

Connecting cable NEBC

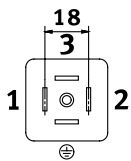
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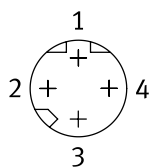
Characteristics

Connection technology left, field device side

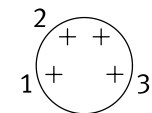
[A1] Socket type A, EN 175301-803



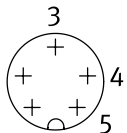
[D8] M8, D-coded, IEC 61076-2-114 ED1



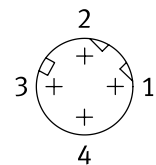
[M8] Socket M8x1 A-coded, EN 61076-2-104



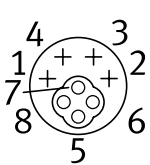
[M9] M9



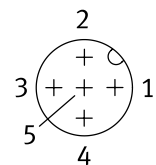
[D12] M12, D-coded



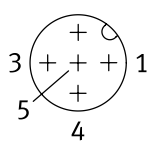
[F12] M12, Festo-specific encoding



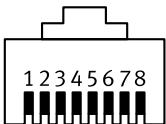
[M12] Socket M12x1 A-coded, EN 61076-2-101



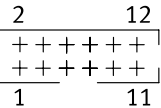
[P1] Fork spring



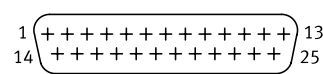
[R3] RJ45



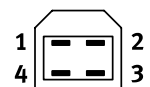
[R3Z12] RJ45 and socket strip 12-pin



[S1] Sub-D socket

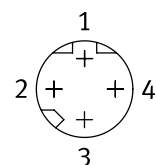


[U1] USB, type A

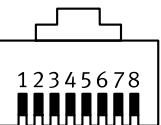


Connection technology right, controller side

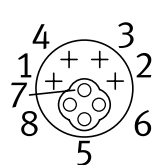
[D8] M8, D-coded, IEC 61076-2-114 ED1



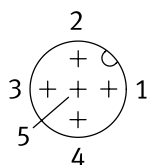
[D12] M12, D-coded



[F12] M12, 4 wires

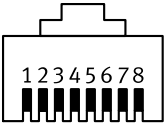


[M12] Plug M12x1 A-coded, EN 61076-2-101

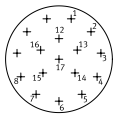


Characteristics

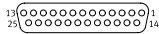
[R3] RJ45



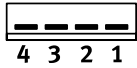
[RS] Round plug



[S1] Sub-D



[U2] USB, type B



Type code

001	Series
NEBC	Connecting cable for controllers

002	Product version
	Standard
C	Easy-to-clean design

003	Connection technology left, field device side
A1	Socket type A, EN 175301-803
D8	M8, D-coded, IEC 61076-2-114 ED1
D12	M12, D-coded
F12	M12, Festo-specific encoding
LE	Open end
M8	Socket M8x1 A-coded, EN 61076-2-104
M9	M9
M12	Socket M12x1 A-coded, EN 61076-2-101
P1	Fork spring
R3	RJ45
R3Z12	RJ45 and socket strip 12-pin
S1	Sub-D socket
U1	USB, type A

004	Cable outlet left
	None
G	Straight
W	Angled
WA	Angled 45°

005	Number of pins/wires on the left
3	3
4	4
5	5
8	8
9	9
20	20
25	25

006	Additional socket functions
	None
HS	With seal
M22	Mounting with union nut M22x1.5

007	Cable characteristic
	Without cable
E	Suitable for energy chains
K	Standard
P	Basic

008	Cable design
	Standard
H	Hybrid cable
S	With shielding

009	Cable length [m]
0.2	0.2
0.25	0.25
0.3	0.3
0.5	0.5
1	1
1.5	1.5
1.8	1.8
2	2
2.5	2.5
3	3
3.2	3.2
5	5
7.5	7.5
10	10
15	15
20	20
25	25
30	30
40	40
50	50

010	Cable identification
	With label holder
N	Without label holder

011	Type of connector
	Standard
B	Socket
S	Plug at both ends
SB	Plug/socket
SBS	Plug, left socket strip/right plug

012	Connection technology right, controller side
D8	M8, D-coded, IEC 61076-2-114 ED1
D12	M12, D-coded
F12	M12, 4 wires
LE	Open end
M12	Plug M12x1 A-coded, EN 61076-2-101
R3	RJ45
RS	Round plug
S1	Sub-D
U2	USB, type B

013	Plug
	None
G	Straight
W	Angled

014	Number of pins/wires on the right
3	3
4	4
5	5
8	8
9	9
17	17
25	25
26	26

Type code

015	Bus protocol/activation	
	None	
ET	EtherNet	
CO	CANopen	
PT	I-Port interface	
RS2	RS232	

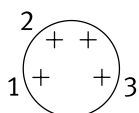
016	Degree of protection, electrical system	
	Standard	
S1	IP65	
S7	IP20	
S10	IP65/IP67/IP69K	

Datasheet

General technical data – Plug M8, A-coded

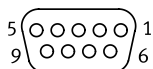
Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 2, connector system	Sub-D
Protocol	RS232
Cable designation	With accessories
Mounting position	optional

Technical data – Electrical connection 1, plug M8, A-coded



Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 2, connector system	Sub-D
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Plugs
Electrical connection 1, cable outlet	Straight
Electrical connection 1, design	Round
Electrical connection 1, number of connections/cores	4
Electrical connection 1, used connections/cores	3
Electrical connection 1, type of mounting	Screw-type lock

Technical data – Electrical connection 2, plug M8, A-coded



Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 2, connector system	Sub-D
Electrical connection 2, function	Controller side
Electrical connection 2, connection type	Socket
Electrical connection 2, cable outlet	Straight
Electrical connection 2, design	Angular
Electrical connection 2, number of connections/cores	9
Electrical connection 2, used connections/cores	8
Electrical connection 2, type of mounting	2x screw 4-40 UNC

Datasheet

Technical data – Electrical, plug M8, A-coded

Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 2, connector system	Sub-D
Nominal operating voltage DC	24
Operational voltage range DC	0 ... 24 V
Immunity to surge	1.5 kV
Current rating at 40° C	4 A
Pollution degree	2
Shielding	yes

Technical data – Cable, plug M8, A-coded

Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 2, connector system	Sub-D
Cable diameter	4.6 mm
Cable diameter tolerance	± 0.1 mm
Cable characteristic	Suitable for energy chains
Bending radius, fixed cable	≥ 24 mm
Bending radius, moving cable	≥ 47 mm
Test conditions cable	Test conditions on request
Cable structure	3 x 0.34 mm ²
Nominal cross section conductor	0.34 mm ²

Materials – Plug M8, A-coded

Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 2, connector system	Sub-D
Material cable sheath	TPE-U(PUR)
Cable sheath colour	Black
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

Operating and environmental conditions – Plug M8, A-coded

Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 2, connector system	Sub-D
Ambient temperature	0 ... 50°C
Ambient temperature with moving cable	0 ... 50°C
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	IP67
Note on degree of protection	IP20 for Sub-D socket, In assembled state

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

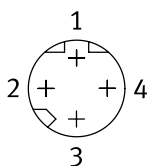
3) More information www.festo.com/catalogue/... Support/Downloads.

Datasheet

General technical data – Plug M8

Electrical connection 1, connector system	M8x1, D-coded according to EN 61076-2-114	
Electrical connection 2, connector system	M8x1, D-coded according to EN 61076-2-114	RJ45 to IEC 60603-7-3
Based on standard	EN 61076-2-114	
Transmission characteristics	According to system communication AP	
Frequency of connection	100	
Cable designation	Without inscription label holder	
Mounting position	–	optional
Product weight	31 ... 2,917 g	25.5 ... 367 g

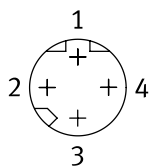
Technical data – Electrical connection 1, plug M8



Electrical connection 1, connector system	M8x1, D-coded according to EN 61076-2-114	
Electrical connection 2, connector system	M8x1, D-coded according to EN 61076-2-114	RJ45 to IEC 60603-7-3
Electrical connection 1, function	Controller side	
Electrical connection 1, connection type	Plugs	
Electrical connection 1, cable outlet	Straight, Angled	Straight
Electrical connection 1, design	Round	
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 longitudinal knurl, Rotatable	Screw-type lock with longitudinal knurl

Datasheet

Technical data – Electrical connection 2, plug M8



Electrical connection 1, connector system	M8x1, D-coded according to EN 61076-2-114	
Electrical connection 2, connector system	M8x1, D-coded according to EN 61076-2-114	RJ45 to IEC 60603-7-3
Electrical connection 2, function	Controller side	
Electrical connection 2, connection type	Plugs	
Electrical connection 2, cable outlet	Straight, Angled	Straight
Electrical connection 2, design	Round	Angular
Electrical connection 2, number of connections/cores	4	8
Electrical connection 2, used connections/cores	4	
Electrical connection 2, type of mounting	Screw-type lock with longitudinal knurl, Rotatable	Snap-locking

Technical data – Electrical, plug M8

Electrical connection 1, connector system	M8x1, D-coded according to EN 61076-2-114	
Electrical connection 2, connector system	M8x1, D-coded according to EN 61076-2-114	RJ45 to IEC 60603-7-3
Nominal operating voltage DC	24	
Operational voltage range DC	0 ... 30 V	0 ... 60 V
Immunity to surge	1.5 kV	
Current rating at 40° C	3 A	1 A
Pollution degree	3	
Reverse polarity protection	no	
Protective conductor connection	Not available	
Shielding	yes	

Technical data - Cable, plug M8

Electrical connection 1, connector system	M8x1, D-coded according to EN 61076-2-114	
Electrical connection 2, connector system	M8x1, D-coded according to EN 61076-2-114	RJ45 to IEC 60603-7-3
Cable diameter	6.3 mm	5.5 mm
Cable diameter tolerance	± 0.2 mm	
Cable characteristic	Suitable for energy chains	
Bending radius, fixed cable	≥20 mm	≥18 mm
Bending radius, moving cable	≥75 mm	
Test conditions cable	Test conditions on request	
Cable structure	1 x (4 x AWG22)	2 x 2 x AWG26
Special characteristics	Oil resistant	UV resistant, Flame-retardant and self-extinguishing, Hydrolysis-resistant, Resistant to microbes, Oil resistant

Datasheet

Materials – Plug M8

Electrical connection 1, connector system	M8x1, D-coded according to EN 61076-2-114	
Electrical connection 2, connector system	M8x1, D-coded according to EN 61076-2-114	RJ45 to IEC 60603-7-3
Material housing	PA; TPE-U(PUR)	TPE-U(PUR)
Housing colour	Black	
Material screw-type lock	Nickel-plated brass	
Material seals	NBR	–
Material electrical contact	Gold-plated copper alloy	
Material cable sheath	TPE-U(PUR)	PUR
Cable sheath colour	Silver-grey with sky blue stripe	
Material insulating sheath	PP	
Note on materials	RoHS-compliant, Free of halogen	CFC-free, RoHS-compliant, Free of halogen, Free of phosphoric acid ester, Silicone free
LABS (PWIS) conformity	VDMA24364-B2-L	

Operating and environmental conditions – M8 plug

Electrical connection 1, connector system	M8x1, D-coded according to EN 61076-2-114	
Electrical connection 2, connector system	M8x1, D-coded according to EN 61076-2-114	RJ45 to IEC 60603-7-3
Ambient temperature	-20 ... 60°C	-40 ... 80°C
Ambient temperature with moving cable	-5 ... 60°C	-20 ... 80°C
Storage temperature	-40 ... 70°C	-20 ... 70°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress	1 - Low 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 assembled state	
Approval	c UL us (OL)	–
Certificate issuing authority	UL E474609	–
Overvoltage category	–	II

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

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

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

General technical data – Plug M9

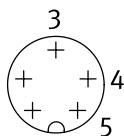
Electrical connection 1, connector system	Open end
Electrical connection 2, connector system	M9x0.5
Cable designation	With accessories
Product weight	108, 250

Technical data – Electrical connection 1, plug M9

Electrical connection 1, connector system	Open end
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Cable
Wire ends	Wire ferrule
Electrical connection 1, number of connections/cores	5
Electrical connection 1, used connections/cores	3

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Technical data – Electrical connection 2, plug M9



Electrical connection 2, connector system	M9x0.5
Electrical connection 2, function	Controller side
Electrical connection 2, connection type	Plugs
Electrical connection 2, cable outlet	Angled
Electrical connection 2, design	Round
Wire ends	Wire ferrule
Electrical connection 2, number of connections/cores	5
Electrical connection 2, used connections/cores	3
electrical connection 2, type of mounting	Screw-type lock

Technical data – Electrical, plug M9

Electrical connection 1, connector system	Open end
Electrical connection 2, connector system	M9x0.5
Operational voltage range DC	0 ... 30 V
Immunity to surge	0.5 kV
Current rating at 40° C	1.6 A
Note on permissible current load at 40°C	2.3 A for 0.34 mm ² , 3.6 A for 0.49 mm ²
Pollution degree	1
Shielding	yes

Technical data – Cable, plug M9

Electrical connection 1, connector system	Open end
Electrical connection 2, connector system	M9x0.5
Cable diameter	5.5 mm
Cable length	2 ... 5
Cable characteristic	Suitable for energy chains
Bending radius, moving cable	≥75 mm
Test conditions cable	Test conditions on request
Cable structure	2 x 0.25 mm ² + 2 x 0.34 mm ² + 0.49 mm ²
Nominal cross section conductor	0.25 mm ² ; 0.34 mm ² ; 0.49 mm ²

Datasheet

Materials – Plug M9

Electrical connection 1, connector system	Open end
Electrical connection 2, connector system	M9x0.5
Material housing	PA, PBT, TPE-U(PUR)
Housing colour	Black
Material screw-type lock	Nickel-plated brass
Material electrical contact	Gold-plated bronze, Gold-plated brass
Material cable sheath	TPE-U(PUR)
Cable sheath colour	Light grey
Material insulating sheath	TPE-U(PUR)
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Operating and environmental conditions – M9 plug

Electrical connection 1, connector system	Open end
Electrical connection 2, connector system	M9x0.5
Ambient temperature	-20 ... 80°C
Ambient temperature with moving cable	-5 ... 80°C
Corrosion resistance class CRC ¹⁾	1 - Low 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 assembled state

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

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

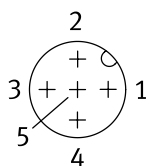
3) More information www.festo.com/catalogue/... Support/Downloads.

General technical data – Plug M12

Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101
Frequency of connection	500
Cable designation	With accessories
Product weight	163 g

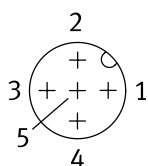
Datasheet

Technical data – Electrical connection 1, plug M12



Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Plugs
Electrical connection 1, cable outlet	Straight
Electrical connection 1, design	Round
Electrical connection 1, number of connections/cores	5
Electrical connection 1, used connections/cores	5
Electrical connection 1, type of mounting	Screw-type lock

Technical data – Electrical connection 2, plug M12



Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection 2, connection type	Plugs
Electrical connection 2, function	Controller side
Electrical connection 2, cable outlet	Straight
Electrical connection 2, design	Round
Electrical connection 2, number of connections/cores	5
Electrical connection 2, used connections/cores	5
Electrical connection 2, type of mounting	Screw-type lock

Technical data – Electrical, M12 plug

Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101
Operational voltage range DC	0 ... 30 V
Operational voltage range AC	0 ... 30 V
Immunity to surge	0.8 kV
Current rating at 40° C	4 A
Pollution degree	3
Shielding	yes

Datasheet

Technical data – Cable, M12 plug

Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101
Cable diameter	5 mm
Cable length	1.5
Cable characteristic	Standard
Test conditions cable	Test conditions on request
Cable structure	4 x 0.34 mm ²
Nominal cross section conductor	0.34 mm ²

Materials – Plug M12

Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101
Material housing	TPE-U(PUR)
Housing colour	Black
Material screw-type lock	Nickel-plated brass
Material electrical contact	Gold-plated bronze, Gold-plated brass
Cable sheath colour	Light grey
Material insulating sheath	PVC
Note on materials	RoHS-compliant
Material cable sheath	TPE-U(PUR)
LABS (PWIS) conformity	VDMA24364-B2-L

Operating and environmental conditions – Plug M12

Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101
Ambient temperature	-25 ... 70°C
Ambient temperature with moving cable	-5 ... 70°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)	To UK RoHS instructions
Degree of protection	IP65, IP67
Note on degree of protection	In assembled state

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

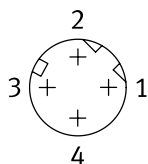
2) More information www.festo.com/catalogue/... Support/Downloads.

General technical data – Plug M12

Electrical connection 1, connector system	M12x1, D-coded to EN 61076-2-101		Open end
Electrical connection 2, connector system	M12x1, D-coded to EN 61076-2-101	RJ45 to IEC 60603-7-3	M12x1, D-coded to EN 61076-2-101
Transmission characteristics	In accordance with category 5, EN 50173, class D, In accordance with category 5, ISO/IEC 11801, class D		
Specification Ethernet cable	Type: CAT.5		
Frequency of connection	50		
Cable designation	With label holder		
Product weight	64, 98.5, 211, 331.5, 680	93.5, 219.5, 350, 679.5	343

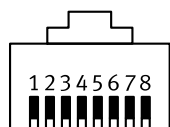
Datasheet

Technical data – Electrical connection 1, plug M12



Electrical connection 2, connector system	M12x1, D-coded to EN 61076-2-101		RJ45 to IEC 60603-7-3
Electrical connection 1, connector system	M12x1, D-coded to EN 61076-2-101	Open end	M12x1, D-coded to EN 61076-2-101
Electrical connection 1, function	Field device side		
Electrical connection 1, connection type	Plugs	Cable	Plugs
Electrical connection 1, cable outlet	Straight		
Electrical connection 1, design	Round	–	Round
Wire ends	–	Sheath removed, Cut off bluntly	–
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 13 mm hexagon and longitudinal knurl	–	Screw-type lock with 13 mm hexagon and longitudinal knurl

Technical data – Electrical connection 2, plug M12



Electrical connection 1, connector system	M12x1, D-coded to EN 61076-2-101		Open end
Electrical connection 2, connector system	M12x1, D-coded to EN 61076-2-101	RJ45 to IEC 60603-7-3	M12x1, D-coded to EN 61076-2-101
Electrical connection 2, connection type	Plugs		
Electrical connection 2, function	Controller side		
Electrical connection 2, cable outlet	Straight		
Electrical connection 2, design	Round	Angular	Round
Electrical connection 2, number of connections/cores	4	8	4
Electrical connection 2, used connections/cores	4		
Electrical connection 2, type of mounting	Screw-type lock with 13 mm hexagon and longitudinal knurl	Snap-locking	Screw-type lock with 13 mm hexagon and longitudinal knurl

Datasheet

Technical data – Electrical, M12 plug

Electrical connection 2, connector system	M12x1, D-coded to EN 61076-2-101	RJ45 to IEC 60603-7-3
Electrical connection 1, connector system	M12x1, D-coded to EN 61076-2-101	Open end
Operational voltage range DC	0 ... 30 V	
Operational voltage range AC	–	0 ... 30 V
Immunity to surge	0.8 kV	
Note on immunity to surge	A leakage current of up to 20 mA is permissible due to shielding.	
Current rating at 40° C	4 A	1.3 A
Pollution degree	3	
Shielding	yes	

Technical data – Cable, M12 plug

Electrical connection 2, connector system	M12x1, D-coded to EN 61076-2-101	RJ45 to IEC 60603-7-3
Electrical connection 1, connector system	M12x1, D-coded to EN 61076-2-101	Open end
Cable diameter	6.7 mm	
Cable length	0.5 ... 10	5
Cable diameter tolerance	± 0.3 mm	
Cable characteristic	Suitable for energy chains	
Bending radius, fixed cable	≥40 mm	
Bending radius, moving cable	≥100 mm	
Test conditions cable	Bending strength: to Festo standard, Test conditions on request, Energy chain: > 2 million cycles, bending radius 100 mm	
Cable structure	4 x 0.34 mm ²	
Nominal cross section conductor	0.34	
Special characteristics	Oil resistant	

Materials – Plug M12

Electrical connection 1, connector system	M12x1, D-coded to EN 61076-2-101	Open end
Electrical connection 2, connector system	M12x1, D-coded to EN 61076-2-101	RJ45 to IEC 60603-7-3
Material housing	TPE-U(PUR)	Brass, nickel-plated, PA, TPE-U(PUR)
Housing colour	Black	
Material screw-type lock	Die-cast zinc, nickel-plated	
Material threaded sleeve	Die-cast zinc	
Material electrical contact	Brass, Bronze	
Cable sheath colour	Green	
Material insulating sheath	PE	
Note on materials	RoHS-compliant	
Material cable sheath	TPE-U(PUR)	
LABS (PWIS) conformity	VDMA24364-B2-L	

Datasheet

Operating and environmental conditions – M12 plug

Electrical connection 2, connector system	M12x1, D-coded to EN 61076-2-101		RJ45 to IEC 60603-7-3
Electrical connection 1, connector system	M12x1, D-coded to EN 61076-2-101	Open end	M12x1, D-coded to EN 61076-2-101
Ambient temperature	-25 ... 80°C		
Ambient temperature with moving cable	-20 ... 60°C		
Storage temperature	-25 ... 80°C		
Corrosion resistance class CRC ¹⁾	1 - Low 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		
Approval	–	c UL us listed (OL)	–
Certificate issuing authority	–	UL E474609	–

1) More information at www.festo.com/x/topic/kbk

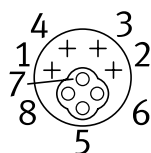
2) More information www.festo.com/catalogue/... Support/Downloads.

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

General technical data – Plug M12

Electrical connection 1, connector system	M12x1, Festo-specific coding
Electrical connection 2, connector system	M12x1, Festo-specific coding
Based on standard	Dimensions to EN 61076-2-101
Frequency of connection	100
Cable designation	Without inscription label holder
Product weight	47, 69, 113, 154, 200, 280

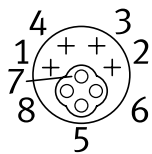
Technical data – Electrical connection 1, plug M12



Electrical connection 1, connector system	M12x1, Festo-specific coding
Electrical connection 2, connector system	M12x1, Festo-specific coding
Electrical connection 1, function	Field device side, Controller side
Electrical connection 1, connection type	Hybrid plug
Electrical connection 1, cable outlet	Straight
Electrical connection 1, design	Round
Electrical connection 1, number of connections/cores	8
Electrical connection 1, used connections/cores	8
Electrical connection 1, type of mounting	Screw-type lock, size 14 mm, and longitudinal knurl

Datasheet

Technical data – Electrical connection 2, plug M12



Electrical connection 1, connector system	M12x1, Festo-specific coding
Electrical connection 2, connector system	M12x1, Festo-specific coding
Electrical connection 2, connection type	Hybrid plug
Electrical connection 2, function	Field device side, Controller side
Electrical connection 2, cable outlet	Straight
Electrical connection 2, design	Round
Electrical connection 2, number of connections/cores	8
Electrical connection 2, used connections/cores	8
electrical connection 2, type of mounting	Screw-type lock, size 14 mm, and longitudinal knurl

Technical data – Electrical, M12 plug

Electrical connection 2, connector system	M12x1, Festo-specific coding
Electrical connection 1, connector system	M12x1, Festo-specific coding
Operational voltage range DC	0 ... 30 V
Immunity to surge	0.8 kV
Current rating at 40° C	7 A
Note on permissible current load at 40°C	1.5 A for conductor cross section 0.14 mm ²
Pollution degree	3

Technical data – Cable, M12 plug

Electrical connection 2, connector system	M12x1, Festo-specific coding
Electrical connection 1, connector system	M12x1, Festo-specific coding
Cable diameter	8 mm
Cable length	0.25 ... 3
Cable diameter tolerance	± 0.2 mm
Cable characteristic	Standard
Bending radius, fixed cable	≥24 mm
Bending radius, moving cable	≥56 mm
Test conditions cable	Test conditions on request
Cable structure	(1 x (4 x 0.14 mm ²)) + 4 x 0.75 mm ²
Nominal cross section conductor	0.14, 0.75
Special characteristics	Oil resistant

Datasheet

Materials – Plug M12

Electrical connection 1, connector system	M12x1, Festo-specific coding
Electrical connection 2, connector system	M12x1, Festo-specific coding
Material housing	TPE-U(PUR)
Housing colour	Black
Material screw-type lock	Nickel-plated brass
Material electrical contact	Gold-plated brass
Cable sheath colour	Light grey
Material insulating sheath	PP
Note on materials	RoHS-compliant, Free of halogen
Material cable sheath	TPE-U(PUR)
LABS (PWIS) conformity	VDMA24364-B2-L

Operating and environmental conditions – Plug M12

Electrical connection 2, connector system	M12x1, Festo-specific coding
Electrical connection 1, connector system	M12x1, Festo-specific coding
Ambient temperature	-25 ... 70°C
Ambient temperature with moving cable	-5 ... 70°C
Storage temperature	-40 ... 70°C
Corrosion resistance class CRC ¹⁾	1 - Low corrosion stress
CE mark (see declaration of conformity) ²⁾	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 assembled state

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

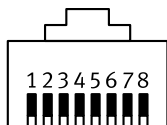
²⁾ More information www.festo.com/catalogue/... Support/Downloads.

General technical data – Plug RJ45 with snap-locking

Frequency of connection	50	750
Based on standard	–	EN 61076-2-114
Transmission characteristics	In accordance with category 5, EN 50173, class D; In accordance with category 5, ISO/IEC 11801, class D	According to system communication AP
Specification Ethernet cable	Type: CAT.5	–
Cable designation	With label holder	Without inscription label holder
Mounting position	–	optional
Product weight	89.5 g	25.5 ... 382.5 g

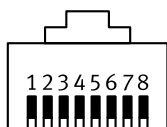
Datasheet

Technical data – Electrical connection 1, plug RJ45 with snap-locking



Electrical connection 1, connector system	RJ45	RJ45 to IEC 60603-7-3
Electrical connection 1, function	Field device side	Field device side, Controller side
Electrical connection 1, connection type	Plugs	
Electrical connection 1, cable outlet	Straight	
Electrical connection 1, design	Angular	
Electrical connection 1, used connections/cores	8	4
Electrical connection 1, number of connections/cores	8	
Electrical connection 1, type of mounting	–	Snap-locking

Technical data – Electrical connection 2, plug RJ45 with snap-locking



Electrical connection 2, connector system	RJ45	RJ45 to IEC 60603-7-3
Electrical connection 2, function	Controller side	
Electrical connection 2, connection type	Plugs	
Electrical connection 2, cable outlet	Straight	
Electrical connection 2, design	Angular	
Electrical connection 2, used connections/cores	8	4
Electrical connection 2, number of connections/cores	8	
Electrical connection 2, type of mounting	–	Snap-locking
Electrical connection 2, tightening torque	–	0.4
Electrical connection 2, tolerance for tightening torque	–	± 50%

Technical data – Electrical, plug RJ45 with snap-locking

Immunity to surge	0.8 kV	1.5 kV	2.5 kV
Operational voltage range DC	0 ... 30 V	0 ... 60 V	0 ... 50 V
Note on immunity to surge	A leakage current of up to 20 mA is permissible due to shielding.		
Current rating at 40° C	1.3 A	1 A	1.5 A
Pollution degree	3		2
Shielding	yes		

Datasheet

Technical data – Cable, plug RJ45 with snap-locking

Electrical connection 1, used connections/cores	4	8
Cable diameter	5.5 ... 6.7 mm	5 mm
Cable diameter tolerance	± 0.2 mm, ± 0.3 mm	–
Cable characteristic	Suitable for energy chains	Standard
Bending radius, fixed cable	≥ 18 mm	24 mm
Bending radius, moving cable	≥ 75 mm	–
Test conditions cable	Bending strength: to Festo standard, Test conditions on request, Energy chain: > 2 million cycles, bending radius 100 mm	Test conditions on request
Cable structure	2 x 2 x AWG26 4 x 0.34 mm ²	4 x 2 x 0.16 mm ²
Nominal cross section conductor	0.34 mm ²	0.16 mm ²
Special characteristics	UV resistant; Flame-retardant and self-extinguishing; Hydrolysis-resistant; Resistant to microbes; Oil resistant	–
Cable length	0.3 ... 10 m	0.2 m

Materials – plug RJ45 with snap-locking

Note on materials	RoHS-compliant		CFC-free; RoHS-compliant; Free of halogen; Free of phosphoric acid ester; Silicone free
Material housing	PVC	Brass, nickel-plated; PA	TPE-U(PUR)
Housing colour	grey	Black	
Material screw-type lock	–		Nickel-plated brass
Material electrical contact	–	Brass; Bronze	Gold-plated copper alloy
Material cable sheath	PVC	TPE-U(PUR)	PUR
Cable sheath colour	Grey	Green	Silver-grey with sky blue stripe
Material insulating sheath	PVC	PE	PP
LABS (PWIS) conformity	VDMA24364-B2-L		

Operating and environmental conditions – Plug RJ45 with snap-locking

Operational voltage range DC	0 ... 50 V	0 ... 60 V	0 ... 30 V
Ambient temperature	-20 ... 60°C	-40 ... 80°C	-25 ... 80°C
Ambient temperature with moving cable	–	-20 ... 80°C	-20 ... 60°C
Storage temperature	–	-20 ... 70°C	-25 ... 80°C
Corrosion resistance class CRC ¹⁾	0 - No corrosion stress	1 - Low corrosion stress	
CE mark (see declaration of conformity) ²⁾	In accordance with EU RoHS Directive		
Degree of protection	IP20		
Note on degree of protection	In assembled state		–
Overvoltage category	–	II	–
UKCA marking (see declaration of conformity)	To UK RoHS instructions		
Nominal operating voltage DC	–	24	–

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

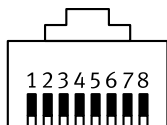
2) More information www.festo.com/catalogue/... Support/Downloads.

General technical data – Plug RJ45 with screw-type lock

Conforms to standard	IEC 60603-7-3
Transmission characteristics	In accordance with category 5, EN 50173, class D; In accordance with category 5, ISO/IEC 11801, class D
Cable designation	Without inscription label holder

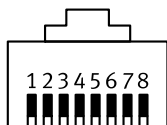
Datasheet

Technical data – Electrical connection 1, plug RJ45 with screw-type lock



Electrical connection 1, connector system	RJ45
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Plugs
Electrical connection 1, cable outlet	Straight
Electrical connection 1, design	Angular
Electrical connection 1, number of connections/cores	8
Electrical connection 1, used connections/cores	8
Electrical connection 1, type of mounting	Screw-type lock
Electrical connection 1, tightening torque	3 Nm

Technical data – Electrical connection 2, plug RJ45 with screw-type lock



Electrical connection 2, connector system	RJ45
Electrical connection 2, function	Controller side
Electrical connection 2, connection type	Plugs
Electrical connection 2, cable outlet	Straight
Electrical connection 2, design	Angular
Electrical connection 2, number of connections/cores	8
Electrical connection 2, used connections/cores	8
Electrical connection 2, type of mounting	Snap-locking

Technical data – Electrical, plug RJ45 with screw-type lock

Operational voltage range DC	0 ... 60 V
Current rating at 40° C	1 A
Shielding	yes

Technical data – Cable, plug RJ45 with screw-type lock

Cable diameter	5.5 mm
Cable diameter tolerance	± 0.2 mm
Cable length	5
Cable characteristic	For static applications

Datasheet

Materials – Plug RJ45 with screw-type lock

Material housing	PC
Housing colour	Transparent
Material screw-type lock	High-alloy stainless steel
Material seals	TPE-V
Material electrical contact	Brass, nickel-plated and gold-plated
Material cable sheath	PVC
Cable sheath colour	Black
Material insulating sheath	PVC
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

Operating and ambient conditions – Plug RJ45 with screw-type lock

Ambient temperature	-20 ... 55°C
Storage temperature	-20 ... 70°C
Corrosion resistance class CRC ¹⁾	4 - Very high corrosion stress, (when installed)
CE mark (see declaration of conformity) ²⁾	To EU EMC Directive In accordance with EU RoHS Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Degree of protection	IP20; IP66; IP67
Note on degree of protection	In assembled state
Approval	RCM trademark; c UL us listed (OL)
Certificate issuing authority	UL E239998

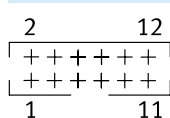
1) More information www.festo.com/x/topic/crc

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

General technical data – RJ45 plug with socket strip

Cable designation	Without inscription label holder
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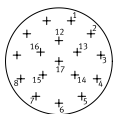
Technical data – electrical connection 1, RJ45 plug with socket strip



Electrical connection 1, connector system	RJ45 and socket strip 12 pins, 2 rows
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Plug and socket strip
Electrical connection 1, cable outlet	Straight
Electrical connection 1, design	Angular
Electrical connection 1, number of connections/cores	20
Electrical connection 1, used connections/cores	14
Electrical connection 1, type of mounting	Screw-type lock

Datasheet

Technical data – electrical connection 2, RJ45 plug with socket strip



Electrical connection 2, function	Controller side
Electrical connection 2, connection type	Hybrid plug
Electrical connection 2, cable outlet	Straight
Electrical connection 2, design	Round
Electrical connection 2, number of connections/cores	17
Electrical connection 2, used connections/cores	14
Electrical connection 2, type of mounting	Threaded

Technical data – electric, RJ45 plug with socket strip

Nominal operating voltage DC	24 V
Operational voltage range DC	0 ... 24 V
Immunity to surge	6 kV
Current rating at 40° C	11.7 A
Pollution degree	3
Shielding	no

Technical data – cable, RJ45 plug with socket strip

Cable diameter	8 mm
Cable diameter tolerance	± 1 mm
Cable characteristic	Standard
Bending radius, fixed cable	≥130 mm
Bending radius, moving cable	≥130 mm
Test conditions cable	Test conditions on request
Cable structure	4 x (1 x 0.128 mm ²) + 10 x 0.128 mm ²
Nominal cross section conductor	0.128 mm ²
Cable length	5 ... 15 m

Materials – RJ45 plug with socket strip

Material cable sheath	TPE-U(PUR)
Cable sheath colour	Red
Material insulating sheath	PP
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

Datasheet

Operating and environmental conditions – RJ45 plug with socket strip

Ambient temperature	0 ... 40°C
Ambient temperature with moving cable	0 ... 40°C
Storage temperature	-20 ... 70°C
Corrosion resistance class CRC ¹⁾	0 - No corrosion stress
CE mark (see declaration of conformity) ²⁾	To EU Low Voltage Directive
Degree of protection	IP65
Note on degree of protection	In assembled state

1) More information: www.festo.com/x/topic/crc2) More information www.festo.com/catalogue/... Support/Downloads.

General technical data – Sub-D plug

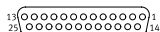
Electrical connection 2, connector system	Sub-D	Open end
Cable designation	Without inscription label holder	
Mounting position	–	optional

Technical data – Electrical connection 1, plug Sub-D

Electrical connection 1, connector system	Sub-D	
Electrical connection 1, function	Field device side	
Electrical connection 1, connection type	Plugs	
Electrical connection 1, cable outlet	Straight	
Electrical connection 1, design	Angular	
Electrical connection 2, number of connections/cores	25	26
Electrical connection 1, number of connections/cores	25	
Electrical connection 1, used connections/cores	25	
Electrical connection 1, type of mounting	2x screw 4-40 UNC	

Datasheet

Technical data – Electrical connection 2, plug Sub-D



Electrical connection 2, connector system	Sub-D	Open end
Electrical connection 2, function	Controller side	
Electrical connection 2, connection type	Socket	Cable
Electrical connection 2, cable outlet	Straight	–
Electrical connection 2, design	Angular	–
Wire ends	–	Wire ferrule, Pin terminal
Electrical connection 2, number of connections/cores	25	26
Electrical connection 2, used connections/cores	25	26
Electrical connection 2, type of mounting	2x screw 4-40 UNC	–

Technical data – Electrical, Sub-D plug

Electrical connection 2, connector system	Sub-D	Open end
Electrical connection 2, number of connections/cores	25	26
Nominal operating voltage DC	24 V	
Operational voltage range DC	–	0 ... 30 V
Immunity to surge	–	0.8 kV
Permissible current load	–	3.9 A
Current rating at 40° C	1 A	3.9 A
Shielding	yes	

Technical data – Cable, plug Sub-D

Electrical connection 2, connector system	Sub-D	Open end
Electrical connection 2, number of connections/cores	25	26
Cable diameter	7 mm	10.8 mm
Cable length	1, 2, 5	2.5
Cable diameter tolerance	–	± 0.2 mm
Cable characteristic	Standard	
Bending radius, fixed cable	–	≥220 mm
Min. cable bending radius	–	220 mm
Test conditions cable	–	Bending strength: to Festo standard
Cable structure	–	5 x (2 x 0.25 mm ²) + 16 x 0.25 mm ²
Nominal cross section conductor	–	0.25 mm ²
Connection cross section	–	0.25 mm ²

Datasheet

Materials – Sub-D plug

Electrical connection 2, connector system	Sub-D	Open end
Electrical connection 2, number of connections/cores	25	26
Material housing	–	Die-cast zinc, nickel-plated
Housing colour	grey	–
Material electrical contact	–	Copper alloy, tin-plated, Nickel-plated and gold-plated
Material cable sheath	PVC	
Cable sheath colour	Grey	
Material insulating sheath	–	PVC
Note on materials	RoHS-compliant	
LABS (PWIS) conformity	VDMA24364 zone III	VDMA24364-B2-L

Operating and environmental conditions – Sub-D plug

Electrical connection 2, connector system	Sub-D	Open end
Electrical connection 2, number of connections/cores	25	26
Ambient temperature	0 ... 70°C	-30 ... 80°C
Ambient temperature with moving cable	–	-5 ... 80°C
Corrosion resistance class CRC ¹⁾	0 - No 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	IP20
Note on degree of protection	In assembled state	

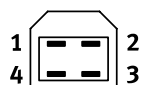
1) More information www.festo.com/x/topic/kbk

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

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

General technical data – Plug USB

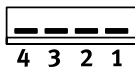
Cable designation	Without inscription label holder
Mounting position	optional

Technical data – Electrical connection 1, plug USB

Electrical connection 1, connector system	USB 2.0 Type B
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Plugs
Electrical connection 1, cable outlet	Straight
Electrical connection 1, design	Angular
Electrical connection 1, number of connections/cores	4
Electrical connection 1, used connections/cores	4

Datasheet

Technical data – Electrical connection 2, plug USB



Electrical connection 2, connector system	USB 2.0 type A
Electrical connection 2, function	Controller side
Electrical connection 2, connection type	Plugs
Electrical connection 2, cable outlet	Straight
Electrical connection 2, design	Angular
Electrical connection 2, number of connections/cores	4
Electrical connection 2, used connections/cores	4

Technical data – Cable, plug USB

Cable characteristic	Standard
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Materials – USB plug

Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

Operating and environmental conditions – USB plug

Corrosion resistance class CRC ¹⁾	0 - No 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

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

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

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

General technical data – Plug SCSI

Cable designation	Without inscription label holder
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Technical data – Electrical connection 1, plug SCSI



Electrical connection 1, connector system	SCSI
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Plugs
Electrical connection 1, cable outlet	Straight
Electrical connection 1, design	Angular
Electrical connection 1, number of connections/cores	36
Electrical connection 1, used connections/cores	36

Datasheet

Technical data – Electrical connection 2, plug SCSi



Electrical connection 2, connector system	Screw terminal
Electrical connection 2, function	Controller side
Electrical connection 2, connection type	Terminal strip
Electrical connection 2, cable outlet	Straight
Electrical connection 2, design	Angular
Electrical connection 2, number of connections/cores	36
Electrical connection 2, used connections/cores	36
Electrical connection 2, type of mounting	On H-rail

Technical data – Electrical, plug SCSi

Operational voltage range DC	0 ... 30 V
Operational voltage range AC	0 ... 30 V
Immunity to surge	0.5 kV
Current rating at 40° C	1.5 A
Pollution degree	1

Technical data – Cable, plug SCSi

Cable diameter	7.4 mm
Cable characteristic	Standard
Bending radius, fixed cable	≥74 mm
Bending radius, moving cable	≥110 mm
Cable structure	18 x 2 x 0.09 mm ²
Nominal cross section conductor	0.09 mm ²

Materials –Plug SCSi

Material housing	PA, PBT
Housing colour	Green, Black
Material cable sheath	PVC
Cable sheath colour	Black
Material insulating sheath	PVC
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

Operating and environmental conditions – Plug SCSi

Ambient temperature	-40 ... 80°C
Corrosion resistance class CRC ¹⁾	0 - No 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	IP20
Note on degree of protection	In assembled state

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

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

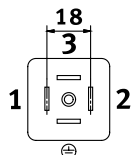
3) More information www.festo.com/catalogue/... Support/Downloads.

Datasheet

General technical data – Socket, square

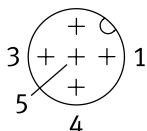
Based on standard	EN 61076-2-101
Cable designation	Without inscription label holder
Product weight	188 g

Technical data – Electrical connection 1, square socket



Electrical connection 1, connector system	Connection pattern P1	Plug pattern type A to EN 175301-803
Electrical connection 1, function	Field device side	
Electrical connection 1, connection type	Socket	
Electrical connection 1, cable outlet	Angled	
Electrical connection 1, design	Angular	
Electrical connection 1, number of connections/cores	4	3
Electrical connection 1, used connections/cores	4	3
Electrical connection 1, type of mounting	Central screw M3	

Technical data – Electrical connection 2, square socket



Electrical connection 1, connector system	Connection pattern P1	Plug pattern type A to EN 175301-803
Electrical connection 2, function	Controller side	
Electrical connection 2, connection type	Plugs	
Electrical connection 2, cable outlet	Straight	
Electrical connection 2, design	Round	
Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101	
Electrical connection 2, number of connections/cores	5	
Electrical connection 2, used connections/cores	4	
Electrical connection 2, type of mounting	Screw-type lock	–

Datasheet

Technical data – Electrical, square socket

Electrical connection 1, connector system	Connection pattern P1	Plug pattern type A to EN 175301-803
Operational voltage range DC	0 ... 30 V	0 ... 60 V
Operational voltage range AC	0, 30	0, 60
Immunity to surge	0.8 kV	1.5 kV
Current rating at 40° C	4 A	
Pollution degree	3	
Protective conductor connection	Available	
Shielding	yes	

Technical data – Cable, rectangular socket

Electrical connection 1, connector system	Connection pattern P1	Plug pattern type A to EN 175301-803
Cable diameter	5.9 mm	
Cable length	0.3 m	
Permissible cable diameter	5.7 ... 6.1 mm	
Cable characteristic	Standard	
Bending radius, fixed cable	≥90 mm	
Min. cable bending radius	90	
Test conditions cable	–	Test conditions on request
Cable structure	4 x 0.34 mm ²	
Nominal cross section conductor	0.34 mm ²	

Materials – Angular socket

Material housing	PA, TPE-U(PUR)
Housing colour	Black
Material cable sheath	PVC, TPE-U(PUR)
Cable sheath colour	Grey
Material insulating sheath	PVC
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Operating and environmental conditions – Square socket

Ambient temperature	-25 ... 80°C
Ambient temperature with moving cable	-5 ... 70°C
Corrosion resistance class CRC ¹⁾	0 - No 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
Note on degree of protection	In assembled state

1) More information at www.festo.com/x/topic/kbk

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

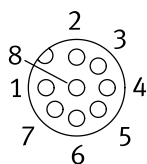
3) More information www.festo.com/catalogue/... Support/Downloads.

Datasheet

General technical data – Socket M12

Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101	Open end	
Electrical connection 2, number of connections/cores	8	5	8
Protocol	–	CANopen, DeviceNet	–
Based on standard	EN 61076-2-101	–	EN 61076-2-101
Frequency of connection	–	100	–
Cable designation	Without inscription label holder	With 2x inscription label holders	Without inscription label holder
Product weight	112 ... 736 g	310.7 g	105 ... 729 g

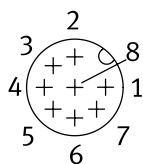
Technical data – Electrical connection 1, socket M12



Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101	Open end
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, A-coded to EN 61076-2-101	
Electrical connection 2, number of connections/cores	8	5, 8
Electrical connection 1, number of connections/cores	8	5 ... 8
Electrical connection 1, used connections/cores	8	5 ... 8
Electrical connection 1, type of mounting	Screw-type lock	

Datasheet

Technical data – Electrical connection 2, socket M12



Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101	Open end
Electrical connection 2, connection type	Plugs	Cable
Electrical connection 2, function	Controller side	
Electrical connection 2, cable outlet	Straight	–
Electrical connection 2, design	Round	–
Wire ends	–	Sheath removed
Electrical connection 2, number of connections/cores	8	5 ... 8
Electrical connection 2, used connections/cores	8	5 ... 8
Electrical connection 2, type of mounting	Screw-type lock	–

Technical data – Electrical, M12 socket

Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101	Open end	
Operational voltage range DC	0 ... 30 V		
Operational voltage range AC	0 ... 30 V	–	0 ... 30 V
Immunity to surge	0.8 kV	2 kV	0.8 kV
Current rating at 40° C	2 A	4 A	2 A
Pollution degree	3		
Shielding	no	yes	no

Technical data – Cable, M12 socket

Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101	Open end	
Cable diameter	6 mm	6.7 mm	6 mm
Cable length	2 ... 15 m	5 m	2 ... 15 m
Cable diameter tolerance	± 0.2 mm	± 0.3 mm	± 0.2 mm
Cable characteristic	Suitable for energy chains		
Bending radius, fixed cable	≥ 30 mm	≥ 35 mm	≥ 30 mm
Bending radius, moving cable	≥ 30 mm	≥ 70 mm	≥ 30 mm
Test conditions cable	Test conditions on request		
Cable structure	8 x 0.25 mm ²	(2 x 0.34 mm ²) + (2 x 0.25 mm ²) + 0.34 mm ²	8 x 0.25 mm ²
Nominal cross section conductor	0.25 mm ²	0.25 mm ² ; 0.34 mm ²	0.25 mm ²

Datasheet

Materials – Socket M12

Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101	Open end	
Material housing	TPE-U(PUR)	TPE-U(PUR), reinforced	TPE-U(PUR)
Housing colour	Black		
Material screw-type lock	Die-cast zinc, nickel-plated		
Material seals	NBR		
Material electrical contact	Brass	Brass, nickel-plated and gold-plated	Brass
Material cable sheath	TPE-U(PUR)		
Cable sheath colour	Silver-grey	Red-purple	Silver-grey
Material insulating sheath	PP	PE	PP
Note on materials	RoHS-compliant		
LABS (PWIS) conformity	VDMA24364-B2-L		

Environmental and operating conditions – M12 socket

Electrical connection 2, connector system	M12x1, A-coded to EN 61076-2-101	Open end	
Ambient temperature	-25 ... 90°C	-25 ... 80°C	-25 ... 90°C
Ambient temperature with moving cable	-25 ... 90°C	-20 ... 80°C	-25 ... 90°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress	–	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 assembled state		
Approval	c UL us listed (OL)	–	c UL us listed (OL)
Certificate issuing authority	UL E474609	–	UL E474609

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

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

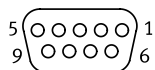
3) More information www.festo.com/catalogue/... Support/Downloads.

General technical data – Sub-D socket

Electrical connection 1, connector system	Sub-D
Protocol	I-Port
Based on standard	DIN 47100
Frequency of connection	50
Cable designation	Without inscription label holder

Datasheet

Technical data – Electrical connection 1, Sub-D socket



Electrical connection 1, connector system	Sub-D
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Socket
Electrical connection 1, cable outlet	Angled
Electrical connection 1, design	Angular
Electrical connection 1, number of connections/cores	9
Electrical connection 1, used connections/cores	5
Electrical connection 1, type of mounting	2x screw 4-40 UNC, With seal

Technical data – Electrical connection 2, Sub-D socket

Electrical connection 2, connector system	Open end
Electrical connection 2, function	Controller side
Electrical connection 2, connection type	Cable
Electrical connection 2, number of connections/cores	5

Technical data – Electrical, Sub-D socket

Electrical connection 1, connector system	Sub-D
Operational voltage range DC	0 ... 30 V
Current rating at 40° C	5.2 A
Pollution degree	3
Note on the contamination level	In mounted state
Protective conductor connection	Not available

Technical data – Cable, Sub-D socket

Electrical connection 1, connector system	Sub-D
Cable diameter	6.5 mm
Cable diameter tolerance	± 0.1 mm
Cable characteristic	Standard
Bending radius, fixed cable	≥26 mm
Bending radius, moving cable	≥78 mm
Cable structure	5 x 0.5 mm ²
Nominal cross section conductor	0.5 mm ²
Special characteristics	Easy to clean
Cable length	0.5 ... 20 m

Datasheet

Materials – Sub-D socket

Electrical connection 1, connector system	Sub-D
Material housing	PA-reinforced
Housing colour	grey
Material screws	Stainless steel
Material seals	EPDM
Material electrical contact	Gold-plated bronze
Material cable sheath	PVC
Cable sheath colour	Grey
Material insulating sheath	PVC
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Operating and environmental conditions – Sub-D socket

Electrical connection 1, connector system	Sub-D
Ambient temperature	-5 ... 60°C
Ambient temperature with moving cable	-5 ... 60°C
Storage temperature	-20 ... 40°C
Corrosion resistance class CRC ¹⁾	3 - 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	IP65, IP67, IP69K
Note on degree of protection	In assembled state

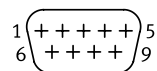
1) More information www.festo.com/x/topic/kbk

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

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

General technical data – Sub-D socket

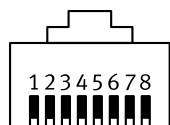
Electrical connection 1, connector system	Sub-D
Cable designation	Without inscription label holder

Technical data – Electrical connection 1, Sub-D socket

Electrical connection 1, connector system	Sub-D
Electrical connection 1, function	Field device side
Electrical connection 1, connection type	Socket
Electrical connection 1, cable outlet	Straight
Electrical connection 1, design	Angular
Electrical connection 1, number of connections/cores	9
Electrical connection 1, used connections/cores	8

Datasheet

Technical data – Electrical connection 2, Sub-D socket



Electrical connection 2, connector system	RJ45
Electrical connection 2, function	Controller side
Electrical connection 2, connection type	Plugs
Electrical connection 2, cable outlet	Straight
Electrical connection 2, design	Angular
Electrical connection 2, number of connections/cores	8
Electrical connection 2, used connections/cores	8

Technical data – Electrical, Sub-D socket

Electrical connection 1, connector system	Sub-D
Nominal operating voltage DC	5 V
Operational voltage range DC	0 ... 30 V
Nominal operating voltage AC	5 V
Operational voltage range AC	0 ... 30 V

Technical data – Cable, Sub-D socket

Electrical connection 1, connector system	Sub-D
Cable characteristic	Standard
Cable length	1.5 m

Materials – Sub-D socket

Electrical connection 1, connector system	Sub-D
Electrical connection 1, cable outlet	Straight
Housing colour	Black
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364 zone III

Operating and environmental conditions – Sub-D socket

Electrical connection 1, connector system	Sub-D
Ambient temperature	-20 ... 60°C
Corrosion resistance class CRC ¹⁾	0 - No 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	IP20
Note on degree of protection	In assembled state

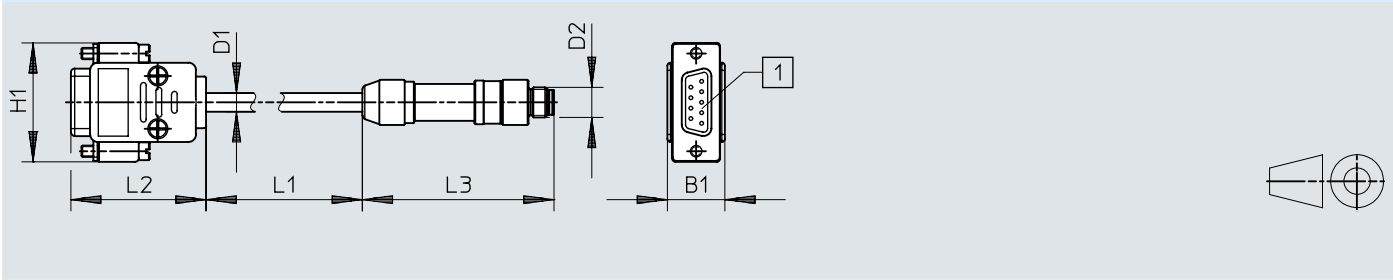
1) More information www.festo.com/x/topic/kbk

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

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

Dimensions

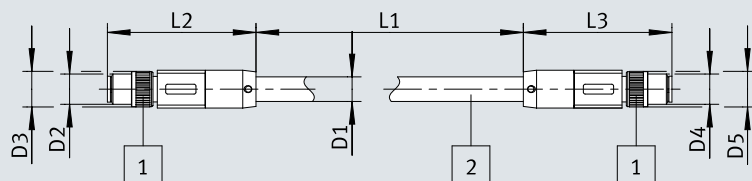
Dimensions – Plug M8, A-coded Download CAD data www.festo.com



	B1	D1 Ø	D2	H1	L1	L2	L3
NEBC-F12G8-KH-0.25-N-S-F12G8	15,2	4,6	M8x1	31,5	1500	35,8	50,7
NEBC-F12G8-KH-0.5-N-S-F12G8					2500		

Dimensions

Dimensions – Plug M8, D-coded, straight

[Download CAD data](http://www.festo.com)


[1] Socket

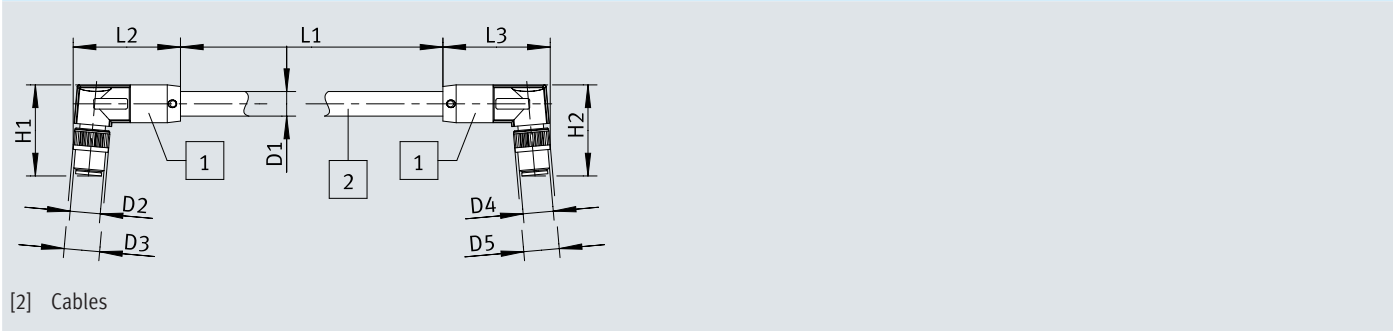
[2] Cables

	D1 ø	D2	D3 ø	D4	D5 ø	L1	L2	L3
NEBC-D8G4-ES- 0.3-N-S-D8G4-ET	6,3	M8x1	10	M8x1	10	300±0,04	39,3	39,3
NEBC-D8G4-ES- 0.5-N-S-D8G4-ET						500±0,04		
NEBC-D8G4-ES- 1-N-S-D8G4-ET						1000±0,04		
NEBC-D8G4-ES- 2-N-S-D8G4-ET						2000±0,04		
NEBC-D8G4-ES- 5-N-S-D8G4-ET						5000±1%		
NEBC-D8G4-ES- 7.5-N-S-D8G4-ET						7500±1%		
NEBC-D8G4-ES-10-N-S-D8G4-ET						10000±1%		
NEBC-D8G4-ES-15-N-S-D8G4-ET						15000±1%		
NEBC-D8G4-ES-20-N-S-D8G4-ET						20000±1%		
NEBC-D8G4-ES-25-N-S-D8G4-ET						25000±1%		
NEBC-D8G4-ES-30-N-S-D8G4-ET						30000±1%		
NEBC-D8G4-ES-40-N-S-D8G4-ET						40000±1%		
NEBC-D8G4-ES-50-N-S-D8G4-ET						50000±1%		

Dimensions

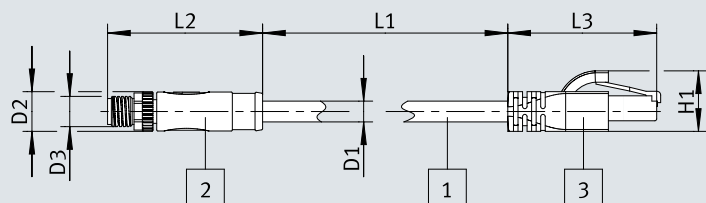
Dimensions – Plug M8, D-coded, angled

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Dimensions

Dimensions – Plug M8 with plug RJ45

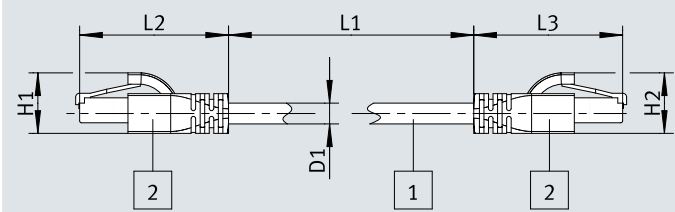
[Download CAD data](http://www.festo.com)


- [1] Cables
[3] RJ45 plug

	D1 Ø ±0,2	D2 Ø	D3	H1	L1	L2	L3 ±2
NEBC-D8G4-ES-0,3-N-S-R3G4-ET	5,5	10,5	M8x1	~17	300 +0,04	~40,4	~40,4
NEBC-D8G4-ES-0,5-N-S-R3G4-ET					500 +0,04		
NEBC-D8G4-ES-1-N-S-R3G4-ET					1000 +0,04		
NEBC-D8G4-ES-2-N-S-R3G4-ET					2000 +0,08		
NEBC-D8G4-ES-5-N-S-R3G4-ET					5000 +0,12		
NEBC-D8G4-ES-7,5-N-S-R3G4-ET					7500 +0,2		
NEBC-D8G4-ES-10-N-S-R3G4-ET					10000 +0,3		

Dimensions

Dimensions – Plug RJ45 with plug RJ45, without snap-locking [Download CAD data](#) www.festo.com



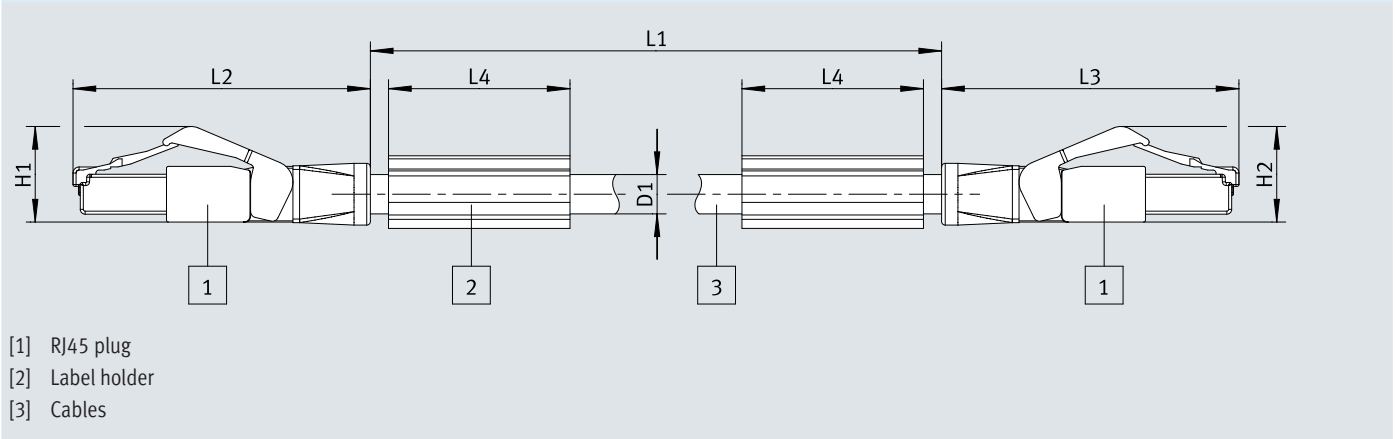
- [1] Cables
- [2] RJ45 plug

	D1 Ø ±0,2	H1	H2	L1	L2 ±2	L3 ±2
NEBC-R3G4-ES-0,3-N-S-R3G4-ET	5,5	~17	~17	300 +0,04	~40,4	~40,4
NEBC-R3G4-ES-0,5-N-S-R3G4-ET				500 +0,04		
NEBC-R3G4-ES-1-N-S-R3G4-ET				1000 +0,04		
NEBC-R3G4-ES-2-N-S-R3G4-ET				2000 +0,08		
NEBC-R3G4-ES-5-N-S-R3G4-ET				5000 +0,12		
NEBC-R3G4-ES-7,5-N-S-R3G4-ET				7500 +0,2		
NEBC-R3G4-ES-10-N-S-R3G4-ET				10000 +0,3		

Dimensions

Dimensions – Plug RJ45 with plug RJ45, with snap-locking

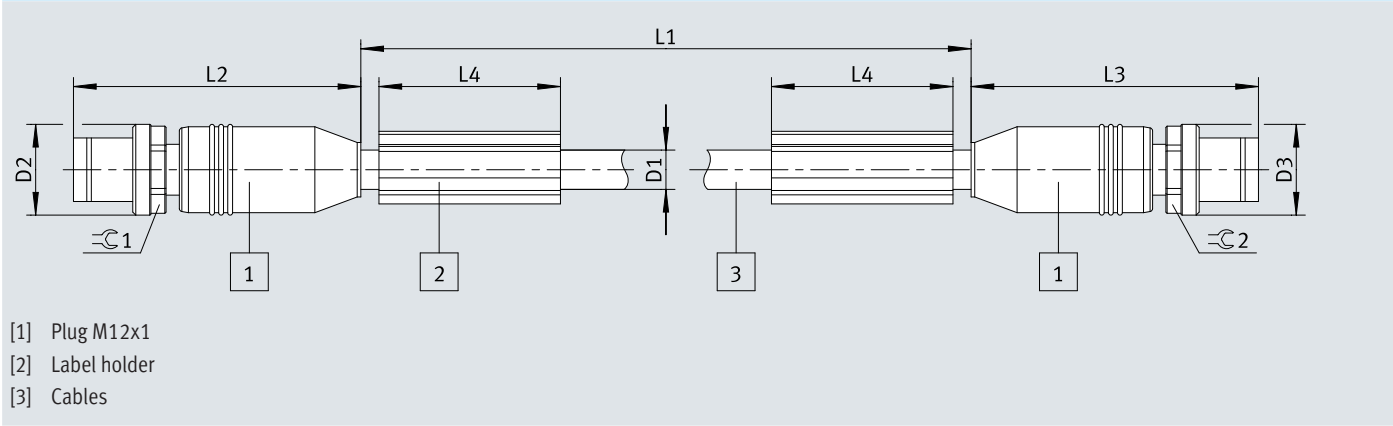
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	D1 Ø	H1	H2	L1	L2	L3	L4
NEBC-R3G4-ES-1-S-R3G4-ET	6,7	16,3	16,3	100	49	49	30

Dimensions

Dimensions – Plug M12 with plug M12, D-coded Download CAD data www.festo.com

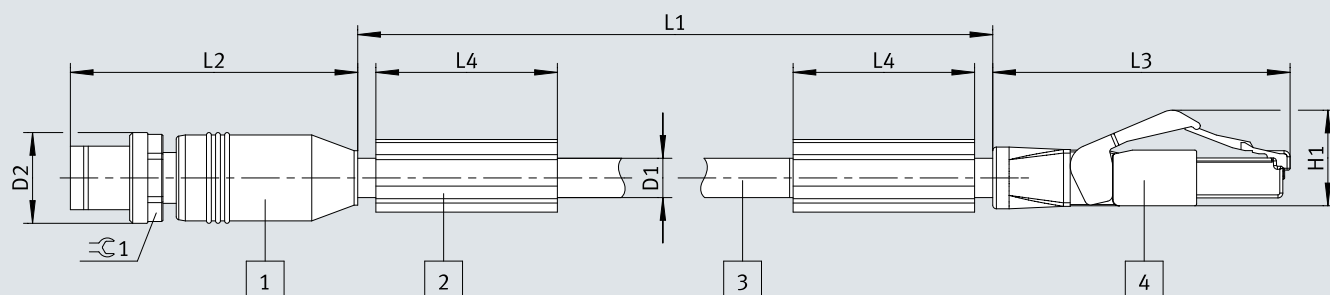


	D1 Ø	D2 Ø	D3 Ø	L1	L2	L3	L4	⌀1	⌀2
NEBC-D12G4-ES-0.5-S-D12G4-ET	6,7	15	15	50	47,5	47,5	30	13	13
NEBC-D12G4-ES-1-S-D12G4-ET				100					
NEBC-D12G4-ES-3-S-D12G4-ET				300					
NEBC-D12G4-ES-5-S-D12G4-ET				500					
NEBC-D12G4-ES-10-S-D12G4-ET				1000					

Dimensions

Dimensions – Plug M12 with plug RJ45, D-coded

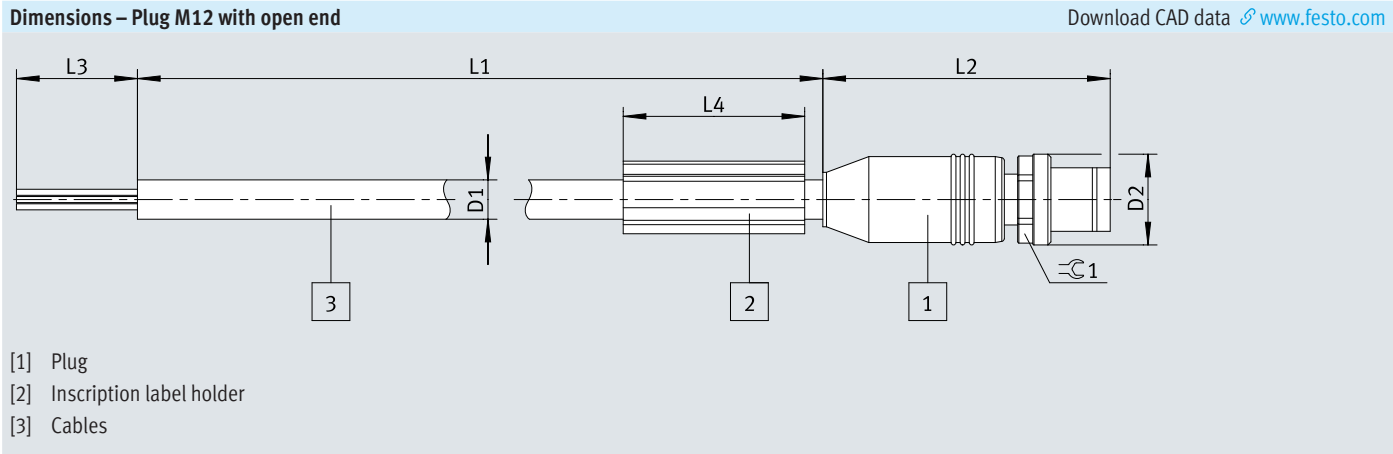
Download CAD data www.festo.com



- [1] Plug M12x1
- [2] Label holder
- [3] Cables
- [4] RJ45 plug

	D1 ø	D2 ø	H1	L1	L2	L3	L4	≈G1
NEBC-D12G4-ES-1-S-R3G4-ET	6,7	15	16,3	100	47,5	49	30	13
NEBC-D12G4-ES-3-S-R3G4-ET				300				
NEBC-D12G4-ES-5-S-R3G4-ET				500				
NEBC-D12G4-ES-10-S-R3G4-ET				1000				

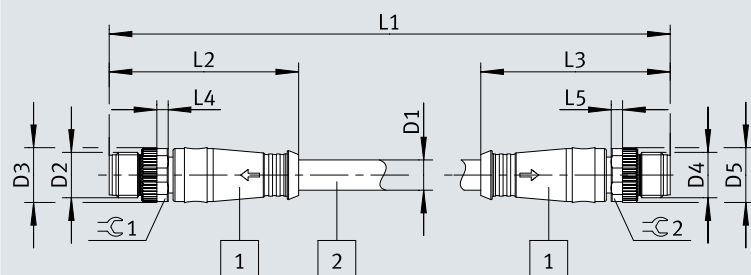
Dimensions



	D1 Ø	D2 Ø	L1	L2	L3	L4	⌀1
NEBC-LE4-ES-5-D12G4-ET	6,7	15	500	47,5	20	30	13

Dimensions

Dimensions – Plug M12, hybrid

[Download CAD data](http://www.festo.com)


[2] Cables

	D1 ∅	D2	D3 ∅ +0,3/- 0,1	D4	D5 ∅ +0,3/- 0,1	L1	L2	L3	L4	L5	⌀C1	⌀C2
NEBC-F12G8-KH-0.25-N-S-F12G8	8	M12x1	14,5	M12x1	14,5	250±10	50	50	3	3	14	14
NEBC-F12G8-KH-0.5-N-S-F12G8						500±10						
NEBC-F12G8-KH-1-N-S-F12G8						1000+30/-10						
NEBC-F12G8-KH-1.5-N-S-F12G8						1500±25						
NEBC-F12G8-KH-2-N-S-F12G8						2000±25						
NEBC-F12G8-KH-3-N-S-F12G8						3000+10/-30						

Ordering data

Plug M8, A-coded

	Electrical connection 1, number of connections/cores	Electrical connection 1, cable outlet	Electrical connection 2, connector system	Cable length	Part no.	Type
	4	Straight	Sub-D	1.5 m	8099218	NEBC-M8G4-ES-1.5-N-SB-S1G9-RS2-S7
				2.5 m	8086524	NEBC-M8G4-ES-2.5-N-SB-S1G9-RS2-S7

Plug M8, D-coded, straight

	Electrical connection 1, number of connections/cores	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	4	M8x1, D-coded according to EN 61076-2-114	0.3 m	31 g	8082902	NEBC-D8G4-ES-0.3-N-S-D8G4-ET
			0.5 m	43 g	8065123	NEBC-D8G4-ES-0.5-N-S-D8G4-ET
			1 m	70 g	8065125	NEBC-D8G4-ES-1-N-S-D8G4-E
			2 m	129 g	8065127	NEBC-D8G4-ES-2-N-S-D8G4-ET
			5 m	305 g	8065129	NEBC-D8G4-ES-5-N-S-D8G4-ET
			7.5 m	445 g	8065131	NEBC-D8G4-ES-7.5-N-S-D8G4-ET
			10 m	590 g	8065133	NEBC-D8G4-ES-10-N-S-D8G4-ET
			15 m	875 g	8065135	NEBC-D8G4-ES-15-N-S-D8G4-ET
			20 m	1,172 g	8146031	NEBC-D8G4-ES-20-N-S-D8G4-ET
			25 m	1,462 g	8146032	NEBC-D8G4-ES-25-N-S-D8G4-ET
			30 m	1,752 g	8146033	NEBC-D8G4-ES-30-N-S-D8G4-ET
			40 m	2,332 g	8146034	NEBC-D8G4-ES-40-N-S-D8G4-ET
			50 m	2,912 g	8146035	NEBC-D8G4-ES-50-N-S-D8G4-ET
		RJ45 to IEC 60603-7-3	0.3 m	25.5 g	8188942	NEBC-D8G4-ES-0.3-N-S-R3G4-ET
			0.5 m	32.5 g	8188943	NEBC-D8G4-ES-0.5-N-S-R3G4-ET
			1 m	50 g	8188944	NEBC-D8G4-ES-1-N-S-R3G4-ET
			2 m	86.5 g	8188945	NEBC-D8G4-ES-2-N-S-R3G4-ET
			5 m	194.5 g	8188946	NEBC-D8G4-ES-5-N-S-R3G4-ET
			7.5 m	286.5 g	8188947	NEBC-D8G4-ES-7.5-N-S-R3G4-ET
			10 m	367 g	8188948	NEBC-D8G4-ES-10-N-S-R3G4-ET

Plug M8, D-coded, angled

	Electrical connection 1, number of connections/cores	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	4	M8x1, D-coded according to EN 61076-2-114	0.5 m	46 g	8065124	NEBC-D8W4-ES-0.5-N-S-D8W4-ET
			1 m	75 g	8065126	NEBC-D8W4-ES-1-N-S-D8W4-ET
			2 m	133 g	8065128	NEBC-D8W4-ES-2-N-S-D8W4-ET
			5 m	306 g	8065130	NEBC-D8W4-ES-5-N-S-D8W4-ET
			7.5 m	446 g	8065132	NEBC-D8W4-ES-7.5-N-S-D8W4-ET
			10 m	594 g	8065134	NEBC-D8W4-ES-10-N-S-D8W4-ET
			15 m	875 g	8065136	NEBC-D8W4-ES-15-N-S-D8W4-ET
			20 m	1,177 g	8146036	NEBC-D8W4-ES-20-N-S-D8W4-ET
			25 m	1,467 g	8146037	NEBC-D8W4-ES-25-N-S-D8W4-ET
			30 m	1,757 g	8146038	NEBC-D8W4-ES-30-N-S-D8W4-ET
			40 m	2,337 g	8146039	NEBC-D8W4-ES-40-N-S-D8W4-ET
			50 m	2,917 g	8146040	NEBC-D8W4-ES-50-N-S-D8W4-ET

Ordering data

Plug M9							
	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Electrical connection 1, connector system	Cable length	Product weight	Part no.	Type
	M9x0.5	5	Open end	2 m	108 g	563711	NEBC-M9W5-K-2-N-LE3
				5 m	250 g	563712	NEBC-M9W5-K-5-N-LE3

Plug M12, A-coded						
	Electrical connection 1, number of connections/ cores	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	5	M12x1, A-coded to EN 61076-2-101	1.5 m	163 g	8085741	NEBC-M12G5-S-1,5-N-M12G5

Plug M12, D-coded						
	Electrical connection 1, number of connections/ cores	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	4	M12x1, D-coded to EN 61076-2-101	0.5 m	64 g	8040446	NEBC-D12G4-ES-0.5-S-D12G4-ET
			1 m	98.5 g	8040447	NEBC-D12G4-ES-1-S-D12G4-ET
			3 m	211 g	8040448	NEBC-D12G4-ES-3-S-D12G4-ET
			5 m	331.5 g	8040449	NEBC-D12G4-ES-5-S-D12G4-ET
				343 g	8040456	NEBC-LE4-ES-5-D12G4-ET
			10 m	680 g	8040450	NEBC-D12G4-ES-10-S-D12G4-ET
		RJ45 to IEC 60603-7-3	1 m	93.5 g	8040451	NEBC-D12G4-ES-1-S-R3G4-ET
			3 m	219.5 g	8040452	NEBC-D12G4-ES-3-S-R3G4-ET
			5 m	350 g	8040453	NEBC-D12G4-ES-5-S-R3G4-ET
			10 m	679.5 g	8040454	NEBC-D12G4-ES-10-S-R3G4-ET

Plug M12, hybrid						
	Electrical connection 1, number of connections/ cores	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	8	M12x1, Fes-to-specific coding	0.25 m	47 g	564189	NEBC-F12G8-KH-0.25-N-S-F12G8
			0.5 m	69 g	564190	NEBC-F12G8-KH-0.5-N-S-F12G8
			1 m	113 g	564191	NEBC-F12G8-KH-1-N-S-F12G8
			1.5 m	154 g	564192	NEBC-F12G8-KH-1.5-N-S-F12G8
			2 m	200 g	576015	NEBC-F12G8-KH-2-N-S-F12G8
			3 m	280 g	576636	NEBC-F12G8-KH-3-N-S-F12G8

Ordering data

Plug RJ45 with snap-locking

	Electrical connection 1, connector system	Electrical connection 1, number of connections/ cores	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	RJ45	8	RJ45	0.2 m	15 g	8082383	NEBC-R3G8-KS-0.2-N-S-R3G8-ET
	RJ45 to IEC 60603-7-3		RJ45 to IEC 60603-7-3	0.3 m	25.5 g	8188950	NEBC-R3G4-ES-0.3-N-S-R3G4-ET
				0.5 m	32.5 g	8188951	NEBC-R3G4-ES-0.5-N-S-R3G4-ET
				1 m	52 g	8188952	NEBC-R3G4-ES-1-N-S-R3G4-ET
					89.5 g	8040455	NEBC-R3G4-ES-1-S-R3G4-ET
				2 m	88 g	8188953	NEBC-R3G4-ES-2-N-S-R3G4-ET
				5 m	197.5 g	8188954	NEBC-R3G4-ES-5-N-S-R3G4-ET
				7.5 m	291 g	8188955	NEBC-R3G4-ES-7.5-N-S-R3G4-ET
				10 m	382.5 g	8188956	NEBC-R3G4-ES-10-N-S-R3G4-ET

Plug RJ45 with screw-type lock

	Electrical connection 1, connector system	Electrical connection 1, number of connections/cores	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	RJ45	8	RJ45	5 m	440 g	8155228	NEBC-R3G8M22-P-5-N-S-R3G8

Plug RJ45 with socket strip

	Electrical connection 1, connector system	Electrical connection 1, number of connections/cores	Cable length	Product weight	Part no.	Type
	RJ45 and socket strip 12 pins, 2 rows	20	5 m	680 g	8126916	NEBC-R3Z12G20-KH-5-N-SBS-RSG17-ET-S1
			10 m	1,300 g	8126917	NEBC-R3Z12G20-KH-10-N-SBS-RSG17-ET-S1
			15 m	1,900 g	8126918	NEBC-R3Z12G20-KH-15-N-SBS-RSG17-ET-S1

Sub-D plug, 25-pin

Sub-D plug, 25 pin

	Electrical connection 1, number of connections/ cores	Electrical connection 2, number of connections/ cores	Cable length	Product weight	Part no.	Type
			3.2 m		8001373	NEBC-S1G25-K-3.2-N-LE25
	25	25	1 m		8001374	NEBC-S1G25-K-1.0-N-S1G25
			2 m		8001375	NEBC-S1G25-K-2.0-N-S1G25
			5 m		8001376	NEBC-S1G25-K-5.0-N-S1G25
		26	2.5 m	570 g	552254	NEBC-S1G25-K-2.5-N-LE26

USB plug

	Electrical connection 1, connector system	Electrical connection 1, number of connections/cores	Electrical connection 2, connector system	Electrical connection 2, number of connections/cores	Cable length	Part no.	Type
	USB 2.0 Type B	4	USB 2.0 type A	4	1.8 m	1501332	NEBC-U1G4-K-1.8-N-U2G4

Ordering data

Plug SCSI							
	Electrical connection 1, connector system	Electrical connection 1, number of connections/cores	Electrical connection 1, cable outlet	Electrical connection 2, connector system	Cable length	Part no.	Type
	SCSI	36	Straight	Screw terminal	0.5 m	5105646	NEBC-S2G36-K-0.5-N-C2W36-S7

Rectangular socket, plug pattern P1						
	Electrical connection 1, number of connections/ cores	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	4	M12x1, A-coded to EN 61076-2-101	0.3 m	188 g	549293	NEBC-P1W4-K-0.3-N-M12G5

Rectangular socket, plug pattern type A to EN 175301-803						
	Electrical connection 1, number of connections/ cores	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	3	M12x1, A-coded to EN 61076-2-101	0.3 m	188 g	549294	NEBC-A1W3-K-0.3-N-M12G5

Socket M12							
	Electrical connection 1, connector system	Electrical connection 1, cable outlet	Electrical connection 2, connector system	Cable length	Product weight	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	Straight	M12x1, A-coded to EN 61076-2-101	2 m	112 g	8080782	NEBC-M12G8-E-2-N-M12G8
				5 m	256 g	8080783	NEBC-M12G8-E-5-N-M12G8
				10 m	496 g	8080784	NEBC-M12G8-E-10-N-M12G8
				15 m	736 g	8080785	NEBC-M12G8-E-15-N-M12G8
			Open end	2 m	105 g	8094480	NEBC-M12G8-E-2-N-B-LE8
				5 m	249 g	8094477	NEBC-M12G8-E-5-N-B-LE8
					310.7 g	8074191	NEBC-M12G5-ES-5-LE5-CO
				10 m	489 g	8094482	NEBC-M12G8-E-10-N-B-LE8
				15 m	729 g	8094475	NEBC-M12G8-E-15-N-B-LE8
		Angled	M12x1, A-coded to EN 61076-2-101	2 m	112 g	8080786	NEBC-M12W8-E-2-N-M12G8
				5 m	256 g	8080787	NEBC-M12W8-E-5-N-M12G8
				10 m	496 g	8080788	NEBC-M12W8-E-10-N-M12G8
				15 m	736 g	8080789	NEBC-M12W8-E-15-N-M12G8
			Open end	2 m	105 g	8094476	NEBC-M12W8-E-2-N-B-LE8
				5 m	249 g	8094478	NEBC-M12W8-E-5-N-B-LE8
				10 m	489 g	8094481	NEBC-M12W8-E-10-N-B-LE8
				15 m	729 g	8094479	NEBC-M12W8-E-15-N-B-LE8

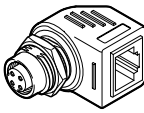
Ordering data

Sub-D socket with open cable end						
	Electrical connection 1, connector system	Electrical connection 1, number of connections/cores	Cable length	Product weight	Part no.	Type
	Sub-D	9	0.5 ... 20 m		4106124	NEBC-C-S1WA9HS-K- -N-B-LE5-PT-S10
			2.5 m	300 g	2376018	NEBC-C-S1WA9HS-K-2.5-N-B-LE5-PT-S10
			5 m	600 g	2376019	NEBC-C-S1WA9HS-K-5-N-B-LE5-PT-S10
			10 m	1,120 g	2376020	NEBC-C-S1WA9HS-K-10-N-B-LE5-PT-S10

Sub-D socket with plug RJ45						
	Electrical connection 1, connector system	Electrical connection 1, number of connections/cores	Cable length	Product weight	Part no.	Type
	Sub-D	9	1.5 m		5105645	NEBC-S1G9-K-1.5-N-R3G8

Accessories

Inscription labels			
	Description	Part no.	Type
	For attaching to a cable with diameter 5 ... 8 mm	33361	KM-BZ

Cabinet through-feed				
	Electrical connection 1	Electrical connection 2	Part no.	Type
	Straight socket, M12x1, 4-pin, D-coded	Straight socket, M12x1, 4-pin, D-coded	8040459	NEFU-D12G4-D12DG4
		Angled socket, RJ45, 4-pin	8040457	NEFU-D12G4-R3DW4