

電磁線圈繞線組

## 連接器件用於 制動器和感應器

**Encapsulated coils  
Electromagnets  
Electrical windings  
Connecting devices  
for actuators  
and sensors**

## Encapsulated coils

## Electromagnets

## Electrical windings

## Connecting devices for actuators and sensors



我們公司架構的每個層面都在持續發展，我們的創新與為客戶提供最佳方案的能力，使我們成為所有追求完美產品和服務的客戶之最佳夥伴。

我們的技術目錄介紹了公司標準產品是如何製造生產。此外，為滿足客戶的特別需求，我們日益加強“客製化”產品的研製。我們的特點是使用熱塑性和熱固性創新材料進行彈性靈活的設計，以及為每個產品的電力特性進行個性化打造。

我們致力於生產流程的控制和追蹤管理方面的創新，而且從產品的開發到整個生命週期，我們都給予合作夥伴不懈支持，這使得我們能夠和以下行業的領導企業合作：

- 農業 ● 林業 ● 畜牧業
- 空氣 ● 水 ● 流體 ● 蒸汽 ● 燃氣
- 汽車
- 建築 ● 土木工程
- 能源 ● 石油化工
- 食品 ● 飲料 ● 自動販賣機
- 工業自動化 ● 機器人
- 海運 ● 港口
- 採礦 ● 採石場 ● 水泥攪拌
- 包裝 ● 裝瓶
- 動力傳動 ● 液壓 ● 氣動
- 交通運輸 ● 服務
- 傳輸設備 ● 組裝

Our company is organised and committed to seek continuous improvements at every level. Innovation and our ability to support our customers with dedicated solutions allow us to be the ideal partner for companies looking for high levels of quality and service.

Our technical catalogues illustrate the standard range of products manufactured. In addition our product portfolio also includes a wide and diverse range of custom products designed to satisfy the specific technical requirements of our customers. This characteristic is demonstrated by our focus on the products technical development, by the use of innovative injection moulding techniques and materials and in the design of the products dedicated electrical features.

Our commitment to innovation in terms of organisation, the traceability of all of the various processes together with our ability and desire to constantly support our customers from the products conception and throughout its complete lifetime allows our company to cooperate Internationally with market leading organisations in the following market sectors:

- AGRICULTURE ● FORESTRY ● FARMING
- AIR ● WATER ● FLUID ● STEAM ● GAS
- AUTOMOTIVE
- CONSTRUCTION ● EARTHMOVING
- ENERGY ● PETROCHEMICAL
- FOOD ● BEVERAGE ● VENDING
- INDUSTRIAL AUTOMATION ● ROBOTICS
- MARINE ● PORTS
- MINING ● QUARRYING ● CEMENT MIXING
- PACKAGING ● BOTTLING
- POWER TRANSMISSION ● HYDRAULICS ● PNEUMATICS
- TRANSPORT ● SERVICES
- TRANSFER MACHINES ● ASSEMBLY

**參照規則:**

|                |                             |
|----------------|-----------------------------|
| IEC 60335-1    | 家用和其相關電器使用 - 安全性            |
| IEC 60730-1    | 家用自動電氣控制和其相關使用              |
| IEC 60204-1    | 機電設備之機械安全                   |
| 2006/95/EC     | 低電壓指令                       |
| 2011/65/UE     | 限制使用特定有害物質於電氣和電子設備(RoHS)    |
| EC N°1907/2006 | 關於化學品的註冊,評估,授權和限制規則 (REACH) |

**Reference rules:**

|                |                                                                                                                        |
|----------------|------------------------------------------------------------------------------------------------------------------------|
| IEC 60335-1    | Household and similar electrical appliances - Safety                                                                   |
| IEC 60730-1    | Automatic electrical controls for household and similar use                                                            |
| IEC 60204-1    | Safety of machinery<br>Electrical equipment of machines                                                                |
| 2006/95/EC     | Low voltage Directive                                                                                                  |
| 2011/65/UE     | Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipments (RoHS) |
| EC N°1907/2006 | Regulation concerning the registration, evaluation, authorization and restriction of chemicals (REACH)                 |

我們竭力確保所提供呈報在資料頁面上的圖表和技術數據資訊的準確和可信度, 然而本公司將不承擔因任何不準確或遺漏而引起的任何損失或損害的責任。

我們建議您聯繫我們的技術部門以獲得更精確的數據。

本公司保留修改報導內規格和圖表的權利,

恕不因技術或商業原因另行通知。

參照CE之標誌, 規定請注意線圈等電子元件不經CE形式的標記規範, 因此必不能標有CE標誌。

此被低電壓EMC準則和歐盟委員會所確認。

我們的線圈開發和設計是用於設備, 控制和電器領域, 基於使用者責任下也可用於其他應用。

The drawings and the technical data reported on the data sheets have been checked and are believed to be correct. However no liability is accepted therefore. We always recommend to contact our technical department for the most significant values.

The company reserves the right to modify what is reported on specifications and drawings without notice due to technical or commercial reasons.

With reference to CE marking, it should be noted that electronic components such as coils are not subject to any form of marking and therefore must not be marked with a CE mark. This is confirmed within the conditions of the European Commission for Low Voltage and EMC guidelines.

Our coils are developed and designed for the use in the field of equipment, control and electrical appliances.

They can also be used in other applications under the responsibility of the user.





### Atam Group. 科技創新

自1992年以來Atam Group生產自動化元件, 並廣泛地延伸至工業自動化及液壓工程之市場需求。集團之共同目的為完全滿足客戶所需之多元化策略及研究, 以持續不斷的科技演進為導向, 預測市場需求及競爭, 使得 Atam Group成為主動且值得信賴的合作夥伴而讓各產品能獲得最好的表現。

### Atam Group. Innovation and technology.

Since 1992 Atam Group produces components for the automatic regulation and, more in general, for the wide market of industrial automation and engineering oil hydraulic.

The group was born with the common intention to diversify strategies and researches with the purpose of completely satisfy the customer.

The continuous technological evolution, oriented to anticipate the market demands and the competition, allows Atam Group to be an active and trusted partner in order to grant the maximum performances of each product.



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包封線圈  
電磁元件  
電磁線圈繞線組  
Encapsulated coils  
Electromagnets  
Electrical windings





# 2



電磁作動組  
Operators

Catalogues



# 3



電磁作動組用於電磁閥  
Operators for  
solenoid valves



# 4



連接器件用於制動器和感應器  
近接開關  
Connecting devices  
for actuators and sensors  
Proximity switches

## 技術概念

### 螺線管/線圈的基礎概念

螺線管/線圈是一種將電能轉化為機械能的機電裝置。它們由幾個部分組成：一個固定芯，一個電線圈和供活動鐵芯在內部滑動的一個導管。當線圈激勵時，驅動活動芯運動，從而產生吸力。隨著電流增大和活動鐵芯靠近其行程限位器（即螺線管的固定芯），吸力也增大。活動鐵芯直接或間接地連接到閥門的調節機構上，或者連接到其引導的機構上；它可以按照兩種方式來工作：

- 拉
- 推

將線圈電源斷開後，活動鐵芯通過荷載本身或復位彈簧復位，後者是螺線管/線圈組的組成部分之一。

### 螺線管/線圈的選擇考慮因素

在為特定用途選擇最有效和高效的螺線管/線圈時，要先考慮一些機械、電氣和熱力因素，然後才做決定。在這些因素之間找到合適的平衡並做出正確的決定並不容易。這幾頁內容能夠在這個過程中協助您。另外，我們的工程專家將和您齊心協力，幫助您找到最有效的解決方案。我們集中一切資源和技能，為您提供最高的性能。我們能夠說明並評估您以下幾個方面的需要：

- 吸力/行程要求
- 電氣要求
- 工作週期
- 最大整體尺寸
- 環境因素
- 可達到的最低和最高溫度
- 使用環境
- 機械和電氣連接

### 磁力/行程

螺線管/線圈磁力為線圈啟動時活動鐵芯產生的拉力或推力。一定數量的因素影響著螺線管/線圈的磁力/行程關係。電壓、溫度以及工作週期都影響著螺線管/線圈能夠拉動或推動的力度。而且，力度隨著行程長度的減小而增大。電源電壓的變化影響螺線管/線圈的磁力/行程特性。根據最低電源電壓和功率來選擇螺線管/線圈的磁力/行程，不失為一種好的做法。選擇合適的螺線管/線圈時，記得考慮移動和放置鐵芯時線圈必須克服的磁力。除了要移動的外部負荷之外，通常還必須考慮復位彈簧的影響。如果使用了彈簧，必須從可以做功的磁力中將其減去，以得到實際所需的淨力

### 機械壽命

我們的工程師確保螺線管/線圈產生的磁力與荷載需求接近一致，以延長螺線管/線圈的壽命。如果螺線管/線圈產生的磁力過大，則會導致超載且機械元件之間發生衝擊，可能引起故障。鐵芯的適當校準，有助於確保最佳性能和延長設備的壽命。

### 磁力/行程曲線

從很久之前，工業上就開始利用磁力/行程曲線來評價螺線管/線圈的性能，說明選擇螺線管/線圈。這些曲線可以成為有用的工具；但是，在比較不同廠家的產品系列時，您必須謹慎，因為他們的資料可能基於不同的設計準則。這些曲線受到許多因素的影響，比如：

- 活動鐵芯的幾何形狀
- 活動鐵芯的直徑
- 線圈/螺線管的溫度
- 線圈/螺線管的安培匝數
- 輸入功率
- 工作週期

性能圖表強調懂得如何確定磁力/行程曲線的重要性。這些曲線代表著某個型號名稱的最低性能。在評價不同廠家的螺線管/線圈的配置時，確保您完全理解參照標準，然後再做最終選擇。我們可以為您提供螺線管/線圈樣品，用於在實際應用條件下進行測試。

### 功率/溫度

螺線管/線圈的工作溫度，極大地影響著螺線管/線圈在特定輸入電壓下產生的磁力。螺線管/線圈的電阻隨著自身溫度升高時而增大。這導致輸入電壓的降低和機械力的減小。螺線管/線圈的溫升（ $\Delta T$ ），用以下公式來計算：

$$\Delta T = (R2 - R1) : R1 \times (234.5 + t1) - (t2 - t1)$$

其中：

R1 是測試開始時的線圈電阻值。

R2 是線圈達到熱穩定性時的電阻值。

234.5 是銅的恒定溫度（單位K）。

t1 是測試開始時的環境溫度。

t2 是測試結束時的環境溫度。

### 荷載/功率

螺線管/線圈可以使用交流電或者直流電。大多數應用都優先選擇直流電，因為具有設計靈活、螺線管/線圈可靠、較少電磁噪音和更加恒定的運行速度等優點。額定電壓的變化會大大影響螺線管/線圈的磁力/行程特點，所以要根據最低預計輸入電壓來選擇磁力/行程性能。電流和線匝數量決定螺線管/線圈的磁通量。按照您的規格要求來決定電流限制。線匝的數量受到機械包裝的物理約束的限制，也受到線圈/螺線管溫度的限制。隨著允許溫度的升高，減小線圈/螺線管的尺寸和重量，以確保最高效的設計。

### 工作週期

是螺線管/線圈工作的“通電”時間與總週期時間的比值，應將其保持在最小。表達如下：

$$\text{工作週期}(\%) =$$

$$(\text{通電時間}) / (\text{通電時間} + \text{關閉時間}) \times 100$$

連續運行的螺線管/線圈（工作週期為100%）能夠避免線圈的過熱和中斷，但相較於連續或間歇性服務（工作週期低於100%）的方法來說力度更低。我們的技術人員能夠協助您選擇連續服務的螺線管/線圈，在獲得所需力度的同時又能保證尺寸最小，使過熱降至最低。我們還能幫助您在不過建議限值的情況下確保某個確定的螺線管/線圈的“通電”的最大時間。如果應用上允許，當活動芯與固定芯接觸時可能會降低螺線管/線圈的電壓。即使電壓最低時在該位置降低保持力，也足以降低初始功率和減少熱增益以及能量的消耗。

### 環境溫度

螺線管/線圈所在位置的環境溫度，對性能有極大影響。任何螺線管/線圈的最高工作溫度，都取決於絕緣/封裝材料的額定溫度。標準磁螺線管/線圈使用“F”或“H”級絕緣材料，允許線圈最高容許溫度升高到155°C或180°C。

| 絕緣等級 | 最高溫度    |
|------|---------|
| A    | 105 ° C |
| B    | 130 ° C |
| F    | 155 ° C |
| H    | 180 ° C |
| N    | 200 ° C |
| R    | 220 ° C |
| S    | 240 ° C |

### 電氣連接

為了供應電力，我們可以使用許多不同類型的連接，比如DIN、Deutsch、AMP Junior、飛線和Kostal AMP Superseal等等。

### 尺寸構造

許多用途的內在尺寸構造和實體空間限制，對螺線管/線圈的總體性能有重大影響。對選擇決定有特別影響的四個因素：

1. 可用空間幫助確定螺線管/線圈的外觀大小，並且對工作熱因素有著重要影響。
2. 當您完全理解空間限制和螺線管/線圈的外觀大小時，有必要考慮適合組裝的螺線管/線圈構造。
3. 空間和安裝方向、機械和電氣連接也影響著預期性能特點。
4. 最後，您需要認真考慮最有效的方法，使螺線管/線圈與其他成品元件相匹配，以確保最佳的系統效率。

## Technical Concepts

### Solenoids/coils concepts

Solenoids/coils are electromechanical devices, which convert electrical energy into mechanical motion. They are composed by: a fixed core, an electric coil and a guide tube in which the mobile plunger slides. The supply applied to electric coil produces the plunger movement that provides a force, whose value increases as the value of current increases and as plunger approaches to its mechanical end stop that is the solenoid's fixed core. The plunger is linked, directly or indirectly, to the regulation mechanism of a valve or to the mechanism that operates; it can operate according to two main options:

- PULL
- PUSH

With the coil de-energized, the plunger return motion is provided by the load itself and/or by a return spring which can be provided as an integral part of the solenoid/coil assembly.

### Solenoid/coil choice factors

A number of mechanical, electrical and thermal factors should influence the decision-making process when you are selecting the most effective and efficient solenoid/coil for a particular application. Striking the right balance among these factors is critical to make the right choice. These pages are designed to aid you with this process. Furthermore our engineering experts will work together with you to make sure you get the most effective solution. We focus all our resources and skills on providing you the best combination of price and performance available.

We can help you evaluate your needs in terms of:

- FORCE/STROKE REQUIREMENTS
- ELECTRICAL REQUIREMENTS
- DUTY CYCLE
- MAXIMUM ENVELOPE DIMENSIONS
- ENVIRONMENTAL FACTORS
- MINIMUM AND MAXIMUM ACHIEVABLE TEMPERATURES
- OPERATING ENVIRONMENT
- MECHANICAL AND ELECTRICAL CONNECTIONS

### Force/stroke

Solenoid/coil force is the pull or push force developed by the plunger when the coil is activated. A number of interrelated factors influence the solenoid/coil force/stroke relationship. Voltage, temperature, and duty cycle all affect the force your solenoid/coil is capable of pulling or pushing. Also, the force capability increases as the stroke length decreases. Variations in supply voltage greatly affect the force/stroke characteristic of a solenoid/coil. It is good practice to select a solenoid/coil force/stroke based upon the lowest supply voltage and power. When selecting the proper solenoid/coil, remember to consider all forces against which the coil must work to move and seat the plunger. In addition to the external load to be moved, often the effects of a return spring must be considered. If one is used, its force must be subtracted from the force available to do work to arrive at net force needed.

### Mechanical life

Our engineers allow to the solenoid/coil to achieve longer life by insuring that the force the solenoid/coil generates coincides closely with the demands of the load. Solenoids/coils that generate excess force are subject to mechanical stressful hammering that can cause failures. Proper alignment of the plunger also helps insure optimum performance and longer life expectancy.

### Force/stroke curves

Industry has long used force/stroke characteristic curves to evaluate solenoid/coil performance and to help make solenoid/coil selection. These curves can be useful tools; however, you must use care when comparing different manufacturers' product lines because their data may be based on different design criteria. Many factors influence these curves, like:

- PLUNGER GEOMETRY
- PLUNGER DIAMETER
- COIL/SOLENOID TEMPERATURE
- COIL/SOLENOID AMPERE TURNS
- APPLIED POWER
- DUTY CYCLE

The performance graph underscores the importance of understanding how force/stroke curves are determined. These curves represent the minimal performance for a model designation.

As you evaluate different manufacturers' solenoids/coils configurations, make sure you fully understand the frame of reference before making a final selection. We can provide you sample solenoids/coils for testing under actual application conditions.

### Power/temperature

Operating solenoid/coil temperature greatly influences the solenoid/coil force delivers at a given applied voltage. Solenoid/coil resistance increase as solenoid/coil temperature goes up.

This causes a reduction in applied voltage and resulting mechanical force.

The solenoids/ coils rising temperature ( $\Delta T$ ) calculation is carried out with the following formula:

$$\Delta T = (R_2 - R_1) : R_1 \times (234,5 + t_1) - (t_2 - t_1)$$

Where:

R1 is the coil resistance value at the test start.

R2 is the coil resistance value after the achieved coil thermal stabilization.

234,5 is the constant k of copper.

t1 is the ambient temperature at the test start.

t2 is the ambient temperature at the test end.

### Load/power

Solenoids/coils can be designed to operate from either AC or DC power. DC power is preferable for most applications because of design flexibility, solenoid/coil reliability, less electrical noise and more consistent operating speed. Variations in nominal voltage greatly affect solenoid/coil force/stroke characteristics, so it is important to select force/stroke performance based on lowest anticipated input voltage. The current and the number of wire turns determine the solenoid's/coil's magnetic flux.

The current limitations are determined by your specifications requirements. The number of wire turns are limited by the physical constraints of the mechanical package and by coil/solenoid temperature. Magnetic solenoids/coils ensure the most efficient design by decreasing size and weight as allowable temperature increases.

### Duty cycle

Duty cycle is the ratio of time "on" to total cycle time for solenoid/coil operation, and it should be kept to a minimum. It is expressed as:

$$\text{Duty Cycle (\%)} = \frac{(\text{On time})/(\text{On time} + \text{Off time}) \times 100$$

### Ambient temperature

The ambient temperature in which the solenoid/coil is going to operate can greatly affect performance.

The maximum operating temperature for any solenoid/coil is a product of the temperature rating of the insulating/encapsulating materials. Standard magnetic solenoids/coils use Class "F" or "H" insulation which permits maximum allowable total coil temperature to rise to 155 °C or 180 °C.

| Insulation class | Maximum temperature |
|------------------|---------------------|
| A                | 105 °C              |
| B                | 130 °C              |
| F                | 155 °C              |
| H                | 180 °C              |
| N                | 200 °C              |
| R                | 220 °C              |
| S                | 240 °C              |

### Electrical connections

To supply electrical power we can use many different types of connections like: DIN, Deutsch, AMP Junior, flying leads, Kostal AMP Superseal etc.

### Dimensional configurations

Dimensional configurations and physical space limitations inherent in many applications can have a critical effect on overall solenoid/coil performance.

Four factors especially influence the selection decision:

1. Space available helps determine solenoid/coil size and has an important bearing on operating heat factors.
2. Once you fully understand space limitations and solenoid/coil size, it is important to consider the proper solenoid/coil configuration for its assembling.
3. Space and mounting orientation, mechanical and electrical connections also influence desired performance characteristic.
4. Finally, you need to carefully consider the most effective method to match the solenoid/coil with the others finished product elements to ensure the maximum system efficiency.



## 專有名詞

安培 (A)：用來衡量電流強度的國際單位。

交流電 (AC)：強度和方向隨時間變化的電流。經過零，達到最大正值和最大負值。

直流電 (DC)：強度和方向都是恆定的電流。

接地 (PE)：擬與地表進行物理連接的電質的連接點。正確操作可避免觸電危險。

二極體：非線性電子元件，功能是只允許電流由單一方向通過，反向時阻斷。

歐姆 (Ω)：電阻的國際單位。

整流器：含有二極體的一種裝置，可以將交流電轉換為直流電。

電阻：導體對電流阻礙作用的大小值

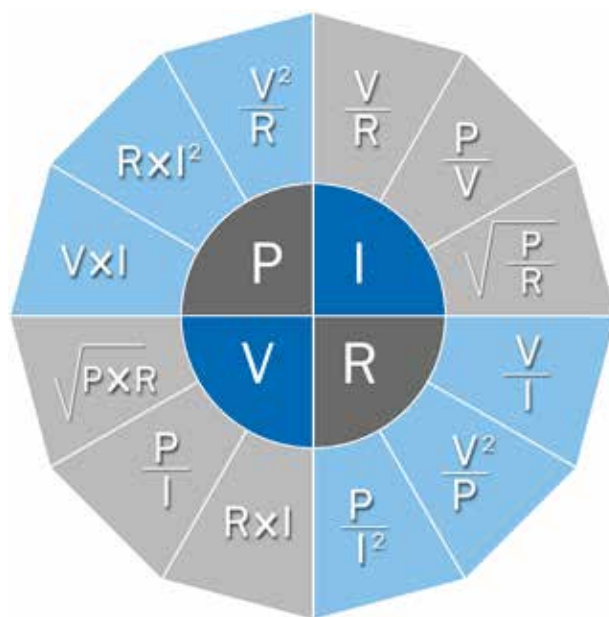
**Transil (TVS=瞬態電壓抑制器)**：屬於非線性瞬態抑制器類別的電子元件。與齊納二極體的特性類似；但與後者不同，其用於保護電子電路免受尖峰過電壓的破壞。

**壓敏電阻 (VDR =電壓敏感電阻)**：用於保護電子電路免受尖峰的過電壓破壞非線性電子元件。其特性可以與電阻器（非線性）對比，當超過設計電壓時，快速降低其內部電阻，以大大削弱尖峰。

伏特 (V)：電勢的國際單位，也表示一個導體或電氣元件的兩點之間的電勢差。

瓦特 (W)：國際功率單位。

## 歐姆定律和功率計算



V：電壓伏特(V)  
R：電阻歐姆(Ω)  
I：電流強度安培(A)  
P：功率瓦特(W)



## Glossary

**Ampère (A):** International unit of measurement of the intensity of electric current.

**Alternate current (AC):** Electrical current flow, variable in time, both as intensity that direction. Reaches a maximum positive value and a maximum negative value passing from zero.

**Direct current (DC):** Flow of electrical current, constant in time, both in intensity as that direction.

**Ground connection (PE):** Point of connection of the electric masses intended to be connected physically to the earth. The correct operation avoids the risk of electric shock.

**Diode** Non-linear passive electronic component, whose function is to allow the passage of current flow in one direction only and lock it in the opposite direction.

**Ohm ( $\Omega$ ):** International unit of electrical resistance.

**Current rectifier:** It is a device consisting of diodes, capable of converting an AC voltage into a DC voltage.

**Electrical resistance:** Capacity of a conductor to oppose the passage of electric current generating heat.

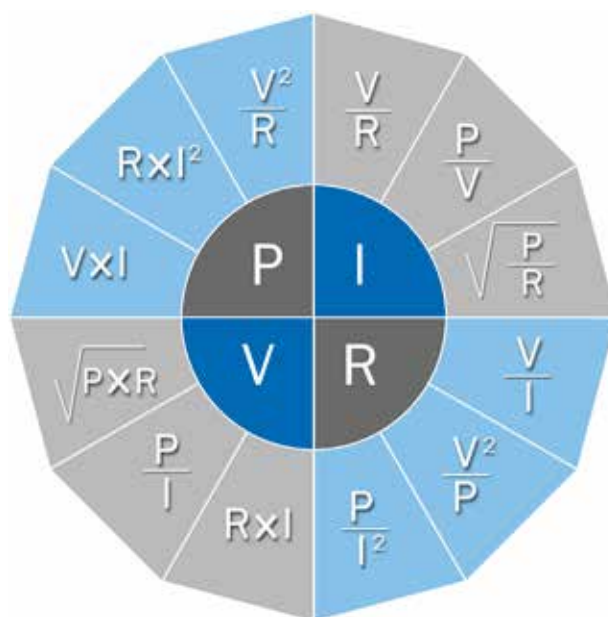
**Transil (TVS = Trans Voltage Suppressor):** Electrical component belonging to the category of non-linear transient suppressors. Has a behavior similar to a Zener diode, but unlike the latter, serves to protect electronic circuits against overvoltage spikes fast and destructive.

**Varistor (VDR = Voltage Dependent resistor):** Non-linear electronic component used to protect electronic circuitry from overvoltage spikes fast and destructive. Its behavior can be compared to a resistor (non-linear) that if it is exceeded the voltage for which it is designed, rapidly lowers its internal resistance so that the spike is strongly attenuated.

**Volt (V):** International unit of electric potential, and also of the potential difference between two points of a conductor or an electric component.

**Watt (W):** International unit of power.

## OHM law and power calculation



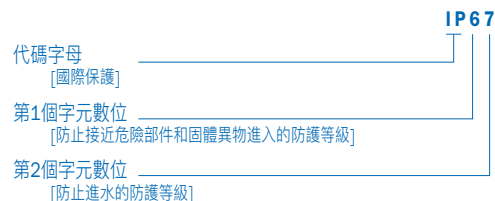
V : Voltage Volt (V)  
R : Resistance Ohm ( $\Omega$ )  
I : Current intensity Ampere (A)  
P : Power Watt (W)

## 防護等級(IP-代碼)

出於安全考慮，必須保護連接器不受外部影響的破壞，比如塵埃、異物、直接接觸、濕氣/或水等。

工業接頭通過其外殼來提供保護，借助它們的鎖緊裝置和密封的進線口。可以根據擬定用途的類型來選擇防護等級。

IEC EN60529 標準規定了防護等級，並劃分為幾個類別。



### 防止接近危險部件的防護等級（用第一個字元數位表示）

| 第一個字元數   | 防護等級       |                                |
|----------|------------|--------------------------------|
|          | 簡單描述       | 定義                             |
| <b>0</b> | 不受保護       |                                |
| <b>1</b> | 防止手背接近危險部件 | 50 mm直徑直觀探針球與危險部件之間應有充足間隙      |
| <b>2</b> | 防止手指接近危險部件 | 12 mm直徑80 mm長試驗指標與危險部件之間應有充足間隙 |
| <b>3</b> | 防止工具接近危險部件 | 2,5 mm直徑直觀探針不得刺入               |
| <b>4</b> | 防止電線接近危險部件 | 1,0 mm直徑直觀探針不得刺入               |
| <b>5</b> | 防止電線接近危險部件 | 1,0 mm直徑探針不得刺入                 |
| <b>6</b> | 防止電線接近危險部件 | 1,0 mm直徑直觀探針不得刺入               |

### 防止固體異物進入的防護等級（用第一個字元數位表示）

| 第一個字元數位  | 防護等級                |                                    |
|----------|---------------------|------------------------------------|
|          | 簡單描述                | 定義                                 |
| <b>0</b> | 不受保護                |                                    |
| <b>1</b> | 防止≥50 mm直徑的固體異物進入   | 50 mm物體探針球不得完全刺入                   |
| <b>2</b> | 防止≥12,5 mm直徑的固體異物進入 | 12,5 mm物體探針球不得完全刺入                 |
| <b>3</b> | 防止≥2,5 mm直徑的固體異物進入  | 2,5mm物體探針球不得完全刺入                   |
| <b>4</b> | 防止≥1,0 mm直徑的固體異物進入  | 1,0mm物體探針球不得完全刺入                   |
| <b>5</b> | 防塵                  | 不能完全防止塵埃進入殼內,但進塵量不足以干擾電器的正常運行或影響安全 |
| <b>6</b> | 完全塵密                | 無塵埃進入                              |

### 防止水進入的防護等級（用第二個字元數位表示）

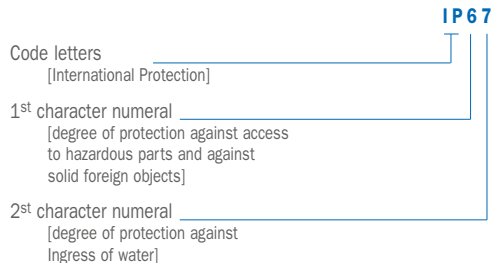
| 第二個字元數位                   | 防護等級           |                                                    |
|---------------------------|----------------|----------------------------------------------------|
|                           | 簡單描述           | 定義                                                 |
| <b>0</b>                  | 無保護            |                                                    |
| <b>1</b>                  | 防垂直滴水          | 垂直滴水應無有害影響                                         |
| <b>2</b>                  | 防垂直滴水          | 當外殼從垂直線任何一側傾斜至15°以內任一角度時,垂直滴水應無有害影響                |
| <b>3</b>                  | 防淋水            | 與垂直線成60°範圍以內的淋水應無有害影響                              |
| <b>4</b>                  | 防濺水            | 任何方向對外殼的濺水應無有害影響                                   |
| <b>5</b>                  | 防噴水            | 強力噴嘴從任何方向對外殼噴水應無有害影響                               |
| <b>6</b>                  | 防猛烈噴水          | 強力噴嘴從任何方向對外殼噴水應無有害影響                               |
| <b>7</b>                  | 防浸水            | 外殼臨時浸入規定水壓的水中,經規定時間後,進水量應不致達到有害的影響                 |
| <b>8</b>                  | 防長時間浸水         | 外殼長時間浸入水中,水壓和時間等條件由廠家與用戶約定但比第7項的更為嚴厲,進水量應不致達到有害的影響 |
| <b>DIN40050-9規定的IP69K</b> | 防止高壓噴熱水進行清洗的影響 | 噴嘴向外殼噴規定壓力和溫度的水,無有害影響                              |

## Degree of protection (IP-Code)

Connectors have to be protected for safety reasons from outside influences like dust, foreign objects, direct contact, moisture and water.

This protection is provided on industrial connectors by its housing with their latching devices and sealed cable entries. The degree of protection can be selected depending on the type of intended use.

The standard IEC EN60529 has specified the degree of protection and divided into several classes.



### DEGREES OF PROTECTION against ACCESS to hazardous parts indicated by the first characteristic numeral

| FIRST<br>characteristic<br>numeral | DEGREE OF PROTECTION                                                |                                                                                                    |
|------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|                                    | Brief Description                                                   | Definition                                                                                         |
| <b>0</b>                           | Non-protected                                                       |                                                                                                    |
| <b>1</b>                           | Protected against access to hazardous parts with the back of a hand | The access probe sphere of 50 mm Ø shall have adequate clearance from hazardous parts              |
| <b>2</b>                           | Protected against access to hazardous parts with a finger           | The jointed test finger of 12 mm Ø 80 mm length shall have adequate clearance from hazardous parts |
| <b>3</b>                           | Protected against access to hazardous parts with a tool             | The access probe of 2,5 mm Ø shall not penetrate                                                   |
| <b>4</b>                           | Protected against access to hazardous parts with a wire             | The access probe of 1,0 mm Ø shall not penetrate                                                   |
| <b>5</b>                           | Protected against access to hazardous parts with a wire             | The access probe of 1,0 mm Ø shall not penetrate                                                   |
| <b>6</b>                           | Protected against access to hazardous parts with a wire             | The access probe of 1,0 mm Ø shall not penetrate                                                   |

### DEGREES OF PROTECTION against SOLID foreign objects indicated by the first characteristic numeral

| FIRST<br>characteristic<br>numeral | DEGREE OF PROTECTION                                                    |                                                                                                                                                                    |
|------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    | Brief Description                                                       | Definition                                                                                                                                                         |
| <b>0</b>                           | Non-protected                                                           |                                                                                                                                                                    |
| <b>1</b>                           | Protected against solid foreign objects of $\geq 50$ mm Ø and greater   | To object probe sphere of 50 mm Ø shall not fully penetrate                                                                                                        |
| <b>2</b>                           | Protected against solid foreign objects of $\geq 12,5$ mm Ø and greater | To object probe sphere of 12,5 mm Ø shall not fully penetrate                                                                                                      |
| <b>3</b>                           | Protected against solid foreign objects of $\geq 2,5$ mm Ø and greater  | To object probe sphere of 2,5 mm Ø shall not fully penetrate                                                                                                       |
| <b>4</b>                           | Protected against solid foreign objects of $\geq 1,0$ mm Ø and greater  | To object probe sphere of 1,0 mm Ø shall not fully penetrate                                                                                                       |
| <b>5</b>                           | Dust-protected                                                          | Ingress of dust is not totally prevented, but dust shall not penetrate in a quantity to interfere with satisfactory operation of the apparatus or to impair safety |
| <b>6</b>                           | Dust-tight                                                              | No ingress of dust                                                                                                                                                 |

### DEGREES OF PROTECTION against WATER indicated by the second characteristic numeral

| SECOND<br>characteristic<br>numeral             | DEGREE OF PROTECTION                                                      |                                                                                                                                                                                                                                                     |
|-------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 | Brief Description                                                         | Definition                                                                                                                                                                                                                                          |
| <b>0</b>                                        | Non-protected                                                             |                                                                                                                                                                                                                                                     |
| <b>1</b>                                        | Protected against vertically falling water drops                          | Vertically falling drops shall have no harmful effects                                                                                                                                                                                              |
| <b>2</b>                                        | Protected against vertically falling water drops when up to 15°           | Vertically falling drops shall have no harmful effects when the enclosure is tilted at any angle up to 15° on either side of the vertical                                                                                                           |
| <b>3</b>                                        | Protected against spraying water                                          | Water sprayed at an angle up to 60° on either side of the vertical shall have no harmful effects                                                                                                                                                    |
| <b>4</b>                                        | Protected against splashing water                                         | Water splashed against the enclosure from any direction shall have no harmful effects                                                                                                                                                               |
| <b>5</b>                                        | Protected against water jets                                              | Water projected in powerful jets against the enclosure from any direction shall have no harmful effects                                                                                                                                             |
| <b>6</b>                                        | Protected against powerful water jets                                     | Water projected in powerful jets against the enclosure from any direction shall have no harmful effects                                                                                                                                             |
| <b>7</b>                                        | Protected against immersion in water                                      | Ingress of water in quantities the effects of temporary causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardized conditions of pressure and time                                        |
| <b>8</b>                                        | Protected against the effects of continuous immersion in water            | Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be agreed between manufacturer and user but which are more severe than for numeral 7 |
| <b>IP69K<br/>in according to<br/>DIN40050-9</b> | Protected against the effects due to cleaning with hot water pressure jet | The water jet sprayed against the enclosure, in the conditions of pressure and temperature standardized, have no harmful effects                                                                                                                    |





描述  
DESCRIPTION

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TO PAGE

熱塑性線圈

THERMOPLASTIC COILS

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含外磁路金屬線圈

METAL COILS WITH EXTERNAL MAGNETIC CIRCUIT

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防爆線圈

ATEX/IECEX COILS

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連接器(端子)

CONNECTORS

59 ..... 83

| 線圈系列<br>COIL SERIES | 代碼<br>CODES                                   | 應用<br>APPLICATION   |                 |                 |             |           | 頁數<br>PAGE |
|---------------------|-----------------------------------------------|---------------------|-----------------|-----------------|-------------|-----------|------------|
|                     |                                               | 油壓<br>Oil Hydraulic | 液壓<br>Hydraulic | 空氣<br>Pneumatic | 蒸氣<br>Steam | 熱氣<br>Gas |            |
| 15x25.4             | 280   282   376                               |                     |                 |                 |             |           | 14         |
| 16x25               | 256   262                                     |                     |                 |                 |             |           | 16         |
| 22x29.5             | 447   288                                     |                     |                 |                 |             |           | 18         |
| 22x30.9             | 246   278   301   394   401                   |                     |                 |                 |             |           | 20         |
| 30x30.5             | 204   210   370   396                         |                     |                 |                 |             |           | 22         |
| 30x38.6             | 259   268   279   312   342   407             |                     |                 |                 |             |           | 24         |
| 30x39.8             | 387   388   389                               |                     |                 |                 |             |           | 26         |
| 36x38.5             | 314   315   316   302   392   416   417   418 |                     |                 |                 |             |           | 28         |
| 36x40               | 385   384   398   480                         |                     |                 |                 |             |           | 30         |
| 36x50               | 305   306   308   309   391                   |                     |                 |                 |             |           | 32         |
| 37x50.4             | 254   340   341   213                         |                     |                 |                 |             |           | 34         |
| 45x55               | 463   464   465   466                         |                     |                 |                 |             |           | 36         |
| 46x58               | 247   307   412   413   414   415             |                     |                 |                 |             |           | 38         |
| 65x76.4             | 395   467   468   469                         |                     |                 |                 |             |           | 40         |

| 代碼<br>COD | 頁數<br>PAG | 代碼<br>COD | 頁數<br>PAG | 代碼<br>COD | 頁數<br>PAG |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 204000    | 22        | 307000    | 38        | 447000    | 18        |
| 204001    | 22        | 307001    | 38        | 447001    | 18        |
| 204002    | 22        | 307002    | 38        | 463000    | 36        |
| 204003    | 22        | 307003    | 38        | 463002    | 36        |
| 204005    | 22        | 308000    | 32        | 464000    | 36        |
| 204006    | 22        | 309000    | 33        | 464002    | 36        |
| 204007    | 22        | 312000    | 25        | 465000    | 37        |
| 204008    | 22        | 312001    | 25        | 465002    | 37        |
| 204009    | 22        | 314000    | 28        | 466000    | 37        |
| 210000    | 22        | 315000    | 28        | 466002    | 37        |
| 210001    | 22        | 316000    | 28        | 467000    | 40        |
| 210002    | 22        | 340000    | 34        | 468000    | 41        |
| 210003    | 22        | 340001    | 34        | 469000    | 41        |
| 210004    | 22        | 340002    | 34        | 480000    | 31        |
| 210005    | 22        | 340003    | 34        |           |           |
| 210006    | 22        | 341000    | 35        |           |           |
| 213000    | 35        | 341001    | 35        |           |           |
| 213001    | 35        | 341002    | 35        |           |           |
| 213002    | 35        | 341003    | 35        |           |           |
| 213003    | 35        | 342000    | 25        |           |           |
| 246001    | 20        | 342001    | 25        |           |           |
| 246002    | 20        | 370000    | 23        |           |           |
| 246004    | 20        | 370001    | 23        |           |           |
| 246008    | 20        | 370002    | 23        |           |           |
| 247000    | 38        | 370003    | 23        |           |           |
| 247001    | 38        | 370004    | 23        |           |           |
| 247002    | 38        | 370005    | 23        |           |           |
| 247003    | 38        | 370006    | 23        |           |           |
| 254000    | 34        | 376000    | 15        |           |           |
| 254001    | 34        | 384000    | 30        |           |           |
| 254002    | 34        | 385000    | 30        |           |           |
| 254003    | 34        | 387000    | 26        |           |           |
| 256000    | 16        | 388000    | 26        |           |           |
| 256003    | 16        | 389000    | 27        |           |           |
| 259000    | 24        | 391000    | 33        |           |           |
| 259001    | 24        | 392000    | 29        |           |           |
| 262000    | 16        | 394000    | 21        |           |           |
| 268000    | 24        | 394001    | 21        |           |           |
| 268001    | 24        | 395002    | 40        |           |           |
| 278004    | 20        | 396000    | 23        |           |           |
| 278005    | 20        | 398000    | 31        |           |           |
| 279000    | 24        | 401000    | 21        |           |           |
| 279001    | 24        | 401001    | 21        |           |           |
| 280000    | 14        | 407000    | 25        |           |           |
| 282000    | 14        | 407001    | 25        |           |           |
| 288004    | 19        | 412000    | 39        |           |           |
| 288005    | 19        | 413000    | 39        |           |           |
| 301000    | 21        | 414000    | 39        |           |           |
| 301001    | 21        | 415000    | 39        |           |           |
| 302000    | 28        | 416000    | 29        |           |           |
| 305000    | 32        | 417000    | 29        |           |           |
| 306000    | 32        | 418000    | 29        |           |           |



## 280

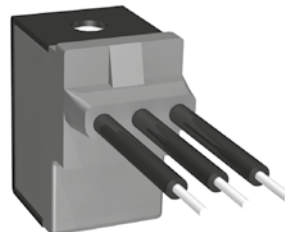
C 端子型電磁線圈  
C Industrial connection



|        |        |
|--------|--------|
| 代碼 Cod | 280000 |
| Ø A    | 4.55   |
| Ø B    | 5.55   |

## 282

出線型電磁線圈(三線式)  
Lead wires connection



|        |        |
|--------|--------|
| 代碼 Cod | 282000 |
| Ø A    | 4.55   |
| Ø B    | 5.55   |

標準導線長度530mm  
Standard lead wires length 530 mm

## 技術描述

|                 |                                                             |
|-----------------|-------------------------------------------------------------|
| 應用              | 空壓                                                          |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求            |
| 指標平均功率          | AC額定消耗功率5.5VA<br>最大瞬間流入功率8VA<br>DC 額定消耗功率4W<br>其他功率可依客戶要求製作 |
| 工作週期            | ED 100% 於標示功率及溫度下                                           |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                   |
| 絕緣等級            | 155°C (F) or 180°C (H)                                      |
| 漆包線絕緣等級         | 200°C (H)                                                   |
| 防護等級            | IP54(IEC 60529) / 需使用於適當的端子                                 |
| 標準顏色            | 黑色                                                          |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝繞線組<br>其他熱塑性材料可依要求<br>外部黑色的抗氧化鐵磁殼              |

## Technical description

|                                                  |                                                                                                                                                             |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Pneumatic                                                                                                                                                   |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                           |
| Indicative average power                         | AC absorbed power 5.5 VA<br>Maximum inrush power 8 VA<br>DC absorbed power 4 W<br>Other powers on request                                                   |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                      |
| Insulation class                                 | 155°C (F) or 180°C (H)                                                                                                                                      |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                   |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector                                                                                                             |
| Standard colour                                  | Black                                                                                                                                                       |
| Construction characteristics for class 155°C (F) | Encapsulated winding with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>External black anti oxidation ferromagnetic shell |

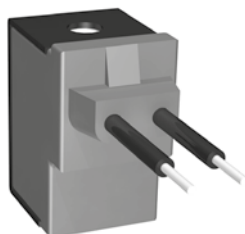
## Coil series 15x25.4

Codes | 280 | 282 | 376 |

### 376

出線型電磁線圈

Lead wires connection



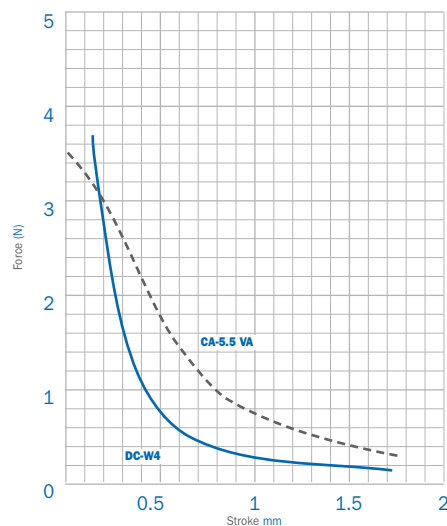
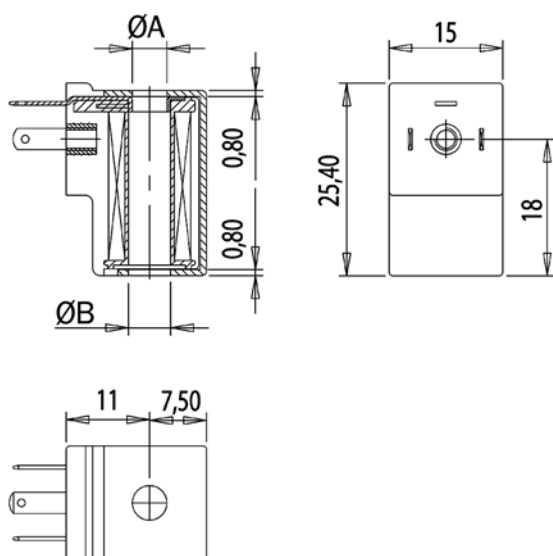
|        |        |
|--------|--------|
| 代碼 Cod | 376000 |
| Ø A    | 4.55   |
| Ø B    | 5.55   |

標準導線長度330mm

Standard lead wires length 330 mm

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下,測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 256

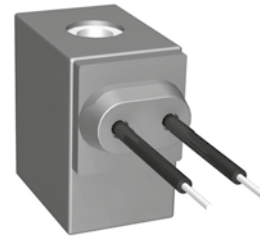
C 端子型電磁線圈  
C Industrial connection



| 代碼 Cod | 256000 | 256003 |
|--------|--------|--------|
| Ø A    | 5.1    | 5.1    |
| Ø B    | 7.1    | 7.1    |
| Ø C    | 8      | 6.5    |
| Ø D    | 12     | 12     |

## 262

出線型電磁線圈  
Lead wires connection



| 代碼 Cod | 262000 |
|--------|--------|
| Ø A    | 5.1    |
| Ø B    | 7.1    |
| Ø C    | 8      |
| Ø D    | 12     |

標準導線長度300mm  
Standard lead wires length 300 mm

## 技術描述

|                 |                                                                        |
|-----------------|------------------------------------------------------------------------|
| 應用              | 空壓                                                                     |
| 供應電壓            | 12 - 24 VDC 24 VAC<br>其他電壓可依需求                                         |
| 指標平均功率          | AC額定消耗功率5.5VA<br>最大瞬間流入功率8VA<br>DC 額定消耗功率4W<br>其他功率可依客戶要求製作            |
| 工作週期            | ED 100% 於標示功率及溫度下                                                      |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                              |
| 絕緣等級            | 155°C (F) 180°C (H)                                                    |
| 漆包線絕緣等級         | 200°C (H)                                                              |
| 防護等級            | IP54(IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                     |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                           |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Pneumatic                                                                                                                                                     |
| Supply voltages                                  | 12 - 24 VDC 24 VAC<br>Other voltages on request                                                                                                               |
| Indicative average power                         | AC absorbed power 5.5 VA<br>Maximum inrush power 8 VA<br>DC absorbed power 4 W<br>Other powers on request                                                     |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

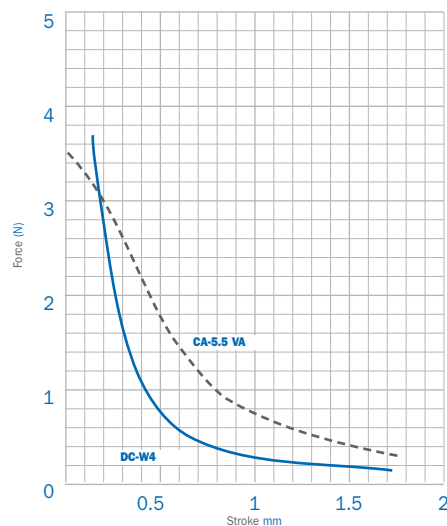
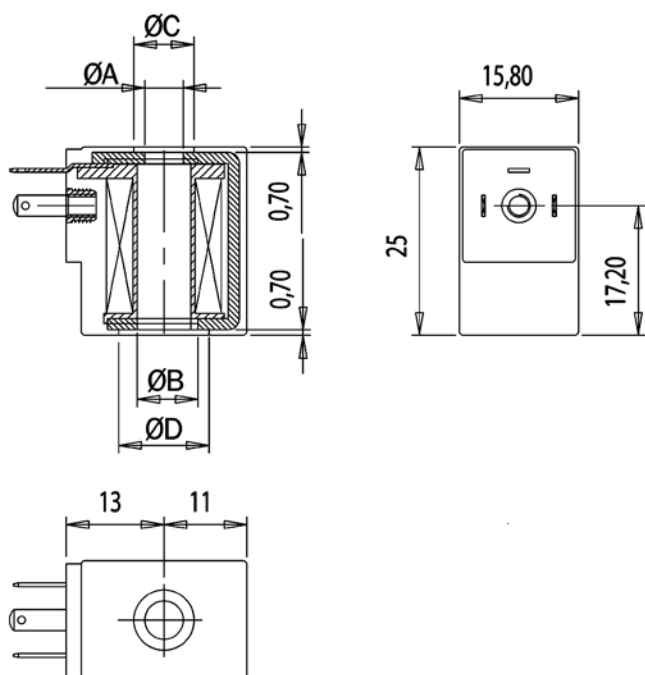
# Coil series 16x25

Codes | 256 | 262 |

16x25

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used  
operators with 10% reduced nominal  
voltage. The graph values are indicative.

## 447

B 端子型電磁線圈

B Industrial connection



| 代碼 Cod | 447000 | 447001 |
|--------|--------|--------|
| Ø A    | 8.2    | 6.2    |
| Ø B    | 8.2    | 9.1    |
| Ø C    | 16     | 16     |
| Ø D    | 16.5   | 10.1   |

## 技術描述

|                 |                                                            |
|-----------------|------------------------------------------------------------|
| 應用              | 空壓                                                         |
| 供應電壓            | 6 – 12 – 24 VDC 24 – 110 – 220 – 230 VAC<br>其他電壓可依需求       |
| 指標平均功率          | AC額定消耗功率9VA<br>最大瞬間流入功率14VA<br>DC 額定消耗功率7W<br>其他功率可依客戶要求製作 |
| 工作週期            | ED 100% 於標示功率及溫度下                                          |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                  |
| 絕緣等級            | 155°C (F)                                                  |
| 漆包線絕緣等級         | 200°C (H)                                                  |
| 防護等級            | IP54 (IEC 60529) / 需使用於適當的端子                               |
| 標準顏色            | 黑色                                                         |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件               |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Pneumatic                                                                                                                                                     |
| Supply voltages                                  | 6 - 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                         |
| Indicative average power                         | AC absorbed power 9 VA<br>Maximum inrush power 14 VA<br>DC absorbed power 7 W<br>Other powers on request                                                      |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F)                                                                                                                                                     |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector                                                                                                               |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |



## Coil series 22x29.5

Codes | 447 | 288 |

### 288

B 端子型電磁線圈含增加磁場之結構

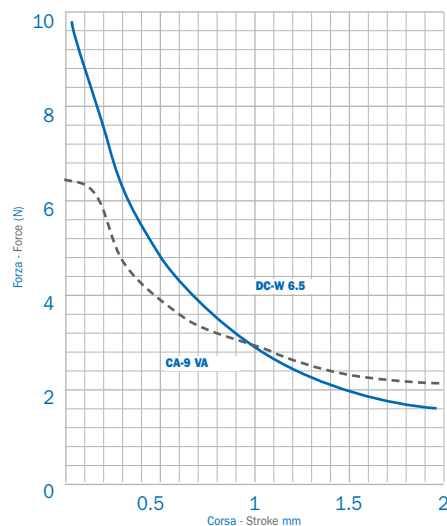
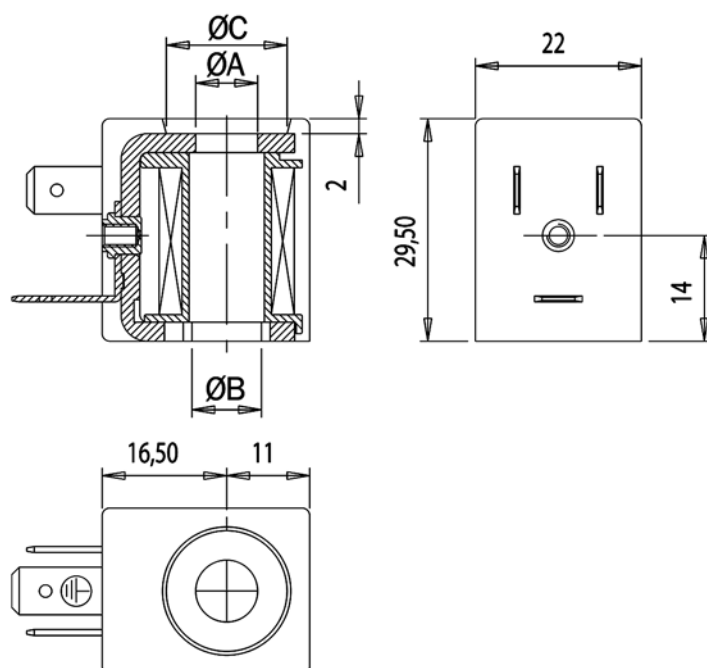
B Industrial connection with pole expansions



| 代碼 Cod | 288004 | 288005 |
|--------|--------|--------|
| Ø A    | 10.2   | 8.2    |
| Ø B    | 10.2   | 10.2   |
| Ø C    | 16     | 16     |

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 246

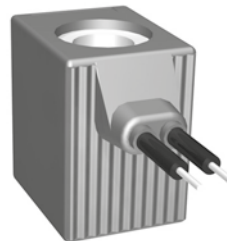
B 端子型電磁線圈  
B Industrial connection



| 代碼 Cod | 246001 | 246002 | 246004 | 246008 |
|--------|--------|--------|--------|--------|
| Ø A    | 6.2    | 8.2    | 10.2   | 10.2   |
| Ø B    | 9.2    | 9.2    | 10.2   | 10.2   |
| Ø C    | 16     | 16     | 16     | 13     |
| Ø D    | 16     | 16     | 16     | 13     |

## 278

出線型電磁線圈  
Lead wires connection



| 代碼 Cod | 278004 | 278005 |
|--------|--------|--------|
| Ø A    | 10.2   | 8.2    |
| Ø B    | 10.2   | 10.2   |
| Ø C    | 16     | 16     |
| Ø D    | 16     | 16     |

標準導線長度 200-1500 mm  
Standard lead wires length 200-1500mm  
\* 尺寸 12,5      \*\* 尺寸 15,5  
\* Dimension 12,5      \*\* Dimension 15,5

## 技術描述

|                 |                                                                        |
|-----------------|------------------------------------------------------------------------|
| 應用              | 液壓-空壓-蒸汽-燃氣                                                            |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                       |
| 指標平均功率          | AC額定消耗功率9VA<br>最大瞬間流入功率14VA<br>DC 額定消耗功率6.5W      其他功率可依客戶要求製作         |
| 工作週期            | ED 100% 於標示功率及溫度下                                                      |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                              |
| 絕緣等級            | 155°C (F) 180°C (H)                                                    |
| 漆包線絕緣等級         | 200°C (H)                                                              |
| 防護等級            | IP54(IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                     |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                           |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Hydraulic - Pneumatic - Steam - Gas                                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power 9 VA<br>Maximum inrush power 14 VA<br>DC absorbed power 6.5 W      Other powers on request                                                  |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

## Coil series 22x30.9

Codes | 246 | 278 | 301 | 394 | 401 |

### 301

B 端子型電磁線圈含增加磁場之結構

B Industrial connection with pole expansions



| 代碼 Cod | 301000 | 301001 |
|--------|--------|--------|
| Ø A    | 8.2    | 10.2   |
| Ø B    | 10.2   | 10.2   |
| Ø C    | 10.5   | 13     |
| Ø D    | 11.6   | 13     |

### 394

B 端子型電磁線圈含增加磁場之結構

B Industrial connection with pole expansions



| 代碼 Cod | 394000 | 394001 |
|--------|--------|--------|
| Ø A    | 10.2   | 8.2    |
| Ø B    | 10.2   | 10.2   |
| Ø C    | 13     | 13     |
| Ø D    | 13     | 13     |

\* 尺寸 18,3

\* Dimension 18,3

### 401

AMP 超級密封電磁線圈

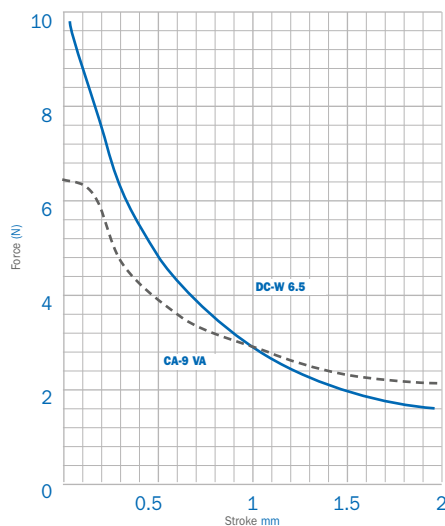
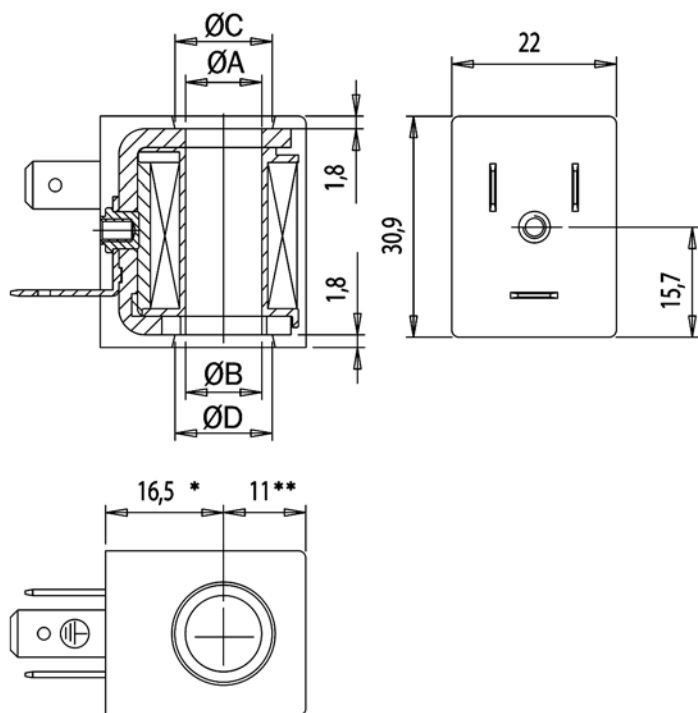
AMP Super Seal connection



| 代碼 Cod | 401000 | 401001 |
|--------|--------|--------|
| Ø A    | 9      | 10.2   |
| Ø B    | 9      | 10.2   |
| Ø C    | 17     | 13     |
| Ø D    | 13     | 13     |

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 204

A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 (DIN 43650) connection



| 代碼 Cod | 204000 | 204001 | 204002 | 204003 | 204005 |
|--------|--------|--------|--------|--------|--------|
| Ø A    | 8      | 8      | 7.2    | 10.2   | 8.2    |
| Ø B    | 8      | 9.1    | 9.1    | 10.2   | 8.2    |
| Ø C    | 16     | 16     | 16     | 16     | 16     |
| Ø D    | 11     | 11     | 11     | 11.5   | 15     |

| 代碼 Cod | 204006 | 204007* | 204008 | 204009 |
|--------|--------|---------|--------|--------|
| Ø A    | 8.2    | 10.2    | 10.2   | 8.1    |
| Ø B    | 10.2   | 10.2    | 10.2   | 8.1    |
| Ø C    | 16     | 13      | 13     | 13     |
| Ø D    | 11     | 13      | 13     | 15     |

備註: Note: \*包括二極管整流橋接  
\*Included diodes bridge rectifier

## 210

Kostal M24x1 電磁線圈  
Kostal M24x1 connection



| 代碼 Cod | 210000 | 210001 | 210002 | 210003 |
|--------|--------|--------|--------|--------|
| Ø A    | 10.2   | 8      | 8      | 7.2    |
| Ø B    | 10.2   | 8      | 9.1    | 9.1    |
| Ø C    | 13     | 16     | 16     | 16     |
| Ø D    | 13     | 11     | 11     | 11     |

| 代碼 Cod | 210004 | 210005 | 204006 |
|--------|--------|--------|--------|
| Ø A    | 10.2   | 8.2    | 8.1    |
| Ø B    | 10.2   | 8.2    | 8.1    |
| Ø C    | 16     | 16     | 13     |
| Ø D    | 11.5   | 15     | 15     |

## 技術描述

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽                                                             |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                        |
| 指標平均功率          | AC額定消耗功率11VA<br>最大瞬間流入功率16VA<br>DC 額定消耗功率7W<br>其他功率可依客戶要求製作             |
| 工作週期            | ED 100% 於標示功率及溫度下                                                       |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                               |
| 絕緣等級            | 155°C (F) 180°C (H)                                                     |
| 漆包線絕緣等級         | 200°C (H)                                                               |
| 防護等級            | IP54 (IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                      |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                            |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam                                                                                                                 |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power 11 VA<br>Maximum inrush power 16 VA<br>DC absorbed power 7 W<br>Other powers on request                                                     |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65. IP67 and IP69K solutions are feasible          |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

## Coil series 30x30.5

Codes | 204 | 210 | 370 | 396 |

### 370

出線型電磁線圈

Lead wires connection



| 代碼 Cod | 370000 | 370001 | 370002 | 370003 |
|--------|--------|--------|--------|--------|
| Ø A    | 10.2   | 8      | 8      | 7.2    |
| Ø B    | 10.2   | 8      | 9.1    | 9.1    |
| Ø C    | 13     | 16     | 16     | 16     |
| Ø D    | 13     | 11     | 11     | 11     |

| 代碼 Cod | 370004 | 370005 | 370006 |
|--------|--------|--------|--------|
| Ø A    | 10.2   | 8.2    | 8.1    |
| Ø B    | 10.2   | 8.2    | 8.1    |
| Ø C    | 16     | 16     | 13     |
| Ø D    | 11.5   | 15     | 15     |

標準導線長度200-600mm

Standard lead wires length 200-600 mm

比例 1:1

Scale 1:1

### 396

AMP 初級電磁線圈

AMP Junior connection

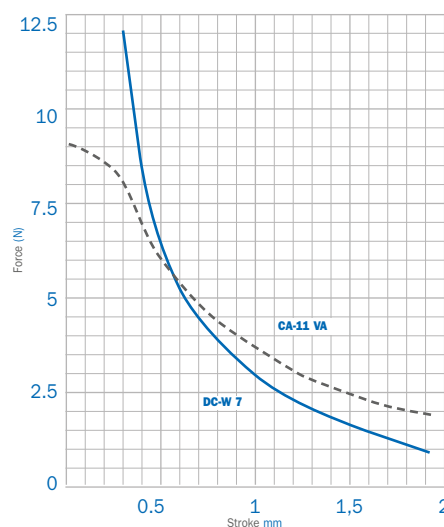
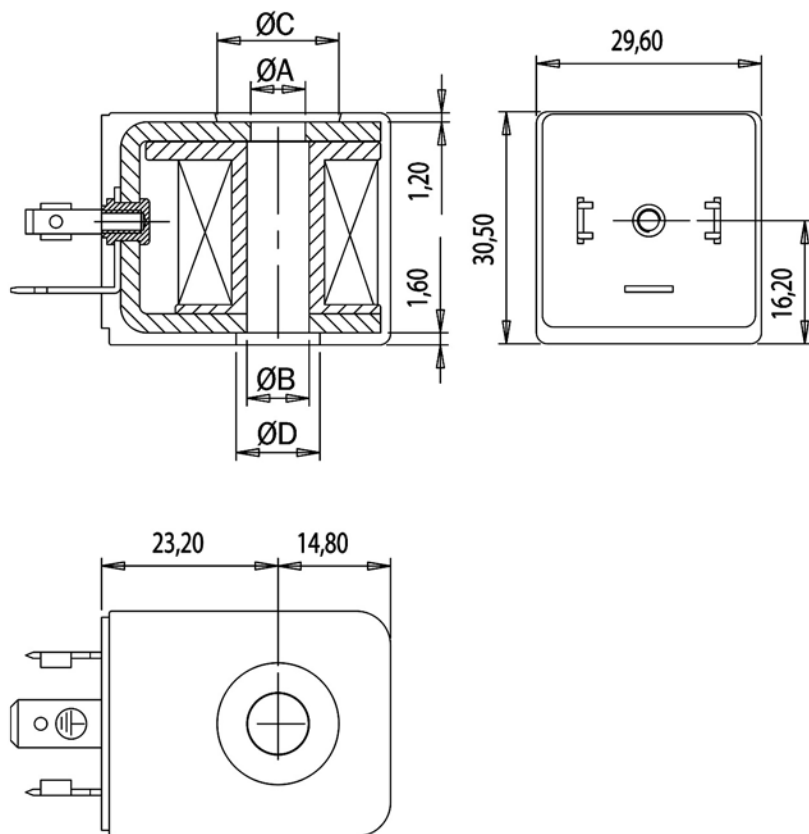


| 代碼 Cod | 396000 |
|--------|--------|
| Ø A    | 10.2   |
| Ø B    | 10.2   |
| Ø C    | 13     |
| Ø D    | 13     |

30x30.5

磁力/行程 曲線圖

Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 線圈系列 30x38.6

代碼 | 259 | 268 | 279 | 312 | 342 | 407 |

30x38.6

### 259

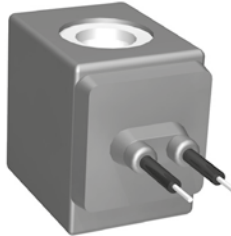
A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 (DIN 43650) connection



| 代碼 Cod | 259000 | 259001 |
|--------|--------|--------|
| Ø A    | 9.8    | 13.25  |
| Ø B    | 13.25  | 13.25  |
| Ø C    | 16.75  | 16.75  |
| Ø D    | 16.75  | 16.75  |

### 268

出線型電磁線圈  
Lead wires connection

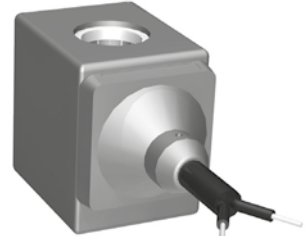


| 代碼 Cod | 268000 | 268001 |
|--------|--------|--------|
| Ø A    | 9.8    | 13.25  |
| Ø B    | 13.25  | 13.25  |
| Ø C    | 16.75  | 16.75  |
| Ø D    | 16.75  | 16.75  |

標準導線長度200-600 mm  
Standard lead wires length 200-600 mm

### 279

雙極,三極電纜電磁線圈  
Bipolar, tripolar cable connection



| 代碼 Cod | 279000 | 279001 |
|--------|--------|--------|
| Ø A    | 9.8    | 13.25  |
| Ø B    | 13.25  | 13.25  |
| Ø C    | 16.75  | 16.75  |
| Ø D    | 16.75  | 16.75  |

標準二極電纜長度600-2000 mm  
標準三極電纜長度450 mm  
Standard bipolar cable length 600-2000 mm  
Standard tripolar cable length 450 mm

### 技術描述

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽-燃氣                                                          |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                        |
| 指標平均功率          | AC額定消耗功率25VA<br>最大瞬間流入功率50VA<br>DC 額定消耗功率18W<br>其他功率可依客戶要求製作            |
| 工作週期            | ED 100% 於標示功率及溫度下                                                       |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                               |
| 絕緣等級            | 155°C (F) 180°C (H)                                                     |
| 漆包線絕緣等級         | 200°C (H)                                                               |
| 防護等級            | IP54 (IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                      |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                            |

### Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam - Gas                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power 25 VA<br>Maximum inrush power 50 VA<br>DC absorbed power 18 W<br>Other powers on request                                                    |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

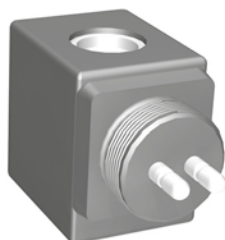


## Coil series 30x38.6

Codes | 259 | 268 | 279 | 312 | 342 | 407 |

### 312

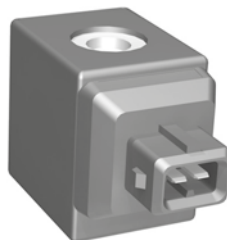
Kostal M.24x1 電磁線圈  
Kostal M.24x1 connection



| 代碼 Cod | 312000 | 312001 |
|--------|--------|--------|
| Ø A    | 9.8    | 13.25  |
| Ø B    | 13.25  | 13.25  |
| Ø C    | 16.75  | 16.75  |
| Ø D    | 16.75  | 16.75  |

### 342

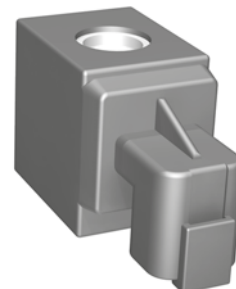
AMP 初級電磁線圈  
AMP Junior connection



| 代碼 Cod | 342000 | 342001 |
|--------|--------|--------|
| Ø A    | 9.8    | 13.25  |
| Ø B    | 13.25  | 13.25  |
| Ø C    | 16.75  | 16.75  |
| Ø D    | 16.75  | 16.75  |

### 407

德規電磁線圈  
Deutsch connection

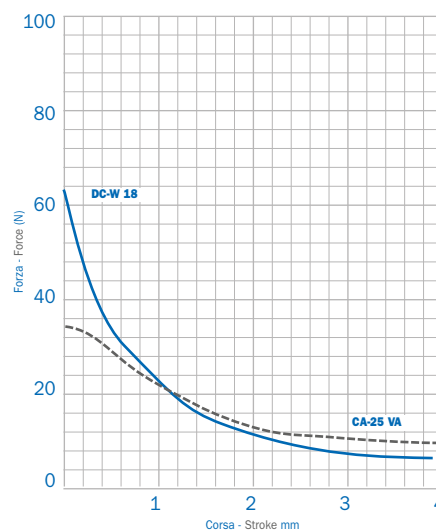
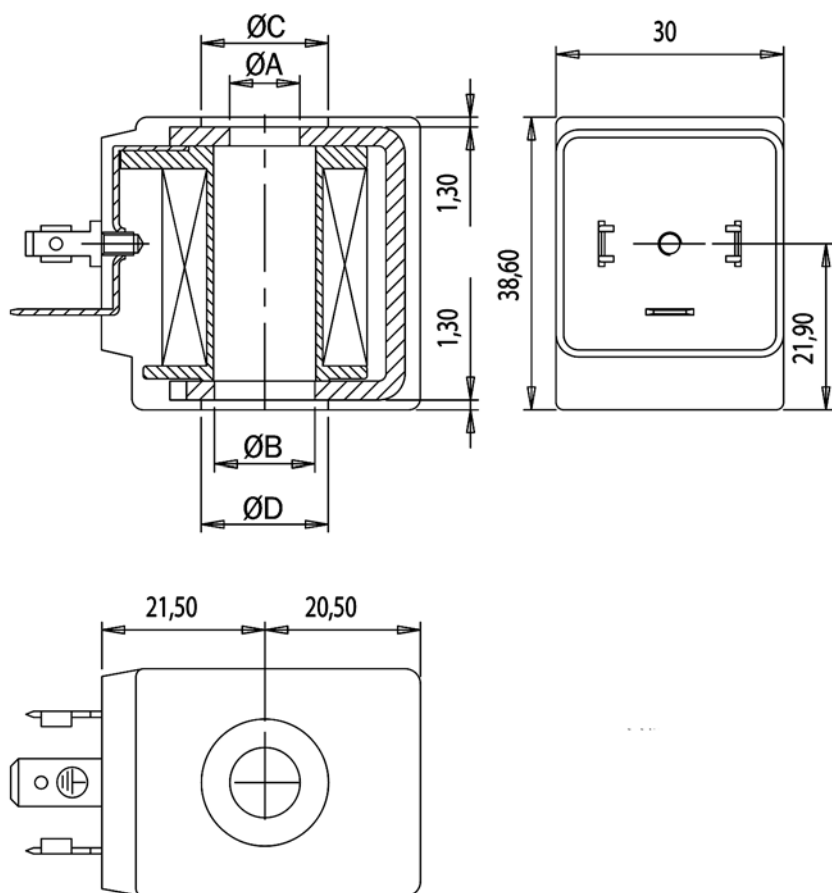


| 代碼 Cod | 407000 | 407001 |
|--------|--------|--------|
| Ø A    | 9.8    | 13.25  |
| Ø B    | 13.25  | 13.25  |
| Ø C    | 16.75  | 16.75  |
| Ø D    | 16.75  | 16.75  |

30x38.6

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 387

A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈

A EN 175301-803 ISO 4400 (DIN 43650) connection



代碼 Cod 387000

Ø A 13.1

Ø B 13.1

Ø C 16.5

Ø D 16.5

## 388

AMP 初級電磁線圈

AMP Junior connection



代碼 Cod 388000

Ø A 13.1

Ø B 13.1

Ø C 16.5

Ø D 16.5

## 技術描述

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽-燃氣                                                          |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                        |
| 指標平均功率          | AC額定消耗功率27VA<br>最大瞬間流入功率50VA<br>DC 額定消耗功率19W 其他功率可依客戶要求製作               |
| 工作週期            | ED 100% 於標示功率及溫度下                                                       |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                               |
| 絕緣等級            | 155°C (F) 180°C (H)                                                     |
| 漆包線絕緣等級         | 200°C (H)                                                               |
| 防護等級            | IP54 (IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                      |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                            |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam - Gas                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power 27 VA<br>Maximum inrush power 50 VA<br>DC absorbed power 19 W Other powers on request                                                       |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

## Coil series 30x39.8

Codes | 387 | 388 | 389 |

### 389

出線型電磁線圈

Lead wires connection



|        |        |
|--------|--------|
| 代碼 Cod | 389000 |
| Ø A    | 13.1   |
| Ø B    | 13.1   |
| Ø C    | 16.5   |
| Ø D    | 16.5   |

標準導線長度 200-300-600 mm

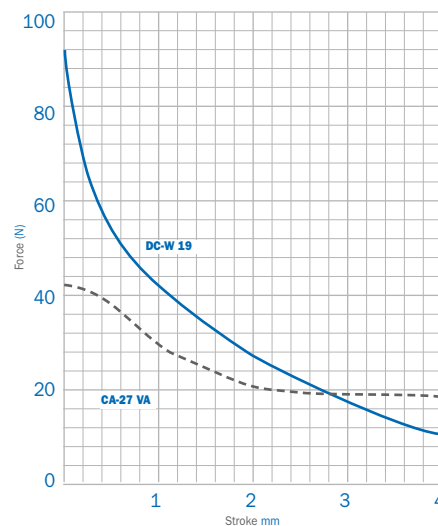
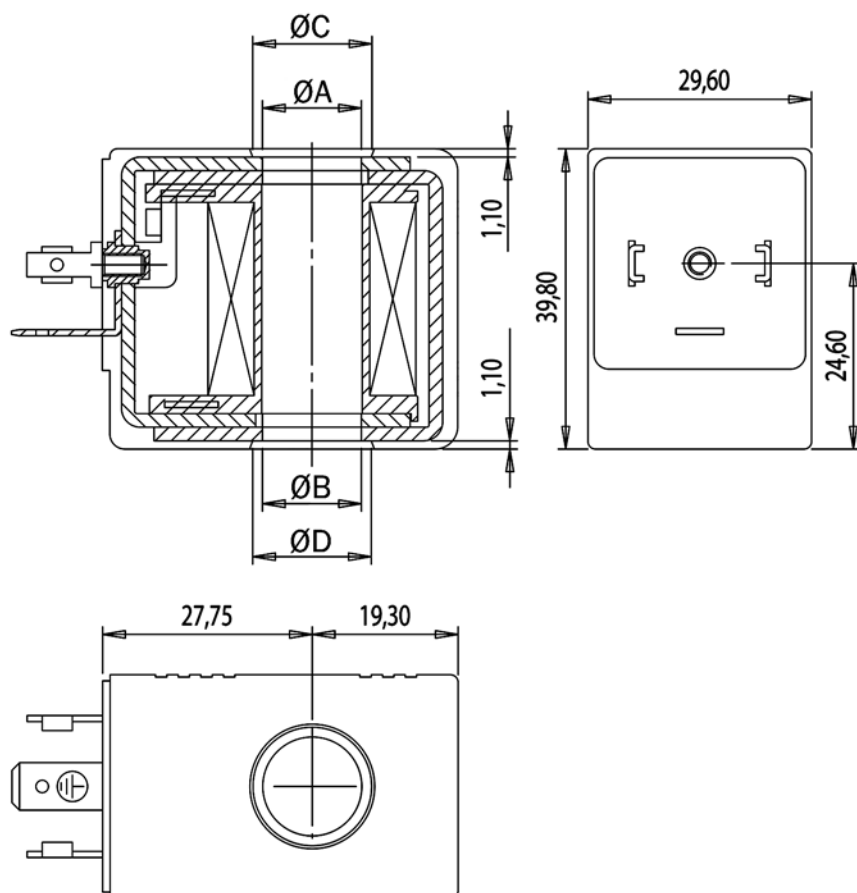
Standard lead wires length 200-300-600 mm

比例 1:1

Scale 1:1

磁力/行程 曲線圖

Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 314

A EN 175301-803 ISO 4400  
(DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400  
(DIN 43650) connection



|        |        |
|--------|--------|
| 代碼 Cod | 314000 |
| Ø A    | 13.15  |
| Ø B    | 13.15  |
| Ø C    | 17     |
| Ø D    | 17     |

## 315

Kostal M27x1 電磁線圈  
Kostal M27x1 connection



|        |        |
|--------|--------|
| 代碼 Cod | 315000 |
| Ø A    | 13.15  |
| Ø B    | 13.15  |
| Ø C    | 17     |
| Ø D    | 17     |

## 316

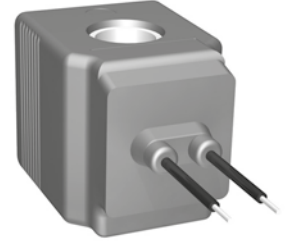
AMP 初級電磁線圈  
AMP Junior connection



|        |        |
|--------|--------|
| 代碼 Cod | 316000 |
| Ø A    | 13.15  |
| Ø B    | 13.15  |
| Ø C    | 17     |
| Ø D    | 17     |

## 302

出線型電磁線圈  
Lead wires connection



|        |        |
|--------|--------|
| 代碼 Cod | 302000 |
| Ø A    | 13.15  |
| Ø B    | 13.15  |
| Ø C    | 17     |
| Ø D    | 17     |

標準導線長度 200-300-600 mm  
Standard lead wires length 200-300-600 mm

## 技術描述

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽-燃氣                                                          |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                        |
| 指標平均功率          | AC額定消耗功率37VA<br>最大瞬間流入功率70VA<br>DC 額定消耗功率26W<br>其他功率可依客戶要求製作            |
| 工作週期            | ED 100% 於標示功率及溫度下                                                       |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                               |
| 絕緣等級            | 155°C (F) 180°C (H)                                                     |
| 漆包線絕緣等級         | 200°C (H)                                                               |
| 防護等級            | IP54 (IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                      |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                            |

## Technical description

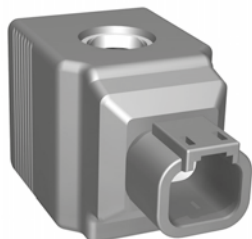
|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam - Gas                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power 37 VA<br>Maximum inrush power 70 VA<br>DC absorbed power 26 W<br>Other powers on request                                                    |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

## Coil series 36x38.5

Codes | 314 | 315 | 316 | 302 | 392 | 416 | 417 | 418 |

### 392

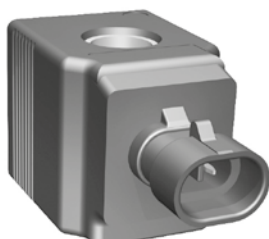
德規電磁線圈  
Deutsch connection



|        |        |
|--------|--------|
| 代碼 Cod | 392000 |
| Ø A    | 13.15  |
| Ø B    | 13.15  |
| Ø C    | 17     |
| Ø D    | 17     |

### 416

AMP超級密封電磁線圈  
AMP super seal connection



|        |        |
|--------|--------|
| 代碼 Cod | 416000 |
| Ø A    | 13.15  |
| Ø B    | 13.15  |
| Ø C    | 17     |
| Ø D    | 17     |

### 417

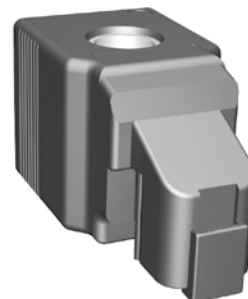
AMP超級密封電磁線圈  
AMP super seal connection



|        |        |
|--------|--------|
| 代碼 Cod | 417000 |
| Ø A    | 13.15  |
| Ø B    | 13.15  |
| Ø C    | 17     |
| Ø D    | 17     |

### 418

德規電磁線圈  
Deutsch connection

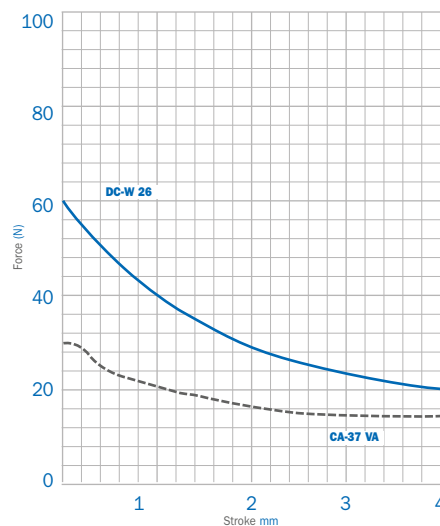
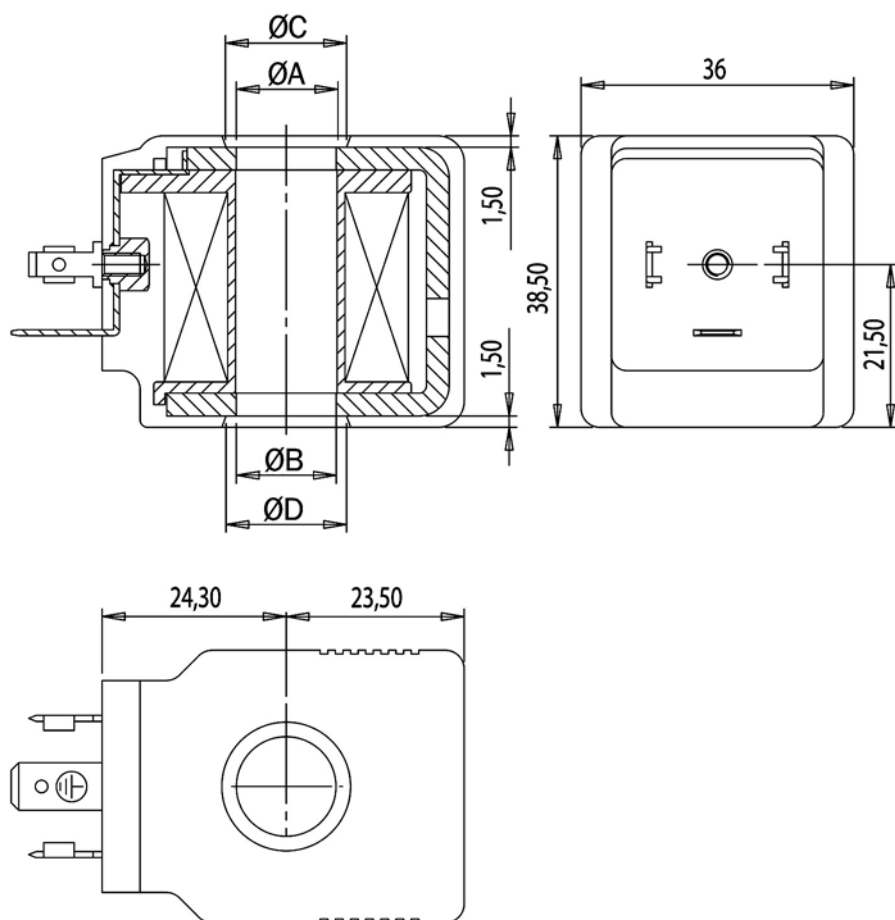


|        |        |
|--------|--------|
| 代碼 Cod | 418000 |
| Ø A    | 13.15  |
| Ø B    | 13.15  |
| Ø C    | 17     |
| Ø D    | 17     |

36x38.5

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 385

A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 (DIN 43650) connection



|        |        |
|--------|--------|
| 代碼 Cod | 385000 |
| Ø A    | 14.2   |
| Ø B    | 14.2   |
| Ø C    | 16     |
| Ø D    | 27.4   |

## 384

AMP 初級電磁線圈  
AMP Junior connection



|        |        |
|--------|--------|
| 代碼 Cod | 384000 |
| Ø A    | 14.2   |
| Ø B    | 14.2   |
| Ø C    | 16     |
| Ø D    | 27.4   |

## 技術描述

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽-燃氣                                                          |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                        |
| 指標平均功率          | AC 額定消耗功率37VA<br>DC 額定消耗功率12 - 30W                                      |
| 工作週期            | ED 100% 於標示功率及溫度下                                                       |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                               |
| 絕緣等級            | 155°C (F) 180°C (H)                                                     |
| 漆包線絕緣等級         | 200°C (H)                                                               |
| 防護等級            | IP54 (IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                      |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                            |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam - Gas                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power around 37 VA<br>DC absorbed power 12 - 30 W                                                                                                 |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |



## Coil series 36x40

Codes | 385 | 384 | 398 | 480 |

### 398

出線型電磁線圈

Lead wires connection



|        |        |
|--------|--------|
| 代碼 Cod | 398000 |
| Ø A    | 14.2   |
| Ø B    | 14.2   |
| Ø C    | 16     |
| Ø D    | 27.4   |

標準導線長度 200-300-600 mm

Standard lead wires length 200-300-600 mm

### 480

德規電磁線圈

Deutsch connection



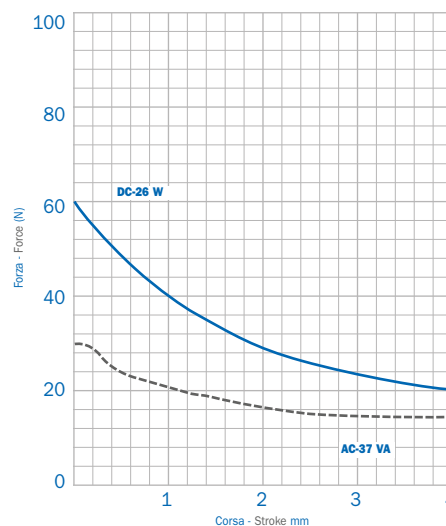
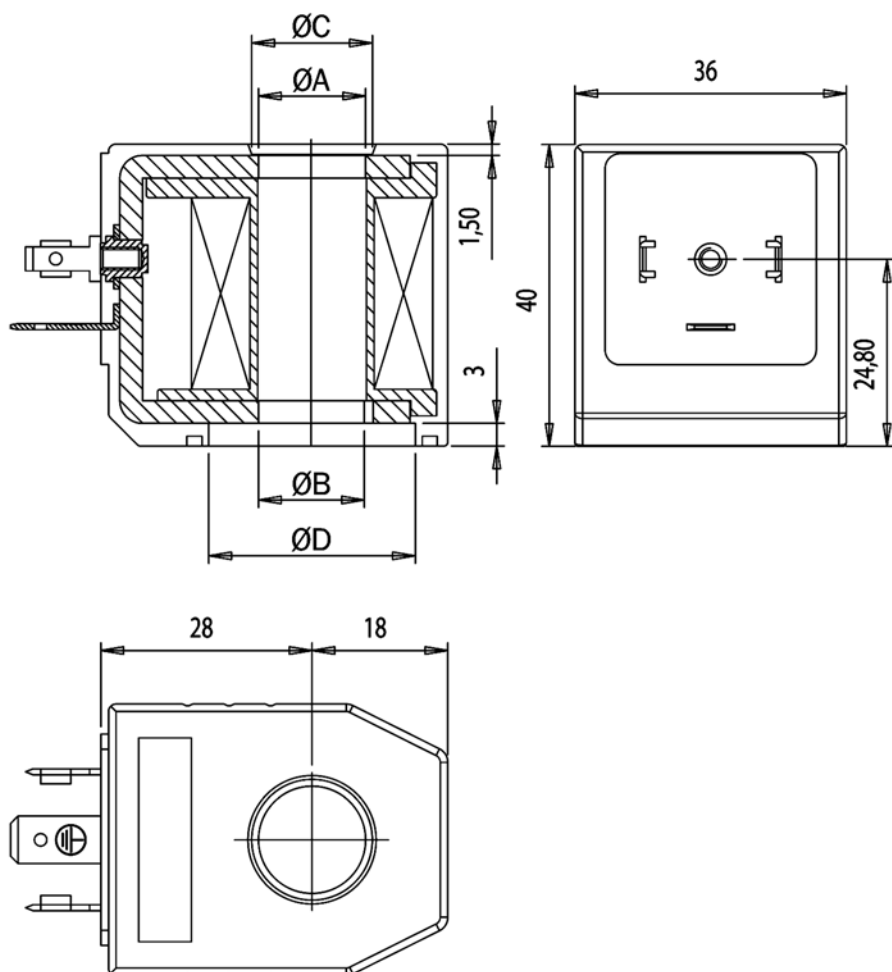
|        |        |
|--------|--------|
| 代碼 Cod | 480000 |
| Ø A    | 14.2   |
| Ø B    | 14.2   |
| Ø C    | 16     |
| Ø D    | 27.4   |

比例 1:1

Scale 1:1

磁力/行程 曲線圖

Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used  
operators with 10% reduced nominal  
voltage. The graph values are indicative.

## 305

A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 connection (DIN 43650)



|        |        |
|--------|--------|
| 代碼 Cod | 305000 |
| Ø A    | 16.1   |
| Ø B    | 16.1   |
| Ø C    | 20     |
| Ø D    | 20     |

## 306

Kostal M27x1 電磁線圈  
Kostal M27x1 connection



|        |        |
|--------|--------|
| 代碼 Cod | 306000 |
| Ø A    | 16.1   |
| Ø B    | 16.1   |
| Ø C    | 20     |
| Ø D    | 20     |

## 308

AMP 初級電磁線圈  
AMP Junior connection



|        |        |
|--------|--------|
| 代碼 Cod | 308000 |
| Ø A    | 16.1   |
| Ø B    | 16.1   |
| Ø C    | 20     |
| Ø D    | 20     |

## 技術描述

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽-燃氣                                                          |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                        |
| 指標平均功率          | AC額定消耗功率45VA<br>最大瞬間流入功率110VA<br>額定消耗功率28W<br>其他功率可依客戶要求製作              |
| 工作週期            | ED 100% 於標示功率及溫度下                                                       |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                               |
| 絕緣等級            | 155°C (F) 180°C (H)                                                     |
| 漆包線絕緣等級         | 200°C (H)                                                               |
| 防護等級            | IP54 (IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                      |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                            |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam - Gas                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power 45 VA<br>Maximum inrush power 110 VA<br>DC absorbed power 28 W<br>Other powers on request                                                   |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

## Coil series 36x50

Codes | 305 | 306 | 308 | 309 | 391 |

36x50

### 309

出線型電磁線圈

Lead wires connection



|        |        |
|--------|--------|
| 代碼 Cod | 309000 |
| Ø A    | 16.1   |
| Ø B    | 16.1   |
| Ø C    | 20     |
| Ø D    | 20     |

標準導線長度200-300-600 mm  
Standard lead wires length 200-300-600 mm

### 391

德規電磁線圈

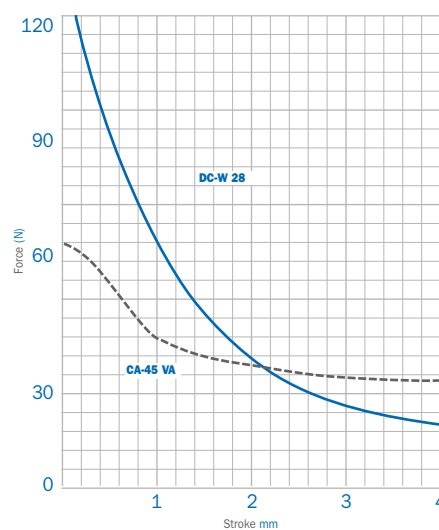
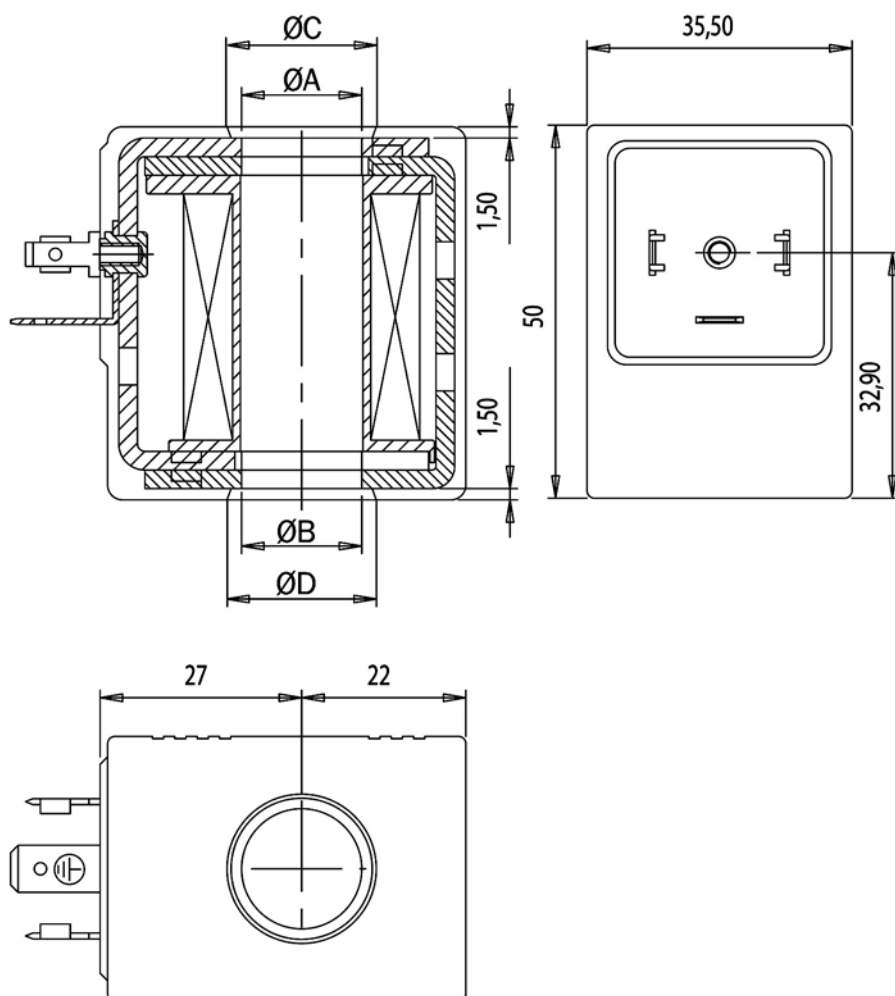
Deutsch connection



|        |        |
|--------|--------|
| 代碼 Cod | 391000 |
| Ø A    | 16.1   |
| Ø B    | 16.1   |
| Ø C    | 20     |
| Ø D    | 20     |

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 254

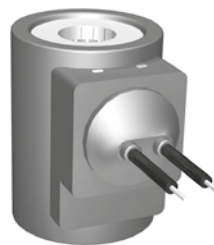
A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 (DIN 43650) connection



| 代碼 Cod | 254000 | 254001 | 254002 | 254003 |
|--------|--------|--------|--------|--------|
| Ø A    | 14.1   | 14.1   | 16.1   | 16.1   |
| Ø B    | 14.1   | 14.1   | 16.1   | 16.1   |
| Ø C    | 27.2   | 17     | 20     | 20     |
| Ø D    | 27.2   | 17     | 20     | 26     |

## 340

出線型電磁線圈  
Lead wires connection



| 代碼 Cod | 340000 | 340001 | 340002 | 340003 |
|--------|--------|--------|--------|--------|
| Ø A    | 14.1   | 14.1   | 16.1   | 16.1   |
| Ø B    | 14.1   | 14.1   | 16.1   | 16.1   |
| Ø C    | 27.2   | 17     | 20     | 20     |
| Ø D    | 27.2   | 17     | 20     | 26     |

標準導線長度200-500-1000 mm  
Standard lead wires length 200-500-1000 mm

## 技術描述

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽-燃氣                                                          |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                        |
| 指標平均功率          | AC額定消耗功率35VA<br>最大瞬間流入功率70VA<br>DC 額定消耗功率26W<br>其他功率可依客戶要求製作            |
| 工作週期            | ED 100% 於標示功率及溫度下                                                       |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                               |
| 絕緣等級            | 155°C (F) 180°C (H)                                                     |
| 漆包線絕緣等級         | 200°C (H)                                                               |
| 防護等級            | IP54 (IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                      |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                            |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam - Gas                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power 35 VA<br>Maximum inrush power 70 VA<br>DC absorbed power 26 W<br>Other powers on request                                                    |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

## Coil series 37x50.4

Codes | 254 | 340 | 341 | 213 |

### 341

AMP 初級電磁線圈

AMP Junior connection

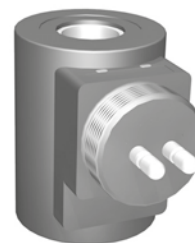


| 代碼 Cod | 341000 | 341001 | 341002 | 341003 |
|--------|--------|--------|--------|--------|
| Ø A    | 14.1   | 14.1   | 16.1   | 16.1   |
| Ø B    | 14.1   | 14.1   | 16.1   | 16.1   |
| Ø C    | 27.2   | 17     | 20     | 20     |
| Ø D    | 27.2   | 17     | 20     | 26     |

### 213

Kostal M27x1 電磁線圈

Kostal M27x1 connection



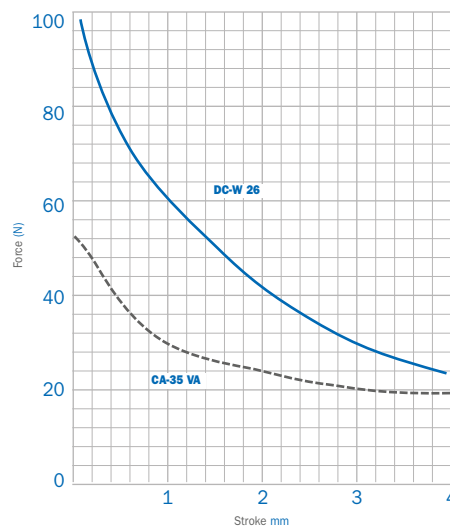
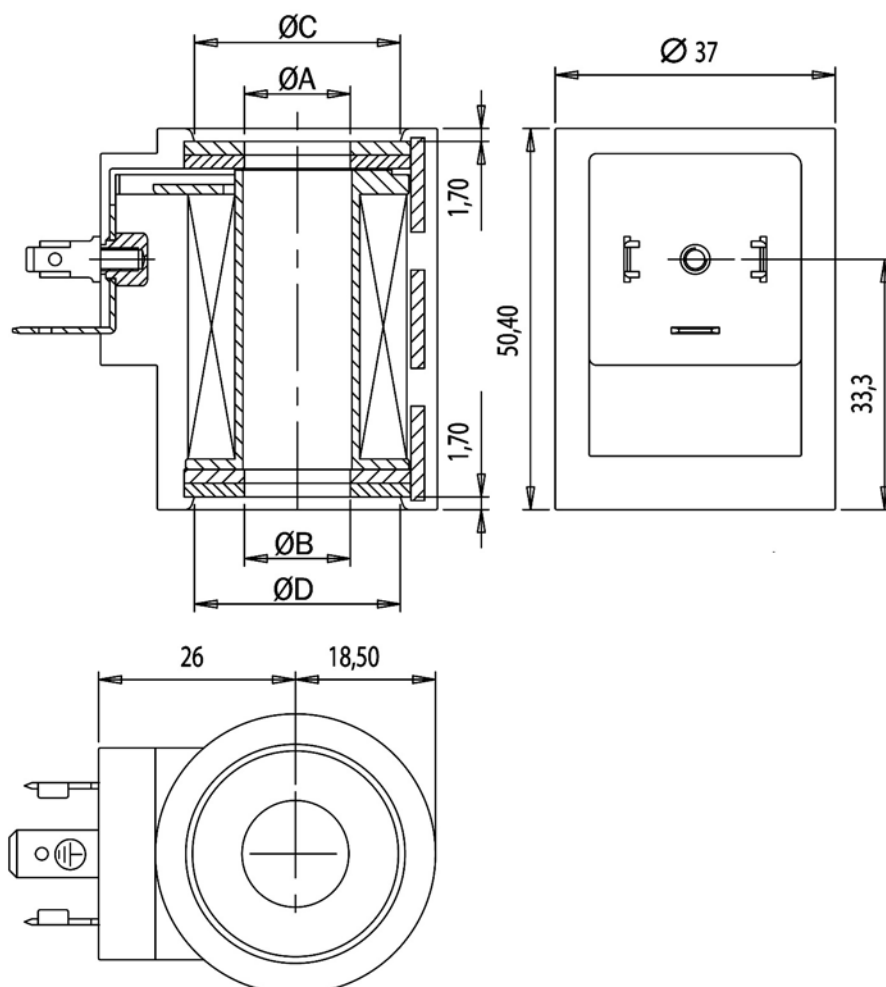
| 代碼 Cod | 213000 | 213001 | 213002 | 213003 |
|--------|--------|--------|--------|--------|
| Ø A    | 14.1   | 14.1   | 16.1   | 16.1   |
| Ø B    | 14.1   | 14.1   | 16.1   | 16.1   |
| Ø C    | 27.2   | 17     | 20     | 20     |
| Ø D    | 27.2   | 17     | 20     | 26     |

比例 1:1

Scale 1:1

磁力/行程 曲線圖

Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used  
operators with 10% reduced nominal  
voltage. The graph values are indicative.

## 463

A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 (DIN 43650) connection



| 代碼 Cod | 463000 | 463002 |
|--------|--------|--------|
| Ø A    | 19.2   | 19.2   |
| Ø B    | 19.2   | 19.2   |
| Ø C    | 24     | 24     |
| Ø D    | 27     | 24     |

## 464

AMP 初級電磁線圈  
AMP Junior connection



| 代碼 Cod | 464000 | 464002 |
|--------|--------|--------|
| Ø A    | 19.2   | 19.2   |
| Ø B    | 19.2   | 19.2   |
| Ø C    | 24     | 24     |
| Ø D    | 27     | 24     |

## 技術描述

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽-燃氣                                                          |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                        |
| 指標平均功率          | AC 額定消耗功率40VA<br>DC 額定消耗功率15-36W                                        |
| 工作週期            | ED 100% 於標示功率及溫度下                                                       |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                               |
| 絕緣等級            | 155°C (F) 180°C (H)                                                     |
| 漆包線絕緣等級         | 200°C (H)                                                               |
| 防護等級            | IP54 (IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                      |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                            |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam - Gas                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power around 40 VA<br>DC absorbed power 15 - 36 W                                                                                                 |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

## Coil series 45x55

Codes | 463 | 464 | 465 | 466 |

### 465

出線型單頭雙出線  
Cable connection



| 代碼 Cod | 465000 | 465002 |
|--------|--------|--------|
| Ø A    | 19.2   | 19.2   |
| Ø B    | 19.2   | 19.2   |
| Ø C    | 24     | 24     |
| Ø D    | 27     | 24     |

標準二極電纜長度 600-2000 mm  
Standard bipolar cable length 600-2000 mm

### 466

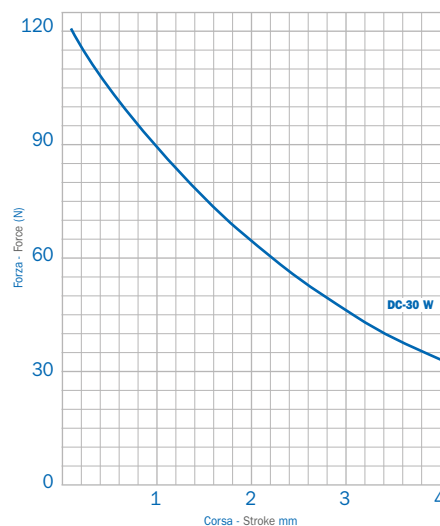
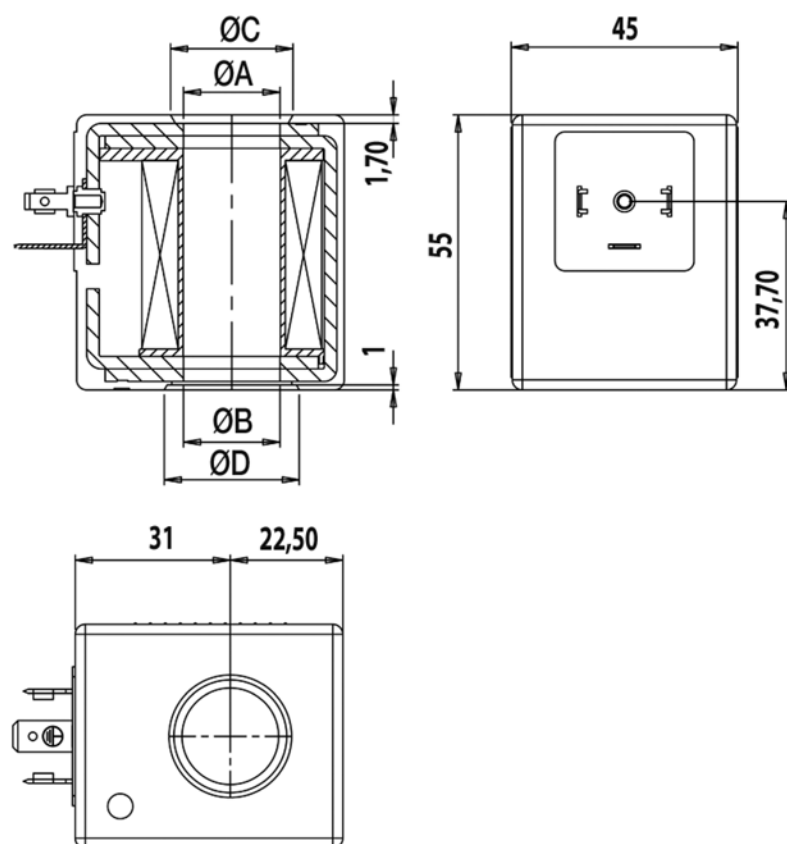
德規電磁線圈  
Deutsch connection



| 代碼 Cod | 466000 | 466002 |
|--------|--------|--------|
| Ø A    | 19.2   | 19.2   |
| Ø B    | 19.2   | 19.2   |
| Ø C    | 24     | 24     |
| Ø D    | 27     | 24     |

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.



## 247

A EN 175301-803 ISO 4400  
(DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400  
(DIN 43650) connection



代碼 Cod 247001 247002

|     |      |      |
|-----|------|------|
| Ø A | 19.2 | 19.2 |
| Ø B | 19.2 | 19.2 |
| Ø C | 24   | 24.5 |
| Ø D | 24   | 24.5 |
| E   | /    | /    |

## 247

A EN 175301-803 ISO 4400  
(DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400  
(DIN 43650) connection



代碼 Cod 247000 247003

|     |       |      |
|-----|-------|------|
| Ø A | 19.2  | 19.2 |
| Ø B | 19.2  | 19.2 |
| Ø C | 20.50 | 20.5 |
| Ø D | 20.50 | 24.5 |
| E   | 2     | 2    |

## 307

Kostal M27x1 電磁線圈  
Kostal M27x1 connection



代碼 Cod 307001 307002

|     |      |      |
|-----|------|------|
| Ø A | 19.2 | 19.2 |
| Ø B | 19.2 | 19.2 |
| Ø C | 24   | 24.5 |
| Ø D | 24   | 24.5 |
| E   | /    | /    |

## 307

Kostal M27x1 電磁線圈  
Kostal M27x1 connection



代碼 Cod 307000 307003

|     |       |      |
|-----|-------|------|
| Ø A | 19.2  | 19.2 |
| Ø B | 19.2  | 19.2 |
| Ø C | 20.50 | 20.5 |
| Ø D | 20.50 | 24.5 |
| E   | 2     | 2    |

## 技術描述

|                 |                                                                          |
|-----------------|--------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽-燃氣                                                           |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                         |
| 指標平均功率          | AC額定消耗功率45VA<br>最大瞬間流入功率110VA<br>DC 額定消耗功率28W<br>其他功率可依客戶要求製作            |
| 工作週期            | ED 100% 於標示功率及溫度下                                                        |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                                |
| 絕緣等級            | 155°C (F) 180°C (H)                                                      |
| 漆包線絕緣等級         | 200°C (H)                                                                |
| 防護等級            | IP54 (IEC 60529) / 需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                       |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                             |

## Technical description

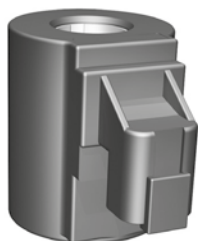
|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam - Gas                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power 45 VA<br>Maximum inrush power 110 VA<br>DC absorbed power 28 W<br>Other powers on request                                                   |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

## Coil series 46x58

Codes | 247 | 307 | 412 | 413 | 414 | 415 |

### 412

德規電磁線圈  
Deutsch connection



|        |        |
|--------|--------|
| 代碼 Cod | 412000 |
| Ø A    | 19.2   |
| Ø B    | 19.2   |
| Ø C    | 21     |
| Ø D    | 21     |

### 413

AMP超級密封電磁線圈  
AMP super seal connection



|        |        |
|--------|--------|
| 代碼 Cod | 413000 |
| Ø A    | 19.2   |
| Ø B    | 19.2   |
| Ø C    | 21     |
| Ø D    | 21     |

### 414

出線型電磁線圈  
Lead wires connection



|        |        |
|--------|--------|
| 代碼 Cod | 414000 |
| Ø A    | 19.2   |
| Ø B    | 19.2   |
| Ø C    | 21     |
| Ø D    | 21     |

標準導線長度200-600 mm  
Standard lead wires length 200-600 mm

### 415

AMP 初級電磁線圈  
AMP junior connection

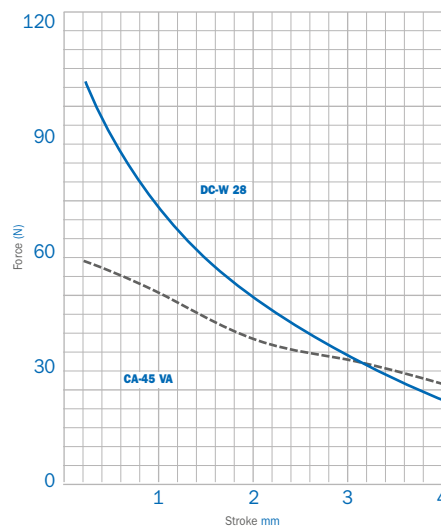
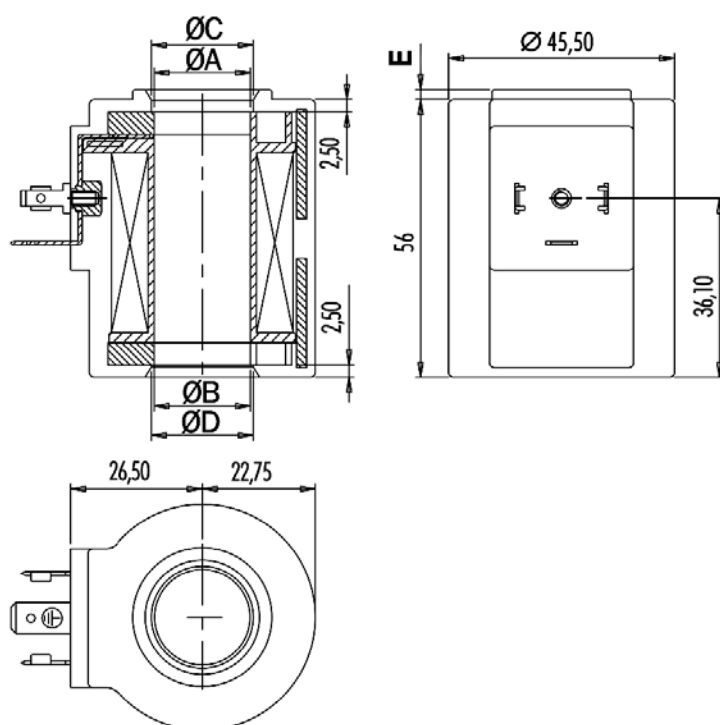


|        |        |
|--------|--------|
| 代碼 Cod | 415000 |
| Ø A    | 19.2   |
| Ø B    | 19.2   |
| Ø C    | 21     |
| Ø D    | 21     |

46x58

比例 1:1,5  
Scale 1:1,5

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下,  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 395

A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 (DIN 43650) connection



|        |        |
|--------|--------|
| 代碼 Cod | 395002 |
| Ø A    | 25.5   |
| Ø B    | 25.5   |
| Ø C    | 32.7   |
| Ø D    | 32.7   |

## 467

德規電磁線圈  
Deutsch connection



|        |        |
|--------|--------|
| 代碼 Cod | 467000 |
| Ø A    | 25.5   |
| Ø B    | 25.5   |
| Ø C    | 32.7   |
| Ø D    | 32.7   |

## 技術描述

|                 |                                                                         |
|-----------------|-------------------------------------------------------------------------|
| 應用              | 油壓-液壓-空壓-蒸汽-燃氣                                                          |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求                        |
| 指標平均功率          | AC 額定消耗功率75VA<br>DC 額定消耗功率45 - 60W                                      |
| 工作週期            | ED 100% 於標示功率及溫度下                                                       |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                                               |
| 絕緣等級            | 155°C (F) 180°C (H)                                                     |
| 漆包線絕緣等級         | 200°C (H)                                                               |
| 防護等級            | IP54 (IEC 60529) /需使用於適當的端子<br>IP65防護等級/需使用於適當的墊片<br>可達到IP67及IP69K之防護等級 |
| 標準顏色            | 黑色                                                                      |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺封裝磁路<br>其他熱塑性材料可依要求<br>抗氧化保護之金屬元件                            |

## Technical description

|                                                  |                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Oil Hydraulic - Hydraulic - Pneumatic - Steam - Gas                                                                                                           |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                                             |
| Indicative average power                         | AC absorbed power around 75 VA<br>DC absorbed power 45 - 60 W                                                                                                 |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                                                  |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                                        |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                                           |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                                     |
| Protection grade                                 | IP54 (IEC 60529) with the appropriate connector<br>With appropriate gaskets the protection grade becomes IP65<br>IP67 and IP69K solutions are feasible        |
| Standard colour                                  | Black                                                                                                                                                         |
| Construction characteristics for class 155°C (F) | Magnetic circuit encapsulated with fibre-glass reinforced polyamide<br>Other thermoplastic materials on request<br>Metallic parts protected against oxidation |

## Coil series 65x76.4

Codes | 395 | 467 | 468 | 469 |

### 468

AMP 初級電磁線圈

AMP Junior connection



|        |        |
|--------|--------|
| 代碼 Cod | 468000 |
| Ø A    | 25.5   |
| Ø B    | 25.5   |
| Ø C    | 32.7   |
| Ø D    | 32.7   |

### 469

出線型單頭雙出線

Cable connection



|        |        |
|--------|--------|
| 代碼 Cod | 469000 |
| Ø A    | 25.5   |
| Ø B    | 25.5   |
| Ø C    | 32.7   |
| Ø D    | 32.7   |

標準二極電纜長度 600-2000 mm

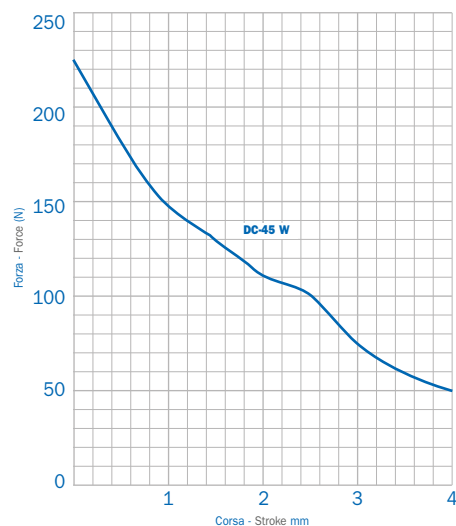
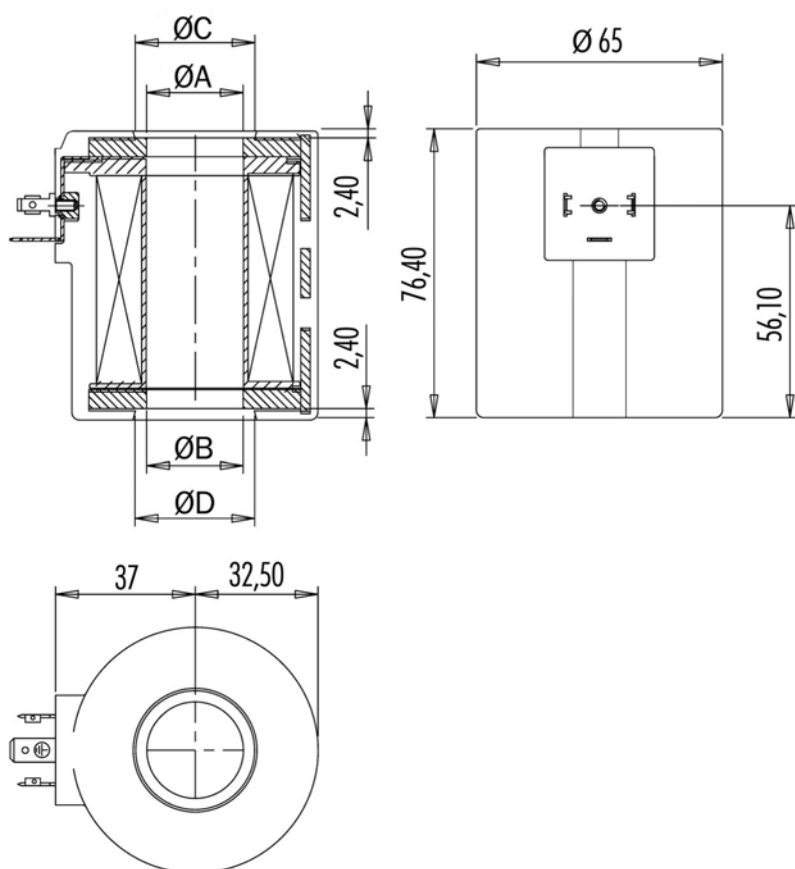
Standard bipolar cable length 600-2000 mm

比例 1:1

Scale 1:1

磁力/行程 曲線圖

Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

| 線圈系列<br>COIL SERIES | 代碼<br>CODES     | 應用<br>APPLICATION                                                                                                                     | 頁數<br>PAGE |
|---------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------|------------|
|                     |                 | <div>油壓<br/>Oil Hydraulic</div> <div>液壓<br/>Hydraulic</div> <div>空氣<br/>Pneumatic</div> <div>蒸汽<br/>Steam</div> <div>氣體<br/>Gas</div> |            |
| 37x51               | 471   474   475 | <div>油壓</div> <div>液壓</div> <div>空氣</div> <div>蒸汽</div> <div>氣體</div>                                                                 | 44         |
| 45x54.5             | 472   476   477 | <div>油壓</div> <div>液壓</div> <div>空氣</div> <div>蒸汽</div> <div>氣體</div>                                                                 | 46         |
| 65x72.5             | 473   478   479 | <div>油壓</div> <div>液壓</div> <div>空氣</div> <div>蒸汽</div> <div>氣體</div>                                                                 | 48         |

| 代碼<br>COD | 頁數<br>PAG |
|-----------|-----------|
| 471000    | 44        |
| 472000    | 46        |
| 472001    | 46        |
| 473000    | 48        |
| 474000    | 44        |
| 475000    | 45        |
| 476000    | 46        |
| 476001    | 46        |
| 477000    | 47        |
| 477001    | 47        |
| 478000    | 48        |
| 479000    | 49        |

## 471

A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 (DIN 43650) connection



代碼 Cod 471000  
Ø A 19.1

## 474

AMP 初級電磁線圈  
AMP Junior connection



代碼 Cod 474000  
Ø A 19.1

## 技術描述

|                 |                                                  |
|-----------------|--------------------------------------------------|
| 應用              | 液壓-空壓-蒸汽-燃氣                                      |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求 |
| 指標平均功率          | AC 額定消耗功率35VA<br>DC 額定消耗功率26 - 30W               |
| 工作週期            | ED 100% 於標示功率及溫度下                                |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                        |
| 絕緣等級            | 155°C (F) 180°C (H)                              |
| 漆包線絕緣等級         | 200°C (H)                                        |
| 防護等級            | IP65 (IEC/EN 60529) 和 IP69K 需使用於適當的端子            |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺之封裝磁路<br>抗氧化保護之金屬元件                   |

## Technical description

|                                                  |                                                                                                                                          |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Hydraulic - Pneumatic - Steam - Gas                                                                                                      |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                        |
| Indicative average power                         | AC absorbed power around 35 VA<br>DC absorbed power 26 - 30 W                                                                            |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                             |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                   |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                      |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                |
| Protection grade                                 | IP65 (IEC/EN 60529) and IP69K with the appropriate connector                                                                             |
| Construction characteristics for class 155°C (F) | External magnetic circuit covers the incapsulated coil in fibre-glass reinforced polyamide<br>Metallic parts protected against oxidation |



## Coil series 37x51

Codes | 471 | 474 | 475 |

### 475

德規電磁線圈

Deutsch connection



代碼 Cod

475000

Ø A

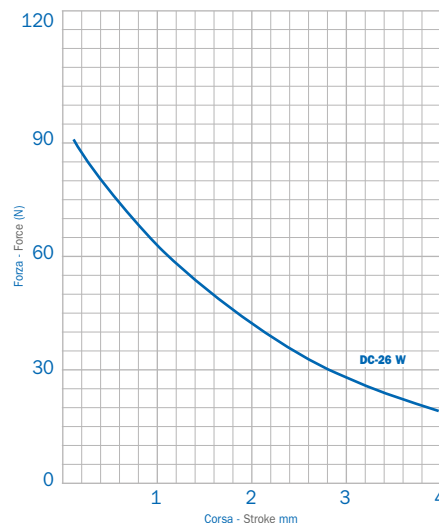
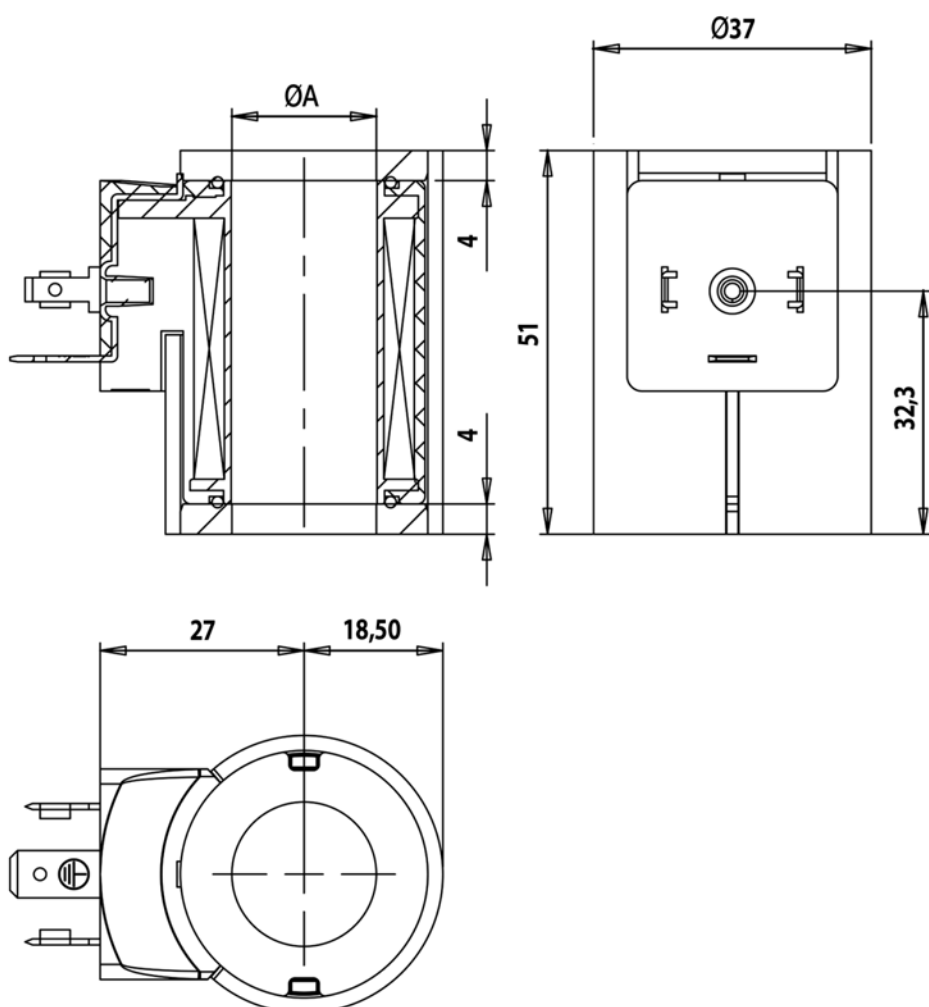
19.1

比例 1:1

Scale 1:1

磁力/行程 曲線圖

Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used  
operators with 10% reduced nominal  
voltage. The graph values are indicative.

## 472

A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 (DIN 43650) connection



|        |        |        |
|--------|--------|--------|
| 代碼 Cod | 472000 | 472001 |
| Ø A    | 22.1   | 23.1   |

## 476

AMP 初級電磁線圈  
AMP Junior connection



|        |        |        |
|--------|--------|--------|
| 代碼 Cod | 476000 | 476001 |
| Ø A    | 22.1   | 23.1   |

## 技術描述

|                 |                                                  |
|-----------------|--------------------------------------------------|
| 應用              | 液壓-空壓-蒸汽-燃氣                                      |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求 |
| 指標平均功率          | AC 額定消耗功率45VA<br>DC 額定消耗功率30-38W                 |
| 工作週期            | ED 100% 於標示功率及溫度下                                |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                        |
| 絕緣等級            | 155°C (F) 180°C (H)                              |
| 漆包線絕緣等級         | 200°C (H)                                        |
| 防護等級            | IP65 (IEC/EN 60529) 和 IP69K 需使用於適當的端子            |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺之封裝磁路<br>抗氧化保護之金屬元件                   |

## Technical description

|                                                  |                                                                                                                                          |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Hydraulic - Pneumatic - Steam - Gas                                                                                                      |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                        |
| Indicative average power                         | AC absorbed power around 45 VA<br>DC absorbed power 30-38 W                                                                              |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                             |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                   |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                      |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                |
| Protection grade                                 | IP65 (IEC/EN 60529) and IP69K with the appropriate connector                                                                             |
| Construction characteristics for class 155°C (F) | External magnetic circuit covers the incapsulated coil in fibre-glass reinforced polyamide<br>Metallic parts protected against oxidation |

## Coil series 45x54.5

Codes | 472 | 476 | 477 |

### 477

德規電磁線圈

Deutsch connection



|        |        |        |
|--------|--------|--------|
| 代碼 Cod | 477000 | 477001 |
| Ø A    | 22.1   | 23.1   |

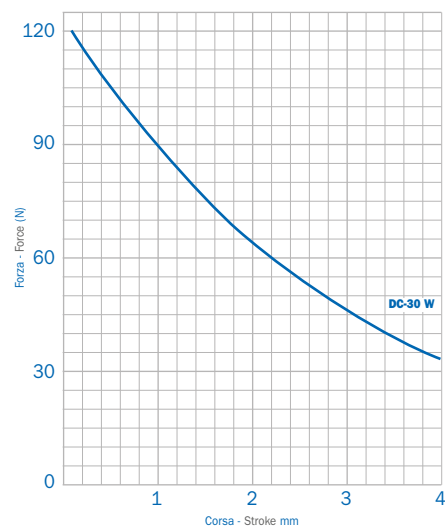
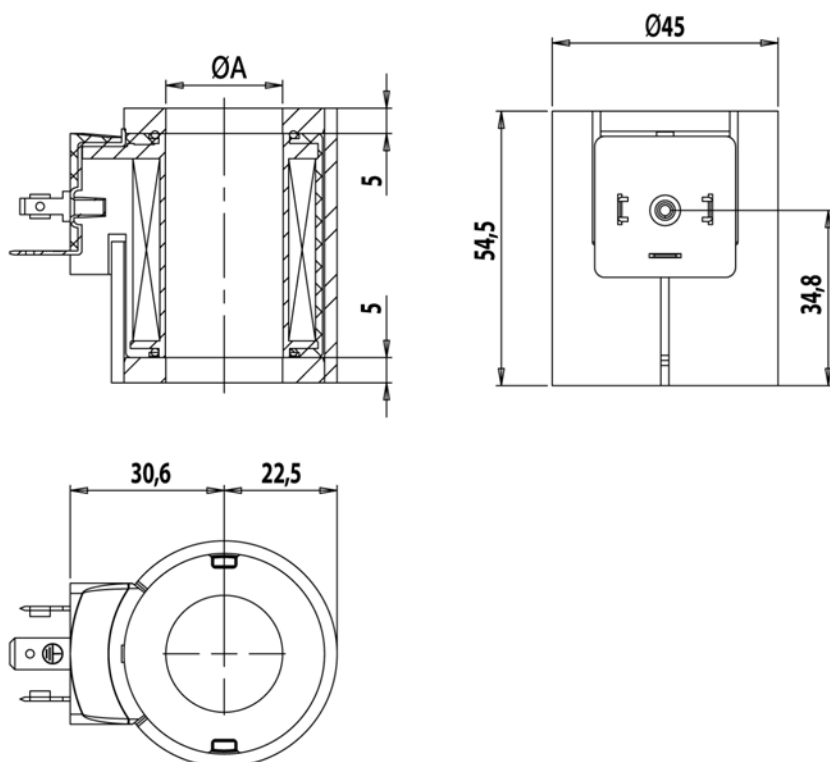
45x54.5

比例 1:1

Scale 1:1

磁力/行程 曲線圖

Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 473

A EN 175301-803 ISO 4400 (DIN 43650) 電磁線圈  
A EN 175301-803 ISO 4400 (DIN 43650) connection



代碼 Cod 473000  
Ø A 31.1

## 478

AMP 初級電磁線圈  
AMP Junior connection



代碼 Cod 478000  
Ø A 31.1

## 技術描述

|                 |                                                  |
|-----------------|--------------------------------------------------|
| 應用              | 液壓-空壓-蒸汽-燃氣                                      |
| 供應電壓            | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>其他電壓可依需求 |
| 指標平均功率          | AC 額定消耗功率65VA<br>DC 額定消耗功率45-60W                 |
| 工作週期            | ED 100% 於標示功率及溫度下                                |
| 環境溫度限制          | -30度+50度於標示功率下使用本公司之電磁作動組                        |
| 絕緣等級            | 155°C (F) 180°C (H)                              |
| 漆包線絕緣等級         | 200°C (H)                                        |
| 防護等級            | IP65 (IEC/EN 60529) 和 IP69K 需使用於適當的端子            |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚酰胺之封裝磁路<br>抗氧化保護之金屬元件                   |

## Technical description

|                                                  |                                                                                                                                          |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Typical applications                             | Hydraulic - Pneumatic - Steam - Gas                                                                                                      |
| Supply voltages                                  | 12 - 24 VDC 24 - 110 - 220 - 230 VAC<br>Other voltages on request                                                                        |
| Indicative average power                         | AC absorbed power around 65 VA<br>DC absorbed power 45-60 W                                                                              |
| Duty cycle                                       | ED 100% at the showed power and temperatures                                                                                             |
| Environment temperature limits                   | -30°C +50°C at the showed power, using an our operator                                                                                   |
| Insulation class                                 | 155°C (F) 180°C (H)                                                                                                                      |
| Copper wire insulation class                     | 200°C (H)                                                                                                                                |
| Protection grade                                 | IP65 (IEC/EN 60529) and IP69K with the appropriate connector                                                                             |
| Construction characteristics for class 155°C (F) | External magnetic circuit covers the incapsulated coil in fibre-glass reinforced polyamide<br>Metallic parts protected against oxidation |

## Coil series 65x72.5

Codes | 473 | 478 | 479 |

**479**

德規電磁線圈

Deutsch connection



代碼 Cod

479000

Ø A

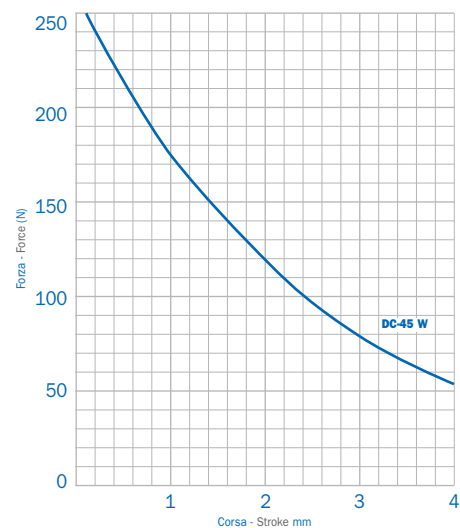
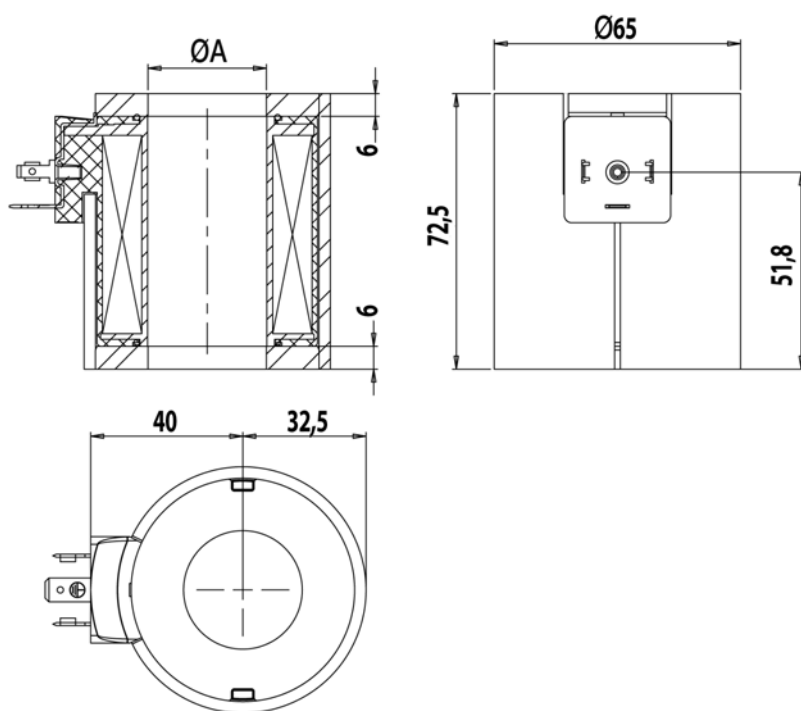
31.1

比例 1:1

Scale 1:1

磁力/行程 曲線圖

Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used  
operators with 10% reduced nominal  
voltage. The graph values are indicative.

| 應用<br>APPLICATION   | 頁數<br>PAGE |
|---------------------|------------|
| 油壓<br>Oil Hydraulic | 52         |
| 液壓<br>Hydraulic     | 54         |
| 空氣<br>Pneumatic     | 56         |
| 蒸氣<br>Steam         |            |
| 機油<br>Gas           |            |

| 代碼<br>COD    | 頁數<br>PAG | 代碼<br>COD | 頁數<br>PAG |
|--------------|-----------|-----------|-----------|
| 257GD1003488 | 54        | 394002210 | 52        |
| 257GD1003489 | 54        | 455GDB0   | 56        |
| 257GD1003490 | 54        | 455GDA0   | 56        |
| 257GD1003491 | 54        | 455GD20   | 56        |
| 257GD1003492 | 54        | 455GD10   | 56        |
| 257GD1003493 | 54        | 455GD00   | 56        |
| 257GD3003470 | 55        | 455GDB1   | 57        |
| 257GD3003471 | 55        | 455GDA1   | 57        |
| 257GD3003472 | 55        | 455GD21   | 57        |
| 257GD3003473 | 55        | 455GD11   | 57        |
| 257GD3003474 | 55        | 455GD01   | 57        |
| 257GD3003475 | 55        |           |           |



## 394002210

**B** 端子型電磁線圈含增加磁場之結構

**B** Industrial connection with pole expansion



**ATEX:**

II 3GD Ex nA IIC T5, T4 Gc IP65

Ex tc IIIC T.98°C, T.120°C Dc



溫度等級/最高表面溫度 Class temperature/Max surface temperature

|                                          | T5/T100°C     | T4/T135°C     | T4/T135°C     | T4/T135°C     | T4/T135°C     | T4/T135°C     |
|------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 環境溫度限制<br>Environment temperature limits | -20°C ÷ +50°C | -20°C ÷ +50°C | -20°C ÷ +50°C | -20°C ÷ +50°C | -20°C ÷ +50°C | -20°C ÷ +40°C |
| 電壓<br>Voltage                            | 12 DC         | 12 DC         | 24 DC         | 24 DC         | 24 AC         | 24 AC         |
| 最大耗散功率<br>Maximum dissipable power       | 3,5 W         | 5,5 W         | 3,5 W         | 5,5 W         | 3,5 VA        | 5,5 VA        |
| 爆炸性氣氛類型<br>Explosive atmosphere type     | Gas/Dust      | Gas/Dust      | Gas/Dust      | Gas/Dust      | Gas/Dust      | Gas/Dust      |

## 技術描述

|                 |                                       |  |  |                            |  |  |
|-----------------|---------------------------------------|--|--|----------------------------|--|--|
| 應用              | 液壓-空壓-蒸汽-燃氣<br>可實現於潛在爆炸性環境            |  |  |                            |  |  |
| 工作週期            | ED 100% 於標示功率及溫度下                     |  |  |                            |  |  |
| 絕緣等級            | 155°C (F)                             |  |  |                            |  |  |
| 漆包線絕緣等級         | 200°C (H)                             |  |  |                            |  |  |
| 防護等級            | IP65 (IEC 60529) / 需使用於適當的端子          |  |  |                            |  |  |
| 標準顏色            | 黑色                                    |  |  |                            |  |  |
| 155°C(F)等級之構造特色 | 使用玻璃纖維強化聚對苯二甲酸丁二酯 (PBT)<br>抗氧化保護之金屬元件 |  |  |                            |  |  |
| 適用標準            | IEC 60079-0:2012 + A11:2013           |  |  | EN 60079-0:2012 + A11:2013 |  |  |
|                 | IEC 60079-15:2010                     |  |  | EN 60079-15:2010           |  |  |
|                 | IEC 60079-31:2014                     |  |  |                            |  |  |

## Technical description

|                              |                                                                                                                                     |  |  |                            |  |  |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--|--|----------------------------|--|--|
| Typical applications         | Hydraulic - Pneumatic - Steam - Gas<br>Realised for potentially explosive atmospheres                                               |  |  |                            |  |  |
| Duty cycle                   | ED 100% at the showed power and temperatures                                                                                        |  |  |                            |  |  |
| Insulation class             | 155°C (F)                                                                                                                           |  |  |                            |  |  |
| Copper wire insulation class | 200°C (H)                                                                                                                           |  |  |                            |  |  |
| Protection grade             | IP65 (IEC 60529) with the appropriate connector                                                                                     |  |  |                            |  |  |
| Standard colour              | Black                                                                                                                               |  |  |                            |  |  |
| Construction characteristics | Magnetic circuit encapsulated with polybutylene terephthalate (PBT) with fibre glass.<br>Metallic parts protected against oxidation |  |  |                            |  |  |
| for class 155°C (F)          |                                                                                                                                     |  |  |                            |  |  |
| Standard applied             | IEC 60079-0:2012 + A11:2013                                                                                                         |  |  | EN 60079-0:2012 + A11:2013 |  |  |
|                              | IEC 60079-15:2010                                                                                                                   |  |  | EN 60079-15:2010           |  |  |
|                              | IEC 60079-31:2014                                                                                                                   |  |  |                            |  |  |

## Coil series 22x30.9

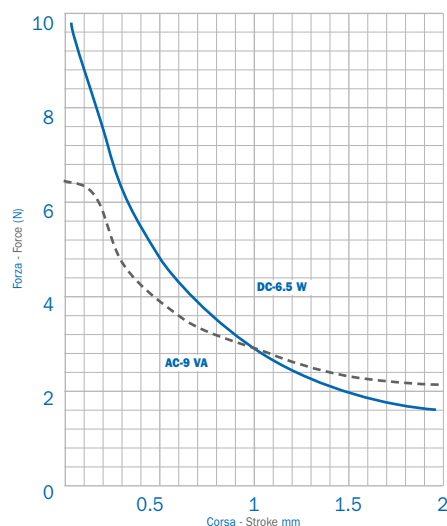
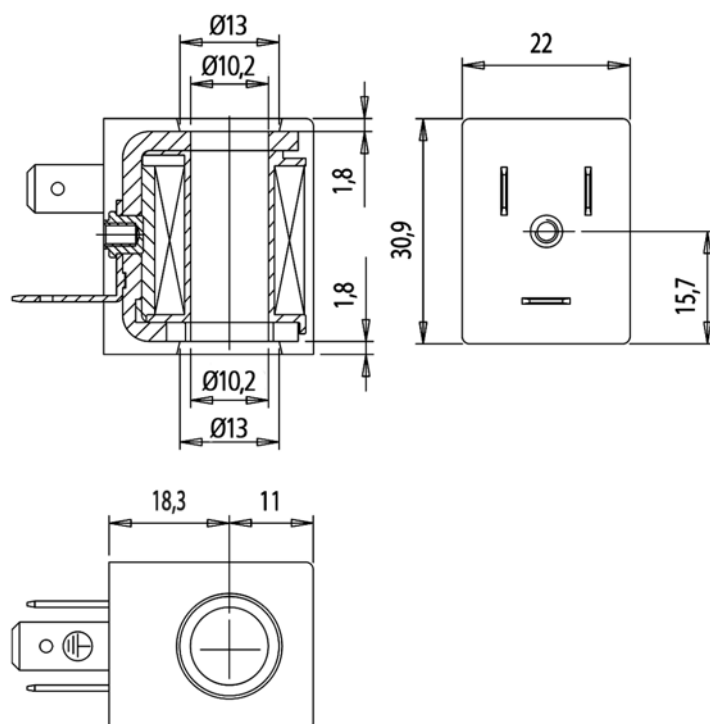
Codes | 394 ATEX |

22x30.9 ATEX

| 溫度等級/最高表面溫度                              | Class temperature/Max surface temperature |               |               |               |               |               |
|------------------------------------------|-------------------------------------------|---------------|---------------|---------------|---------------|---------------|
|                                          | T5/T100°C                                 | T4/T135°C     | T4/T135°C     | T4/T135°C     | T4/T135°C     | T4/T135°C     |
| 環境溫度限制<br>Environment temperature limits | -20°C ÷ +50°C                             | -20°C ÷ +40°C | -20°C ÷ +50°C | -20°C ÷ +40°C | -20°C ÷ +50°C | -20°C ÷ +40°C |
| 電壓<br>Voltage                            | 48 AC                                     | 48 AC         | 120 AC        | 120 AC        | 230 AC        | 230 AC        |
| 最大耗散功率<br>Maximum dissipable power       | 4,5 VA                                    | 7,5 VA        | 3,5 VA        | 5,5 VA        | 3,5 VA        | 5,5 VA        |
| 爆炸性氣氛類型<br>Explosive atmosphere type     | Gas/Dust                                  | Gas/Dust      | Gas/Dust      | Gas/Dust      | Gas/Dust      | Gas/Dust      |

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 257

### 三極電纜電磁線圈

#### Tripolar cable connection



#### ATEX:

II 2G Ex mb IIC T6, T5, T4 Gb  
II 2D Ex mb IIIC T85°C, T100°C, T135°C Db  
I M2 Ex mb I Mb  
INERIS 06ATEX0002X

#### IECEX:

Ex mb IIC T6, T5, T4 Gb  
Ex mb IIIC T85°C, T100°C, T135°C Db  
Ex mb I Mb  
IECEX INE 15.0053X



| 代碼 Cod                                                   | 257GD1003493 | 257GD1003492 | 257GD1003491 | 257GD1003490 | 257GD1003489 | 257GD1003488 |
|----------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Ø A                                                      | 8            | 8            | 8            | 8            | 8            | 8            |
| Ø B                                                      | 9.1          | 9.1          | 9.1          | 9.1          | 9.1          | 9.1          |
| 電壓<br>Voltage                                            | 24 DC        | 24 AC        | 48 AC        | 110 AC       | 220 AC       | 230 AC       |
| 溫度等級/最高表面溫度<br>Class temperature/Max surface temperature | T4/T135°C    | T4/T135°C    | T4/T135°C    | T4/T135°C    | T4/T135°C    | T4/T135°C    |
| 電纜長度<br>Cable length                                     | 3m           | 3m           | 3m           | 3m           | 3m           | 3m           |

Note: 可用1m或5m長的三極電纜其他長度可依要求 / 1m or 5 m length tripolar cable available other length under request  
ATEX T5和T6溫度等級可依要求 / T5 or T6 temperature class ATEX coils available on request

## 技術描述

|        |                                                           |
|--------|-----------------------------------------------------------|
| 應用     | 氣動，潛在爆炸環境                                                 |
| 供應電壓   | 24 VDC 24 - 48 - 110 - 220 - 230 VAC                      |
| 功率     | 最大耗散功率<br>5,3W T4/T135°C ; 4,8W T5/T100°C ; 3,2W T6/T85°C |
| 工作週期   | ED 100% 於標示功率及溫度下                                         |
| 環境溫度限制 | -30度+50度於標示功率下使用本公司之電磁作動組                                 |
| 銅線絕緣   | 200°C (H)                                                 |
| 防護等級   | IP6X (IEC 60529)                                          |
| 保險絲    | 內部保險絲                                                     |
| 標準顏色   | 黑色                                                        |
| 結構特色   | 玻璃纖維防火強化型聚酰胺封裝的磁路<br>金屬零件防氧化                              |
| 電氣連接方式 | 三極電纜連接. 標準長度3000毫米                                        |
| 適用標準   | 符合EN 60079-0的證書EN 60079-18                                |

## Technical description

|                                   |                                                                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Typical applications              | Pneumatic, potential explosive environments                                                                                       |
| Supply voltages (to be specified) | 24 VDC 24 - 48 - 110 - 220 - 230 VAC                                                                                              |
| Power                             | Maximum dissipable power:<br>5,3W T4/T135°C ; 4,8W T5/T100°C ; 3,2W T6/T85°C                                                      |
| Duty cycle                        | ED 100% at the showed power and temperature                                                                                       |
| Environment temperature limits    | -20°C +40°C at the showed power, using an our operator                                                                            |
| Copper wire insulation            | 200°C (H)                                                                                                                         |
| Protection grade                  | IP6X (IEC 60529)                                                                                                                  |
| Fuse                              | Internal fuse                                                                                                                     |
| Standard colour                   | Black                                                                                                                             |
| Construction characteristics      | Magnetic circuit encapsulated with fibre-glass self-extinguish reinforced polyamide<br>Metallic parts protected against oxidation |
| Connection                        | Connection by tripolar cable. Standard length 3000 mm                                                                             |
| Standard applied                  | Certificate complying with EN 60079-0 EN 60079-18                                                                                 |

## Coil series 30x30.5

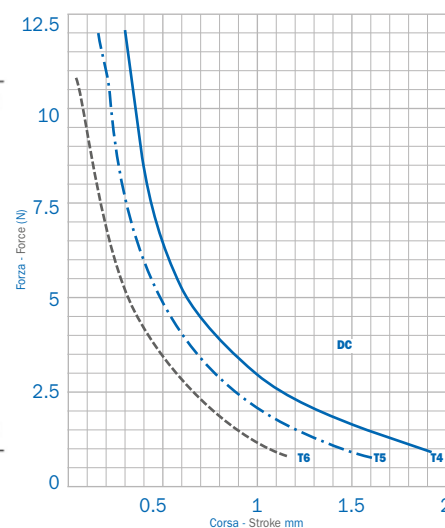
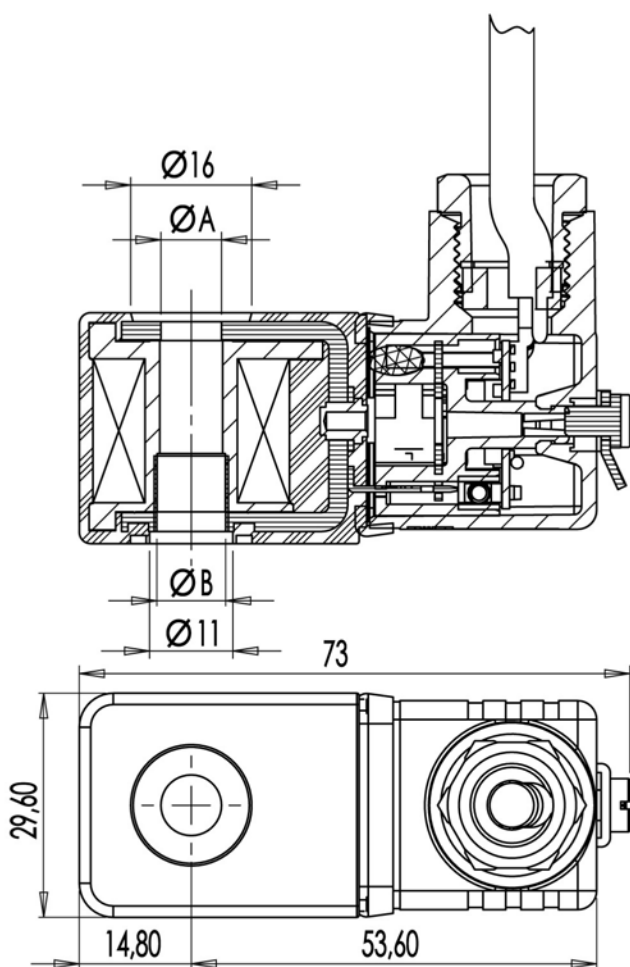
Codes | 257 ATEX |

30x30.5 ATEX

| 代碼 Cod                                                | 257GD3003475 | 257GD3003474 | 257GD3003473 | 257GD3003472 | 257GD3003471 | 257GD3003470 |
|-------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Ø A                                                   | 10.2         | 10.2         | 10.2         | 10.2         | 10.2         | 10.2         |
| Ø B                                                   | 10.2         | 10.2         | 10.2         | 10.2         | 10.2         | 10.2         |
| 電壓<br>Voltage                                         | 24 DC        | 24 AC        | 48 AC        | 110 AC       | 220 AC       | 230 AC       |
| 溫度等級/最高表面溫度 Class temperature/Max surface temperature | T4/T135°C    | T4/T135°C    | T4/T135°C    | T4/T135°C    | T4/T135°C    | T4/T135°C    |
| 電纜長度<br>Cable length                                  | 3m           | 3m           | 3m           | 3m           | 3m           | 3m           |

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.

## 455

3極纜線或接線端子座連接

Tripolar connection with cable or terminal block



### ATEX:

II 2G Ex db IIC T6, T5, T4 Gb  
II 2D Ex tb IIIC T.85°C, T.135°C Db  
I M2 Ex db I Mb  
EPT 17 ATEX 2768 X

### IECEx:

Ex db IIC T6, T5, T4 Gd  
Ex tb IIIC T.85°C, T.135°C Db  
Ex db I Mb  
IECEx EUT 17.0030X



| 代碼 Cod                                                | 455GDB0                                                           | 455GDA0       | 455GD20       | 455GD10       | 455GD00       |
|-------------------------------------------------------|-------------------------------------------------------------------|---------------|---------------|---------------|---------------|
| 溫度等級/最高表面溫度 Class temperature/Max surface temperature | T6/T85°C                                                          | T5/T100°C     | T5/T100°C     | T4/T135°C     | T4/T135°C     |
| 環境溫度限制 Environment temperature limits                 | -60°C ÷ +55°C                                                     | -60°C ÷ +70°C | -60°C ÷ +60°C | -60°C ÷ +80°C | -60°C ÷ +70°C |
| 最大耗散功率 Maximum dissipable power                       | 10W                                                               | 10W           | 14 W          | 14 W          | 30 W          |
| 更低的功率可依要求 Versions at the less power on request       |                                                                   |               |               |               |               |
| 電壓 Voltage                                            | AC                                                                | AC            | AC            | AC            | AC            |
| 電纜長度 Cable length                                     | 最低標準1 m。其他長度可依要求 minimum standard 1 m. other lenght under request |               |               |               |               |
| 爆炸性氣氛類型 Explosive atmosphere type                     | Gas/Dust                                                          | Gas/Dust      | Gas/Dust      | Gas/Dust      | Gas/Dust      |

## 技術描述

|           |                                              |  |                            |  |  |
|-----------|----------------------------------------------|--|----------------------------|--|--|
| 應用        | 推動電磁閥用於模塊化應用. 適用於“ CETOP 03”發行商. 可實現於潛在爆炸性環境 |  |                            |  |  |
| 供應電壓      | 6 - 240 VDC<br>6 - 240 VAC                   |  |                            |  |  |
| 工作週期      | ED 100% 於標示功率及溫度下                            |  |                            |  |  |
| 流體溫度 (最高) | 最大環境溫度                                       |  |                            |  |  |
| 工作壓力 (最高) | 350 bar                                      |  |                            |  |  |
| 結構特色      | 碳鋼包覆防腐蝕<br>作動組 不鏽鋼AISI 304 或低碳鋼              |  |                            |  |  |
| 固定        | 螺紋1/2”NPT                                    |  |                            |  |  |
| 防護等級      | IP66; IP67 (IEC/EN 60529)                    |  |                            |  |  |
| 電氣連接      | 三極電纜 3G 1.5 平方公釐, 溫度105°C<br>接線端子 4x1.5 平方公釐 |  |                            |  |  |
| 適用標準      | IEC 60079-0:2011                             |  | EN 60079-0:2012 + A11:2013 |  |  |
|           | IEC 60079-1:2014                             |  | EN 60079-1:2014            |  |  |
|           | IEC 60079-31:2013                            |  | EN 60079-31:2014           |  |  |

## Technical description

|                                   |                                                                                                                               |  |                            |  |  |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--|----------------------------|--|--|
| Typical applications              | Push solenoid for modular applications. Suitable for “ CETOP 03” distributors. Realised for potentially explosive atmospheres |  |                            |  |  |
| Supply voltages (to be specified) | 6 - 240 VDC<br>6 - 240 VAC                                                                                                    |  |                            |  |  |
| Duty cycle                        | ED 100% at the showed power and temperature                                                                                   |  |                            |  |  |
| Fluid temperature (max.)          | ≤ maximum ambient temperature                                                                                                 |  |                            |  |  |
| Working pressure (max.)           | 350 bar                                                                                                                       |  |                            |  |  |
| Construction characteristics      | Enclosure in carbon steel protected against corrosion<br>Actuator AISI 304 or low carbon steel                                |  |                            |  |  |
| Fixing                            | Thread 1/2”NPT                                                                                                                |  |                            |  |  |
| Protection grade                  | IP66; IP67 (IEC/EN 60529)                                                                                                     |  |                            |  |  |
| Connection (to be specified)      | Tripolar cable 3G 1,5mm², temperature 105°C<br>Terminal screw block 4x1,5 mm²                                                 |  |                            |  |  |
| Standard applied                  | IEC 60079-0:2011                                                                                                              |  | EN 60079-0:2012 + A11:2013 |  |  |
|                                   | IEC 60079-1:2014                                                                                                              |  | EN 60079-1:2014            |  |  |
|                                   | IEC 60079-31:2013                                                                                                             |  | EN 60079-31:2014           |  |  |

## Coil series 45x120

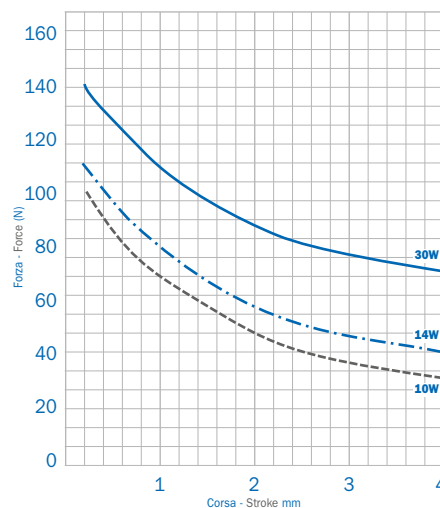
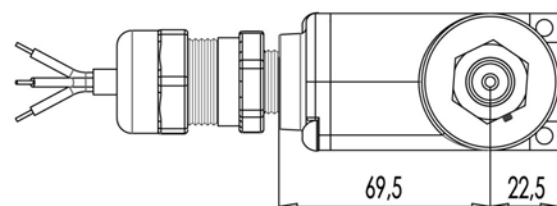
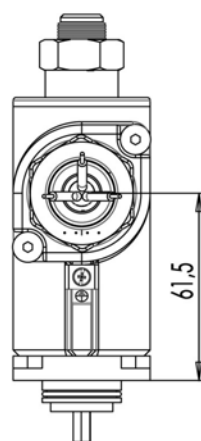
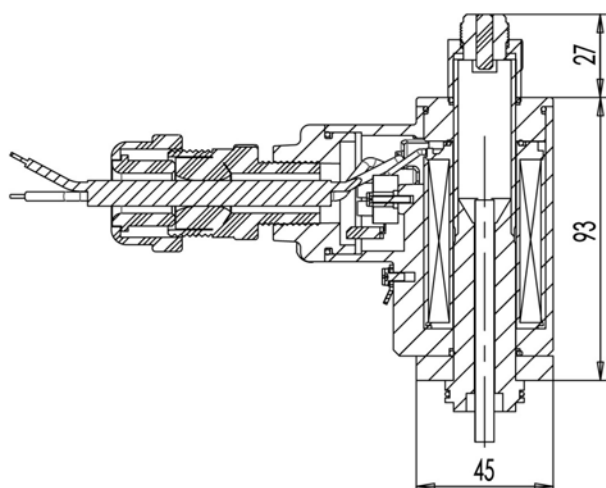
Codes | 455 ATEX |

45x120 ATEX

| 代碼 Cod                                                | 455GDB1                                                               | 455GDA1       | 455GD21       | 455GD11       | 455GD01       |
|-------------------------------------------------------|-----------------------------------------------------------------------|---------------|---------------|---------------|---------------|
| 溫度等級/最高表面溫度 Class temperature/Max surface temperature | T6/T85°C                                                              | T5/T100°C     | T5/T100°C     | T4/T135°C     | T4/T135°C     |
| 環境溫度限制<br>Environment temperature limits              | -60°C ÷ +55°C                                                         | -60°C ÷ +70°C | -60°C ÷ +60°C | -60°C ÷ +80°C | -60°C ÷ +70°C |
| 最大耗散功率<br>Maximum dissipatable power                  | 10W                                                                   | 10W           | 14 W          | 14 W          | 30 W          |
| 更低的功率可依要求 Versions at the less power on request       |                                                                       |               |               |               |               |
| 電壓<br>Voltage                                         | DC                                                                    | DC            | DC            | DC            | DC            |
| 電纜長度<br>Cable length                                  | 最低標準1 m. 其他長度可依要求<br>minimum standard 1 m. other lenght under request |               |               |               |               |
| 爆炸性氣氛類型<br>Explosive atmosphere type                  | Gas/Dust                                                              | Gas/Dust      | Gas/Dust      | Gas/Dust      | Gas/Dust      |

比例 1:1  
Scale 1:1

磁力/行程 曲線圖  
Force/Stroke graph



在減少10%之額定電壓下，  
測量作動器所測得之曲線圖

Curves measured in function of the used operators with 10% reduced nominal voltage. The graph values are indicative.



描述  
DESCRIPTION

頁數  
PAG

|            |                                                                                     |                                               |                                                                                                     |    |
|------------|-------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------|----|
| SERIES: KA |    | 母連接器(端子)<br>A型 (接觸間隙18 mm)<br>標準 (黑 - 灰)      | FEMALE CONNECTORS<br>FORM A (contact spacing 18mm)<br>STANDARD (black - grey) .....                 | 60 |
| SERIES: KA |    | 母連接器(端子)<br>A型 (接觸間隙18 mm)<br>含電路 (透明)        | FEMALE CONNECTORS<br>FORM A (contact spacing 18mm)<br>WITH CIRCUITS (transparent) .....             | 64 |
| SERIES: KA |    | 母連接器(端子)<br>A型 (接觸間隙18 mm)<br>含電路 (黑-灰)       | FEMALE CONNECTORS<br>FORM A (contact spacing 18mm)<br>WITH CIRCUITS (black - grey) .....            | 66 |
| SERIES: KA |    | 母連接器(端子)<br>A型 (接觸間隙18 mm)<br>含電路 (透明)        | FEMALE CONNECTORS<br>FORM A (contact spacing 18mm)<br>WITH CIRCUITS (transparent) .....             | 68 |
| SERIES: KB |   | 母連接器(端子)<br>類別B-工業用 (接觸間隙11 mm)<br>標準 (黑 - 灰) | FEMALE CONNECTORS<br>FORM B industrial (contact spacing 11mm)<br>STANDARD (black - grey) .....      | 70 |
| SERIES: KB |  | 母連接器(端子)<br>類別B-工業用 (接觸間隙11 mm)<br>含電路 (透明)   | FEMALE CONNECTORS<br>FORM B industrial (contact spacing 11mm)<br>WITH CIRCUITS (transparent) .....  | 72 |
| SERIES: KC |  | 母連接器(端子)<br>C型 (接觸間隙8 mm)<br>標準 (黑)           | FEMALE CONNECTORS<br>FORM C (contact spacing 8mm)<br>STANDARD (black) .....                         | 76 |
| SERIES: KC |  | 母連接器(端子)<br>C型 (接觸間隙8 mm)<br>含電路 (透明)         | FEMALE CONNECTORS<br>FORM C (contact spacing 8mm)<br>WITH CIRCUITS (transparent) .....              | 77 |
| SERIES: KD |  | 母連接器(端子)<br>類別D-工業用 (接觸間隙9,4 mm)<br>標準 (黑)    | FEMALE CONNECTORS<br>FORM D industrial (contact spacing 9,4mm)<br>STANDARD (black) .....            | 80 |
| SERIES: KD |  | 母連接器(端子)<br>類別D-工業用 (接觸間隙9,4 mm)<br>含電路 (透明)  | FEMALE CONNECTORS<br>FORM D industrial (contact spacing 9,4mm)<br>WITH CIRCUITS (transparent) ..... | 81 |

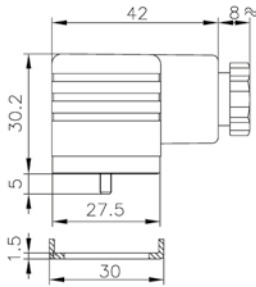
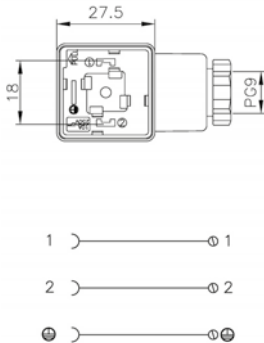
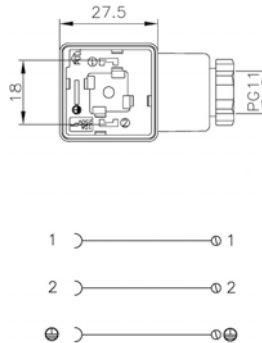


# 連接器 KA0 - KA1 系列

請自行安裝導線



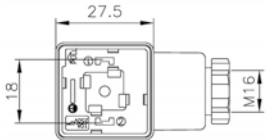
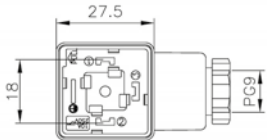
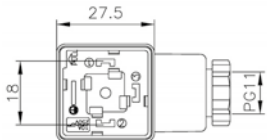
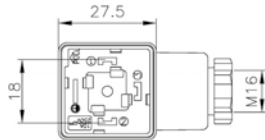
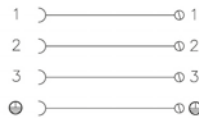
類別 A - EN 175301-803 (DIN43650) / ISO 4400

| 產品描述 Product description                                                             |                                                                                     |                                     |                           |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------|---------------------------|
| 標準 Standard                                                                          | EN175301-803                                                                        | EN175301-803                        |                           |
| 構造種類 Construction type                                                               | A                                                                                   | A                                   |                           |
| 描述 Description                                                                       | P18 connector with screw terminals<br>NBR profile gasket<br>(PE) earth position H12 | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12 |                           |
| 外觀顏色 Housing colour                                                                  | 黑 black                                                                             | 黑 black                             |                           |
| 接觸點 Number of contacts                                                               | 2+PE                                                                                | 2+PE                                |                           |
| 訂購編號 Order no.                                                                       | <b>KA132000B9</b>                                                                   | <b>KA132000B1</b>                   |                           |
| 要求選項 Other options on request                                                        | 灰色外觀 grey housing                                                                   | 訂購編號 <b>KA132000A9</b>              | 訂購編號 <b>KA132000A1</b>    |
| 導線入口 Cable gland                                                                     | PG9                                                                                 | PG11                                |                           |
| 最大導線尺寸 Max. conductor size                                                           | without splice/terminal                                                             | 1,5mm <sup>2</sup> 無接合/端點           | 1,5mm <sup>2</sup> 無接合/端點 |
| 圖 Drawing                                                                            |                                                                                     |                                     |                           |
|    |                                                                                     |                                     |                           |
|   |                                                                                     |                                     |                           |
|  |                                                                                     |                                     |                           |
| 技術資料 Technical data                                                                  |                                                                                     |                                     |                           |
| 插入銷口尺寸 Pin dimension                                                                 | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                           | 6,3 x 0,8mm ; 4,8 x 0,8mm           |                           |
| 額定最大電壓 Rated voltage max.                                                            | 250 V AC/DC                                                                         | 250 V AC/DC                         |                           |
| 額定最大電流 Rated current max. (EN 60512-5-2 test 5b)                                     | 10 A                                                                                | 10 A                                |                           |
| 接觸阻抗 Contact resistance                                                              | 15mΩ 最大 max.                                                                        | 15mΩ 最大 max.                        |                           |
| 過電壓分類 Overvoltage category                                                           | III                                                                                 | III                                 |                           |
| 終端樣式 Type of termination                                                             | 螺紋 screw M3                                                                         | 螺紋 screw M3                         |                           |
| 接觸旋緊力矩 Contact screw torque                                                          | 最大 max. 0,5 N/m                                                                     | 最大 max. 0,5 N/m                     |                           |
| 適合電線 Suitable cables                                                                 | 5 mm to 7 mm 直徑 diameter                                                            | 6 mm to 9 mm 直徑 diameter            |                           |
| 安裝 Mounting                                                                          | 中心螺線 central screw M3x32,5                                                          | 中心螺線 central screw M3x32,5          |                           |
| 材質 Material                                                                          |                                                                                     |                                     |                           |
| 接觸點材質 Contact material                                                               | 鍍銅錫銀 CuSn silver plated                                                             | 鍍銅錫銀 CuSn silver plated             |                           |
| 接觸套材質 Contact holder material                                                        | PA6 GF                                                                              | PA6 GF                              |                           |
| 外框材質 Housing material                                                                | PA6 GF                                                                              | PA6 GF                              |                           |
| 環境條件 Environmental conditions                                                        |                                                                                     |                                     |                           |
| 防護等級 Protection class (EN 60529)                                                     | IP 65 when correctly assembled                                                      | 當正確組裝時符合IP65                        | 當正確組裝時符合IP65              |
| 污染程度 Pollution severity (EN 60664-1)                                                 | 3                                                                                   | 3                                   |                           |
| 溫度範圍 Temperature range                                                               | -40°C to + 100°C                                                                    | -40°C to + 100°C                    |                           |
|                                                                                      | 附有矽墊片 with silicon gasket                                                           | -40°C to + 125°C                    | -40°C to + 125°C          |
| 可燃性等級 Inflammability class                                                           |                                                                                     |                                     |                           |
| 接觸套 Contact holder                                                                   | HB - UL 94                                                                          | HB - UL 94                          |                           |
| 外觀 Housing                                                                           | HB - UL 94                                                                          | HB - UL 94                          |                           |
| 包裝 Packaging                                                                         |                                                                                     |                                     |                           |
| 包裝單位/約重 Packaging unit/Weight approx.                                                | 500個 / 14,5公斤                                                                       | 500個 / 14,5公斤                       |                           |
| 包裝尺寸 Box dimensions                                                                  | 80 x 30 x 22 cm                                                                     | 80 x 30 x 22 cm                     |                           |
| 其他附加選項 Other accessory options                                                       |                                                                                     |                                     |                           |
| NBR flat gasket 100 pcs in bag                                                       | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                        |                           |
| Silicon profile gasket 100 pcs in bag                                                | 矽異形墊片100個/包                                                                         | 矽異形墊片100個/包                         |                           |
| Stainless steel screw 100 pcs in bag                                                 | 不鏽鋼螺絲100個/袋                                                                         | 不鏽鋼螺絲100個/袋                         |                           |

# Valve Connectors KAO - KA1 series

SELF - ASSEMBLY CABLE

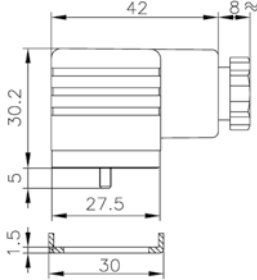
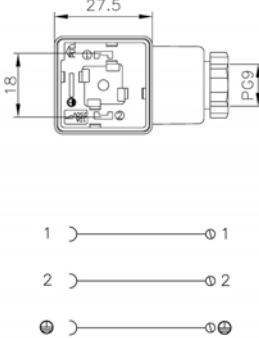
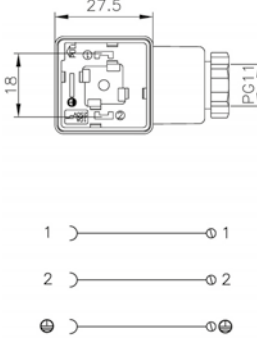


|                                                                                                                                                                           |                                                                                                                                                                           |                                                                                                                                                                             |                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EN175301-803                                                                                                                                                              | EN175301-803                                                                                                                                                              | EN175301-803                                                                                                                                                                | EN175301-803                                                                                                                                                                  |
| A                                                                                                                                                                         | A                                                                                                                                                                         | A                                                                                                                                                                           | A                                                                                                                                                                             |
| P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                                                                                                       | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                                                                                                       | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                                                                                                         | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                                                                                                           |
| 黑 black                                                                                                                                                                   | 黑 black                                                                                                                                                                   | 黑 black                                                                                                                                                                     | 黑 black                                                                                                                                                                       |
| 2+PE                                                                                                                                                                      | 3+PE                                                                                                                                                                      | 3+PE                                                                                                                                                                        | 3+PE                                                                                                                                                                          |
| <b>KA132000B6</b>                                                                                                                                                         | <b>KA042000B9</b>                                                                                                                                                         | <b>KA042000B1</b>                                                                                                                                                           | <b>KA042000B6</b>                                                                                                                                                             |
| 訂購編號 <b>KA132000A6</b>                                                                                                                                                    | 訂購編號 <b>KA042000A9</b>                                                                                                                                                    | 訂購編號 <b>KA042000A1</b>                                                                                                                                                      | 訂購編號 <b>KA042000A6</b>                                                                                                                                                        |
| M16x1,5                                                                                                                                                                   | PG9                                                                                                                                                                       | PG11                                                                                                                                                                        | M16x1,5                                                                                                                                                                       |
| 1,5mm² 無接合/端點                                                                                                                                                             | 1,5mm² 無接合/端點                                                                                                                                                             | 1,5mm² 無接合/端點                                                                                                                                                               | 1,5mm² 無接合/端點                                                                                                                                                                 |
| <br> | <br> | <br> | <br> |
| 6,3 x 0,8mm ; 4,8 x 0,8mm                                                                                                                                                 | 6,3 x 0,8mm; 4,8 x 0,8mm                                                                                                                                                  | 6,3 x 0,8mm; 4,8 x 0,8mm                                                                                                                                                    | 6,3 x 0,8mm; 4,8 x 0,8mm                                                                                                                                                      |
| 250 V AC/DC                                                                                                                                                               | 250 V AC/DC                                                                                                                                                               | 250 V AC/DC                                                                                                                                                                 | 250 V AC/DC                                                                                                                                                                   |
| 10 A                                                                                                                                                                      | 10 A                                                                                                                                                                      | 10 A                                                                                                                                                                        | 10 A                                                                                                                                                                          |
| 15mΩ 最大 max.                                                                                                                                                              | 15mΩ 最大 max.                                                                                                                                                              | 15mΩ 最大 max.                                                                                                                                                                | 15mΩ 最大 max.                                                                                                                                                                  |
| III                                                                                                                                                                       | III                                                                                                                                                                       | III                                                                                                                                                                         | III                                                                                                                                                                           |
| 螺紋 screw M3                                                                                                                                                               | 螺紋 screw M3                                                                                                                                                               | 螺紋 screw M3                                                                                                                                                                 | 螺紋 screw M3                                                                                                                                                                   |
| 最大 max. 0,5 N/m                                                                                                                                                           | 最大 max. 0,5 N/m                                                                                                                                                           | 最大 max. 0,5 N/m                                                                                                                                                             | 最大 max. 0,5 N/m                                                                                                                                                               |
| 5 mm to 7 mm 直徑 diameter                                                                                                                                                  | 5 mm to 7 mm 直徑 diameter                                                                                                                                                  | 6 mm to 9 mm 直徑 diameter                                                                                                                                                    | 5 mm to 7 mm 直徑 diameter                                                                                                                                                      |
| 中心螺絲 central screw M3x32,5                                                                                                                                                | 中心螺絲 central screw M3x32,5                                                                                                                                                | 中心螺絲 central screw M3x32,5                                                                                                                                                  | 中心螺絲 central screw M3x32,5                                                                                                                                                    |
| 鍍銅錫銀 CuSn silver plated                                                                                                                                                   | 鍍銅錫銀 CuSn silver plated                                                                                                                                                   | 鍍銅錫銀 CuSn silver plated                                                                                                                                                     | 鍍銅錫銀 CuSn silver plated                                                                                                                                                       |
| PA6 GF                                                                                                                                                                    | PA6 GF                                                                                                                                                                    | PA6 GF                                                                                                                                                                      | PA6 GF                                                                                                                                                                        |
| 當正確組裝時符合IP65                                                                                                                                                              | 當正確組裝時符合IP65                                                                                                                                                              | 當正確組裝時符合IP65                                                                                                                                                                | 當正確組裝時符合IP65                                                                                                                                                                  |
| 3                                                                                                                                                                         | 3                                                                                                                                                                         | 3                                                                                                                                                                           | 3                                                                                                                                                                             |
| -40°C to + 100°C                                                                                                                                                          | -40°C to + 100°C                                                                                                                                                          | -40°C to + 100°C                                                                                                                                                            | -40°C to + 100°C                                                                                                                                                              |
| -40°C to + 125°C                                                                                                                                                          | -40°C to + 125°C                                                                                                                                                          | -40°C to + 125°C                                                                                                                                                            | -40°C to + 125°C                                                                                                                                                              |
| HB - UL 94                                                                                                                                                                | HB - UL 94                                                                                                                                                                | HB - UL 94                                                                                                                                                                  | HB - UL 94                                                                                                                                                                    |
| HB - UL 94                                                                                                                                                                | HB - UL 94                                                                                                                                                                | HB - UL 94                                                                                                                                                                  | HB - UL 94                                                                                                                                                                    |
| 500個 / 14,5公斤                                                                                                                                                             | 500個 / 14,5公斤                                                                                                                                                             | 500個 / 14,5公斤                                                                                                                                                               | 500個 / 14,5公斤                                                                                                                                                                 |
| 80 x 30 x 22 cm                                                                                                                                                           | 80 x 30 x 22 cm                                                                                                                                                           | 80 x 30 x 22 cm                                                                                                                                                             | 80 x 30 x 22 cm                                                                                                                                                               |
| NBR平墊片100個/包                                                                                                                                                              | NBR平墊片100個/包                                                                                                                                                              | NBR平墊片100個/包                                                                                                                                                                | NBR平墊片100個/包                                                                                                                                                                  |
| 矽異形墊片100個/包                                                                                                                                                               | 矽異形墊片100個/包                                                                                                                                                               | 矽異形墊片100個/包                                                                                                                                                                 | 矽異形墊片100個/包                                                                                                                                                                   |
| 不鏽鋼螺絲100個/袋                                                                                                                                                               | 不鏽鋼螺絲100個/袋                                                                                                                                                               | 不鏽鋼螺絲100個/袋                                                                                                                                                                 | 不鏽鋼螺絲100個/袋                                                                                                                                                                   |

Form A - EN 175301-803 (DIN43650) / ISO 4400



類別 A - EN 175301-803 (DIN43650) / ISO 4400

| 產品描述 Product description                         |                                                                                     |                                                                                     |                                                                                      |
|--------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 標準 Standard                                      | EN175301-803                                                                        | EN175301-803                                                                        |                                                                                      |
| 構造種類 Construction type                           | A                                                                                   | A                                                                                   |                                                                                      |
| 描述 Description                                   | P18 connector with screw terminals<br>NBR profile gasket<br>(PE) earth position H12 | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                 | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                  |
| 外觀顏色 Housing colour                              | 黑 black                                                                             | 黑 black                                                                             |                                                                                      |
| 接觸點 Number of contacts                           | 2+PE                                                                                | 2+PE                                                                                |                                                                                      |
| 訂購編號 Order no.                                   | KA132000B9UR                                                                        | KA132000B1UR                                                                        |                                                                                      |
| 要求選項 Other options on request                    | 灰色外觀 grey housing                                                                   | 訂購編號KA132000A1UR                                                                    |                                                                                      |
| 導線入口 Cable gland                                 | PG9                                                                                 | PG11                                                                                |                                                                                      |
| 最大導線尺寸 Max. conductor size                       | without splice/terminal                                                             | 1,5mm² 無接合/端點                                                                       |                                                                                      |
| 圖 Drawing                                        |   |  |  |
| 技術資料 Technical data                              |                                                                                     |                                                                                     |                                                                                      |
| 插入銷口尺寸 Pin dimension                             | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                           | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                           |                                                                                      |
| 額定最大電壓 Rated voltage max.                        | 250 V AC/DC                                                                         | 250 V AC/DC                                                                         |                                                                                      |
| 額定最大電流 Rated current max. (EN 60512-5-2 test 5b) | 10 A                                                                                | 10 A                                                                                |                                                                                      |
| 接觸阻抗 Contact resistance                          | 15mΩ 最大 max.                                                                        | 15mΩ 最大 max.                                                                        |                                                                                      |
| 過電壓分類 Overvoltage category                       | III                                                                                 | III                                                                                 |                                                                                      |
| 終端樣式 Type of termination                         | 螺紋 screw M3                                                                         | 螺紋 screw M3                                                                         |                                                                                      |
| 接觸旋緊力矩 Contact screw torque                      | 最大 max. 0,5 N/m                                                                     | 最大 max. 0,5 N/m                                                                     |                                                                                      |
| 適合電線 Suitable cables                             | 5 mm to 7 mm 直徑 diameter                                                            | 6 mm to 9 mm 直徑 diameter                                                            |                                                                                      |
| 安裝 Mounting                                      | 中心螺線 central screw M3x32,5                                                          | 中心螺線 central screw M3x32,5                                                          |                                                                                      |
| 材質 Material                                      |                                                                                     |                                                                                     |                                                                                      |
| 接觸點材質 Contact material                           | 鍍銅錫銀 CuSn silver plated                                                             | 鍍銅錫銀 CuSn silver plated                                                             |                                                                                      |
| 接觸套材質 Contact holder material                    | PA66 GF H2                                                                          | PA66 GF H2                                                                          |                                                                                      |
| 外框材質 Housing material                            | PA66 GF H2                                                                          | PA66 GF H2                                                                          |                                                                                      |
| 環境條件 Environmental conditions                    |                                                                                     |                                                                                     |                                                                                      |
| 防護等級 Protection class (EN 60529)                 | IP 65 when correctly assembled                                                      | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 汙染程度 Pollution severity (EN 60664-1)             | 3                                                                                   | 3                                                                                   |                                                                                      |
| 溫度範圍 Temperature range                           | -40°C to + 100°C                                                                    | -40°C to + 100°C                                                                    |                                                                                      |
|                                                  | with silicon gasket                                                                 |                                                                                     |                                                                                      |
| 可燃性等級 Inflammability class                       |                                                                                     |                                                                                     |                                                                                      |
| 接觸套 Contact holder                               | 94-V0                                                                               | 94-V0                                                                               |                                                                                      |
| 外觀 Housing                                       | 94-V0                                                                               | 94-V0                                                                               |                                                                                      |
| 許可 Approvals                                     | UL/cUL                                                                              | UL/cUL                                                                              |                                                                                      |
| 包裝 Packaging                                     |                                                                                     |                                                                                     |                                                                                      |
| 包裝單位/約重 Packaging unit/Weight approx.            | 500個 / 14,5公斤                                                                       | 500個 / 14,5公斤                                                                       |                                                                                      |
| 包裝尺寸 Box dimensions                              | 80 x 30 x 22 cm                                                                     | 80 x 30 x 22 cm                                                                     |                                                                                      |
| 其他附加選項 Other accessory options                   |                                                                                     |                                                                                     |                                                                                      |
|                                                  | NBR flat gasket 100 pcs in bag                                                      |                                                                                     |                                                                                      |
|                                                  | Silicon profile gasket 100 pcs in bag                                               |                                                                                     |                                                                                      |
|                                                  | Stainless steel screw 100 pcs in bag                                                |                                                                                     |                                                                                      |

## Valve Connectors KAO - KA1 series

SELF - ASSEMBLY CABLE

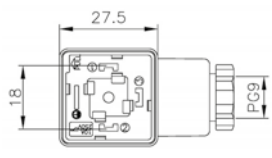
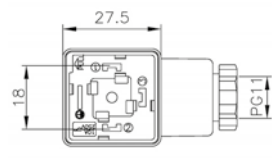
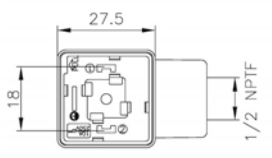
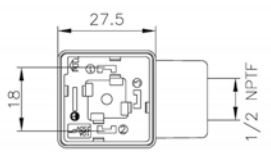


CAUS



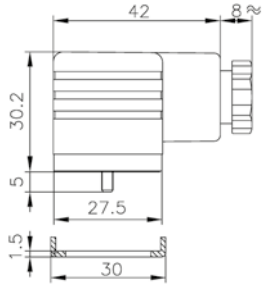
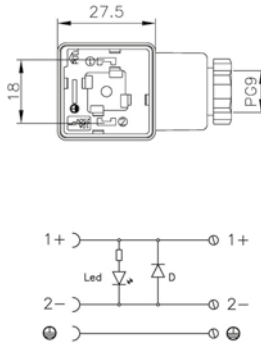
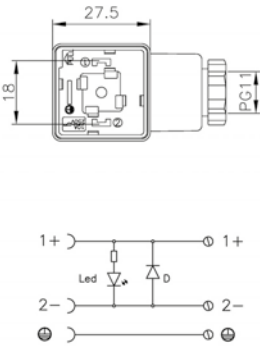
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|                                                                                                                                            |                                                                                                                                            |                                                                                                                               |                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| EN175301-803                                                                                                                               | EN175301-803                                                                                                                               | EN175301-803                                                                                                                  | EN175301-803                                                                                                                                 |
| A                                                                                                                                          | A                                                                                                                                          | A                                                                                                                             | A                                                                                                                                            |
| P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                                                                        | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                                                                        | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                                                           | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12                                                                                                          |
| 黑 black                                                                                                                                    | 黑 black                                                                                                                                    | 黑 black                                                                                                                       | 黑 black                                                                                                                                      |
| 3+PE                                                                                                                                       | 3+PE                                                                                                                                       | 2+PE                                                                                                                          | 3+PE                                                                                                                                         |
| <b>KA042000B9UR</b>                                                                                                                        | <b>KA042000B1UR</b>                                                                                                                        | <b>KA132000B3</b>                                                                                                             | <b>KA042000B3</b>                                                                                                                            |
| 訂購編號KA042000A9UR                                                                                                                           | 訂購編號KA042000A1UR                                                                                                                           | 訂購編號KA132000A3                                                                                                                | 訂購編號KA042000A3                                                                                                                               |
| PG9                                                                                                                                        | PG11                                                                                                                                       | 1/2 NPTF                                                                                                                      | 1/2 NPTF                                                                                                                                     |
| 1,5mm <sup>2</sup> 無接合/端點                                                                                                                  | 1,5mm <sup>2</sup> 無接合/端點                                                                                                                  | 1,5mm <sup>2</sup> 無接合/端點                                                                                                     | 1,5mm <sup>2</sup> 無接合/端點                                                                                                                    |
| <br>1 ———— ♂ 1<br>2 ———— ♂ 2<br>3 ———— ♂ 3<br>⊕ ———— ⊕ ⊕ | <br>1 ———— ♂ 1<br>2 ———— ♂ 2<br>3 ———— ♂ 3<br>⊕ ———— ⊕ ⊕ | <br>1 ———— ♂ 1<br>2 ———— ♂ 2<br>⊕ ———— ⊕ ⊕ | <br>1 ———— ♂ 1<br>2 ———— ♂ 2<br>3 ———— ♂ 3<br>⊕ ———— ⊕ ⊕ |
| 6,3 x 0,8mm ; 4,8 x 0,8mm                                                                                                                  | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                                                                                  | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                                                                     | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                                                                                    |
| 250 V AC/DC                                                                                                                                | 250 V AC/DC                                                                                                                                | 250 V AC/DC                                                                                                                   | 250 V AC/DC                                                                                                                                  |
| 10 A                                                                                                                                       | 10 A                                                                                                                                       | 10 A                                                                                                                          | 10 A                                                                                                                                         |
| 15mΩ 最大 max.                                                                                                                               | 15mΩ 最大 max.                                                                                                                               | 15mΩ 最大 max.                                                                                                                  | 15mΩ 最大 max.                                                                                                                                 |
| III                                                                                                                                        | III                                                                                                                                        | III                                                                                                                           | III                                                                                                                                          |
| 螺紋 screw M3                                                                                                                                | 螺紋 screw M3                                                                                                                                | 螺紋 screw M3                                                                                                                   | 螺紋 screw M3                                                                                                                                  |
| 最大 max. 0,5 N/m                                                                                                                            | 最大 max. 0,5 N/m                                                                                                                            | 最大 max. 0,5 N/m                                                                                                               | 最大 max. 0,5 N/m                                                                                                                              |
| 5 mm to 7 mm 直徑 diameter                                                                                                                   | 6 mm to 9 mm 直徑 diameter                                                                                                                   | not included                                                                                                                  | not included                                                                                                                                 |
| 中心螺線 central screw M3x32,5                                                                                                                 | 中心螺線 central screw M3x32,5                                                                                                                 | 中心螺線 central screw M3x32,5                                                                                                    | 中心螺線 central screw M3x32,5                                                                                                                   |
| 鍍銅錫銀 CuSn silver plated                                                                                                                    | 鍍銅錫銀 CuSn silver plated                                                                                                                    | 鍍銅錫銀 CuSn silver plated                                                                                                       | 鍍銅錫銀 CuSn silver plated                                                                                                                      |
| PA66 GF H2                                                                                                                                 | PA66 GF H2                                                                                                                                 | PA6 GF                                                                                                                        | PA6 GF                                                                                                                                       |
| PA66 GF H2                                                                                                                                 | PA66 GF H2                                                                                                                                 | PA6 GF                                                                                                                        | PA6 GF                                                                                                                                       |
| 當正確組裝時符合IP65                                                                                                                               | 當正確組裝時符合IP65                                                                                                                               | 當正確組裝時符合IP65                                                                                                                  | 當正確組裝時符合IP65                                                                                                                                 |
| 3                                                                                                                                          | 3                                                                                                                                          | 3                                                                                                                             | 3                                                                                                                                            |
| -40°C to + 100°C                                                                                                                           | -40°C to + 100°C                                                                                                                           | -40°C to + 100°C                                                                                                              | -40°C to + 100°C                                                                                                                             |
|                                                                                                                                            |                                                                                                                                            | -40°C to + 125°C 用於矽墊片                                                                                                        | -40°C to + 125°C 用於矽墊片                                                                                                                       |
| 94-V0                                                                                                                                      | 94-V0                                                                                                                                      | HB - UL 94                                                                                                                    | HB - UL 94                                                                                                                                   |
| 94-V0                                                                                                                                      | 94-V0                                                                                                                                      | HB - UL 94                                                                                                                    | HB - UL 94                                                                                                                                   |
| UL/cUL                                                                                                                                     | UL/cUL                                                                                                                                     |                                                                                                                               |                                                                                                                                              |
| 500個 / 14,5公斤                                                                                                                              | 500個 / 14,5公斤                                                                                                                              | 500個 / 14,5公斤                                                                                                                 | 500個 / 14,5公斤                                                                                                                                |
| 80 x 30 x 22 cm                                                                                                                            | 80 x 30 x 22 cm                                                                                                                            | 80 x 30 x 22 cm                                                                                                               | 80 x 30 x 22 cm                                                                                                                              |
|                                                                                                                                            |                                                                                                                                            | NBR平墊片100個/包<br>矽異形墊片100個/包<br>不鏽鋼螺絲100個/袋                                                                                    | NBR平墊片100個/包<br>矽異形墊片100個/包<br>不鏽鋼螺絲100個/袋                                                                                                   |

Form A - EN 175301-803 (DIN43650) / ISO 4400

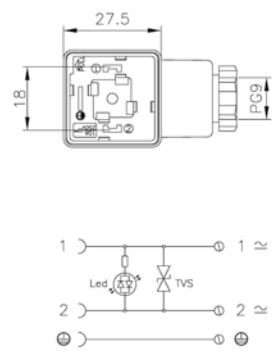
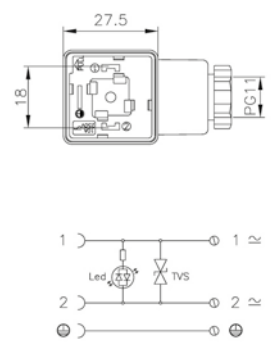
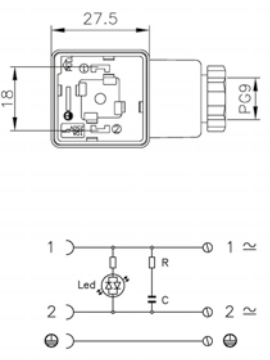
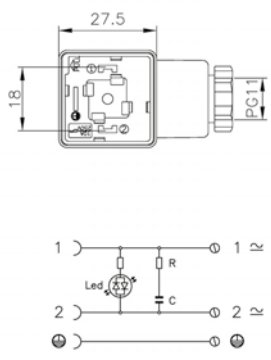


| 產品描述 Product description                                                             |                                                                                                                                                                                               |                                                                   |                                                                   |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|
| 標準 Standard                                                                          | EN175301-803                                                                                                                                                                                  | EN175301-803                                                      |                                                                   |
| 構造種類 Construction type                                                               | A                                                                                                                                                                                             | A                                                                 |                                                                   |
| 描述 Description                                                                       | P18 connector with screw terminals<br>NBR profile gasket<br>(PE) earth position H12<br>function indicator (LED)<br>and protective circuit (diode)/and TVS (transil)/and RC protective circuit | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和保護電路 (二極管) | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和保護電路 (二極管) |
| 外觀顏色 Housing colour                                                                  | 透明 transparent                                                                                                                                                                                | 透明 transparent                                                    |                                                                   |
| 接觸點 Number of contacts                                                               | 2+PE                                                                                                                                                                                          | 2+PE                                                              |                                                                   |
| 訂購編號 Order no.                                                                       | KA132D54T9                                                                                                                                                                                    | KA132D54T1                                                        |                                                                   |
| 要求選項 Other options on request                                                        | LED 顏色紅 colour red<br>LED 顏色綠 colour green                                                                                                                                                    | 訂購編號KA132D57T9<br>訂購編號KA132D5AT9                                  | 訂購編號KA132D57T1<br>訂購編號KA132D5AT1                                  |
| 導線入口 Cable gland                                                                     | PG9 (M16x1,5 可依要求 on request)                                                                                                                                                                 | PG11                                                              |                                                                   |
| 最大導線尺寸 Max. conductor size                                                           | 1,5mm <sup>2</sup> 無接合/端點                                                                                                                                                                     | 1,5mm <sup>2</sup> 無接合/端點                                         |                                                                   |
| 圖 Drawing                                                                            |                                                                                                                                                                                               |                                                                   |                                                                   |
|    |                                                                                                                                                                                               |                                                                   |                                                                   |
|   |                                                                                                                                                                                               |                                                                   |                                                                   |
|  |                                                                                                                                                                                               |                                                                   |                                                                   |
| 技術資料 Technical data                                                                  |                                                                                                                                                                                               |                                                                   |                                                                   |
| 插入銷口尺寸 Pin dimension                                                                 | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                                                                                                                                     | 6,3 x 0,8mm ; 4,8 x 0,8mm                                         |                                                                   |
| 電壓 Voltage                                                                           | 24 V DC                                                                                                                                                                                       | 24 V DC                                                           |                                                                   |
| 額定最大電流 Rated current max.                                                            | 4 A                                                                                                                                                                                           | 4 A                                                               |                                                                   |
| 抑制器 Suppressor                                                                       | 二極管 Diode 1A 1000V                                                                                                                                                                            | 二極管 Diode 1A 1000V                                                |                                                                   |
| 顏色 LED colour                                                                        | 黃 yellow                                                                                                                                                                                      | 黃 yellow                                                          |                                                                   |
| 接觸抗阻 Contact resistance                                                              | 15mΩ 最大 max.                                                                                                                                                                                  | 15mΩ 最大 max.                                                      |                                                                   |
| 過電壓分類 Overvoltage category                                                           | III                                                                                                                                                                                           | III                                                               |                                                                   |
| 終端樣式 Type of termination                                                             | 螺紋 screw M3                                                                                                                                                                                   | 螺紋 screw M3                                                       |                                                                   |
| 接觸旋緊力矩 Contact screw torque                                                          | 最大 max. 0,5 N/m                                                                                                                                                                               | 最大 max. 0,5 N/m                                                   |                                                                   |
| 適合電線 Suitable cables                                                                 | 5 mm to 7 mm 直徑 diameter                                                                                                                                                                      | 6 mm to 9 mm 直徑 diameter                                          |                                                                   |
| 安裝 Mounting                                                                          | 中心螺線 central screw M3x32,5                                                                                                                                                                    | 中心螺線 central screw M3x32,5                                        |                                                                   |
| 材質 Material                                                                          |                                                                                                                                                                                               |                                                                   |                                                                   |
| 接觸點材質 Contact material                                                               | 鍍銅錫銀 CuSn silver plated                                                                                                                                                                       | 鍍銅錫銀 CuSn silver plated                                           |                                                                   |
| 接觸套材質 Contact holder material                                                        | PA6 GF                                                                                                                                                                                        | PA6 GF                                                            |                                                                   |
| 外框材質 Housing material                                                                | PA12                                                                                                                                                                                          | PA12                                                              |                                                                   |
| 環境條件 Environmental conditions                                                        |                                                                                                                                                                                               |                                                                   |                                                                   |
| 防護等級 Protection class (EN 60529)                                                     | IP 65 when correctly assembled                                                                                                                                                                | 當正確組裝時符合IP65                                                      |                                                                   |
| 汙染程度 Pollution severity (EN 60664-1)                                                 | 3                                                                                                                                                                                             | 3                                                                 |                                                                   |
| 溫度範圍 Temperature range                                                               | -20°C to + 80°C                                                                                                                                                                               | -20°C to + 80°C                                                   |                                                                   |
| 可燃性等級 Inflammability class                                                           |                                                                                                                                                                                               |                                                                   |                                                                   |
| 接觸套 Contact holder                                                                   | HB - UL 94                                                                                                                                                                                    | HB - UL 94                                                        |                                                                   |
| 外觀 Housing                                                                           | HB - UL 94                                                                                                                                                                                    | HB - UL 94                                                        |                                                                   |
| 包裝 Packaging                                                                         |                                                                                                                                                                                               |                                                                   |                                                                   |
| 包裝單位/約重 Packaging unit/Weight approx.                                                | 100個 / 2,5公斤                                                                                                                                                                                  | 100個 / 2,5公斤                                                      |                                                                   |
| 包裝尺寸 Box dimensions                                                                  | 29 x 15 x 18 cm                                                                                                                                                                               | 29 x 15 x 18 cm                                                   |                                                                   |
| Other accessories options                                                            |                                                                                                                                                                                               |                                                                   |                                                                   |
| NBR flat gasket 100 pcs in bag                                                       | NBR平墊片100個/包                                                                                                                                                                                  | NBR平墊片100個/包                                                      |                                                                   |
| Silicon profile gasket 100 pcs in bag                                                | 矽異形墊片100個/包                                                                                                                                                                                   | 矽異形墊片100個/包                                                       |                                                                   |
| Stainless steel screw 100 pcs in bag                                                 | 不鏽鋼螺絲100個/袋                                                                                                                                                                                   | 不鏽鋼螺絲100個/袋                                                       |                                                                   |

# Valve Connectors KA1 series

SELF - ASSEMBLY CABLE

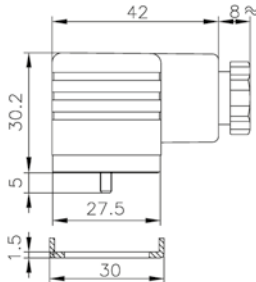
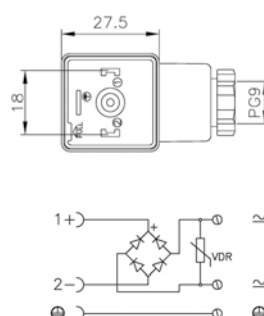
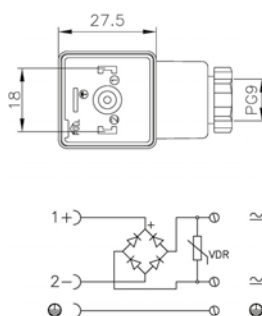


| EN175301-803                                                                       | EN175301-803                                                                       | EN175301-803                                                                        | EN175301-803                                                                         |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| A                                                                                  | A                                                                                  | A                                                                                   | A                                                                                    |
| P18螺紋端子連接器                                                                         | P18螺紋端子連接器                                                                         | P18螺紋端子連接器                                                                          | P18螺紋端子連接器                                                                           |
| NBR 墊片                                                                             | NBR 墊片                                                                             | NBR 墊片                                                                              | NBR 墊片                                                                               |
| (PE)接地位置H12                                                                        | (PE)接地位置H12                                                                        | (PE)接地位置H12                                                                         | (PE)接地位置H12                                                                          |
| 功能指示燈 (LED)                                                                        | 功能指示燈 (LED)                                                                        | 功能指示燈 (LED)                                                                         | 功能指示燈 (LED)                                                                          |
| 和TVS保護電路 (TRANSIL)                                                                 | 和TVS保護電路 (TRANSIL)                                                                 | 和RC 保護電路                                                                            | 和RC 保護電路                                                                             |
| 透明 transparent                                                                     | 透明 transparent                                                                     | 透明 transparent                                                                      | 透明 transparent                                                                       |
| 2+PE                                                                               | 2+PE                                                                               | 2+PE                                                                                | 2+PE                                                                                 |
| <b>KA132T54T9</b>                                                                  | <b>KA132T54T1</b>                                                                  | <b>KA132C54T9</b>                                                                   | <b>KA132C54T1</b>                                                                    |
| 訂購編號KA132T57T9                                                                     | 訂購編號KA132T57T1                                                                     |                                                                                     |                                                                                      |
| 訂購編號KA132T5AT9                                                                     | 訂購編號KA132T5AT1                                                                     |                                                                                     |                                                                                      |
| PG9 (M16x1,5 可依要求 on request)                                                      | PG11                                                                               | PG9 (M16x1,5 可依要求 on request)                                                       | PG11                                                                                 |
| 1,5mm² 無接合/端點                                                                      | 1,5mm² 無接合/端點                                                                      | 1,5mm² 無接合/端點                                                                       | 1,5mm² 無接合/端點                                                                        |
|  |  |  |  |
| 6,3 x 0,8mm ; 4,8 x 0,8mm                                                          | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                          | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                           | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                            |
| 24 V AC/DC                                                                         | 24 V AC/DC                                                                         | 24 V AC/DC                                                                          | 24 V AC/DC                                                                           |
| 4 A                                                                                | 4 A                                                                                | 4 A                                                                                 | 4 A                                                                                  |
| TVS Vbr max.=37,8V Peak=400W                                                       | TVS Vbr max.=37,8V Peak=400W                                                       | Filter RC C=0,1 µF R=100 Ω                                                          | Filter RC C=0,1 µF R=100 Ω                                                           |
| 黃 yellow                                                                           | 黃 yellow                                                                           | 黃 yellow                                                                            | 黃 yellow                                                                             |
| 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                        | 15mΩ 最大 max.                                                                         |
| III                                                                                | III                                                                                | III                                                                                 | III                                                                                  |
| 螺紋 screw M3                                                                        | 螺紋 screw M3                                                                        | 螺紋 screw M3                                                                         | 螺紋 screw M3                                                                          |
| 最大 max. 0,5 N/m                                                                    | 最大 max. 0,5 N/m                                                                    | 最大 max. 0,5 N/m                                                                     | 最大 max. 0,5 N/m                                                                      |
| 5 mm to 7 mm 直徑 diameter                                                           | 6 mm to 9 mm 直徑 diameter                                                           | 5 mm to 7 mm 直徑 diameter                                                            | 6 mm to 9 mm 直徑 diameter                                                             |
| 中心螺線 central screw M3x32,5                                                         | 中心螺線 central screw M3x32,5                                                         | 中心螺線 central screw M3x32,5                                                          | 中心螺線 central screw M3x32,5                                                           |
| 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                             | 鍍銅錫銀 CuSn silver plated                                                              |
| PA6 GF                                                                             | PA6 GF                                                                             | PA6 GF                                                                              | PA6 GF                                                                               |
| PA12                                                                               | PA12                                                                               | PA12                                                                                | PA12                                                                                 |
| 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 3                                                                                  | 3                                                                                  | 3                                                                                   | 3                                                                                    |
| -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                     | -20°C to + 80°C                                                                      |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          | HB - UL 94                                                                           |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          | HB - UL 94                                                                           |
| 100個 / 2,5公斤                                                                       | 100個 / 2,5公斤                                                                       | 100個 / 2,5公斤                                                                        | 100個 / 2,5公斤                                                                         |
| 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                     | 29 x 15 x 18 cm                                                                      |
| NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                                                                         |
| 矽異形墊片100個/包                                                                        | 矽異形墊片100個/包                                                                        | 矽異形墊片100個/包                                                                         | 矽異形墊片100個/包                                                                          |
| 不鏽鋼螺絲100個/袋                                                                        | 不鏽鋼螺絲100個/袋                                                                        | 不鏽鋼螺絲100個/袋                                                                         | 不鏽鋼螺絲100個/袋                                                                          |

Form A - EN 175301-803 (DIN43650) / ISO 4400



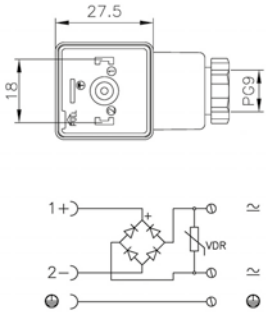
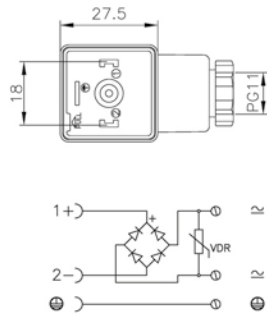
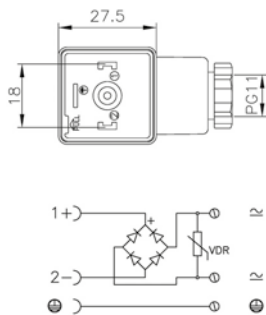
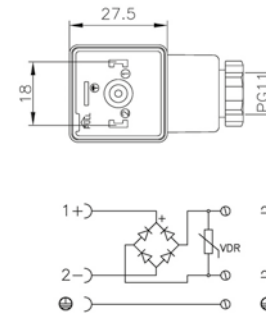


| 產品描述 Product description              |                                                                                                                                               |                                                                                     |                                                                                      |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 標準 Standard                           |                                                                                                                                               | EN175301-803                                                                        | EN175301-803                                                                         |
| 構造種類 Construction type                |                                                                                                                                               | A                                                                                   | A                                                                                    |
| 描述 Description                        | P18 connector with screw terminals<br>NBR profile gasket<br>(PE) earth position H12<br>full bridge rectifier<br>and VDR suppressor (varistor) | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>全橋整流器<br>和VDR抑制器 (壓敏電阻)                      | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>全橋整流器<br>和VDR抑制器 (壓敏電阻)                       |
| 外觀顏色 Housing colour                   |                                                                                                                                               | 黑 black                                                                             | 黑 black                                                                              |
| 接觸點 Number of contacts                |                                                                                                                                               | 2+PE                                                                                | 2+PE                                                                                 |
| 訂購編號 Order no.                        |                                                                                                                                               | <b>KA132R11B9</b>                                                                   | <b>KA132R12B9</b>                                                                    |
| 要求選項 Other options on request         | 灰色外觀 grey housing                                                                                                                             | 訂購編號 <b>KA132R11A9</b>                                                              | 訂購編號 <b>KA132R12A9</b>                                                               |
| 導線入口 Cable gland                      |                                                                                                                                               | PG9 (M16x1,5 可依要求 on request)                                                       | PG9 (M16x1,5 可依要求 on request)                                                        |
| 最大導線尺寸 Max. conductor size            | without splice/terminal                                                                                                                       | 1mm <sup>2</sup> 無接合/端點                                                             | 1mm <sup>2</sup> 無接合/端點                                                              |
| 圖 Drawing                             |                                                             |  |  |
| 技術資料 Technical data                   |                                                                                                                                               |                                                                                     |                                                                                      |
| 插入鎖口尺寸 Pin dimension                  |                                                                                                                                               | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                           | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                            |
| 電壓 Voltage                            | input ; output                                                                                                                                | 輸入 24 VAC ; 輸出 20 VDC                                                               | 輸入 115 VAC ; 輸出 103 VDC                                                              |
| 額定最大電流 Rated current max.             |                                                                                                                                               | 1 A                                                                                 | 1 A                                                                                  |
| 抑制器 Suppressor                        |                                                                                                                                               | VDR 30 Vrms 0,9 Joule                                                               | VDR 130 Vrms 4,5 Joule                                                               |
| 顏色 LED colour                         |                                                                                                                                               |                                                                                     |                                                                                      |
| 接觸抗阻 Contact resistance               |                                                                                                                                               | 15mΩ 最大 max.                                                                        | 15mΩ 最大 max.                                                                         |
| 過電壓分類 Overvoltage category            |                                                                                                                                               | III                                                                                 | III                                                                                  |
| 終端樣式 Type of termination              |                                                                                                                                               | 螺紋 screw M3                                                                         | 螺紋 screw M3                                                                          |
| 接觸旋緊力矩 Contact screw torque           |                                                                                                                                               | 最大 max. 0,5 N/m                                                                     | 最大 max. 0,5 N/m                                                                      |
| 適合電線 Suitable cables                  |                                                                                                                                               | 5 mm to 7 mm 直徑 diameter                                                            | 5 mm to 7 mm 直徑 diameter                                                             |
| 安裝 Mounting                           |                                                                                                                                               | 中心螺線 central screw M3x32,5                                                          | 中心螺線 central screw M3x32,5                                                           |
| 材質 Material                           |                                                                                                                                               |                                                                                     |                                                                                      |
| 接觸點材質 Contact material                |                                                                                                                                               | 鍍銅錫銀 CuSn silver plated                                                             | 鍍銅錫銀 CuSn silver plated                                                              |
| 接觸套材質 Contact holder material         |                                                                                                                                               | PA6 GF                                                                              | PA6 GF                                                                               |
| 外框材質 Housing material                 |                                                                                                                                               | PA6 GF                                                                              | PA6 GF                                                                               |
| 環境條件 Enviromental conditions          |                                                                                                                                               |                                                                                     |                                                                                      |
| 防護等級 Protection class (EN 60529)      | IP 65 when correctly assembled                                                                                                                | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 污染程度 Pollution severity (EN 60664-1)  |                                                                                                                                               | 3                                                                                   | 3                                                                                    |
| 溫度範圍 Temperature range                |                                                                                                                                               | -40°C to + 80°C                                                                     | -40°C to + 80°C                                                                      |
| 可燃性等級 Inflammability class            |                                                                                                                                               |                                                                                     |                                                                                      |
| 接觸套 Contact holder                    |                                                                                                                                               | HB - UL 94                                                                          | HB - UL 94                                                                           |
| 外觀 Housing                            |                                                                                                                                               | HB - UL 94                                                                          | HB - UL 94                                                                           |
| 包裝 Packaging                          |                                                                                                                                               |                                                                                     |                                                                                      |
| 包裝單位/約重 Packaging unit/Weight approx. |                                                                                                                                               | 100個 / 2,7公斤                                                                        | 100個 / 2,7公斤                                                                         |
| 包裝尺寸 Box dimensions                   |                                                                                                                                               | 29 x 15 x 18 cm                                                                     | 29 x 15 x 18 cm                                                                      |
| Other accessories options             |                                                                                                                                               |                                                                                     |                                                                                      |
|                                       | NBR flat gasket 100 pcs in bag                                                                                                                | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                                                                         |
|                                       | Silicon profile gasket 100 pcs in bag                                                                                                         | 矽異形墊片100個/包                                                                         | 矽異形墊片100個/包                                                                          |
|                                       | Stainless steel screw 100 pcs in bag                                                                                                          | 不鏽鋼螺絲100個/袋                                                                         | 不鏽鋼螺絲100個/袋                                                                          |

## Valve Connectors KA1 series

SELF - ASSEMBLY CABLE

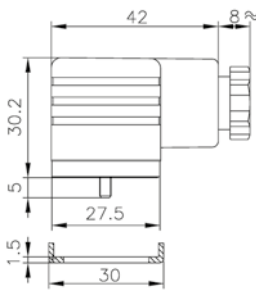
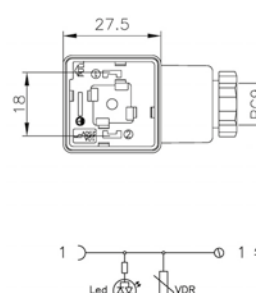
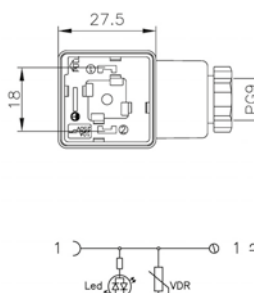


| EN175301-803                                                                       | EN175301-803                                                                       | EN175301-803                                                                        | EN175301-803                                                                         |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| A                                                                                  | A                                                                                  | A                                                                                   | A                                                                                    |
| P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>全橋整流器<br>和VDR抑制器 (壓敏電阻)                     | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>全橋整流器<br>和VDR抑制器 (壓敏電阻)                     | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>全橋整流器<br>和VDR抑制器 (壓敏電阻)                      | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>全橋整流器<br>和VDR抑制器 (壓敏電阻)                       |
| 黑 black                                                                            | 黑 black                                                                            | 黑 black                                                                             | 黑 black                                                                              |
| 2+PE                                                                               | 2+PE                                                                               | 2+PE                                                                                | 2+PE                                                                                 |
| <b>KA132R13B9</b>                                                                  | <b>KA132R11B1</b>                                                                  | <b>KA132R12B1</b>                                                                   | <b>KA132R13B1</b>                                                                    |
| 訂購編號 <b>KA132R13A9</b>                                                             | 訂購編號 <b>KA132R11A1</b>                                                             | 訂購編號 <b>KA132R12A1</b>                                                              | 訂購編號 <b>KA132R13A1</b>                                                               |
| PG9 (M16x1,5 可依要求 on request)                                                      | PG11                                                                               | PG11                                                                                | PG11                                                                                 |
| 1mm <sup>2</sup> 無接合/端點                                                            | 1mm <sup>2</sup> 無接合/端點                                                            | 1mm <sup>2</sup> 無接合/端點                                                             | 1mm <sup>2</sup> 無接合/端點                                                              |
|  |  |  |  |
| 6,3 x 0,8mm ; 4,8 x 0,8mm                                                          | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                          | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                           | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                            |
| 輸入230 VAC ; 輸出 207 VDC                                                             | 輸入24 VAC ; 輸出 20 VDC                                                               | 輸入115 VAC ; 輸出 103 VDC                                                              | 輸入230 VAC ; 輸出 207 VDC                                                               |
| 1 A                                                                                | 1 A                                                                                | 1 A                                                                                 | 1 A                                                                                  |
| VDR 275 Vrms 8,6 Joule                                                             | VDR 30 Vrms 0,9 Joule                                                              | VDR 130 Vrms 4,5 Joule                                                              | VDR 275 Vrms 8,6 Joule                                                               |
| 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                        | 15mΩ 最大 max.                                                                         |
| III                                                                                | III                                                                                | III                                                                                 | III                                                                                  |
| 螺紋 screw M3                                                                        | 螺紋 screw M3                                                                        | 螺紋 screw M3                                                                         | 螺紋 screw M3                                                                          |
| 最大 max. 0,5 N/m                                                                    | 最大 max. 0,5 N/m                                                                    | 最大 max. 0,5 N/m                                                                     | 最大 max. 0,5 N/m                                                                      |
| 5 mm to 7 mm 直徑 diameter                                                           | 6 mm to 9 mm 直徑 diameter                                                           | 6 mm to 9 mm 直徑 diameter                                                            | 6 mm to 9 mm 直徑 diameter                                                             |
| 中心螺線 central screw M3x32,5                                                         | 中心螺線 central screw M3x32,5                                                         | 中心螺線 central screw M3x32,5                                                          | 中心螺線 central screw M3x32,5                                                           |
| 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                             | 鍍銅錫銀 CuSn silver plated                                                              |
| PA6 GF                                                                             | PA6 GF                                                                             | PA6 GF                                                                              | PA6 GF                                                                               |
| PA6 GF                                                                             | PA6 GF                                                                             | PA6 GF                                                                              | PA6 GF                                                                               |
| 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 3                                                                                  | 3                                                                                  | 3                                                                                   | 3                                                                                    |
| -40°C to + 80°C                                                                    | -40°C to + 80°C                                                                    | -40°C to + 80°C                                                                     | -40°C to + 80°C                                                                      |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          | HB - UL 94                                                                           |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          | HB - UL 94                                                                           |
| 100個 / 2,7公斤                                                                       | 100個 / 2,7公斤                                                                       | 100個 / 2,7公斤                                                                        | 100個 / 2,7公斤                                                                         |
| 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                     | 29 x 15 x 18 cm                                                                      |
| NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                                                                         |
| 矽異形墊片100個/包                                                                        | 矽異形墊片100個/包                                                                        | 矽異形墊片100個/包                                                                         | 矽異形墊片100個/包                                                                          |
| 不鏽鋼螺絲100個/袋                                                                        | 不鏽鋼螺絲100個/袋                                                                        | 不鏽鋼螺絲100個/袋                                                                         | 不鏽鋼螺絲100個/袋                                                                          |

Form A - EN 175301-803 (DIN43650) / ISO 4400



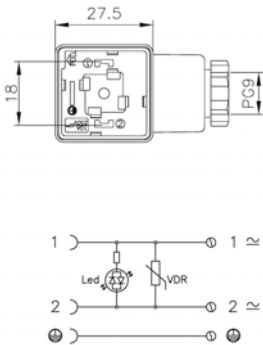
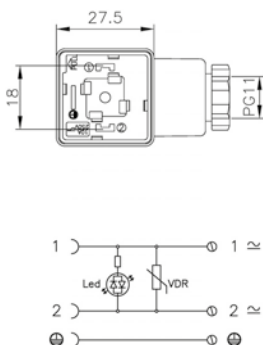
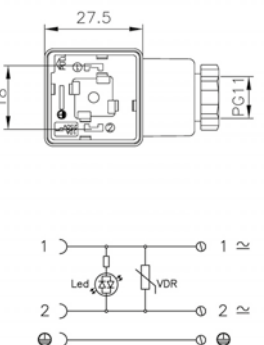
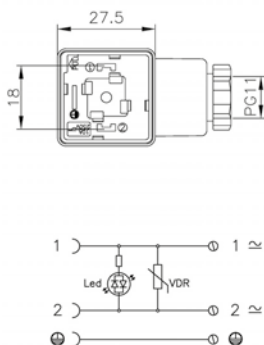


| 產品描述 Product description              |                                                                                                                                                          |                                                                                     |                                                                                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 標準 Standard                           | EN175301-803                                                                                                                                             | EN175301-803                                                                        |                                                                                      |
| 構造種類 Construction type                | A                                                                                                                                                        | A                                                                                   |                                                                                      |
| 描述 Description                        | P18 connector with screw terminals<br>NBR profile gasket<br>(PE) earth position H12<br>function indicator (LED)<br>and VDR protective circuit (varistor) | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)               | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)                |
| 外觀顏色 Housing colour                   | 透明                                                                                                                                                       | 透明                                                                                  |                                                                                      |
| 接觸點 Number of contacts                | 2+PE                                                                                                                                                     | 2+PE                                                                                |                                                                                      |
| 訂購編號 Order no.                        | KA132V54T9                                                                                                                                               | KA132V55T9                                                                          |                                                                                      |
| 要求選項 Other options on request         | LED 顏色紅 colour red<br>LED 顏色綠 colour green                                                                                                               | 訂購編號KA132V57T9<br>訂購編號KA132V5AT9                                                    | 訂購編號KA132V58T9<br>訂購編號KA132V5BT9                                                     |
| 導線入口 Cable gland                      | PG9 (M16x1,5 可依要求 on request)                                                                                                                            | PG9 (M16x1,5 可依要求 on request)                                                       |                                                                                      |
| 最大導線尺寸 Max. conductor size            | without splice/terminal<br>max. 1,5mm <sup>2</sup> 無接合/端點                                                                                                | max. 1,5mm <sup>2</sup> 無接合/端點                                                      |                                                                                      |
| 圖 Drawing                             |                                                                        |  |  |
| 技術資料 Technical data                   |                                                                                                                                                          |                                                                                     |                                                                                      |
| 插入銷口尺寸 Pin dimension                  | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                                                                                                | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                           |                                                                                      |
| 電壓 Voltage                            | 24 V AC/DC                                                                                                                                               | 115 V AC/DC                                                                         |                                                                                      |
| 額定最大電流 Rated current max.             | 5 A                                                                                                                                                      | 5 A                                                                                 |                                                                                      |
| 抑制器 Suppressor                        | VDR 30 Vrms 0,9 Joule                                                                                                                                    | VDR 130 Vrms 4,5 Joule                                                              |                                                                                      |
| 顏色 LED colour                         | 黃 yellow                                                                                                                                                 | 黃 yellow                                                                            |                                                                                      |
| 接觸抗阻 Contact resistance               | 15mΩ 最大 max.                                                                                                                                             | 15mΩ 最大 max.                                                                        |                                                                                      |
| 過電壓分類 Overvoltage category            | III                                                                                                                                                      | III                                                                                 |                                                                                      |
| 終端樣式 Type of termination              | 螺紋 screw M3                                                                                                                                              | 螺紋 screw M3                                                                         |                                                                                      |
| 接觸旋緊力矩 Contact screw torque           | 最大 max. 0,5 N/m                                                                                                                                          | 最大 max. 0,5 N/m                                                                     |                                                                                      |
| 適合電線 Suitable cables                  | 5 mm to 7 mm 直徑 diameter                                                                                                                                 | 5 mm to 7 mm 直徑 diameter                                                            |                                                                                      |
| 安裝 Mounting                           | 中心螺線 central screw M3x32,5                                                                                                                               | 中心螺線 central screw M3x32,5                                                          |                                                                                      |
| 材質 Material                           |                                                                                                                                                          |                                                                                     |                                                                                      |
| 接觸點材質 Contact material                | 鍍銅錫銀 CuSn silver plated                                                                                                                                  | 鍍銅錫銀 CuSn silver plated                                                             |                                                                                      |
| 接觸套材質 Contact holder material         | PA6 GF                                                                                                                                                   | PA6 GF                                                                              |                                                                                      |
| 外框材質 Housing material                 | PA12                                                                                                                                                     | PA12                                                                                |                                                                                      |
| 環境條件 Environmental conditions         |                                                                                                                                                          |                                                                                     |                                                                                      |
| 防護等級 Protection class (EN 60529)      | IP 65 when correctly assembled                                                                                                                           | 當正確組裝時符合IP65                                                                        |                                                                                      |
| 污染程度 Pollution severity (EN 60664-1)  | 3                                                                                                                                                        | 3                                                                                   |                                                                                      |
| 溫度範圍 Temperature range                | -20°C to + 80°C                                                                                                                                          | -20°C to + 80°C                                                                     |                                                                                      |
| 可燃性等級 Inflammability class            |                                                                                                                                                          |                                                                                     |                                                                                      |
| 接觸套 Contact holder                    | HB - UL 94                                                                                                                                               | HB - UL 94                                                                          |                                                                                      |
| 外觀 Housing                            | HB - UL 94                                                                                                                                               | HB - UL 94                                                                          |                                                                                      |
| 包裝 Packaging                          |                                                                                                                                                          |                                                                                     |                                                                                      |
| 包裝單位/約重 Packaging unit/Weight approx. | 100個 / 2,5公斤                                                                                                                                             | 100個 / 2,5公斤                                                                        |                                                                                      |
| 包裝尺寸 Box dimensions                   | 29 x 15 x 18 cm                                                                                                                                          | 29 x 15 x 18 cm                                                                     |                                                                                      |
| 其他附加選項 Other accessory options        |                                                                                                                                                          |                                                                                     |                                                                                      |
| NBR flat gasket 100 pcs in bag        | NBR平墊片100個/包                                                                                                                                             | NBR平墊片100個/包                                                                        |                                                                                      |
| Silicon profile gasket 100 pcs in bag | 矽異形墊片100個/包                                                                                                                                              | 矽異形墊片100個/包                                                                         |                                                                                      |
| Stainless steel screw 100 pcs in bag  | 不鏽鋼螺絲100個/袋                                                                                                                                              | 不鏽鋼螺絲100個/袋                                                                         |                                                                                      |

# Valve Connectors KA1 series

SELF - ASSEMBLY CABLE



| EN175301-803                                                                       | EN175301-803                                                                       | EN175301-803                                                                        | EN175301-803                                                                         |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| A                                                                                  | A                                                                                  | A                                                                                   | A                                                                                    |
| P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)              | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)              | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)               | P18螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)                |
| 透明                                                                                 | 透明                                                                                 | 透明                                                                                  | 透明                                                                                   |
| 2+PE                                                                               | 2+PE                                                                               | 2+PE                                                                                | 2+PE                                                                                 |
| <b>KA132V56T9</b>                                                                  | <b>KA132V54T1</b>                                                                  | <b>KA132V55T1</b>                                                                   | <b>KA132V56T1</b>                                                                    |
| 訂購編號 <b>KA132V59T9</b>                                                             | 訂購編號 <b>KA132V57T1</b>                                                             | 訂購編號 <b>KA132V58T1</b>                                                              | 訂購編號 <b>KA132V59T1</b>                                                               |
| 訂購編號 <b>KA132V5CT9</b>                                                             | 訂購編號 <b>KA132V5AT1</b>                                                             | 訂購編號 <b>KA132V5BT1</b>                                                              | 訂購編號 <b>KA132V5CT1</b>                                                               |
| PG9 (M16x1,5 可依要求 on request)                                                      | PG11                                                                               | PG11                                                                                | PG11                                                                                 |
| max. 1,5mm <sup>2</sup> 無接合/端點                                                     | max. 1,5mm <sup>2</sup> 無接合/端點                                                     | max. 1,5mm <sup>2</sup> 無接合/端點                                                      | max. 1,5mm <sup>2</sup> 無接合/端點                                                       |
|  |  |  |  |
| 6,3 x 0,8mm ; 4,8 x 0,8mm                                                          | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                          | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                           | 6,3 x 0,8mm ; 4,8 x 0,8mm                                                            |
| 230 V AC/DC                                                                        | 24 V AC/DC                                                                         | 115 V AC/DC                                                                         | 230 V AC/DC                                                                          |
| 5 A                                                                                | 5 A                                                                                | 5 A                                                                                 | 5 A                                                                                  |
| VDR 275 Vrms 8,6 Joule                                                             | VDR 30 Vrms 0,9 Joule                                                              | VDR 130 Vrms 4,5 Joule                                                              | VDR 275 Vrms 8,6 Joule                                                               |
| 黃 yellow                                                                           | 黃 yellow                                                                           | 黃 yellow                                                                            | 黃 yellow                                                                             |
| 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                        | 15mΩ 最大 max.                                                                         |
| III                                                                                | III                                                                                | III                                                                                 | III                                                                                  |
| 螺紋 screw M3                                                                        | 螺紋 screw M3                                                                        | 螺紋 screw M3                                                                         | 螺紋 screw M3                                                                          |
| 最大 max. 0,5 N/m                                                                    | 最大 max. 0,5 N/m                                                                    | 最大 max. 0,5 N/m                                                                     | 最大 max. 0,5 N/m                                                                      |
| 5 mm to 7 mm 直徑 diameter                                                           | 6 mm to 9 mm 直徑 diameter                                                           | 6 mm to 9 mm 直徑 diameter                                                            | 6 mm to 9 mm 直徑 diameter                                                             |
| 中心螺絲 central screw M3x32,5                                                         | 中心螺絲 central screw M3x32,5                                                         | 中心螺絲 central screw M3x32,5                                                          | 中心螺絲 central screw M3x32,5                                                           |
| 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                             | 鍍銅錫銀 CuSn silver plated                                                              |
| PA6 GF                                                                             | PA6 GF                                                                             | PA6 GF                                                                              | PA6 GF                                                                               |
| PA12                                                                               | PA12                                                                               | PA12                                                                                | PA12                                                                                 |
| 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 3                                                                                  | 3                                                                                  | 3                                                                                   | 3                                                                                    |
| -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                     | -20°C to + 80°C                                                                      |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          | HB - UL 94                                                                           |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          | HB - UL 94                                                                           |
| 100個 / 2,5公斤                                                                       | 100個 / 2,5公斤                                                                       | 100個 / 2,5公斤                                                                        | 100個 / 2,5公斤                                                                         |
| 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                     | 29 x 15 x 18 cm                                                                      |
| NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                                                                         |
| 矽異形墊片100個/包                                                                        | 矽異形墊片100個/包                                                                        | 矽異形墊片100個/包                                                                         | 矽異形墊片100個/包                                                                          |
| 不鏽鋼螺絲100個/袋                                                                        | 不鏽鋼螺絲100個/袋                                                                        | 不鏽鋼螺絲100個/袋                                                                         | 不鏽鋼螺絲100個/袋                                                                          |

Form A - EN 175301-803 (DIN43650) / ISO 4400

# 連接器 KB1 系列

請自行安裝導線



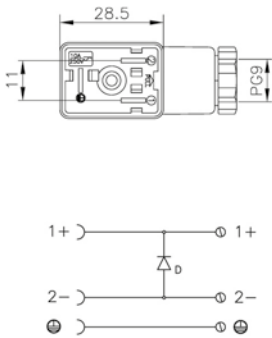
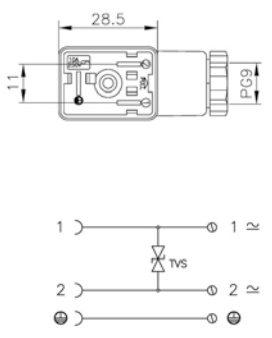
類別B-工業用

| 產品描述 Product description              |  |                                     |                                     |
|---------------------------------------|--|-------------------------------------|-------------------------------------|
| 標準 Standard                           |  | 標準工業用 Industrial standard (11 mm)   | 標準工業用 Industrial standard (11 mm)   |
| 構造種類 Construction type                |  | B                                   | B                                   |
| 描述 Description                        |  | P11螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12 | P11螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12 |
| 外觀顏色 Housing colour                   |  | 黑 black                             | 黑 black                             |
| 接觸點 Number of contacts                |  | 2+PE                                | 2+PE                                |
| 訂購編號 Order no.                        |  | KB132000B9                          | KB132000B7                          |
| 要求選項 Other options on request         |  | 灰色外觀 grey housing                   | 訂購編號 KB132000A9                     |
| 導線入口 Cable gland                      |  | PG9 (M16x1,5 可依要求 on request)       | PG7                                 |
| 最大導線尺寸 Max. conductor size            |  | 1,5mm <sup>2</sup> 無接合/端點           | 1,5mm <sup>2</sup> 無接合/端點           |
| 圖 Drawing                             |  |                                     |                                     |
| 技術資料 Technical data                   |  |                                     |                                     |
| 插入銷口尺寸 Pin dimension                  |  | 6,3 x 0,8mm                         | 6,3 x 0,8mm                         |
| 電壓 Voltage                            |  | 250 V AC/DC 最大 max.                 | 250 V AC/DC 最大 max.                 |
| 額定最大電流 Rated current max.             |  | 10 A (EN 60512-5-2 test 5b)         | 10 A (EN 60512-5-2 test 5b)         |
| 抑制器 Suppressor                        |  |                                     |                                     |
| 接觸抗阻 Contact resistance               |  | 15mΩ 最大 max.                        | 15mΩ 最大 max.                        |
| 過電壓分類 Overvoltage category            |  | III                                 | III                                 |
| 終端樣式 Type of termination              |  | 螺紋 screw M3                         | screw M3                            |
| 接觸旋緊力矩 Contact screw torque           |  | 最大 max. 0,5 N/m                     | 最大 max. 0,5 N/m                     |
| 適合電線 Suitables cables                 |  | 5 mm to 7 mm 直徑 diameter            | 4 mm to 6 mm 直徑 diameter            |
| 安裝 Mounting                           |  | 中心螺線 central screw M3x32,5          | 中心螺線 central screw M3x32,5          |
| 材質 Material                           |  |                                     |                                     |
| 接觸套材質 Contact material                |  | 鍍銅錫銀 CuSn silver plated             | 鍍銅錫銀 CuSn silver plated             |
| 接觸套材質 Contact holder material         |  | PA6 GF                              | PA6 GF                              |
| 外框材質 Housing material                 |  | PA6 GF                              | PA6 GF                              |
| 環境條件 Enviromental conditions          |  |                                     |                                     |
| 防護等級 Protection class (EN 60529)      |  | IP 65 when correctly assembled      | 當正確組裝時符合IP65                        |
| 汙染程度 Pollution severity (EN 60664-1)  |  | 3                                   | 3                                   |
| 溫度範圍 Temperature range                |  | -40°C to + 100°C                    | -40°C to + 100°C                    |
| 可燃性等級 Inflammability class            |  |                                     |                                     |
| 接觸套 Contact holder                    |  | HB - UL 94                          | HB - UL 94                          |
| 外觀 Housing                            |  | HB - UL 94                          | HB - UL 94                          |
| 包裝 Packaging                          |  |                                     |                                     |
| 包裝單位/約重 Packaging unit/Weight approx. |  | 500個 / 14,5公斤                       | 500個 / 14,5公斤                       |
| 包裝尺寸 Box dimensions                   |  | 80 x 30 x 22 cm                     | 80 x 30 x 22 cm                     |
| 其他附加選項 Other accessory options        |  |                                     |                                     |
| NBR flat gasket 100 pcs in bag        |  | NBR平墊片100個/包                        | NBR平墊片100個/包                        |
| Stainless steel screw 100 pcs in bag  |  | 不鏽鋼螺絲100個/袋                         | 不鏽鋼螺絲100個/袋                         |

# Valve Connectors **KB1** series

SELF - ASSEMBLY CABLE



|                                                                                    |                                                                                    |  |  |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--|--|
| 標準工業用 Industrial standard (11 mm)                                                  | 標準工業用 Industrial standard (11 mm)                                                  |  |  |
| B                                                                                  | B                                                                                  |  |  |
| P11螺紋端子連接器                                                                         | P11螺紋端子連接器                                                                         |  |  |
| NBR 墊片                                                                             | NBR 墊片                                                                             |  |  |
| (PE)接地位置H12                                                                        | (PE)接地位置H12                                                                        |  |  |
| 黑 black                                                                            | 黑 black                                                                            |  |  |
| 2+PE                                                                               | 2+PE                                                                               |  |  |
| <b>KB132D10B9</b>                                                                  | <b>KB132T11B9</b>                                                                  |  |  |
|                                                                                    |                                                                                    |  |  |
| PG9 (M16x1,5 可依要求 on request)                                                      | PG9 (M16x1,5 可依要求 on request)                                                      |  |  |
| 1,5mm <sup>2</sup> 無接合/端點                                                          | 1,5mm <sup>2</sup> 無接合/端點                                                          |  |  |
|  |  |  |  |
|                                                                                    |                                                                                    |  |  |
| 6,3 x 0,8mm                                                                        | 6,3 x 0,8mm                                                                        |  |  |
| 0 ... 230V DC                                                                      | 24 V AC/DC                                                                         |  |  |
| 4 A                                                                                | 4 A                                                                                |  |  |
| 二極管 Diode 1A 1000V                                                                 | TVS Vbr max.=37,8V Peak=400W                                                       |  |  |
| 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                       |  |  |
| III                                                                                | III                                                                                |  |  |
| 螺紋 screw M3                                                                        | 螺紋 screw M3                                                                        |  |  |
| 最大 max. 0,5 N/m                                                                    | 最大 max. 0,5 N/m                                                                    |  |  |
| 5 mm to 7 mm 直徑 diameter                                                           | 5 mm to 7 mm 直徑 diameter                                                           |  |  |
| 中心螺線 central screw M3x32,5                                                         | 中心螺線 central screw M3x32,5                                                         |  |  |
|                                                                                    |                                                                                    |  |  |
| 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                            |  |  |
| PA6 GF                                                                             | PA6 GF                                                                             |  |  |
| PA6 GF                                                                             | PA6 GF                                                                             |  |  |
|                                                                                    |                                                                                    |  |  |
| 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                       |  |  |
| 3                                                                                  | 3                                                                                  |  |  |
| -40°C to + 100°C                                                                   | -40°C to + 100°C                                                                   |  |  |
|                                                                                    |                                                                                    |  |  |
| HB - UL 94                                                                         | HB - UL 94                                                                         |  |  |
| HB - UL 94                                                                         | HB - UL 94                                                                         |  |  |
|                                                                                    |                                                                                    |  |  |
| 100個 / 2,5公斤                                                                       | 100個 / 2,5公斤                                                                       |  |  |
| 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                    |  |  |
|                                                                                    |                                                                                    |  |  |
| NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                       |  |  |
| 不鏽鋼螺絲100個/袋                                                                        | 不鏽鋼螺絲100個/袋                                                                        |  |  |

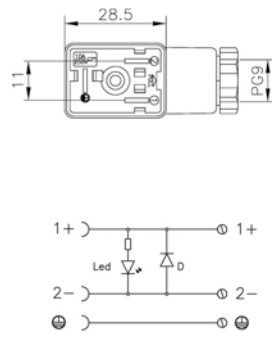
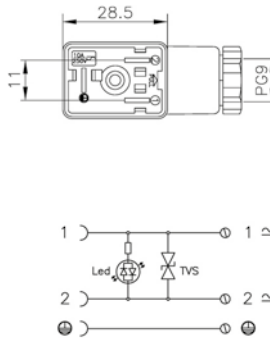
Form B - INDUSTRIAL

# 連接器 KB1 系列

請自行安裝導線



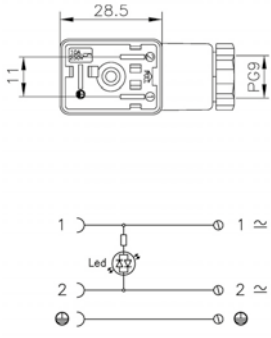
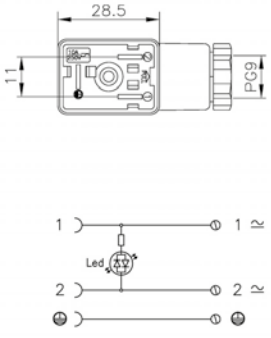
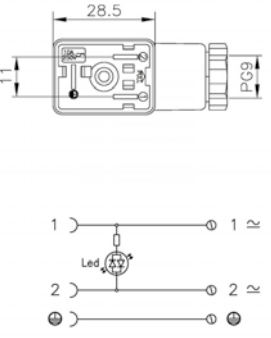
類別B-工業用

| 產品描述 Product description              |                                                                                                                                                                     | 標準工業用 Industrial standard (11 mm)                                                   | 標準工業用 Industrial standard (11 mm)                                                    |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 標準 Standard                           |                                                                                                                                                                     | B                                                                                   | B                                                                                    |
| 構造種類 Construction type                |                                                                                                                                                                     | P11螺紋端子連接器                                                                          | P11螺紋端子連接器                                                                           |
| 描述 Description                        | P11 connector with screw terminals<br>NBR profile gasket<br>(PE) earth position H12<br>function indicator (LED)<br>and protective circuit (diode)/and TVS (transil) | NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和保護電路 (二極管)                                 | NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和TVS保護電路 (TRANSIL)                           |
| 外觀顏色 Housing colour                   |                                                                                                                                                                     | 透明 transparent                                                                      | 透明 transparent                                                                       |
| 接觸點 Number of contacts                |                                                                                                                                                                     | 2+PE                                                                                | 2+PE                                                                                 |
| 訂購編號 Order no.                        |                                                                                                                                                                     | <b>KB132D54T9</b>                                                                   | <b>KB132T54T9</b>                                                                    |
| 要求選項 Other options on request         | LED 顏色紅 colour red                                                                                                                                                  | 訂購編號 <b>KB132D57T9</b>                                                              | 訂購編號 <b>KB132T57T9</b>                                                               |
|                                       | LED 顏色綠 colour green                                                                                                                                                | 訂購編號 <b>KB132D5AT9</b>                                                              | 訂購編號 <b>KB132T5AT9</b>                                                               |
| 導線入口 Cable gland                      |                                                                                                                                                                     | PG9 (M16x1.5 可依要求 on request)                                                       | PG9 (M16x1.5 可依要求 on request)                                                        |
| 最大導線尺寸 Max. conductor size            | without splice/terminal                                                                                                                                             | 1,5mm <sup>2</sup> 無接合/端點                                                           | 1,5mm <sup>2</sup> 無接合/端點                                                            |
| 圖 Drawing                             |                                                                                                                                                                     |  |  |
| 技術資料 Technical data                   |                                                                                                                                                                     |                                                                                     |                                                                                      |
| 插入銷口尺寸 Pin dimension                  |                                                                                                                                                                     | 6,3 x 0,8mm                                                                         | 6,3 x 0,8mm                                                                          |
| 電壓 Voltage                            |                                                                                                                                                                     | 24 V DC                                                                             | 24 V AC/DC                                                                           |
| 額定最大電流 Rated current max.             |                                                                                                                                                                     | 4 A                                                                                 | 4 A                                                                                  |
| 抑制器 Suppressor                        |                                                                                                                                                                     | 二極管 diode 1A 1000V                                                                  | TVS Vbr max.=37,8V Peak=400W                                                         |
| 顏色 LED colour                         |                                                                                                                                                                     | 黃 yellow                                                                            | 黃 yellow                                                                             |
| 接觸抗阻 Contact resistance               |                                                                                                                                                                     | 15mΩ 最大 max.                                                                        | 15mΩ 最大 max.                                                                         |
| 過電壓分類 Overvoltage category            |                                                                                                                                                                     | III                                                                                 | III                                                                                  |
| 終端樣式 Type of termination              |                                                                                                                                                                     | 螺紋 screw M3                                                                         | 螺紋 screw M3                                                                          |
| 接觸旋緊力矩 Contact screw torque           |                                                                                                                                                                     | 最大 max. 0,5 N/m                                                                     | 最大 max. 0,5 N/m                                                                      |
| 適合電線 Suitable cables                  |                                                                                                                                                                     | 5 mm to 7 mm 直徑 diameter                                                            | 5 mm to 7 mm 直徑 diameter                                                             |
| 安裝 Mounting                           |                                                                                                                                                                     | 中心螺線 central screw M3x32,5                                                          | 中心螺線 central screw M3x32,5                                                           |
| 材質 Material                           |                                                                                                                                                                     |                                                                                     |                                                                                      |
| 接觸點材質 Contact material                |                                                                                                                                                                     | 鍍銅錫銀 CuSn silver plated                                                             | 鍍銅錫銀 CuSn silver plated                                                              |
| 接觸套材質 Contact holder material         |                                                                                                                                                                     | PA6 GF                                                                              | PA6 GF                                                                               |
| 外框材質 Housing material                 |                                                                                                                                                                     | PA12                                                                                | PA12                                                                                 |
| 環境條件 Environmental conditions         |                                                                                                                                                                     |                                                                                     |                                                                                      |
| 防護等級 Protection class (EN 60529)      | IP 65 when correctly assembled                                                                                                                                      | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 污染程度 Pollution severity (EN 60664-1)  |                                                                                                                                                                     | 3                                                                                   | 3                                                                                    |
| 溫度範圍 Temperature range                |                                                                                                                                                                     | -20°C to + 80°C                                                                     | -20°C to + 80°C                                                                      |
| 可燃性等級 Inflammability class            |                                                                                                                                                                     |                                                                                     |                                                                                      |
| 接觸套 Contact holder                    |                                                                                                                                                                     | HB - UL 94                                                                          | HB - UL 94                                                                           |
| 外觀 Housing                            |                                                                                                                                                                     | HB - UL 94                                                                          | HB - UL 94                                                                           |
| 包裝 Packaging                          |                                                                                                                                                                     |                                                                                     |                                                                                      |
| 包裝單位/約重 Packaging unit/Weight approx. |                                                                                                                                                                     | 100個 / 2,5公斤                                                                        | 100個 / 2,5公斤                                                                         |
| 包裝尺寸 Box dimensions                   |                                                                                                                                                                     | 29 x 15 x 18 cm                                                                     | 29 x 15 x 18 cm                                                                      |
| 其他附加選項 Other accessory options        |                                                                                                                                                                     |                                                                                     |                                                                                      |
|                                       | NBR flat gasket 100 pcs in bag                                                                                                                                      | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                                                                         |
|                                       | Stainless steel screw 100 pcs in bag                                                                                                                                | 不鏽鋼螺絲100個/袋                                                                         | 不鏽鋼螺絲100個/袋                                                                          |

## Valve Connectors **KB1** series

SELF - ASSEMBLY CABLE



| 標準工業用 Industrial standard (11 mm)                                                  | 標準工業用 Industrial standard (11 mm)                                                  | 標準工業用 Industrial standard (11 mm)                                                   | 標準工業用 Industrial standard (11 mm) |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------|
| B                                                                                  | B                                                                                  | B                                                                                   |                                   |
| P11螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)                                 | P11螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)                                 | P11螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)                                  |                                   |
| 透明 transparent                                                                     | 透明 transparent                                                                     | 透明 transparent                                                                      |                                   |
| 2+PE                                                                               | 2+PE                                                                               | 2+PE                                                                                |                                   |
| <b>KB132L34T9</b>                                                                  | <b>KB132L35T9</b>                                                                  | <b>KB132L36T9</b>                                                                   |                                   |
| 訂購編號 <b>KB132L37T9</b>                                                             | 訂購編號 <b>KB132L38T9</b>                                                             | 訂購編號 <b>KB132L39T9</b>                                                              |                                   |
| 訂購編號 <b>KB132L3AT9</b>                                                             | 訂購編號 <b>KB132L3BT9</b>                                                             | 訂購編號 <b>KB132L3CT9</b>                                                              |                                   |
| PG9 (M16x1,5 可依要求 on request)                                                      | PG9 (M16x1,5 可依要求 on request)                                                      | PG9 (M16x1,5 可依要求 on request)                                                       |                                   |
| 1,5mm² 無接合/端點                                                                      | 1,5mm² 無接合/端點                                                                      | 1,5mm² 無接合/端點                                                                       |                                   |
|  |  |  |                                   |
| 6,3 x 0,8mm                                                                        | 6,3 x 0,8mm                                                                        | 6,3 x 0,8mm                                                                         |                                   |
| 24 V AC/DC                                                                         | 115 V AC/DC                                                                        | 230 V AC/DC                                                                         |                                   |
| 8 A                                                                                | 8 A                                                                                | 8 A                                                                                 |                                   |
| 黃 yellow                                                                           | 黃 yellow                                                                           | 黃 yellow                                                                            |                                   |
| 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                        |                                   |
| III                                                                                | III                                                                                | III                                                                                 |                                   |
| 螺紋 screw M3                                                                        | 螺紋 screw M3                                                                        | 螺紋 screw M3                                                                         |                                   |
| 最大 max. 0,5 N/m                                                                    | 最大 max. 0,5 N/m                                                                    | 最大 max. 0,5 N/m                                                                     |                                   |
| 5 mm to 7 mm 直徑 diameter                                                           | 5 mm to 7 mm 直徑 diameter                                                           | 5 mm to 7 mm 直徑 diameter                                                            |                                   |
| 中心螺線 central screw M3x32,5                                                         | 中心螺線 central screw M3x32,5                                                         | 中心螺線 central screw M3x32,5                                                          |                                   |
| 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                             |                                   |
| PA6 GF                                                                             | PA6 GF                                                                             | PA6 GF                                                                              |                                   |
| PA12                                                                               | PA12                                                                               | PA12                                                                                |                                   |
| 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                        |                                   |
| 3                                                                                  | 3                                                                                  | 3                                                                                   |                                   |
| -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                     |                                   |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          |                                   |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          |                                   |
| 100個 / 2,5公斤                                                                       | 100個 / 2,5公斤                                                                       | 100個 / 2,5公斤                                                                        |                                   |
| 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                     |                                   |
| NBR平墊片100個/包<br>不鏽鋼螺絲100個/袋                                                        | NBR平墊片100個/包<br>不鏽鋼螺絲100個/袋                                                        | NBR平墊片100個/包<br>不鏽鋼螺絲100個/袋                                                         |                                   |

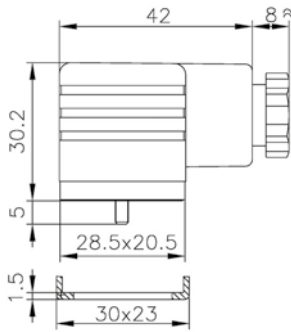
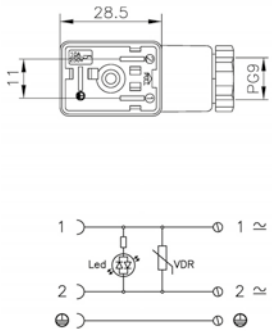
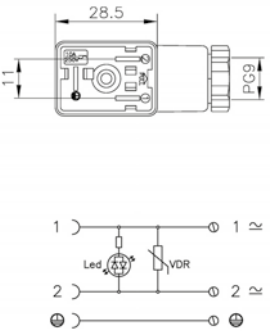
Form B - INDUSTRIAL

# 連接器 KB1 系列

請自行安裝導線



類別B-工業用

| 產品描述 Product description              |                                                                                                                                                          |                                                                                     |                                                                                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 標準 Standard                           | 標準工業用 Industrial standard (11 mm)                                                                                                                        | 標準工業用 Industrial standard (11 mm)                                                   |                                                                                      |
| 構造種類 Construction type                | B                                                                                                                                                        | B                                                                                   |                                                                                      |
| 描述 Description                        | P11 connector with screw terminals<br>NBR profile gasket<br>(PE) earth position H12<br>function indicator (LED)<br>and VDR protective circuit (varistor) | P11螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)               | P11螺紋端子連接器<br>NBR 墊片<br>(PE)接地位置H12<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)                |
| 外觀顏色 Housing colour                   | 透明                                                                                                                                                       | 透明                                                                                  |                                                                                      |
| 接觸點 Number of contacts                | 2+PE                                                                                                                                                     | 2+PE                                                                                |                                                                                      |
| 訂購編號 Order no.                        | <b>KB132V54T9</b>                                                                                                                                        | <b>KB132V55T9</b>                                                                   |                                                                                      |
| 要求選項 Other options on request         | LED 顏色紅 colour red<br>LED 顏色綠 colour green                                                                                                               | 訂購編號 <b>KB132V57T9</b><br>訂購編號 <b>KB132V58T9</b>                                    | 訂購編號 <b>KB132V57T9</b><br>訂購編號 <b>KB132V58T9</b>                                     |
| 導線入口 Cable gland                      | PG9 (M16x1.5 可依要求 on request)                                                                                                                            | PG9 (M16x1.5 可依要求 on request)                                                       |                                                                                      |
| 最大導線尺寸 Max. conductor size            | 1.5mm <sup>2</sup> 無接合/端點                                                                                                                                | 1.5mm <sup>2</sup> 無接合/端點                                                           |                                                                                      |
| 圖 Drawing                             |                                                                        |  |  |
| 技術資料 Technical data                   |                                                                                                                                                          |                                                                                     |                                                                                      |
| 插入銷口尺寸 Pin dimension                  | 6,3 x 0,8mm                                                                                                                                              | 6,3 x 0,8mm                                                                         |                                                                                      |
| 電壓 Voltage                            | 24 V AC/DC                                                                                                                                               | 115 V AC/DC                                                                         |                                                                                      |
| 額定最大電流 Rated current max.             | 5 A                                                                                                                                                      | 5 A                                                                                 |                                                                                      |
| 抑制器 Suppressor                        | VDR 30 Vrms 0,9 Joule                                                                                                                                    | VDR 130 Vrms 4,5 Joule                                                              |                                                                                      |
| 顏色 LED colour                         | 黃 yellow                                                                                                                                                 | 黃 yellow                                                                            |                                                                                      |
| 接觸抗阻 Contact resistance               | 15mΩ 最大 max.                                                                                                                                             | 15mΩ 最大 max.                                                                        |                                                                                      |
| 過電壓分類 Overvoltage category            | III                                                                                                                                                      | III                                                                                 |                                                                                      |
| 終端樣式 Type of termination              | 螺紋 screw M3                                                                                                                                              | 螺紋 screw M3                                                                         |                                                                                      |
| 接觸旋緊力矩 Contact screw torque           | 最大 max. 0,5 N/m                                                                                                                                          | 最大 max. 0,5 N/m                                                                     |                                                                                      |
| 適合電線 Suitable cables                  | 5 mm to 7 mm 直徑 diameter                                                                                                                                 | 5 mm to 7 mm 直徑 diameter                                                            |                                                                                      |
| 安裝 Mounting                           | 中心螺線 central screw M3x32,5                                                                                                                               | 中心螺線 central screw M3x32,5                                                          |                                                                                      |
| 材質 Material                           |                                                                                                                                                          |                                                                                     |                                                                                      |
| 接觸點材質 Contact material                | 鍍銅錫銀 CuSn silver plated                                                                                                                                  | 鍍銅錫銀 CuSn silver plated                                                             |                                                                                      |
| 接觸套材質 Contact holder material         | PA6 GF                                                                                                                                                   | PA6 GF                                                                              |                                                                                      |
| 外框材質 Housing material                 | PA12                                                                                                                                                     | PA12                                                                                |                                                                                      |
| 環境條件 Environmental conditions         |                                                                                                                                                          |                                                                                     |                                                                                      |
| 防護等級 Protection class (EN 60529)      | IP 65 when correctly assembled                                                                                                                           | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 污染程度 Pollution severity (EN 60664-1)  | 3                                                                                                                                                        | 3                                                                                   |                                                                                      |
| 溫度範圍 Temperature range                | -20°C to + 80°C                                                                                                                                          | -20°C to + 80°C                                                                     |                                                                                      |
| 可燃性等級 Inflammability class            |                                                                                                                                                          |                                                                                     |                                                                                      |
| 接觸套 Contact holder                    | HB - UL 94                                                                                                                                               | HB - UL 94                                                                          |                                                                                      |
| 外觀 Housing                            | HB - UL 94                                                                                                                                               | HB - UL 94                                                                          |                                                                                      |
| 包裝 Packaging                          |                                                                                                                                                          |                                                                                     |                                                                                      |
| 包裝單位/約重 Packaging unit/Weight approx. | 100個 / 2,5公斤                                                                                                                                             | 100個 / 2,5公斤                                                                        |                                                                                      |
| 包裝尺寸 Box dimensions                   | 29 x 15 x 18 cm                                                                                                                                          | 29 x 15 x 18 cm                                                                     |                                                                                      |
| 其他附加選項 Other accessory options        |                                                                                                                                                          |                                                                                     |                                                                                      |
| NBR flat gasket 100 pcs in bag        | NBR平墊片100個/包                                                                                                                                             | NBR平墊片100個/包                                                                        |                                                                                      |
| Stainless steel screw 100 pcs in bag  | 不鏽鋼螺絲100個/袋                                                                                                                                              | 不鏽鋼螺絲100個/袋                                                                         |                                                                                      |

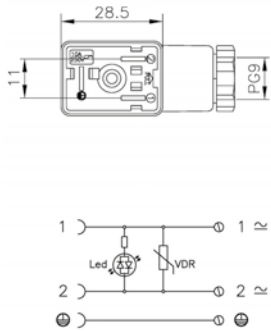


# Valve Connectors **KB1** series

SELF - ASSEMBLY CABLE



Form B - INDUSTRIAL

|                                                                                    |  |  |  |
|------------------------------------------------------------------------------------|--|--|--|
| 標準工業用 Industrial standard (11 mm)                                                  |  |  |  |
| B                                                                                  |  |  |  |
| P11螺紋端子連接器                                                                         |  |  |  |
| NBR 墊片                                                                             |  |  |  |
| (PE)接地位置H12                                                                        |  |  |  |
| 功能指示燈 (LED)                                                                        |  |  |  |
| 和VDR保護電路 (壓敏電阻)                                                                    |  |  |  |
| 透明                                                                                 |  |  |  |
| 2+PE                                                                               |  |  |  |
| <b>KB132V56T9</b>                                                                  |  |  |  |
| 訂購編號 <b>KB132V59T9</b>                                                             |  |  |  |
| 訂購編號 <b>KB132V5CT9</b>                                                             |  |  |  |
| PG9 (M16x1,5 可依要求 on request)                                                      |  |  |  |
| 1,5mm² 無接合/端點                                                                      |  |  |  |
|  |  |  |  |
| 6,3 x 0,8mm                                                                        |  |  |  |
| 230 V AC/DC                                                                        |  |  |  |
| 5 A                                                                                |  |  |  |
| VDR 275 Vrms 8,6 Joule                                                             |  |  |  |
| 黃 yellow                                                                           |  |  |  |
| 15mΩ 最大 max.                                                                       |  |  |  |
| III                                                                                |  |  |  |
| 螺紋 screw M3                                                                        |  |  |  |
| 最大 max. 0,5 N/m                                                                    |  |  |  |
| 5 mm to 7 mm 直徑 diameter                                                           |  |  |  |
| 中心螺絲 central screw M3x32,5                                                         |  |  |  |
| 鍍銅錫銀 CuSn silver plated                                                            |  |  |  |
| PA6 GF                                                                             |  |  |  |
| PA12                                                                               |  |  |  |
| 當正確組裝時符合IP65                                                                       |  |  |  |
| 3                                                                                  |  |  |  |
| -20°C to + 80°C                                                                    |  |  |  |
| HB - UL 94                                                                         |  |  |  |
| HB - UL 94                                                                         |  |  |  |
| 100個 / 2,5公斤                                                                       |  |  |  |
| 29 x 15 x 18 cm                                                                    |  |  |  |
| NBR平墊片100個/包                                                                       |  |  |  |
| 不鏽鋼螺絲100個/袋                                                                        |  |  |  |

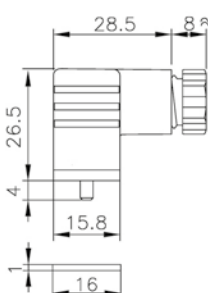
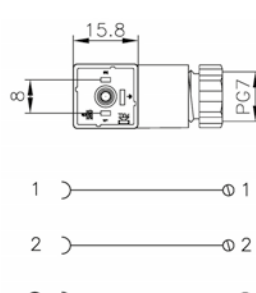
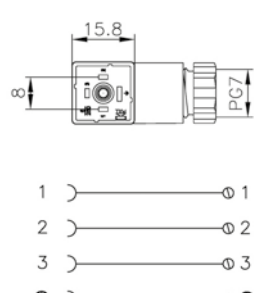


# 連接器 KC0 - KC1 系列

請自行安裝導線



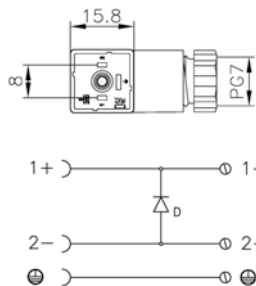
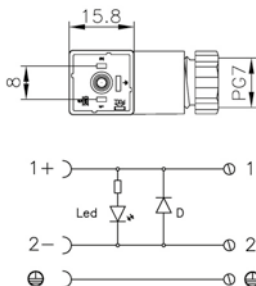
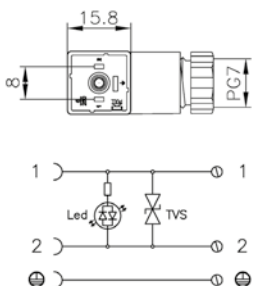
類別C - EN 175301-803 (DIN43650)

| 產品描述 Product description              |                                                                                                                                                          |                                                                                     |                                                                                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 標準 Standard                           | EN175301-803                                                                                                                                             | EN175301-803                                                                        |                                                                                      |
| 構造種類 Construction type                | C                                                                                                                                                        | C                                                                                   |                                                                                      |
| 描述 Description                        | P8 connector with screw terminals<br>NBR flat gasket (PE)<br>earth position H6<br>and protective circuit (diode)<br>and TVS protective circuit (transil) | P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6                                                      | P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6                                                       |
| 外觀顏色 Housing colour                   | 黑 black                                                                                                                                                  | 黑 black                                                                             |                                                                                      |
| 接觸點 Number of contacts                | 2+PE                                                                                                                                                     | 3+PE                                                                                |                                                                                      |
| 訂購編號 Order no.                        | KC136000B7                                                                                                                                               | KC046000B7                                                                          |                                                                                      |
| 要求選項 Other option on request          | earth pos. H12                                                                                                                                           | 訂購編號KC135000B7 接地位置H12                                                              | 訂購編號KC045000B7 接地位置H12                                                               |
| 導線入口 Cable gland                      | PG7                                                                                                                                                      | PG7                                                                                 |                                                                                      |
| 最大導線尺寸 Max. conductor size            | without splice/terminal                                                                                                                                  | 1,0mm² 無接合/端點                                                                       | 1,0mm² 無接合/端點                                                                        |
| 圖 Drawing                             |                                                                        |  |  |
| 技術資料 Technical data                   |                                                                                                                                                          |                                                                                     |                                                                                      |
| 插入銷口尺寸 Pin dimension                  | 3,6 x 0,8mm; 2,8 x 0,8mm                                                                                                                                 | 3,6 x 0,8mm; 2,8 x 0,8mm                                                            |                                                                                      |
| 電壓 Voltage                            | 250 V AC/DC 最大 max.                                                                                                                                      | 250 V AC/DC 最大 max.                                                                 |                                                                                      |
| 額定最大電流 Rated current max.             | 6 A (IEC512-3 test 5b)                                                                                                                                   | 6 A (IEC512-3 test 5b)                                                              |                                                                                      |
| 抑制器 Suppressor                        |                                                                                                                                                          |                                                                                     |                                                                                      |
| 顏色 LED colour                         |                                                                                                                                                          |                                                                                     |                                                                                      |
| 接觸抗阻 Contact resistance               | 15mΩ 最大 max.                                                                                                                                             | 15mΩ 最大 max.                                                                        |                                                                                      |
| 過電壓分類 Overvoltage category            | III                                                                                                                                                      | III                                                                                 |                                                                                      |
| 終端樣式 Type of termination              | headless screw                                                                                                                                           | 無頭螺釘 M3                                                                             | 無頭螺釘 M3                                                                              |
| 接觸旋緊力矩 Contact screw torque           | 最大 max. 0,2 N/m                                                                                                                                          | 最大 max. 0,2 N/m                                                                     |                                                                                      |
| 適合電線 Suitable cables                  | 4 mm to 6 mm 直徑 diameter                                                                                                                                 | 4 mm to 6 mm 直徑 diameter                                                            |                                                                                      |
| 安裝 Mounting                           | 中心螺線 central screw M2,5x27,5                                                                                                                             | 中心螺線 central screw M2,5x27,5                                                        |                                                                                      |
| 材質 Material                           |                                                                                                                                                          |                                                                                     |                                                                                      |
| 接觸點材質 Contact holder                  | 鍍銅錫銀 CuSn silver plated                                                                                                                                  | 鍍銅錫銀 CuSn silver plated                                                             |                                                                                      |
| 接觸套材質 Contact holder material         | PA6 GF                                                                                                                                                   | PA6 GF                                                                              |                                                                                      |
| 外框材質 Housing material                 | PA6 GF                                                                                                                                                   | PA6 GF                                                                              |                                                                                      |
| 環境條件 Environmental conditions         |                                                                                                                                                          |                                                                                     |                                                                                      |
| 防護等級 Protection class (EN 60529)      | IP 65 when correctly assembled                                                                                                                           | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 污染程度 Pollution severity (EN 60664-1)  | 3                                                                                                                                                        | 3                                                                                   |                                                                                      |
| 溫度範圍 Temperature range                | -40°C to + 100°C                                                                                                                                         | -40°C to + 100°C                                                                    |                                                                                      |
| 可燃性等級 Inflammability class            |                                                                                                                                                          |                                                                                     |                                                                                      |
| 接觸套 Contact holder                    | HB - UL 94                                                                                                                                               | HB - UL 94                                                                          |                                                                                      |
| 外觀 Housing                            | HB - UL 94                                                                                                                                               | HB - UL 94                                                                          |                                                                                      |
| 包裝 Packaging                          |                                                                                                                                                          |                                                                                     |                                                                                      |
| 包裝單位/約重 Packaging unit/Weight approx. | 1000個 / 13公斤                                                                                                                                             | 1000個 / 13公斤                                                                        |                                                                                      |
| 包裝尺寸 Box dimensions                   | 80 x 30 x 22 cm                                                                                                                                          | 80 x 30 x 22 cm                                                                     |                                                                                      |
| 其他附加選項 Other accessory options        |                                                                                                                                                          |                                                                                     |                                                                                      |
|                                       | NBR profile gasket 100 pcs in bag                                                                                                                        | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                                                                         |

# Valve Connectors **KC0 - KC1** series

SELF - ASSEMBLY CABLE



|                                                                                    |                                                                                    |                                                                                     |  |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
| EN175301-803                                                                       | EN175301-803                                                                       | EN175301-803                                                                        |  |
| C                                                                                  | C                                                                                  | C                                                                                   |  |
| P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>保護電路 (二極管)                                       | P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED) )<br>和保護電路 (二極管)                     | P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)<br>和TVS保護電路 (TRANSIL)                 |  |
| 黑 black                                                                            | 透明 transparent                                                                     | 透明 transparent                                                                      |  |
| 2+PE                                                                               | 2+PE                                                                               | 2+PE                                                                                |  |
| <b>KC136D10B7</b>                                                                  | <b>KC136D54T7</b>                                                                  | <b>KC136T54T7</b>                                                                   |  |
| 訂購編號 <b>KC135D10B7</b> 接地位置H12                                                     | 訂購編號 <b>KC136D57T7</b> (LED 顏色紅 red)                                               | 訂購編號 <b>KC136T57T7</b> (LED 顏色紅 red)                                                |  |
| PG7                                                                                | PG7                                                                                | PG7                                                                                 |  |
| 1,0mm² 無接合/端點                                                                      | 1,0mm² 無接合/端點                                                                      | 1,0mm² 無接合/端點                                                                       |  |
|  |  |  |  |
| 3,6 x 0,8mm; 2,8 x 0,8mm                                                           | 3,6 x 0,8mm; 2,8 x 0,8mm                                                           | 3,6 x 0,8mm; 2,8 x 0,8mm                                                            |  |
| 0...230 V DC                                                                       | 24 V DC                                                                            | 24 V AC/DC                                                                          |  |
| 4 A                                                                                | 4 A                                                                                | 4 A                                                                                 |  |
| 二極管 diode 1A 1000V                                                                 | 二極管 diode 1A 1000V                                                                 | TVS Vbr max.=37,8V Peak=400W                                                        |  |
| 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                        |  |
| III                                                                                | III                                                                                | III                                                                                 |  |
| 無頭螺釘 M3                                                                            | 無頭螺釘 M3                                                                            | 無頭螺釘 M3                                                                             |  |
| 最大 max. 0,2 N/m                                                                    | 最大 max. 0,2 N/m                                                                    | 最大 max. 0,2 N/m                                                                     |  |
| 4 mm to 6 mm 直徑 diameter                                                           | 4 mm to 6 mm 直徑 diameter                                                           | 4 mm to 6 mm 直徑 diameter                                                            |  |
| 中心螺線 central screw M2,5x27,5                                                       | 中心螺線 central screw M2,5x27,5                                                       | 中心螺線 central screw M2,5x27,5                                                        |  |
| 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                             |  |
| PA6 GF                                                                             | PA6 GF                                                                             | PA6 GF                                                                              |  |
| PA6 GF                                                                             | PA12                                                                               | PA12                                                                                |  |
| 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                        |  |
| 3                                                                                  | 3                                                                                  | 3                                                                                   |  |
| -40°C to + 100°C                                                                   | -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                     |  |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          |  |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          |  |
| 200個 / 2,5公斤                                                                       | 200個 / 2,6公斤                                                                       | 200個 / 2,6公斤                                                                        |  |
| 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                     |  |
| NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                        |  |

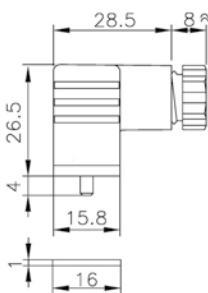
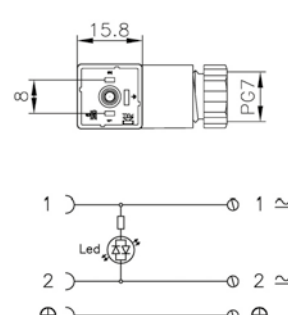
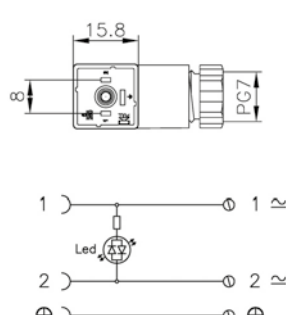
Form C - EN 175301-803 (DIN43650)

# 連接器 KC1 系列

請自行安裝導線



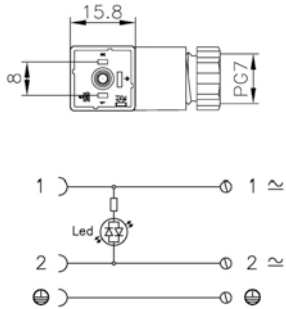
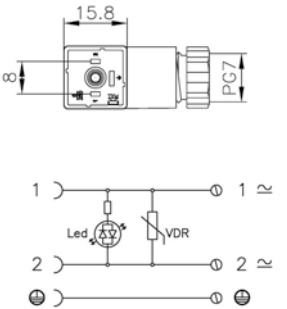
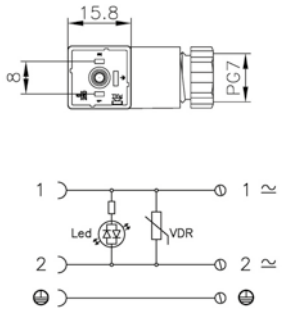
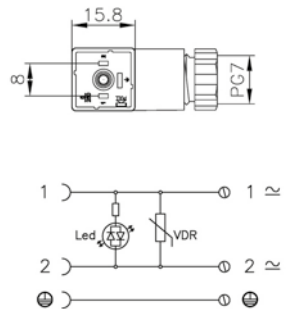
類別C - EN 175301-803 (DIN43650)

| 產品描述 Product description              |                                                                                                                                                     |                                                                                     |                                                                                      |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 標準 Standard                           | EN175301-803                                                                                                                                        | EN175301-803                                                                        |                                                                                      |
| 構造種類 Construction type                | C                                                                                                                                                   | C                                                                                   |                                                                                      |
| 描述 Description                        | P8 connector with screw terminals<br>NBR flat gasket (PE)<br>earth position H6<br>function indicator (LED)<br>and VDR protective circuit (varistor) | P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)                                       | P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)                                        |
| 外觀顏色 Housing colour                   | 透明 transparent                                                                                                                                      | 透明 transparent                                                                      |                                                                                      |
| 接觸點 Number of contacts                | 2+PE                                                                                                                                                | 2+PE                                                                                |                                                                                      |
| 訂購編號 Order no.                        | KC136L34T7                                                                                                                                          | KC136L35T7                                                                          |                                                                                      |
| 要求選項 Other options on request         | LED 顏色紅 red                                                                                                                                         | 訂購編號KC136L37T7                                                                      | 訂購編號KC136L38T7                                                                       |
| 導線入口 Cable gland                      | PG7                                                                                                                                                 | PG7                                                                                 |                                                                                      |
| 最大導線尺寸 Max. conductor size            | without splice/terminal                                                                                                                             | 1,0mm <sup>2</sup> 無接合/端點                                                           | 1,0mm <sup>2</sup> 無接合/端點                                                            |
| 圖 Drawing                             |                                                                   |  |  |
| 技術資料 Technical data                   |                                                                                                                                                     |                                                                                     |                                                                                      |
| 插入銷口尺寸 Pin dimension                  | 3,6 x 0,8mm; 2,8 x 0,8mm                                                                                                                            | 3,6 x 0,8mm; 2,8 x 0,8mm                                                            |                                                                                      |
| 電壓 Voltage                            | 24 V AC/DC                                                                                                                                          | 115 V AC/DC                                                                         |                                                                                      |
| 額定最大電流 Rated current max.             | 6 A                                                                                                                                                 | 6 A                                                                                 |                                                                                      |
| 抑制器 Suppressor                        |                                                                                                                                                     |                                                                                     |                                                                                      |
| 顏色 LED colour                         | 黃 yellow                                                                                                                                            | 黃 yellow                                                                            |                                                                                      |
| 接觸抗阻 Contact resistance               | 15mΩ 最大 max.                                                                                                                                        | 15mΩ 最大 max.                                                                        |                                                                                      |
| 過電壓分類 Overvoltage category            | III                                                                                                                                                 | III                                                                                 |                                                                                      |
| 終端樣式 Type of termination              | headless screw                                                                                                                                      | 無頭螺釘 M3                                                                             |                                                                                      |
| 接觸旋緊力矩 Contact screw torque           | 最大max. 0,2 N/m                                                                                                                                      | 最大max. 0,2 N/m                                                                      |                                                                                      |
| 適合電線 Suitable cables                  | 4 mm to 6 mm 直徑 diameter                                                                                                                            | 4 mm to 6 mm 直徑 diameter                                                            |                                                                                      |
| 安裝 Mounting                           | 中心螺絲 central screw M2,5x27,5                                                                                                                        | 中心螺絲 central screw M2,5x27,5                                                        |                                                                                      |
| 材質 Material                           |                                                                                                                                                     |                                                                                     |                                                                                      |
| 接觸點材質 Contact material                | 鍍銅錫銀 CuSn silver plated                                                                                                                             | 鍍銅錫銀 CuSn silver plated                                                             |                                                                                      |
| 接觸套材質 Contact holder material         | PA6 GF                                                                                                                                              | PA6 GF                                                                              |                                                                                      |
| 外框材質 Housing material                 | PA12                                                                                                                                                | PA12                                                                                |                                                                                      |
| 環境條件 Enviromental conditions          |                                                                                                                                                     |                                                                                     |                                                                                      |
| 防護等級 Protection class (EN 60529)      | IP 65 when correctly assembled                                                                                                                      | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 汙染程度 Pollution severity (EN 60664-1)  | 3                                                                                                                                                   | 3                                                                                   |                                                                                      |
| 溫度範圍 Temperature range                | -20°C to + 80°C                                                                                                                                     | -20°C to + 80°C                                                                     |                                                                                      |
| 可燃性等級 Inflammability class            |                                                                                                                                                     |                                                                                     |                                                                                      |
| 接觸套 Contact holder                    | HB - UL 94                                                                                                                                          | HB - UL 94                                                                          |                                                                                      |
| 外觀 Housing                            | HB - UL 94                                                                                                                                          | HB - UL 94                                                                          |                                                                                      |
| 包裝 Packaging                          |                                                                                                                                                     |                                                                                     |                                                                                      |
| 包裝單位/約重 Packaging unit/Weight approx. | 200個 / 2,6公斤                                                                                                                                        | 200個 / 2,6公斤                                                                        |                                                                                      |
| 包裝尺寸 Box dimensions                   | 29 x 15 x 18 cm                                                                                                                                     | 29 x 15 x 18 cm                                                                     |                                                                                      |
| 其他附加選項 Other accessory options        |                                                                                                                                                     |                                                                                     |                                                                                      |
|                                       | NBR flat gasket 100 pcs in bag                                                                                                                      | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                                                                         |

# Valve Connectors **KC1** series

SELF - ASSEMBLY CABLE



| EN175301-803                                                                       | EN175301-803                                                                       | EN175301-803                                                                        | EN175301-803                                                                         |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| C                                                                                  | C                                                                                  | C                                                                                   | C                                                                                    |
| P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)                   | P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)                   | P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)                    | P8螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)<br>和VDR保護電路 (壓敏電阻)                     |
| 透明 transparent                                                                     | 透明 transparent                                                                     | 透明 transparent                                                                      | 透明 transparent                                                                       |
| 2+PE                                                                               | 2+PE                                                                               | 2+PE                                                                                | 2+PE                                                                                 |
| <b>KC136L36T7</b>                                                                  | <b>KC136V54T7</b>                                                                  | <b>KC136V55T7</b>                                                                   | <b>KC136V56T7</b>                                                                    |
| 訂購編號 <b>KC136L39T7</b>                                                             | 訂購編號 <b>KC136V57T7</b>                                                             | 訂購編號 <b>KC136V58T7</b>                                                              | 訂購編號 <b>KC136V59T7</b>                                                               |
| PG7                                                                                | PG7                                                                                | PG7                                                                                 | PG7                                                                                  |
| 1,0mm <sup>2</sup> 無接合/端點                                                          | 1,0mm <sup>2</sup> 無接合/端點                                                          | 1,0mm <sup>2</sup> 無接合/端點                                                           | 1,0mm <sup>2</sup> 無接合/端點                                                            |
|  |  |  |  |
| 3,6 x 0,8mm; 2,8 x 0,8mm                                                           | 3,6 x 0,8mm; 2,8 x 0,8mm                                                           | 3,6 x 0,8mm; 2,8 x 0,8mm                                                            | 3,6 x 0,8mm; 2,8 x 0,8mm                                                             |
| 230 V AC/DC                                                                        | 24 V AC/DC                                                                         | 115 V AC/DC                                                                         | 230 V AC/DC                                                                          |
| 6 A                                                                                | 5 A                                                                                | 5 A                                                                                 | 5 A                                                                                  |
| 黃 yellow                                                                           | 黃 yellow                                                                           | 黃 yellow                                                                            | 黃 yellow                                                                             |
| 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                        | 15mΩ 最大 max.                                                                         |
| III                                                                                | III                                                                                | III                                                                                 | III                                                                                  |
| 無頭螺釘 M3                                                                            | 無頭螺釘 M3                                                                            | 無頭螺釘 M3                                                                             | 無頭螺釘 M3                                                                              |
| 最大max. 0,2 N/m                                                                     | 最大max. 0,2 N/m                                                                     | 最大max. 0,2 N/m                                                                      | 最大max. 0,2 N/m                                                                       |
| 4 mm to 6 mm 直徑 diameter                                                           | 4 mm to 6 mm 直徑 diameter                                                           | 4 mm to 6 mm 直徑 diameter                                                            | 4 mm to 6 mm 直徑 diameter                                                             |
| 中心螺線 central screw M2,5x27,5                                                       | 中心螺線 central screw M2,5x27,5                                                       | 中心螺線 central screw M2,5x27,5                                                        | 中心螺線 central screw M2,5x27,5                                                         |
| 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                             | 鍍銅錫銀 CuSn silver plated                                                              |
| PA6 GF                                                                             | PA6 GF                                                                             | PA6 GF                                                                              | PA6 GF                                                                               |
| PA12                                                                               | PA12                                                                               | PA12                                                                                | PA12                                                                                 |
| 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 3                                                                                  | 3                                                                                  | 3                                                                                   | 3                                                                                    |
| -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                     | -20°C to + 80°C                                                                      |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          | HB - UL 94                                                                           |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          | HB - UL 94                                                                           |
| 200個 / 2,6公斤                                                                       | 200個 / 2,6公斤                                                                       | 200個 / 2,6公斤                                                                        | 200個 / 2,6公斤                                                                         |
| 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                     | 29 x 15 x 18 cm                                                                      |
| NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                                                                         |

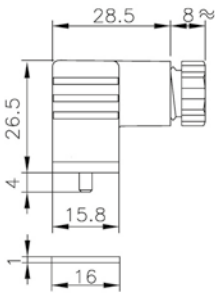
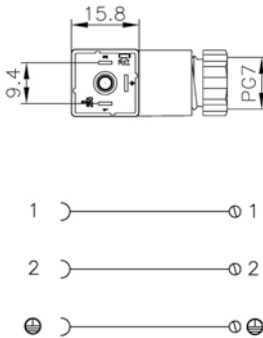
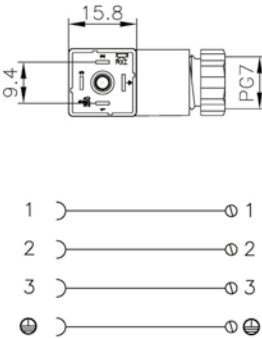
Form C - EN 175301-803 (DIN43650)

# 連接器 KD0 - KD1 系列

請自行安裝導線



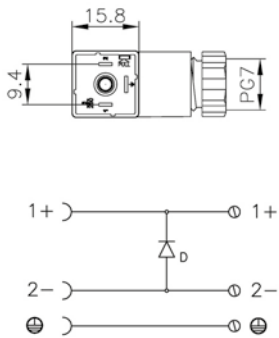
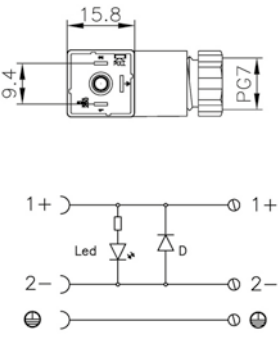
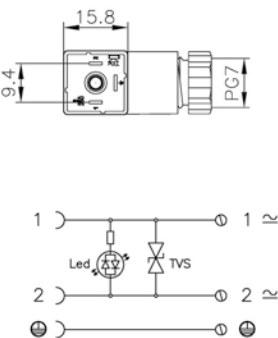
類別D-工業用

| 產品描述 Product description              |                                                                                                                                         |                                                                                                                                                                             |                                                                                                                                                                               |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 標準 Standard                           | 標準工業用 Industrial standard (9,4 mm)                                                                                                      | 標準工業用 Industrial standard (9,4 mm)                                                                                                                                          |                                                                                                                                                                               |
| 構造種類 Construction type                | C                                                                                                                                       | C                                                                                                                                                                           |                                                                                                                                                                               |
| 描述 Description                        | P9,4 connector with screw terminals<br>NBR flat gasket (PE)<br>earth position H6<br>and protective circuit (diode)<br>and TVS (transil) | P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6                                                                                                                                            | P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6                                                                                                                                              |
| 外觀顏色 Housing colour                   | 黑 black                                                                                                                                 | 黑 black                                                                                                                                                                     |                                                                                                                                                                               |
| 接觸點 Number of contacts                | 2+PE                                                                                                                                    | 3+PE                                                                                                                                                                        |                                                                                                                                                                               |
| 訂購編號 Order no.                        | <b>KD136000B7</b>                                                                                                                       | <b>KD046000B7</b>                                                                                                                                                           |                                                                                                                                                                               |
| 要求選項 Other options on request         | earth pos. H12                                                                                                                          | 訂購編號 <b>KD135000B7</b> 接地位置H12                                                                                                                                              | 訂購編號 <b>KD045000B7</b> 接地位置H12                                                                                                                                                |
| 導線入口 Cable gland                      | PG7                                                                                                                                     | PG7                                                                                                                                                                         |                                                                                                                                                                               |
| 最大導線尺寸 Max. conductor size            | without splice/terminal                                                                                                                 | 1,0mm <sup>2</sup> 無接合/端點                                                                                                                                                   | 1,0mm <sup>2</sup> 無接合/端點                                                                                                                                                     |
| 圖 Drawing                             |                                                       | <br> | <br> |
| 技術資料 Technical data                   |                                                                                                                                         |                                                                                                                                                                             |                                                                                                                                                                               |
| 插入銷口尺寸 Pin dimension                  | 3,6 x 0,5mm; 2,8 x 0,5mm                                                                                                                | 3,6 x 0,5mm; 2,8 x 0,5mm                                                                                                                                                    |                                                                                                                                                                               |
| 電壓 Voltage                            | 250 V AC/DC 最大 max.                                                                                                                     | 250 V AC/DC 最大 max.                                                                                                                                                         |                                                                                                                                                                               |
| 額定最大電流 Rated current max.             | 6 A ( IEC512-3 test 5b )                                                                                                                | 6 A ( IEC512-3 test 5b )                                                                                                                                                    |                                                                                                                                                                               |
| 抑制器 Suppressor                        |                                                                                                                                         |                                                                                                                                                                             |                                                                                                                                                                               |
| 顏色 LED colour                         |                                                                                                                                         |                                                                                                                                                                             |                                                                                                                                                                               |
| 接觸抗阻 Contact resistance               | 15mΩ 最大 max.                                                                                                                            | 15mΩ 最大 max.                                                                                                                                                                |                                                                                                                                                                               |
| 過電壓分類 Overvoltage category            | III                                                                                                                                     | III                                                                                                                                                                         |                                                                                                                                                                               |
| 終端樣式 Type of termination              | headless screw                                                                                                                          | 無頭螺釘M3                                                                                                                                                                      | 無頭螺釘M3                                                                                                                                                                        |
| 接觸旋緊力矩 Contact screw torque           | 最大 max. 0,2 N/m                                                                                                                         | 最大 max. 0,2 N/m                                                                                                                                                             |                                                                                                                                                                               |
| 適合電線 Suitables cables                 | 4 mm to 6 mm 直徑 diameter                                                                                                                | 4 mm to 6 mm 直徑 diameter                                                                                                                                                    |                                                                                                                                                                               |
| 安裝 Mounting                           | 中心螺線 central screw M3x27,5                                                                                                              | 中心螺線 central screw M3x27,5                                                                                                                                                  |                                                                                                                                                                               |
| 材質 Material                           |                                                                                                                                         |                                                                                                                                                                             |                                                                                                                                                                               |
| 接觸點材質 Contact material                | 鍍銅錫銀 CuSn silver plated                                                                                                                 | 鍍銅錫銀 CuSn silver plated                                                                                                                                                     |                                                                                                                                                                               |
| 接觸套材質 Contact holder material         | PA6 GF                                                                                                                                  | PA6 GF                                                                                                                                                                      |                                                                                                                                                                               |
| 外框材質 Housing material                 | PA6 GF                                                                                                                                  | PA6 GF                                                                                                                                                                      |                                                                                                                                                                               |
| 環境條件 Enviromental conditions          |                                                                                                                                         |                                                                                                                                                                             |                                                                                                                                                                               |
| 防護等級 Protection class (EN 60529)      | IP 65 when correctly assembled                                                                                                          | 當正確組裝時符合IP65                                                                                                                                                                | 當正確組裝時符合IP65                                                                                                                                                                  |
| 汙染程度 Pollution severity (EN 60664-1)  | 3                                                                                                                                       | 3                                                                                                                                                                           |                                                                                                                                                                               |
| 溫度範圍 Temperature range                | -40°C to + 100°C                                                                                                                        | -40°C to + 100°C                                                                                                                                                            |                                                                                                                                                                               |
| 可燃性等級 Inflammability class            |                                                                                                                                         |                                                                                                                                                                             |                                                                                                                                                                               |
| 接觸套 Contact holder                    | HB - UL 94                                                                                                                              | HB - UL 94                                                                                                                                                                  |                                                                                                                                                                               |
| 外觀 Housing                            | HB - UL 94                                                                                                                              | HB - UL 94                                                                                                                                                                  |                                                                                                                                                                               |
| 包裝 Packaging                          |                                                                                                                                         |                                                                                                                                                                             |                                                                                                                                                                               |
| 包裝單位/約重 Packaging unit/Weight approx. | 1000個 / 13公斤                                                                                                                            | 1000個 / 13公斤                                                                                                                                                                |                                                                                                                                                                               |
| 包裝尺寸 Box dimensions                   | 80 x 30 x 22 cm                                                                                                                         | 80 x 30 x 22 cm                                                                                                                                                             |                                                                                                                                                                               |
| 其他附加選項 Other accessory options        |                                                                                                                                         |                                                                                                                                                                             |                                                                                                                                                                               |
|                                       | NBR flat gasket 100 pcs in bag                                                                                                          | NBR平墊片100個/包                                                                                                                                                                | NBR平墊片100個/包                                                                                                                                                                  |

# Valve Connectors KDO - KD1 series

SELF - ASSEMBLY CABLE



| 標準工業用 Industrial standard (9,4 mm)                                                 | 標準工業用 Industrial standard (9,4 mm)                                                 | 標準工業用 Industrial standard (9,4 mm)                                                  |  |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
| C                                                                                  | C                                                                                  | C                                                                                   |  |
| P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>保護電路 (二極管)                                     | P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED) 和保護電路 (二極管)                        | P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)<br>和TVS保護電路 (TRANSIL)               |  |
| 黑 black                                                                            | 透明 transparent                                                                     | 透明 transparent                                                                      |  |
| 2+PE                                                                               | 2+PE                                                                               | 2+PE                                                                                |  |
| <b>KD136D10B7</b>                                                                  | <b>KD136D54T7</b>                                                                  | <b>KD136T54T7</b>                                                                   |  |
| 訂購編號KD135D10B7 接地位置H12                                                             | 訂購編號KD136D57T7 (LED 顏色紅 red)                                                       | 訂購編號KD136T57T7 (LED 顏色紅 red)                                                        |  |
| PG7                                                                                | PG7                                                                                | PG7                                                                                 |  |
| 1,0mm² 無接合/端點                                                                      | 1,0mm² 無接合/端點                                                                      | 1,0mm² 無接合/端點                                                                       |  |
|  |  |  |  |
| 3,6 x 0,5mm; 2,8 x 0,5mm                                                           | 3,6 x 0,5mm; 2,8 x 0,5mm                                                           | 3,6 x 0,5mm; 2,8 x 0,5mm                                                            |  |
| 0...230 V DC                                                                       | 24 V DC                                                                            | 24 V AC/DC                                                                          |  |
| 4 A                                                                                | 4 A                                                                                | 4 A                                                                                 |  |
| 二極管 diode 1A 1000V                                                                 | 二極管 diode 1A 1000V                                                                 | TVS Vbr max.=37,8V Peak=400W                                                        |  |
| 黃 yellow                                                                           | 黃 yellow                                                                           | 黃 yellow                                                                            |  |
| 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                       | 15mΩ 最大 max.                                                                        |  |
| III                                                                                | III                                                                                | III                                                                                 |  |
| 無頭螺釘M3                                                                             | 無頭螺釘M3                                                                             | 無頭螺釘M3                                                                              |  |
| 最大 max. 0,2 N/m                                                                    | 最大 max. 0,2 N/m                                                                    | 最大 max. 0,2 N/m                                                                     |  |
| 4 mm to 6 mm 直徑 diameter                                                           | 4 mm to 6 mm 直徑 diameter                                                           | 4 mm to 6 mm 直徑 diameter                                                            |  |
| 中心螺線 central screw M3x27,5                                                         | 中心螺線 central screw M3x27,5                                                         | 中心螺線 central screw M3x27,5                                                          |  |
| 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                            | 鍍銅錫銀 CuSn silver plated                                                             |  |
| PA6 GF                                                                             | PA6 GF                                                                             | PA6 GF                                                                              |  |
| PA6 GF                                                                             | PA12                                                                               | PA12                                                                                |  |
| 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                       | 當正確組裝時符合IP65                                                                        |  |
| 3                                                                                  | 3                                                                                  | 3                                                                                   |  |
| -40°C to + 100°C                                                                   | -20°C to + 80°C                                                                    | -20°C to + 80°C                                                                     |  |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          |  |
| HB - UL 94                                                                         | HB - UL 94                                                                         | HB - UL 94                                                                          |  |
| 200個 / 2,5公斤                                                                       | 200個 / 2,6公斤                                                                       | 200個 / 2,6公斤                                                                        |  |
| 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                    | 29 x 15 x 18 cm                                                                     |  |
| NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                       | NBR平墊片100個/包                                                                        |  |

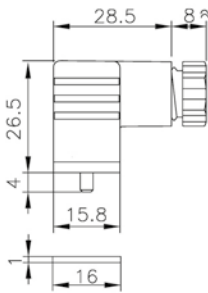
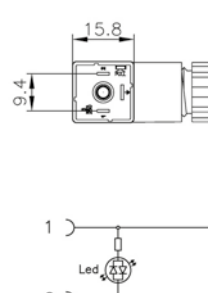
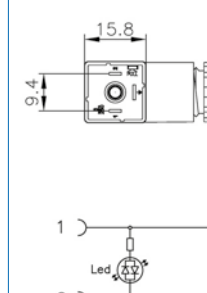
Form D - INDUSTRIAL

# 連接器 KD1 系列

請自行安裝導線



類別D-工業用

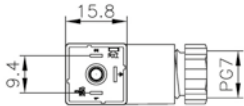
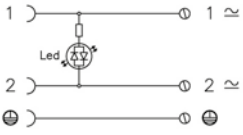
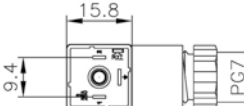
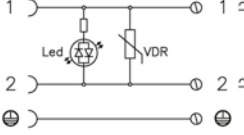
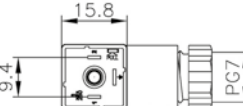
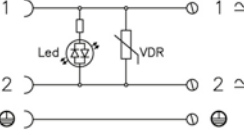
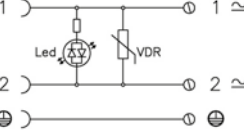
| 產品描述 Product description              |                                                                                                                                                       |                                                                                     |                                                                                      |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 標準 Standard                           | 標準工業用 Industrial standard (9,4 mm)                                                                                                                    | 標準工業用 Industrial standard (9,4 mm)                                                  |                                                                                      |
| 構造種類 Construction type                | C                                                                                                                                                     | C                                                                                   |                                                                                      |
| 描述 Description                        | P9,4 connector with screw terminals<br>NBR flat gasket (PE)<br>earth position H6<br>function indicator (LED)<br>and VDR protective circuit (varistor) | P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)                                     | P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)                                      |
| 外觀顏色 Housing colour                   | 透明                                                                                                                                                    | 透明                                                                                  |                                                                                      |
| 接觸點 Number of contacts                | 2+PE                                                                                                                                                  | 2+PE                                                                                |                                                                                      |
| 訂購編號 Order no.                        | <b>KD136L34T7</b>                                                                                                                                     | <b>KD136L35T7</b>                                                                   |                                                                                      |
| 要求選項 Other options on request         | LED 顏色紅 colour red                                                                                                                                    | 訂購編號 <b>KD136L37T7</b>                                                              |                                                                                      |
| 導線入口 Cable gland                      | PG7                                                                                                                                                   | PG7                                                                                 |                                                                                      |
| 最大導線尺寸 Max. conductor size            | without splice/terminal                                                                                                                               | 1,0mm <sup>2</sup> 無接合/端點                                                           | 1,0mm <sup>2</sup> 無接合/端點                                                            |
| 圖 Drawing                             |                                                                     |  |  |
| 技術資料 Technical data                   |                                                                                                                                                       |                                                                                     |                                                                                      |
| 插入銷口尺寸 Pin dimension                  | 3,6 x 0,5mm; 2,8 x 0,5mm                                                                                                                              | 3,6 x 0,5mm; 2,8 x 0,5mm                                                            |                                                                                      |
| 電壓 Voltage                            | 24 V AC/DC                                                                                                                                            | 115 V AC/DC                                                                         |                                                                                      |
| 額定最大電流 Rated current max.             | 6 A                                                                                                                                                   | 6 A                                                                                 |                                                                                      |
| 抑制器 Suppressor                        |                                                                                                                                                       |                                                                                     |                                                                                      |
| 顏色 LED colour                         | 黃 yellow                                                                                                                                              | 黃 yellow                                                                            |                                                                                      |
| 接觸抗阻 Contact resistance               | 15mΩ 最大 max.                                                                                                                                          | 15mΩ 最大 max.                                                                        |                                                                                      |
| 過電壓分類 Overvoltage category            | III                                                                                                                                                   | III                                                                                 |                                                                                      |
| 終端樣式 Type of termination              | headless screw                                                                                                                                        | 無頭螺釘M3                                                                              | 無頭螺釘M3                                                                               |
| 接觸旋緊力矩 Contact screw torque           | 最大 max. 0,2 N/m                                                                                                                                       | 最大 max. 0,2 N/m                                                                     |                                                                                      |
| 適合電線 Suitable cables                  | 4 mm to 6 mm 直徑 diameter                                                                                                                              | 4 mm to 6 mm 直徑 diameter                                                            |                                                                                      |
| 安裝 Mounting                           | 中心螺線 central screw M3x27,5                                                                                                                            | 中心螺線 central screw M3x27,5                                                          |                                                                                      |
| 材質 Material                           |                                                                                                                                                       |                                                                                     |                                                                                      |
| 接觸點材質 Contact material                | 鍍銅錫銀 CuSn silver plated                                                                                                                               | 鍍銅錫銀 CuSn silver plated                                                             |                                                                                      |
| 接觸套材質 Contact holder material         | PA6 GF                                                                                                                                                | PA6 GF                                                                              |                                                                                      |
| 外框材質 Housing material                 | PA12                                                                                                                                                  | PA12                                                                                |                                                                                      |
| 環境條件 Environmental conditions         |                                                                                                                                                       |                                                                                     |                                                                                      |
| 防護等級 Protection class (EN 60529)      | IP 65 when correctly assembled                                                                                                                        | 當正確組裝時符合IP65                                                                        | 當正確組裝時符合IP65                                                                         |
| 污染程度 Pollution severity (EN 60664-1)  | 3                                                                                                                                                     | 3                                                                                   |                                                                                      |
| 溫度範圍 Temperature range                | -20°C to + 80°C                                                                                                                                       | -20°C to + 80°C                                                                     |                                                                                      |
| 可燃性等級 Inflammability class            |                                                                                                                                                       |                                                                                     |                                                                                      |
| 接觸套 Contact holder                    | HB - UL 94                                                                                                                                            | HB - UL 94                                                                          |                                                                                      |
| 外觀 Housing                            | HB - UL 94                                                                                                                                            | HB - UL 94                                                                          |                                                                                      |
| 包裝 Packaging                          |                                                                                                                                                       |                                                                                     |                                                                                      |
| 包裝單位/約重 Packaging unit/Weight approx. | 200個 / 2,6公斤                                                                                                                                          | 200個 / 2,6公斤                                                                        |                                                                                      |
| 包裝尺寸 Box dimensions                   | 29 x 15 x 18 cm                                                                                                                                       | 29 x 15 x 18 cm                                                                     |                                                                                      |
| 其他附加選項 Other accessory options        |                                                                                                                                                       |                                                                                     |                                                                                      |
|                                       | NBR flat gasket 100 pcs in bag                                                                                                                        | NBR平墊片100個/包                                                                        | NBR平墊片100個/包                                                                         |



## Valve Connectors **KD1** series

SELF - ASSEMBLY CABLE



| 標準工業用 Industrial standard (9,4 mm)                                                                                                                                        | 標準工業用 Industrial standard (9,4 mm)                                                                                                                                        | 標準工業用 Industrial standard (9,4 mm)                                                                                                                                          | 標準工業用 Industrial standard (9,4 mm)                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| C                                                                                                                                                                         | C                                                                                                                                                                         | C                                                                                                                                                                           | C                                                                                                                                                                             |
| P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)                                                                                                                           | P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)<br>和VDR保護電路(壓敏電阻)                                                                                                         | P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)<br>和VDR保護電路(壓敏電阻)                                                                                                           | P9.4螺紋端子連接器<br>NBR 平墊片<br>接地位置H6<br>功能指示燈 (LED)<br>和VDR保護電路(壓敏電阻)                                                                                                             |
| 透明                                                                                                                                                                        | 透明                                                                                                                                                                        | 透明                                                                                                                                                                          | 透明                                                                                                                                                                            |
| 2+PE                                                                                                                                                                      | 2+PE                                                                                                                                                                      | 2+PE                                                                                                                                                                        | 2+PE                                                                                                                                                                          |
| <b>KD136L36T7</b>                                                                                                                                                         | <b>KD136V54T7</b>                                                                                                                                                         | <b>KD136V55T7</b>                                                                                                                                                           | <b>KD136V56T7</b>                                                                                                                                                             |
| 訂購編號 <b>KD136L39T7</b>                                                                                                                                                    | 訂購編號 <b>KD136V57T7</b>                                                                                                                                                    | 訂購編號 <b>KD136V58T7</b>                                                                                                                                                      | 訂購編號 <b>KD136V59T7</b>                                                                                                                                                        |
| PG7                                                                                                                                                                       | PG7                                                                                                                                                                       | PG7                                                                                                                                                                         | PG7                                                                                                                                                                           |
| 1,0mm <sup>2</sup> 無接合/端點                                                                                                                                                 | 1,0mm <sup>2</sup> 無接合/端點                                                                                                                                                 | 1,0mm <sup>2</sup> 無接合/端點                                                                                                                                                   | 1,0mm <sup>2</sup> 無接合/端點                                                                                                                                                     |
| <br> | <br> | <br> | <br> |
| 3,6 x 0,5mm; 2,8 x 0,5mm                                                                                                                                                  | 3,6 x 0,5mm; 2,8 x 0,5mm                                                                                                                                                  | 3,6 x 0,5mm; 2,8 x 0,5mm                                                                                                                                                    | 3,6 x 0,5mm; 2,8 x 0,5mm                                                                                                                                                      |
| 230 V AC/DC                                                                                                                                                               | 24 V AC/DC                                                                                                                                                                | 115 V AC/DC                                                                                                                                                                 | 230 V AC/DC                                                                                                                                                                   |
| 6 A                                                                                                                                                                       | 5 A                                                                                                                                                                       | 5 A                                                                                                                                                                         | 5 A                                                                                                                                                                           |
| 黃 yellow                                                                                                                                                                  | VDR 30 Vrms 0,9 Joule                                                                                                                                                     | VDR 130 Vrms 4,5 Joule                                                                                                                                                      | VDR 275 Vrms 8,6 Joule                                                                                                                                                        |
| 15mΩ 最大 max.                                                                                                                                                              | 黃 yellow                                                                                                                                                                  | 黃 yellow                                                                                                                                                                    | 黃 yellow                                                                                                                                                                      |
| III                                                                                                                                                                       | 15mΩ 最大 max.                                                                                                                                                              | 15mΩ 最大 max.                                                                                                                                                                | 15mΩ 最大 max.                                                                                                                                                                  |
| 無頭螺釘M3                                                                                                                                                                    | III                                                                                                                                                                       | III                                                                                                                                                                         | III                                                                                                                                                                           |
| 最大 max. 0,2 N/m                                                                                                                                                           | 無頭螺釘M3                                                                                                                                                                    | 無頭螺釘M3                                                                                                                                                                      | 無頭螺釘M3                                                                                                                                                                        |
| 4 mm to 6 mm 直徑 diameter                                                                                                                                                  | max. 0,2 N/m                                                                                                                                                              | 最大 max. 0,2 N/m                                                                                                                                                             | 最大 max. 0,2 N/m                                                                                                                                                               |
| 中心螺線 central screw M3x27,5                                                                                                                                                | 4 mm to 6 mm 直徑 diameter                                                                                                                                                  | 4 mm to 6 mm 直徑 diameter                                                                                                                                                    | 4 mm to 6 mm 直徑 diameter                                                                                                                                                      |
|                                                                                                                                                                           | 中心螺線 central screw M3x27,5                                                                                                                                                | 中心螺線 central screw M3x27,5                                                                                                                                                  | 中心螺線 central screw M3x27,5                                                                                                                                                    |
| 鍍銅錫銀 CuSn silver plated                                                                                                                                                   |                                                                                                                                                                           |                                                                                                                                                                             |                                                                                                                                                                               |
| PA6 GF                                                                                                                                                                    | 鍍銅錫銀 CuSn silver plated                                                                                                                                                   | 鍍銅錫銀 CuSn silver plated                                                                                                                                                     | 鍍銅錫銀 CuSn silver plated                                                                                                                                                       |
| PA12                                                                                                                                                                      | PA6 GF                                                                                                                                                                    | PA6 GF                                                                                                                                                                      | PA6 GF                                                                                                                                                                        |
|                                                                                                                                                                           | PA12                                                                                                                                                                      | PA12                                                                                                                                                                        | PA12                                                                                                                                                                          |
| 當正確組裝時符合IP65                                                                                                                                                              |                                                                                                                                                                           |                                                                                                                                                                             |                                                                                                                                                                               |
| 3                                                                                                                                                                         | 當正確組裝時符合IP65                                                                                                                                                              | 當正確組裝時符合IP65                                                                                                                                                                | 當正確組裝時符合IP65                                                                                                                                                                  |
| -20°C to + 80°C                                                                                                                                                           | 3                                                                                                                                                                         | 3                                                                                                                                                                           | 3                                                                                                                                                                             |
|                                                                                                                                                                           | -20°C to + 80°C                                                                                                                                                           | -20°C to + 80°C                                                                                                                                                             | -20°C to + 80°C                                                                                                                                                               |
| HB - UL 94                                                                                                                                                                |                                                                                                                                                                           |                                                                                                                                                                             |                                                                                                                                                                               |
| HB - UL 94                                                                                                                                                                | HB - UL 94                                                                                                                                                                | HB - UL 94                                                                                                                                                                  | HB - UL 94                                                                                                                                                                    |
|                                                                                                                                                                           | HB - UL 94                                                                                                                                                                | HB - UL 94                                                                                                                                                                  | HB - UL 94                                                                                                                                                                    |
| 200個 / 2,6公斤                                                                                                                                                              |                                                                                                                                                                           |                                                                                                                                                                             |                                                                                                                                                                               |
| 29 x 15 x 18 cm                                                                                                                                                           | 200個 / 2,6公斤                                                                                                                                                              | 200個 / 2,6公斤                                                                                                                                                                | 200個 / 2,6公斤                                                                                                                                                                  |
|                                                                                                                                                                           | 29 x 15 x 18 cm                                                                                                                                                           | 29 x 15 x 18 cm                                                                                                                                                             | 29 x 15 x 18 cm                                                                                                                                                               |
| NBR平墊片100個/包                                                                                                                                                              |                                                                                                                                                                           |                                                                                                                                                                             |                                                                                                                                                                               |
|                                                                                                                                                                           | NBR平墊片100個/包                                                                                                                                                              | NBR平墊片100個/包                                                                                                                                                                | NBR平墊片100個/包                                                                                                                                                                  |

Form D - INDUSTRIAL









**ATAM S.p.A.**

Via Archimede, 7  
20864 Agrate Brianza (MB) Italy  
Tel +39 039 60746.1  
Fax +39 039 60746243  
info@atam.it  
**www.atam.it**

**ATAM Electric and Engineering Co., Ltd.**

No.71, Huazong Rd., Xuejia Dist., Tainan City  
72645, Taiwan (R.O.C.)  
Tel. +886-6-7838268  
Fax +886-6-7837268  
info@atam.tw  
**www.atam.tw**