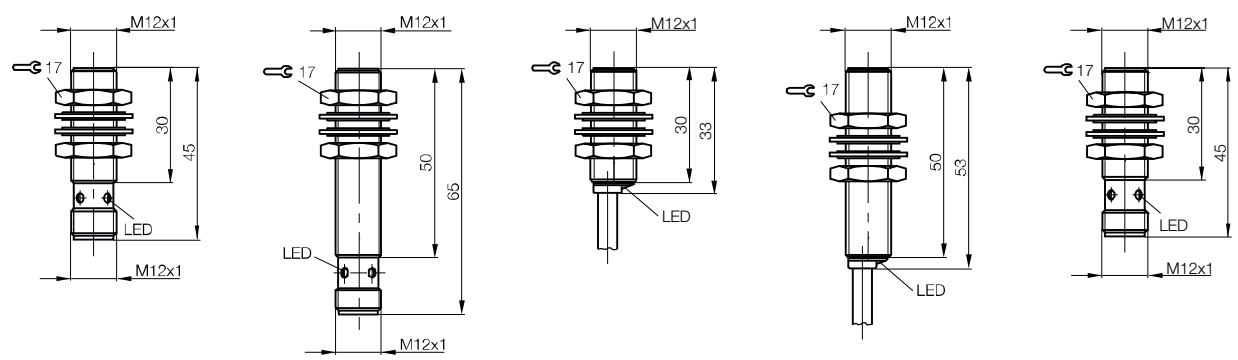




Inductive sensors
Global DC 3-wire
Cylinder designs
DC 3-/4-wire
DC 2-wire
AC/DC 2-wire
AC 2-wire
Special properties
Analog distance measurement
Accessories



M12x1	M12x1	M12x1	M12x1	M12x1	M12x1
Flush	Flush	Flush	Flush	Flush	Flush
2 mm	2 mm	2 mm	2 mm	2 mm	4 mm
0...1.6 mm	0...1.6 mm	0...1.6 mm	0...1.6 mm	0...1.6 mm	0...3.2 mm
■	■	■	■	■	■ ■
BES00EE	BES0060	BES00E4	BES005U	BES00EF	
BES M12ME-PSC20B-S04G-003	BES M12MI-PSC20B-S04G	BES M12MD-PSC20B-BP02-003	BES M12MI-PSC20B-BV02	BES M12ME-PSC40B-S04G-003	
BES00EA	BES005F	BES00E2	BES00FP	BES00EC	
BES M12ME-POC20B-S04G-003	BES M12MI-POC20B-S04G	BES M12MD-POC20B-BP02-003	BES M12MI-POC20B-BV02	BES M12ME-POC40B-S04G-003	
BES00E8	BES0054	BES00E0	BES00FL	BES00E9	
BES M12ME-NSC20B-S04G-003	BES M12MI-NSC20B-S04G	BES M12MD-NSC20B-BP02-003	BES M12MI-NSC20B-BV02	BES M12ME-NSC40B-S04G-003	
BES00E6	BES004Y	BES00CY	BES03PR	BES00E7	
BES M12ME-NOC20B-S04G-003	BES M12MI-NOC20B-S04G	BES M12MD-NOC20B-BP02-003	BES M12MI-NOC20B-BV02	BES M12ME-NOC40B-S04G-003	
10...30 V DC	12...30 V DC	10...30 V DC	12...30 V DC	10...30 V DC	
2 V	2.5 V	2 V	2.5 V	2.5 V	
250 V AC (□)	250 V AC (□)	250 V AC (□)	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	
1.2 kHz	1.2 kHz	1.2 kHz	1.2 kHz	300 Hz	
Yellow LED	Yellow LED	Yellow LED	Yellow LED	Yellow LED	
IP 67	IP 68 per BWN Pr. 20	IP 67	IP 68 per BWN Pr. 20	IP 67	
CE, cULus	CE, cULus	CE, cULus	CE, cULus	CE, cULus	
Brass-coated	Brass-coated	Brass-coated	Brass-coated	Brass-coated	
PBT	PA 12	PBT	PA 12	LCP	
M12 connector, 4-pin	M12 connector, 4-pin	2 m PUR cable, 3x0.34 mm ²	2 m PVC cable, 3x0.34 mm ²	M12 connector, 4-pin	



DC 3-wire Inductive Global Sensors

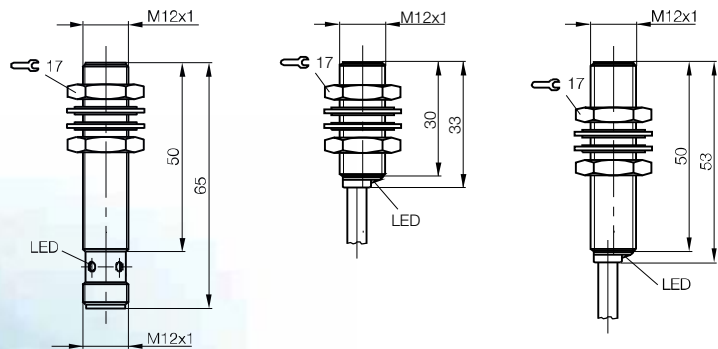
Cylinder design, M12x1



Series		M12x1	M12x1	M12x1
Installation type (observe instructions in Basic Information chapter)		Flush	Flush	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	BES0068	BES00E5	BES0064
	Part number	BES M12MI-PSC40B-S04G	BES M12MD-PSC40B-BP02-003	BES M12MI-PSC40B-BV02
PNP, NC	Ordering code	BES005N	BES00E3	BES005L
	Part number	BES M12MI-POC40B-S04G	BES M12MD-POC40B-BP02-003	BES M12MI-POC40B-BV02
NPN, NO	Ordering code	BES0059	BES00E1	BES00FM
	Part number	BES M12MI-NSC40B-S04G	BES M12MD-NSC40B-BP02-003	BES M12MI-NSC40B-BV02
NPN, NC	Ordering code	BES004Z	BES00CZ	BES03PT
	Part number	BES M12MI-NOC40B-S04G	BES M12MD-NOC40B-BP02-003	BES M12MI-NOC40B-BV02
Supply voltage U_B		12...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	2.5 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.		500 Hz	300 Hz	500 Hz
Output function indicator		Yellow LED	Yellow LED	Yellow LED
Degree of protection as per IEC 60529		IP 68 per BWN Pr. 20	IP 67	IP 68 per BWN Pr. 20
Approvals		CE, cULus	CE, cULus	CE, cULus
Material	Housing	Brass-coated	Brass-coated	Brass-coated
	Sensing surface	PA 12	LCP	PA 12
Connection		M12 connector, 4-pin	2 m PUR cable, 3x0.34 mm ²	2 m PVC cable, 3x0.34 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.



Global



M12x1	M12x1	M12x1			Inductive sensors
Not flush	Not flush	Not flush			
8 mm	8 mm	8 mm			Global DC 3-wire
0...6.4 mm	0...6.4 mm	0...6.4 mm			Cylinder designs
■ ■	■ ■	■ ■			
BES01PY	BES004N	BES004M			DC 3-/4-wire
BES M12MD-PSC80F-S04G	BES M12MG-PSC80F-S04G	BES M12MG-PSC80F-BV02			
BES01PU	BES004K	BES004J			DC 2-wire
BES M12MD-POC80F-S04G	BES M12MG-POC80F-S04G	BES M12MG-POC80F-BV02			
BES01PT	BES004F	BES004E			AC/DC 2-wire
BES M12MD-NSC80F-S04G	BES M12MG-NSC80F-S04G	BES M12MG-NSC80F-BV02			
BES01PR	BES004A	BES0049			AC 2-wire
BES M12MD-NOC80F-S04G	BES M12MG-NOC80F-S04G	BES M12MG-NOC80F-BV02			
10...30 V DC	10...30 V DC	10...30 V DC			Special properties
2.5 V	2.5 V	2.5 V			
250 V AC (□)	250 V AC (□)	250 V AC (□)			Analog distance measurement
200 mA	200 mA	200 mA			
Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes			Accessories
-25...70 °C	-25...70 °C	-25...70 °C			
800 Hz	800 Hz	800 Hz			
Yellow LED	Yellow LED	Yellow LED			
IP 68 per BWN Pr. 20	IP 67	IP 67			
CE, cULus	CE, cULus	CE, cULus			
Brass-coated	Brass-coated	Brass-coated			
PBT	PBT	PBT			
M12 connector, 4-pin	M12 connector, 4-pin	2 m PVC cable, 3x0.34 mm ²			

