

Limit switch boxes SRBI

FESTO



Key features

Function

Limit switch boxes SRBI are the most compact solution when it comes to electrical feedback signals and monitoring the position of process valves which are actuated with

pneumatic quarter turn actuators. They can be mounted directly without other accessories on quarter turn actuators with a port pattern to VDI/VDE 3845.

Direct mounting means that they require minimal space.

Design

- Direct mounting on quarter turn actuators to VDI/VDE 3845
- LED indicator for ready status, switching status and position status
- For clockwise and anticlockwise rotating actuators with up to 90° rotation

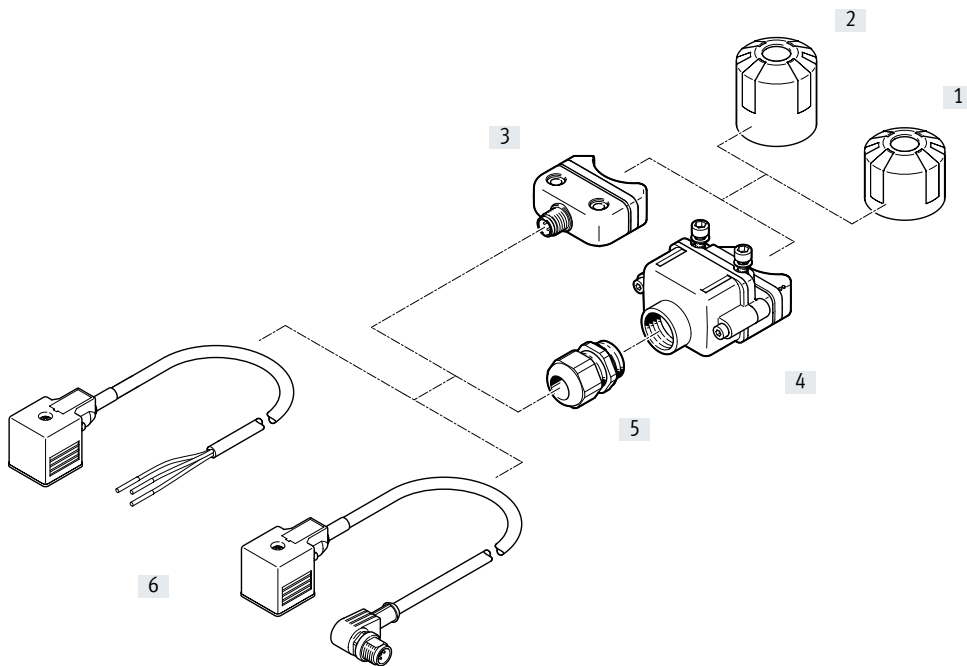
- Compact polymer housing
- M12 plug, A-coded or screw terminal
- c UL us - Recognized (OL)



Product range overview

Electrical connection, input	Type	Operating voltage range [V DC]	Switching output	Switching element function	Pin allocation
M12 plug, A-coded	SRBI-C2-N-1-P-M12	10 ... 30	PNP	N/O	
Screw terminal	SRBI-C2-N-1-P-C2	10 ... 30	PNP	N/O	

Peripherals overview



Accessories	Description	→ Page/Internet
[1] Position indicator SASF-S3-B-F-A20	<ul style="list-style-type: none"> • Dimensions $\varnothing 40 \times 32$ • Connection for positioner and position sensor conforms to standard VDI/VDE 3845 size AA 1 	9
[2] Position indicator SASF-S3-B-F-A30	<ul style="list-style-type: none"> • Dimensions $\varnothing 40 \times 43$ • Connection for positioner and position sensor conforms to standard VDI/VDE 3845 size AA 2 	9
[3] Limit switch box SRBI-...-M12	<ul style="list-style-type: none"> • Electrical connection input M12 plug, A-coded 	5
[4] Limit switch box SRBI-...-C2	<ul style="list-style-type: none"> • Electrical connection input screw terminal 	5
[5] Cable connector NETC-P-...	<ul style="list-style-type: none"> • M20x1.5 made from polymer • Colour: black 	9
[6] Connecting cables NEBV-...	<ul style="list-style-type: none"> • Connecting cables for connecting a solenoid valve to SRBI-...-M12 or SRBI-...-C2 	9

Type codes

001	Series	
SRBI	Limit switch box	

002	Design type	
C2	Dual sensor, compact	

003	Sensor principle	
N	Proximity sensor, inductive	

004	Nominal operating voltage	
1	24 V DC	

005	Electrical output 1	
P	PNP	

006	Electrical connection	
C2	Screw terminal	
M12	Plug M12, A-coded	

Data sheet

- Compact housing with M12 plug, A-coded or screw terminal
- Direct mounting on quarter turn actuators to VDI/VDE 3845
- Switching output PNP



General technical data		
Electrical connection, input	Plug, M12x1, 4-pin	Screw terminal
Based on standard	EN 60947-5-2, VDI/VDE 3845	
Mounting position	Any	
Design	Rectangular	
Product weight	48 g	98 g

Electrical characteristic data		
Electrical connection, input	Plug, M12x1, 4-pin	Screw terminal
Measuring principle	Inductive	
Switching output	PNP	
Switching element function	N/O	
Max. switching frequency	1000 Hz	
Operating voltage range DC	10 ... 30 V	
Max. output current DC	200 mA	
Voltage drop	2.5 V	
No-load supply current	22.5 mA	
Residual current	0 ... 0.5 mA	
Reverse polarity protection	For all electrical connections	
Short circuit current rating	Pulsed	

Display/operation		
Electrical connection, input	Plug, M12x1, 4-pin	Screw terminal
Ready status indication	Green LED	
Switching status indication	Yellow LED	
Status indication	Yellow LED = valve switching status, green LED = power supply indicator	

Data sheet

Electromechanics		
Electrical connection, input	Plug, M12x1, 4-pin	Screw terminal
Electrical connection, output	–	Screw terminal
Cable diameter	–	1.5 ... 2.5 mm
Connectable nominal conductor cross section	–	0.2 ... 2.5 mm ²
Cable connector	–	M20x1.5

Operating and environmental conditions	
Ambient temperature	-25 ... 70°C
Storage temperature	-40 ... 85°C
Degree of protection	IP67
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6
Pollution degree	3
Certification ¹⁾	RCM, c UL us - Recognized (OL)
KC mark	KC EMC
Certificate issuing authority	UL E232949

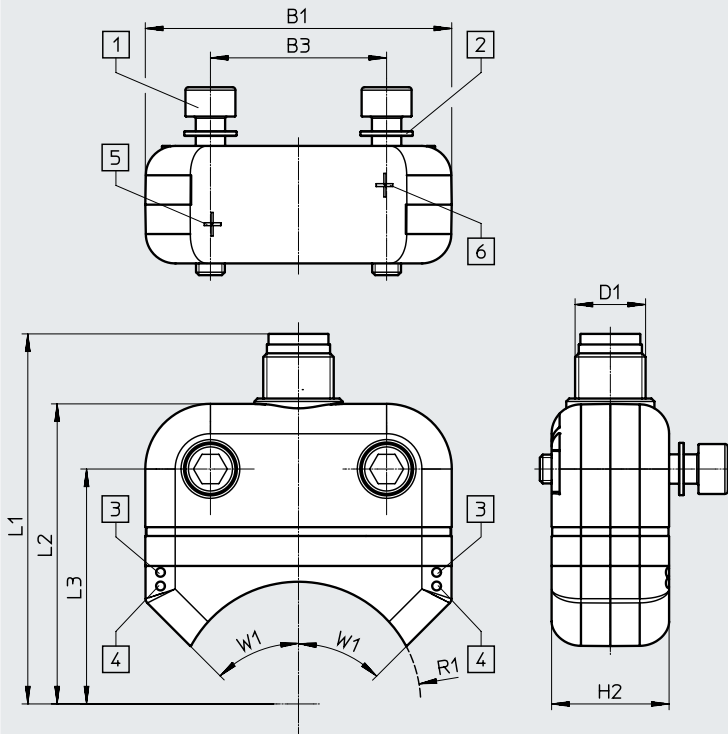
1) Additional information: www.festo.com/catalogue/... → Support/Downloads.

Materials	
Housing material	PBT
Material of screws	High-alloy stainless steel
Note on materials	Contains paint-wetting impairment substances, RoHS-compliant

Data sheet

Dimensions

Download CAD data → www.festo.com



- [1] Screw M5x25
- [2] Washer 10x5.3
- [3] Green LED
- [4] Yellow LED
- [5] Inductive sensor target position 1
- [6] Inductive sensor target position 2

	B1	B3	D1	H2	L1	L2	L3	R1	W1
SRBI...-M12	52.2	30	M12	20	63	51.1	40	20.8	45°

Circuitry to DIN EN 61076-2-101

View of M12 plug, A-coded

Pin	Wire colour ¹⁾
1	BN
2	WH
3	BU
4	BK

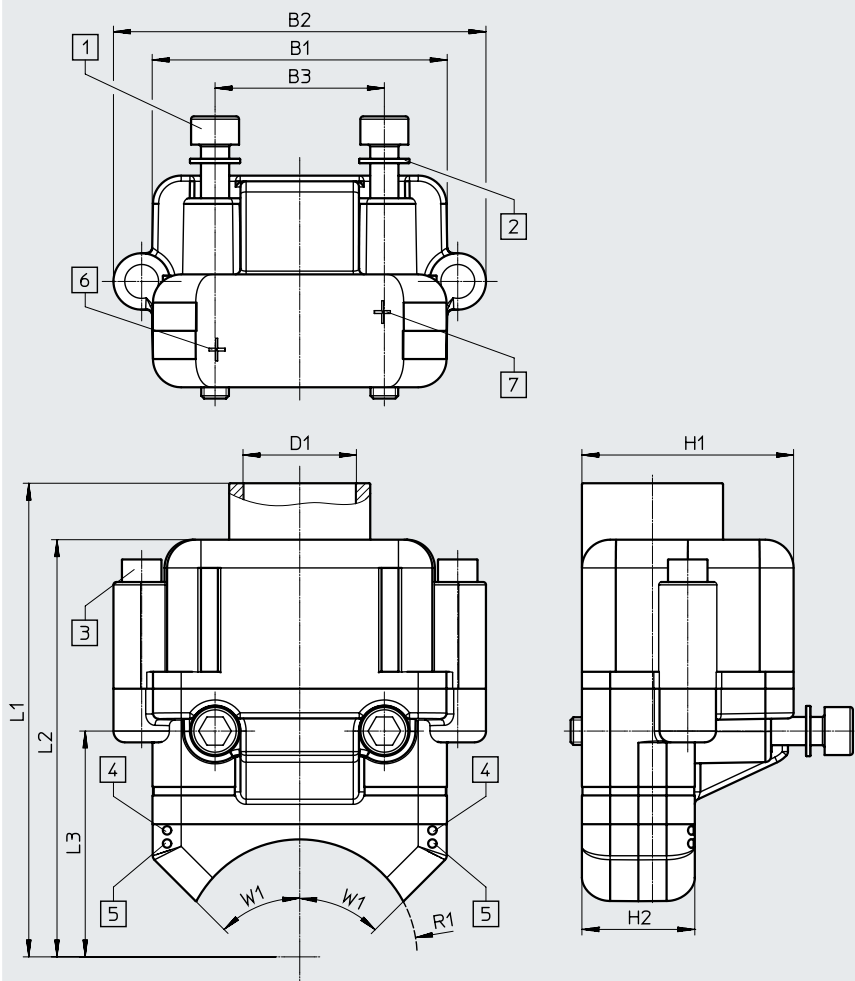
1) To EN 60947-5-2

Note
Pin allocation
→ page 2

Data sheet

Dimensions

Download CAD data → www.festo.com



- [1] Screw M5x40
- [2] Washer 10x5.3
- [3] Screw M4x25
- [4] Green LED
- [5] Yellow LED
- [6] Inductive sensor target position 1
- [7] Inductive sensor target position 2

	B1	B2	B3	D1	H1	H2	L1	L2	L3	R1	W1
SRBI...C2	52.2	66	30	M20x1.5	37.5	20	83.9	73.9	40	20.8	45°

Note
 Pin allocation
 → page 2

Ordering data

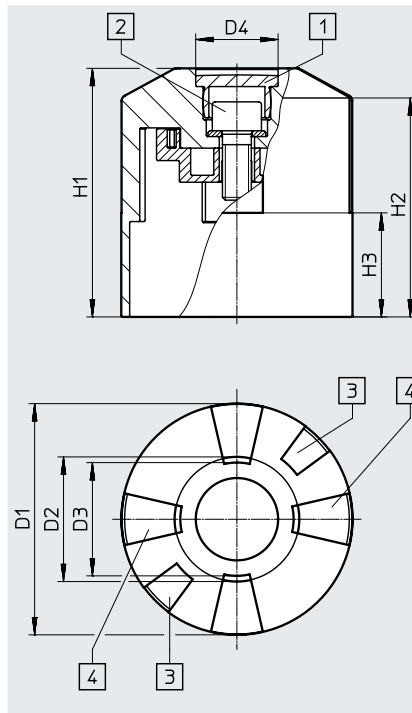
	Description	Part no.	Type
	Electrical connection input plug, M12x1, 4-pin, A-coded	8140399	SRBI-C2-N-1-P-M12
	Electrical connection input screw terminal	8140400	SRBI-C2-N-1-P-C2

Accessories

Position indicators SASF


Materials:
PP and high-alloy stainless steel

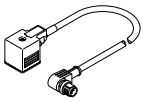
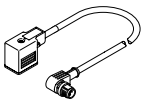
RoHS-compliant
Contains paint-wetting impairment substances

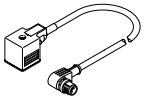
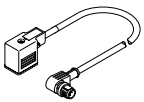


- [1] Sealing plug
- [2] Screws (M5 and M6) and washer included in scope of delivery
- [3] Actuating lug (2x)
- [4] Identification stopper – yellow (2x)
- [5] Identification stopper – black (2x)

Dimensions and ordering data									
H1	H2	H3	D1 ∅	D2 ∅	D3 ∅	D4 ∅	Product weight [g]	Part no.	Type
33	28	8	40	21.6	19.6	14.3	24	8140396	SASF-S3-B-F-A20
43	38	18	40	21.6	19.6	14.3	26	8140397	SASF-S3-B-F-A30

Ordering data				
	Description	Colour	Part no.	Type
Cable connectors NETC				
	M20x1.5 made from polymer	Black	4464895	NETC-P-M20

Ordering data					
	Electrical connection	Cable length [m]	Protective circuit	Part no.	Type
Connecting cables NEBV for valve connection for limit switch attachments with AS-Interface					
	Angled socket, plug pattern type A, EN 175301-803	0.3	Yes	3679771	NEBV-A1W3F-P-K-0.3-N-M12W3
			No	3579461	NEBV-A1W3-K-0.3-N-M12W3
		0.6	Yes	3679772	NEBV-A1W3F-P-K-0.6-N-M12W3
			No	3579462	NEBV-A1W3-K-0.6-N-M12W3
	Angled socket, plug pattern type B, to industry standard 11 mm	0.3	Yes	3679773	NEBV-B2W3F-P-K-0.3-N-M12W3
			No	3579463	NEBV-B2W3-K-0.3-N-M12W3
		0.6	Yes	3679774	NEBV-B2W3F-P-K-0.6-N-M12W3
			No	3579464	NEBV-B2W3-K-0.6-N-M12W3

Connecting cables NEBV for valve connection for limit switch boxes with screw terminal					
	Electrical connection	Cable length [m]	Protective circuit	Part no.	Type
	Angled socket, plug pattern type A, EN 175301-803	0.6	No	3579466	NEBV-A1W3-K-0.6-N-LE3
	Angled socket, plug pattern type B, to industry standard 11 mm	0.6	No	3579468	NEBV-B2W3-K-0.6-N-LE3