



Highest quality and  
accuracy for automation

# INDUCTIVE SENSORS





Automation is almost inconceivable without inductive sensors. Wherever processes are automated, non-contact position detection of metallic objects, freedom from wear, and reliability are in demand. Whether in machine building, electronics production, in the automobile, foods or plastics industry.

At Balluff you are offered a wide range of inductive sensors in various form factors for virtually any application: from standard sensors to sensors with extended switching distance, hygiene-approved, high-pressure and Ex sensors, Factor 1 or all-metal sensors. They are also available with additional ceramic or PTFE coating, for example to prevent weld splatter from adhering. You will also find all-metal with Factor 1 in our range.

Balluff inductive sensors are used to monitor, control and automate your processes and conditions. With the highest level of quality – even in extreme environments.

#### The most important benefits

- Suitable for a variety of applications
- Contact-free and therefore wear-free
- Resistant to dirt
- Short-circuit protected
- In configurations from 3 mm Ø to 80 × 80 mm square dimensions



PNP normally open	<b>BES03Z6</b> BES G03EC-PSC10B-EP02	<b>BES0409</b> BES G03EC-PSC10B-EP00,3-GS49	
PNP normally closed			
Dimension	Ø 3 x 22 mm	Ø 3 x 22 mm	
Style	D3.0	D3.0	
Installation	flush	flush	
Range	1 mm	1 mm	
Switching frequency	3500 Hz	3500 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Cable, 2.00 m, PUR	Cable with connector, M8x1-Male, 3-pin, 0.30 m, PUR	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES0122</b> BES G04EC-PSC08B-S26G	<b>BES012F</b> BES G04ED-PSC15B-S26G	<b>BES012H</b> BES G04ED-PSC50F-EP02	<b>BES012J</b> BES G04ED-PSC50F-EP05
	<b>BES0120</b> BES G04EC-POC08B-S26G			
	Ø 4 x 29 mm	Ø 4 x 35 mm	Ø 4 x 35 mm	Ø 4 x 35 mm
	D4.0	D4.0	D4.0	D4.0
	flush	flush	non-flush	non-flush
	0.8 mm	1.5 mm	5 mm	5 mm
	5000 Hz	3000 Hz	3000 Hz	3000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	PBT	PBT	PET-C	PET-C
	Connector, M5x0.5-Male	Connector, M5x0.5-Male	Cable, 2.00 m, PUR	Cable, 5.00 m, PUR
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES012K</b> BES G04ED-PSC50F-S26G	<b>BES01P0</b> BES M04EC-PSD06B-BP02	
PNP normally closed			
NPN normally open		<b>BES03ZJ</b> BES M04EC-NSC10B-EP02	
Dimension	Ø 4 x 44 mm	Ø 4 x 22 mm	
Style	D4.0	M4x0.5	
Installation	non-flush	flush	
Range	5 mm	0.6 mm	
Switching frequency	3000 Hz	3500 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PET-C	PBT	
Connection	Connector, M5x0.5-Male	Cable, 2.00 m, PUR	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES03Z8</b> BES M04EC-PSC10B-EP02	<b>BES040R</b> BES M04EC-PSC10B-EP00,3-GS49	<b>BES051J</b> BES M05ED-PSC10B-EP00,2-097	<b>BES012Z</b> BES M05EC-PSC08B-S26G
			<b>BES051L</b> BES M05ED-POC10B-EP00,3-097	
				<b>BES012W</b> BES M05EC-NSC08B-S26G
	Ø 4 x 22 mm	Ø 4 x 22 mm	Ø 5 x 27 mm	Ø 5 x 29 mm
	M4x0.5	M4x0.5	M5x0.5	M5x0.5
	flush	flush	flush	flush
	1 mm	1 mm	1 mm	0.8 mm
	3500 Hz	3500 Hz	5000 Hz	3000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	PBT	PBT	PBT	PBT
	Cable, 2.00 m, PUR	Cable with connector, M8x1-Male, 3-pin, 0.30 m, PUR	Cable, 0.20 m, PUR	Connector, M5x0.5-Male
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES013A</b> BES M05ED-PSC15B-S26G	<b>BES013E</b> BES M05ED-PSC50F-EP02	
PNP normally closed	<b>BES0137</b> BES M05ED-POC15B-S26G		
NPN normally closed	<b>BES0130</b> BES M05ED-NOC15B-S26G		
Dimension	Ø 5 x 35 mm	Ø 5 x 35 mm	
Style	M5x0.5	M5x0.5	
Installation	flush	non-flush	
Range	1.5 mm	5 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PET-C	
Connection	Connector, M5x0.5-Male	Cable, 2.00 m, PUR	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES013F</b> BES M05ED-PSC50F-EP05	<b>BES013C</b> BES M05ED-PSC50F-EP00,3-GS04	<b>BES013H</b> BES M05ED-PSC50F-S26G	<b>BES025U</b> BES G06K40-PSC15B-FP02
			<b>BES0139</b> BES M05ED-POC50F-S26G	
	Ø 5 x 35 mm	Ø 5 x 35 mm	Ø 5 x 44 mm	Ø 6.5 x 6 mm
	M5x0.5	M5x0.5	M5x0.5	D6.5
	non-flush	non-flush	non-flush	flush
	5 mm	5 mm	5 mm	1.5 mm
	3000 Hz	3000 Hz	3000 Hz	3000 Hz
	Stainless steel	Stainless steel	Stainless steel	PBT
	PET-C	PET-C	PET-C	PBT
	Cable, 5.00 m, PUR	Cable with connector, M12x1-Male, 4-pin, 0.30 m, PUR	Connector, M5x0.5-Male	Cable, 2.00 m, PUR
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP65
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES0256</b> BES G06E60-PSC15B-EP02	<b>BES0251L</b> BES G06EA-PSC15B-EP01	
PNP normally closed	<b>BES0251</b> BES G06E60-POC15B-EP02		
Dimension	Ø 6.5 x 6 mm	Ø 6.5 x 10 mm	
Style	D6.5	D6.5	
Installation	flush	flush	
Range	1.5 mm	1.5 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Cable, 2.00 m, PUR	Cable, 1.00 m, PUR	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES025M</b> BES G06EA-PSC15B-EP02	<b>BES0258</b> BES G06E60-PSC20B-EP02	<b>BES037A</b> BES G06K40-PSC20B-FP02	<b>BES0254</b> BES G06E60-PSC15B-EP00,3-GS49
	<b>BES025H</b> BES G06EA-POC15B-EP02			
	Ø 6.5 x 10 mm	Ø 6.5 x 6 mm	Ø 6.5 x 6 mm	Ø 6.5 x 6 mm
	D6.5	D6.5	D6.5	D6.5
	flush	flush	flush	flush
	1.5 mm	2 mm	2 mm	1.5 mm
	3000 Hz	3000 Hz	1500 Hz	3000 Hz
	Stainless steel	Stainless steel	PBT	Stainless steel
	PBT	PBT	PBT	PBT
	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	Cable with connector, M8x1-Male, 3-pin, 0.30 m, PUR
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP65	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open		<b>BES0257</b> BES G06E60-PSC20B-EP00,3-GS49	
PNP normally closed	<b>BES051H</b> BES G06E60-POC15B-EP01-GS49		
Dimension	Ø 6.5 x 6 mm	Ø 6.5 x 6 mm	
Style	D6.5	D6.5	
Installation	flush	flush	
Range	1.5 mm	2 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Cable with connector, M8x1-Male, 3-pin, 1.00 m, PUR	Cable with connector, M8x1-Male, 3-pin, 0.30 m, PUR	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES025N</b> BES G06EA-PSD15B-S49G	<b>BES03R9</b> BES G06EE-PSC20B-S49G-003	<b>BES03P4</b> BES G06EH-PSC20B-S49G	<b>BES038Y</b> BES G06EI-PSC30B-S49G
	Ø 6.5 x 18 mm	Ø 6.5 x 40 mm	Ø 6.5 x 55 mm	Ø 6.5 x 60 mm
	D6.5	D6.5	D6.5	D6.5
	flush	flush	flush	quasi-flush
	1.5 mm	2 mm	2 mm	3 mm
	3000 Hz	700 Hz	1500 Hz	1200 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	PBT	PBT	PBT	PBT
	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP68
	CE, cULus, EAC, WEEE	cULus, CE, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES000E</b> BES G06ED-PSC40F-BP02	<b>BES0005</b> BES G06EB-PSC40F-S49G	
NPN normally open	<b>BES0008</b> BES G06ED-NSC40F-BP02		
Dimension	Ø 6.5 x 30 mm	Ø 6.5 x 30 mm	
Style	D6.5	D6.5	
Installation	non-flush	non-flush	
Range	4 mm	4 mm	
Switching frequency	4000 Hz	4000 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Cable, 2.00 m, PUR	Connector, M8x1-Male, 3-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES01NP</b> BES G06EF-PSC40F-S49G	<b>BES03P5</b> BES G06EH-PSC40F-S49G	<b>BES03EJ</b> BES G06MH-PSC30B-BP00,3-GS49	
	Ø 6.5 x 50 mm	Ø 6.5 x 60 mm	Ø 6.5 x 45 mm	
	D6.5	D6.5	D6.5	
	non-flush	non-flush	quasi-flush	
	4 mm	4 mm	3 mm	
	4000 Hz	4000 Hz	1000 Hz	
	Stainless steel	Stainless steel	Brass, Chrome-plated	
	PBT	PBT	PBT	
	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	Cable with connector, M8x1-Male, 3-pin, 0.30 m, PUR	
	10...30 VDC	10...30 VDC	10...30 VDC	
	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	-25...70 °C	
	IP68	IP68	IP67	
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, WEEE	
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PNP normally open	<b>BES05WE</b> BES G06EI-PSC40B-S49G	<b>BES012R</b> BES G08EG-PSC15B-BP05	
Dimension	Ø 6.5 x 60 mm	Ø 8 x 45 mm	
Style	D6.5	D8.0	
Installation	quasi-flush	flush	
Range	4 mm	1.5 mm	
Switching frequency	1100 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Connector, M8x1-Male, 3-pin	Cable, 5.00 m, PUR	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES01NY</b> BES G08EG-PSC15B-BV02	<b>BES012T</b> BES G08EG-PSC15B-BV05	<b>BES012L</b> BES G08EE-PSC20B-BP02	<b>BES026M</b> BES M08E60-PSC15B-EP02
	Ø 8 x 45 mm	Ø 8 x 45 mm	Ø 8 x 35 mm	Ø 8 x 6 mm
	D8.0	D8.0	D8.0	M8x1
	flush	flush	flush	flush
	1.5 mm	1.5 mm	2 mm	1.5 mm
	3000 Hz	3000 Hz	1500 Hz	3000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	PBT	PBT	PBT	PBT
	Cable, 2.00 m, PVC	Cable, 5.00 m, PVC	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP68	IP68	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES0275</b> BES M08EA-PSC15B-EP02		
PNP normally closed		<b>BES00CR</b> BES M08EF-POC15B-BP02-003	
NPN normally open		<b>BES00CN</b> BES M08EF-NSC15B-BP02-003	
Dimension	Ø 8 x 10 mm	Ø 8 x 40 mm	
Style	M8x1	M8x1	
Installation	flush	flush	
Range	1.5 mm	1.5 mm	
Switching frequency	3000 Hz	1000 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	
Operating voltage U <sub>B</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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<b>BES014K</b> BES M08EF-PSC15B-BP02	<b>BES0034</b> BES M08MI-PSC15B-BP02	<b>BES0036</b> BES M08MI-PSC15B-BP05	
			<b>BES0031</b> BES M08MI-POC15B-BV03
	<b>BES002H</b> BES M08MI-NSC15B-BV03		
Ø 8 x 40 mm	Ø 8 x 50 mm	Ø 8 x 50 mm	Ø 8 x 50 mm
M8x1	M8x1	M8x1	M8x1
flush	flush	flush	flush
1.5 mm	1.5 mm	1.5 mm	1.5 mm
3000 Hz	1000 Hz	1000 Hz	5000 Hz
Stainless steel	Brass, nickel plated	Brass, nickel plated	Brass, Nickel-free coated
PBT	PA 12	PA 12	PBT
Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	Cable, 5.00 m, PUR	Cable, 3.00 m, PVC
10...30 VDC	12...30 VDC	12...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP68	IP67	IP67	IP68
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open		<b>BES0037</b> BES M08MI-PSC15B-BV02	
PNP normally closed	<b>BES0032</b> BES M08MI-POC15B-BV05		
NPN normally open			
Dimension	Ø 8 x 50 mm	Ø 8 x 50 mm	
Style	M8x1	M8x1	
Installation	flush	flush	
Range	1.5 mm	1.5 mm	
Switching frequency	1000 Hz	5000 Hz	
Housing material	Brass, nickel plated	Brass, Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Cable, 5.00 m, PVC	Cable, 2.00 m, PVC	
Operating voltage U <sub>B</sub>	12...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES0389</b> BES M08EE-PSC20B-EP05-511	<b>BES00CW</b> BES M08EF-PSC20B-BP02-003	<b>BES003F</b> BES M08MI-PSC20B-BP02	<b>BES003J</b> BES M08MI-PSC20B-BP05
			<b>BES002P</b> BES M08MI-NSC20B-BV02	
	Ø 8 x 30 mm	Ø 8 x 40 mm	Ø 8 x 50 mm	Ø 8 x 50 mm
	M8x1	M8x1	M8x1	M8x1
	flush	flush	flush	flush
	2 mm	2 mm	2 mm	2 mm
	1000 Hz	700 Hz	700 Hz	700 Hz
	Stainless steel	Stainless steel	Brass, nickel plated	Brass, nickel plated
	PBT	PBT	PA 12	PA 12
	Cable, 5.00 m, PUR	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	Cable, 5.00 m, PUR
	10...30 VDC	10...30 VDC	12...30 VDC	12...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES03TL</b> BES M08MI-PSC20B-BP10	<b>BES003K</b> BES M08MI-PSC20B-BV02	
PNP normally closed			
Dimension	Ø 8 x 50 mm	Ø 8 x 50 mm	
Style	M8x1	M8x1	
Installation	flush	flush	
Range	2 mm	2 mm	
Switching frequency	700 Hz	5000 Hz	
Housing material	Brass, nickel plated	Brass, Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Cable, 10.00 m, PUR	Cable, 2.00 m, PVC	
Operating voltage U <sub>b</sub>	12...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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<b>BES003M</b> BES M08MI-PSC20B-BV05		<b>BES0276</b> BES M08EA-PSC20B-EP00,3-GS49	<b>BES0277</b> BES M08EA-PSD15B-S49G
	<b>BES03TH</b> BES M08MI-POC20B-BV02		<b>BES0270</b> BES M08EA-POD15B-S49G
Ø 8 x 50 mm	Ø 8 x 50 mm	Ø 8 x 10 mm	Ø 8 x 18 mm
M8x1	M8x1	M8x1	M8x1
flush	flush	flush	flush
2 mm	2 mm	2 mm	1.5 mm
700 Hz	5000 Hz	3000 Hz	3000 Hz
Brass, nickel plated	Brass, Nickel-free coated	Stainless steel	Stainless steel
PA 12	PBT	PBT	PBT
Cable, 5.00 m, PVC	Cable, 2.00 m, PVC	Cable with connector, M8x1-Male, 3-pin, 0.30 m, PUR	Connector, M8x1-Male, 3-pin
12...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP68	IP67	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES013N</b> BES M08EC-PSC15B-S49G	<b>BES013M</b> BES M08EC-PSC15B-S04G	
PNP normally closed	<b>BES013K</b> BES M08EC-POC15B-S49G		
NPN normally open	<b>BES013J</b> BES M08EC-NSC15B-S49G		
Dimension	Ø 8 x 30 mm	Ø 8 x 33 mm	
Style	M8x1	M8x1	
Installation	flush	flush	
Range	1.5 mm	1.5 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Connector, M8x1-Male, 3-pin	Connector, M12x1-Male, 4-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES0147</b> BES M08EE-PSC15B-S49G	<b>BES0146</b> BES M08EE-PSC15B-S04G	<b>BES01P7</b> BES M08EG-PSC15B-S49G	
	<b>BES0143</b> BES M08EE-POC15B-S49G	<b>BES0142</b> BES M08EE-POC15B-S04G		<b>BES01PE</b> BES M08EH-POC15B-S04G
		<b>BES013Y</b> BES M08EE-NSC15B-S04G		<b>BES01PC</b> BES M08EH-NSC15B-S04G
	Ø 8 x 40 mm	Ø 8 x 43 mm	Ø 8 x 50 mm	Ø 8 x 58 mm
	M8x1	M8x1	M8x1	M8x1
	flush	flush	flush	flush
	1.5 mm	1.5 mm	1.5 mm	1.5 mm
	3000 Hz	3000 Hz	5000 Hz	3000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	PBT	PBT	PBT	PBT
	Connector, M8x1-Male, 3-pin	Connector, M12x1-Male, 4-pin	Connector, M8x1-Male, 3-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-40...85 °C	-25...70 °C
	IP68	IP68	IP68	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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RFID

Machine Vision and  
Optical IdentificationHuman Machine  
Interfaces

Safety

Industrial Networking

Software and  
System Solutions

Power Supply

Connectivity

Accessories



PNP normally open		<b>BES003C</b> BES M08MI-PSC15B-S49G	
PNP normally closed	<b>BES03P6</b> BES M08MI-POC15B-S49G		
NPN normally open	<b>BES002K</b> BES M08MI-NSC15B-S49G		
Dimension	Ø 8 x 59 mm	Ø 8 x 60 mm	
Style	M8x1	M8x1	
Installation	flush	flush	
Range	1.5 mm	1.5 mm	
Switching frequency	1000 Hz	5000 Hz	
Housing material	Brass, nickel plated	Brass, Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	
Operating voltage U <sub>b</sub>	12...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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		<b>BES0027</b> BES M08MH1-PSC15B-S04G	<b>BES0278</b> BES M08EA-PSD20B-S49G	<b>BES013P</b> BES M08EC-PSC20B-S49G
	<b>BES0026</b> BES M08MH1-POC15B-S04G			<b>BES013L</b> BES M08EC-POC20B-S49G
	<b>BES0024</b> BES M08MH1-NSC15B-S04G			
	Ø 8 x 65 mm	Ø 8 x 65 mm	Ø 8 x 18 mm	Ø 8 x 30 mm
	M8x1	M8x1	M8x1	M8x1
	flush	flush	flush	flush
	1.5 mm	1.5 mm	2 mm	2 mm
	1000 Hz	1000 Hz	3000 Hz	1500 Hz
	Brass, nickel plated	Brass, nickel plated	Stainless steel	Stainless steel
	PA 12	PA 12	PBT	PBT
	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin
	12...30 VDC	12...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES014A</b> BES M08EE-PSC20B-S49G	<b>BES0149</b> BES M08EE-PSC20B-S04G-101	
PNP normally closed	<b>BES0145</b> BES M08EE-POC20B-S49G		
NPN normally open			
Dimension	Ø 8 x 40 mm	Ø 8 x 43 mm	
Style	M8x1	M8x1	
Installation	flush	flush	
Range	2 mm	2 mm	
Switching frequency	1500 Hz	1500 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	ceramic coated	
Connection	Connector, M8x1-Male, 3-pin	Connector, M12x1-Male, 4-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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<b>BES01PH</b> BES M08EH-PSC20B-S04G		<b>BES003P</b> BES M08MI-PSC20B-S49G	<b>BES0028</b> BES M08MH1-PSC20B-S04G
		<b>BES0033</b> BES M08MI-POC20B-S49G	<b>BES03T5</b> BES M08MH1-POC20B-S04G
	<b>BES002U</b> BES M08MI-NSC20B-S49G		<b>BES0025</b> BES M08MH1-NSC20B-S04G
Ø 8 x 58 mm	Ø 8 x 59 mm	Ø 8 x 60 mm	Ø 8 x 65 mm
M8x1	M8x1	M8x1	M8x1
flush	flush	flush	flush
2 mm	2 mm	2 mm	2 mm
1500 Hz	700 Hz	5000 Hz	700 Hz
Stainless steel	Brass, nickel plated	Brass, Nickel-free coated	Brass, nickel plated
PBT	PA 12	PBT	PA 12
Connector, M12x1-Male, 4-pin	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	Connector, M12x1-Male, 4-pin
10...30 VDC	12...30 VDC	10...30 VDC	12...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP68	IP67	IP68	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES0427</b> BES M08EE-PSC25B-S49G	<b>BES054N</b> BES M08MI-PSC30B-S49G	
PNP normally closed			
NPN normally open			
Dimension	Ø 8 x 40 mm	Ø 8 x 60 mm	
Style	M8x1	M8x1	
Installation	flush	flush	
Range	2.5 mm	3 mm	
Switching frequency	5000 Hz	1200 Hz	
Housing material	Stainless steel	Brass, Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	0...60 °C	-25...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES02W9</b> BES M08MH1-PSC30B-S04G	<b>BES000Y</b> BES M08ED-PSC40F-BP02		<b>BES0016</b> BES M08EG-PSC40F-BP02
				<b>BES0014</b> BES M08EG-POC40F-BP02
	<b>BES02W7</b> BES M08MH1-NSC30B-S04G	<b>BES000T</b> BES M08ED-NSC40F-BV02	<b>BES0013</b> BES M08EG-NSC40F-BV02	
	Ø 8 x 63 mm	Ø 8 x 30 mm	Ø 8 x 50 mm	Ø 8 x 50 mm
	M8x1	M8x1	M8x1	M8x1
	flush	non-flush	non-flush	non-flush
	3 mm	4 mm	4 mm	4 mm
	1200 Hz	4000 Hz	4000 Hz	4000 Hz
	Brass, Nickel-free coated	Stainless steel	Stainless steel	Stainless steel
	PBT	PBT	PBT	PBT
	Connector, M12x1-Male, 4-pin	Cable, 2.00 m, PUR	Cable, 2.00 m, PVC	Cable, 2.00 m, PUR
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C
	IP68	IP68	IP68	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES01P3</b> BES M08ED-PSC25F-S04G	<b>BES01P8</b> BES M08EG-PSC25F-S04G	
PNP normally closed		<b>BES01P6</b> BES M08EG-POC25F-S04G	
NPN normally open		<b>BES01P5</b> BES M08EG-NSC25F-S04G	
Dimension	Ø 8 x 43 mm	Ø 8 x 58 mm	
Style	M8x1	M8x1	
Installation	non-flush	non-flush	
Range	2.5 mm	2.5 mm	
Switching frequency	2000 Hz	2000 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>B</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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<b>BES000M</b> BES M08EB-PSC40F-S49G	<b>BES014M</b> BES M08EF-PSC40F-S49G	<b>BES001J</b> BES M08EH-PSC40F-S49G	<b>BES01P9</b> BES M08EG1-PSC40F-S04G
<b>BES000L</b> BES M08EB-POC40F-S49G		<b>BES001F</b> BES M08EH-POC40F-S49G	
		<b>BES001C</b> BES M08EH-NSC40F-S49G	
Ø 8 x 30 mm	Ø 8 x 50 mm	Ø 8 x 60 mm	Ø 8 x 63 mm
M8x1	M8x1	M8x1	M8x1
non-flush	non-flush	non-flush	non-flush
4 mm	4 mm	4 mm	4 mm
4000 Hz	4000 Hz	4000 Hz	4000 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
PBT	PBT	PBT	PBT
Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	Connector, M12x1-Male, 3-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C
IP68	IP68	IP68	IP68
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES001H</b> BES M08EH-PSC40F-S04G	<b>BES054Z</b> BES M08EH1-PSC60F-S49G	
PNP normally closed	<b>BES001E</b> BES M08EH-POC40F-S04G	<b>BES0550</b> BES M08EH1-POC60F-S49G	
NPN normally open	<b>BES001A</b> BES M08EH-NSC40F-S04G		
Dimension	Ø 8 x 63 mm	Ø 8 x 60 mm	
Style	M8x1	M8x1	
Installation	non-flush	non-flush	
Range	4 mm	6 mm	
Switching frequency	4000 Hz	1200 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	
Operating voltage U <sub>B</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C, Temperature drift max. (% of Sr) >15% between 50...70 °C	-25...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES058J</b> BES M08EH1-PSC60F-S04G	<b>BES05U9</b> BES M08MM-PSC40B-BP00,3-GS04		
		<b>BES05UA</b> BES M08MM-NSC40B-BP00,3-GS04		
	Ø 8 x 63 mm	Ø 8 x 60 mm		
	M8x1	M8x1		
	non-flush	quasi-flush		
	6 mm	4 mm		
	1200 Hz	1200 Hz		
	Stainless steel	Brass, Nickel-free coated		
	PBT	PBT		
	Connector, M12x1-Male, 4-pin	Cable with connector, M12x1-Male, 3-pin, 0.3 m, PUR		
	10...30 VDC	10...30 VDC		
	-25...70 °C	-25...70 °C		
	IP68	IP67		
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE		
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PNP normally open	<b>BES05U8</b> BES M08MM-PSC40B-BP00,3-GS49	<b>BES01ZW</b> BES M08MI-PSC40B-S49G	
NPN normally open		<b>BES01ZT</b> BES M08MI-NSC40B-S49G	
normally open			
Dimension	Ø 8 x 60 mm	Ø 8 x 60 mm	
Style	M8x1	M8x1	
Installation	quasi-flush	quasi-flush	
Range	4 mm	4 mm	
Switching frequency	1200 Hz	1200 Hz	
Housing material	Brass, Nickel-free coated	Brass, Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Cable with connector, M8x1-Male, 3-pin, 0.3 m, PUR	Connector, M8x1-Male, 3-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES02W6</b> BES M08MH-PSC40B-S49G-507	<b>BES04TU</b> BES G10ED-PSC08B-EP00,3-GS49		
			<b>BES02C9</b> BES 516-449-B0-L-05	<b>BES027M</b> BES 516-207-B0-E-03
	Ø 8 x 60 mm	Ø 10 x 27 mm	Ø 12 x 60 mm	Ø 12 x 60 mm
	M8x1	D10.0	M12x1	M12x1
	quasi-flush	flush	flush	flush
	4 mm	0.8 mm	2 mm	2 mm
	500 Hz	5000 Hz	25 Hz	1000 Hz
	Brass, Chrome-plated	Stainless steel	Brass, nickel plated	Stainless steel
	PBT	PBT	PA 12	PA 12
	Connector, M8x1-Male, 3-pin	Cable with connector, M8x1-Male, 3-pin, 0.30 m, PUR	Cable, 5.00 m, PVC	Cable, 3.00 m, PVC
	10...30 VDC	10...30 VDC	20...250 VAC	20...250 VDC/20...250 VAC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, cULus, WEEE
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PNP normally open		<b>BES00E5</b> BES M12MD-PSC40B-BP02-003	
NPN normally open			
normally open	<b>BES027N</b> BES 516-207-B0-E-05		
Dimension	Ø 12 x 60 mm	Ø 12 x 33 mm	
Style	M12x1	M12x1	
Installation	flush	flush	
Range	2 mm	4 mm	
Switching frequency	1000 Hz	2500 Hz	
Housing material	Stainless steel	Brass, Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Cable, 5.00 m, PVC	Cable, 2.00 m, TPU	
Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, EAC, cULus, WEEE	CE, cULus, EAC, WEEE	
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			<b>BES0062</b> BES M12MI-PSC40B-BP03	<b>BES0064</b> BES M12MI-PSC40B-BV02
	<b>BES0057</b> BES M12MI-NSC40B-BV03	<b>BES0058</b> BES M12MI-NSC40B-BV05		
	Ø 12 x 53 mm	Ø 12 x 53 mm	Ø 12 x 53 mm	Ø 12 x 53 mm
	M12x1	M12x1	M12x1	M12x1
	flush	flush	flush	flush
	4 mm	4 mm	4 mm	4 mm
	2500 Hz	2500 Hz	2500 Hz	2500 Hz
	Brass, Nickel-free coated	Brass, Nickel-free coated	Brass, Nickel-free coated	Brass, Nickel-free coated
	PBT	PBT	PBT	PBT
	Cable, 3.00 m, PVC	Cable, 5.00 m, PVC	Cable, 3.00 m, TPU	Cable, 2.00 m, PVC
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP68	IP68	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES0001</b> BES M12MI-PSC40B-BV03	<b>BES0065</b> BES M12MI-PSC40B-BV05	
PNP normally closed			
PNP normally open/normally closed			
Dimension	Ø 12 x 53 mm	Ø 12 x 53 mm	
Style	M12x1	M12x1	
Installation	flush	flush	
Range	4 mm	4 mm	
Switching frequency	2500 Hz	2500 Hz	
Housing material	Brass, Nickel-free coated	Brass, Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Cable, 3.00 m, PVC	Cable, 5.00 m, PVC	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES00PW</b> BES 516-325-G-E4-C-S4-00,5		<b>BES035E</b> BES 516-325-SA45	<b>BES00PK</b> BES 516-325-E5-C-S4
				<b>BES00YT</b> BES 516-370-E5-C-S4
		<b>BES032M</b> BES 516-113-SA3-S4-C		
	Ø 12 x 33 mm	Ø 12 x 70 mm	Ø 12 x 31 mm	Ø 12 x 45 mm
	M12x1	M12x1	M12x1	M12x1
	flush	flush	flush	flush
	4 mm	1.5 mm	2 mm	2 mm
	2500 Hz	2000 Hz	1000 Hz	3500 Hz
	Brass, Nickel-free coated	Stainless steel	Brass, nickel plated	Brass, Nickel-free coated
	PBT	PA 12	PA 12	PBT
	Cable with connector, M12x1-Male, 3-pin, 0.50 m, TPU	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...85 °C	-25...70 °C	-25...70 °C
	IP68	IP68	IP67	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES0060</b> BES M12MI-PSC20B-S04G		
normally open			
IO-Link		<b>BES04FK</b> BES M12MI-PSIC20C-S04G	
Dimension	Ø 12 x 65 mm	Ø 12 x 65 mm	
Style	M12x1	M12x1	
Installation	flush	flush	
Range	2 mm	0.5...2 mm	
Switching frequency	3500 Hz	2000 Hz	
Housing material	Brass, Nickel-free coated	Brass, Nickel-free coated	
Material sensing surface	PBT	LCP	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage $U_b$	10...30 VDC	12...30 VDC	
Ambient temperature	-25...70 °C	-25...85 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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				<b>BES01C8</b> BES 516-325-S4-C
	<b>BES02FP</b> BES 515-449-SA7-S21	<b>BES027U</b> BES 516-207-S21-E	<b>BES027W</b> BES 516-207-S27-E	
	Ø 12 x 70 mm	Ø 12 x 70 mm	Ø 12 x 70 mm	Ø 12 x 70 mm
	M12x1	M12x1	M12x1	M12x1
	flush	flush	flush	flush
	2 mm	2 mm	2 mm	2 mm
	10 Hz	1000 Hz	1000 Hz	3500 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	PA 12	PA 12	PA 12	PBT
	Connector, 1/2"-20 UNF-2A-Male	Connector, 1/2"-20 UNF-2A-Male	Connector, M12x1-Male	Connector, M12x1-Male, 4-pin
	35...250 VAC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-40...85 °C
	IP67	IP67	IP67	IP68
	CE, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open			
PNP normally closed		<b>BES01K6</b> BES 516-370-S4-C	
PNP normally open/normally closed	<b>BES0161</b> BES 516-113-S4-C		
Dimension	Ø 12 x 70 mm	Ø 12 x 70 mm	
Style	M12x1	M12x1	
Installation	flush	flush	
Range	2 mm	2 mm	
Switching frequency	3500 Hz	3500 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-40...85 °C	-40...85 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES00PZ</b> BES 516-325-G-E5-C-S49	<b>BES00EF</b> BES M12ME-PSC40B-S04G-003	<b>BES00PY</b> BES 516-325-G-E5-C-S4	<b>BES014W</b> BES M12EE-PSC40B-S04G
	Ø 12 x 44 mm	Ø 12 x 45 mm	Ø 12 x 45 mm	Ø 12 x 45 mm
	M12x1	M12x1	M12x1	M12x1
	flush	flush	flush	flush
	4 mm	4 mm	4 mm	4 mm
	2500 Hz	2500 Hz	2500 Hz	2000 Hz
	Brass, Nickel-free coated	Brass, Nickel-free coated	Brass, Nickel-free coated	Stainless steel
	LCP	PBT	PBT	LCP
	Connector, M8x1-Male, 3-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...85 °C
	IP67	IP68	IP68	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open		<b>BES0068</b> BES M12MI-PSC40B-S04G	
PNP normally closed	<b>BES00Z0</b> BES 516-370-G-E5-C-S4	<b>BES005N</b> BES M12MI-POC40B-S04G	
NPN normally open		<b>BES0059</b> BES M12MI-NSC40B-S04G	
normally open			
Dimension	Ø 12 x 45 mm	Ø 12 x 65 mm	
Style	M12x1	M12x1	
Installation	flush	flush	
Range	4 mm	4 mm	
Switching frequency	2500 Hz	2500 Hz	
Housing material	Brass, Nickel-free coated	Brass, Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 3-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	BES02FU BES M12EI-PSC40B-S04G		BES01C7 BES 516-325-G-S4-C	BES03AR BES 516-325-G-S4-L
		BES027T BES 516-207-G-S21-E		
	Ø 12 x 65 mm	Ø 12 x 70 mm	Ø 12 x 70 mm	Ø 12 x 70 mm
	M12x1	M12x1	M12x1	M12x1
	flush	flush	flush	flush
	4 mm	4 mm	4 mm	4 mm
	1000 Hz	500 Hz	2500 Hz	600 Hz
	Stainless steel	Stainless steel	Brass, Nickel-free coated	Brass, nickel plated
	LCP	PA 12	PBT	LCP
	Connector, M12x1-Male, 4-pin	Connector, 1/2"-20 UNF-2A-Male	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	20...250 VDC/20...250 VAC	10...30 VDC	10...30 VDC
	-25...85 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP67	IP68	IP67
	CE, cULus, EAC, WEEE	CE, EAC, cULus, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open			
normally open	<b>BES0285</b> BES 516-209-B0-E-03	<b>BES0286</b> BES 516-209-B0-E-05	
normally closed	<b>BES028F</b> BES 516-210-B0-E-03		
Dimension	Ø 12 x 60 mm	Ø 12 x 60 mm	
Style	M12x1	M12x1	
Installation	non-flush	non-flush	
Range	4 mm	4 mm	
Switching frequency	600 Hz	600 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 3.00 m, PVC	Cable, 5.00 m, PVC	
Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, EAC, cULus, WEEE	CE, EAC, cULus, WEEE	
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<b>BES00UY</b> BES 516-356-E5-C-S4	<b>BES036T</b> BES 516-356-SA26-S4-C		
		<b>BES028A</b> BES 516-209-S21-E	<b>BES0330</b> BES 516-209-SA1-S21-E
Ø 12 x 50 mm	Ø 12 x 61 mm	Ø 12 x 70 mm	Ø 12 x 70 mm
M12x1	M12x1	M12x1	M12x1
non-flush	non-flush	non-flush	non-flush
4 mm	4 mm	4 mm	4 mm
2500 Hz	1000 Hz	600 Hz	600 Hz
Brass, Nickel-free coated	Stainless steel	Stainless steel	Stainless steel
PBT	PA 12	PA 12	PA 12
Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, 1/2"-20 UNF-2A-Male	Connector, 1/2"-20 UNF-2A-Male
10...30 VDC	10...30 VDC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP68	IP68	IP67	IP67
CE, cULus, EAC, WEEE	CE, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, WEEE
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PNP normally open	<b>BES01H6</b> BES 516-356-S4-C	<b>BES036R</b> BES 516-356-SA24-S4-C	
PNP normally open/normally closed			
Dimension	Ø 12 x 70 mm	Ø 12 x 70 mm	
Style	M12x1	M12x1	
Installation	non-flush	non-flush	
Range	4 mm	4 mm	
Switching frequency	2500 Hz	1500 Hz	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PA 12	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>B</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-40...85 °C	-40...85 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, EAC, WEEE	
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		<b>BES01PY</b> BES M12MD-PSC80F-S04G	<b>BES01PN</b> BES M12EG-PSC80F-S04G	<b>BES004N</b> BES M12MG-PSC80F-S04G
	<b>BES0178</b> BES 516-131-S4-C			
	Ø 12 x 70 mm	Ø 12 x 45 mm	Ø 12 x 60 mm	Ø 12 x 60 mm
	M12x1	M12x1	M12x1	M12x1
	non-flush	non-flush	non-flush	non-flush
	4 mm	8 mm	8 mm	8 mm
	2500 Hz	1000 Hz	1000 Hz	1000 Hz
	Stainless steel	Brass, Nickel-free coated	Stainless steel	Brass, Nickel-free coated
	PBT	PBT	PBT	PBT
	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-40...85 °C	-25...70 °C	-40...85 °C	-25...70 °C
	IP68	IP68	IP68	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open		<b>BES02WK</b> BES M12MC1-PSC10F-S04G	
PNP normally closed			
normally open	<b>BES0289</b> BES 516-209-G-S21-E		
Dimension	Ø 12 x 70 mm	Ø 12 x 45 mm	
Style	M12x1	M12x1	
Installation	non-flush	non-flush	
Range	8 mm	10 mm	
Switching frequency	600 Hz	600 Hz	
Housing material	Stainless steel	Brass, Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Connector, 1/2"-20 UNF-2A-Male	Connector, M12x1-Male, 3-pin	
Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...85 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES02WR</b> BES M12MF1-PSC10F-S04G	<b>BES02WM</b> BES M12MD1-PSC60B-S04G	<b>BES02WZ</b> BES M12MG1-PSC60B-S04G	<b>BES01ZN</b> BES M12MI-PSH80B-S04G
			<b>BES02WY</b> BES M12MG1-POC60B-S04G	
	Ø 12 x 60 mm	Ø 12 x 45 mm	Ø 12 x 60 mm	Ø 12 x 65 mm
	M12x1	M12x1	M12x1	M12x1
	non-flush	quasi-flush	quasi-flush	quasi-flush
	10 mm	6 mm	6 mm	8 mm
	600 Hz	1000 Hz	1000 Hz	300 Hz
	Brass, Nickel-free coated	Brass, Nickel-free coated	Brass, Nickel-free coated	Brass, nickel plated
	PBT	PBT	PBT	LCP
	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...55 VDC
	-25...85 °C	-25...85 °C	-25...85 °C	0...60 °C
	IP68	IP68	IP68	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, WEEE
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PNP normally open			
normally open	<b>BES02AU</b> BES 516-420-E4-L-02	<b>BES02AW</b> BES 516-420-E4-L-05	
Dimension	Ø 18 x 56 mm	Ø 18 x 56 mm	
Style	M18x1	M18x1	
Installation	flush	flush	
Range	5 mm	5 mm	
Switching frequency	25 Hz	25 Hz	
Housing material	Brass, nickel plated	Brass, nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 2.00 m, PVC	Cable, 5.00 m, PVC	
Operating voltage U <sub>b</sub>	20...250 VAC	20...250 VAC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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<b>BES0083</b> BES M18MI-PSC50B-BV03			
	<b>BES028L</b> BES 516-211-E4-E-03	<b>BES028N</b> BES 516-211-E4-E-PU-05	<b>BES028U</b> BES 516-211-E6-E-05
Ø 18 x 55 mm	Ø 18 x 61.5 mm	Ø 18 x 61.5 mm	Ø 18 x 71 mm
M18x1	M18x1	M18x1	M18x1
flush	flush	flush	flush
5 mm	5 mm	5 mm	5 mm
2000 Hz	250 Hz	250 Hz	250 Hz
Brass, Nickel-free coated	Brass, nickel plated	Brass, nickel plated	Brass, nickel plated
PBT	PA 12	PA 12	PA 12
Cable, 3.00 m, PVC	Cable, 3.00 m, PVC	Cable, 5.00 m, PUR	Cable, 5.00 m, PVC
10...30 VDC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC
-40...85 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP68	IP67	IP67	IP67
CE, cULus, EAC, WEEE	CE, EAC, cULus, WEEE	CE, EAC, cULus, WEEE	CE, EAC, cULus, WEEE
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PNP normally open	<b>BES04F1</b> BES M18MD-PSC80B-BP05-003	<b>BES008E</b> BES M18MI-PSC80B-BV02	
NPN normally open			
Dimension	Ø 18 x 36 mm	Ø 18 x 55 mm	
Style	M18x1	M18x1	
Installation	flush	flush	
Range	8 mm	8 mm	
Switching frequency	150 Hz	1300 Hz	
Housing material	Brass, nickel plated	Brass, Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Cable, 5.00 m, PUR	Cable, 2.00 m, PVC	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-40...85 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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			<b>BES0089</b> BES M18MI-PSC80B-BP03	<b>BES008F</b> BES M18MI-PSC80B-BV03
	<b>BES007H</b> BES M18MI-NSC80B-BP03	<b>BES007J</b> BES M18MI-NSC80B-BV03		
	Ø 18 x 55 mm	Ø 18 x 55 mm	Ø 18 x 55 mm	Ø 18 x 55 mm
	M18x1	M18x1	M18x1	M18x1
	flush	flush	flush	flush
	8 mm	8 mm	8 mm	8 mm
	1300 Hz	1300 Hz	1300 Hz	1300 Hz
	Brass, Nickel-free coated	Brass, Nickel-free coated	Brass, Nickel-free coated	Brass, Nickel-free coated
	PBT	PBT	PBT	PBT
	Cable, 3.00 m, PUR	Cable, 3.00 m, PVC	Cable, 3.00 m, PUR	Cable, 3.00 m, PVC
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-40...85 °C	-40...85 °C	-40...85 °C	-40...85 °C
	IP68	IP68	IP68	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES008H</b> BES M18MI-PSC80B-BV05	<b>BES00R5</b> BES 516-326-E4-C-S4-00,2	
Dimension	Ø 18 x 55 mm	Ø 18 x 36 mm	
Style	M18x1	M18x1	
Installation	flush	flush	
Range	8 mm	5 mm	
Switching frequency	1300 Hz	1000 Hz	
Housing material	Brass, Nickel-free coated	Brass, nickel plated	
Material sensing surface	PBT	PA 12	
Connection	Cable, 5.00 m, PVC	Cable with connector, M12x1-Male, 4-pin, 0.20 m, PUR	
Operating voltage Ub	10...30 VDC	10...30 VDC	
Ambient temperature	-40...85 °C	-25...70 °C	
IP rating	IP68	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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<b>BES00EY</b> BES M18ME-PSC50B-S04G-003	<b>BES00R6</b> BES 516-326-E5-C-S4	<b>BES02ET</b> BES 515-326-E5-T-S4	<b>BES0086</b> BES M18MI-PSC50B-S04G
Ø 18 x 46 mm	Ø 18 x 44.5 mm	Ø 18 x 45 mm	Ø 18 x 66 mm
M18x1	M18x1	M18x1	M18x1
flush	flush	flush	flush
5 mm	5 mm	5 mm	5 mm
2000 Hz	1000 Hz	500 Hz	2000 Hz
Brass, Nickel-free coated	Brass, nickel plated	Stainless steel	Brass, Nickel-free coated
PBT	PBT	PA 12	PBT
Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 3-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-40...85 °C	-25...70 °C	-40...105 °C	-40...85 °C
IP68	IP67	IP68	IP68
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open		<b>BES02EU</b> BES 515-326-S4-C	
PNP normally closed			
PNP normally open/normally closed			
normally open	<b>BES028R</b> BES 516-211-E5-E-S27		
Dimension	Ø 18 x 70.5 mm	Ø 18 x 83 mm	
Style	M18x1	M18x1	
Installation	flush	flush	
Range	5 mm	5 mm	
Switching frequency	400 Hz	900 Hz	
Housing material	Brass, nickel plated	Stainless steel	
Material sensing surface	PA 12	PA 12	
Connection	Connector, M12x1-Male	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-40...85 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES01CW</b> BES 516-326-S4-C		<b>BES00RC</b> BES 516-326-G-E5-C-S4	<b>BES02P3</b> BES 516-326-SA96-G-E5-Y-S4
	<b>BES01JW</b> BES 516-367-S4-C			
		<b>BES015N</b> BES 516-105-S4-C		
	Ø 18 x 83 mm	Ø 18 x 83 mm	Ø 18 x 44.5 mm	Ø 18 x 44.5 mm
	M18x1	M18x1	M18x1	M18x1
	flush	flush	flush	flush
	5 mm	5 mm	8 mm	8 mm
	900 Hz	500 Hz	200 Hz	200 Hz
	Brass, nickel plated	Brass, nickel plated	Brass, nickel plated	Brass, nickel plated
	PA 12	PA 12	PBT	ceramic coated
	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP68	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES008L</b> BES M18MI-PSC80B-S04G	<b>BES02H0</b> BES M18EI-PSC80B-S04G	
PNP normally closed	<b>BES03RP</b> BES M18MI-POC80B-S04G		
NPN normally open	<b>BES007M</b> BES M18MI-NSC80B-S04K		
normally open			
Dimension	Ø 18 x 66 mm	Ø 18 x 65 mm	
Style	M18x1	M18x1	
Installation	flush	flush	
Range	8 mm	8 mm	
Switching frequency	1300 Hz	700 Hz	
Housing material	Brass, Nickel-free coated	Stainless steel, Ceramic	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-40...85 °C	-40...85 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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		<b>BES0496</b> BES M18MI2-PSC80B-S04G		
	<b>BES02ZE</b> BES M18MN-USU80B-S21G		<b>BES02C5</b> BES 516-437-E4-L-02	
	Ø 18 x 70 mm	Ø 18 x 83 mm	Ø 18 x 61.5 mm	
	M18x1	M18x1	M18x1	
	flush	flush	non-flush	
	8 mm	8 mm	8 mm	
	30 Hz	1000 Hz	25 Hz	
	Brass, nickel plated	Brass, Nickel-free coated	Brass, nickel plated	
	PBT	PBT	PA 12	
	Connector, 1/2"-20 UNF-2A-Male, 3-pin	Connector, M12x1-Male, 4-pin	Cable, 2.00 m, PVC	
	20...300 VDC/20...250 VAC	10...30 VDC	20...250 VAC	
	-25...70 °C	-25...70 °C	-25...70 °C	
	IP67	IP68	IP67	
	CE, EAC, cULus, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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PNP normally open		<b>BES00WM</b> BES 516-360-E5-Y-S4	
normally open	<b>BES0292</b> BES 516-213-E4-E-03		
Dimension	Ø 18 x 61.5 mm	Ø 18 x 54 mm	
Style	M18x1	M18x1	
Installation	non-flush	non-flush	
Range	8 mm	8 mm	
Switching frequency	250 Hz	200 Hz	
Housing material	Brass, nickel plated	Brass, nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 3.00 m, PVC	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, EAC, cULus, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES02C7</b> BES 516-437-E5-L-S21	<b>BES0296</b> BES 516-213-E5-E-S21	<b>BES0297</b> BES 516-213-E5-E-S27	<b>BES0298</b> BES 516-213-E5-E-S5
	Ø 18 x 65 mm	Ø 18 x 70.5 mm	Ø 18 x 70.5 mm	Ø 18 x 80 mm
	M18x1	M18x1	M18x1	M18x1
	non-flush	non-flush	non-flush	non-flush
	8 mm	8 mm	8 mm	8 mm
	25 Hz	250 Hz	250 Hz	250 Hz
	Brass, nickel plated	Brass, nickel plated	Brass, nickel plated	Brass, nickel plated
	PA 12	PA 12	PA 12	PA 12
	Connector, 1/2"-20 UNF-2A-Male	Connector, 1/2"-20 UNF-2A-Male	Connector, M12x1-Male	Connector, 7/8"-16 UN-Male
	20...250 VAC	20...250 VAC	20...250 VAC	20...250 VDC/20...250 VAC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES01HY</b> BES 516-360-S4-C	<b>BES03RM</b> BES M18MG-PSC16F-S04G	
PNP normally open/normally closed			
Dimension	Ø 18 x 83 mm	Ø 18 x 66 mm	
Style	M18x1	M18x1	
Installation	non-flush	non-flush	
Range	8 mm	16 mm	
Switching frequency	600 Hz	430 Hz	
Housing material	Brass, nickel plated	Brass, Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 3-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-40...85 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES0070</b> BES M18MG-PSC16F-S04K	<b>BES01HW</b> BES 516-360-G-S4-H		
			<b>BES016W</b> BES 516-123-G-S4-H	
	Ø 18 x 65 mm	Ø 18 x 83 mm	Ø 18 x 83 mm	
	M18x1	M18x1	M18x1	
	non-flush	non-flush	non-flush	
	16 mm	16 mm	16 mm	
	800 Hz	80 Hz	80 Hz	
	Brass, Nickel-free coated	Brass, nickel plated	Brass, nickel plated	
	PBT	PA 12	PA 12	
	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
	10...30 VDC	10...55 VDC	10...55 VDC	
	-25...70 °C	-25...70 °C	-25...70 °C	
	IP67	IP68	IP68	
	CE, cULus, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE	
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PNP normally open	<b>BES05EY</b> BES M18MG-PSC20F-S04G	<b>BES05ER</b> BES M18ME-PSC12B-S04G	
NPN normally open			
normally open			
Dimension	Ø 18 x 66 mm	Ø 18 x 46 mm	
Style	M18x1	M18x1	
Installation	—	quasi-flush	
Range	20 mm	12 mm	
Switching frequency	400 Hz	550 Hz	
Housing material	Brass, Nickel-free coated	Brass, Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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<b>BES05EU</b> BES M18MI-PSC12B-S04G	<b>BES00RE</b> BES 516-327-E4-Y-01,5	<b>BES00A1</b> BES M30MI-PSC10B-BV03	
		<b>BES009E</b> BES M30MI-NSC10B-BV03	
			<b>BES029L</b> BES 516-215-E4-E-03
Ø 18 x 66 mm	Ø 30 x 36 mm	Ø 30 x 56 mm	Ø 30 x 61.5 mm
M18x1	M30x1.5	M30x1.5	M30x1.5
—	flush	flush	flush
12 mm	10 mm	10 mm	10 mm
550 Hz	200 Hz	400 Hz	150 Hz
Brass, Nickel-free coated	Brass, nickel plated	Brass, nickel plated	Brass, nickel plated
PBT	PA 12	PA 12	PA 12
Connector, M12x1-Male, 3-pin	Cable, 1.50 m, PVC	Cable, 3.00 m, PVC	Cable, 3.00 m, PVC
10...30 VDC	10...30 VDC	12...30 VDC	20...250 VDC/20...250 VAC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP68	IP68	IP68	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, cULus, WEEE
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PNP normally open		<b>BES00RT</b> BES 516-327-G-E4-Y-03	
PNP normally closed			
normally open	<b>BES029M</b> BES 516-215-E4-E-05		
Dimension	Ø 30 x 61.5 mm	Ø 30 x 36 mm	
Style	M30x1.5	M30x1.5	
Installation	flush	flush	
Range	10 mm	15 mm	
Switching frequency	150 Hz	100 Hz	
Housing material	Brass, nickel plated	Brass, nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 5.00 m, PVC	Cable, 3.00 m, PVC	
Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, EAC, cULus, WEEE	CE, cULus, EAC, WEEE	
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		<b>BES00AA</b> BES M30MI-PSC15B-BV02	<b>BES00AC</b> BES M30MI-PSC15B-BV03	
	<b>BES00LR</b> BES 516-3028-G-E4-Y-PU-05			<b>BES00LT</b> BES 516-3028-G-E4-Y-S4-01
	Ø 30 x 36 mm	Ø 30 x 53 mm	Ø 30 x 53 mm	Ø 30 x 36 mm
	M30x1.5	M30x1.5	M30x1.5	M30x1.5
	flush	flush	flush	flush
	15 mm	15 mm	15 mm	15 mm
	100 Hz	100 Hz	100 Hz	100 Hz
	Brass, nickel plated	Brass, Nickel-free coated	Brass, Nickel-free coated	Brass, nickel plated
	PA 12	PA 12	PA 12	PA 12
	Cable, 5.00 m, TPU	Cable, 2.00 m, PVC	Cable, 3.00 m, PVC	Cable with connector, M12x1-Male, 4-pin, 1.00 m, PUR
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP67	IP67	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES00RP</b> BES 516-327-E5-Y-S4	<b>BES02F0</b> BES 515-327-E5-T-S4	
normally open			
Dimension	Ø 30 x 44.5 mm	Ø 30 x 45 mm	
Style	M30x1.5	M30x1.5	
Installation	flush	flush	
Range	10 mm	10 mm	
Switching frequency	200 Hz	200 Hz	
Housing material	Brass, nickel plated	Stainless steel	
Material sensing surface	PA 12	PA 12	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>B</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-40...105 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES00A3</b> BES M30MI-PSC10B-S04G	<b>BES00A4</b> BES M30MI-PSC10B-S04K		
			<b>BES0316</b> BES 516-418-E5-L-S27	<b>BES02E9</b> BES 515-215-E5-E-S21
	Ø 30 x 65 mm	Ø 30 x 65 mm	Ø 30 x 65 mm	Ø 30 x 70.5 mm
	M30x1.5	M30x1.5	M30x1.5	M30x1.5
	flush	flush	flush	flush
	10 mm	10 mm	10 mm	10 mm
	400 Hz	400 Hz	25 Hz	150 Hz
	Brass, nickel plated	Brass, nickel plated	Brass, nickel plated	Stainless steel
	PA 12	PA 12	PA 12	PA 12
	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male	Connector, 1/2"-20 UNF-2A-Male
	12...30 VDC	12...30 VDC	20...250 VAC	20...250 VDC/20...250 VAC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP68	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open		<b>BES02F1</b> BES 515-327-S4-C	
PNP normally closed			
PNP normally open/normally closed			
normally open	<b>BES029W</b> BES 516-215-E5-E-S5		
Dimension	Ø 30 x 80 mm	Ø 30 x 83 mm	
Style	M30x1.5	M30x1.5	
Installation	flush	flush	
Range	10 mm	10 mm	
Switching frequency	150 Hz	300 Hz	
Housing material	Brass, nickel plated	Stainless steel	
Material sensing surface	PA 12	PA 12	
Connection	Connector, 7/8\"-16 UN-Male	Connector, M12x1-Male, 4-pin	
Operating voltage $U_b$	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES01EE</b> BES 516-327-S4-C		<b>BES00RW</b> BES 516-327-G-E5-Y-S4	<b>BES00AF</b> BES M30MI-PSC15B-S04G
			<b>BES00LU</b> BES 516-3028-G-E5-Y-S4	
		<b>BES0167</b> BES 516-114-S4-C		
	Ø 30 x 83 mm	Ø 30 x 83 mm	Ø 30 x 44.5 mm	Ø 30 x 65 mm
	M30x1.5	M30x1.5	M30x1.5	M30x1.5
	flush	flush	flush	flush
	10 mm	10 mm	15 mm	15 mm
	300 Hz	300 Hz	100 Hz	100 Hz
	Brass, nickel plated	Brass, nickel plated	Brass, nickel plated	Brass, Nickel-free coated
	PA 12	PA 12	PA 12	PA 12
	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP68	IP68	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES01EA</b> BES 516-327-G-S4-C	<b>BES01EC</b> BES 516-327-G-S4-H	
PNP normally open/normally closed			
normally open			
Dimension	Ø 30 x 83 mm	Ø 30 x 83 mm	
Style	M30x1.5	M30x1.5	
Installation	flush	flush	
Range	15 mm	15 mm	
Switching frequency	100 Hz	150 Hz	
Housing material	Brass, Nickel-free coated	Brass, Nickel-free coated	
Material sensing surface	PA 12	PA 12	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...55 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, EAC, WEEE	
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			<b>BES00AY</b> BES M30MM-PSC30F-BV02	<b>BES00Y0</b> BES 516-362-E5-Y-S4
	<b>BES0166</b> BES 516-114-G-S4-H			
		<b>BES02A5</b> BES 516-217-E4-E-03		
	Ø 30 x 83 mm	Ø 30 x 61.5 mm	Ø 30 x 76.5 mm	Ø 30 x 57 mm
	M30x1.5	M30x1.5	M30x1.5	M30x1.5
	flush	non-flush	non-flush	non-flush
	15 mm	15 mm	30 mm	15 mm
	150 Hz	100 Hz	300 Hz	100 Hz
	Brass, Nickel-free coated	Brass, nickel plated	Brass, Nickel-free coated	Brass, nickel plated
	PA 12	PA 12	PBT	PA 12
	Connector, M12x1-Male, 4-pin	Cable, 3.00 m, PVC	Cable, 2.00 m, PVC	Connector, M12x1-Male, 4-pin
	10...55 VDC	20...250 VDC/20...250 VAC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP67	IP67	IP67
	CE, EAC, WEEE	CE, EAC, cULus, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open			
normally open	<b>BES02AC</b> BES 516-217-E5-E-S27	<b>BES02AE</b> BES 516-217-E5-E-S5	
Dimension	Ø 30 x 70.5 mm	Ø 30 x 80 mm	
Style	M30x1.5	M30x1.5	
Installation	non-flush	non-flush	
Range	15 mm	15 mm	
Switching frequency	100 Hz	100 Hz	
Housing material	Brass, nickel plated	Brass, nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Connector, M12x1-Male	Connector, 7/8"-16 UN-Male	
Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES02FN</b> BES 515-362-S4-C	<b>BES01JE</b> BES 516-362-S4-C	<b>BES00A7</b> BES M30MM-PSC30F-S04K	<b>BES01JC</b> BES 516-362-G-S4-H
	Ø 30 x 83 mm	Ø 30 x 83 mm	Ø 30 x 83 mm	Ø 30 x 83 mm
	M30x1.5	M30x1.5	M30x1.5	M30x1.5
	non-flush	non-flush	non-flush	non-flush
	15 mm	15 mm	30 mm	30 mm
	100 Hz	100 Hz	300 Hz	70 Hz
	Stainless steel	Brass, nickel plated	Brass, Nickel-free coated	Brass, nickel plated
	PA 12	PA 12	PBT	PA 12
	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...55 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP68	IP67	IP68
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, WEEE
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PNP normally open	<b>BES02YJ</b> BES M30MG1-PSC40F-S04G	<b>BES02YM</b> BES M30MI1-PSC22B-S04G	
PNP normally closed		<b>BES02YL</b> BES M30MI1-POC22B-S04G	
Dimension	Ø 30 x 73.5 mm	Ø 30 x 73.5 mm	
Style	M30x1.5	M30x1.5	
Installation	non-flush	quasi-flush	
Range	40 mm	22 mm	
Switching frequency	100 Hz	200 Hz	
Housing material	Brass, Chrome-plated	Brass, Chrome-plated	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP54	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	cULus, CE, EAC, WEEE	
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		<b>BES01FJ</b> BES 516-347-M0-C-03	<b>BES01FK</b> BES 516-347-M0-C-05	<b>BES01FM</b> BES 516-347-M0-C-PU-05
	<b>BES0341</b> BES 516-3009-SA2-M0-C-05			
	50 x 25 x 10 mm	50 x 25 x 10 mm	50 x 25 x 10 mm	50 x 25 x 10 mm
	block style	block style	block style	block style
	flush	flush	flush	flush
	2.5 mm	5 mm	5 mm	5 mm
	1000 Hz	500 Hz	500 Hz	500 Hz
	Aluminum	Aluminum, Die casting	Aluminum, Die casting	Aluminum
	PBT	PBT	PBT	PBT
	Cable, 5.00 m, PUR	Cable, 3.00 m, PVC	Cable, 5.00 m, PVC	Cable, 5.00 m, PUR
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE
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PNP normally open			
PNP normally open/normally closed	<b>BES017H</b> BES 516-133-M0-C-PU-05	<b>BES032R</b> BES 516-133-SA3-C-PU-04	
Dimension	50 x 25 x 10 mm	50 x 25 x 10 mm	
Style	block style	block style	
Installation	flush	flush	
Range	5 mm	5.6 mm	
Switching frequency	500 Hz	500 Hz	
Housing material	Aluminum	Aluminum	
Material sensing surface	PBT	PBT	
Connection	Cable, 5.00 m, PUR	Cable, 4.00 m, PUR	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, EAC, WEEE	
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BES01FN BES 516-347-M0-C-S4-00,2	BES01FT BES 516-347-M0-C-S49-00,2		BES01FR BES 516-347-M0-C-S49
		<b>BES0153</b> BES 516-133-M0-C-S4-00,2	
50 x 25 x 10 mm	50 x 25 x 10 mm	50 x 25 x 10 mm	59 x 25 x 10 mm
block style	block style	block style	block style
flush	flush	flush	flush
5 mm	5 mm	5 mm	5 mm
500 Hz	500 Hz	500 Hz	500 Hz
Aluminum	Aluminum	Aluminum	Aluminum
PBT	PBT	PBT	PBT
Cable with connector, M12x1-Male, 4-pin, 0.20 m, PUR	Cable with connector, M8x1-Male, 3-pin, 0.20 m, PUR	Cable with connector, M12x1-Male, 4-pin, 0.20 m, PUR	Connector, M8x1-Male, 3-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP67	IP67	IP65
CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE
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PNP normally open			
NPN normally open			
normally open	<b>BES02CT</b> BES R05KB-USU20B-EV02	<b>BES02CU</b> BES R05KB-USU20B-EV03	
Dimension	40 x 12 x 26 mm	40 x 12 x 26 mm	
Style	40x12x26	40x12x26	
Installation	flush	flush	
Range	2 mm	2 mm	
Switching frequency	400 Hz	400 Hz	
Housing material	PA 12	PA 12	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 2.00 m, PVC	Cable, 3.00 m, PVC	
Operating voltage $U_b$	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, EAC, WEEE	
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		<b>BES0175</b> BES R05KB-PSC20B-EP05		<b>BES017A</b> BES R05KB-PSC40B-EV02
	<b>BES01YZ</b> BES R05KB-NSC20B-EP05			
			<b>BES02CY</b> BES R05KB-USU40B-EV02	
	40 x 12 x 26 mm	40 x 12 x 26 mm	40 x 12 x 26 mm	40 x 12 x 26 mm
	40x12x26	40x12x26	40x12x26	40x12x26
	flush	flush	flush	flush
	2 mm	2 mm	4 mm	4 mm
	2000 Hz	400 Hz	400 Hz	400 Hz
	PA 12	PA 12	PA 12	PA 12
	PA 12	PA 12	PA 12	PA 12
	Cable, 5.00 m, PUR	Cable, 5.00 m, PUR	Cable, 2.00 m, PVC	Cable, 2.00 m, PVC
	10...30 VDC	10...30 VDC	20...250 VDC/20...250 VAC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES01ZC</b> BES R05KB-PSC40B-EV03	<b>BES01Z8</b> BES R05KB-PSC40B-EP00,3-GS04	
PNP normally closed			
NPN normally open			
Dimension	40 x 12 x 26 mm	40 x 12 x 26 mm	
Style	40x12x26	40x12x26	
Installation	flush	flush	
Range	4 mm	4 mm	
Switching frequency	400 Hz	400 Hz	
Housing material	PA 12	PA 12	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 3.00 m, PVC	Cable with connector, M12x1-Male, 4-pin, 0.30 m, PUR	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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	<b>BES01Z7</b> BES R05KB-PSC20B-S49A	<b>BES01ZE</b> BES R05KB-PSC40B-S49A	<b>BES01N5</b> BES 517-398-NO-C-03	<b>BES01N6</b> BES 517-398-NO-C-05
	<b>BES048A</b> BES R05KB-POC20B-S49A	<b>BES01Z2</b> BES R05KB-POC40B-S49A		
			<b>BES01NH</b> BES 517-399-NO-C-03	
	40 x 12 x 26 mm	40 x 12 x 26 mm	30 x 10.5 x 16.5 mm	30 x 10.5 x 16.5 mm
	40x12x26	40x12x26	block style	block style
	flush	flush	flush	flush
	2 mm	4 mm	2 mm	2 mm
	400 Hz	400 Hz	2500 Hz	2500 Hz
	PA 12	PA 12	PBT, GF20	PBT, GF20
	PA 12	PA 12	PBT, GF20	PBT, GF20
	Connector, M8x1-Male, 3-pin	Connector, M8x1-Male, 3-pin	Cable, 3.00 m, PVC	Cable, 5.00 m, PVC
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP65	IP65
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open	<b>BES01N8</b> BES 517-398-NO-C-PU-03	<b>BES01N9</b> BES 517-398-NO-C-PU-05	
PNP normally closed			
Dimension	30 x 10.5 x 16.5 mm	30 x 10.5 x 16.5 mm	
Style	block style	block style	
Installation	flush	flush	
Range	2 mm	2 mm	
Switching frequency	2500 Hz	2500 Hz	
Housing material	PBT, GF20	PBT, GF20	
Material sensing surface	PBT, GF20	PBT, GF20	
Connection	Cable, 3.00 m, PUR	Cable, 5.00 m, PUR	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP65	IP65	
Approval/Conformity	CE, EAC, WEEE	CE, EAC, WEEE	
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		<b>BES01NA</b> BES 517-398-N0-C-S49-00,2	<b>BES01N1</b> BES 517-398-N1-C	<b>BES01N2</b> BES 517-398-N2-C
	<b>BES01MM</b> BES 517-351-N0-C-03	<b>BES01MT</b> BES 517-351-N0-C-S49-00,2		
	30 x 10.5 x 16.5 mm	30 x 10.5 x 16.5 mm	30 x 10.5 x 16.5 mm	30 x 10.5 x 16.5 mm
	block style	block style	block style	block style
	flush	flush	flush	flush
	2 mm	2 mm	2 mm	2 mm
	2500 Hz	2500 Hz	2500 Hz	2500 Hz
	PBT, GF20	PBT, GF20	PBT, GF20	PBT, GF20
	PBT, GF20	PBT, GF20	PBT, GF20	PBT, GF20
	Cable, 3.00 m, PVC	Cable with connector, M8x1-Male, 3-pin, 0.20 m, PUR	Connector, DIN 46244	Connector, DIN 46244
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP65	IP65	IP00	IP00
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, WEEE
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PNP normally open	<b>BES033J</b> BES 516-300-S279		
PNP normally open/normally closed			
NPN normally open	<b>BES033H</b> BES 516-300-S255		
NPN normally open/normally closed		<b>BES01W0</b> BES R01ZC-NAC70B-BP05	
Dimension	30 x 20 x 10 mm	32 x 20 x 8 mm	
Style	block style	32x20x8	
Installation	flush	flush	
Range	2 mm	7 mm	
Switching frequency	1500 Hz	150 Hz	
Housing material	Aluminum	Zinc, Die casting	
Material sensing surface	PBT	PA 12	
Connection	Cable, 5.00 m, PVC	Cable, 5.00 m, PUR	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP65	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, cULus, EAC, WEEE	
Productview	Page 134	Page 134	



		<b>BES01WE</b> BES R01ZC-PSC70B-BP00.2-GS49	<b>BES01WF</b> BES R01ZC-PSC70B-BP00.3-GS49	<b>BES048Z</b> BES R01ZC-PSC70B-BZ00.2-GS04-110
	<b>BES01W4</b> BES R01ZC-PAC70B-BP03			
	32 x 20 x 8 mm	32 x 20 x 8 mm	32 x 20 x 8 mm	32 x 20 x 8 mm
	32x20x8	32x20x8	32x20x8	32x20x8
	flush	flush	flush	flush
	7 mm	7 mm	7 mm	7 mm
	150 Hz	150 Hz	150 Hz	150 Hz
	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting
	PA 12	PA 12	PA 12	ceramic coated
	Cable, 3.00 m, PUR	Cable with connector, M8x1-Male, 3-pin, 0.20 m, PUR	Cable with connector, M8x1-Male, 3-pin, 0.30 m, PUR	Cable with connector, M12x1-Male, 4-pin, 0.20 m, TPU
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open			
PNP normally open/normally closed	<b>BES01W2</b> BES R01ZC-PAC70B-BP00.2-GS04	<b>BES0314</b> BES R01ZC-PAC70B-BP00.2-GS04-107	
Polarized normally open			
Dimension	32 x 20 x 8 mm	32 x 20 x 8 mm	
Style	32x20x8	32x20x8	
Installation	flush	flush	
Range	7 mm	7 mm	
Switching frequency	150 Hz	150 Hz	
Housing material	Zinc, Die casting	Zinc, Die casting	
Material sensing surface	PA 12	ceramic coated	
Connection	Cable with connector, M12x1-Male, 4-pin, 0.20 m, PUR	Cable with connector, M12x1-Male, 4-pin, 0.20 m, PUR	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
Productview	Page 134	Page 135	



				<b>BES0227</b> BES 517-3036-I02-C-S4
<b>BES01W3</b> BES R01ZC-PAC70B-BP00.5-GS04				
	<b>BES030E</b> BES Z03K-GSS10B-EP00.15-GS04-006	<b>BES030F</b> BES Z03K-GSS10B-EP00.8-GS04-006		
32 x 20 x 8 mm	26 x 26 x 43 mm	26 x 26 x 43 mm		26 x 26 x 68.5 mm
32x20x8	26x26	26x26		26x26
flush	flush	flush		flush
7 mm	10 mm	10 mm		10 mm
150 Hz	250 Hz	250 Hz		500 Hz
Zinc, Die casting	PA	PA		PA 12
PA 12	PA	PA		PA 12
Cable with connector, M12x1-Male, 4-pin, 0.50 m, PUR	Cable with connector, M12x1-Male, 4-pin, 0.15 m, PUR	Cable with connector, M12x1-Male, 4-pin, 0.80 m, PUR		Connector, M12x1-Male, 4-pin
10...30 VDC	10...36 VDC	10...36 VDC		10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C		-25...70 °C
IP67	IP67	IP67		IP67
CE, cULus, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE		CE, EAC, WEEE
Page 134	Page 135	Page 135		Page 135



PNP normally open		<b>BES052M</b> BES Q40KFA-PSY20B-DV02	
PNP normally open/normally closed	<b>BES02TN</b> BES IKU-031.28-S4		
Dimension	300 x 35 x 47 mm	40 x 40 x 54.5 mm	
Style	block style	40x40	
Installation	non-flush	flush	
Range	30 mm	20 mm	
Switching frequency	50 Hz	40 Hz ±15 Hz	
Housing material	Plastic	PBT	
Material sensing surface	Plastic	PBT	
Connection	Connector, M12x1-Male, 4-pin	Cable, 2.00 m, PVC	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP65	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, cULus, EAC, WEEE	
Productview	Page 135	Page 135	





<b>BES0555</b> BES Q40KFC-PSY20B-DV02			
			<b>BES0201</b> BES 517-132-M3-H
40 x 40 x 54.5 mm	120 x 40 x 40 mm	120 x 40 x 40 mm	120 x 40 x 40 mm
40x40	40x40	40x40	40x40
flush	flush	flush	flush
20 mm	15 mm	15 mm	15 mm
40 Hz ±15 Hz	100 Hz	100 Hz	100 Hz
PBT	PBT	Aluminum, Die casting PBT	PBT
PBT	PBT	PBT	PBT
Cable, 2.00 m, PVC	Screw terminals	Screw terminals	Screw terminals
10...30 VDC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	10...55 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP67	IP67	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, WEEE
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PNP normally open			
PNP normally open/normally closed	<b>BES0209</b> BES 517-132-M6-H	<b>BES020A</b> BES 517-132-M6-H-S4	
Dimension	120 x 40 x 40 mm	132.5 x 40 x 40 mm	
Style	40x40	40x40	
Installation	flush	flush	
Range	20 mm	20 mm	
Switching frequency	50 Hz	50 Hz	
Housing material	PBT	PBT	
Material sensing surface	PBT	PBT	
Connection	Screw terminals	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>b</sub>	10...55 VDC	10...55 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, EAC, WEEE	
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<b>BES021W</b> BES Q40KFU-PSC20B-S04G			
	<b>BES0217</b> BES Q40KFU-PAC20B-S04G	<b>BES03PN</b> BES Q40KHU-PAC20B-S04G	
40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 65 mm	120 x 40 x 40 mm
40x40	40x40	40x40	40x40
flush	flush	flush	non-flush
20 mm	20 mm	20 mm	20 mm
50 Hz	50 Hz	50 Hz	100 Hz
PBT	PBT	Zinc, Die casting PBT	PBT
PBT	PBT	PBT	PBT
Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Screw terminals
10...30 VDC	10...30 VDC	10...30 VDC	20...250 VDC/20...250 VAC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP67	IP67	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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PNP normally open			
PNP normally open/normally closed			
normally open/normally closed	<b>BES0244</b> BES 517-223-U4-E	<b>BES023Y</b> BES 517-223-M5-E	
Dimension	120 x 40 x 40 mm	120 x 40 x 40 mm	
Style	40x40	40x40	
Installation	non-flush	non-flush	
Range	20 mm	30 mm	
Switching frequency	100 Hz	100 Hz	
Housing material	Aluminum, Die casting PBT	PBT	
Material sensing surface	PBT	PBT	
Connection	Screw terminals	Screw terminals	
Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
Productview	Page 135	Page 135	



				<b>BES0236</b> BES 517-385-V-C-S4
		<b>BES0206</b> BES 517-132-M5-H	<b>BES020C</b> BES 517-132-M7-H	
<b>BES0247</b> BES 517-223-U5-E				
120 x 40 x 40 mm	120 x 40 x 40 mm	120 x 40 x 40 mm	120 x 40 x 40 mm	132.5 x 40 x 40 mm
40x40	40x40	40x40	40x40	40x40
non-flush	non-flush	non-flush	non-flush	non-flush
30 mm	30 mm	40 mm	40 mm	25 mm
100 Hz	60 Hz	50 Hz	50 Hz	50 Hz
Aluminum, Die casting PBT	PBT	PBT	PBT	PBT
PBT	PBT	PBT	PBT	PBT
Screw terminals	Screw terminals	Screw terminals	Screw terminals	Connector, M12x1-Male, 4-pin
20...250 VDC/20...250 VAC	10...55 VDC	10...55 VDC	10...55 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP67	IP67	IP67	IP67
CE, cULus, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE
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PNP normally open	<b>BES021Z</b> BES Q40KFU-PSC30F-S04G		
PNP normally open/normally closed		<b>BES021E</b> BES Q40KFU-PAC30F-S04G	
Dimension	40 x 40 x 62 mm	40 x 40 x 62 mm	
Style	40x40	40x40	
Installation	non-flush	non-flush	
Range	30 mm	30 mm	
Switching frequency	50 Hz	50 Hz	
Housing material	PBT	PBT	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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		<b>BES0308</b> BES Q40KFU-PSC40F-S04G-012		
	<b>BES020E</b> BES 517-132-M7-H-S4		<b>BES030C</b> BES Q80KA-PAC50B-S04Q-U	
	132.5 x 40 x 40 mm	40 x 40 x 66 mm	112 x 80 x 40 mm	
	40x40	40x40	80x80	
	non-flush	non-flush	flush	
	40 mm	40 mm	50 mm	
	50 Hz	60 Hz	70 Hz	
	PBT	PA	PPE	
	PBT	PA	PPE	
	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
	10...55 VDC	10...36 VDC	10...36 VDC	
	-25...70 °C	-25...70 °C	-25...70 °C	
	IP67	IP67	IP67	
	CE, EAC, WEEE	CE, EAC, cULus, WEEE	CE, EAC, cULus, WEEE	
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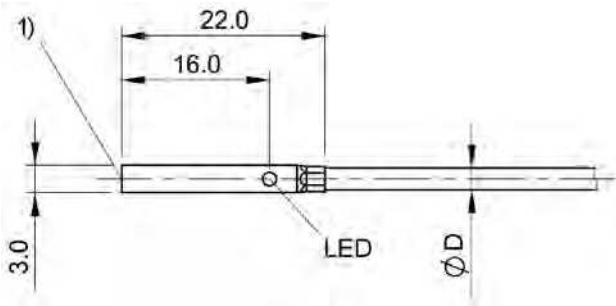


PNP normally open/normally closed	<b>BES023P</b> BES 517-139-M4-H		
normally open/normally closed		<b>BES022R</b> BES 517-460-U5-L-D	
Dimension	80 x 80 x 40 mm	80 x 80 x 40 mm	
Style	80x80	80x80	
Installation	flush	non-flush	
Range	40 mm	50 mm	
Switching frequency	50 Hz	10 Hz	
Housing material	PBT	PBT	
Material sensing surface	PBT	PBT	
Connection	Screw terminals	Screw terminals	
Operating voltage $U_b$	10...55 VDC	20...250 VAC	
Ambient temperature	-15...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, EAC, WEEE	
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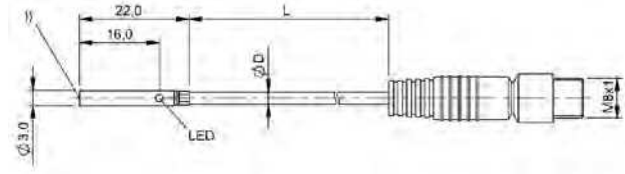


	<b>BES023R</b> BES 517-139-M5-H	<b>BES024F</b> BES 517-224-M5-E	<b>BES023W</b> BES 517-139-U5-H-S4	
	80 x 80 x 40 mm	40 x 80 x 80 mm	80 x 80 x 40 mm	
	80x80	80x80	80x80	
	non-flush	non-flush	non-flush	
	50 mm	50 mm	50 mm	
	100 Hz	10 Hz	100 Hz	
	PBT	PBT	PBT	
	PBT	PBT	PBT	
	Screw terminals	Screw terminals	Connector, M12x1-Male, 4-pin	
	10...55 VDC	20...250 VAC	10...55 VDC	
	-25...70 °C	-25...70 °C	-25...70 °C	
	IP67	IP67	IP67	
	CE, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
	Page 136	Page 137	Page 137	



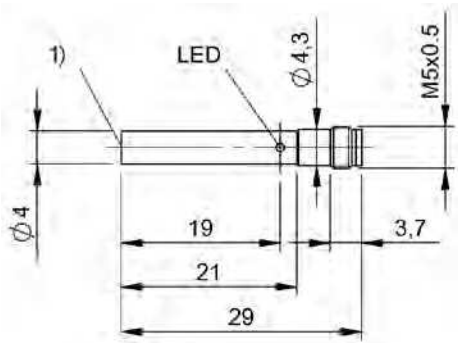
1) Sensing surface

**BES03Z6**



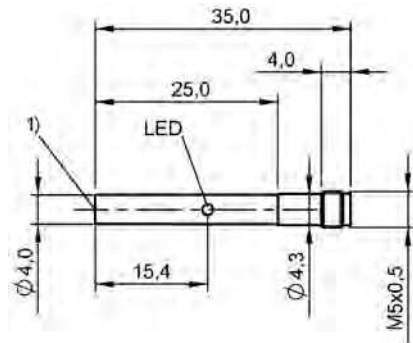
1) Sensing surface

**BES0409**



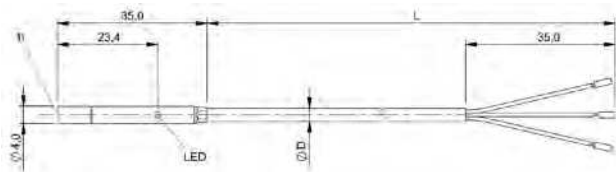
1) Sensing surface

**BES0122, BES0120**



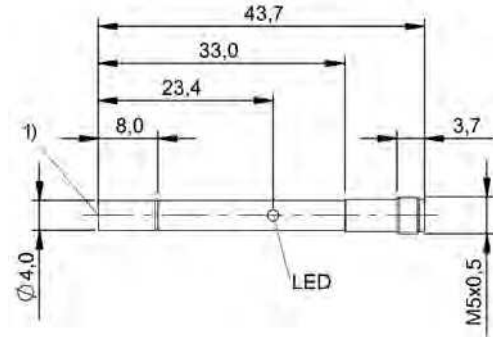
1) Sensing surface

**BES012F**



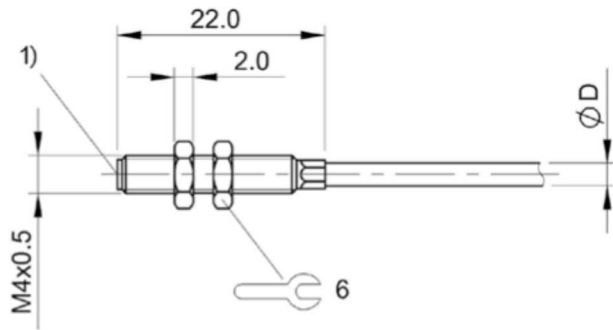
1) Sensing surface

**BES012H, BES012J**

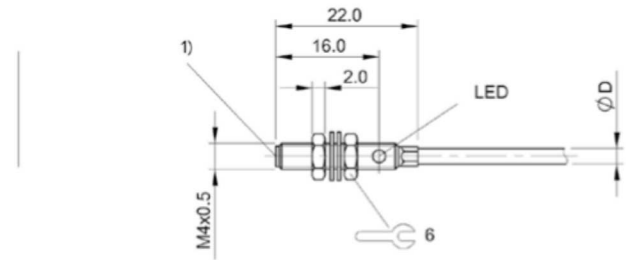
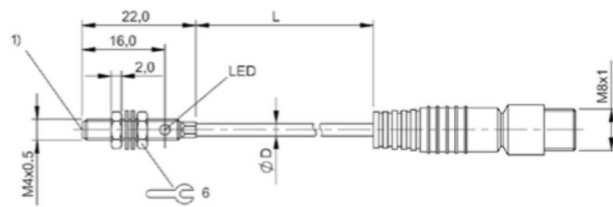


1) Sensing surface

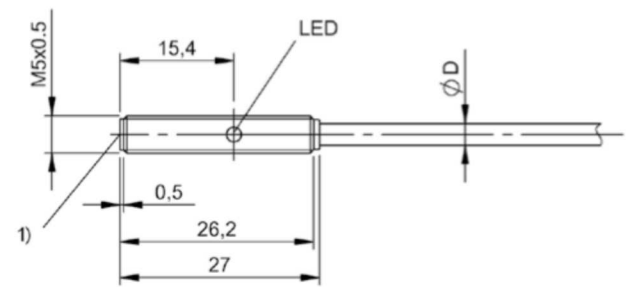
**BES012K**



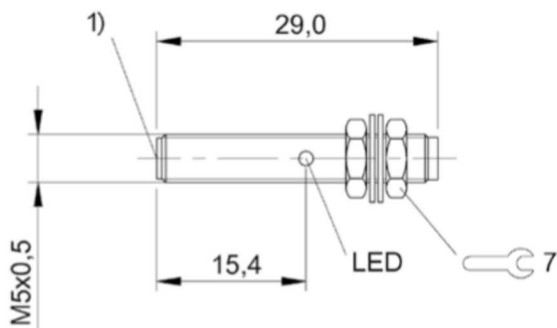
1) Sensing surface

**BES01P0****BES03ZJ, BES03Z8**

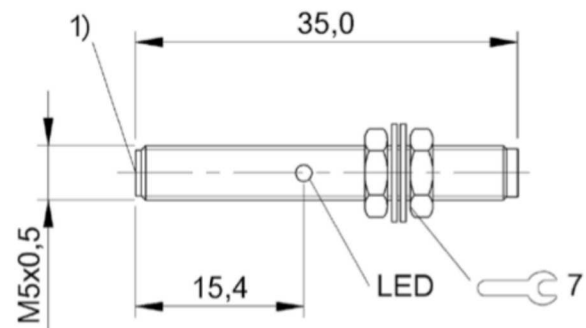
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**BES040R**

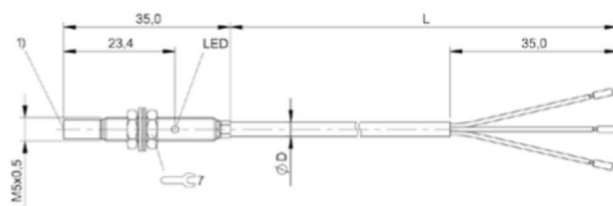
1) Sensing surface

**BES051J, BES051L**

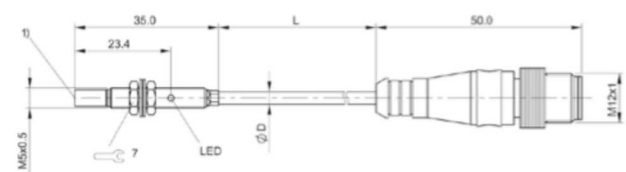
1) Sensing surface

**BES012W, BES012Z**

1) Sensing surface

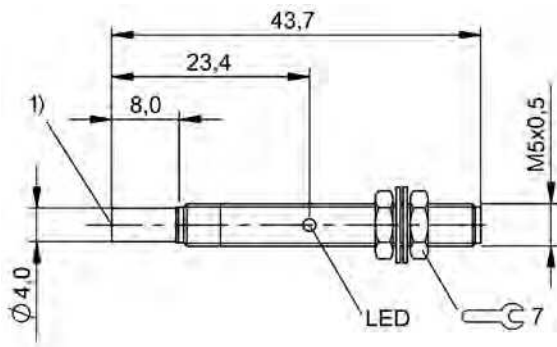
**BES0130, BES013A, BES0137**

1) Sensing surface

**BES013E, BES013F**

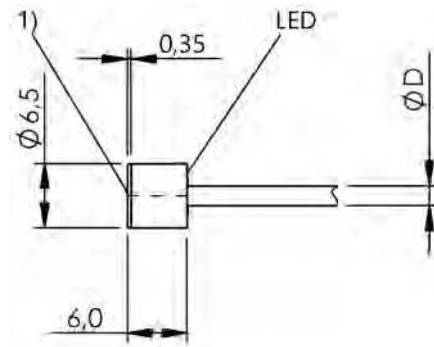
1) Sensing surface

**BES013C**



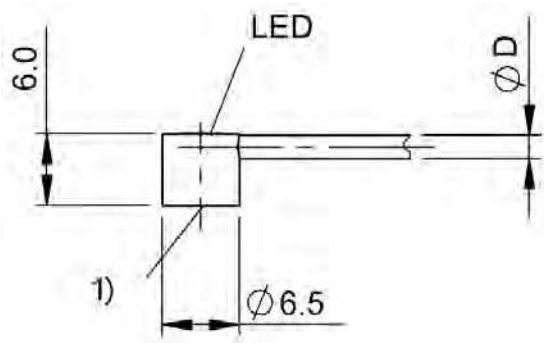
1) Sensing surface

**BES013H, BES0139**



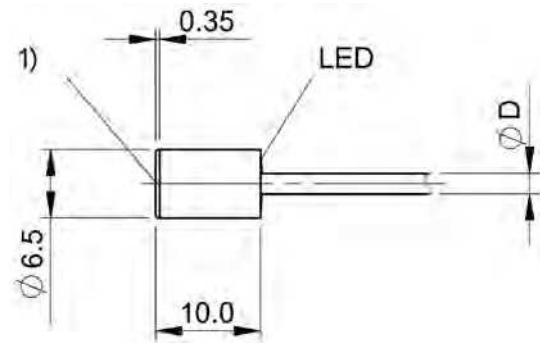
1) Sensing surface

**BES0256, BES0251, BES0258**



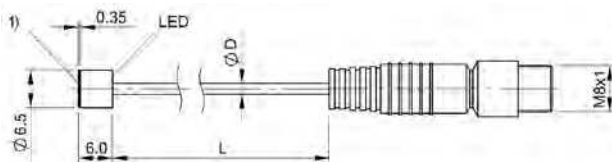
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**BES025U, BES03ZA**



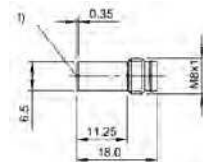
1) Sensing surface

**BES025L, BES025M, BES025H**



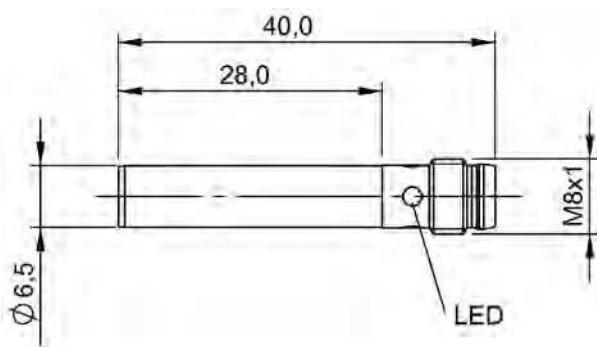
1) Sensing surface

**BES0254, BES051H, BES0257**

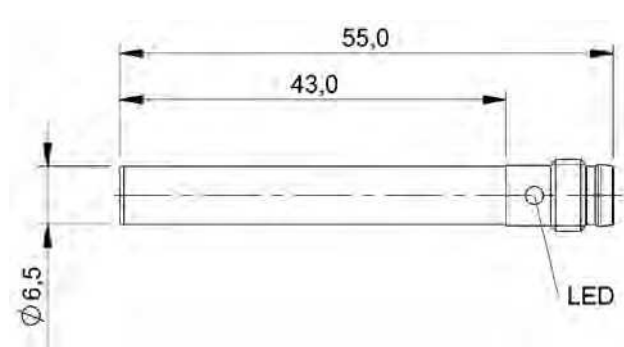


1) Sensing surface

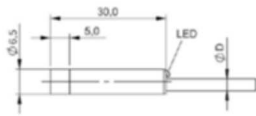
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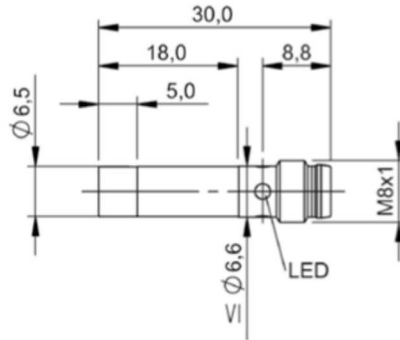
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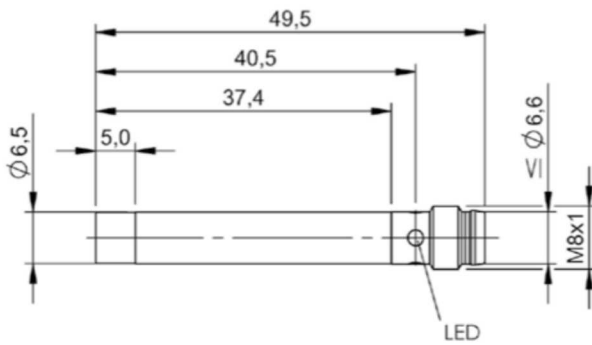
**BES03P4**



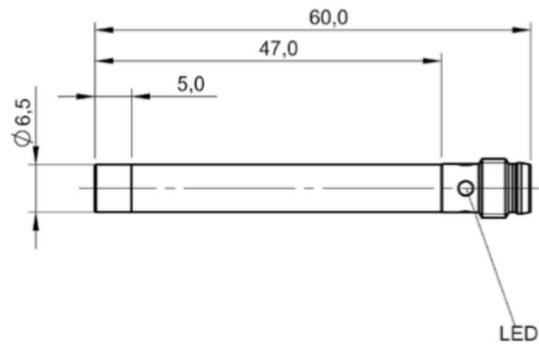
BES0008, BES000E



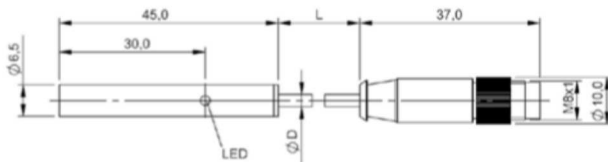
BES0005



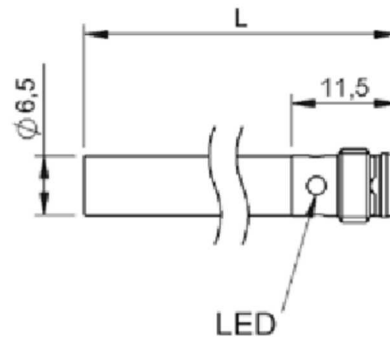
BES01NP



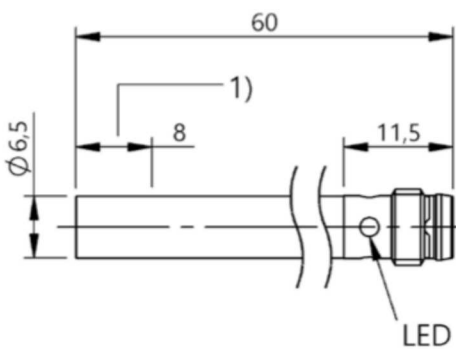
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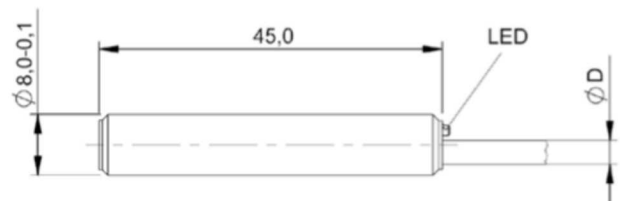
BES03EJ



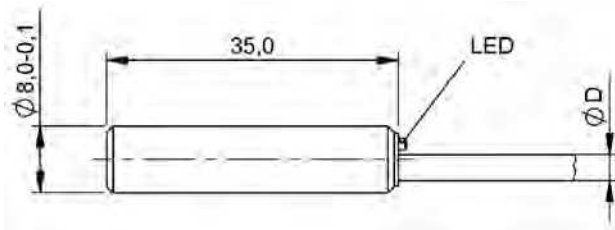
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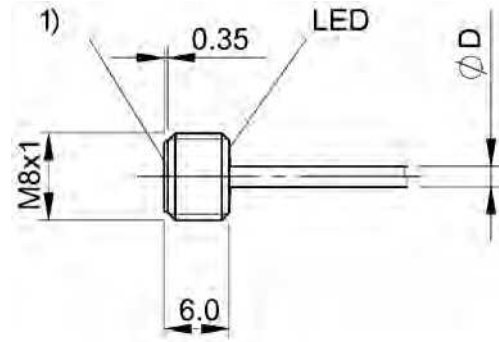
BES05WE



BES012R, BES01NY, BES012T

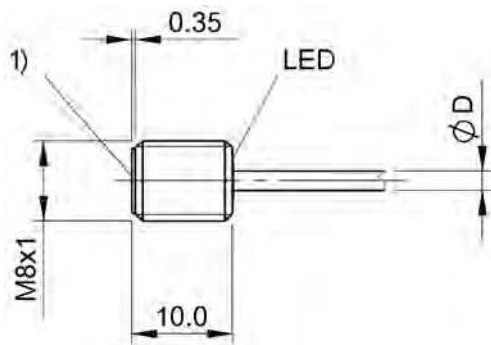


BES012L



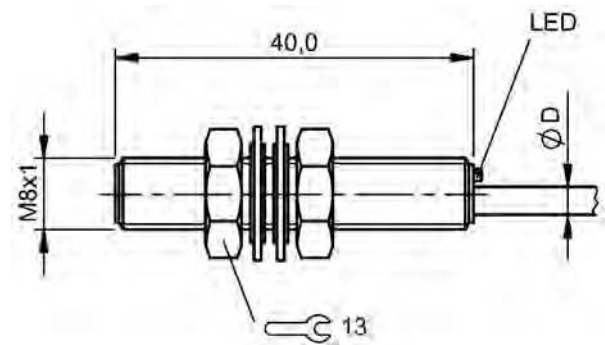
1) Sensing surface

BES026M

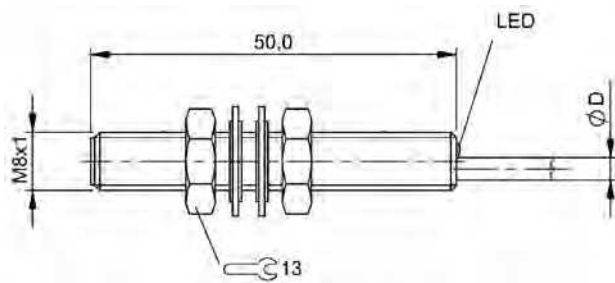


1) Sensing surface

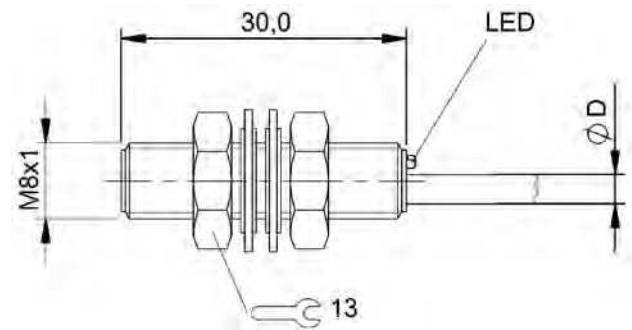
BES0275



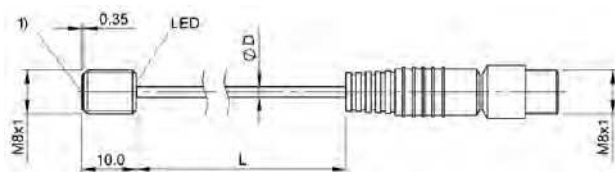
BES00CN, BES014K, BES00CR, BES00CW



BES002H, BES0034, BES0036, BES0031, BES0032, BES0037, BES002P, BES003F, BES003J, BES03TL, BES003K, BES003M, BES03TH

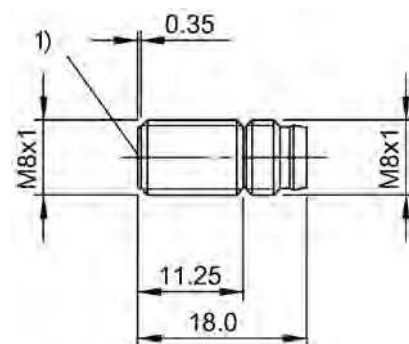


BES0389



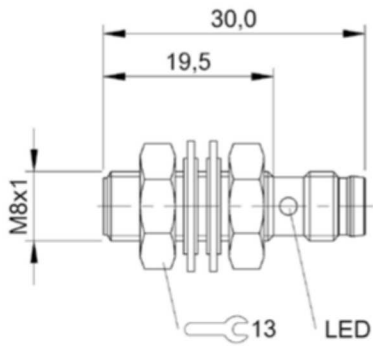
1) Sensing surface

BES0276

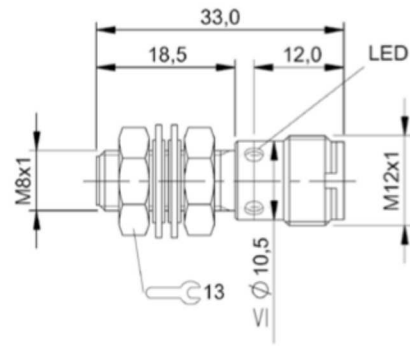


1) Sensing surface

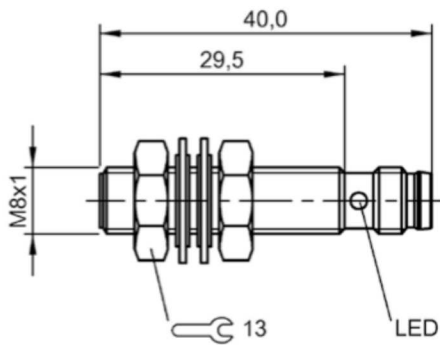
BES0277, BES0270, BES0278



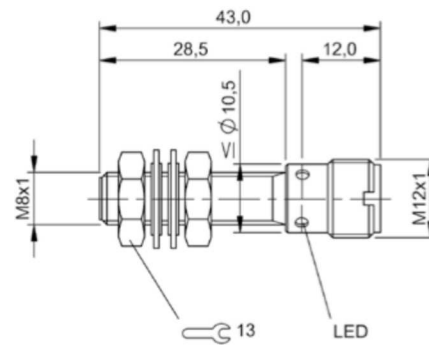
BES013J, BES013N, BES013K, BES013P, BES013L



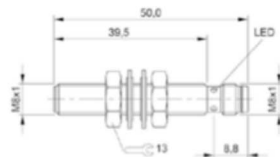
BES013M



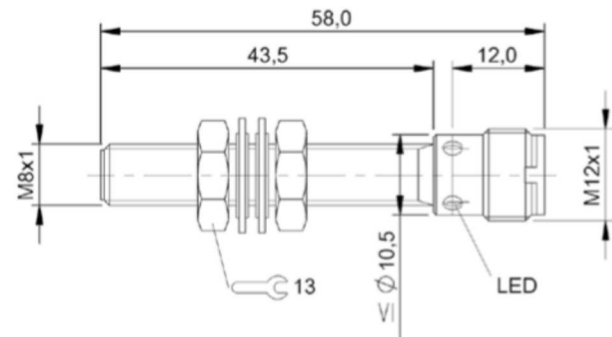
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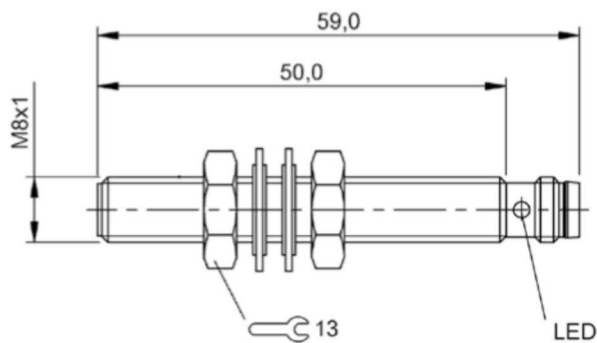
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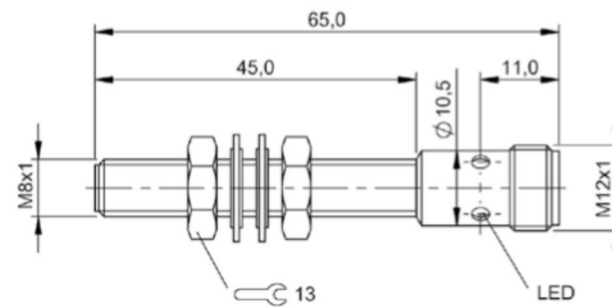
BES01P7



BES01PC, BES01PE, BES01PH

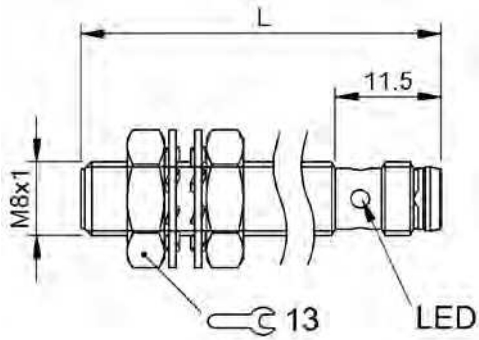


BES002K, BES03P6, BES003C, BES002U, BES0033, BES003P

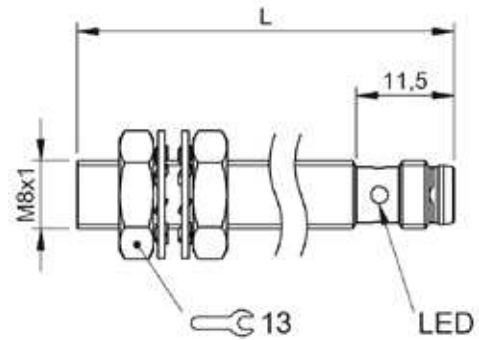


BES0024, BES0026, BES0027, BES0025, BES0028, BES03T5

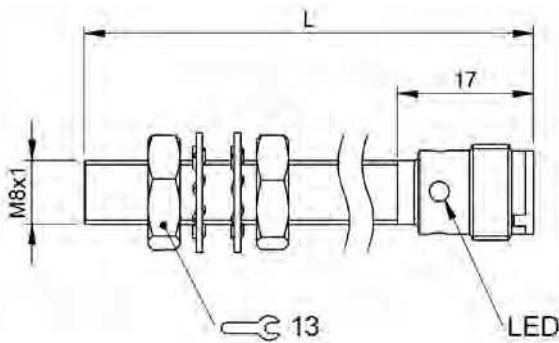




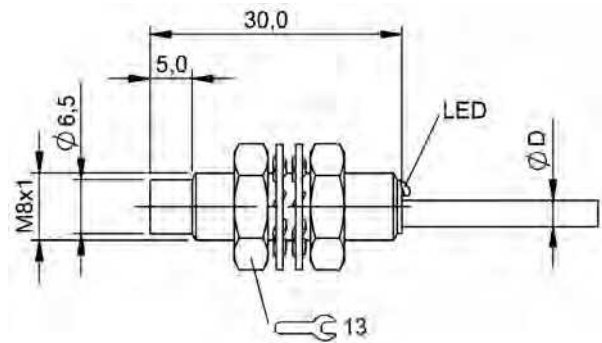
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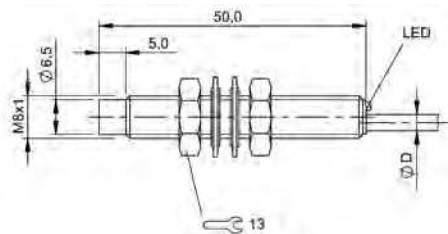
BES054N



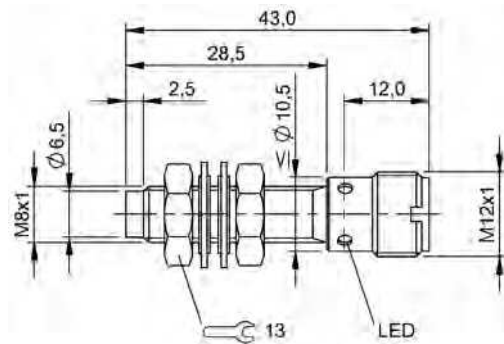
BES02W7, BES02W9



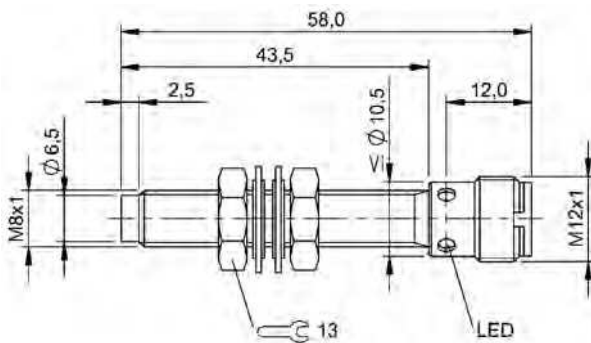
BES000T, BES000Y



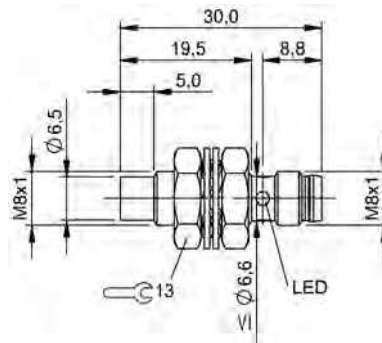
BES0013, BES0016, BES0014



BES01P3

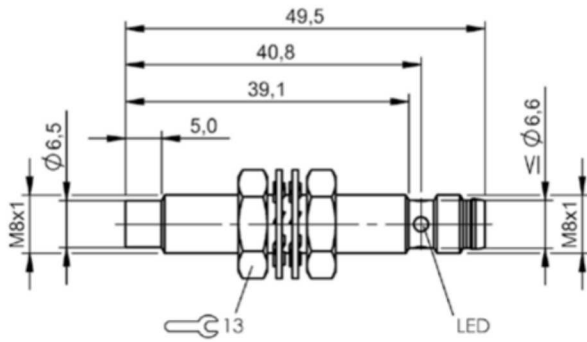


BES01P5, BES01P8, BES01P6

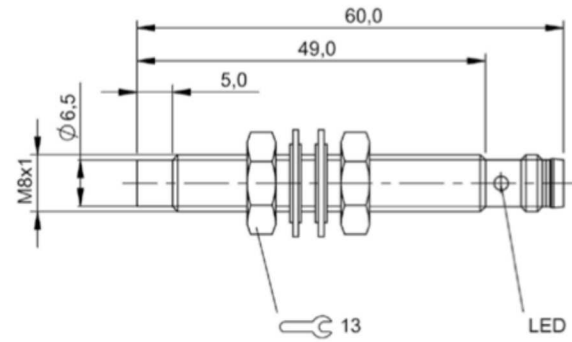


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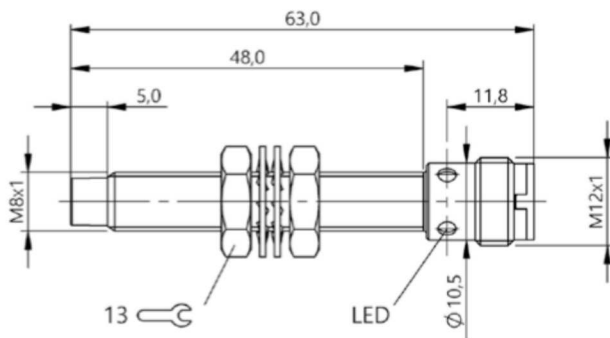




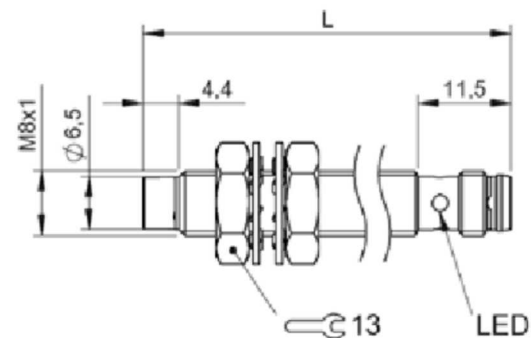
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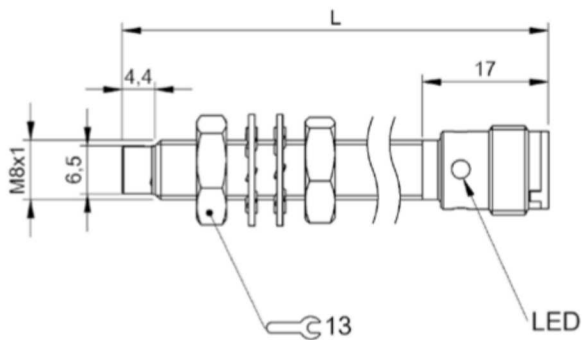
BES001C, BES001J, BES001F



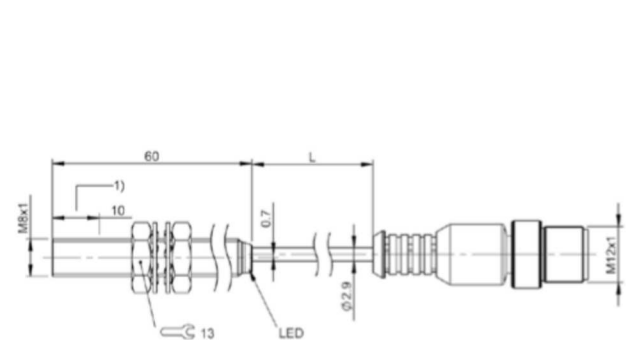
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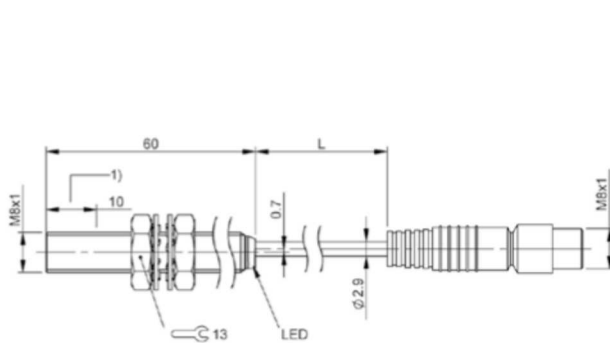
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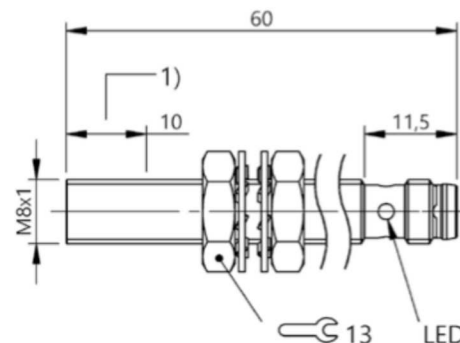
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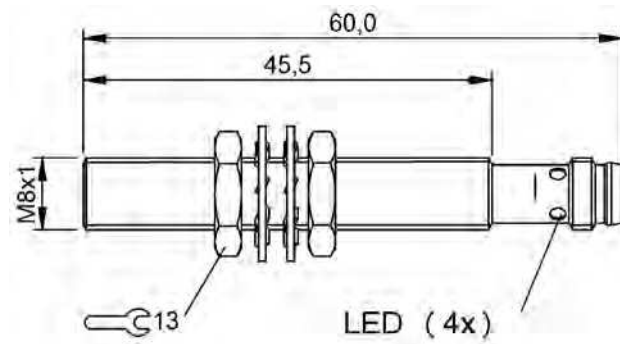
BES05UA, BES05U9



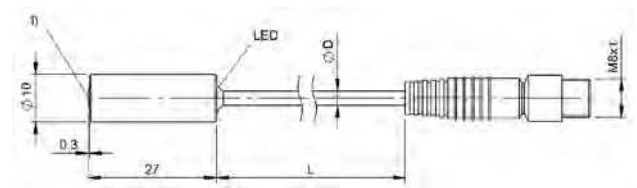
BES05U8



BES01ZT, BES01ZW

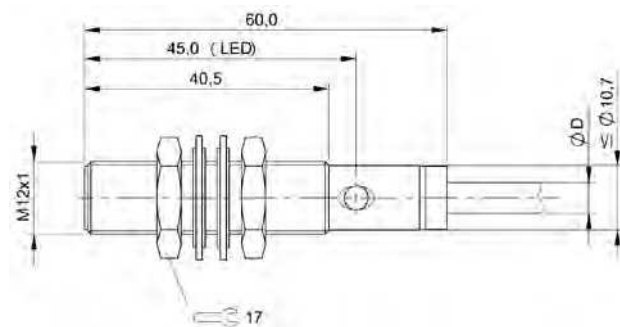


BES02W6

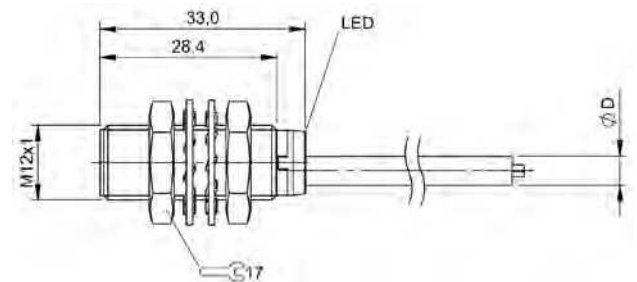


1) Sensing surface

BES04TU

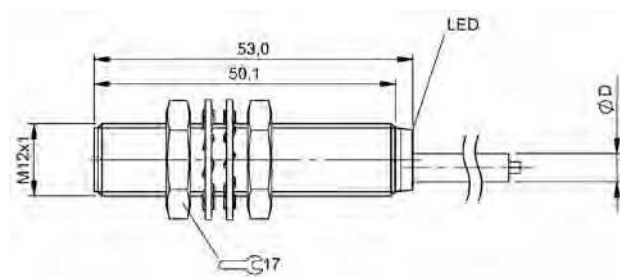


BES02C9, BES027M, BES027N

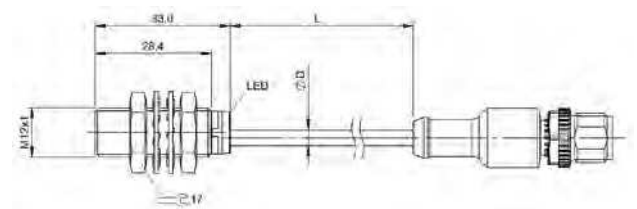


1) Sensing surface

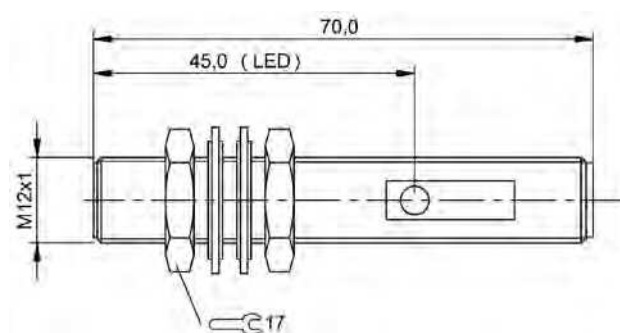
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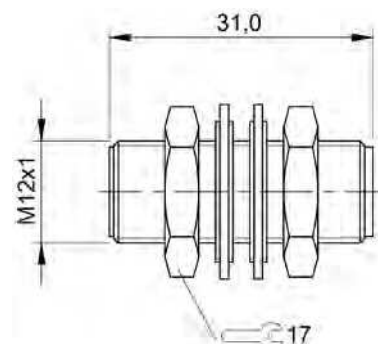
BES0057, BES0058, BES0062, BES0064, BES0001, BES0065



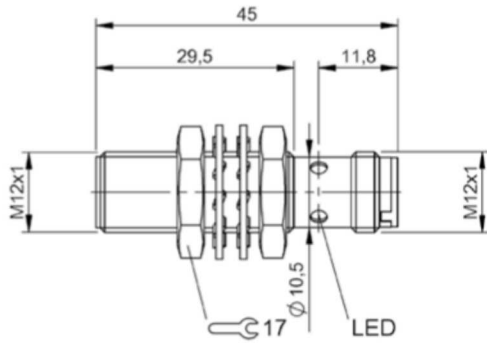
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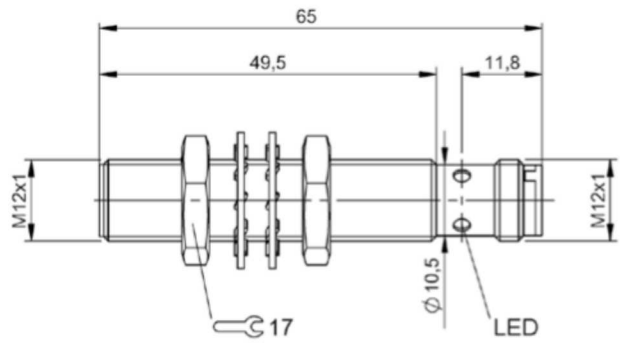
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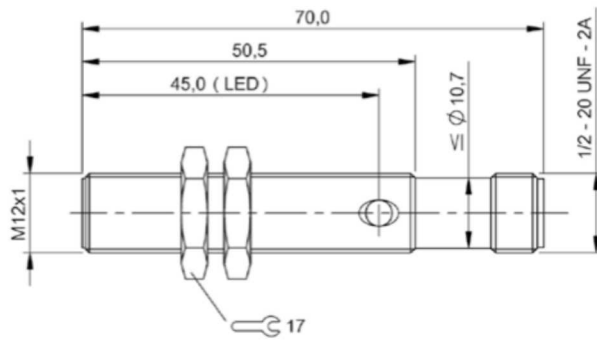
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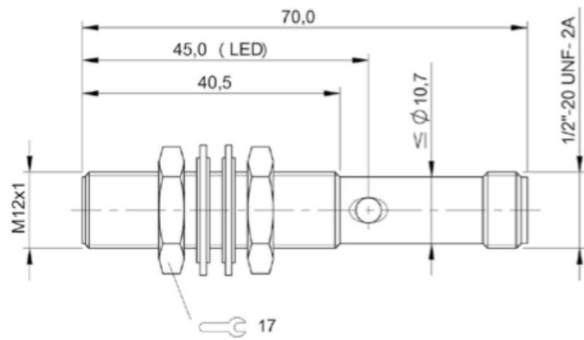
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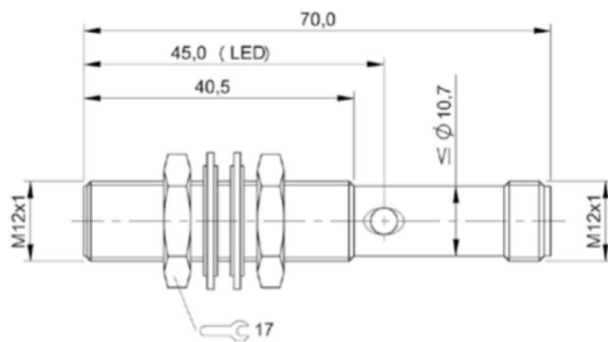
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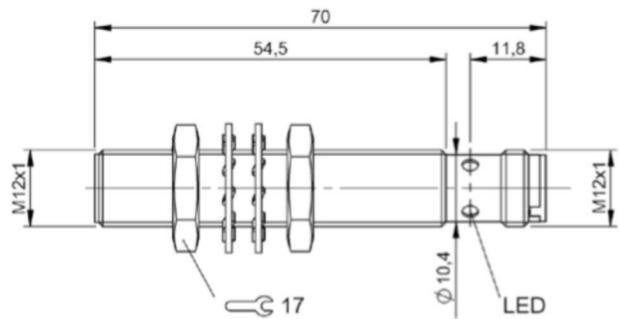
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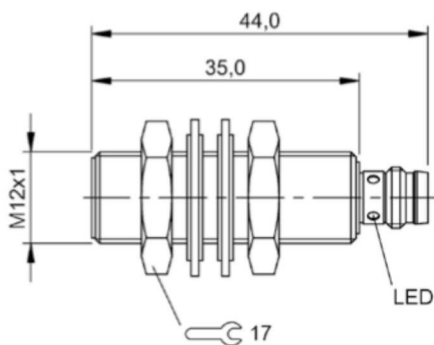
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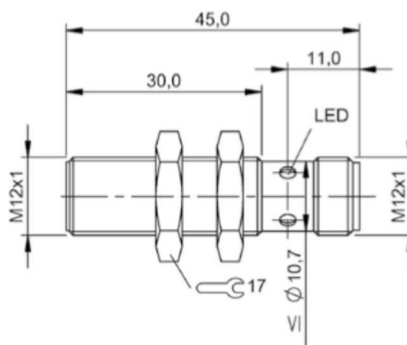
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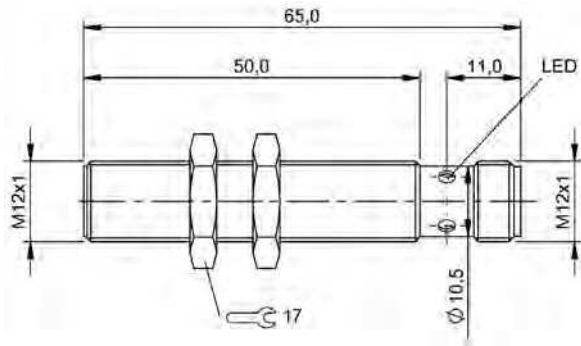
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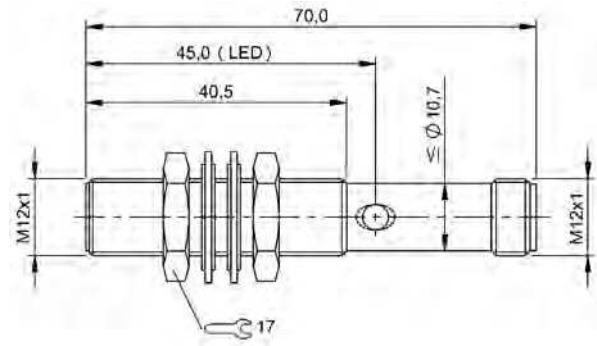
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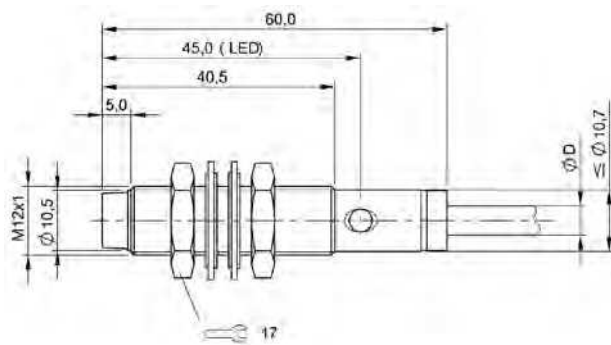
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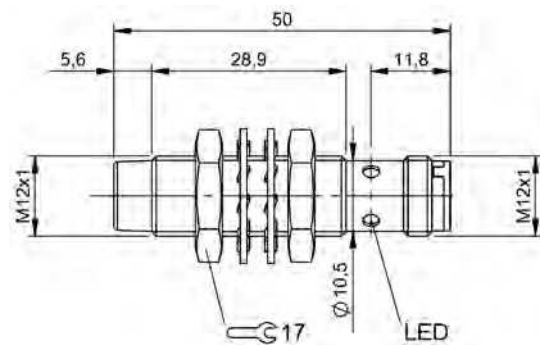
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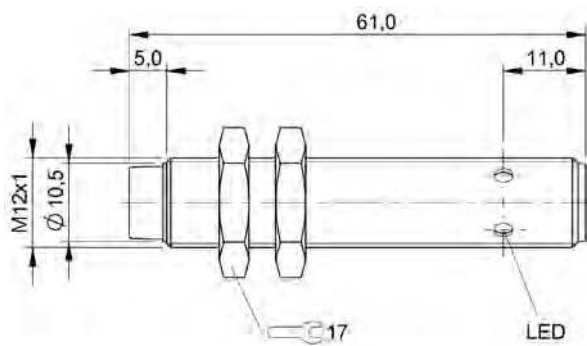
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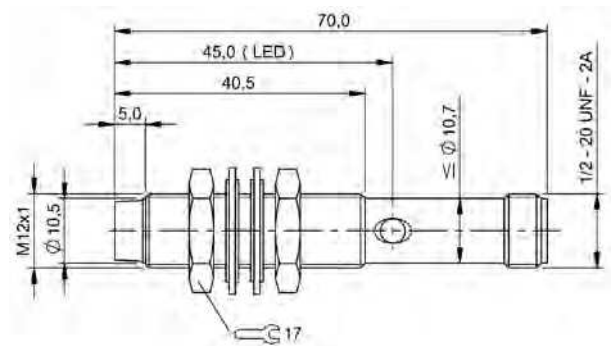
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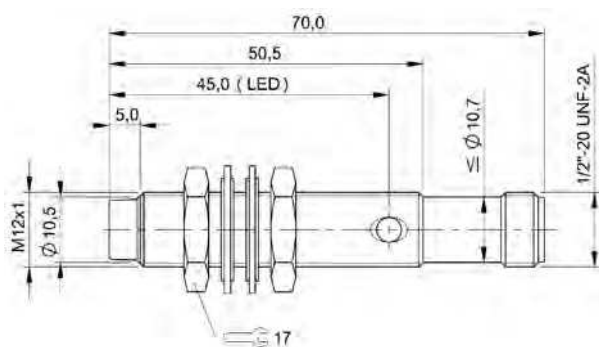
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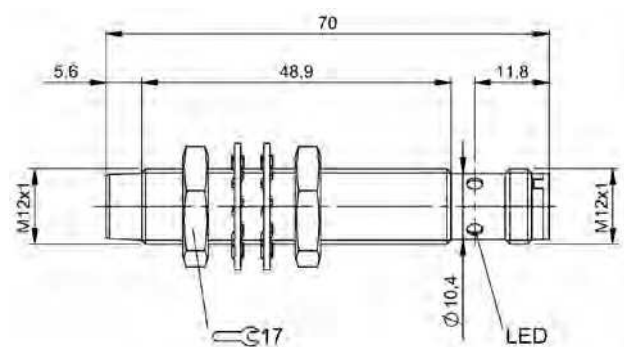
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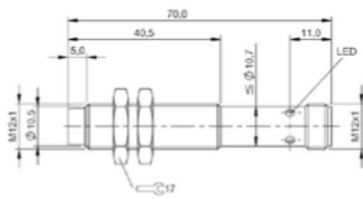
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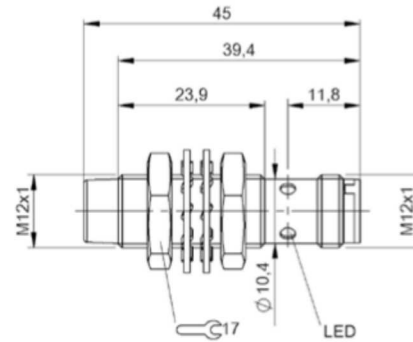
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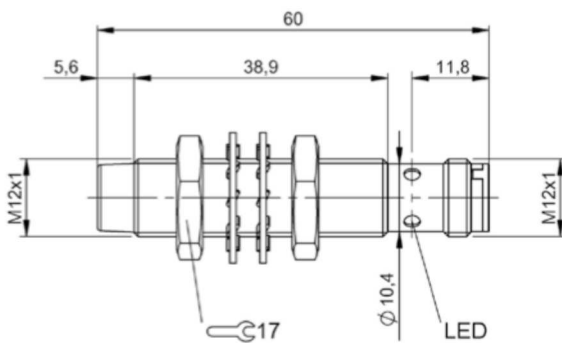
BES01H6, BES0178



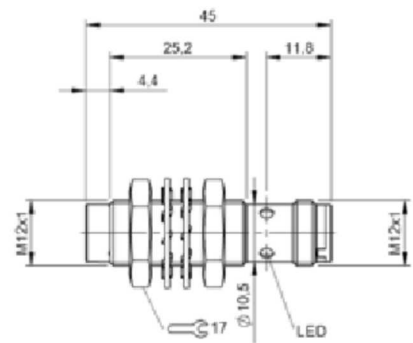
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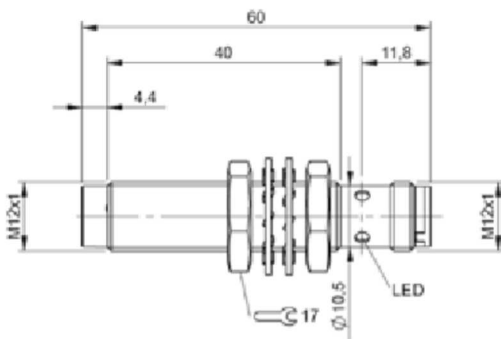
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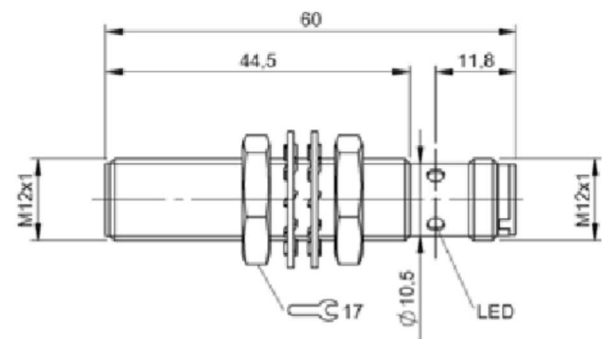
BES01PN, BES004N



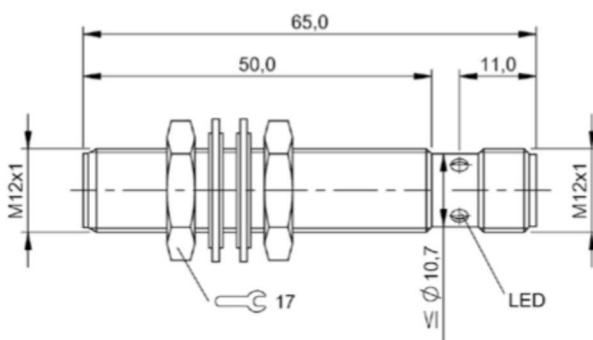
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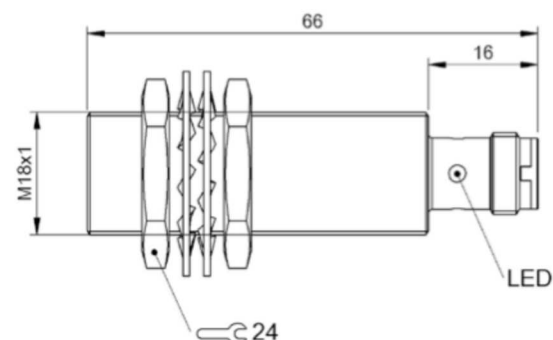
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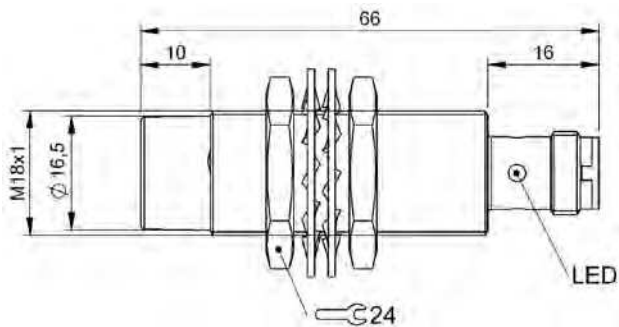
BES02WZ, BES02WY



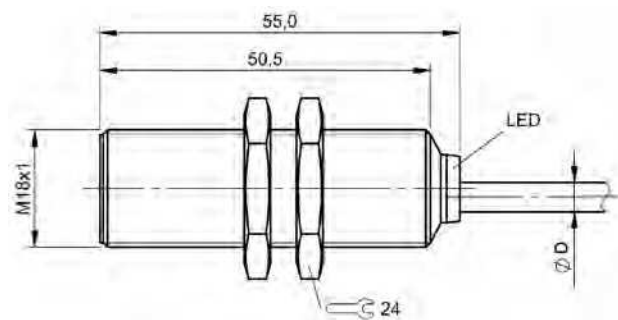
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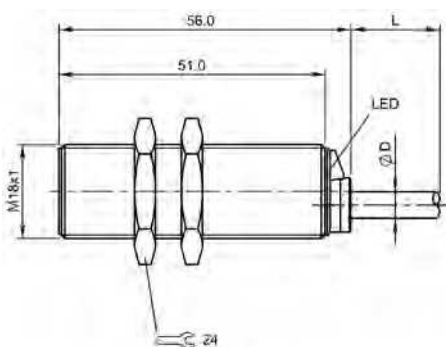
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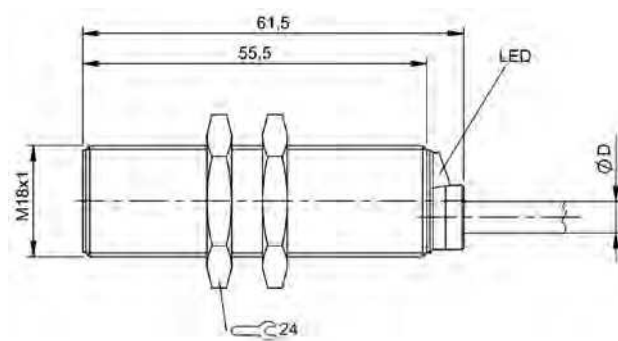
BES05EY



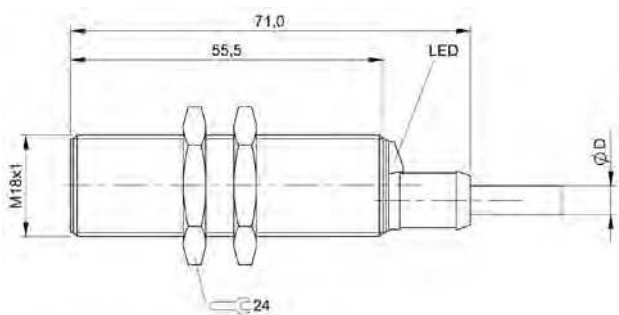
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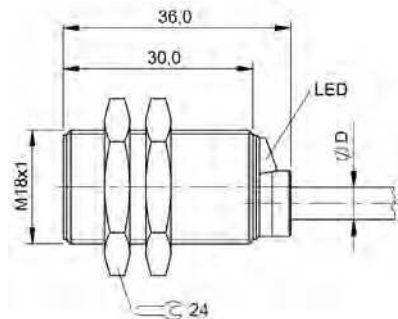
BES02AU, BES02AW



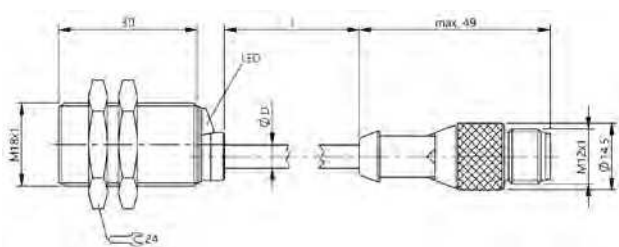
BES028L, BES028N



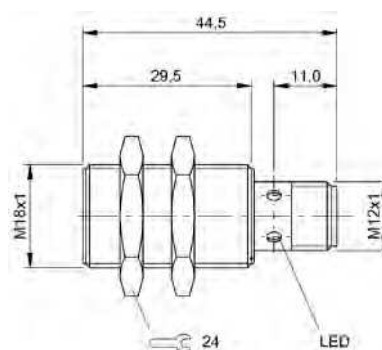
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BES04F1

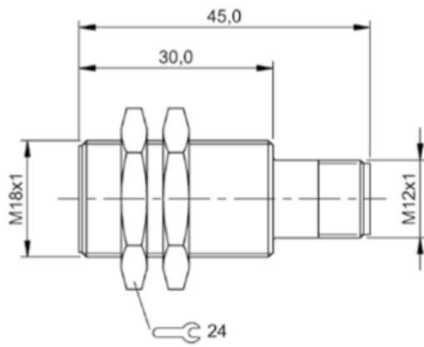
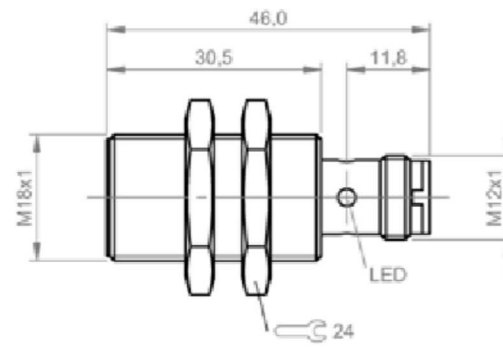
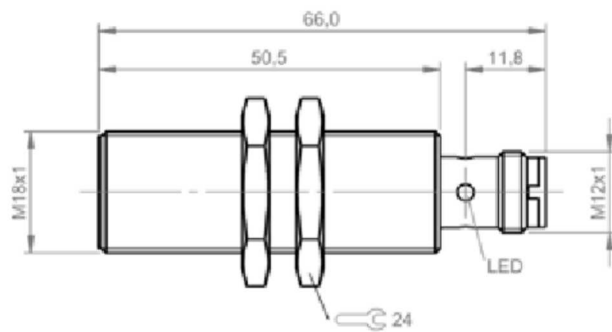
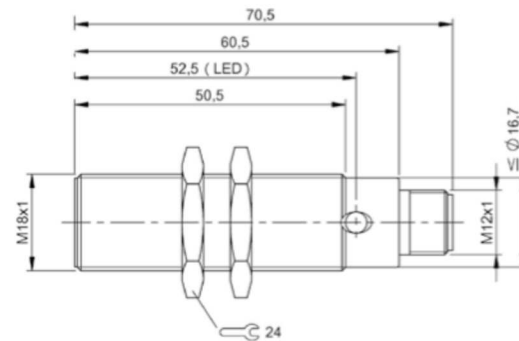
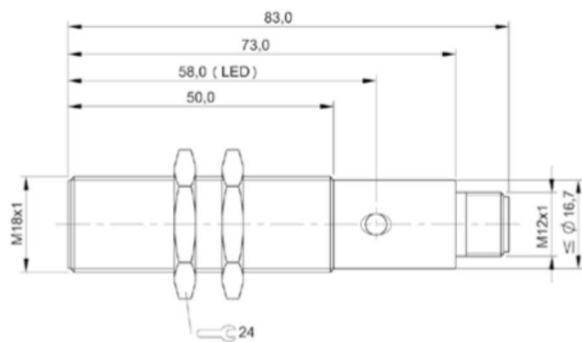
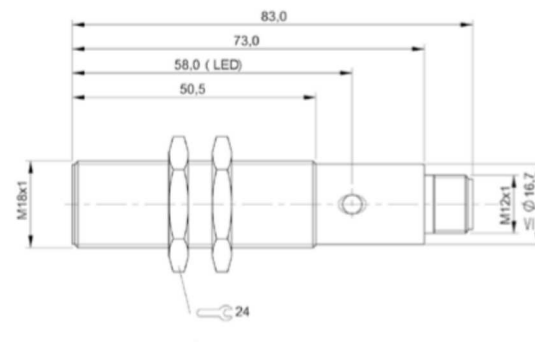
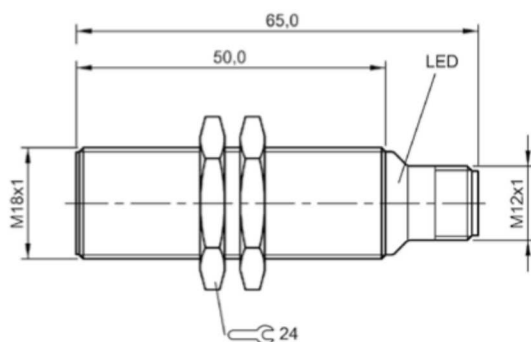
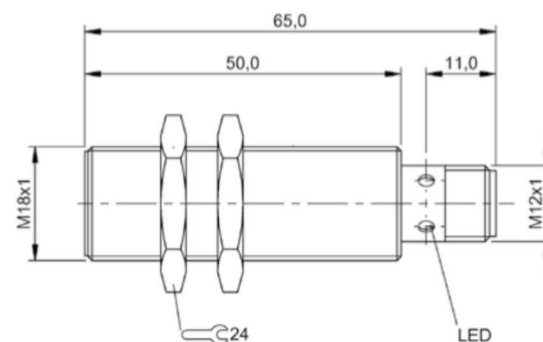


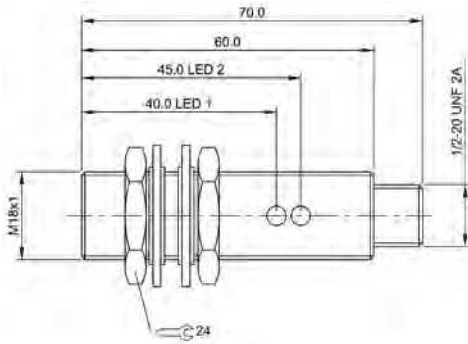
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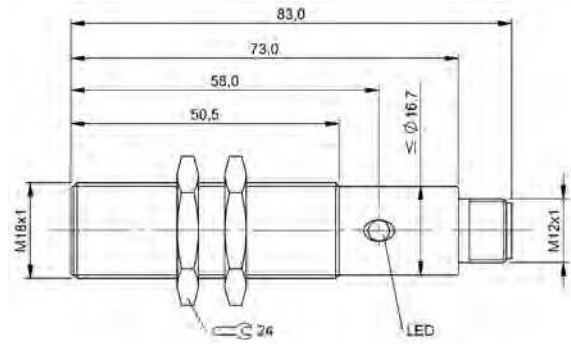
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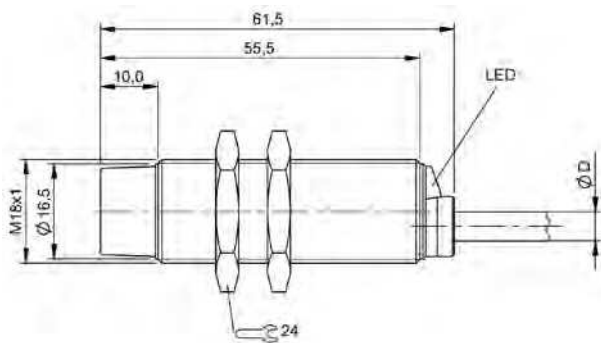
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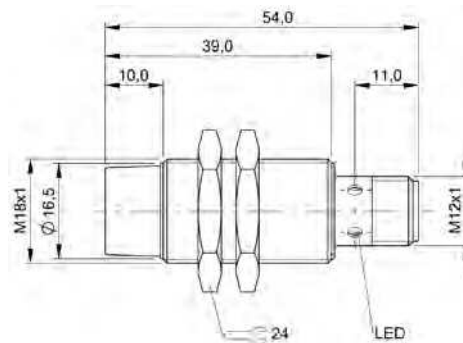
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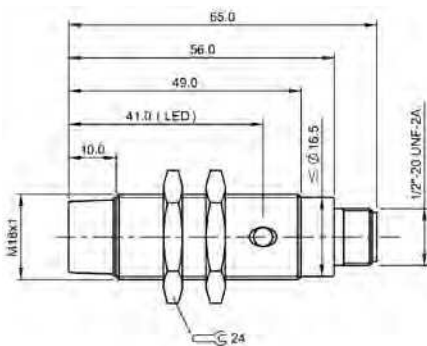
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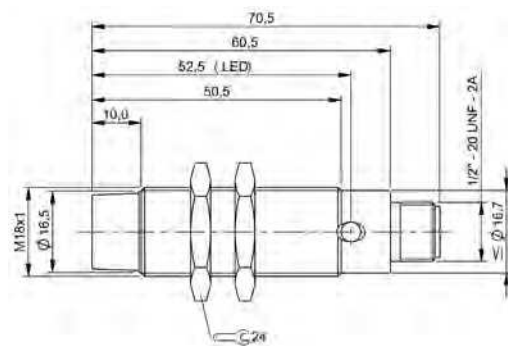
BES02C5, BES0292



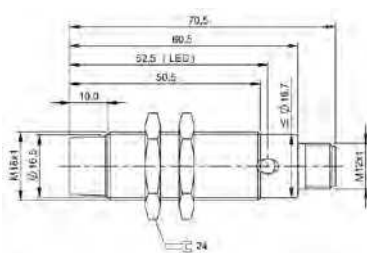
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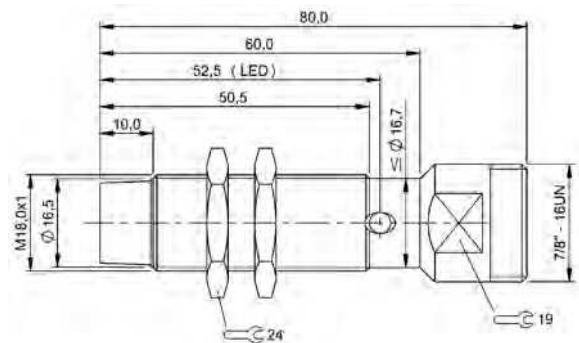
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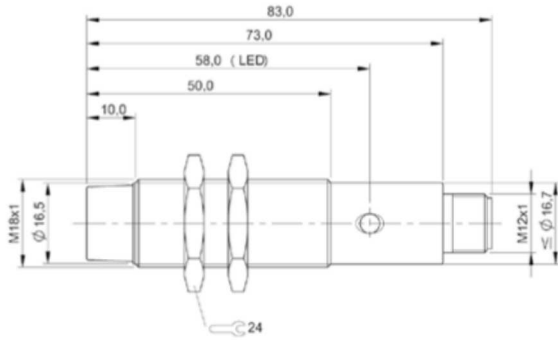


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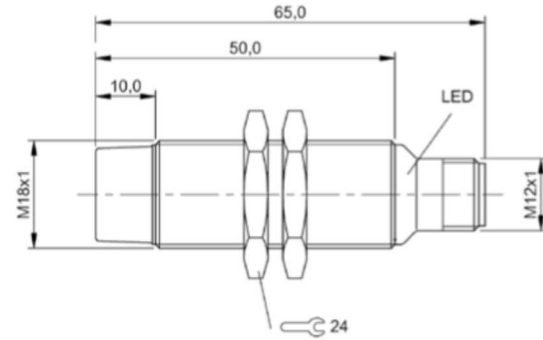


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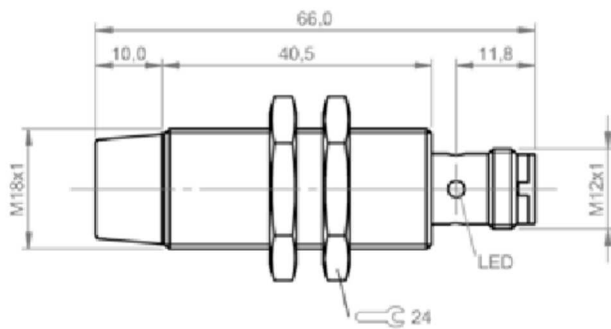




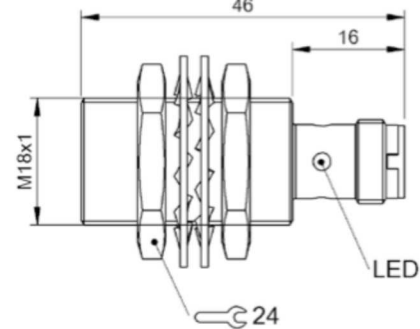
BES01HY, BES01HW, BES016W



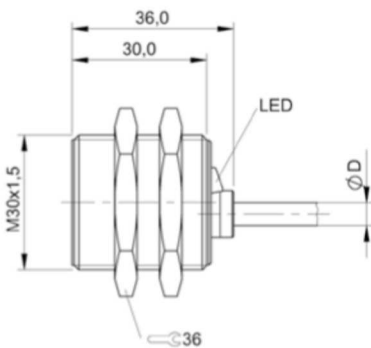
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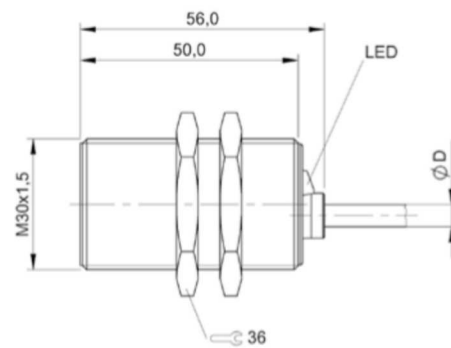
BES03RM



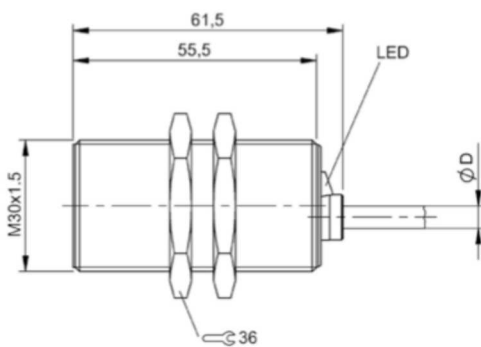
BES05ER



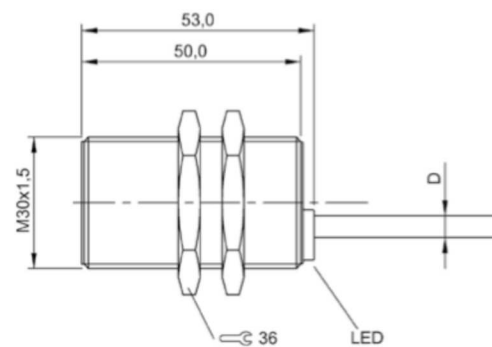
BES00RE, BES00RT, BES00LR



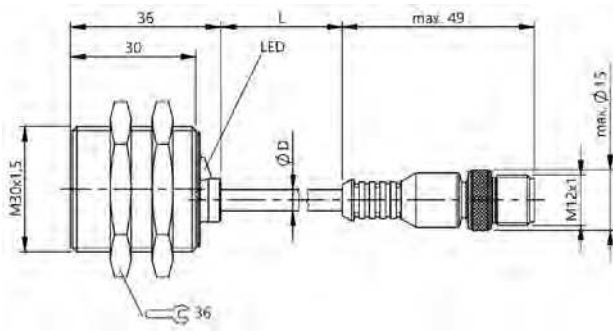
BES009E, BES00A1



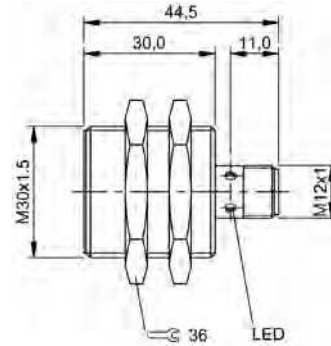
BES029L, BES029M



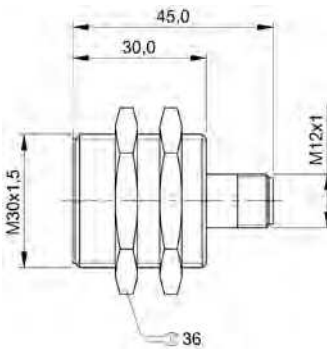
BES00AA, BES00AC



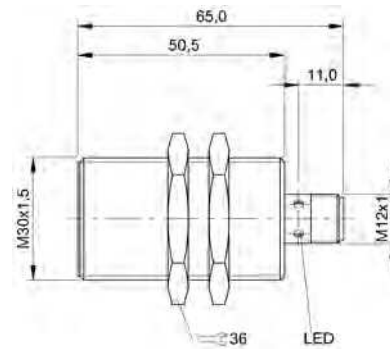
BES00LT



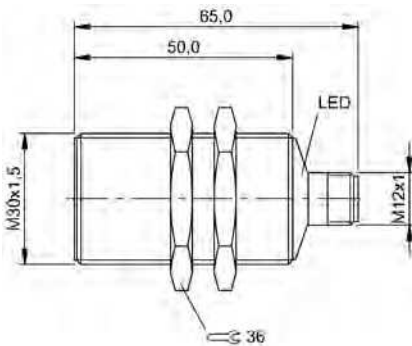
BES00RP, BES00RW, BES00LU



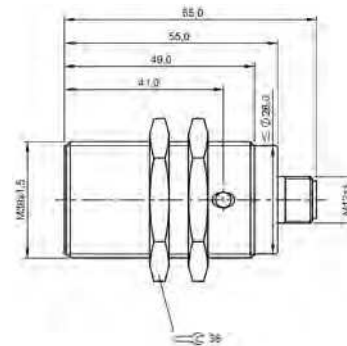
BES02F0



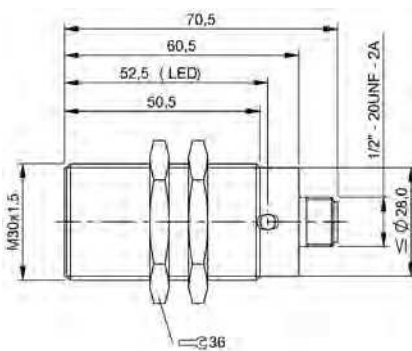
BES00A3



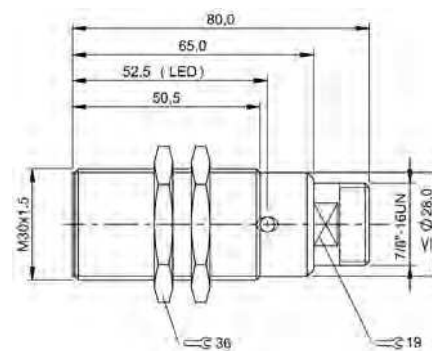
BES00A4



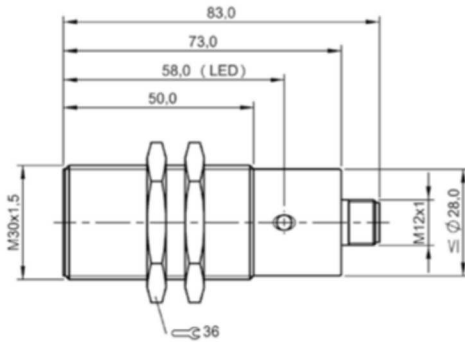
BES0316



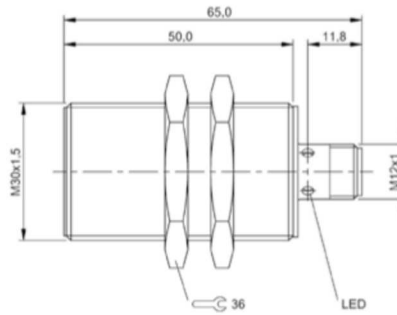
BES02E9



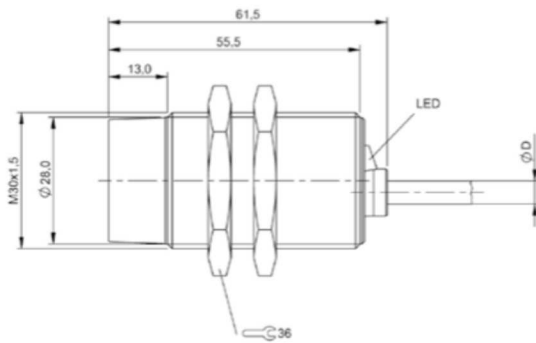
BES029W



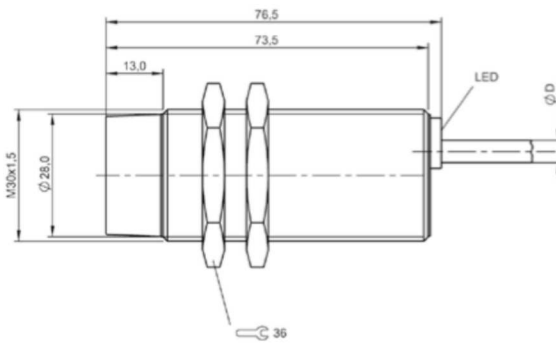
BES02F1, BES01EE, BES0167, BES01EA, BES01EC, BES0166



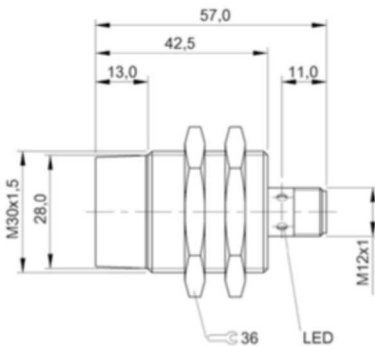
BES00AF



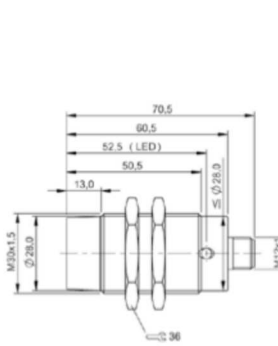
BES02A5



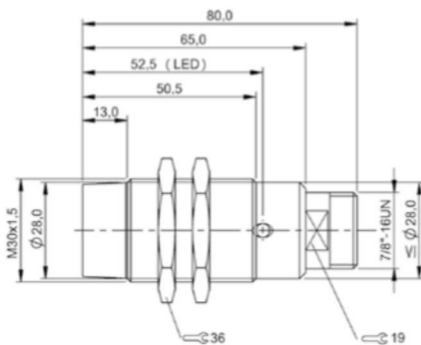
BES00AY



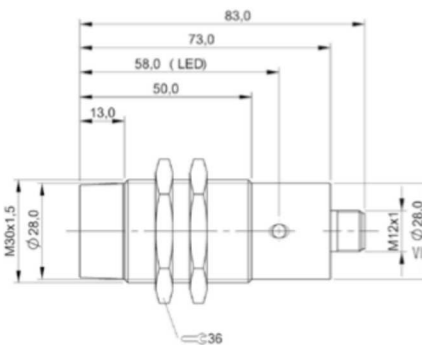
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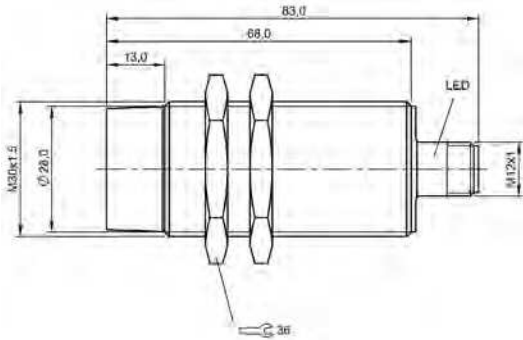
BES02AC



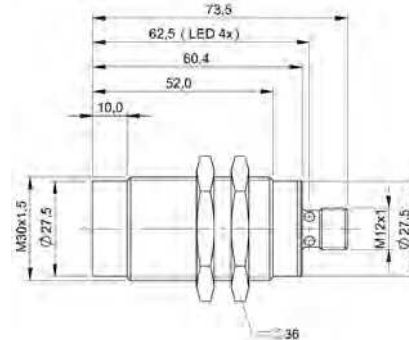
BES02AE



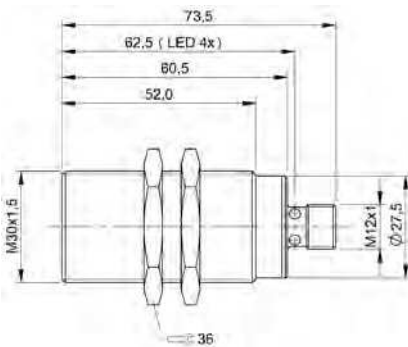
BES02FN, BES01JE, BES01JC



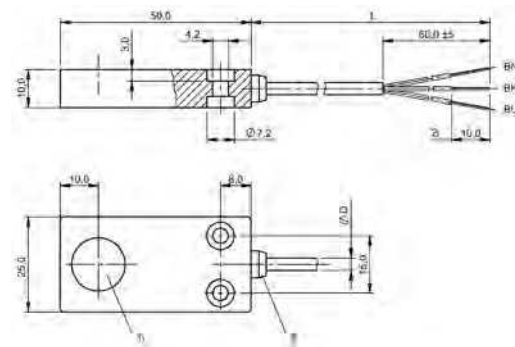
BES00AZ



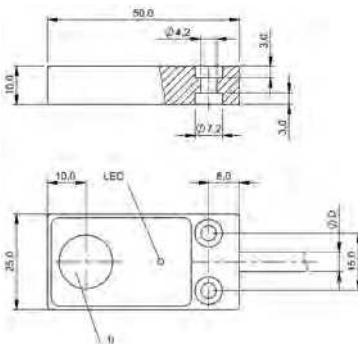
BES02YJ



BES02YM, BES02YL

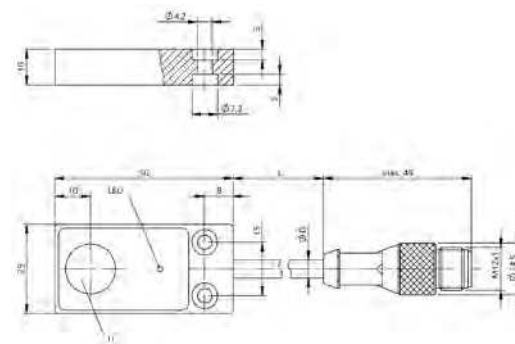


1) Sensing surface, 2) tinned, 3) LED red



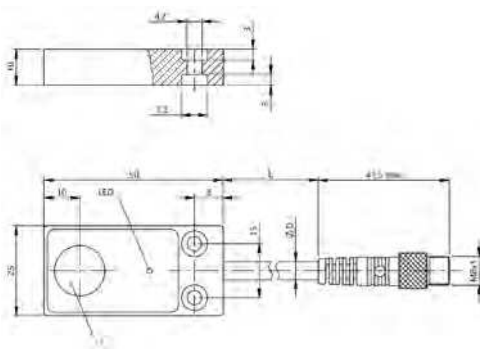
1) Sensing surface

BES01FJ, BES01FK, BES01FM, BES017H, BES032R



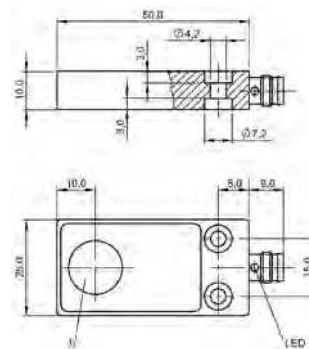
1) Sensing surface

BES01FN, BES0153



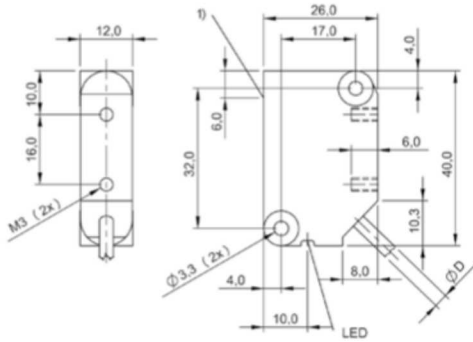
1) Sensing surface

BES01FT



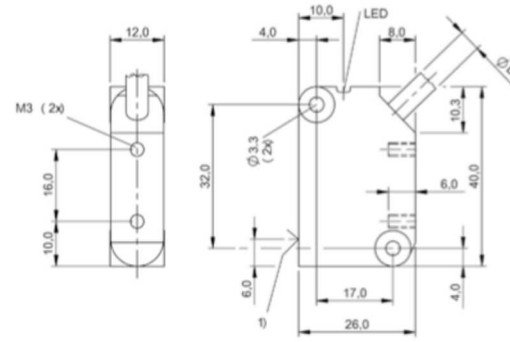
1) Sensing surface

BES01FR



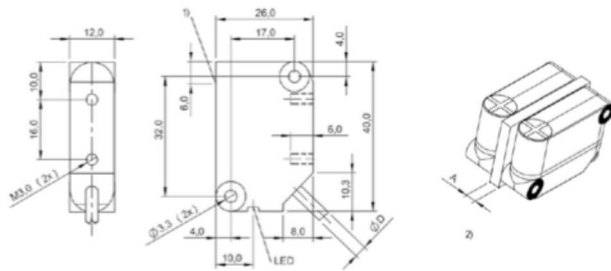
1) Sensing surface Ø8

BES02CT, BES02CU, BES01Z5



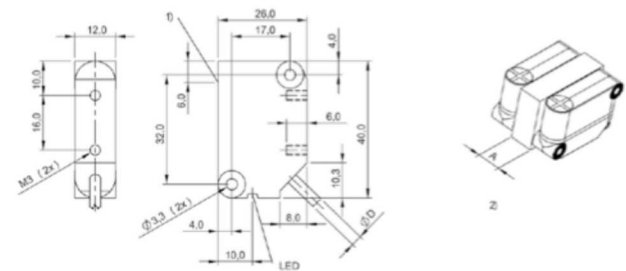
1) Sensing surface Ø8

BES01YZ



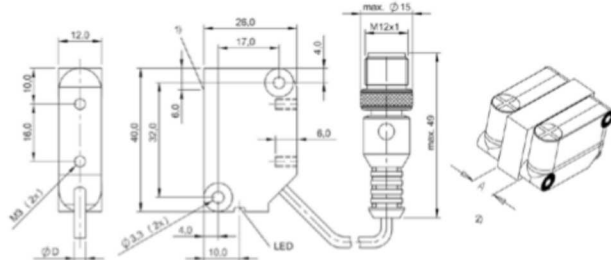
1) Sensing surface Ø8, 2) see remarks

BES02CY



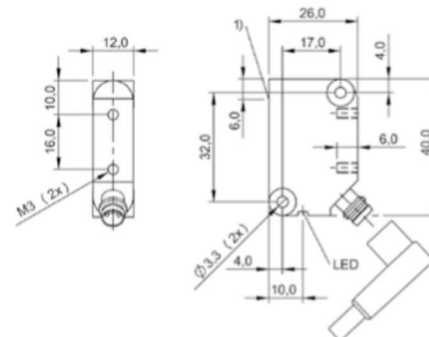
1) Sensing surface Ø8, 2) see remarks

BES01ZA, BES01ZC



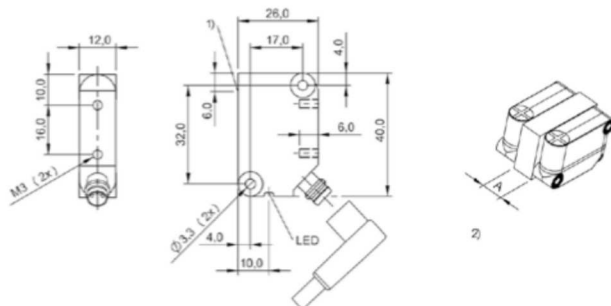
1) Sensing surface Ø8, 2) see remarks

BES01Z8



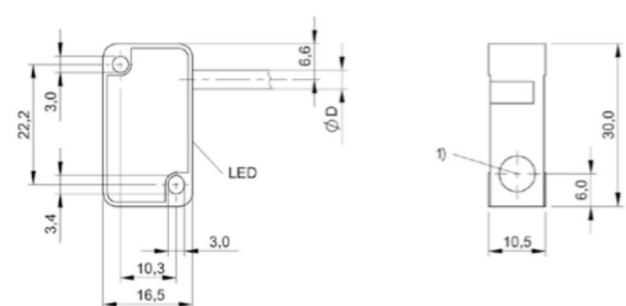
1) Sensing surface Ø8

BES01Z7, BES048A



1) Sensing surface Ø8, 2) see remarks

BES01ZE, BES01Z2



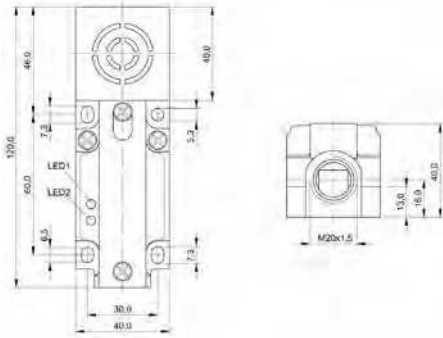
1) Sensing surface

BES01NH, BES01N5, BES01N6, BES01N8, BES01N9, BES01MM

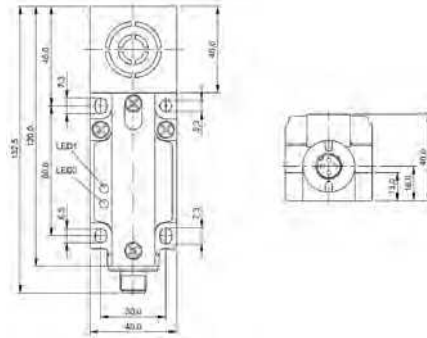




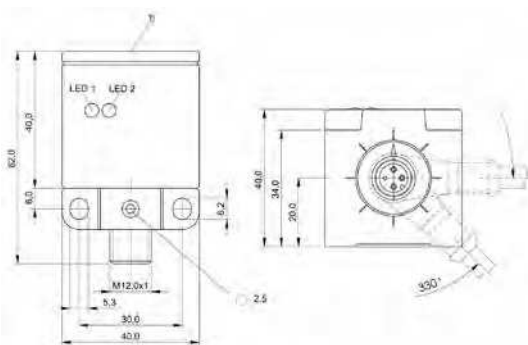




BES0201, BES0209, BES0206, BES020C

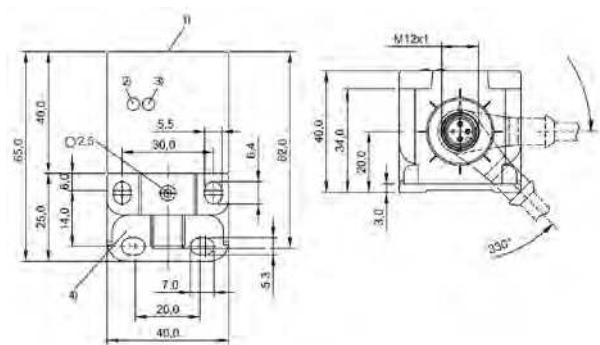


BES020A, BES0236, BES020E



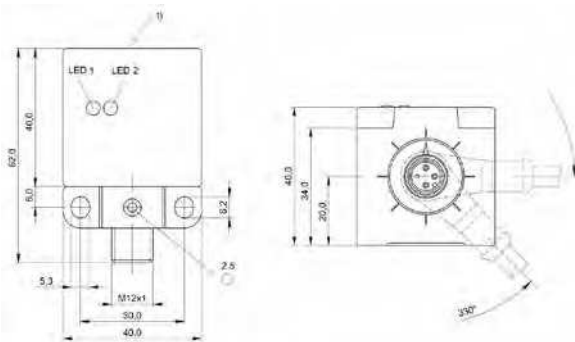
1) Sensing surface

BES021W, BES0217



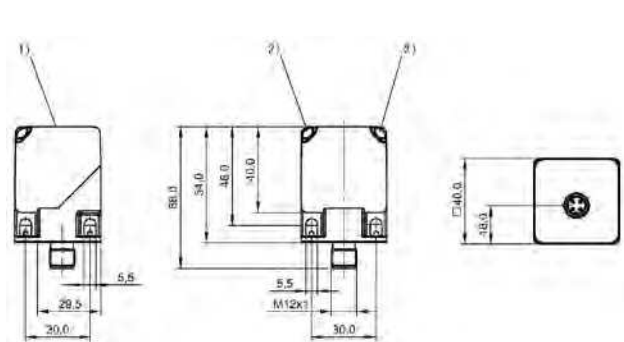
1) Sensing surface, 2) LED function indicator, 3) LED Power, 4) Metal

BES03PN



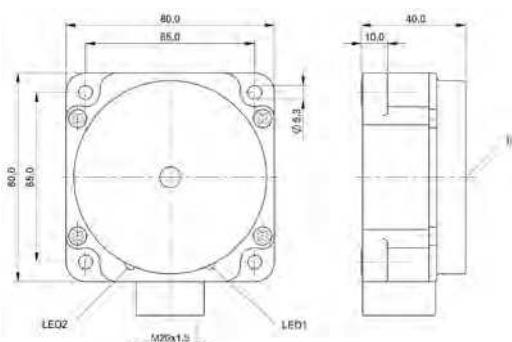
1) Sensing surface

BES021Z, BES021E



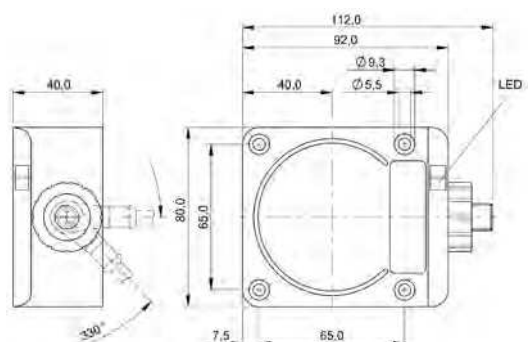
1) Sensing surface, 2) LED yellow, 3) LED green

BES0308



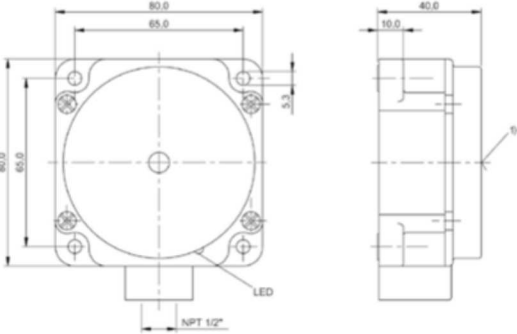
1) Sensing surface

BES023P, BES023R



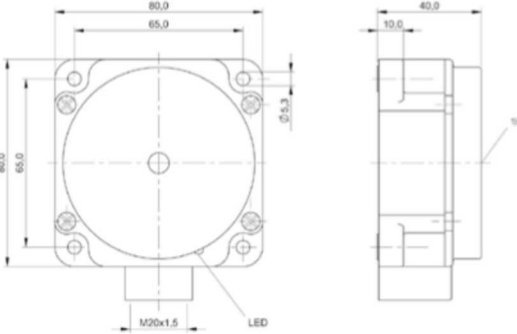
BES030C





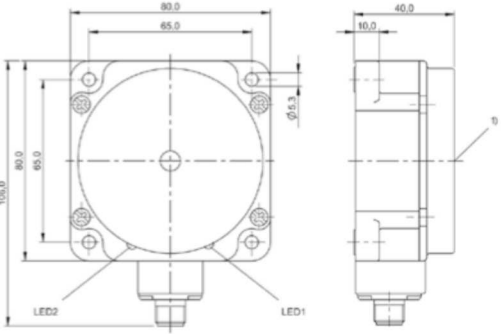
1) Sensing surface

**BES022R**



1) Sensing surface

**BES024F**



1) Sensing surface

**BES023W**



Polarized normally open	<b>BES001L</b> BES M08MG-GSC20B-BV02		
Non-polarized normally open		<b>BES001P</b> BES M08MG-USC20B-BP03	
Dimension	Ø 8 x 40 mm	Ø 8 x 40 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	2 mm	2 mm	
Switching output	polarized normally open (NO)	non-polarized normally open (NO)	
Switching frequency	1500 Hz	1500 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Cable, 2.00 m, PVC	Cable, 3.00 m, PUR	
Operating voltage $U_b$	10...36 VDC	10...36 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP66	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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			<b>BES0021</b> BES M08MG-GSC20B-BP03	
	<b>BES001T</b> BES M08MG-USC20B-BV02	<b>BES001U</b> BES M08MG-USC20B-BV03		<b>BES001W</b> BES M08MG-USC20B-BV05
	Ø 8 x 40 mm	Ø 8 x 40 mm	Ø 8 x 40 mm	Ø 8 x 40 mm
	M8x1	M8x1	M8x1	M8x1
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	2 mm	2 mm	2 mm	2 mm
	non-polarized normally open (NO)	non-polarized normally open (NO)	polarized normally open (NO)	non-polarized normally open (NO)
	1500 Hz	1500 Hz	1500 Hz	1500 Hz
	Brass	Brass	Brass	Brass
	Nickel-free coated	Nickel-free coated	Nickel-free coated	Nickel-free coated
	PBT	PBT	PBT	PBT
	Cable, 2.00 m, PVC	Cable, 3.00 m, PVC	Cable, 3.00 m, PUR	Cable, 5.00 m, PVC
	10...36 VDC	10...36 VDC	10...36 VDC	10...36 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP66	IP66	IP67	IP66
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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Polarized normally open			
Non-polarized normally open			
Non-polarized normally closed	<b>BES004T</b> BES M12MG-USC30B-BV02	<b>BES03HH</b> BES M08MG-UOC20B-BV03	
Dimension	Ø 12 x 43 mm	Ø 8 x 40 mm	
Style	M12x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	3 mm	2 mm	
Switching output	non-polarized normally open (NO)	non-polarized normally closed (NC)	
Switching frequency	1300 Hz	1500 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Cable, 2.00 m, PVC	Cable, 3.00 m, PVC	
Operating voltage $U_b$	10...36 VDC	10...36 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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<b>BES001Z</b> BES M08MG-GSC20B-BP00,3-GS04	<b>BES0324</b> BES M08MG-GSC20B-BP00,3-GS04-101	<b>BES0022</b> BES M08ME1-GSC20B-S04G	
			<b>BES001Y</b> BES M08ME1-USC20B-S04G
Ø 8 x 40 mm	Ø 8 x 40 mm	Ø 8 x 50 mm	Ø 8 x 50 mm
M8x1	M8x1	M8x1	M8x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
2 mm	2 mm	2 mm	2 mm
polarized normally open (NO)	polarized normally open (NO)	polarized normally open (NO)	non-polarized normally open (NO)
1500 Hz	1500 Hz	1500 Hz	1500 Hz
Brass	Brass	Brass	Brass
Nickel-free coated	Nickel-free coated	Nickel-free coated	Nickel-free coated
PBT	ceramic coated	PBT	PBT
Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
10...36 VDC	10...30 VDC	10...36 VDC	10...36 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP67	IP67	IP67
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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Polarized normally open			
Polarized normally closed			
Non-polarized normally open	<b>BES004P</b> BES M12MG-USC30B-BP03	<b>BES004T</b> BES M12MG-USC30B-BV02	
Non-polarized normally closed			
Dimension	Ø 12 x 43 mm	Ø 12 x 43 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	3 mm	3 mm	
Switching output	non-polarized normally open (NO)	non-polarized normally open (NO)	
Switching frequency	1300 Hz	1300 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 3.00 m, PUR	Cable, 2.00 m, PVC	
Operating voltage U <sub>b</sub>	10...36 VDC	10...36 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	<b>BES0046</b> BES M12MG-GSC30B-BV03			
	<b>BES0474</b> BES M12MG-GOC30B-BV03			
		<b>BES004U</b> BES M12MG-USC30B-BV03	<b>BES004W</b> BES M12MG-USC30B-BV05	
				<b>BES03HM</b> BES M12MG-UOC30B-BV03
	Ø 12 x 43 mm	Ø 12 x 43 mm	Ø 12 x 43 mm	Ø 12 x 43 mm
	M12x1	M12x1	M12x1	M12x1
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	3 mm	3 mm	3 mm	3 mm
	polarized normally open (NO)	non-polarized normally open (NO)	non-polarized normally open (NO)	non-polarized normally closed (NC)
	1300 Hz	1300 Hz	1300 Hz	1300 Hz
	Brass	Brass	Brass	Brass
	Nickel-free coated	Nickel-free coated	Nickel-free coated	Nickel-free coated
	PA 12	PA 12	PA 12	PA 12
	Cable, 3.00 m, PVC	Cable, 3.00 m, PVC	Cable, 5.00 m, PVC	Cable, 3.00 m, PVC
	10...36 VDC	10...36 VDC	10...36 VDC	10...36 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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Polarized normally open	<b>BES0042</b> BES M12MG-GSC30B-BP00,3-GS04	<b>BES0326</b> BES M12MG-GSC30B-BP00,3-GS04-101	
Non-polarized normally open			
Dimension	Ø 12 x 43 mm	Ø 12 x 43 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	3 mm	3 mm	
Switching output	polarized normally open (NO)	polarized normally open (NO)	
Switching frequency	1300 Hz	1300 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PA 12	LCP PTFE	
Connection	Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	
Operating voltage $U_b$	10...36 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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<b>BES039W</b> BES M12MG-GSC30B-BX00,3-GS04-U	<b>BES0037</b> BES M12MF-GSC30B-S04G		
		<b>BES0041</b> BES M12MF-USC30B-S04G	<b>BES0073</b> BES M18MG-USC70B-BV02
Ø 12 x 43 mm	Ø 12 x 50 mm	Ø 12 x 50 mm	Ø 18 x 46 mm
M12x1	M12x1	M12x1	M18x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
3 mm	3 mm	3 mm	7 mm
polarized normally open (NO)	polarized normally open (NO)	non-polarized normally open (NO)	non-polarized normally open (NO)
1300 Hz	1300 Hz	1300 Hz	600 Hz
Brass	Brass	Brass	Brass
coated, PTFE	Nickel-free coated	Nickel-free coated	Nickel-free coated
LCP PTFE	PA 12	PA 12	PA 12
Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Cable, 2.00 m, PVC
10...36 VDC	10...36 VDC	10...36 VDC	10...36 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP67	IP67	IP67
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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Polarized normally open			
Non-polarized normally open	<b>BES0074</b> BES M18MG-USC70B-BV03	<b>BES0071</b> BES M18MG-USC70B-BP03	
Dimension	Ø 18 x 46 mm	Ø 18 x 46 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	7 mm	7 mm	
Switching output	non-polarized normally open (NO)	non-polarized normally open (NO)	
Switching frequency	600 Hz	600 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 3.00 m, PVC	Cable, 3.00 m, PUR	
Operating voltage U <sub>b</sub>	10...36 VDC	10...36 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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<b>BES006C</b> BES M18MG-GSC70B-BP00,3-GS04	<b>BES03FJ</b> BES M18MG-GSC70B-BX00,3-GS04-U	<b>BES0069</b> BES M18MF-GSC70B-S04K	
			<b>BES006A</b> BES M18MF-USC70B-S04K
Ø 18 x 46 mm	Ø 18 x 46 mm	Ø 18 x 50 mm	Ø 18 x 50 mm
M18x1	M18x1	M18x1	M18x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
7 mm	7 mm	7 mm	7 mm
polarized normally open (NO)	polarized normally open (NO)	polarized normally open (NO)	non-polarized normally open (NO)
600 Hz	600 Hz	600 Hz	600 Hz
Brass	Brass	Brass	Brass
Nickel-free coated	coated, PTFE	Nickel-free coated	Nickel-free coated
PA 12	LCP PTFE	PA 12	PA 12
Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
10...36 VDC	10...36 VDC	10...36 VDC	10...36 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP67	IP67	IP67
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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Polarized normally open	<b>BES0328</b> BES M18MF-GSC70B-S04G	<b>BES03FH</b> BES M18MF-GSC70B-S04G-U	
Non-polarized normally open			
Dimension	Ø 18 x 51 mm	Ø 18 x 51 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	7 mm	7 mm	
Switching output	polarized normally open (NO)	polarized normally open (NO)	
Switching frequency	600 Hz	600 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	coated, PTFE	
Material sensing surface	PA 12	LCP PTFE	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage $U_b$	10...36 VDC	10...36 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Productview	Page 153	Page 153	



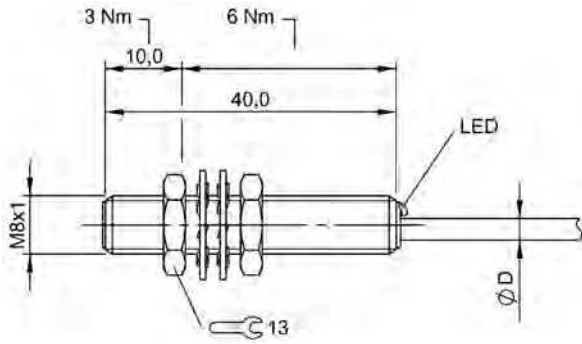
		<b>BES008R</b> BES M30MF-GSC15B-BV02		
<b>BES02NR</b> BES M18MF-USC70B-S04G			<b>BES0091</b> BES M30MF-USC15B-BV02	<b>BES0092</b> BES M30MF-USC15B-BV03
Ø 18 x 51 mm	Ø 30 x 42.5 mm	Ø 30 x 42.5 mm	Ø 30 x 42.5 mm	Ø 30 x 42.5 mm
M18x1	M30x1.5	M30x1.5	M30x1.5	M30x1.5
for flush mounting	for flush mounting	for flush mounting	for flush mounting	for flush mounting
7 mm	15 mm	15 mm	15 mm	15 mm
non-polarized normally open (NO)	polarized normally open (NO)	non-polarized normally open (NO)	non-polarized normally open (NO)	non-polarized normally open (NO)
600 Hz	400 Hz	400 Hz	400 Hz	400 Hz
Brass	Brass	Brass	Brass	Brass
Nickel-free coated	Nickel-free coated	Nickel-free coated	Nickel-free coated	Nickel-free coated
PA 12	PA 12	PA 12	PA 12	PA 12
Connector, M12x1 connector, 4-pin	Cable, 2.00 m, PVC	Cable, 2.00 m, PVC	Cable, 2.00 m, PVC	Cable, 3.00 m, PVC
10...36 VDC	10...36 VDC	10...36 VDC	10...36 VDC	10...36 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP67	IP67	IP67	IP67
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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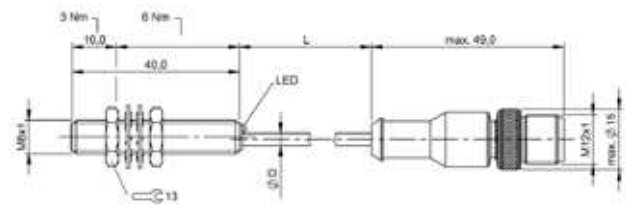
Polarized normally open		<b>BES027K</b> BES M30MF-GSC15B-BX00,3-GS04-U	
Non-polarized normally open	<b>BES008Z</b> BES M30MF-USC15B-BP03		
Dimension	Ø 30 x 42.5 mm	Ø 30 x 42.5 mm	
Style	M30x1.5	M30x1.5	
Installation	for flush mounting	for flush mounting	
Range	15 mm	15 mm	
Switching output	non-polarized normally open (NO)	polarized normally open (NO)	
Switching frequency	400 Hz	400 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	coated, PTFE	
Material sensing surface	PA 12	LCP PTFE	
Connection	Cable, 3.00 m, PUR	Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	
Operating voltage $U_b$	10...36 VDC	10...36 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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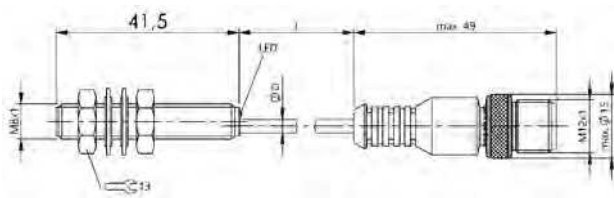
	<b>BES008W</b> BES M30MF-GSC15B-S04K		<b>BES03KL</b> BES M30MF-GSC15B-S04G-U	
		<b>BES0094</b> BES M30MF-USC15B-S04K		
	Ø 30 x 50 mm	Ø 30 x 50 mm	Ø 30 x 51 mm	
	M30x1.5	M30x1.5	M30x1.5	
	for flush mounting	for flush mounting	for flush mounting	
	15 mm	15 mm	15 mm	
	polarized normally open (NO)	non-polarized normally open (NO)	polarized normally open (NO)	
	400 Hz	400 Hz	400 Hz	
	Brass	Brass	Brass	
	Nickel-free coated	Nickel-free coated	coated, PTFE	
	PA 12	PA 12	LCP PTFE	
	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
	10...36 VDC	10...36 VDC	10...36 VDC	
	-25...70 °C	-25...70 °C	-25...70 °C	
	IP67	IP67	IP67	
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	
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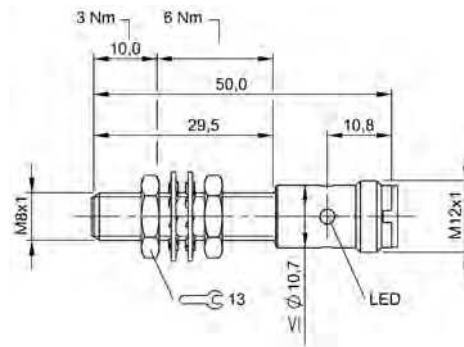
BES001L, BES001P, BES001T, BES001U, BES0021, BES001W, BES03HH



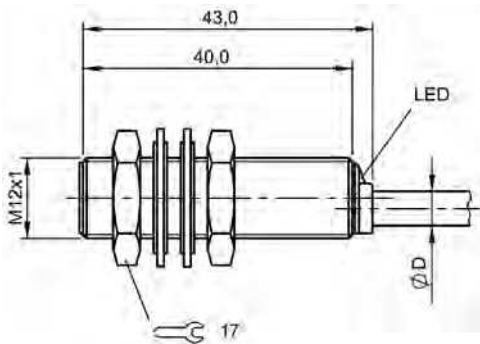
BES001Z



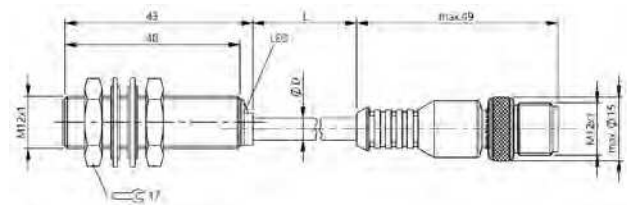
BES0324



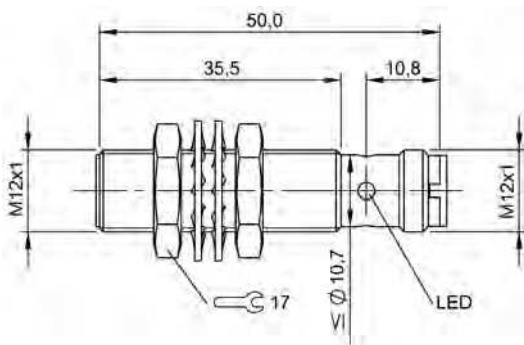
BES0022, BES001Y



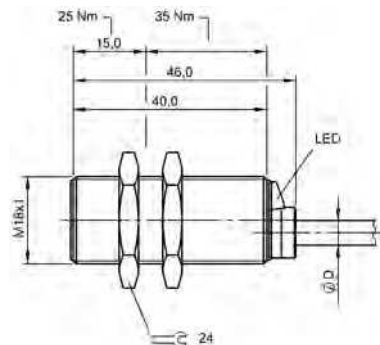
BES004P, BES004T, BES0046, BES0474, BES004U, BES004W, BES03HM



BES0042, BES0326, BES039W

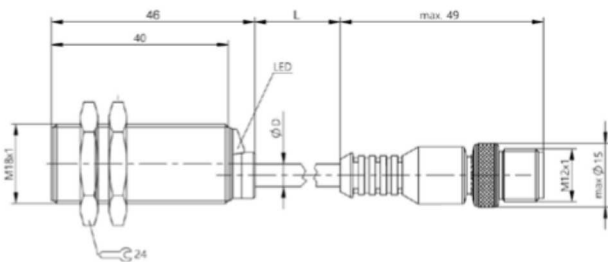


BES003Z, BES0041

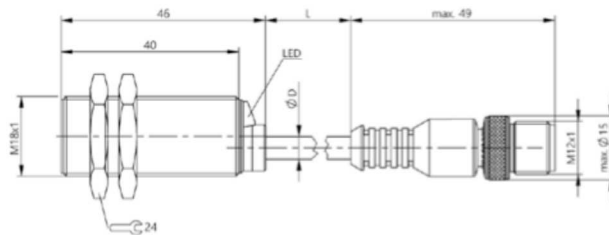


BES0073, BES0074, BES0071

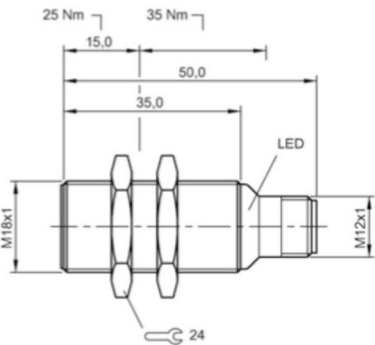




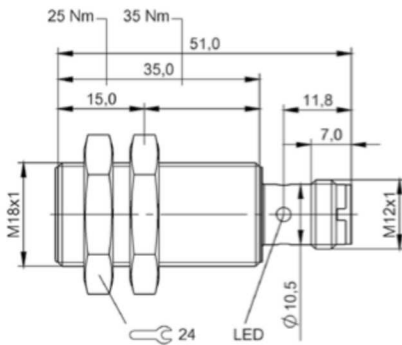
BES006C



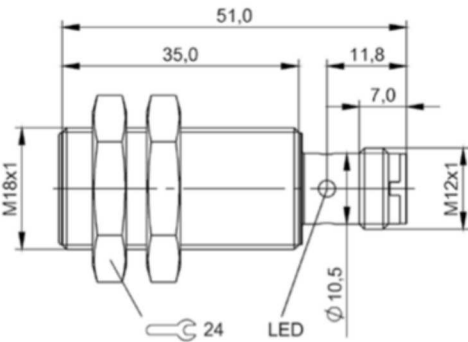
BES03FJ



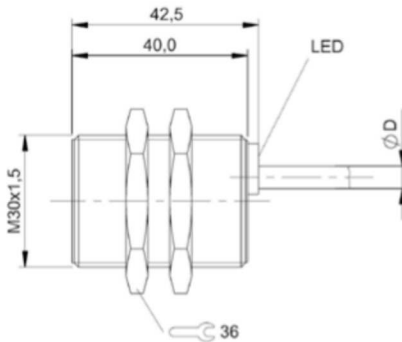
BES0069, BES006A



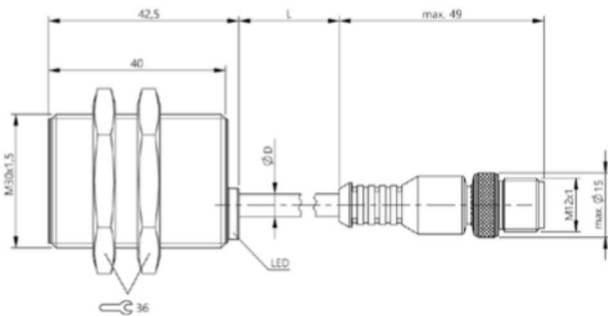
BES0328, BES02NR



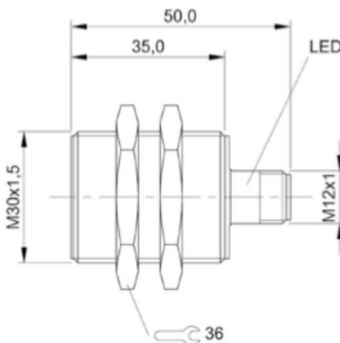
BES03FH



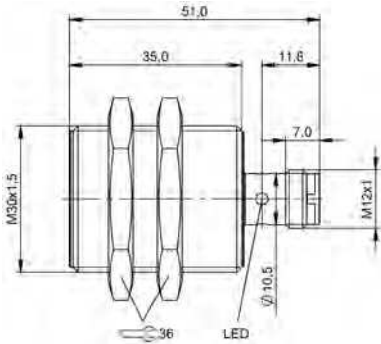
BES008R, BES0091, BES0092, BES008Z



BES027K



BES008W, BES0094



BES03KL





PNP normally open	<b>BHS006U</b> BHS G409N-PSD10-EP02	<b>BHS007J</b> BHS G409N-PSD10-EP00,3-GS49	
NPN normally open	<b>BHS006Y</b> BHS G409N-NSD10-EP02		
Dimension	Ø 4.2 x 32 mm	Ø 4.2 x 32 mm	
Style	D4.2	D4.2	
Installation	for flush mounting	for flush mounting	
Installation length from contact surface	—	—	
Range	1 mm	1 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	Ceramic	Ceramic	
Connection	Cable, 2.00 m, PUR	Cable with connector, M8x1 connector, 3-pin, 0.30 m, PUR	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...80 °C	-25...80 °C	
Pressure rating max.	500 bar	500 bar	
Magnetic field immune	—	—	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	<b>BHS006N</b> BHS G403N-PSD10-S26	<b>BHS005H</b> BHS G408N-PSC10-S49	<b>BES055Y</b> BES M05EE1-PSC08B-EV00,9-116	<b>BES03H6</b> BES M05EG-PSC08B-BP02
	Ø 4.2 x 40.5 mm	Ø 4.2 x 47 mm	Ø 5 x 42 mm	Ø 5 x 42 mm
	D4.2	D4.2	M5x0.5	M5x0.5
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	—	—	—	—
	1 mm	1 mm	0.8 mm	0.8 mm
	3000 Hz	3000 Hz	5000 Hz	3000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	—	—	—	—
	Ceramic	Ceramic	Ceramic	Ceramic
	Connector, M5x0.5 plug	Connector, M8x1 connector, 3-pin	Cable, 0.92 m, PVC	Cable, 2.00 m, PUR
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...80 °C	-25...80 °C	-25...70 °C	-25...70 °C
	500 bar	500 bar	10 bar	10 bar
	—	—	—	—
	IP68	IP68	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	EAC, CE, cULus	CE, cULus, EAC
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PNP normally open	<b>BES03JM</b> BES M05EG-PSC08B-BP00,2-GS49	<b>BES03NZ</b> BES M05ED-PSC08B-BP02-R50	
PNP normally closed			
NPN normally open	<b>BES0315</b> BES M05EG-NSC08B-BP00,2-GS49		
Dimension	Ø 5 x 42 mm	Ø 5 x 27 mm	
Style	M5x0.5	M5x0.5	
Installation	for flush mounting	for flush mounting	
Installation length from contact surface	—	—	
Range	0.8 mm	0.8 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	Ceramic	Ceramic	
Connection	Cable with connector, M8x1 connector, 3-pin, 0.20 m, PUR	Cable, 2.00 m, PUR	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Pressure rating max.	10 bar	50 bar	
Magnetic field immune	—	—	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	cULus, CE, EAC	
Productview	Page 179	Page 179	



<b>BES03L7</b> BES M05ED-PSD08B-BP02-R03	<b>BES03LC</b> BES M05ED-PSD08B-BP00,3-GS49-R03	<b>BES034K</b> BES 516-324-SA17-05	<b>BES03UY</b> BES M08EE1-PSC20B-S49G-S
	<b>BES03LE</b> BES M05ED-POD08B-BP00,3-GS49-R03		
			<b>BES03Z3</b> BES M08EE1-NSC20B-S49G-S
Ø 5 x 27 mm	Ø 5 x 27 mm	Ø 8 x 45 mm	Ø 8 x 50 mm
M5x0.5	M5x0.5	M8x1	M8x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
—	—	—	—
0.8 mm	0.8 mm	1.2 mm	2 mm
3000 Hz	3000 Hz	1500 Hz	100 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
—	—	—	—
Ceramic	Ceramic	PA 12	Stainless steel (1.4404)
Cable, 2.00 m, PUR	Cable with connector, M8x1 connector, 3-pin, 0.30 m, PUR	Cable, 5.00 m, PVC	Connector, M8x1 connector, 3-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
100 bar	100 bar	10 bar	80 bar
—	—	—	—
IP67	IP67	IP68	IP67
CE, cULus, EAC	CE, cULus, EAC	CE, EAC	CE, cULus, EAC
Page 179	Page 179	Page 179	Page 179



PNP normally open			
NPN normally open	<b>BES02N3</b> BES M08EH1-NSC20B-S04G-S	<b>BES02N4</b> BES M08EH1-NSC20B-S04G-S01	
Dimension	Ø 8 x 65 mm	Ø 8 x 65 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Installation length from contact surface	—	—	
Range	2 mm	2 mm	
Switching frequency	750 Hz	750 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	coated, PTFE	
Material sensing surface	Stainless steel	Stainless steel	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Pressure rating max.	80 bar	80 bar	
Magnetic field immune	—	—	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	<b>BHS0039</b> BES 516-300-S289-BO-D-PU-05	<b>BHS0058</b> BHS A407N-PSD15-BP02	<b>BHS0054</b> BHS A404N-PSC15-S49	<b>BHS0050</b> BHS A402N-PSC15-S49
	Ø 8 x 34 mm	Ø 6.5 x 31.3 mm	Ø 6.5 x 45 mm	Ø 6.5 x 55 mm
	M8x1	D6.5	D6.5	D6.5
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	—	—	—	—
	1.5 mm	1.5 mm	1.5 mm	1.5 mm
	1000 Hz	4000 Hz	4000 Hz	4000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	—	—	—	—
	Ceramic	Ceramic	Ceramic	Ceramic
	Cable, 5.00 m, PUR	Cable, 2.00 m, PUR	Connector, M8x1 connector, 3-pin	Connector, M8x1 connector, 3-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...80 °C	-25...80 °C	-25...80 °C
	100 bar	500 bar	500 bar	500 bar
	—	—	—	—
	IP67	IP68	IP68	IP68
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	<b>BHS003A</b> BES 516-300-S291-S4-D	<b>BES02NA</b> BES M12EI-PSC40B-S04G-S	
NPN normally open			
Normally open			
Dimension	Ø 12 x 56 mm	Ø 12 x 65 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Installation length from contact surface	—	—	
Range	1.5 mm	4 mm	
Switching frequency	2000 Hz	500 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	EP	Stainless steel	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...80 °C	-25...70 °C	
Pressure rating max.	50 bar	60 bar	
Magnetic field immune	—	—	
Protection degree	IP68	IP67	
Approval/Conformity	CE, EAC	CE, cULus, EAC	
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	<b>BES02NC</b> BES M12EI-PSC40B-S04G-S01	<b>BES02WH</b> BES M12EG1-PSC60Z-S04G-S11		
				<b>BHS0008</b> BES 516-200-S2/1.250°-S21
			<b>BHS0006</b> BES 516-200-S2/1.025°-S5	
	Ø 12 x 65 mm	Ø 12 x 60 mm	64.2 x 48 x 26.04 mm	64.2 x 48 x 31.75 mm
	M12x1	M12x1	D12.7	D12.7
	for flush mounting	quasi-flush	for flush mounting	for flush mounting
	—	—	—	—
	4 mm	6 mm	2 mm	2 mm
	500 Hz	400 Hz	50 Hz	50 Hz
	Stainless steel	Stainless steel	Stainless steel (1.4104) Zinc, die-cast	Stainless steel Zinc, Die casting
	coated, PTFE	—	nickel plated	nickel plated
	Stainless steel	Stainless steel	Ceramic	Ceramic
	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, 7/8"-16 UN plug	Connector, 1/2"-20 UNF2A-Male
	10...30 VDC	10...30 VDC	20...250 VDC/20...250 VAC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	60 bar	80 bar	207 bar	207 bar
	—	—	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)
	IP67	IP67	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	<b>BHS003M</b> BES 516-300-S295/1.250"-S4		
Normally open		<b>BHS0009</b> BES 516-200-S2/1.250"-S5	
Dimension	51 x 48 x 31.75 mm	64.2 x 48 x 31.75 mm	
Style	D12.7	D12.7	
Installation	for flush mounting	for flush mounting	
Installation length from contact surface	—	—	
Range	2 mm	2 mm	
Switching frequency	10 Hz	50 Hz	
Housing material	Stainless steel Zinc, Die casting	Stainless steel (1.4104) Zinc, die-cast	
Surface protection	nickel plated	nickel plated	
Material sensing surface	Ceramic	Ceramic	
Connection	Connector, M12x1 connector, 4-pin	Connector, 7/8"-16 UN plug	
Operating voltage $U_b$	10...30 VDC	20...250 VDC/20...250 VAC	
Ambient temperature	-25...70 °C	-25...70 °C	
Pressure rating max.	207 bar	207 bar	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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<b>BHS0041</b> BES 516-300-S295/2.062"-S4			
	<b>BHS000T</b> BES 516-200-S2/2.062"-S21	<b>BHS000U</b> BES 516-200-S2/2.062"-S5	<b>BHS0014</b> BES 516-200-S2/2.875"-S5
51 x 48 x 52.37 mm	64.2 x 48 x 52.37 mm	64.2 x 48 x 52.37 mm	64.2 x 48 x 73.03 mm
D12.7	D12.7	D12.7	D12.7
for flush mounting	for flush mounting	for flush mounting	for flush mounting
—	—	—	—
2 mm	2 mm	2 mm	2 mm
10 Hz	50 Hz	50 Hz	50 Hz
Stainless steel Zinc, Die casting	Stainless steel Zinc, Die casting	Stainless steel (1.4104) Zinc, die-cast	Stainless steel Zinc, Die casting
nickel plated	nickel plated	nickel plated	nickel plated
Ceramic	Ceramic	Ceramic	Ceramic
Connector, M12x1 connector, 4-pin	Connector, 1/2"-20 UNF2A-Male	Connector, 7/8"-16 UN plug	Connector, 7/8"-16 UN plug
10...30 VDC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
207 bar	207 bar	207 bar	207 bar
magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)
IP67	IP67	IP67	IP67
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		<b>BHS0030</b> BES 516-300-S260-S4-D	
Normally open	<b>BHS0019</b> BES 516-200-S2/4.560°-S5		
Dimension	64.2 x 48 x 115.82 mm	Ø 10 x 37 mm	
Style	D12.7	D10.0	
Installation	for flush mounting	for flush mounting	
Installation length from contact surface	—	—	
Range	2 mm	1.5 mm	
Switching frequency	50 Hz	2000 Hz	
Housing material	Stainless steel (1.4104) Zinc, die-cast	Stainless steel	
Surface protection	nickel plated	—	
Material sensing surface	Ceramic	EP	
Connection	Connector, 7/8"-16 UN plug	Connector, M12x1 connector, 4-pin	
Operating voltage U <sub>b</sub>	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...80 °C	
Pressure rating max.	207 bar	350 bar	
Magnetic field immune	magnetic field immune (AC/DC)	—	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, EAC	
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<b>BHS0028</b> BES 516-300-S205-D-PU-03	<b>BHS0029</b> BES 516-300-S205-D-PU-05	<b>BES042M</b> BES 516-300-S337-S4-D	<b>BES042L</b> BES 516-300-S338-S4-D
Ø 12 x 37 mm	Ø 12 x 37 mm	Ø 12 x 56 mm	Ø 12 x 56 mm
M12x1	M12x1	M12x1	M12x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
—	—	—	—
1.5 mm	1.5 mm	1.5 mm	1.5 mm
2000 Hz	2000 Hz	1000 Hz	1000 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
—	—	—	—
EP	EP	EP	EP
Cable, 3.00 m, PUR	Cable, 5.00 m, PUR	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...80 °C	-25...80 °C	-25...80 °C	-25...80 °C
350 bar	350 bar	350 bar	350 bar
—	—	—	—
IP68	IP68	IP68	IP68
CE, EAC	CE, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	<b>BHS004N</b> BES 516-300-S321-S4-D	<b>BHS002H</b> BES 516-300-S240-D-PU-03	
Dimension	Ø 12 x 78 mm	Ø 12 x 47 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Installation length from contact surface	—	—	
Range	1.5 mm	1.5 mm	
Switching frequency	1000 Hz	2000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	EP	EP	
Connection	Connector, M12x1 connector, 4-pin	Cable, 3.00 m, PUR	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...80 °C	-25...80 °C	
Pressure rating max.	350 bar	500 bar	
Magnetic field immune	—	—	
Protection degree	IP68	IP68	
Approval/Conformity	CE, EAC	CE, cULus, EAC	
Productview	Page 181	Page 181	





<b>BHS002J</b> BES 516-300-S240-D-PU-05	<b>BHS001F</b> BES 516-300-S135-D-PU-05	<b>BHS0032</b> BES 516-300-S262-S4-D	<b>BHS002Y</b> BES 516-300-S249-S4-D
Ø 12 x 47 mm	Ø 12 x 61 mm	Ø 12 x 50 mm	Ø 12 x 56 mm
M12x1	M12x1	M12x1	M12x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
—	—	—	17.9 mm
1.5 mm	1.5 mm	1.5 mm	1.5 mm
2000 Hz	1000 Hz	2000 Hz	2000 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
—	—	—	—
EP	EP	EP	EP
Cable, 5.00 m, PUR	Cable, 5.00 m, PUR	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...80 °C	-25...80 °C	-25...90 °C	-25...80 °C
500 bar	500 bar	500 bar	500 bar
—	—	—	—
IP68	IP68	IP68	IP68
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
Page 181	Page 181	Page 181	Page 180



PNP normally open	<b>BHS0033</b> BES 516-300-S265-S4-D	<b>BHS005Y</b> BHS B249V-PSD15-S04	
Dimension	Ø 12 x 56 mm	Ø 12 x 56 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Installation length from contact surface	14.9 mm	18 mm	
Range	1.5 mm	1.5 mm	
Switching frequency	2000 Hz	400 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	EP	Ceramic	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...80 °C	-25...120 °C	
Pressure rating max.	500 bar	500 bar	
Magnetic field immune	—	—	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Productview	Page 181	Page 181	



<b>BHS0061</b> BHS B265V-PSD15-S04	<b>BHS0021</b> BES 516-300-S162-S4-D	<b>BHS001L</b> BES 516-300-S135-S4-D	<b>BHS005R</b> BHS B135V-PSD15-S04
Ø 12 x 56 mm	Ø 12 x 69 mm	Ø 12 x 78 mm	Ø 12 x 78 mm
M12x1	M12x1	M12x1	M12x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
15 mm	—	—	—
1.5 mm	1.5 mm	1.5 mm	1.5 mm
400 Hz	2000 Hz	1000 Hz	400 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
—	—	—	—
Ceramic	EP	EP	Ceramic
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...120 °C	-25...80 °C	-25...80 °C	-25...80 °C
500 bar	500 bar	500 bar	500 bar
—	—	—	—
IP68	IP68	IP68	IP68
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
Page 182	Page 182	Page 181	Page 182



PNP normally open		<b>BHS0022</b> BES 516-300-S163-S4-D	
PNP normally open/normally closed	<b>BHS0001</b> BES 516-100-S45-S4-D		
Dimension	Ø 12 x 78 mm	Ø 12 x 93 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Installation length from contact surface	—	—	
Range	1.5 mm	1.5 mm	
Switching frequency	1000 Hz	1000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	EP	EP	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...80 °C	-25...80 °C	
Pressure rating max.	500 bar	500 bar	
Magnetic field immune	—	—	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Productview	Page 181	Page 182	



	<b>BHS004C</b> BES 516-300-S300-S4-D	<b>BHS005U</b> BHS B135V-PSD25-S04-003	<b>BES02NK</b> BES M18EI-PSC72B-S04G-S01	<b>BES02Y1</b> BES M18EF1-PSC20F-S04G-S
	Ø 12 x 93 mm	Ø 12 x 78 mm	Ø 18 x 65 mm	Ø 18 x 63.5 mm
	M12x1	M12x1	M18x1	M18x1
	for flush mounting	for flush mounting	for flush mounting	non-flush
	—	—	—	—
	1.5 mm	2.5 mm	7.2 mm	20 mm
	1000 Hz	400 Hz	250 Hz	200 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	—	—	coated, PTFE	—
	EP	Ceramic	Stainless steel	Stainless steel
	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...80 °C	-25...90 °C	-25...70 °C	-25...70 °C
	500 bar	500 bar	40 bar	60 bar
	—	—	—	—
	IP68	IP68	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	<b>BES02Y3</b> BES M18EG1-PSC10Z-S04G-S11	<b>BHS001N</b> BES 516-300-S144-S4-D	
Dimension	Ø 18 x 63.5 mm	Ø 18 x 73 mm	
Style	M18x1	M18x1	
Installation	quasi-flush	for flush mounting	
Installation length from contact surface	—	—	
Range	10 mm	1.5 mm	
Switching frequency	200 Hz	1000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	Stainless steel	EP	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...80 °C	
Pressure rating max.	60 bar	350 bar	
Magnetic field immune	—	—	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, EAC	
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<b>BHS004A</b> BES 516-300-S299-S4-D	<b>BHS0026</b> BES 516-300-S190-S4	<b>BHS0027</b> BES 516-300-S203	
Ø 18 x 55 mm	Ø 18 x 58 mm	Ø 18 x 61 mm	
M18x1	M18x1	M18x1	
for flush mounting	for flush mounting	for flush mounting	
—	—	—	
1.5 mm	3 mm	3 mm	
2000 Hz	400 Hz	1000 Hz	
Stainless steel	Stainless steel	Stainless steel	
—	—	—	
EP	PEEK	PEEK	
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M18x1 connector, 4-pin	
10...30 VDC	10...30 VDC	10...30 VDC	
-25...80 °C	-25...80 °C	-25...80 °C	
500 bar	500 bar	500 bar	
—	—	—	
IP68	IP68	IP68	
CE, EAC	CE, EAC	CE, EAC	
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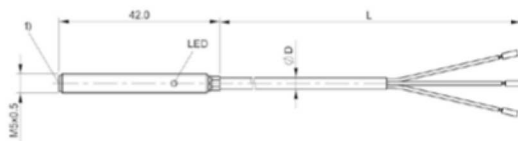
PNP normally open	<b>BES02YF</b> BES M30EG1-PSC20Z-S04G-S11	<b>BES02YC</b> BES M30EE1-PSC40F-S04G-S	
NAMUR			
Dimension	Ø 30 x 63.5 mm	Ø 30 x 63.5 mm	
Style	M30x1.5	M30x1.5	
Installation	for flush mounting	non-flush	
Installation length from contact surface	—	—	
Range	20 mm	40 mm	
Switching frequency	100 Hz	100 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	1.4305 stainless steel	1.4305 stainless steel	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Pressure rating max.	40 bar	40 bar	
Magnetic field immune	—	—	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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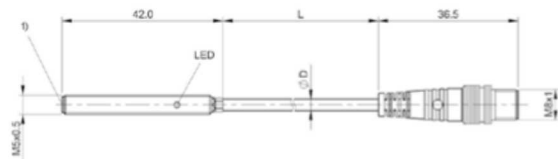


<b>BHS006M</b> BES 516-300-S331-S4-D			
Ø 16.66 x 50 mm			
G3/8"			
for flush mounting			
—			
1.5 mm			
2000 Hz			
Stainless steel			
—			
EP			
Connector, M12x1 connector, 4-pin			
10...30 VDC			
-25...90 °C			
500 bar			
—			
IP68			
CE, cULus, EAC			
Page 183			

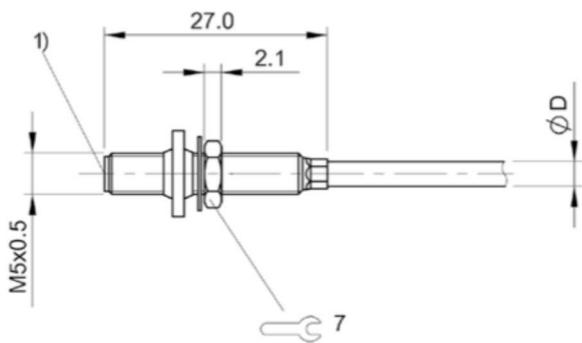




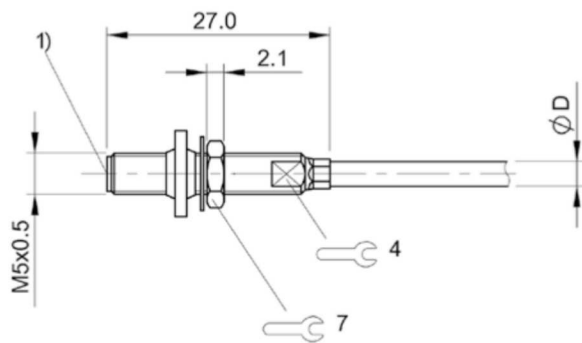
1) Sensing surface

**BES03H6**

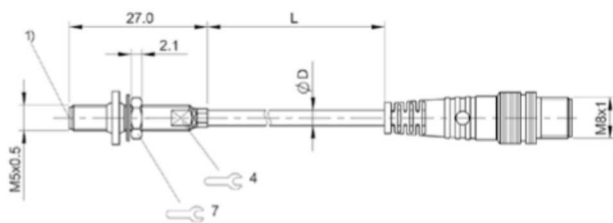
1) Sensing surface

**BES0315, BES03JM**

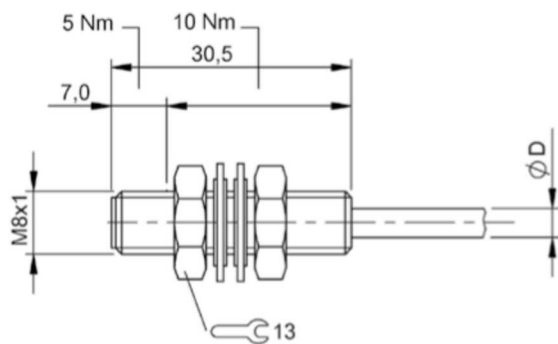
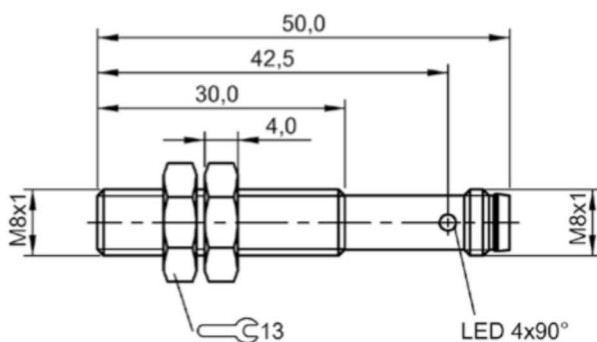
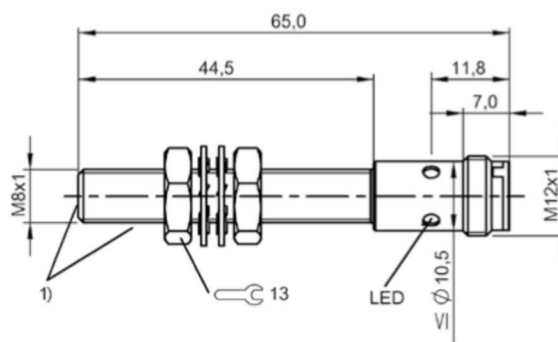
1) Sensing surface

**BES03NZ**

1) Sensing surface

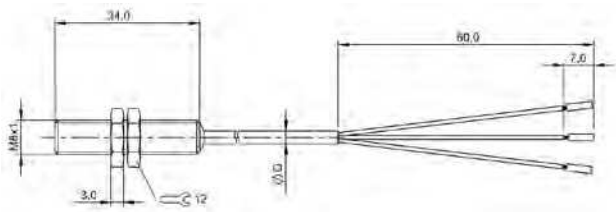
**BES03L7**

1) Sensing surface

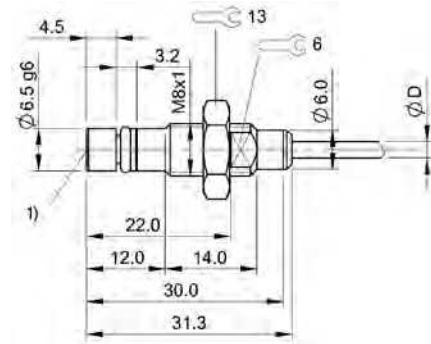
**BES03LC, BES03LE****BES034K****BES03UY, BES03Z3**

1) Pressure resistant area

**BES02N3, BES02N4**

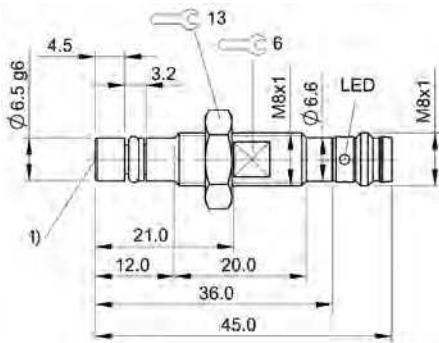


BHS0039



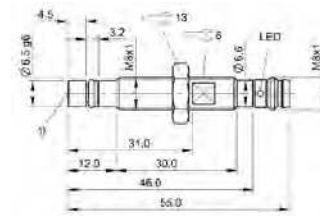
1) Sensing surface

BHS0058



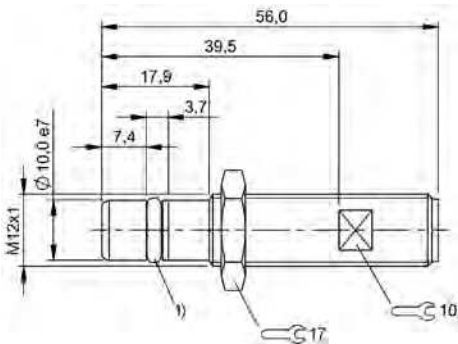
1) Sensing surface

BHS0054



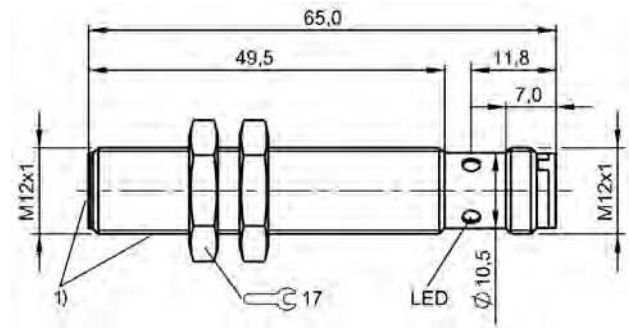
1) Sensing surface

BHS0050



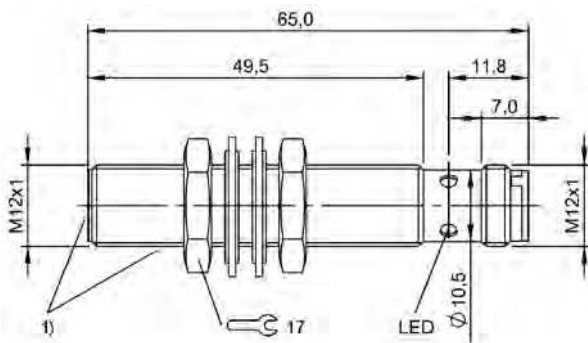
1) O-Ring with thrust ring

BHS003A, BES042M, BHS002Y



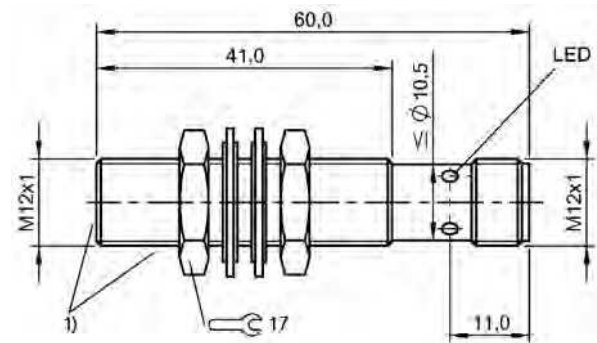
1) Pressure resistant area

BES02NA



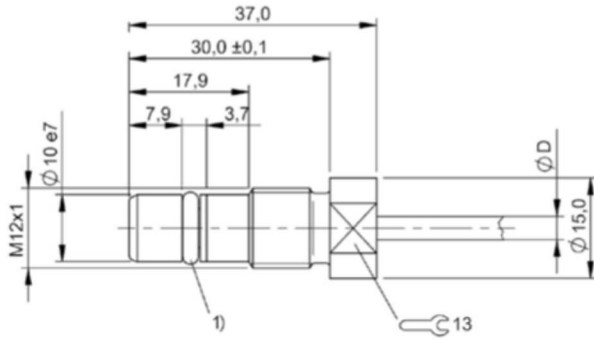
1) Pressure resistant area

BES02NC



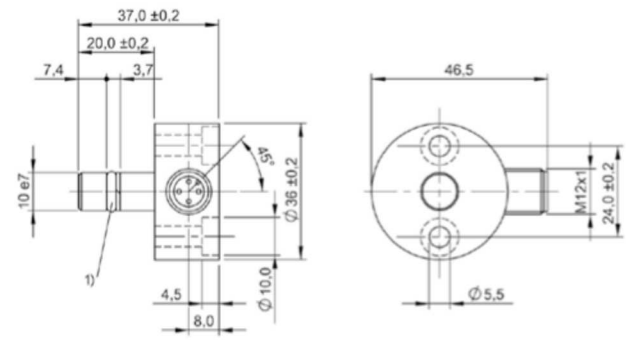
1) Pressure resistant area

BES02WH



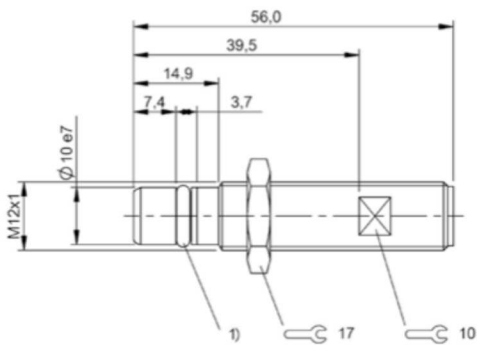
1) O-Ring with thrust ring

BHS0028, BHS0029



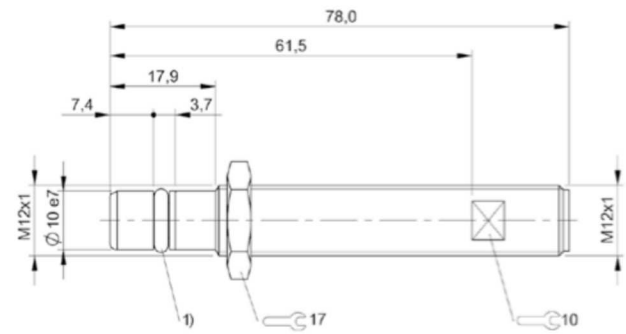
1) O-Ring with thrust ring

BHS0030



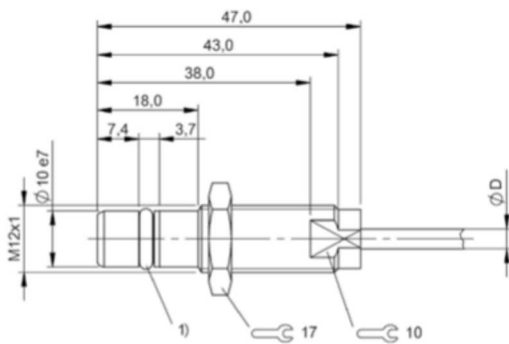
1) O-Ring with thrust ring

BES042L, BHS0033



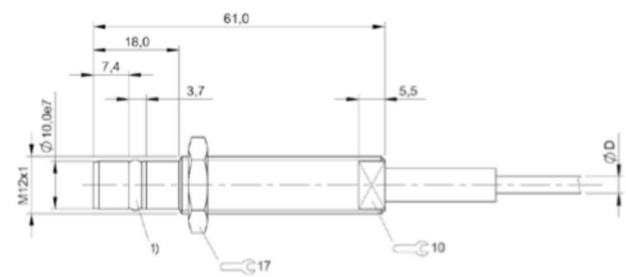
1) O-Ring with thrust ring

BHS004N, BHS001L, BHS0001



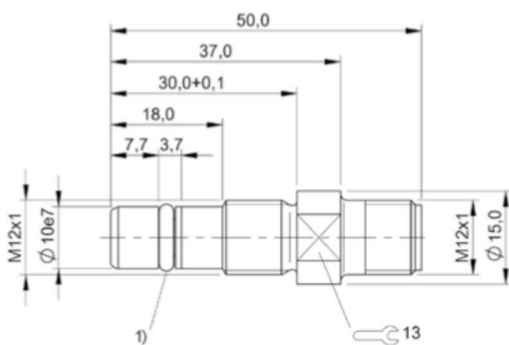
1) O-Ring with thrust ring

BHS002H, BHS002J



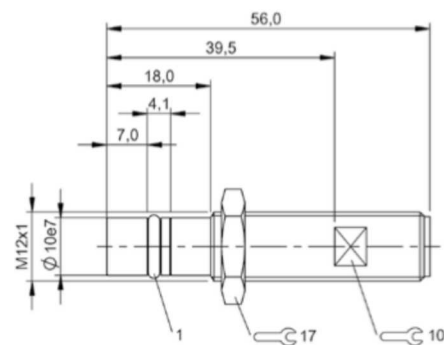
1) O-Ring with thrust ring

BHS001F



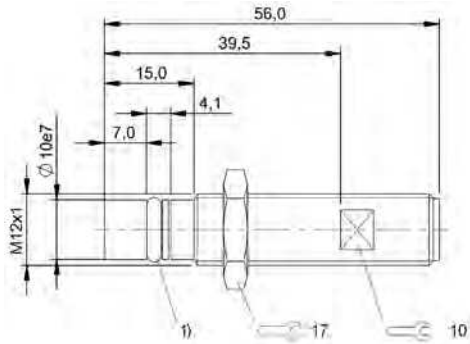
1) O-Ring with thrust ring

BHS0032



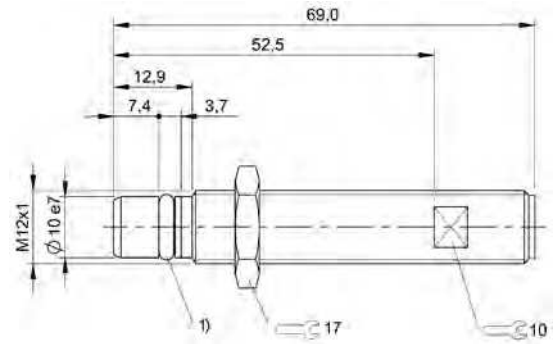
1) O-Ring with thrust ring

BHS005Y



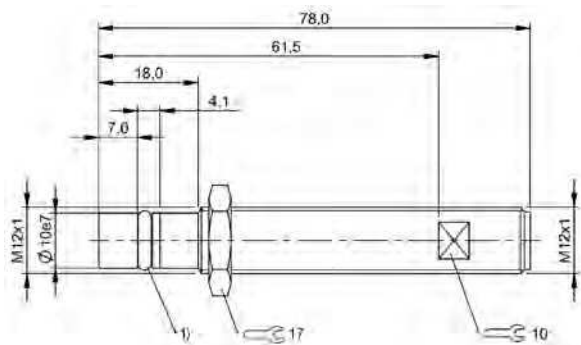
1) O-Ring with thrust ring

**BHS0061**



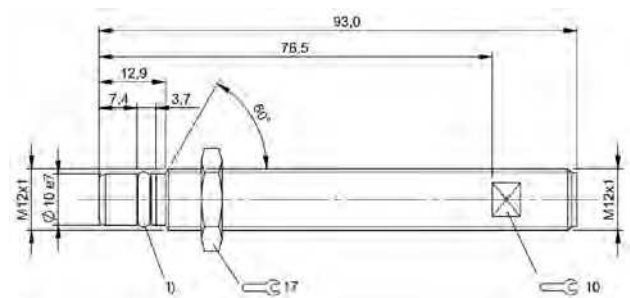
1) O-Ring with thrust ring

**BHS0021**



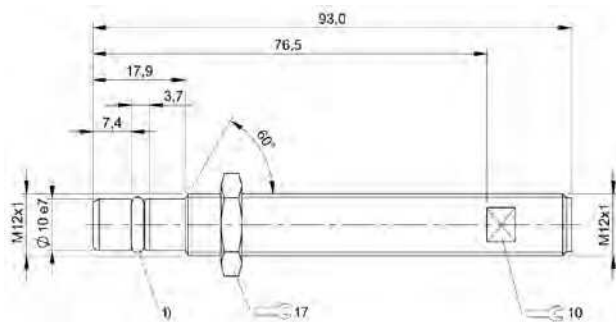
1) O-Ring with thrust ring

**BHS005R, BHS005U**



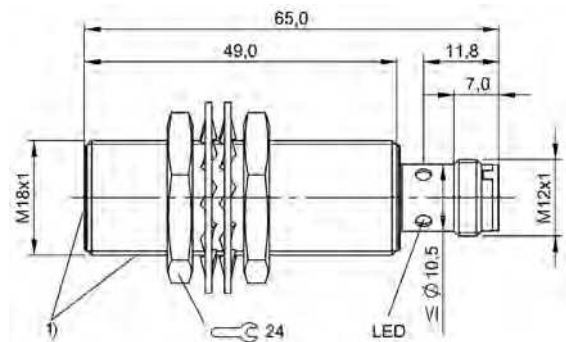
1) O-Ring with thrust ring

**BHS0022**



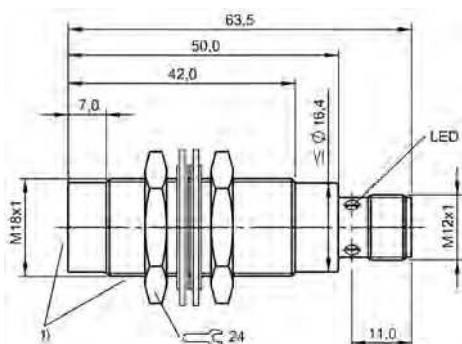
1) O-Ring with thrust ring

**BHS004C**



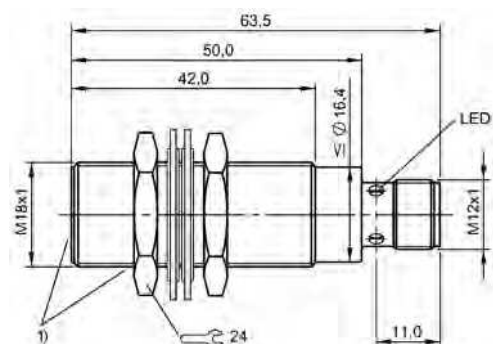
1) Pressure resistant area

**BES02NK**



1) Pressure resistant area

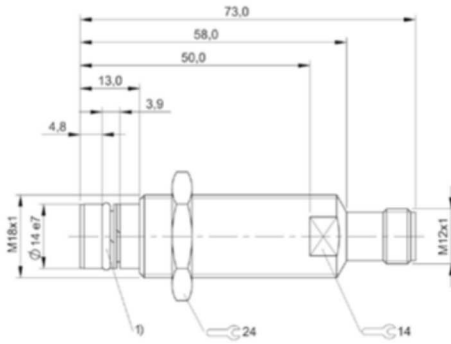
**BES02Y1**



1) Pressure resistant area

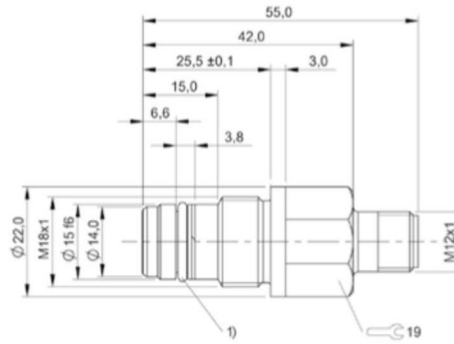
**BES02Y3**





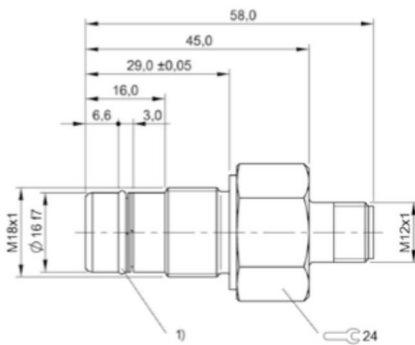
1) O-Ring with thrust ring

**BHS001N**



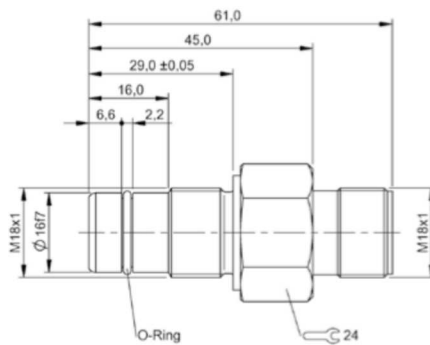
1) O-Ring with thrust ring

**BHS004A**

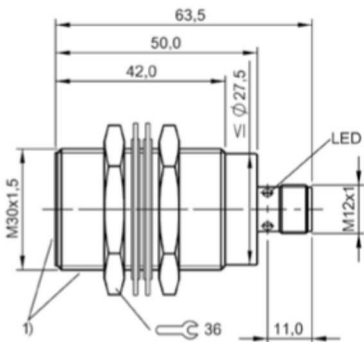


1) O-Ring with thrust ring

**BHS0026**

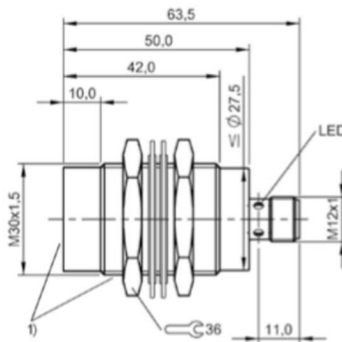


**BHS0027**



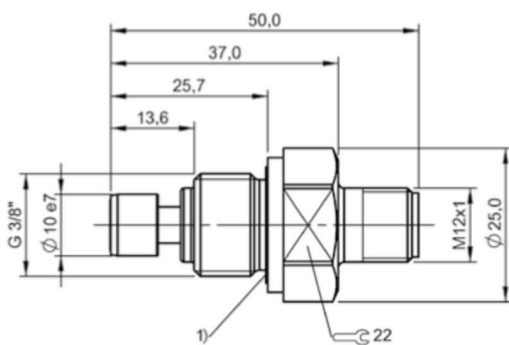
1) Pressure resistant area

**BES02YF**



1) Pressure resistant area

**BES02YC**



1) Sealing ring

**BHS006M**

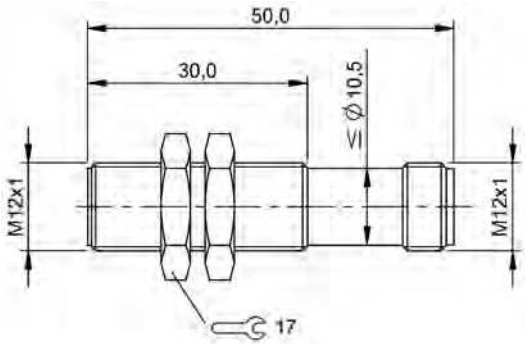


PNP normally open	<b>BES0444</b> BES M12EE1-PSY20B-S04G-L01	<b>BES0433</b> BES M12EE-PSC40B-S04G-L01	
Dimension	Ø 12 x 50 mm	Ø 12 x 45 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	2 mm	4 mm	
Switching frequency	800 Hz	2000 Hz	
Housing material	Stainless steel (1.4571)	Stainless steel (1.4404)	
Material sensing surface	PEEK	LCP	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-40...105 °C	-25...85 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, Ecolab, FDA compliant	CE, cULus, EAC, FDA compliant	
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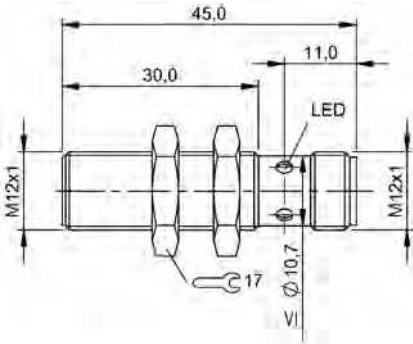




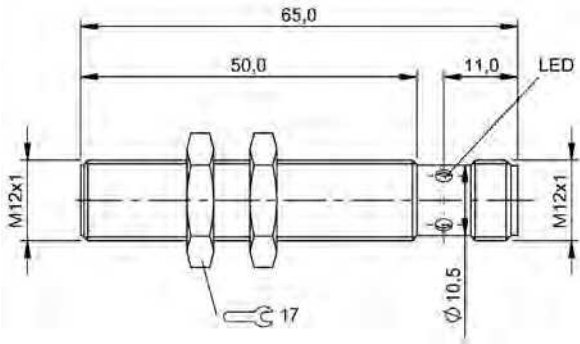
<b>BES0435</b> BES M12EI-PSC40B-S04G-L01	<b>BES0443</b> BES M12EE1-PSY40F-S04G-L01	<b>BES0441</b> BES M18EE1-PSY50B-S04G-L01	<b>BES0437</b> BES M18EI-PSC80B-S04G-L01	
Ø 12 x 65 mm	Ø 12 x 54.5 mm	Ø 18 x 45 mm	Ø 18 x 65 mm	
M12x1	M12x1	M18x1	M18x1	
for flush mounting	non-flush	for flush mounting	for flush mounting	
4 mm	4 mm	5 mm	8 mm	
1000 Hz	400 Hz	500 Hz	700 Hz	
Stainless steel (1.4404)	Stainless steel (1.4571)	Stainless steel (1.4571)	Stainless steel (1.4404)	
LCP	PEEK	PEEK	PEEK	
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC	
-25...85 °C	-40...105 °C	-40...105 °C	-40...85 °C	
IP68	IP68	IP68	IP68	
CE, cULus, EAC, Ecolab, FDA compliant	CE, cULus, EAC, Ecolab, FDA compliant	CE, cULus, EAC, Ecolab, FDA compliant	CE, cULus, EAC, Ecolab, FDA compliant	
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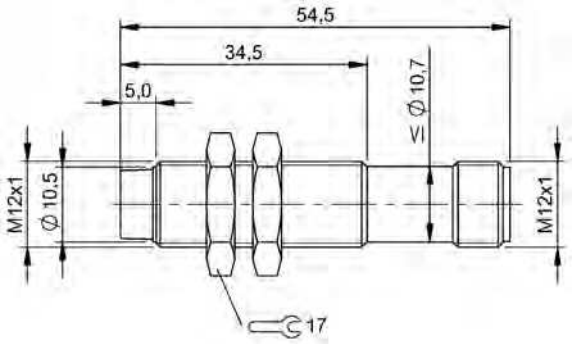
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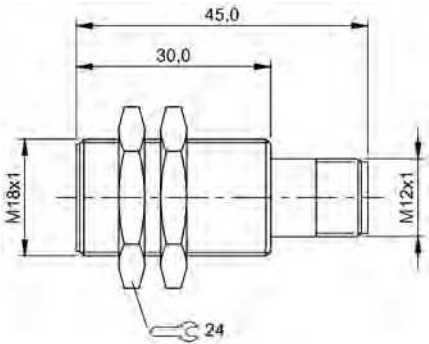
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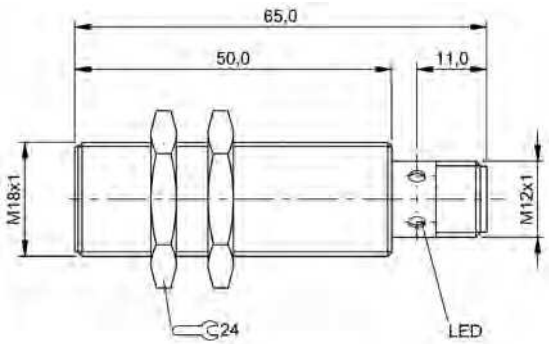
BES0435



BES0443



BES0441



BES0437





PNP normally open	<b>BES02YR</b> BES M08EG-PSC15A-S49G-W	<b>BES02YT</b> BES M08EG1-PSC15A-S04G-W	
Dimension	Ø 8 x 49 mm	Ø 8 x 57 mm	
Style	M8x1	M8x1	
Installation	flush	flush	
Range	1.5 mm	1.5 mm	
Interface	—	—	
Switching frequency	2000 Hz	2000 Hz	
Housing material	Stainless steel (1.4301), PTFE coated	Stainless steel (1.4301), PTFE coated	
Material sensing surface	PBT/PTFE	PBT/PTFE	
Connection	Connector, M8x1-Male, 3-pin	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Pressure rating max.	—	—	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Ex category	—	—	
IP rating	IP67	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, EAC, WEEE	
Additional features	Factor 1, Weld immune	Factor 1, Weld immune	
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<b>BES03YP</b> BES M08MG1-PSC20A-S04G-W	<b>BES02JZ</b> BES M12MF1-PSC30A-S04G-W	<b>BES02K0</b> BES M12MF1-PSC30A-S04G-W01	
Ø 8 x 65 mm	Ø 12 x 50 mm	Ø 12 x 50 mm	
M8x1	M12x1	M12x1	
flush	flush	flush	
2 mm	3 mm	3 mm	
—	—	—	
1000 Hz	2000 Hz	2000 Hz	
Brass, PTFE coated	Brass, PTFE coated	Brass, PTFE coated	
LCP	LCP/PTFE	Ceramic	
Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
10...30 VDC	10...30 VDC	10...30 VDC	
-25...70 °C	-25...70 °C	-25...70 °C	
—	—	—	
magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
—	—	—	
IP67	IP67	IP67	
CE, EAC, cULus, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
Factor 1, Weld immune	Factor 1, Weld immune	Weld immune, Factor 1	
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PNP normally open	<b>BES02K4</b> BES M12ML-PSC30A-S04G-W01	<b>BES05KT</b> BES M12MI-PSC40A-S04G-W08	
Dimension	Ø 12 x 65 mm	Ø 12 x 65 mm	
Style	M12x1	M12x1	
Installation	flush	flush	
Range	3 mm	4 mm	
Interface	—	—	
Switching frequency	2000 Hz	2000 Hz	
Housing material	Brass, PTFE coated	Brass, PTFE coated	
Material sensing surface	ceramic coated	PBT	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 3-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-40...85 °C	
Pressure rating max.	—	—	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Ex category	—	—	
IP rating	IP67	IP68	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, EAC, WEEE	
Additional features	Factor 1, Weld immune	Factor 1, Extended temperature range, Housing resistant to weld spatter, weld-immune (magnetic field 100kA/m)	
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<b>BES02K5</b> BES M12ML-PSC80E-S04G-W	<b>BES05PR</b> BES M18ME-PSC80A-S04G-W10	<b>BES05PN</b> BES M18MI-PSC80A-S04G-W09	<b>BES05PP</b> BES M18MI-PSC80A-S04G-W10
Ø 12 x 65 mm	Ø 18 x 46 mm	Ø 18 x 66 mm	Ø 18 x 66 mm
M12x1	M18x1	M18x1	M18x1
non-flush	flush	flush	flush
8 mm	8 mm	8 mm	8 mm
—	—	—	—
2000 Hz	2000 Hz	2000 Hz	2000 Hz
Brass, PTFE coated	Brass, PTFE coated	Brass, PTFE coated	Brass, PTFE coated
LCP/PTFE	PBT	PBT, PTFE coated	PBT
Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-40...85 °C	-40...85 °C	-40...85 °C
—	—	—	—
magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)
—	—	—	—
IP67	IP67, IP68	IP67, IP68	IP67, IP68
CE, cULus, EAC, WEEE	CE, EAC, cULus, WEEE	CE, EAC, cULus, WEEE	CE, EAC, cULus, WEEE
Factor 1, Weld immune	Factor 1, Extended temperature range, Housing resistant to weld spatter	Factor 1, Extended temperature range, Housing resistant to weld spatter	Factor 1, Extended temperature range, Housing resistant to weld spatter
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PNP normally open	<b>BES05AL</b> BES M18ME-PSC12E-S04G-W08	<b>BES05AM</b> BES M18MI-PSC12E-S04G-W08	
Dimension	Ø 18 x 56 mm	Ø 18 x 76 mm	
Style	M18x1	M18x1	
Installation	non-flush	non-flush	
Range	12 mm	12 mm	
Interface	—	—	
Switching frequency	2000 Hz	2000 Hz	
Housing material	Brass, PTFE coated	Brass, PTFE coated	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-40...85 °C	-40...85 °C	
Pressure rating max.	—	—	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Ex category	—	—	
IP rating	IP67, IP68	IP67, IP68	
Approval/Conformity	CE, EAC, cULus, WEEE	CE, EAC, cULus, WEEE	
Additional features	Factor 1, Extended temperature range, Housing resistant to weld spatter	Factor 1, Extended temperature range, Housing resistant to weld spatter	
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BES02KM BES M30ML-PSC10A-S04G-W	BES02KN BES M30ML-PSC10A-S04G-W01	BES0454 BES M30MI-PSC15A-S04G-W12	BES04AH BES R01EC-PSC50A-BP00,3-GS04-W50
Ø 30 x 65 mm	Ø 30 x 65 mm	Ø 30 x 65 mm	32 x 20 x 8 mm
M30x1.5	M30x1.5	M30x1.5	32x20x8
flush	flush	flush	flush
10 mm	10 mm	15 mm	5 mm
—	—	—	—
600 Hz	600 Hz	750 Hz	20 Hz
Brass, PTFE coated	Brass, PTFE coated	Brass, PTFE coated	Stainless steel
LCP/PTFE	ceramic coated	PPS	Stainless steel
Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 3-pin	Cable with connector, M12x1-Male, 4-pin, 0.30 m, PUR
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
—	—	—	—
magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)
—	—	—	—
IP67	IP67	IP67	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, EAC, cULus, WEEE	CE, cULus, EAC, WEEE
Factor 1, Weld immune	Factor 1, Weld immune	Factor 1, Weld immune	Factor 1, Weld immune
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PNP normally open	<b>BES04RE</b> BES R01EC-PSC50A-BS00,3-GS04-W51	<b>BES049Y</b> BES R01EC-PSC50A-BP00,3-GS04-W51	
PNP normally open/normally closed			
Dimension	32 x 20 x 8 mm	32 x 20 x 8 mm	
Style	32x20x8	32x20x8	
Installation	flush	flush	
Range	5 mm	5 mm	
Interface	—	—	
Switching frequency	20 Hz	20 Hz	
Housing material	Stainless steel, PTFE coated	Stainless steel, PTFE coated	
Material sensing surface	Stainless steel, W51 ceramic coating	Stainless steel, W51 ceramic coating	
Connection	Cable with connector, M12x1-Male, 4-pin, 0.30 m, Silicone	Cable with connector, M12x1-Male, 4-pin, 0.30 m, PUR	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Pressure rating max.	—	—	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Ex category	—	—	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
Additional features	Factor 1, Housing resistant to weld spatter, Weld immune	Factor 1, Housing resistant to weld spatter, Weld immune	
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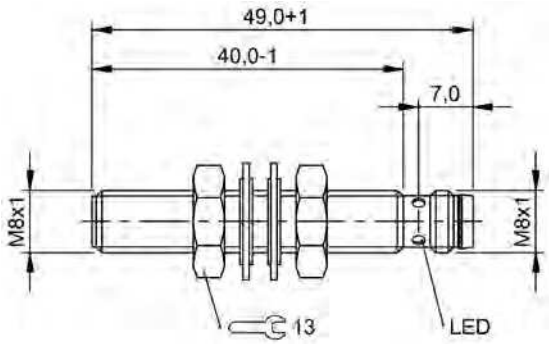
BES021P BES Q40KFU-PSC15A-S04G		BES021T BES Q40KFU-PSC15A-S04G-W01	BES021U BES Q40KFU-PSC20A-S04G
	<b>BES022K</b> BES Q40KFU-PAC15A-S04G		
40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm
40x40	40x40	40x40	40x40
flush	flush	flush	flush
15 mm	15 mm	15 mm	20 mm
—	—	—	—
400 Hz	400 Hz	400 Hz	400 Hz
PBT	PBT	PBT, partly coated	PBT
PBT	PBT	ceramic coated	PBT
Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
—	—	—	—
magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)
—	—	—	—
IP67	IP67	IP67	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
Factor 1, Weld immune	Factor 1	Factor 1, Weld immune	Factor 1
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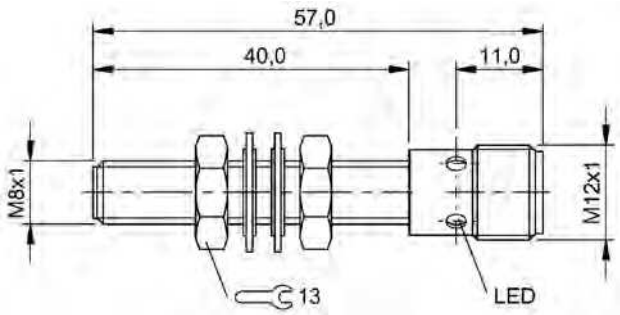
PNP normally open		<b>BES0222</b> BES Q40KFU-PSC35Z-S04G-011	
PNP normally open/normally closed	<b>BES0457</b> BES Q40KFU-PAC20A-S04G-W01		
Dimension	40 x 40 x 62 mm	40 x 40 x 62 mm	
Style	40x40	40x40	
Installation	flush	flush on one side	
Range	20 mm	35 mm	
Interface	—	—	
Switching frequency	400 Hz	250 Hz	
Housing material	PBT, partly coated	PBT	
Material sensing surface	ceramic coated	PBT	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>B</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-10...60 °C	
Pressure rating max.	—	—	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Ex category	—	—	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
Additional features	Factor 1	Factor 1	
Productview	Page 200	Page 200	



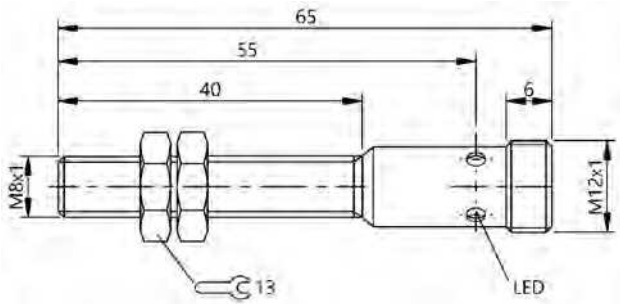
			<b>BES0223</b> BES Q40KFU-PSC40E-S04G	
	<b>BES021H</b> BES Q40KFU-PAC35E-S04G	<b>BES021K</b> BES Q40KFU-PAC35E-S04G-W01		<b>BES021M</b> BES Q40KFU-PAC40E-S04G
	40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm
	40x40	40x40	40x40	40x40
	non-flush	non-flush	non-flush	non-flush
	35 mm	35 mm	40 mm	40 mm
	—	—	—	—
	250 Hz	250 Hz	100 Hz	100 Hz
	PBT	PBT, partly coated	PBT	PBT
	PBT	ceramic coated	PBT	PBT
	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-10...70 °C	-10...70 °C	-10...70 °C	-10...70 °C
	—	—	—	—
	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)
	—	—	—	—
	IP67	IP67	IP67	IP67
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
	Factor 1	Factor 1, Weld immune	Factor 1	Factor 1
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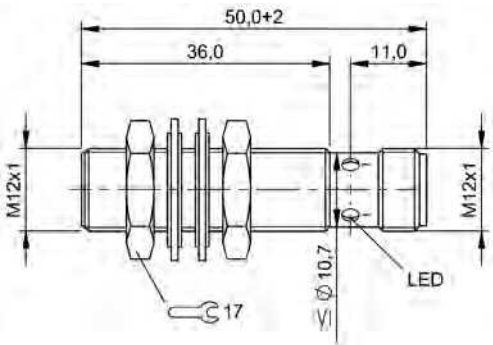
BES02YR



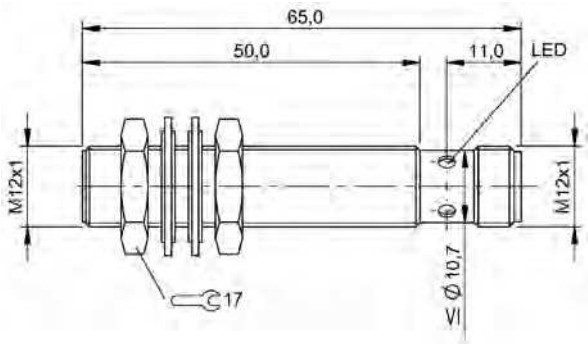
BES02YT



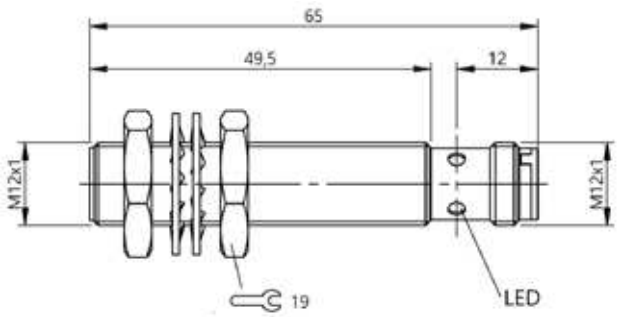
BES03YP



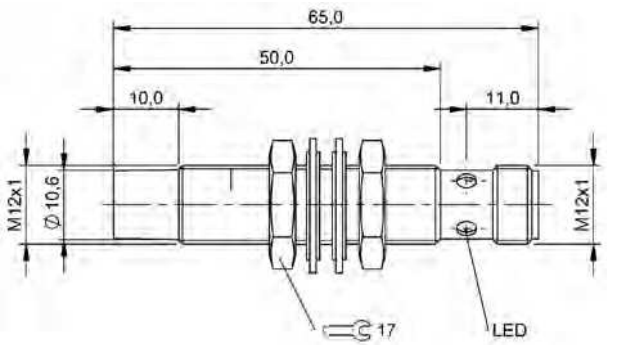
BES02JZ, BES02K0



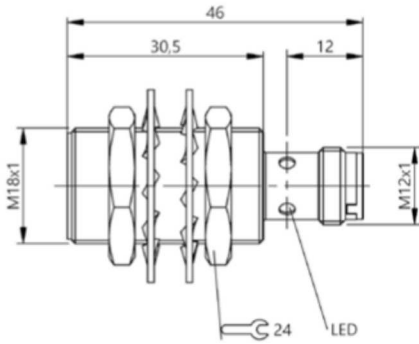
BES02K4



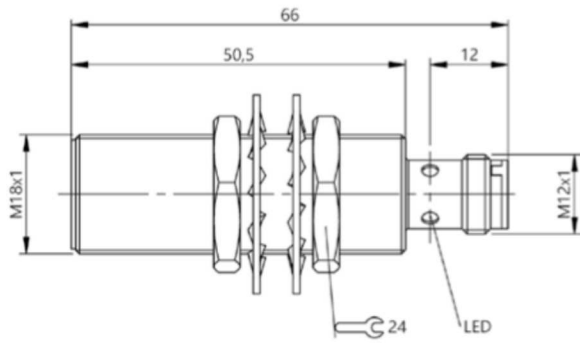
BES05KT



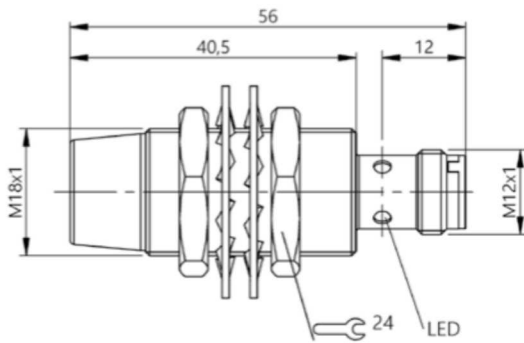
BES02K5



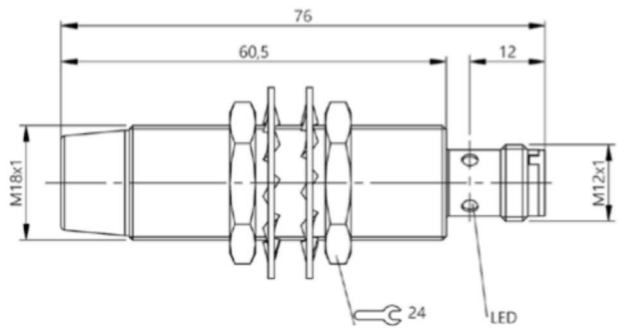
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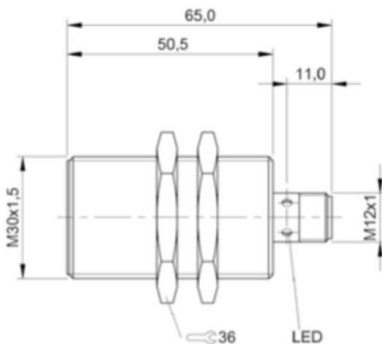
BES05PN, BES05PP



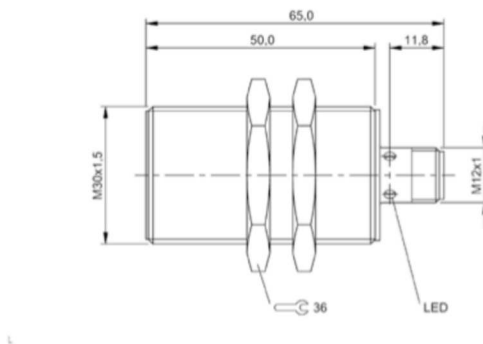
BES05AL



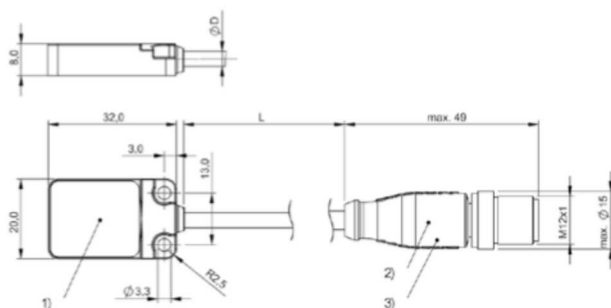
BES05AM



BES02KM, BES02KN

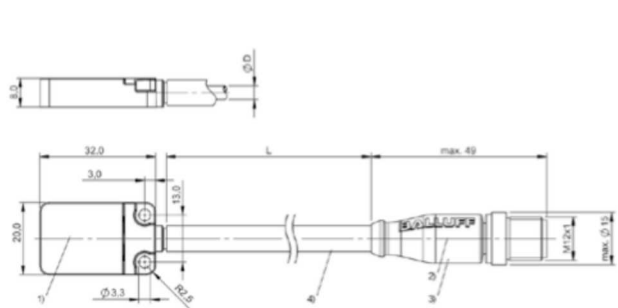


BES0454



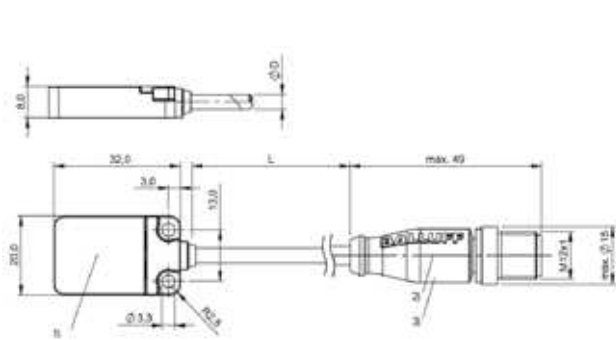
1) Sensing surface, 2) LED yellow, 3) LED green

BES04AH



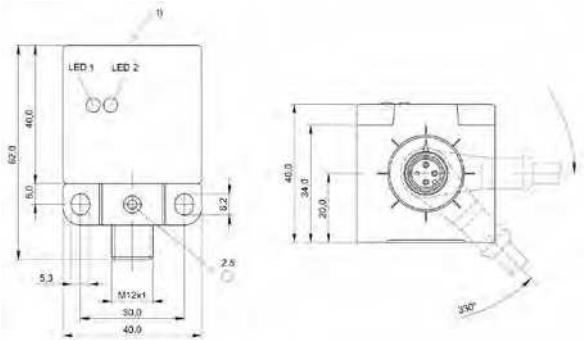
1) Sensing surface, 2) LED green, 3) LED yellow, 4) Silicon tube D=7mm

BES049Y



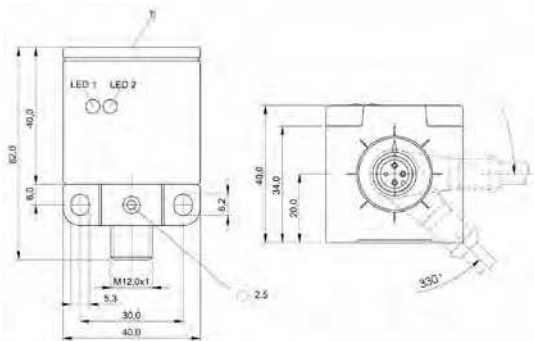
1) Sensing surface, 2) LED green, 3) LED yellow

**BES04RE**



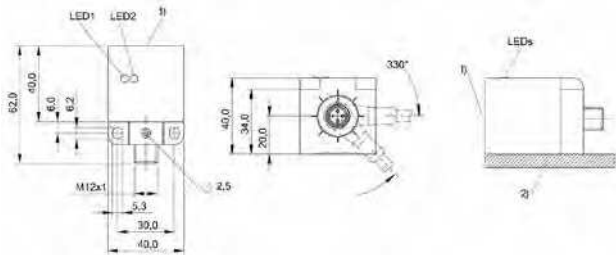
1) Sensing surface

**BES021P, BES022K, BES021T, BES021H, BES021K, BES0223, BES021M**



1) Sensing surface

**BES021U, BES0457**



1) Sensing surface, 2) Metal plate

**BES0222**







PNP normally open	<b>BES02YZ</b> BES M08EG1-PSC15S-S04G-S	<b>BES02N5</b> BES M08EH1-PSC20B-S04G-S	
Dimension	Ø 8 x 64.5 mm	Ø 8 x 65 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	1.5 mm	2 mm	
Switching frequency	20 Hz	750 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	Stainless steel	Stainless steel	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Magnetic field immune	—	—	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Additional features	—	—	
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<b>BES02N6</b> BES M08EH1-PSC20B-S04G-S01	<b>BES02Z3</b> BES M12EG1-PSC20S-S04G-S	<b>BES02Z2</b> BES M12EG1-PSC20N-S04G-S	<b>BES04Z5</b> BES M12EI-PSC40A-S04G-S
Ø 8 x 65 mm	Ø 12 x 65 mm	Ø 12 x 65 mm	Ø 12 x 65 mm
M8x1	M12x1	M12x1	M12x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
2 mm	2 mm	2 mm	4 mm
750 Hz	50 Hz	50 Hz	80 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
coated, PTFE	—	—	—
Stainless steel, coated	Stainless steel	Stainless steel	Stainless steel
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
—	—	—	magnetic field immune (AC/DC)
IP67	IP67	IP67	IP67
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
Housing resistant to weld spatter	—	—	Factor 1, Weld immune
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PNP normally open	<b>BES0567</b> BES M12EI-PSC40A-S04G-S02	<b>BES0510</b> BES M12EI-PSC40S-S04G-S	
Dimension	Ø 12 x 65 mm	Ø 12 x 65 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	4 mm	4 mm	
Switching frequency	80 Hz	70 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	weld spatter resistant, coated	—	
Material sensing surface	Stainless steel, coated	Stainless steel	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Additional features	Factor 1, Weld immune, Housing resistant to weld spatter	Damping: Steel	
Productview	Page 208	Page 208	



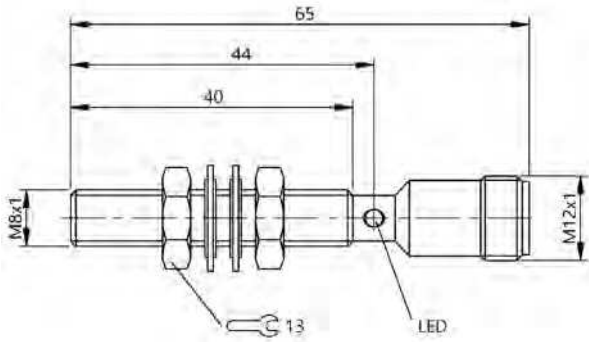
<b>BES0511</b> BES M12EI-PSC40N-S04G-S	<b>BES02Z9</b> BES M18EG1-PSC50S-S04G-S	<b>BES0278</b> BES M18EG1-PSC50N-S04G-S	<b>BES05K7</b> BES M18EG1-PSC80A-S04G-S
Ø 12 x 65 mm	Ø 18 x 66 mm	Ø 18 x 66 mm	Ø 18 x 56 mm
M12x1	M18x1	M18x1	M18x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
4 mm	5 mm	5 mm	8 mm
70 Hz	15 Hz	15 Hz	110 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
—	—	—	—
Stainless steel	Stainless steel	Stainless steel	Stainless steel
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 3-pin
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
magnetic field immune (AC/DC)	—	—	magnetic field immune (AC/DC)
IP67	IP67	IP67	IP68
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
Damping: Alloys	—	—	Factor 1
Page 208	Page 208	Page 208	Page 208



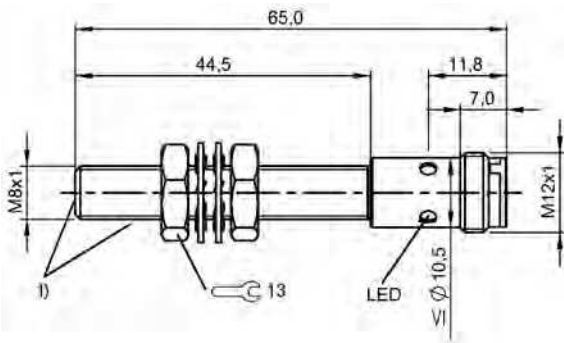
PNP normally open	<b>BES05NC</b> BES M18EG1-PSC80A-S04G-S02	<b>BES05K8</b> BES M18EG1-PSC80S-S04G-S	
Dimension	Ø 18 x 56 mm	Ø 18 x 56 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	8 mm	8 mm	
Switching frequency	110 Hz	110 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	weld spatter resistant, coated	—	
Material sensing surface	Stainless steel, coated	Stainless steel	
Connection	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 3-pin	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Additional features	Factor 1	Damping: Steel	
Productview	Page 209	Page 208	



<b>BES05K9</b> BES M18EG1-PSC80N-S04G-S	<b>BES02ZJ</b> BES M30EG1-PSC80S-S04G-S	<b>BES02ZH</b> BES M30EG1-PSC80N-S04G-S	
Ø 18 x 56 mm	Ø 30 x 66 mm	Ø 30 x 66 mm	
M18x1	M30x1.5	M30x1.5	
for flush mounting	for flush mounting	for flush mounting	
8 mm	8 mm	8 mm	
110 Hz	15 Hz	15 Hz	
Stainless steel	Stainless steel	Stainless steel	
—	—	—	
Stainless steel	Stainless steel	Stainless steel	
Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
10...30 VDC	10...30 VDC	10...30 VDC	
-25...70 °C	-25...70 °C	-25...70 °C	
magnetic field immune (AC/DC)	—	—	
IP68	IP67	IP67	
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	
Damping: Alloys	—	—	
Page 208	Page 209	Page 209	

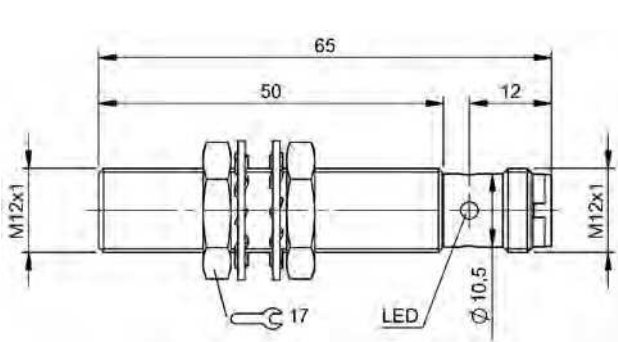


BES02YZ

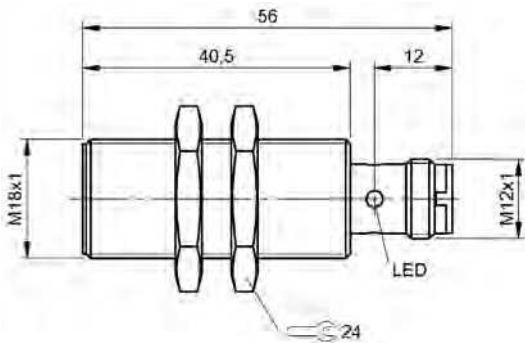


1) Range of compressive strength

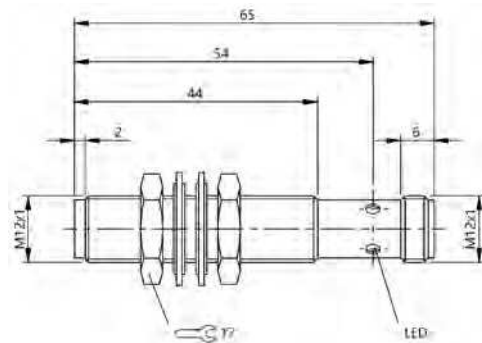
BES02N5, BES02N6



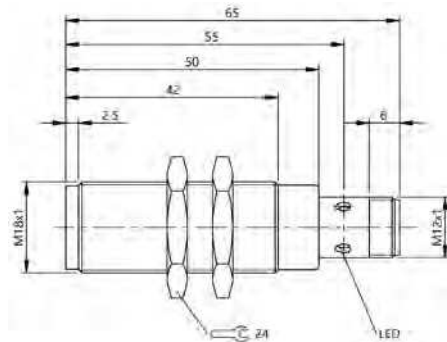
BES0510, BES0511



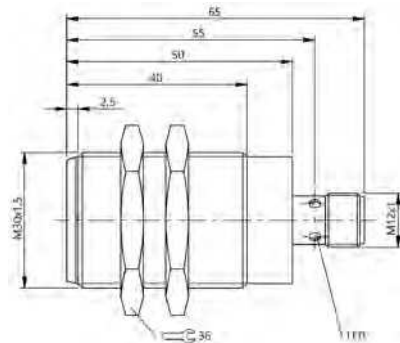
BES05K8, BES05K9



BES02Z3, BES02Z2

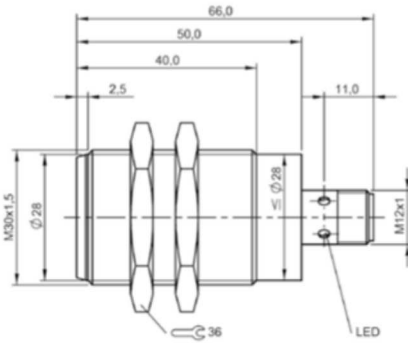


BES02Z9, BES02Z8

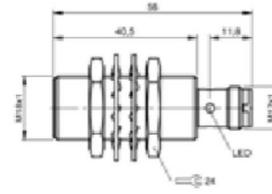


BES02ZJ

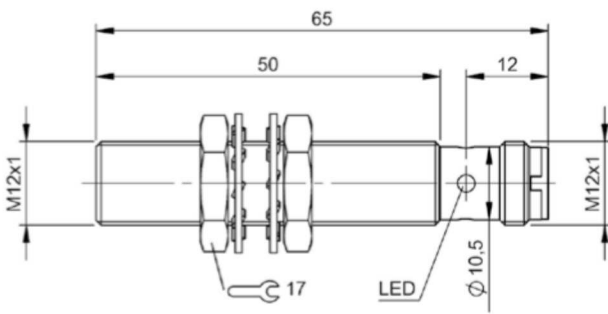




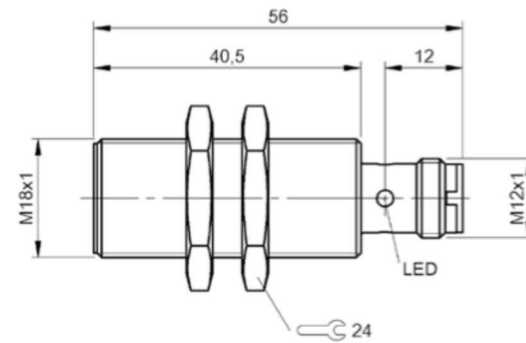
BES02ZH



BES05NC



BES04Z5, BES0567



BES05K7



PNP normally open	<b>BES02J5</b> BES 516-325-S4-CW	
Dimension	Ø 12 x 61 mm	
Style	M12x1	
Installation	for flush mounting	
Range	2 mm	
Switching frequency	1000 Hz	
Housing material	Stainless steel	
Surface protection	coated, PTFE	
Material sensing surface	PTFE	
Connection	Connector, M12x1 connector, 4-pin	
Operating voltage Ub	10...30 VDC	
Ambient temperature	-25...70 °C	
Magnetic field immune	magnetic field immune (AC/DC)	
Protection degree	IP67	
Approval/Conformity	cULus, CE, EAC	
Productview	Page 214	



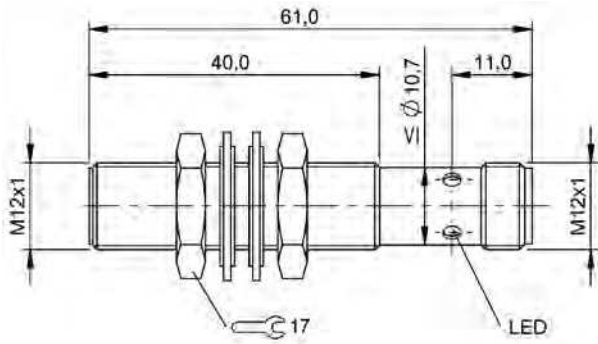
BES02JM BES 516-356-S4-CW	BES02J9 BES 516-326-S4-CW	BES02JH BES 516-327-S4-CW
Ø 12 x 61 mm	Ø 18 x 65 mm	Ø 30 x 65 mm
M12x1	M18x1	M30x1.5
non-flush	for flush mounting	for flush mounting
4 mm	5 mm	10 mm
1000 Hz	500 Hz	100 Hz
Stainless steel	Brass	Brass
coated, PTFE	coated, PTFE	coated, PTFE
PTFE	PTFE	PTFE
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C
magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)
IP67	IP67	IP67
cULus, CE, EAC	cULus, CE, EAC	CE, cULus, EAC
Page 214	Page 214	Page 214



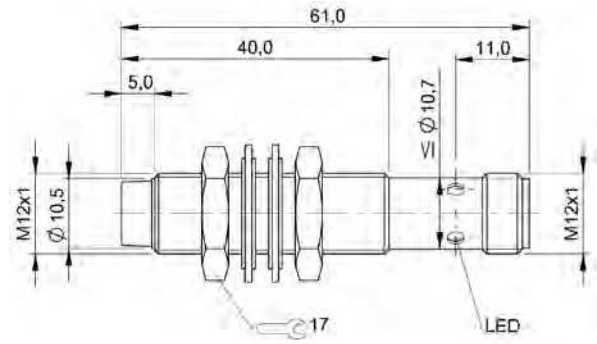
PNP normally open	<b>BES0481</b> BES R01ZC-PSC50B-BZ03-V02	
Dimension	32 x 20 x 8 mm	
Style	block style	
Installation	for flush mounting	
Range	5 mm	
Switching frequency	100 Hz	
Housing material	Zinc, die-cast	
Surface protection	—	
Material sensing surface	PA 12	
Connection	Cable, 3.00 m, TPU	
Operating voltage Ub	10...30 VDC	
Ambient temperature	-25...70 °C	
Magnetic field immune	magnetic field immune (AC/DC)	
Protection degree	IP67	
Approval/Conformity	CE, cULus, EAC	
Productview	Page 214	



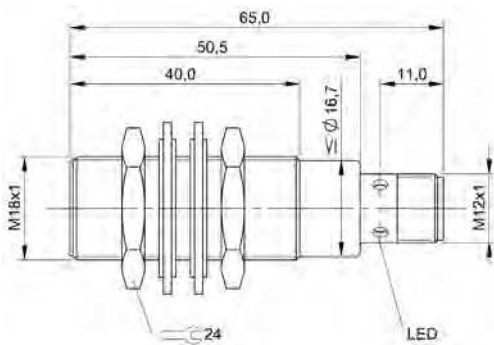
<b>BES048J</b> BES R01ZC-PSC50B-BZ00,2-GS04-V02	<b>BES0493</b> BES R01ZC-PSC50B-BZ00,2-GS49-V02	<b>BES048W</b> BES R01ZC-PSC50B-BZ00,5-GS04-V02
32 x 20 x 8 mm	32 x 20 x 8 mm	32 x 20 x 8 mm
block style	block style	block style
for flush mounting	for flush mounting	for flush mounting
5 mm	5 mm	5 mm
100 Hz	100 Hz	100 Hz
Zinc, die-cast	Zinc, die-cast	Zinc, die-cast
—	—	—
PA 12	PA 12	PA 12
Cable with connector, M12x1 connector, 4-pin, 0.20 m, TPU	Cable with connector, M8x1 connector, 3-pin, 0.20 m, TPU	Cable with connector, M12x1 connector, 4-pin, 0.50 m, TPU
10...30 VDC	10...30 VDC	10...30 VDC
-25...70 °C	-25...70 °C	-25...70 °C
magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)
IP67	IP67	IP67
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
Page 214	Page 214	Page 214



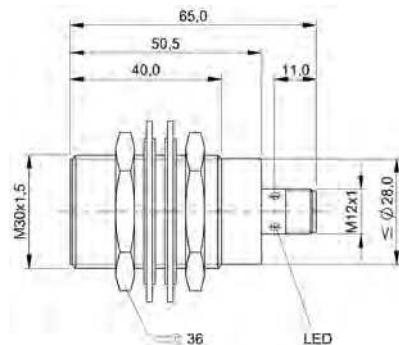
BES02J5



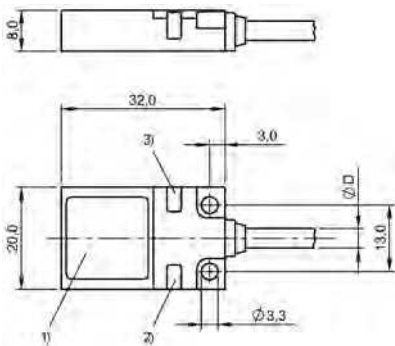
BES02JM



BES02J9

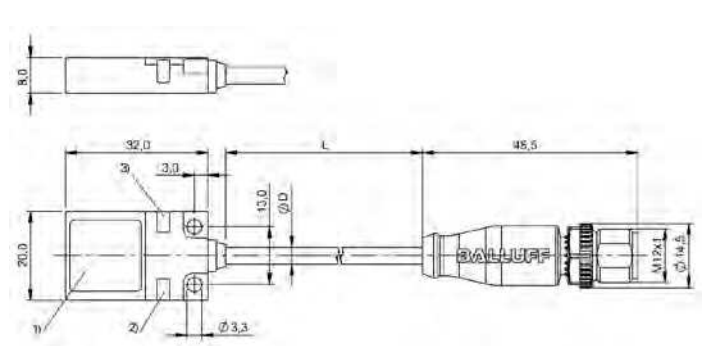


BES02JH



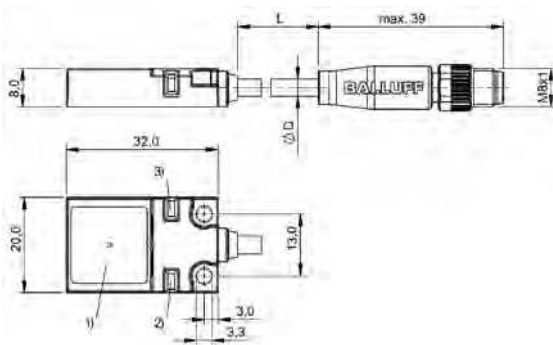
1) Sensing surface, 2) LED green, 3) LED yellow

BES0481



1) Sensing surface, 2) LED green, 3) LED yellow

BES048J, BES048W



1) Sensing surface, 2) LED green, 3) LED yellow

BES0493





PNP normally open	<b>BES02PU</b> BES M08MH1-PSC20B-S04G-101	<b>BES02PW</b> BES M08MH1-PSC30B-S04G-101	
Dimension	Ø 8 x 65 mm	Ø 8 x 66 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	quasi-flush	
Range	2 mm	3 mm	
Switching frequency	700 Hz	1000 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	Chrome-plated	
Material sensing surface	ceramic coated	ceramic coated	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage $U_b$	12...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Magnetic field immune	—	—	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, EAC	
Productview	Page 220	Page 220	





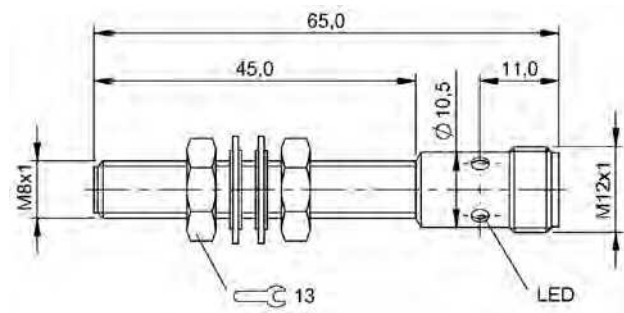
<b>BES056A</b> BES M12EI-PSC40B-S04G-S03	<b>BES02KC</b> BES M18MI-PSC70B-S04G-W	<b>BES056C</b> BES M18EI-PSC72B-S04G-S03	
Ø 12 x 65 mm	Ø 18 x 65 mm	Ø 18 x 65 mm	
M12x1	M18x1	M18x1	
for flush mounting	for flush mounting	for flush mounting	
4 mm	7 mm	7.2 mm	
500 Hz	50 Hz	250 Hz	
Stainless steel	Brass	Stainless steel	
weld spatter resistant	coated, PTFE	weld spatter resistant	
Stainless steel	LCP PTFE	Stainless steel	
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
10...30 VDC	10...30 VDC	10...30 VDC	
-25...70 °C	5...60 °C	-25...70 °C	
—	magnetic field immune (AC/DC)	—	
IP67	IP67	IP67	
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	
Page 220	Page 220	Page 220	



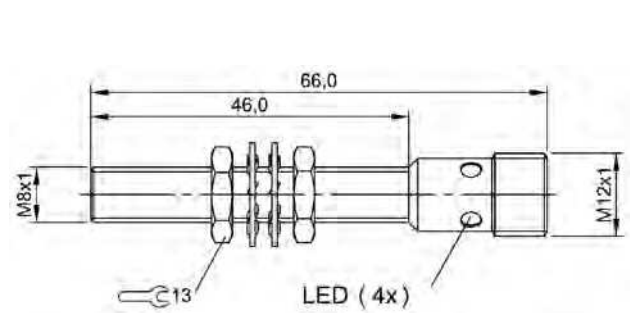
PNP normally open	<b>BES048K</b> BES R01ZC-PSC50B-BZ00,2-GS04-W05	<b>BES048N</b> BES R01ZC-PSC50B-BZ00,2-GS04-W13	
Dimension	32 x 20 x 8 mm	32 x 20 x 8 mm	
Style	block style	block style	
Installation	for flush mounting	for flush mounting	
Range	5 mm	5 mm	
Switching frequency	100 Hz	100 Hz	
Housing material	Zinc, die-cast	Zinc, die-cast	
Surface protection	partly coated	partly coated	
Material sensing surface	ceramic coated	ceramic coated	
Connection	Cable with connector, M12x1 connector, 4-pin, 0.20 m, TPU	Cable with connector, M12x1 connector, 4-pin, 0.20 m, TPU	
Operating voltage $U_b$	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Productview	Page 220	Page 220	



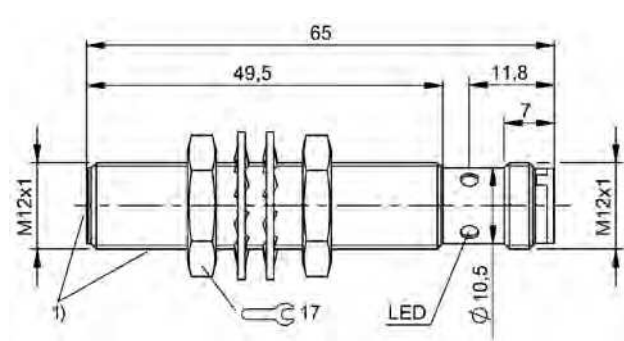
<b>BES048Y</b> BES R01ZC-PSC70B-BZ00,2-GS04-108			
32 x 20 x 8 mm			
block style			
for flush mounting			
7 mm			
150 Hz			
Zinc, die-cast			
partly coated			
ceramic coated			
Cable with connector, M12x1 connector, 4-pin, 0.20 m, TPU			
10...30 VDC			
-25...70 °C			
—			
IP67			
CE, cULus, EAC			
Page 220			



BES02PU

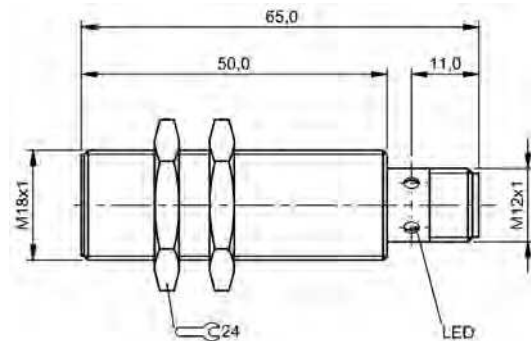


BES02PW

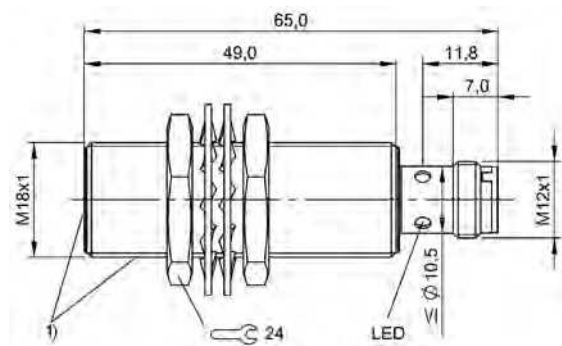


1) Pressure resistant area

BES056A

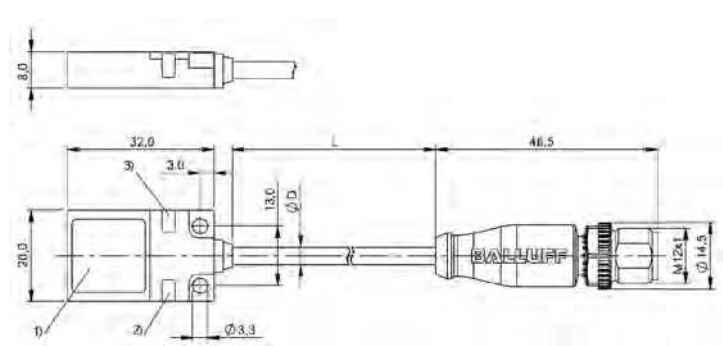


BES02KC



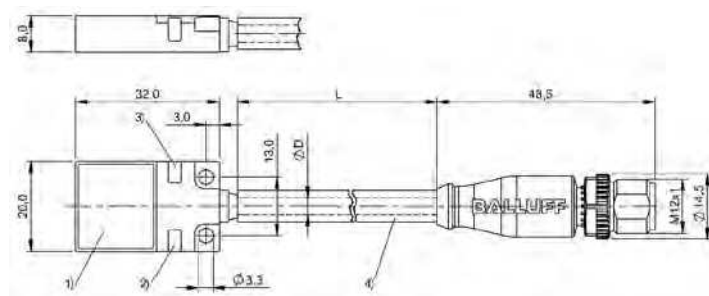
1) Pressure resistant area

BES056C



1) Sensing surface, 2) LED green, 3) LED yellow

BES048K, BES048Y



1) Sensing surface, 2) LED green, 3) LED yellow, 4) Silicon tube D=7mm

BES048N





PNP normally open	<b>BES05RP</b> BES M05ED-PSD08B-ES02-T	<b>BES05RR</b> BES M05ED-PSD08B-ES05-T	
Dimension	Ø 5 x 27 mm	Ø 5 x 27 mm	
Style	M5x0.5	M5x0.5	
Installation	flush	flush	
Range	0.8 mm	0.8 mm	
Switching frequency	1.5 kHz	1.5 kHz	
Housing material	Stainless steel (1.4104)	Stainless steel (1.4104)	
Material sensing surface	Ceramic	Ceramic	
Connection	Cable, 2 m, Silicone	Cable, 5 m, Silicone	
Operating voltage Ub	10...30 VDC	10...30 VDC	
Ambient temperature	0...135 °C	0...135 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, EAC, cULus, WEEE	CE, EAC, cULus, WEEE	
Productview	Page 232	Page 232	



<b>BES05RN</b> BES M05ED-PSD08B-ES01-GS49-T	<b>BES05FN</b> BES M08EM-PSD20B-ET05-T	<b>BES04CK</b> BES 515-325-SA74-D-TF-02	
Ø 5 x 27 mm	Ø 8 x 60 mm	Ø 12 x 62 mm	
M5x0.5	M8x1	M12x1	
flush	flush	flush	
0.8 mm	2 mm	2 mm	
1.5 kHz	600 Hz	200 Hz	
Stainless steel (1.4104)	Stainless steel	Stainless steel	
Ceramic	LCP	PEEK	
Cable with connector, M8x1, 1 m, Silicone	Cable, 5.0 m, PTFE	Cable, 2.00 m, PTFE	
10...30 VDC	10...30 VDC	10...30 VDC	
0...135 °C	0...140 °C	-25...160 °C	
IP67	IP50	IP68	
CE, EAC, cULus, WEEE	CE, EAC, WEEE	CE, EAC, WEEE	
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PNP normally open	<b>BES02HU</b> BES 516-325-SA19-03	<b>BES02HW</b> BES 516-325-SA19-05	
PNP normally open/normally closed			
Dimension	Ø 12 x 75 mm	Ø 12 x 75 mm	
Style	M12x1	M12x1	
Installation	flush	flush	
Range	2 mm	2 mm	
Switching frequency	1000 Hz	1000 Hz	
Housing material	Brass, nickel plated	Brass, nickel plated	
Material sensing surface	PEEK	PEEK	
Connection	Cable, 3.00 m, Silicone	Cable, 5.00 m, Silicone	
Operating voltage U <sub>B</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	-25...120 °C	-25...120 °C	
IP rating	IP68	IP68	
Approval/Conformity	CE, EAC, cULus, WEEE	CE, EAC, cULus, WEEE	
Productview	Page 232	Page 232	





BES04CL BES 515-356-SA35-D-TF-02	BES043T BES 515-326-SA49-D-TF-02	BES04AT BES 515-326-SA49-D-TF-05	BES02H5 BES 516-105-SA2-05
Ø 12 x 66 mm	Ø 18 x 95 mm	Ø 18 x 95 mm	Ø 18 x 95.5 mm
M12x1	M18x1	M18x1	M18x1
non-flush	flush	flush	flush
4 mm	5 mm	5 mm	5 mm
200 Hz	200 Hz	200 Hz	500 Hz
Stainless steel (1.4571)	Stainless steel	Stainless steel	Brass, nickel plated
PEEK	PEEK	PEEK	PBT
Cable, 2.00 m, PTFE	Cable, 2.00 m, PTFE	Cable, 5.00 m, PTFE	Cable, 5.00 m, Silicone
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...160 °C	-25...160 °C	-25...160 °C	-25...120 °C
IP68	IP68	IP68	IP67
CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE
Page 232	Page 232	Page 232	Page 232



PNP normally open	<b>BES05N4</b> BES M18ED-PSC50B-GT05-T		
PNP normally open/normally closed		<b>BES02H6</b> BES 516-105-SA5	
Dimension	Ø 18 x 35 mm	Ø 18 x 83 mm	
Style	M18x1	M18x1	
Installation	flush	flush	
Range	5 mm	5 mm	
Switching frequency	9 Hz	500 Hz	
Housing material	Stainless steel	Brass, nickel plated	
Material sensing surface	LCP	PBT	
Connection	Connector, M12x1-Male, 4-pin, 5.0 m, PTFE	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	0...230 °C	-25...120 °C	
IP rating	IP50	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, EAC, WEEE	
Productview	Page 233	Page 233	



BES04C7 BES 515-360-SA13-D-TF-05		BES043W BES 515-327-SA22-D-TF-02	BES04AU BES 515-327-SA22-D-TF-05
	BES02H7 BES 516-114-SA1-05		
Ø 18 x 103 mm	Ø 30 x 91.5 mm	Ø 30 x 100 mm	Ø 30 x 100 mm
M18x1	M30x1.5	M30x1.5	M30x1.5
non-flush	flush	flush	flush
8 mm	10 mm	10 mm	10 mm
200 Hz	300 Hz	200 Hz	200 Hz
Stainless steel	Brass, nickel plated	Stainless steel	Stainless steel
PEEK	PBT	PEEK	PEEK
Cable, 5.00 m, PTFE	Cable, 5.00 m, Silicone	Cable, 2.00 m, PTFE	Cable, 5.00 m, PTFE
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...160 °C	-25...120 °C	-25...160 °C	-25...160 °C
IP68	IP67	IP68	IP68
CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE
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PNP normally open	<b>BES05N5</b> BES M30N1-PSC10B-GT05-T		
PNP normally open/normally closed		<b>BES02HE</b> BES 516-125-SA1-05	
Dimension	Ø 30 x 74 mm	Ø 30 x 91 mm	
Style	M30x1.5	M30x1.5	
Installation	flush	non-flush	
Range	10 mm	15 mm	
Switching frequency	9 Hz	100 Hz	
Housing material	Stainless steel	Brass, nickel plated	
Material sensing surface	LCP	PA 12	
Connection	Connector, M12x1, 4-pin, 5.0 m, PTFE	Cable, 5.00 m, Silicone	
Operating voltage U <sub>b</sub>	10...30 VDC	10...30 VDC	
Ambient temperature	0...230 °C	-25...120 °C	
IP rating	IP50	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, EAC, WEEE	
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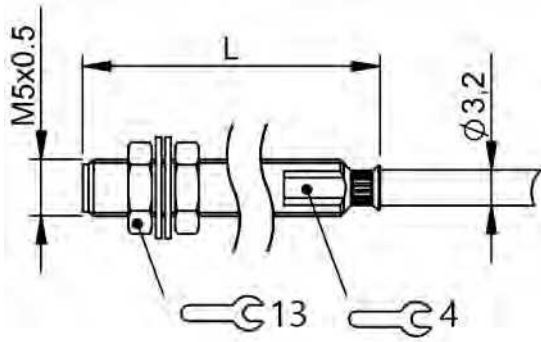


	<b>BES043Y</b> BES 515-362-SA4-D-TF-02	<b>BES04C8</b> BES 515-362-SA4-D-TF-05	<b>BES05N7</b> BES Q08EC-PSD20B-ES05	<b>BES05N8</b> BES Q12EC-PSD40B-ES05
	Ø 30 x 110 mm	Ø 30 x 110 mm	8 x 8 x 55 mm	12 x 12 x 59 mm
	M30x1.5	M30x1.5	8x8	12x12
	non-flush	non-flush	flush	flush
	15 mm	15 mm	2 mm	4 mm
	200 Hz	200 Hz	500 Hz	500 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	PEEK	PEEK	LCP	LCP
	Cable, 2.00 m, PTFE	Cable, 5.00 m, PTFE	Cable, 5.0 m, Silicone	Cable, 5.0 m, Silicone
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...160 °C	-25...160 °C	-25...140 °C	-25...130 °C
	IP68	IP68	IP65	IP65
	CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE	CE, EAC, WEEE
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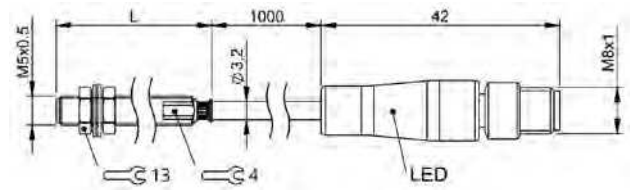


PNP normally open		<b>BES05N9</b> BES Q40KG-PSD25F-S04G	
For switching amplifier	<b>BES05N6</b> BES Q40KG-X20F-SZ03		
Dimension	40 x 40 x 66.6 mm	40 x 40 x 70.7 mm	
Style	40x40	40x40	
Installation	non-flush	non-flush	
Range	20 mm	25 mm	
Switching frequency	100 Hz	100 Hz	
Housing material	Stainless steel	Stainless steel (1.4305) LCP	
Material sensing surface	LCP	LCP	
Connection	Connector, LEMO connector-Special connector, 2-pin	Connector, M12x1-Male, 4-pin	
Operating voltage $U_b$	10...30 VDC	10...35 VDC	
Ambient temperature	0...230 °C	0...150 °C	
IP rating	IP50	IP67	
Approval/Conformity	CE, EAC, WEEE	CE, EAC, WEEE	
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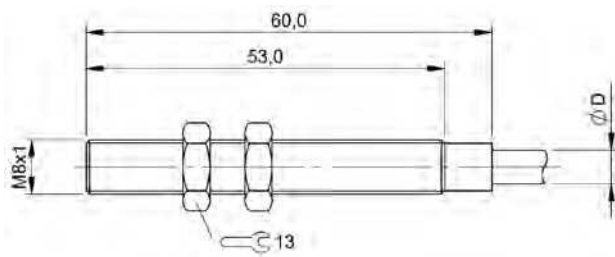
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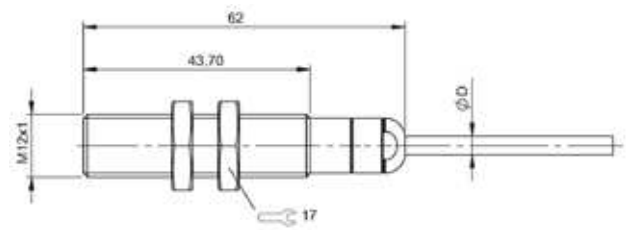
BES05RP, BES05RR



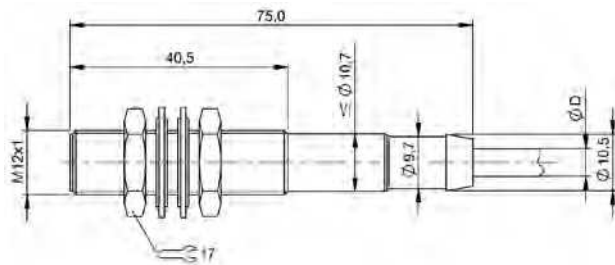
BES05RN



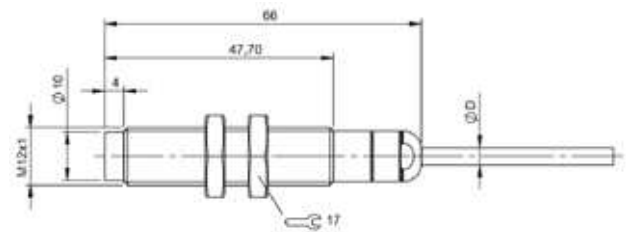
BES05FN



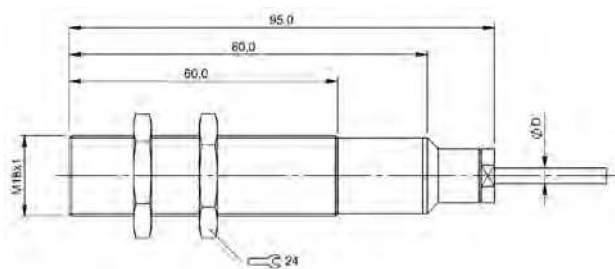
BES04CK



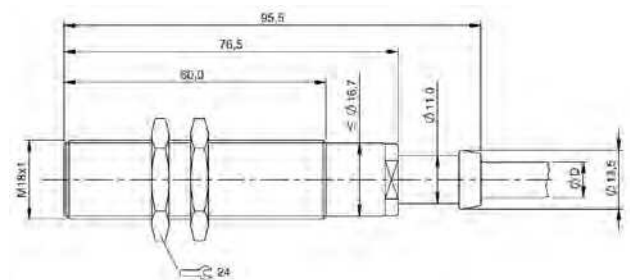
BES02HU, BES02HW



BES04CL

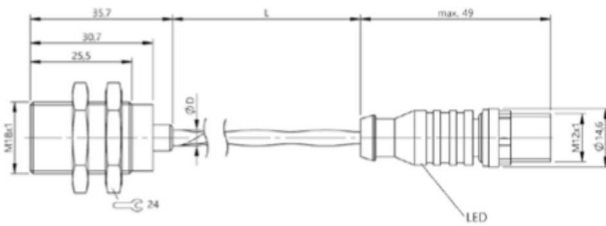


BES043T, BES04AT

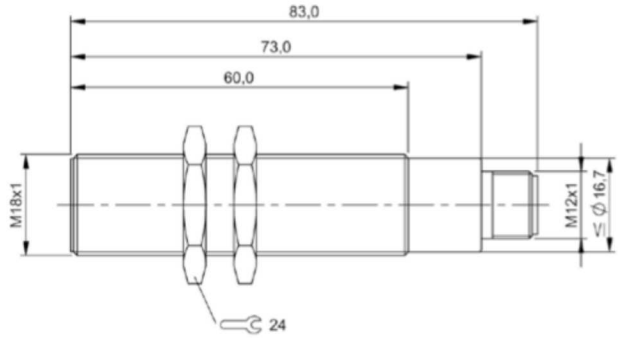


BES02H5

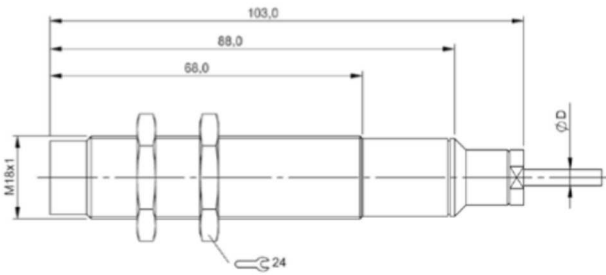




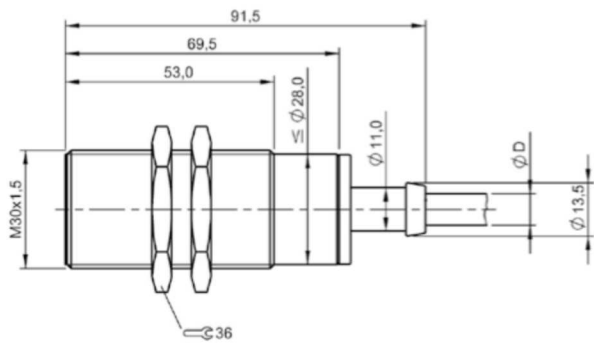
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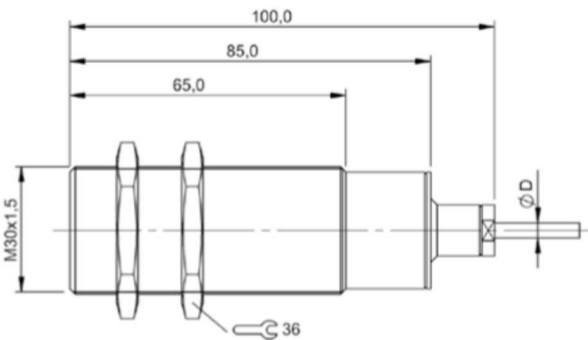
BES02H6



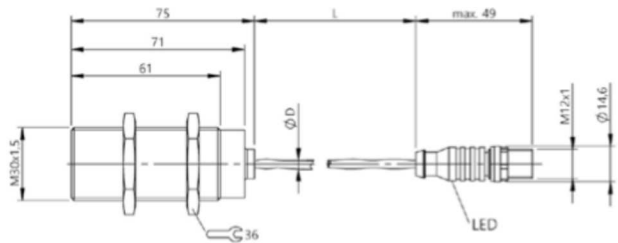
BES04C7



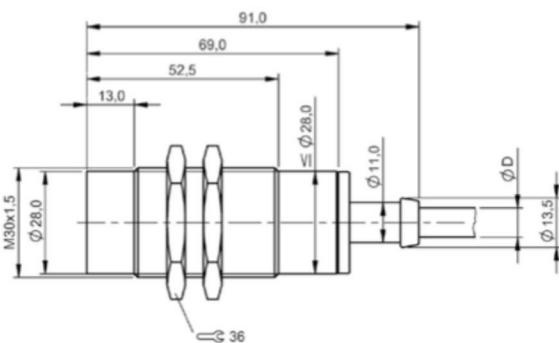
BES02H7



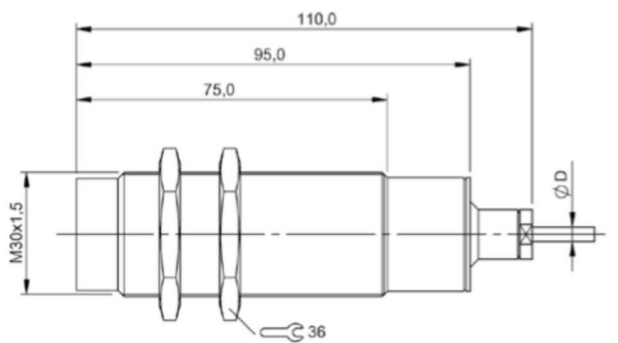
BES043W, BES04AU



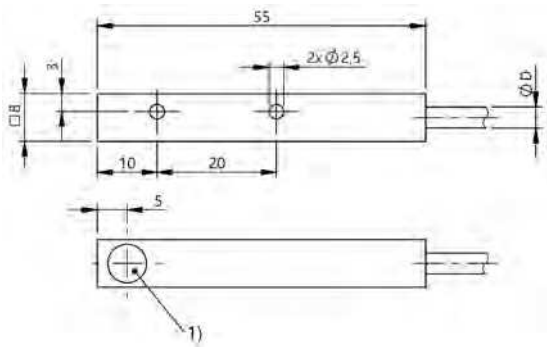
BES05N5



BES02HE

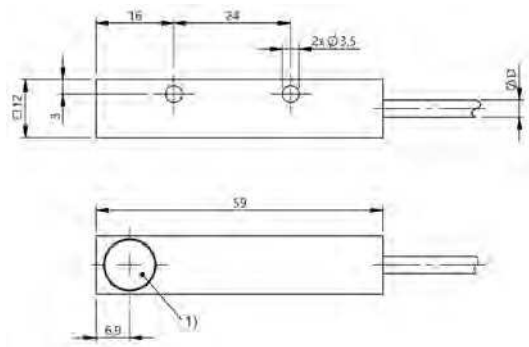


BES043Y, BES04C8



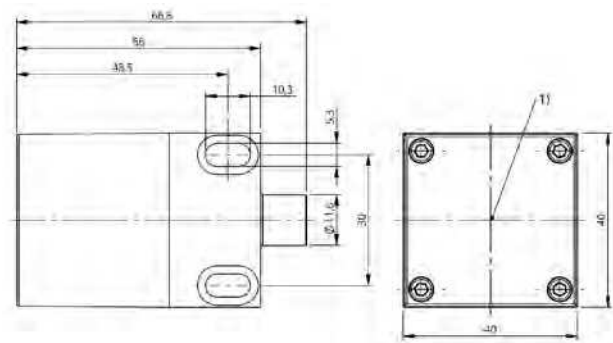
1) Sensing surface

BES05N7



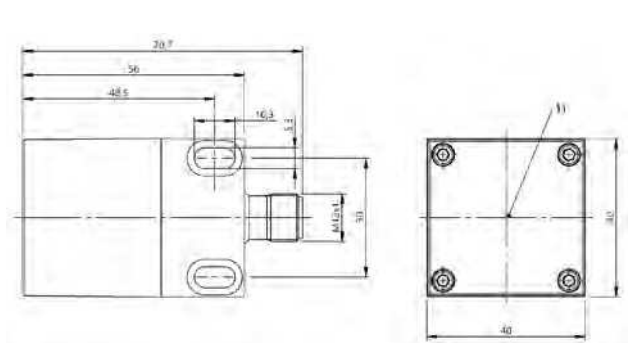
1) Sensing surface

BES05N8



1) Sensing surface

BES05N6



1) Sensing surface

BES05N9





NAMUR	<b>BES02ZR</b> BES G06MD-GNX10B-EV02-EEX	<b>BES02ZT</b> BES M08MD-GNX10B-EV02-EEX		
PNP normally open			<b>BES05M3</b> BES M12EG2-PSC20B-BV02-EXF	
Dimension	Ø 6.5 x 30 mm	Ø 8 x 30 mm	Ø 12 x 59 mm	
Style	D6.5	M8x1	M12x1	
Installation	for flush mounting	for flush mounting	for flush mounting	
Range	1 mm	1 mm	2 mm	
Switching frequency	2000 Hz	2000 Hz	180 Hz	
Housing material	Brass	Brass	Stainless steel	
Surface protection	Nickel-free coated	Nickel-free coated	—	
Material sensing surface	PBT	PBT	Stainless steel	
Connection	Cable, 2.00 m, PVC	Cable, 2.00 m, PVC	Cable, PUR	
Operating voltage U <sub>b</sub>	7.7...9 VDC	7.7...9 VDC	10...30 VDC	
Ambient temperature	-20...70 °C	-20...70 °C	-5...60 °C	
Pressure rating max.	—	—	—	
Ex category	ATEX: 2G (EPL Gb) ATEX: 1D (EPL Da)	ATEX: 2G (EPL Gb) ATEX: 1D (EPL Da)	ATEX: 3G (EPL Gc) ATEX: 3D (EPL Dc) IECEX: EPL Gc IECEX: EPL Dc	
Protection degree	IP67	IP67	IP67	
Approval/Conformity	CE, EAC, ATEX, cCSAus, FM	CE, EAC, ATEX, cCSAus, FM	CE, EAC, IECEX, ATEX	
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		<b>BES05NE</b> BES M12MG2-GNX20B-BT02-EXA	<b>BES05NM</b> BES M12MG2-GNX20B-BT02-EXB	<b>BHS004L</b> BES 516-300-S318-S4-N	
	<b>BES05L6</b> BES M12MF2-PSC20B-BV02-EXE				<b>BHS002W</b> BES 516-300-S249-NEX-S4-D
	Ø 12 x 59 mm	Ø 12 x 62 mm	Ø 12 x 62 mm	Ø 12 x 56 mm	Ø 12 x 56 mm
	M12x1	M12x1	M12x1	M12x1	M12x1
	for flush mounting	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	2 mm	2 mm	2 mm	1.5 mm	1.5 mm
	300 Hz	—	—	1000 Hz	2000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	—	—	—	—	—
	LCP	PEEK	PTFE	POM	EP
	Cable, PUR	Cable, FEP	Cable, FEP	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
	10...30 VDC	7.7...9 VDC	7.7...9 VDC	7.7...9 VDC	10...30 VDC
	-20...60 °C	-20...60 °C, depending on Ex category	-20...60 °C, depending on Ex category	-25...70 °C	-25...80 °C
	—	—	—	500 bar	500 bar
	ATEX: 3G (EPL Gc) ATEX: 3D (EPL Dc) IECEX: EPL Gc IECEX: EPL Dc	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 2G (EPL Gb)	ATEX: 3G (EPL Gc)
	IP67	IP68	IP68	IP68	IP68
	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	CE, EAC, ATEX
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NAMUR	<b>BHS0034</b> BES 516-300-S266-S4	<b>BHS004K</b> BES 516-300-S315-S4-N		
PNP normally open			<b>BHS005P</b> BHS B135V-PSD15-NEX-S04	
Dimension	Ø 12 x 56 mm	Ø 12 x 56 mm	Ø 12 x 78 mm	
Style	M12x1	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	for flush mounting	
Range	1.5 mm	1.5 mm	1.5 mm	
Switching frequency	1000 Hz	1000 Hz	400 Hz	
Housing material	Stainless steel	Stainless steel	Stainless steel	
Surface protection	—	—	—	
Material sensing surface	POM	POM	Ceramic	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage $U_b$	7.7...9 VDC	7.7...9 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	-25...100 °C	
Pressure rating max.	500 bar	500 bar	500 bar	
Ex category	ATEX: 2G (EPL Gb)	ATEX: 2G (EPL Gb)	ATEX: 3G (EPL Gc)	
Protection degree	IP68	IP68	IP68	
Approval/Conformity	CE, EAC	CE, EAC, IECEx, ATEX	CE, EAC, ATEX	
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BES05MW BES M12MG2-GNX20B-S04G-EXC	BES027U BES M12ME-GNX40B-S04G-EEEX		BES05NF BES M12MG2-GNX40F-BT02-EXA	BES05NN BES M12MG2-GNX40F-BT02-EXB
		<b>BES05L7</b> BES M12MF2-PSC40F-BV02-EXE		
Ø 12 x 65 mm	Ø 12 x 45 mm	Ø 12 x 61 mm	Ø 12 x 66 mm	Ø 12 x 66 mm
M12x1	M12x1	M12x1	M12x1	M12x1
for flush mounting	for flush mounting	non-flush	non-flush	non-flush
2 mm	4 mm	1.5 mm	4 mm	4 mm
—	700 Hz	300 Hz	—	—
Brass	Brass	Stainless steel	Stainless steel	Stainless steel
nickel plated	Nickel-free coated	—	—	—
PA	PBT	LCP POM	PEEK	PTFE
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Cable, PUR	Cable, FEP	Cable, FEP
7.7...9 VDC	7.7...9 VDC	10...30 VDC	7.7...9 VDC	7.7...9 VDC
-20...60 °C, depending on Ex category	-20...70 °C	-20...60 °C	-20...60 °C, depending on Ex category	-20...60 °C, depending on Ex category
—	—	—	—	—
ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 3G (EPL Gc) ATEX: 3D (EPL Dc) IECEX: EPL Gc IECEX: EPL Dc	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)
IP67	IP67	IP67	IP68	IP68
CE, EAC, IECEx, ATEX	CE, EAC, cCSAus, FM	CE, EAC, IECEx, ATEX	CE, EAC, IECEx, ATEX	CE, EAC, IECEx, ATEX
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NAMUR	<b>BES05MY</b> BES M12MG2-GNX40F-S04G-EXC			
PNP normally open		<b>BES05M4</b> BES M18EG2-PSC50B-BV02-EXF	<b>BES05L2</b> BES M18MF2-PSC50B-BV02-EXD	
Dimension	Ø 12 x 70 mm	Ø 18 x 57 mm	Ø 18 x 60 mm	
Style	M12x1	M18x1	M18x1	
Installation	non-flush	for flush mounting	for flush mounting	
Range	4 mm	5 mm	5 mm	
Switching frequency	—	180 Hz	300 Hz	
Housing material	Brass	Stainless steel	Brass	
Surface protection	nickel plated	—	nickel plated	
Material sensing surface	PA	Stainless steel	PA	
Connection	Connector, M12x1 connector, 4-pin	Cable, PUR	Cable, PUR	
Operating voltage $U_b$	7.7...9 VDC	10...30 VDC	18...27 VDC	
Ambient temperature	-20...60 °C, depending on Ex category	-10...60 °C	-20...60 °C	
Pressure rating max.	—	—	—	
Ex category	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 3G (EPL Gc) ATEX: 3D (EPL Dc) IECEX: EPL Gc IECEX: EPL Dc	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	
Protection degree	IP67	IP67	IP67	
Approval/Conformity	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	
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		<b>BES05NH</b> BES M18MH2-GNX50B-BT02-EXA	<b>BES05NP</b> BES M18MH2-GNX50B-BT02-EXB	<b>BES05MZ</b> BES M18MH2-GNX50B-S04G-EXC	
	<b>BES05L8</b> BES M18MF2-PSC50B-BV02-EXE				
	Ø 18 x 60 mm	Ø 18 x 67 mm	Ø 18 x 67 mm	Ø 18 x 67 mm	
	M18x1	M18x1	M18x1	M18x1	
	for flush mounting	for flush mounting	for flush mounting	for flush mounting	
	5 mm	5 mm	5 mm	5 mm	
	300 Hz	—	—	—	
	Brass	Stainless steel	Stainless steel	Brass	
	nickel plated	—	—	nickel plated	
	PA	PEEK	PTFE	PA	
	Cable, PUR	Cable, FEP	Cable, FEP	Connector, M12x1 connector, 4-pin	
	10...30 VDC	7.7...9 VDC	7.7...9 VDC	7.7...9 VDC	
	-20...60 °C	-20...60 °C, depending on Ex category	-20...60 °C, depending on Ex category	-20...60 °C, depending on Ex category	
	—	—	—	—	
	ATEX: 3G (EPL Gc) ATEX: 3D (EPL Dc) IECEX: EPL Gc IECEX: EPL Dc	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	
	IP67	IP68	IP68	IP67	
	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	
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NAMUR	<b>BES02ZW</b> BES M18ME1-GNX80B-S04G-EEX			
PNP normally open		<b>BES05L3</b> BES M18MF2-PSC80F-BV02-EXD	<b>BES05L9</b> BES M18MF2-PSC80F-BV02-EXE	
Dimension	Ø 18 x 46 mm	Ø 18 x 69 mm	Ø 18 x 69 mm	
Style	M18x1	M18x1	M18x1	
Installation	for flush mounting	non-flush	non-flush	
Range	8 mm	5.5 mm	5.5 mm	
Switching frequency	400 Hz	300 Hz	300 Hz	
Housing material	Brass	Brass	Brass	
Surface protection	Nickel-free coated	nickel plated	nickel plated	
Material sensing surface	PBT	PA POM	PA POM	
Connection	Connector, M12x1 connector, 4-pin	Cable, PUR	Cable, PUR	
Operating voltage U <sub>b</sub>	7.7...9 VDC	18...27 VDC	10...30 VDC	
Ambient temperature	-20...70 °C	-20...60 °C	-20...60 °C	
Pressure rating max.	—	—	—	
Ex category	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 3G (EPL Gc) ATEX: 3D (EPL Dc) IECEx: EPL Gc IECEx: EPL Dc	
Protection degree	IP67	IP67	IP67	
Approval/Conformity	CE, EAC, cCSAus, FM	CE, EAC, IECEx, ATEX	CE, EAC, IECEx, ATEX	
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<b>BES05NJ</b> BES M18MH2-GNX80F-BT02-EXA	<b>BES05NR</b> BES M18MH2-GNX80F-BT02-EXB	<b>BES05N0</b> BES M18MH2-GNX80F-S04G-EXC		<b>BES05M5</b> BES M30EG2-PSC10B-BV02-EXF	<b>BES05L4</b> BES M30MF2-PSC10B-BV02-EXD
Ø 18 x 75 mm	Ø 18 x 75 mm	Ø 18 x 75 mm		Ø 30 x 59 mm	Ø 30 x 62 mm
M18x1	M18x1	M18x1		M30x1.5	M30x1.5
non-flush	non-flush	non-flush		for flush mounting	for flush mounting
8 mm	8 mm	8 mm		10 mm	10 mm
—	—	—		180 Hz	300 Hz
Stainless steel	Stainless steel	Brass		Stainless steel	Brass
—	—	nickel plated		—	nickel plated
PEEK	PTFE	PA		Stainless steel	PA
Cable, FEP	Cable, FEP	Connector, M12x1 connector, 4-pin		Cable, PUR	Cable, PUR
7.7...9 VDC	7.7...9 VDC	7.7...9 VDC		10...30 VDC	18...27 VDC
-20...60 °C, depending on Ex category	-20...60 °C, depending on Ex category	-20...60 °C, depending on Ex category		-20...60 °C	-20...60 °C
—	—	—		—	—
ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)		ATEX: 3G (EPL Gc) ATEX: 3D (EPL Dc) IECEX: EPL Gc IECEX: EPL Dc	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)
IP68	IP68	IP67		IP67	IP67
CE, EAC, IECEx, ATEX	CE, EAC, IECEx, ATEX	CE, EAC, IECEx, ATEX		CE, EAC, IECEx, ATEX	CE, EAC, IECEx, ATEX
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NAMUR		<b>BES05NK</b> BES M30MH2-GNX10B-BT02-EXA	<b>BES05NT</b> BES M30MH2-GNX10B-BT02-EXB	
PNP normally open	<b>BES05LA</b> BES M30MF2-PSC10B-BV02-EXE			
Dimension	Ø 30 x 62 mm	Ø 30 x 68 mm	Ø 30 x 68 mm	
Style	M30x1.5	M30x1.5	M30x1.5	
Installation	for flush mounting	for flush mounting	for flush mounting	
Range	10 mm	10 mm	10 mm	
Switching frequency	300 Hz	—	—	
Housing material	Brass	Stainless steel	Stainless steel	
Surface protection	nickel plated	—	—	
Material sensing surface	PA	PEEK	PTFE	
Connection	Cable, PUR	Cable, FEP	Cable, FEP	
Operating voltage U <sub>b</sub>	10...30 VDC	7.7...9 VDC	7.7...9 VDC	
Ambient temperature	-20...60 °C	-20...60 °C, depending on Ex category	-20...60 °C, depending on Ex category	
Pressure rating max.	—	—	—	
Ex category	ATEX: 3G (EPL Gc) ATEX: 3D (EPL Dc) IECEX: EPL Gc IECEX: EPL Dc	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	
Protection degree	IP67	IP68	IP68	
Approval/Conformity	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	
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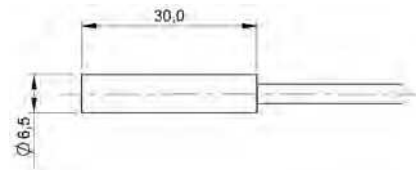
BES05N1 BES M30MH2-GNX10B-S04G-EXC	BES02ZY BES M30ME1-GNX15B-S04G-EEEX			BES05NL BES M30MH2-GNX15F-BT02-EXA
		BES05L5 BES M30MF2-PSC15F-BV02-EXD	BES05LC BES M30MF2-PSC15F-BV02-EXE	
Ø 30 x 68 mm	Ø 30 x 50 mm	Ø 30 x 74 mm	Ø 30 x 74 mm	Ø 30 x 77 mm
M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5
for flush mounting	for flush mounting	non-flush	non-flush	non-flush
10 mm	15 mm	12 mm	12 mm	15 mm
—	100 Hz	300 Hz	300 Hz	—
Brass	Brass	Brass	Brass	Stainless steel
nickel plated	Nickel-free coated	nickel plated	nickel plated	—
PA	PBT	PA POM	PA POM	PEEK
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Cable, PUR	Cable, PUR	Cable, FEP
7.7...9 VDC	7.7...9 VDC	18...27 VDC	10...30 VDC	7.7...9 VDC
-20...60 °C, depending on Ex category	-20...70 °C	-20...60 °C	-20...60 °C	-20...60 °C, depending on Ex category
—	—	—	—	—
ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 3G (EPL Gc) ATEX: 3D (EPL Dc) IECEX: EPL Gc IECEX: EPL Dc	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)
IP67	IP67	IP67	IP67	IP68
CE, EAC, IECEx, ATEX	CE, EAC, cCSAus, FM	CE, EAC, IECEx, ATEX	CE, EAC, IECEx, ATEX	CE, EAC, IECEx, ATEX
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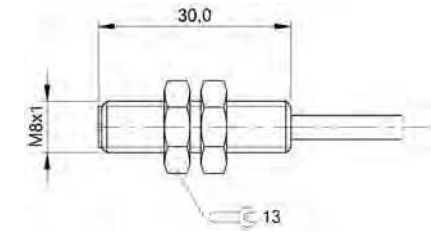
NAMUR	<b>BES05NU</b> BES M30MH2-GNX15F-BT02-EXB	<b>BES05N2</b> BES M30MH2-GNX15F-S04G-EXC	<b>BES02ZZ</b> BES Q40KFU-GNX20B-S92G-EEEX	
Dimension	Ø 30 x 77 mm	Ø 30 x 77 mm	40 x 40 x 66 mm	
Style	M30x1.5	M30x1.5	block style	
Installation	non-flush	non-flush	for flush mounting	
Range	15 mm	15 mm	20 mm	
Switching frequency	—	—	200 Hz	
Housing material	Stainless steel	Brass	PPE PPS	
Surface protection	—	nickel plated	—	
Material sensing surface	PTFE	PA	PPE	
Connection	Cable, FEP	Connector, M12x1-Male, connector, 4-pin	Connector, M12x1-Male, connector, 5-pin	
Operating voltage U <sub>b</sub>	7.7...9 VDC	7.7...9 VDC	7.7...9 VDC	
Ambient temperature	-20...60 °C, depending on Ex category	-20...60 °C, depending on Ex category	-20...70 °C	
Pressure rating max.	—	—	—	
Ex category	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)	ATEX: 2G (EPL Gb) ATEX: 1D (EPL Da)	
Protection degree	IP68	IP67	IP67	
Approval/Conformity	CE, EAC, IECEx, ATEX	CE, EAC, IECEx, ATEX	CE, EAC, cCSAus, FM	
Productview	Page 252	Page 252	Page 252	



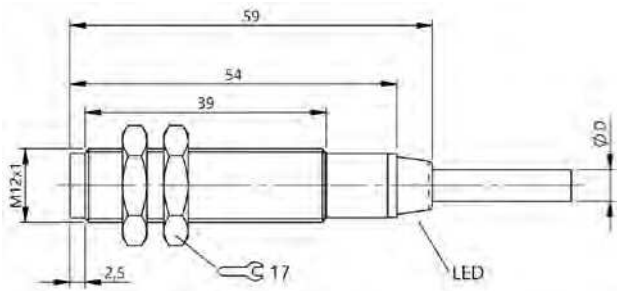
	<b>BES0300</b> BES Q40KFU-GNX35F-S92G-EEEX				
	40 x 40 x 66 mm				
	block style				
	non-flush				
	35 mm				
	100 Hz				
	PPE PPS				
	—				
	PPE				
	Connector, M12x1-Male, connector, 5-pin				
	7.7...9 VDC				
	-20...70 °C				
	—				
	ATEX: 2G (EPL Gb) ATEX: 1D (EPL Da)				
	IP67				
	CE, EAC, cCSAus, FM				
	Page 252				



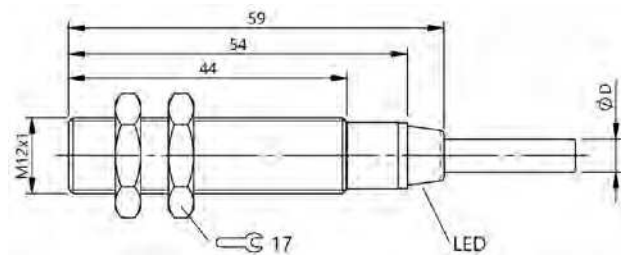
BES02ZR



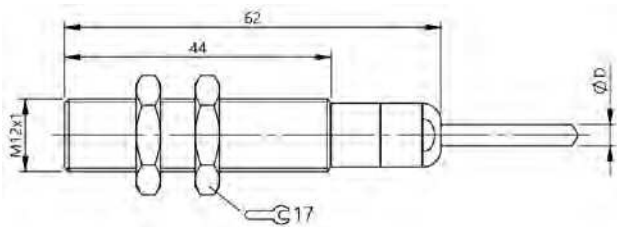
BES02ZT



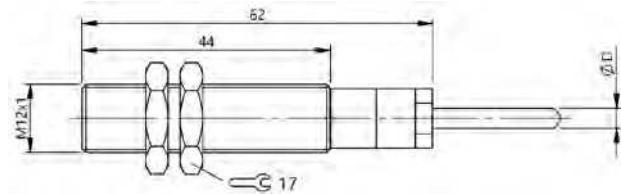
BES05M3



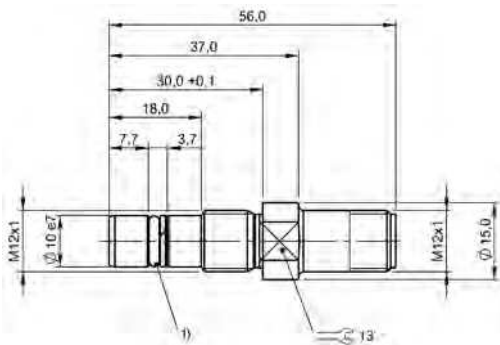
BES05L6



BES05NE

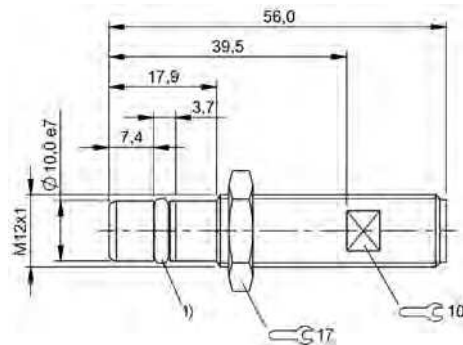


BES05NM



1) O-Ring with thrust ring

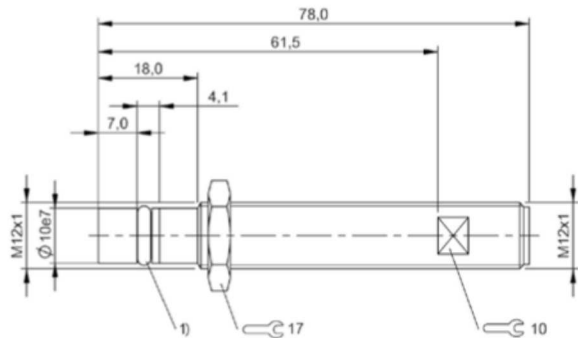
BHS004L



1) O-Ring with thrust ring

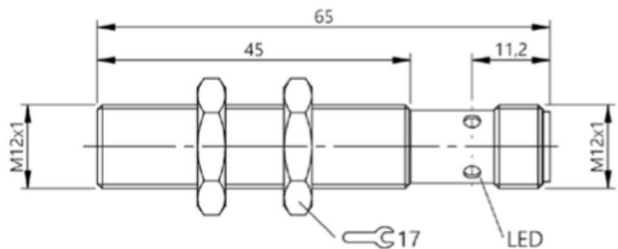
BHS002W, BHS0034, BHS004K



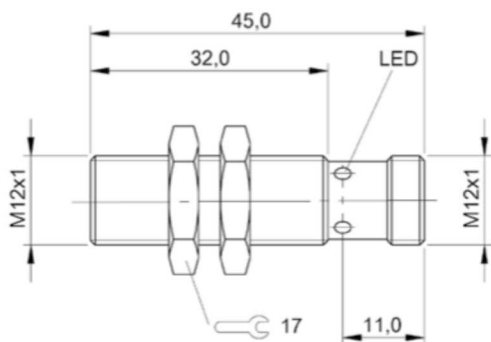


1) O-Ring with thrust ring

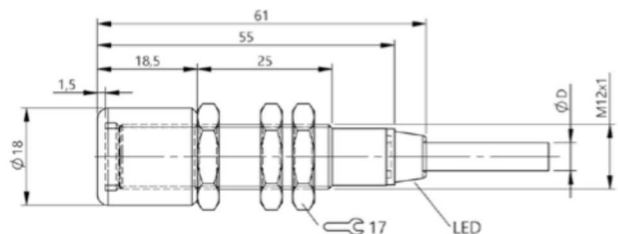
**BES005P**



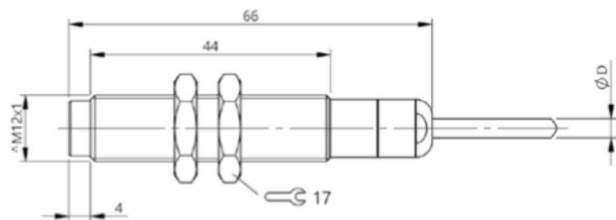
**BES05MW**



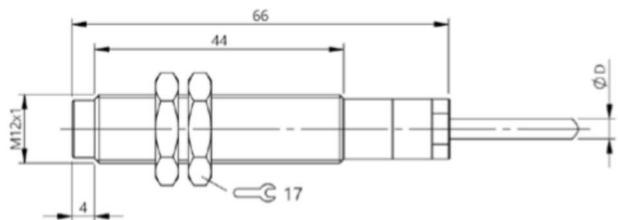
**BES02ZU**



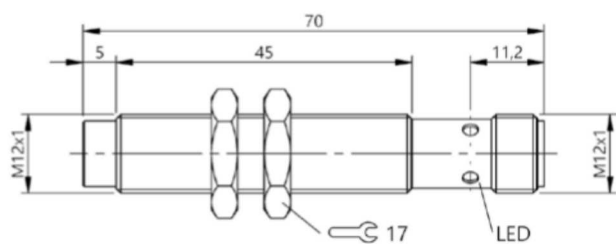
**BES05L7**



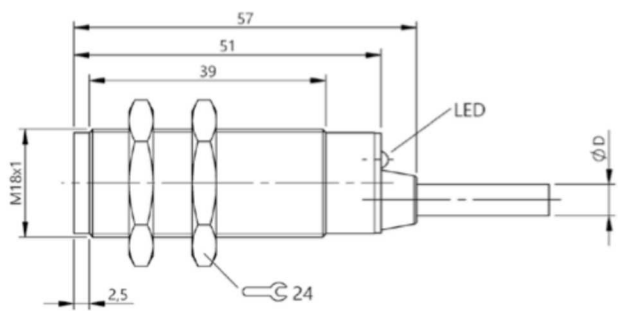
**BES05NF**



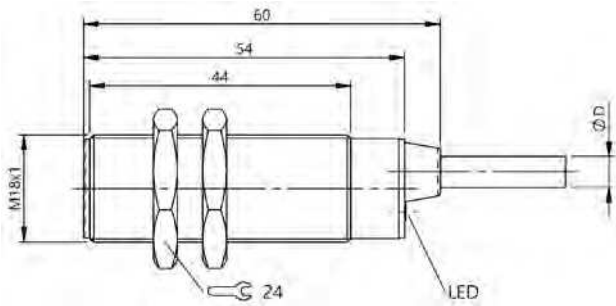
**BES05NN**



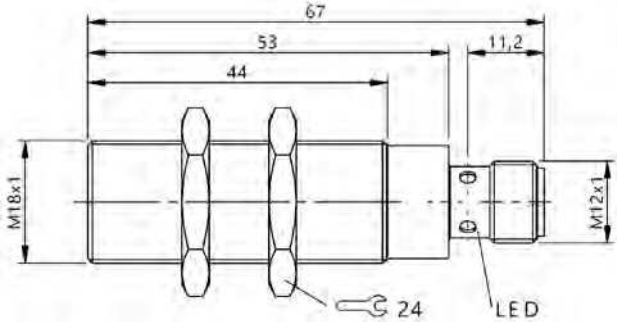
**BES05MY**



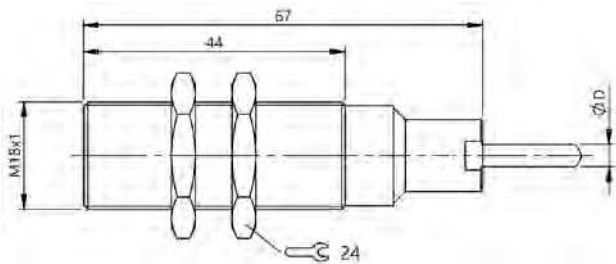
**BES05M4**



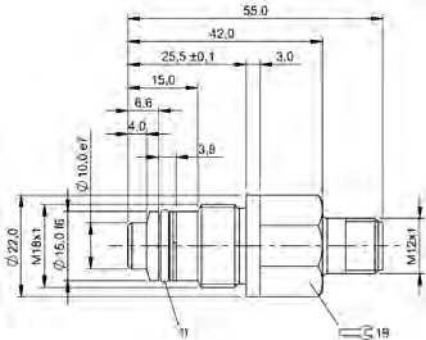
BES05L2, BES05L8



BES05NH, BES05MZ

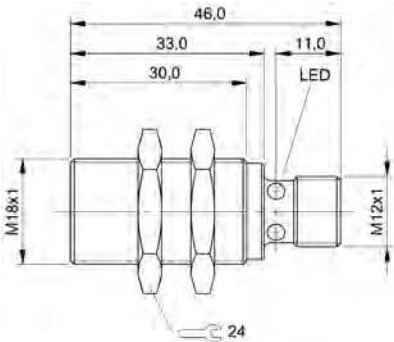


BES05NP

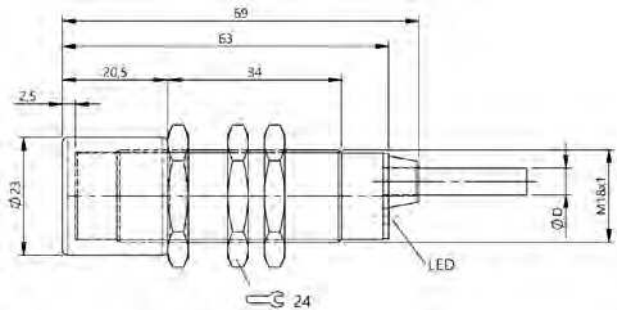


1) O-Ring with thrust ring

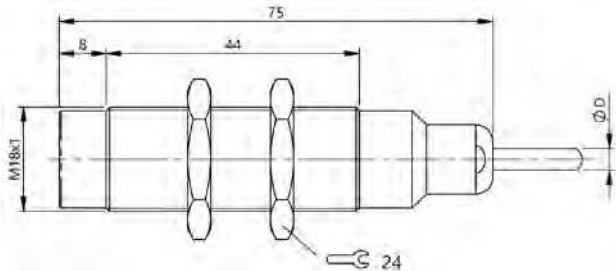
BHS004H



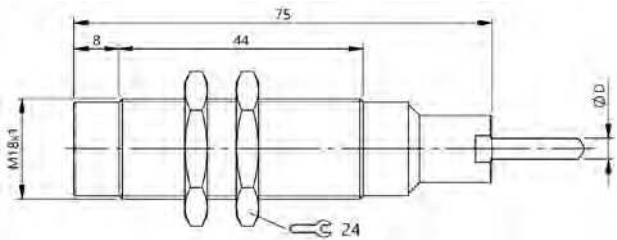
BES02ZW



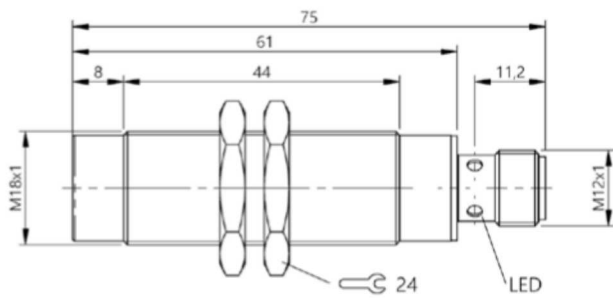
BES05L3, BES05L9



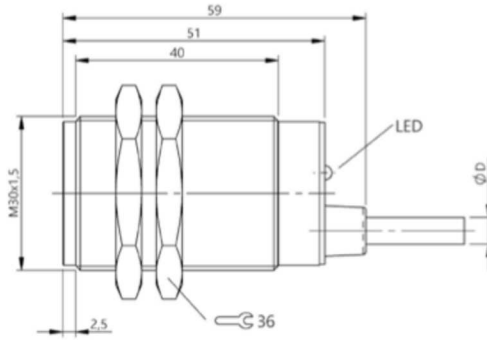
BES05NJ



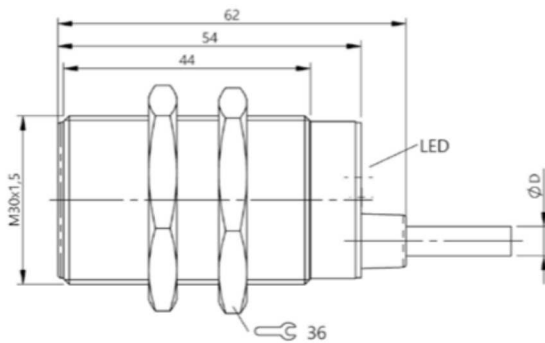
BES05NR



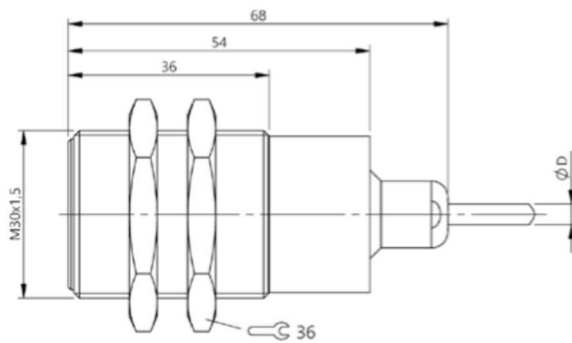
BES05N0



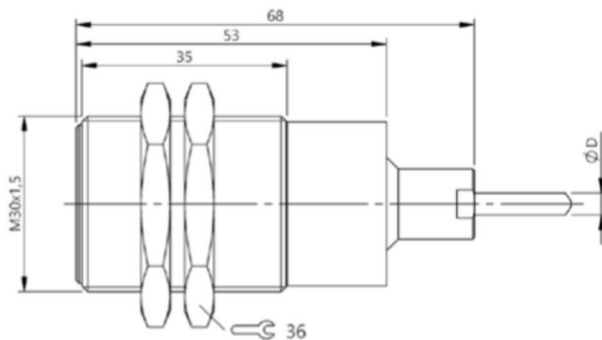
BES05M5



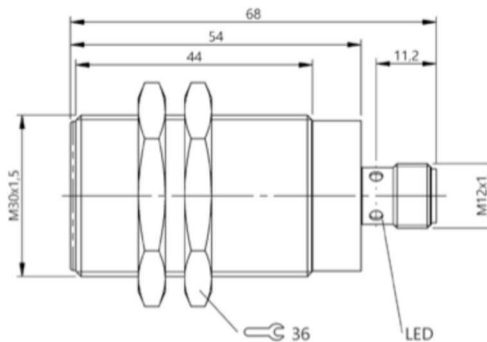
BES05L4, BES05LA



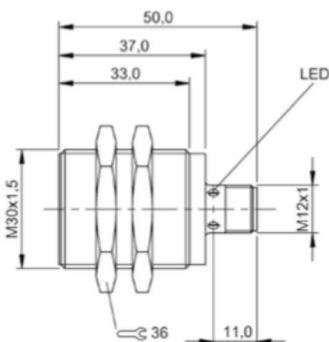
BES05NK



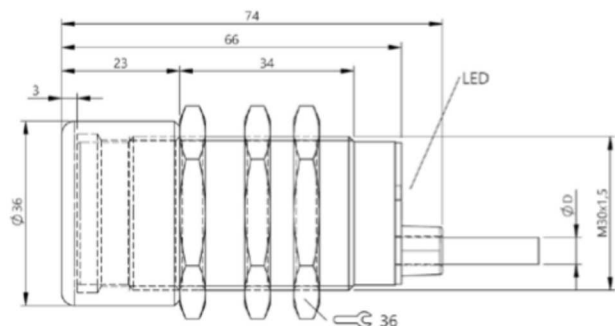
BES05NT



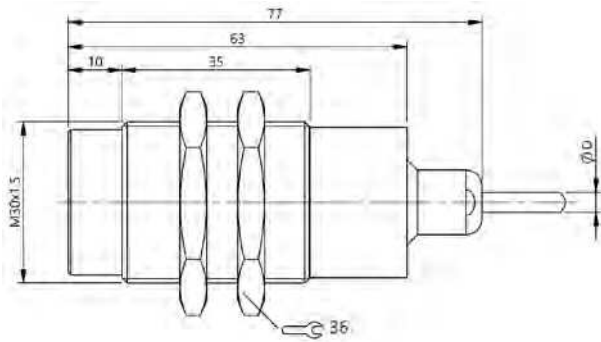
BES05N1



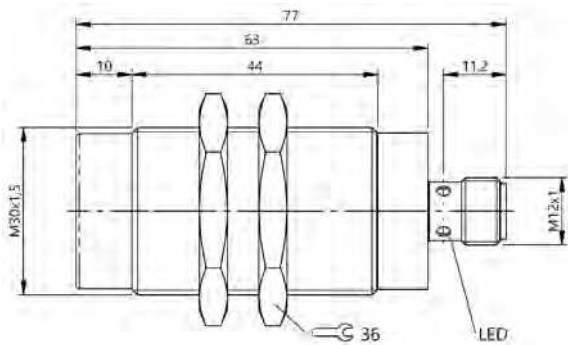
BES02ZY



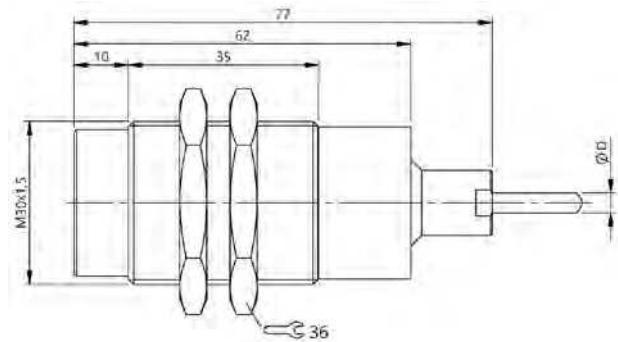
BES05L5, BES05LC



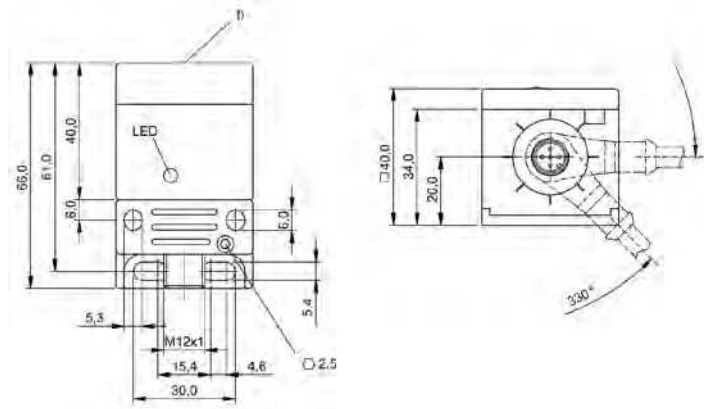
BES05NL



BES05N2



BES05NU



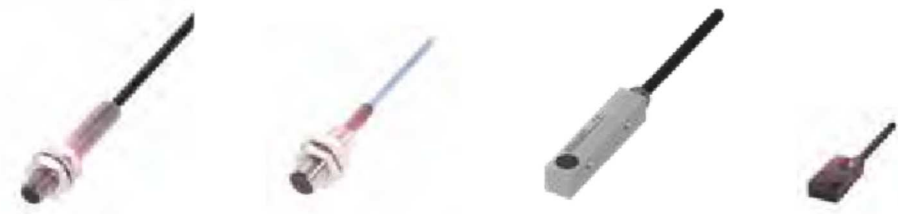
1) Sensing surface

BES02ZZ, BES0300

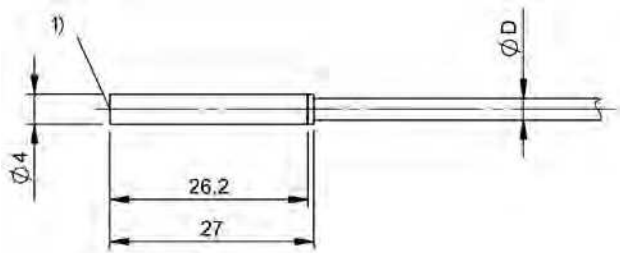




	<b>BES050N</b> BES G04ED-GNX08B-EP02	<b>BES02L6</b> BES 516-3005-F0-N-03	<b>BES050P</b> BES M05ED-GNX08B-EP02	
Dimension	Ø 4 x 27 mm	Ø 5 x 24.5 mm	Ø 5 x 27 mm	
Style	D4.0	M5x0.5	M5x0.5	
Installation	flush	flush	flush	
Range	0.8 mm	0.8 mm	0.8 mm	
Interface	NAMUR	NAMUR	NAMUR	
Switching frequency	2500 Hz	2000 Hz	2500 Hz	
Housing material	Stainless steel	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	PBT	
Connection	Cable, 2.00 m, PUR	Cable, 3.00 m, PVC	Cable, 2.00 m, PUR	
Operating voltage U <sub>b</sub>	7.7...9 VDC	7.7...9 VDC	7.7...9 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, EAC, WEEE	CE, cULus, EAC, WEEE	
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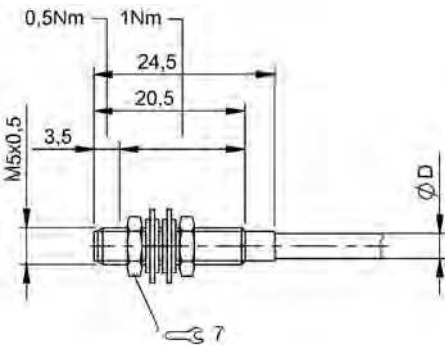


	<b>BES02LA</b> BES 516-324-E0-N-03	<b>BES02LE</b> BES 516-325-E3-N-PU-05	<b>BES0568</b> BES Q08ZC-GNX15B-EP02	<b>BES03M5</b> BES R04KC-GNX15B-EP02	
	Ø 8 x 45.5 mm	Ø 12 x 30 mm	40 x 8 x 8 mm	16 x 8 x 4 mm	
	M8x1	M12x1	8x8	16x8x4.7	
	flush	flush	flush	flush	
	1.2 mm	2 mm	1.5 mm	1.5 mm	
	NAMUR	NAMUR	NAMUR	NAMUR	
	2000 Hz	1000 Hz	5000 Hz	8000 Hz	
	Stainless steel	Brass, nickel plated	Zinc, Die casting, coated	PA 6, GF30	
	PBT	PA 12	PBT	PA 6	
	Cable, 3.00 m, PVC	Cable, 5.00 m, PUR	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	
	7.7...9 VDC	7.7...9 VDC	7.7...9 VDC	7.7...9 VDC	
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C	
	IP67	IP67	IP67	IP67	
	CE, EAC, WEEE	CE, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
	Page 256	Page 256	Page 256	Page 256	

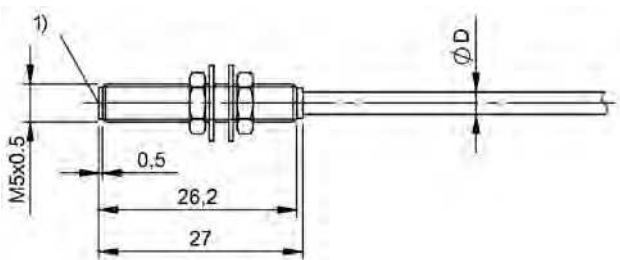


1) Sensing surface

**BES050N**

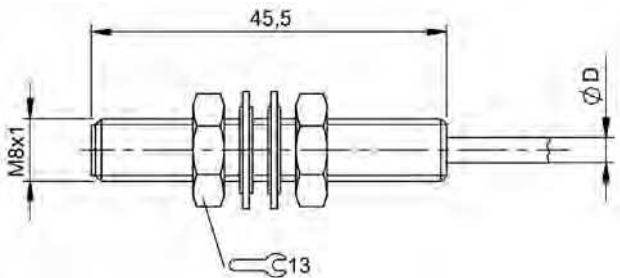


**BES02L6**

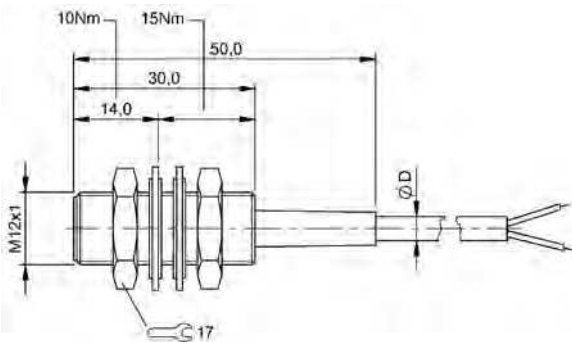


1) Sensing surface

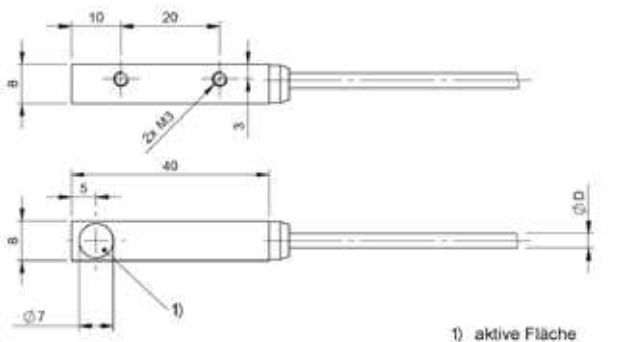
**BES050P**



**BES02LA**

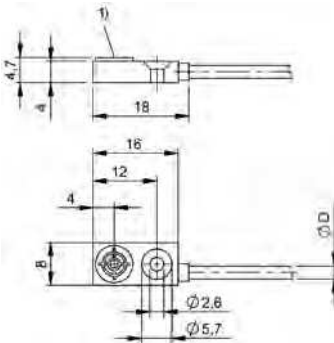


**BES02LE**



1) Sensing surface

**BES0568**



1) Sensing surface

**BES03M5**



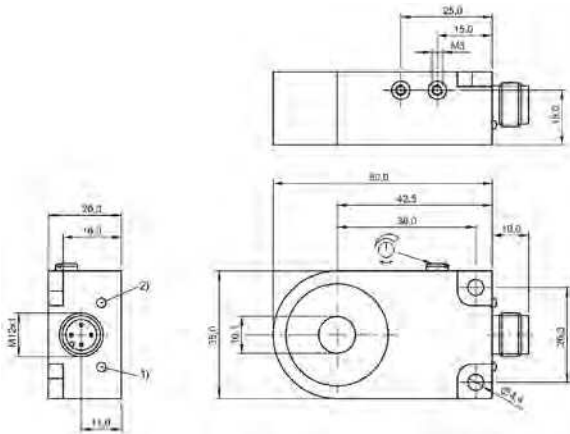




PNP normally open	<b>BES03JA</b> BES IKVS-010.23-G-S4	<b>BES03JC</b> BES IKVS-015.23-G-S4	
Dimension	60 x 35 x 20 mm	60 x 35 x 20 mm	
Style	block style	block style	
Pass-through	10.1 mm	15.1 mm	
Target size min.	Ball D = 2 mm	Ball D = 3 mm	
Range	—	—	
Switching frequency	16 Hz	16 Hz	
Housing material	Plastic	Plastic	
Material sensing surface	Plastic	Plastic	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage Ub	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP65	IP65	
Approval/Conformity	CE, EAC	CE, EAC	
Productview	Page 260	Page 260	

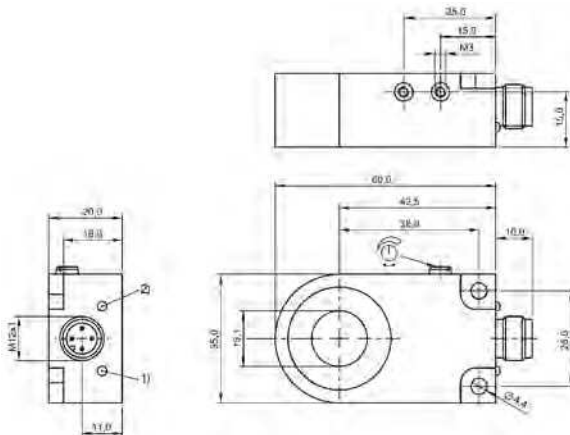


	<b>BES03JH</b> BES IKVS-025.23-G-S4	<b>BES0429</b> BES Z06K-PSC16F-BP00,1-GS04	<b>BES0428</b> BES Z06K-PSC16F-S49G	
	60 x 35 x 20 mm	78.5 x 17 x 11.9 mm	78.5 x 17 x 11.9 mm	
	block style	block style	block style	
	25.1 mm	—	—	
	Ball D = 4 mm	M3x5 screw	M3x5 screw	
	—	16 mm	16 mm	
	16 Hz	10 Hz	10 Hz	
	Plastic	PA 6.6	PA 6.6	
	Plastic	—	—	
	Connector, M12x1 connector, 4-pin	Cable with connector, M12x1 connector, 4-pin, 0.10 m, PUR	Connector, M8x1 connector, 3-pin	
	10...30 VDC	10...30 VDC	10...30 VDC	
	-25...70 °C	-25...70 °C	-25...70 °C	
	IP65	IP67	IP67	
	CE, EAC	CE, EAC	CE, EAC	
	Page 260	Page 261	Page 261	



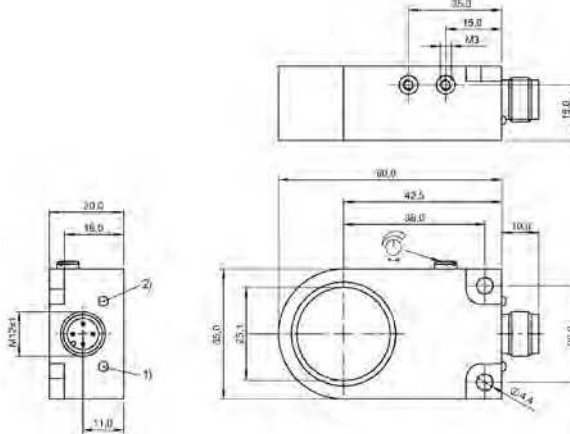
1) LED function indicator, 2) LED operating voltage

**BES03JA**



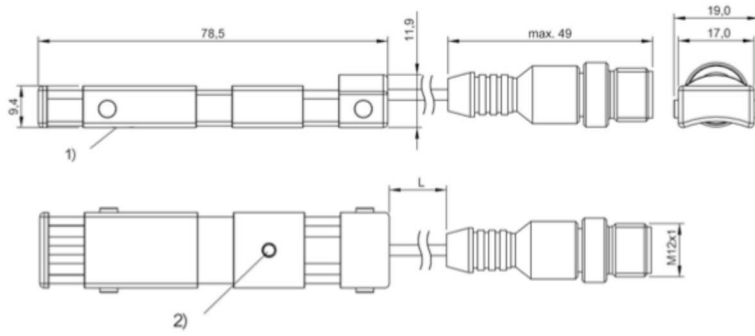
1) LED function indicator, 2) LED operating voltage

**BES03JC**



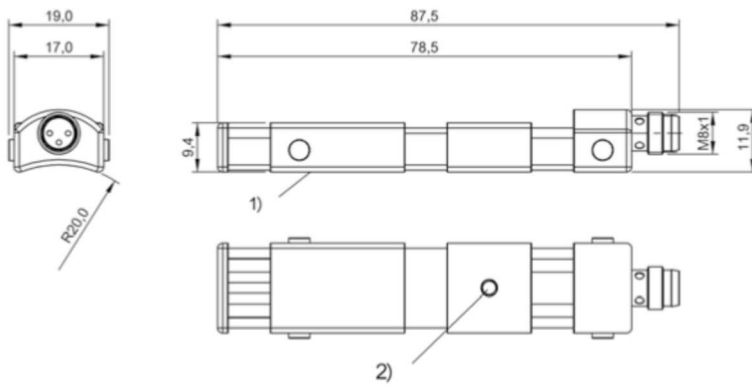
1) LED function indicator, 2) LED operating voltage

**BES03JH**



1) Sensing surface, 2) LED yellow

**BES0429**



**BES0428**



	<b>BAW000J</b> BAW G06EE-UAF20B-EP03-K	<b>BAW000T</b> BAW M08EI-UAD15B-BP03	
Dimension	Ø 6.5 x 30.5 mm	Ø 8 x 51.5 mm	
Style	D6.5	M8x1	
Installation	flush	flush	
Range	0.5...2 mm	0.5...1.5 mm	
Interface	—	—	
Analog output	Analog, voltage 0...10 V Analog, temperature	Analog, voltage 0...10 V	
Output characteristic	falling on approach	falling on approach	
Limit frequency -3 dB	1000 Hz	1000 Hz	
Switching output	—	—	
Switching frequency	—	—	
Repeat accuracy per BWN	±10 µm	±8 µm	
Non-linearity max.	±45 µm	±30 µm	
Housing material	Stainless steel	Stainless steel	
Material sensing surface	PBT	PBT	
Connection	Cable, 3.00 m, PUR	Cable, 3.00 m, PUR	
Operating voltage U <sub>b</sub>	21.6...26.4 VDC	15...30 VDC	
Ambient temperature	10...60 °C	-10...70 °C	
Pressure rating max.	—	—	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
Productview	Page 270	Page 270	



BAW0040 BAW Z08E0-UAD20B-S04G-H11	BAW004K BAW M12ME-UAC35C-S04G	BAW006A BAW M12MF-IAC35C-S04G	BAW0069 BAW M12MF-ICC35C-S04G
Ø 12 x 78 mm	Ø 12 x 45 mm	Ø 12 x 45 mm	Ø 12 x 45 mm
M12x1	M12x1	M12x1	M12x1
flush	flush	flush	flush
0.5...2 mm	0.2...3.5 mm	0.2...3.5 mm	0.2...3.5 mm
—	—	—	—
Analog, voltage 0...10 V	Analog, voltage 0...10 V	Analog, current 0...20 mA	Analog, current 4...20 mA
falling on approach	falling on approach	falling on approach	falling on approach
1000 Hz	1000 Hz	1000 Hz	1000 Hz
—	—	—	—
—	—	—	—
±8 µm	±7 µm	±7 µm	±7 µm
±45 µm	±35 µm	±53 µm	±53 µm
Stainless steel	Brass, Nickel-free coated	Brass, Nickel-free coated	Brass, Nickel-free coated
Ceramic	PBT	PBT	PBT
Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin
15...30 VDC	15...30 VDC	16...30 VDC	16...30 VDC
-25...85 °C	-40...80 °C	-40...80 °C	-40...80 °C
500 bar	—	—	—
IP68	IP67	IP67	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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	<b>BAW004M</b> BAW M12MI-BLC35C-S04G	<b>BAW004H</b> BAW M12ME-UAC70G-S04G	
Dimension	Ø 12 x 65 mm	Ø 12 x 50 mm	
Style	M12x1	M12x1	
Installation	flush	non-flush	
Range	0.2...3.5 mm	0.2...7 mm	
Interface	IO-Link 1.1 12 bits	—	
Analog output	—	Analog, voltage 0...10 V	
Output characteristic	falling on approach	falling on approach	
Limit frequency –3 dB	1000 Hz	1000 Hz	
Switching output	—	—	
Switching frequency	—	—	
Repeat accuracy per BWN	±7 µm	±7 µm	
Non-linearity max.	±35 µm	±70 µm	
Housing material	Brass, Nickel-free coated	Brass, Nickel-free coated	
Material sensing surface	PBT	LCP	
Connection	Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 4-pin	
Operating voltage U <sub>B</sub>	18...30 VDC	15...30 VDC	
Ambient temperature	-40...80 °C	-40...80 °C	
Pressure rating max.	—	—	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
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BAW0056 BAW M12MH-BLC70G-S04G	BAW0011 BAW M12ME-UAD50B-BP01	BAW001T BAW M18ME-ICC50B-BP03	BAW0026 BAW M18ME-UAE50B-S04G-K
Ø 12 x 65 mm	Ø 12 x 30 mm	Ø 18 x 36 mm	Ø 18 x 44.5 mm
M12x1	M12x1	M18x1	M18x1
non-flush	quasi-flush	flush	flush
0.2...7 mm	1...5 mm	1...5 mm	1...5 mm
IO-Link 1.1 12 bits	—	—	—
—	Analog, voltage 0...10 V Analog, temperature	Analog, current 4...20 mA	Analog, voltage 0...10 V Analog, temperature
falling on approach	falling on approach	falling on approach	falling on approach
1000 Hz	1000 Hz	500 Hz	500 Hz
—	—	—	—
—	—	—	—
±14 µm	±10 µm	±8 µm	±8 µm
±70 µm	±160 µm	±120 µm	±120 µm
Brass, Nickel-free coated	Brass, nickel plated	Brass, nickel plated	Brass, nickel plated
LCP	PA 12	PBT	PBT
Connector, M12x1-Male, 4-pin	Cable, 1.00 m, PUR	Cable, 3.00 m, PUR	Connector, M12x1-Male, 4-pin
18...30 VDC	15...30 VDC	15...30 VDC	21.6...26.4 VDC
-40...80 °C	0...60 °C	-10...70 °C	-10...70 °C
—	—	—	—
IP67	IP67	IP67	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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	<b>BAW002F</b> BAW M18MI-BLC50B-S04G	<b>BAW002H</b> BAW M18MI-IAC50B-S04G	
Dimension	Ø 18 x 65 mm	Ø 18 x 65 mm	
Style	M18x1	M18x1	
Installation	flush	flush	
Range	1...5 mm	1...5 mm	
Interface	IO-Link 1.1 10 bit	—	
Analog output	—	Analog, current 0...20 mA	
Output characteristic	falling on approach	falling on approach	
Limit frequency –3 dB	500 Hz	500 Hz	
Switching output	—	—	
Switching frequency	—	—	
Repeat accuracy per BWN	±10 µm	±8 µm	
Non-linearity max.	±120 µm	±120 µm	
Housing material	Brass, nickel plated	Brass, nickel plated	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin	
Operating voltage U <sub>B</sub>	18...30 VDC	10...30 VDC	
Ambient temperature	-10...70 °C	-10...70 °C	
Pressure rating max.	—	—	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
Productview	Page 271	Page 271	



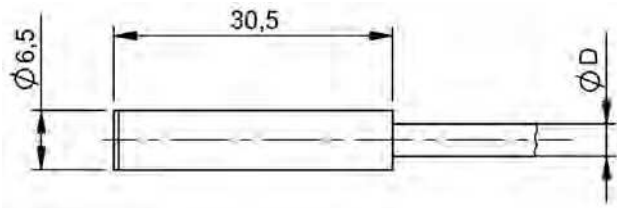
BAW0029 BAW M18MG-UAC16F-S04G-K	BAW005Y BAW M30EE-ICD10B-S04G-L01	BAW002W BAW M30ME-UAC10B-S04G	BAW002Y BAW M30ME-UAC15F-S04G
Ø 18 x 65 mm	Ø 30 x 44.5 mm	Ø 30 x 44.5 mm	Ø 30 x 57 mm
M18x1	M30x1.5	M30x1.5	M30x1.5
non-flush	flush	flush	non-flush
4...16 mm	2...10 mm	2...10 mm	3...15 mm
—	—	—	—
Analog, voltage 0...10 V Analog, temperature	Analog, current 4...20 mA	Analog, voltage 0...10 V	Analog, voltage 0...10 V
falling on approach	falling on approach	falling on approach	falling on approach
500 Hz	500 Hz	500 Hz	350 Hz
—	—	—	—
—	—	—	—
±200 µm	±10 µm	±10 µm	±12 µm
±360 µm	±300 µm	±240 µm	±360 µm
Brass, nickel plated	Stainless steel	Brass, nickel plated	Brass, nickel plated
PBT	PEEK	PBT	PBT
Connector, M12x1-Male, 4-pin	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin
15...30 VDC	15...30 VDC	15...30 VDC	15...30 VDC
10...60 °C	-10...70 °C	-10...70 °C	-10...70 °C
—	—	—	—
IP67	IP68	IP67	IP67
CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE
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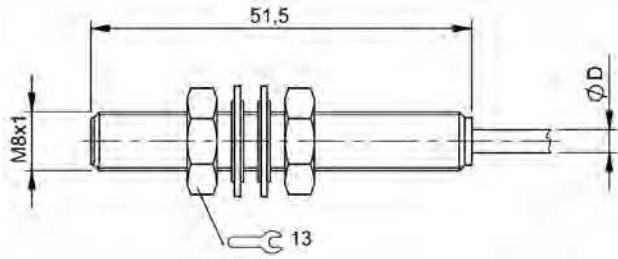
	<b>BAW005Z</b> BAW R03KC-UAA40B-BP03-505	<b>BAW003E</b> BAW Z01AC-UAD50B-DP03-K	
Dimension	10 x 6 x 30 mm	38.5 x 14 x 17 mm	
Style	block style	block style	
Installation	flush	non-flush	
Range	1...4 mm	1...5 mm	
Interface	—	—	
Analog output	Analog, voltage 0...10 V	Analog, voltage 0...10 V Analog, temperature	
Output characteristic	falling on approach	falling on approach	
Limit frequency –3 dB	1000 Hz	1000 Hz	
Switching output	—	—	
Switching frequency	—	—	
Repeat accuracy per BWN	±35 µm	±10 µm	
Non-linearity max.	±150 µm	±120 µm	
Housing material	PA 6, GF30	Aluminum, Anodized	
Material sensing surface	PA 6, GF30	PA 12	
Connection	Cable, 3.00 m, PUR	Cable, 3.00 m, PUR	
Operating voltage U <sub>b</sub>	21.6...26.4 VDC	15...30 VDC	
Ambient temperature	0...70 °C	-10...60 °C	
Pressure rating max.	—	—	
IP rating	IP67	IP67	
Approval/Conformity	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE	
Productview	Page 272	Page 272	



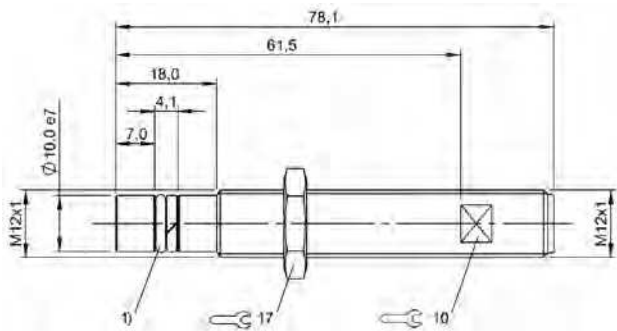
	<b>BAW003W</b> BAW Z05AC-BLD50B-BP00,75-GS04	<b>BAW0034</b> BAW R06AC-UAF20B-S49G		
	30 x 38.5 x 16.5 mm	30 x 20 x 8 mm		
	block style	block style		
	non-flush	flush		
	1...5 mm	0.5...2 mm		
	IO-Link 1.1 10 bit	—		
	—	Analog, voltage 0...10 V		
	falling on approach	falling on approach		
	200 Hz	1000 Hz		
	—	—		
	—	—		
	±12 µm	±12 µm		
	±150 µm	±45 µm		
	Aluminum, Anodized	Aluminum, Anodized		
	LCP	PBT		
	Cable with connector, M12x1-Male, 4-pin, 0.75 m, PUR	Connector, M8x1-Male, 3-pin		
	18...30 VDC	21.6...26.4 VDC		
	-10...60 °C	-10...70 °C		
	—	—		
	IP67	IP67		
	CE, cULus, EAC, WEEE	CE, cULus, EAC, WEEE		
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BAW000J

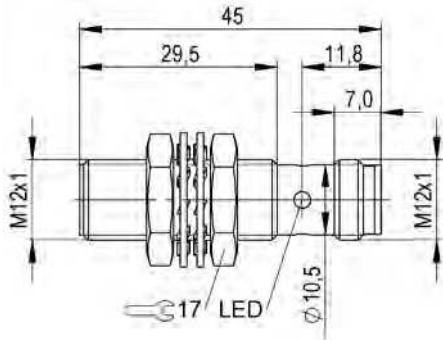


BAW000T

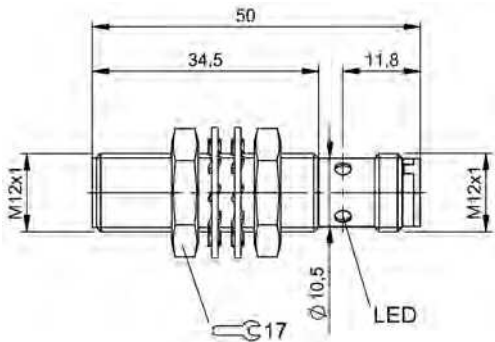


1) O-Ring with thrust ring

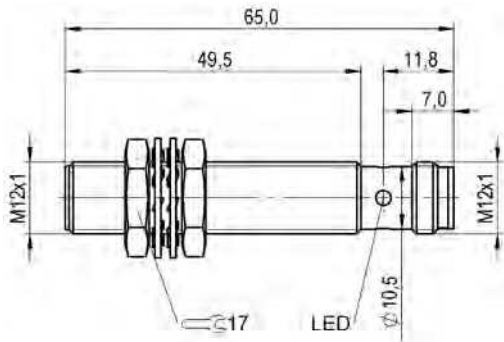
BAW0040



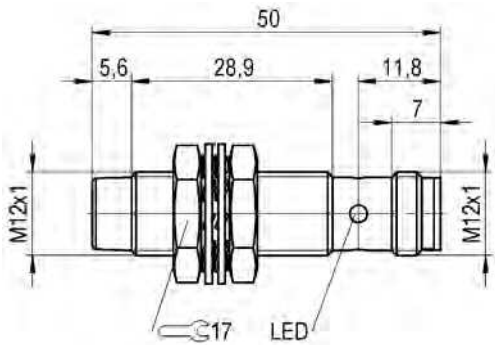
BAW004K



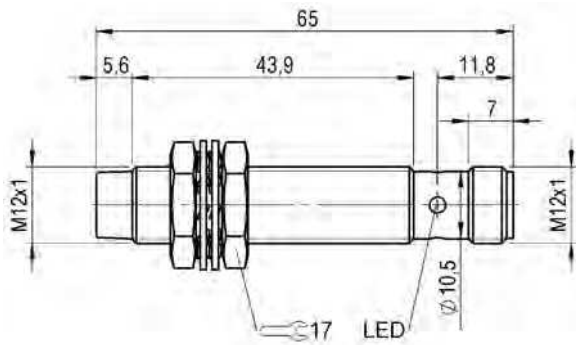
BAW006A, BAW0069



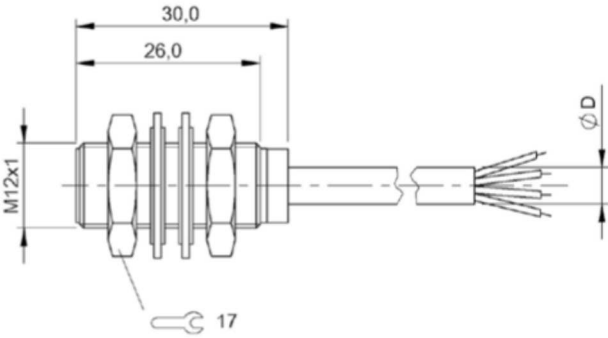
BAW004M



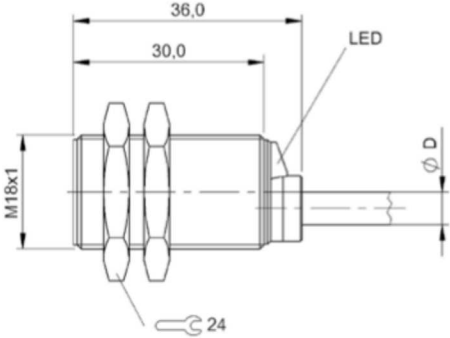
BAW004H



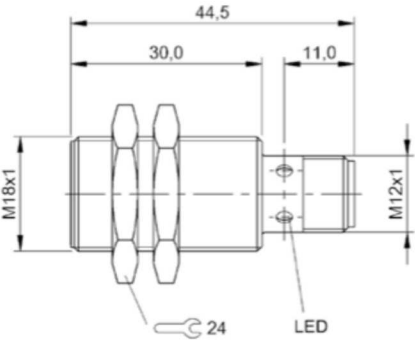
BAW0056



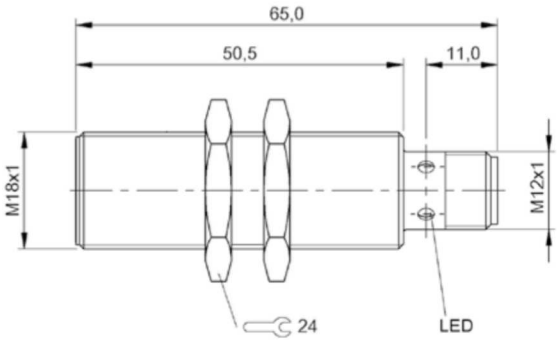
BAW0011



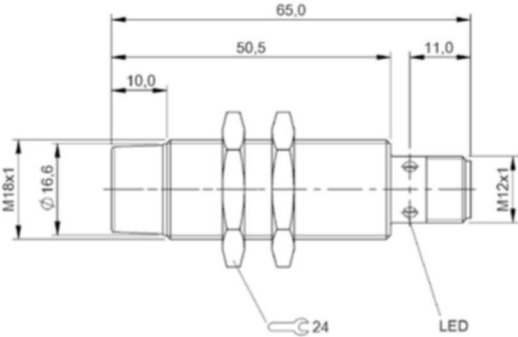
BAW001T



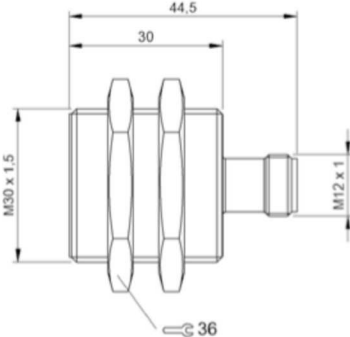
BAW0026



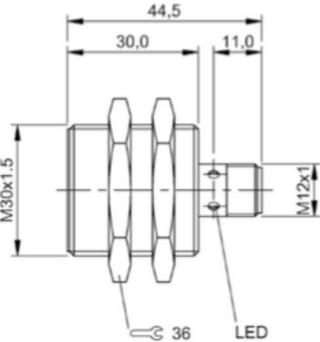
BAW002F, BAW002H



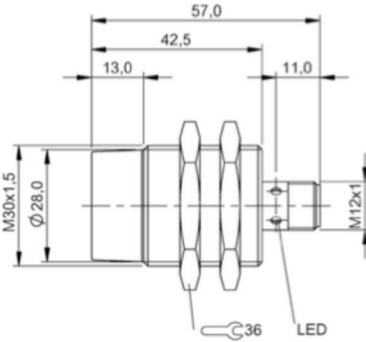
BAW0029



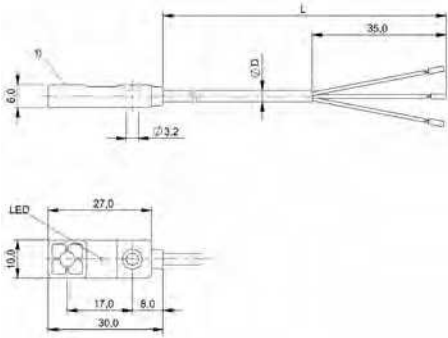
BAW005Y



BAW002W

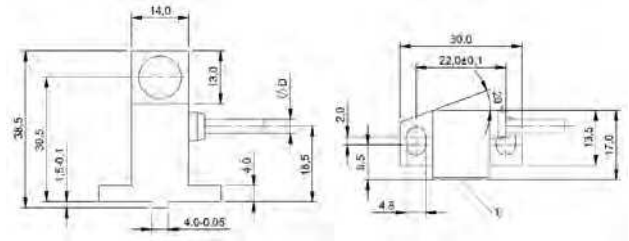


BAW002Y



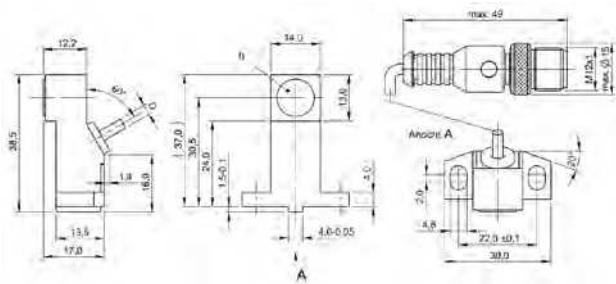
1) Sensing surface

**BAW005Z**



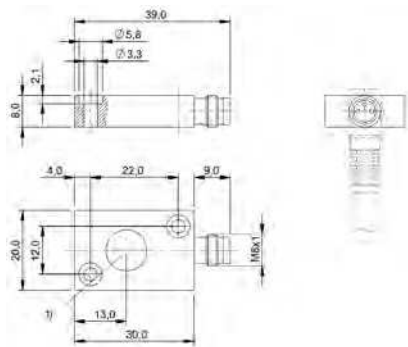
1) Sensing surface

**BAW003E**



1) Sensing surface

**BAW003W**



1) Sensing surface

**BAW0034**







	<b>BIP001U</b> BIP AD2-T017-01-EB02	<b>BIP001W</b> BIP CD2-T017-01-EB02	
Dimension	35 x 35 x 31 mm	—	
Style	block style	—	
Connection	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	
Cable shield	yes	yes	
Housing material	PA	PA	
Measuring range	0...17 mm	0...17 mm	
Interface	—	—	
Analog output	Analog, voltage 0...10 V	Analog, current 4...20 mA	
Output characteristic	Adjustable	Adjustable	
Repeat accuracy per BWN	±50 µm	±50 µm	
Non-linearity max.	±250 µm	±250 µm	
Operating voltage U <sub>B</sub>	15...30 VDC	15...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cURus, EAC, WEEE	CE, cURus, EAC, WEEE	
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	<b>BIP001Y</b> BIP LD2-T017-01-EP00,5-S4	<b>BIP001K</b> BIP AD2-T017-04-BP02	<b>BIP001L</b> BIP CD2-T017-04-BP02	<b>BIP001M</b> BIP LD2-T017-04-BP00,5-S4
	35 x 35 x 31 mm	30 x 18 x 40.5 mm	30 x 18 x 40.5 mm	30 x 18 x 40.5 mm
	block style	block style	block style	block style
	Cable with connector, M12x1-Male, 3-pin, 0.5 m, PUR	Cable, 2 m, PUR	Cable, 2 m, PUR	Cable with connector, M12x1 connector, 3-pin, 0.5 m, PUR
	no	yes	yes	yes
	PA	PA	PA	PA
	0...17 mm	0...17 mm	0...17 mm	0...17 mm
	IO-Link 1.1	—	—	IO-Link 1.1
	—	Analog, voltage 0...10 V	Analog, current 4...20 mA	—
	—	Adjustable	Adjustable	—
	±50 µm	±50 µm	±50 µm	±40 µm
	±250 µm	±250 µm	±250 µm	±250 µm
	18...30 VDC	15...30 VDC	15...30 VDC	18...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C, Temperature drift is between -10...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cURus, EAC, WEEE	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC
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	<b>BIP000L</b> BIP AD2-T030-02-S4	<b>BIP0002</b> BIP AD2-B040-02-S4	
Dimension	52 x 30 x 16 mm	70 x 30 x 16 mm	
Style	block style	block style	
Connection	Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin	
Cable shield	—	—	
Housing material	PA	PA	
Measuring range	0...30 mm	0...40 mm	
Interface	—	—	
Analog output	Analog, voltage 0...10 V	Analog, voltage 0...10 V	
Output characteristic	Adjustable	Adjustable	
Repeat accuracy per BWN	±100 µm	±100 µm	
Non-linearity max.	±500 µm	±500 µm	
Operating voltage U <sub>B</sub>	15...30 VDC	15...30 VDC	
Ambient temperature	-25...85 °C	-25...85 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cURus, EAC, WEEE	CE, cURus, EAC, WEEE	
Productview	Page 280	Page 280	



<b>BIP0005</b> BIP CD2-B040-02-S4	<b>BIP0004</b> BIP LD2-T040-02-S4	<b>BIP000M</b> BIP ED2-B048-03-S75	<b>BIP001J</b> BIP LD2-T048-03-S75
70 x 30 x 16 mm	70 x 30 x 16 mm	64 x 21 x 22 mm	64 x 21 x 22 mm
block style	block style	block style	block style
Connector, M12x1-Male, 3-pin	Connector, M12x1-Male, 3-pin	Connector, M8x1-Male, 4-pin	Connector, M8x1-Male, 4-pin
—	—	—	—
PA	PA	PBT	PBT
0...40 mm	0...40 mm	0...48 mm	0...48 mm
—	IO-Link 1.0	—	IO-Link 1.1
Analog, current 4...20 mA	—	Analog, voltage 0...10 V Analog, current 4...20 mA	—
Adjustable	—	Adjustable	—
±100 µm	±100 µm	±80 µm	±80 µm
±500 µm	±500 µm	±400 µm	±400 µm
15...30 VDC	18...30 VDC	16...30 VDC	18...30 VDC
-25...85 °C	-25...85 °C	-25...85 °C	-25...85 °C
IP67	IP67	IP67	IP67
CE, cURus, EAC, WEEE	CE, cURus, EAC, WEEE	CE, cURus, EAC, WEEE	CE, cURus, EAC, WEEE
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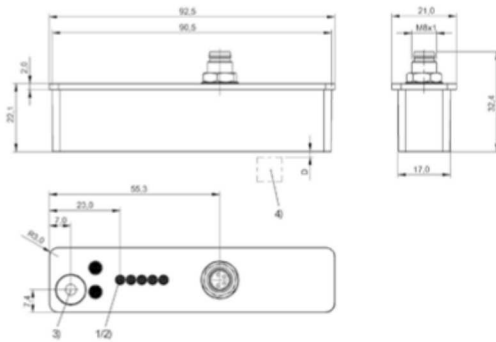
	<b>BIP000C</b> BIP ED2-B070-03-S75	<b>BIP001H</b> BIP LD2-T070-03-S75	
Dimension	92.5 x 21 x 22 mm	92.5 x 21 x 22 mm	
Style	block style	block style	
Connection	Connector, M8x1-Male, 4-pin	Connector, M8x1-Male, 4-pin	
Cable shield	—	—	
Housing material	PBT	PBT	
Measuring range	0...70 mm	0...70 mm	
Interface	—	IO-Link 1.1	
Analog output	Analog, voltage 0...10 V Analog, current 4...20 mA	—	
Output characteristic	Adjustable	—	
Repeat accuracy per BWN	±80 µm	±80 µm	
Non-linearity max.	±300 µm	±300 µm	
Operating voltage U <sub>B</sub>	16...30 VDC	18...30 VDC	
Ambient temperature	-25...85 °C	-25...85 °C	
IP rating	IP67	IP67	
Approval/Conformity	CE, cURus, EAC, WEEE	CE, cURus, EAC, WEEE	
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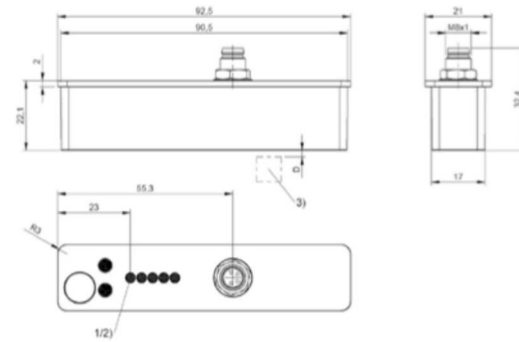
<b>BIP000E</b> BIP ED2-B103-03-S75	<b>BIP0014</b> BIP LD2-T103-03-S75	<b>BIP000R</b> BIP ED2-B133-03-S75	<b>BIP001F</b> BIP LD2-T133-03-S75
121 x 21 x 22 mm	121 x 21 x 22 mm	149.5 x 21 x 22 mm	149.5 x 21 x 22 mm
block style	block style	block style	block style
Connector, M8x1-Male, 4-pin	Connector, M8x1-Male, 4-pin	Connector, M8x1-Male, 4-pin	Connector, M8x1-Male, 4-pin
—	—	—	—
PBT	PBT	PBT	PBT
0...103 mm	0...103 mm	0...133 mm	0...133 mm
—	IO-Link 1.1	—	IO-Link 1.1
Analog, voltage 0...10 V Analog, current 4...20 mA	—	Analog, voltage 0...10 V Analog, current 4...20 mA	—
Adjustable	—	Adjustable	—
±80 µm	±80 µm	±80 µm	±80 µm
±300 µm	±300 µm	±400 µm	±400 µm
16...30 VDC	18...30 VDC	16...30 VDC	18...30 VDC
-25...85 °C	-25...85 °C	-25...85 °C	-25...85 °C
IP67	IP67	IP67	IP67
CE, cURus, EAC, WEEE	CE, cURus, EAC, WEEE	CE, cURus, EAC, WEEE	CE, cURus, EAC, WEEE
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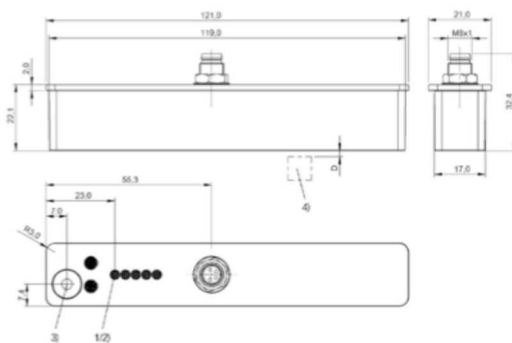




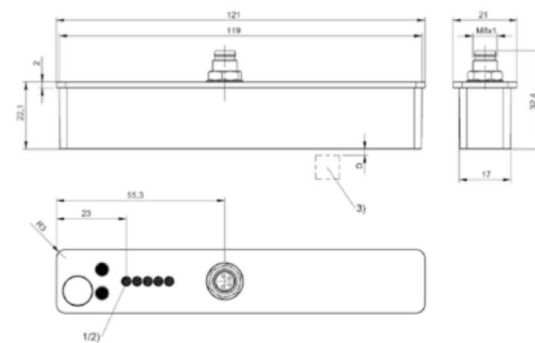
1) LED function indicator, 2) LED function indicator, 3) Teach-In button, 4) Encoder

**BIP000C**

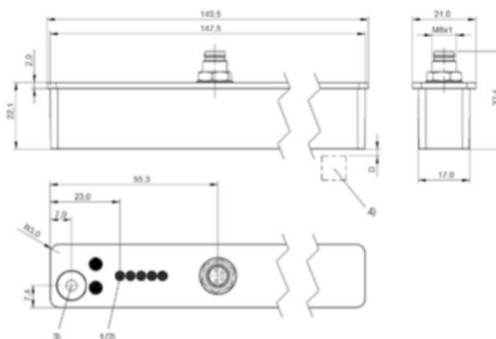
1) LED Power, 2) LED function indicator, 3) Encoder

**BIP001H**

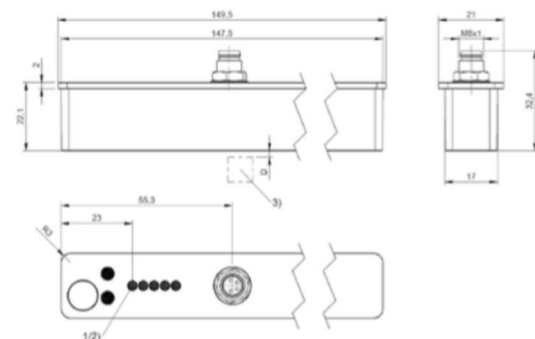
1) LED function indicator, 2) LED function indicator, 3) Teach-In button, 4) Encoder

**BIP000E**

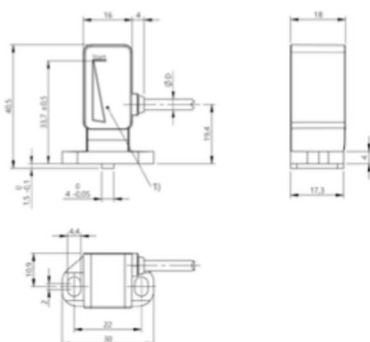
1) LED Power, 2) LED function indicator, 3) Encoder

**BIP0014**

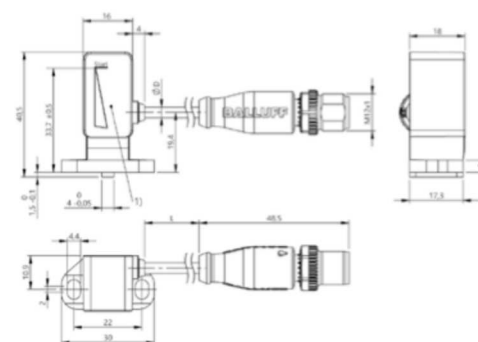
1) LED function indicator, 2) LED function indicator, 3) Teach-In button, 4) Encoder

**BIP000R**

1) LED Power, 2) LED function indicator, 3) Encoder

**BIP001F**

1) Sensing surface

**BIP001K, BIP001L**

1) Sensing surface

**BIP001M**



Features

- High resolution and repeatability
- Insensitive to shock, vibration and noise fields
- Absolute analog output signal rising or falling
- Guided sensor element
- 32 kHz sampling rate
- Potential-free
- Non-contact operating principle

	BIW1-A310 BIW1-A310-M____-P1-S115	
Analog output $U_A / I_A$	A (0...+10 V)	
Repeat accuracy	10 µm	
Sampling rate	typ. 32 kHz	
Non-linearity max.	≤ 0.02%	
Operating voltage	18...30 V DC	
Operating temperature	-20...+85 °C	
Degree of protection as per IEC 60529	IP 54	
Approval/Conformity	cULus, CE	
Housing material	Anodized aluminum	
Connection	M12 connector, 8-pin standard	

Calculation example:  
BIW1-...-M0100-P1-S115  
Nominal length 100  
A = 200  
B = 110  
C = 80

Ordering example:

BIW1 -    310 - M             - P1 - S115

	Output signal	Standard nominal length [mm]			
A	0...+10 V	0075	0100	0130	0150
E	4...20 mA	0175	0225	0260	0300
C	0...20 mA	0360	0375	0400	0450
G	-10...+10 V	0500	0600	0650	0750
					0775