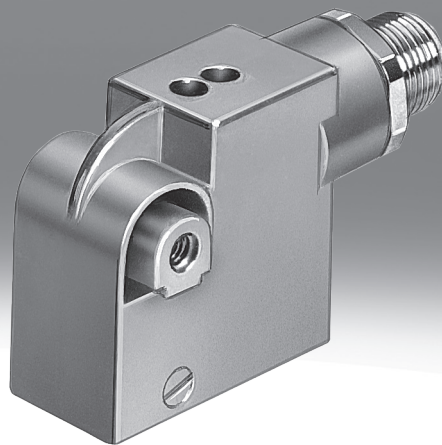


Proximity switch SMTSO-1

FESTO



Type code

001	Series
SMTSO-1	Proximity switch, block design, magneto-resistive, welding field resistant
002	Switching output, switching element function
PS	PNP, N/O contact, 3-wire

003	Electrical connection, cable length
S	Plug M8x1
004	Switching status indication
LED	Yellow LED
005	Rated operating voltage
24	24 V DC

Datasheet

General technical data

Design	Block design
Mounting position	optional
Based on standard	EN 60947-5-2
Approval	RCM trademark
CE mark (see declaration of conformity)	To EU EMC Directive, In accordance with EU RoHS Directive
CE marking (see declaration of conformity)	To UK RoHS instructions, To UK instructions for EMC
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B2-L

Input signal/measuring element

Measured variable	Position
Measuring principle	Magneto-inductive
Ambient temperature	-25 ... 70°C

Switching output

Switching output	PNP
Switching element function	N/O contact
Hysteresis	0.1 ... 1.5 mm
Repetition accuracy	0.2 mm
Switch-on time	35 ms
Switch-off time	20 ms
Max. switching frequency	20 Hz
Max. output current	200 mA
Max. switching capacity DC	6 W
Voltage drop	3 V
Inductive protective circuit	Adapted to MZ, MY, ME coils

Output, additional data

Short circuit current rating	Pulsed
Overload protection	Available

Electronics

Operational voltage range DC	10 ... 30 V
Residual ripple	10%
Reverse polarity protection	For all electrical connections

Electromechanical systems

Electrical connection 1, connection type	Plugs
Electrical connection 1, function	Power supply, Switching output
Electrical connection 1, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection 1, number of connections/cores	3
Electrical connection 1, used connections/cores	3
Connection outlet orientation	In-line

Display/operation

Switching status indication	Yellow LED
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Datasheet

Mechanics

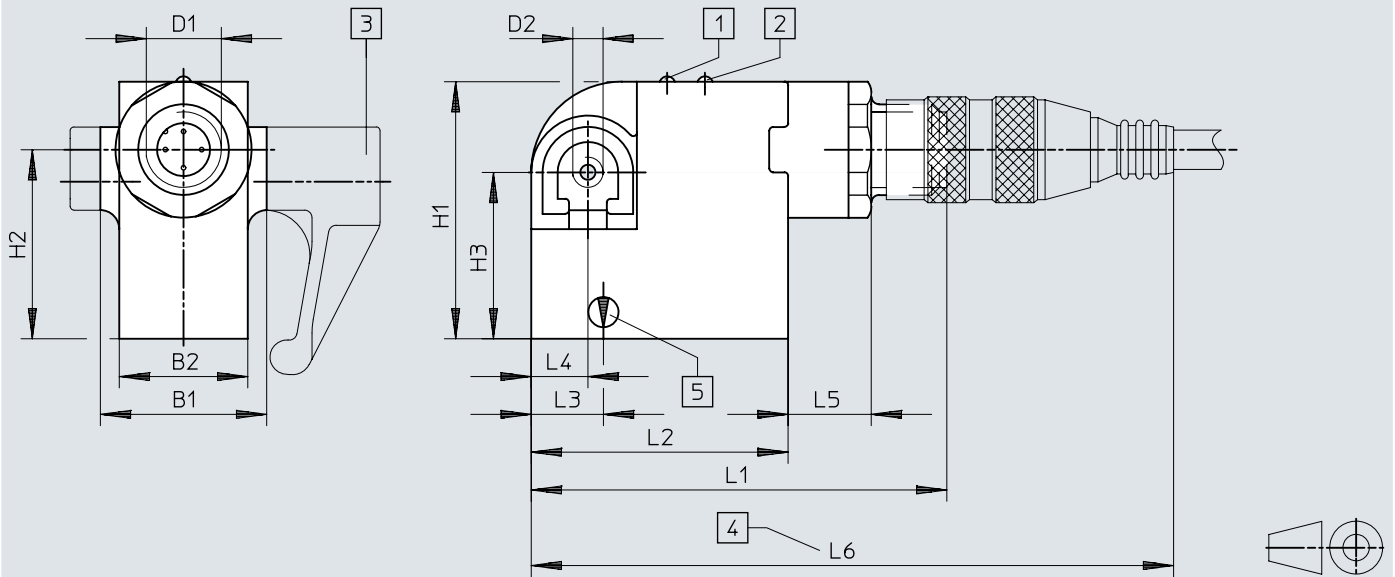
Electrical connection 1, connection type	Plugs
Type of mounting	With accessories
Product weight	70 g
Material housing	PA, PUR, Die-cast zinc

Immission/emission

Degree of protection	IP67
Corrosion resistance class CRC	2 - Moderate corrosion stress

Dimensions

Dimensions – Plug M12x1

Download CAD data → www.festo.com

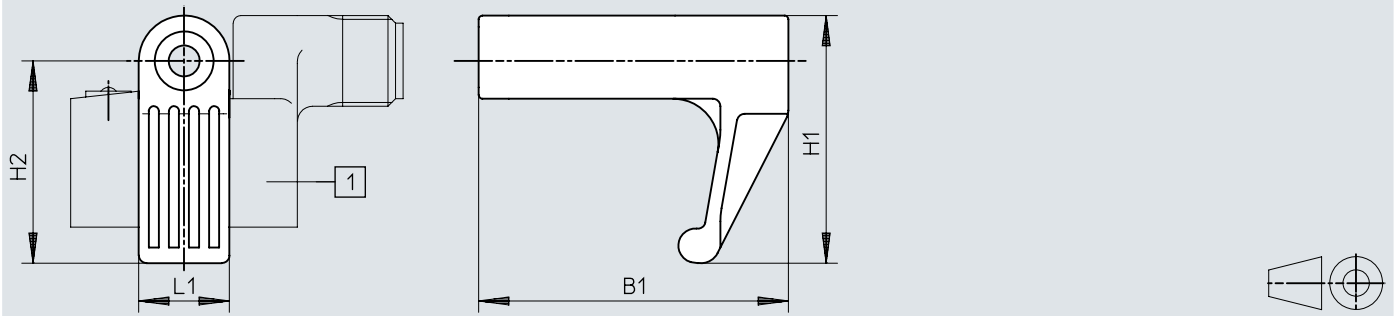
- [1] Green LED ready status indication
- [2] Yellow LED switching status
- [3] Mounting kit SMBT-1
- [4] Installation space for plug socket
- [5] Identification of theoretical switching point

	B1	B2	D1	D2	H1	H2	H3	L1	L2	L3	L4	L5	L6
	±0,25	+0,8			±0,3	±0,25	±0,2	±0,6	±0,3		±0,2	±0,3	
SMTSO-1-PS-S-LED-24	22	16,6	M12x1	M4	34	25	22	55	34	10	7,5	11	~85

Dimensions

Dimensions – Mounting kit SMBT-1


Download CAD data → www.festo.com



[1] Proximity switch SMTO-6

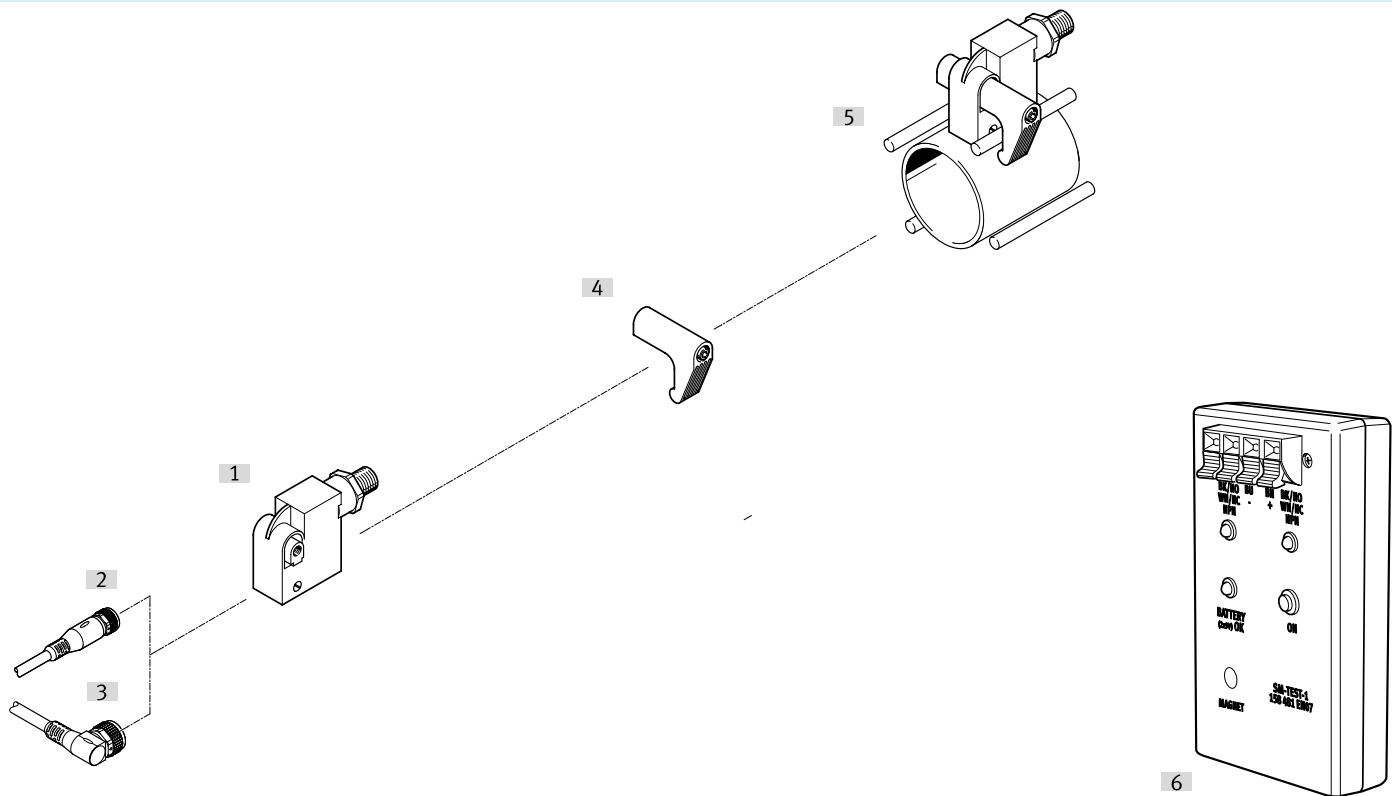
		B1 ±0,3	H1	H2 ±0,2	L1 ±0,2
SMBT-1	32 ... 200	41	33	27	12

Ordering data

Ordering data					
	Electrical connection 1, connection type	Electrical connection 1, number of connections/ cores	Switching output	Part no.	Type
	Plugs	3	PNP	30441	SMTSO-1-PS-S-LED-24

Peripherals


Peripherals overview




Accessories			→ Page/Internet
Type/order code	Description		
[1] Proximity switch SMTSO-1, magneto-resistive, weld-proof, with plug M12x1	Magneto-resistive, welding field resistant, with plug M12x1		smtso-1
[2] Connecting cable NEBU, socket M12x1, 3-pin, straight	Straight socket, M12x1, 3-pin		9
[3] Connecting cable NEBU, socket, M12x1, 3-pin, angled	Angled socket, M12x1, 3-pin		9
[4] Mounting kit SMBT-1	For standards-based cylinders DSBG		9
[5] Standards-based cylinder DSBG	–		–
[6] Sensor tester SM-TEST-1	Checking that the proximity switches are functioning using the built-in voltage source. Adjusting proximity switches on the cylinder		9

Accessories

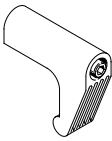
Connecting cable NEBU, socket M12x1, 5-pin, straight

	Connection technology left, field device side	Electrical connection 1, cable outlet	Connection technology right, controller side	Cable length [m]	Part no.	Type
	Socket M12x1 A-coded, EN 61076-2-101	Straight	Open end	2.5 m	★ 541363	NEBU-M12G5-K-2.5-LE3
				5 m	★ 541364	NEBU-M12G5-K-5-LE3

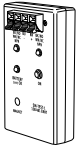
Connecting cable NEBU, socket M12x1, 5-pin, angled

	Connection technology left, field device side	Electrical connection 1, cable outlet	Connection technology right, controller side	Cable length [m]	Part no.	Type
	Socket M12x1 A-coded, EN 61076-2-101	Angled	Open end	2.5 m	541367	NEBU-M12W5-K-2.5-LE3
				5 m	541370	NEBU-M12W5-K-5-LE3

Mounting kit SMBT-1

	Size	LABS (PWIS) conformity	RoHS status	Part no.	Type
	1	VDMA24364-B2-L	Not RoHS-compliant	150002	SMBT-1

Sensor tester SM-Test-1

	Operational voltage range DC	Ambient temperature	Degree of protection	Part no.	Type
	12 ... 20 V	0 ... 40 °C	IP20	158481	SM-TEST-1