

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 x 80 mm square dimensions



	BES0376 BES G03EC-PSC10B-EP02	BES0409 BES G03EC-PSC10B-EP00,3-GS49	
PNP normally open			
PNP normally closed			
Dimension	Ø 3 x 22 mm	Ø 3 x 22 mm	
Style	D3.0	D3.0	
Installation	for flush mounting	for flush mounting	
Range	1 mm	1 mm	
Switching frequency	3500 Hz	3500 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
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...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES0122 BES G04EC-PSC08B-S26G	BES012F BES G04ED-PSC15B-S26G	BES012H BES G04ED-PSC50F-EP02	BES012J BES G04ED-PSC50F-EP05
	BES0120 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
	for flush mounting	for flush mounting	non-flush	non-flush
	0.8 mm	1.5 mm	5 mm	5 mm
	3000 Hz	3000 Hz	3000 Hz	3000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	—	—	—	—
	PBT	PBT	PET-C	PET-C
	Connector, M5x0.5 plug	Connector, M5x0.5 plug	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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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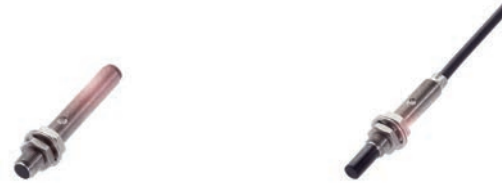
Accessories



PNP normally open	BES012K BES G04ED-PSC50F-S26G	BES01P0 BES M04EC-PSD06B-BP02	
PNP normally closed			
NPN normally open		BES03ZJ BES M04EC-NSC10B-EP02	
Dimension	Ø 4 x 44 mm	Ø 4 x 22 mm	
Style	D4.0	M4x0.5	
Installation	non-flush	for flush mounting	
Range	5 mm	0.6 mm	
Switching frequency	3000 Hz	3500 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PET-C	PBT	
Connection	Connector, M5x0.5 plug	Cable, 2.00 m, PUR	
Operating voltage U_b	10...30 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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	BES03Z8 BES M04EC-PSC10B-EP02	BES040R BES M04EC-PSC10B-EP00,3-GS49	BES051J BES M05ED-PSC10B-EP00,2-097	BES012Z BES M05EC-PSC08B-S26G
			BES051L BES M05ED-POC10B-EP00,3-097	
				BES012W 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	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 connector, 3-pin, 0.30 m, PUR	Cable, 0.20 m, PUR	Connector, M5x0.5 plug
	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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES013A BES M05ED-PSC15B-S26G	BES013E BES M05ED-PSC50F-EP02	
PNP normally closed	BES0137 BES M05ED-POC15B-S26G		
NPN normally closed	BES0130 BES M05ED-NOC15B-S26G		
Dimension	Ø 5 x 35 mm	Ø 5 x 35 mm	
Style	M5x0.5	M5x0.5	
Installation	for flush mounting	non-flush	
Range	1.5 mm	5 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PET-C	
Connection	Connector, M5x0.5 plug	Cable, 2.00 m, PUR	
Operating voltage U_b	10...30 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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	BES013F BES M05ED-PSC50F-EP05	BES013C BES M05ED-PSC50F-EP00,3-GS04	BES013H BES M05ED-PSC50F-S26G	BES025U BES G06K40-PSC15B-FP02
			BES0139 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	for flush mounting
	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 connector, 4-pin, 0.30 m, PUR	Connector, M5x0.5 plug	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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES0256 BES G06E60-PSC15B-EP02	BES025L BES G06EA-PSC15B-EP01	
PNP normally closed	BES0251 BES G06E60-POC15B-EP02		
Dimension	Ø 6.5 x 6 mm	Ø 6.5 x 10 mm	
Style	D6.5	D6.5	
Installation	for flush mounting	for flush mounting	
Range	1.5 mm	1.5 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Cable, 2.00 m, PUR	Cable, 1.00 m, PUR	
Operating voltage U_b	10...30 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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	BES025M BES G06EA-PSC15B-EP02	BES0258 BES G06E60-PSC20B-EP02	BES03ZA BES G06K40-PSC20B-FP02	BES0254 BES G06E60-PSC15B-EP00,3-GS49
	BES025H 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	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 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BES0257 BES G06E60-PSC20B-EP00,3-GS49	
PNP normally closed	BES051H BES G06E60-POC15B-EP01-GS49		
Dimension	Ø 6.5 x 6 mm	Ø 6.5 x 6 mm	
Style	D6.5	D6.5	
Installation	for flush mounting	for flush mounting	
Range	1.5 mm	2 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Cable with connector, M8x1 connector, 3-pin, 1.00 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...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES025N BES G06EA-PSD15B-S49G	BES03R9 BES G06EE-PSC20B-S49G-003	BES03P4 BES G06EH-PSC20B-S49G	BES038Y 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	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 connector, 3-pin	Connector, M8x1 connector, 3-pin	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...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP68
	CE, cULus, EAC	cULus, CE, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES000E BES G06ED-PSC40F-BP02	BES0005 BES G06EB-PSC40F-S49G	
NPN normally open	BES0008 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	1500 Hz	1500 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PA 12	
Connection	Cable, 2.00 m, PUR	Connector, M8x1 connector, 3-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP68	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES01NP BES G06EF-PSC40F-S49G	BES03P5 BES G06EH-PSC40F-S49G	BES03EJ BES G06MH-PSC30B-BP00,3-GS49	BES02UR BES G06MH1-PSC30B-S04G
	Ø 6.5 x 49.5 mm	Ø 6.5 x 60 mm	Ø 6.5 x 45 mm	Ø 6.5 x 66 mm
	D6.5	D6.5	D6.5	D6.5
	non-flush	non-flush	quasi-flush	quasi-flush
	4 mm	4 mm	3 mm	3 mm
	1500 Hz	1500 Hz	1000 Hz	1000 Hz
	Stainless steel	Stainless steel	Brass	Brass
	—	—	Chrome-plated	Chrome-plated
	PBT	PBT	PBT	PBT
	Connector, M8x1 connector, 3-pin	Connector, M8x1 connector, 3-pin	Cable with connector, M8x1 connector, 3-pin, 0.30 m, PUR	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
	IP67	IP67	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, EAC	CE, EAC
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PNP normally open	BES01NT BES G06MI-PSC40B-S49G	BES012R BES G08EG-PSC15B-BP05	
Dimension	Ø 6.5 x 59 mm	Ø 8 x 45 mm	
Style	D6.5	D8.0	
Installation	quasi-flush	for flush mounting	
Range	4 mm	1.5 mm	
Switching frequency	700 Hz	3000 Hz	
Housing material	Brass	Stainless steel	
Surface protection	nickel plated	—	
Material sensing surface	PBT	PBT	
Connection	Connector, M8x1 connector, 3-pin	Cable, 5.00 m, PUR	
Operating voltage U _b	10...30 VDC	10...30 VDC	
Ambient temperature	0...60 °C	-25...70 °C	
Protection degree	IP65	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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BES01NY BES G08EG-PSC15B-BV02	BES012T BES G08EG-PSC15B-BV05	BES012L BES G08EE-PSC20B-BP02	BES026M 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
for flush mounting	for flush mounting	for flush mounting	for flush mounting
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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES0275 BES M08EA-PSC15B-EP02		
PNP normally closed		BES00CR BES M08EF-POC15B-BP02-003	
NPN normally open		BES00CN BES M08EF-NSC15B-BP02-003	
Dimension	Ø 8 x 10 mm	Ø 8 x 40 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	1.5 mm	1.5 mm	
Switching frequency	3000 Hz	1000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	
Operating voltage U _b	10...30 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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	BES014K BES M08EF-PSC15B-BP02	BES0034 BES M08MI-PSC15B-BP02	BES0036 BES M08MI-PSC15B-BP05	
				BES0031 BES M08MI-POC15B-BV03
		BES002H 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	1.5 mm	1.5 mm	1.5 mm	1.5 mm
	3000 Hz	1000 Hz	1000 Hz	5000 Hz
	Stainless steel	Brass	Brass	Brass
	—	nickel plated	nickel plated	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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BES0037 BES M08MI-PSC15B-BV02	
PNP normally closed	BES0032 BES M08MI-POC15B-BV05		
NPN normally open			
Dimension	Ø 8 x 50 mm	Ø 8 x 50 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	1.5 mm	1.5 mm	
Switching frequency	1000 Hz	5000 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Cable, 5.00 m, PVC	Cable, 2.00 m, PVC	
Operating voltage U _b	12...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES0389 BES M08EE-PSC20B-EP05-511	BES00CW BES M08EF-PSC20B-BP02-003	BES003F BES M08MI-PSC20B-BP02	BES003J BES M08MI-PSC20B-BP05
			BES002P 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	2 mm	2 mm	2 mm	2 mm
	1000 Hz	700 Hz	700 Hz	700 Hz
	Stainless steel	Stainless steel	Brass	Brass
	—	—	nickel plated	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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES03TL BES M08MI-PSC20B-BP10	BES003K BES M08MI-PSC20B-BV02	
PNP normally closed			
Dimension	Ø 8 x 50 mm	Ø 8 x 50 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	2 mm	2 mm	
Switching frequency	700 Hz	5000 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Cable, 10.00 m, PUR	Cable, 2.00 m, PVC	
Operating voltage U_b	12...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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BES003M BES M08MI-PSC20B-BV05	BES03TH BES M08MI-POC20B-BV02	BES0276 BES M08EA-PSC20B-EP00,3-GS49	BES0277 BES M08EA-PSD15B-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
for flush mounting	for flush mounting	for flush mounting	for flush mounting
2 mm	2 mm	2 mm	1.5 mm
700 Hz	5000 Hz	3000 Hz	3000 Hz
Brass	Brass	Stainless steel	Stainless steel
nickel plated	Nickel-free coated	—	—
PA 12	PBT	PBT	PBT
Cable, 5.00 m, PVC	Cable, 2.00 m, PVC	Cable with connector, M8x1 connector, 3-pin, 0.30 m, PUR	Connector, M8x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES013N BES M08EC-PSC15B-S49G	BES013M BES M08EC-PSC15B-S04G	
PNP normally closed	BES013K BES M08EC-POC15B-S49G		
NPN normally open	BES013J BES M08EC-NSC15B-S49G		
Dimension	Ø 8 x 30 mm	Ø 8 x 33 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	1.5 mm	1.5 mm	
Switching frequency	3000 Hz	3000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Connector, M8x1 connector, 3-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES0147 BES M08EE-PSC15B-S49G	BES0146 BES M08EE-PSC15B-S04G	BES01P7 BES M08EG-PSC15B-S49G	
	BES0143 BES M08EE-POC15B-S49G	BES0142 BES M08EE-POC15B-S04G		BES01PE BES M08EH-POC15B-S04G
		BES013Y BES M08EE-NSC15B-S04G		BES01PC 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	1.5 mm	1.5 mm	1.5 mm	1.5 mm
	3000 Hz	3000 Hz	3000 Hz	3000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	—	—	—	—
	PBT	PBT	PBT	PBT
	Connector, M8x1 connector, 3-pin	Connector, M12x1 connector, 4-pin	Connector, M8x1 connector, 3-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
	IP68	IP68	IP68	IP68
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BES003C BES M08MI-PSC15B-S49G	
PNP normally closed	BES03P6 BES M08MI-POC15B-S49G		
NPN normally open	BES002K BES M08MI-NSC15B-S49G		
Dimension	Ø 8 x 59 mm	Ø 8 x 60 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	1.5 mm	1.5 mm	
Switching frequency	1000 Hz	5000 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Connector, M8x1 connector, 3-pin	Connector, M8x1 connector, 3-pin	
Operating voltage U_b	12...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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		BES0027 BES M08MH1-PSC15B-S04G	BES0278 BES M08EA-PSD20B-S49G	BES013P BES M08EC-PSC20B-S49G
	BES0026 BES M08MH1-POC15B-S04G			BES013L BES M08EC-POC20B-S49G
	BES0024 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	1.5 mm	1.5 mm	2 mm	2 mm
	1000 Hz	1000 Hz	3000 Hz	1500 Hz
	Brass	Brass	Stainless steel	Stainless steel
	nickel plated	nickel plated	—	—
	PA 12	PA 12	PBT	PBT
	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M8x1 connector, 3-pin	Connector, M8x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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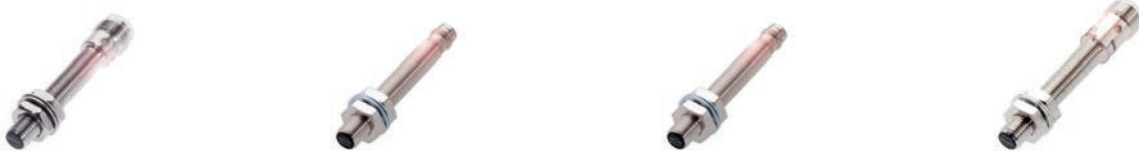
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PNP normally open	BES014A BES M08EE-PSC20B-S49G	BES0149 BES M08EE-PSC20B-S04G-101	
PNP normally closed	BES0145 BES M08EE-POC20B-S49G		
NPN normally open			
Dimension	Ø 8 x 40 mm	Ø 8 x 43 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	2 mm	2 mm	
Switching frequency	1500 Hz	1500 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	ceramic coated	
Connection	Connector, M8x1 connector, 3-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES01PH BES M08EH-PSC20B-S04G		BES003P BES M08MI-PSC20B-S49G	BES0028 BES M08MH1-PSC20B-S04G
			BES0033 BES M08MI-POC20B-S49G	BES03T5 BES M08MH1-POC20B-S04G
		BES002U BES M08MI-NSC20B-S49G		BES0025 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	2 mm	2 mm	2 mm	2 mm
	1500 Hz	700 Hz	5000 Hz	700 Hz
	Stainless steel	Brass	Brass	Brass
	–	nickel plated	Nickel-free coated	nickel plated
	PBT	PA 12	PBT	PA 12
	Connector, M12x1 connector, 4-pin	Connector, M8x1 connector, 3-pin	Connector, M8x1 connector, 3-pin	Connector, M12x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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	BES0427 BES M08EE-PSC25B-S49G	BES054N BES M08MI-PSC30B-S49G	
PNP normally open			
PNP normally closed			
NPN normally open			
Dimension	Ø 8 x 40 mm	Ø 8 x 60 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	2.5 mm	3 mm	
Switching frequency	1000 Hz	1200 Hz	
Housing material	Stainless steel	Brass	
Surface protection	—	Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Connector, M8x1 connector, 3-pin	Connector, M8x1 connector, 3-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	0...60 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES02W9 BES M08MH1-PSC30B-S04G	BES000Y BES M08ED-PSC40F-BP02		BES0016 BES M08EG-PSC40F-BP02
				BES0014 BES M08EG-POC40F-BP02
	BES02W7 BES M08MH1-NSC30B-S04G	BES000T BES M08ED-NSC40F-BV02	BES0013 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
	for flush mounting	non-flush	non-flush	non-flush
	3 mm	4 mm	4 mm	4 mm
	1200 Hz	1500 Hz	1500 Hz	1500 Hz
	Brass	Stainless steel	Stainless steel	Stainless steel
	Nickel-free coated	—	—	—
	PBT	PA 12	PBT	PBT
	Connector, M12x1 connector, 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	-25...70 °C	-25...70 °C
	IP68	IP68	IP68	IP68
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES01P3 BES M08ED-PSC25F-S04G	BES01P8 BES M08EG-PSC25F-S04G	
PNP normally closed		BES01P6 BES M08EG-POC25F-S04G	
NPN normally open		BES01P5 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	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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BES000M BES M08EB-PSC40F-S49G	BES014M BES M08EF-PSC40F-S49G	BES001J BES M08EH-PSC40F-S49G	BES01P9 BES M08EG1-PSC40F-S04G
BES000L BES M08EB-POC40F-S49G		BES001F BES M08EH-POC40F-S49G	
		BES001C BES M08EH-NSC40F-S49G	
Ø 8 x 30 mm	Ø 8 x 49.5 mm	Ø 8 x 60 mm	Ø 8 x 64 mm
M8x1	M8x1	M8x1	M8x1
non-flush	non-flush	non-flush	non-flush
4 mm	4 mm	4 mm	4 mm
1500 Hz	1500 Hz	1500 Hz	5000 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
—	—	—	—
PBT	PBT	PBT	PBT
Connector, M8x1 connector, 3-pin	Connector, M8x1 connector, 3-pin	Connector, M8x1 connector, 3-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
IP68	IP68	IP68	IP68
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES001H BES M08EH-PSC40F-S04G	BES054Z BES M08EH1-PSC60F-S49G	
PNP normally closed	BES001E BES M08EH-POC40F-S04G	BES0550 BES M08EH1-POC60F-S49G	
NPN normally open	BES001A BES M08EH-NSC40F-S04G		
Dimension	Ø 8 x 65.5 mm	Ø 8 x 60 mm	
Style	M8x1	M8x1	
Installation	non-flush	non-flush	
Range	4 mm	6 mm	
Switching frequency	1500 Hz	1200 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M8x1 connector, 3-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES02W4 BES M08MG1-PSC60F-S49G	BES058J BES M08EH1-PSC60F-S04G	BES02W3 BES M08MG1-PSC60F-S04G	BES01ZU BES M08MI-PSC40B-BP00,2-GS04
			BES02W0 BES M08MG1-NSC60F-S04G	BES01ZR BES M08MI-NSC40B-BP00,2-GS04
	Ø 8 x 60 mm	Ø 8 x 63 mm	Ø 8 x 66 mm	Ø 8 x 51.5 mm
	M8x1	M8x1	M8x1	M8x1
	non-flush	non-flush	non-flush	quasi-flush
	6 mm	6 mm	6 mm	4 mm
	500 Hz	1200 Hz	500 Hz	800 Hz
	Brass	Stainless steel	Brass	Brass
	Chrome-plated	—	Chrome-plated	nickel plated
	PBT	PBT	PBT	PBT
	Connector, M8x1 connector, 3-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Cable with connector, M12x1 connector, 4-pin, 0.20 m, PUR
	10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	0...60 °C
	IP67	IP68	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES003R BES M08MI-PSC40B-BP00,3-GS49	BES01ZW BES M08MI-PSC40B-S49G	
NPN normally open		BES01ZT BES M08MI-NSC40B-S49G	
normally open			
Dimension	Ø 8 x 51.5 mm	Ø 8 x 59 mm	
Style	M8x1	M8x1	
Installation	quasi-flush	quasi-flush	
Range	4 mm	4 mm	
Switching frequency	800 Hz	800 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PBT	PBT	
Connection	Cable with connector, M8x1 connector, 3-pin, 0.30 m, PUR	Connector, M8x1 connector, 3-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	0...60 °C	0...60 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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BES02W6 BES M08MH-PSC40B-S49G-507	BES04TU BES G10ED-PSC08B-EP00,3-GS49		BES02C9 BES 516-449-B0-L-05	BES027M 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	for flush mounting		for flush mounting	for flush mounting
4 mm	0.8 mm		2 mm	2 mm
500 Hz	5000 Hz		25 Hz	1000 Hz
Brass	Stainless steel		Brass	Stainless steel
Chrome-plated	—		nickel plated	—
PBT	PBT		PA 12	PA 12
Connector, M8x1 connector, 3-pin	Cable with connector, M8x1 connector, 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	CE, cULus, EAC		CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BES00E5 BES M12MD-PSC40B-BP02-003	
NPN normally open			
Normally open	BES027N BES 516-207-B0-E-05		
Dimension	Ø 12 x 60 mm	Ø 12 x 33 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	2 mm	4 mm	
Switching frequency	1000 Hz	300 Hz	
Housing material	Stainless steel	Brass	
Surface protection	—	Nickel-free coated	
Material sensing surface	PA 12	LCP	
Connection	Cable, 5.00 m, PVC	Cable, 2.00 m, PUR	
Operating voltage U _b	20...250 VDC/20...250 VAC	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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			BES0062 BES M12MI-PSC40B-BP03	BES0064 BES M12MI-PSC40B-BV02
	BES0057 BES M12MI-NSC40B-BV03	BES0058 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	4 mm	4 mm	4 mm	4 mm
	2500 Hz	2500 Hz	2500 Hz	2500 Hz
	Brass	Brass	Brass	Brass
	Nickel-free coated	Nickel-free coated	Nickel-free coated	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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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	BES0001 BES M12MI-PSC40B-BV03	BES0065 BES M12MI-PSC40B-BV05	
PNP normally open			
PNP normally closed			
PNP normally open/normally closed			
Dimension	Ø 12 x 53 mm	Ø 12 x 53 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	4 mm	4 mm	
Switching frequency	2500 Hz	2500 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Cable, 3.00 m, PVC	Cable, 5.00 m, PVC	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES00PW BES 516-325-G-E4-C-S4-00,5		BES035E BES 516-325-SA45	BES00PK BES 516-325-E5-C-S4
				BES00YT BES 516-370-E5-C-S4
		BES032M 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	4 mm	1.5 mm	2 mm	2 mm
	2500 Hz	2000 Hz	1000 Hz	5000 Hz
	Brass	Stainless steel	Brass	Brass
	Nickel-free coated	—	nickel plated	Nickel-free coated
	LCP	PA 12	PA 12	PBT
	Cable with connector, M12x1 connector, 4-pin, 0.50 m, PUR	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...85 °C	-25...70 °C	-25...70 °C
	IP68	IP68	IP67	IP68
	CE, cULus, EAC	CE, cULus, EAC	CE, EAC	CE, cULus, EAC
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PNP normally open	BES0060 BES M12MI-PSC20B-S04G		
Normally open			
IO-Link		BES04FK BES M12MI-PSIC20C-S04G	
Dimension	Ø 12 x 65 mm	Ø 12 x 65 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	2 mm	0.5...2 mm	
Switching frequency	5000 Hz	2000 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PBT	LCP	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	12...30 VDC	
Ambient temperature	-25...70 °C	-25...85 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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				BES01C8 BES 516-325-S4-C
	BES02FP BES 515-449-SA7-S21	BES027U BES 516-207-S21-E	BES027W 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	2 mm	2 mm	2 mm	2 mm
	10 Hz	1000 Hz	1000 Hz	5000 Hz
	Stainless steel	Stainless steel	Stainless steel	Stainless steel
	—	—	—	—
	PA 12	PA 12	PA 12	PBT
	Connector, 1/2"-20 UNF2A-Male	Connector, 1/2"-20 UNF2A-Male	Connector, M12x1 connector	Connector, M12x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open			
PNP normally closed		BES01K6 BES 516-370-S4-C	
PNP normally open/normally closed	BES0161 BES 516-113-S4-C		
Dimension	Ø 12 x 70 mm	Ø 12 x 70 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	2 mm	2 mm	
Switching frequency	5000 Hz	5000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-40...85 °C	-40...85 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES00PZ BES 516-325-G-E5-C-S49	BES00EF BES M12ME-PSC40B-S04G-003	BES00PY BES 516-325-G-E5-C-S4	BES014W 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	4 mm	4 mm	4 mm	4 mm
	2500 Hz	2500 Hz	2500 Hz	2000 Hz
	Brass	Brass	Brass	Stainless steel
	Nickel-free coated	Nickel-free coated	Nickel-free coated	—
	LCP	PBT	PBT	LCP
	Connector, M8x1 connector, 3-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...85 °C
	IP67	IP68	IP68	IP68
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BES0068 BES M12MI-PSC40B-S04G	
PNP normally closed	BES0070 BES 516-370-G-E5-C-S4	BES005N BES M12MI-POC40B-S04G	
NPN normally open		BES0059 BES M12MI-NSC40B-S04G	
Normally open			
Dimension	Ø 12 x 45 mm	Ø 12 x 65 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	4 mm	4 mm	
Switching frequency	2500 Hz	2500 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 3-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	4 mm	4 mm	4 mm	4 mm
	1000 Hz	500 Hz	2500 Hz	600 Hz
	Stainless steel	Stainless steel	Brass	Brass
	—	—	Nickel-free coated	nickel plated
	LCP	PA 12	PBT	LCP
	Connector, M12x1 connector, 4-pin	Connector, 1/2"-20 UNF2A-Male	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open			
Normally open	BES0285 BES 516-209-B0-E-03	BES0286 BES 516-209-B0-E-05	
Normally closed	BES028F 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	
Surface protection	—	—	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 3.00 m, PVC	Cable, 5.00 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	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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BES00UY BES 516-356-E5-C-S4	BES036T BES 516-356-SA26-S4-C		BES028A BES 516-209-S21-E	BES0330 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	Stainless steel		Stainless steel	Stainless steel
Nickel-free coated	—		—	—
PBT	PA 12		PA 12	PA 12
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin		Connector, 1/2"-20 UNF2A-Male	Connector, 1/2"-20 UNF2A-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	CE, EAC		CE, cULus, EAC	CE, EAC
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PNP normally open	BES01H6 BES 516-356-S4-C	BES036R 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	
Surface protection	—	—	
Material sensing surface	PBT	PA 12	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-40...85 °C	-40...85 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	CE, EAC	
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	BES0178 BES 516-131-S4-C	BES01PY BES M12MD-PSC80F-S04G	BES01PN BES M12EG-PSC80F-S04G	BES004N BES M12MG-PSC80F-S04G
	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	Stainless steel	Brass
	—	Nickel-free coated	—	Nickel-free coated
	PBT	PBT	PBT	PBT
	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
	-40...85 °C	-25...70 °C	-40...85 °C	-25...70 °C
	IP68	IP68	IP68	IP68
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BES02WK BES M12MC1-PSC10F-S04G	
PNP normally closed			
Normally open	BES0289 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	
Surface protection	—	Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Connector, 1/2"-20 UNF2A-Male	Connector, M12x1 connector, 3-pin	
Operating voltage U _b	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...85 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES02WR BES M12MF1-PSC10F-S04G	BES02WM BES M12MD1-PSC60B-S04G	BES02WZ BES M12MG1-PSC60B-S04G	BES01ZN BES M12MI-PSH80B-S04G
			BES02WY 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	Brass	Brass	Brass
	Nickel-free coated	Nickel-free coated	Nickel-free coated	nickel plated
	PBT	PBT	PBT	LCP
	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, EAC
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PNP normally open			
Normally open	BES02AU BES 516-420-E4-L-02	BES02AW BES 516-420-E4-L-05	
Dimension	Ø 18 x 56 mm	Ø 18 x 56 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	5 mm	5 mm	
Switching frequency	25 Hz	25 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 2.00 m, PVC	Cable, 5.00 m, PVC	
Operating voltage U _b	20...250 VAC	20...250 VAC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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BES0083 BES M18MI-PSC50B-BV03		BES028L BES 516-211-E4-E-03	BES028N BES 516-211-E4-E-PU-05	BES028U BES 516-211-E6-E-05
Ø 18 x 56 mm		Ø 18 x 61.5 mm	Ø 18 x 61.5 mm	Ø 18 x 71 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
700 Hz		250 Hz	250 Hz	250 Hz
Brass		Brass	Brass	Brass
nickel plated		nickel plated	nickel plated	nickel plated
PA 12		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
12...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
IP68		IP67	IP67	IP67
CE, cULus, EAC		CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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	BES04F1 BES M18MD-PSC80B-BP05-003	BES008E BES M18MI-PSC80B-BV02	
PNP normally open			
NPN normally open			
Dimension	Ø 18 x 36 mm	Ø 18 x 56 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	8 mm	8 mm	
Switching frequency	150 Hz	150 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PBT	PA 12	
Connection	Cable, 5.00 m, PUR	Cable, 2.00 m, PVC	
Operating voltage U_b	10...30 VDC	12...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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			BES0089 BES M18MI-PSC80B-BP03	BES008F BES M18MI-PSC80B-BV03
	BES007H BES M18MI-NSC80B-BP03	BES007J BES M18MI-NSC80B-BV03		
	Ø 18 x 56 mm	Ø 18 x 56 mm	Ø 18 x 56 mm	Ø 18 x 56 mm
	M18x1	M18x1	M18x1	M18x1
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	8 mm	8 mm	8 mm	8 mm
	150 Hz	150 Hz	150 Hz	150 Hz
	Brass	Brass	Brass	Brass
	nickel plated	nickel plated	nickel plated	nickel plated
	PA 12	PA 12	PA 12	PA 12
	Cable, 3.00 m, PUR	Cable, 3.00 m, PVC	Cable, 3.00 m, PUR	Cable, 3.00 m, PVC
	12...30 VDC	12...30 VDC	12...30 VDC	12...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP68	IP68	IP68
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES008H BES M18MI-PSC80B-BV05	BES00R5 BES 516-326-E4-C-S4-00,2	
Dimension	Ø 18 x 56 mm	Ø 18 x 36 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	8 mm	5 mm	
Switching frequency	150 Hz	1000 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 5.00 m, PVC	Cable with connector, M12x1 connector, 4-pin, 0.20 m, PUR	
Operating voltage U_b	12...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP68	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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BES00EY BES M18ME-PSC50B-S04G-003	BES00R6 BES 516-326-E5-C-S4	BES02ET BES 515-326-E5-T-S4	BES0086 BES M18MI-PSC50B-S04G
Ø 18 x 44.5 mm	Ø 18 x 44.5 mm	Ø 18 x 45 mm	Ø 18 x 65 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
700 Hz	1000 Hz	500 Hz	700 Hz
Brass	Brass	Stainless steel	Brass
nickel plated	nickel plated	—	nickel plated
PBT	PBT	PA 12	PA 12
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	12...30 VDC
-25...70 °C	-25...70 °C	-40...105 °C	-25...70 °C
IP67	IP67	IP68	IP68
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BES02EU BES 515-326-S4-C	
PNP normally closed			
PNP normally open/normally closed			
Normally open	BES028R BES 516-211-E5-E-S27		
Dimension	Ø 18 x 70.5 mm	Ø 18 x 83 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	5 mm	5 mm	
Switching frequency	400 Hz	900 Hz	
Housing material	Brass	Stainless steel	
Surface protection	nickel plated	—	
Material sensing surface	PA 12	PA 12	
Connection	Connector, M12x1 connector	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-40...85 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES01CW BES 516-326-S4-C		BES00RC BES 516-326-G-E5-C-S4	BES02P3 BES 516-326-SA96-G-E5-Y-S4
	BES01JW BES 516-367-S4-C			
		BES015N 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	5 mm	5 mm	8 mm	8 mm
	900 Hz	500 Hz	200 Hz	200 Hz
	Brass	Brass	Brass	Brass
	nickel plated	nickel plated	nickel plated	nickel plated
	PA 12	PA 12	PBT	ceramic coated
	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
	IP68	IP68	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES008L BES M18MI-PSC80B-S04G	BES008M BES M18MI-PSC80B-S04K	
PNP normally closed		BES007Y BES M18MI-POC80B-S04K	
NPN normally open		BES007M BES M18MI-NSC80B-S04K	
Normally open			
Dimension	Ø 18 x 65 mm	Ø 18 x 65 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	8 mm	8 mm	
Switching frequency	1000 Hz	150 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	nickel plated	
Material sensing surface	PBT	PA 12	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	12...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES02H0 BES M18EI-PSC80B-S04G		BES0496 BES M18MI2-PSC80B-S04G	
		BES02ZE BES M18MN-USU80B-S21G		BES02C5 BES 516-437-E4-L-02
	Ø 18 x 65 mm	Ø 18 x 70 mm	Ø 18 x 83 mm	Ø 18 x 61.5 mm
	M18x1	M18x1	M18x1	M18x1
	for flush mounting	for flush mounting	for flush mounting	non-flush
	8 mm	8 mm	8 mm	8 mm
	700 Hz	30 Hz	1000 Hz	25 Hz
	Stainless steel	Brass	Brass	Brass
	Ceramic	nickel plated	Nickel-free coated	nickel plated
	PBT	PBT	PBT	PA 12
	Connector, M12x1 connector, 4-pin	Connector, 1/2"-20 UNF2A-Male	Connector, M12x1 connector, 4-pin	Cable, 2.00 m, PVC
	10...30 VDC	20...300 VDC/20...250 VAC	10...30 VDC	20...250 VAC
	-40...85 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP67	IP68	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BES00WM BES 516-360-E5-Y-S4	
Normally open	BES0292 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	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 3.00 m, PVC	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	20...250 VDC/20...250 VAC	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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	BES02C7 BES 516-437-E5-L-S21	BES0296 BES 516-213-E5-E-S21	BES0297 BES 516-213-E5-E-S27	BES0298 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	Brass	Brass	Brass
	nickel plated	nickel plated	nickel plated	nickel plated
	PA 12	PA 12	PA 12	PA 12
	Connector, 1/2"-20 UNF2A-Male	Connector, 1/2"-20 UNF2A-Male	Connector, M12x1 connector	Connector, 7/8"-16 UN plug
	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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES01HY BES 516-360-S4-C	BES03RM BES M18MG-PSC16F-S04G	
PNP normally open/normally closed			
Normally open			
Dimension	Ø 18 x 83 mm	Ø 18 x 65 mm	
Style	M18x1	M18x1	
Installation	non-flush	non-flush	
Range	8 mm	16 mm	
Switching frequency	600 Hz	800 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	Nickel-free coated	
Material sensing surface	PA 12	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP68	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES0070 BES M18MG-PSC16F-S04K		BES01HW BES 516-360-G-S4-H	
				BES016W BES 516-123-G-S4-H
	BES029A BES 516-213-G-E5-E-S21			
Ø 18 x 65 mm	Ø 18 x 70.5 mm	Ø 18 x 70.5 mm	Ø 18 x 83 mm	Ø 18 x 83 mm
M18x1	M18x1	M18x1	M18x1	M18x1
non-flush	non-flush	non-flush	non-flush	non-flush
16 mm	16 mm	16 mm	16 mm	16 mm
800 Hz	250 Hz	250 Hz	80 Hz	80 Hz
Brass	Brass	Brass	Brass	Brass
Nickel-free coated	nickel plated	nickel plated	nickel plated	nickel plated
PBT	PA 12	PA 12	PA 12	PA 12
Connector, M12x1 connector, 4-pin	Connector, 1/2"-20 UNF2A-Male	Connector, 1/2"-20 UNF2A-Male	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin
10...30 VDC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	10...55 VDC	10...55 VDC
-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
IP67	IP67	IP67	IP68	IP68
CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, EAC	CE, EAC
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	BES02Y7 BES M18ME1-PSC20F-S04G	BES02Y5 BES M18MD1-PSC12B-S04G	
PNP normally open			
NPN normally open			
Normally open			
Dimension	Ø 18 x 63.5 mm	Ø 18 x 48.5 mm	
Style	M18x1	M18x1	
Installation	non-flush	quasi-flush	
Range	20 mm	12 mm	
Switching frequency	200 Hz	500 Hz	
Housing material	Brass	Brass	
Surface protection	Chrome-plated	Chrome-plated	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 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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	BES02Y9 BES M18MG1-PSC12B-S04G	BES00RE BES 516-327-E4-Y-01,5	BES00A1 BES M30MI-PSC10B-BV03	
			BES009E BES M30MI-NSC10B-BV03	
				BES029L BES 516-215-E4-E-03
	Ø 18 x 63.5 mm	Ø 30 x 36 mm	Ø 30 x 56 mm	Ø 30 x 61.5 mm
	M18x1	M30x1.5	M30x1.5	M30x1.5
	quasi-flush	for flush mounting	for flush mounting	for flush mounting
	12 mm	10 mm	10 mm	10 mm
	500 Hz	200 Hz	400 Hz	150 Hz
	Brass	Brass	Brass	Brass
	Chrome-plated	nickel plated	nickel plated	nickel plated
	PBT	PA 12	PA 12	PA 12
	Connector, M12x1 connector, 4-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
	IP67	IP68	IP68	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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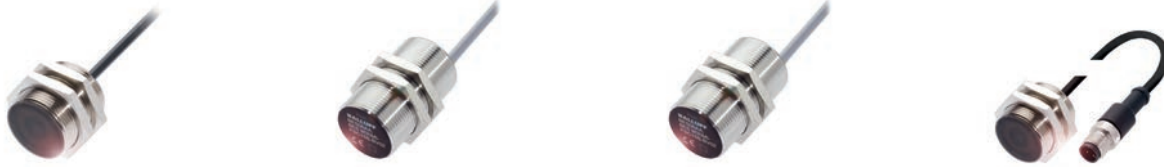
Power Supply

Connectivity

Accessories



PNP normally open		BES00RT BES 516-327-G-E4-Y-03	
PNP normally closed			
Normally open	BES029M BES 516-215-E4-E-05		
Dimension	Ø 30 x 61.5 mm	Ø 30 x 36 mm	
Style	M30x1.5	M30x1.5	
Installation	for flush mounting	for flush mounting	
Range	10 mm	15 mm	
Switching frequency	150 Hz	100 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 5.00 m, PVC	Cable, 3.00 m, PVC	
Operating voltage U _b	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES00LR BES 516-3028-G-E4-Y-PU-05	BES00AA BES M30MI-PSC15B-BV02	BES00AC BES M30MI-PSC15B-BV03	BES00LT 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	15 mm	15 mm	15 mm	15 mm
	100 Hz	100 Hz	100 Hz	100 Hz
	Brass	Brass	Brass	Brass
	nickel plated	Nickel-free coated	Nickel-free coated	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 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open	BES00RP BES 516-327-E5-Y-S4	BES02F0 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	for flush mounting	for flush mounting	
Range	10 mm	10 mm	
Switching frequency	200 Hz	200 Hz	
Housing material	Brass	Stainless steel	
Surface protection	nickel plated	—	
Material sensing surface	PA 12	PA 12	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-40...105 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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BES00A3 BES M30MI-PSC10B-S04G	BES00A4 BES M30MI-PSC10B-S04K		BES0316 BES 516-418-E5-L-S27	BES02E9 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
for flush mounting	for flush mounting		for flush mounting	for flush mounting
10 mm	10 mm		10 mm	10 mm
400 Hz	400 Hz		25 Hz	150 Hz
Brass	Brass		Brass	Stainless steel
nickel plated	nickel plated		nickel plated	—
PA 12	PA 12		PA 12	PA 12
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin		Connector, M12x1 connector	Connector, 1/2"-20 UNF2A-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	CE, cULus, EAC		CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BES02F1 BES 515-327-S4-C	
PNP normally closed			
PNP normally open/normally closed			
Normally open	BES029W BES 516-215-E5-E-S5		
Dimension	Ø 30 x 80 mm	Ø 30 x 83 mm	
Style	M30x1.5	M30x1.5	
Installation	for flush mounting	for flush mounting	
Range	10 mm	10 mm	
Switching frequency	150 Hz	300 Hz	
Housing material	Brass	Stainless steel	
Surface protection	nickel plated	—	
Material sensing surface	PA 12	PA 12	
Connection	Connector, 7/8"-16 UN plug	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	20...250 VDC/20...250 VAC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES01EE BES 516-327-S4-C		BES00RW BES 516-327-G-E5-Y-S4	BES00AF BES M30MI-PSC15B-S04G
			BES00LU BES 516-3028-G-E5-Y-S4	
		BES0167 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
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	10 mm	10 mm	15 mm	15 mm
	300 Hz	300 Hz	100 Hz	100 Hz
	Brass	Brass	Brass	Brass
	nickel plated	nickel plated	nickel plated	Nickel-free coated
	PA 12	PA 12	PA 12	PA 12
	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
	IP68	IP68	IP68	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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	BES01EA BES 516-327-G-S4-C	BES01EC BES 516-327-G-S4-H	
PNP normally open			
PNP normally open/normally closed			
Normally open			
Dimension	Ø 30 x 83 mm	Ø 30 x 83 mm	
Style	M30x1.5	M30x1.5	
Installation	for flush mounting	for flush mounting	
Range	15 mm	15 mm	
Switching frequency	100 Hz	150 Hz	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PA 12	PA 12	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...55 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP68	
Approval/Conformity	CE, cULus, EAC	CE, EAC	
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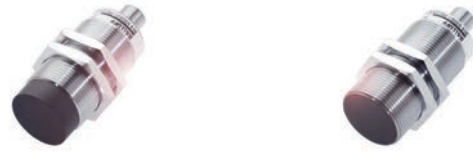
			BES00AY BES M30MM-PSC30F-BV02	BES00Y0 BES 516-362-E5-Y-S4
	BES0166 BES 516-114-G-S4-H			
		BES02A5 BES 516-217-E4-E-03		
	Ø 30 x 83 mm	Ø 30 x 61.5 mm	Ø 30 x 76.5 mm	Ø 30 x 57 mm
	M30x1.5	M30x1.5	M30x1.5	M30x1.5
	for flush mounting	non-flush	non-flush	non-flush
	15 mm	15 mm	30 mm	15 mm
	150 Hz	100 Hz	300 Hz	100 Hz
	Brass	Brass	Brass	Brass
	Nickel-free coated	nickel plated	Nickel-free coated	nickel plated
	PA 12	PA 12	PBT	PA 12
	Connector, M12x1 connector, 4-pin	Cable, 3.00 m, PVC	Cable, 2.00 m, PVC	Connector, M12x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open			
Normally open	BES02AC BES 516-217-E5-E-S27	BES02AE 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	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Connector, M12x1 connector	Connector, 7/8"-16 UN plug	
Operating voltage U _b	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BES02FN BES 515-362-S4-C	BES01JE BES 516-362-S4-C	BES00AZ BES M30MM-PSC30F-S04K	BES01JC 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	Brass	Brass
	—	nickel plated	Nickel-free coated	nickel plated
	PA 12	PA 12	PBT	PA 12
	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...55 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP68	IP68	IP67	IP68
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, EAC
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PNP normally open	BES02YJ BES M30MG1-PSC40F-S04G	BES02YM BES M30MI1-PSC22B-S04G	
PNP normally closed		BES02YL 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	Brass	
Surface protection	Chrome-plated	Chrome-plated	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP54	IP67	
Approval/Conformity	CE, cULus, EAC	cULus, CE, EAC	
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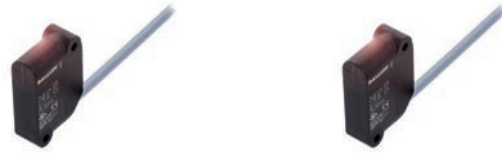
	BES0341 BES 516-3009-SA2-M0-C-05	BES01FJ BES 516-347-M0-C-03	BES01FK BES 516-347-M0-C-05	BES01FM BES 516-347-M0-C-PU-05
	50 x 25 x 10 mm	50 x 25 x 10 mm	50 x 25 x 10 mm	50 x 25 x 10 mm
	block style	block style	block style	block style
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	2.5 mm	5 mm	5 mm	5 mm
	1000 Hz	500 Hz	500 Hz	500 Hz
	Aluminum	Aluminum, die-cast	Aluminum, die-cast	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	CE, EAC	CE, EAC	CE, EAC
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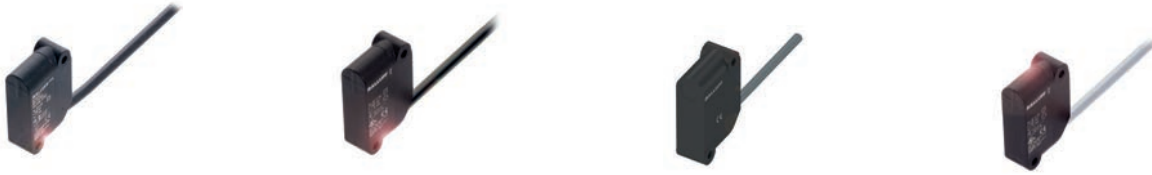
PNP normally open			
PNP normally open/normally closed	BES017H BES 516-133-M0-C-PU-05	BES032R BES 516-133-SA3-C-PU-04	
Dimension	50 x 25 x 10 mm	50 x 25 x 10 mm	
Style	block style	block style	
Installation	for flush mounting	for flush mounting	
Range	5 mm	5.6 mm	
Switching frequency	500 Hz	500 Hz	
Housing material	Aluminum	Aluminum	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Cable, 5.00 m, PUR	Cable, 4.00 m, PUR	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, EAC	CE, EAC	
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BES01FN BES 516-347-M0-C-S4-00,2	BES01FT BES 516-347-M0-C-S49-00,2	BES0153 BES 516-133-M0-C-S4-00,2	BES01FR BES 516-347-M0-C-S49
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
for flush mounting	for flush mounting	for flush mounting	for flush mounting
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 connector, 4-pin, 0.20 m, PUR	Cable with connector, M8x1 connector, 3-pin, 0.20 m, PUR	Cable with connector, M12x1 connector, 4-pin, 0.20 m, PUR	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
IP67	IP67	IP67	IP65
CE, EAC	CE, EAC	CE, EAC	CE, EAC
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PNP normally open			
NPN normally open			
Normally open	BES02CT BES R05KB-USU20B-EV02	BES02CU BES R05KB-USU20B-EV03	
Dimension	40 x 12 x 26 mm	40 x 12 x 26 mm	
Style	block style	block style	
Installation	for flush mounting	for flush mounting	
Range	2 mm	2 mm	
Switching frequency	400 Hz	400 Hz	
Housing material	PA 12	PA 12	
Surface protection	—	—	
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	
Protection degree	IP67	IP67	
Approval/Conformity	CE, EAC	CE, EAC	
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		BES01Z5 BES R05KB-PSC20B-EP05		BES01ZA BES R05KB-PSC40B-EV02
	BES01YZ BES R05KB-NSC20B-EP05			
			BES02CY 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
	block style	block style	block style	block style
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	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	CE, cULus, EAC	CE, EAC	CE, cULus, EAC
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PNP normally open	BES01ZC BES R05KB-PSC40B-EV03	BES01Z8 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	block style	block style	
Installation	for flush mounting	for flush mounting	
Range	4 mm	4 mm	
Switching frequency	400 Hz	400 Hz	
Housing material	PA 12	PA 12	
Surface protection	—	—	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 3.00 m, PVC	Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	
Operating voltage U_b	10...30 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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	BES01Z7 BES R05KB-PSC20B-S49A	BES01ZE BES R05KB-PSC40B-S49A	BES01N5 BES 517-398-N0-C-03	BES01N6 BES 517-398-N0-C-05
	BES048A BES R05KB-POC20B-S49A	BES01Z2 BES R05KB-POC40B-S49A		
			BES01NH BES 517-399-N0-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
	block style	block style	block style	block style
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	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 connector, 3-pin	Connector, M8x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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Systems

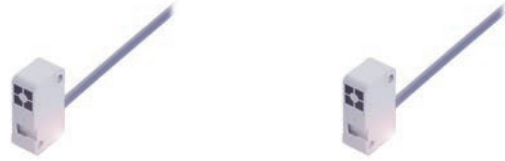
Safety

Industrial Networking

Power Supply

Connectivity

Accessories



PNP normally open	BES01N8 BES 517-398-N0-C-PU-03	BES01N9 BES 517-398-N0-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	for flush mounting	for flush mounting	
Range	2 mm	2 mm	
Switching frequency	2500 Hz	2500 Hz	
Housing material	PBT, GF20	PBT, GF20	
Surface protection	—	—	
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	
Protection degree	IP65	IP65	
Approval/Conformity	CE, EAC	CE, EAC	
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	BES01NA BES 517-398-N0-C-S49-00,2	BES01N1 BES 517-398-N1-C	BES01N2 BES 517-398-N2-C
BES01MM BES 517-351-N0-C-03	BES01MT 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
for flush mounting	for flush mounting	for flush mounting	for flush mounting
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 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, EAC
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PNP normally open	BES033J BES 516-300-S279		
PNP normally open/normally closed			
NPN normally open	BES033H BES 516-300-S255		
NPN normally open/normally closed		BES01W0 BES R01ZC-NAC70B-BP05	
Dimension	30 x 20 x 10 mm	32 x 20 x 8 mm	
Style	block style	block style	
Installation	for flush mounting	for flush mounting	
Range	2 mm	7 mm	
Switching frequency	1500 Hz	150 Hz	
Housing material	Aluminum	Zinc, die-cast	
Surface protection	—	—	
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	
Protection degree	IP65	IP67	
Approval/Conformity	CE, EAC	CE, cULus, EAC	
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	BES01WE BES R01ZC-PSC70B-BP00.2-GS49	BES01WF BES R01ZC-PSC70B-BP00.3-GS49	BES048Z BES R01ZC-PSC70B-BZ00.2-GS04-110
BES01W4 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
block style	block style	block style	block style
for flush mounting	for flush mounting	for flush mounting	for flush mounting
7 mm	7 mm	7 mm	7 mm
150 Hz	150 Hz	150 Hz	150 Hz
Zinc, die-cast	Zinc, die-cast	Zinc, die-cast	Zinc, die-cast
—	—	—	—
PA 12	PA 12	PA 12	ceramic coated
Cable, 3.00 m, PUR	Cable with connector, M8x1 connector, 3-pin, 0.20 m, PUR	Cable with connector, M8x1 connector, 3-pin, 0.30 m, PUR	Cable with connector, M12x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open			
PNP normally open/normally closed	BES01W2 BES R01ZC-PAC70B-BP00.2-GS04	BES0314 BES R01ZC-PAC70B-BP00.2-GS04-107	
Polarized normally open			
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	7 mm	7 mm	
Switching frequency	150 Hz	150 Hz	
Housing material	Zinc, die-cast	Zinc, die-cast	
Surface protection	—	—	
Material sensing surface	PA 12	ceramic coated	
Connection	Cable with connector, M12x1 connector, 4-pin, 0.20 m, PUR	Cable with connector, M12x1 connector, 4-pin, 0.20 m, PUR	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Productview	Page 135	Page 135	



				BES022Z BES 517-3036-I02-C-S4
BES01W3 BES R01ZC-PAC70B-BP00.5-GS04				
	BES030E BES Z03K-GSS10B-EP00,15-GS04-006	BES030F BES Z03K-GSS10B-EP00,8-GS04-006		
32 x 20 x 8 mm	26 x 26 x 26 mm	26 x 26 x 26 mm		68.5 x 26 x 26 mm
block style	block style	block style		block style
for flush mounting	for flush mounting	for flush mounting		for flush mounting
7 mm	10 mm	10 mm		10 mm
150 Hz	250 Hz	250 Hz		500 Hz
Zinc, die-cast	PA	PA		PA 12
—	—	—		—
PA 12	PA	PA		PA 12
Cable with connector, M12x1 connector, 4-pin, 0.50 m, PUR	Cable with connector, M12x1 connector, 4-pin, 0.15 m, PUR	Cable with connector, M12x1 connector, 4-pin, 0.80 m, PUR		Connector, M12x1 connector, 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	CE, EAC	CE, EAC		CE, EAC
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PNP normally open		BES052M BES Q40KFA-PSY20B-DV02	
PNP normally open/normally closed	BES02TN BES IKU-031.28-S4		
Normally open/normally closed			
Dimension	300 x 35 x 47 mm	40 x 40 x 54.5 mm	
Style	block style	block style	
Installation	non-flush	for flush mounting	
Range	30 mm	20 mm	
Switching frequency	50 Hz	40 Hz ±15 Hz	
Housing material	Plastic	PBT	
Surface protection	—	—	
Material sensing surface	Plastic	PBT	
Connection	Connector, M12x1 connector, 4-pin	Cable, 2.00 m, PVC	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP65	IP67	
Approval/Conformity	CE, EAC	CE, cULus, EAC	
Productview	Page 135	Page 135	



BES0555

BES Q40KFC-PSY20B-DV02

BES020Y

BES 517-223-M3-E

BES0241

BES 517-223-U3-E

BES0201

BES 517-132-M3-H

40 x 40 x 54.5 mm

block style

for flush mounting

20 mm

40 Hz ±15 Hz

PBT

—

PBT

Cable, 2.00 m, PVC

10...30 VDC

-25...70 °C

IP67

CE, cULus, EAC

Page 136

120 x 40 x 40 mm

block style

for flush mounting

15 mm

100 Hz

PBT

—

PBT

Screw terminal

20...250 VDC/20...250 VAC

-25...70 °C

IP67

CE, cULus, EAC

Page 136

120 x 40 x 40 mm

block style

for flush mounting

15 mm

100 Hz

Aluminum, Die casting
PBT

—

PBT

Screw terminal

20...250 VDC/20...250 VAC

-25...70 °C

IP67

CE, cULus, EAC

Page 136

120 x 40 x 40 mm

block style

for flush mounting

15 mm

100 Hz

PBT

—

PBT

Screw terminal

10...55 VDC

-25...70 °C

IP67

CE, EAC

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PNP normally open			
PNP normally open/normally closed	BES0209 BES 517-132-M6-H	BES020A BES 517-132-M6-H-S4	
Normally open/normally closed			
Dimension	120 x 40 x 40 mm	132.5 x 40 x 40 mm	
Style	block style	block style	
Installation	for flush mounting	for flush mounting	
Range	20 mm	20 mm	
Switching frequency	50 Hz	50 Hz	
Housing material	PBT	PBT	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Screw terminal	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...55 VDC	10...55 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, EAC	CE, EAC	
Productview	Page 136	Page 136	



BES021W BES Q40KFU-PSC20B-S04G			
	BES0217 BES Q40KFU-PAC20B-S04G	BES03PN BES Q40KHU-PAC20B-S04G	
			BES020Z BES 517-223-M4-E
40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 65 mm	120 x 40 x 40 mm
block style	block style	block style	block style
for flush mounting	for flush mounting	for flush mounting	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 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Screw terminal
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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
Page 136	Page 136	Page 136	Page 136



PNP normally open			
PNP normally open/normally closed			
Normally open/normally closed	BES0244 BES 517-223-U4-E	BES023Y BES 517-223-M5-E	
Dimension	120 x 40 x 40 mm	120 x 40 x 40 mm	
Style	block style	block style	
Installation	non-flush	non-flush	
Range	20 mm	30 mm	
Switching frequency	100 Hz	100 Hz	
Housing material	Aluminum, Die casting PBT	PBT	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Screw terminal	Screw terminal	
Operating voltage U_b	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Productview	Page 136	Page 136	



				BES0236 BES 517-385-V-C-S4
		BES0206 BES 517-132-M5-H	BES020C BES 517-132-M7-H	
BES0247 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
block style	block style	block style	block style	block style
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 terminal	Screw terminal	Screw terminal	Screw terminal	Connector, M12x1 connector, 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	CE, EAC	CE, EAC	CE, EAC	CE, EAC
Page 136	Page 136	Page 136	Page 136	Page 136



PNP normally open	BES021Z BES Q40KFU-PSC30F-S04G		
PNP normally open/normally closed		BES021E BES Q40KFU-PAC30F-S04G	
Dimension	40 x 40 x 62 mm	40 x 40 x 62 mm	
Style	block style	block style	
Installation	non-flush	non-flush	
Range	30 mm	30 mm	
Switching frequency	50 Hz	50 Hz	
Housing material	PBT	PBT	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Productview	Page 136	Page 136	



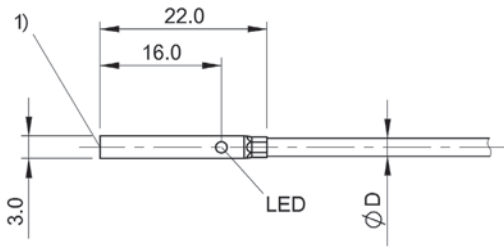
	BES020E BES 517-132-M7-H-S4	BES0308 BES Q40KFU-PSC40F-S04G-012	BES030C BES Q80KA-PAC50B-S04Q-U	
	132.5 x 40 x 40 mm	40 x 40 x 66 mm	112 x 80 x 40 mm	
	block style	block style	block style	
	non-flush	non-flush	for flush mounting	
	40 mm	40 mm	50 mm	
	50 Hz	60 Hz	70 Hz	
	PBT	PA	PPE	
	—	—	—	
	PBT	PA	PPE	
	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
	10...55 VDC	10...30 VDC	10...36 VDC	
	-25...70 °C	-25...70 °C	-25...70 °C	
	IP67	IP67	IP67	
	CE, EAC	CE, cULus, EAC	CE, cULus, EAC	
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PNP normally open/normally closed	BES023P BES 517-139-M4-H		
Normally open/normally closed		BES022R BES 517-460-U5-L-D	
Dimension	80 x 80 x 40 mm	80 x 80 x 40 mm	
Style	block style	block style	
Installation	for flush mounting	non-flush	
Range	40 mm	50 mm	
Switching frequency	50 Hz	10 Hz	
Housing material	PBT	PBT	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Screw terminal	Screw terminal	
Operating voltage U_b	10...55 VDC	20...250 VAC	
Ambient temperature	-15...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, EAC	CE, EAC	
Productview	Page 137	Page 137	

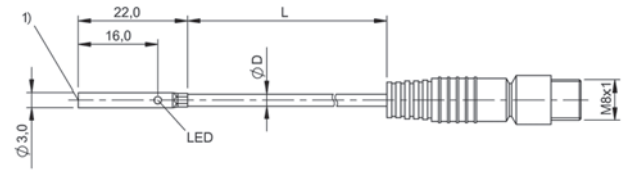


	BES023R BES 517-139-M5-H	BES024F BES 517-224-M5-E	BES023W BES 517-139-U5-H-S4	
	80 x 80 x 40 mm	40 x 80 x 80 mm	80 x 80 x 40 mm	
	block style	block style	block style	
	non-flush	non-flush	non-flush	
	50 mm	50 mm	50 mm	
	100 Hz	10 Hz	100 Hz	
	PBT	PBT	PBT	
	—	—	—	
	PBT	PBT	PBT	
	Screw terminal	Screw terminal	Connector, M12x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	
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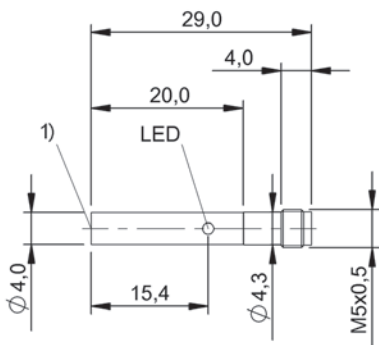
1) Sensing surface

BES03Z6



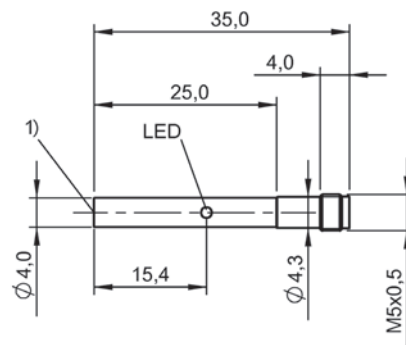
1) Sensing surface

BES0409



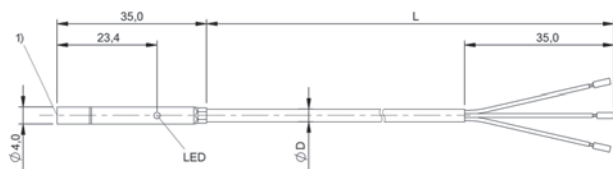
1) Sensing surface

BES0122, BES0120



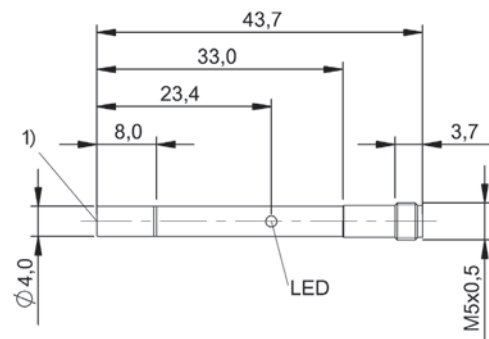
1) Sensing surface

BES012F



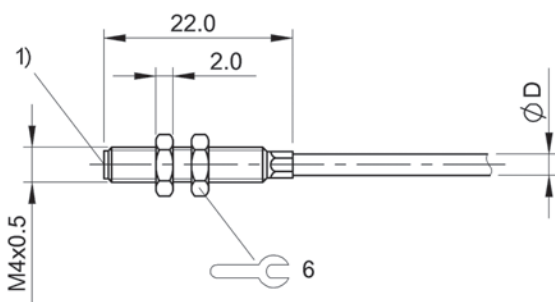
1) Sensing surface

BES012H, BES012J



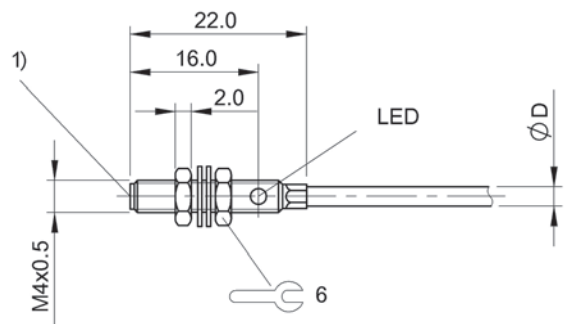
1) Sensing surface

BES012K

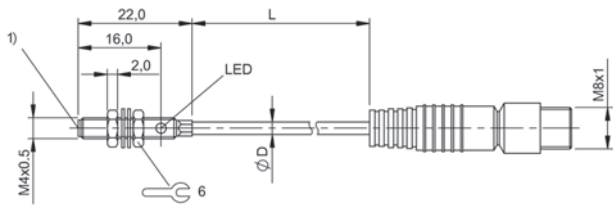


1) Sensing surface

BES01P0

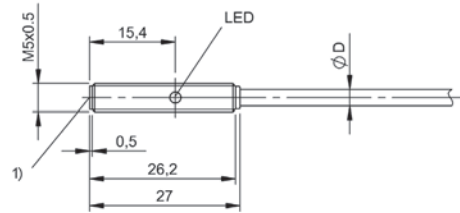


BES03ZJ, BES03Z8



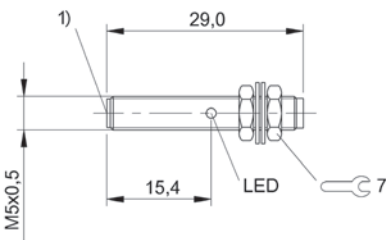
1) Sensing surface

BES040R



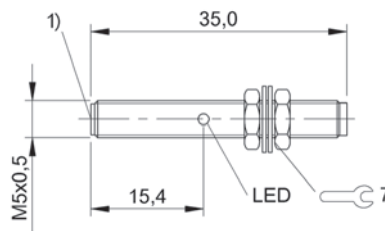
1) Sensing surface

BES051J, BES051L



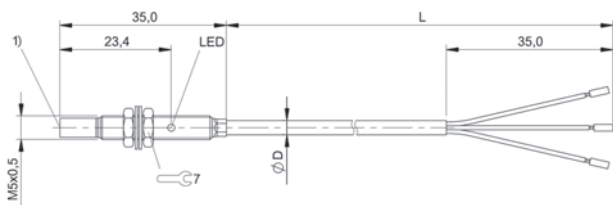
1) Sensing surface

BES012W, BES012Z



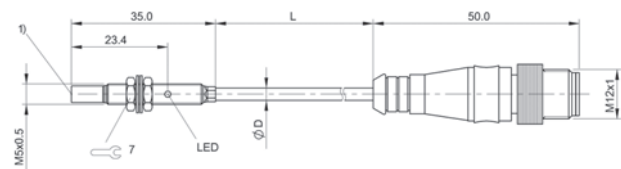
1) Sensing surface

BES0130, BES013A, BES0137



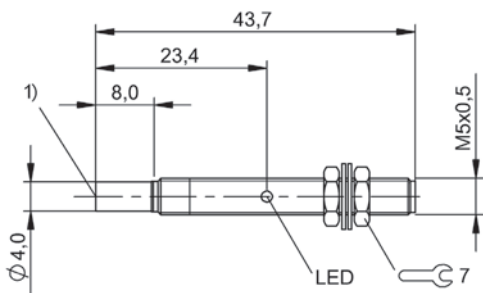
1) Sensing surface

BES013E, BES013F



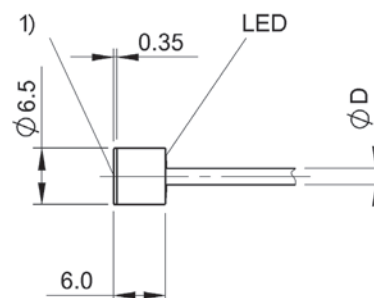
1) Sensing surface

BES013C



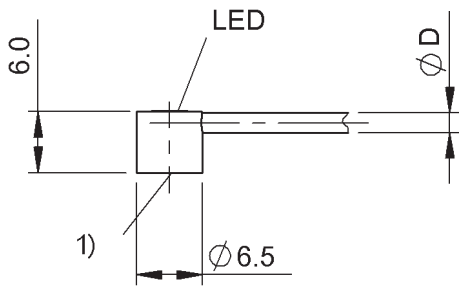
1) Sensing surface

BES013H, BES0139



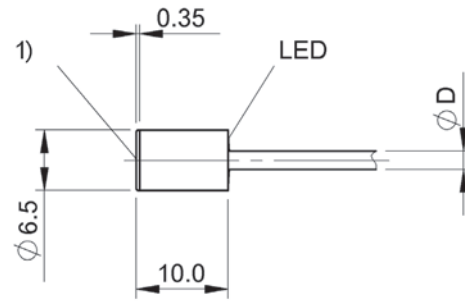
1) Sensing surface

BES0256, BES0251, BES0258



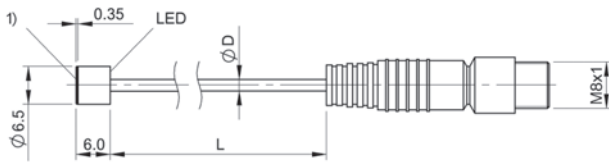
1) Sensing surface

BES025U, BES03ZA



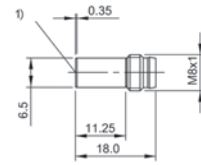
1) Sensing surface

BES025L, BES025M, BES025H



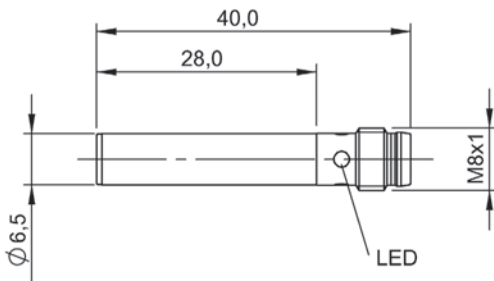
1) Sensing surface

BES0254, BES051H, BES0257

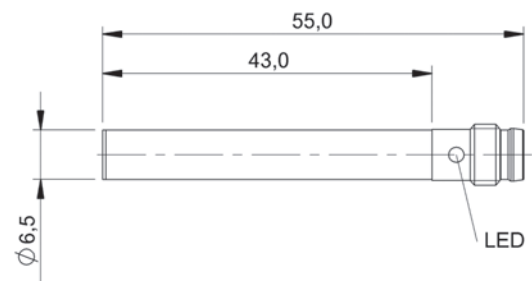


1) Sensing surface

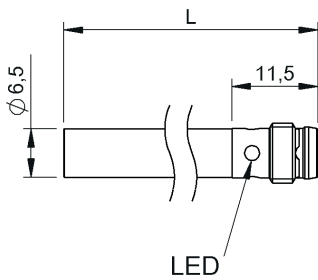
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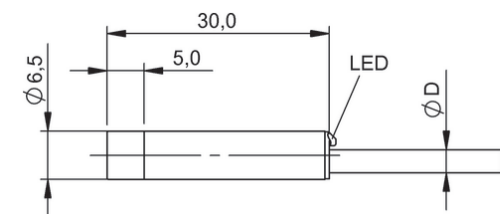
BES03R9



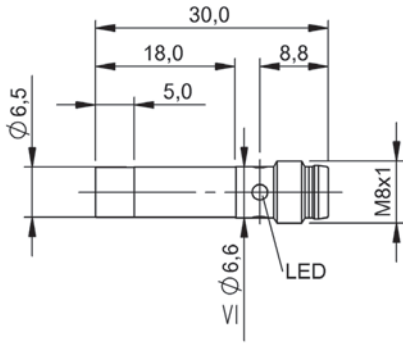
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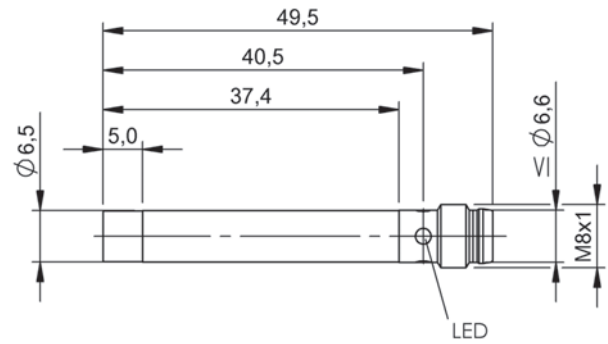
BES038Y



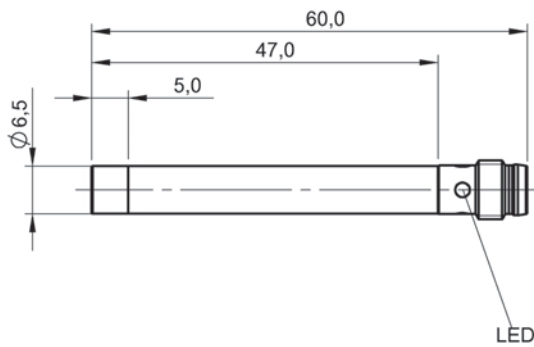
BES0008, BES000E



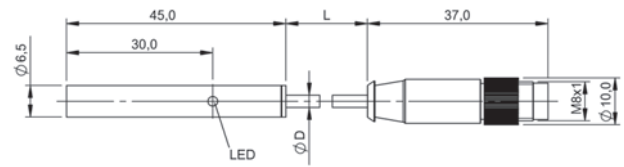
BES0005



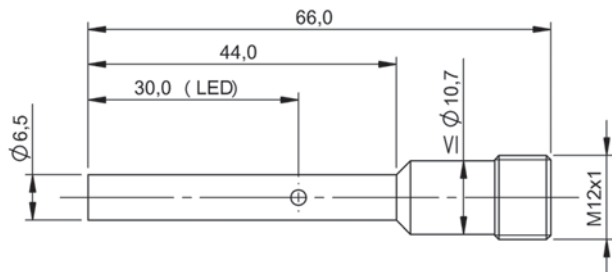
BES01NP



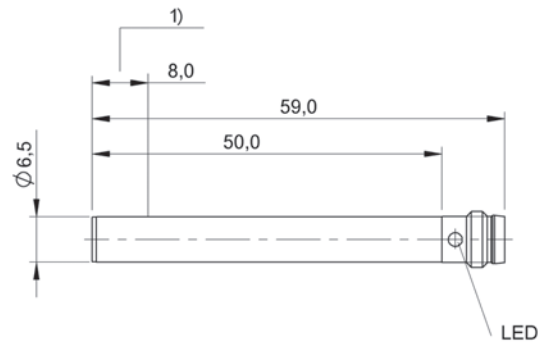
BES03P5



BES03EJ

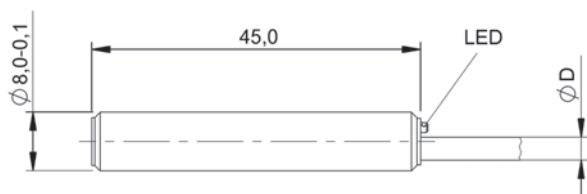


BES02UR

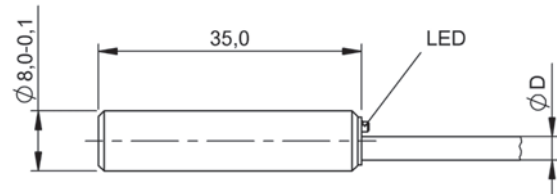


BES01NT

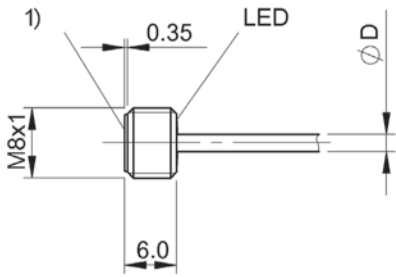
1) siehe Bemerkungen



BES012R, BES01NY, BES012T

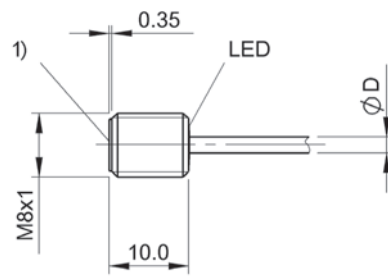


BES012L



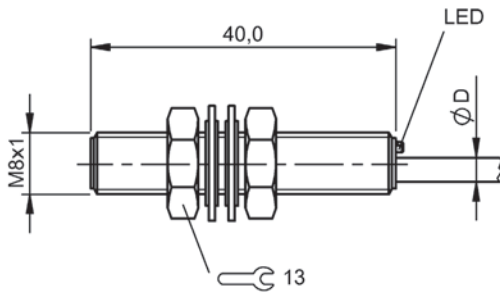
1) Sensing surface

BES026M

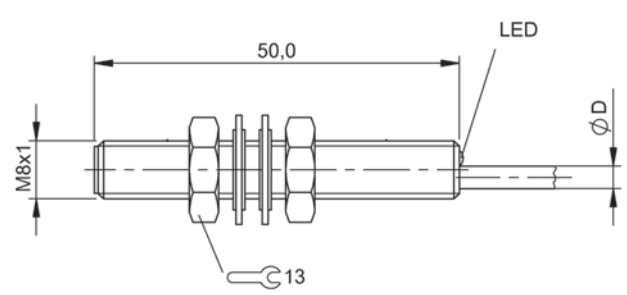


1) Sensing surface

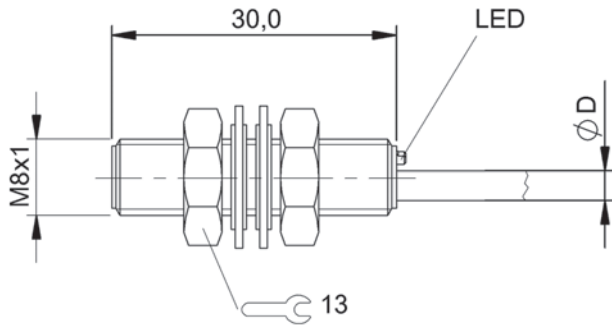
BES0275



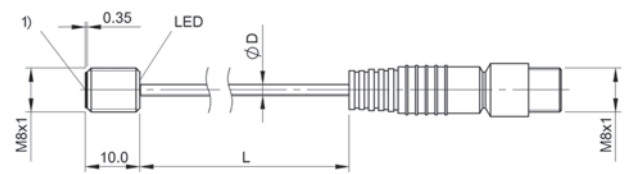
BES00CN, BES014K, BES00CR, BES00CW



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

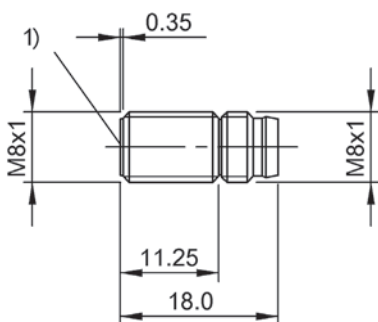


BES0389



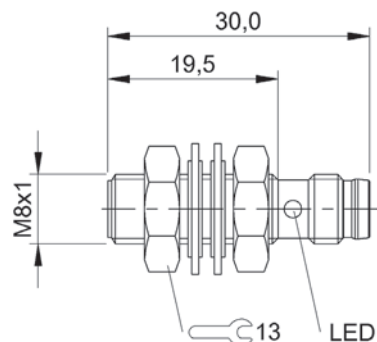
1) Sensing surface

BES0276

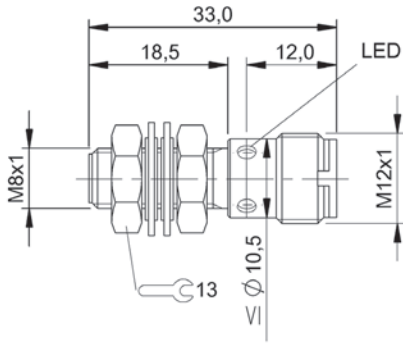


1) Sensing surface

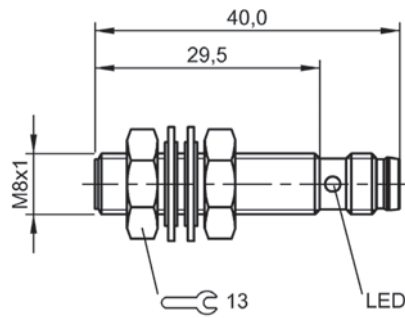
BES0277, BES0270, BES0278



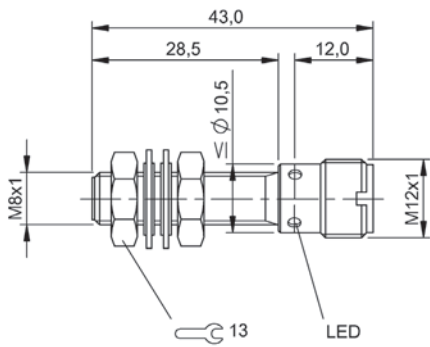
BES013J, BES013N, BES013K, BES013P, BES013L



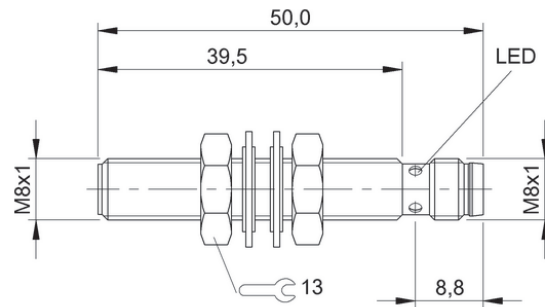
BES013M



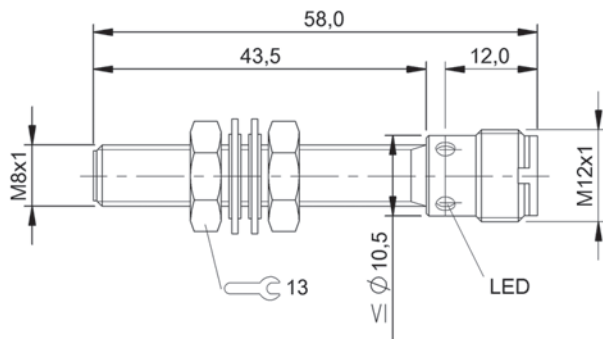
BES0147, BES0143, BES014A, BES0145, BES0427



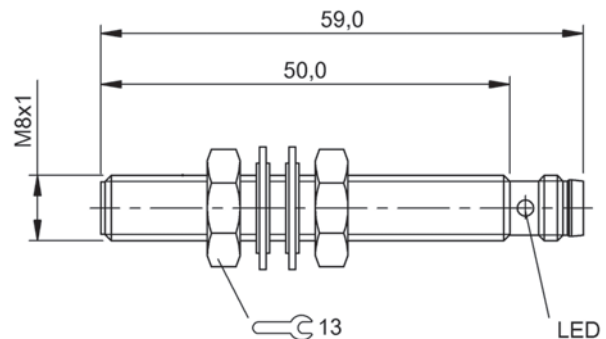
BES013Y, BES0146, BES0142, BES0149



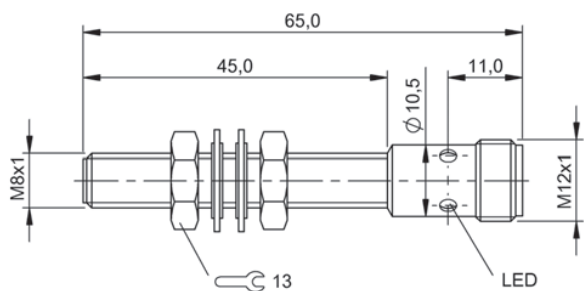
BES01P7



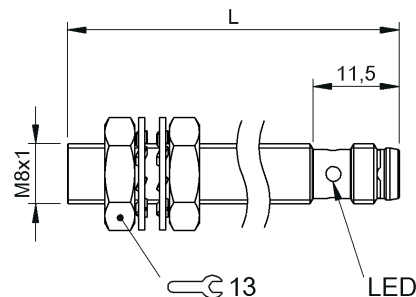
BES01PC, BES01PE, BES01PH



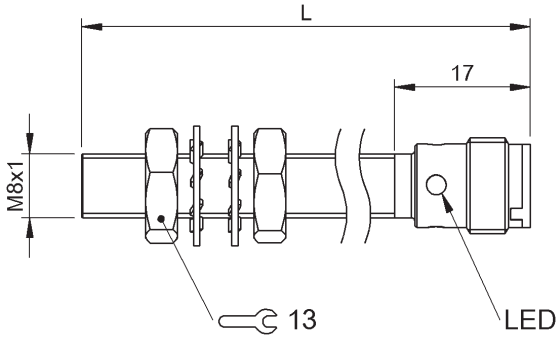
BES002K, BES03P6, BES003C, BES002U, BES0033, BES003P, BES01ZT, BES01ZW



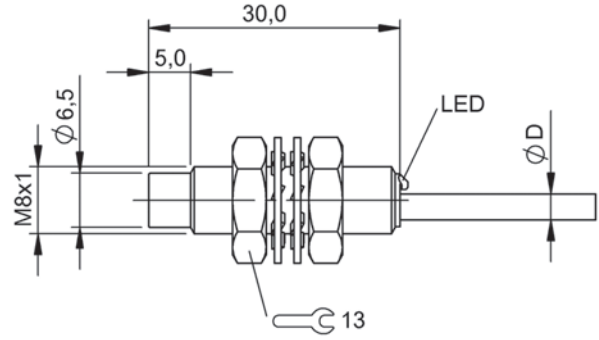
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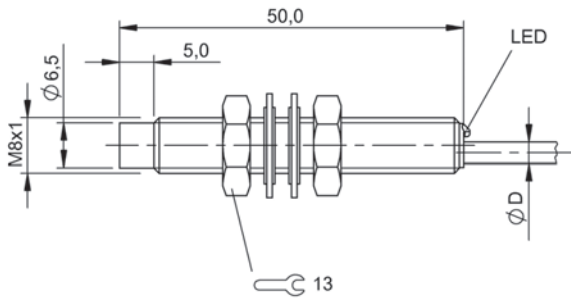
BES054N



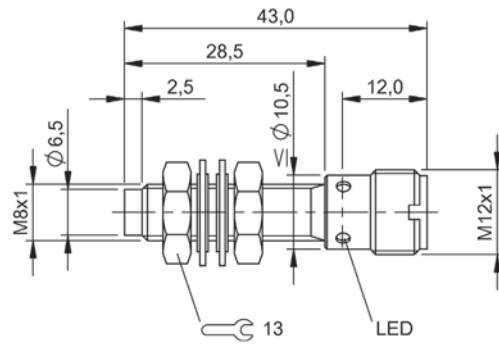
BES02W7, BES02W9



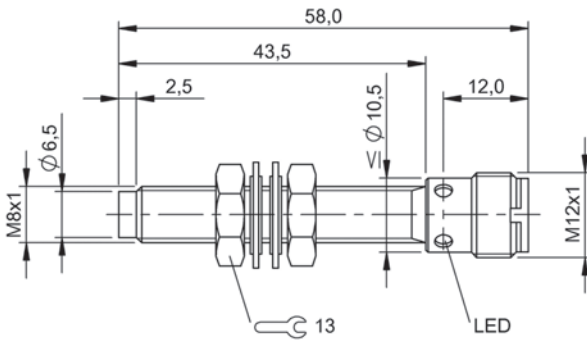
BES000T, BES000Y



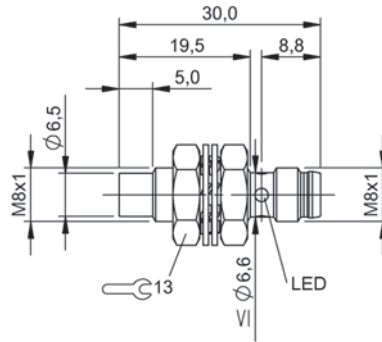
BES0013, BES0016, BES0014



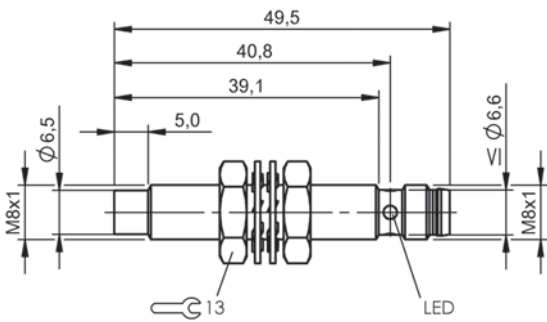
BES01P3



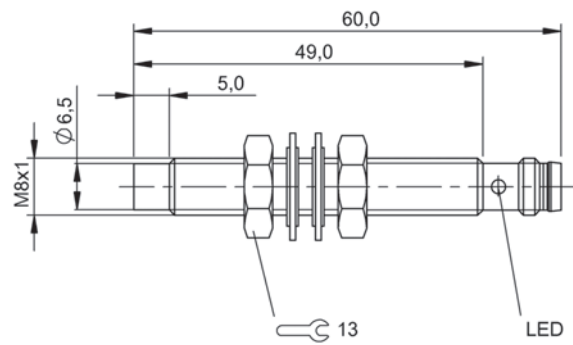
BES01P5, BES01P8, BES01P6



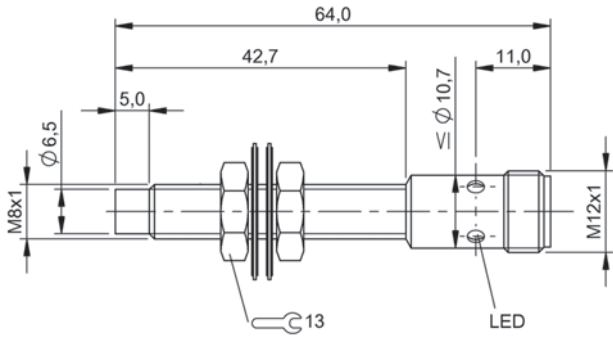
BES000M, BES000L



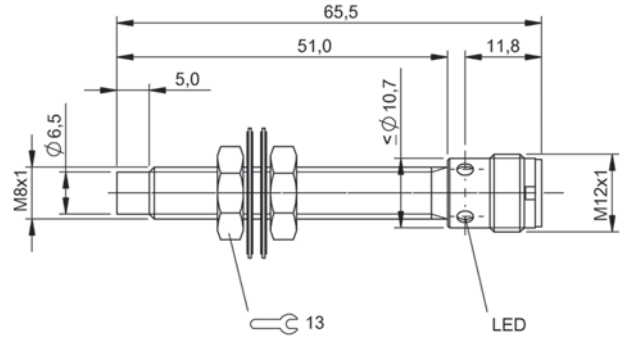
BES014M



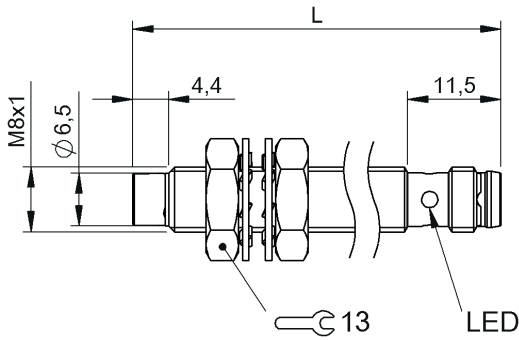
BES001C, BES001J, BES001F



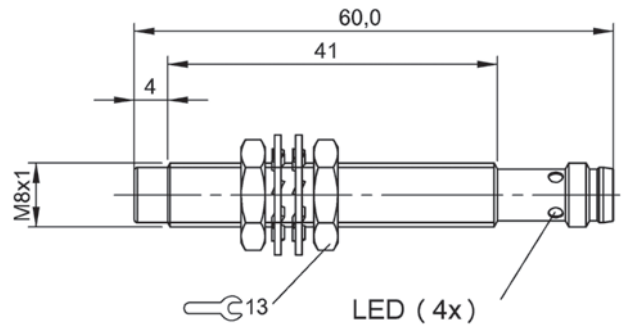
BES01P9



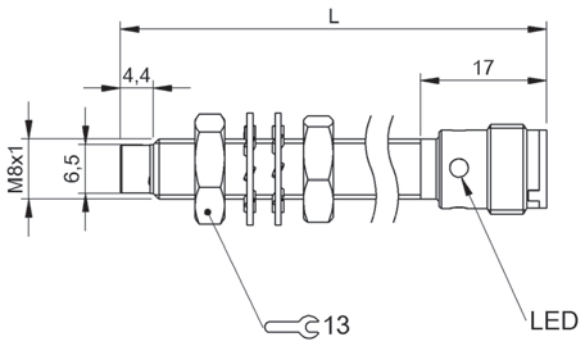
BES001A, BES001H, BES001E



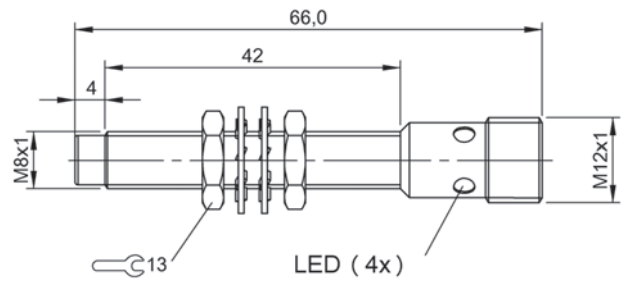
BES054Z, BES0550



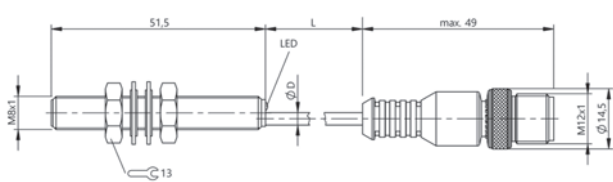
BES02W4



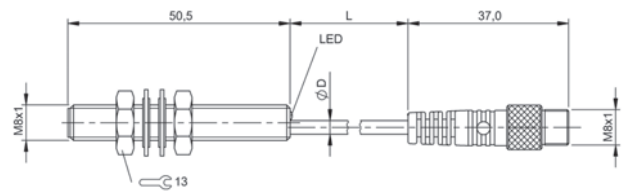
BES058J



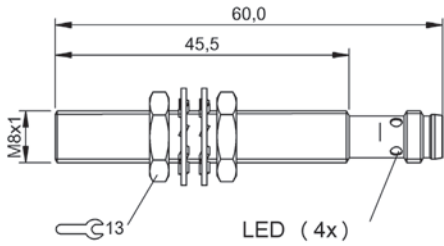
BES02W0, BES02W3



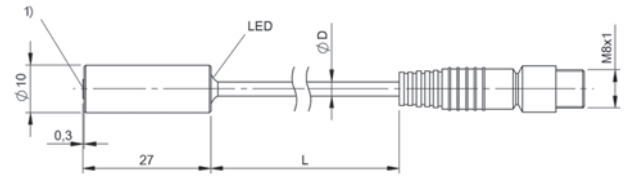
BES01ZR, BES01ZU



BES003R

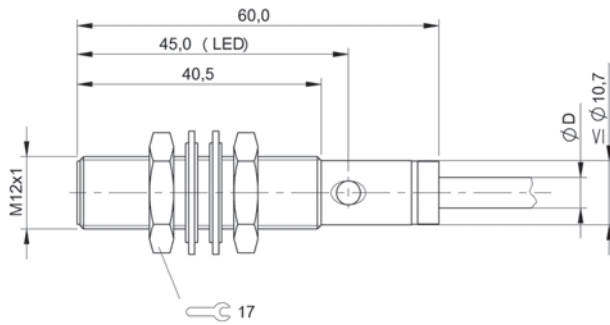


BES02W6

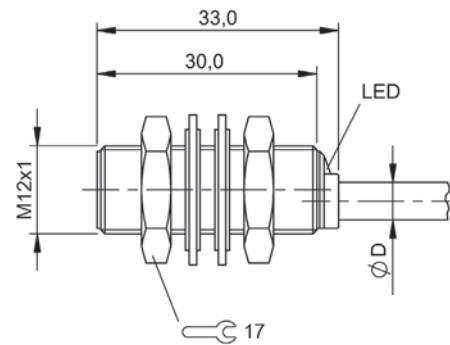


1) Sensing surface

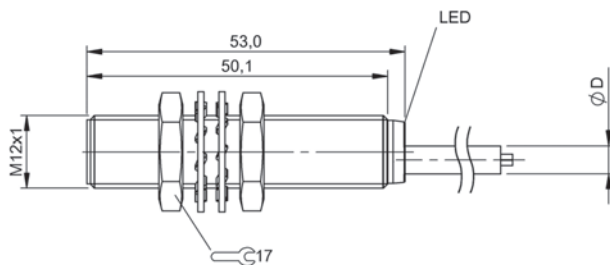
BES04TU



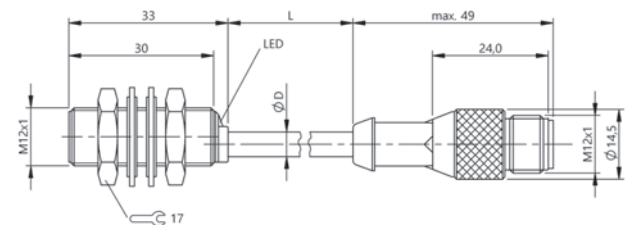
BES02C9, BES027M, BES027N



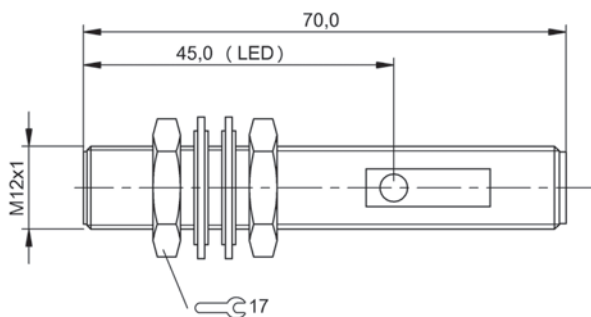
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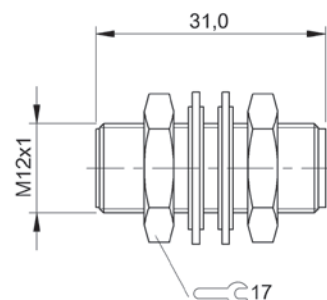
BES0057, BES0058, BES0062, BES0064, BES0001, BES0065



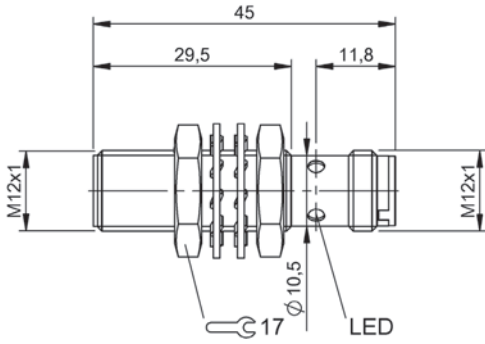
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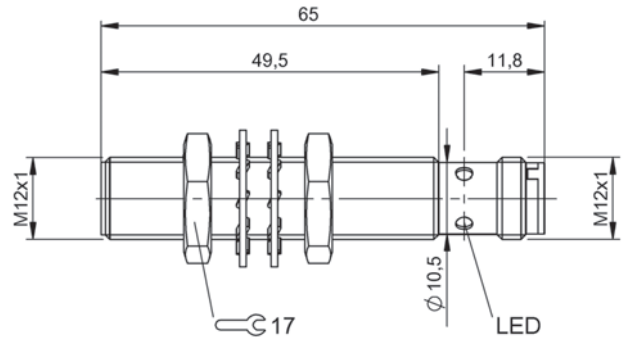
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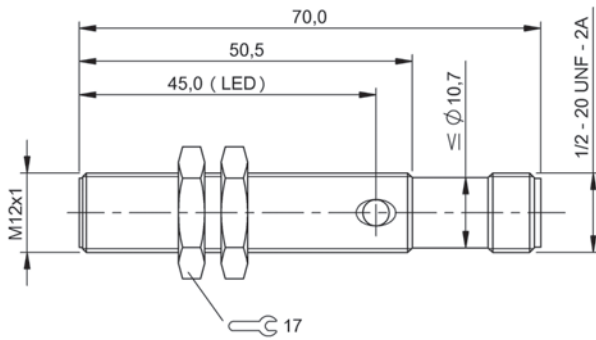
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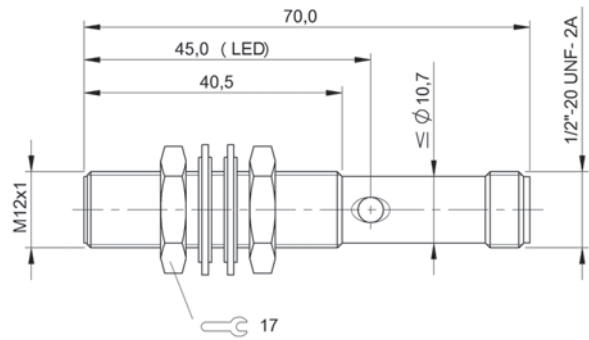
BES00PK, BES00YT, BES00EF, BES00PY, BES00ZO, BES02WM



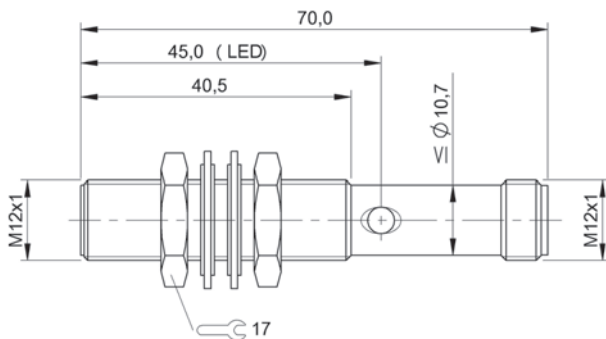
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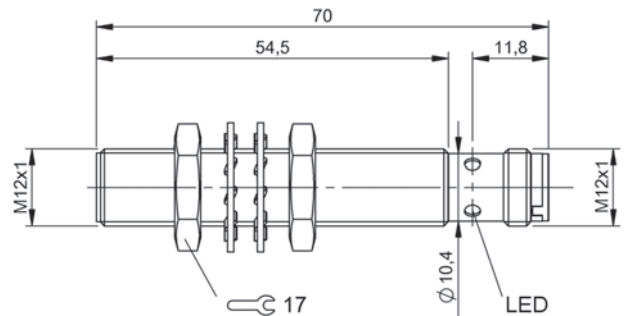
BES02FP



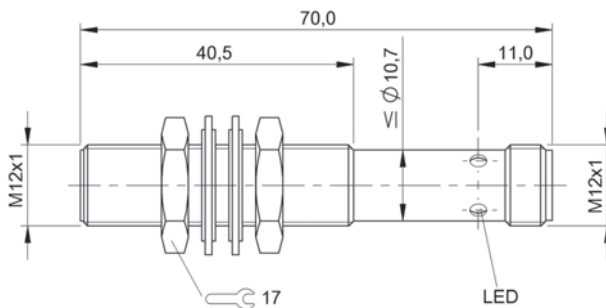
BES027U, BES027T



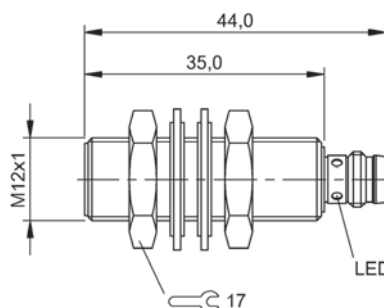
BES027W



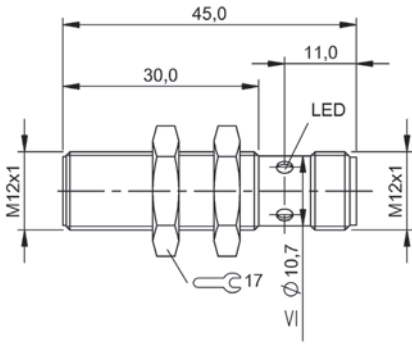
BES01C8, BES01K6, BES01C7



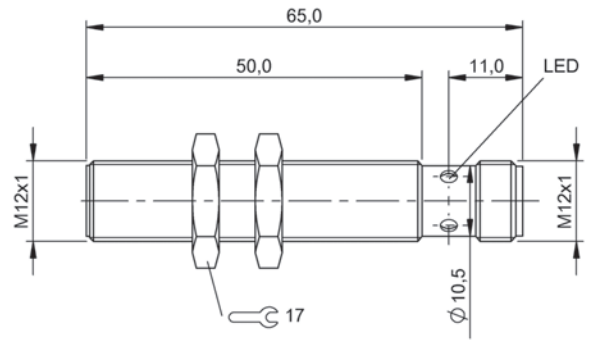
BES0161



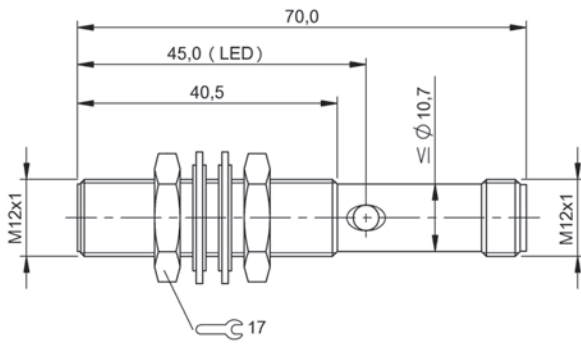
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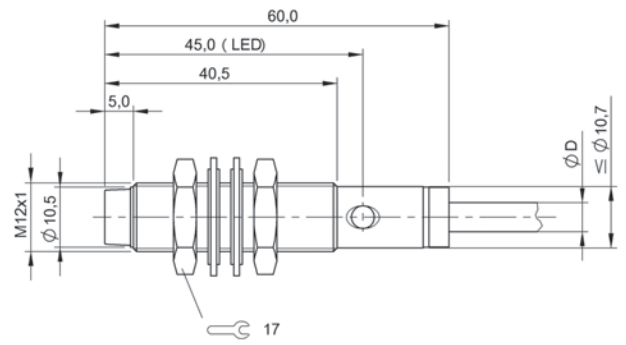
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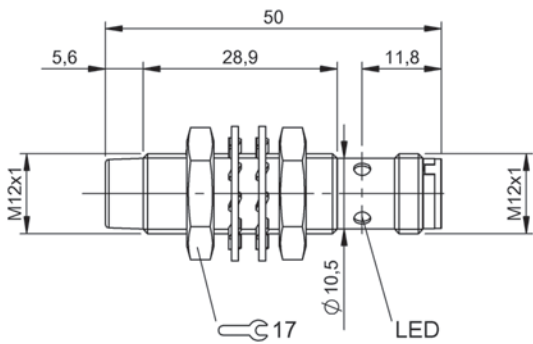
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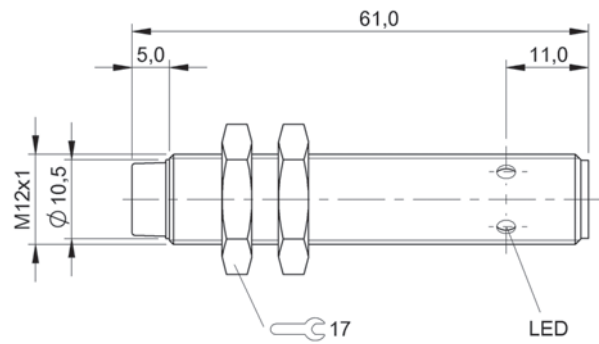
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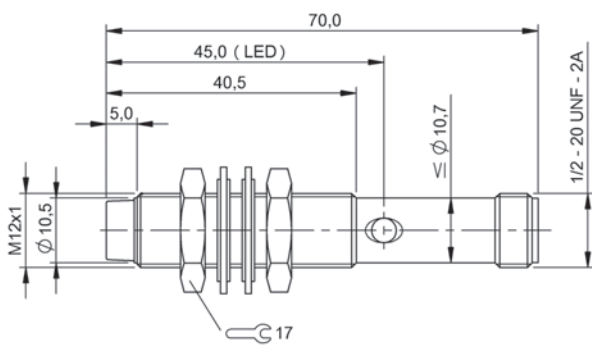
BES0285, BES0286, BES028F



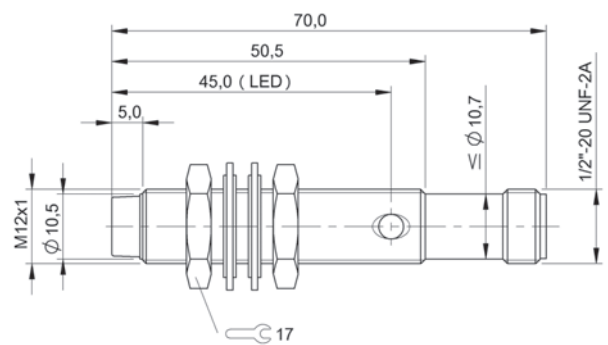
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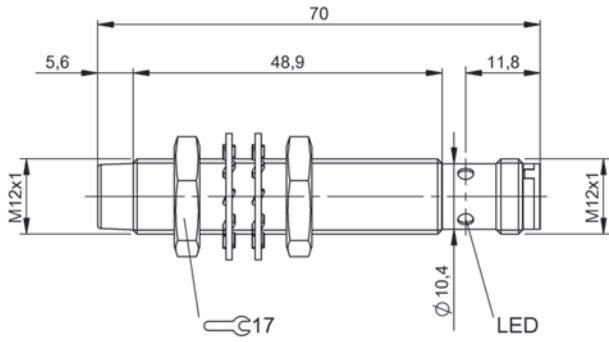
BES036T



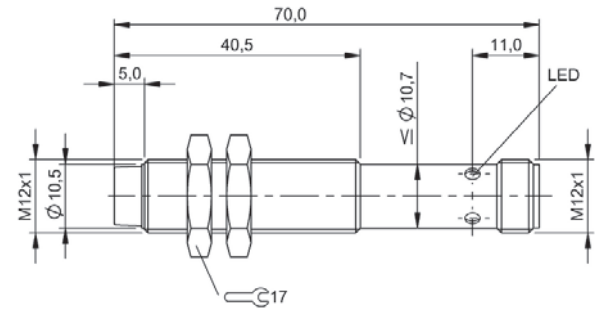
BES028A, BES0289



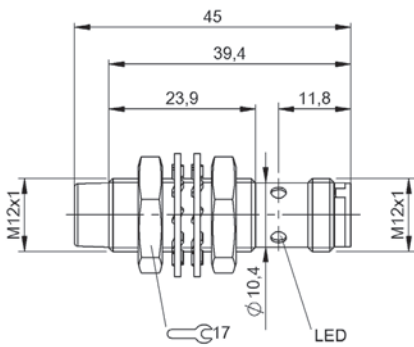
BES0330



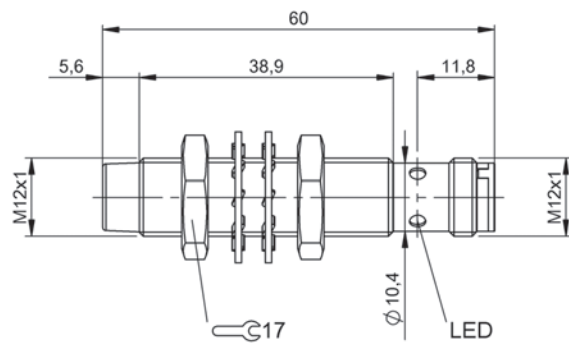
BES01H6, BES0178



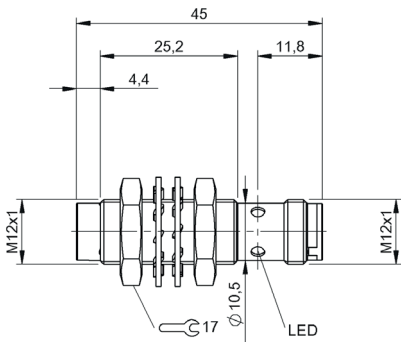
BES036R



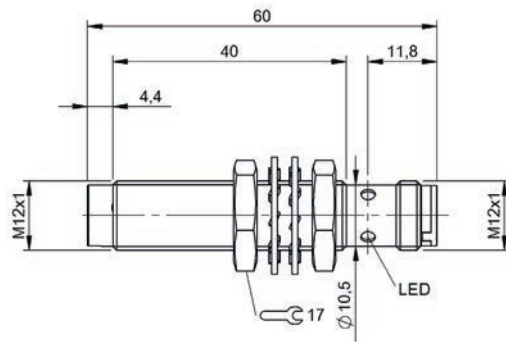
BES01PY



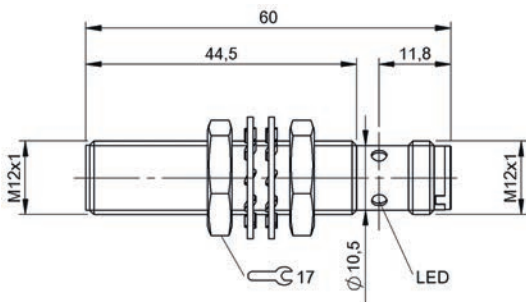
BES01PN, BES004N



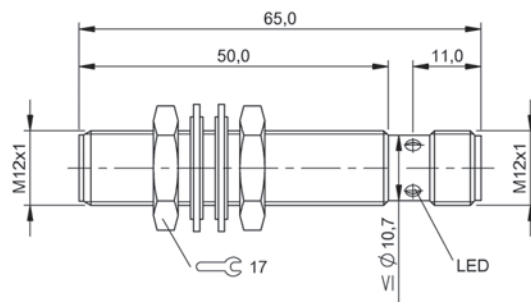
BES02WK



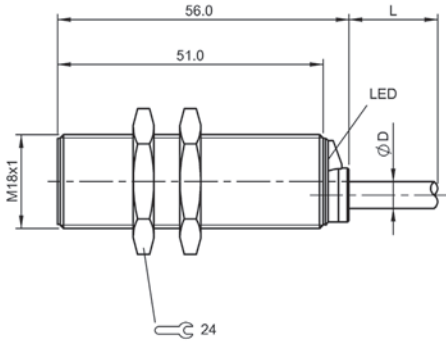
BES02WR



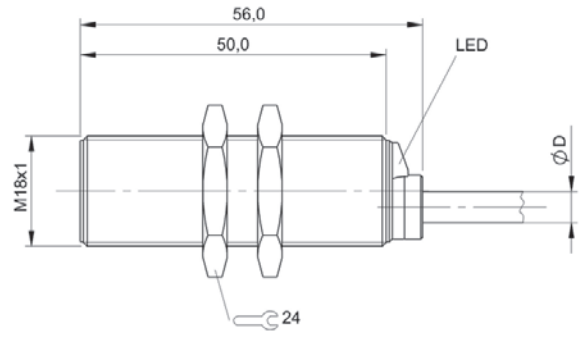
BES02WZ, BES02WY



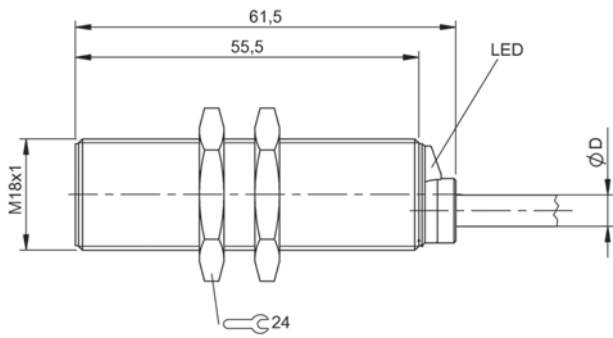
BES012N



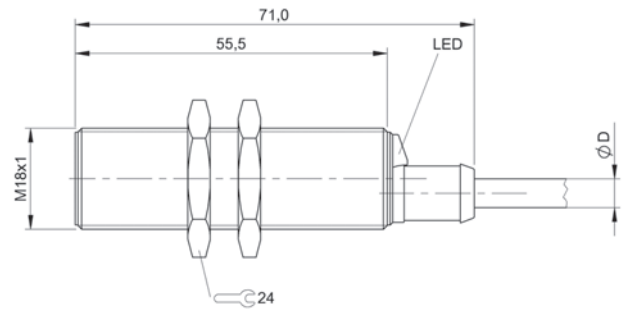
BES02AU, BES02AW



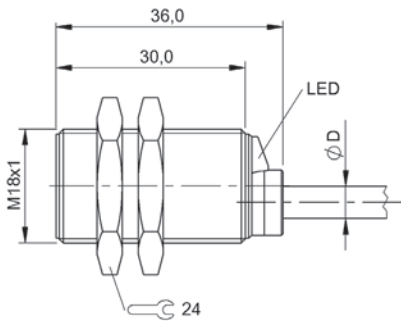
BES0083, BES007H, BES007J



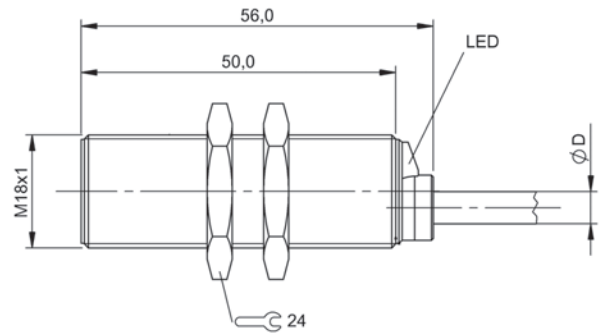
BES028L, BES028N



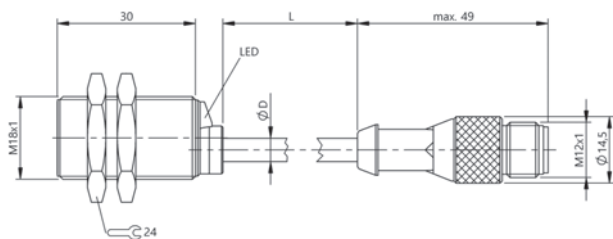
BES028U



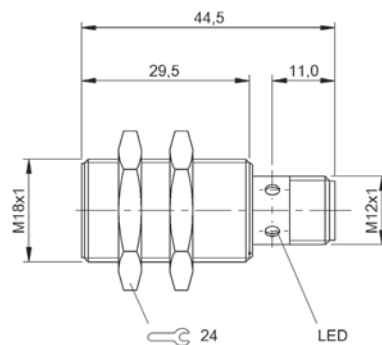
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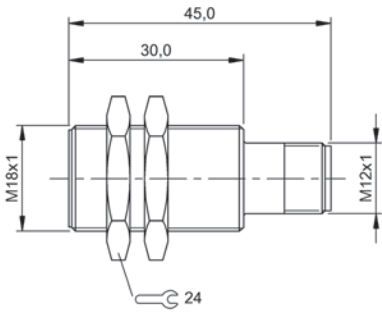
BES008E, BES0089, BES008F, BES008H



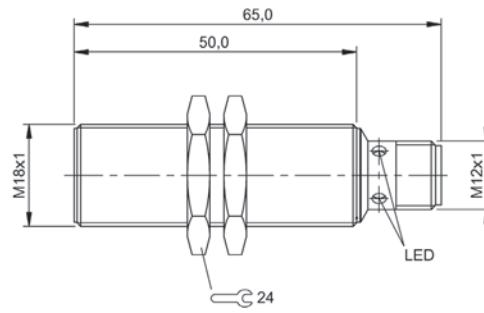
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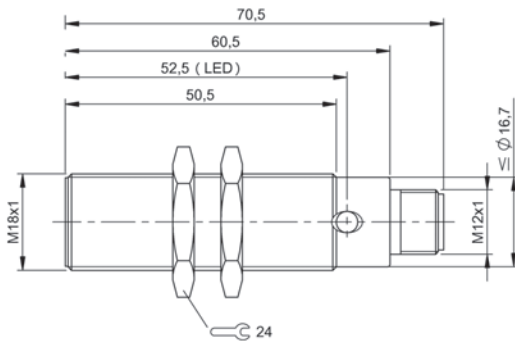
BES00EY, BES00R6, BES00RC, BES02P3



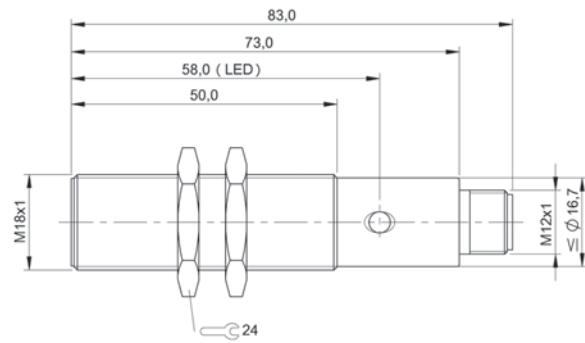
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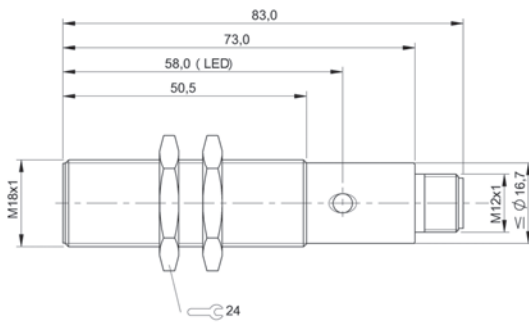
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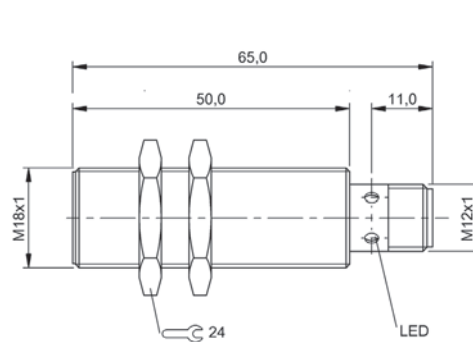
BES028R



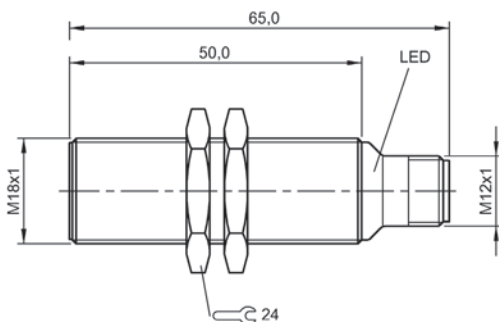
BES02EU



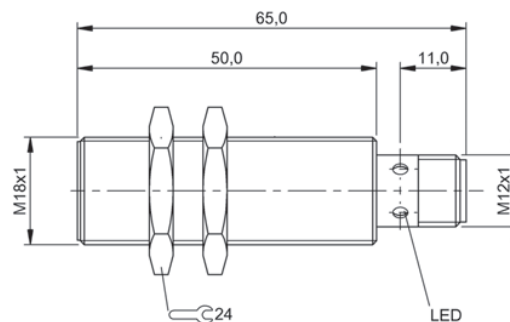
BES01CW, BES015N, BES01JW



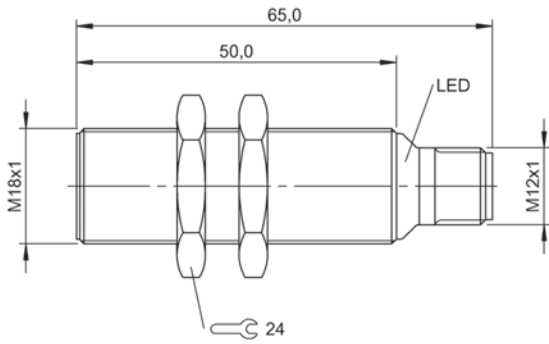
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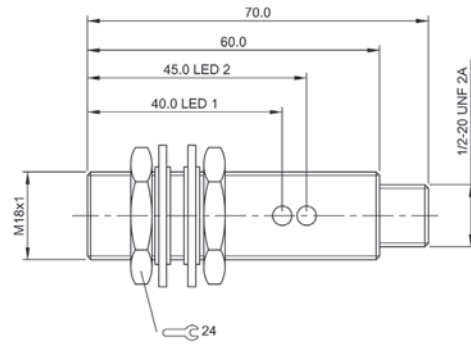
BES007M



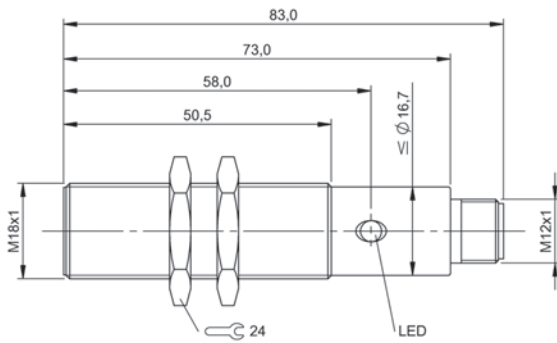
BES02H0



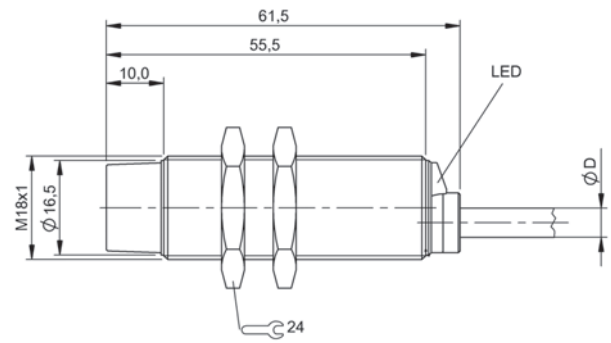
BES008M, BES007Y



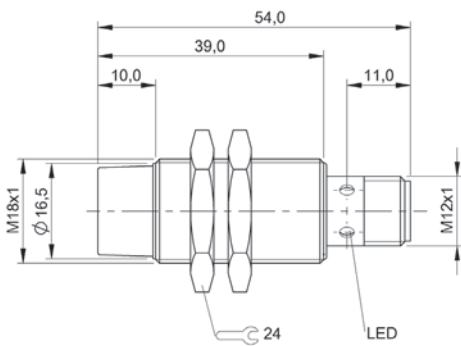
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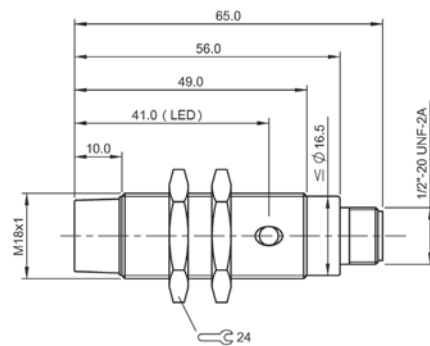
BES0496



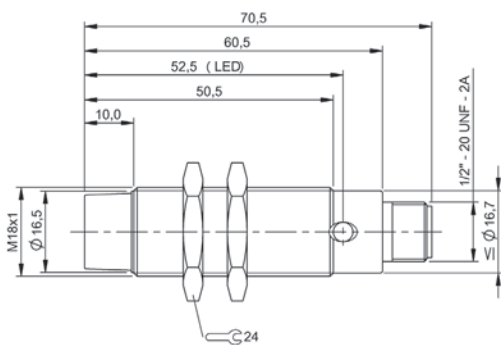
BES02C5, BES0292



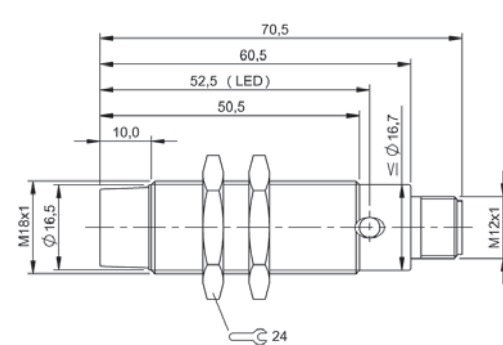
BES00WM



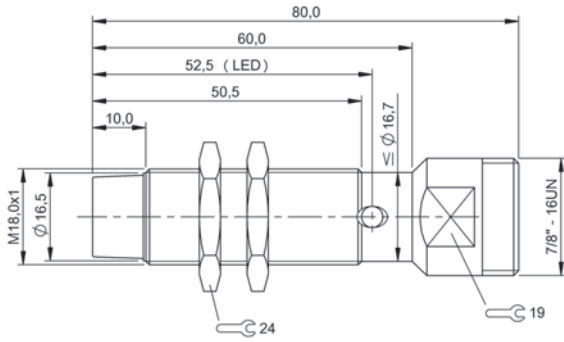
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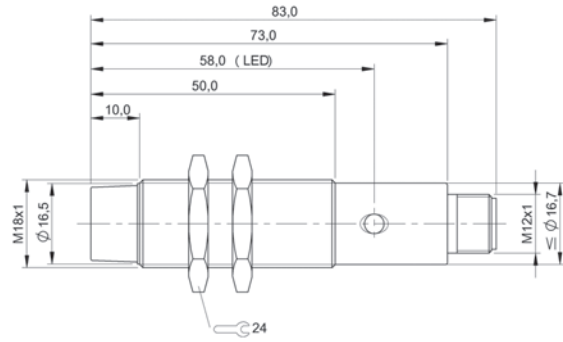
BES0296, BES029A



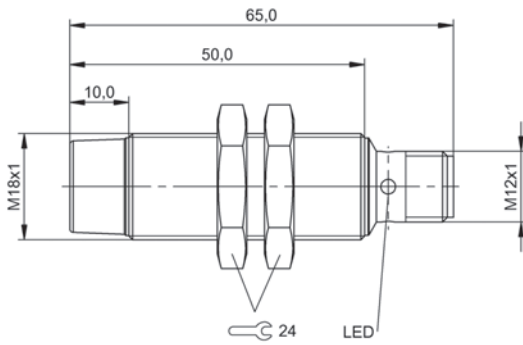
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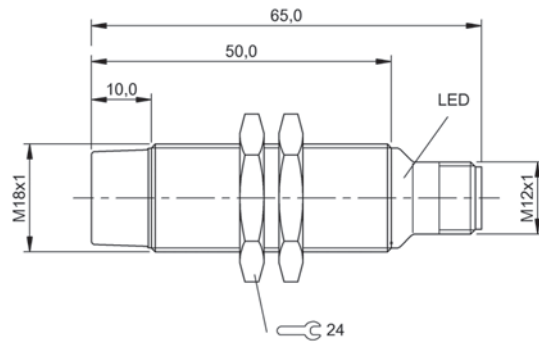
BES0298



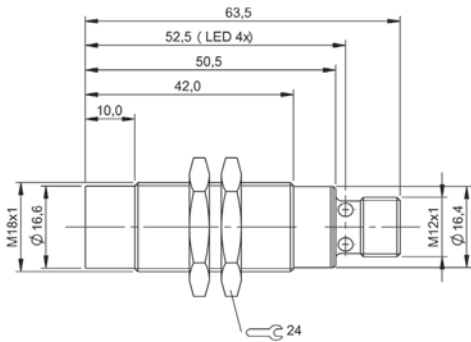
BES01HY, BES01HW, BES016W



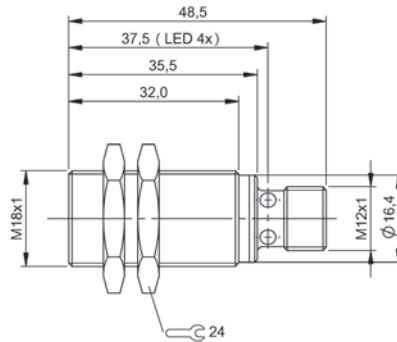
BES03RM



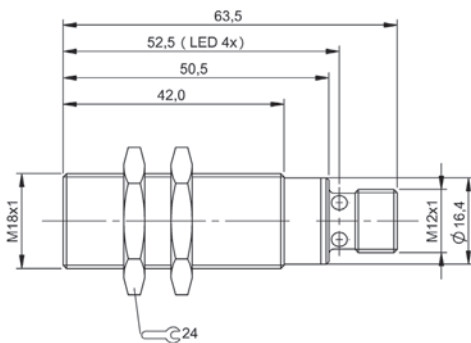
BES0070



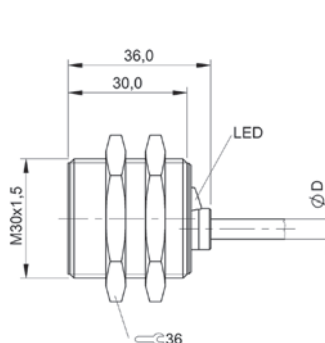
BES02Y7



BES02Y5

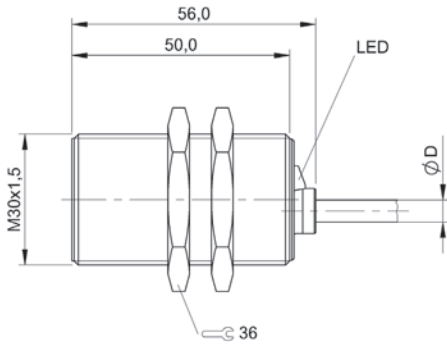


BES02Y9

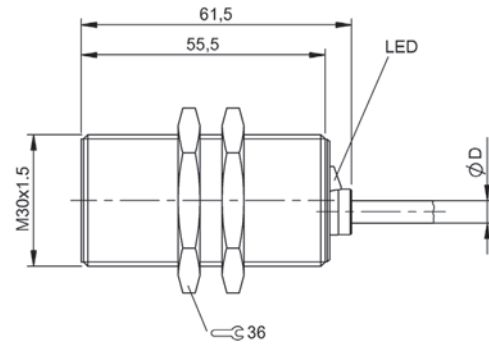


BES00RE, BES00RT, BES00LR

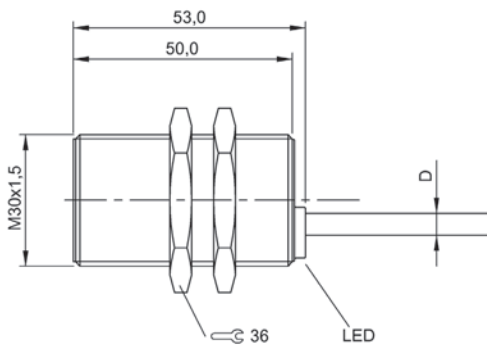
130 | Sensors | Inductive Sensors



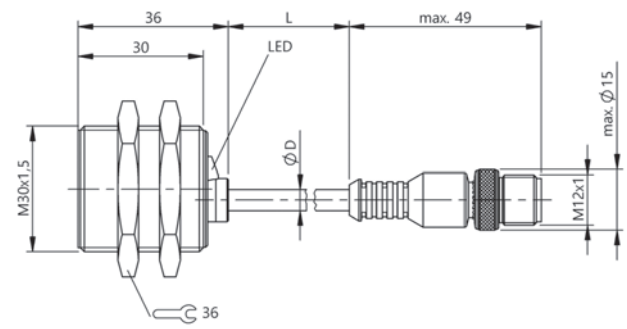
BES009E, BES00A1



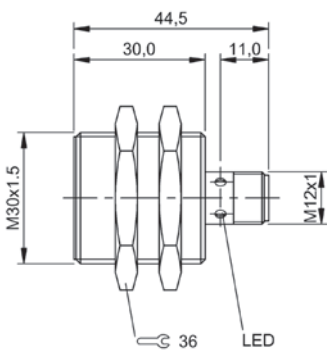
BES029L, BES029M



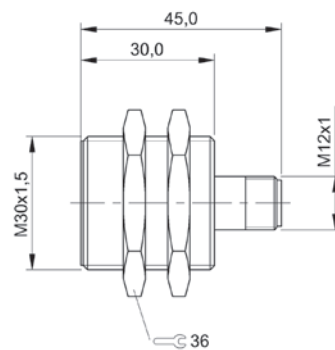
BES00AA, BES00AC



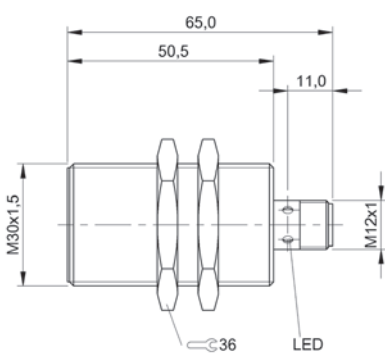
BES00LT



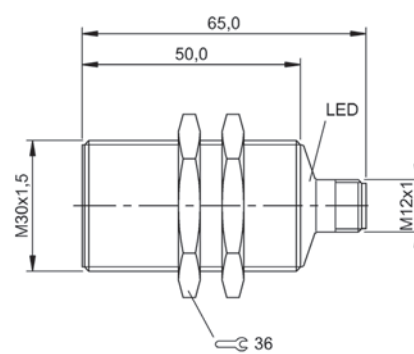
BES00RP, BES00RW, BES00LU



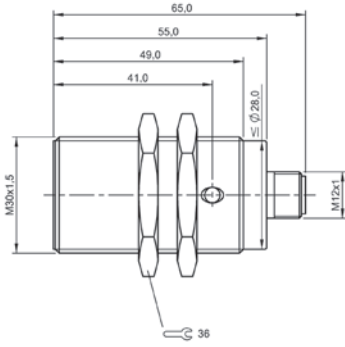
BES02F0



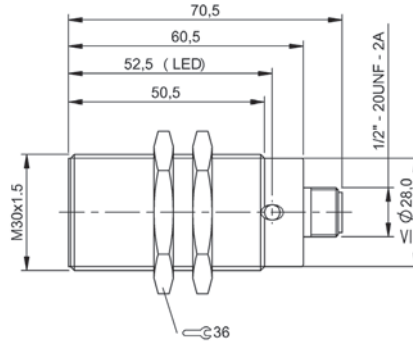
BES00A3



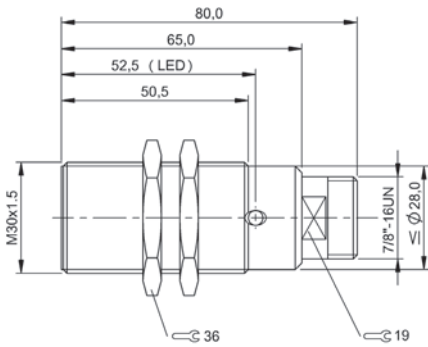
BES00A4



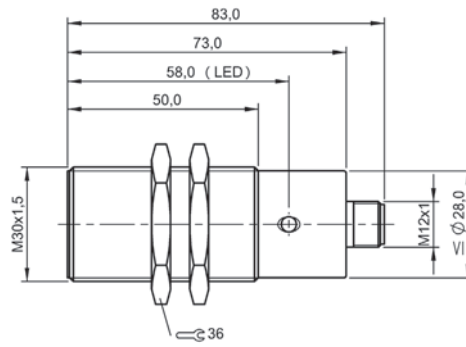
BES0316



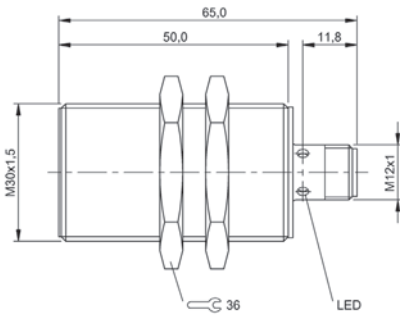
BES02E9



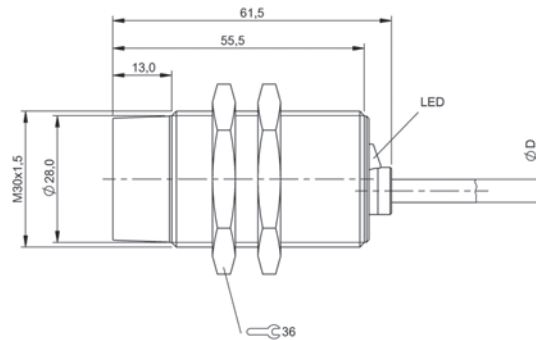
BES029W



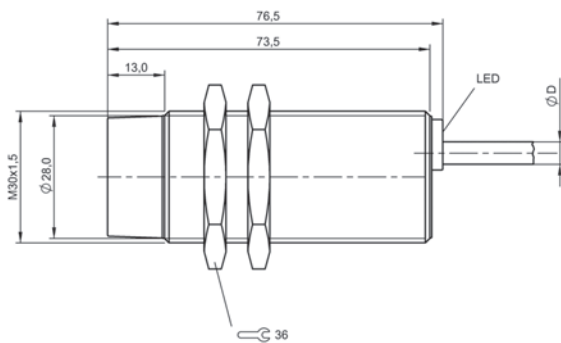
BES02F1, BES01EE, BES0167, BES01EA, BES01EC, BES0166



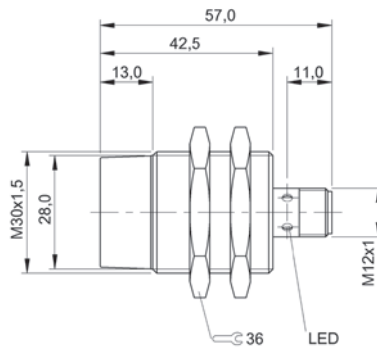
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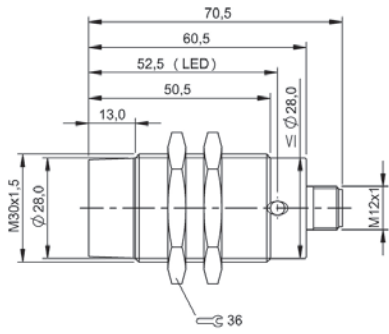
BES02A5



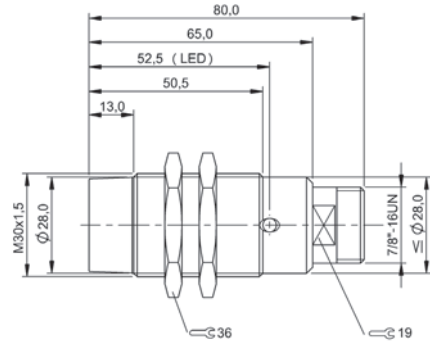
BES00AY



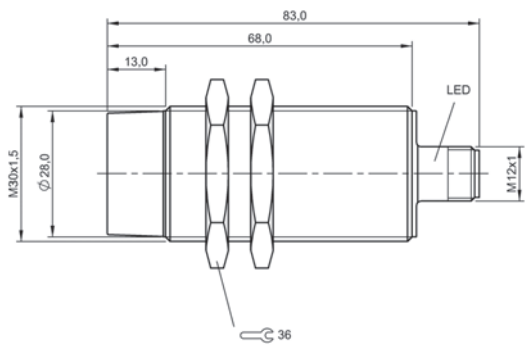
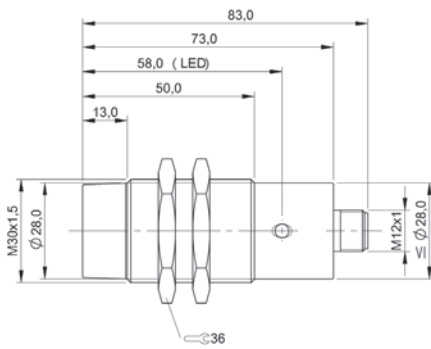
BES00Y0



BES02AC

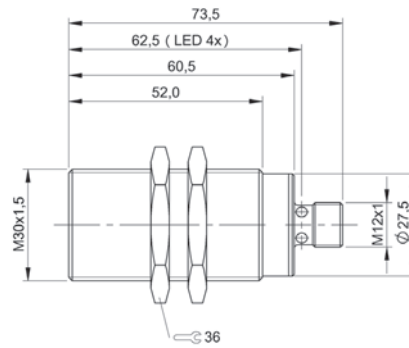
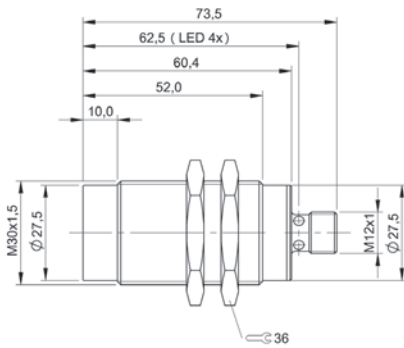


BES02AE



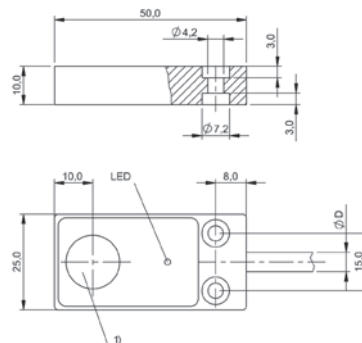
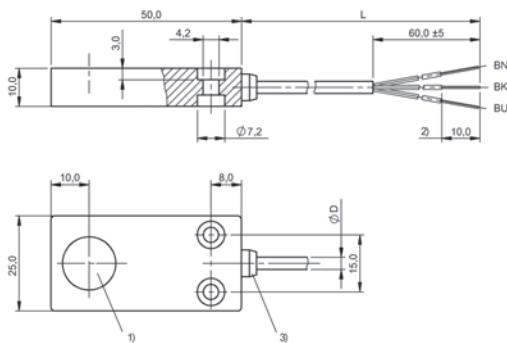
BES02FN, BES01JE, BES01JC

BES00AZ



BES02YJ

BES02YM, BES02YL

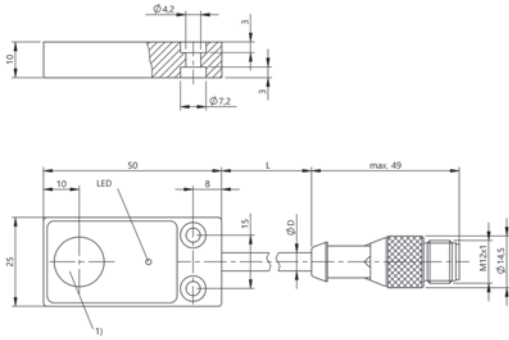


1) Sensing surface, 2) verzinkt, 3) LED rot

1) Sensing surface

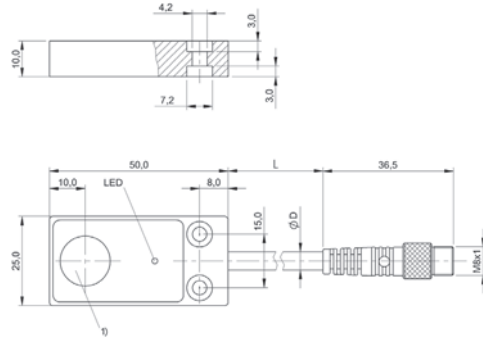
BES0341

BES01FJ, BES01FK, BES01FM, BES017H, BES032R



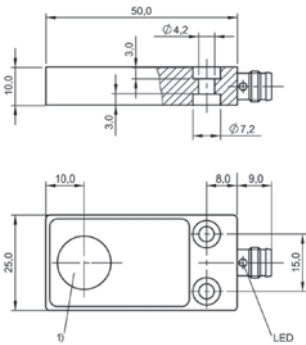
1) Sensing surface

BES01FN, BES0153



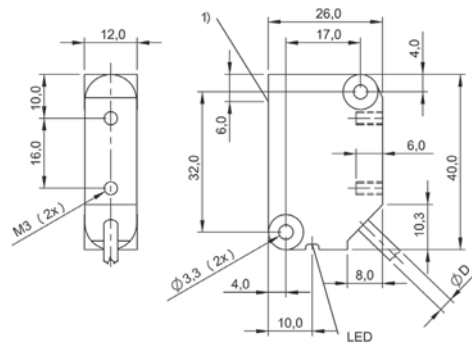
1) Sensing surface

BES01FT



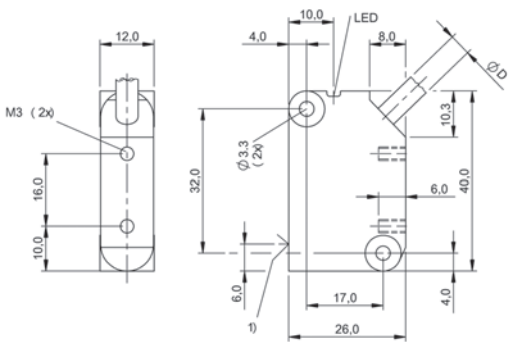
1) Sensing surface

BES01FR



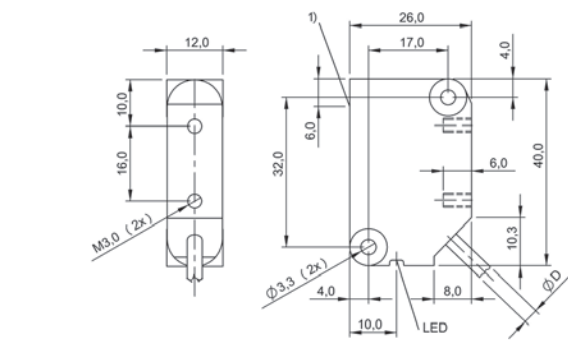
1) Sensing surface Ø8

BES02CT, BES02CU, BES01Z5



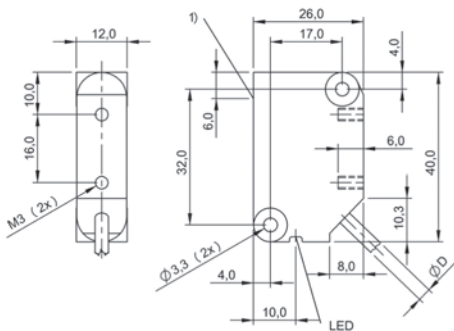
1) Sensing surface Ø8

BES01YZ



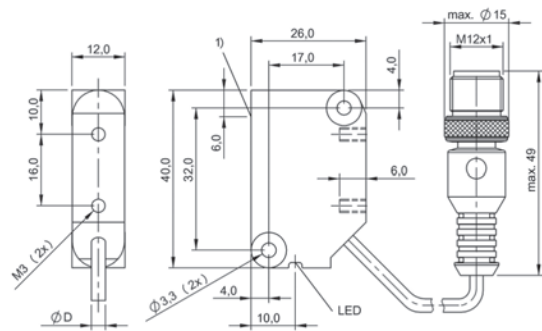
1) Sensing surface Ø8

BES02CY



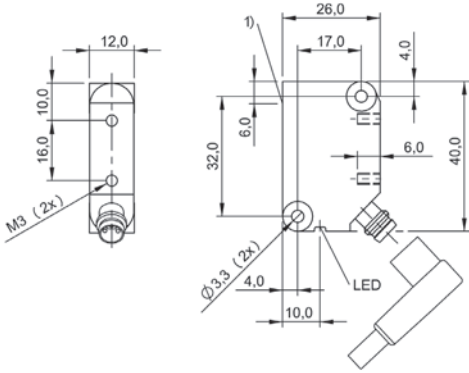
1) Sensing surface Ø8

BES01ZA, BES01ZC



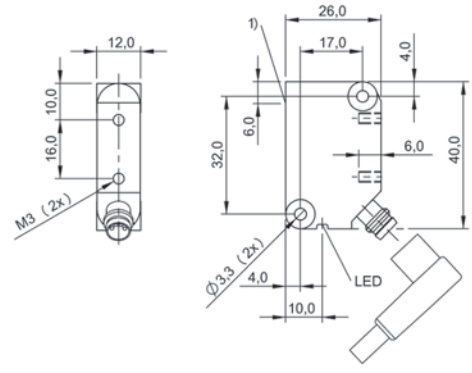
1) Sensing surface Ø8

BES01Z8



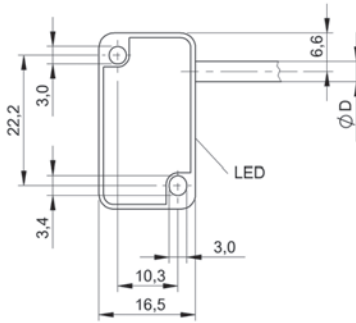
1) Sensing surface Ø8

BES01Z7, BES048A



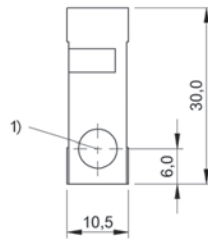
1) Sensing surface Ø8

BES01ZE, BES01Z2



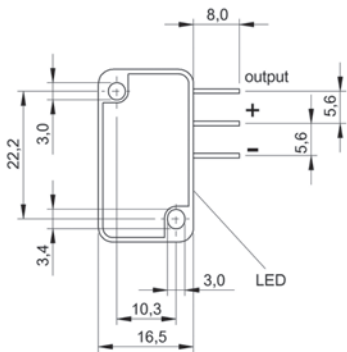
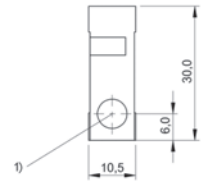
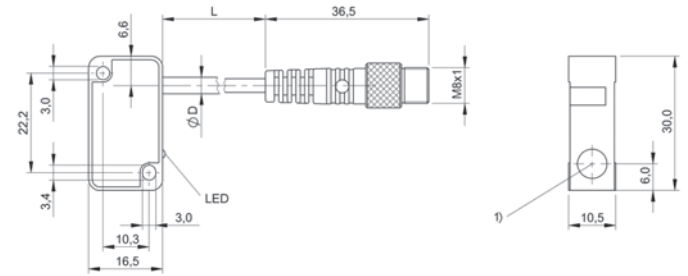
1) Sensing surface

BES01NH, BES01N5, BES01N6, BES01N8, BES01N9, BES01MM



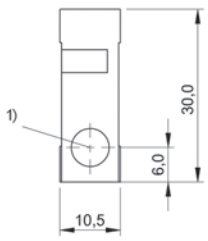
1) Sensing surface

BES01NA, BES01MT



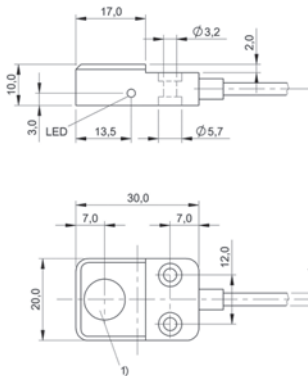
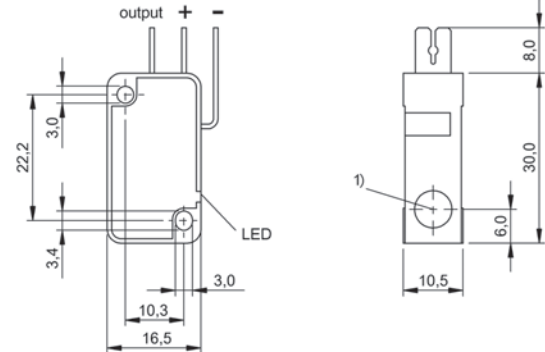
1) Sensing surface

BES01N1



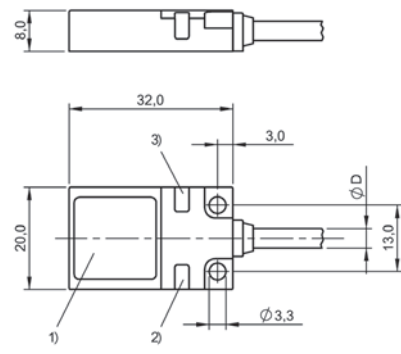
1) Sensing surface

BES01N2



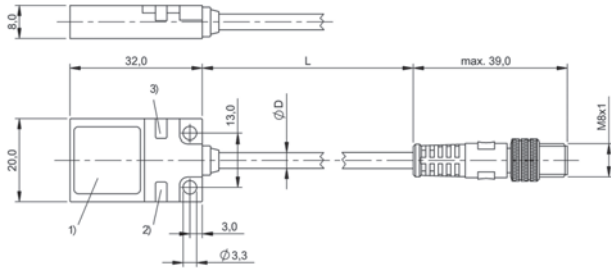
1) Sensing surface

BES033H, BES033J



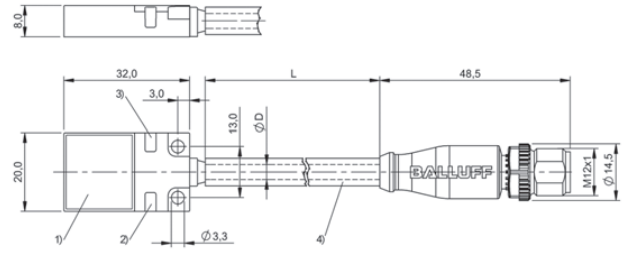
1) Sensing surface, 2) LED green, 3) LED yellow

BES01W0, BES01W4



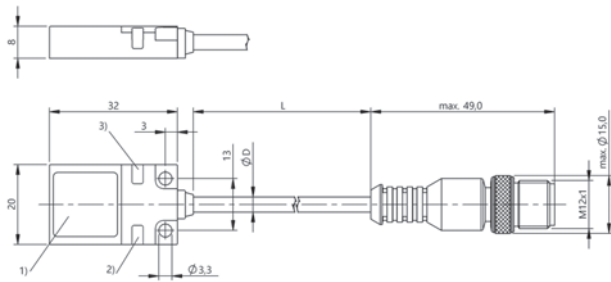
1) Sensing surface, 2) LED green 3) LED yellow

BES01WE, BES01WF



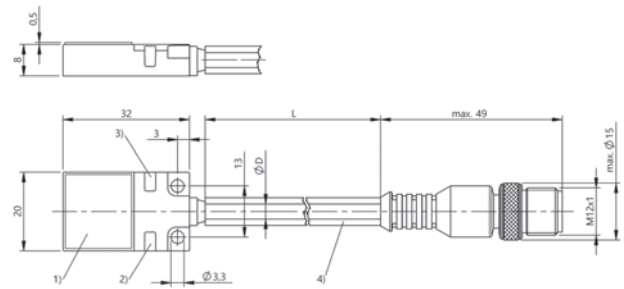
1) Sensing surface, 2) LED green, 3) LED yellow, 4) Silicon tube D=7mm

BES048Z



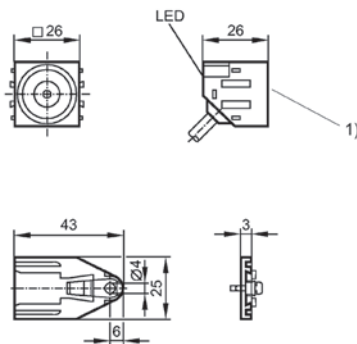
1) Sensing surface, 2) LED green, 3) LED yellow

BES01W2, BES01W3



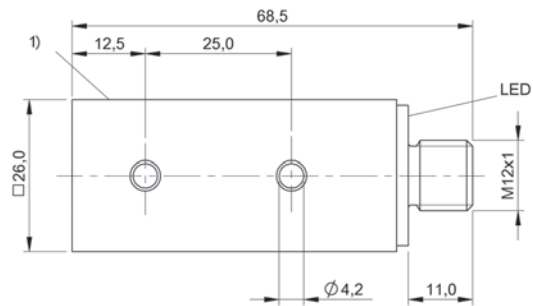
1) Sensing surface, 2) LED green, 3) LED yellow, 4) Silicon tube D=7mm

BES0314



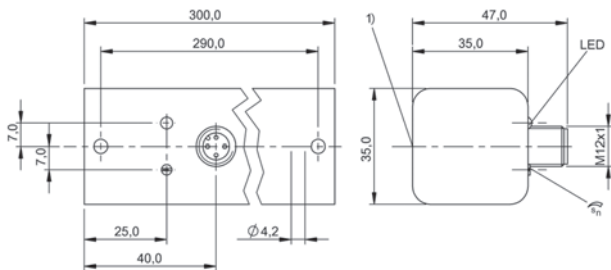
1) Sensing surface

BES030E, BES030F



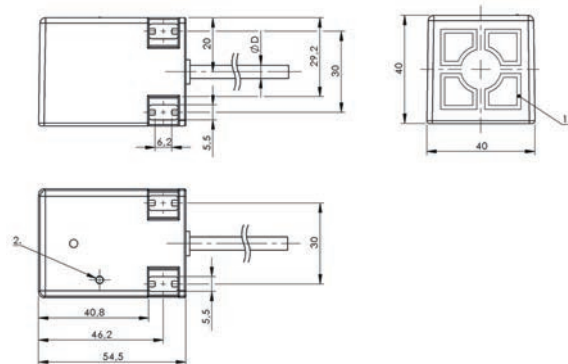
1) Sensing surface

BES022Z



1) Sensing surface

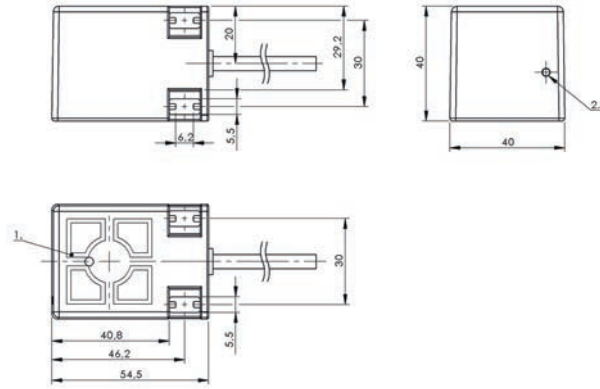
BES02TN



1) Sensing surface, 2) LED yellow

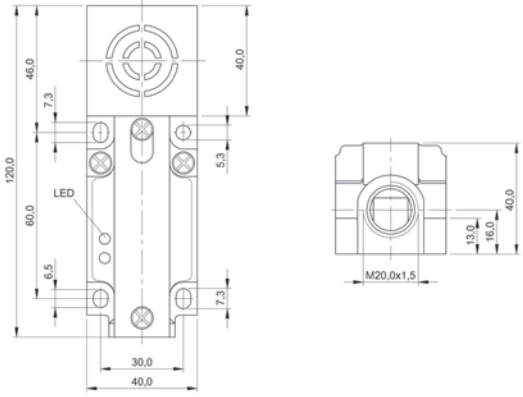
BES052M

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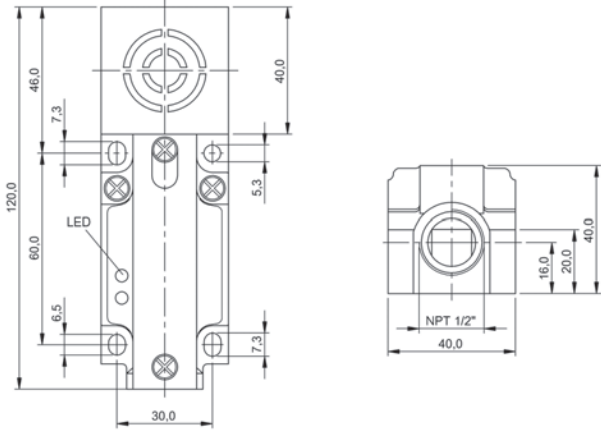


1) Sensing surface, 2) LED yellow

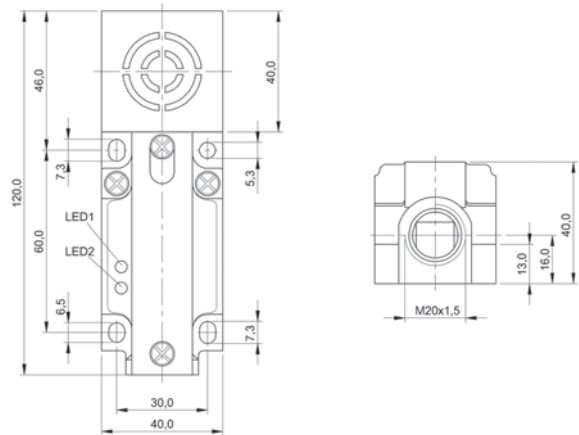
BES0555



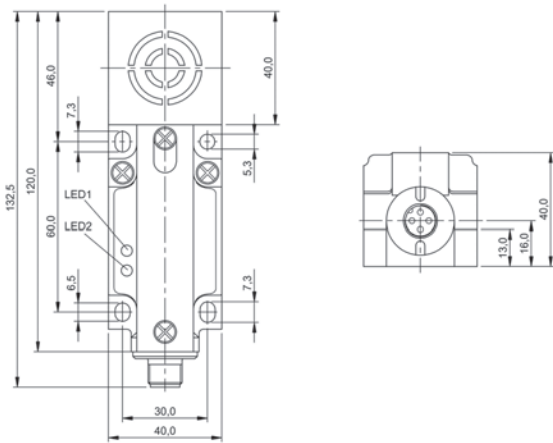
BES020Y, BES020Z, BES023Y



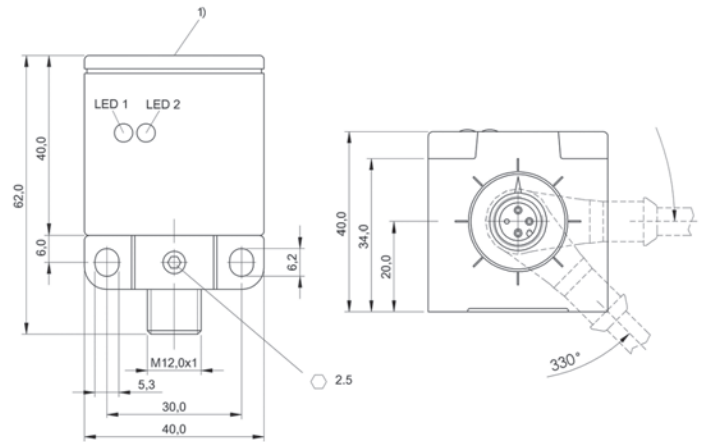
BES0241, BES0244, BES0247



BES0201, BES0209, BES0206, BES020C

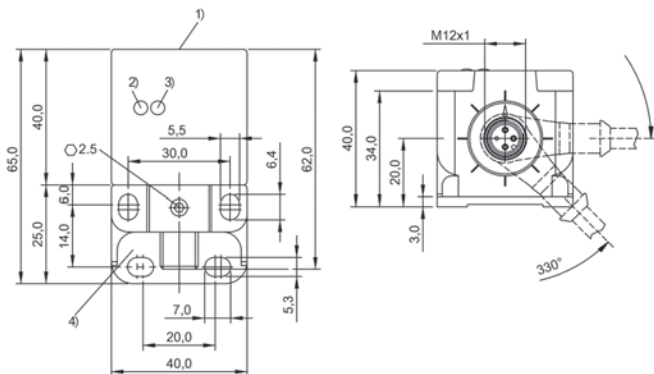


BES020A, BES0236, BES020E



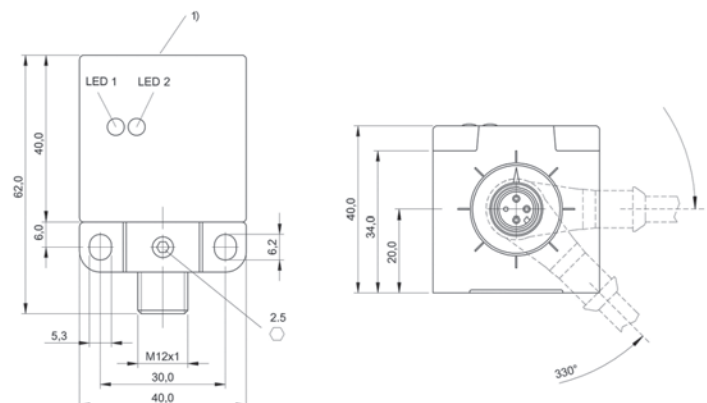
1) Sensing surface

BES021W, BES0217



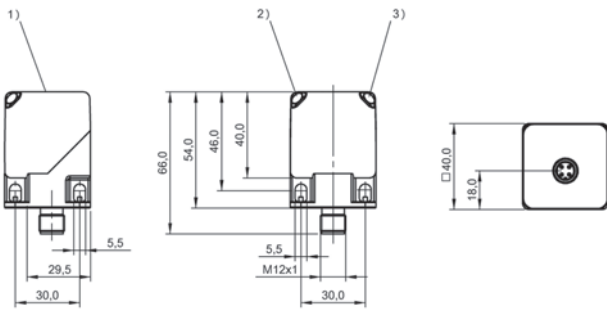
1) Sensing surface, 2) LED function indicator, 3) LED Power 4) Metal

BES03PN



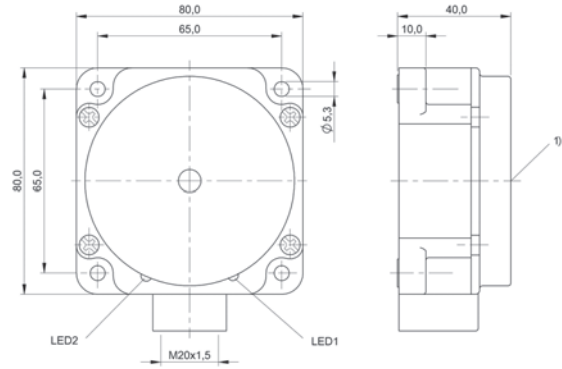
1) Sensing surface

BES021Z, BES021E



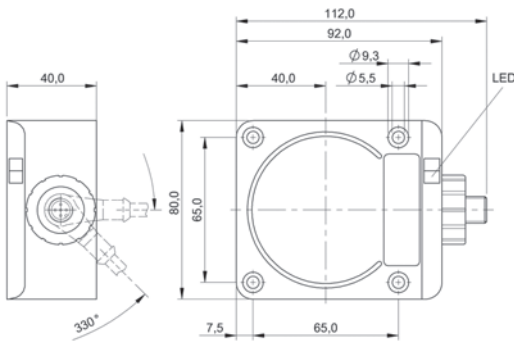
1) Sensing surface, 2) LED yellow, 3) LED green

BES0308

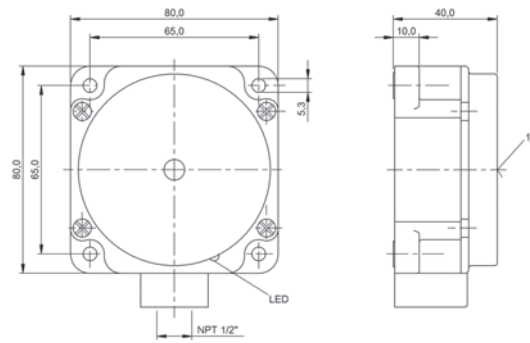


1) Sensing surface

BES023P, BES023R

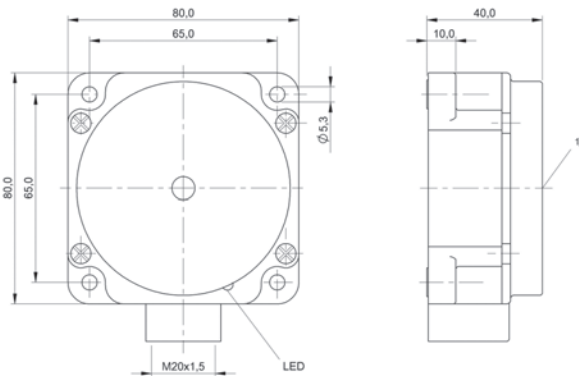


BES030C



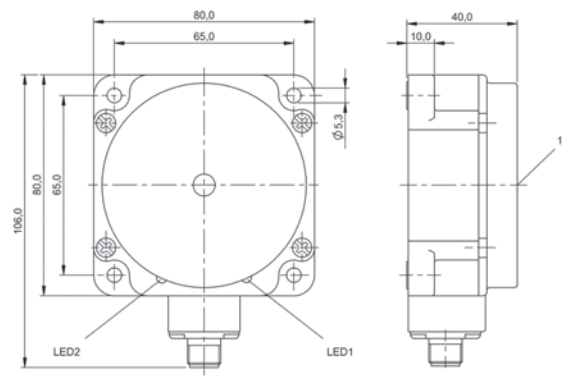
1) Sensing surface

BES022R



1) Sensing surface

BES024F



1) Sensing surface

BES023W



Polarized normally open	BES001L BES M08MG-GSC20B-BV02		
Non-polarized normally open		BES001P 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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			BES0021 BES M08MG-GSC20B-BP03	
	BES001T BES M08MG-USC20B-BV02	BES001U BES M08MG-USC20B-BV03		BES001W 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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Sensors

RFID

Machine Vision and
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Safety

Industrial Networking

Power Supply

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Accessories



Polarized normally open			
Non-polarized normally open			
Non-polarized normally closed	BES004T BES M12MG-USC30B-BV02	BES03HH 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	
Productview	Page 152	Page 152	



BES001Z BES M08MG-GSC20B-BP00,3-GS04	BES0324 BES M08MG-GSC20B-BP00,3-GS04-101	BES0022 BES M08ME1-GSC20B-S04G	BES001Y 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	BES004P BES M12MG-USC30B-BP03	BES004T 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_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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BES0046 BES M12MG-GSC30B-BV03				
BES0474 BES M12MG-GOC30B-BV03				
	BES004U BES M12MG-USC30B-BV03	BES004W BES M12MG-USC30B-BV05		
			BES03HM 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	BES0042 BES M12MG-GSC30B-BP00,3-GS04	BES0326 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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BES039W BES M12MG-GSC30B-BX00,3-GS04-U	BES003Z BES M12MF-GSC30B-S04G		
		BES0041 BES M12MF-USC30B-S04G	BES0073 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	BES0074 BES M18MG-USC70B-BV03	BES0071 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 _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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BES006C BES M18MG-GSC70B-BP00,3-GS04	BES03FJ BES M18MG-GSC70B-BX00,3-GS04-U	BES0069 BES M18MF-GSC70B-S04K	BES006A 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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	BES0328 BES M18MF-GSC70B-S04G	BES03FH BES M18MF-GSC70B-S04G-U	
Polarized normally open			
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	



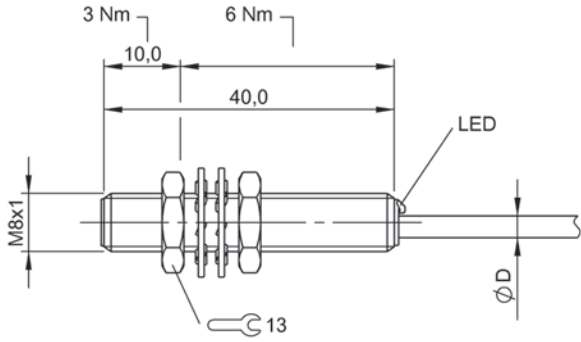
		BES008R BES M30MF-GSC15B-BV02		
	BES02NR BES M18MF-USC70B-S04G		BES0091 BES M30MF-USC15B-BV02	BES0092 BES M30MF-USC15B-BV03
	Ø 18 x 51 mm	Ø 30 x 42.5 mm	Ø 30 x 42.5 mm	Ø 30 x 42.5 mm
	M18x1	M30x1.5	M30x1.5	M30x1.5
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	7 mm	15 mm	15 mm	15 mm
	non-polarized normally open (NO)	polarized normally open (NO)	non-polarized normally open (NO)	non-polarized normally open (NO)
	600 Hz	400 Hz	400 Hz	400 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
	Connector, M12x1 connector, 4-pin	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
	-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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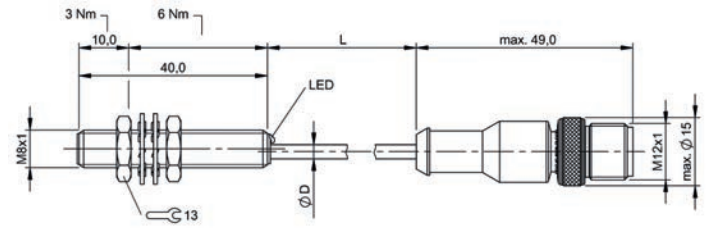
Polarized normally open		BES027K BES M30MF-GSC15B-BX00,3-GS04-U	
Non-polarized normally open	BES008Z BES M30MF-USC15B-BP03		
Dimension	Ø 30 x 42.5 mm	Ø 30 x 42.5 mm	
Style	M30x1.5	M30x1.5	
Installation	for flush mounting	for flush mounting	
Range	15 mm	15 mm	
Switching output	non-polarized normally open (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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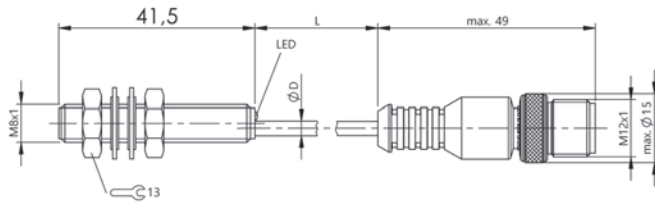
BES008W BES M30MF-GSC15B-S04K	BES0094 BES M30MF-USC15B-S04K	BES03KL BES M30MF-GSC15B-S04G-U	
Ø 30 x 50 mm	Ø 30 x 50 mm	Ø 30 x 51 mm	
M30x1.5	M30x1.5	M30x1.5	
for flush mounting	for flush mounting	for flush mounting	
15 mm	15 mm	15 mm	
polarized normally open (NO)	non-polarized normally open (NO)	polarized 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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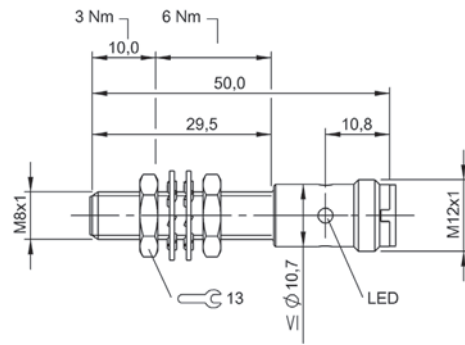
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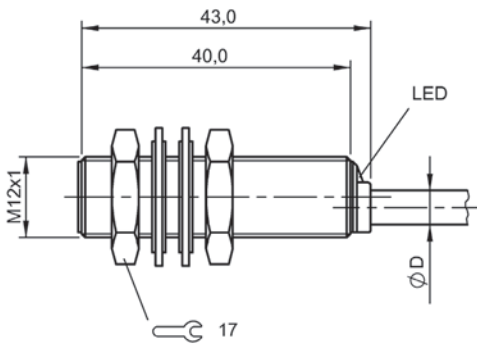
BES001Z



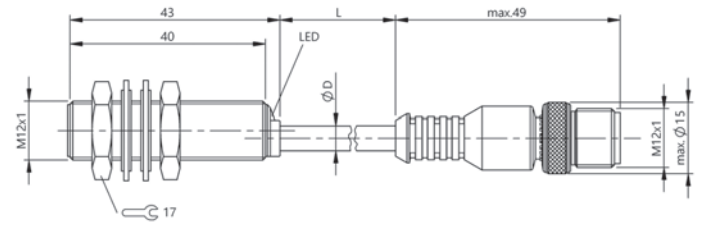
BES0324



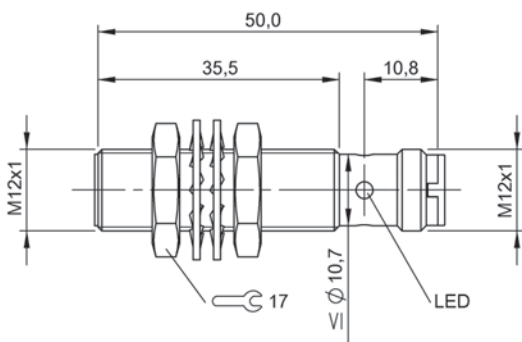
BES0022, BES001Y



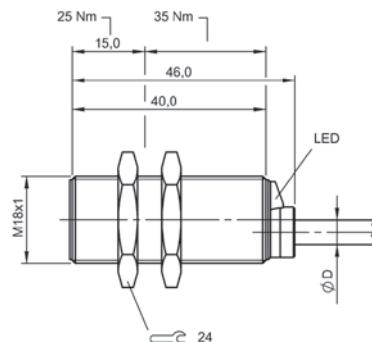
BES004P, BES004T, BES0046, BES0474, BES004U, BES004W, BES03HM



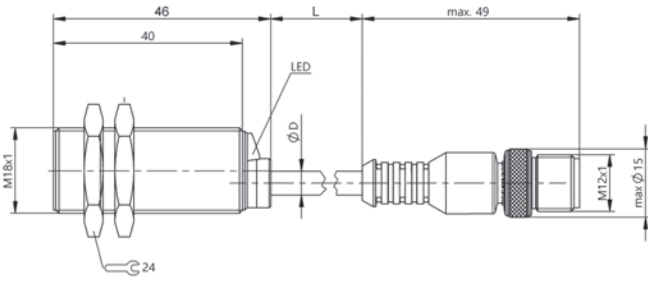
BES0042, BES0326, BES039W



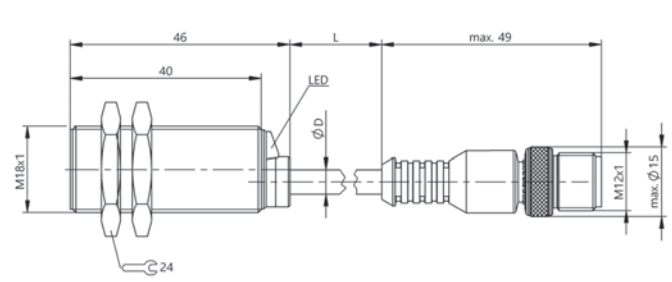
BES003Z, BES0041



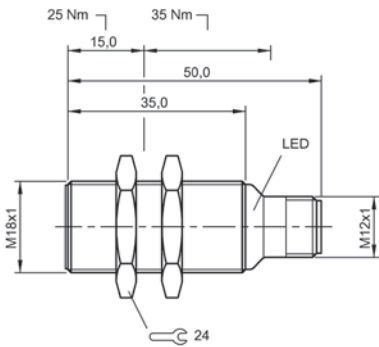
BES0073, BES0074, BES0071



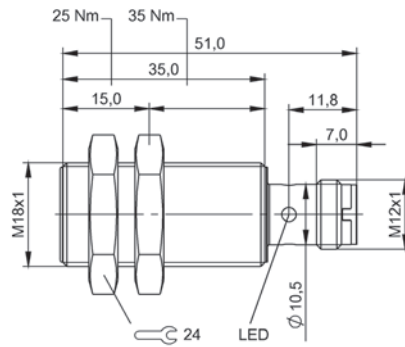
BES006C



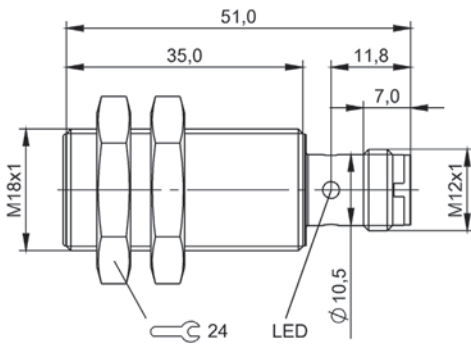
BES03FJ



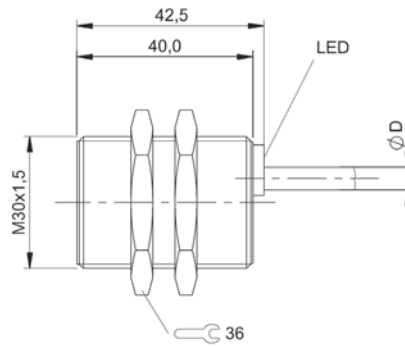
BES0069, BES006A



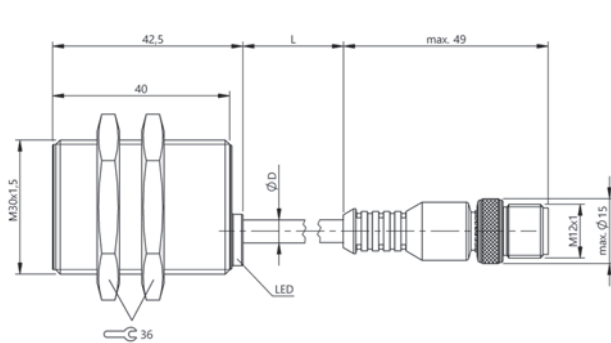
BES0328, BES02NR



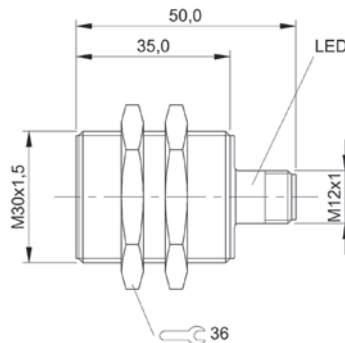
BES03FH



BES008R, BES0091, BES0092, BES008Z

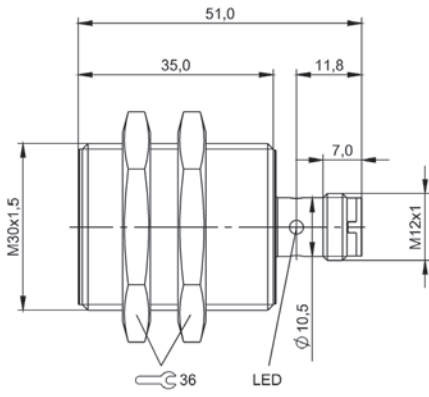


BES027K



BES008W, BES0094

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BES03KL



PNP normally open	BHS006U BHS G409N-PSD10-EP02	BHS007J BHS G409N-PSD10-EP00,3-GS49	
NPN normally open	BHS006Y 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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	BHS006N BHS G403N-PSD10-S26	BHS005H BHS G408N-PSC10-S49	BES055Y BES M05EE1-PSC08B-EV00,9-116	BES03H6 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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Sensors

RFID

Machine Vision and Optical Identification

Human Machine Interfaces

Systems

Safety

Industrial Networking

Power Supply

Connectivity

Accessories



PNP normally open	BES03JM BES M05EG-PSC08B-BP00,2-GS49	BES03NZ BES M05ED-PSC08B-BP02-R50	
PNP normally closed			
NPN normally open	BES0315 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 _b	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 178	Page 178	



	BES03L7 BES M05ED-PSD08B-BP02-R03	BES03LC BES M05ED-PSD08B-BP00,3-GS49-R03	BES034K BES 516-324-SA17-05	BES03UY BES M08EE1-PSC20B-S49G-S
		BES03LE BES M05ED-POD08B-BP00,3-GS49-R03		
				BES03Z3 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
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PNP normally open			
NPN normally open	BES02N3 BES M08EH1-NSC20B-S04G-S	BES02N4 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 _b	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	
Productview	Page 179	Page 179	



	BHS0039 BES 516-300-S289-BO-D-PU-05	BHS0058 BHS A407N-PSD15-BP02	BHS0054 BHS A404N-PSC15-S49	BHS0050 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	BHS003A BES 516-300-S291-S4-D	BES02NA 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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BES02NC BES M12EI-PSC40B-S04G-S01	BES02WH BES M12EG1-PSC60Z-S04G-S11		
			BHS0008 BES 516-200-S2/1.250"-S21
		BHS0006 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	BHS003M BES 516-300-S295/1.250"-S4	
Normally open		BHS0009 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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	BHS0041 BES 516-300-S295/2.062"-S4			
		BHS000T BES 516-200-S2/2.062"-S21	BHS000U BES 516-200-S2/2.062"-S5	BHS0014 BES 516-200-S2/2.875"-S5
Dimensions	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
Diameter	D12.7	D12.7	D12.7	D12.7
Mounting	for flush mounting	for flush mounting	for flush mounting	for flush mounting
Material	—	—	—	—
Stroke	2 mm	2 mm	2 mm	2 mm
Frequency	10 Hz	50 Hz	50 Hz	50 Hz
Material	Stainless steel Zinc, Die casting	Stainless steel Zinc, Die casting	Stainless steel (1.4104) Zinc, die-cast	Stainless steel Zinc, Die casting
Finish	nickel plated	nickel plated	nickel plated	nickel plated
Material	Ceramic	Ceramic	Ceramic	Ceramic
Connector	Connector, M12x1 connector, 4-pin	Connector, 1/2"-20 UNF2A-Male	Connector, 7/8"-16 UN plug	Connector, 7/8"-16 UN plug
Voltage	10...30 VDC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC	20...250 VDC/20...250 VAC
Temperature	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
Pressure	207 bar	207 bar	207 bar	207 bar
Immunity	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)
Protection	IP67	IP67	IP67	IP67
Certification	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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PNP normally open		BHS0030 BES 516-300-S260-S4-D	
Normally open	BHS0019 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 _b	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	
Productview	Page 180	Page 181	



	BHS0028 BES 516-300-S205-D-PU-03	BHS0029 BES 516-300-S205-D-PU-05	BES042M BES 516-300-S337-S4-D	BES042L 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	BHS004N BES 516-300-S321-S4-D	BHS002H 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_b	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	
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BHS002J BES 516-300-S240-D-PU-05	BHS001F BES 516-300-S135-D-PU-05	BHS0032 BES 516-300-S262-S4-D	BHS002Y 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
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	BHS0033 BES 516-300-S265-S4-D	BHS005Y BHS B249V-PSD15-S04	
PNP normally open			
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	
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BHS0061 BHS B265V-PSD15-S04	BHS0021 BES 516-300-S162-S4-D	BHS001L BES 516-300-S135-S4-D	BHS005R 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
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PNP normally open		BHS0022 BES 516-300-S163-S4-D	
PNP normally open/normally closed	BHS0001 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 _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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	BHS004C BES 516-300-S300-S4-D	BHS005U BHS B135V-PSD25-S04-003	BES02NK BES M18EI-PSC72B-S04G-S01	BES02Y1 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	BES02Y3 BES M18EG1-PSC10Z-S04G-S11	BHS001N 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_b	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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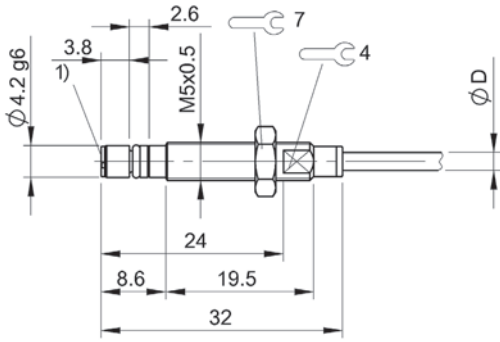
BHS004A BES 516-300-S299-S4-D	BHS0026 BES 516-300-S190-S4	BHS0027 BES 516-300-S203	BHS0036 BES 516-300-S271-S4
Ø 18 x 55 mm	Ø 18 x 58 mm	Ø 18 x 61 mm	Ø 22 x 79 mm
M18x1	M18x1	M18x1	M22x1.5
for flush mounting	for flush mounting	for flush mounting	for flush mounting
—	—	—	—
1.5 mm	3 mm	3 mm	3 mm
2000 Hz	400 Hz	1000 Hz	500 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
—	—	—	—
EP	PEEK	PEEK	POM
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M18x1 connector, 4-pin	Connector, M12x1 connector, 4-pin, 0.50 m, PUR
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
-25...80 °C	-25...80 °C	-25...80 °C	0...85 °C
500 bar	500 bar	500 bar	350 bar
—	—	—	—
IP68	IP68	IP68	IP68
CE, EAC	CE, EAC	CE, EAC	CE, EAC
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	BES02YF BES M30EG1-PSC20Z-S04G-S11	BES02YC BES M30EE1-PSC40F-S04G-S	
PNP normally open			
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 _b	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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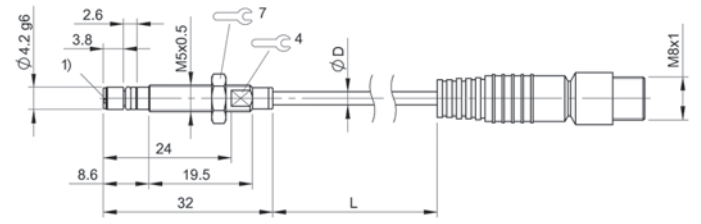


	BHS007A BES 516-300-S332-S4-N	BHS006M BES 516-300-S331-S4-D		
	Ø 16.66 x 50 mm	Ø 16.66 x 50 mm		
	G3/8"	G3/8"		
	for flush mounting	for flush mounting		
	—	—		
	1.5 mm	1.5 mm		
	1000 Hz	2000 Hz		
	Stainless steel (1.4404)	Stainless steel		
	—	—		
	POM	EP		
	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin		
	7.7...9 VDC	10...30 VDC		
	-25...70 °C	-25...90 °C		
	500 bar	500 bar		
	—	—		
	IP68	IP68		
	CE, EAC	CE, cULus, EAC		
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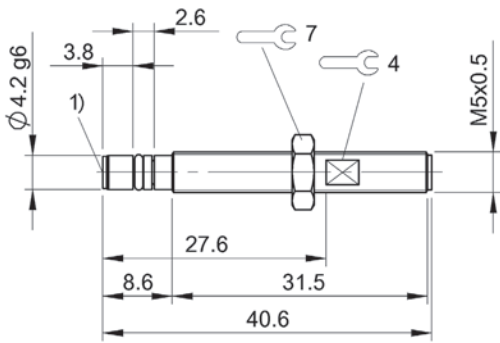
1) Sensing surface

BHS006Y, BHS006U



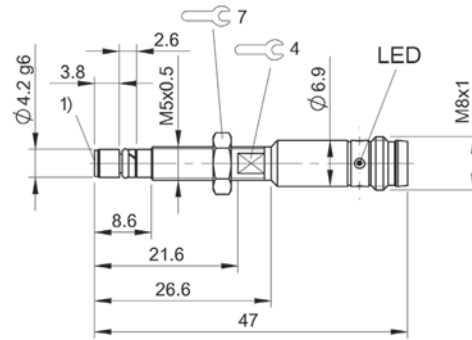
1) Sensing surface

BHS007J



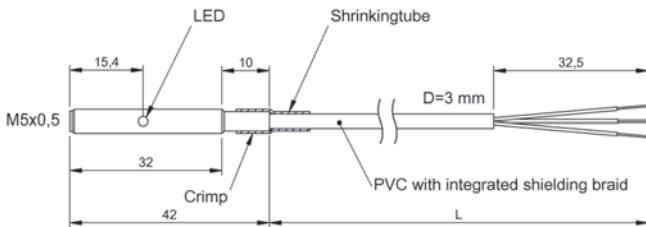
1) Sensing surface

BHS006N

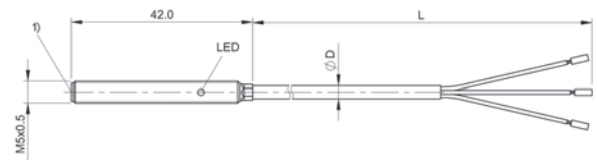


1) Sensing surface

BHS005H

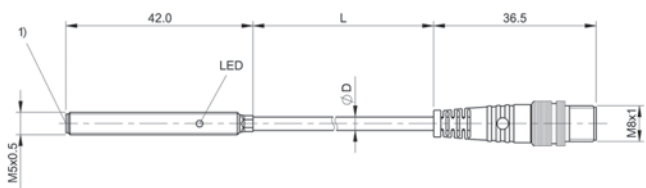


BES055Y



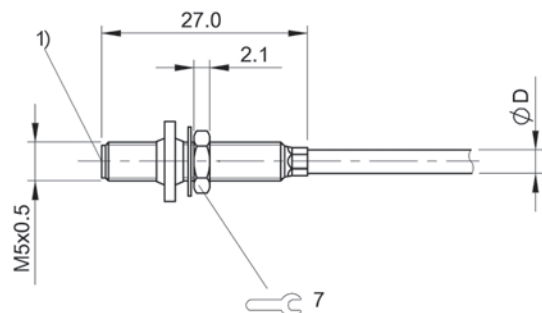
1) Sensing surface

BES03H6



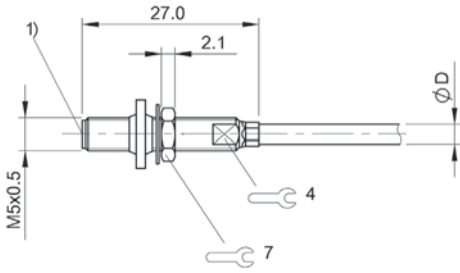
1) Sensing surface

BES0315, BES03JM



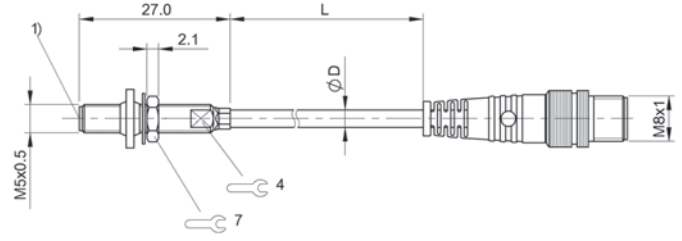
1) Sensing surface

BES03NZ



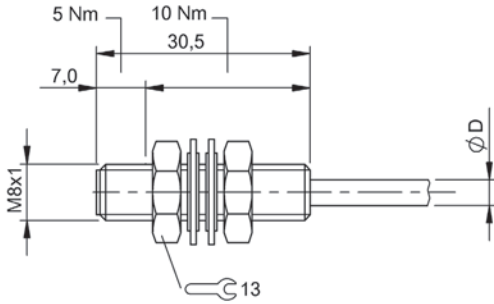
1) Sensing surface

BES03L7

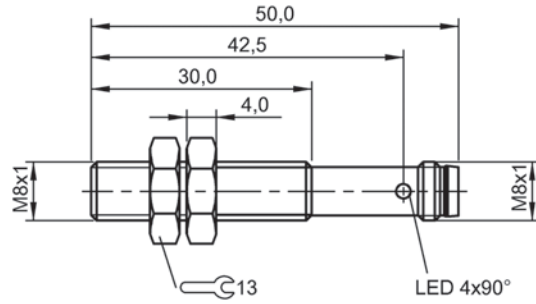


1) Sensing surface

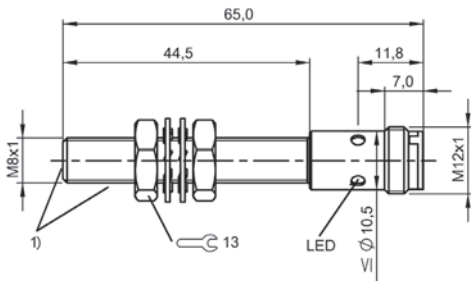
BES03LC, BES03LE



BES034K

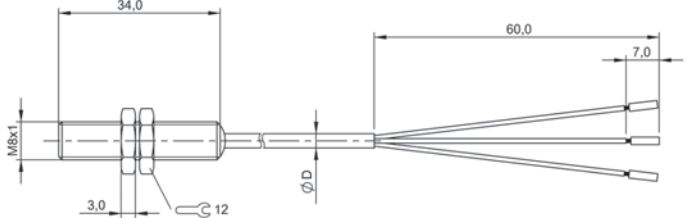


BES03Z3, BES03UY

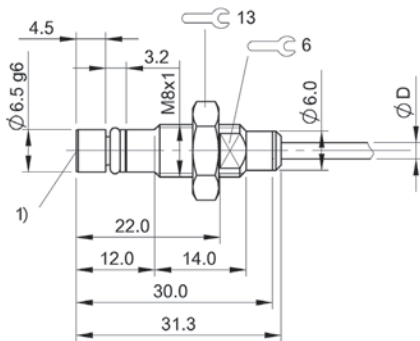


1) Pressure resistant area

BES02N3, BES02N4

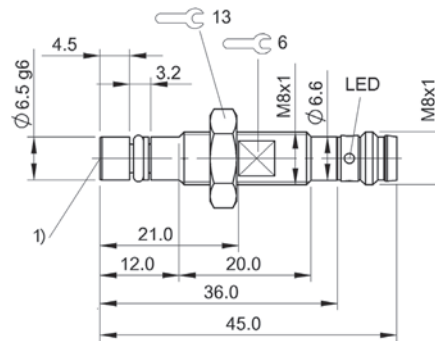


BHS0039



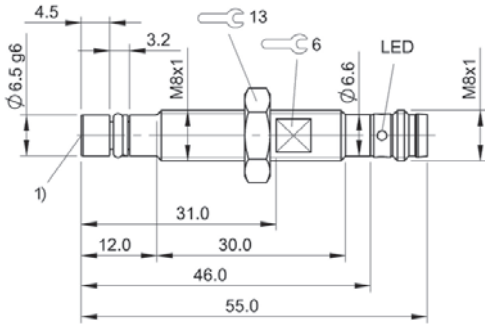
1) Sensing surface

BHS0058



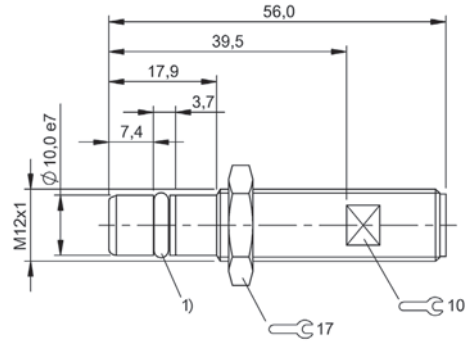
1) Sensing surface

BHS0054



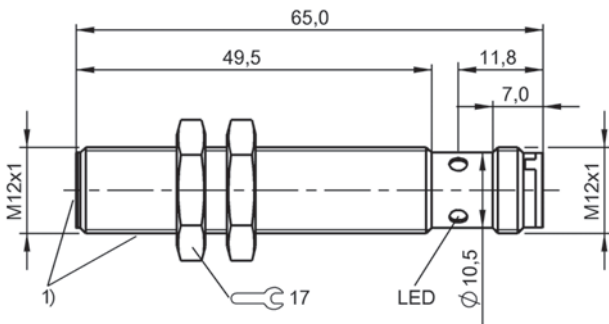
1) Sensing surface

BHS0050



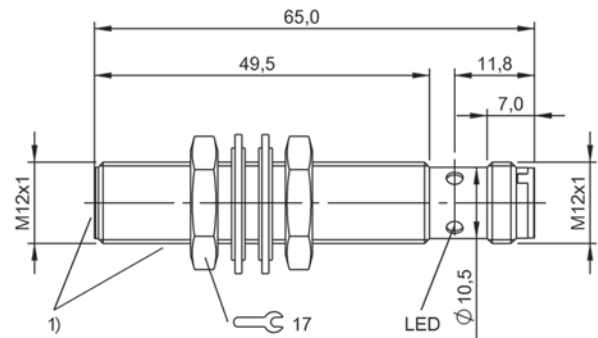
1) O-Ring with thrust ring

BHS003A, BES042M, BHS002Y



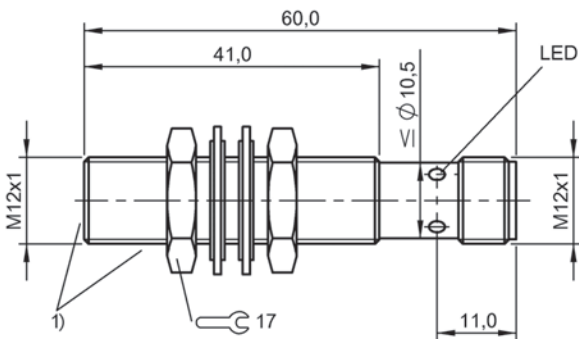
1) Pressure resistant area

BES02NA



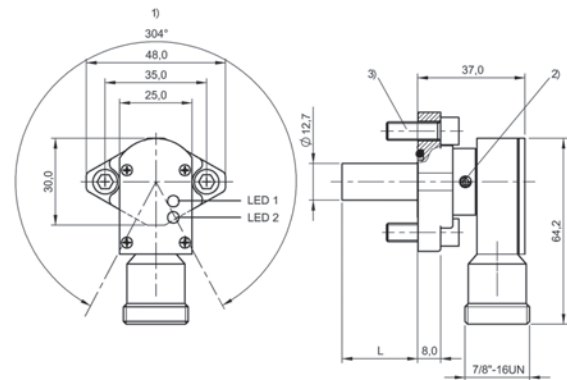
1) Pressure resistant area

BES02NC



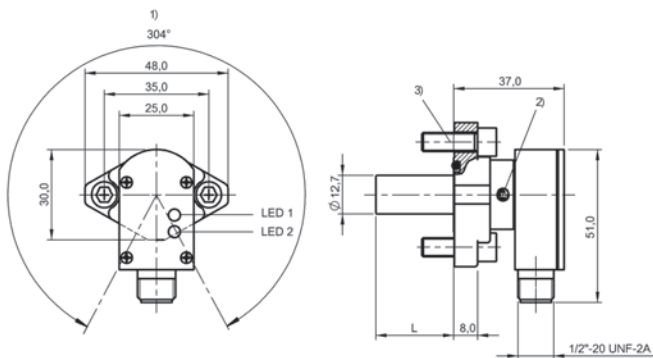
1) Pressure resistant area

BES02WH



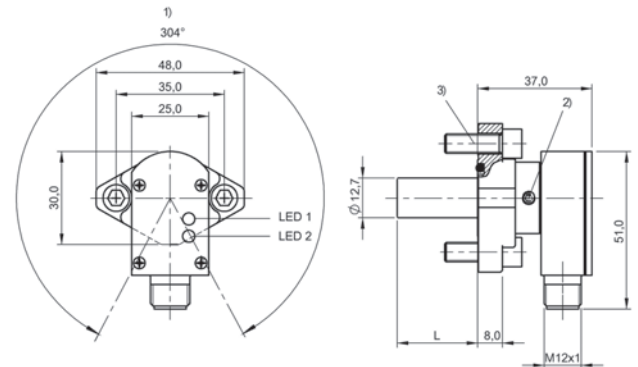
1) Housing rotatable 304°, 2) Tightening torque 1...1.5 Nm, 3) Tightening torque 16.5 Nm

BHS0006, BHS0009, BHS000U, BHS0014, BHS0019



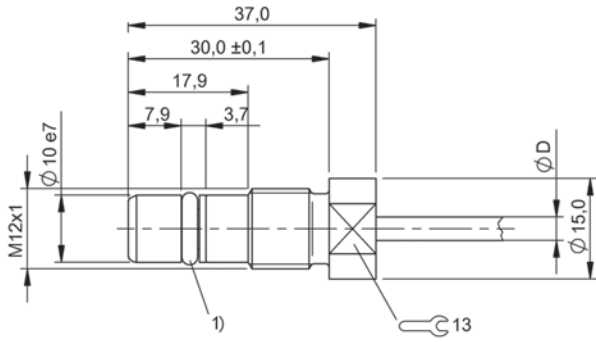
1) Housing rotatable 304°, 2) Tightening torque 1...1.5 Nm, 3) Tightening torque 16.5 Nm

BHS0008, BHS000T



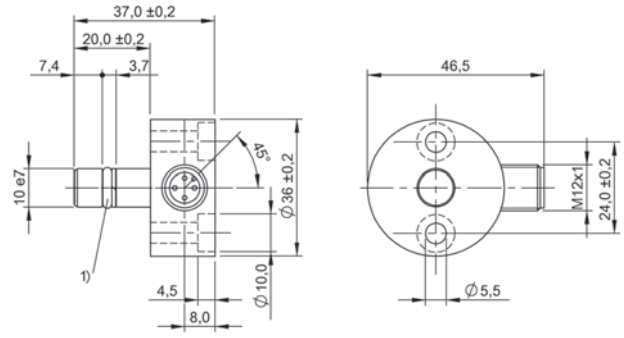
1) Housing rotatable 304°, 2) Tightening torque 1...1.5 Nm, 3) Tightening torque 16.5 Nm

BHS003M, BHS0041



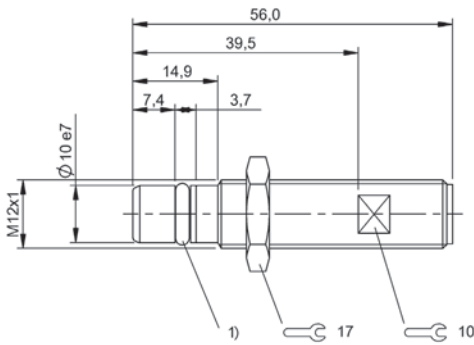
1) O-Ring with thrust ring

BHS0028, BHS0029



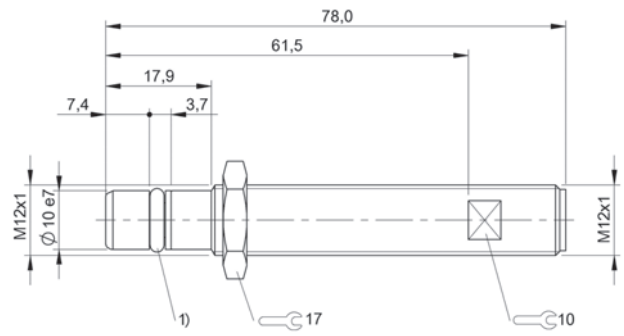
1) O-Ring with thrust ring

BHS0030



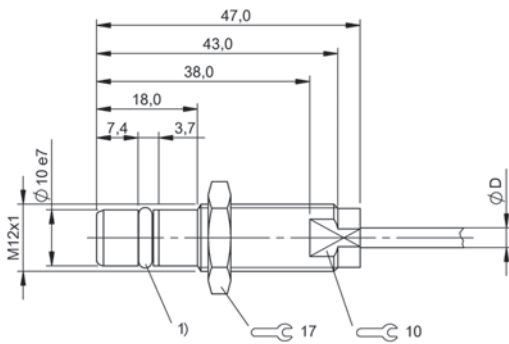
1) O-Ring with thrust ring

BES042L, BHS0033



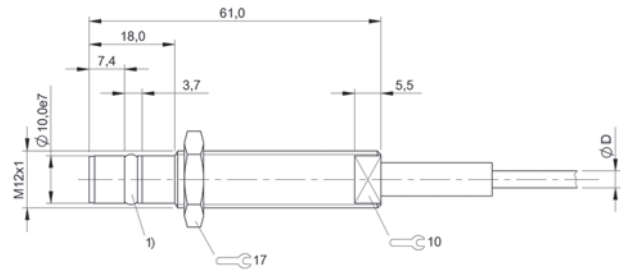
1) O-Ring with thrust ring

BHS004N, BHS001L, BHS0001



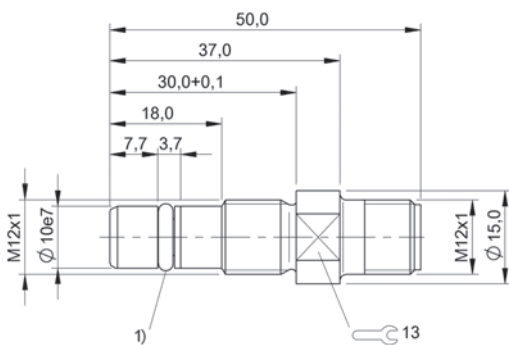
1) O-Ring with thrust ring

BHS002H, BHS002J



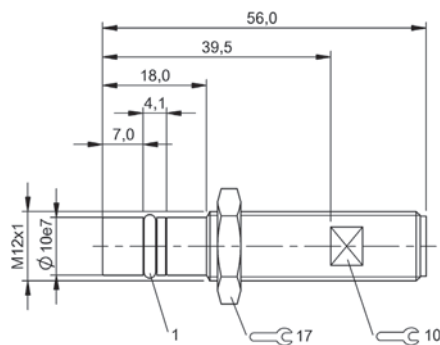
1) O-Ring with thrust ring

BHS001F



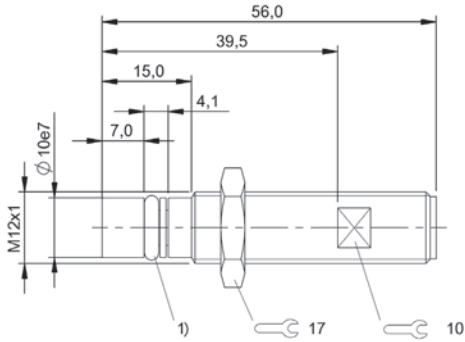
1) O-Ring with thrust ring

BHS0032



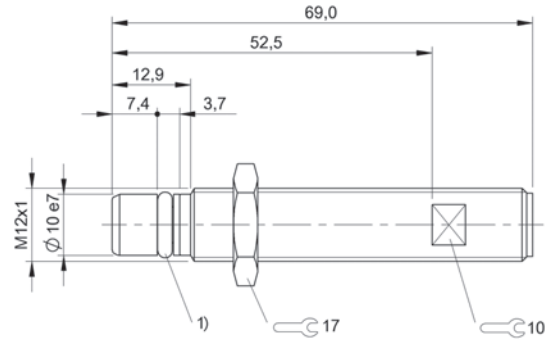
1) O-Ring with thrust ring

BHS005Y



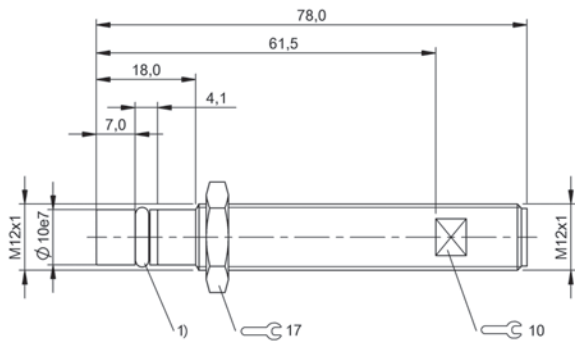
1) O-Ring with thrust ring

BHS0061



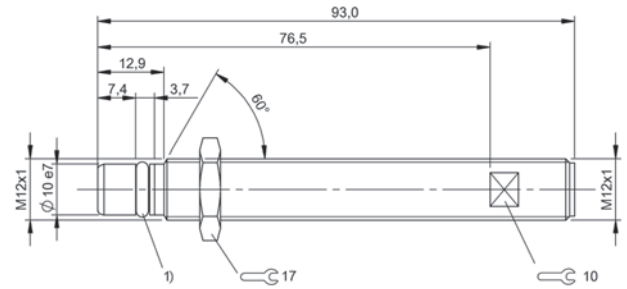
1) O-Ring with thrust ring

BHS0021



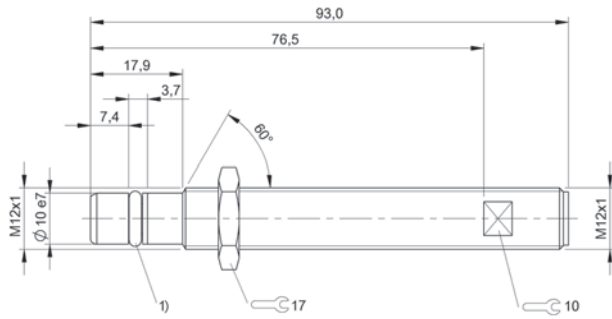
1) O-Ring with thrust ring

BHS005R, BHS005U



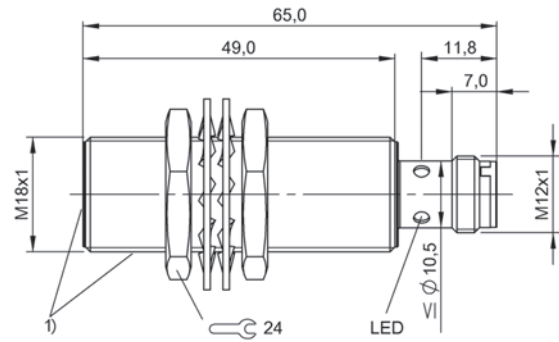
1) O-Ring with thrust ring

BHS0022



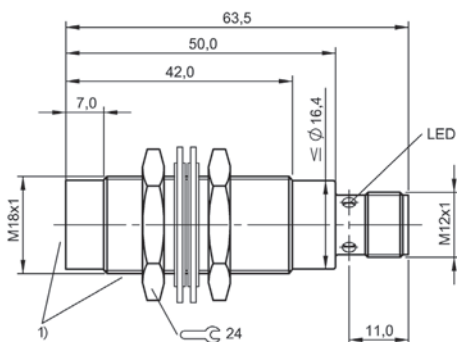
1) O-Ring with thrust ring

BHS004C



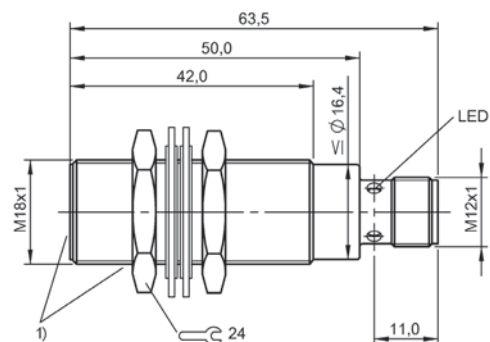
1) Pressure resistant area

BES02NK



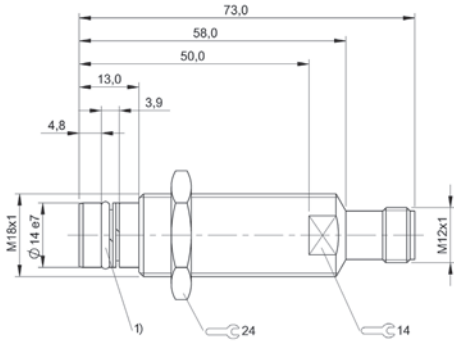
1) Pressure resistant area

BES02Y1



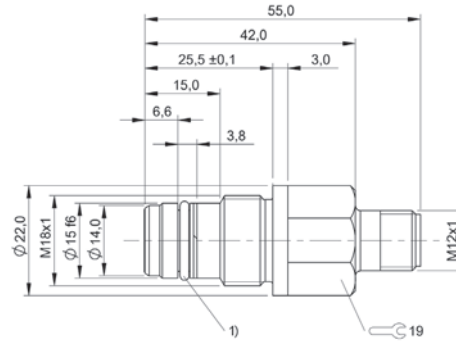
1) Pressure resistant area

BES02Y3



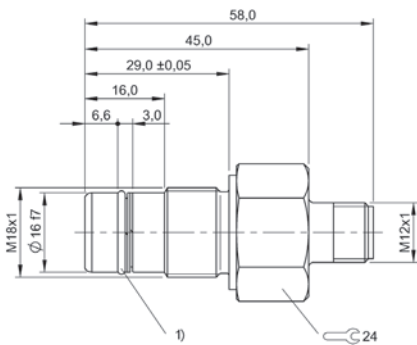
1) O-Ring with thrust ring

BHS001N



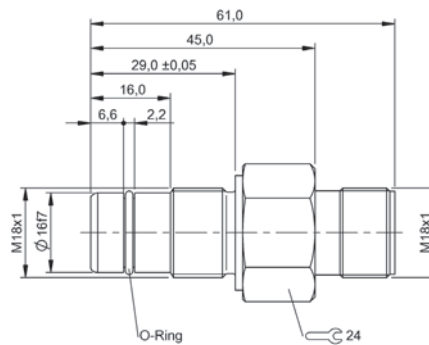
1) O-Ring with thrust ring

BHS004A



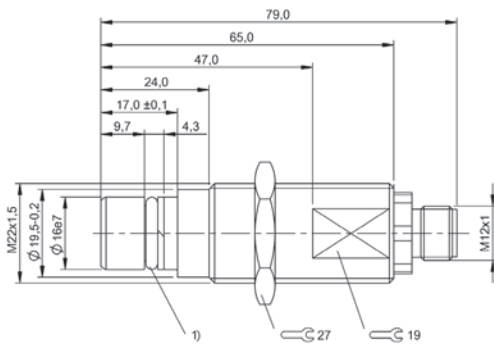
1) O-Ring with thrust ring

BHS0026



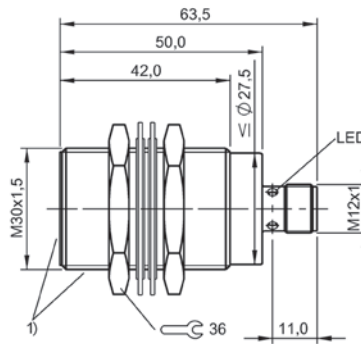
1) Pressure resistant area

BHS0027



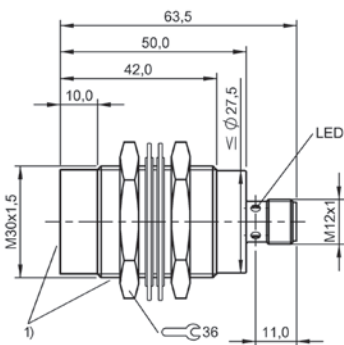
1) O-Ring with thrust ring

BHS0036



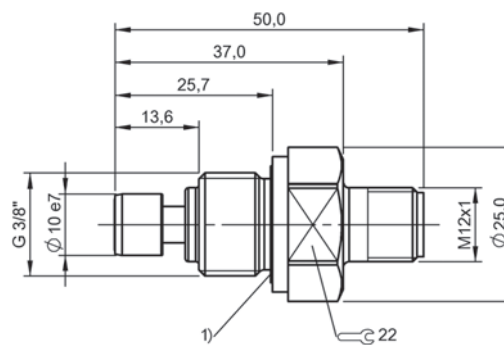
1) Pressure resistant area

BES02YF



1) Pressure resistant area

BES02YC



1) Sealing ring

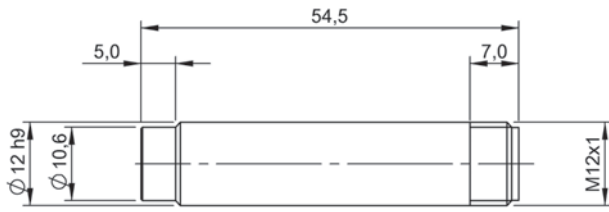
BHS007A, BHS006M



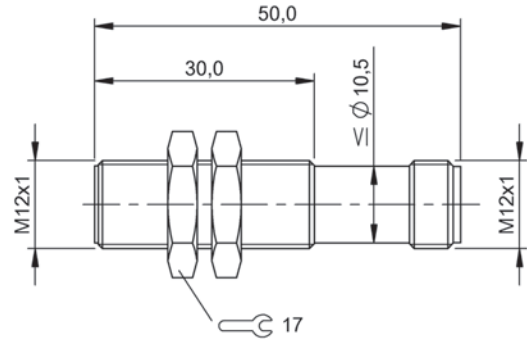
PNP normally open	BES0431 BES G12EE1-PSY40F-S04G-L02	BES0444 BES M12EE1-PSY20B-S04G-L01	BES0433 BES M12EE-PSC40B-S04G-L01	
Dimension	Ø 12 x 54.5 mm	Ø 12 x 50 mm	Ø 12 x 45 mm	
Style	D12.0	M12x1	M12x1	
Installation	non-flush	for flush mounting	for flush mounting	
Range	4 mm	2 mm	4 mm	
Switching frequency	400 Hz	800 Hz	2000 Hz	
Housing material	Stainless steel (1.4571)	Stainless steel (1.4571)	Stainless steel (1.4404)	
Material sensing surface	PEEK	PEEK	LCP	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U _b	10...30 VDC	10...30 VDC	10...30 VDC	
Ambient temperature	-40...105 °C	-40...105 °C	-25...85 °C	
Protection degree	IP68	IP68	IP68	
Approval/Conformity	CE, cULus, EAC, Ecolab, FDA compliant	CE, cULus, EAC, Ecolab, FDA compliant	CE, cULus, EAC, FDA compliant	
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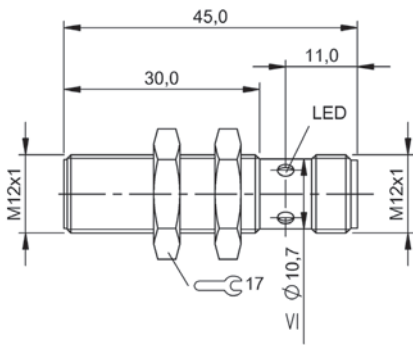
BES0435 BES M12EI-PSC40B-S04G-L01	BES0443 BES M12EE1-PSY40F-S04G-L01	BES0441 BES M18EE1-PSY50B-S04G-L01	BES0437 BES M18EI-PSC80B-S04G-L01	
Ø 12 x 65 mm	Ø 12 x 54.5 mm	Ø 18 x 45 mm	Ø 18 x 65 mm	
M12x1	M12x1	M18x1	M18x1	
for flush mounting	non-flush	for flush mounting	for flush mounting	
4 mm	4 mm	5 mm	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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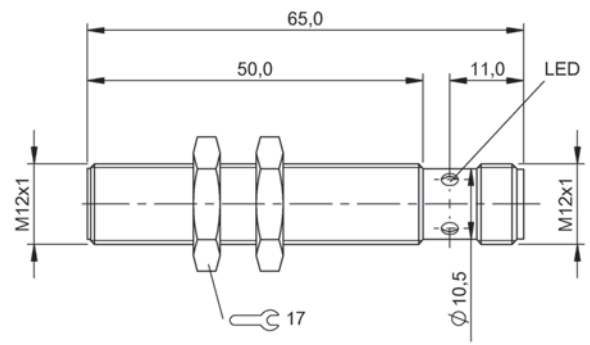
BES0431



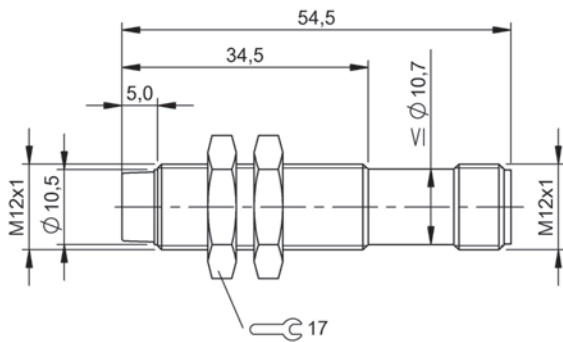
BES0444



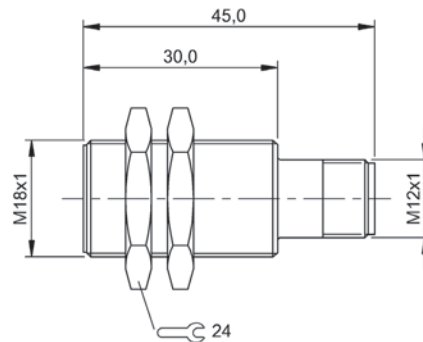
BES0433



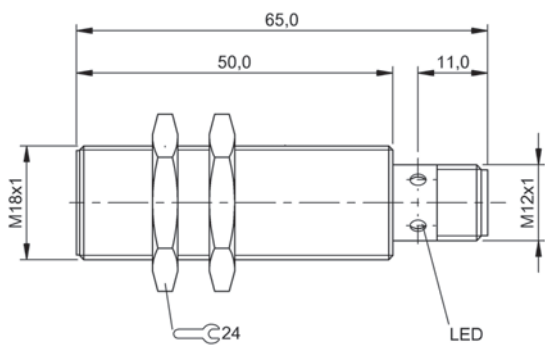
BES0435



BES0443



BES0441



BES0437



PNP normally open	BES02YR BES M08EG-PSC15A-S49G-W	BES02YT BES M08EG1-PSC15A-S04G-W	
Dimension	Ø 8 x 49 mm	Ø 8 x 57 mm	
Style	M8x1	M8x1	
Installation	for flush mounting	for flush mounting	
Range	1.5 mm	1.5 mm	
Switching frequency	2000 Hz	2000 Hz	
Housing material	Stainless steel (1.4301)	Stainless steel (1.4301)	
Surface protection	coated, PTFE	coated, PTFE	
Material sensing surface	PBT PTFE	PBT PTFE	
Connection	Connector, M8x1 connector, 3-pin	Connector, M12x1 connector, 4-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	IP67	IP67	
Approval/Conformity	CE, EAC	CE, EAC	
Additional features	Factor 1, Weld immune	Factor 1, Weld immune	
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BES03YP BES M08MG1-PSC20A-S04G-W	BES02JZ BES M12MF1-PSC30A-S04G-W	BES02K0 BES M12MF1-PSC30A-S04G-W01	BES02K3 BES M12ML-PSC30A-S04G-W
Ø 8 x 65 mm	Ø 12 x 50 mm	Ø 12 x 50 mm	Ø 12 x 65 mm
M8x1	M12x1	M12x1	M12x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
2 mm	3 mm	3 mm	3 mm
1000 Hz	2000 Hz	2000 Hz	2000 Hz
Brass	Brass	Brass	Brass
coated, PTFE	coated, PTFE	coated, PTFE	coated, PTFE
LCP	LCP PTFE	Ceramic	LCP PTFE
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)	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, WEEE
Factor 1, Weld immune	Factor 1, Weld immune	Weld immune, Factor 1	Factor 1, Weld immune
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PNP normally open	BES02K4 BES M12ML-PSC30A-S04G-W01	BES0452 BES M12MG-PSC40A-S04G-W12	
Dimension	Ø 12 x 65 mm	Ø 12 x 56 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	3 mm	4 mm	
Switching frequency	2000 Hz	2000 Hz	
Housing material	Brass	Brass	
Surface protection	coated, PTFE	coated, PTFE	
Material sensing surface	ceramic coated	PPS, GF40	
Connection	Connector, M12x1 connector, 4-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	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus	
Additional features	Factor 1, Weld immune	Factor 1, Weld immune	
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BES02K5 BES M12ML-PSC80E-S04G-W	BES05AJ BES M18ME-PSC80A-S04G-W08	BES05AH BES M18MI-PSC80A-S04G-W07	BES05AK BES M18MI-PSC80A-S04G-W08
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	for flush mounting	for flush mounting	for flush mounting
8 mm	8 mm	8 mm	8 mm
2000 Hz	2500 Hz	2500 Hz	2500 Hz
Brass	Brass	Brass	Brass
coated, PTFE	coated, PTFE	coated, PTFE	coated, PTFE
LCP PTFE	PBT	PBT, PTFE coated	PBT
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 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	IP68	IP68	IP68
CE, cULus, EAC, WEEE	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
Factor 1, Weld immune	Factor 1, Extended temperature range, Housing resistant to weld spatter, weld-immune (magnetic field 100kA/m)	Factor 1, Extended temperature range, Housing resistant to weld spatter, weld-immune (magnetic field 100kA/m)	Factor 1, Extended temperature range, Housing resistant to weld spatter, weld-immune (magnetic field 100kA/m)
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PNP normally open	BES05AL BES M18ME-PSC12E-S04G-W08	BES05AM 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	
Switching frequency	2500 Hz	2500 Hz	
Housing material	Brass	Brass	
Surface protection	coated, PTFE	coated, PTFE	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 3-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-40...85 °C	-40...85 °C	
Magnetic field immune	magnetic field immune (AC/DC)	magnetic field immune (AC/DC)	
Protection degree	IP68	IP68	
Approval/Conformity	CE, cULus, EAC	—	
Additional features	Factor 1, Extended temperature range, Housing resistant to weld spatter, weld-immune (magnetic field 100kA/m)	Factor 1, Extended temperature range, Housing resistant to weld spatter, weld-immune (magnetic field 100kA/m)	
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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	block style
for flush mounting	for flush mounting	for flush mounting	for flush mounting
10 mm	10 mm	15 mm	5 mm
600 Hz	600 Hz	750 Hz	20 Hz
Brass	Brass	Brass	Stainless steel
coated, PTFE	coated, PTFE	coated, PTFE	—
LCP PTFE	ceramic coated	PPS	Stainless steel
Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 3-pin	Cable with connector, M12x1 connector, 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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
Factor 1, Weld immune	Factor 1, Weld immune	Factor 1, Weld immune	Factor 1, Weld immune
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	BES04RE BES R01EC-PSC50A-BS00,3-GS04-W51	BES049Y BES R01EC-PSC50A-BP00,3-GS04-W51	
PNP normally open			
PNP normally open/normally closed			
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	20 Hz	20 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	coated, PTFE	coated, PTFE	
Material sensing surface	Stainless steel, W51 ceramic coating	Stainless steel, W51 ceramic coating	
Connection	Cable with connector, M12x1 connector, 4-pin, 0.30 m, silicone	Cable with connector, M12x1 connector, 4-pin, 0.30 m, PUR	
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	
Additional features	Factor 1, Housing resistant to weld spatter, Weld immune	Housing resistant to weld spatter, Weld immune, Factor 1	
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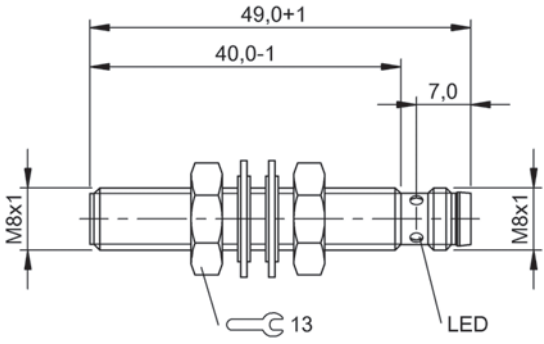
	BES021P BES Q40KFU-PSC15A-S04G		BES021T BES Q40KFU-PSC15A-S04G-W01	BES021U BES Q40KFU-PSC20A-S04G
		BES022K BES Q40KFU-PAC15A-S04G		
	40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm
	block style	block style	block style	block style
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	15 mm	15 mm	15 mm	20 mm
	400 Hz	400 Hz	400 Hz	400 Hz
	PBT	PBT	PBT	PBT
	—	—	partly coated	—
	PBT	PBT	ceramic coated	PBT
	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)	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
	Factor 1, Weld immune	Factor 1	Factor 1, Weld immune	Factor 1
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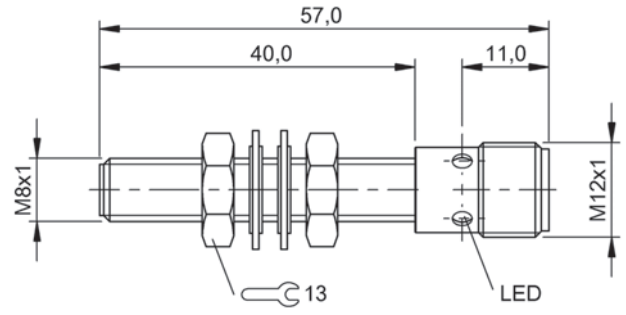
PNP normally open		BES0222 BES Q40KFU-PSC35Z-S04G-011	
PNP normally open/normally closed	BES0457 BES Q40KFU-PAC20A-S04G-W01		
Dimension	40 x 40 x 62 mm	40 x 40 x 62 mm	
Style	block style	block style	
Installation	for flush mounting	Shielded on one side	
Range	20 mm	35 mm	
Switching frequency	400 Hz	250 Hz	
Housing material	PBT	PBT	
Surface protection	partly coated	—	
Material sensing surface	ceramic coated	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...70 °C	-10...60 °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	Factor 1	
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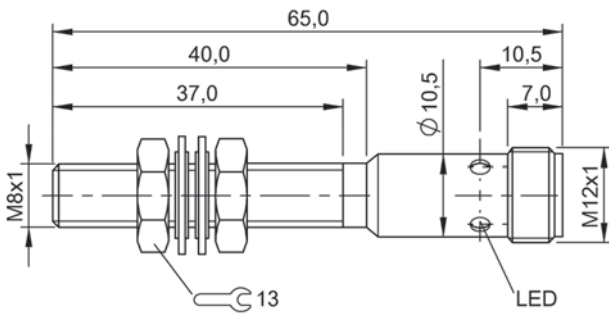
			BES0223 BES Q40KFU-PSC40E-S04G	
	BES021H BES Q40KFU-PAC35E-S04G	BES021K BES Q40KFU-PAC35E-S04G-W01		BES021M BES Q40KFU-PAC40E-S04G
	40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm
	block style	block style	block style	block style
	non-flush	non-flush	non-flush	non-flush
	35 mm	35 mm	40 mm	40 mm
	250 Hz	250 Hz	100 Hz	100 Hz
	PBT	PBT	PBT	PBT
	—	partly coated	—	—
	PBT	ceramic coated	PBT	PBT
	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
	-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	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
	Factor 1	Factor 1, Weld immune	Factor 1	Factor 1
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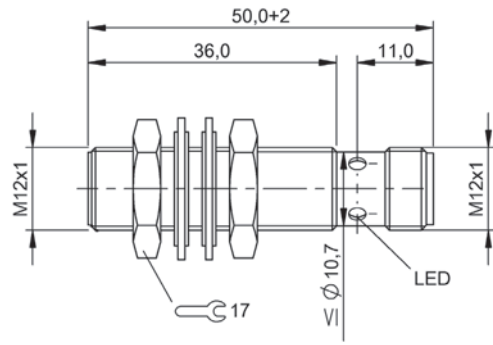
BES02YR



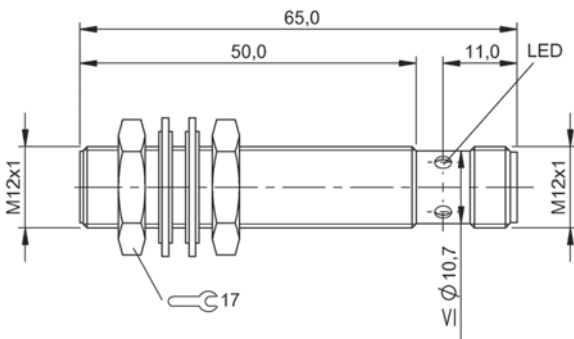
BES02YT



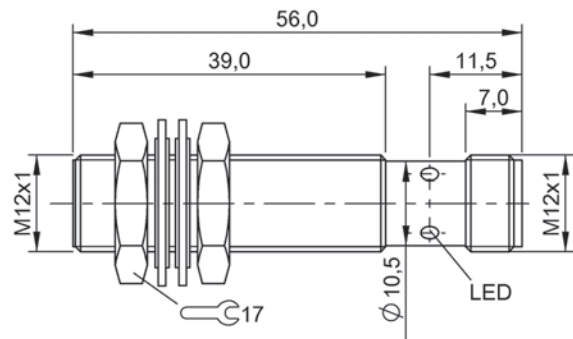
BES03YP



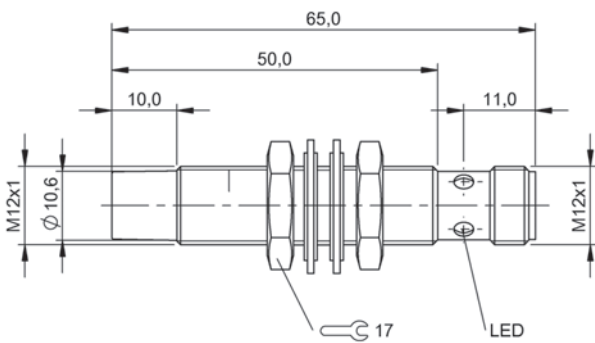
BES02JZ, BES02K0



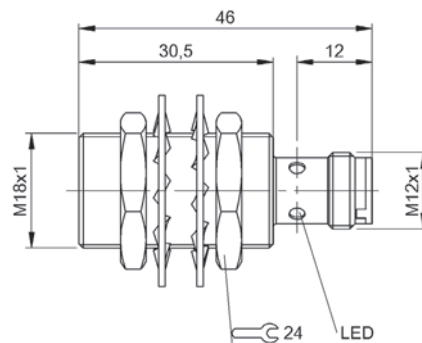
BES02K3, BES02K4



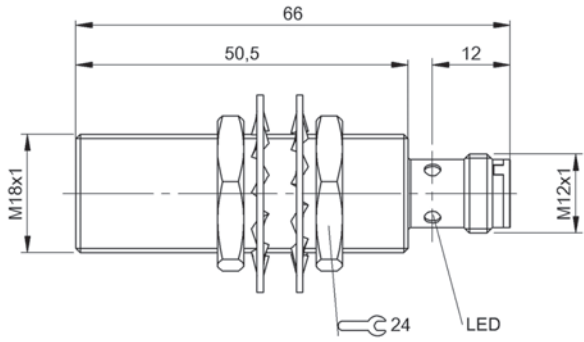
BES0452



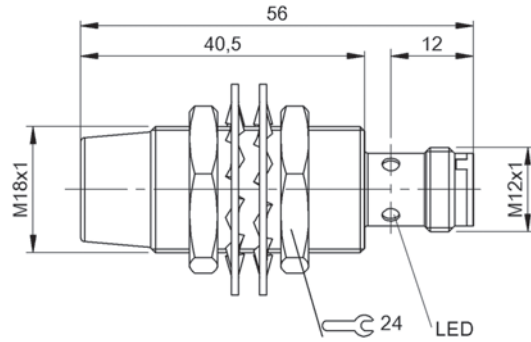
BES02K5



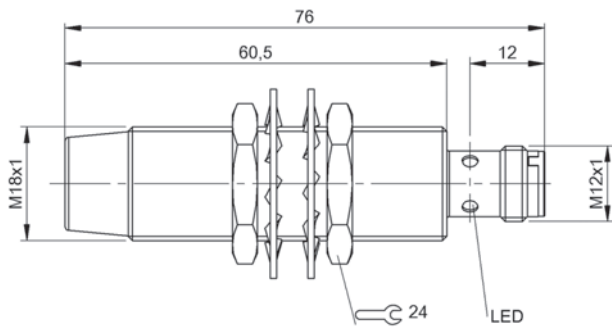
BES05AJ



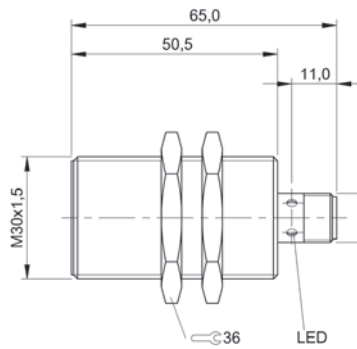
BES05AH, BES05AK



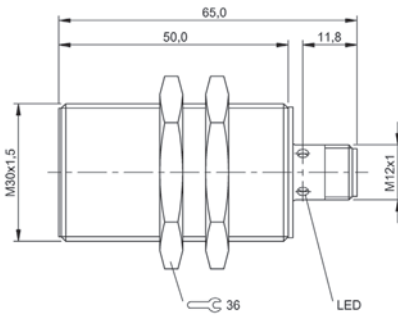
BES05AL



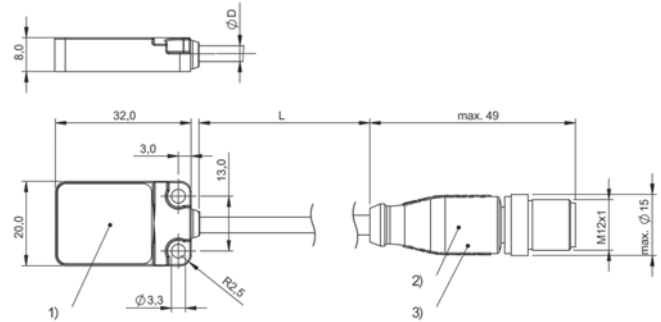
BES05AM



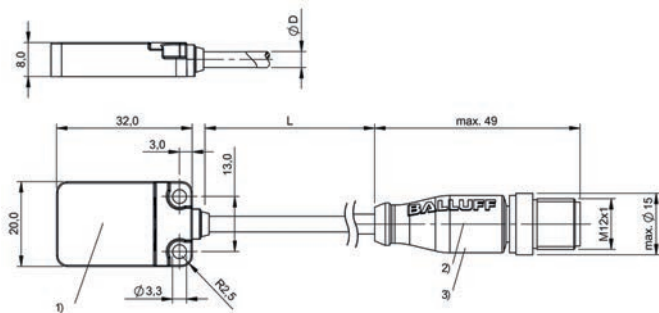
BES02KM, BES02KN



BES0454

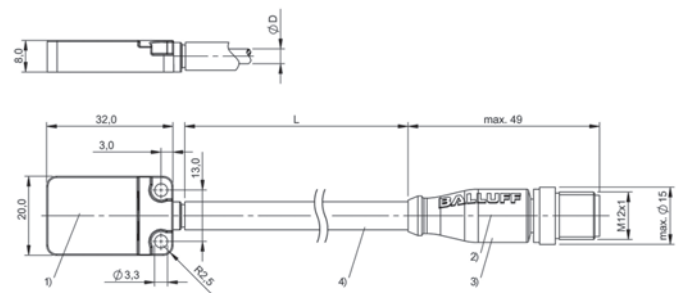


1) Sensing surface, 2) LED yellow, 3) LED green



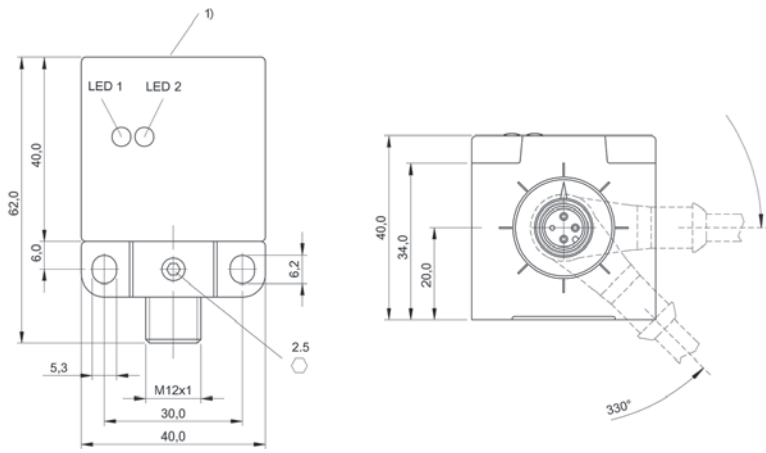
1) Sensing surface, 2) LED green, 3) LED yellow

BES04RE



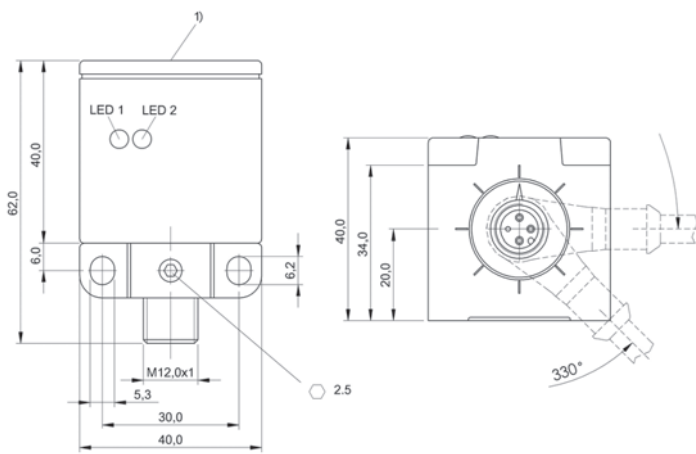
1) Sensing surface, 2) LED green, 3) LED yellow, 4) Silicon tube D=7mm

BES049Y



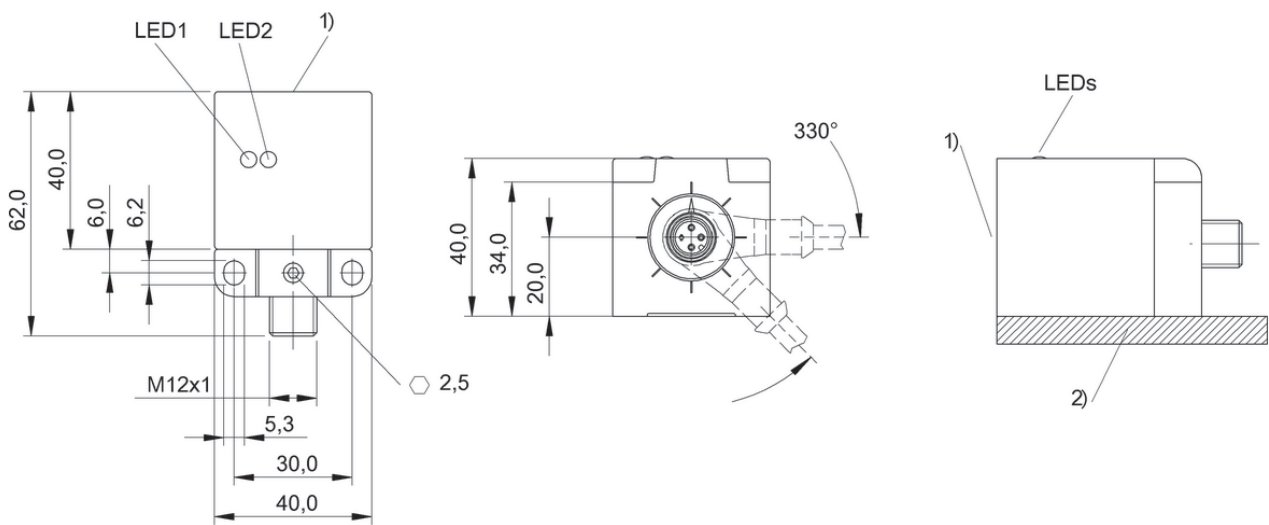
1) Sensing surface

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



1) Sensing surface

BES021U, BES0457



1) Sensing surface, 2) Metal plate

BES0222



PNP normally open	BES02YZ BES M08EG1-PSC15S-S04G-S	BES02N5 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 _b	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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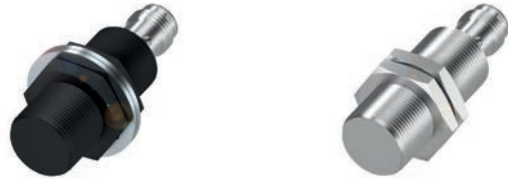
BES02N6 BES M08EH1-PSC20B-S04G-S01	BES02Z3 BES M12EG1-PSC20S-S04G-S	BES02Z2 BES M12EG1-PSC20N-S04G-S	BES04Z5 BES M12EI-PSC40A-S04G-S
Ø 8 x 65 mm	Ø 12 x 65 mm	Ø 12 x 65 mm	Ø 12 x 65 mm
M8x1	M12x1	M12x1	M12x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
2 mm	2 mm	2 mm	4 mm
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	BES0567 BES M12EI-PSC40A-S04G-S02	BES0510 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_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	
Additional features	Factor 1, Weld immune, Housing resistant to weld spatter	Damping: Steel	
Productview	Page 208	Page 208	



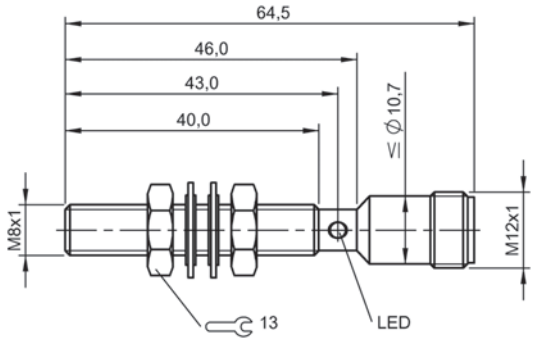
BES0511 BES M12EI-PSC40N-S04G-S	BES0279 BES M18EG1-PSC50S-S04G-S	BES0278 BES M18EG1-PSC50N-S04G-S	BES05K7 BES M18EG1-PSC80A-S04G-S
Ø 12 x 65 mm	Ø 18 x 66 mm	Ø 18 x 66 mm	Ø 18 x 56 mm
M12x1	M18x1	M18x1	M18x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
4 mm	5 mm	5 mm	8 mm
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
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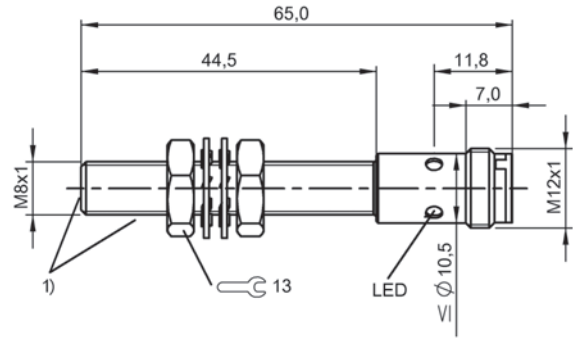
	BES05NC BES M18EG1-PSC80A-S04G-S02	BES05K8 BES M18EG1-PSC80S-S04G-S	
PNP normally open			
Dimension	Ø 18 x 56 mm	Ø 18 x 56 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	8 mm	8 mm	
Switching frequency	110 Hz	110 Hz	
Housing material	Stainless steel	Stainless steel	
Surface 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	
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BES05K9 BES M18EG1-PSC80N-S04G-S	BES02ZJ BES M30EG1-PSC80S-S04G-S	BES02ZH 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	—	—	
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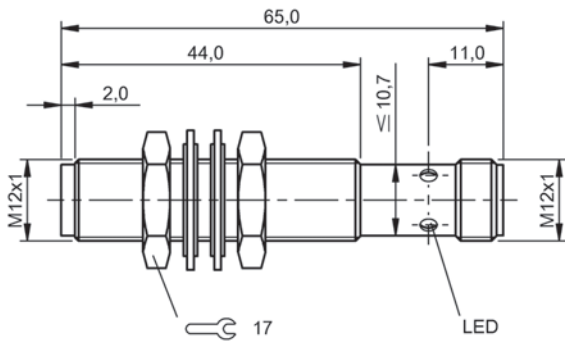


BES02YZ

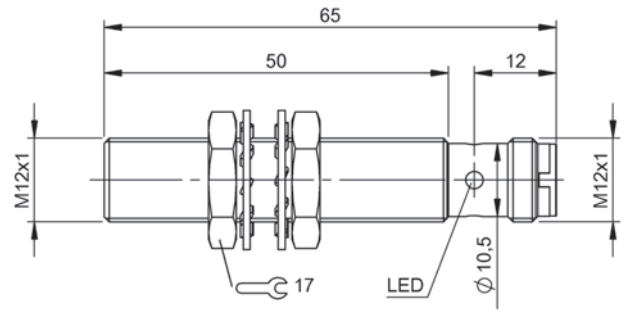


1) Pressure resistant area

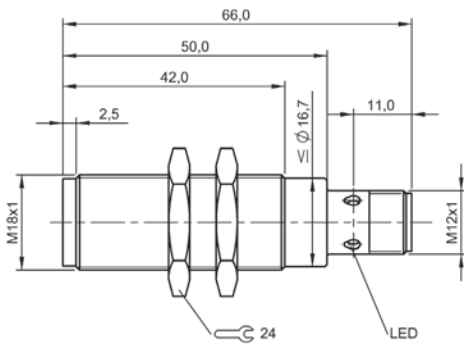
BES02N5, BES02N6



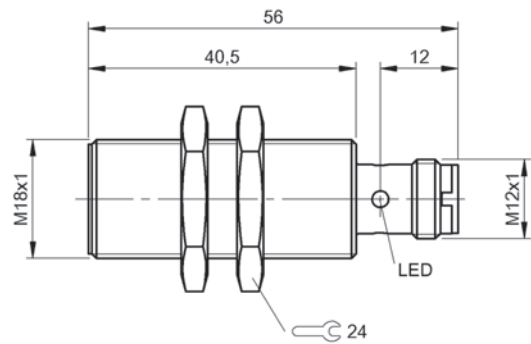
BES02Z3, BES02Z2



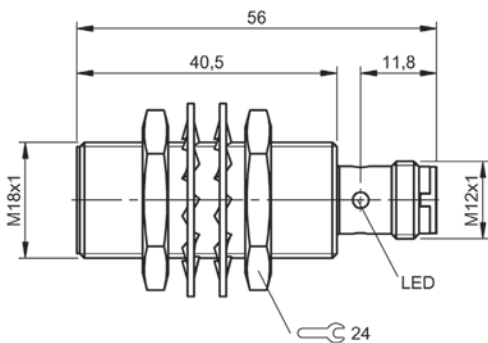
BES04Z5, BES0567, BES0510, BES0511



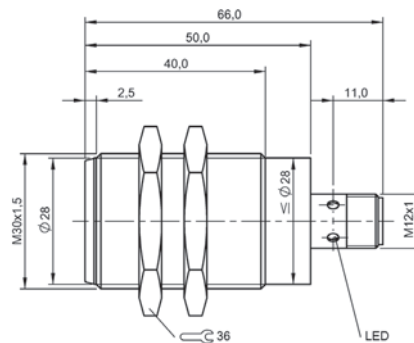
BES02Z9, BES02Z8



BES05K7, BES05K8, BES05K9



BES05NC



BES02ZJ, BES02ZH



PNP normally open	BES02J5 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 U_b	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	



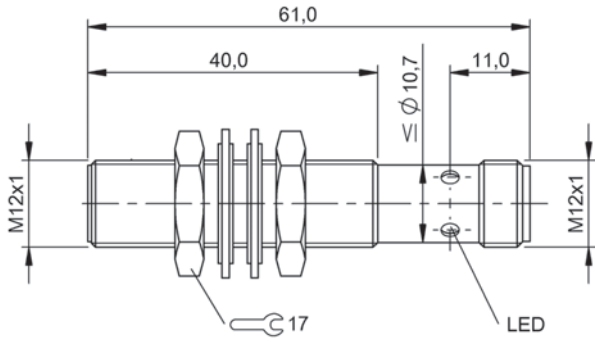
	BES02JM BES 516-356-S4-CW	BES02J9 BES 516-326-S4-CW	BES02JH BES 516-327-S4-CW
	Ø 12 x 61 mm	Ø 18 x 65 mm	Ø 30 x 65 mm
	M12x1	M18x1	M30x1.5
	non-flush	for flush mounting	for flush mounting
	4 mm	5 mm	10 mm
	1000 Hz	500 Hz	100 Hz
	Stainless steel	Brass	Brass
	coated, PTFE	coated, PTFE	coated, PTFE
	PTFE	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



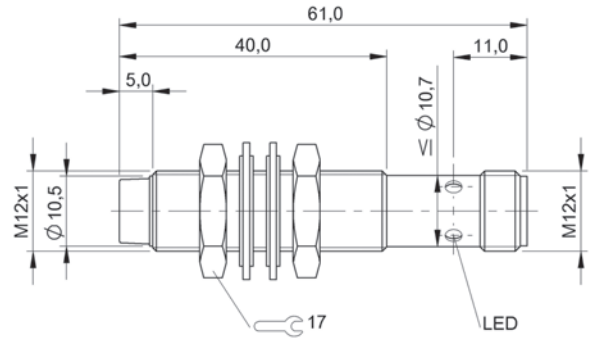
PNP normally open	BES0481 BES R01ZC-PSC50B-BZ03-V02	
Dimension	32 x 20 x 8 mm	
Style	block style	
Installation	for flush mounting	
Range	5 mm	
Switching frequency	100 Hz	
Housing material	Zinc, die-cast	
Surface protection	—	
Material sensing surface	PA 12	
Connection	Cable, 3.00 m, TPU	
Operating voltage U_b	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	



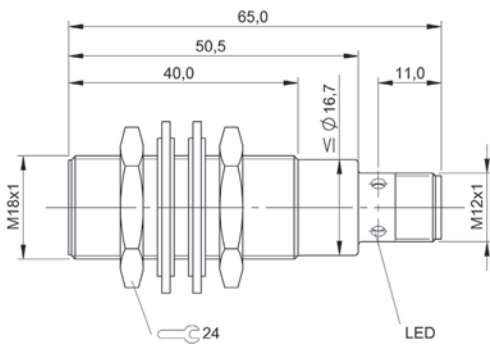
BES048J BES R01ZC-PSC50B-BZ00,2-GS04-V02	BES0493 BES R01ZC-PSC50B-BZ00,2-GS49-V02	BES048W BES R01ZC-PSC50B-BZ00,5-GS04-V02
32 x 20 x 8 mm	32 x 20 x 8 mm	32 x 20 x 8 mm
block style	block style	block style
for flush mounting	for flush mounting	for flush mounting
5 mm	5 mm	5 mm
100 Hz	100 Hz	100 Hz
Zinc, 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
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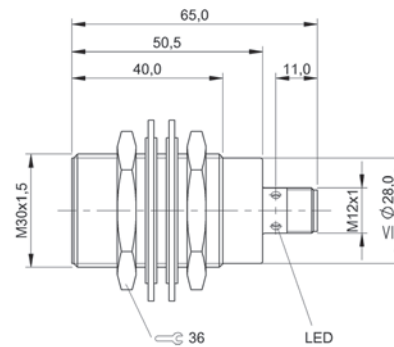
BES02J5



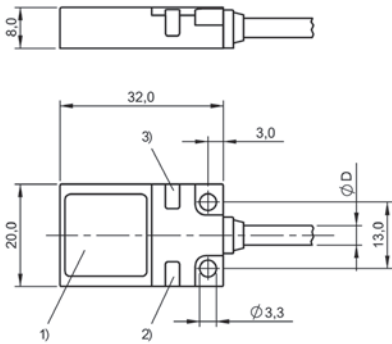
BES02JM



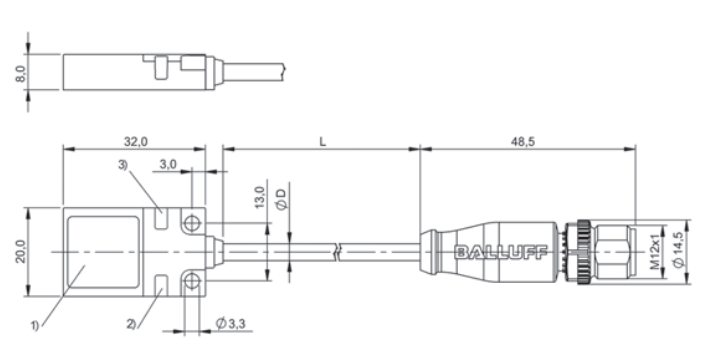
BES02J9



BES02JH



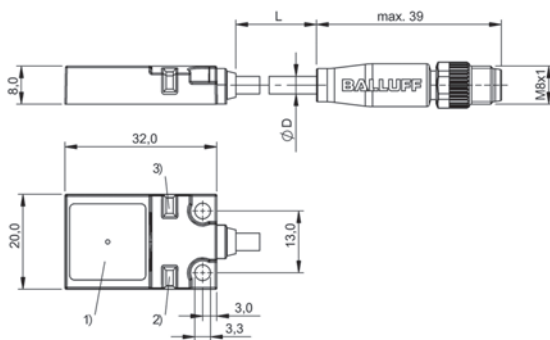
1) Sensing surface, 2) LED green, 3) LED yellow



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

BES0481

BES048J, BES048W



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

BES0493



PNP normally open	BES02PU BES M08MH1-PSC20B-S04G-101	BES02PW 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	



BES056A BES M12EI-PSC40B-S04G-S03	BES02KC BES M18MI-PSC70B-S04G-W	BES056C 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	
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PNP normally open	BES048K BES R01ZC-PSC50B-BZ00,2-GS04-W05	BES048N 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	



BES048Y 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			

Sensors

RFID

Machine Vision and Optical Identification

Human Machine Interfaces

Systems

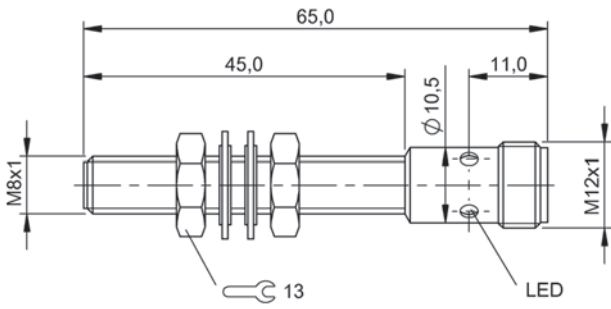
Safety

Industrial Networking

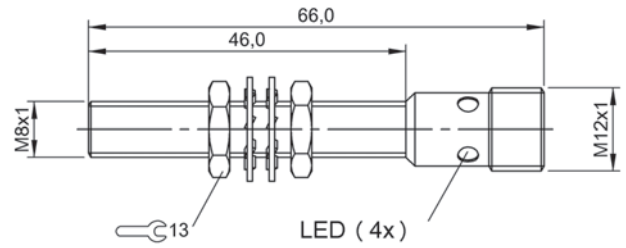
Power Supply

Connectivity

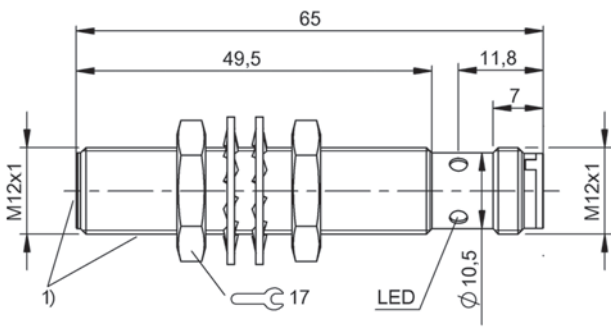
Accessories



BES02PU

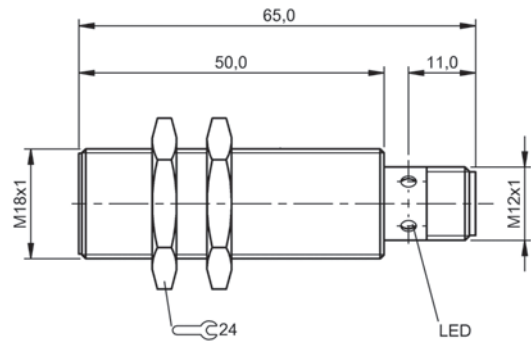


BES02PW

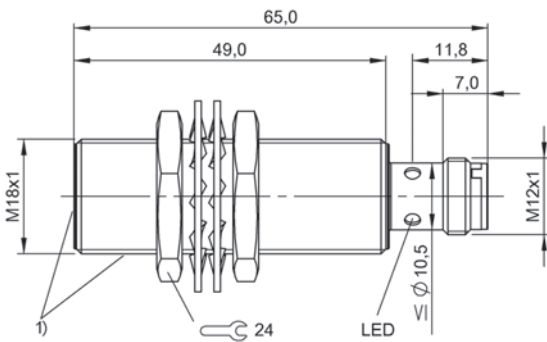


1) Pressure resistant area

BES056A

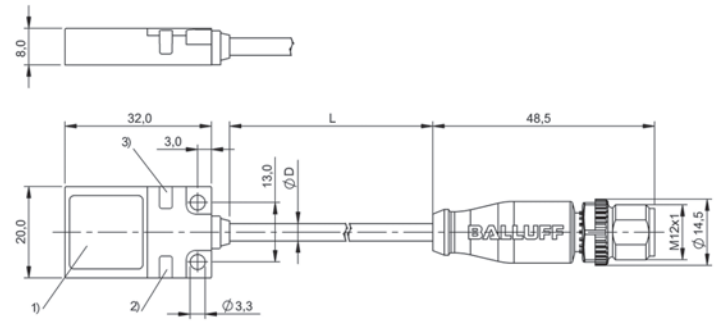


BES02KC



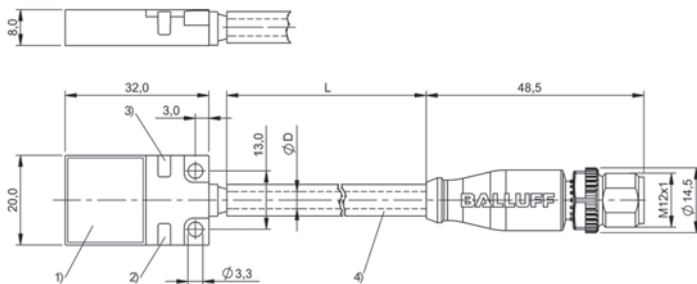
1) Pressure resistant area

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	BES02J2 BES M05ED-PSD05B-ES02-T01	BES046C BES M05ED-PSD05B-ES05-T01	
Dimension	Ø 5 x 27 mm	Ø 5 x 27 mm	
Style	M5x0.5	M5x0.5	
Installation	for flush mounting	for flush mounting	
Range	0.5 mm	0.5 mm	
Switching frequency	1000 Hz	1000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	POM	POM	
Connection	Cable, 2.00 m, silicone	Cable, 5.00 m, silicone	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...120 °C	-25...120 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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BES03P1 BES M05ED-PSD08B-ES02-T01	BES04FL BES M05ED-PSD05B-ES05-GS04-T50	BES05FN BES M08EM-PSD20B-ET05-T	BES04CK BES 515-325-SA74-D-TF-02
Ø 5 x 27 mm	Ø 5 x 27 mm	Ø 8 x 60 mm	Ø 12 x 62 mm
M5x0.5	M5x0.5	M8x1	M12x1
for flush mounting	for flush mounting	for flush mounting	for flush mounting
0.8 mm	0.5 mm	2 mm	2 mm
900 Hz	1000 Hz	600 Hz	200 Hz
Stainless steel	Stainless steel	Stainless steel	Stainless steel
—	—	—	—
POM	POM	LCP	PEEK
Cable, 2.00 m, silicone	Cable with connector, 5.00 m, silicone	Cable, 5.0 m, PTFE	Cable, 2.00 m, PTFE
10...30 VDC	10...30 VDC	10...30 VDC	10...30 VDC
0...120 °C	-25...120 °C	0...140 °C	-25...160 °C
IP67	IP67	IP50	IP68
CE, cULus, EAC	CE, cULus, EAC	CE, EAC	CE, EAC
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Sensors

RFID

Machine Vision and
Optical Identification

Human Machine
Interfaces

Systems

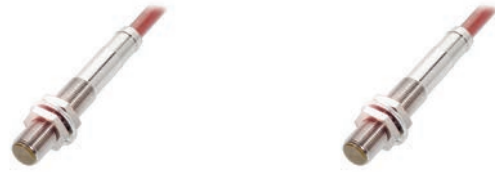
Safety

Industrial Networking

Power Supply

Connectivity

Accessories



PNP normally open	BES02HU BES 516-325-SA19-03	BES02HW 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	for flush mounting	for flush mounting	
Range	2 mm	2 mm	
Switching frequency	1000 Hz	1000 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PEEK	PEEK	
Connection	Cable, 3.00 m, silicone	Cable, 5.00 m, silicone	
Operating voltage U _b	10...30 VDC	10...30 VDC	
Ambient temperature	-25...120 °C	-25...120 °C	
Protection degree	IP68	IP68	
Approval/Conformity	CE, EAC	CE, EAC	
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	for flush mounting	for flush mounting	for flush mounting
	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	CE, EAC	CE, EAC	CE, EAC
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PNP normally open	BES05N4 BES M18ED-PSC50B-GT05-T		
PNP normally open/normally closed		BES02H6 BES 516-105-SA5	
Dimension	Ø 18 x 35 mm	Ø 18 x 83 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	5 mm	5 mm	
Switching frequency	9 Hz	500 Hz	
Housing material	Stainless steel	Brass	
Surface protection	—	nickel plated	
Material sensing surface	LCP	PBT	
Connection	Connector, M12x1-Male, 4-pole, 5.0 m, PTFE	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	0...230 °C	-25...120 °C	
Protection degree	IP50	IP67	
Approval/Conformity	CE, EAC	CE, EAC	
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		for flush mounting	for flush mounting	for flush mounting
8 mm		10 mm	10 mm	10 mm
200 Hz		300 Hz	200 Hz	200 Hz
Stainless steel		Brass	Stainless steel	Stainless steel
—		nickel plated	—	—
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		CE, EAC	CE, EAC	CE, EAC
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PNP normally open	BES05N5 BES M30N1-PSC10B-GT05-T		
PNP normally open/normally closed		BES02HE BES 516-125-SA1-05	
Dimension	Ø 30 x 74 mm	Ø 30 x 91 mm	
Style	M30x1.5	M30x1.5	
Installation	for flush mounting	non-flush	
Range	10 mm	15 mm	
Switching frequency	9 Hz	100 Hz	
Housing material	Stainless steel	Brass	
Surface protection	—	nickel plated	
Material sensing surface	LCP	PA 12	
Connection	Connector, M12x1, 4-pole, 5.0 m, PTFE	Cable, 5.00 m, silicone	
Operating voltage U_b	10...30 VDC	10...30 VDC	
Ambient temperature	0...230 °C	-25...120 °C	
Protection degree	IP50	IP67	
Approval/Conformity	CE, EAC	CE, EAC	
Productview	Page 233	Page 233	



	BES043Y BES 515-362-SA4-D-TF-02	BES04C8 BES 515-362-SA4-D-TF-05	BES05N7 BES Q08EC-PSD20B-ES05	BES05N8 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	for flush mounting	for flush mounting
	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	CE, EAC	CE, EAC	CE, EAC
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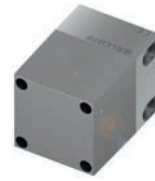
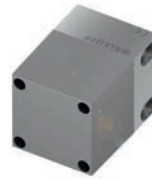
Safety

Industrial Networking

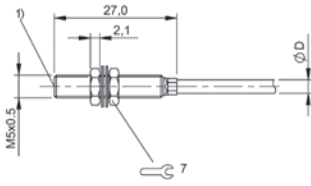
Power Supply

Connectivity

Accessories

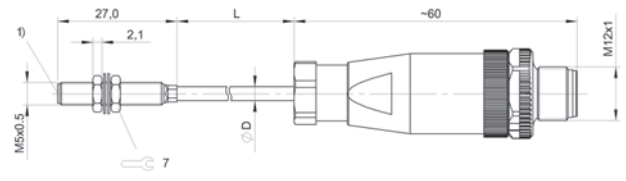


PNP normally open		BES05N9 BES Q40KG-PSD25F-S04G	
For switching amplifier	BES05N6 BES Q40KG-X20F-SZ03		
Dimension	40 x 40 x 66.6 mm	40 x 40 x 70.7 mm	
Style	40x40	40x40	
Installation	non-flush	non-flush	
Range	20 mm	25 mm	
Switching frequency	100 Hz	100 Hz	
Housing material	Stainless steel	Stainless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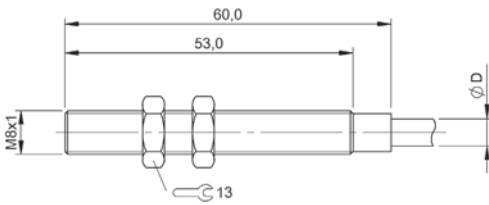
1) Sensing surface

BES02J2, BES046C, BES03P1

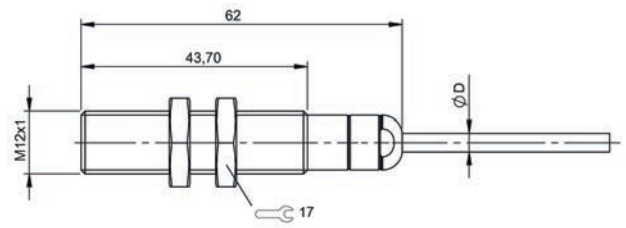


1) Sensing surface

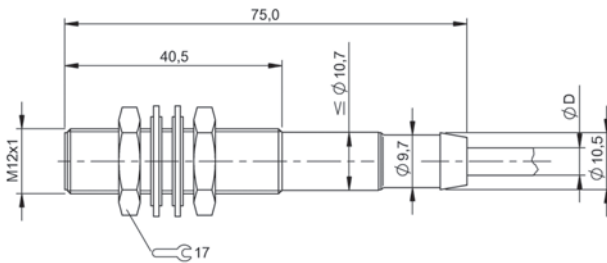
BES04FL



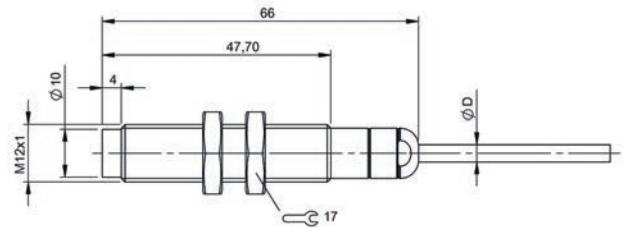
BES05FN



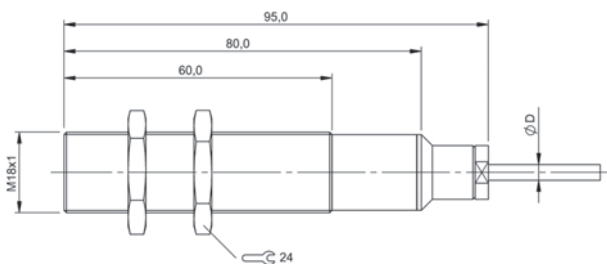
BES04CK



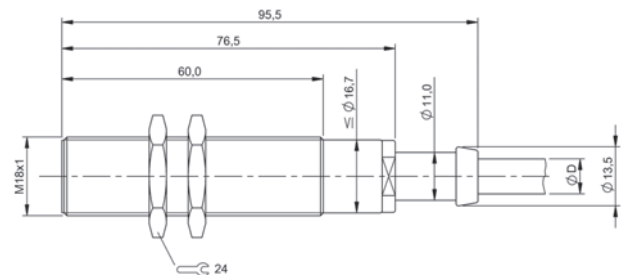
BES02HU, BES02HW



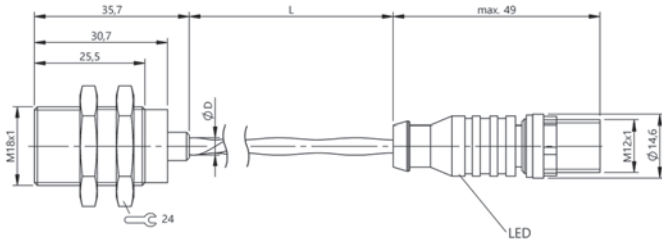
BES04CL



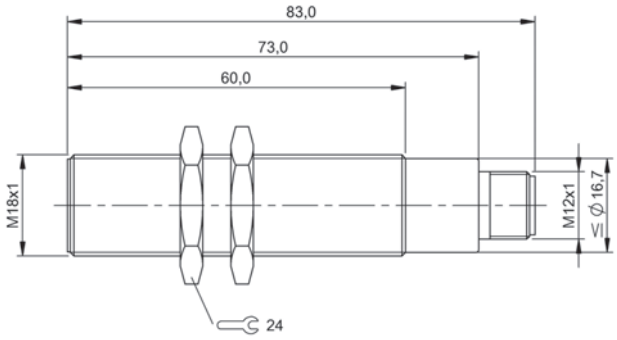
BES043T, BES04AT



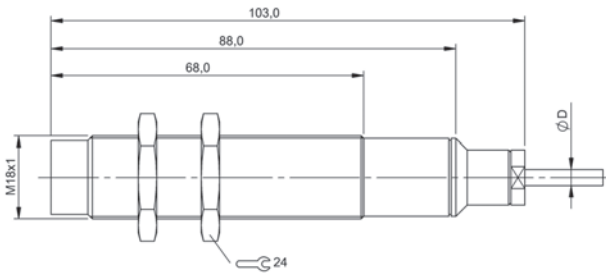
BES02H5



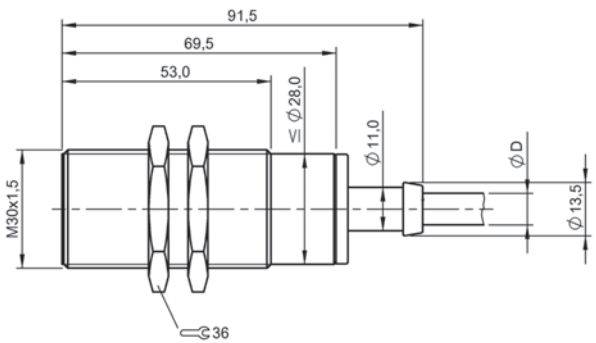
BES05N4



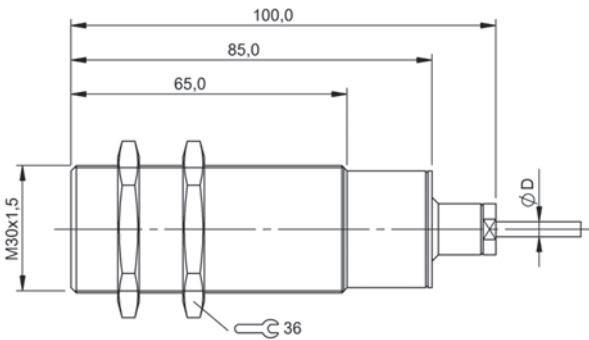
BES02H6



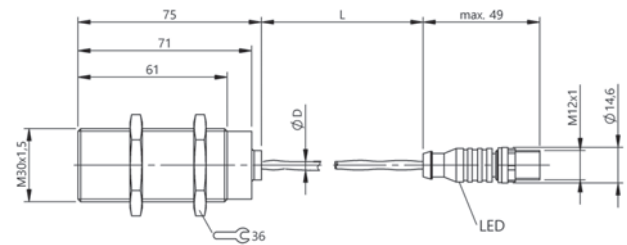
BES04C7



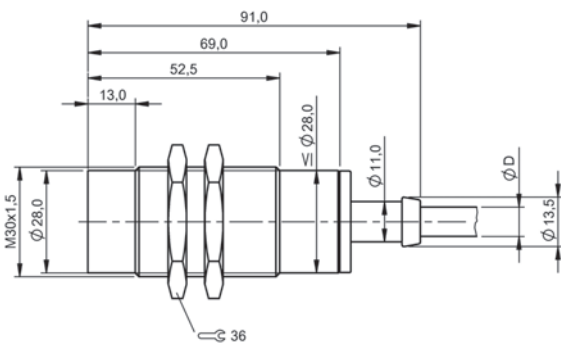
BES02H7



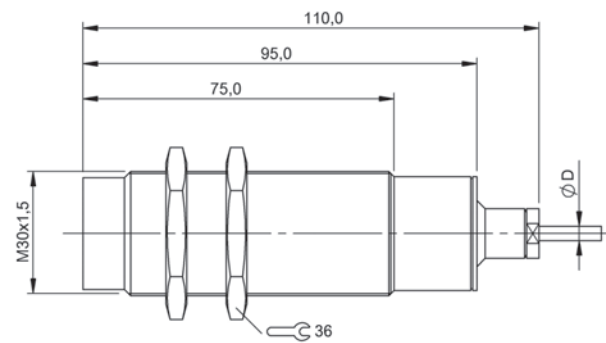
BES043W, BES04AU



BES05N5

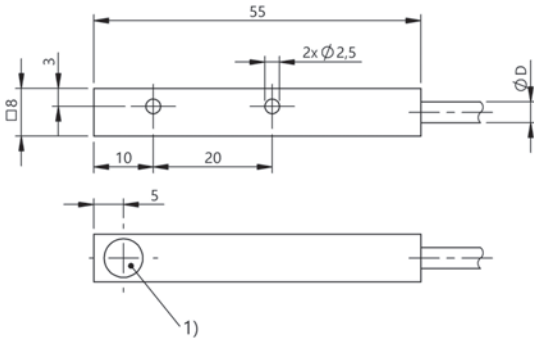


BES02HE



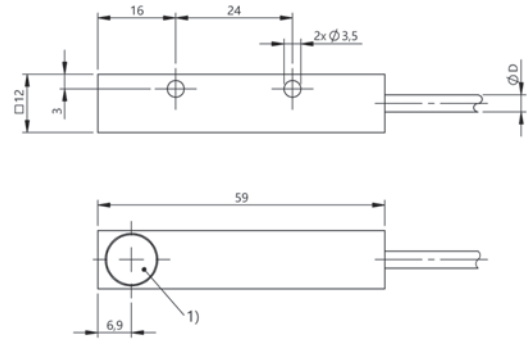
BES043Y, BES04C8

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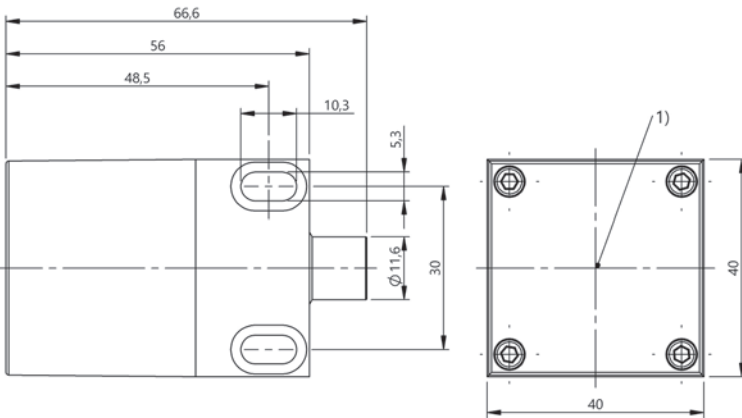
1) Sensing surface

BES05N7



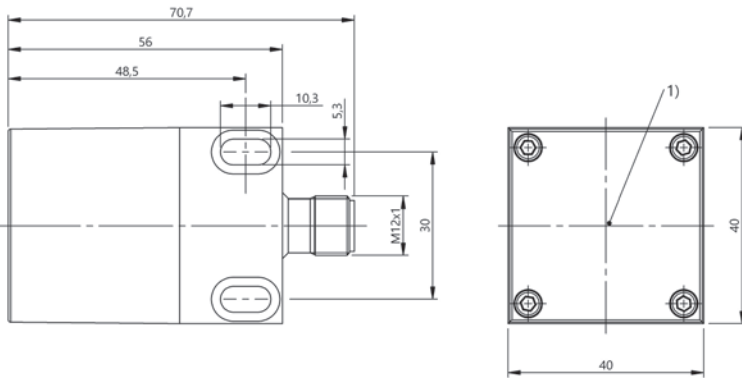
1) Sensing surface

BES05N8



1) Sensing surface

BES05N6



1) Sensing surface

BES05N9



NAMUR	BES02ZR BES G06MD-GNX10B-EV02-EEX	BES02ZT BES M08MD-GNX10B-EV02-EEX		
PNP normally open			BES05M3 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_b	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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	BES05NE BES M12MG2-GNX20B-BT02-EXA	BES05NM BES M12MG2-GNX20B-BT02-EXB	BHS004L BES 516-300-S318-S4-N	
				BHS002W BES 516-300-S249-NEX-S4-D
BES05L6 BES M12MF2-PSC20B-BV02-EXE				
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	BHS0034 BES 516-300-S266-S4	BHS004K BES 516-300-S315-S4-N		
PNP normally open			BHS005P 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	BES02ZU BES M12ME-GNX40B-S04G-EEX	BES05L7 BES M12MF2-PSC40F-BV02-EXE	BES05NF BES M12MG2-GNX40F-BT02-EXA	BES05NN BES M12MG2-GNX40F-BT02-EXB
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	BES05MY BES M12MG2-GNX40F-S04G-EXC			
PNP normally open		BES05M4 BES M18EG2-PSC50B-BV02-EXF	BES05L2 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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	BES05L8 BES M18MF2-PSC50B-BV02-EXE	BES05NH BES M18MH2-GNX50B-BT02-EXA	BES05NP BES M18MH2-GNX50B-BT02-EXB	BHS004H BES 516-300-S308-NEX-S4-D	BES05MZ BES M18MH2-GNX50B-S04G-EXC
	Ø 18 x 60 mm	Ø 18 x 67 mm	Ø 18 x 67 mm	Ø 18 x 55 mm	Ø 18 x 67 mm
	M18x1	M18x1	M18x1	M18x1	M18x1
	for flush mounting	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	5 mm	5 mm	5 mm	1.5 mm	5 mm
	300 Hz	—	—	2000 Hz	—
	Brass	Stainless steel	Stainless steel	Stainless steel	Brass
	nickel plated	—	—	—	nickel plated
	PA	PEEK	PTFE	EP	PA
	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	10...30 VDC	7.7...9 VDC
	-20...60 °C	-20...60 °C, depending on Ex category	-20...60 °C, depending on Ex category	-25...80 °C	-20...60 °C, depending on Ex category
	—	—	—	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: 3G (EPL Gc)	ATEX: 1G (EPL Ga) ATEX: 1D (EPL Da)
	IP67	IP68	IP68	IP68	IP67
	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	CE, EAC, IECEX, ATEX	CE, EAC, ATEX	CE, EAC, IECEX, ATEX
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NAMUR	BES02ZW BES M18ME1-GNX80B-S04G-EEX			
PNP normally open		BES05L3 BES M18MF2-PSC80F-BV02-EXD	BES05L9 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_b	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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BES05NJ BES M18MH2-GNX80F-BT02-EXA	BES05NR BES M18MH2-GNX80F-BT02-EXB	BES05NO BES M18MH2-GNX80F-S04G-EXC	BES05M5 BES M30EG2-PSC10B-BV02-EXF	BES05L4 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		BES05NK BES M30MH2-GNX10B-BT02-EXA	BES05NT BES M30MH2-GNX10B-BT02-EXB	
PNP normally open	BES05LA 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_b	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-EEX				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	BES05NU BES M30MH2-GNX15F-BT02-EXB	BES05N2 BES M30MH2-GNX15F-S04G-EXC	BES02ZZ 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 connector, 4-pin	Connector, M12x1 connector	
Operating voltage U_b	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	
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BES0300 BES Q40KFU-GNX35F-S92G-EEX				
40 x 40 x 66 mm				
block style				
non-flush				
35 mm				
100 Hz				
PPE PPS				
—				
PPE				
Connector, M12x1 connector				
7.7...9 VDC				
-20...70 °C				
—				
ATEX: 2G (EPL Gb) ATEX: 1D (EPL Da)				
IP67				
CE, EAC, cCSAus, FM				
Page 252				

Sensors

RFID

Machine Vision and
Optical Identification

Human Machine
Interfaces

Systems

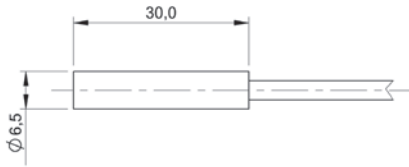
Safety

Industrial Networking

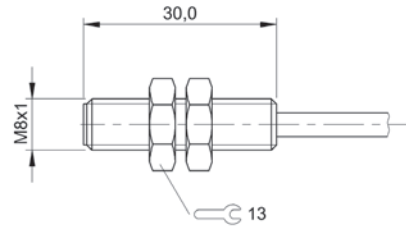
Power Supply

Connectivity

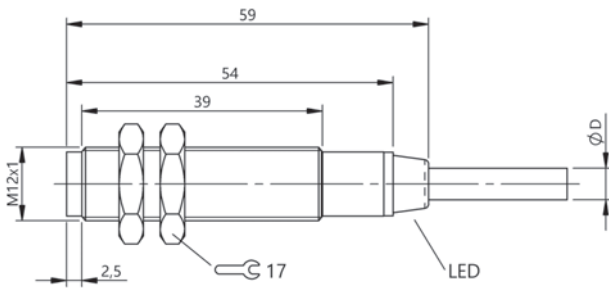
Accessories



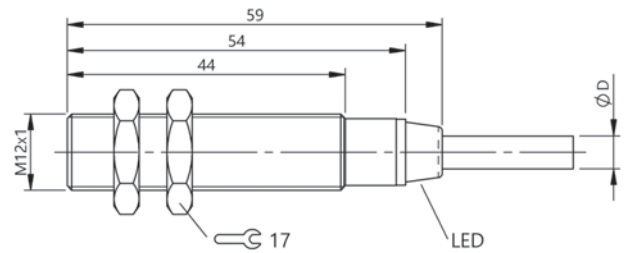
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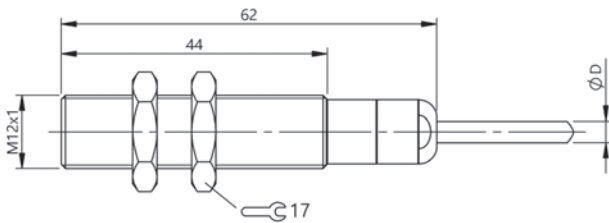
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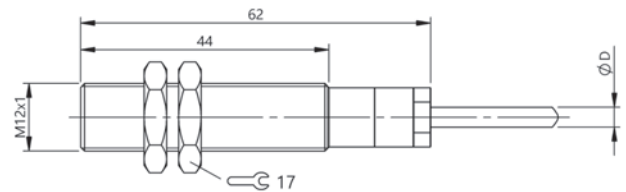
BES05M3



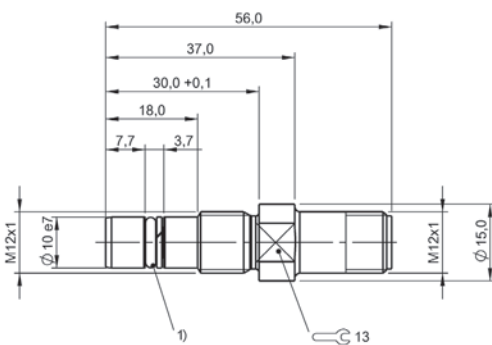
BES05L6



BES05NE

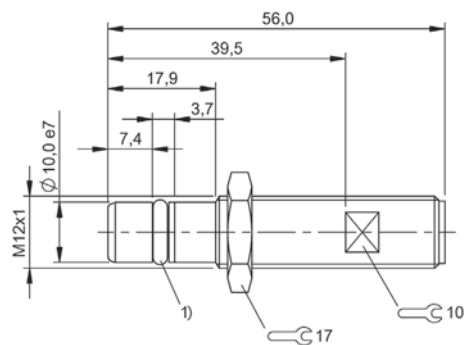


BES05NM



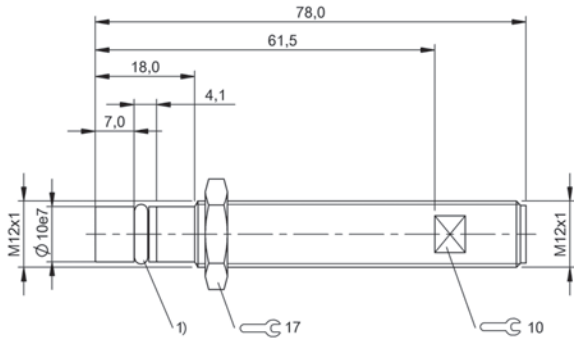
1) O-Ring with thrust ring

BHS004L



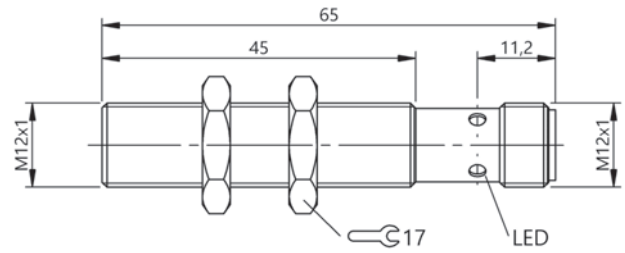
1) O-Ring with thrust ring

BHS002W, BHS0034, BHS004K

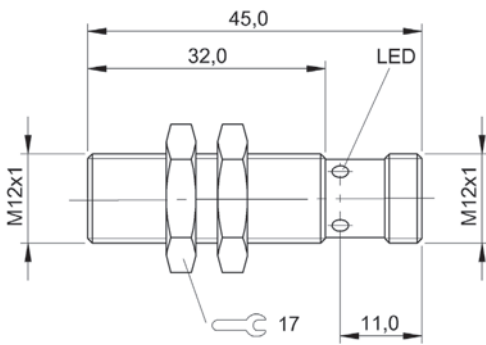


1) O-Ring with thrust ring

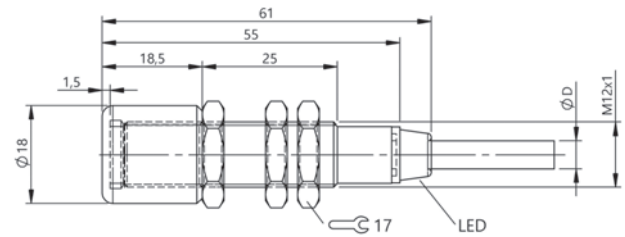
BHS005P



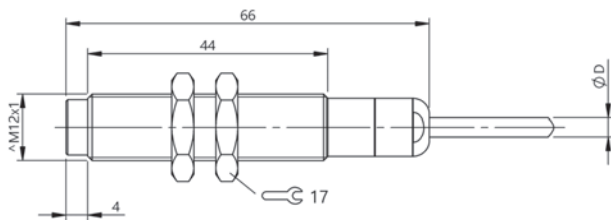
BES05MW



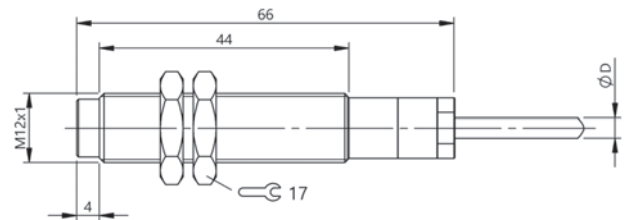
BES02ZU



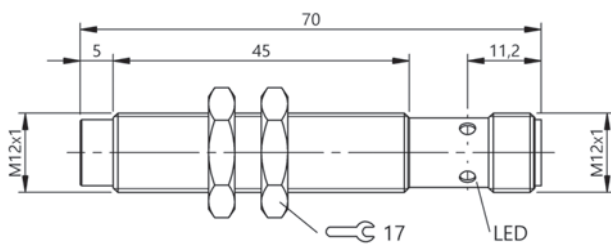
BES05L7



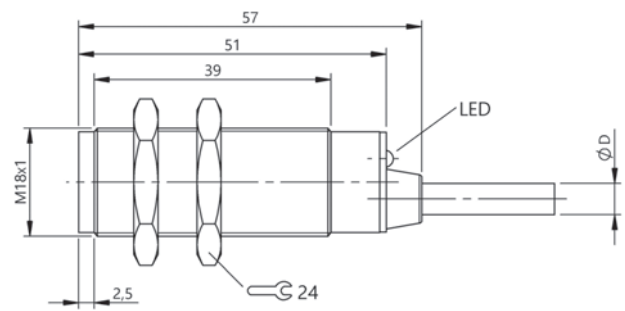
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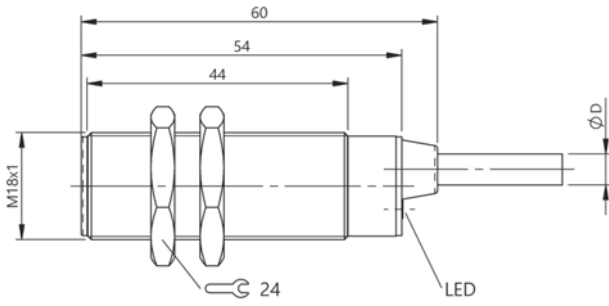
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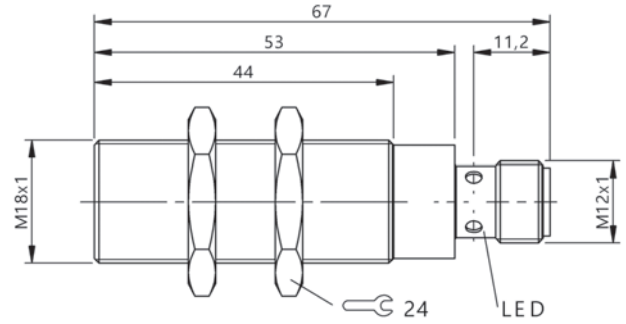
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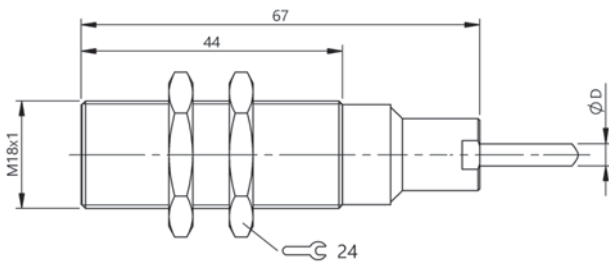
BES05M4



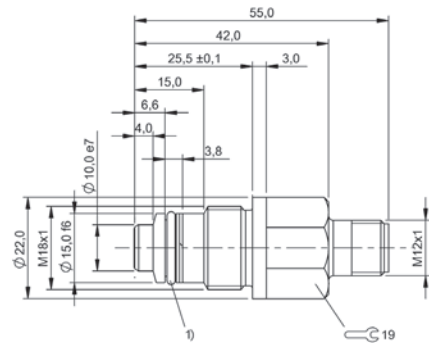
BES05L2, BES05L8



BES05NH, BES05MZ

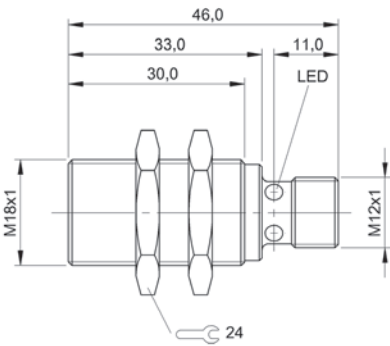


BES05NP

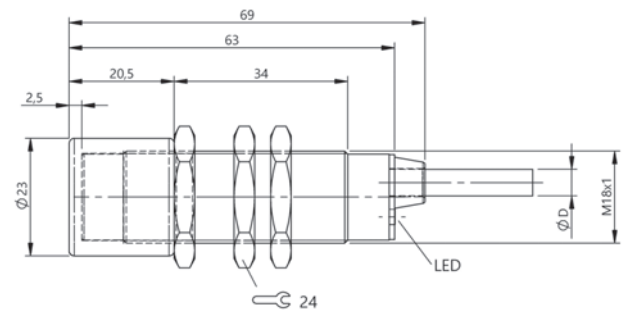


1) O-Ring with thrust ring

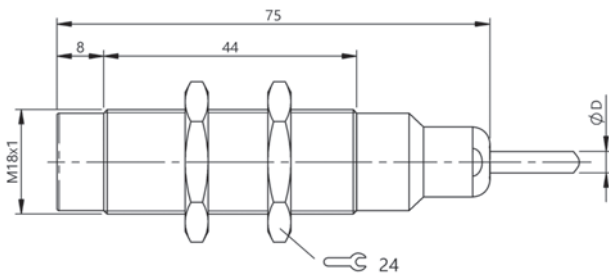
BHS004H



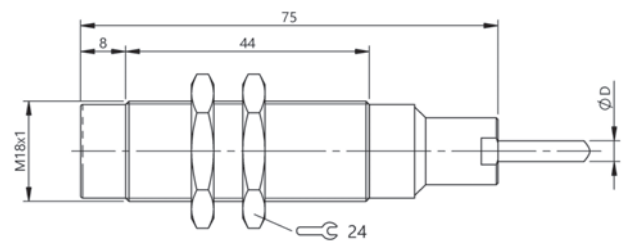
BES02ZW



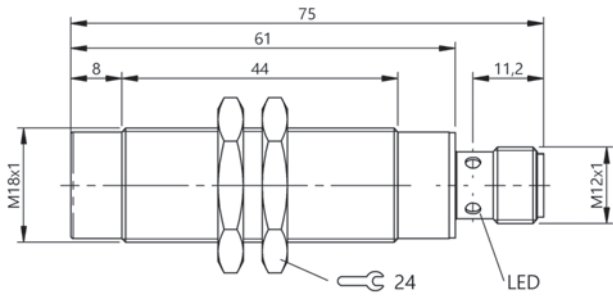
BES05L3, BES05L9



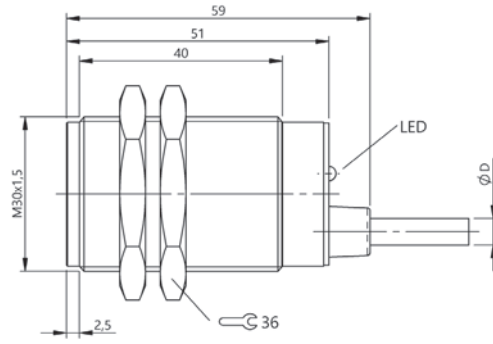
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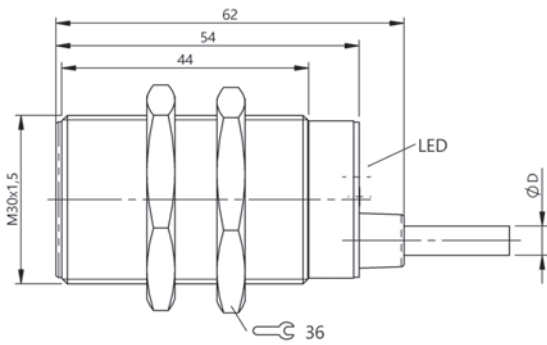
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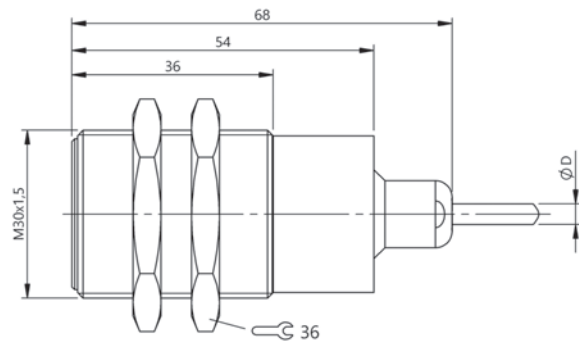
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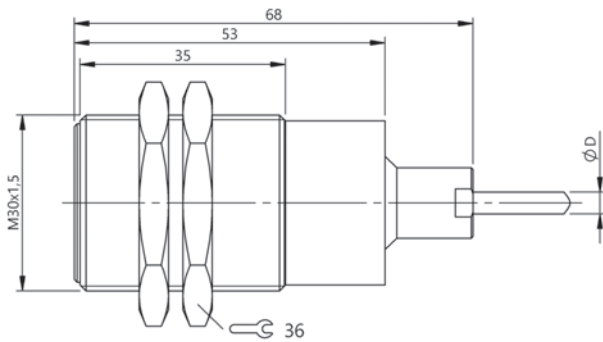
BES05M5



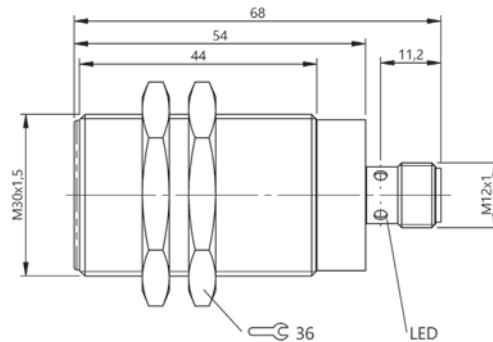
BES05L4, BES05LA



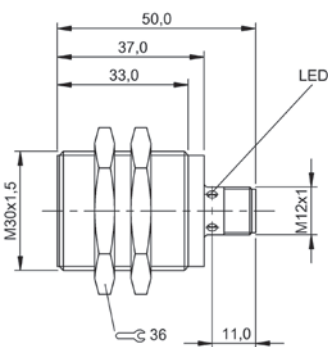
BES05NK



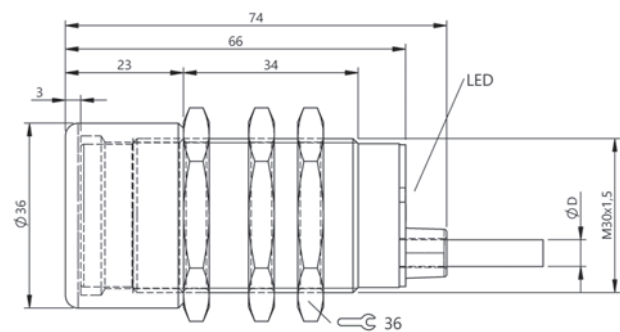
BES05NT



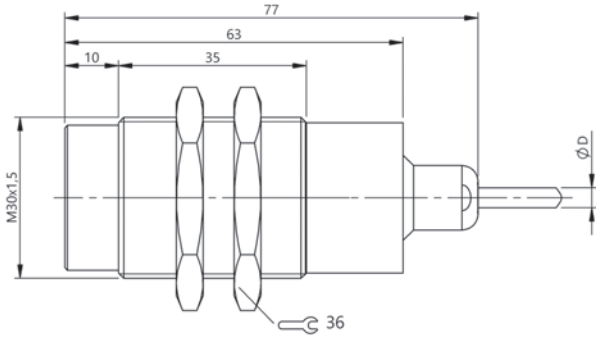
BES05N1



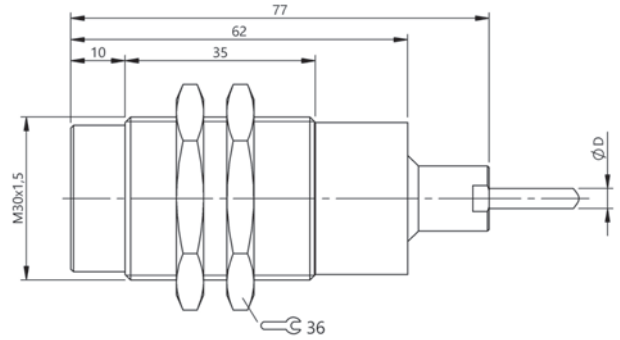
BES02ZY



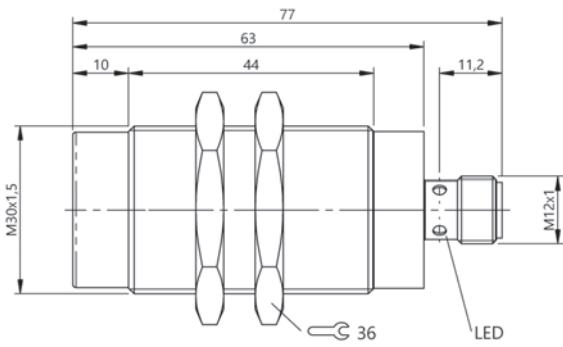
BES05L5, BES05LC



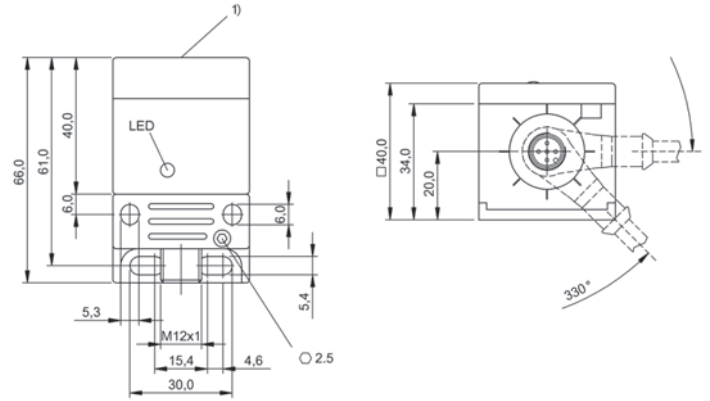
BES05NL



BES05NU



BES05N2



1) Sensing surface

BES02ZZ, BES0300



	BES050N BES G04ED-GNX08B-EP02	BES02L6 BES 516-3005-F0-N-03	
Dimension	Ø 4 x 27 mm	Ø 5 x 24.5 mm	
Style	D4.0	M5x0.5	
Installation	for flush mounting	for flush mounting	
Range	0.8 mm	0.8 mm	
Interface	NAMUR	NAMUR	
Switching frequency	2500 Hz	2000 Hz	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Cable, 2.00 m, PUR	Cable, 3.00 m, PVC	
Operating voltage U_b	7.7...9 VDC	7.7...9 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, EAC	
Productview	Page 258	Page 258	



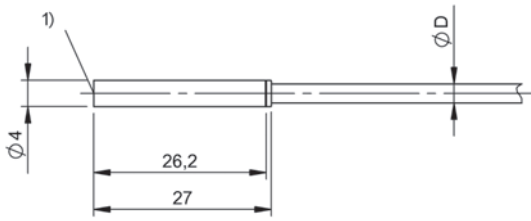
	BES050P BES M05ED-GNX08B-EP02	BES02LW BES 516-371-SA3-03	BES02LY BES 516-371-SA3-05	BES02LA BES 516-324-E0-N-03
	Ø 5 x 27 mm	Ø 6.5 x 22.5 mm	Ø 6.5 x 22.5 mm	Ø 8 x 45.5 mm
	M5x0.5	D6.5	D6.5	M8x1
	for flush mounting	for flush mounting	for flush mounting	for flush mounting
	0.8 mm	0.3 mm	0.3 mm	1.2 mm
	NAMUR	NAMUR	NAMUR	NAMUR
	2500 Hz	2000 Hz	2000 Hz	2000 Hz
	Stainless steel	Aluminum	Aluminum	Stainless steel
	—	—	—	—
	PBT	PA 12	PA 12	PBT
	Cable, 2.00 m, PUR	Cable, 3.00 m, PVC	Cable, 5.00 m, PVC	Cable, 3.00 m, PVC
	7.7...9 VDC	10.8...13.2 VDC	10.8...13.2 VDC	7.7...9 VDC
	-25...70 °C	-25...70 °C	-25...70 °C	-25...70 °C
	IP67	IP67	IP67	IP67
	CE, cULus, EAC	CE, EAC	CE, EAC	CE, EAC
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	BES02LE BES 516-325-E3-N-PU-05	BES02LL BES 516-327-E3-N-PU-05	
Dimension	Ø 12 x 30 mm	Ø 30 x 30 mm	
Style	M12x1	M30x1.5	
Installation	for flush mounting	for flush mounting	
Range	2 mm	10 mm	
Interface	NAMUR	NAMUR	
Switching frequency	1000 Hz	300 Hz	
Housing material	Brass	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PA 12	PA 12	
Connection	Cable, 5.00 m, PUR	Cable, 5.00 m, PUR	
Operating voltage U_b	7.7...9 VDC	7.7...9 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	
Approval/Conformity	CE, EAC	CE, EAC	
Productview	Page 258	Page 258	

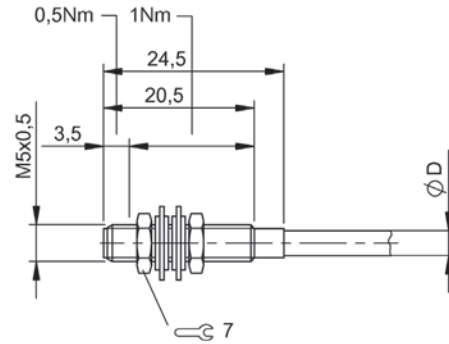


	BES0566 BES Q05EC-GNX08B-EP02	BES0568 BES Q08ZC-GNX15B-EP02	BES03M5 BES R04KC-GNX15B-EP02	
	25 x 5 x 5 mm	40 x 8 x 8 mm	16 x 8 x 4 mm	
	block style	block style	block style	
	for flush mounting	for flush mounting	for flush mounting	
	0.8 mm	1.5 mm	1.5 mm	
	NAMUR	NAMUR	NAMUR	
	3000 Hz	5000 Hz	8000 Hz	
	Stainless steel	Zinc, die-cast	PA 6, GF30	
	—	—	—	
	PBT	PBT	PA 6	
	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	
	7.7...9 VDC	7.7...9 VDC	7.7...9 VDC	
	—	-25...70 °C	-25...70 °C	
	IP67	IP67	IP67	
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	
	Page 258	Page 259	Page 259	

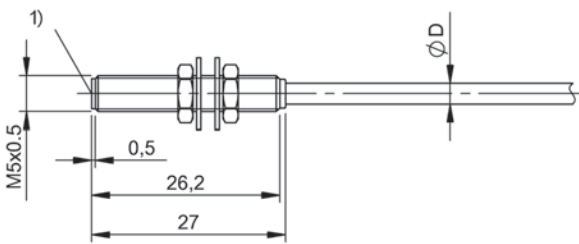


1) Sensing surface

BES050N

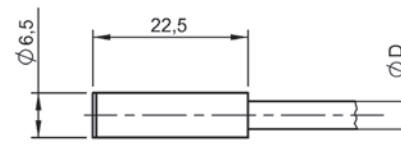


BES02L6

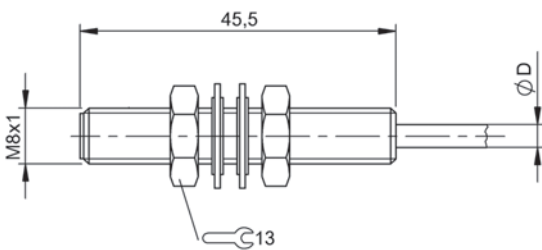


1) Sensing surface

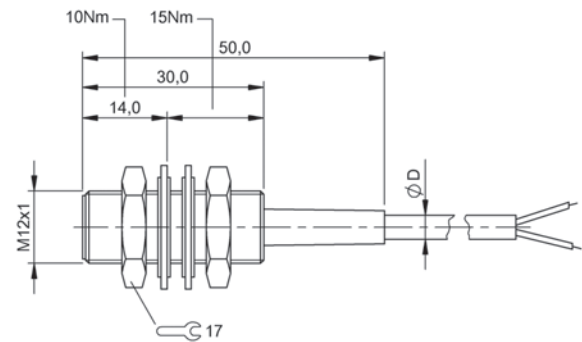
BES050P



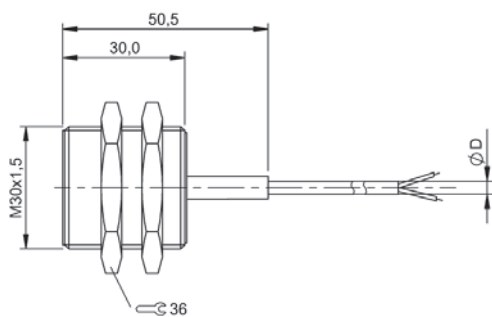
BES02LW, BES02LY



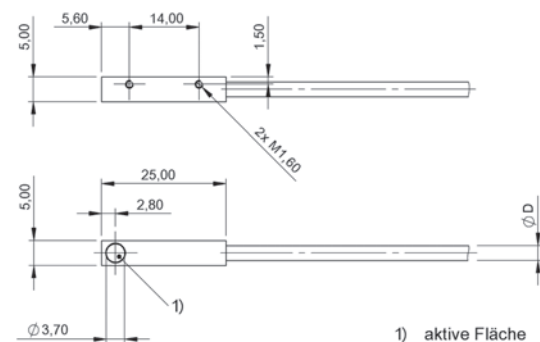
BES02LA



BES02LE

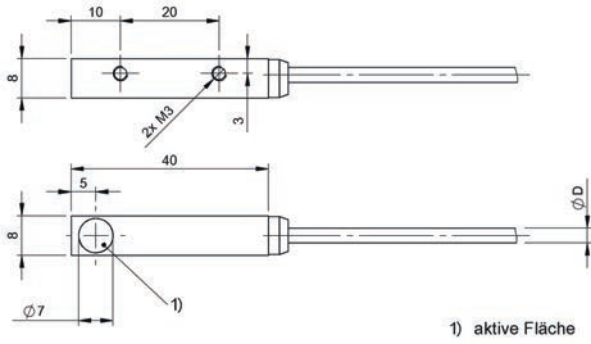


BES02LL



BES0566

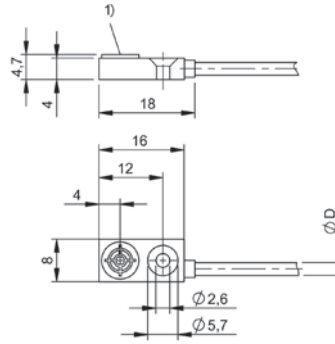
1) aktive Fläche



1) Sensing surface

BES0568

1) aktive Fläche



1) Sensing surface

BES03M5



PNP normally open	BES03JA BES IKVS-010.23-G-S4	BES03JC 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 U_b	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 262	Page 262	



BES03JH BES IKVS-025.23-G-S4	BES0429 BES Z06K-PSC16F-BP00,1-GS04	BES0428 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	
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Sensors

RFID

Machine Vision and Optical Identification

Human Machine Interfaces

Systems

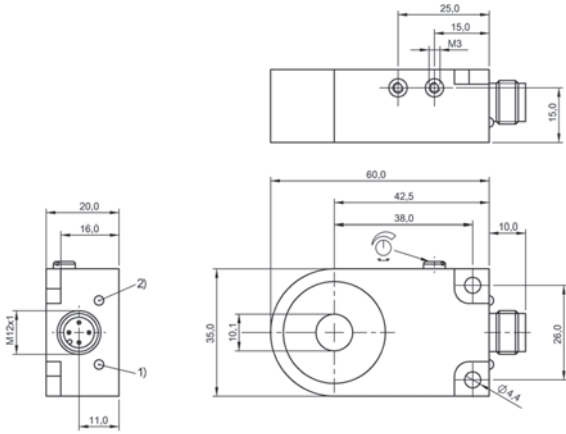
Safety

Industrial Networking

Power Supply

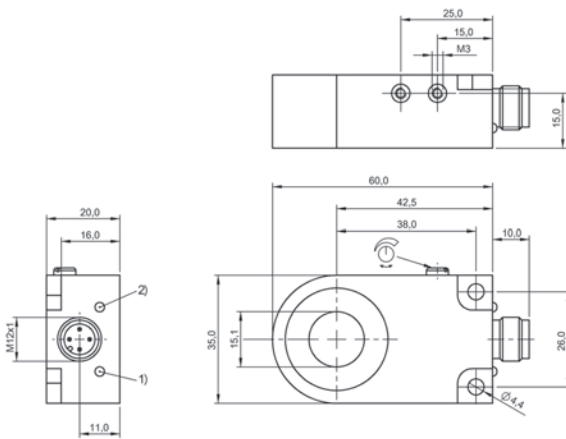
Connectivity

Accessories



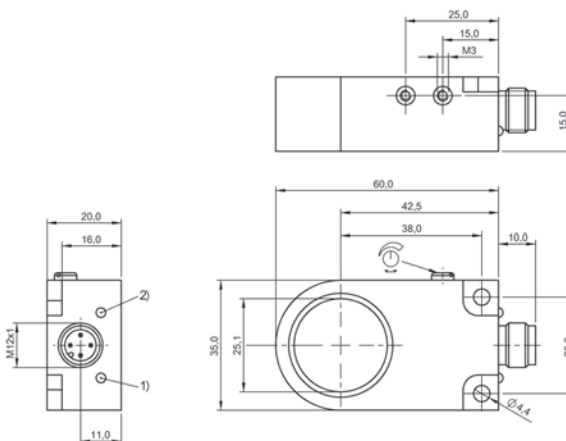
1) LED function indicator, 2) LED operating voltage

BES03JA



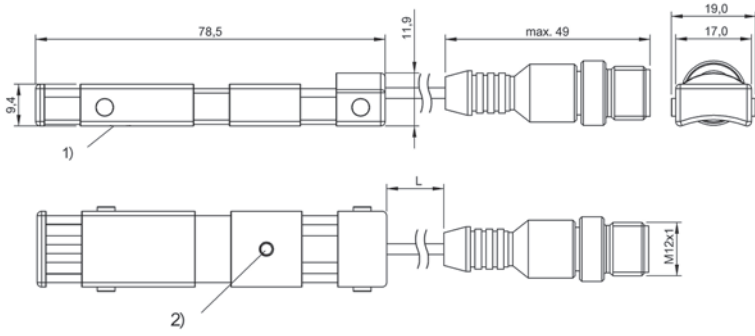
1) LED function indicator, 2) LED operating voltage

BES03JC



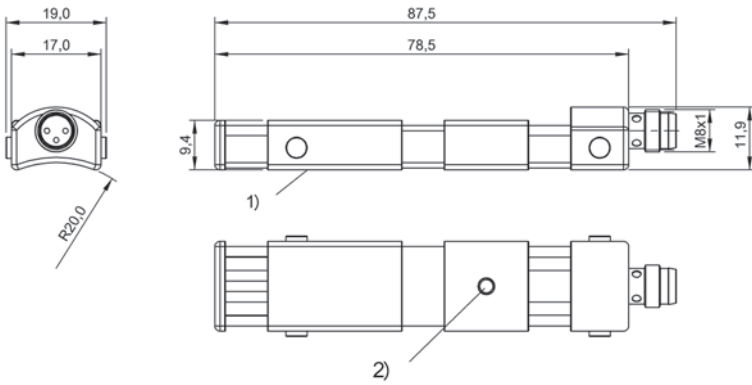
1) LED function indicator, 2) LED operating voltage

BES03JH



1) Sensing surface, 2) LED yellow

BES0429



BES0428



	BAW000J BAW G06EE-UAF20B-EP03-K	BAW000L BAW G06EF-UAC20B-S49G	
Dimension	Ø 6.5 x 30.5 mm	Ø 6.5 x 45 mm	
Style	D6.5	D6.5	
Installation	for flush mounting	for flush mounting	
Range	0.5...2 mm	0.5...2 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	±40 µm	
Non-linearity max.	±45 µm	±45 µm	
Housing material	Stainless steel	Stainless steel	
Surface protection	—	—	
Material sensing surface	PBT	PBT	
Connection	Cable, 3.00 m, PUR	Connector, M8x1 connector, 3-pin	
Operating voltage U_b	21.6...26.4 VDC	15...30 VDC	
Ambient temperature	10...60 °C	10...60 °C	
Pressure rating max.	—	—	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
Productview	Page 274	Page 274	



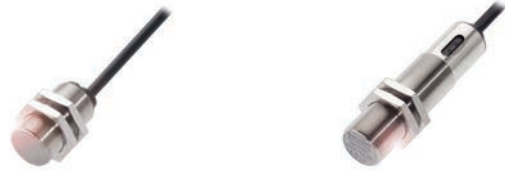
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	Ø 8 x 51.5 mm	Ø 8 x 51.5 mm	Ø 12 x 78 mm	Ø 12 x 45 mm
	M8x1	M8x1	M12x1	M12x1
	for flush mounting	non-flush	for flush mounting	for flush mounting
	0.5...1.5 mm	0.5...2.5 mm	0.5...2 mm	0.2...3.5 mm
	—	—	—	—
	Analog, voltage 0...10 V	Analog, voltage 0...10 V	Analog, voltage 0...10 V	Analog, voltage 0...10 V
	falling on approach	falling on approach	falling on approach	falling on approach
	1000 Hz	1000 Hz	1000 Hz	1000 Hz
	—	—	—	—
	—	—	—	—
	±8 µm	±10 µm	±8 µm	±7 µm
	±30 µm	±60 µm	±45 µm	±35 µm
	Stainless steel	Stainless steel	Stainless steel	Brass
	—	—	—	Nickel-free coated
	PBT	PBT	Ceramic	PBT
	Cable, 3.00 m, PUR	Cable, 3.00 m, PUR	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 4-pin
	15...30 VDC	15...30 VDC	15...30 VDC	15...30 VDC
	-10...70 °C	-10...70 °C	-25...85 °C	-40...80 °C
	—	—	500 bar	—
	IP67	IP67	IP68	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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	BAW0054 BAW M12ME-IAC35C-S04G	BAW0055 BAW M12ME-ICC35C-S04G	
Dimension	Ø 12 x 45 mm	Ø 12 x 45 mm	
Style	M12x1	M12x1	
Installation	for flush mounting	for flush mounting	
Range	0.2...3.5 mm	0.2...3.5 mm	
Interface	—	—	
Analog output	Analog, current 0...20 mA	Analog, current 4...20 mA	
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	±35 µm	
Housing material	Brass	Brass	
Surface protection	Nickel-free coated	Nickel-free coated	
Material sensing surface	PBT	PBT	
Connection	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	
Operating voltage U_b	16...30 VDC	16...30 VDC	
Ambient temperature	-40...80 °C	-40...80 °C	
Pressure rating max.	—	—	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BAW004M BAW M12MI-BLC35C-S04G	BAW004H BAW M12ME-UAC70G-S04G	BAW0056 BAW M12MH-BLC70G-S04G	BAW0011 BAW M12ME-UAD50B-BP01
	Ø 12 x 65 mm	Ø 12 x 50 mm	Ø 12 x 65 mm	Ø 12 x 30 mm
	M12x1	M12x1	M12x1	M12x1
	for flush mounting	non-flush	non-flush	quasi-flush
	0.2...3.5 mm	0.2...7 mm	0.2...7 mm	1...5 mm
	IO-Link 1.1 12 bit	—	IO-Link 1.1 12 bit	—
	—	Analog, voltage 0...10 V	—	Analog, voltage 0...10 V Analog, Temperature
	falling on approach	falling on approach	falling on approach	falling on approach
	1000 Hz	1000 Hz	1000 Hz	1000 Hz
	—	—	—	—
	—	—	—	—
	±7 µm	±7 µm	±14 µm	±10 µm
	±35 µm	±70 µm	±70 µm	±160 µm
	Brass	Brass	Brass	Brass
	Nickel-free coated	Nickel-free coated	Nickel-free coated	nickel plated
	PBT	LCP	LCP	PA 12
	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 4-pin	Cable, 1.00 m, PUR
	18...30 VDC	15...30 VDC	18...30 VDC	15...30 VDC
	-40...80 °C	-40...80 °C	-40...80 °C	0...60 °C
	—	—	—	—
	IP67	IP67	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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	BAW001T BAW M18ME-ICC50B-BP03	BAW002M BAW M18M2-UAC50B-BP05-002	
Dimension	Ø 18 x 36 mm	Ø 18 x 76.5 mm	
Style	M18x1	M18x1	
Installation	for flush mounting	for flush mounting	
Range	1...5 mm	1...5 mm	
Interface	—	—	
Analog output	Analog, current 4...20 mA	Analog, voltage 0...10 V	
Output characteristic	falling on approach	falling on approach	
Limit frequency -3 dB	500 Hz	500 Hz	
Switching output	—	3x PNP Normally open (NO) Programmable	
Switching frequency	—	1000 Hz	
Repeat accuracy per BWN	±8 µm	±8 µm	
Non-linearity max.	±120 µm	±120 µm	
Housing material	Brass	Brass	
Surface protection	nickel plated	nickel plated	
Material sensing surface	PBT	PBT	
Connection	Cable, 3.00 m, PUR	Cable, 5.00 m, PUR	
Operating voltage U_b	15...30 VDC	15...30 VDC	
Ambient temperature	-10...70 °C	-10...70 °C	
Pressure rating max.	—	—	
Protection degree	IP67	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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	BAW0026 BAW M18ME-UAE50B-S04G-K	BAW002F BAW M18MI-BLC50B-S04G	BAW002H BAW M18MI-IAC50B-S04G	BAW0029 BAW M18MG-UAC16F-S04G-K
	Ø 18 x 44.5 mm	Ø 18 x 65 mm	Ø 18 x 65 mm	Ø 18 x 65 mm
	M18x1	M18x1	M18x1	M18x1
	for flush mounting	for flush mounting	for flush mounting	non-flush
	1...5 mm	1...5 mm	1...5 mm	4...16 mm
	—	IO-Link 1.1 10 bit	—	—
	Analog, voltage 0...10 V Analog, Temperature	—	Analog, current 0...20 mA	Analog, voltage 0...10 V Analog, Temperature
	falling on approach	falling on approach	falling on approach	falling on approach
	500 Hz	500 Hz	500 Hz	500 Hz
	—	—	—	—
	—	—	—	—
	±8 µm	±10 µm	±8 µm	±200 µm
	±120 µm	±120 µm	±120 µm	±360 µm
	Brass	Brass	Brass	Brass
	nickel plated	nickel plated	nickel plated	nickel plated
	PBT	PBT	PBT	PBT
	Connector, M12x1 connector, 4-pin	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 4-pin
	21.6...26.4 VDC	18...30 VDC	10...30 VDC	15...30 VDC
	-10...70 °C	-10...70 °C	-10...70 °C	10...60 °C
	—	—	—	—
	IP67	IP67	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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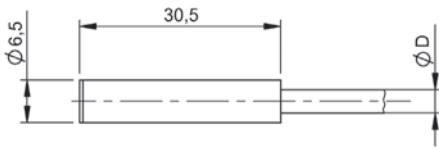
	BAW005Y BAW M30EE-ICD10B-S04G-L01	BAW002W BAW M30ME-UAC10B-S04G	
Dimension	Ø 30 x 44.5 mm	Ø 30 x 44.5 mm	
Style	M30x1.5	M30x1.5	
Installation	for flush mounting	for flush mounting	
Range	2...10 mm	2...10 mm	
Interface	—	—	
Analog output	Analog, current 4...20 mA	Analog, voltage 0...10 V	
Output characteristic	falling on approach	falling on approach	
Limit frequency -3 dB	500 Hz	500 Hz	
Switching output	—	—	
Switching frequency	—	—	
Repeat accuracy per BWN	±10 µm	±10 µm	
Non-linearity max.	±300 µm	±240 µm	
Housing material	Stainless steel	Brass	
Surface protection	—	nickel plated	
Material sensing surface	PEEK	PBT	
Connection	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 3-pin	
Operating voltage U_b	15...30 VDC	15...30 VDC	
Ambient temperature	-10...70 °C	-10...70 °C	
Pressure rating max.	—	—	
Protection degree	IP68	IP67	
Approval/Conformity	CE, cULus, EAC	CE, cULus, EAC	
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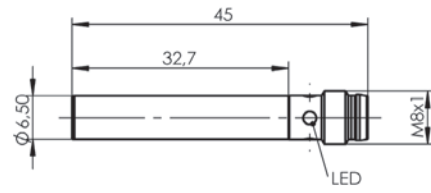
	BAW002Y BAW M30ME-UAC15F-S04G	BAW005Z BAW R03KC-UAA40B-BP03-505	BAW003E BAW Z01AC-UAD50B-DP03-K	BAW003W BAW Z05AC-BLD50B-BP00,75-GS04
	Ø 30 x 57 mm	10 x 6 x 30 mm	38,5 x 14 x 17 mm	30 x 38,5 x 16,5 mm
	M30x1,5	block style	block style	block style
	non-flush	for flush mounting	non-flush	non-flush
	3...15 mm	1...4 mm	1...5 mm	1...5 mm
	—	—	—	IO-Link 1.1 10 bit
	Analog, voltage 0...10 V	Analog, voltage 0...10 V	Analog, voltage 0...10 V Analog, Temperature	—
	falling on approach	falling on approach	falling on approach	falling on approach
	350 Hz	1000 Hz	1000 Hz	200 Hz
	—	—	—	—
	—	—	—	—
	±12 µm	±35 µm	±10 µm	±12 µm
	±360 µm	±150 µm	±120 µm	±150 µm
	Brass	PA 6, GF30	Aluminum	Aluminum
	nickel plated	—	Anodized	Anodized
	PBT	PA 6, GF30	PA 12	LCP
	Connector, M12x1 connector, 3-pin	Cable, 3.00 m, PUR	Cable, 3.00 m, PUR	Cable with connector, M12x1 connector, 4-pin, 0.75 m, PUR
	15...30 VDC	21.6...26.4 VDC	15...30 VDC	18...30 VDC
	-10...70 °C	0...70 °C	-10...60 °C	-10...60 °C
	—	—	—	—
	IP67	IP67	IP67	IP67
	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
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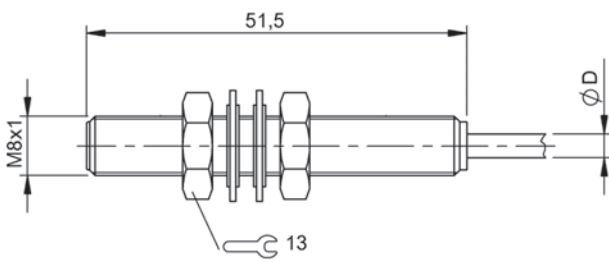
	BAW0034 BAW R06AC-UAF20B-S49G		
Dimension	30 x 20 x 8 mm		
Style	block style		
Installation	for flush mounting		
Range	0.5...2 mm		
Interface	—		
Analog output	Analog, voltage 0...10 V		
Output characteristic	falling on approach		
Limit frequency -3 dB	1000 Hz		
Switching output	—		
Switching frequency	—		
Repeat accuracy per BWN	±12 µm		
Non-linearity max.	±45 µm		
Housing material	Aluminum		
Surface protection	Anodized		
Material sensing surface	PBT		
Connection	Connector, M8x1 connector, 3-pin		
Operating voltage U _b	21.6...26.4 VDC		
Ambient temperature	-10...70 °C		
Pressure rating max.	—		
Protection degree	IP67		
Approval/Conformity	CE, cULus, EAC		
Productview	Page 276		



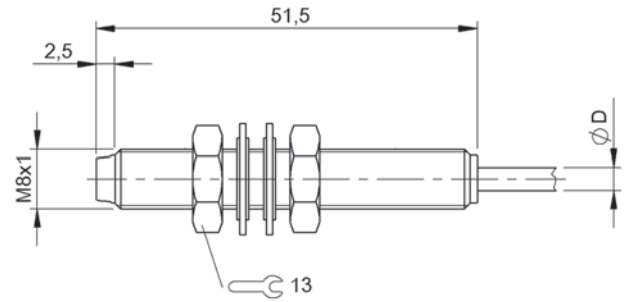
BAW000J



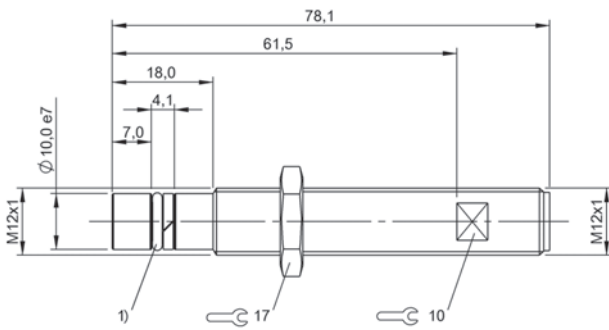
BAW000L



BAW000T

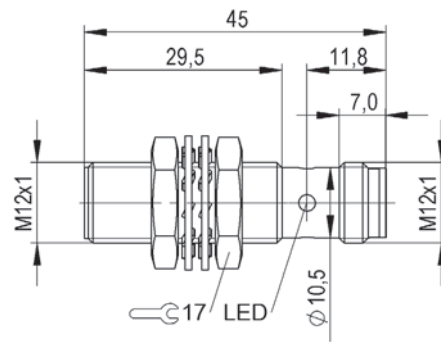


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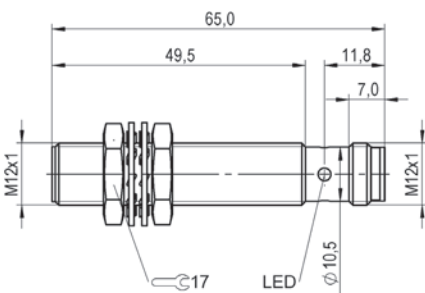


1) O-Ring with thrust ring

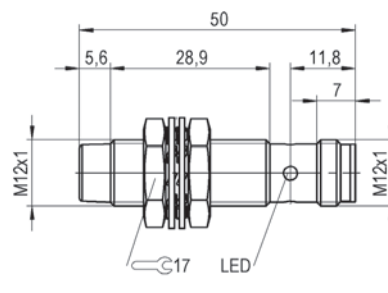
BAW0040



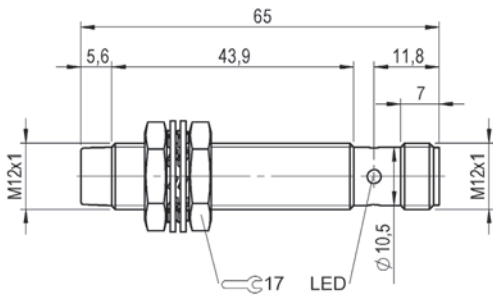
BAW004K, BAW0054, BAW0055



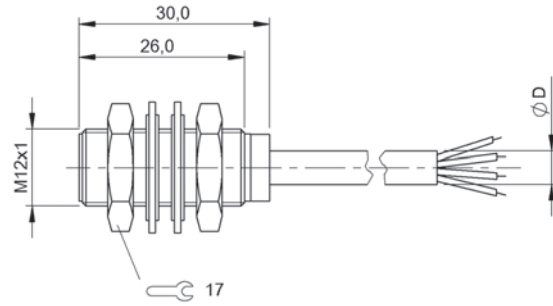
BAW004M



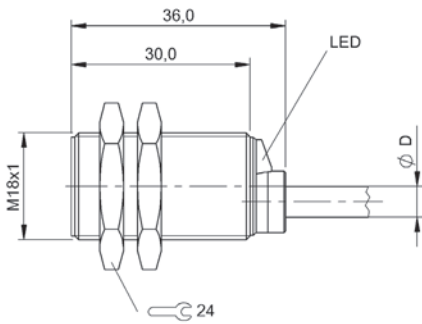
BAW004H



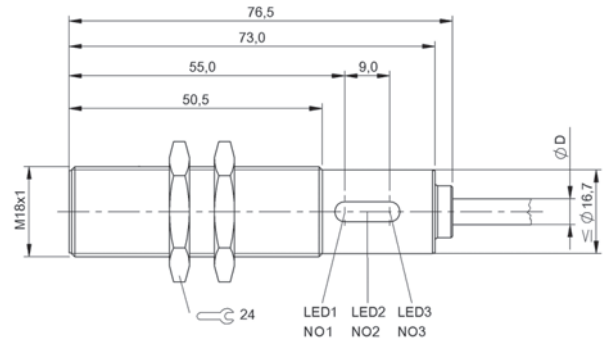
BAW0056



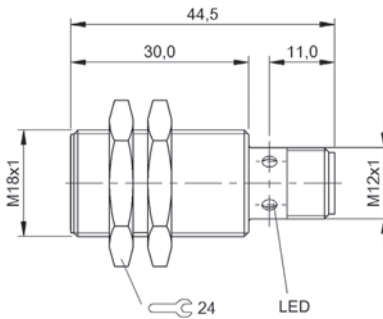
BAW0011



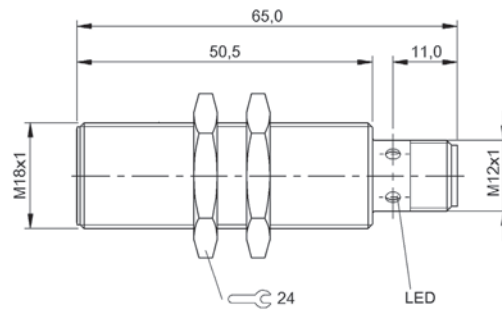
BAW001T



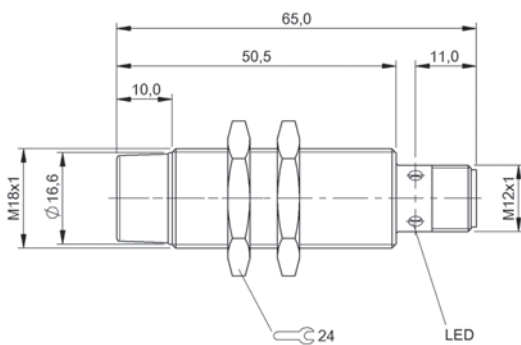
BAW002M



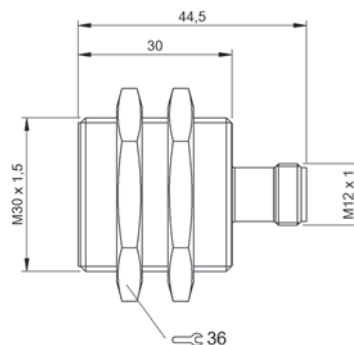
BAW0026



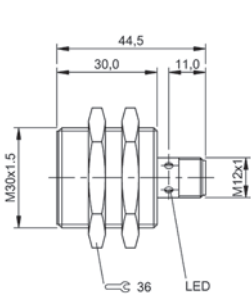
BAW002F, BAW002H



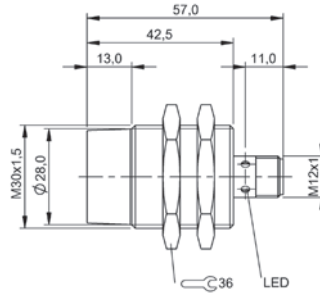
BAW0029



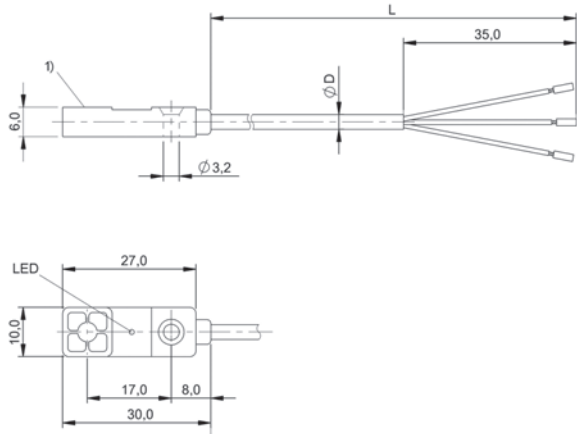
BAW005Y



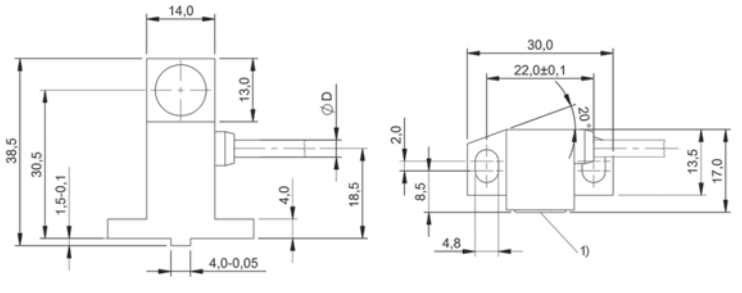
BAW002W



BAW002Y

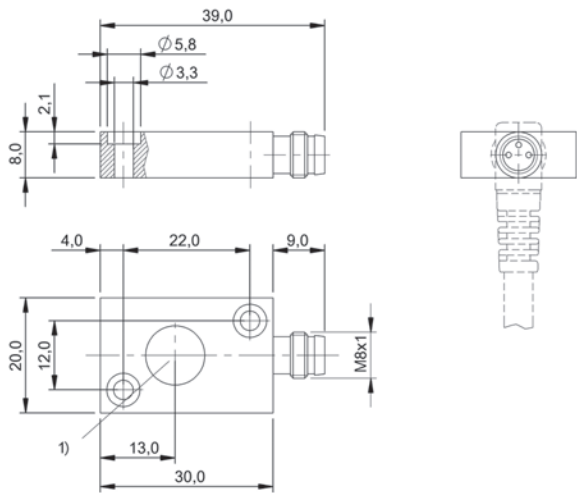


1) Sensing surface



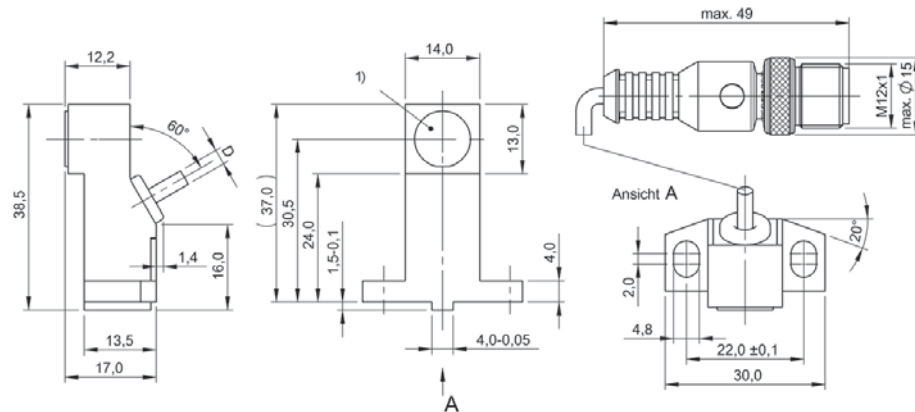
1) Sensing surface

BAW005Z



1) Sensing surface

BAW0034



1) Sensing surface

BAW003W



	BIP0001 BIP AD0-B014-01-EP02	BIP000T BIP AD2-T014-01-EB02-505	BIP0008 BIP CD2-B014-01-EP02	
Dimension	35 x 35 x 31 mm	35 x 35 x 31 mm	35 x 35 x 31 mm	
Style	block style	block style	block style	
Connection	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	Cable, 2.00 m, PUR	
Cable shield	no	yes	no	
Housing material	PA	PA	PA	
Measuring range	0...14 mm	0...14 mm	0...14 mm	
Interface	—	—	—	
Analog output	Analog, voltage 0...10 V	Analog, voltage 0...10 V	Analog, current 4...20 mA	
Output characteristic	Adjustable	Adjustable	Adjustable	
Repeat accuracy per BWN	±80 µm	±80 µm	±80 µm	
Non-linearity max.	±250 µm	±250 µm	±250 µm	
Operating voltage U _b	15...30 VDC	15...30 VDC	15...30 VDC	
Ambient temperature	-25...70 °C	-25...70 °C	-25...70 °C	
Protection degree	IP67	IP67	IP67	
Approval/Conformity	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC	
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	BIP000F BIP LD2-T014-01-EP01-S4	BIP001K BIP AD2-T017-04-BP02	BIP001L BIP CD2-T017-04-BP02	BIP001M BIP LD2-T017-04-BP00,5-S4	BIP000L BIP AD2-T030-02-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	52 x 30 x 16 mm
	block style	block style	block style	block style	block style
	Cable with connector, M12x1-Male, 3-pole, 1.00 m, PUR	Cable, 2 m, PUR	Cable, 2 m, PUR	Cable with connector, M12x1 connector, 3-pin, 0.5 m, PUR	Connector, M12x1 connector, 3-pin
	no	yes	yes	yes	—
	PA	PA	PA	PA	PA
	0...14 mm	0...17 mm	0...17 mm	0...17 mm	0...30 mm
	IO-Link 1.0	—	—	IO-Link 1.1	—
	—	Analog, voltage 0...10 V	Analog, current 4...20 mA	—	Analog, voltage 0...10 V
	—	Adjustable	Adjustable	—	Adjustable
	±80 µm	±50 µm	±50 µm	±40 µm	±100 µm
	±250 µm	±250 µm	±250 µm	±250 µm	±500 µm
	18...30 VDC	15...30 VDC	15...30 VDC	18...30 VDC	15...30 VDC
	-25...70 °C	-25...70 °C	-25...70 °C, Temperature drift is between -10...70 °C	-25...70 °C	-25...85 °C
	IP67	IP67	IP67	IP67	IP67
	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC
	Page 284	Page 284	Page 284	Page 284	Page 284



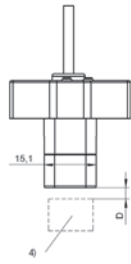
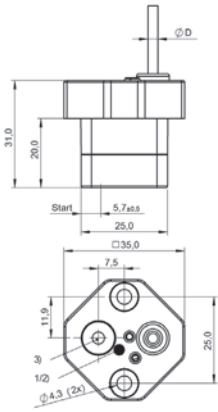
	BIP0002 BIP AD2-B040-02-S4	BIP0005 BIP CD2-B040-02-S4	BIP0004 BIP LD2-T040-02-S4	
Dimension	70 x 30 x 16 mm	70 x 30 x 16 mm	70 x 30 x 16 mm	
Style	block style	block style	block style	
Connection	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 3-pin	Connector, M12x1 connector, 3-pin	
Cable shield	—	—	—	
Housing material	PA	PA	PA	
Measuring range	0...40 mm	0...40 mm	0...40 mm	
Interface	—	—	IO-Link 1.0	
Analog output	Analog, voltage 0...10 V	Analog, current 4...20 mA	—	
Output characteristic	Adjustable	Adjustable	—	
Repeat accuracy per BWN	±100 µm	±100 µm	±100 µm	
Non-linearity max.	±500 µm	±500 µm	±500 µm	
Operating voltage U_b	15...30 VDC	15...30 VDC	18...30 VDC	
Ambient temperature	-25...85 °C	-25...85 °C	-25...85 °C	
Protection degree	IP67	IP67	IP67	
Approval/Conformity	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC	
Productview	Page 285	Page 285	Page 285	



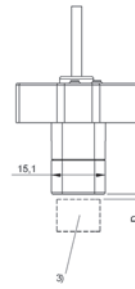
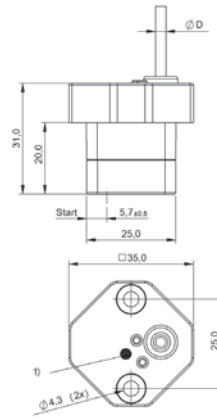
	BIP000M BIP ED2-B048-03-S75	BIP001J BIP LD2-T048-03-S75	BIP000C BIP ED2-B070-03-S75	BIP001H BIP LD2-T070-03-S75	BIP000E BIP ED2-B103-03-S75
	64 x 21 x 22 mm	64 x 21 x 22 mm	92.5 x 21 x 22 mm	92.5 x 21 x 22 mm	121 x 21 x 22 mm
	block style	block style	block style	block style	block style
	Connector, M8x1 connector, 4-pin	Connector, M8x1 connector, 4-pin	Connector, M8x1 connector, 4-pin	Connector, M8x1 connector, 4-pin	Connector, M8x1 connector, 4-pin
	—	—	—	—	—
	PBT	PBT	PBT	PBT	PBT
	0...48 mm	0...48 mm	0...70 mm	0...70 mm	0...103 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	—	Analog, voltage 0...10 V Analog, current 4...20 mA
	Adjustable	—	Adjustable	—	Adjustable
	±80 µm	±80 µm	±80 µm	±80 µm	±80 µm
	±400 µm	±400 µm	±300 µm	±300 µm	±300 µm
	16...30 VDC	18...30 VDC	16...30 VDC	18...30 VDC	16...30 VDC
	-25...85 °C	-25...85 °C	-25...85 °C	-25...85 °C	-25...85 °C
	IP67	IP67	IP67	IP67	IP67
	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC
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	BIP0014 BIP LD2-T103-03-S75	BIP000R BIP ED2-B133-03-S75	BIP001F BIP LD2-T133-03-S75	
Dimension	121 x 21 x 22 mm	149.5 x 21 x 22 mm	149.5 x 21 x 22 mm	
Style	block style	block style	block style	
Connection	Connector, M8x1 connector, 4-pin	Connector, M8x1 connector, 4-pin	Connector, M8x1 connector, 4-pin	
Cable shield	—	—	—	
Housing material	PBT	PBT	PBT	
Measuring range	0...103 mm	0...133 mm	0...133 mm	
Interface	IO-Link 1.1	—	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	±80 µm	
Non-linearity max.	±300 µm	±400 µm	±400 µm	
Operating voltage U _b	18...30 VDC	16...30 VDC	18...30 VDC	
Ambient temperature	-25...85 °C	-25...85 °C	-25...85 °C	
Protection degree	IP67	IP67	IP67	
Approval/Conformity	CE, cURus, EAC	CE, cURus, EAC	CE, cURus, EAC	
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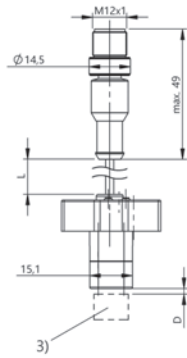
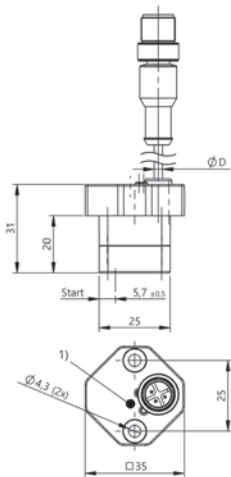


1) LED function indicator, 2) LED function indicator, 3) Teach-In button, 4) Encoder



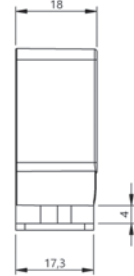
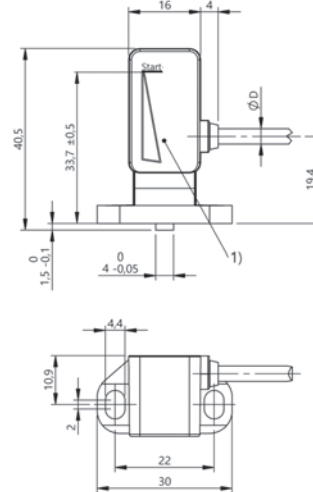
1) LED function indicator, 3) Encoder

BIP0001, BIP0008



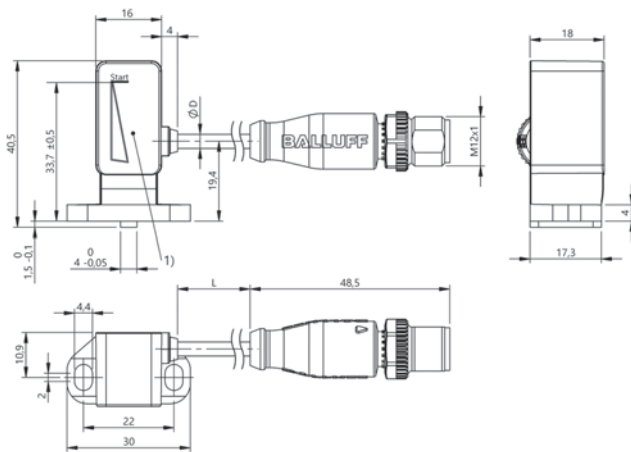
1) LED function indicator, 3) Encoder

BIP000T



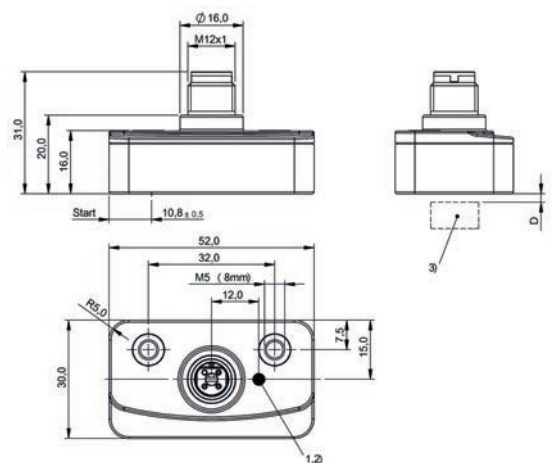
1) Sensing surface

BIP000F



1) Sensing surface

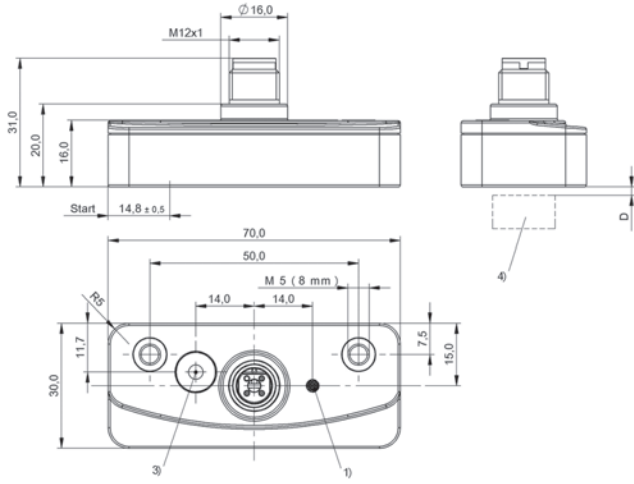
BIP001K, BIP001L



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

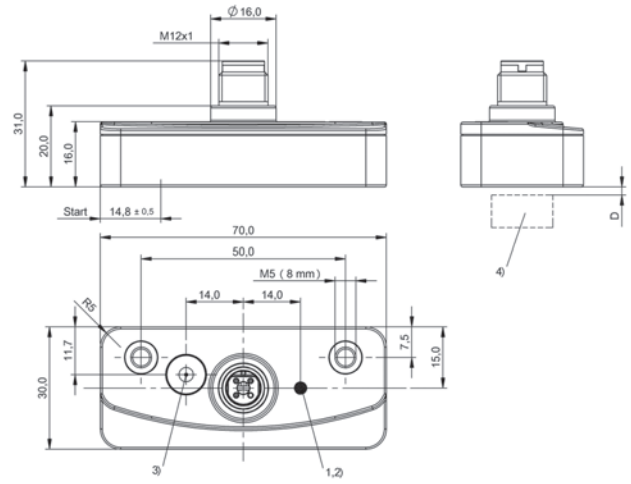
BIP001M

BIP000L



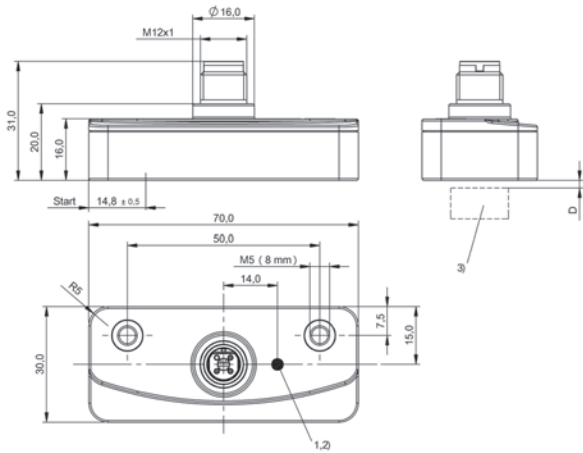
1) LED function indicator, 3) Teach-In button, 4) Encoder

BIP0002



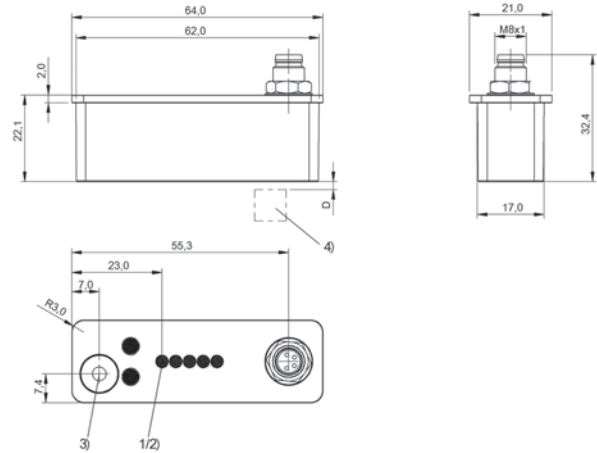
1) LED function indicator, 2) LED function indicator, 3) Teach-In button, 4) Encoder

BIP0005



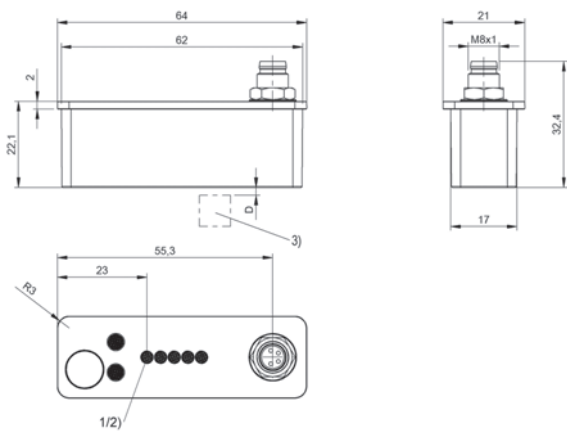
1) LED function indicator, 2) LED function indicator, 3) Encoder

BIP0004



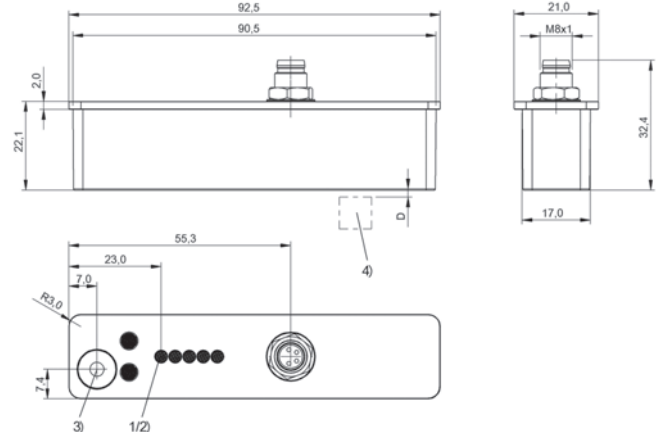
1) LED function indicator, 2) LED function indicator, 3) Teach-In button, 4) Encoder

BIP000M



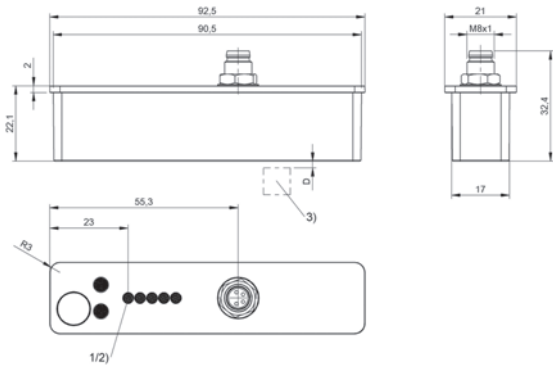
1) LED Power, 2) LED function indicator, 3) Encoder

BIP001J



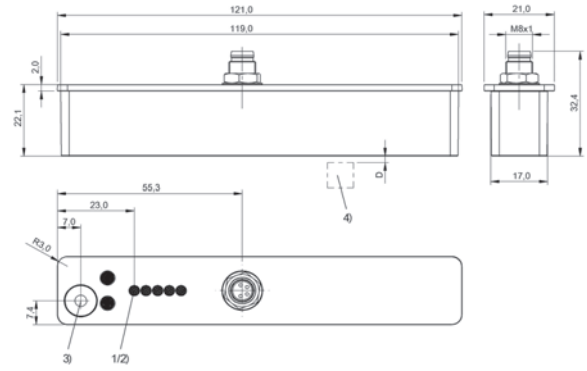
1) LED function indicator, 2) LED function indicator, 3) Teach-In button, 4) Encoder

BIP000C



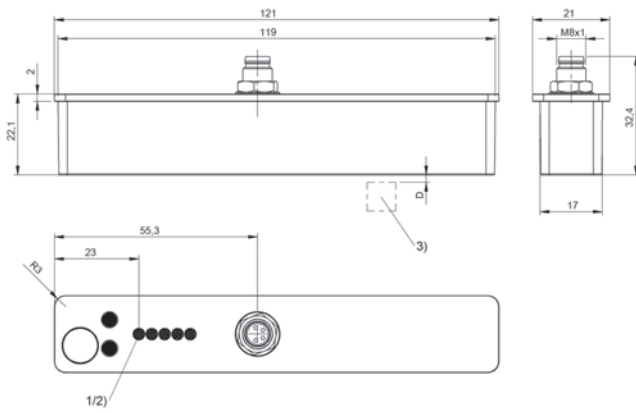
1) LED Power, 2) LED function indicator, 3) Encoder

BIP001H



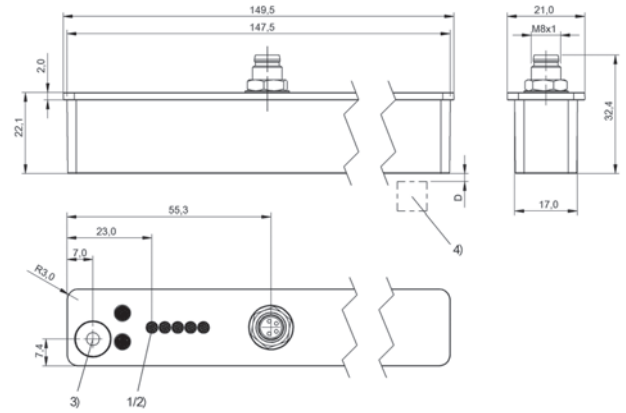
1) LED function indicator, 2) LED function indicator, 3) Teach-In button, 4) Encoder

BIP000E



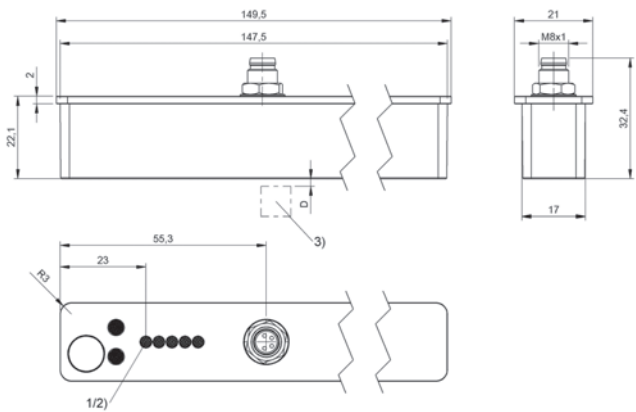
1) LED Power, 2) LED function indicator, 3) Encoder

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



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 μ m	
Sampling rate	typ. 32 kHz	
Non-linearity max.	\leq 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

BIW1-E310 BIW1-E310-M____-P1-S115	BIW1-C310 BIW1-C310-M____-P1-S115	BIW1-G310 BIW1-G310-M____-P1-S115
E (4...20 mA)	C (0...20 mA)	G (-10...+10 V)
10 µm	10 µm	10 µm
typ. 32 kHz	typ. 32 kHz	typ. 32 kHz
≤ 0.02%	≤ 0.02%	≤ 0.02%
18...30 V DC	18...30 V DC	18...30 V DC
-20...+85 °C	-20...+85 °C	-20...+85 °C
IP 54	IP 54	IP 54
cULus, CE	cULus, CE	cULus, CE
Anodized aluminum	Anodized aluminum	Anodized aluminum
M12 connector, 8-pin standard	M12 connector, 8-pin standard	M12 connector, 8-pin standard

