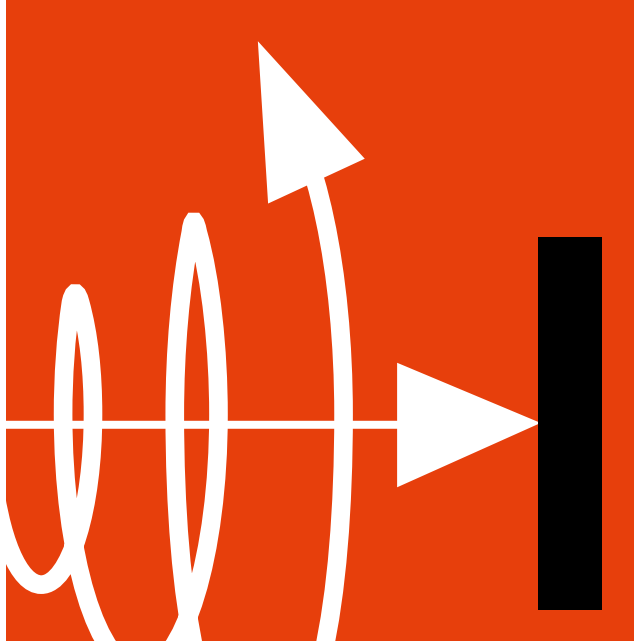




Inductive Global Sensors

Inductive Global sensors – wide variety of models provide flexibility

Inductive Global sensors provide sophisticated technology at the best price. The wide range of over 400 models includes cylindrical sensors in M8, M12, M18 and M30, and DC 3-wire and DC 2-wire versions.

Features

- **Wide variety of versions: DC 2-wire and DC 3-wire as normally open or normally closed version**
- **Shielded and unshielded versions**
- **Plug or cable connection**
- **Highly reliable due to protection against short-circuit, overvoltage, polarity reversal and overcurrent**
- **Robust designs with metal plug for rough environments**
- **As standard version and with increased switching distance**





Inductive Global Sensors

Contents

Cylinder design, DC 3-wire

M5x0,5 38

M8x1 40

M12x1 44

M18x1 47

M30x1 49

Block Designs

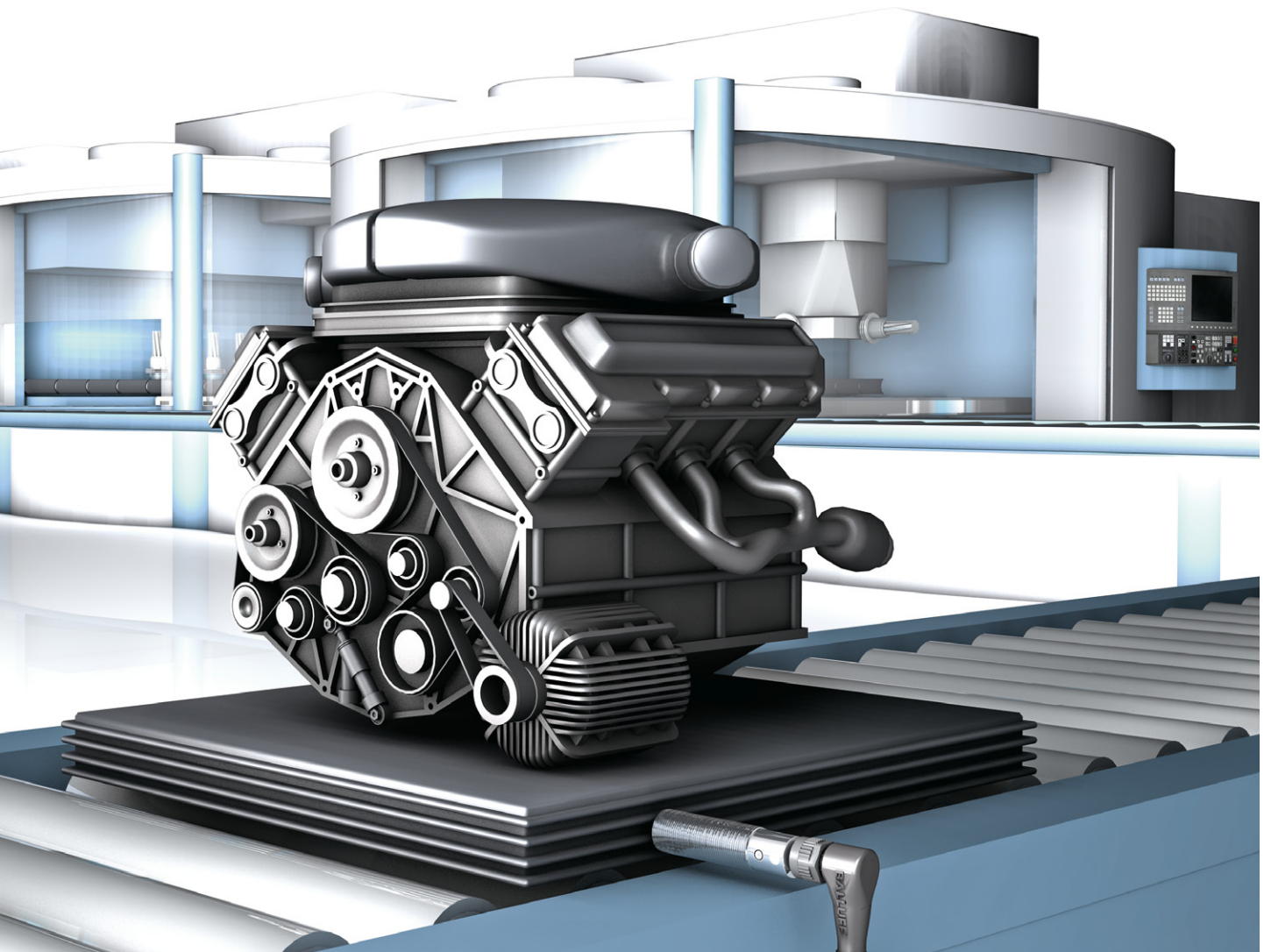
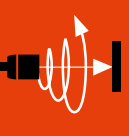
40x40 mm 50

Cylinder Designs, DC 2-wire

M8x1 52

M12x1 52

M30x1.5 53



Inductive Global Sensors
Cylinder design, DC 3-wire
M5x0,5, range 0.8 mm, 1.5 mm

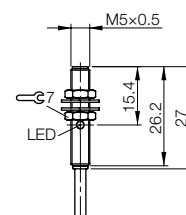
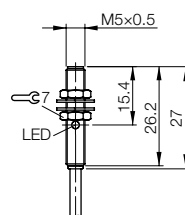
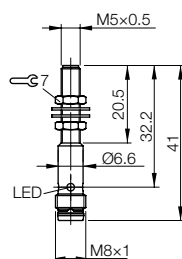
M5, Ø 6.5
Global

Preferred variants
available immediately



Model		M5x0.5	M5x0.5	M5x0.5	
Installation type		Flush	Flush	Flush	
Range s_n		0.8 mm	0.8 mm	1.5 mm	
Assured switching distance s_a		0...0.65 mm	0...0.65 mm	0...1.2 mm	
PNP, NO	Order code	BES00H2	BES00FT	BES00H3	
	Part number	BES 516-3005-E5-C-S49	BES 516-3005-E4-C-PU-02	BES 516-3005-G-E4-C-PU-02	
PNP, NC	Order code		BES00KZ	BES00L2	
	Part number		BES 516-3022-E4-C-PU-02	BES 516-3022-G-E4-C-PU-02	
NPN, NO	Order code			BES00HM	
	Part number			BES 516-3006-G-E4-C-PU-02	
NPN, NC	Order code				
	Part number				
Supply voltage U_S		10...30 V DC	10...30 V DC	10...30 V DC	
Voltage drop U_d at I_o max.		3 V	3 V	3 V	
Rated insulation voltage U_i		75 V DC	75 V DC	75 V DC	
Rated operating current I_o		100 mA	100 mA	100 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.		3 kHz	3 kHz	3 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	Stainless steel	Stainless steel	Stainless steel	
	Sensing surface	PBT	PBT	PBT	
Connection		M8 connector, 3-pin	2 m PUR cable, 3x0.14 mm ²	2 m PUR cable, 3x0.14 mm ²	

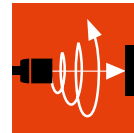
Other variants on our website or on request.



Inductive Global Sensors

Cylinder design, DC 3-wire

Ø 6.5 mm, range 4 mm



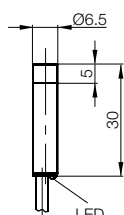
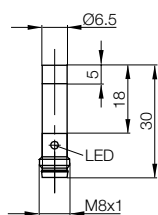
Inductive
Global
Sensors

**Cylinder
Design,
DC 3-wire**

Block
Design,
DC 3-/4-wire

Cylinder
Design,
DC 2-wire

Ø 6.5 mm	Ø 6.5 mm			
Not flush	Not flush			
4 mm	4 mm			
0...3.2 mm	0...3.2 mm			
BES0005	BES000E			
BES G06EB-PSC40F-S49G	BES G06ED-PSC40F-BP02			
BES0004	BES000A			
BES G06EB-POC40F-S49G	BES G06ED-POC40F-BP02			
BES0003	BES0008			
BES G06EB-NSC40F-S49G	BES G06ED-NSC40F-BP02			
BES0002	BES0006			
BES G06EB-NOC40F-S49G	BES G06ED-NOC40F-BP02			
10...30 V DC	10...30 V DC			
2.5 V	2.5 V			
75 V DC	250 V AC (□)			
200 mA	200 mA			
Yes/Yes/Yes	Yes/Yes/Yes			
-25...70 °C	-25...70 °C			
1.5 kHz	1.5 kHz			
Yellow LED	Yellow LED			
IP 67	IP 68 per BWN Pr. 20			
CE, cULus	CE, cULus			
Stainless steel	Stainless steel			
PA 12	PUR			
M8 connector, 3-pin	2 m PVC cable, 3x0.14 mm²			



Inductive Global Sensors

Cylinder design, DC 3-wire

M8x1, range 1.5 mm

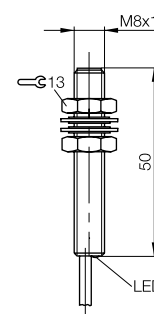
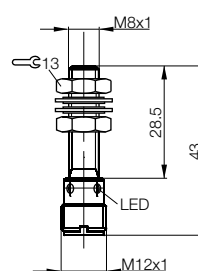
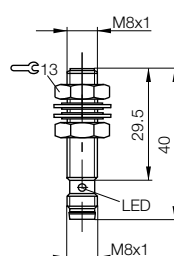
M8
Global

Preferred variants
available immediately



Series		M8x1	M8x1	M8x1	
Installation type		Flush	Flush	Flush	
Range 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	
PNP, NO	Order code	BES00CJ	BES00CH	BES0037	
	Part number	BES M08EE-PSC15B-S49G-003	BES M08EE-PSC15B-S04G-003	BES M08MI-PSC15B-BV02	
PNP, NC	Order code	BES00CC	BES00CA	BES0030	
	Part number	BES M08EE-POC15B-S49G-003	BES M08EE-POC15B-S04G-003	BES M08MI-POC15B-BV02	
NPN, NO	Order code	BES00C7	BES00C6	BES002F	
	Part number	BES M08EE-NSC15B-S49G-003	BES M08EE-NSC15B-S04G-003	BES M08MI-NSC15B-BV02	
NPN, NC	Order code	BES00C3	BES00C2	BES03PJ	
	Part number	BES M08EE-NOC15B-S49G-003	BES M08EE-NOC15B-S04G-003	BES M08MI-NOC15B-BV02	
Supply voltage U_S		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 (II)	250 V AC (II)	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	Stainless steel	Stainless steel	Brass-coated	
	Sensing surface	PBT	PBT	PA 12	
Connection		M8 connector, 3-pin	M12 connector, 4-pin	2 m PVC cable, 3x0.14 mm ²	

Other variants on our website or on request.



Suitable connectors

Size/design	Length/cable material	Order code
M8, 3-pin/straight	2 m/PVC	BCC02NU
M8, 3-pin/angled	2 m/PVC	BCC02P5
M8, 3-pin/straight	5 m/PVC	BCC02NW
M8, 3-pin/angled	5 m/PVC	BCC02P6
M12, 4-pin/straight	2 m/PVC	BCC0367
M12, 4-pin/angled	2 m/PVC	BCC036N
M12, 4-pin/straight	5 m/PVC	BCC0368
M12, 4-pin/angled	5 m/PVC	BCC036P

Recommended accessories

Description	Order code
Mounting bracket	BAM009U
Mounting cuff	BAM00A2

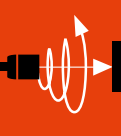
You can find additional mechanical accessories in our catalog **Accessories Line**.

You can find additional electrical accessories in our catalog
Industrial Networking and Connectivity.

Inductive Global Sensors

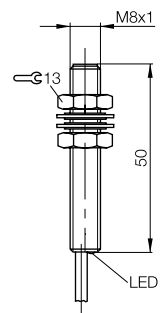
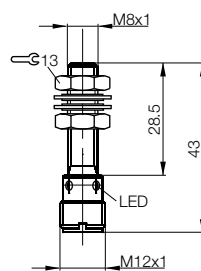
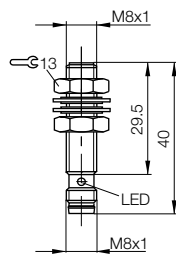
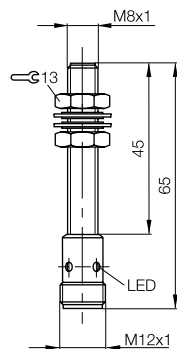
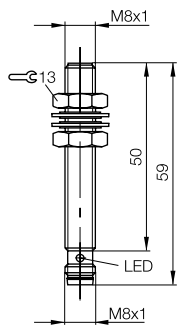
Cylinder design, DC 3-wire

M8x1, range 1.5 mm, 2 mm



Inductive
Global
Sensors
**Cylinder
Design,
DC 3-wire**
Block
Design,
DC 3-/4-wire
Cylinder
Design,
DC 2-wire

M8x1	M8x1	M8x1	M8x1	M8x1
Flush	Flush	Flush	Flush	Flush
1.5 mm	1.5 mm	2 mm	2 mm	2 mm
0...1.2 mm	0...1.2 mm	0...1.6 mm	0...1.6 mm	0...1.6 mm
BES003C	BES0027	BES00CK	BES00FC	BES003K
BES M08MI-PSC15B-S49G	BES M08MH1-PSC15B-S04G	BES M08EE-PSC20B-S49G-003	BES M08EE-PSC20B-S04G-003	BES M08MI-PSC20B-BV02
BES03P6	BES0026	BES00CF	BES00CE	BES03TH
BES M08MI-POC15B-S49G	BES M08MH1-POC15B-S04G	BES M08EE-POC20B-S49G-003	BES M08EE-POC20B-S04G-003	BES M08MI-POC20B-BV02
BES002K	BES0024	BES00C9	BES00C8	BES002P
BES M08MI-NSC15B-S49G	BES M08MH1-NSC15B-S04G	BES M08EE-NSC20B-S49G-003	BES M08EE-NSC20B-S04G-003	BES M08MI-NSC20B-BV02
BES03PK	BES0023	BES00C5	BES00C4	BES03TF
BES M08MI-NOC15B-S49G	BES M08MH1-NOC15B-S04G	BES M08EE-NOC20B-S49G-003	BES M08EE-NOC20B-S04G-003	BES M08MI-NOC20B-BV02
12...30 V DC	12...30 V DC	10...30 V DC	10...30 V DC	12...30 V DC
2 V	2 V	2.5 V	2.5 V	2.5 V
75 V DC	75 V DC	250 V AC (□)	250 V AC (□)	75 V DC
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	700 Hz	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	Brass-coated	Stainless steel	Stainless steel	Brass-coated
PA 12	PA 12	PBT	PBT	PA 12
M8 connector, 3-pin	M12 connector, 4-pin	M8 connector, 3-pin	M12 connector, 4-pin	2 m PVC cable, 3x0.14 mm²



Inductive Global Sensors

Cylinder design, DC 3-wire

M8x1, range 2 mm, 4 mm

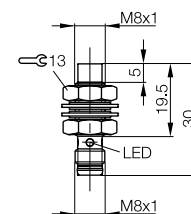
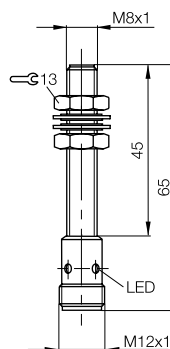
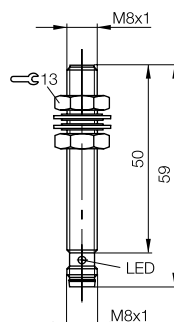
M8
Global

Preferred variants
available immediately



Series		M8x1	M8x1	M8x1	
Installation type		Flush	Flush	Non-flush	
Range s_n		2 mm	2 mm	4 mm	
Assured switching distance s_a		0...1.6 mm	0...1.6 mm	0...3.2 mm	
PNP, NO	Order code	BES003P	BES0028	BES000M	
	Part number	BES M08MI-PSC20B-S49G	BES M08MH1-PSC20B-S04G	BES M08EB-PSC40F-S49G	
PNP, NC	Order code	BES0033	BES03T5	BES000L	
	Part number	BES M08MI-POC20B-S49G	BES M08MH1-POC20B-S04G	BES M08EB-POC40F-S49G	
NPN, NO	Order code	BES002U	BES0025	BES000K	
	Part number	BES M08MI-NSC20B-S49G	BES M08MH1-NSC20B-S04G	BES M08EB-NSC40F-S49G	
NPN, NC	Order code	BES03TJ	BES03T6	BES000J	
	Part number	BES M08MI-NOC20B-S49G	BES M08MH1-NOC20B-S04G	BES M08EB-NOC40F-S49G	
Supply voltage U_S		12...30 V DC	12...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)		75 V DC	75 V DC	250 V AC (II)	
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.		700 Hz	700 Hz	1.5 kHz	
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	Brass-coated	Stainless steel	
	Sensing surface	PA 12	PA 12	PBT	
Connection		M8 connector, 3-pin	M12 connector, 4-pin	M8 connector, 3-pin	

Other variants on our website or on request.



Suitable connectors

Size/design	Length/cable material	Order code
M8, 3-pin/straight	2 m/PVC	BCC02NU
M8, 3-pin/angled	2 m/PVC	BCC02P5
M8, 3-pin/straight	5 m/PVC	BCC02NW
M8, 3-pin/angled	5 m/PVC	BCC02P6
M12, 4-pin/straight	2 m/PVC	BCC0367
M12, 4-pin/angled	2 m/PVC	BCC036N
M12, 4-pin/straight	5 m/PVC	BCC0368
M12, 4-pin/angled	5 m/PVC	BCC036P

Recommended accessories

Description	Order code
Mounting bracket	BAM009U
Mounting cuff	BAM00A2

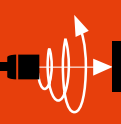
You can find additional mechanical accessories in our catalog **Accessories Line**.

You can find additional electrical accessories in our catalog
Industrial Networking and Connectivity.

Inductive Global Sensors

Cylinder design, DC 3-wire

M8x1, range 4 mm



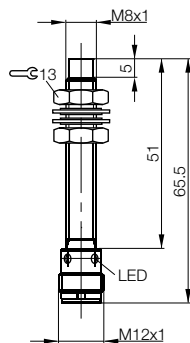
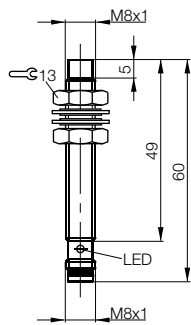
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Global
Sensors

**Cylinder
Design,
DC 3-wire**

Block
Design,
DC 3-/4-wire

Cylinder
Design,
DC 2-wire

M8x1	M8x1			
Non-flush	Non-flush			
4 mm	4 mm			
0...3.2 mm	0...3.2 mm			
BES001J	BES001H			
BES M08EH-PSC40F-S49G	BES M08EH-PSC40F-S04G			
BES001F	BES001E			
BES M08EH-POC40F-S49G	BES M08EH-POC40F-S04G			
BES001C	BES001A			
BES M08EH-NSC40F-S49G	BES M08EH-NSC40F-S04G			
BES0019	BES0018			
BES M08EH-NOC40F-S49G	BES M08EH-NOC40F-S04G			
10...30 V DC	10...30 V DC			
2.5 V	2.5 V			
250 V AC (□)	250 V AC (□)			
200 mA	200 mA			
Yes/Yes/Yes	Yes/Yes/Yes			
-25...70 °C	-25...70 °C			
1.5 kHz	1.5 kHz			
Yellow LED	Yellow LED			
IP 68 per BWN Pr. 20	IP 67			
CE, cULus	CE, cULus			
Stainless steel	Stainless steel			
PBT	PBT			
M8 connector, 3-pin	M12 connector, 4-pin			



Inductive Global Sensors
Cylinder design, DC 3-wire
M12x1, range 2 mm

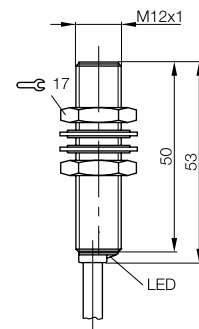
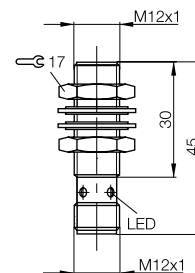
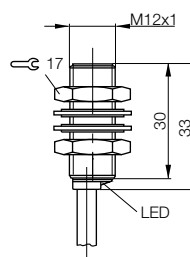
M12
Global

Preferred variants
available immediately



Series		M12x1	M12x1	M12x1	
Installation type		Flush	Flush	Flush	
Range 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	
PNP, NO	Order code	BES04CU	BES00EE	BES005U	
	Part number	BES M12MD-PSC20B-BV02-003	BES M12ME-PSC20B-S04G-003	BES M12MI-PSC20B-BV02	
PNP, NC	Order code		BES00EA	BES00FP	
	Part number		BES M12ME-POC20B-S04G-003	BES M12MI-POC20B-BV02	
NPN, NO	Order code	BES04CW	BES00E8	BES00FL	
	Part number	BES M12MD-NSC20B-BV02-003	BES M12ME-NSC20B-S04G-003	BES M12MI-NSC20B-BV02	
NPN, NC	Order code		BES00E6	BES03PR	
	Part number		BES M12ME-NOC20B-S04G-003	BES M12MI-NOC20B-BV02	
Supply voltage U_S		10...30 V DC	10...30 V DC	12...30 V DC	
Voltage drop U_d at I_e max.		2 V	2 V	2.5 V	
Rated insulation voltage U_i (protection class)		250 V AC (II)	250 V AC (II)	250 V AC (II)	
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.		1.2 kHz	1.2 kHz	1.2 kHz	
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	Brass-coated	Brass-coated	
	Sensing surface	PBT	PBT	PA 12	
Connection		2 m PUR cable, 3x0.34 mm ²	M12 connector, 4-pin	2 m PVC cable, 3x0.34 mm ²	

Other variants on our website or on request.



Suitable connectors

Size/design	Length/cable material	Order code
M12, 4-pin/straight	2 m/PVC	BCC0367
M12, 4-pin/angled	2 m/PVC	BCC036N
M12, 4-pin/straight	5 m/PVC	BCC0368
M12, 4-pin/angled	5 m/PVC	BCC036P

Recommended accessories

Description	Order code
Mounting bracket	BAM00C0
Mounting cuff	BAM00C4

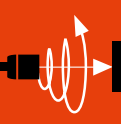
You can find additional electrical accessories in our catalog
Industrial Networking and Connectivity.

You can find additional mechanical accessories in
our catalog **Accessories Line**.

Inductive Global Sensors

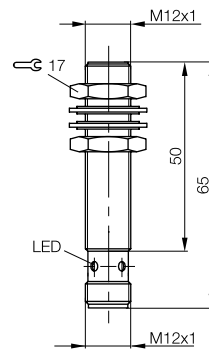
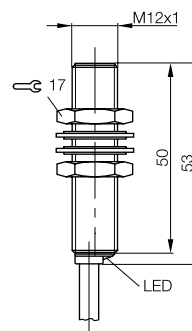
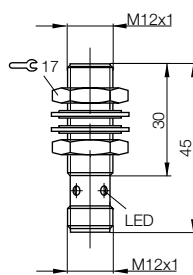
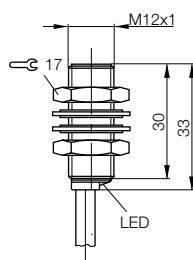
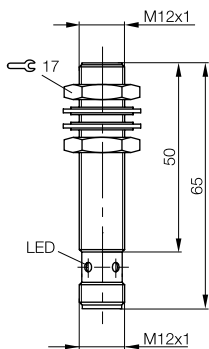
Cylinder design, DC 3-wire

M12×1, range 2 mm, 4 mm



Inductive
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Sensors
**Cylinder
Design,
DC 3-wire**
Block
Design,
DC 3-/4-wire
Cylinder
Design,
DC 2-wire

M12×1	M12×1	M12×1	M12×1	M12×1
Flush	Flush	Flush	Flush	Flush
2 mm	4 mm	4 mm	4 mm	4 mm
0...1.6 mm	0...3.2 mm	0...3.2 mm	0...3.2 mm	0...3.2 mm
BES0060	BES00E5	BES00EF	BES0064	BES0068
BES M12MI-PSC20B-S04G	BES M12MD-PSC40B-BP02-003	BES M12ME-PSC40B-S04G-003	BES M12MI-PSC40B-BV02	BES M12MI-PSC40B-S04G
BES005F	BES00E3	BES00EC	BES005L	BES005N
BES M12MI-POC20B-S04G	BES M12MD-POC40B-BP02-003	BES M12ME-POC40B-S04G-003	BES M12MI-POC40B-BV02	BES M12MI-POC40B-S04G
BES0054	BES00E1	BES00E9	BES00FM	BES0059
BES M12MI-NSC20B-S04G	BES M12MD-NSC40B-BP02-003	BES M12ME-NSC40B-S04G-003	BES M12MI-NSC40B-BV02	BES M12MI-NSC40B-S04G
BES004Y	BES00CZ	BES00E7	BES03PT	BES004Z
BES M12MI-NOC20B-S04G	BES M12MD-NOC40B-BP02-003	BES M12ME-NOC40B-S04G-003	BES M12MI-NOC40B-BV02	BES M12MI-NOC40B-S04G
12...30 V DC	10...30 V DC	10...30 V DC	12...30 V DC	12...30 V DC
2.5 V	2.5 V	2.5 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	300 Hz	300 Hz	500 Hz	500 Hz
Yellow LED	Yellow LED	Yellow LED	Yellow LED	Yellow LED
IP 68 per BWN Pr. 20	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	Brass-coated	Brass-coated	Brass-coated	Brass-coated
PA 12	LCP	LCP	PA 12	PA 12
M12 connector, 4-pin	2 m PUR cable, 3×0.34 mm²	M12 connector, 4-pin	2 m PVC cable, 3×0.34 mm²	M12 connector, 4-pin



Inductive Global Sensors
Cylinder design, DC 3-wire
M12×1, range 8 mm

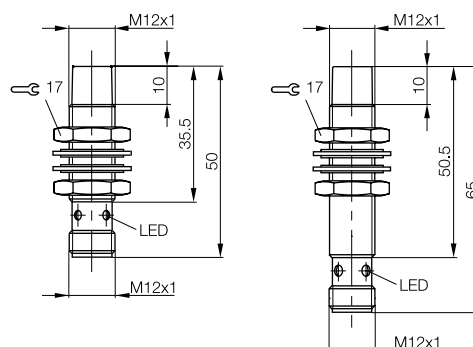
M12, M18
Global

Preferred variants
available immediately



Series		M12×1	M12×1		
Installation type		Non-flush	Non-flush		
Range s_n		8 mm	8 mm		
Assured switching distance s_a		0...6.4 mm	0...6.4 mm		
PNP, NO	Order code	BES01PY	BES004N		
	Part number	BES M12MD-PSC80F-S04G	BES M12MG-PSC80F-S04G		
PNP, NC	Order code	BES01PU	BES004K		
	Part number	BES M12MD-POC80F-S04G	BES M12MG-POC80F-S04G		
NPN, NO	Order code	BES01PT	BES004F		
	Part number	BES M12MD-NSC80F-S04G	BES M12MG-NSC80F-S04G		
NPN, NC	Order code	BES01PR	BES004A		
	Part number	BES M12MD-NOC80F-S04G	BES M12MG-NOC80F-S04G		
Supply voltage U_S		10...30 V DC	10...30 V DC		
Voltage drop U_d at I_e max.		2.5 V	2.5 V		
Rated insulation voltage U_i (protection class)		250 V AC (□)	250 V AC (□)		
Rated operating current I_e		200 mA	200 mA		
Polarity reversal protected/transposition protected/ short-circuit protected		Yes/Yes/Yes	Yes/Yes/Yes		
Ambient temperature T_a		-25...70 °C	-25...70 °C		
Switching frequency f max.		800 Hz	800 Hz		
Output function indicator		Yellow LED	Yellow LED		
Degree of protection as per IEC 60529		IP 68 per BWN Pr. 20	IP 67		
Approvals		CE, cULus	CE, cULus		
Material	Housing	Brass-coated	Brass-coated		
	Sensing surface	PBT	PBT		
Connection		M12 connector, 4-pin	M12 connector, 4-pin		

Other variants on our website or on request.



Suitable connectors

Size/design	Length/cable material	Order code
M12, 4-pin/straight	2 m/PVC	BCC0367
M12, 4-pin/angled	2 m/PVC	BCC036N
M12, 4-pin/straight	5 m/PVC	BCC0368
M12, 4-pin/angled	5 m/PVC	BCC036P

You can find additional electrical accessories in our catalog
Industrial Networking and Connectivity.

Recommended accessories

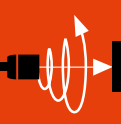
Description	Order code
Mounting cuff	BAM00C4
Mounting cuff	BAM00F2
Mounting bracket	BAM00C0
Mounting bracket	BAM00EY

You can find additional mechanical accessories in
our catalog **Accessories Line**.

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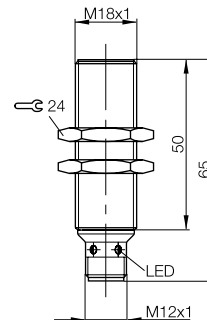
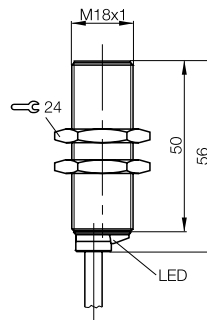
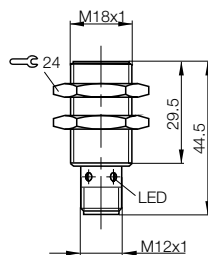
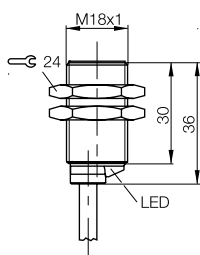
Cylinder design, DC 3-wire

M18×1, range 5 mm



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Sensors
**Cylinder
Design,
DC 3-wire**
Block
Design,
DC 3-/4-wire
Cylinder
Design,
DC 2-wire

M18×1	M18×1	M18×1	M18×1	
Flush	Flush	Flush	Flush	
5 mm	5 mm	5 mm	5 mm	
0...4 mm	0...4 mm	0...4 mm	0...4 mm	
BES00EN	BES00EY	BES0082	BES0086	
BES M18MD-PSC50B-BP02-003	BES M18ME-PSC50B-S04G-003	BES M18MI-PSC50B-BV02	BES M18MI-PSC50B-S04G	
BES00EL	BES00EU	BES007R	BES043J	
BES M18MD-POC50B-BP02-003	BES M18ME-POC50B-S04G-003	BES M18MI-POC50B-BV02	BES M18MI-POC50B-S04G	
BES00EJ	BES00ER	BES007A	BES044F	
BES M18MD-NSC50B-BP02-003	BES M18ME-NSC50B-S04G-003	BES M18MI-NSC50B-BV02	BES M18MI-NSC50B-S04G	
BES03T8	BES03T7	BES03RR		
BES M18MD-NOC50B-BP02-003	BES M18ME-NOC50B-S04G-003	BES M18MI-NOC50B-BV02		
10...30 V DC	10...30 V DC	12...30 V DC	12...30 V DC	
2 V	2 V	2.5 V	2.5 V	
75 V DC	75 V DC	250 V AC (□)	250 V AC (□)	
200 mA	200 mA	200 mA	200 mA	
Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes	
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C	
700 Hz	700 Hz	700 Hz	700 Hz	
Yellow LED	Yellow LED	Yellow LED	Yellow LED	
IP 67	IP 67	IP 68 per BWN Pr. 20	IP 68 per BWN Pr. 20	
CE, cULus	CE, cULus	CE, cULus	CE, cULus	
Brass-coated	Brass-coated	Brass-coated	Brass-coated	
PA 12	PA 12	PA 12	PA 12	
2 m PUR cable, 3 x 0.34 mm²	M12 connector, 4-pin	2 m PVC cable, 3x0.34 mm²	M12 connector, 4-pin	



Inductive Global Sensors
Cylinder design, DC 3-wire
M18x1, range 8 mm

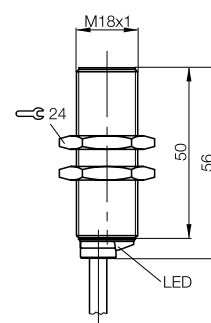
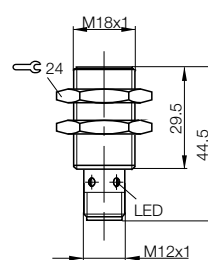
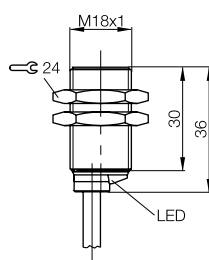
M18, M30
Global

Preferred variants
available immediately



Series		M18x1	M18x1	M18x1	
Installation type		Flush	Flush	Flush	
Range s_n		8 mm	8 mm	8 mm	
Assured switching distance s_a		0...6.4 mm	0...6.4 mm	0...6.4 mm	
PNP, NO	Order code	BES00EP	BES00EZ	BES008E	
	Part number	BES M18MD-PSC80B-BP02-003	BES M18ME-PSC80B-S04G-003	BES M18MI-PSC80B-BV02	
PNP, NC	Order code	BES00EM	BES00EW	BES03PY	
	Part number	BES M18MD-POC80B-BP02-003	BES M18ME-POC80B-S04G-003	BES M18MI-POC80B-BV02	
NPN, NO	Order code	BES00EK	BES00ET		
	Part number	BES M18MD-NSC80B-BP02-003	BES M18ME-NSC80B-S04G-003		
NPN, NC	Order code	BES00EH	BES03RN		
	Part number	BES M18MD-NOC80B-BP02-003	BES M18ME-NOC80B-S04G-003		
Supply voltage U_S		10...30 V DC	10...30 V DC	12...30 V DC	
Voltage drop U_d at I_e max.		3.5 V	3.5 V	2.5 V	
Rated insulation voltage U_i (protection class)		75 V DC	75 V DC	250 V AC (II)	
Rated operating current I_e		130 mA	130 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.		150 Hz	150 Hz	150 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	Brass-coated	Brass-coated	
	Sensing surface	PBT	PBT	PA 12	
Connection		2 m PUR cable, 3x0.34 mm ²	M12 connector, 4-pin	2 m PVC cable, 3x0.34 mm ²	

Other variants on our website or on request.



Suitable connectors

Size/design	Length/cable material	Order code
M12, 4-pin/straight	2 m/PVC	BCC0367
M12, 4-pin/angled	2 m/PVC	BCC036N
M12, 4-pin/straight	5 m/PVC	BCC0368
M12, 4-pin/angled	5 m/PVC	BCC036P

Recommended accessories

Description	Order code
Mounting cuff	BAM00F2
Mounting bracket	BAM00EY

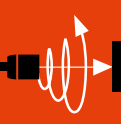
You can find additional electrical accessories in our catalog
Industrial Networking and Connectivity.

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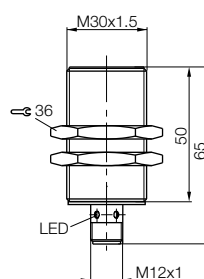
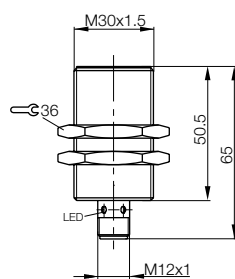
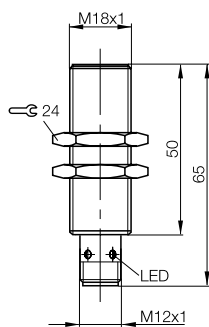
Cylinder design, DC 3-wire

M18×1, M30×1, range 8 mm, 10 mm, 15 mm



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Sensors
**Cylinder
Design,
DC 3-wire**
Block
Design,
DC 3-/4-wire
Cylinder
Design,
DC 2-wire

M18×1	M30×1.5	M30×1.5		
Flush	Flush	Flush		
8 mm	10 mm	15 mm		
0...6.4 mm	0...8.1 mm	0...12.2 mm		
BES008L	BES00A3	BES00AF		
BES M18MI-PSC80B-S04G	BES M30MI-PSC10B-S04G	BES M30MI-PSC15B-S04G		
BES03RP	BES043H	BES03RK		
BES M18MI-POC80B-S04G	BES M30MI-POC10B-S04G	BES M30MI-POC15B-S04G		
BES007L				
BES M18MI-NSC80B-S04G				
BES0077				
BES M18MI-NOC80B-S04G				
10...30 V DC	12...30 V DC	10...30 V DC		
2.5 V	2.5 V	2.5 V		
250 V AC (□)	75 V DC	250 V AC (□)		
200 mA	200 mA	200 mA		
Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes		
-25...70 °C	-25...70 °C	-25...70 °C		
1 kHz	400 Hz	100 Hz		
Yellow LED	Yellow LED	Yellow LED		
IP 67	IP 67	IP 67		
CE, cULus	CE, cULus	CE, cULus		
Brass-coated	Brass-coated	Brass-coated		
PBT	PA 12	PA 12		
M12 connector, 4-pin	M12 connector, 4-pin	M12 connector, 4-pin		



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Block design, DC 3-/4-wire
40×40 mm, range 20 mm, 25 mm

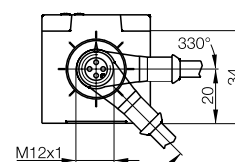
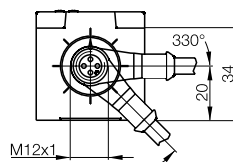
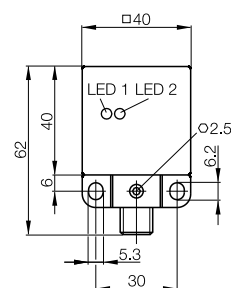
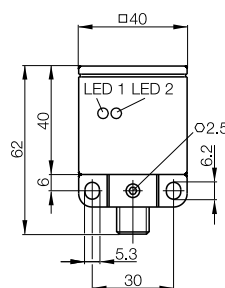
40×40 mm
Global

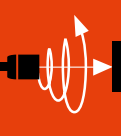
Preferred variants
available immediately



Model		40×40 mm Unicomact	40×40 mm
Installation type		Flush	Not flush
Rated switching distance s_n		20 mm	25 mm
Assured switching distance s_a		0...16 mm	0...20 mm
PNP, NO	Order code	BES021W	
	Part number	BES Q40KFU-PSC20B-S04G	
PNP, complementary	Order code	BES0217	
	Part number	BES Q40KFU-PAC20B-S04G	
NPN, complementary	Order code		BES022J
	Part number		BES Q40KFU-NAC25F-S04G
Supply voltage U_s		10...30 V DC	10...30 V DC
Voltage drop U_d at I_e max.		2.5 V	2.5 V
Rated insulation voltage U_i (protection class)		250 V AC (□)	250 V AC (□)
Rated operating current I_e		200 mA	200 mA
Polarity reversal protected/t		Yes/Yes/Yes	Yes/Yes/Yes
ransposition protected/short-circuit protected			
Ambient temperature T_a		-25...+70 °C	-25...+70 °C
Switching frequency f max.		50 Hz	50 Hz
Output function indicator		Yellow LED	Yellow LED
Degree of protection as per IEC 60529		IP 67	IP 67
Approvals		CE, cULus	CE, cULus
Material	Housing	PA	PBT
	Sensing surface	PA	PBT
Connection		M12 connector, 4-pin	M12 connector, 4-pin

Other variants on our website or on request.





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Sensors
Cylinder
Design,
DC 3-wire
**Block
Design,
DC 3-/4-wire**
Cylinder
Design,
DC 2-wire



Inductive Global Sensors
Cylinder design, DC 2-wire
M8x1, M12x1, range 2 mm, 3 mm

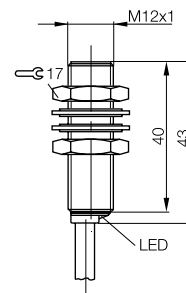
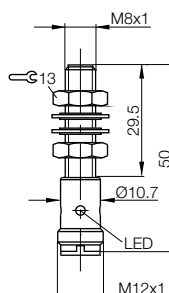
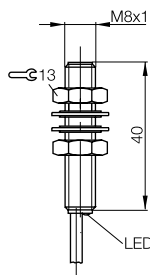
M8, M12,
M18, M30
Global

Preferred variants
available immediately



Series		M8x1	M8x1	M12x1	
Installation type		Flush	Flush	Flush	
Range s_n		2 mm	2 mm	3 mm	
Assured switching distance s_a		0...1.6 mm	0...1.6 mm	0...2.4 mm	
Polarized, NO	Order code	BES001L	BES0022	BES0045	
	Part number	BES M08MG-GSC20B-BV02	BES M08ME1-GSC20B-S04G	BES M12MG-GSC30B-BV02	
Polarized, NC	Order code	BES024R	BES024N	BES024L	
	Part number	BES M08MG-GOC20B-BV02	BES M08ME1-GOC20B-S04G	BES M12MG-GOC30B-BV02	
Non-polarized, NO	Order code	BES001T	BES001Y	BES004T	
	Part number	BES M08MG-USC20B-BV02	BES M08ME1-USC20B-S04G	BES M12MG-USC30B-BV02	
Non-polarized, NC	Order code	BES024T	BES024P	BES024M	
	Part number	BES M08MG-UOC20B-BV02	BES M08ME1-UOC20B-S04G	BES M12MG-UOC30B-BV02	
Supply voltage U_S		10...36 V DC	10...36 V DC	10...36 V DC	
Voltage drop U_d at I_e max.		5 V	5 V	≤ 5 V	
Rated insulation voltage U_i		75 V DC	75 V DC	75 V DC	
Rated operating current I_e		100 mA	100 mA	100 mA	
Minimum operational current I_m		5 mA	5 mA	5 mA	
Residual current I_r max.		600 μ A	600 μ A	600 μ A	
Permissible load capacitance max.		1 μ F	1 μ F	1 μ F	
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	1.3 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	Brass-coated	Brass-coated	Brass-coated	
	Sensing surface	PBT	PBT	PA 12	
Connection		2 m PVC cable, 2x0.14 mm ²	M12 connector, 4-pin	2 m PVC cable, 2x0.34 mm ²	

Other variants on our website or on request.



Suitable connectors

Size/design	Length/cable material	Order code
M12, 4-pin/straight	2 m/PVC	BCC0367
M12, 4-pin/angled	2 m/PVC	BCC036N
M12, 4-pin/straight	5 m/PVC	BCC0368
M12, 4-pin/angled	5 m/PVC	BCC036P

Recommended accessories

Description	Order code
Mounting cuff	BAM00F2
Mounting cuff	BAM0219
Mounting bracket	BAM00EY

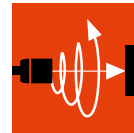
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Industrial Networking and Connectivity.

You can find additional mechanical accessories in
our catalog **Accessories Line**.

Inductive Global Sensors

Cylinder design, DC 2-wire

M12x1, M18x1, M30x1.5, range 3 mm, 7 mm, 15 mm



Inductive
Global
Sensors
Cylinder
Design,
DC 3-wire
Block
Design,
DC 3-/4-wire
Cylinder
Design,
DC 2-wire

M12x1	M12x1	M18x1	M18x1	M30x1.5
Flush	Flush	Flush	Flush	Flush
3 mm	3 mm	7 mm	7 mm	15 mm
0...2.4 mm	0...2.4 mm	0...5.6 mm	0...5.6 mm	0...12 mm
BES003Z	BES0042	BES006C	BES00FA	BES008R
BES M12MF-GSC30B-S04G	BES M12MG-GSC30B-BP00,3-GS04	BES M18MG-GSC70B-BP00,3-GS04	BES M18MG-GSC70B-BV02	BES M30MF-GSC15B-BV02
BES024J	BES03HK	BES039L	BES02NT	BES0279
BES M12MF-GOC30B-S04G	BES M12MG-GOC30B-BP00,3-GS04	BES M18MG-GOC70B-BP00,3-GS04	BES M18MG-GOC70B-BV02	BES M30MF-GOC15B-BV02
BES0041			BES0073	BES0091
BES M12MF-USC30B-S04G			BES M18MG-USC70B-BV02	BES M30MF-USC15B-BV02
BES024K			BES02NU	BES027A
BES M12MF-UOC30B-S04G			BES M18MG-UOC70B-BV02	BES M30MF-UOC15B-BV02
10...36 V DC	10...36 V DC	10...36 V DC	10...36 V DC	10...36 V DC
≤ 5 V	4 V	4 V	4 V	≤ 5 V
75 V DC	75 V DC	75 V DC	75 V DC	75 V DC
100 mA	100 mA	100 mA	100 mA	100 mA
5 mA	5 mA	5 mA	5 mA	5 mA
600 µA	600 µA	600 µA	600 µA	600 µA
1 µF	1 µF	1 µF	1 µF	1 µF
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
1.3 kHz	1.3 kHz	600 Hz	600 Hz	400 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	Brass-coated	Brass-coated	Brass-coated	Brass-coated
PA 12	PA 12	PA 12	PA 12	PA 12
M12 connector, 4-pin	0.3 m PUR cable with M12 connector, 4-pin	0.3 m PUR cable with M12 connector, 4-pin	2 m PVC cable, 3x0.34 mm²	2 m PVC cable, 2x0.34 mm²

