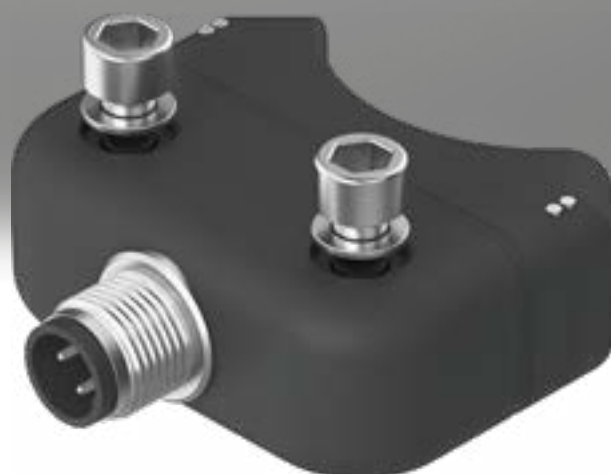


Limit switch boxes SRBI

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

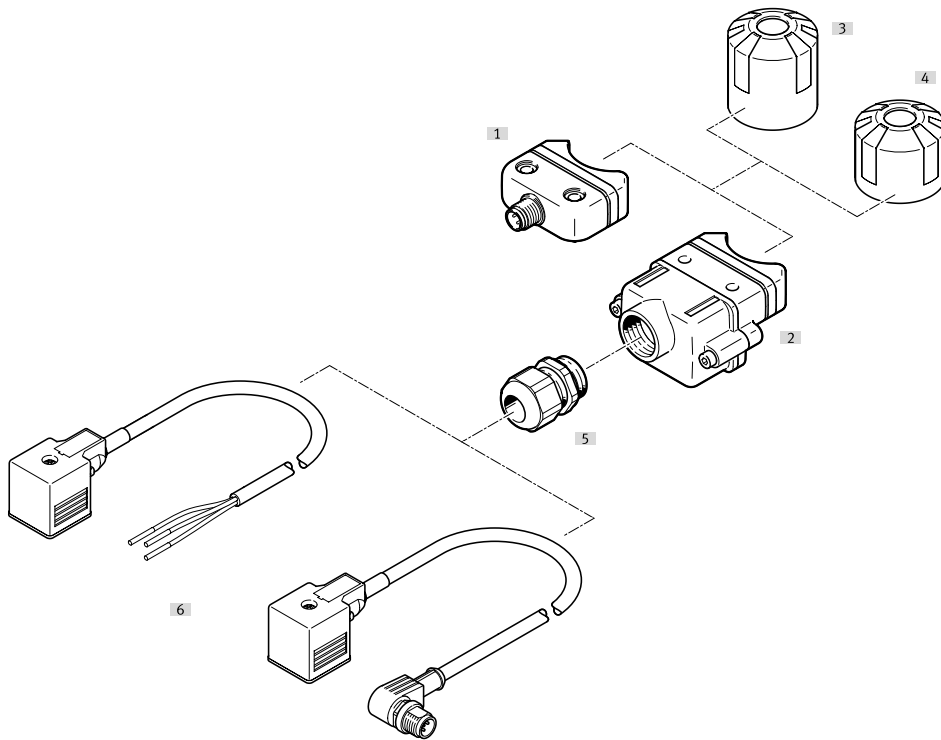
- Compact polymer housing
- M12 plug, A-coded or screw terminal
- c UL us - Recognized (OL)



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] Limit switch box SRBI-...-M12	• Electrical connection input M12 plug, A-coded	5
[2] Limit switch box SRBI-...-C2	• Electrical connection input screw terminal	5
[3] Position indicator SASF-S3-B-F-A30	• Dimensions $\varnothing 40 \times 43$ • Connection for positioner and position sensor conforms to standard VDI/VDE 3845 size AA 2	9
[4] Position indicator SASF-S3-B-F-A20	• Dimensions $\varnothing 40 \times 32$ • Connection for positioner and position sensor conforms to standard VDI/VDE 3845 size AA 1	9
[5] Cable connector NETC-P-...	• M20x1.5 made from polymer • Colour: black	10
[6] Connecting cables NEBV-...	• Connecting cables for connecting a solenoid valve to SRBI-...-M12 or SRBI-...-C2	10

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

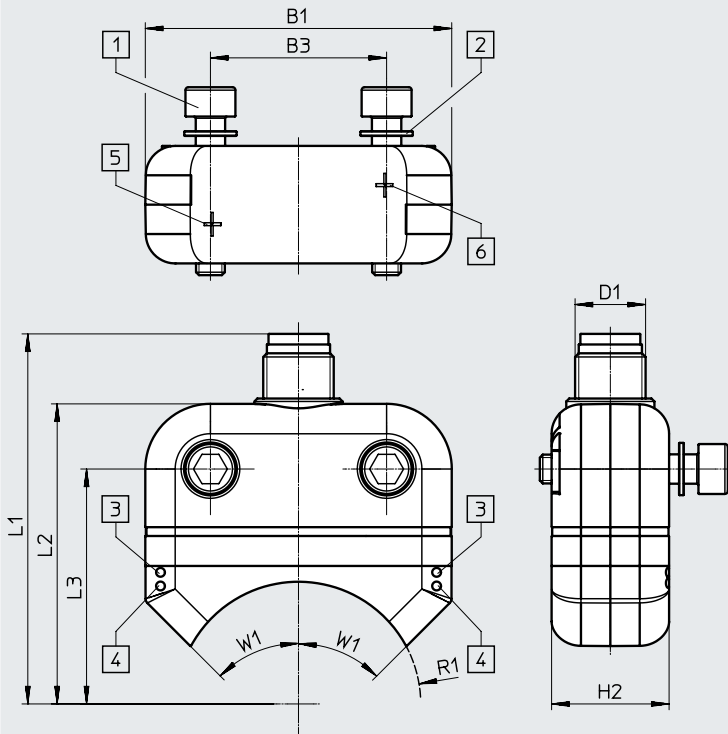
1) Additional information: www.festo.com/catalogue/... → Support/Downloads.

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

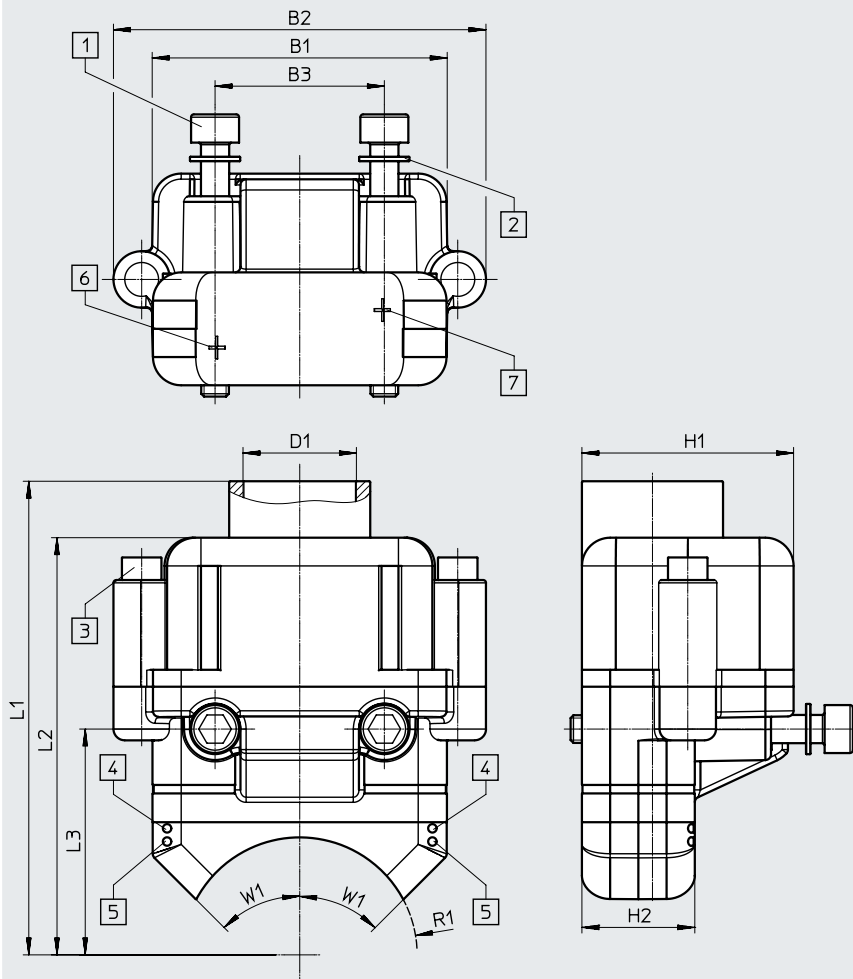
1) To EN 60947-5-2

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

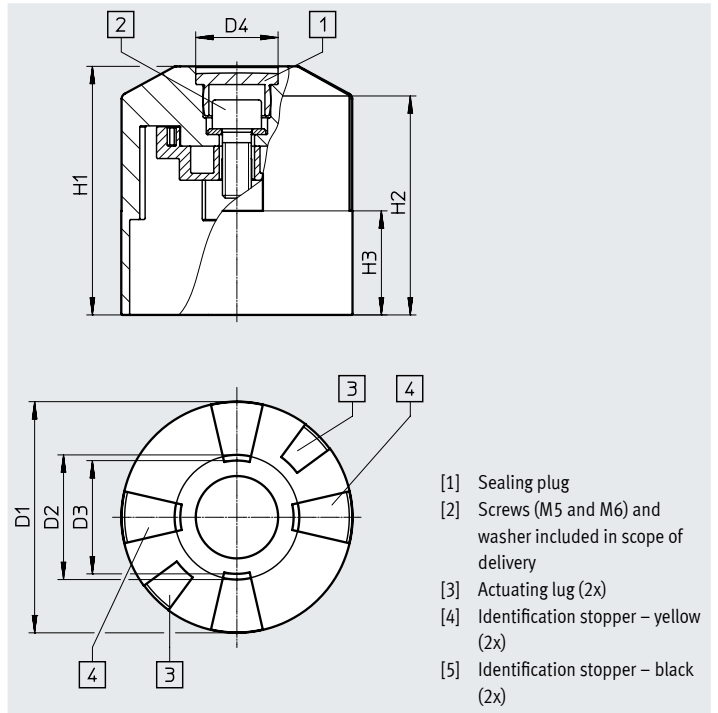
	Description	Part no.	Type
	Electrical connection input plug, M12x1, 4-pin, A-coded	8140399	SRBI-C2-N-1-P-M12
	Electrical connection input screw terminal	8140400	SRBI-C2-N-1-P-C2

Accessories

Position indicators SASF

Materials:
PP and high-alloy stainless steel


RoHS-compliant
Contains paint-wetting impairment substances

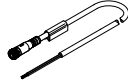


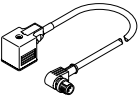
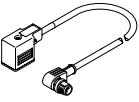
Dimensions and ordering data

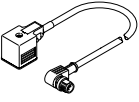
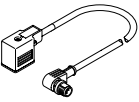
H1	H2	H3	D1 ∅	D2 ∅	D3 ∅	D4 ∅	Product weight [g]	Part no.	Type
33	28	8	40	21.6	19.6	14.3	24	8140396	SASF-S3-B-F-A20
43	38	18	40	21.6	19.6	14.3	26	8140397	SASF-S3-B-F-A30

Accessories

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

Ordering data – NEBU						
	Cable characteristic	Cable length [m]	Outlet direction	Product weight [g]	Part no.	Type
Socket, 5-pin, M12 – Open cable end, 4-wire						
	Standard	2.5	Straight	77	★ 550326	NEBU-M12G5-K-2.5-LE4
			Angled	78	550325	NEBU-M12W5-K-2.5-LE4
	5	Straight		143	★ 541328	NEBU-M12G5-K-5-LE4
				–	164259	SIM-M12-4GD-5-PU
		Angled		144	541329	NEBU-M12W5-K-5-LE4
				–	164258	SIM-M12-4WD-5-PU
	7	Straight	197	8003134	NEBU-M12G5-K-7-LE4	
	10	Angled	278	569841	NEBU-M12W5-K-10-LE4	


Ordering data – NEBV						
	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	

Ordering data – NEBS							
Electrical connection			Cable length [m]	Weight [g]	Part no.	Type	
Connection 1	Connection 2						
Socket, straight design	5-pin	Open end	5-wire	5	276	8030962	NEBS-M12G5-ES-5-LE5
				10	528	8030963	NEBS-M12G5-ES-10-LE5
				15	828	8097576	NEBS-M12G5-ES-15-LE5

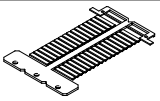
Accessories

Ordering data – Inscription label holder

	Length	Width	Height	For cable diameter	Part no.	Type	ST ¹⁾
	23 mm	5.4 mm	12.1 mm	4.2 ... 5.6 mm	8143238	NEAU-LH-4	100

1) Pack size

Ordering data – Inscription labels

	Use	Size	Part no.	Type	PJ ¹⁾
	Inscription label for insertion in label holder	23x4 mm	541598	ASLR-L-423	30

1) Packaging unit