

Connecting cables NEBS, for sensors



Connecting cables NEBS, for sensors

Type codes

NEBS - M12 G 12 - K S - 0.5 - N - M12 G 12

Function

NEBS	Connecting cable
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Connection technology, left (field device side)

L1	Socket, rectangular design L1 (circuit board plug connector)
M12	Socket, M12x1, A-coded, EN 61076-2-101
SM12	Plug, M12x1, A-coded, EN 61076-2-101

Cable outlet, left

-	None
G	Straight

Number of pins/wires (left)

4	4-pin
5	5-pin
12	12-pin

Cable characteristic

E	Suitable for use with energy chains
K	Standard

Cable design

-	Standard
S	With screening

Cable length

0.3	0.3 m
0.5	0.5 m
2	2 m
2.5	2.5 m
5	5 m
10	10 m

Cable identification

-	With inscription label holder
N	Without inscription label holder

Connection technology, right (controller side)

LE	Open end
M12	Plug, M12x1, A-coded
SM12	Socket, M12x1, A-coded

Plug/socket

-	Open end
G	Straight
W	Angled

Number of pins/wires (right)

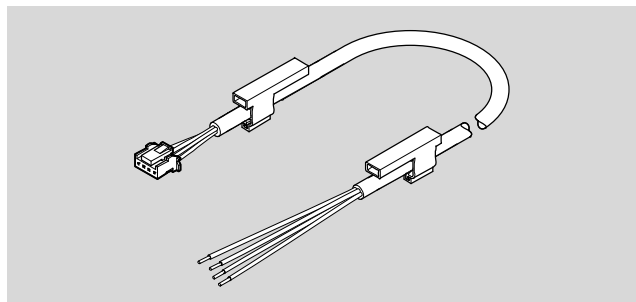
4	4-pin
5	5-pin
12	12-pin

Connecting cables, socket, rectangular design L1, 4-pin

Technical data

Connecting cable NEBS-L1G4

- Connecting cable for connecting pressure sensors SPAB
- Pre-assembled at one end
- Cable lengths: 2.5 m and 5 m
- 4 wires
- Socket, rectangular design L1



General technical data		
Electrical connection		Socket, rectangular design L1, 4-pin – open end, 4-wire
Cable characteristic		Standard
Cable test conditions		Bending strength: according to Festo standard
		Test conditions on request
Cable composition		4 x 0.14 mm ²
Cable diameter	[mm]	4.1
Conductor nominal cross section	[mm ²]	0.14

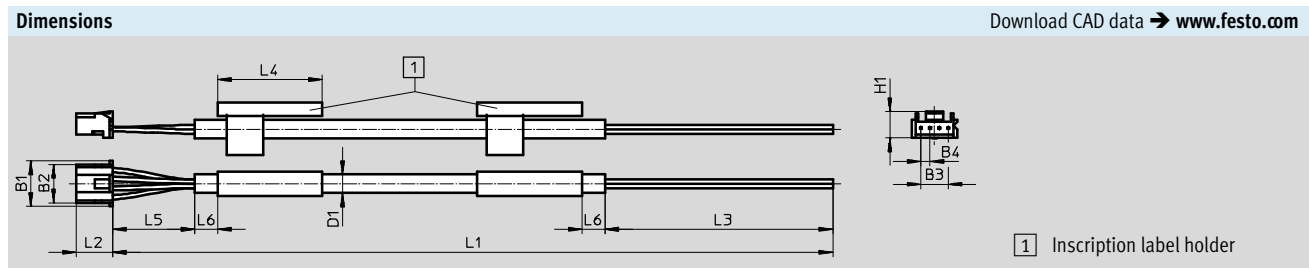
Technical data		
Operating voltage range	[V DC]	0 ... 30
Acceptable current load	at 40 °C [A]	1
Surge resistance	[kV]	0.8
Degree of protection to EN 60529		IP40

Materials	
Cable sheath colour	Grey
Wire colours	Blue, brown, black, white
Housing	PA
Cable sheath	PVC
Insulating sheath	PP
Note on materials	Free of copper and PTFE
	RoHS-compliant

Operating and environmental conditions		
Ambient temperature	[°C]	-20 ... +60
Ambient temperature with flexible cable installation	[°C]	-5 ... +60
Degree of contamination		2

Connecting cables, socket, rectangular design L1, 4-pin

Technical data



Type	B1	B2	B3	B4	D1 Ø	H1	L1	L2	L3	L4	L5	L6
NEBS-L1G4-K-2.5-LE4	10	8.4	6	2	4.1	5.8	2500	8	50	23	15	≥ 5
NEBS-L1G4-K-5-LE4							5000					

Ordering data						
Electrical connection				Cable length [m]	Part No.	Type
Connection 1		Connection 2				
Socket, rectangular design L1	4-pin	Open end		4-wire	2.5	572576 NEBS-L1G4-K-2.5-LE4
					5	572577 NEBS-L1G4-K-5-LE4

Ordering data – Accessories					
	Usage	Size	Part No.	Type	PU ¹⁾
	Inscription label for insertion in inscription label holder	23 x 4 mm	541598	ASLR-L-423	30

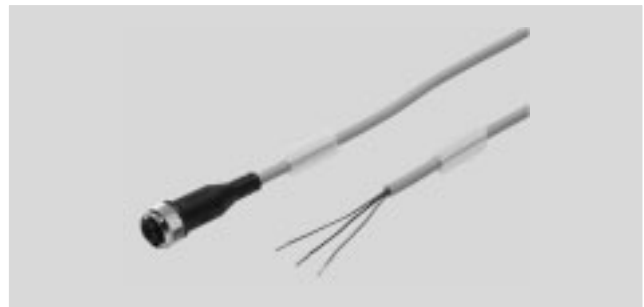
1) Packaging unit

Connecting cables, socket M12x1, 5-pin

Technical data

Connecting cable NEBS-M12G5

- Pre-assembled at one end
- Cable lengths: 5 m and 10 m
- 5 wires
- Socket M12x1



General technical data		
Electrical connection		Socket M12x1, 5-pin – open end, 5-wire
Cable characteristic		Basic
Cable test conditions		Test conditions on request
Plug coding		A
Cable composition	[mm ²]	5 x 0.34 (screened)
Cable type		Lif9YC11Y
Cable diameter	[mm]	5.9
Tolerance cable diameter	[mm]	± 0.2
Conductor nominal cross section	[mm ²]	0.34
Min. cable bending radius	[mm]	59
Max. tightening torque of socket	[Nm]	0.4

Technical data		
Operating voltage range	[V DC]	0 ... 60
Nominal operating voltage	[V DC]	60
Acceptable current load	[A]	4
Surge resistance	[kV]	1.5
Degree of protection to EN 60529		IP67

Materials	
Seals	NBR
Cable sheath	TPE-U (PUR)
Cable sheath colour	Black
Union nut	Die-cast zinc
Pin contacts	Tin-plated, nickel-plated and gold-plated copper alloy
Note on materials	RoHS-compliant

Operating and environmental conditions		
Ambient temperature with flexible cable installation	[°C]	–25 ... +80
Degree of contamination		3

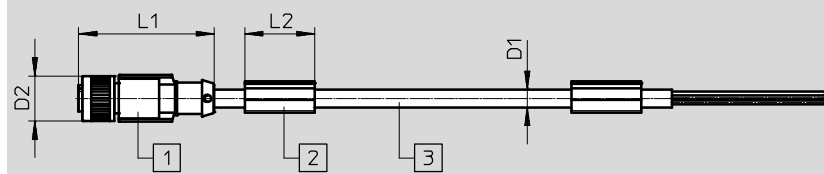
Connecting cables, socket M12x1, 5-pin

Technical data

Wiring allocation (socket view)				
Electrical connection 1	Pin	Wire colour ¹⁾	Pin	Electrical connection 2
	1	BN	-	-
	2	WH	-	
	3	BU	-	
	4	BK	-	
	5	GY	-	

1) To IEC 757

Dimensions Download CAD data → www.festo.com



- 1 Socket, straight, M12x1, A-coded
- 2 Inscription label holder
- 3 Cable, length depending on order

Type	D1 Ø	D2 Ø	L1	L2
NEBS-M12G5-KS-5-LE5	5.9	14.8	44.5	22
NEBS-M12G5-KS-10-LE5				

Ordering data

Electrical connection				Cable length [m]	Product weight [g]	Part No.	Type
Connection 1		Connection 2					
Socket, straight design	5-pin	Open end	5-wire	5	276	8030962	NEBS-M12G5-KS-5-LE5
				10	528	8030963	NEBS-M12G5-KS-10-LE5

Connecting cables, socket M12x1, 12-pin

Technical data

Connecting cable
NEBS-M12G12

- Pre-assembled at one or both ends
- Cable lengths: 0.5 m, 2 m, 5 m and 10 m
- 12 wires
- Socket M12x1



General technical data		
Electrical connection		Socket M12x1, 12-pin – socket M12x1, 12-pin Socket M12x1, 12-pin – open end, 12-wire
Cable characteristic		Basic
Cable test conditions		Test conditions on request
Cable composition	[mm ²]	12 x 0.14, screened
Cable diameter	[mm]	8.5
Tolerance cable diameter	[mm]	± 0.2
Min. cable bending radius	[mm]	85
Max. tightening torque of socket	[Nm]	0.4

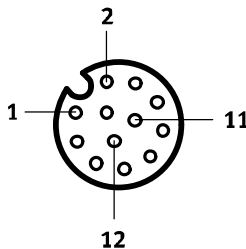
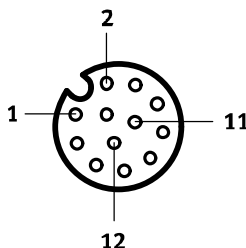
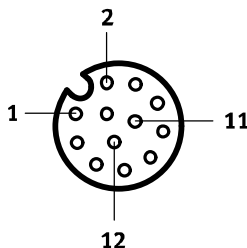
Technical data			
Type		With socket M12x1	With open cable end
Operating voltage range	[V DC]	0 ... 30	
Nominal operating voltage	[V DC]	30	
Acceptable current load	[A]	–	1.5
	at 40 °C	[A]	1.5
Surge resistance	[kV]	0.8	–
Degree of protection to EN 60529		IP67	

Materials	
Seals	NBR
Cable sheath	TPE-U (PUR)
Cable sheath colour	Black
Union nut	Die-cast zinc
Pin contacts	Nickel-plated and gold-plated brass
Note on materials	RoHS-compliant

Operating and environmental conditions		
Ambient temperature with flexible cable installation	[°C]	–5 ... +80
Degree of contamination		3

Connecting cables, socket M12x1, 12-pin

Technical data

Wiring allocation (socket view)				
Electrical connection 1	Pin	Wire colour ¹⁾	Pin	Electrical connection 2
Electrical connection, socket M12x1, 12-pin – open cable end				
	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	-	
Electrical connection, socket M12x1, 12-pin – socket M12x1, 12-pin				
	1	BN	1	
	2	BU	2	
	3	WH	3	
	4	GN	4	
	5	PK	5	
	6	YE	6	
	7	BK	7	
	8	GY	8	
	9	RD	9	
	10	VT	10	
	11	GY PK	11	
	12	RD BU	12	

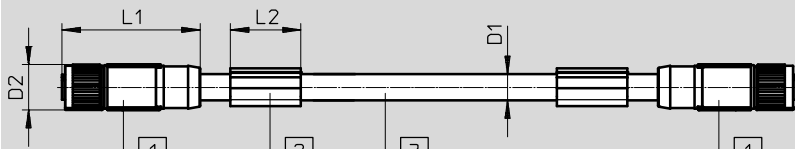
1) To IEC 757

Connecting cables, socket M12x1, 12-pin

Technical data

Dimensions

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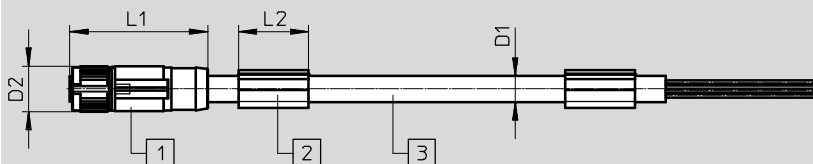


- 1 Socket, straight, M12x1, A-coded
- 2 Inscription label holder
- 3 Cable, length depending on order

Type	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

Download CAD data → www.festo.com



- 1 Socket, straight, M12x1, A-coded
- 2 Inscription label holder
- 3 Cable, length depending on order

Type	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

Electrical connection		Cable length [m]	Product weight [g]	Part No.	Type			
Connection 1	Connection 2							
Socket, straight design	12-pin	Socket, straight design	12-pin	0.5	87	3056124	NEBS-M12G12-KS-0.5-SM12G12	
		Socket, straight design	12-pin	2	223	3058527	NEBS-M12G12-KS-2-SM12G12	
	Open end	12-wire			5	492	3058614	NEBS-M12G12-KS-5-LE12
					10	945	2912452	NEBS-M12G12-KS-10-LE12

Connecting cables, plug M12x1, 12-pin

Technical data

Connecting cable
NEBS-SM12G12

- Pre-assembled at one or both ends
- Cable lengths: 0.3 m, 0.5 m and 5 m
- 12 wires
- Plug M12x1



General technical data		
Electrical connection		Plug M12x1, 12-pin – plug M12x1, 12-pin Plug M12x1, 12-pin – open end, 12-wire
Cable characteristic		Suitable for use with energy chains
Cable test conditions		Test conditions on request
Cable composition	[mm ²]	12 x 0.25
Cable diameter	[mm]	6.5
Conductor nominal cross section	[mm ²]	0.25
Bending radius, fixed cable installation	[mm]	≥32
Bending radius, flexible cable installation	[mm]	≥65

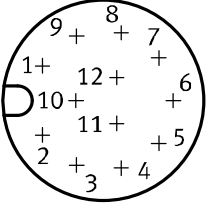
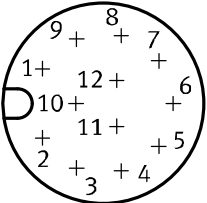
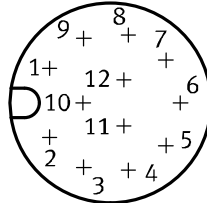
Technical data		
Operating voltage range	[V DC]	0 ... 30
Operating voltage range	[V AC]	0 ... 30
Acceptable current load	at 40 °C [A]	1.5
Surge resistance	[kV]	0.5
Degree of protection to EN 60529		IP67 (in assembled state)

Materials	
Cable sheath	TPE-U (PUR)
Cable sheath colour	Black
Union nut	Nickel-plated die-cast zinc
Pin contacts	Gold-plated brass
Note on materials	RoHS-compliant

Operating and environmental conditions		
Ambient temperature with flexible cable installation	[°C]	–5 ... +70
Ambient temperature with fixed cable installation	[°C]	–5 ... +70
Degree of contamination		3

Connecting cables, plug M12x1, 12-pin

Technical data

Wiring allocation (plug view)				
Electrical connection 1	Pin	Wire colour ¹⁾	Pin	Electrical connection 2
Electrical connection, plug M12x1, 12-pin – open cable end				
	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	-	
Electrical connection, plug M12x1, 12-pin – plug M12x1, 12-pin				
	1	BN	1	
	2	BU	2	
	3	WH	3	
	4	GN	4	
	5	PK	5	
	6	YE	6	
	7	BK	7	
	8	GY	8	
	9	RD	9	
	10	VT	10	
	11	GY PK	11	
	12	RD BU	12	

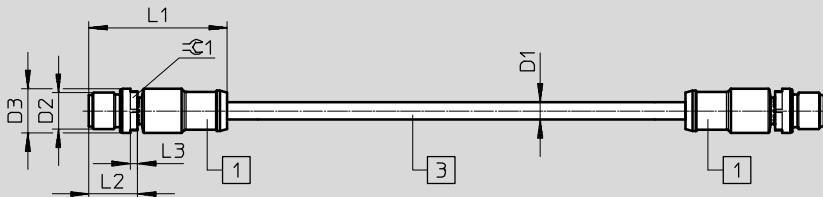
1) To IEC 757

Connecting cables, plug M12x1, 12-pin

Technical data

Dimensions

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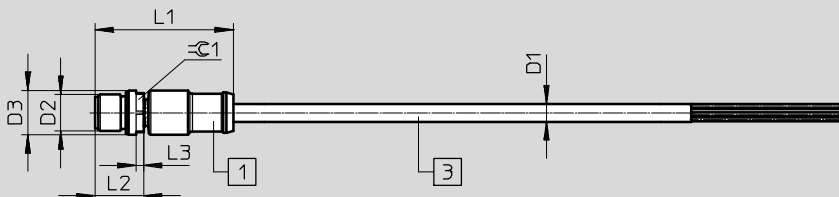


- 1 Plug, straight, 12-pin, M12x1, A-coded
- 2 Cable length depending on order
- 3 Cable, length depending on order

Type	D1 Ø	D2	D3 Ø	L1	L2	L3	B 1
NEBS-SM12G12-E-0.3-N-M12G12	7	M12x1	14.5	45.4	16	2.5	13

Dimensions

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- 1 Plug, straight, 12-pin, M12x1, A-coded
- 2 Cable length depending on order
- 3 Cable, length depending on order

Type	D1 Ø	D2	D3 Ø	L1	L2	L3	B 1
NEBS-SM12G12-E-0.5-N-LE12	7	M12x1	14.5	45.4	16	2.5	13
NEBS-SM12G12-E-5-N-LE12							

Ordering data

Electrical connection				Cable length [m]	Part No.	Type
Connection 1		Connection 2				
Plug, straight design	12-pin	Plug, straight design	12-pin	0.3	3947404	NEBS-SM12G12-E-0.3-N-M12G12
		Open end	12-wire	0.5	3947401	NEBS-SM12G12-E-0.5-N-LE12
				5	3947395	NEBS-SM12G12-E-5-N-LE12