

DC 3-wire Inductive Global Sensors

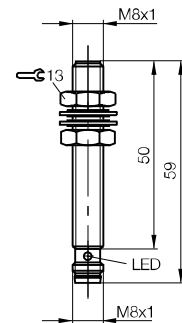
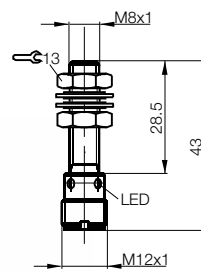
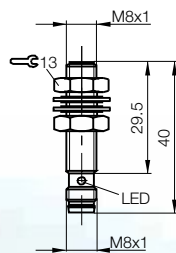
Cylinder designs, M8x1



Series	M8 x 1	M8 x 1	M8 x 1
Installation type (observe instructions in Basic Information chapter)	Flush	Flush	Flush
Rated switching distance s_n	1.5 mm	1.5 mm	1.5 mm
Assured switching distance s_a	0...1.2 mm	0...1.2 mm	0...1.2 mm
Switching distance marking	■	■	■
PNP, NO	Ordering code BES00CJ	Ordering code BES00CH	Ordering code BES003C
	Part number BES M08EE-PSC15B-S49G-003	Part number BES M08EE-PSC15B-S04G-003	Part number BES M08MI-PSC15B-S49G
PNP, NC	Ordering code BES00CC	Ordering code BES00CA	Ordering code BES03P6
	Part number BES M08EE-POC15B-S49G-003	Part number BES M08EE-POC15B-S04G-003	Part number BES M08MI-POC15B-S49G
NPN, NO	Ordering code BES00C7	Ordering code BES00C6	Ordering code BES002K
	Part number BES M08EE-NSC15B-S49G-003	Part number BES M08EE-NSC15B-S04G-003	Part number BES M08MI-NSC15B-S49G
NPN, NC	Ordering code BES00C3	Ordering code BES00C2	Ordering code BES03PK
	Part number BES M08EE-NOC15B-S49G-003	Part number BES M08EE-NOC15B-S04G-003	Part number BES M08MI-NOC15B-S49G
Supply voltage U_B	10...30 V DC	10...30 V DC	12...30 V DC
Voltage drop U_d at I_e max.	2.5 V	2.5 V	2 V
Rated insulation voltage U_i (protection class)	250 V AC (□)	250 V AC (□)	75 V DC
Rated operating current I_e	200 mA	200 mA	200 mA
Polarity reversal protected/transposition protected/short-circuit protected	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes
Ambient temperature T_a	-25...70 °C	-25...70 °C	-25...70 °C
Switching frequency f max.	1 kHz	1 kHz	1 kHz
Output function indicator	Yellow LED	Yellow LED	Yellow LED
Degree of protection as per IEC 60529	IP 67	IP 67	IP 67
Approvals	CE, cULus	CE, cULus	CE, cULus
Material	Housing Sensing surface	Housing Sensing surface	Housing Sensing surface
	Stainless steel PBT	Stainless steel PBT	Brass-coated PA 12
Connection	M8 connector, 3-pin	M12 connector, 4-pin	M8 connector, 3-pin

Connection-Switching diagram, see page 906
The meaning of switching distance markings can be found on page 911

Additional cable lengths and PUR cable jacket material available on request.



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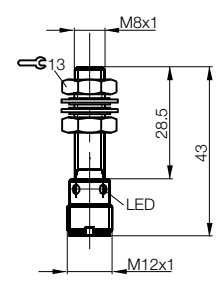
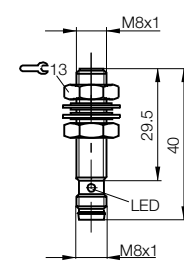
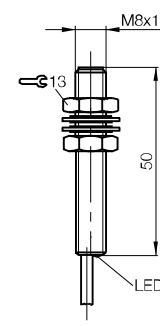
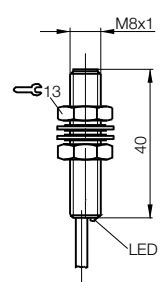
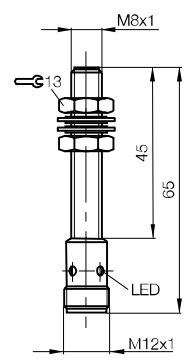
Cylinder designs, M8x1



Inductive sensors
Global DC 3-wire
Cylinder designs
DC 3-/4-wire
DC 2-wire
AC/DC 2-wire
AC 2-wire
Special properties
Analog distance measurement
Accessories



M8 x 1	M8 x 1	M8 x 1	M8 x 1	M8 x 1
Flush	Flush	Flush	Flush	Flush
1.5 mm	1.5 mm	1.5 mm	2 mm	2 mm
0...1.2 mm	0...1.2 mm	0...1.2 mm	0...1.6 mm	0...1.6 mm
■	■	■	■ ■	■ ■
BES0027	BES00CU	BES0037	BES00CK	BES00FC
BES M08MH1-PSC15B-S04G	BES M08EF-PSC15B-BP02-003	BES M08MI-PSC15B-BV02	BES M08EE-PSC20B-S49G-003	BES M08EE-PSC20B-S04G-003
BES0026	BES00CR	BES0030	BES00CF	BES00CE
BES M08MH1-POC15B-S04G	BES M08EF-POC15B-BP02-003	BES M08MI-POC15B-BV02	BES M08EE-POC20B-S49G-003	BES M08EE-POC20B-S04G-003
BES0024	BES00CN	BES002F	BES00C9	BES00C8
BES M08MH1-NSC15B-S04G	BES M08EF-NSC15B-BP02-003	BES M08MI-NSC15B-BV02	BES M08EE-NSC20B-S49G-003	BES M08EE-NSC20B-S04G-003
BES0023	BES00CL	BES03PJ	BES00C5	BES00C4
BES M08MH1-NOC15B-S04G	BES M08EF-NOC15B-BP02-003	BES M08MI-NOC15B-BV02	BES M08EE-NOC20B-S49G-003	BES M08EE-NOC20B-S04G-003
12...30 V DC	10...30 V DC	12...30 V DC	10...30 V DC	10...30 V DC
2 V	2.5 V	2 V	2.5 V	2.5 V
75 V DC	250 V AC (□)	75 V DC	250 V AC (□)	250 V AC (□)
200 mA	200 mA	200 mA	200 mA	200 mA
Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
1 kHz	1 kHz	1 kHz	700 Hz	700 Hz
Yellow LED	Yellow LED	Yellow LED	Yellow LED	Yellow LED
IP 67	IP 67	IP 67	IP 67	IP 67
CE, cULus	CE, cULus	CE, cULus	CE, cULus	CE, cULus
Brass-coated	Stainless steel	Brass-coated	Stainless steel	Stainless steel
PA 12	PBT	PA 12	PBT	PBT
M12 connector, 4-pin	2 m PUR cable, 3x0.14 mm ²	2 m PVC cable, 3x0.14 mm ²	M8 connector, 3-pin	M12 connector, 4-pin



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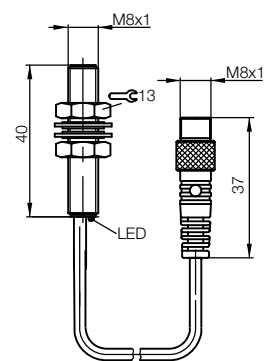
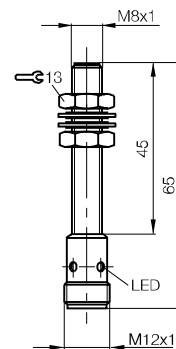
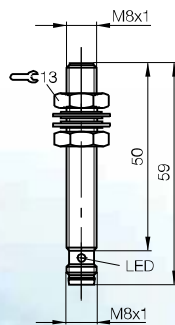
Cylinder designs, M8x1



Series	M8 x 1	M8 x 1	M8 x 1
Installation type (observe instructions in Basic Information chapter)	Flush	Flush	Flush
Rated switching distance s_n	2 mm	2 mm	2 mm
Assured switching distance s_a	0...1.6 mm	0...1.6 mm	0...1.6 mm
Switching distance marking	■ ■	■ ■	■ ■
PNP, NO	Ordering code Part number	BES003P BES M08MI-PSC20B-S49G	BES0028 BES M08MH1-PSC20B-S04G
PNP, NC	Ordering code Part number	BES0033 BES M08MI-POC20B-S49G	BES03T5 BES M08MH1-POC20B-S04G
NPN, NO	Ordering code Part number	BES002U BES M08MI-NSC20B-S49G	BES0025 BES M08MH1-NSC20B-S04G
NPN, NC	Ordering code Part number	BES03TJ BES M08MI-NOC20B-S49G	BES03T6 BES M08MH1-NOC20B-S04G
Supply voltage U_B	12...30 V DC	12...30 V DC	10...30 V DC
Voltage drop U_d at I_o max.	2.5 V	2.5 V	2.5 V
Rated insulation voltage U_i (protection class)	75 V DC	75 V DC	250 V AC (□)
Rated operating current I_o	200 mA	200 mA	200 mA
Polarity reversal protected/transposition protected/short-circuit protected	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes
Ambient temperature T_a	-25...70 °C	-25...70 °C	-25...70 °C
Switching frequency f max.	700 Hz	700 Hz	700 Hz
Output function indicator	Yellow LED	Yellow LED	Yellow LED
Degree of protection as per IEC 60529	IP 67	IP 67	IP 68 per BWN Pr. 20
Approvals	CE, cULus	CE, cULus	CE, cULus
Material	Housing: Brass-coated Sensing surface: PA 12	Brass-coated PA 12	Stainless steel PBT
Connection	M8 connector, 3-pin	M12 connector, 4-pin	0.3 m PUR cable with M8 connector, 3-pin

Connection-Switching diagram, see page 906
The meaning of switching distance markings can be found on page 911

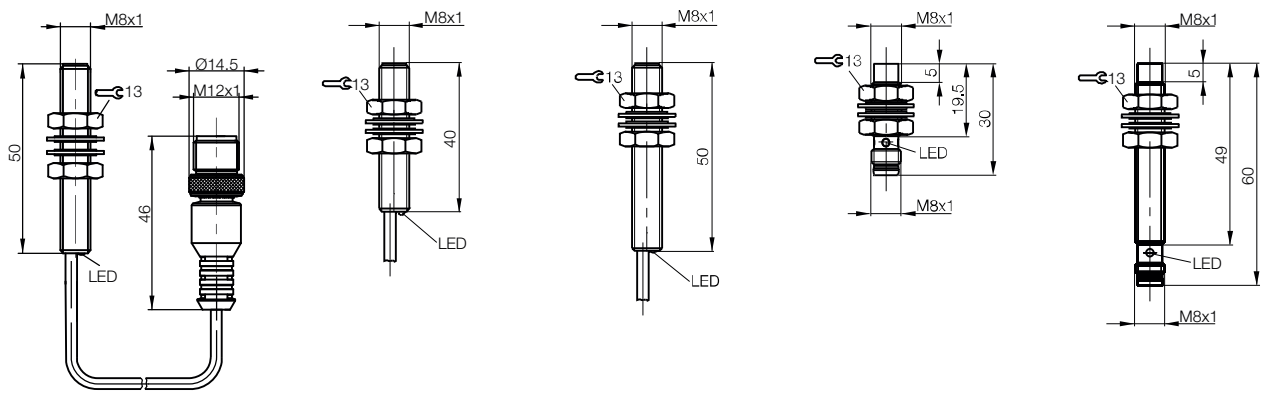
Additional cable lengths and PUR cable jacket material available on request.





M8 x 1	M8 x 1	M8 x 1	M8 x 1	M8 x 1
Flush	Flush	Flush	Not flush	Not flush
2 mm	2 mm	2 mm	4 mm	4 mm
0...1.6 mm	0...1.6 mm	0...1.6 mm	0...3.2 mm	0...3.2 mm
■ ■	■ ■	■ ■	■ ■	■ ■
BES003E	BES00CW	BES003K	BES000M	BES001J
BES M08MI-PSC20B-BP00,2-GS04	BES M08EF-PSC20B-BP02-003	BES M08MI-PSC20B-BV02	BES M08EB-PSC40F-S49G	BES M08EH-PSC40F-S49G
	BES00CT	BES03TH	BES000L	BES001F
	BES M08EF-POC20B-BP02-003	BES M08MI-POC20B-BV02	BES M08EB-POC40F-S49G	BES M08EH-POC40F-S49G
	BES00CP	BES002P	BES000K	BES001C
	BES M08EF-NSC20B-BP02-003	BES M08MI-NSC20B-BV02	BES M08EB-NSC40F-S49G	BES M08EH-NSC40F-S49G
	BES00CM	BES03TF	BES000J	BES0019
	BES M08EF-NOC20B-BP02-003	BES M08MI-NOC20B-BV02	BES M08EB-NOC40F-S49G	BES M08EH-NOC40F-S49G
12...30 V DC	10...30 V DC	12...30 V DC	10...30 V DC	10...30 V DC
2.5 V	2.5 V	2.5 V	2.5 V	2.5 V
75 V DC	250 V AC (□)	75 V DC	250 V AC (□)	250 V AC (□)
200 mA	200 mA	200 mA	200 mA	200 mA
Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
700 Hz	700 Hz	700 Hz	1.5 kHz	1.5 kHz
Yellow LED	Yellow LED	Yellow LED	Yellow LED	Yellow LED
IP 67	IP 67	IP 67	IP 68 per BWN Pr. 20	IP 68 per BWN Pr. 20
CE, cULus	CE, cULus	CE, cULus	CE, cULus	CE, cULus
Brass-coated	Stainless steel	Brass-coated	Stainless steel	Stainless steel
PA 12	PBT	PA 12	PBT	PBT
0.2 m PUR cable with M12 connector, 4-pin	2 m PUR cable, 3x0.14 mm ²	2 m PVC cable, 3x0.14 mm ²	M8 connector, 3-pin	M8 connector, 3-pin

Inductive sensors
Global DC 3-wire
Cylinder designs
DC 3-/4-wire
DC 2-wire
AC/DC 2-wire
AC 2-wire
Special properties
Analog distance measurement
Accessories



DC 3-wire Inductive Global Sensors

Cylinder designs, M8x1



Series		M8 x 1	M8 x 1	M8 x 1
Installation type (observe instructions in Basic Information chapter)		Not flush	Not flush	Not flush
Rated switching distance s_n		4 mm	4 mm	4 mm
Assured switching distance s_a		0...3.2 mm	0...3.2 mm	0...3.2 mm
Switching distance marking		■ ■	■ ■	■ ■
PNP, NO	Ordering code	BES001H	BES000Z	BES0017
	Part number	BES M08EH-PSC40F-S04G	BES M08ED-PSC40F-BV02	BES M08EG-PSC40F-BV02
PNP, NC	Ordering code	BES001E	BES000W	BES0015
	Part number	BES M08EH-POC40F-S04G	BES M08ED-POC40F-BV02	BES M08EG-POC40F-BV02
NPN, NO	Ordering code	BES001A	BES000T	BES0013
	Part number	BES M08EH-NSC40F-S04G	BES M08ED-NSC40F-BV02	BES M08EG-NSC40F-BV02
NPN, NC	Ordering code	BES0018	BES000P	BES0011
	Part number	BES M08EH-NOC40F-S04G	BES M08ED-NOC40F-BV02	BES M08EG-NOC40F-BV02
Supply voltage U_B		10...30 V DC	10...30 V DC	10...30 V DC
Voltage drop U_d at I_e max.		2.5 V	2.5 V	2.5 V
Rated insulation voltage U_i (protection class)		250 V AC (□)	250 V AC (□)	250 V AC (□)
Rated operating current I_e		200 mA	200 mA	200 mA
Polarity reversal protected/transposition protected/short-circuit protected		Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes
Ambient temperature T_a		-25...70 °C	-25...70 °C	-25...70 °C
Switching frequency f max.		1.5 kHz	1.5 kHz	1.5 kHz
Output function indicator		Yellow LED	Yellow LED	Yellow LED
Degree of protection as per IEC 60529		IP 67	IP 68 per BWN Pr. 20	IP 68 per BWN Pr. 20
Approvals		CE, cULus	CE, cULus	CE, cULus
Material	Housing	Stainless steel	Stainless steel	Stainless steel
	Sensing surface	PBT	PA 12	PBT
Connection		M12 connector, 4-pin	2 m PVC cable, 3x0.14 mm ²	2 m PVC cable, 3x0.14 mm ²

Connection-Switching diagram, see page 906
The meaning of switching distance markings can be found on page 911

Additional cable lengths and PUR cable jacket material available on request.

