Product data sheet

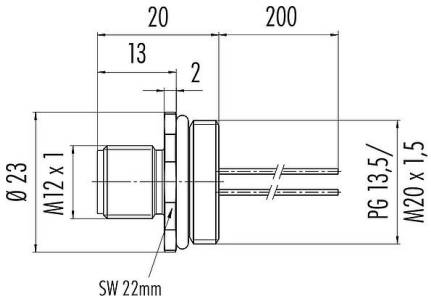
Automation technology - Sensors and actuators

Product description	**M12 Male panel mount connector, Contacts: 5, unshielded, single wires, IP68, UL 2238, M20x1.5, Front mounting, potted**
Area	**M12-A**
Coding	**A-coded**
Series	**763**
Part no.	**76 0431 0111 00005-0200**

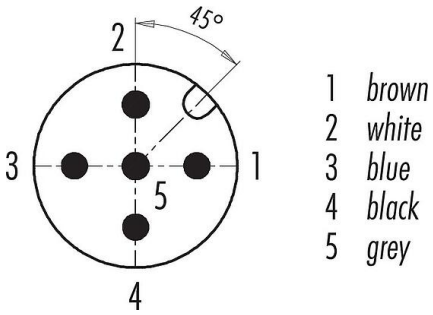
Illustration (may vary)



Scale drawing



Contact arrangement (Plug-in side)



You can find the assembly instructions on the next page.

Technical data

General features

Part no.	76 0431 0111 00005-0200
Connector design	Male panel mount connector
Type standard	DIN EN 61076-2-101
Coding	A-coded
Wire length	0.2 m (Standard 0.2 m. Other lengths are available on request).
Version	Connector pin straight
Connector locking system	screw
Termination	single wires
Degree of protection	IP68
Connection cross-section	0.25 mm² / AWG 24
Temperature range from/to	-40 °C / 85 °C
Mechanical operation	> 100 Mating cycles
Weight (g)	20.79
Customs tariff number	85369010
Country of Origin	DE

Electrical parameters

Rated voltage	60 V
Rated impulse voltage	1500 V
Rated current	4 A (3 A UL)
Insulation resistance	> 10^8 Ω
Pollution degree	3
Overvoltage category	II
Insulating material group	II

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EMC compliance	unshielded

Material

Housing material	CuZn (Brass nickel plated)
Contact body material	PA black
Contact material	CuZn (brass)
Contact plating	Au (gold)
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	e5bb8336-988e-4f2c-8787-514a1dcaf06c

Wire Data - Structure of the wire

Cross section (mm²)	5 x 0.25 mm²
Cross section (AWG)	5 x AWG 24
Wire diameter	1,5 mm
Wire colors	white brown blue black grey
Sheath material	PVC
Wire material	Cu (tinned)
Wire structure	7 x 0.203 mm

Wire Data - Electrical properties

Rated voltage	300 V
Rated impulse voltage	3000 V
Wire resistance	90 Ω/Km (20°C)
Insulation resistance	20.0 MΩ/Km (20 °C)

Wire Data - Thermal properties

Temperature range wire in move from / to (°C)	-10 °C / 105 °C
Temperature range wire fixed from / to (°C)	-30 °C / 105 °C

Authorization/approvals

Approvals	UL 2238

Classifications

eCl@ss 11.1	27-44-01-03
ETIM 9.0	EC003570

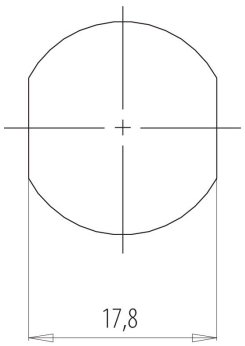
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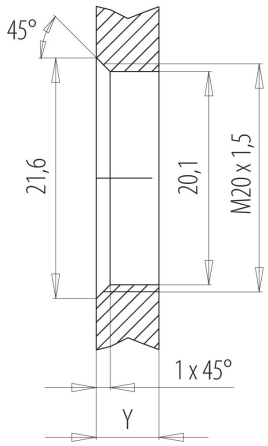
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Assembly instructions / Panel cut-out

With flats as anti-rotation device



With bore hole



Installation direction:
o-ring sits on chamfer.

Tightening moment

Metall housing	2,00 Nm
Plastic housing	1,25 Nm

Thickness of wall **Y** (mm)		
Version	**min** (mm)	**max** (mm)
Fastened from rear	2	3,5
Front fastened	2	4,5
positioning possible [1]	2	3,5
Screw clamp	2	3,5
Thread M12 x 1	2	3,0
Thread M14 x 1 [2]	[3]1,5/[4]2	6,5

Notes

[1] Do not attach a chamfer
[2] Wall thickness:
use nut 38 5385 100 001 to 1,5 mm,
>1,5 mm cut thread
[3] Nut
[4] Thread in wall of housing

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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.

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

The user must take appropriate safety precautions to ensure that the connector cannot be accidentally disconnected. In addition, the user must ensure that the cable is suitably secured.