

TB-8M8M-3-1 Passive Actuator/Sensor Junction Box, 8 Ports – M8 × 1 I/O Port with Integral Homerun Cable





Technical data

Туре	TB-8M8M-3-1
ID	100006928
Distributed I/O	Junction box, 8, with integral homerun ca- ble
Housing	Plastic, PA 6 GF30, Black
I/O port	Female,M8 × 1
Design specification	acc. to IEC 61076-2-104
Number of Pins	3
Contacts	Brass, CuZn, Gold-plated
Contact carriers	Plastic, PA 4.6 GF30, Black
Seal	O ring, Plastic, FKM/FPM
Flange housing	Brass, CuZn, Nickel-plated
Mechanical lifespan	> 100 Mating cycles
Pollution degree	3
Protection class	IP67, IP68, IP69, IP69K
	NEMA: 1, 3, 4, 6P, 12
Group terminal	Cable, Side output
Cable	
Cable Platform	Universal cable
Cable ID	RF50836
Number of cores	10
Cable diameter	Ø 6.6 mm
Cable length	1 m, (+ 50 mm or 4 % of the length/-0.0, depending on which value is larger)
Cable jacket	PVC, Black
Shielding	Aluminum/polyester (IN)

Features



Housing material: Nylon
Housing color: black
Protection class IP67
RoHS conform
cULus listed
I/O port (number of pins): 3-pin + PE
General purpose cable
PVC jacket, black, shielded, 10 × 24 AWG
-40 °C cold bending strength
Fire classes: UL1061, CSA FT1
UL/CSA AWM 300V
Cable length: 1 m

Cable Cross-Section



Contact assignment



Technical data

Approvals

Note

UL Approvals **CSA** Approvals

Cable compliances

I/O connector

Drain wire cross section	26 AWG, TC (tinned copper)
Conductor diameter	0.044 "
Conductor material	TC (tinned copper)
Core insulation	PVC
Core cross-section	10 x 24 AWG [Similar to 0.25 mm ²]
Arrangement of strands	19 x 36 AWG
Core colors	BU, PK, BN, GN, GY, VT, YL, BK, WH, RD
Weight	0.136 lbs. /meter
Electrical properties at +20 °C	
Rated voltage	30 VDC
Voltage	UL/CSA AWM 300V
Current	2 A per signal contact, total current 6 A
Dielectric withstand (min.)	2 KVAC
DC resistance (max)	25.67 Ω/1000ft max.
Mechanical and chemical properties	
Bending radius (stationary installation)	≥ 5 x Ø
Bending radius (flexible use)	≥ 15 x Ø
Cold flexural strength	-40 °C
Ambient temperature range (stationary)	-40 °C+85 °C
Ambient temperature range (In motion)	5 °C+105 °C
Ambient temperature during installation	-10 °C+105 °C
Approval	

UL 758 AWM 2517

CSA AWM I/II A/B

CSA FT1 RoHS

CE

RoHS

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Using the cable in extreme temperatures, when it is exposed to certain chemicals and above the nominal cycle speed or below the nominal bending radius of the cable can reduce the flexural strength. - We reserve the right to make technical modifications without prior notice.



Scope of delivery

Device	Quantity	Description
Junction boxes	1	Passive actuator/sensor junction box
VS-M12-BK	2	Closure caps for M12 female connectors
KS9/20	5	Labels

Accessories

Ident-No.	Designation	Description
6900197	CK12-0	Field-wireable female M23, 12-pin, straight
6931889	CS12-0	Field-wireable male M23, 12-pin, straight
6931780	CKCM12-11-5/S90	Connection cable, M23 female, straight, 12-pin, 5 m*
6931781	CKCM12-11-10/S90	Connection cable, M23 female, straight, 12-pin, 10 m*
6931885	CKCWM12-11-5/S90	Connection cable, M23 female, angled, 12-pin, 5 m*
6931886	CKCWM12-11-10/S90	Connection cable, M23 female, angled, 12-pin, 10 m*
6931782	CSCM-CK-	Extension cable, male M23 - female M23, straight, 12-pin, 5 m *
	CM12-11-5/S90	
6931783	CSCM-CK-	Extension cable, male M23 - female M23, straight, 12-pin, 10 m *
	CM12-11-10/S90	
6931887	CSCM-CK-	Extension cable, male M23 straight - female M23 angled, 12-pin, 5
	CWM12-11-5/S90	m *
6931888	CSCM-CK-	Extension cable, male M23 straight - female M23 angled, 12-pin,
	CWM12-11-10/S90	10 m *
6625616	RKC5T-2-RSC5T/TXL	Actuator/sensor cable, female M12 - male M12, straight, 5-pin, 2 m
		*
6936055	VS-M12-BK	Closure caps for M12 female connectors
8015002	KS9/20	Labels
Other lengths a	available on request	·

Circuit Diagram

