

Connecting cable NEBL

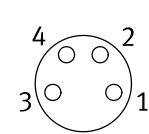
FESTO



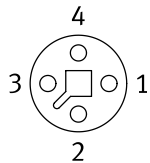
Characteristics

Connection technology left, field device side

[M8] Socket M8x1 A-coded, EN 61076-2-104



[T12] Socket M12x1 T-coded, EN 61076-2-111



Type code

001	Series	
NEBL	Connecting cable	
002	Connection technology left, field device side	
M8	Socket M8x1 A-coded, EN 61076-2-104	
T12	Socket M12x1 T-coded, EN 61076-2-111	
003	Cable outlet left	
G	Straight	
W	Angled	
004	Number of pins/wires on the left	
4	4	
005	Cable characteristic	
E	Suitable for energy chains	

006	Cable length [m]	
0.3	0.3	
0.5	0.5	
1	1	
2	2	
5	5	
7.5	7.5	
10	10	
15	15	
007	Cable identification	
N	Without label holder	
008	Connection technology right, controller side	
LE	Open end	
M8	Plug M8x1 A-coded, EN 61076-2-104	
009	Plug	
	None	
G	Straight	
W	Angled	
010	Number of pins/wires on the right	
4	4	

Datasheet

General technical data – M8 socket

Conforms to standard	EN 61076-2-104
Cable designation	Without inscription label holder

Technical data – Electrical connection 1, socket M8

Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Socket
Electrical connection 1, cable outlet	Straight, Angled
Electrical connection 1, design	Round
Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, number of connections/cores	4
Electrical connection 1, used connections/cores	4
Electrical connection 1, type of mounting	Screw-type lock with hexagon A/F 9 mm and longitudinal knurl

Technical data – Electrical connection 2, M8 socket

Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 2, function	Control side
Electrical connection 2, connection type	Cable, Plug
Electrical connection 2, cable outlet	Straight, Angled
Electrical connection 2, design	Round
Electrical connection 2, connector system	M8x1, A-coded to EN 61076-2-104, Open end
Wire ends	Stripped, Cut off bluntly
Electrical connection 2, number of connections/cores	4
Electrical connection 2, used connections/cores	4
Electrical connection 2, type of mounting	Screw-type lock with hexagon A/F 9 mm and longitudinal knurl

Technical data – Electrical, M8 socket

Nominal operating voltage DC	24 V
Operational voltage range DC	0 ... 30 V
Nominal operating voltage AC	24 V
Operational voltage range AC	0 ... 30 V
Immunity to surge	0.8 kV
Current rating at 40° C	5.2 A
Pollution degree	3
Protective conductor connection	Not provided
Shielding	No

Datasheet

Technical data – Cable, socket M8

Cable diameter	4.8 mm
Cable diameter tolerance	±0.15 mm
Cable characteristic	Suitable for energy chains
Bending radius, fixed cable	≥15 mm
Bending radius, moving cable	≥50 mm
Test conditions cable	Test conditions on request
Cable structure	4 x 0.5 mm ²
Nominal cross section conductor	0.5 mm ²
Special characteristics	Oil-resistant

Materials – M8 socket

Material housing	TPE-U(PUR)
Housing colour	Black
Material screw-type lock	Brass, nickel-plated
Material seals	Fluoro rubber
Material electrical contact	Gold-plated copper alloy
Material cable sheath	TPE-U(PUR)
Cable sheath colour	Black
Material insulating sheath	PP
Note on materials	RoHS compliant, Free of halogen
LABS (PWIS) conformity	VDMA24364-B2-L

Environmental and operating conditions – M8 socket

Ambient temperature	-40 ... 90°C
Ambient temperature with moving cable	-20 ... 90°C
Storage temperature	-40 ... 90°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress
CE mark (see declaration of conformity) ²⁾	In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity) ³⁾	To UK RoHS instructions
Degree of protection	IP65, IP67, IP69K
Note on degree of protection	In mounted state
Approval	c UL us - Listed (Oil)
Certificate issuing authority	UL E253748

1) Corrosion resistance class CRC 2 to Festo standard FN 940070 Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements that are in direct contact with a normal industrial environment.

2) More information www.festo.com/catalogue/... Support/Downloads.

3) More information www.festo.com/catalogue/... Support/Downloads.

General technical data – M12 socket

Based on standard	EN 61076-2-111
Cable designation	Without inscription label holder

Datasheet

Technical data – Electrical connection 1, M12 socket

Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Socket
Electrical connection 1, cable outlet	Straight, Angled
Electrical connection 1, design	Round
Electrical connection 1, connector system	M12x1, T-coded according to EN 61076-2-111
Electrical connection 1, number of connections/cores	4
Electrical connection 1, used connections/cores	4
Electrical connection 1, type of mounting	Screw-type lock

Technical data – Electrical connection 2, M12 socket

Electrical connection 2, function	Control side
Electrical connection 2, connection type	Cable
Electrical connection 2, connector system	Open end
Wire ends	Stripped
Electrical connection 2, number of connections/cores	4

Technical data – Electrical, socket M12

Operational voltage range DC	0 ... 63 V
Immunity to surge	1.5 kV
Current rating at 40° C	12 A
Pollution degree	3
Shielding	No

Technical data – Cable, M12 socket

Cable diameter	6.75 mm
Cable diameter tolerance	±0.2 mm
Cable characteristic	Suitable for energy chains
Bending radius, fixed cable	≥34 mm
Bending radius, moving cable	≥68 mm
Test conditions cable	Test conditions on request
Cable structure	4 x 1.5 mm ²
Nominal cross section conductor	1.5 mm ²

Materials – M12 socket

Material housing	PA
Housing colour	Black
Material screw-type lock	Nickel-plated die-cast zinc
Material seals	NBR
Material electrical contact	Brass
Material cable sheath	TPE-U(PUR)
Cable sheath colour	Black
Material insulating sheath	PP
Note on materials	RoHS compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Datasheet

Environmental and operating conditions – Socket M12

Ambient temperature	-50 ... 85°C
Ambient temperature with moving cable	-30 ... 85°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress
CE mark (see declaration of conformity) ²⁾	In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity) ³⁾	To UK RoHS instructions
Degree of protection	IP65, IP67
Note on degree of protection	In mounted state
Approval	c UL us - Listed (Oil)
Certificate issuing authority	UL E504946

1) Corrosion resistance class CRC 1 to Festo standard FN 940070. Low corrosion stress. Dry indoor application or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, or parts that are covered in the application (e.g. drive trunnions).

2) More information www.festo.com/catalogue/... Support/Downloads.

3) More information www.festo.com/catalogue/... Support/Downloads.

Ordering data

Socket M8, straight

	Electrical connection 1, connector system	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	M8x1, A-coded to EN 61076-2-104	0.3 m	31 g	8082904	NEBL-M8G4-E-0.3-N-M8G4
			0.5 m	38 g	8065102	NEBL-M8G4-E-0.5-N-M8G4
			1 m	56 g	8065104	NEBL-M8G4-E-1-N-M8G4
			2 m	90 g	8065106	NEBL-M8G4-E-2-N-M8G4
			5 m	194 g	8065108	NEBL-M8G4-E-5-N-M8G4
			7.5 m	280 g	8065111	NEBL-M8G4-E-7.5-N-M8G4
			10 m	366 g	8065115	NEBL-M8G4-E-10-N-M8G4
			15 m	539 g	8065119	NEBL-M8G4-E-15-N-M8G4
		Open end	5 m	183 g	8065110	NEBL-M8G4-E-5-N-LE4
			7.5 m	269 g	8065113	NEBL-M8G4-E-7.5-N-LE4
			10 m	356 g	8065117	NEBL-M8G4-E-10-N-LE4
			15 m	528 g	8065121	NEBL-M8G4-E-15-N-LE4

Socket M8, angled

	Electrical connection 1, connector system	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	M8x1, A-coded, to EN 61076-2-104	M8x1, A-coded to EN 61076-2-104	0.3 m	23 g	8146577	NEBL-M8W4-E-0.3-N-M8W4
			0.5 m	29 g	8065103	NEBL-M8W4-E-0.5-N-M8W4
			1 m	47 g	8065105	NEBL-M8W4-E-1-N-M8W4
			2 m	84 g	8065107	NEBL-M8W4-E-2-N-M8W4
			5 m	194 g	8065109	NEBL-M8W4-E-5-N-M8W4
			7.5 m	285 g	8065112	NEBL-M8W4-E-7.5-N-M8W4
			10 m	376 g	8065116	NEBL-M8W4-E-10-N-M8W4
			15 m	559 g	8065120	NEBL-M8W4-E-15-N-M8W4
		Open end	7.5 m	275 g	8065114	NEBL-M8W4-E-7.5-N-LE4
			10 m	366 g	8065118	NEBL-M8W4-E-10-N-LE4
			15 m	549 g	8065122	NEBL-M8W4-E-15-N-LE4

Socket M12, straight

	Electrical connection 1, connector system	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	M12x1, T-coded according to EN 61076-2-111	Open end	2 m	243 g	8080790	NEBL-T12G4-E-2-N-LE4
			5 m	546 g	8080791	NEBL-T12G4-E-5-N-LE4
			10 m	1,051 g	8080792	NEBL-T12G4-E-10-N-LE4
			15 m	1,556 g	8080793	NEBL-T12G4-E-15-N-LE4

Socket M12, angled

	Electrical connection 1, connector system	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	M12x1, T-coded according to EN 61076-2-111	Open end	2 m	243 g	8080778	NEBL-T12W4-E-2-N-LE4
			5 m	546 g	8080779	NEBL-T12W4-E-5-N-LE4
			10 m	1,051 g	8080780	NEBL-T12W4-E-10-N-LE4
			15 m	1,556 g	8080781	NEBL-T12W4-E-15-N-LE4