



Electrical Connection Technology, for Inputs/Outputs

Electrical connection technology, for inputs/outputs

Product range overview

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Overview of connections for input/output modules for CPV/CPA					
Plug/cable	Input/output module type				
Type	CP-E16-M8	CP-E-16-KL-IP20-Z	CP-E16-M12 x 2-5POL	CP-E16N-M8	➔ Page
SEA-GS-M8	■	–	■	■	4 / 5.1-160
SEA-3GS-M8-S	■	–	■	■	4 / 5.1-160
SEA-GS-7	–	–	■	–	4 / 5.1-162
SEA-GS-9	–	–	■	–	4 / 5.1-162
SEA-4GS-7-2,5	–	–	■	–	4 / 5.1-164
SEA-GS-11-DUO	–	–	■	–	4 / 5.1-162
SEA-5GS-11-DUO	–	–	■	–	4 / 5.1-164
SEA-M12-5GS-PG7	–	–	■	–	4 / 5.1-166
SEA-KL-SAC10/30	–	■	–	–	4 / 5.1-156
PS1-ZC13-Z	–	■	–	–	4 / 5.1-156
PS1-ZC13-S	–	■	–	–	4 / 5.1-156
KM8-M8-GSGD-1	■	–	–	■	4 / 5.1-150
KM8-M8-GSGD-2,5	■	–	–	■	4 / 5.1-150
KM8-M8-GSGD-	■	–	–	■	4 / 5.1-150
KM12-M12-GSGD-2,5	–	–	■	–	4 / 5.1-23
KM12-M12-GSGD-5	–	–	■	–	4 / 5.1-23
KM-12-DUO-M8-GDGD	–	–	■	–	4 / 5.1-154
KM-12-DUO-M8-GDWD	–	–	■	–	4 / 5.1-154
KM-12-DUO-M8-WDWD	–	–	■	–	4 / 5.1-154

Overview of connections for input/output modules for CPV/CPA					
Plug/cable	Input/output module type				
Type	CP-E16N-M12 x 2	CP-E16-M8-Z	CP-A08-M12-5POL	CP-A08N-M12	➔ Page
SEA-GS-M8	–	■	–	–	4 / 5.1-160
SEA-3GS-M8-S	–	■	–	–	4 / 5.1-160
SEA-GS-7	■	–	■	■	4 / 5.1-162
SEA-GS-9	■	–	■	■	4 / 5.1-162
SEA-4GS-7-2,5	■	–	■	■	4 / 5.1-164
SEA-GS-11-DUO	■	–	■	■	4 / 5.1-162
SEA-5GS-11-DUO	■	–	■	■	4 / 5.1-164
SEA-M12-5GS-PG7	■	–	–	–	4 / 5.1-166
KM8-M8-GSGD-1	–	■	–	–	4 / 5.1-150
KM8-M8-GSGD-2,5	–	■	–	–	4 / 5.1-150
KM8-M8-GSGD-	–	■	–	–	4 / 5.1-150
KM12-M12-GSGD-2,5	■	–	■	■	4 / 5.1-23
KM12-M12-GSGD-5	■	–	■	■	4 / 5.1-23
KM-12-DUO-M8-GDGD	■	–	■	■	4 / 5.1-154
KM-12-DUO-M8-GDWD	■	–	■	■	4 / 5.1-154
KM-12-DUO-M8-WDWD	■	–	■	■	4 / 5.1-154

Electrical connection technology, for inputs/outputs

Product range overview

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Overview of connections for inputs/outputs, CPX terminal type 50				
Plug/cable	Manifold sub-base			→ Page
Type	CPX-AB-M12 x 2-5POL	CPX-AB-M8-3POL	CPX-AB-1-SUB-BU-25POL	
SEA-GS-M8	–	■	–	4 / 5.1-160
SEA-3GS-M8-S	–	■	–	4 / 5.1-160
SEA-GS-7	■	–	–	4 / 5.1-162
SEA-GS-9	■	–	–	4 / 5.1-162
SEA-4GS-7-2,5	■	–	–	4 / 5.1-164
SEA-GS-11-DUO	■	–	–	4 / 5.1-162
SEA-5GS-11-DUO	■	–	–	4 / 5.1-164
SEA-M12-5GS-PG7	■	–	–	4 / 5.1-166
SEA-GS-HAR-4POL	–	–	–	4 / 5.1-168
SD-SUB-D-ST-25	–	–	■	4 / 5.1-158
KM8-M8-GSGD-1	–	■	–	4 / 5.1-150
KM8-M8-GSGD-2,5	–	■	–	4 / 5.1-150
KM8-M8-GSGD-5	–	■	–	4 / 5.1-150
KM8-M12-GSGD-1	■	–	–	4 / 5.1-150
KM8-M12-GSGD-2,5	■	–	–	4 / 5.1-150
KM8-M12-GSGD-5	■	–	–	4 / 5.1-150
KM12-M12-GSGD-2,5	■	–	–	4 / 5.1-23
KM12-M12-GSGD-5	■	–	–	4 / 5.1-23
KM12-M12-GSWD-1-4	■	–	–	4 / 5.1-23
KM12-DUO-M8-GDGD	■	–	–	4 / 5.1-154
KM12-DUO-M8-GDWD	■	–	–	4 / 5.1-154
KM12-DUO-M8-WDWD	■	–	–	4 / 5.1-154

Overview of connections for inputs/outputs, CPX terminal type 50				
Plug/cable	Manifold sub-base			→ Page
Type	CPX-AB-4-HAR-4POL	CPX-AB-4-M12-8POL		
SEA-GS-HAR-4POL	■	–		4 / 5.1-168
KM12-8GD8GS-2-PU	–	■		4 / 5.1-152

Electrical connection technology, for inputs/outputs

Product range overview

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Overview of connections for inputs/outputs, valve terminal type 03/04					
Plug/connecting cable	Input/output module type				
Type	VIGE-03-MP-...	VIGE-03-FB-...-5POL	VIGE-03-FB-16-SUB-D-S	VIGE-03-FB-...-N	➔ Page
SEA-GS-7	■	■	–	■	4 / 5.1-162
SEA-GS-9	■	■	–	■	4 / 5.1-162
SEA-4GS-7-2,5	■	■	–	■	4 / 5.1-164
SEA-GS-11-DUO	■	■	–	■	4 / 5.1-162
SEA-5GS-11-DUO	–	■	–	–	4 / 5.1-164
SEA-M12-5GS-PG7	–	■	–	–	4 / 5.1-166
KM12-M12-GSGD-2,5	■	■	–	■	4 / 5.1-23
KM12-M12-GSGD-5	■	■	–	■	4 / 5.1-23
KM12-M12-GSWD-1-4	■	■	–	■	4 / 5.1-23
KM-12-DUO-M8-GDGD	■	–	–	■	4 / 5.1-154
KM-12-DUO-M8-GDWD	■	–	–	■	4 / 5.1-154
KM-12-DUO-M8-WDWD	■	–	–	■	4 / 5.1-154
SD-SUB-D-ST-15	–	–	■	–	4 / 5.1-158

Overview of connections for inputs/outputs, valve terminal type 03/04					
Plug/connecting cable	Input/output module type				
Type	VIEA-03-FB-12E-8A-...	VIGA-03-FB-4-5POL	VIGA-03-FB-4-PH/NH	VIAP/VIAU-03-FB-...	➔ Page
SEA-GS-7	–	■	■	–	4 / 5.1-162
SEA-GS-9	–	■	■	–	4 / 5.1-162
SEA-4GS-7-2,5	–	■	■	–	4 / 5.1-164
SEA-GS-11-DUO	–	■	■	–	4 / 5.1-162
SEA-5GS-11-DUO	–	■	–	–	4 / 5.1-164
SEA-M12-5GS-PG7	–	■	–	–	4 / 5.1-166
KM12-M12-GSGD-2,5	–	■	■	–	4 / 5.1-23
KM12-M12-GSGD-5	–	■	■	–	4 / 5.1-23
KM12-M12-GSWD-1-4	–	■	■	–	4 / 5.1-23
KM-12-DUO-M8-GDGD	–	–	–	–	4 / 5.1-154
KM-12-DUO-M8-GDWD	–	–	–	–	4 / 5.1-154
KM-12-DUO-M8-WDWD	–	–	–	–	4 / 5.1-154
KEA-1-25-P-5	■	–	–	–	4 / 5.1-67
KEA-1-25-P-10	■	–	–	–	4 / 5.1-67
KEA-1-25-P-X	■	–	–	–	4 / 5.1-67
SD-SUB-BU25	■	–	–	–	4 / 5.1-71
KVIA-5	–	–	–	■	4 / 5.1-147
KVIA-10	–	–	–	■	4 / 5.1-147
KVIA-MPYE-5	–	–	–	■	4 / 5.1-147
KVIA-MPYE-10	–	–	–	■	4 / 5.1-147
KVIA-MPPE-5	–	–	–	■	4 / 5.1-147
KVIA-MPPE-10	–	–	–	■	4 / 5.1-147

Electrical connection technology, for inputs/outputs

Product range overview

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Overview of connections for inputs/outputs, valve/sensor terminal type 02			
Plug/cable			
Type	IIMP-02-...	IIFB-02-...	→ Page
SEA-GS-7	■	■	4 / 5.1-162
SEA-GS-9	■	■	4 / 5.1-162
KM12-M12-GSGD-2,5	■	■	4 / 5.1-23
KM12-M12-GSGD-5	■	■	4 / 5.1-23
KM-12-DUO-M8-GDGD	■	■	4 / 5.1-154
KM-12-DUO-M8-GDWD	■	■	4 / 5.1-154
KM-12-DUO-M8-WDWD	■	■	4 / 5.1-154

Electrical connection technology, for inputs/outputs

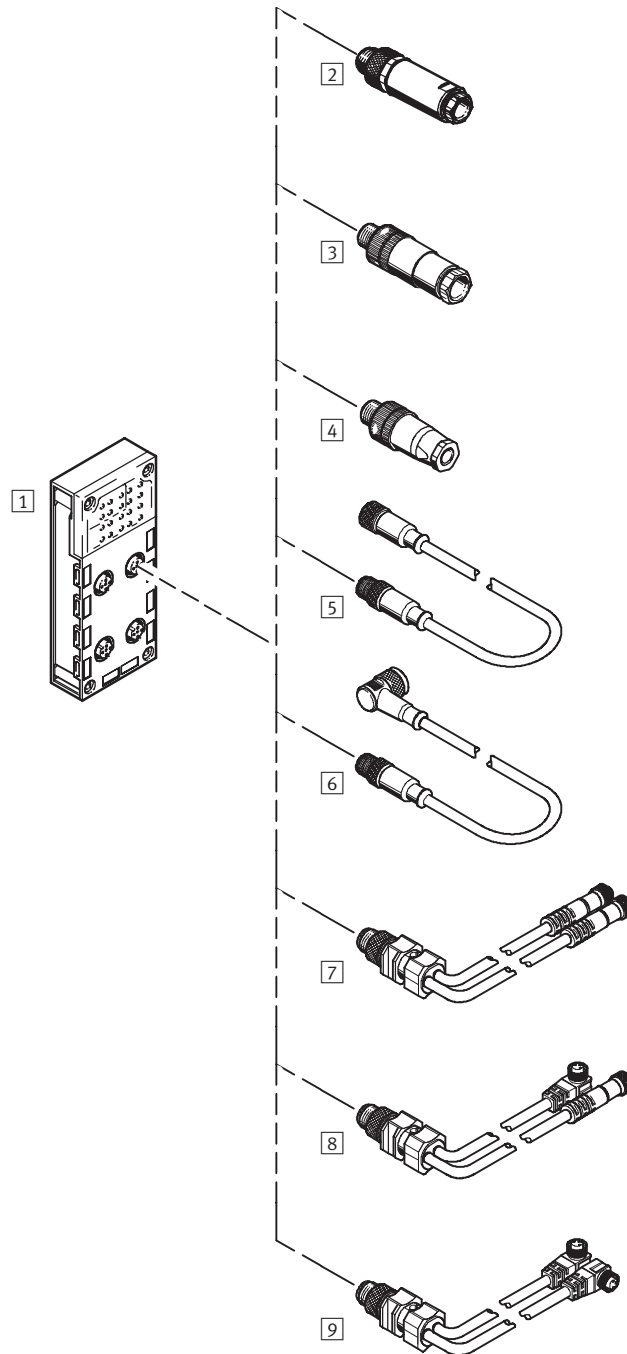
Peripherals overview

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Plugs and cables CPX-AB-...

Accessories for valve terminals
Electrical connector systems

5.1



Electrical connection technology, for inputs and outputs

Peripherals overview

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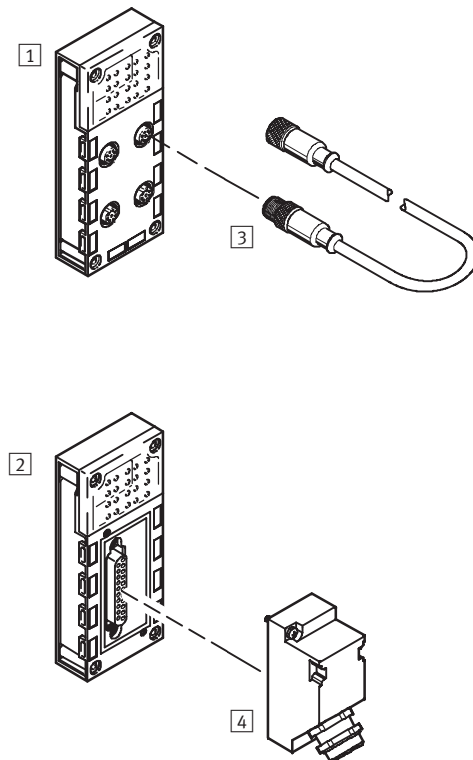
Accessories		
	Brief description	→ Page
1 CPX-AB-4-M12x2...5POL	Connection block, CPX terminal	4 / 4.8-94
2 SEA-GS-7	Plug for inputs and outputs, straight socket	4 / 5.1-162
SEA-4GS-7-2,5	Plug for inputs and outputs, straight socket	4 / 5.1-164
SEA-GS-9	Plug for inputs and outputs, straight socket	4 / 5.1-162
3 SEA-GS-11-DUO	Plug for inputs and outputs, straight socket, 4-pin, for 2 cables	4 / 5.1-162
SEA-5GS-11-DUO	Plug for inputs and outputs, straight socket, 5-pin, for 2 cables	4 / 5.1-164
4 SEA-M12-5GS-PG7	Plug for inputs and outputs, 5-pin	4 / 5.1-166
5 KM12-M12-GSGD-...	Extension cable, straight socket	4 / 5.1-23
6 KM12-M12-GSWD-1-4	Extension cable, straight socket/angled socket	4 / 5.1-23
7 KM12-DUO-M8-GDGD	DUO cable, straight sockets	4 / 5.1-154
8 KM12-DUO-M8-GDWD	DUO cable, straight socket/angled socket	4 / 5.1-154
9 KM12-DUO-M8-WDWD	DUO cable, angled sockets	4 / 5.1-154

Electrical connection technology, for inputs and outputs

Peripherals overview

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CPX-AB-...



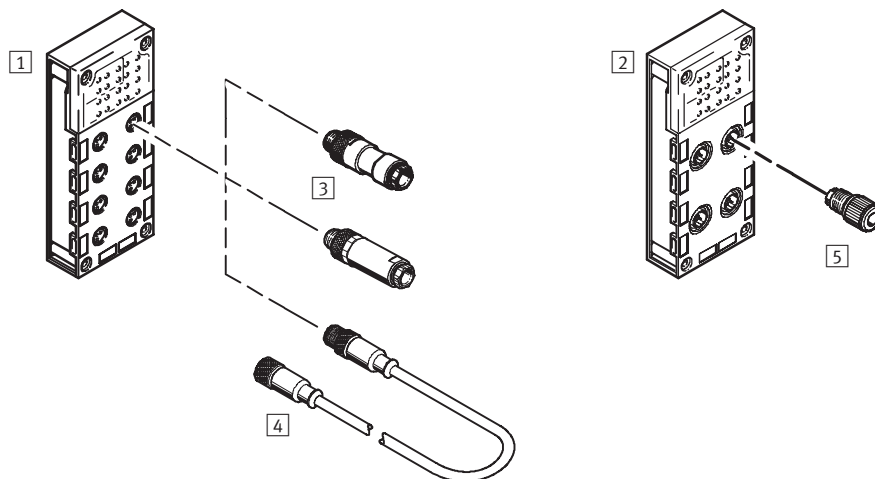
Accessories		
	Brief description	→ Page
1	CPX-AB-4-M12-8POL Connection block, CPX terminal	4 / 4.8-94
2	CPX-AB-1-SUB-BU-25POL Connection block, CPX terminal	4 / 4.8-94
3	KM12-8GD8GS-2-PU Connecting cable, 8-pin (DNCV)	4 / 5.1-152
4	SD-SUB-D-ST25 Plug, Sub-D, 25-pin	4 / 5.1-158

Electrical connection technology, for inputs and outputs

Peripherals overview

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CPX-AB-...



Accessories for valve terminals
Electrical connector systems

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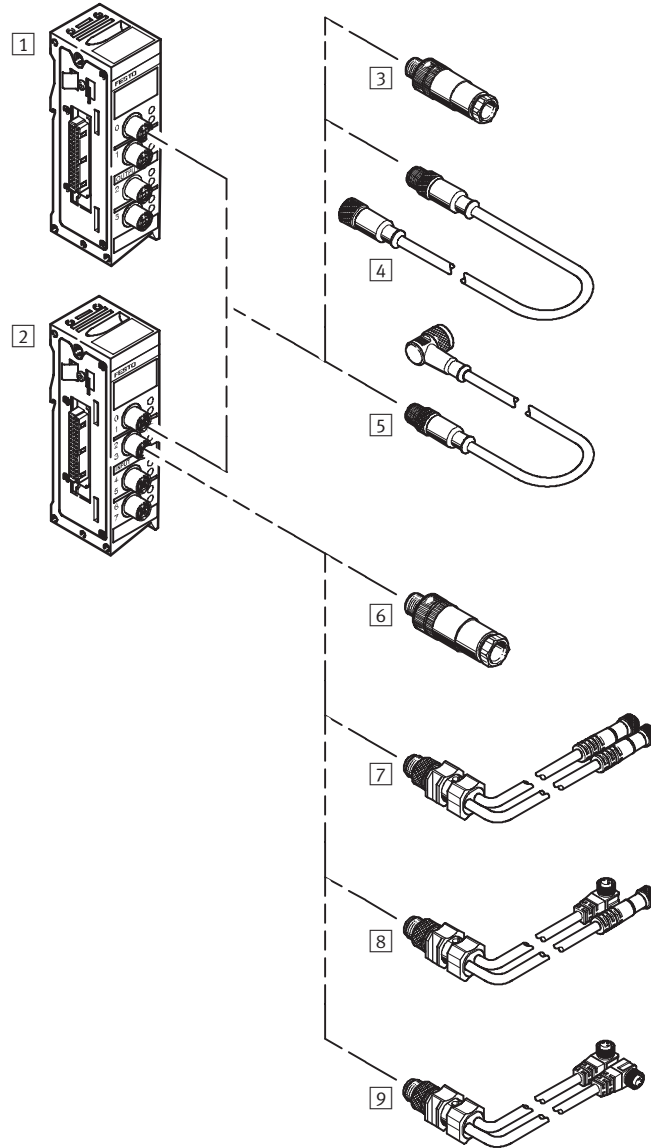
Accessories		Brief description	→ Page
1	CPX-AB-8-M8-3POL	Connection block, CPX terminal	4 / 4.8-94
2	CPX-AB-4-HAR-4POL	Connection block, CPX terminal	4 / 4.8-94
3	SEA-GS-M8 SEA-3GS-M8-S	Plug for inputs and outputs	4 / 5.1-162 4 / 5.1-164
4	KM8-M8-GSGD-... KM8-M12-GSGD-...	Extension cable, with straight plug and straight socket	4 / 5.1-150 4 / 5.1-150
5	SEA-GS-HAR-4POL	Plug for inputs and outputs	4 / 5.1-168

Electrical connection technology, for inputs and outputs

Peripherals overview

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VIGE-03-MP-...-4POL



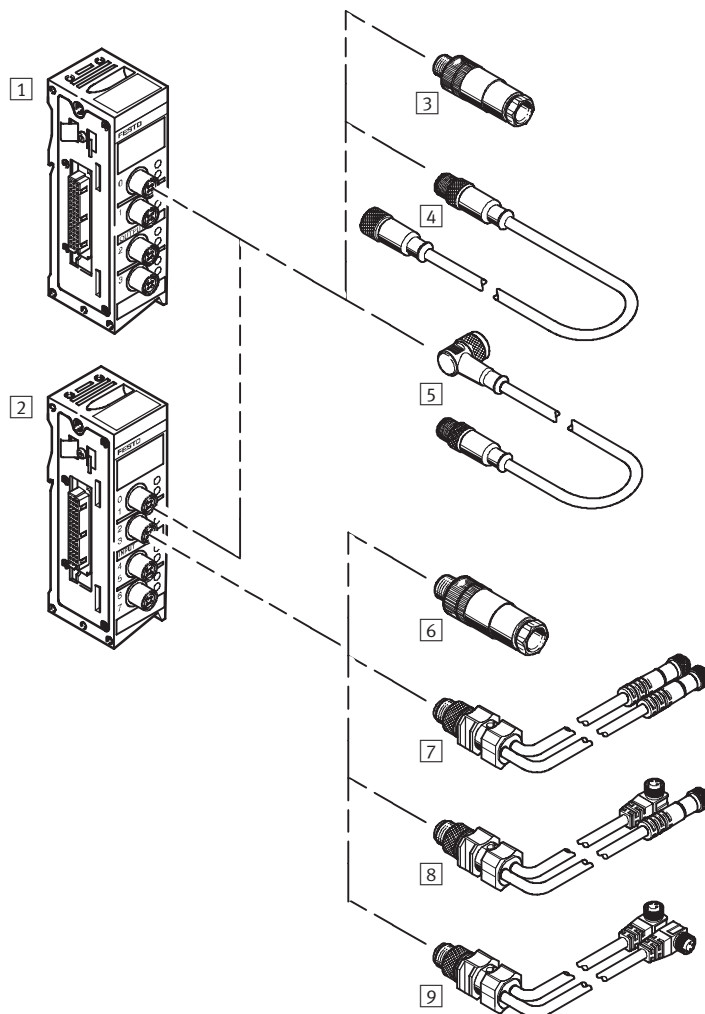
Accessories			
	Brief description		→ Page
1	VIGE-03-MP-4	Electrical module, electrical peripherals, valve terminal type 03, 4 inputs	4 / 2.2-78
2	VIGE-03-MP-8	Electrical module, electrical peripherals, valve terminal type 03, 8 inputs	4 / 2.2-78
3	SEA-GS-7 SEA-4GS-7-2,5 SEA-GS-9	Plug for inputs and outputs	4 / 5.1-162 4 / 5.1-164 4 / 5.1-162
4	KM12-M12-GSGD-...	Extension cable, with straight plug and straight socket	4 / 5.1-23
5	KM12-M12-GSWD-1-4	Extension cable, straight socket/angled socket	4 / 5.1-23
6	SEA-GS-11-DUO	Plug for inputs and outputs, straight socket	4 / 5.1-162
7	KM12-DUO-M8-GDGD	DUO cable, straight sockets	4 / 5.1-154
8	KM12-DUO-M8-GDWD	DUO cable, straight socket/angled socket	4 / 5.1-154
9	KM12-DUO-M8-WDWD	DUO cable, angled sockets	4 / 5.1-154

Electrical connection technology, for inputs and outputs

Peripherals overview

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VIGE-03-FB-...N



Accessories for valve terminals
Electrical connector systems

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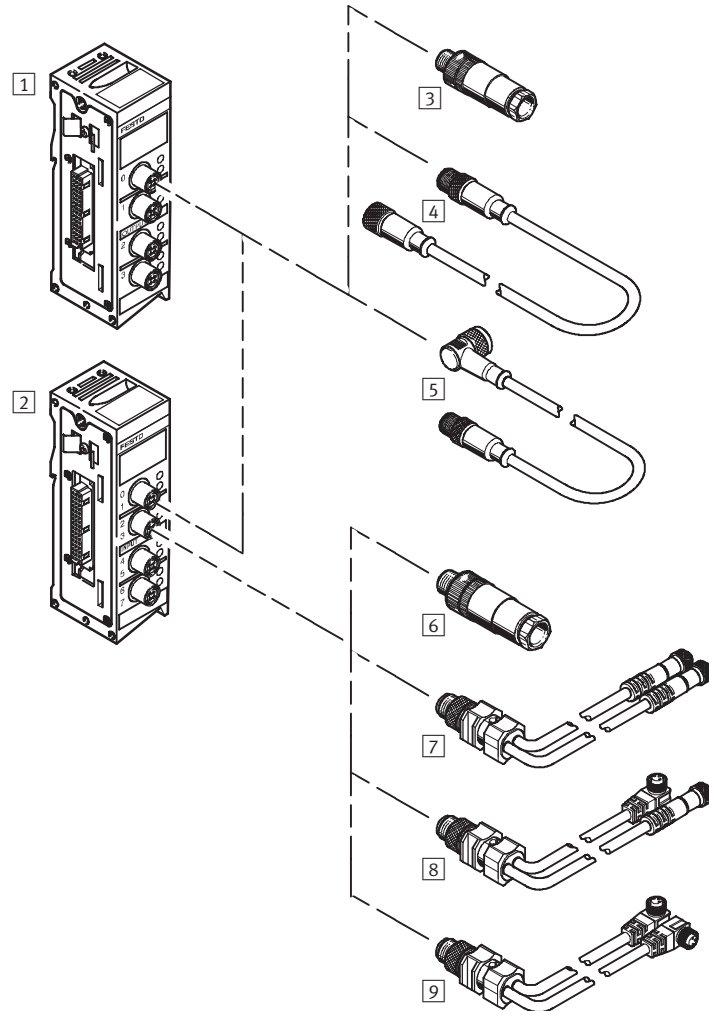
Accessories		
	Brief description	→ Page
1	VIGE-03-FB-4N	Electrical module, electrical peripherals, valve terminal type 03, 4 inputs
2	VIGE-03-FB-8N	Electrical module, electrical peripherals, valve terminal type 03, 8 inputs
3	SEA-GS-7 SEA-4GS-7-2,5 SEA-GS-9	Plug for inputs and outputs, straight socket
4	KM12-M12-GSGD-...	Extension cable, straight sockets
5	KM12-M12-GSWD-1-4	Extension cable, straight socket/angled socket
6	SEA-GS-11-DUO	Plug for inputs and outputs
7	KM12-DUO-M8-GDGD	DUO cable, straight sockets
8	KM12-DUO-M8-GDWD	DUO cable, straight socket/angled socket
9	KM12-DUO-M8-WDWD	DUO cable, angled sockets

Electrical connection technology, for inputs and outputs

Peripherals overview

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VIGE-03-FB-...-5POL



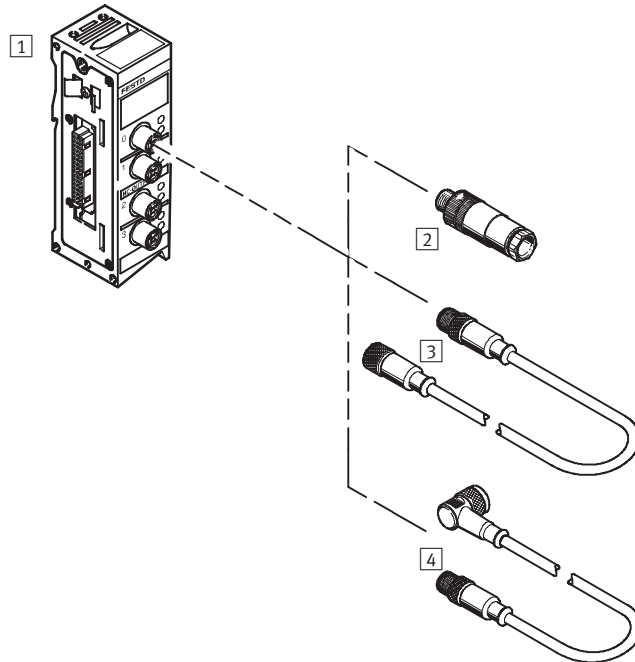
Accessories		
	Brief description	→ Page
1	VIGE-03-FB-4-5POL	Electrical module, electrical peripherals, valve terminal type 03, 4 inputs
2	VIGE-03-FB-8-5POL	Electrical module, electrical peripherals, valve terminal type 03, 8 inputs
	VIGE-03-FB-8.1-5POL	4 / 4.8-229
	VIGE-03-FB-8-5POL-S	4 / 4.8-229
3	SEA-GS-7	Plug for inputs and outputs, straight socket
	SEA-4GS-7-2,5	4 / 5.1-162
	SEA-GS-9	4 / 5.1-164
	SEA-M12-5GS-PG7	4 / 5.1-162
		4 / 5.1-166
4	KM12-M12-GSGD-...	Extension cable, straight sockets
5	KM12-M12-GSWD-1-4	Extension cable, straight socket/angled socket
		4 / 5.1-23
6	SEA-GS-11-DUO	Plug for inputs and outputs
	SEA-5GS-11-DUO	4 / 5.1-162
		4 / 5.1-164
7	KM12-DUO-M8-GDGD	DUO cable, straight sockets
		4 / 5.1-154
8	KM12-DUO-M8-GDWD	DUO cable, straight socket/angled socket
		4 / 5.1-154
9	KM12-DUO-M8-WDWD	DUO cable, angled sockets
		4 / 5.1-154

Electrical connection technology, for inputs and outputs

Peripherals overview

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VIGA-03-FB-4-...



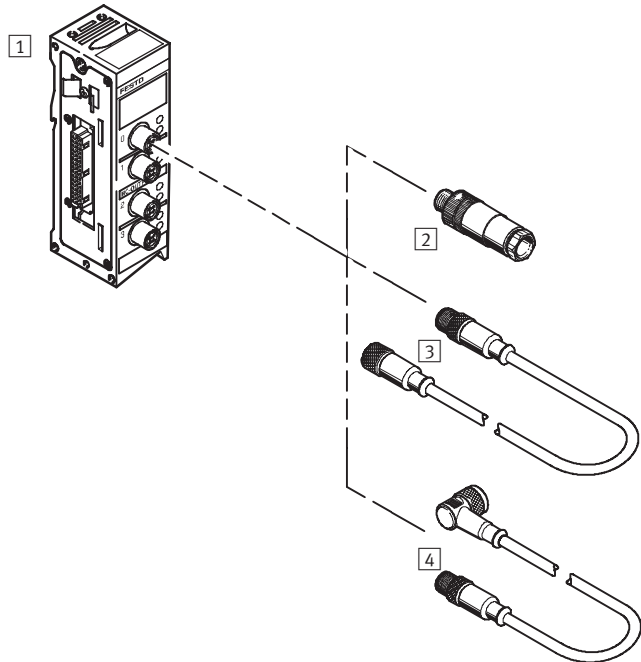
Accessories		
	Brief description	→ Page
1 VIGA-03-FB-4-PH VIGA-03-FB-4-NH	Electrical module, electrical peripherals, valve terminal type 03, 4 outputs	4 / 4.8-236
2 SEA-GS-7 SEA-4GS-7-2,5 SEA-GS-9 SEA-GS-11-DUO	Plug for inputs and outputs, straight socket	4 / 5.1-162 4 / 5.1-164 4 / 5.1-162 4 / 5.1-162
3 KM12-M12-GSGD-...	Extension cable, straight sockets	4 / 5.1-23
4 KM12-M12-GSWD-1-4	Extension cable, straight socket/angled socket	4 / 5.1-23

Electrical connection technology, for inputs and outputs

Peripherals overview

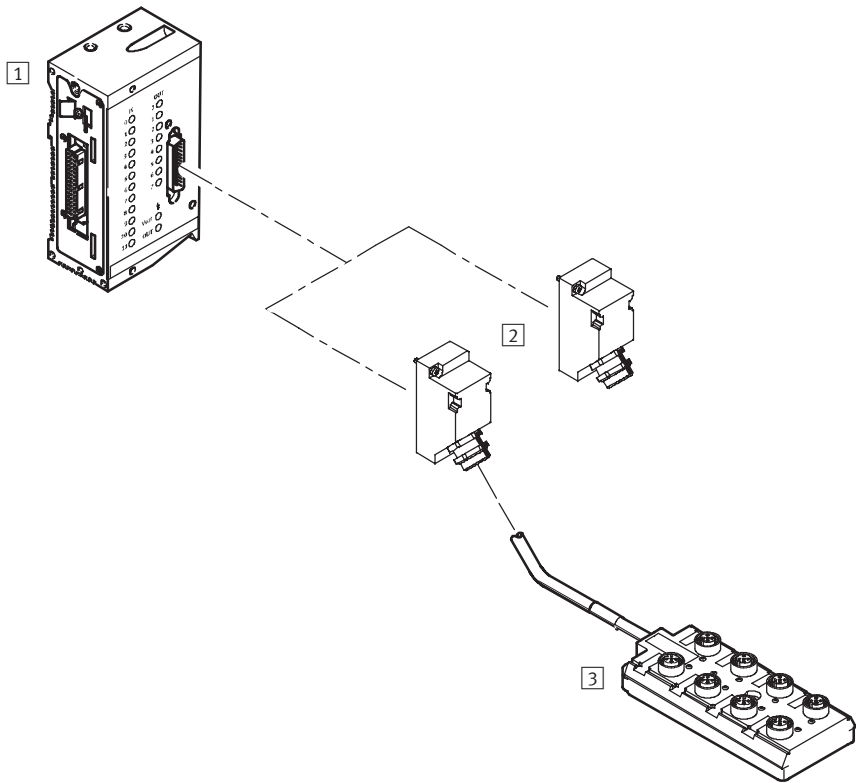
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VIGA-03-FB-4-5POL



Accessories		
	Brief description	→ Page
1 VIGA-03-FB-4-5POL	Electrical module, electrical peripherals, valve terminal type 03, 4 outputs	4 / 4.8-236
2 SEA-GS-7	Plug for inputs and outputs, straight socket	4 / 5.1-162
SEA-4GS-7-2,5		4 / 5.1-164
SEA-GS-9		4 / 5.1-162
SEA-GS-11-DUO		4 / 5.1-162
SEA-5GS-11-DUO		4 / 5.1-164
SEA-M12-5GS-PG7		4 / 5.1-166
3 KM12-M12-GSGD-...	Extension cable, straight sockets	4 / 5.1-23
4 KM12-M12-GSWD-1-4	Extension cable, straight socket/angled socket	4 / 5.1-23

VIEA-03-FB-12E-8A-...



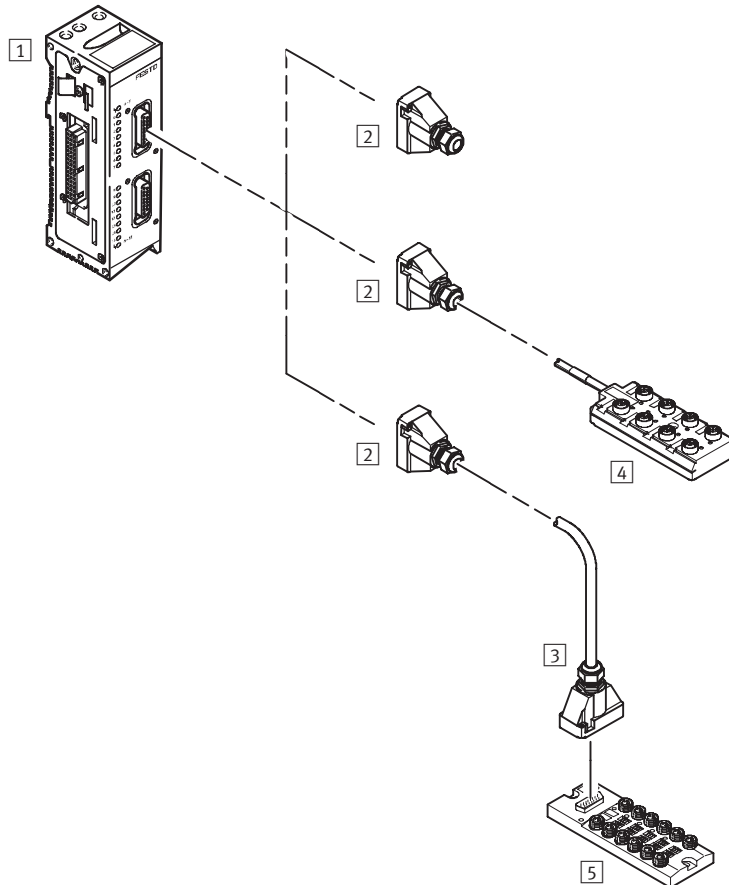
Accessories		Brief description	→ Page
1	VIEA-03-FB-...	Electrical module for valve terminal type 03	4 / 4.8-243
2	KEA-1-25-...	Connecting cable	4 / 5.1-67
	KMP3-25P-22-...	Connecting cable	4 / 5.1-59
	SD-SUB-D-BU25	Plug socket for Sub-D connections	4 / 5.1-71
3	MPV-E-...	Multi-pin plug distributor	4 / 4.8-252

Electrical connection technology, for inputs and outputs

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VIGE-03-FB-16-SUBD-S-...



Accessories		
	Brief description	→ Page
1	VIGE-03-FB-16-SUBD-S	Input module, 16-fold, for valve terminal type 03/04
2	SD-SUB-D-ST15	Plug for Sub-D connections
3	KMPV-SUB-D-15-...	Connecting cable for multi-pin plug distributor
4	MPV-E/A08-M12	Multi-pin plug distributor
5	MPV-E/A...-M8	Multi-pin plug distributor

Electrical connection technology, for inputs and outputs

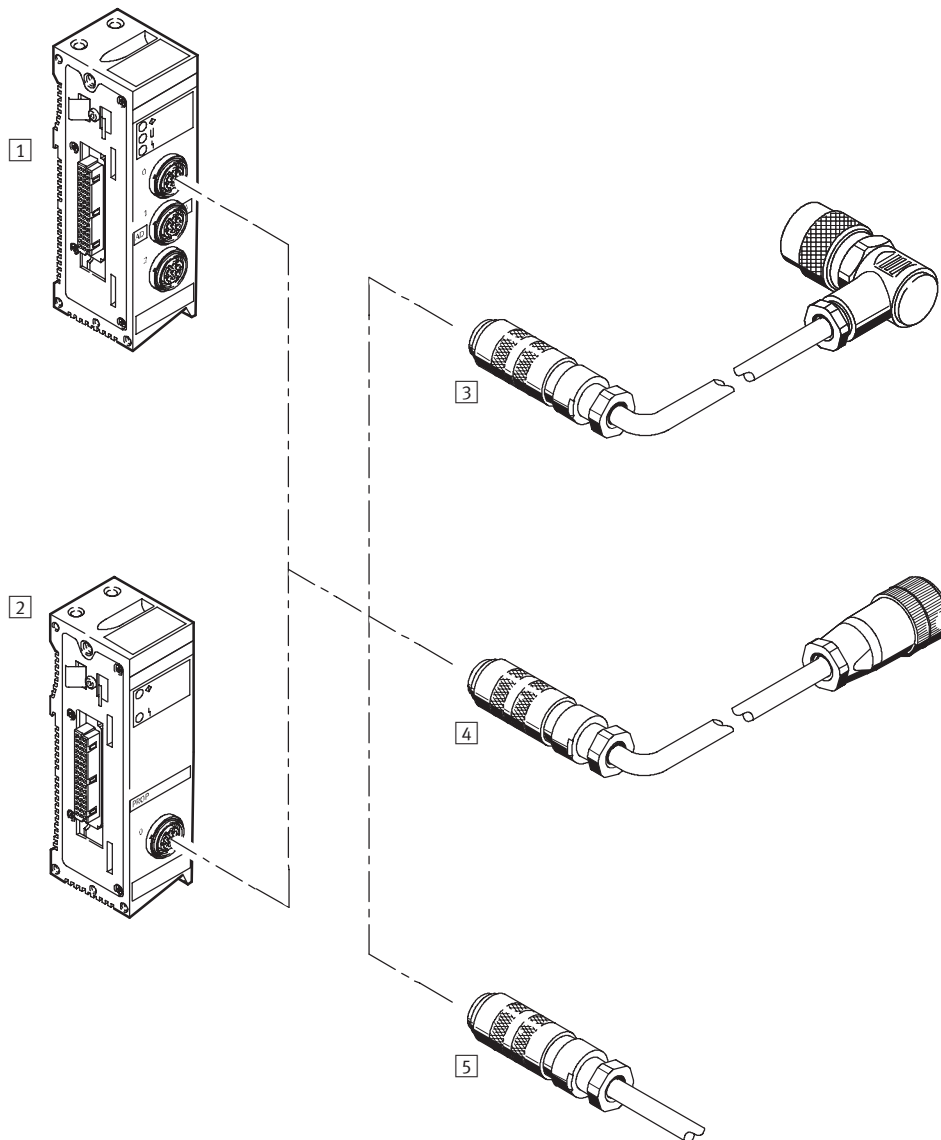
Peripherals overview

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Accessories for valve terminals
Electrical connector systems

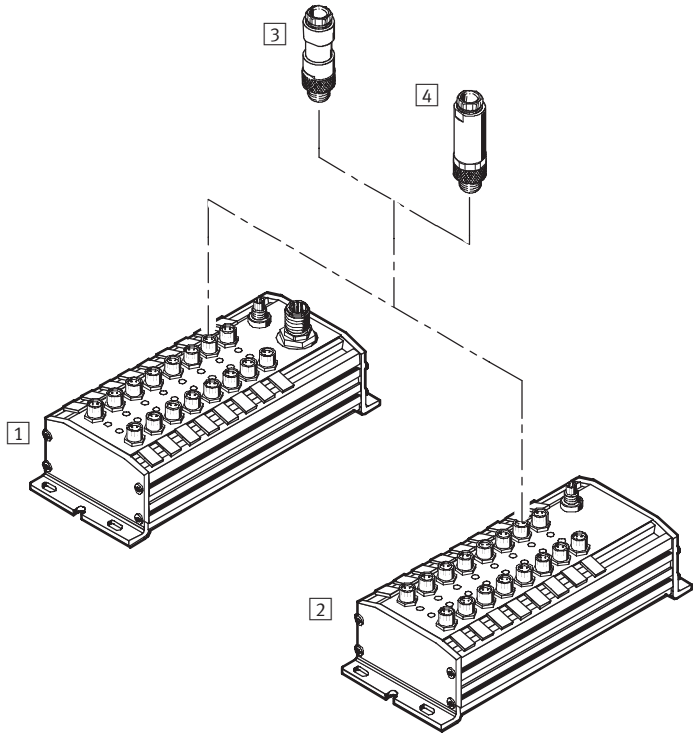
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VIAU-03-FB-...



Accessories		
	Brief description	→ Page
1	VIAU-03-FB-...	Analogue module for electrical peripherals, valve terminal type 03/04
2	VIAP-03-FB-...	Analogue module for electrical peripherals, valve terminal type 03/04
3	KVIA-MPYE-...	Connecting cable for proportional valves
4	KVIA-MPPE-...	Connecting cable for proportional pressure regulator
5	KVIA-...	Connecting cable for analogue units

CP installation system CP-E...



Accessories		
	Brief description	→ Page
1	CP-E16-M8-Z Input module M8, 3-pin, with additional power supply	4 / 4.6-47
2	CP-E16-M8 CP-E16N-M8 Input module M8, PNP/NPN	4 / 4.6-47
3	SEA-GS-M8-... Plug for inputs and outputs	4 / 5.1-160
4	SEA-3GS-M8-S-... Plug for inputs and outputs	4 / 5.1-160

Electrical connection technology, for inputs and outputs

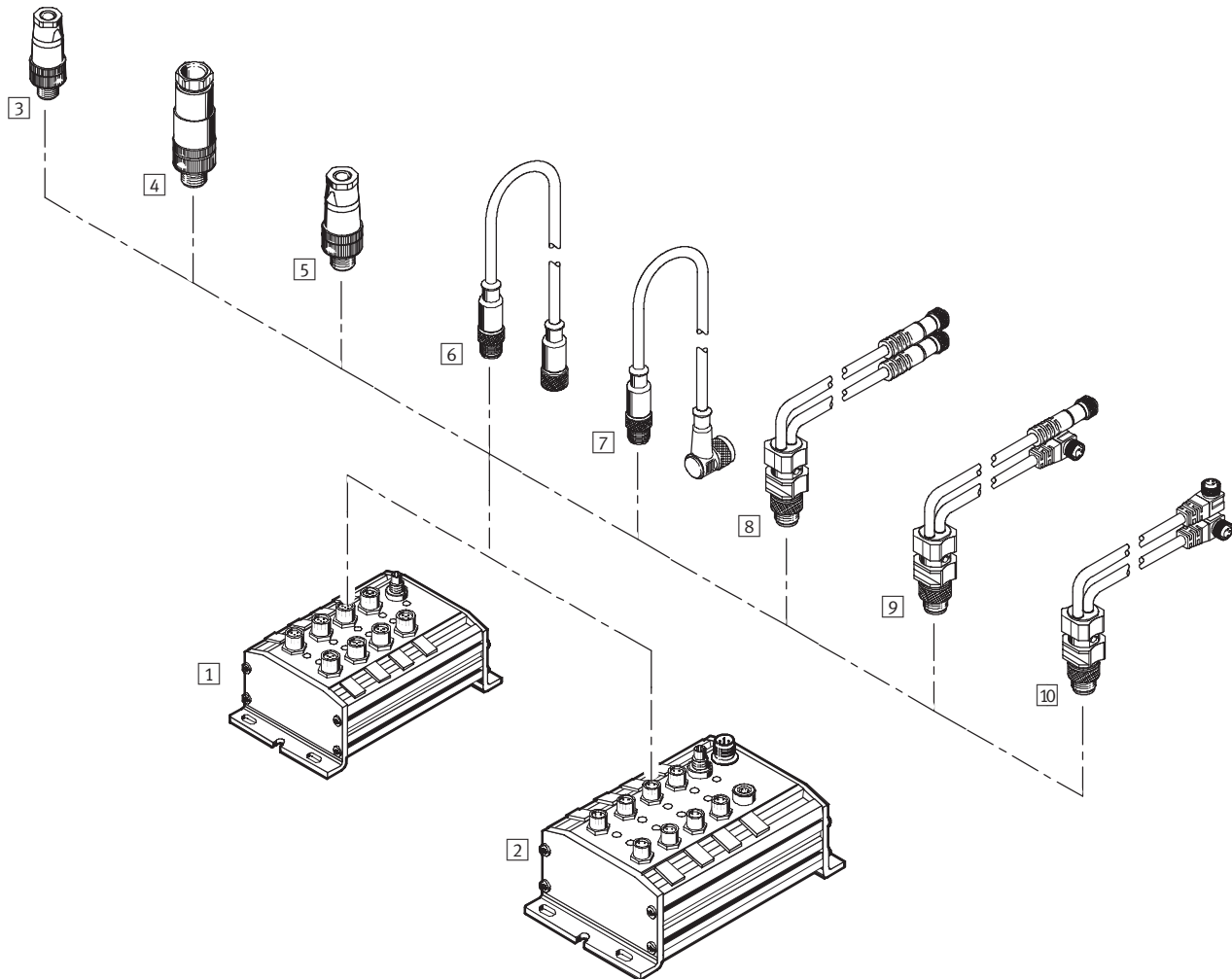
Peripherals overview

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Accessories for valve terminals
Electrical connector systems

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CP installation system CP-E...



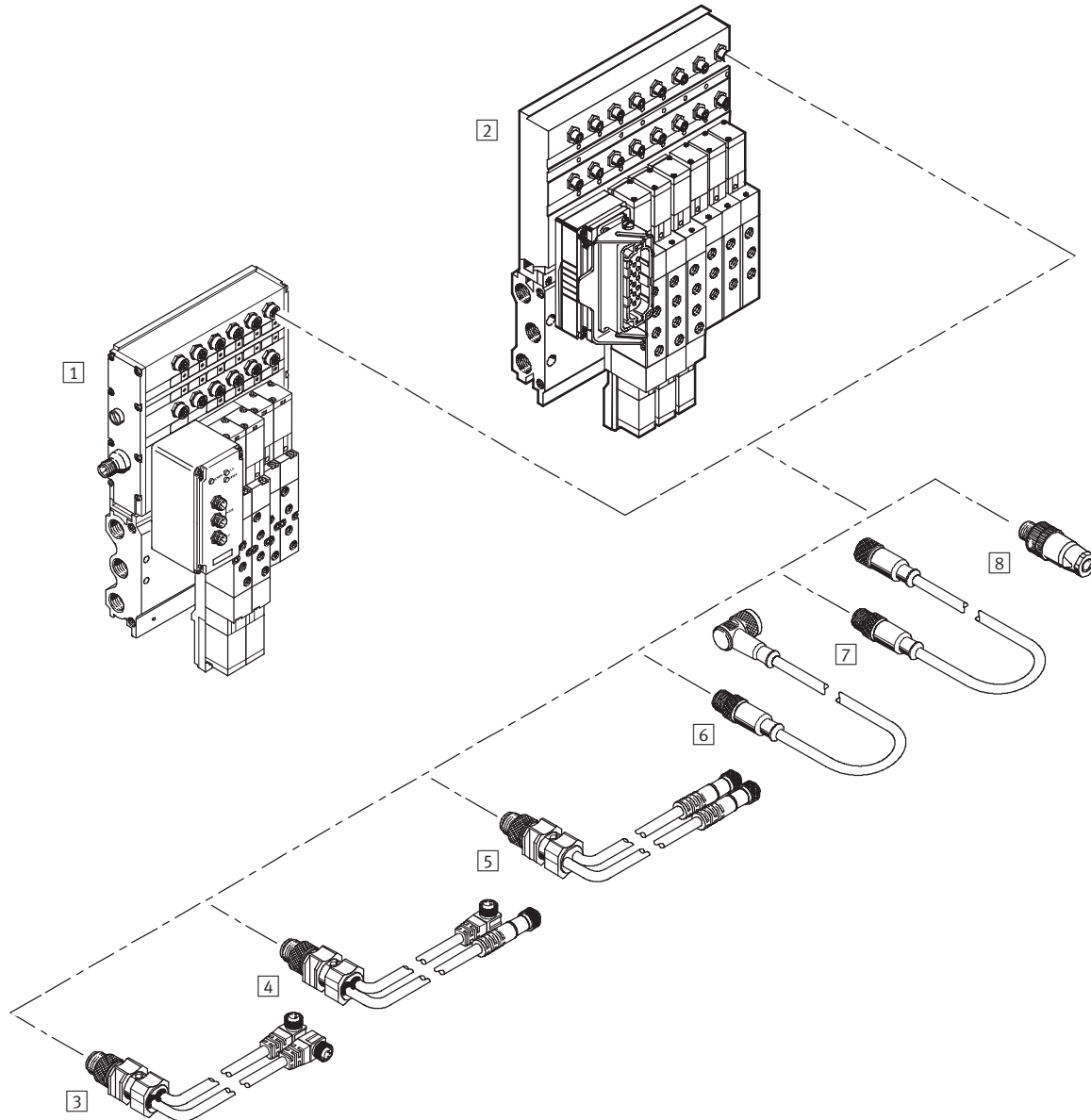
Accessories		
	Brief description	→ Page
1	CP-E16-M12x2-5POL CP-E16N-M12x2	Input module with 16 inputs 4 / 4.6-47
2	CP-A08N-M12	Output module 4 / 4.6-65
3	SEA-GS-...	Plug for inputs and outputs, straight socket 4 / 5.1-162
4	SEA-4GS-7-2,5... SEA-5GS-11-DUO	Plug for inputs and outputs, straight socket, for cable 2.5 square mm Plug for inputs and outputs, straight socket, for 2 cables 4 / 5.1-164 4 / 5.1-164
5	SEA-M12-5GS-PG7	Plug for inputs and outputs, 5-pin 4 / 5.1-166
6	KM12-M12-GSGD-...	Extension cable, straight sockets 4 / 5.1-23
7	KM12-M12-GSWD-1-4	Extension cable, straight socket/angled socket 4 / 5.1-23
8	KM12-DUO-M8-GDGD	DUO cable, straight sockets 4 / 5.1-154
9	KM12-DUO-M8-GDWD	DUO cable, straight socket/angled socket 4 / 5.1-154
10	KM12-DUO-M8-WDWD	DUO cable, angled sockets 4 / 5.1-154

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Peripherals overview

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Valve/sensor terminal type 02, Tiger 2000



Accessories		Brief description	→ Page
1	IIFB-02-...	Valve/sensor terminal type 02, fieldbus, Tiger 2000	4 / 2.3-1
2	IIMP-02-...	Valve/sensor terminal type 02, multiple connector plate, Tiger 2000	4 / 2.3-1
3	KM12-DUO-M8-WDWD	DUO cable, angled sockets	4 / 5.1-154
4	KM12-DUO-M8-GDWD	DUO cable, straight socket/angled socket	4 / 5.1-154
5	KM12-DUO-M8-GDGD	DUO cable, straight sockets	4 / 5.1-154
6	KM12-M12-GSWD-1-4	Extension cable, straight socket/angled socket	4 / 5.1-23
7	KM12-M12-GSGD-...	Extension cable, straight sockets	4 / 5.1-23
8	SEA-GS-7	Plug for inputs and outputs, M12, straight socket	4 / 5.1-162
	SEA-4GS-7-2,5	Plug for inputs and outputs, M12, straight socket	4 / 5.1-164

Electrical connection technology, for inputs/outputs

Technical data – KVIA-...

FESTO

- Plug socket with cable for inputs/ outputs (valve terminal type 03/04, analogue connections)
- Pre-assembled at both ends
- Cable lengths 5 m or 10 m
- 4-pin/5-pin
- Round plug
- Suitable for chain link trunking



Accessories for valve terminals
Electrical connector systems

5.1

General technical data		
Type	KVIA-...	
Type of mounting	M16/M12 union nut	
Mounting position	Any	
Operating voltage range	[V]	250 AC
Current-carrying capacity	[A]	1
Protection class to EN 60 529	IP65 (assembled)	
Material of housing	Polybuteneterephthalate	
Material of contacts	Silver-plated/gold-plated bronze	
Material of cable sheath	Polyvinyl chloride	
Ambient temperature	[°C]	–30 ... +80

Ordering data								
	Suitable for chain link trunking	Electrical connection	Constructional design [mm ²]	Cable diameter [mm]	Product weight [g]	Cable length [m]	Type	Part No.
	■	Straight plug	6x0.25	8	306	5	KVIA-5	163 960
	■	Straight plug	6x0.25	8	567	10	KVIA-10	163 961
	■	Straight plug Straight socket	4x0.25	6.2	297	5	KVIA-MPYE-5	161 984
	■	Straight plug Straight socket	4x0.25	6.2	530	10	KVIA-MPYE-10	161 985
	■	Straight plug Angled socket	6x0.25	8	352	5	KVIA-MPPE-5	163 882
	■	Straight plug Angled socket	6x0.25	8	828	10	KVIA-MPPE-10	163 883

Electrical connection technology, for inputs/outputs

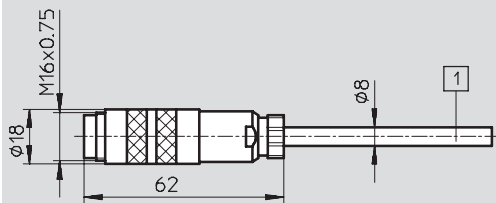
Technical data – KVIA-...

FESTO

Dimensions

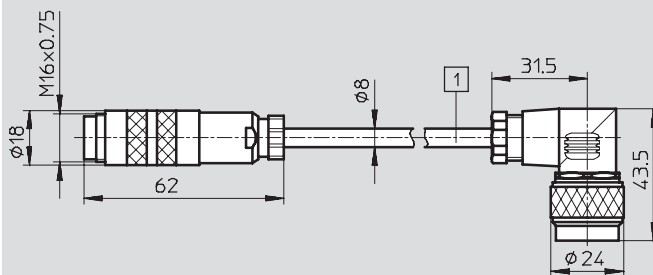
Download CAD data → www.festo.com/en/engineering

KVIA-5 and KVIA-10



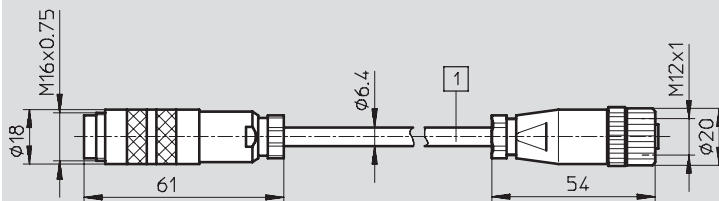
1 Cable length 5 m or 10 m

Type KVIA-MPPE-...



1 Cable length 5 m or 10 m

Type KVIA-MPYE-...



1 Cable length 5 m or 10 m

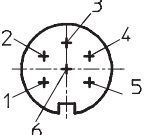
Electrical connection technology, for inputs/outputs

Technical data – KVIA-...

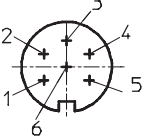
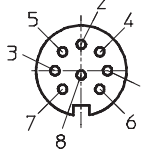
FESTO

Wiring allocation (socket/plug view)

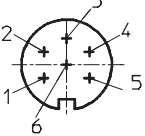
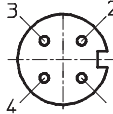
KVIA-5 and KVIA-10

Plug	Pin	Core colour	
	1	Grey	
	2	Pink	
	3	Green	
	4	Yellow	
	5	Brown	
	6	White	
	Housing	Screen	

Type KVIA-MPPE-...

Plug	Pin	Core colour	Pin	Socket
	1	Grey	6	
	2	Pink	8	
	3	Green	4	
	4	Yellow	2	
	5	Brown	7	
	6	White	3	
	Housing	Screen	–	

Type KVIA-MPYE-...

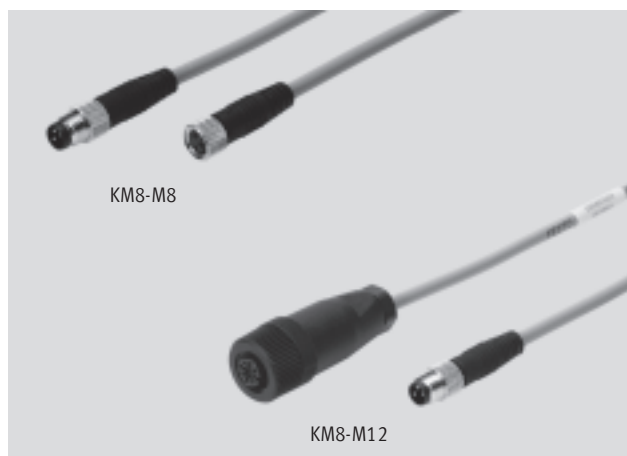
Plug	Pin	Core colour	Pin	Socket
	1	–	–	
	2	–	–	
	3	Green	3	
	4	Yellow	4	
	5	Brown	1	
	6	White	2	
	Housing	Screen	–	

Electrical connection technology, for inputs/outputs

Technical data – KM8

FESTO

- Plug socket with cable for connecting inputs/outputs
- Pre-assembled at both ends
- Cable lengths 1 m, 2.5 m or 5 m
- Socket/plug, 3-pin or 4-pin



General technical data		
Type	KM8-...	
Type of mounting	Union nut/threaded connector	
Mounting position	Any	
Operating voltage range	[V]	60 AC
	[V]	75 DC
Current-carrying capacity	[A]	4
Protection class to EN 60 529	IP65 (assembled)	
Material of housing	Polyurethane	
Material of contacts	Nickel-plated/gold-plated bronze	
Material of union nut	Nickel-plated brass	
Material of cable sheath	Polyurethane	
Ambient temperature	[°C]	–25 ... +85
Ambient temperature of flexible cable installation	[°C]	+20 ... +80

Ordering data							
	Electrical connection	Construc- tional design [mm ²]	Cable diameter [mm]	Product weight [g]	Cable length [m]	Type	Part No.
	Straight plug, 3-pin, M8	3x0.25	4.5	26	0.5	KM8-M8-GSGD-0,5	175 488
	Straight socket, 3-pin, M8						
	Straight plug, 3-pin, M8	3x0.25	4.5	40	1	KM8-M8-GSGD-1	175 489
	Straight socket, 3-pin, M8						
	Straight plug, 3-pin, M8	3x0.25	4.5	78.8	2.5	KM8-M8-GSGD-2,5	165 610
	Straight socket, 3-pin, M8						
	Straight plug, 3-pin, M8	3x0.25	4.5	140	5	KM8-M8-GSGD-5	165 611
	Straight socket, 3-pin, M8						
	Straight plug, 3-pin, M8	3x0.25	4.5	49	1	KM8-M12-GSGD-1	187 859
	Straight socket, 3-pin, M12						
	Straight plug, 3-pin, M8	3x0.25	4.5	87	2.5	KM8-M12-GSGD-2,5	187 860
	Straight socket, 3-pin, M12						
	Straight plug, 3-pin, M8	3x0.25	4.5	150	5	KM8-M12-GSGD-5	187 861
	Straight socket, 3-pin, M12						

Technical data – KM8

Accessories for valve terminals

4 / 5.1-151

Electrical connection technology, for inputs/outputs

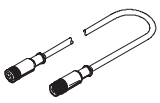
Technical data – KM12-8GD8GS

FESTO

- Plug socket with cable for connecting inputs/outputs (e.g. DNCV)
- Pre-assembled at both ends
- Cable length 2 m
- Socket/plug, 8-pin
- Not suitable for chain link trunking

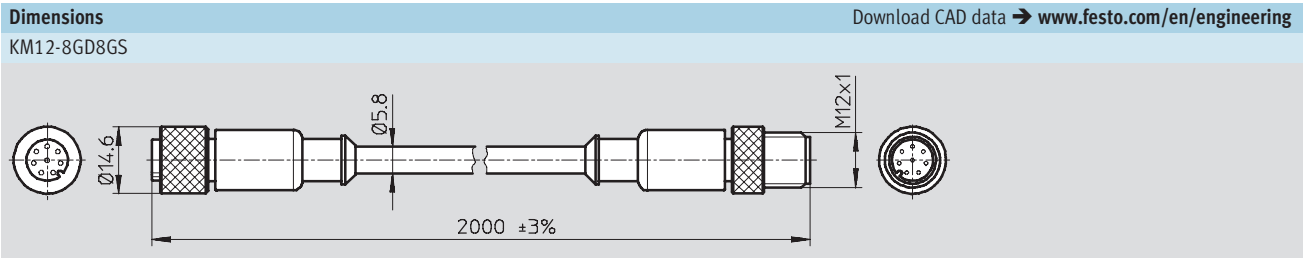


General technical data		
Type		KM12-8GD8GS
Type of mounting		Union nut/threaded connector
Mounting position		Any
Operating voltage range	[V]	30 AC
	[V]	36 DC
Current-carrying capacity	[A]	1.5
Protection class to EN 60 529		IP68 (assembled)
Material of contacts		Nickel-plated/gold-plated bronze
Material of union nut		Nickel-plated brass
Material of cable sheath		Polyurethane
Ambient temperature	[°C]	−25 ... +80

Ordering data							
	Electrical connection	Construc- tional design [mm ²]	Cable diameter [mm]	Product weight [g]	Cable length [m]	Type	Part No.
	Straight plug, 8-pin, M12 Straight socket, 8-pin, M12	8x0.25	5.8	156	2	KM12-8GD8GS-2-PU	525 617

Electrical connection technology, for inputs/outputs

Technical data – KM12-8GD8GS



Wiring allocation (socket/plug view)				
KM12-8GD8GS				
Socket	Pin	Core colour	Pin	Plug
	1	White	1	
	2	Brown	2	
	3	Green	3	
	4	Yellow	4	
	5	Grey	5	
	6	Pink	6	
	7	Blue	7	
	8	Red	8	
	Housing	Screen	Housing	

Electrical connection technology, for inputs/outputs

Technical data – KM12-DUO

FESTO

- Plug socket with cable for connecting 2 sensors to an input socket with double allocation
- Pre-assembled at both ends
- Cable length 0.6 m
- Plug, 4-pin, socket, 3-pin



General technical data		
Type	KM12-DUO-...	
Type of mounting	Union nut/threaded connector, threaded connector with mounting option via cable binder or screw M4	
Mounting position	Any	
Operating voltage range	[V]	60 AC
	[V]	75 DC
Current-carrying capacity	[A]	2.8
Protection class to EN 60 529	IP67 (assembled)	
Material of housing	Polyurethane	
Material of contacts	Gold-plated brass	
Material of union nut	Nickel-plated brass	
Material of cable sheath	Polyurethane	
Ambient temperature	[°C]	–30 ... +70
Ambient temperature of flexible cable installation	[°C]	–5 ... +70

Ordering data							
	Electrical connection	Construc- tional design [mm ²]	Cable diameter [mm]	Product weight [g]	Cable length [m]	Type	Part No.
	Straight plug, 4-pin, M12 2x straight socket, 3-pin, M8	2x3x0.25	4.5	59	0.6	KM12-DUO-M8-GDGD	18 685
	Straight plug, 4-pin, M12 Straight socket, 3-pin, M8 Angled socket, 3-pin, M8	2x3x0.25	4.5	61	0.6	KM12-DUO-M8-GDWD	18 688
	Straight plug, 4-pin, M12 2x angled socket, 3-pin, M8	2x3x0.25	4.5	60	0.6	KM12-DUO-M8-WDWD	18 687

Electrical connection technology, for inputs/outputs

Technical data – KM12-DUO

FESTO

Dimensions

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

KM12-DUO-...

KM12-DUO-M8-GDGD

KM12-DUO-M8-GDWD

KM12-DUO-M8-WDWD

Accessories for valve terminals
Electrical connector systems

5.1

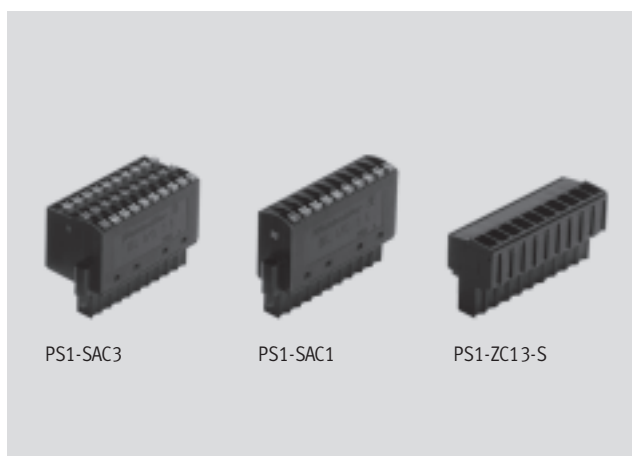
Wiring allocation (plug/socket view)		
KM12-DUO-...		
Plug	Wiring allocation	Socket
	+ (24 V) 1 - (24 V) 3 x (Signal x) 4 x+1 (Signal x+1) 2 Brown Blue Black Black Brown Blue Black Black 1 + (24 V) 3 - (0 V) 4 x (Signal x) 1 + (24 V) 3 - (0 V) 4 x+1 (Signal x+1)	

Electrical connection technology, for inputs/outputs

Technical data – PS1-...

FESTO

- Plug for inputs/outputs, 10-pin or 30-pin
- Individually or as a set
- Simple cable connection using clamping technology



General technical data	
Type	PS1-SAC-.../SEA-KL-...
Type of mounting	2 M2x7 screws
Max. wire cross section [mm ²]	0.08 ... 0.75
Operating voltage range [V]	50 AC
Material of housing	Polybuteneterephthalate
Ambient temperature [°C]	-20 ... +100

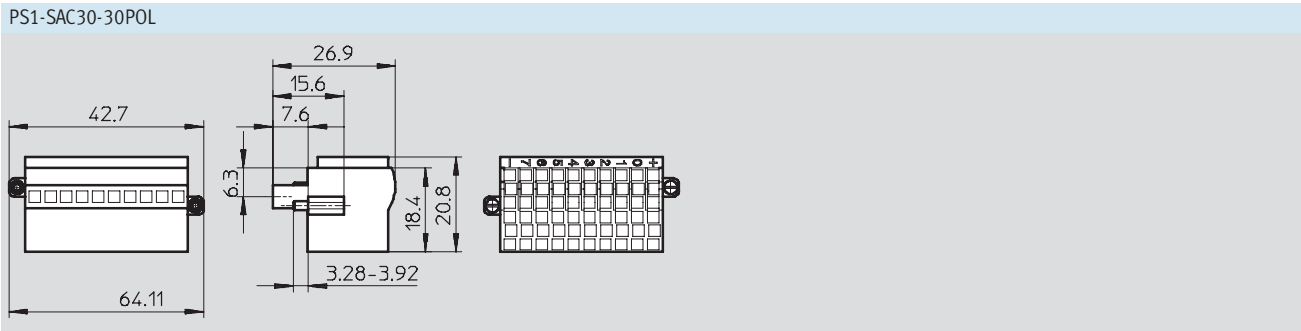
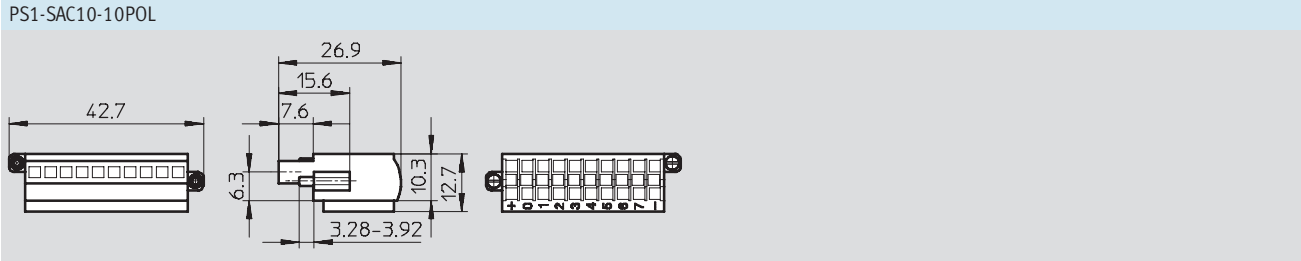
Ordering data					
	Electrical connection	Current-carrying capacity [A]	Product weight [g]	Type	Part No.
	Socket, 10-pin, terminal strip, 10-pin	4	14	PS1-SAC10-10POL	197 159
	Socket, 10-pin, terminal strip, 10-pin	4	40	PS1-SAC11-10POL+LED	197 160
	Socket, 10-pin, terminal strip, 30-pin	0.5	25	PS1-SAC30-30POL	197 161
	Socket, 10-pin, terminal strip, 30-pin	0.5	25	PS1-SAC31-30POL+LED	197 162
	Socket, 10-pin, terminal strip, 10/30-pin	0.5/4	71	SEA-KL-SAC10/30	526 256
	Screw terminal socket, 10-pin	4	37	PS1-ZC13-10POL-SCHRAUBKL	160 800

Electrical connection technology, for inputs/outputs

Technical data – PS1-...



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

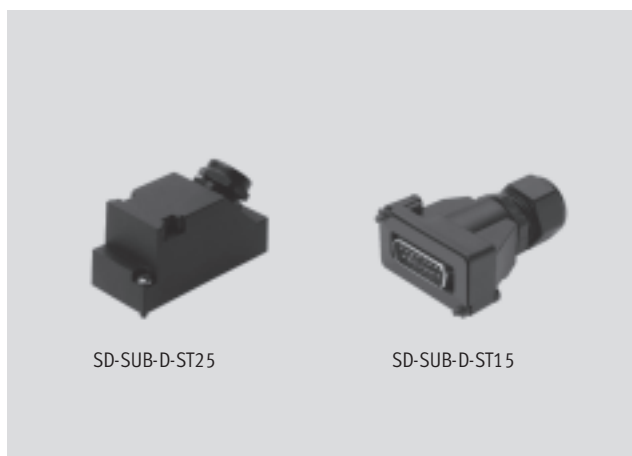


Electrical connection technology, for inputs/outputs

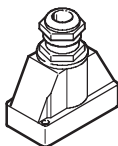
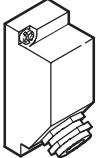
Technical data – SD-SUB-D-ST-...

FESTO

- Plug for inputs/outputs
- Can be fabricated with any cable lengths
- 15-pin or 25-pin
- Sub-D



General technical data		
Type	SD-SUB-D-ST-...	
Type of mounting	2 M3x16 screws	
Mounting position	Any	
Operating voltage range	[V]	250 AC
	[V]	250 DC
Current-carrying capacity	[A]	5
Protection class to EN 60 529	IP65 (assembled)	
Material of contacts	Gold-plated copper base alloy	
Ambient temperature	[°C]	–20 ... +80

Ordering data								
	Electrical connection	Cable gland fitting	Perm. cable diameter [mm]	Material of housing	Material of seal	Product weight [g]	Type	Part No.
	Plug, 15-pin, Sub-D	PG9	6 ... 9	Polyamide (PA66-GF25)	Polychloroprene rubber (Neoprene)	37	SD-SUB-D-ST15	192 768
	Plug, 25-pin, Sub-D	PG11	7 ... 12	Polyamide (Schulamid, 6GB30)	Nitrile rubber (NBR)	51	SD-SUB-D-ST25	527 522

Electrical connection technology, for inputs/outputs

Technical data – SD-SUB-D-ST-...



Dimensions

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

SD-SUB-D-ST-15

1

 Sub-D plug, 15-pin

2

 Cable gland fitting PG9

Dimensions

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

SD-SUB-D-ST-25

1

Type	1	B1	B2	H1	H2	H3	L1	L2
SD-SUB-D-ST25	Sub-D plug, 25-pin	30	23	47	37	35	70	63

Electrical connection technology, for inputs/outputs

Technical data – SEA-GS-M8

FESTO

- Sensor plug/socket for inputs/outputs
- Can be fabricated with any cable lengths
- 3-pin
- With screw terminals or soldered connection
- Wire cross section of up to 0.5 mm²



General technical data		
Type	SEA-GS-M8	
Type of mounting	Threaded connector M8	
Mounting position	Any	
Operating voltage range	[V]	75 DC
Current-carrying capacity	[A]	4
Cable gland fitting	Pg7	
Material of housing	Polyamide	
Material of contacts	Gold-plated brass	
Material of union nut	Nickel-plated/chrome-plated brass	
Ambient temperature	[°C]	–40 ... +85

Ordering data								
	Electrical connection	Operating voltage range AC [V]	Perm. cable diameter [mm]	Max. wire cross section [mm ²]	Protection class to EN 60 529	Product weight [g]	Type	Part No.
	Straight plug, 3-pin, screw terminal	48	2.5 ... 5	0.14 ... 0.5	IP65 (assembled)	11	SEA-3GS-M8-S	192 009
	Straight plug, 3-pin, solder lug	60	3.5 ... 5	0.25	IP67 (assembled)	9	SEA-GS-M8	18 696

Electrical connection technology, for inputs/outputs

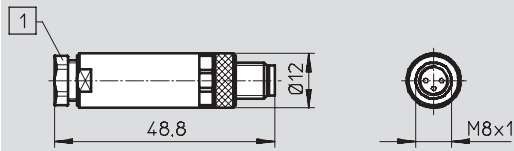
Technical data – SEA-GS-M8

FESTO

Dimensions

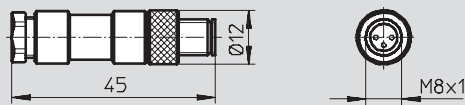
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SEA-3GS-M8-S



- 1 Cable gland fitting:
- Black for cable 3.5 ... 5 mm
 - Blue for cable 2.5 ... 4 mm

SEA-GS-M8



Electrical connection technology, for inputs/outputs

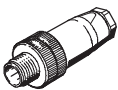
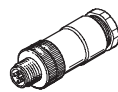
Technical data – SEA-GS

FESTO

- Sensor plug/socket for inputs/outputs
- Can be fabricated with any cable lengths
- 4-pin
- Wire cross section of up to 0.75 mm²



General technical data	
Type	SEA-GS-...
Electrical connection	Straight plug, 4-pin, screw terminal
Type of mounting	Threaded connector M12
Mounting position	Any
Current-carrying capacity [A]	3
Max. wire cross section [mm ²]	0.75
Protection class to EN 60 529	IP67 (assembled)
Material of housing	Polybuteneterephthalate
Material of contacts	Copper base alloy
Material of union nut	Polybuteneterephthalate
Ambient temperature [°C]	–40 ... +85

Ordering data							
	Operating voltage range		Cable gland fitting	Perm. cable diameter [mm]	Product weight [g]	Type	Part No.
	[V]	[V]					
	250 AC	300 DC	Pg7	4 ... 6	17	SEA-GS-7	18 666
	125 AC	150 DC	Pg9	6 ... 8	18	SEA-GS-9	18 778
	125 AC	150 DC	Pg11	3 ... 5	24	SEA-GS-11-DUO	18 779

Electrical connection technology, for inputs/outputs

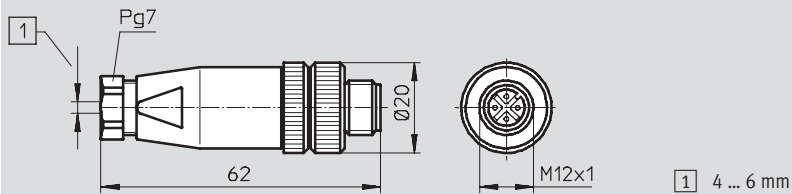
Technical data – SEA-GS

FESTO

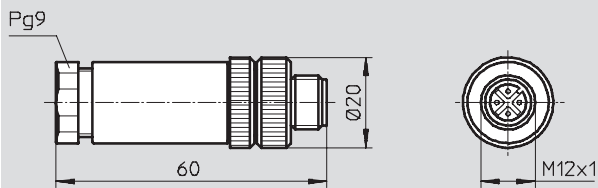
Dimensions

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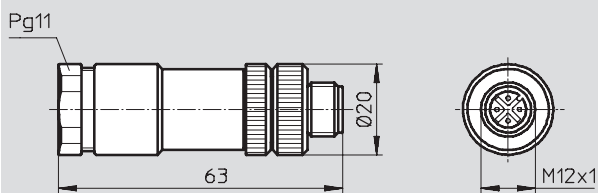
SEA-GS-7



SEA-GS-9



SEA-GS-11-DUO



Electrical connection technology, for inputs/outputs

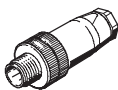
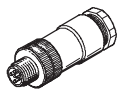
Technical data – SEA-...GS

FESTO

- Sensor plug/socket for inputs/ outputs
- Can be fabricated with any cable lengths
- 4-pin or 5-pin
- Wire cross section of up to 0.5 mm²



General technical data	
Type	SEA-...GS-...
Type of mounting	Threaded connector M12
Mounting position	Any
Perm. cable diameter [mm]	2.5 ... 2.9
Max. wire cross section [mm ²]	0.14 ... 0.5
Protection class to EN 60 529	IP65 (assembled)
Material of housing	Polyamide
Material of contacts	Copper base alloy
Material of union nut	Polyamide
Ambient temperature [°C]	–40 ... +85

Ordering data								
	Electrical connection	Operating voltage range		Current-carrying capacity [A]	Cable gland fitting	Product weight [g]	Type	Part No.
		[V]	[V]					
	Straight plug, 4-pin, screw terminal	48 AC	75 DC	4	Pg7	18	SEA-4GS-7-2,5	192 008
	Straight plug, 5-pin, screw terminal	30 AC	36 DC	3	Pg11	24	SEA-5GS-11-DUO	192 010

Electrical connection technology, for inputs/outputs

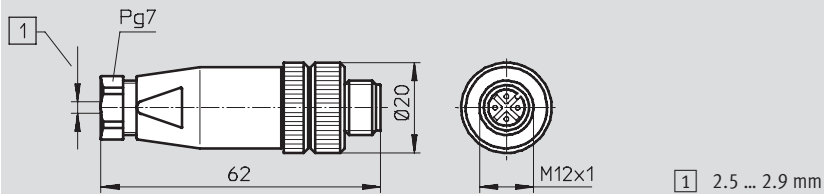
Technical data – SEA-...GS

FESTO

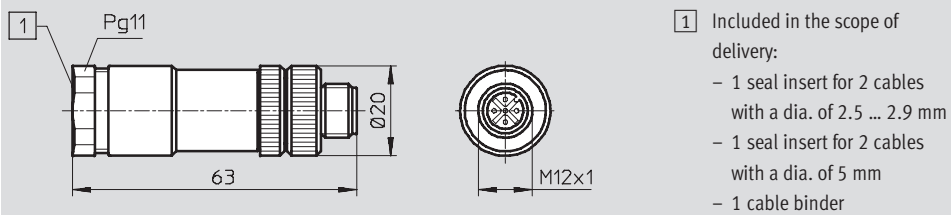
Dimensions

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

SEA-4GS-7-2,5



SEA-5GS-11-DUO



Electrical connection technology, for inputs/outputs

Technical data – SEA-M12

FESTO

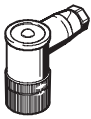
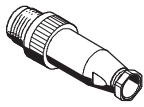
- Sensor plug/socket for inputs/outputs
- Can be fabricated with any cable lengths
- 4-pin or 5-pin
- Wire cross section of up to 0.75 mm²



SEA-M12-4WD-PG7

SEA-M12-5GS-PG7

General technical data		
Type	SEA-M12-...	
Mounting position	Any	
Cable gland fitting	Pg7	
Perm. cable diameter [mm]	4 ... 6	
Max. wire cross section [mm ²]	0.75	
Protection class to EN 60 529	IP67 (assembled)	
Material of housing	Polybuteneterephthalate	
Material of contacts	Copper base alloy	
Material of union nut	Nickel-plated/chrome-plated brass	
Ambient temperature [°C]	–40 ... +85	

Ordering data								
	Electrical connection	Type of mounting	Operating voltage range		Current-carrying capacity [A]	Product weight [g]	Type	Part No.
			[V]	[V]				
	Socket, angled, 4-pin, screw terminal	M12 union nut	125 AC	150 DC	4	30	SEA-M12-4WD-PG7	185 498
	Straight plug, 5-pin, screw terminal	Threaded connector M12	30 AC	36 DC	3	25	SEA-M12-5GS-PG7	175 487

Electrical connection technology, for inputs/outputs

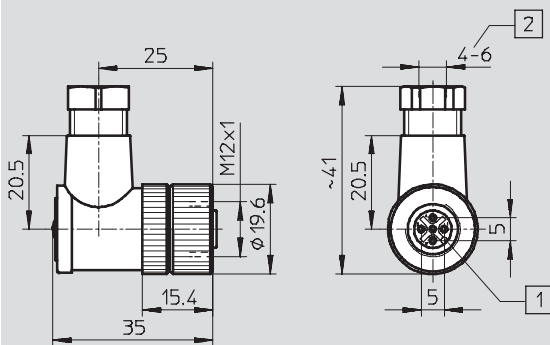
Technical data – SEA-M12

FESTO

Dimensions

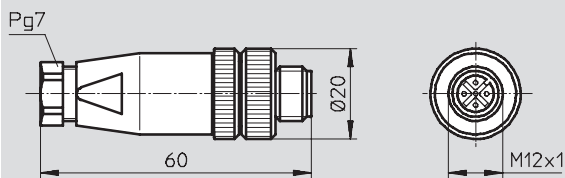
Download CAD data → www.festo.com/en/engineering

SEA-M12-4WD-PG7



- 1 Insert rotatable in steps of 90°
- 2 Cable diameter 4 ... 6 mm

SEA-M12-5GS-PG7



Electrical connection technology, for inputs/outputs

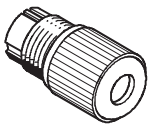
Technical data – SEA-GS-HAR

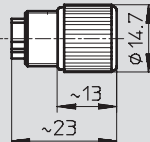
FESTO

- Sensor plug/socket for inputs/outputs
- Can be fabricated with any cable lengths
- 4-pin
- Wire cross section of up to 0.5 mm²



General technical data	
Type	SEA-GS-HAR-4POL
Mounting position	Any
Current-carrying capacity [A]	3
Cable gland fitting	Pg9
Perm. cable diameter [mm]	4 ... 5.1
Max. wire cross section [mm ²]	0.25 ... 0.5
Protection class to EN 60 529	IP67 (assembled)
Material of housing	Nickel-plated brass
Material of contacts	Gold-plated copper base alloy
Ambient temperature [°C]	–25 ... +85

Ordering data							
	Electrical connection	Type of mounting	Operating voltage range		Product weight [g]	Type	Part No.
			[V]	[V]			
	Socket, straight, 4-pin, slot terminal	Threaded connector M12	32 AC	32 DC	11.5	SEA-GS-HAR-4POL	525 928

Dimensions		Download CAD data → www.festo.com/en/engineering	
SEA-GS-HAR			
			

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