

1517178

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Distributor box, application: Standard, extended requirements, connection method: M12 socket Metal, number of slots: 8, number of positions: 4, coding: A, slot assignment: single, status display: yes, PNP; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 10 m, shielding: no

Your advantages

- · Safety in the field, thanks to molded housing and high degree of protection
- · Convenient: increased machine availability thanks to quick and easy diagnostics
- · Save time, thanks to installation with SPEEDCON fast locking system

Commercial data

Item number	1517178
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF42
Product key	AF3CCA
GTIN	4017918967840
Weight per piece (including packing)	1,457.4 g
Weight per piece (excluding packing)	1,417.7 g
Customs tariff number	85444290
Country of origin	DE



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Technical data

Notes

Assembly note	NOTE: Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.
Note on application	Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories".

Product properties

Product type	Distributor box
Application	Standard, extended requirements
Number of positions	4
Number of slots	8
Coding	A
LED	yes

System properties

Local diagnostics

Monitored function	Supply voltage
Optical representation	Green LED

Electrical properties

Max. operating voltage U _{max}	30 V DC
Local diagnostics	Supply voltage Green LED
	Status display I/O Yellow LED
Nominal voltage U _N	24 V DC
Rated current, total	12 A
Max. current carrying capacity per path	2 A
Current carrying capacity per slot	4 A

Connection data

Conductor connection

Sensor/actuator connection system	M12 socket
Tightening torque slot sensor/actuator cable	0.4 Nm
Tightening torque of mounting screw for fixing the housing	0.5 Nm

Connection assignment

g	
Slot/position = Wire color or connection	1 / 4 (A) = WH
	2 / 4 (A) = GN
	3 / 4 (A) = YE
	4 / 4 (A) = GY
	5 / 4 (A) = PK



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	6 / 4 (A) = RD
	7 / 4 (A) = BK
	8 / 4 (A) = VT
	1-8 / 1 (+ 24 V) = BN
	1-8 / 3 (0 V) = BU
	1-8 / 5 (PE) = GNYE

Signaling

Status display present	ves
Status display present	yes

Dimensions

Dimensional drawing	153 153 153 153 153 153 153 153
Width	58 mm
Height	26 mm
Length	153 mm

Material specifications

Material Threaded sleeve	Die-cast zinc
Material Housing	PBT
Material Molding compound	PUR
Flammability rating according to UL 94	VO
Seal material O-ring	NBR
Contact material	Cu alloy
Contact surface material	gold-plated
Contact carrier material	PA

Cable/line

Cable length	10 m
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PUR/PVC black [PUR]

Dimensional drawing



Cable weight	107.4 kg/km



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UL AWM Style	20549 (80°C/300 V)	
Number of positions	11	
Shielded	no	
Cable type	PUR/PVC black [PUR]	
Conductor structure signal line	19x 0.15 mm	
AWG signal line	22	
Conductor structure, voltage supply	42x 0.15 mm	
AWG power supply	18	
Conductor cross section	8x 0.34 mm² (Signal line)	
	3x 0.75 mm² (power line)	
Wire diameter incl. insulation	1.3 mm ±0.1 mm (Signal line)	
	1.8 mm ±0.1 mm (power line)	
External cable diameter	8.50 mm ±0.2 mm	
Outer sheath, material	PUR	
External sheath, color	black RAL 9005	
Conductor material	Bare Cu litz wires	
Material wire insulation	PVC	
Single wire, color	brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet	
Inner sheath thickness	≥ 0.15 mm	
Thickness, outer sheath	≥ 0.38 mm	
Overall twist	Wires twisted in layers	
Max. conductor resistance	≤ 53 Ω/km (Signal line)	
	≤ 26 Ω/km (power line)	
Insulation resistance	≥ 5 MΩ*km	
Nominal voltage, cable	300 V AC	
Test voltage Core/Core	2000 V (50 Hz, 5 min.)	
Minimum bending radius, fixed installation	7.5 x D	
Minimum bending radius, flexible installation	10 x D	
Smallest bending radius, fixed installation	64 mm	
Smallest bending radius, movable installation	85 mm	
Dynamic load capacity (bending)	Max. bending cycles: 1500000, Bending radius: 10 x D, Traversing path: 2 m, Traversing rate: 2 m/s	
Flame resistance	DIN EN 50265	
Resistance to oil	according to VDE 0472 Part 803	
Other resistance	Highly resistant to acids, alkaline solutions and solvents	
Special properties	Silicone-free	
Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)	
	-5 °C 80 °C (Cable, flexible installation)	

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67



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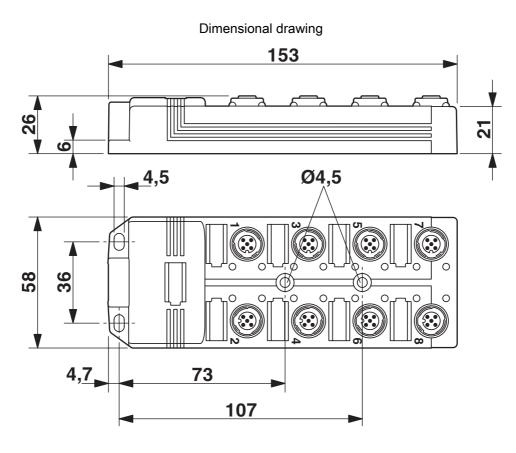
Ambient temperature (operation)	IP69K -30 °C 90 °C
Standards and regulations	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



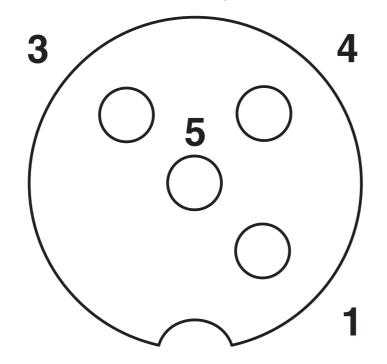
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Drawings







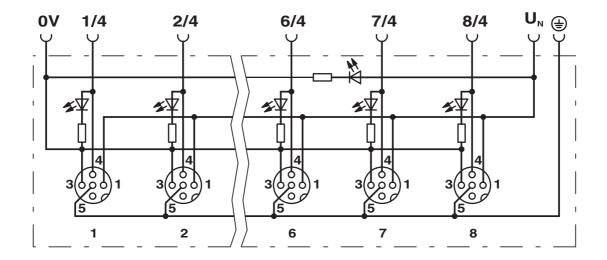
M12 slot, socket, 4-pos.



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Circuit diagram





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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1517178

.51	cUL Recognized Approval ID: E118976				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine					
		24 V	3 A	-	-

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Classifications

ECLASS

	ECLASS-13.0	27440108			
	ECLASS-15.0	27440108			
ΕΊ	ETIM				
	ETIM 9.0	EC002585			
U	NSPSC				
	UNSPSC 21.0	31251500			



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Environmental product compliance

EU RoHS

otions
substances above the limits
above 0.1 wt%
: 6

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