# Product data sheet Miniature connectors



Product description

M16 Male angled connector, Contacts: 12, unshielded, moulded on the cable, IP68, PUR, black, 12 x 0.25 mm², 5 m

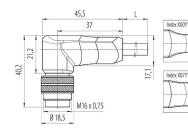
Area Part no. series 425 77 6427 0000 50712-0500

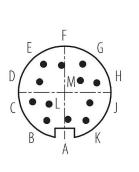
### Illustration

Scale drawing

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







B brown C green D yellow

E grey

A white B brown

F pink

G blue

H red

1 1eu

J black

K purple

L grey/pink M red/blue

### **Technical data**

#### **General features**

Part no.	77 6427 0000 50712-0500
Connector design	Male angled connector
Cable length	5 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	0.25 mm² / AWG 24
Temperature range from/to	-25 °C / 85 °C
Mechanical operation	> 1000 Mating cycles
Weight (g)	0.00
Customs tariff number	85444290
Country of Origin	DE

### **Electrical parameters**

Rated voltage	32 V
Rated impulse voltage	500 V
Rated current	3,0 A
Insulation resistance	≥ 10 <sup>10</sup> Ω
Pollution degree	2
Overvoltage category	11
Insulating material group	III
EMC compliance	unshielded

#### Material

Housing material	PUR
Contact body material	PA (UL94 V-0)

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Contact material     CuZn (brass)       Contact plating     Au (gold)       REACH SVHC     None (No pollutants)       SCIP number     SCIP-number not available         Declarations of conformity         Low Voltage Directive     2014/35/EU (EN 60204-1:2018;EN 60529:1991)       RoHS Directive     2011/65/EU (EN 50581:2012)   Cable data - Structure of the cable       Cable data - Structure of the cable     6.5 mm   Cable data - Structure of the cable       Cable data - Structure of the cable     12 x 0.25 mm <sup>3</sup> Cable data - Structure of the cable       Cable data - Structure of the cable     9.9 Malogen-free   Single-lead structure Cable data - Structure of the cable    Bending radius, fixed cable       SciP number     5 x Ø   Bending radius, moving cable       Structures     5 x Ø   Cable data - Thermal properties
REACH SVHC       None (No pollutants)         SCIP number       SCIP-number not available         Declarations of conformity       2014/35/EU (EN 60229:1991)         Low Voltage Directive       2011/65/EU (EN 50581:2012)         RoHS Directive of the cable       2011/65/EU (EN 50581:2012)         Cable data - Structure of the cable       6.5 mm         Cable data - Structure of the cable       12 x 0.25 mm²         Single-lead insulation       PUR         Single-lead insulation       PP9Y halogen-free         Single-lead insulation       14 x 0.15 mm         Cable color       black         Cable data - Mechanical properties       5 x Ø         Bending radius, fixed cable       5 x Ø         Bending radius, moving cable       10 x Ø
SCIP number       SCIP-number not available         Declarations of conformity       2014/35/EU (EN 60204-1:2018;EN 60529:1991)         Low Voltage Directive       2011/65/EU (EN 50581:2012)         Cable data - Structure of the cable       2011/65/EU (EN 50581:2012)         Cable dameter       6.5 mm         Cross section       12 x 0.25 mm²         Sheath material       PUR         Single-lead insulation       PP9Y halogen-free         Single-lead structure       14 x 0.15 mm         Cable data - Mechanical properties       black
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Bending radius, moving cable 10 x Ø
Bending radius, moving cable 10 x Ø
Cable data - Thermal properties
Cable data - Thermal properties
Temperature range cable in move from/to -25 °C / 80 °C
Temperature range cable fixed from/to -50 °C / 80 °C
Cable data - Other features
Halogen free yes

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#### 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.

To protect against unintentional opening of the connector, the thread between the housing and the connector head must be secured with a suitable cyanoacrylate adhesive when used in circuits with voltages dangerous to the touch. This does not apply to connectors used in SELV and PELV circuits according to IEC 61140 (EN 61140, VDE 0140-1).

Connectors which are used in circuits with voltages dangerous to the touch may only be installed and used by, or under the supervision of, persons with electrical engineering training, taking into account the applicable regulations and standards.

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

Plug connectors with enclosure protection IP67 and IP68 are not suitable for use under water. When used outdoors, the plug connectors must be protected separately against corrosion. For further information on the IP protection classes, please refer to the "Technical Information" download centre.

The plug connector is not suitable for mains voltages Please observe the pollution degree and the overvoltage category. For further information, please refer to the download center "Technical Information".

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