

## MOULDED CABLE CONNECTORS FOR ACTUATORS AND SENSORS



- SOLENOID VALVE CONNECTORS SERIES A, B AND C
- M8 AND M12 CIRCULAR CONNECTORS
- WIDE SELECTION OF CABLES AND CIRCUITED VERSIONS
- HIGH PRODUCTION FLEXIBILITY
- SOLENOID VALVE CONNECTORS WITH IP65-67-69K PROTECTION

# PERFORMANCE AND RELIABILITY BROUGHT TO YOU WITH OUR NEW MOULDED CONNECTORS

## TECHNICAL FEATURES: VALVE CONNECTORS

Type	● Form A	Form B Industrial	■ Form B	Form C Industrial	▲ Form C	
Standard	EN 175301-803 A / ISO 4400	Industrial standard	EN 175301-803 B / ISO 6952	Industrial standard	EN 175301-803 C / ISO 15217	
Construction type	A	B	B	C	C	
Housing colour	black	black	black	black/transparent	black/transparent	
Number of contacts	2P	2P	2P	2P	2P	
	2P + PE	2P + PE	2P + PE	2P + PE	2P + PE	
	2P + PE/PE (bridged)			2P + PE/PE (bridged)	2P + PE/PE (bridged)	
	3P + PE			3P + PE	3P + PE	
	3P + PE (pressure switch)					
Cable colour	black - grey	black - grey	black - grey	black - grey	black - grey	
Conductor size	0,5 mm <sup>2</sup> / 1 mm <sup>2</sup>	0,5 mm <sup>2</sup> / 1 mm <sup>2</sup>	0,5 mm <sup>2</sup> / 1 mm <sup>2</sup>	0,5 mm <sup>2</sup>	0,5 mm <sup>2</sup>	
Rated voltage	<i>without circuit</i>	250V	250V	250V	250V	
	<i>with circuit</i>	12V-24V-115V-230V	12V-24V-115V-230V	12V-24V-115V-230V	12V-24V-115V-230V	12V-24V-115V-230V
Rated current	<i>without circuit</i>	10A	10A	10A	6A	6A
	<i>with circuit</i>	4A	4A	4A	3A	3A
Protection class			IP65, IP67, [IP69K DIN40005-9] <i>(when correctly assembled)</i>			
Pollution severity	3	3	3	3	3	
Inflammability class	<i>contact holder</i>	V0	V0	V0	V0	
	<i>moulded housing</i>	HB	HB	HB	HB	
Pin dimensions	<i>phase</i>	6,3 x 0,8mm;	6,3 x 0,8mm;	6,3 x 0,8mm;	3,6 x 0,5mm;	3,6 x 0,8mm;
	<i>earth</i>	4,8 x 0,8 mm	6,3 x 0,8 mm	4,8 x 0,8 mm	2,8 x 0,5mm	2,8 x 0,8mm
Contact material	CuSn silverplated	CuSn silverplated	CuSn silverplated	CuSn silverplated	CuSn silverplated	
Central screw (captive)			Philips recessed head steel Philips recessed head inox AISI 304			
Screw thread	M3	M3	M3	M3	M 2,5	

### HIGH PRODUCTION CAPACITY AND RELIABILITY

ISO 9001 accredited new production facility with numerous injection moulding machines which can operate in multiple shifts, with 100% fully automated final test and quality control.

### CIRCUITED VERSIONS

Wide range of control circuits available which incorporate a circuit board allowing higher electrical and mechanical performances.  
Visible external tamper print for easy identification of circuit type and voltage.

### TYPES AVAILABLE

Forms A-B-C available in all configurations for earth contact position, including bridged earth versions in Forms A-C.

### CAPTIVE FULLY INTEGRATED GASKET AND FIXING SCREW

All types are supplied with captive integrated moulded gasket and fixing screw are ready to use.  
Identification label available as standard.

### CHOICE OF CABLES

A wide selection of cable types held in stock as well as the possibility to utilise and incorporate special cables in line with the specific requests of our customers.



### FLEXIBLE DESIGN

Standard versions with ample space to facilitate a wide selection of circuit functions and cable types.  
Compact height versions also available.

### INNOVATIVE CONSTRUCTION

Built in cable clamping insert to allow high strain relief performance.  
Double electrical protection insulation to the external surface.  
Overmoulded in TPU material suitable for extreme applications.

### ALL VERSIONS WITH IP65-67-69K PROTECTION

Fully encapsulated connectors suitable for outdoor hostile applications.

Our new range of moulded cable solenoid connectors are suitable for a wide range of applications.  
Manufactured in materials enabling higher operating temperatures.

Significantly increased production capacity allowing us to meet the increasing demands of the Global Market.  
All versions are particularly suitable for outdoor applications with improved IP rating and UV resistance.

# PERFORMANCE AND RELIABILITY BROUGHT TO YOU WITH OUR NEW MOULDED CONNECTORS

## TECHNICAL FEATURES: CIRCULAR CONNECTORS

Type	M12	M8
Standard	IEC 61076-101	IEC 61076-101
Construction type	D Style	E Style
Housing colour	black	black
Number of contacts	2 poles	2 poles
	3 poles	3 poles
	4 poles	4 poles
	5 poles	
	8 poles	
Cable colour	black - grey	black - grey
Conductor size	0,25 mm <sup>2</sup> / 1 mm <sup>2</sup>	0,14 mm <sup>2</sup> / 0,25 mm <sup>2</sup>
Rated voltage	<i>max</i> 250V	60V
Rated current	4A	3A
Protection class	IP 67(when correctly assembled)	IP 67(when correctly assembled)
Pollution severity	3	3
Inflammability class:	<i>contact holder</i> UL	HB
	<i>moulded housing</i> HB	HB
Pin dimensions	1 mm	1 mm
Contact material	CuSn goldplated	CuSn goldplated
Coupling nut	M12 x 1 Zamak 15/ZnA14Cu1	M8 x 1 CuZn Nickel plated

### FAST AND EASY INSTALLATION

Audible confirmation of connection with our secure anti-vibration locking mechanism.  
Mounting key position indicated by an arrow on the connector body.  
Blue ring is visible when coupling nut is fully tightened.

### WIDE SELECTION OF OPTIONS

Wide choice of single ended or double ended extensions M12 to M8 and Y splitter with upto 3 exits.  
Custom designed versions available.

### FLEXIBILITY FOR CONDUCTOR CROSS SECTION

It is possible to use conductor cross sections from 0,14 mm<sup>2</sup> upto 1,0 mm<sup>2</sup> depending on the type and number of pin contacts.

### TYPES AVAILABLE

Male and female Forms D (M12) and E (M8) plus extensions to Forms A - B - C from our moulded cable valve connectors programme.



### RECEPTACLES

Wide selection of receptacles in male and female Forms D (M12) and E (M8).

### HIGH PRODUCTION CAPACITY AND RELIABILITY

ISO 9001 accredited new production facility with numerous injection moulding machines which can operate in multiple shifts, with 100% fully automated final test and quality control.

### INNOVATIVE CONSTRUCTION

Simple and fast hand connection by coupling nut.

### CHOICE OF CABLES

A wide selection of cable types held in stock as well as the possibility to utilise and incorporate special cables in line with the specific requests of our customers upto an outer cable jacket diameter of 7,0 mm<sup>2</sup>.

Our new range of moulded circular connectors are manufactured in high quality materials allowing them to be used in a wide range of standard and customised applications as a result of our highly flexible design and production processes.

High level of protection against dust and water ingress during submersion and resistant to a wide range of oils and chemicals.  
Significantly increased production capacity with continuous controls during the production processes, allowing us to meet the increasing demands of the Global Market.

## SOLENOID VALVE CONNECTORS

Outer jacket specification	Outer jacket colour	No. of cores x cross section (n x mm <sup>2</sup> )	Outer Ø mm. +/-5%	Temperature range static application	Temperature range flexible application	Applicable on Connectors		
						Form A	Form B	Form C
PVC H03VV-F	Black RAL 9005	2 x 0,5	5	-15 + 70 °C		●	■	▲
PVC H03VV-F	Black RAL 9005	3 x 0,5	5,5	-15 + 70 °C		●	■	▲
PVC H03VV-F	Black RAL 9005	4 x 0,5	6	-15 + 70 °C		●		▲
PVC H05VV-F	Black RAL 9005	2 x 0,75	6,3	-15 + 70 °C		●	■	
PVC H05VV-F	Black RAL 9005	3 x 0,75	6,7	-15 + 70 °C		●	■	
PVC H05VV-F	Black RAL 9005	4 x 0,75	7,3	-15 + 70 °C		●		
PVC H05VV-F	Black RAL 9005	2 x 1	6,5	-15 + 70 °C		●	■	
PVC H05VV-F	Black RAL 9005	3 x 1	7	-15 + 70 °C		●	■	
PVC CEI 2022 II	Grey RAL 7035	2 x 0,5	5	-15 + 70 °C		●	■	▲
PVC CEI 2022 II	Grey RAL 7035	3 x 0,5	5,5	-15 + 70 °C		●	■	▲
PVC CEI 2022 II	Grey RAL 7035	4 x 0,5	6	-15 + 70 °C		●		▲
PVC CEI 2022 II	Grey RAL 7035	4 x 0,75	6,5	-15 + 70 °C		●		
PVC CEI 2022 II	Grey RAL 7035	5 x 0,75	7	-15 + 70 °C		●		
PVC CEI 2022 II	Grey RAL 7035	2 x 1	6,5	-15 + 70 °C		●	■	
PVC CEI 2022 II	Grey RAL 7035	3 x 1	7	-15 + 70 °C		●	■	
SILICONE	Red RAL 3016	3 x 0,75	6,5	-40 + 180 °C		●	■	
PVC	Grey RAL 7000	3 x 0,5	5,4	-30 + 70 °C	-5 + 70 °C	●	■	▲
PVC	Grey RAL 7000	4 x 0,5	5,8	-30 + 70 °C	-5 + 70 °C	●		▲
PVC	Grey RAL 7000	5 x 0,5	6,5	-30 + 70 °C	-5 + 70 °C	●		
PVC	Grey RAL 7000	3 x 0,75	6,2	-30 + 70 °C	-5 + 70 °C	●	■	
PVC	Grey RAL 7000	4 x 0,75	6,7	-30 + 70 °C	-5 + 70 °C	●		
PVC	Grey RAL 7000	5 x 0,75	7,3	-30 + 70 °C	-5 + 70 °C	●		
PVC	Grey RAL 7000	3 x 1	6,4	-30 + 70 °C	-5 + 70 °C	●	■	
PVC halogen free - Cu screened	Grey RAL 7000	3 x 1	7,2	-40 + 70 °C	-5 + 70 °C	●	■	
PVC halogen free - Cu screened	Grey RAL 7000	4 x 1	7,9	-40 + 70 °C	-5 + 70 °C	●		
PVC halogen free	Grey RAL 7000	3 x 0,75	6,4	-40 + 70 °C	-5 + 70 °C	●	■	
PVC halogen free	Grey RAL 7000	4 x 0,75	7	-40 + 70 °C	-5 + 70 °C	●		
PVC VDE UL+CSA	Grey RAL 7000	2 x AWG16	6	VDE -40 + 70 °C - UL+CSA up to 90 °C	VDE -5 + 70 °C	●	■	
PVC VDE UL+CSA	Grey RAL 7000	3 X AWG16	6,4	VDE -40 + 70 °C - UL+CSA up to 90 °C	VDE -5 + 70 °C	●	■	
PVC VDE UL+CSA	Grey RAL 7000	3 X AWG18	6,2	VDE -40 + 70 °C - UL+CSA up to 90 °C	VDE -5 + 70 °C	●	■	
PVC VDE UL+CSA	Grey RAL 7000	2 x AWG20	5,3	VDE -40 + 70 °C - UL+CSA up to 90 °C	VDE -5 + 70 °C	●	■	
PVC VDE UL+CSA	Grey RAL 7000	3 X AWG20	5,6	VDE -40 + 70 °C - UL+CSA up to 90 °C	VDE -5 + 70 °C	●	■	
PUR LIY11Y	Black RAL 9005	2 x 0,5	5	-40 + 80 °C	-25 + 80 °C	●	■	▲
PUR LIY11Y	Black RAL 9005	3 x 0,5	5,5	-40 + 80 °C	-25 + 80 °C	●	■	▲
PUR LIY11Y	Black RAL 9005	4 x 0,5	6	-40 + 80 °C	-25 + 80 °C	●		▲
PUR LIY11Y	Black RAL 9005	2 x 0,75	6,3	-40 + 80 °C	-25 + 80 °C	●	■	
PUR LIY11Y	Black RAL 9005	3 x 0,75	6,7	-40 + 80 °C	-25 + 80 °C	●	■	

## CIRCULAR CONNECTORS

Outer jacket specification	Outer jacket colour	No. of cores x cross section (n x mm <sup>2</sup> )	Outer Ø mm. +/-5%	Temperature range static application	Temperature range flexible application	Applicable on Connectors	
						M12	M8
PVC CEI 2022 II	Grey RAL 7035	3 x 0,25	4,5	-15 + 70 °C		■	▲
PVC CEI 2022 II	Grey RAL 7035	4 x 0,25	5	-15 + 70 °C		■	▲
PVC CEI 2022 II	Grey RAL 7035	5 x 0,25	5	-15 + 70 °C		■	
PVC CEI 2022 II	Grey RAL 7035	3 x 0,34	5	-15 + 70 °C		■	
PVC CEI 2022 II	Grey RAL 7035	4 x 0,34	5	-15 + 70 °C		■	
PVC CEI 2022 II	Grey RAL 7035	5 x 0,34	5,5	-15 + 70 °C		■	
PUR LIY11Y	Black	3 x 0,25	5	-40 + 80 °C	-25 + 80 °C	■	▲
PUR LIY11Y	Black	4 x 0,25	5	-40 + 80 °C	-25 + 80 °C	■	▲
PUR LIY11Y	Black	5 x 0,25	5	-40 + 80 °C	-25 + 80 °C	■	
PUR LIY11Y	Black	3 x 0,34	5	-40 + 80 °C	-25 + 80 °C	■	
PUR LIY11Y	Black	4 x 0,34	5	-40 + 80 °C	-25 + 80 °C	■	
PUR LIY11Y	Black	5 x 0,34	5,5	-40 + 80 °C	-25 + 80 °C	■	
PUR LIY11Y	Black	8 x 0,25	5,5	-40 + 80 °C	-25 + 80 °C	■	

## OUR EXPERIENCE, OUR SUCCESS



In our modern production locations we assembly and overmould products for industrial automation, we have been doing this since 1970.

The connector division is fully integrated into the Atam production facility with the result that we now benefit from having at our disposal highly automated production lines and fully integrated quality controls dedicated to our complete range of connectors for solenoid valve and sensor applications.

The solenoid valve connectors are designed and tested in conjunction with the Atam coils to simulate the most extreme and severe conditions of application in order to achieve the most ideal customer solutions in terms of cost, performance and quality.

Our production, with the aid of fully automated computerised machines undergoes rigorous testing to verify the resistance, dielectric rigidity and performance of each individual component or assembly.

The moulded cable solenoid connectors are available in forms A, B, B Industrial, C and C Industrial. These assemblies meet all of the recognised market and industry standards.

Our new M8 and M12 circular connectors are available with male or female contacts, and can be supplied in straight, angled or "Y" configurations.

The new over moulding tools allow the highest level of production flexibility and product customisation.

During the over moulding process we can offer any combination of single or double ended moulded cable assembly (valve + circular) using standard or special cables, with or without connector circuits.

We can also offer single ended moulded connectors with special cable preparation on the open end.

All moulded cable solenoid connectors are supplied with moulded integrated gasket and assembled captive fixing screw to allow the user a ready to use product. On the circuited versions all relevant technical information is printed on the connector.

In addition all our moulded cable solenoid connector range are overmoulded in materials which can reach the IP 69K DIN40005-9 protection class, aslo complete with moulded integrated gasket and assembled captive fixing screw.

Our dedicated sales and technical teams (with their comprehensive market knowledge) are always available to satisfy your specific enquiries, and our global distribution network supports us in providing an optimum level of service and delivery times for our products.

So for all of your standard or specialised connector requirements please contact us:

**"MAKE THE RIGHT CONNECTION"**





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