



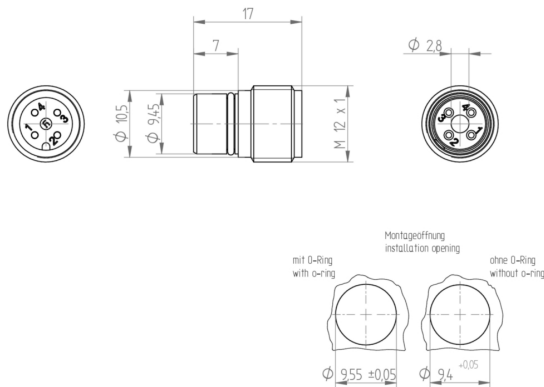
**Product:** [ECM 412](#)

M12 Insert Sensor/Actuator Receptacle Connector: Male, insert with O-ring, M12 - mating side, solder contacts - connecting side, 4-pin, A-coded, unshielded, grey body, 150 V AC/DC, 4 A

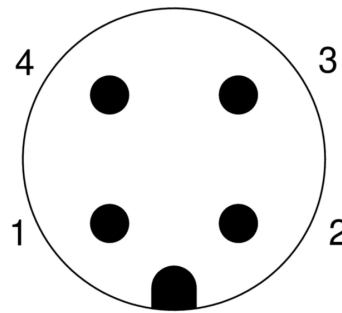
**Product Description**

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**Technical Drawing**



**Male**



**Technical Specifications**

**Technical Data**

Product Family:	Sensor / Actuator Connectors
Side 1 Product Sub Family:	M12 Insert
Mating Side:	M12
Connecting Side:	Solder Contacts
Brand:	Hirschmann
Connector Type:	Receptacle
Side 1 Type of Contact/Gender:	Male
Connector Design:	Insert with O-ring
Number of Pins:	4
Coding, Side 1:	A
Voltage Rating:	150 V
Rated Impulse Voltage:	1.5 kV
Operating Voltage:	150 V AC/DC
Current Rating:	4 A
Side 1 Contact Resistance:	≤ 10 mOhm
Insulation Resistance:	> 10 <sup>9</sup> Ohm
Mating Cycles:	≤ 100
Type of Connection:	Solder

Suitable Conductor Cross Section:	Solid wires: 0.22 mm <sup>2</sup> to 0.5 mm <sup>2</sup> / Standed wires: 0.22 mm <sup>2</sup> to 0.38 mm <sup>2</sup>
Ambient Temperature (Operation)*:	- 25 °C - + 90 °C
Protection Degree / IP Rating**:	IP65, IP67
Side 1 Design Standard:	IEC 61076-2-101
Side 1 Pollution Degree:	3 acc. to DIN EN 60664-1 (VDE 0110-1)
Clearance / Creepage Distance:	DIN EN 60664-1 (2008/01); VDE 0110-1
Overvoltage Category:	II acc. to DIN EN 60664-1 (VDE 0110-1)

## Materials

Contact Base Material:	CuZn
Side 1 Contact Plating:	Cu/Au
Contact Bearer Material:	PA
Contact Bearer Color:	Grey
Flammability Class (Contact Bearer):	UL 94 V-2
Potted:	No
O-Ring Material:	FKM

## Safety & Environmental Compliance

RoHS Compliant:	yes
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## Notes

Note Derating:	* Notice derating
Protection Degree / IP Rating Note:	* only if mounted and locked in combination with Hirschmann / Lumberg connector. On the installation side tightness has to be assured by taking proper measures.
Note:	The receptacle connector is constructively intended for usage in IP67-products. To realise this protection class, the estimated location has to be designed accordingly. Further details see IEC 61076-2-101.

## Variants

Item #	Item Description
934180106	ECM 412

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