

Product data sheet

Automation technology - Voltage and Power Supply

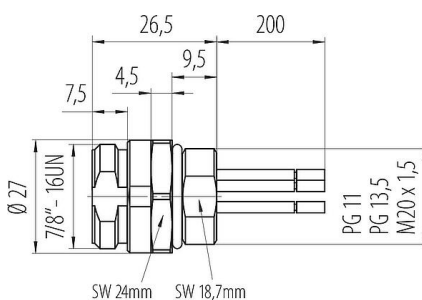


Product description	7/8" Male panel mount connector, Contacts: 4+PE, unshielded, single wires, IP68, UL 2238, VDE, M20x1.5, Front mounting, potted
Area	7/8"
Series	820
Part no.	09 2451 320 05

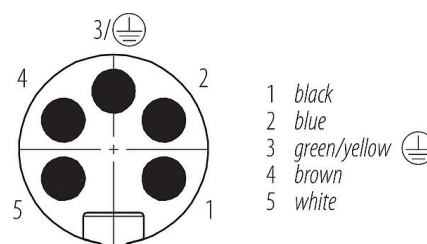
Illustration (may vary)



Scale drawing



Contact arrangement (Plug-in side)



You can find the assembly instructions on the next page.

Technical data

General features

Part no.	09 2451 320 05
Connector design	Male panel mount connector
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	0.75 mm ² / AWG 18
Temperature range from/to	-25 °C / 85 °C
Mechanical operation	> 100 Mating cycles
Weight (g)	46.97
Customs tariff number	85369010
Country of Origin	DE

Electrical parameters

Rated voltage	300 V (600 V UL)
Rated impulse voltage	4000 V
Rated current	6.0 A
Pollution degree	3
Overvoltage category	III
Insulating material group	I
EMC compliance	unshielded



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Material

Housing material	Zinc die-cast nickel-plated
Contact body material	PUR
Contact material	CuZn (brass)
Contact plating	Au (gold)
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	eb6950ed-521e-4fa9-acb9-c1c329f7ebc4

Wire Data - Structure of the wire

Cross section (mm²)	5 x 0.75 mm²
Cross section (AWG)	5 x AWG 18
Wire diameter	2,9 mm
Wire colors	yellow/green brown blue white black
Sheath material	PVC
Wire material	Cu (tinned)
Wire structure	28 x 0.20 mm

Wire Data - Electrical properties

Rated voltage	600 V
Rated impulse voltage	6000 V

Wire Data - Thermal properties

Temperature range wire in move from / to (°C)	-5 °C / 105 °C
Temperature range wire fixed from / to (°C)	-30 °C / 105 °C

Authorization/approvals

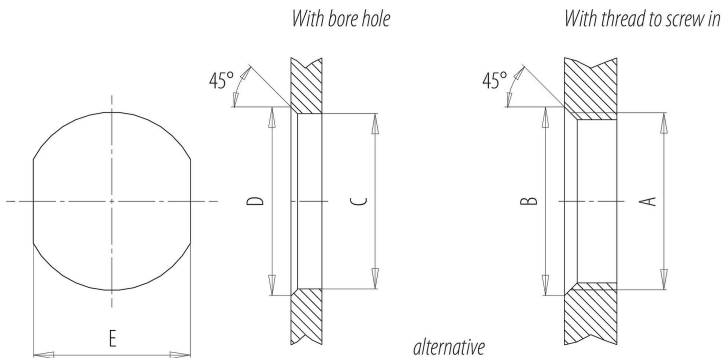
Approvals	UL 2238, VDE
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Classifications

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

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Assembly instructions / Panel cut-out



Tightening moment

Metal housing

2,00 Nm

Plastic housing

1,25 Nm

	A	B	C	D	E
PG 11	PG11	20,2	18,7	20,2	17,0
PG 13,5	PG13,5	22,0	20,5	22,0	18,8
M20 x 1,5	M20x1,5	21,6	20,1	21,6	17,8

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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.

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.

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 to the device connector, we recommend tightening the threaded ring to 1.5 Nm. A suitable torque wrench is available as an accessory (order no. 07 0082 000).