

DC 3-/4-wire Inductive Sensors

Block design, 8x8 mm



SUPERSHORTIES



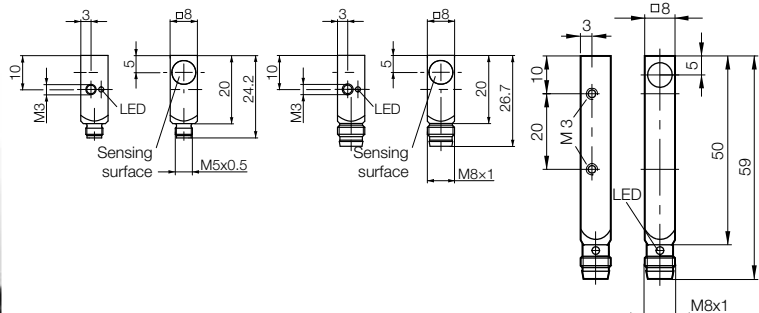
SUPERSHORTIES



Model		8x8 mm	8x8 mm	8x8 mm
Installation type (observe instructions in the 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	BES03U1	BES03Y6	BES0180
	Part number	BES Q08MEC-PSC15B-S26G	BES Q08MEC-PSC15B-S49G	BES 516-300-S166-S49
PNP, NC	Ordering code	BES03YE	BES03U0	BES0187
	Part number	BES Q08MEC-POC15B-S26G	BES Q08MEC-POC15B-S49G	BES 516-300-S180-S49
NPN, NO	Ordering code	BES03Y7	BES03U8	BES0184
	Part number	BES Q08MEC-NSC15B-S26G	BES Q08MEC-NSC15B-S49G	BES 516-300-S170-S49
NPN, NC	Ordering code	BES03U9	BES03YC	BES018H
	Part number	BES Q08MEC-NOC15B-S26G	BES Q08MEC-NOC15B-S49G	BES 516-300-S264-S49
Supply voltage U_s		10...30 V DC	10...30 V DC	10...30 V DC
Voltage drop U_d at I_e max.		2.8 V	2.8 V	2.5 V
Rated insulation voltage U_i		75 V DC	75 V DC	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.		3 kHz	3 kHz	5 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
Special properties		Short design	Short design	
Material	Housing	Brass-coated	Brass-coated	Cast zinc
	Sensing surface	PBT	PBT	PBT
Connection		M5 connector, 3-pin	M8 connector, 3-pin	M8 connector, 3-pin

Wiring diagrams, see page 958.
The meaning of switching distance markings can be found on page 962.

Additional cable lengths and PUR cable jacket material available on request



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Block design, 8x8 mm



SUPERSHORTIES



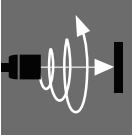
SUPERSHORTIES



SUPERSHORTIES



SUPERSHORTIES



Inductive Sensors

Global DC 3-wire

DC 3-/4-wire

Cylinder Designs

Block Designs

DC 2-wire

AC/DC 2-wire

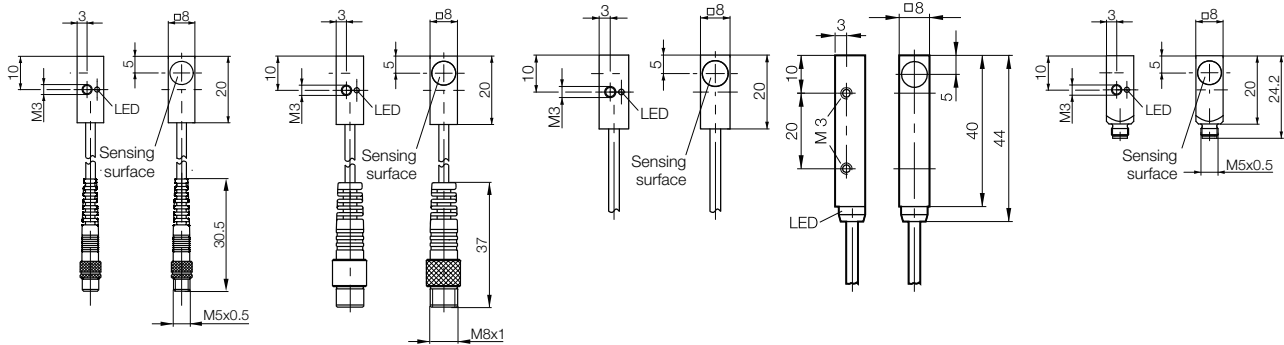
AC 2-wire

Special Properties

Analog Distance Measurement

Accessories

8x8 mm	8x8 mm	8x8 mm	8x8 mm	8x8 mm
Flush	Flush	Flush	Flush	Flush
1.5 mm	1.5 mm	1.5 mm	1.5 mm	2 mm
0...1.2 mm	0...1.2 mm	0...1.2 mm	0...1.2 mm	0...1.6 mm
■	■	■	■	■ ■
BES041J	BES041C	BES03TZ	BES017R	BES03U4
BES Q08MEC-PSC15B-EP00,3-GS26	BES Q08MEC-PSC15B-EP00,3-GS49	BES Q08MEC-PSC15B-EP02	BES 516-300-S166-02	BES Q08MEC-PSC20B-S26G
BES041K	BES041E	BES03Y5		BES03YH
BES Q08MEC-POC15B-EP00,3-GS26	BES Q08MEC-POC15B-EP00,3-GS49	BES Q08MEC-POC15B-EP02		BES Q08MEC-POC20B-S26G
BES041L	BES041F	BES03YA		BES03Y9
BES Q08MEC-NSC15B-EP00,3-GS26	BES Q08MEC-NSC15B-EP00,3-GS49	BES Q08MEC-NSC15B-EP02		BES Q08MEC-NSC20B-S26G
BES041M	BES041H	BES03U7		BES03UE
BES Q08MEC-NOC15B-EP00,3-GS26	BES Q08MEC-NOC15B-EP00,3-GS49	BES Q08MEC-NOC15B-EP02		BES Q08MEC-NOC20B-S26G
10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC
2.8 V	2.8 V	2.8 V	2.5 V	2.8 V
75 V DC	75 V DC	75 V DC	75 V DC	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
3 kHz	3 kHz	3 kHz	3 kHz	3 kHz
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
Short design	Short design	Short design		Short design
Brass-coated	Brass-coated	Brass-coated	Cast zinc	Brass-coated
PBT	PBT	PBT	PBT	PBT
0.3 m PUR cable with M5 connector, 3-pin	0.3 m PUR cable with M8 connector, 3-pin	2 m PUR cable, 3x0.14 mm ²	2 m PVC cable, 3x0.14 mm ²	M5 connector, 3-pin



DC 3-/4-wire Inductive Sensors

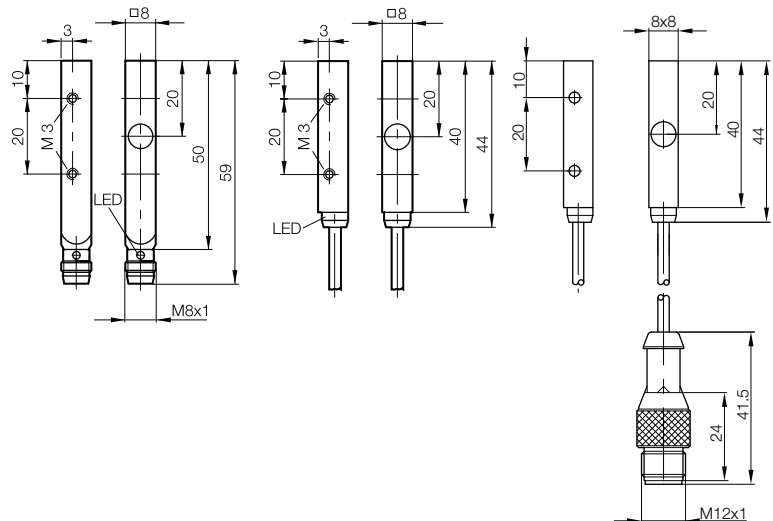
Block design, 8x8 mm



Model		8x8 mm	8x8 mm	8x8 mm
Installation type (observe instructions in the 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	BES018C	BES0189	BES0188
	Part number	BES 516-300-S202-S49	BES 516-300-S202-02	BES 516-300-S202-00,3-S4
PNP, NC	Ordering code	BES018J		
	Part number	BES 516-300-S272-S49		
NPN, NO	Ordering code			
	Part number			
NPN, NC	Ordering 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_e max.		2.5 V	2.5 V	2.5 V
Rated insulation voltage U_i		75 V DC	75 V DC	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.		5 kHz	5 kHz	5 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
Special properties				
Material	Housing	Cast zinc	Cast zinc	Cast zinc
	Sensing surface	PBT	PBT	PBT
Connection		M8 connector, 3-pin	2 m PVC cable, 3x0.14 mm ²	0.3 m PUR cable with M12 connector, 4-pin

Wiring diagrams, see page 958.
The meaning of switching distance markings can be found on page 962.

Additional cable lengths on request.

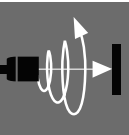


DC 3-/4-wire Inductive Sensors

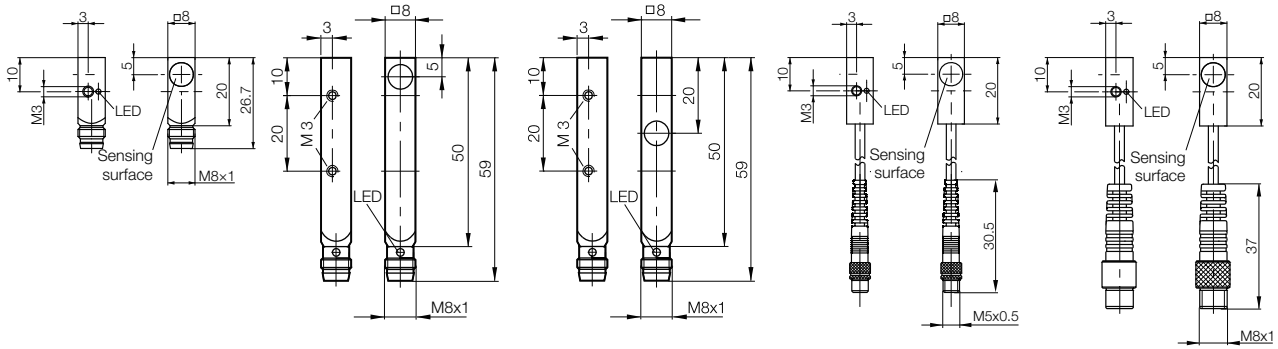
Block design, 8x8 mm



SUPERSHORTIES			SUPERSHORTIES	
8x8 mm	8x8 mm	8x8 mm	8x8 mm	8x8 mm
Flush	Flush	Flush	Flush	Flush
2 mm	2 mm	2 mm	2 mm	2 mm
0...1.6 mm	0...1.6 mm	0...1.6 mm	0...1.6 mm	0...1.6 mm
■ ■	■ ■	■ ■	■ ■	■ ■
BES03Y8	BES01U2	BES01UW	BES041U	BES041N
BES Q08MEC-PSC20B-S49G	BES Q08ZC-PSC20B-S49G	BES Q08ZE-PSC20B-S49G	BES Q08MEC-PSC20B-EP00,3-GS26	BES Q08MEC-PSC20B-EP00,3-GS49
BES03U3	BES01TF	BES01UK	BES041W	BES041P
BES Q08MEC-POC20B-S49G	BES Q08ZC-POC20B-S49G	BES Q08ZE-POC20B-S49G	BES Q08MEC-POC20B-EP00,3-GS26	BES Q08MEC-POC20B-EP00,3-GS49
BES03UC	BES01T3	BES01UC	BES041Y	BES041R
BES Q08MEC-NSC20B-S49G	BES Q08ZC-NSC20B-S49G	BES Q08ZE-NSC20B-S49G	BES Q08MEC-NSC20B-EP00,3-GS26	BES Q08MEC-NSC20B-EP00,3-GS49
BES03YJ	BES01RW	BES01U6	BES041Z	BES041T
BES Q08MEC-NOC20B-S49G	BES Q08ZC-NOC20B-S49G	BES Q08ZE-NOC20B-S49G	BES Q08MEC-NOC20B-EP00,3-GS26	BES Q08MEC-NOC20B-EP00,3-GS49
10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC
2.8 V	2.5 V	2.5 V	2.8 V	2.8 V
75 V DC	75 V DC	75 V DC	75 V DC	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
3 kHz	3 kHz	3 kHz	3 kHz	3 kHz
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
Short design			Short design	Short design
Brass-coated	Cast zinc	Cast zinc	Brass-coated	Brass-coated
PBT	PBT	PBT	PBT	PBT
M8 connector, 3-pin	M8 connector, 3-pin	M8 connector, 3-pin	0.3 m PUR cable with M5 connector, 3-pin	0.3 m PUR cable with M8 connector, 3-pin



- Inductive Sensors
- Global DC 3-wire
- DC 3-/4-wire
- Cylinder Designs
- Block Designs**
- DC 2-wire
- AC/DC 2-wire
- AC 2-wire
- Special Properties
- Analog Distance Measurement
- Accessories



DC 3-/4-wire Inductive Sensors

Block design, 8x8 mm



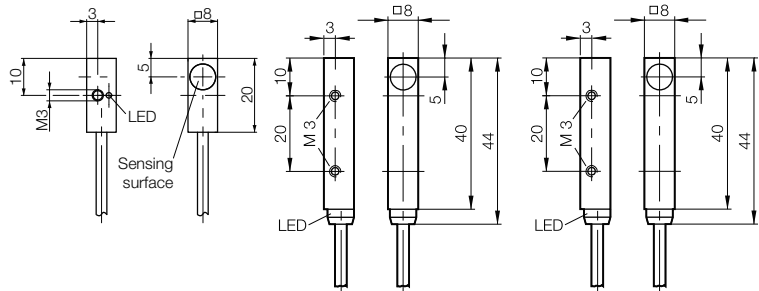
SUPERSHORTIES

Model		8x8 mm	8x8 mm	8x8 mm
Installation type (observe instructions in the 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	BES03U2	BES01TZ	BES01TN
	Part number	BES Q08MEC-PSC20B-EP02	BES Q08ZC-PSC20B-BV02	BES Q08ZC-PSC20B-BP02
PNP, NC	Ordering code	BES03YK	BES01TA	BES01T7
	Part number	BES Q08MEC-POC20B-EP02	BES Q08ZC-POC20B-BV02	BES Q08ZC-POC20B-BP02
NPN, NO	Ordering code		BES01T2	BES01RZ
	Part number		BES Q08ZC-NSC20B-BV02	BES Q08ZC-NSC20B-BP02
NPN, NC	Ordering code	BES03UA	BES01RU	BES01TL
	Part number	BES Q08MEC-NOC20B-EP02	BES Q08ZC-NOC20B-BV02	BES Q08ZC-NOC20B-BP02
Supply voltage U_s		10...30 V DC	10...30 V DC	10...30 V DC
Voltage drop U_d at I_e max.		2.8 V	2.5 V	2.5 V
Rated insulation voltage U_i		75 V DC	75 V DC	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.		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
Special properties				
Material	Housing	Brass-coated	Cast zinc	Cast zinc
	Sensing surface	PBT	PBT	PBT
Connection		2 m PUR cable,	2 m PVC cable,	2 m PUR cable,
		3x0.14 mm ²	3x0.14 mm ²	3x0.14 mm ²

Wiring diagrams, see page 958.

The meaning of switching distance markings can be found on page 962.

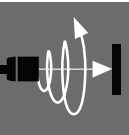
Additional cable lengths and PUR cable jacket material available on request





TRIPLEPROX

8x8 mm	8x8 mm	8x8 mm		
Flush	Flush	Quasi-flush		
2 mm	2 mm	3 mm		
0...1.6 mm	0...1.6 mm	0...2.4 mm		
■ ■	■ ■	■ ■ ■		
BES01UR	BES01UM	BES01U4		
BES Q08ZE-PSC20B-BV02	BES Q08ZE-PSC20B-BP02	BES Q08ZC-PSC30B-S49G		
BES01UH	BES01UE			
BES Q08ZE-POC20B-BV02	BES Q08ZE-POC20B-BP02			
BES01UA	BES01U7			
BES Q08ZE-NSC20B-BV02	BES Q08ZE-NSC20B-BP02			
10...30 V DC	10...30 V DC	10...30 V DC		
2.5 V	2.5 V	2 V		
75 V DC	75 V DC	75 V DC		
200 mA	200 mA	200 mA		
Yes/Yes/Yes	Yes/Yes/Yes	Yes/Yes/Yes		
-25...+70 °C	-25...+70 °C	-25...+70 °C		
3 kHz	3 kHz	1 kHz		
Yellow LED	Yellow LED	Yellow LED		
IP 67	IP 67	IP 67		
CE, cULus	CE, cULus	CE		
		Long range		
Cast zinc	Cast zinc	Brass-coated		
PBT	PBT	PBT		
2 m PVC cable, 3x0.14 mm ²	2 m PUR cable, 3x0.14 mm ²	M8 connector, 3-pin		



Inductive Sensors

Global DC 3-wire

DC 3-/4-wire

Cylinder Designs

Block Designs

DC 2-wire

AC/DC 2-wire

AC 2-wire

Special Properties

Analog Distance Measurement

Accessories

