

Signal converters SVE4

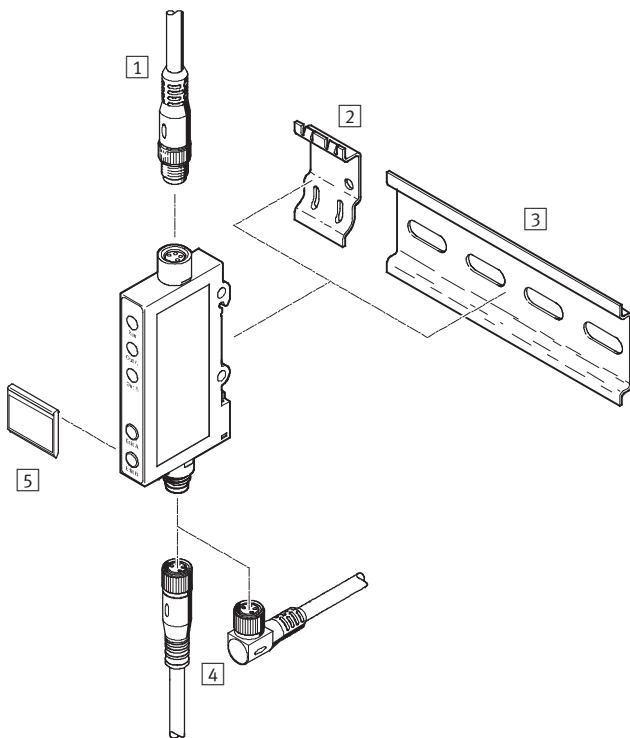


Signal converters SVE4

Product range and peripherals overview

Product range overview						
Type	Signal range	Switching output	Switching function	Electrical connection		→ Page/ Internet
				Input	Output	
SVE4-US	0 ... 10 V	2x PNP	Freely programmable	Socket M8x1, 4-pin, to EN 60947-5-2	Plug M8x1, 4-pin, to EN 60947-5-2	4
SVE4-IS	0 ... 20 mA	2x NPN				
SVE4-HS	Adapted for position sensors SMH-S1-HG					

Overview of peripherals



Mounting attachments and accessories		→ Page/ Internet
1	Connecting cable for signal input NEBU	7
2	Adapter plate SXE3-W	7
3	Mounting rail to DIN EN 60715 NRH-35-2000	7
4	Connecting cable for switching output NEBU	7
5	Inscription label holder SXE3 (included in the scope of delivery)	-

Signal converters SVE4

Type codes

SVE4 - US - R - H M8 - 2P - M8

Type

SVE4	Signal converter
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Signal range

US	0 ... 10 V
IS	0 ... 20 mA
HS	Adapted for position sensors SMH-S1-HG

Display and operation

R	Switching status display via LED, teach-in buttons
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Mounting

H	H-rail mounting
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Electrical connection (signal input)

M8	Socket M8x1, 4-pin
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Switching output

2P	2x PNP
2N	2x NPN

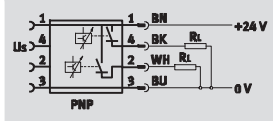
Electrical connection (switching output)

M8	Plug M8x1, 4-pin
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Signal converters SVE4

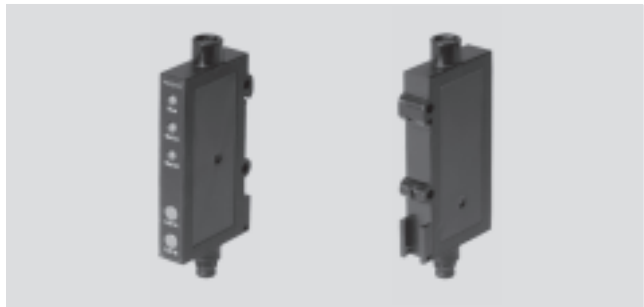
Technical data

Function



E.g. with switching output 2x PNP and signal range 0 ... 10 V

- Switching function freely programmable
- Choice of switching functions (NO/NC)
- Switching points can be taught in
- Mounting via H-rail or adapter plate



General technical data	
Certification	cULus listed (OL) C-Tick
UL temperature rating [°C]	-20 ... 60
CE mark (see declaration of conformity) ¹⁾	To EU EMC Directive
Note on materials	Free of copper and PTFE

1) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: www.festo.com → Support → User documentation.
If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

Input signal/measuring element			
Type	SVE4-US	SVE4-IS	SVE4-HS
Signal range	0 ... 10 ± 0.3 V	0 ... 20 ± 0.6 mA	Adapted for position sensors SMH-S1-HG
Ambient temperature [°C]	-20 ... +70		

Switching output	
Switching output	2x PNP 2x NPN
Switching function	Freely programmable
Switching element function	Switchable

Output, additional data	
Protection against short circuit	Pulsed
Protection against overloading	Yes

Electronic components			
Type	SVE4-US	SVE4-IS	SVE4-HS
Operating voltage range [V DC]	10 ... 30		
Reverse polarity protection	For all electrical connections		For operating voltage and switching outputs

Electromechanical components	
Electrical connection, input	Socket M8x1, 4-pin, to EN 60947-5-2
Electrical connection, output	Plug M8x1, 4-pin, to EN 60947-5-2

Mechanical components	
Product weight [g]	19
Information on housing materials	ABS

Signal converters SVE4

Technical data



Display/operation	
Setting options	Teach-in

Immissions/emissions	
Protection class	IP65
Corrosion resistance class CRC ¹⁾	2

1) Corrosion resistance class 2 according to Festo standard 940 070
 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Signal range 0 ... 10 V¹⁾

Switching output 2x PNP	Switching output 2x NPN	Pin allocation for input	Pin allocation for output
		<p>1 = +24 V (for transmitter) 2 = n.c. 3 = 0 V (for transmitter) 4 = Input 0 ... 10 V</p>	<p>1 = +24 V 2 = Out B 3 = 0 V 4 = Out A</p>

Signal range 0 ... 20 mA¹⁾

Switching output 2x PNP	Switching output 2x NPN	Pin allocation for input	Pin allocation for output
		<p>1 = +24 V (for transmitter) 2 = Input 0 ... 20 mA 3 = 0 V (for transmitter) 4 = n.c.</p>	<p>1 = +24 V 2 = Out B 3 = 0 V 4 = Out A</p>

Signal range adapted for position sensors SMH-S1-HG...¹⁾

Switching output 2x PNP	Switching output 2x NPN	Pin allocation for input	Pin allocation for output
		Adapted for position sensors SMH-S1-HG	<p>1 = +24 V 2 = Out B 3 = 0 V 4 = Out A</p>

1) Core colours indicated apply when using plug sockets with cable NEBU-M8 or SIM-M8

Dimensions

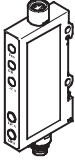
Download CAD data → www.festo.com

Technical drawing showing dimensions and component callouts for the SVE4 signal converter. Dimensions include 10.4, 20, 30, 24.3, 40.7, 34.6, 17, 35.4, 65, 108, 20, 12, 4, 9, 32, and 3.4. Callouts 1-5 identify components: 1 Plug M8x1 to EN 60947-5-2, 2 LED display, 3 Socket M8x1 to EN 60947-5-2, 4 Adapter plate for wall mounting, 5 Inscription label holder.

Signal converters SVE4

Technical data


FESTO

Ordering data					
Version	Signal range	Switching output PNP		Switching output NPN	
		Part No.	Type	Part No.	Type
	0 ... 10 ± 0.3 V	544217	SVE4-US-R-HM8-2P-M8	544220	SVE4-US-R-HM8-2N-M8
	0 ... 20 ± 0.6 mA	544218	SVE4-IS-R-HM8-2P-M8	544221	SVE4-IS-R-HM8-2N-M8
	Adapted for position sensors SMH-S1-HG	544216	SVE4-HS-R-HM8-2P-M8	544219	SVE4-HS-R-HM8-2N-M8



Signal converters SVE4

Accessories

FESTO



Ordering data – Connecting cables for signal input				Technical data → Internet: nebu
	Number of wires	Cable length [m]	Part No.	Type
M8x1, straight plug				
	4	2.5	554033	NEBU-M12G5-E-2.5-W3-M8G4-V2 ¹⁾
			554034	NEBU-M12G5-E-2.5-W2-M8G4-V1 ²⁾
			554035	NEBU-M8G4-K-2.5-M8G4 ³⁾
			554036	NEBU-M12G5-K-2.5-M8G4 ⁴⁾
			554037	NEBU-M8G3-K-2.5-M8G4 ⁴⁾

- 1) For connecting signal converter SVE4-US to pressure transmitter SPTW-...-VD-M12.
- 2) For connecting signal converter SVE4-IS to pressure transmitter SPTW-...-A-M12.
- 3) For connecting to position transmitter SMAT-8M.
- 4) For connecting to proximity sensor SIEA.

Ordering data – Connecting cables for switching output				Technical data → Internet: nebu
	Number of wires	Cable length [m]	Part No.	Type
M8x1, straight socket				
	4	2.5	541342	NEBU-M8G4-K-2.5-LE4
		5	541343	NEBU-M8G4-K-5-LE4
M8x1, angled socket				
	4	2.5	541344	NEBU-M8W4-K-2.5-LE4
		5	541345	NEBU-M8W4-K-5-LE4

- - Note

User-friendly configurator for easy selection of connecting cables NEBU
 → www.festo.com/catalogue

Ordering data		
	Part No.	Type
Adapter plate		
	540214	SXE3-W
Mounting rail		
	35430	NRH-35-2000