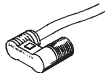

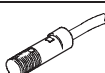
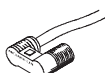


Proximity sensors, round design

Product range overview

FESTO

Measuring principle	Version	Type	Assembly	Switching element function		Switch output	Electrical connection	
				N/O contact	N/C contact		Cable	Plug
Magneto-inductive	Operating voltage range 10 ... 30 V DC							
		SMT0-4U	Via accessories	■	–	PNP	3-wire	M8x1, 3-pin
				■	–	NPN	3-wire	M8x1, 3-pin
Magnetic reed	Operating voltage range 12 ... 30 V AC/DC							
		SME0-4U	Via accessories	■	–	Contacting	3-wire	M8x1, 3-pin
		CRSME0-4 Corrosion resistant	Via accessories	■	–	Contacting	3-wire	–
Operating voltage range 12 ... 250 V AC/DC								
		SME0-4U	Via accessories	■	–	Contacting	2-wire	–

Proximity sensors, round design

Product range overview

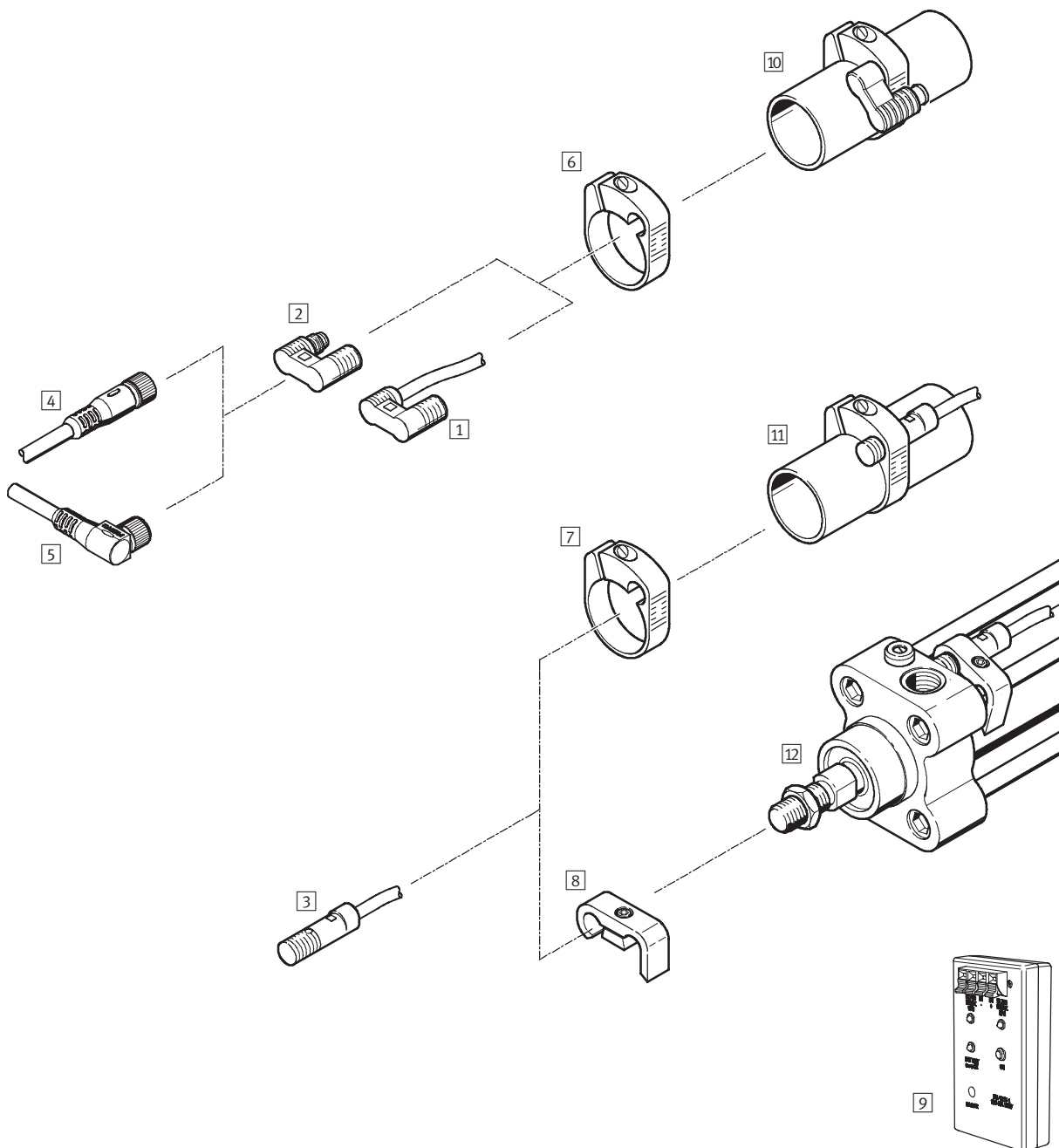
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Type	Connection direction		Switching status display via LED	Free of copper and PTFE	➔ Page/Internet
	In-line	Lateral			
Operating voltage range 10 ... 30 V DC					
SMT0-4U	■	–	■	■	6
	■	–	■	–	
Operating voltage range 12 ... 30 V AC/DC					
SME0-4U	■	–	■	■	8
CRSME0-4 Corrosion resistant	■	–	■	–	10
Operating voltage range 12 ... 250 V AC/DC					
SME0-4U	■	–	■	–	8

Proximity sensors, round design

Peripherals overview

FESTO



Proximity sensors, round design

Peripherals overview

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Mounting attachments and accessories		
	Brief description	→ Page/Internet
Proximity sensors		
1	SMT0-4U-K	Magneto-inductive, with cable
	SME0-4U-K	Magnetic reed, with cable
2	SMT0-4U-S	Magneto-inductive, with plug M8x1
	SME0-4U-S	Magnetic reed, with plug M8x1
3	CRSME0-4	Magnetic reed, corrosion resistant, with cable
Accessories		
4	Plug socket with cable NEBU-M83GD-...	Straight socket, M8x1, 3-pin
5	Plug socket with cable NEBU-M83WD-...	Angled socket, M8x1, 3-pin
6	Mounting kit SMBR-...	For round cylinders
7	Mounting kit CRSMBR-...	Corrosion resistant, for round cylinders
8	Mounting kit CRSMB-...	Corrosion resistant
9	Sensor tester SM-TEST-1	sm-test-1
Drives		
10	Round cylinders	Ø 8 ... 63 mm
11	Round cylinders CRDG, CRDSW, CRDSNU, stainless steel	Ø 12 ... 63 mm
12	Standard cylinders CRDNG, CRDNGS, stainless steel	Ø 32 ... 125 mm

Proximity sensors, round design

Type codes

FESTO

Drive accessories
Cylinder sensors

10.2

		SMT0	—	4U	—	PS	—	K	—	LED	—	24	—	
Function														
SMT0	Proximity sensor, magneto-inductive													
SME0	Proximity sensor, magnetic reed													
CRSME0	Proximity sensor, magnetic reed, corrosion resistant													
Design														
4U	Round design, U-shaped housing													
4	Round design, straight housing													
Switch output, switching element function														
PS	PNP, N/O contact, 3-wire													
NS	NPN, N/O contact, 3-wire													
	N/O contact, 2- or 3-wire													
Electrical connection, cable length														
K	Cable, 2.5 m													
K5	Cable, 5 m													
S	Plug M8x1													
Switching status display														
LED	Yellow LED													
Rated operating voltage														
24	24 V DC													
230	230 V AC													
Generation														
B	B series													

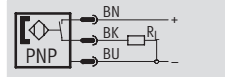
Proximity sensors SMT0-4U, round design, magneto-inductive

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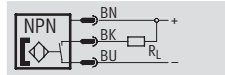
Technical data

Function

e.g. PNP, N/O contact, with plug



e.g. NPN, N/O contact, with plug



- Magneto-inductive measuring principle



Design	
Constructional design	Round
Type of mounting	Via accessories
Connection direction	In-line
Reproducibility of switching point ¹⁾ [mm]	±0.1
Switching status display	Yellow LED

1) Only applicable to drives secured against rotation

Technical data – N/O contact		
Switch output	PNP	
	NPN	
Electrical connection	Cable, 3-wire	Plug M8x1, 3-pin
Cable length [m]	2.5	–
Operating voltage range [V DC]	10 ... 30	
Max. output current [mA]	200	
Max. switching capacity [W]	6	
Voltage drop [V]	2	
Residual current [mA]	≤0.01	
Switch-on time [ms]	≤0.5	
Switch-off time [ms]	≤0.5	
Protection against short circuit	Yes	
Protection against polarity reversal	For all electrical connections	
Protection class	IP67	

Operating and environmental conditions			
Electrical connection	Cable		Plug
Cable installation	Fixed	Flexible	
Ambient temperature [°C]	–25... +70	–5 ... +70	–25... +70
Corrosion resistance class CRC ¹⁾	4		2
CE symbol (declaration of conformity)	In accordance with EU EMC directive		

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. 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.
- Corrosion resistance class 4 according to Festo standard 940 070
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

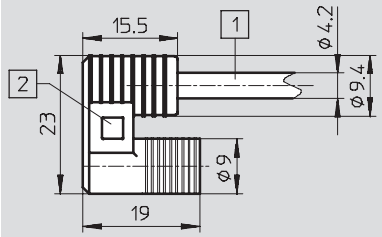
Materials	
Housing	Polyester
Cable sheath	Polyvinyl chloride
Note on materials	Free of copper and PTFE

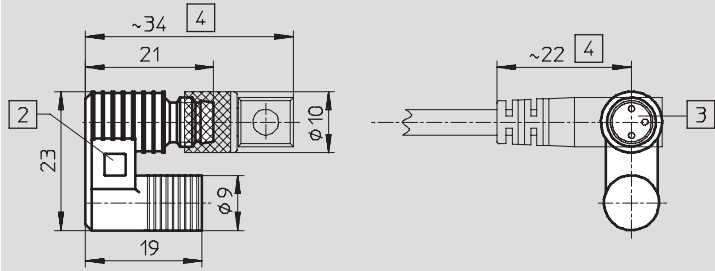
Proximity sensors SMT0-4U, round design, magneto-inductive

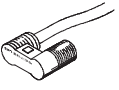
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Technical data

Product weights [g]		
Electrical connection	Cable	Cable with plug
N/O contact		
PNP	70	6
NPN	70	6

Dimensions		Download CAD data → www.festo.com
Cable type		
		

Plug type M8x1		
		

Ordering data						
	Switch output	Electrical connection		Cable length [m]	Part No.	Type
		Cable	Plug M8x1			
	N/O contact					
	PNP	3-wire	–	2.5	152 836	SMT0-4U-PS-K-LED-24
		–	3-pin	–	152 742	SMT0-4U-PS-S-LED-24
	NPN	3-wire	–	2.5	152 837	SMT0-4U-NS-K-LED-24
		–	3-pin	–	152 743	SMT0-4U-NS-S-LED-24

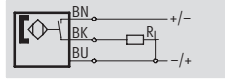
Proximity sensors SMEO-4U, round design, magnetic reed

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Technical data

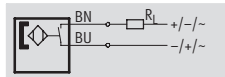
Function

e.g. N/O contact, 3-wire, with cable



- Magnetic reed measuring principle

e.g. N/O contact, 2-wire, with cable



Design	
Constructional design	Round
Type of mounting	Via accessories
Connection direction	In-line
Reproducibility of switching point ¹⁾ [mm]	±0.1
Switching status display	Yellow LED

1) Only applicable to drives secured against rotation

Technical data – N/O contact, 3-wire				
Switch output		Conventional contact, bipolar		
Electrical connection		Cable, 3-wire	Cable, 3-wire	Plug M8x1, 3-pin
Cable length [m]		2.5	5	–
Operating voltage range DC [V DC]		12 ... 27		
Max. output current [mA]		500		
Max. switching capacity DC [W]		10		
Voltage drop [V]		–		
Switch-on time [ms]		≤0.5		
Switch-off time [ms]		0.03		
Protection against short circuit		No		
Protection against polarity reversal		No		
Protection class		IP67		

Technical data – N/O contact, 2-wire				
Switch output			Conventional contact, bipolar ¹⁾	
Electrical connection			Cable, 2-wire	
Cable length		[m]	2.5	
Operating voltage range	DC	[V DC]	12 ... 250	
	AC	[V AC]	12 ... 250	
Max. output current		[mA]	500	
Max. switching capacity	DC	[W]	10	
	AC	[VA]	10	
Voltage drop		[V]	4.1	
Switch-on time		[ms]	≤2	
Switch-off time		[ms]	2	
Protection against short circuit			No	
Protection against polarity reversal			No	
Protection class			IP67	

1) Without LED function

Materials	
Housing	Polyethylene terephthalate
Cable sheath	Polyvinyl chloride
Note on materials	Free of copper and PTFE

Proximity sensors SMEO-4U, round design, magnetic reed

Technical data

FESTO

Operating and environmental conditions			
Electrical connection	Cable		Plug
Cable installation	Fixed	Flexible	
Ambient temperature [°C]	–20 ... +60	–5 ... +60	–20 ... +60
Corrosion resistance class CRC ¹⁾	4		2
CE symbol (declaration of conformity)	In accordance with EU EMC directive		
	In accordance with EU low voltage directive ²⁾		–

- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. 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.
Corrosion resistance class 4 according to Festo standard 940 070
Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.
- 2) Only valid for N/O contact, 2-wire, operating voltage range 3 ... 250 V AC / 250 V DC

Product weights [g]			
Electrical connection	Cable		Plug
Cable length [m]	2,5	5,0	–
N/O contact			
3-wire	70	130	16
2-wire	70	–	–


Dimensions
[Download CAD data → www.festo.com](http://www.festo.com)

Cable type

1 Connecting cable
2 Yellow LED

Plug type M8x1

2 Yellow LED
3 Plug suitable for plug socket with cable NEBU-M8...
4 Installation space for angled socket

Ordering data					
	Electrical connection		Cable length [m]	Part No.	Type
	Cable	Plug M8x1			
	N/O contact				
	Operating voltage range 12 ... 27 V DC				
	3-wire	–	2.5	36 198	SMEO-4U-K-LED-24
			5	175 401	SMEO-4U-K5-LED-24
	–	3-pin	–	151 526	SMEO-4U-S-LED-24-B
	Operating voltage range 12 ... 250 V AC/DC				
	2-wire	–	2.5	150 011	SMEO-4U-K-LED-230

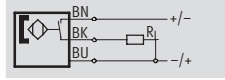
Proximity sensors CRSMEO-4, round design, magnetic reed

FESTO

Technical data

Function

N/O contact, 3-wire, with cable



- Corrosion resistant
- Magnetic reed measuring principle



Design	
Constructional design	Round
Type of mounting	Via accessories
Connection direction	In-line
Reproducibility of switching point ¹⁾	[mm] ±0.1
Switching status display	Yellow LED

1) Only applicable to drives secured against rotation

Technical data – N/O contact, 3-wire			
Switch output			Contacting
Electrical connection			Cable, 3-wire
Cable length		[m]	2.5
Operating voltage range	DC	[V DC]	12 ... 30
	AC	[V AC]	12 ... 30
Max. output current		[mA]	500
Max. switching capacity	DC	[W]	10
	AC	[VA]	10
Switch-on time		[ms]	0.03
Switch-off time		[ms]	≤0.5
Protection against short circuit			No
Protection against polarity reversal			No
Protection class			IP65/IP67

Operating and environmental conditions		
Electrical connection	Cable	
Cable installation	Fixed	Flexible
Ambient temperature	[°C]	–20 ... +60
Corrosion resistance class CRC ¹⁾	4	
CE symbol (declaration of conformity)	In accordance with EU EMC directive	

1) Corrosion resistance class 4 according to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required.

Materials	
Housing	Polypropylene
Cable sheath	Thermoplastic rubber
Note on materials	Free of copper and PTFE

Product weights [g]	
N/O contact	
3-wire	70

Proximity sensors CRSMEO-4, round design, magnetic reed



Technical data

Dimensions

Download CAD data → www.festo.com

1 Connecting cable

2 Yellow LED

3 Clamping range

Ordering data				
	Electrical connection	Cable length [m]	Part No.	Type
	N/O contact			
	Corrosion resistant			
	Cable, 3-wire	2.5	161 775	CRSMEO-4-K-LED-24

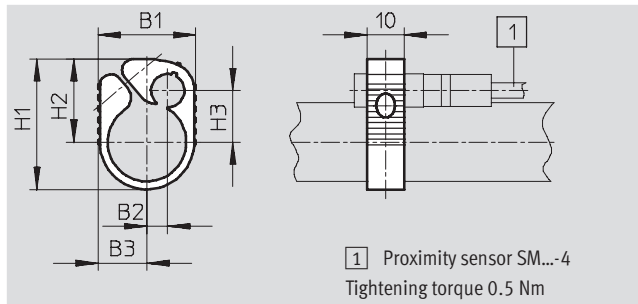
Proximity sensors, round design

Accessories

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Mounting kit SMBR

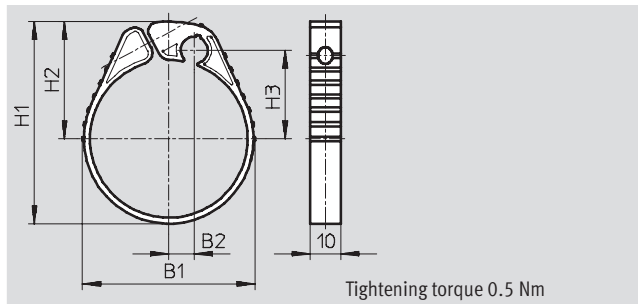
Material:
Polyacetate



Dimensions and ordering data								
For piston Ø	B1	B2	B3	H1	H2	H3	Part No.	Type
8	21	–	14	23.5	16.5	9	19 272	SMBR-8
10	22	0.5	14	26	18.5	10	19 273	SMBR-10
12	22	4	11	28.5	20	10.2	19 274	SMBR-12
16	22.5	4	11.5	33.5	22.5	12.4	19 275	SMBR-16
20	26.5	5.5	13.5	35.5	22.5	14	19 276	SMBR-20
25	31.5	7.5	16	40.5	25	16	19 277	SMBR-25

Mounting kit CRSMBR

Material:
Polypropylene



Dimensions and ordering data							
For piston Ø	B1	B2	H1	H2	H3	Part No.	Type
12	22	4.1	28.6	20	10.2	164 581	CRSMBR-12
16	22.3	4	33.2	22.5	12.4	164 582	CRSMBR-16
20	26.5	5.6	35.25	22.5	14	164 583	CRSMBR-20
25	31.5	7.4	40.2	25	16	164 584	CRSMBR-25
32	38.6	7.9	47.8	29	19.7	163 888	CRSMBR-32
40	46.6	8.1	55.8	33	23.8	163 889	CRSMBR-40
50	57.4	8.2	67.2	39	29.5	163 890	CRSMBR-50
63	70.4	8.2	80.8	45.9	36.2	163 891	CRSMBR-63

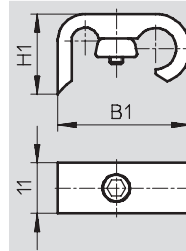
Proximity sensors, round design

Accessories

FESTO

Mounting kit CRSMB

Material:
High-alloy stainless steel



Dimensions and ordering data				
For piston \varnothing	B1	H1	Part No.	Type
32	29	17.6	161 763	CRSMB-32
40	29	15.1	161 764	CRSMB-40
50	31.1	17.4	161 765	CRSMB-50
63	31.1	18.1	161 766	CRSMB-63
80	33	24.2	161 767	CRSMB-80
100	33	27.5	161 768	CRSMB-100
125	36.5	31.1	185 365	CRSMB-125

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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)

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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



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