Product data sheet

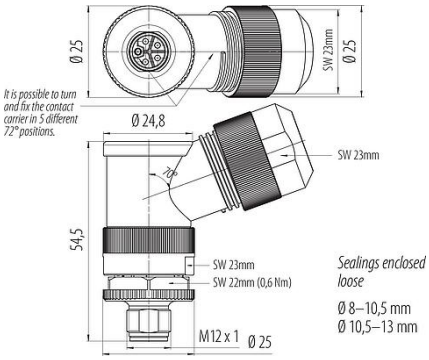
Automation technology - Voltage and Power Supply

Product description	**M12 Male angled connector, Contacts: 4+FE, 8.0-13.0 mm, unshielded, screw clamp, IP67, UL 2238, M12x1.0, for the power supply**
Area	**M12-L**
Coding	**L-coded**
Series	**823**
Part no.	**99 0639 58 05**

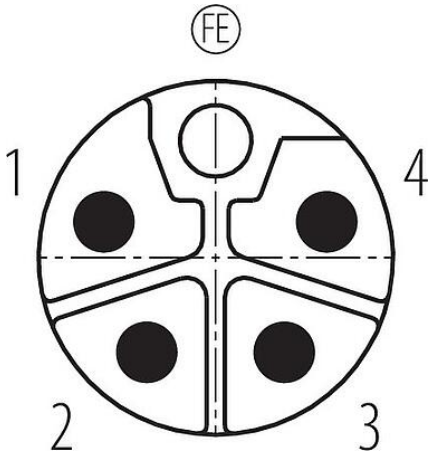
Illustration (may vary)



Scale drawing



Contact arrangement (Plug-in side)



You can find the assembly instructions on the next page.

Technical data

General features

Part no.	99 0639 58 05
Connector design	Male angled connector
Type standard	DIN EN IEC 61076-2-111:2018-10;VDE 0687-76-2-111:2018-10
Coding	L-coded
Version	Connector pin angled
Connector locking system	screw
Termination	screw clamp
Degree of protection	IP67
Connection cross-section	max. 1.50 mm² with ferrule / max. 2.50 mm² without ferrule / AWG 16 with wire-end ferrule / AWG 14 without wire-end ferrule
Cable outlet	8.0-13.0 mm
Twistability	72° (5 coding options)
Temperature range from/to	-40 °C / 105 °C
Mechanical operation	> 100 Mating cycles
Weight (g)	45.69
Customs tariff number	85369010
Country of Origin	DE

Electrical parameters

Rated voltage	63 V
Rated impulse voltage	1500 V

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Rated current	12 A (at 1.5 mm²/AWG 16) / 16 A (at 2.5 mm²/AWG 14)
Insulation resistance	> 10^{10} Ω
Pollution degree	3
Overvoltage category	III
Insulating material group	I
EMC compliance	unshielded

Material

Housing material	PA (UL94 V-0)
Contact body material	PA (UL94 V-0) grey
Contact material	CuZn (brass)
Contact plating	Au (gold)
Locking material	Zinc die-cast nickel-plated
Material seal	FPM
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	a20e949a-b45c-4de0-add7-fedd365828a9

Authorization/approvals

Approvals	UL 2238

Classifications

eCl@ss 11.1	27-44-01-02
ETIM 9.0	EC002635

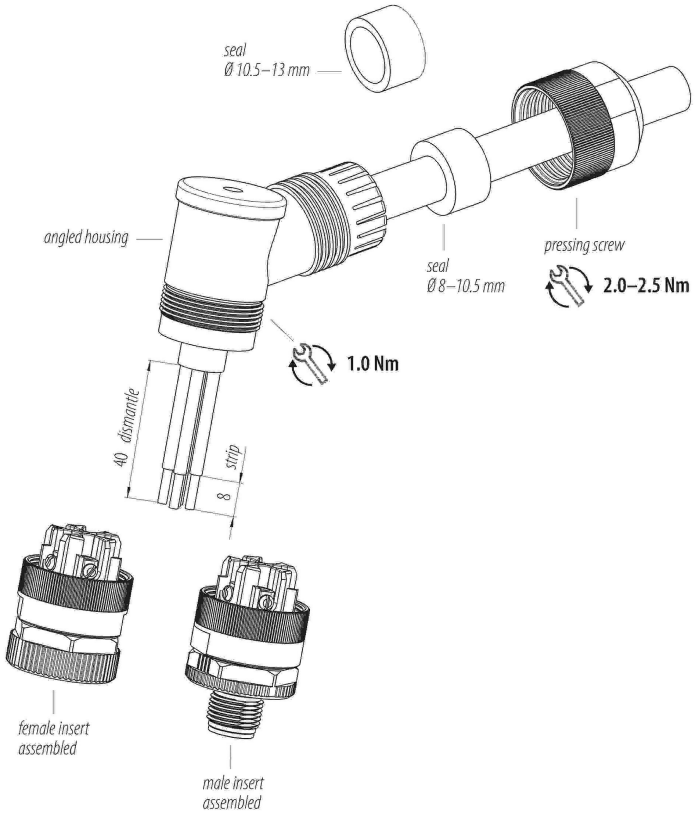
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Assembly instructions

1. *Clamp out screws until bores for single wires are completely free.*
2. *Push pressing screw, suitable seal and angled housing individually on cable.*
3. *Cut off cable coating.*
4. *Strip single cores and twist single wires.*
5. *Insert single wires into the holes and tighten clamping screws (0.4 Nm).*
6. *Slide angled housing to the contact insert (if necessary pull on the cable) and press on. Secure screw connection between angled housing and contact insert with one or two drops of cyanoacrylate adhesive to prevent unintentional unmating. Then screw parts together. Pay attention to the position of the coding to the cable outlet. Adjustable in 72° steps.*
7. *Push seal into the angled housing as far as it will go, if necessary, press in with the flat side of the screwdriver blade.*
8. *Screw and tighten pressing screw (2.0–2.5 Nm).*

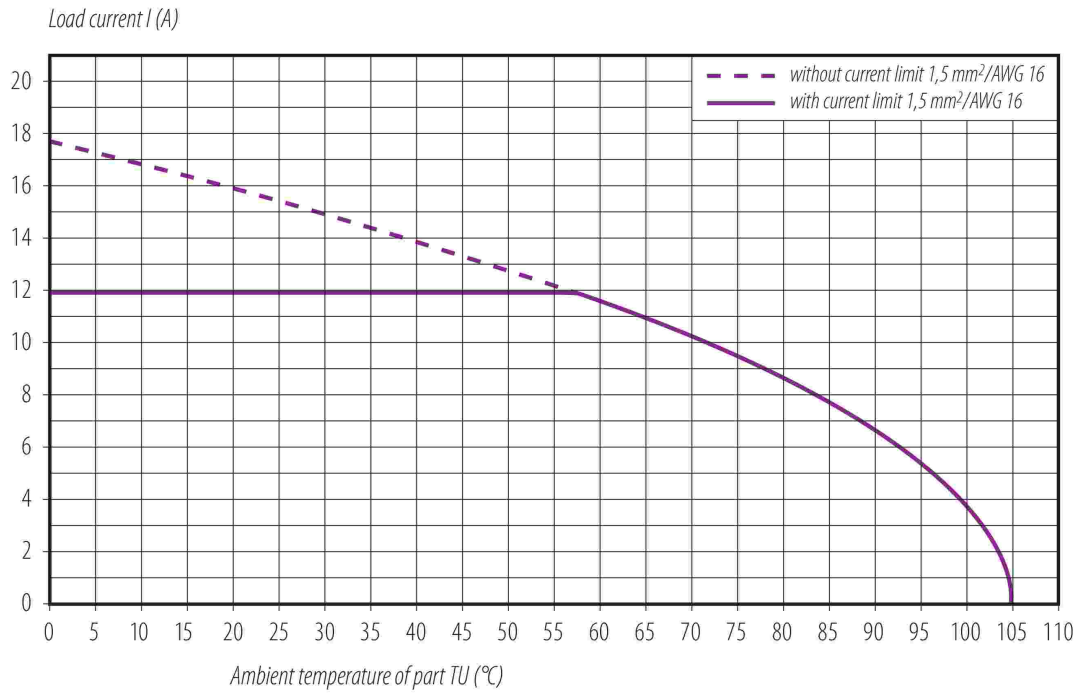


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Derating curve

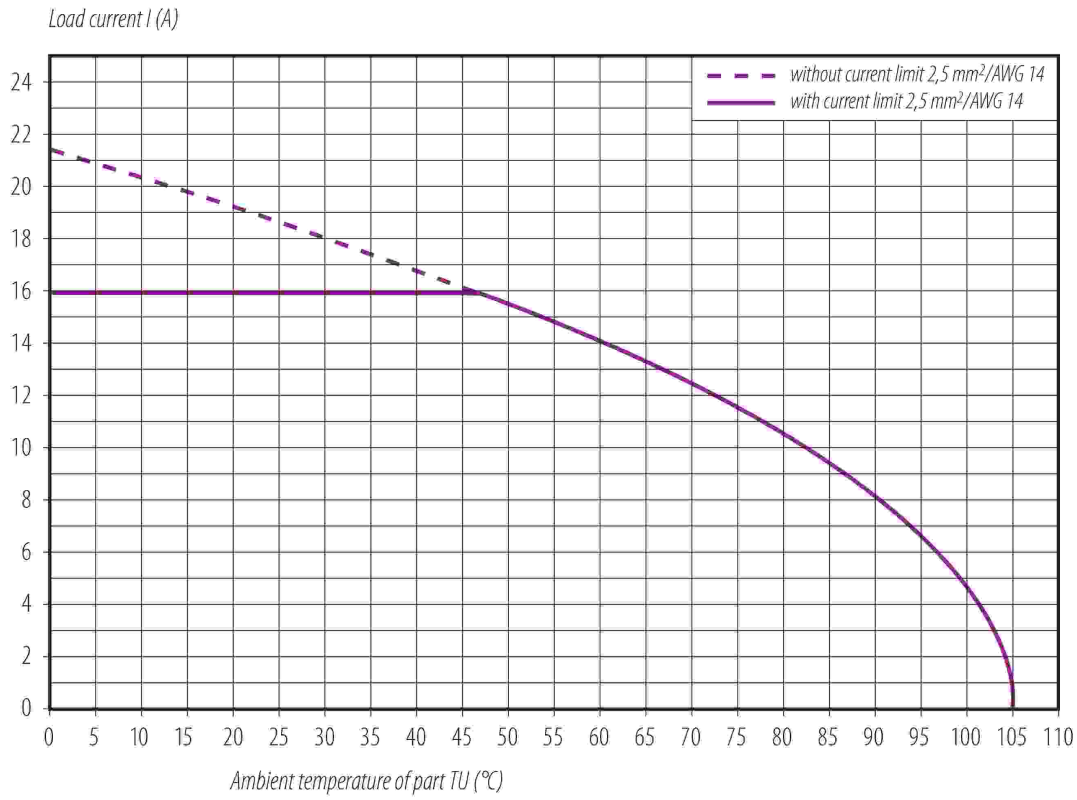


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Security notices

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.

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