

Signal converters SVE4

Product overview



- Signal input range 0 ... 10 V, 0 ... 20 mA or for position sensors SMH-S1-HG
- Switch output 2x PNP or 2x NPN
- Switching function freely programmable
- Mounting direct, on DIN H-rail or with adapter plate

Detailed product information
 → www.festo.com/catalogue/sve4

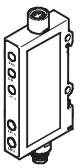
| Type codes | | SVE4 | - | US | - | R | - | H | M8 | - | 2P | - | M8 |
|--|--|------|---|----|---|---|---|---|----|---|----|---|----|
| Type | | | | | | | | | | | | | |
| SVE4 | Signal converter | | | | | | | | | | | | |
| Signal input range | | | | | | | | | | | | | |
| US | 0 ... 10 V | | | | | |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

Signal converters SVE4

Technical data

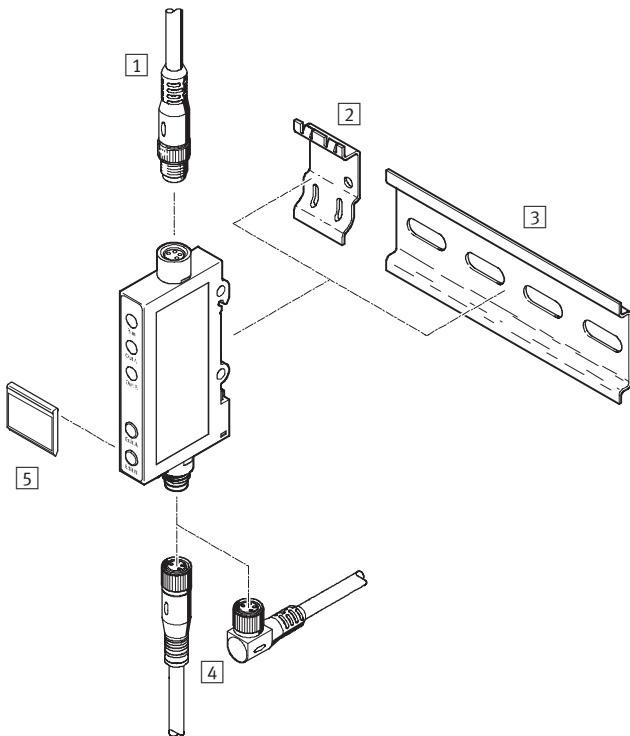
FESTO

| Technical data | | | |
|---|-------------------------------------|-------------------------------------|--|
| Type | SVE4-US | SVE4-IS | SVE4-HS |
| Electrical data | | | |
| Signal input range | 0 ... 10 ± 0.3 V | 0 ... 20 ± 0.6 mA | Adapted for position sensors SMH-S1-HG |
| Switch output | 2x PNP 2x NPN | | |
| Switching element function | Switchable | | |
| Switching function | Freely programmable | | |
| Setting options | Teach-in | | |
| Operating voltage range [V DC] | 10 ... 30 | | |
| Electrical connection | Input | Socket M8x1, 4-pin, to EN 60947-5-2 | |
| | Output | Plug M8x1, 4-pin, to EN 60947-5-2 | |
| Protection against short circuit | Pulsed | | |
| Protection against polarity reversal | Yes | | |
| Operating and environmental conditions | | | |
| Ambient temperature [°C] | -20 ... 70 | | |
| CE mark (see declaration of conformity) | In accordance with EU EMC directive | | |
| Certification | C-Tick | | |
| Protection class | IP65 | | |
| Materials | | | |
| Housing | Acrylic butadiene styrene | | |


| Ordering data | | | | | |
|---|--|-------------------|---------------------|-------------------|---------------------|
| Variant | Signal input range | Switch output PNP | | Switch output NPN | |
| | | Part No. | Type | Part No. | Type |
|  | 0 ... 10 ± 0.3 V | 544 217 | SVE4-US-R-HM8-2P-M8 | 544 220 | SVE4-US-R-HM8-2N-M8 |
| | 0 ... 20 ± 0.6 mA | 544 218 | SVE4-IS-R-HM8-2P-M8 | 544 221 | SVE4-IS-R-HM8-2N-M8 |
| | Adapted for position sensors SMH-S1-HG | 544 216 | SVE4-HS-R-HM8-2P-M8 | 544 219 | SVE4-HS-R-HM8-2N-M8 |



Signal converters SVE4


Peripherals overview



| Accessories | |
|-------------|---|
| 1 | Connecting cable for signal input |
| 2 | Adapter plate SXE3-W |
| 3 | Mounting rail to DIN EN 60715 |
| 4 | Connecting cable for switch output |
| 5 | Inscription label holder SXE3 (included in scope of delivery) |

| Ordering data – Connecting cables for signal input | | | | Technical data → 269 | |
|---|-----------------|------------------|---|----------------------|--|
| | Number of wires | Cable length [m] | Part No. | Type | |
| M8x1, straight socket | | | | | |
|  | 4 | 2 | 175 714 | KSMH-1-M8-2-M8 | |
| | | 0.1 ... 25 | Configurator for easy selection of application-specific connecting cables → 266 | | |

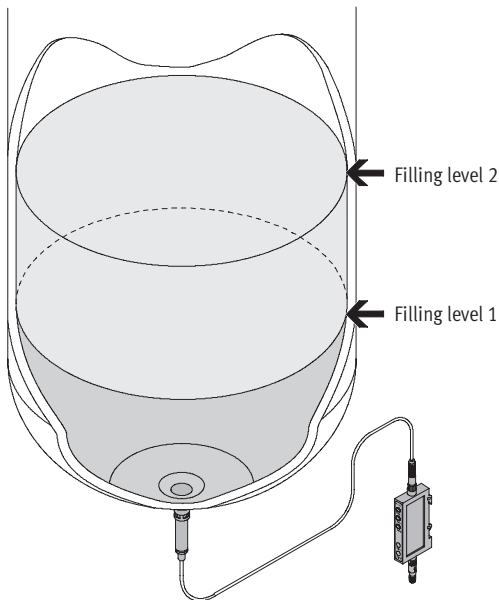
| Ordering data – Connecting cables for switch output | | | | Technical data → 261 | |
|---|-----------------|------------------|----------|----------------------|--|
| | Number of wires | Cable length [m] | Part No. | Type | |
| M8x1, straight socket | | | | | |
|  | 4 | 2.5 | 541 342 | NEBU-M8G4-K-2.5-LE4 | |
| | | 5 | 541 343 | NEBU-M8G4-K-5-LE4 | |
| M8x1, angled socket | | | | | |
|  | 4 | 2.5 | 541 344 | NEBU-M8W4-K-2.5-LE4 | |
| | | 5 | 541 345 | NEBU-M8W4-K-5-LE4 | |

| Ordering data – Adapter plate | |
|---|----------------|
| | Part No. Type |
|  | 540 214 SXE3-W |

Signal converters SVE4

Application examples

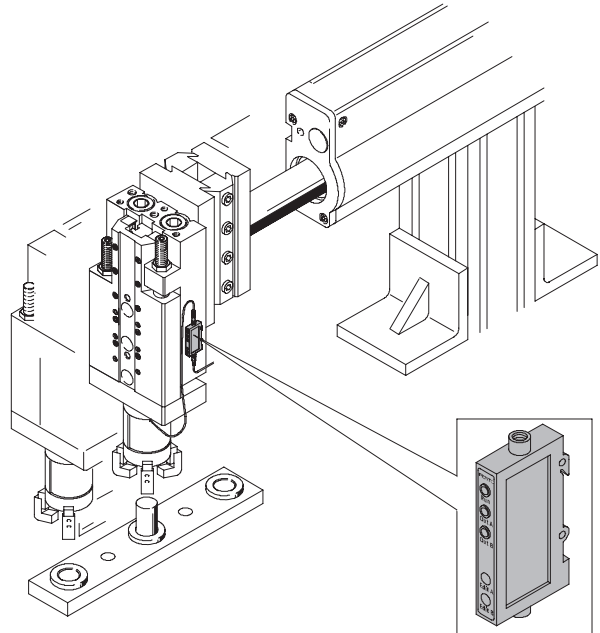
Pump control with SVE4 and pressure transmitter SDET



- A pump control system can easily be realised on a storage tank in combination with the pressure transmitter SDET, which measures the pressure of the liquid column.

The filling levels 1 (= pump on) and 2 (= pump off) are simply taught at the touch of a button.

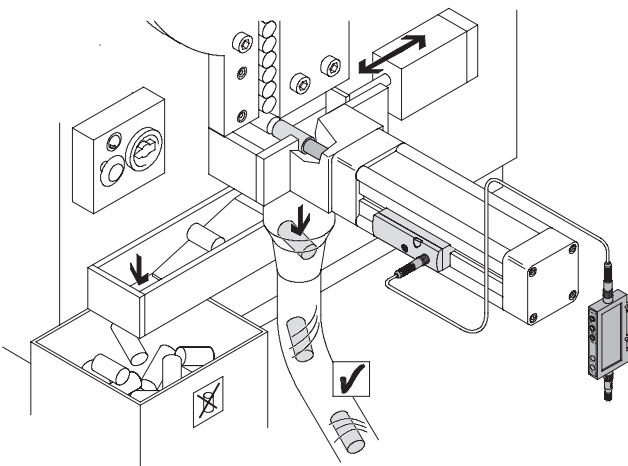
Detection of parts with SVE4 and position sensor SMH-S1



- A part detection system can easily be realised in combination with the position sensor SMH-S1, which senses the position of the jaws on a

gripper. The three statuses "Gripper open", "Part gripped" and "Part not gripped" can be taught at the touch of a button, using just two outputs.

Quality inspection with SVE4 and position transmitter SMAT-8E



- A quality inspection system can easily be realised in combination with the position transmitter SMAT-8E, which senses the position of a feed cylinder in a rivet sorting machine, where the rivet is pressed

against a stop. The upper and lower deviation can simply be taught at the touch of a button. Parts that do not lie within the tolerance range are rejected.