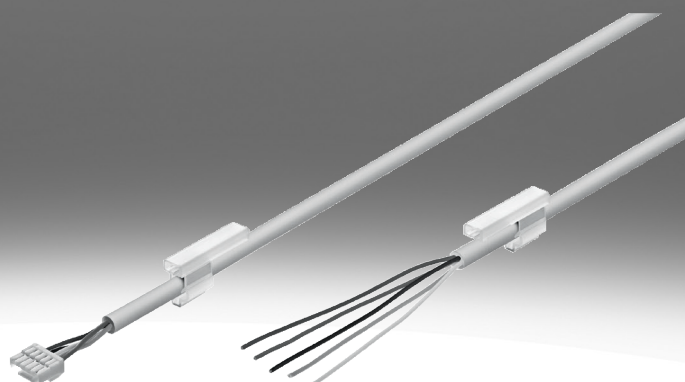


Connecting cable NEBS

FESTO



Type code

001	Series	
NEBS	Connecting cable for sensors	
002	Connection technology left, field device side	
L1	PCB plug connector	
M12	Socket M12x1 A-coded, EN 61076-2-101	
003	Cable outlet left	
G	Straight	
004	Number of pins/wires on the left	
4	4	
5	5	
12	12	
005	Cable characteristic	
E	Suitable for energy chains	
K	Standard	
006	Cable design	
	Standard	
S	With shielding	

007	Cable length [m]	
0.5	0.5	
1	1	
2	2	
2.5	2.5	
5	5	
10	10	
15	15	
008	Cable identification	
	With label holder	
N	Without label holder	
009	Connection technology right, controller side	
LE	Open end	
M12	Plug M12x1 A-coded, EN 61076-2-101	
SM12	Socket, M12, A-coded	
010	Plug/socket	
	None	
G	Straight	
011	Number of pins/wires on the right	
4	4	
5	5	
12	12	

Datasheet

General technical data – NEBS-L1G4

Connection technology right, controller side	Open end	Plug M12x1 A-coded, EN 61076-2-101
Cable designation	With inscription label holder	Without inscription label holder
Frequency of connection	100	

Technical data – Electrical connection 1 Connecting cable NEBS-L1G4

Electrical connection 1, function	Field device side
Electrical connection 1, cable outlet	Straight
Electrical connection 1, connection type	Socket
Electrical connection 1, design	Square
Electrical connection 1, connector system	Plug pattern L1]
Electrical connection 1, number of connections/cores	4
Electrical connection 1, used connections/cores	4
Electrical connection 1, type of mounting	Snap-locking

Technical data – Electrical connection 2 Connecting cable NEBS-L1G4

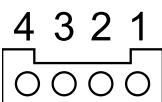
Electrical connection 2, function	Control side
Electrical connection 2, connection type	Cable, Plug
Electrical connection 2, cable outlet	Straight
Electrical connection 2, design	Round
Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101, Open end
Wire ends	Cut off bluntly
Electrical connection 2, number of connections/cores	4
Electrical connection 2, used connections/cores	4
Electrical connection 2, type of mounting	Screw-type lock with 13 mm hexagon and longitudinal knurl

Technical data – Electrical connecting cable NEBS-L1G4

Operational voltage range DC	0 ... 30 V
Immunity to surge	0.8 kV
Current rating at 40° C	1 A
Pollution degree	2

Datasheet

Technical data – Connecting cable NEBS-L1G4



1. BN
2. BK
3. WH
4. BU

Cable structure	4 x 0.25 mm ²	4 x 0.17 mm ²
Cable diameter	4.5 mm	4.1 mm
Cable diameter tolerance	± 0.1 mm	±0.15 mm
Cable characteristic	Standard	
Test conditions cable	Test conditions on request	
Bending radius, fixed cable	≥14 mm	≥13 mm
Bending radius, moving cable	≥46 mm	≥42 mm
Nominal cross section conductor	0.25 mm ²	0.17 mm ²

Materials electrical connecting cable NEBS-L1G4

Material housing	PA, TPE-U(PUR)
Housing colour	Black, White
Material screw-type lock	Brass, nickel-plated
Material electrical contact	Tin-plated bronze, Gold-plated brass
Material cable sheath	PVC, TPE-U(PUR)
Cable sheath colour	Grey
Material insulating sheath	PP, PVC
Note on materials	RoHS compliant, Free of halogen
LABS (PWIS) conformity	VDMA24364-B2-L, VDMA24364 zone III

Operating and environmental conditions connecting cable NEBS-L1G4

Ambient temperature	-20 ... 60°C
Ambient temperature with moving cable	-5 ... 60°C
Storage temperature	-20 ... 60°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress, 4 - Very high 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	IP40, IP65, IP67, IP69K
Note on degree of protection	IP40 for plug connection pattern L1J, In mounted state

1) More information www.festo.com/x/topic/crc

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

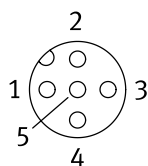
3) More information www.festo.com/catalogue/... → Support/Downloads.

General technical data – NEBS-M12G5

Cable designation	With 2x inscription label holders
Housing colour	Black
Special characteristics	UV-resistant, Abrasion-resistant, Low adhesion, Flame-retardant and self-extinguishing, Hydrolysis-resistant, Alkali-resistant, Solvent-resistant, Resistant to microbes, Oil-resistant, Acid-resistant
Protective conductor connection	Not provided
Type of mounting	Via knurled nut

Datasheet

Technical data – Electrical connection 1 Connecting cable NEBS-M12G5



- 1. BN
- 2. WH
- 3. BU
- 4. BK
- 5. GY

Electrical connection 1, function	Field device side
Electrical connection 1, design	Round
Electrical connection 1, connection type	Socket
Electrical connection 1, cable outlet	Straight
Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection 1, number of connections/cores	5
Electrical connection 1, used connections/cores	5
Electrical connection 1, type of mounting	Screw-type lock, Rotatable
Electrical connection 1, tightening torque	0.4 Nm
Electrical connection 1, compatible type of mounting	Compatible with rotatable/non-rotatable screw-type lock

Technical data – Electrical connection 2 Connecting cable NEBS-M12G5

Electrical connection 2, function	Control side
Electrical connection 2, connection type	Cable
Electrical connection 2, connector system	Open end
Wire ends	Cut off bluntly
Electrical connection 2, number of connections/cores	5
Electrical connection 2, used connections/cores	5

Technical data – Electrical connecting cable NEBS-M12G5

Operational voltage range DC	0 ... 60 V
Operational voltage range AC	0 ... 48 V
Immunity to surge	1.5 kV
Current rating at 40° C	4 A
Shielding	Yes
Pollution degree	3
Overvoltage category	II
Frequency of connection	100

Technical data – Connecting cable NEBS-M12G5

Cable diameter	5.25 mm
Cable diameter tolerance	±0.2 mm
Cable structure	5 x 0.34 mm ²
Conductor nominal cross section	AWG22
Test conditions cable	Test conditions on request
Bending radius, fixed cable	≥26 mm
Bending radius, moving cable	≥52 mm

Datasheet

Materials electrical connecting cable NEBS-M12G5

Material seals	NBR
Material electrical contact	Nickel-plated and gold-plated bronze
Material cable sheath	TPE-U(PUR)
Cable sheath colour	Black
Material insulating sheath	PP
Note on materials	RoHS compliant, Free of halogen, Silicone free
Material screw-type lock	Nickel-plated die-cast zinc
Material housing	TPE-U(PUR)
LABS (PWIS) conformity	VDMA24364-B2-L

Operating and environmental conditions connecting cable NEBS-M12G5

Ambient temperature	-40 ... 80°C
Ambient temperature with moving cable	-25 ... 60°C
CE mark (see declaration of conformity) ¹⁾	In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK RoHS instructions
Degree of protection	IP65, IP67
Note on degree of protection	In mounted state
Note on the contamination level	In mounted state
Based on standard	EN 61076-2-101
Corrosion resistance class CRC	1 - Low corrosion stress

1) More information www.festo.com/catalogue/... → Support/Downloads.

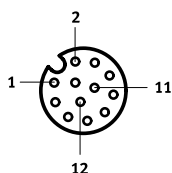
General technical data – Connecting cable NEBS-M12G12

Cable designation	With inscription label holder
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Technical data – Electrical connecting cable NEBS-M12G12

Nominal operating voltage DC	30 V
Operational voltage range DC	0 ... 30 V
Immunity to surge	0.8 kV
Current rating at 40° C	1.5 A
Pollution degree	3
Shielding	Yes

Technical data – Connecting cable NEBS-M12G12



1. BN
2. BU
3. WH
4. GN
5. PK
6. YE
7. BK
8. GY
9. RD
10. VT
11. GY PK
12. RD BU

Cable diameter	8.5 mm
Cable diameter tolerance	±0.2 mm
Cable structure	12 x 0.14 mm ²
Cable characteristic	Basic
Bending radius, fixed cable	42.5 mm
Test conditions cable	Bending strength: to Festo standard

Datasheet

Materials connecting cable NEBS-M12G12

Material union nut	Die-cast zinc
Material seals	NBR
Material electrical contact	Brass, Nickel-plated and gold-plated
Material cable sheath	TPE-U(PUR)
Cable sheath colour	Black
Note on materials	RoHS compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Operating and environmental conditions – Connecting cable NEBS-M12G12

Ambient temperature	-30 ... 80°C
Ambient temperature with moving cable	-25 ... 80°C
CE mark (see declaration of conformity) ¹⁾	In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity) ²⁾	To UK RoHS instructions
Degree of protection	IP67
Corrosion resistance class CRC ³⁾	0 - No corrosion stress

1) More information www.festo.com/catalogue/... → Support/Downloads.

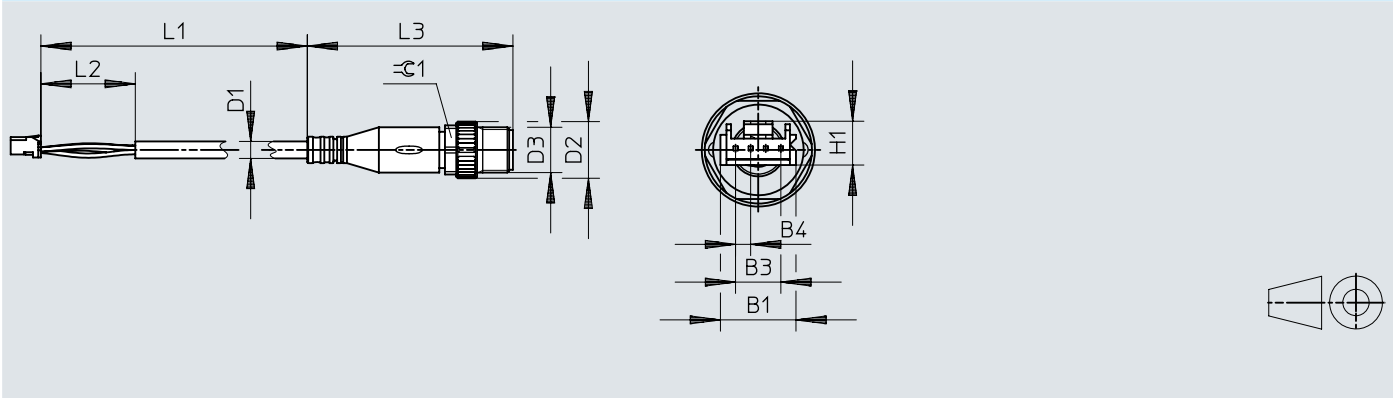
2) More information www.festo.com/catalogue/... → Support/Downloads.

3) More information www.festo.com/x/topic/crc

Dimensions

Dimensions – Electrical connection, socket, rectangular design L1 – plug

Download CAD data www.festo.com

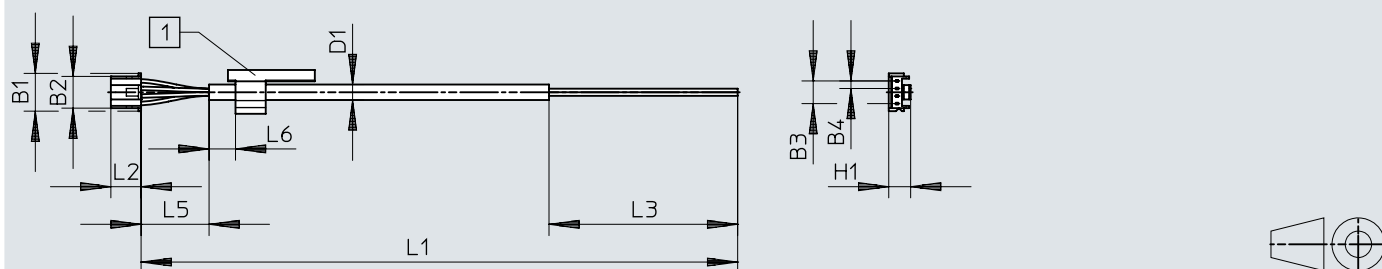


	B1	B3	B4	D1 ø	D2 ø	D3	H1	L1	L2	L3	⊥ 1
NEBS-L1G4-K-1-N-M12G4	10	6	2	4,5	15	M12x1	5,8	1000	25	54,5	13

Dimensions

Dimensions – Electrical connection, socket, rectangular design L1 – open cable end

Download CAD data www.festo.com

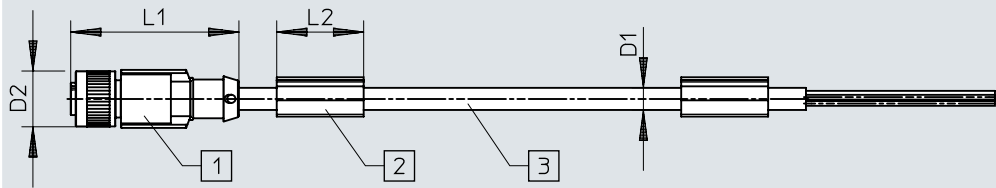


[1] Label holder

	B1	B2	B3	B4	D1 Ø	H1	L1	L2	L3	L5	L6
NEBS-L1G4-K-2.5-LE4	10	8,4	6	2	4,1	5,8	2500	8	50	35	5
NEBS-L1G4-K-5-LE4							5000				

Dimensions

Dimensions – Connecting cable NEBS-M12G5 Download CAD data www.festo.com



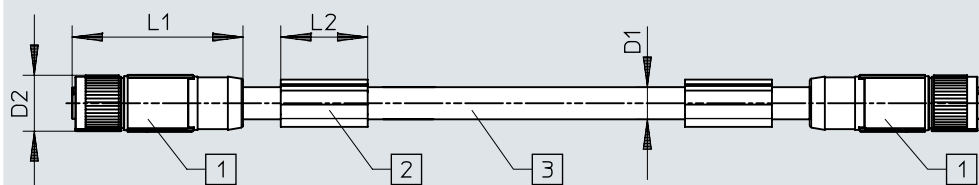
- [1] Socket, straight, M12x1, A-coded
- [2] Label holder
- [3] Cable, length depending on the order

	D1 ø	D2 ø	L1	L2
NEBS-M12G5-ES-5-LE5	5,25	14,8	44,5	22
NEBS-M12G5-ES-10-LE5				
NEBS-M12G5-ES-15-LE5				

Dimensions

Dimensions – Electrical connection, socket M12x1, 12-pin – socket M12x1, 12-pin

Download CAD data www.festo.com

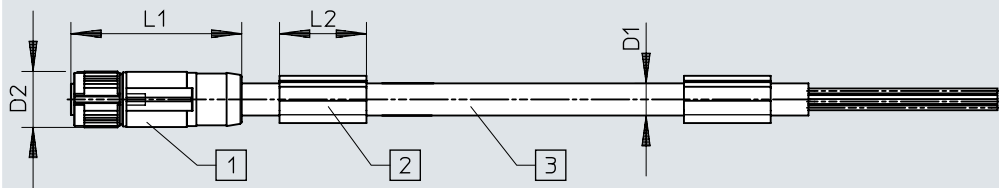


- [1] Socket, straight, M12x1, A-coded
- [2] Label holder
- [3] Cable, length depending on the order

	D1 ø	D2 ø	L1	L2
NEBS-M12G12-KS-0.5-SM12G12	8,5	14,8	45,2	22
NEBS-M12G12-KS-2-SM12G12				

Dimensions

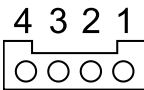
Dimensions – Electrical connection, socket M12x1, 12-pin – open cable end Download CAD data www.festo.com

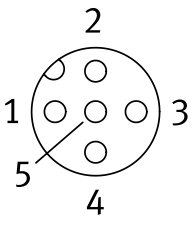


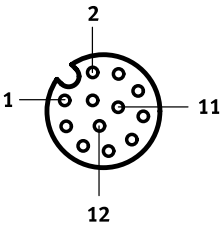
- [1] Socket, straight, M12x1, A-coded
- [2] Label holder
- [3] Cable, length depending on the order

	D1 Ø	D2 Ø	L1	L2
NEBS-M12G12-KS-5-LE12	8,5	14,8	45,2	22
NEBS-M12G12-KS-10-LE12				

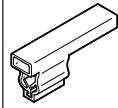
Ordering data

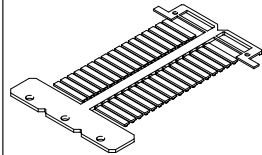
Ordering data						
	Electrical connection 1, connector system	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	Plug pattern L1J	M12x1, A-coded to EN 61076-2-101	1 m	40 g	8091514	NEBS-L1G4-K-1-N-M12G4
		Open end	2.5 m	53 g	572576	NEBS-L1G4-K-2.5-LE4
			5 m	106 g	572577	NEBS-L1G4-K-5-LE4

Ordering data						
	Electrical connection 1, connector system	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Open end	5 m	276 g	8030962	NEBS-M12G5-ES-5-LE5
			10 m	528 g	8030963	NEBS-M12G5-ES-10-LE5
			15 m	828 g	8097576	NEBS-M12G5-ES-15-LE5

Ordering data						
	Electrical connection 1	Electrical connection 2	Cable length	Product weight	Part no.	Type
	Straight socket, M12x1, 12-pin, A-coded	Straight socket, M12x1, 12-pin, A-coded	0.5 m	87 g	3056124	NEBS-M12G12-KS-0.5-SM12G12
			2 m	223 g	3058527	NEBS-M12G12-KS-2-SM12G12
		Open-ended, 12-core	5 m	492 g	3058614	NEBS-M12G12-KS-5-LE12
			10 m	945 g	2912452	NEBS-M12G12-KS-10-LE12

Accessories

Accessories – Inscription label holders			
	Description	Part no.	Type
	For cable diameter 4.2 ... 5.6 mm	8143238	NEAU-LH-4
	For attaching to a cable with diameter 5 ... 8 mm	33361	KM-BZ
	For cable diameter 3.3 ... 4.8 mm	8078307	NEAU-LH-3

Accessories – Inscription label			
	Description	Part no.	Type
	Inscription label for inscription label holder NEAU	541598	ASLR-L-423