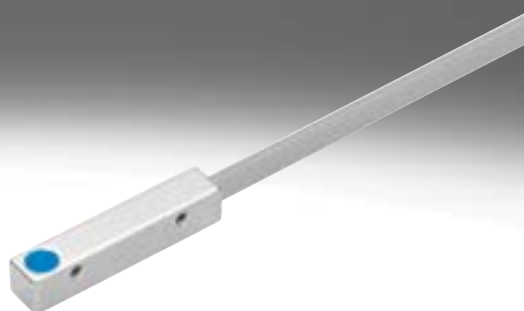


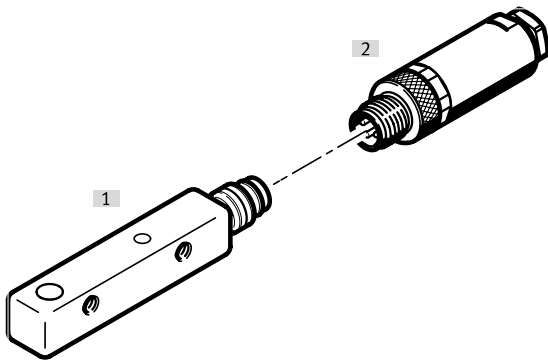
Proximity switches SIES, inductive

FESTO

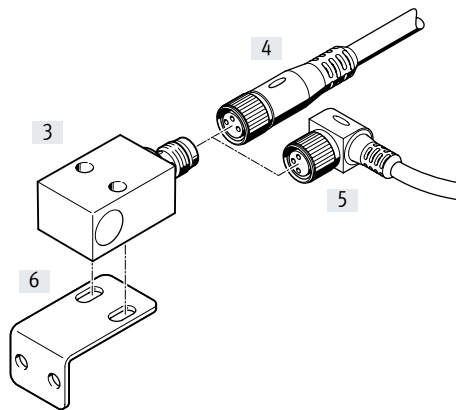


Peripherals overview

SIES-Q8



SIES-V3B



Mounting attachments and accessories		→ Page
[1]	Proximity sensor SIES-Q5B-...	4
[2]	Plug SEA-3GS-M8-S	9
[3]	Proximity sensor SIES-V3B-PS-S-L	4
[4]	Connecting cable, straight socket NEBU-M8G3-...	9
[5]	Connecting cable, angled socket NEBU-M8W3-...	9
[6]	Mounting bracket HV-M5	9

Type codes

001	Series
SIES	Proximity sensor, inductive, special design

002	Design
Q5	Cube 5 mm
Q8	Cube 8 mm
Q40	Cube 40 mm
V3	Cube 15x 20 mm

003	Mounting type
B	Flush

004	Switching input/output
N	NPN
P	PNP

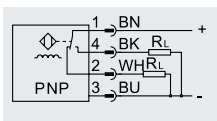
005	Switching element function
A	Antivalent
O	N/C contact
S	N/O contact

006	Electrical connection
K	Open end
S	Plug M8x1, 4-pin
X	Screw terminals

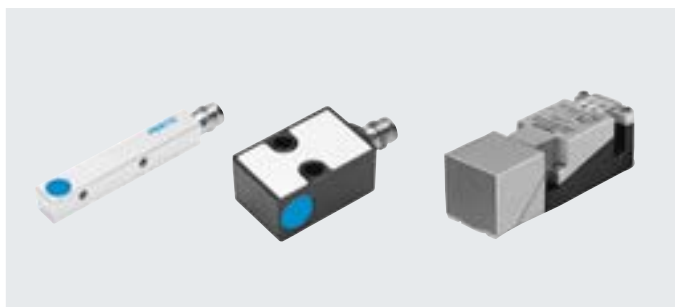
007	Display
L	Switching status
2L	Switching status and ready status

Technical data – Standard switching distance, special design

Function¹⁾



- Standard switching distance
- For DC voltage
- Cuboid-shaped design



1) e.g. antivalent with PNP output and terminal

General technical data	SIES-Q5	SIES-Q8	SIES-V3	SIES-Q40
Conforms to standard	EN 60947-5-2			
Certification	c UL us Listed (OL) RCM			
CE marking (see declaration of conformity)	To EU EMC Directive ¹⁾			
Note on materials	Free of copper and PTFE –			

1) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/SIES → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Input signal/measuring element		SIES-Q5	SIES-Q8	SIES-V3	SIES-Q40
Type					
Size	[mm]	5x5x25	8x8x40	15x20x30	40x40x120
Ambient temperature	[°C]	–25 ... +70		–25 ... +85	

Output, general		SIES-Q5	SIES-Q8	SIES-V3	SIES-Q40
Type					
Size	[mm]	5x5x25	8x8x40	15x20x30	40x40x120
Repetition accuracy	[mm]	0.04	0.07	0.1	0.75

Switching output		SIES-Q5	SIES-Q8	SIES-V3	SIES-Q40
Type					
Size	[mm]	5x5x25	8x8x40	15x20x30	40x40x120
Switching output	PNP			PNP	PNP
	NPN			NPN	–
Switching element function	N/O			N/O	Antivalent
	N/C			–	
Rated operating distance	[mm]	0.8	1.5	2	15
Actual operating distance	[mm]	0.64	1.2	1.6	12

Reduction factors		SIES-Q5	SIES-Q8	SIES-V3	SIES-Q40
Aluminium		0.4	0.45	0.45	0.3
Stainless steel St 18/8		0.7	0.8	0.7	0.7
Copper		0.3	0.4	0.3	0.25
Brass		0.4	0.55	0.5	0.3
Steel St 37		1.0		1.0	1.0
Max. switching frequency DC	[Hz]	3000	3500	1200	100
Max. output current	[mA]	200		–	–
Max. output current at ≤ 50°C	[mA]	–		200	200
Max. output current at ≤ 85°C	[mA]	–		150	150
Voltage drop	[V]	≤ 2		≤ 3.2	≤ 3.5

Technical data – Standard switching distance, special design

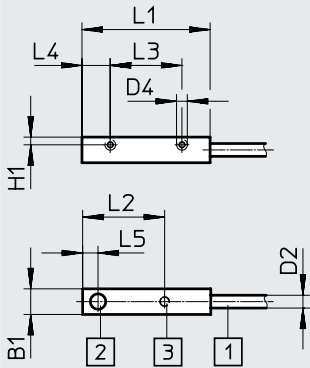
Output, additional data						
Short circuit current rating		Pulsed				
Electronics						
Type		SIES-Q5	SIES-Q8	SIES-V3	SIES-Q40	
Size	[mm]	5x5x25	8x8x40	15x20x30	40x40x120	
Operating voltage range	[V DC]	10 ... 30			10 ... 34	
Residual ripple	[%]	10				
No-load supply current	[mA]	≤ 10		≤ 30	≤ 40	
Reverse polarity protection	For all electrical connections					
Electromechanics						
Electrical connection		Cable		Plug		
Type		SIES-Q5	SIES-Q8	SIES-Q8	SIES-V3	SIES-Q40
Size	[mm]	5x5x25	8x8x40	8x8x40	15x20x30	40x40x120
Electrical connection		Cable, 3-wire		Plug, M8x1, 3-pin		Screw terminal
Cable length	[m]	2.5		-		-
Information on materials: Cable sheath		TPE-U (PUR)		-		-
Mechanical system						
Type		SIES-Q5	SIES-Q8	SIES-V3	SIES-Q40	
Size	[mm]	5x5x25	8x8x40	15x20x30	40x40x120	
Type of mounting		With female thread		Via through-hole		
Type of installation		Flush		Flush		
Product weight	[g]	22	15	120	230	
Information on materials: Housing		Nickel-plated brass	Chrome-plated die-cast zinc	Die-cast zinc	PBT, PA	
Display/operation						
Type		SIES-Q5	SIES-Q8	SIES-V3	SIES-Q40	
Size	[mm]	5x5x25	8x8x40	15x20x30	40x40x120	
Ready status indication		-			Green LED	
Switching status indication		Yellow LED			Yellow LED	
Immission/emission						
Type		SIES-Q5	SIES-Q8	SIES-V3	SIES-Q40	
Size	[mm]	5x5x25	8x8x40	15x20x30	40x40x120	
Degree of protection		IP67			IP65	
Pin allocation to EN 60947-5-2						
M8x1, 3-pin						
N/O contact / N/C contact						
	Pin	Wire colour		Allocation		
	1	Brown		+		
	3	Blue		-		
	4	Black		Output		

Technical data – Standard switching distance, special design

Dimensions

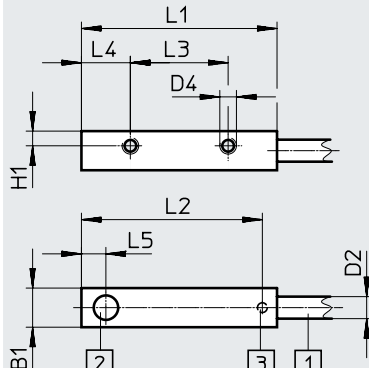
Download CAD data → www.festo.com

SIES-Q5B
Cable



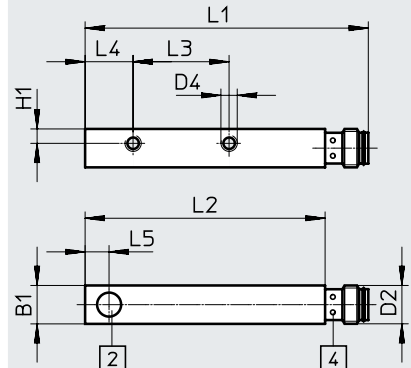
- [1] 3-wire cable, 2.5 m long
- [2] Active surface
- [3] 1 switching status indication, yellow

SIES-Q8B
Cable



- [1] 3-wire cable, 2.5 m long
- [2] Active surface
- [3] 1 switching status indication, yellow

Plug



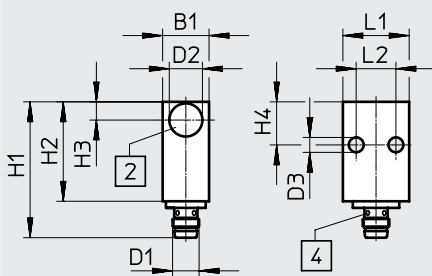
- [2] Active surface
- [4] 4 switching status indications, yellow

Type	B1	D2 ∅	D2	D4	H1	L1	L2	L3	L4	L5
SIES-Q5B-...-K-L	5	2.5	-	M1.6	1.5	25	16	14	5.5	3
SIES-Q8B-...-K-L	8	3.5	-	M3	3	40	37	20	10	5
SIES-Q8B-...-S-L	8	-	M8x1	M3	3	59	50	20	10	5

Dimensions

Download CAD data → www.festo.com

SIES-V3B
Plug



- [2] Active surface
- [4] 4 switching status indications, yellow

Type	B1	D1 ∅	D1	D2 ∅	D3 ∅	H1	H2	H3	H4	L1	L2	L3	L4	L5
SIES-V3B-...-S-S-L	15	-	M8x1	10	4.5	42	30	5.5	13	20	12	-	-	-
SIES-QB-P-...-K-L	12	4.5	-	-	3.2	26	17	4	-	40	32	6.5	4	6

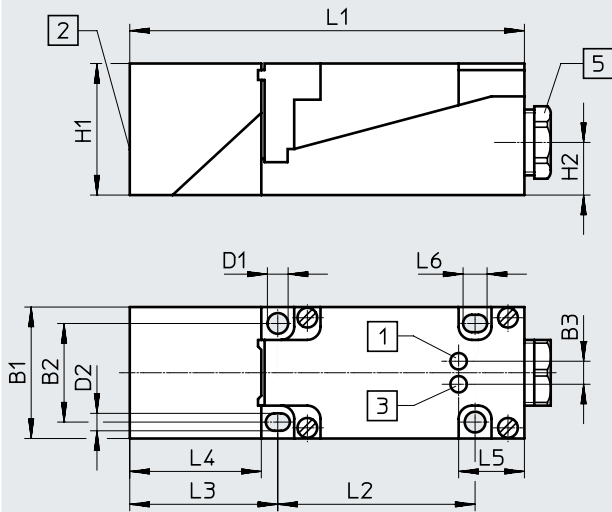
Technical data – Standard switching distance, special design

Dimensions

Download CAD data → www.festo.com

SIES-Q40B

Plug

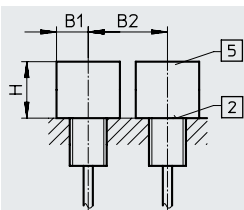


- [1] Operating status indicator, green
- [2] Sensing face at front as supplied: sensor head can be adjusted into a total of 5 sensing directions
- [3] Switching status indication LED, yellow
- [5] M20x1.5, suitable for cable diameter 7.5 mm to 12.5 mm

Type	B1	B2	B3	D1 ∅	D2 ∅	H1	H2	L1	L2	L3	L4	L5	L6
SIE-Q40B-PA-X-2L	40	30	7	5.3	5.3	40	16	120	60	45	40	20	7.3

Fitting instructions


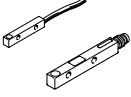

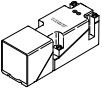
Flush installation



- [2] Active surface
- [5] Metal-free zone





Size	B1	B2	H
5x5x25	2.5	5	2
8x8x40	4	12	3
15x20x30	6	12	5
40x40x120	25	75	30

Technical data – Standard switching distance, special design

Ordering data								
Size [mm]	S _n ¹⁾ [mm]	Type of installation	Switching output	Switching element function	Electrical connection			
					Cable		Plug	
					Part No.	Type	Part No.	Type
5x5x25								
	0.8	Flush	PNP	N/O	178291	SIES-Q5B-PS-K-L	-	
				N/C	174549	SIES-Q5B-PO-K-L		
			NPN	N/O	178290	SIES-Q5B-NS-K-L		
				N/C	174548	SIES-Q5B-NO-K-L		
8x8x40								
	1.5	Flush	PNP	N/O	178294	SIES-Q8B-PS-K-L	178295	SIES-Q8B-PS-S-L
				N/C	174552	SIES-Q8B-PO-K-L	174553	SIES-Q8B-PO-S-L
			NPN	N/O	178292	SIES-Q8B-NS-K-L	178293	SIES-Q8B-NS-S-L
				N/C	174550	SIES-Q8B-NO-K-L	174551	SIES-Q8B-NO-S-L
15x20x30								
	2.0	Flush	PNP	N/O	-		150491	SIES-V3B-PS-S-L
			NPN				150490	SIES-V3B-NS-S-L
40x40x120								
	15.0	Flush	PNP	Antivalent	-		150492	SIES-Q40B-PA-X-2L ²⁾

1) S_n Rated operating distance [mm]
 2) Electrical connection via screw terminals

Accessories

Ordering data – Connecting cables M8x1			Technical data → Internet: nebu	
	Number of wires	Cable length [m]	Part No.	Type
Straight socket				
	3	2.5	★ 541333	NEBU-M8G3-K-2.5-LE3
		5	★ 541334	NEBU-M8G3-K-5-LE3
Angled socket				
	3	2.5	★ 541338	NEBU-M8W3-K-2.5-LE3
		5	★ 541341	NEBU-M8W3-K-5-LE3
Ordering data – Plug			Part No.	Type
	For SIES-Q8-... and SIES-V3B-...		192009	SEA-3GS-M8-S
Ordering data – Mounting components			Part No.	Type
	For size	Mounting bracket for SIES-V3B	9634	HV-M5