Automation technology - Voltage and Power Supply



M12/M12 Connecting cable male cable connector - female cable connector, Contacts: 4, unshielded, moulded on the cable, IP68, PUR, black, $4\times1.50\ mm^2$, $5\ mm^2$ Product description

M12-T Area

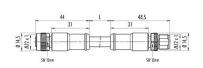
Part no. 77 0630 0629 50704-0500

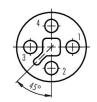
Illustration

Scale drawing

Contact arrangement (Plug-in side)







brown 2 white 3 blue 4 black

Technical data

General features

Part no.	77 0630 0629 50704-0500
Connector design	Connecting cable male cable connector - female cable connector
Type standard	DIN EN IEC 61076-2-111:2018-10;VDE 0687-76-2-111:2018-10
Cable length	5 m (Other lengths are available on request.)
Version	Connecting cable
Connector locking system	screw
Termination	moulded on the cable
Degree of protection	IP68
Cross-sectional area	1.50 mm² / AWG 16
Temperature range from/to	-40 °C / 85 °C
Mechanical operation	> 100 Mating cycles
Weight (g)	266.00
Customs tariff number	85444290

Electrical parameters

Rated voltage	63 V
Rated impulse voltage	1500 V
Rated current	12.0 A
Pollution degree	3
Overvoltage category	III
Insulating material group	II
EMC compliance	unshielded

Material

Housing material	PUR
Contact body material	PUR
Contact material	CuZn (brass) / CuSn (bronze)

Automation technology - Voltage and Power Supply



Product description M12/M12 Connecting cable male cable connector - female cable connector, Contacts: 4, unshielded, moulded on the

cable, IP68, PUR, black, 4 x 1.50 mm², 5 m

Area M12-T

Part no. **77 0630 0629 50704-0500**

Contact plating Au (gold)

REACH SVHC CAS 7439-92-1 (Lead)

SCIP number 9528f550-37bf-4e14-8072-525c048663f8

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
 8.0 mm

 Cross section
 4 x 1.50 mm²

 Sheath material
 PUR

 Single-lead insulation
 PP

 Single-lead structure
 84 x 0.15 mm

Cable color black

Cable data - Electrical properties

Conductor resistance 13.3 Ω /Km (20°C)

Cable data - Mechanical properties

 Bending radius, fixed cable
 ≥ 7.5 x Ø

 Bending radius, moving cable
 ≥ 10 x Ø

 Bending cycles
 5 million

 Permitted acceleration
 5 m/s²

 Travel distance, horizontal
 20 m

 Travel speed
 ≤ 300 m/min

Cable data - Thermal properties

Temperature range cable in move from/to

-30 °C / 80 °C

Temperature range cable fixed from/to

-50 °C / 80 °C

Cable data - Other features

Halogen free yes

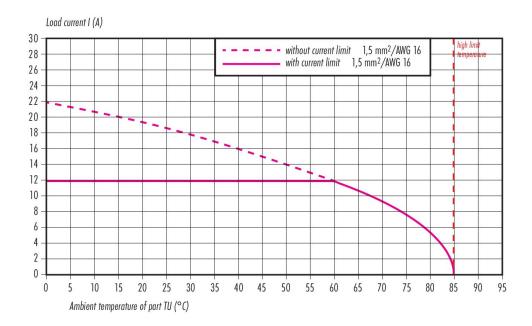
Automation technology - Voltage and Power Supply



M12/M12 Connecting cable male cable connector - female cable connector, Contacts: 4, unshielded, moulded on the cable, IP68, PUR, black, $4\times1.50\ mm^2$, $5\ mm^2$ Product description

M12-T 77 0630 0629 50704-0500 Area Part no.

Derating curve



Automation technology - Voltage and Power Supply



Product description M12/M12 Connecting cable male cable connector - female cable connector, Contacts: 4, unshielded, moulded on the

cable, IP68, PUR, black, 4 x 1.50 mm2, 5 m

Area M12-T

Part no. **77 0630 0629 50704-0500**

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.

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.

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