

Signal converters SVE4

FESTO



Signal converters SVE4

Product range and peripherals overview

FESTO

| 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 |
| | | 2 Adapter plate SXE3-W |
| | | 3 Mounting rail to DIN EN 60715 NRH-35-2000 |
| | | 4 Connecting cable for switching output NEBU |
| | | 5 Inscription label holder SXE3 (included in the scope of delivery) |

Signal converters SVE4

Type codes

FESTO

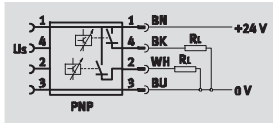
| | | | | | | | | | | | | | |
|---|--|------|---|----|---|---|---|---|----|---|----|---|----|
| | | SVE4 | - | US | - | R | - | H | M8 | - | 2P | - | M8 |
| Type | | | | | | | | | | | | | |
| SVE4 | Signal converter | | | | | | | | | | | | |
| Signal range | | | | | | | | | | | | | |
| US | 0 ... 10 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 | | | | | | | | | | | | |
| Mounting | | | | | | | | | | | | | |
| H | H-rail mounting | | | | | | | | | | | | |
| Electrical connection (signal input) | | | | | | | | | | | | | |
| M8 | Socket M8x1, 4-pin | | | | | | | | | | | | |
| Switching output | | | | | | | | | | | | | |
| 2P | 2x PNP | | | | | | | | | | | | |
| 2N | 2x NPN | | | | | | | | | | | | |
| Electrical connection (switching output) | | | | | | | | | | | | | |
| M8 | Plug M8x1, 4-pin | | | | | | | | | | | | |

Signal converters SVE4

Technical data

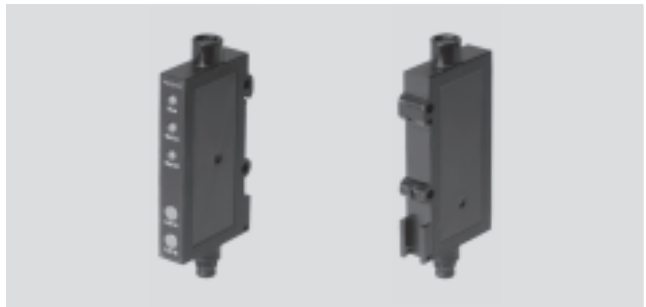
FESTO

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

FESTO

| 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 V ¹⁾ | | | |
|---------------------------------------|-------------------------|--------------------------|---------------------------|
| Switching output 2x PNP | Switching output 2x NPN | Pin allocation for input | Pin allocation for output |
| | | | |

| Signal range 0 ... 20 mA ¹⁾ | | | |
|--|-------------------------|--------------------------|---------------------------|
| Switching output 2x PNP | Switching output 2x NPN | Pin allocation for input | Pin allocation for output |
| | | | |

| 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 |
| | | <p>Adapted for position sensors SMH-S1-HG</p> | |


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

| Dimensions | Download CAD Data → www.festo.com/us/cad |
|------------|--|
| | <ul style="list-style-type: none"> 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-0-VD-M12.

2) For connecting signal converter SVE4-IS to pressure transmitter SPTW-0-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 |

Product Range and Company Overview

A Complete Suite of Automation Services

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



Custom Automation Components
Complete custom engineered solutions



Custom Control Cabinets
Comprehensive engineering support and on-site services



Complete Systems
Shipment, stocking and storage services

The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



Electromechanical
Electromechanical actuators, motors, controllers & drives



Pneumatics
Pneumatic linear and rotary actuators, valves, and air supply



PLCs and I/O Devices
PLC's, operator interfaces, sensors and I/O devices

Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 12,000 employees in 56 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.



© Copyright 2008, Festo Corporation. While every effort is made to ensure that all dimensions and specifications are correct, Festo cannot guarantee that publications are completely free of any error, in particular typing or printing errors. Accordingly, Festo cannot be held responsible for the same. For Liability and Warranty conditions, refer to our "Terms and Conditions of Sale", available from your local Festo office. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of Festo. All technical data subject to change according to technical update.



Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmentally friendly printing plant.

Festo North America

Festo Regional Contact Center

5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Canada

USA Customers:

For ordering assistance,

Call: 1.800.99.FESTO (1.800.993.3786)

Fax: 1.800.96.FESTO (1.800.963.3786)

Email: customer.service@us.festo.com

For technical support,

Call: 1.866.GO.FESTO (1.866.463.3786)

Fax: 1.800.96.FESTO (1.800.963.3786)

Email: product.support@us.festo.com

Canadian Customers:

Call: 1.877.GO.FESTO (1.877.463.3786)

Fax: 1.877.FX.FESTO (1.877.393.3786)

Email: festo.canada@ca.festo.com

USA Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788, USA
www.festo.com/us

USA Sales Offices

Appleton

North 922 Tower View Drive, Suite N
Greenville, WI 54942, USA

Boston

120 Presidential Way, Suite 330
Woburn, MA 01801, USA

Chicago

1441 East Business Center Drive
Mt. Prospect, IL 60056, USA

Dallas

1825 Lakeway Drive, Suite 600
Lewisville, TX 75057, USA

Detroit – Automotive Engineering Center

2601 Cambridge Court, Suite 320
Auburn Hills, MI 48326, USA

New York

395 Moreland Road
Hauppauge, NY 11788, USA

Silicon Valley

4935 Southfront Road, Suite F
Livermore, CA 94550, USA

United States



USA Headquarters, East: Festo Corp., 395 Moreland Road, Hauppauge, NY 11788

Phone: 1.631.435.0800; Fax: 1.631.435.8026;

Email: info@festo-usa.com

www.festo.com/us

Canada



Headquarters: Festo Inc., 5300 Explorer Drive, Mississauga, Ontario L4W 5G4

Phone: 1.905.624.9000; Fax: 1.905.624.9001;

Email: festo.canada@ca.festo.com

www.festo.ca

Mexico



Headquarters: Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquahuac,
54020 Tlalneapantla, Edo. de México

Phone: 011 52 [55] 53 21 66 00; Fax: 011 52 [55] 53 21 66 65;

Email: festo.mexico@mx.festo.com

www.festo.com/mx

Central USA

Festo Corporation
1441 East Business
Center Drive
Mt. Prospect, IL 60056, USA
Phone: 1.847.759.2600
Fax: 1.847.768.9480



Western USA

Festo Corporation
4935 Southfront Road,
Suite F
Livermore, CA 94550, USA
Phone: 1.925.371.1099
Fax: 1.925.245.1286



Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark
Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan Latvia
Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore
Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

www.festo.com