

Electrical connection technology, for diagnostic interface

Product range overview



Overview of diagnostic cables for valve terminals						
Cable type	Valve terminal					→ Page
	Type 04	Type 10/12 ¹⁾	Type 03	Type 02	Type 50	
KDI-SB202-BU9	-	■	■	■	-	4 / 5.1-112
KDI-SB60-3-M12	■	■	■	-	-	4 / 5.1-112
KDI-SB60-6,0-M12	■	■	■	-	-	4 / 5.1-112
KDI-SB60-3-10,0-M12	■	■	■	-	-	4 / 5.1-112
KDTAM-SB60-3-M12	■	■	■	-	-	4 / 5.1-112
KDTAM-SB60-6,0-M12	■	■	■	-	-	4 / 5.1-112
KDTAM-SB60-10,0-M12	■	■	■	-	-	4 / 5.1-112
KV-M12-M12-1,5	-	-	-	-	■	4 / 5.1-114
KV-M12-M12-3,5	-	-	-	-	■	4 / 5.1-114

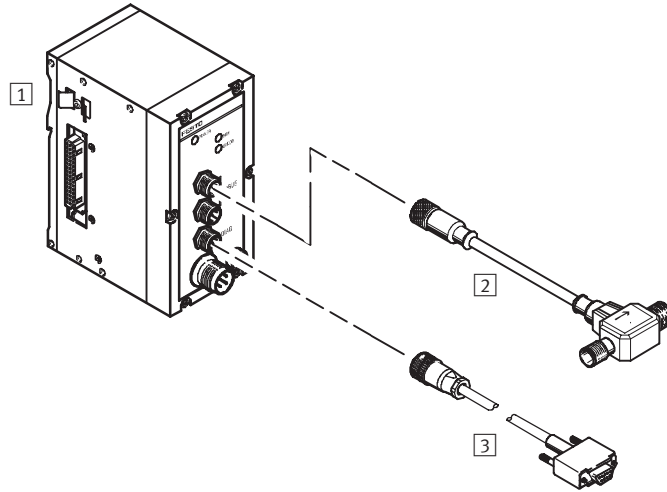
1) Via installation system (ECP)

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Peripherals overview



Diagnostic interface for valve terminal type 03



Accessories for valve terminals
Electrical connector systems

5.1

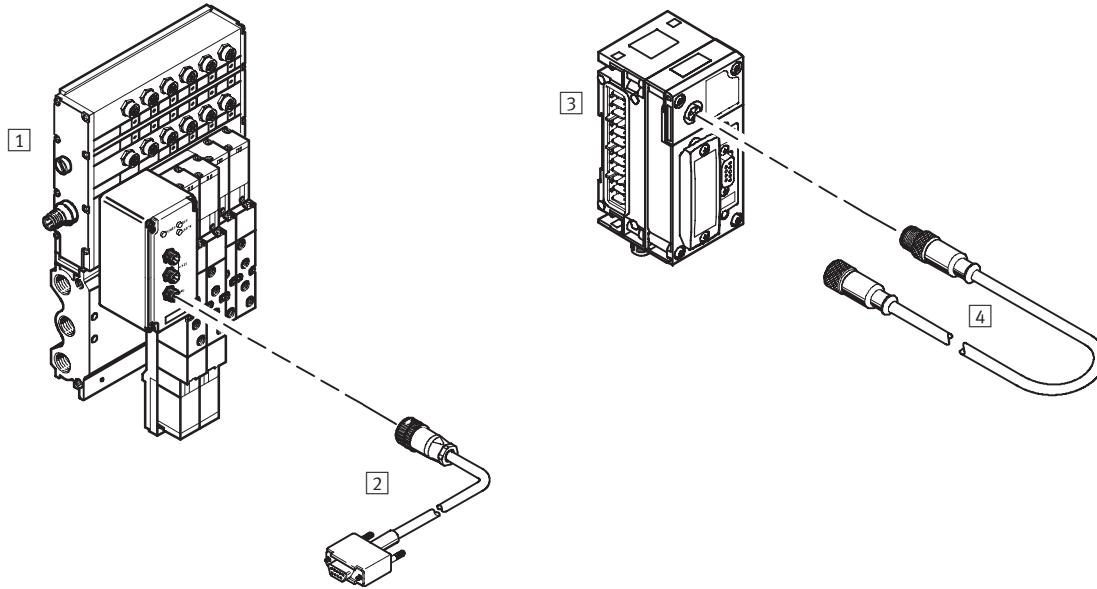
Accessories		
	Brief description	→ Page
1	ISF3-03 Control block, modular electrical peripherals for type 03/04	4 / 4.8-223
2	FB-TA T-adaptor, 3-pin	4 / 5.1-100
3	KDI-SB202-... Programming cable, 4-pin	4 / 5.1-112

Electrical connection technology, for diagnostic interface

Peripherals overview

FESTO

Diagnostic interface, valve/sensor terminal/valve terminal type 02 and CPX terminal



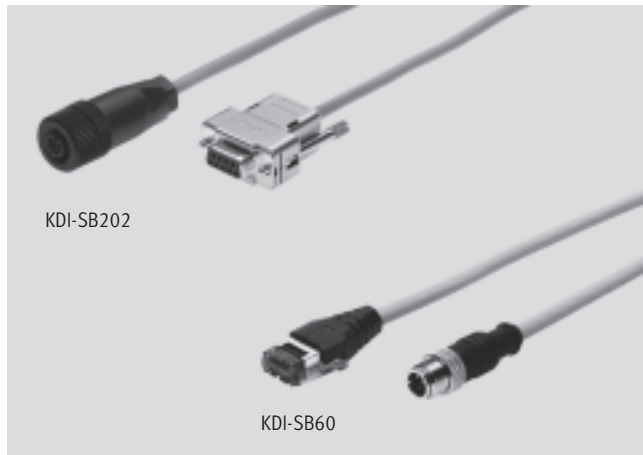
Accessories		Brief description	→ Page
1	IIFB-02-... VIFB02-...	Valve/sensor terminal type 02 Valve terminal type 02	4 / 2.3-1 4 / 2.3-1
2	KDI-SB202-...	Programming cable, 4-pin	4 / 5.1-112
3	CPX-FB...	Fieldbus node, CPX terminal	4 / 4.8-1
4	KV-M12-M12-...	Plug socket with cable for diagnostic interface	4 / 5.1-114

Electrical connection technology, for diagnostic interface

Technical data – KDI/KDTAM



- Programming cable for different applications
- Pre-assembled at both ends
- Cable lengths: 3 m, 6 m and 10 m



5.1

General technical data		
Type	KDI-.../KDTAM-...	KDI-PPA-3-BU9
Type of mounting	M12 union nut/threaded connector, clips/screws 2xM3	Screws 4-40 UNC
Mounting position	Any	
Operating voltage range [V]	300 AC	–
Material of housing	Polyester/Polyurethane	
Material of contacts	Gold-plated copper base alloy	
Material of union nut	Nickel-plated brass	
Material of cable sheath	Polyurethane	Polyvinyl chloride
Ambient temperature [°C]	–30 ... +80	
Ambient temperature of flexible cable installation [°C]	–10 ... +80	

Ordering data							
	Electrical connection	Construc-tional design [mm ²]	Cable diameter [mm]	Product weight [g]	Cable length [m]	Type	Part No.
	Straight plug, 5-pin, M12 – straight socket, 9-pin, Sub-D	7x0.24	5.9	203	3	KDTAM-SB60-3-M12	188 979
				354	6	KDTAM-SB60-6-M12	188 980
				582	10	KDTAM-SB60-10-M12	188 981
	Straight socket, 9-pin, Sub-D – straight plug, 9-pin, Sub-D	9x0.22	–	156	3	KDI-PPA-3-BU9	151 915
	Straight socket, 5-pin, M12 – straight socket, 25-pin, Sub-D	4x0.14	4.5 6.5	210	5	KDI-SB202-BU25	30 437
				181	5	KDI-SB202-BU9	150 268
	Straight plug, 5-pin, M12 – straight socket, 8-pin, SDL	7x0.24	5.9	190	3	KDI-SB60-3,0-M12	171 173
				361	6	KDI-SB60-6,0-M12	175 686
				591	10	KDI-SB60-10,0-M12	171 174

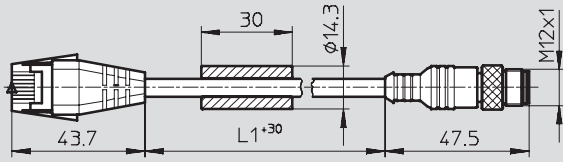
Electrical connection technology, for diagnostic interface

Technical data – KDI/KDTAM

Dimensions

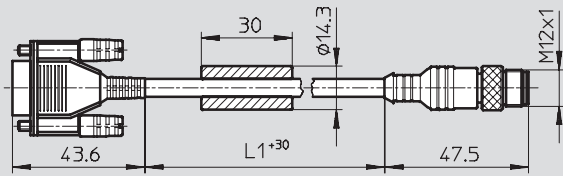
Download CAD data → www.festo.com/en/engineering

KDI-SB60-...



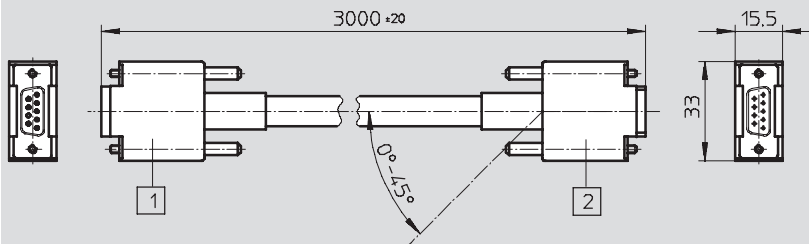
L1 Cable length 3 m, 6 m or 10 m

KDTAM-...



L1 Cable length 3 m, 6 m or 10 m

KDI-PPA-3-BU9



- 1 Straight socket, 9-pin, Sub-D
- 2 Straight plug, 9-pin, Sub-D

Electrical connection technology, for diagnostic interface

Technical data – KV-M12-...



5.1

- Plug socket with cable for diagnostic interface (to terminal CPX)
- Pre-assembled at both ends
- Cable lengths: 1.5 m and 3.5 m
- 5-pin/4-wire
- Round plug



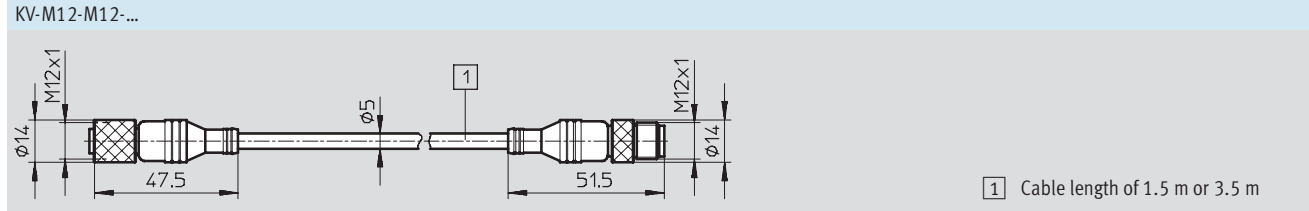
General technical data		
Type	KV-M12-M12-...	
Type of mounting	M12 union nut	
Mounting position	Any	
Operating voltage range	[V]	30 AC
	[V]	36 DC
Current-carrying capacity	[A]	4
Cable diameter	[mm]	5
Protection class to EN 60 529	IP67 (assembled)	
Material of housing	Polyurethane	
Material of contacts	Socket	Gold-plated brass
	Plug	Gold-plated bronze
Material of union nut	Nickel-plated/chrome-plated brass	
Material of cable sheath	Polyurethane	
Ambient temperature	[°C]	-25 ... +70
Ambient temperature of flexible cable installation	[°C]	-5 ... +70

Ordering data						
	Electrical connection	Constructional design [mm ²]	Product weight [g]	Cable length [m]	Type	Part No.
	Straight plug – straight socket, 5-pin	4x0.34	97	1.5	KV-M12-M12-1,5	529 044
	Straight plug – straight socket, 5-pin	4x0.34	182	3.5	KV-M12-M12-3,5	530 901

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Technical data – KV-M12-...

Dimensions Download CAD data → www.festo.com/en/engineering



Wiring allocation (socket/plug view)

View – socket	Wiring allocation	View – plug																									
	<table border="0"> <tr> <td>1 (+24V)</td> <td>↔</td> <td>Brown</td> <td>↔</td> <td>1 (+24V)</td> </tr> <tr> <td>3 (0V)</td> <td>↔</td> <td>Blue</td> <td>↔</td> <td>3 (0V)</td> </tr> <tr> <td>2 (Rx/D, MMI)</td> <td>↔</td> <td>White</td> <td>↔</td> <td>2 (Tx/D, CPX)</td> </tr> <tr> <td>4 (Tx/D, MMI)</td> <td>↔</td> <td>Black</td> <td>↔</td> <td>4 (Rx/D, CPX)</td> </tr> <tr> <td>5 (FE)</td> <td>↔</td> <td>Screen</td> <td>↔</td> <td>5 (FE)</td> </tr> </table>	1 (+24V)	↔	Brown	↔	1 (+24V)	3 (0V)	↔	Blue	↔	3 (0V)	2 (Rx/D, MMI)	↔	White	↔	2 (Tx/D, CPX)	4 (Tx/D, MMI)	↔	Black	↔	4 (Rx/D, CPX)	5 (FE)	↔	Screen	↔	5 (FE)	
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