# Automation technology - data transmission



M12-B Male angled connector, Contacts: 3, unshielded, moulded cable, IP68, UL, PVC grey, 3 x 0.34 mm², 10 m Product description

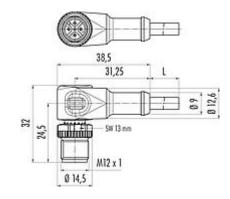
M12-B series 766 Area 77 4427 0000 20003-1000 Part no.

## Illustration

## **Scale drawing**

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







- 1 broun/brown 2 nicht konfektioniert/not assembled
- 2 nicht konfektion 3 blau/blue 4 schwarz/black

## **Technical data**

#### General features

Part no.	77 4427 0000 20003-1000
Connector design	Male angled connector
Cable length	10 m
Version	male angled
Connector locking system	screw
Termination	moulded cable
Degree of protection	IP68
Cross-sectional area	0.34 mm² / AWG 22
Temperature range from/to	-25 °C / 90 °C
Mechanical operation	> 100 Mating cycles
Weight (g)	600.0
Customs tariff number	85444290

## **Electrical parameters**

Rated voltage	250 V
Rated impulse voltage	2500 V
Rated current (40 °C)	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 7.0	EC001855

#### 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





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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

#### Cable data - Other features

Halogen free No

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#### **General Disclaim Notice**

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.

The user must take suitable safety precautions to ensure that the connector cannot be accidentally disconnected.

Plug connectors with enclosure protection IP 67 and IP 68 are not suitable for use under water. For further information on the IP protection classes, please refer to the "Technical Information" download centre.

To lock the cable connector with the device connector, the threaded ring is tightened "hand-tight" (approx. 60 cNm).