## Automation technology - Data transmission



Product description M12 Male angled connector, Contacts: 3, unshielded, moulded on the cable, IP68, UL, PVC, grey, 3 x 0.34 mm², 2 m

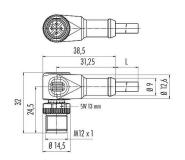
M12-B 77 4427 0000 20003-0200 Area Part no.

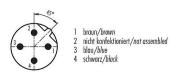
#### Illustration

#### **Scale drawing**

#### Contact arrangement (Plug-in side)







#### **Technical data**

#### General features

Part no.	77 4427 0000 20003-0200
Connector design	Male angled connector
Type standard	DIN EN 61076-2-101
Cable length	2 m (Standard 2 m and 5 m. Other lengths are available on request.)
Version	Connector pin angled
Connector locking system	screw
Termination	moulded on the cable
Degree of protection	IP68
Cross-sectional area	0.34 mm <sup>2</sup> / AWG 22
Temperature range from/to	-25 °C / 90 °C
Mechanical operation	> 100 Mating cycles
Weight (g)	61
Customs tariff number	85444290
Country of Origin	DE

#### **Electrical parameters**

Rated voltage	250 V
Rated impulse voltage	2500 V
Rated current	4.0 A
Insulation resistance	> 10 <sup>8</sup> Ω
Pollution degree	3
Overvoltage category	II.
Insulating material group	II .
EMC compliance	unshielded

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#### Material

Housing material	PUR
Contact body material	PUR
Contact material	CuZn (brass)
Contact plating	Au (gold)
Locking material	Zinc die-cast nickel-plated
REACH SVHC	None (No pollutants)
SCIP number	SCIP-number not available

#### Authorization/approvals

Approvals	UL	

#### Classifications

eCl@ss 11.1	27-06-03-11
ETIM 9.0	EC002638

#### Declarations of conformity

Low Voltage Directive	2014/35/EU (EN 60529:1991;EN 60204-1:2018)
RoHS Directive	2011/65/EU (EN 50581:2012)

#### Cable data - Structure of the cable

Cable diameter	4.5 mm
Cross section	3 x 0.34 mm <sup>2</sup>
Sheath material	PVC
Single-lead insulation	PVC
Single-lead structure	42 x 0.10 mm
Cable color	grey

#### Cable data - Electrical properties

Conductor resistance	57 Ω/Km (20°C)
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#### Cable data - Mechanical properties

Bending radius, fixed cable	≥ 5 x Ø
Bending radius, moving cable	≥ 10 x Ø
Bending cycles	> 2 million
Permitted acceleration	max. $5 \text{ m/s}^2 + 1 \text{ m/s}^2$
Travel distance, horizontal	5 m/s <sup>2</sup> -> 5 m
Travel distance, vertical	5 m/s <sup>2</sup> -> 5 m
Travel speed	≤ 200 m/min (5 m horizontal distance)

#### Cable data - Thermal properties

Temperature range cable in move from/to	-5 °C / 105 °C
Temperature range cable fixed from/to	-40 °C / 105 °C

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#### Cable data - Other features

Halogen free

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Area M12-B

Part no. 77 4427 0000 20003-0200

#### **Security notices**

The connector must not be plugged or unplugged under load. Non-observance and improper use can result in personal injury.

The connectors have been developed for applications in plant engineering, control and electrical equipment construction. The user is responsible for checking whether the connectors can also be used in other areas of application.

Plug connectors with enclosure protection IP67 and IP68 are not suitable for use under water. For further information on the IP protection classes, please refer to the "Technical Information" download centre.