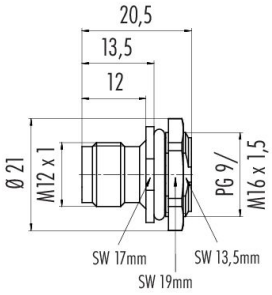
Product data sheet

Automation technology - Sensors and actuators

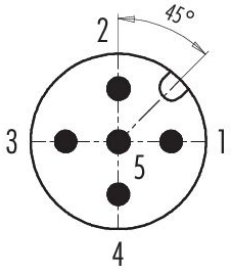
Product description	**M12 Male panel mount connector, Contacts: 5, unshielded, solder, IP67, UL, PG 9**
Area	**M12-A**
Part no.	**86 4231 1002 00005**

Illustration

Scale drawing



Contact arrangement (Plug-in side)



You can find the assembly instructions on the next page.

Technical data

General features

Part no.	**86 4231 1002 00005** Alternative part no.: 09 0433 87 05
Notice	Please note that, due to the change from the old to the new order number, there may be deviations in the technical specifications. For questions about product details, please use the 'Contact Customer Service' form on the right.
Connector design	Male panel mount connector
Type standard	DIN EN 61076-2-101
Version	Connector pin straight
Connector locking system	screw
Termination	solder
Degree of protection	IP67
Cross-sectional area	0.34 mm² / AWG 22
Temperature range from/to	-40 °C / 85 °C
Mechanical operation	> 100 Mating cycles
Weight (g)	5.51
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

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Pollution degree	3
Overvoltage category	II
Insulating material group	III
EMC compliance	unshielded

Material

Housing material	PA
Contact body material	PA black
Contact material	CuZn (brass)
Contact plating	Au (gold)
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	24797d17-c287-4c13-ab78-298fe1170d79

Authorization/approvals

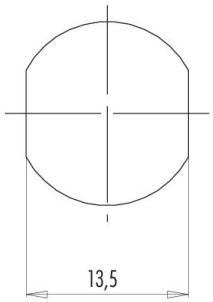
Approvals	UL

Classifications

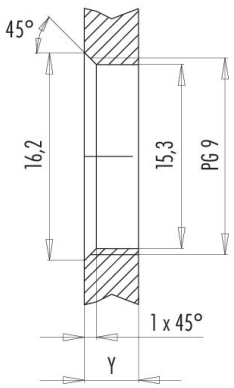
eCl@ss 11.1	27-44-01-09
ETIM 9.0	EC003569

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/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 up 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.

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.