

# Object Detection

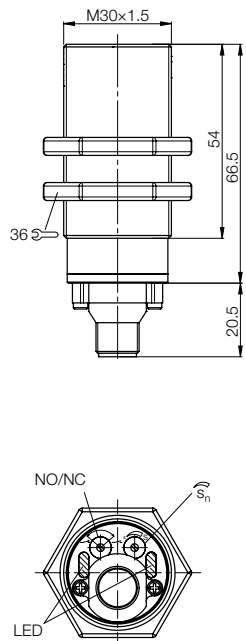
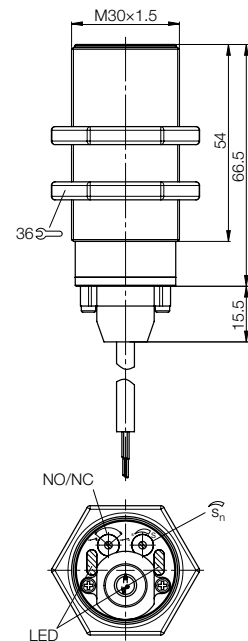
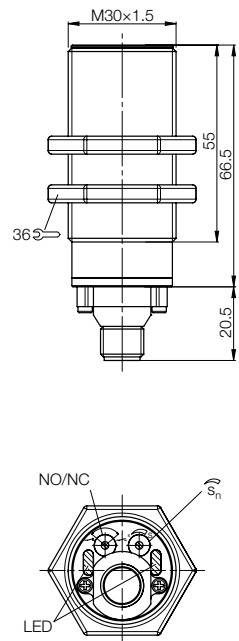
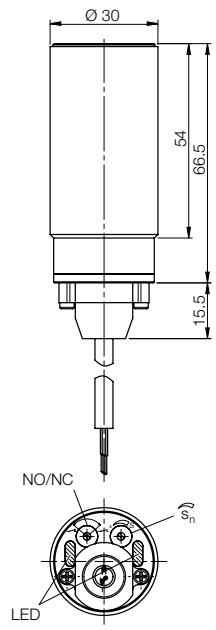
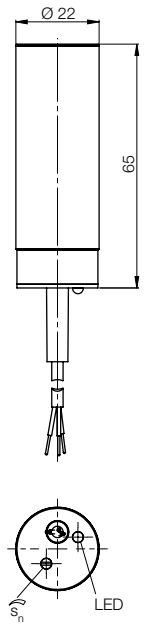
DC 3-wire · Tubular housings  
 Ø 22 mm, Ø 30 mm, M30



**DC 3-wire Tubular housings**  
 Disc types  
 Block-style  
 Stick-on sensor

**DC 4-wire**  
 Dynamic function diagnostics

Ø 22 mm	Ø 30 mm	M30x1.5	M30x1.5	M30x1.5
flush	flush	flush	flush	flush
2...10 mm	2...20 mm	1...20 mm	1...20 mm	1...20 mm
<b>BCS0033</b>				
BCS D22V4M1-PSC10C-EV02				
<b>BCS0034</b>				
BCS D22V4M1-POC10C-EV02				
	<b>BCS004H</b>	<b>BCS004T</b>	<b>BCS004P</b>	<b>BCS004M</b>
	BCS D30B4M3-PPC20C-EP02	BCS M30B4M2-PPM20C-S04G	BCS M30B4M3-PPM20C-EP02	BCS M30BBM2-PPM20C-S04G
<b>BCS0035</b>				
BCS D22V4M1-NSC10C-EV02				
<b>BCS0036</b>				
BCS D22V4M1-NOC10C-EV02				
	<b>BCS004J</b>	<b>BCS004U</b>	<b>BCS004R</b>	<b>BCS004N</b>
	BCS D30B4M3-NPC20C-EP02	BCS M30B4M2-NPM20C-S04G	BCS M30B4M3-NPM20C-EP02	BCS M30BBM2-NPM20C-S04G
10...35 V DC	10...35 V DC	10...35 V DC	10...35 V DC	10...35 V DC
≤ 1.5 V	≤ 1.8 V	≤ 1.8 V	≤ 1.8 V	≤ 1.8 V
75 V DC	75 V DC	75 V DC	75 V DC	75 V DC
300 mA	300 mA	300 mA	300 mA	300 mA
≤ 10 mA	≤ 15 mA	≤ 15 mA	≤ 15 mA	≤ 15 mA
yes/yes	yes/yes	yes/yes	yes/yes	yes/yes
-30...+60 °C	-30...+70 °C	-30...+70 °C	-30...+70 °C	-30...+70 °C
100 Hz	100 Hz	100 Hz	100 Hz	100 Hz
LED yellow	LED green	LED green	LED green	LED green
IP 67	LED yellow	LED yellow	LED yellow	LED yellow
V2A	IP 64	IP 64	IP 64	IP 64
PVC	V2A	V2A	V2A	PBT
PVC	PBT	PBT	PBT	PBT
PVC	PBT/PE	PBT/PE	PBT/PE	PBT/PE
2 m cable PVC, 3×0.25 mm <sup>2</sup>	2 m cable PUR, 3×0.34 mm <sup>2</sup>	M12 connector, 4-pin, A-coded	2 m cable PUR, 3×0.34 mm <sup>2</sup>	M12 connector, 4-pin, A-coded



Electrical devices, connectors and holders see Accessories section starting page 69



# Object Detection

DC 3-wire · Tubular housings  
M30, Ø 34 mm



Housing size		<b>M30x1.5</b>	<b>Ø 34 mm</b>	<b>Ø 34 mm</b>
Mounting		flush	flush	flush
Rated switching distance $s_n$		<b>1...20 mm</b>	<b>1...25 mm</b>	<b>1...25 mm</b>
With sensor amplifier	<b>Ordering code</b>			
	Part number			
PNP NO/NC selectable	<b>Ordering code</b>	<b>BCS004K</b>	<b>BCS004Z</b>	<b>BCS004W</b>
	Part number	BCS M30BBM3-PPC20C-EP02	BCS G34VVM2-PPM20C-S04G	BCS G34VVM3-PPM20C-EP02
NPN NO/NC selectable	<b>Ordering code</b>	<b>BCS004L</b>	<b>BCS0050</b>	<b>BCS004Y</b>
	Part number	BCS M30BBM3-NPC20C-EP02	BCS G34VVM2-NPM20C-S04G	BCS G34VVM3-NPM20C-EP02
Supply voltage $U_s$		10...35 V DC	10...35 V DC	10...35 V DC
Voltage drop $U_d$ at $I_o$		≤ 1.8 V	≤ 1.8 V	≤ 1.8 V
Rated insulation voltage $U_i$		75 V DC	75 V DC	75 V DC
Output current max.		300 mA	300 mA	300 mA
No-load supply current $I_o$ max.		≤ 15 mA	≤ 15 mA	≤ 15 mA
Reverse polarity/short circuit protected		yes/yes	yes/yes	yes/yes
Ambient temperature range $T_a$		-30...+70 °C	-30...+70 °C	-30...+70 °C
Switching frequency f		100 Hz	100 Hz	100 Hz
Power indicator		LED green	LED green	LED green
Output function indicator		LED yellow	LED yellow	LED yellow
Degree of protection per IEC 60529		IP 64	IP 64	IP 64
Material	Housing	PBT	PVC	PVC
	Sensing face	PBT	PVC	PVC
	Cover	PBT/PE	PBT/PE	PBT/PE
Wiring		2 m cable PUR, 3x0.34 mm <sup>2</sup>	M12 connector, 4-pin, A-coded	2 m cable PUR, 3x0.34 mm <sup>2</sup>

For sensor amplifiers see  
Accessories section  
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The flush mount sensors for object detection M12...M30 in plastic or PTFE housing provide IP 68 protection (at approx. 5 bar) at the sensing face.

