

Object Detection

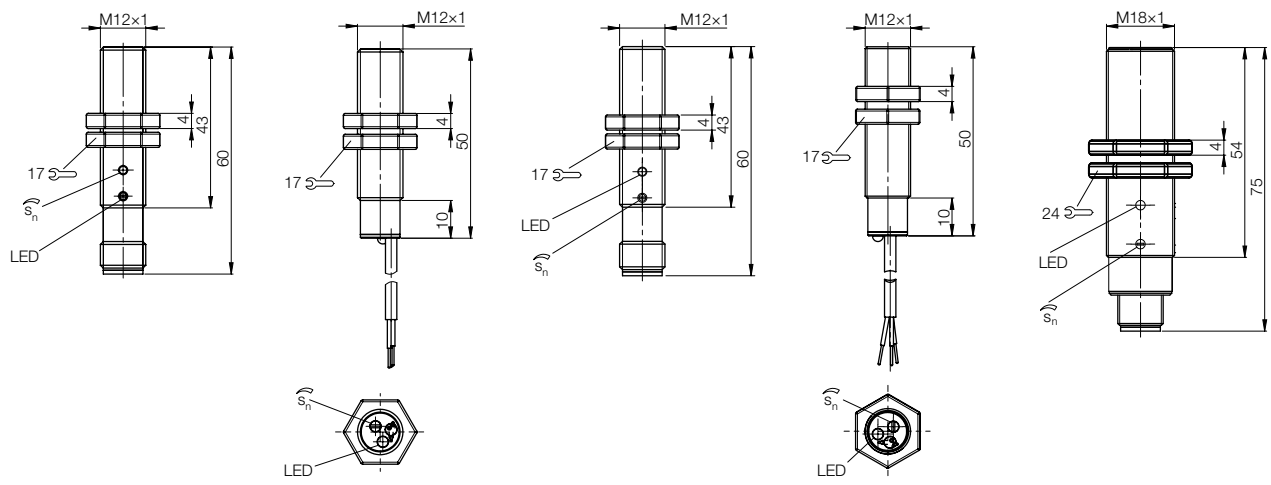
DC 3-wire · Tubular housings
M12, M18



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

DC 4-wire
Dynamic function
diagnostics

M12×1 flush 1...4 mm	M12×1 flush 1...4 mm	M12×1 flush 1...4 mm	M12×1 flush 1...4 mm	M18×1 flush 2...8 mm
BCS0037 BCS M12T4D2-PSM40C-S04G	BCS002Z BCS M12T4G1-PSM40C-EP02	BCS003T BCS M12WVD2-PSM40C-S04G	BCS003M BCS M12VVG1-PSM40C-EP02	BCS0047 BCS M18B4G2-PSC80C-S04G
BCS0038 BCS M12T4D2-POM40C-S04G	BCS0030 BCS M12T4G1-POM40C-EP02	BCS003U BCS M12WVD2-POM40C-S04G	BCS003N BCS M12VVG1-POM40C-EP02	BCS0049 BCS M18B4G2-POC80C-S04G
BCS0039 BCS M12T4D2-NSM40C-S04G	BCS0031 BCS M12T4G1-NSM40C-EP02	BCS003W BCS M12WVD2-NSM40C-S04G	BCS003P BCS M12VVG1-NSM40C-EP02	BCS004C BCS M18B4G2-NSC80C-S04G
BCS00AC BCS M12T4D2-NOM40C-S04G	BCS0032 BCS M12T4G1-NOM40C-EP02	BCS003Y BCS M12WVD2-NOM40C-S04G	BCS003R BCS M12VVG1-NOM40C-EP02	BCS004F BCS M18B4G2-NOC80C-S04G
12...35 V DC ≤ 0.8 V 75 V DC 200 mA ≤ 10 mA yes/yes -30...+70 °C 100 Hz LED yellow IP 65 V2A PTFE PA M12 connector, 4-pin, A-coded	12...35 V DC ≤ 0.8 V 75 V DC 200 mA ≤ 10 mA yes/yes -30...+70 °C 100 Hz LED yellow IP 65 V2A PTFE POM 2 m cable PUR 3×0.14 mm ²	12...35 V DC ≤ 0.8 V 75 V DC 200 mA ≤ 10 mA yes/yes -30...+60 °C 100 Hz LED yellow IP 65 PVC PVC PA M12 connector, 4-pin, A-coded	12...35 V DC ≤ 0.8 V 75 V DC 200 mA ≤ 10 mA yes/yes -30...+70 °C 100 Hz LED yellow IP 65 PVC PVC PVC 2 m cable PUR 3×0.14 mm ²	10...35 V DC ≤ 1.5 V 75 V DC 300 mA ≤ 10 mA yes/yes -30...+70 °C 100 Hz LED yellow IP 67 V2A PBT PA M12 connector, 4-pin, A-coded



Electrical
devices,
connectors and
holders see
Accessories
section starting
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Object Detection

DC 3-wire · Tubular housings
M18



Housing size	M18x1	M18x1	M18x1
Mounting	flush	flush	flush
Rated switching distance s_n	2...8 mm	2...8 mm	2...8 mm
PNP Normally open	Ordering code Part number	BCS0040 BCS M18B4M-PSC80C-EV02	BCS0046 BCS M18VVG2-PSC80C-S04G
PNP Normally closed	Ordering code Part number	BCS0042 BCS M18B4M-POC80C-EV02	BCS0048 BCS M18VVG2-POC80C-S04G
PNP NO/NC selectable	Ordering code Part number		
NPN Normally open	Ordering code Part number	BCS0044 BCS M18B4M-NSC80C-EV02	BCS004A BCS M18VVG2-NSC80C-S04G
NPN Normally closed	Ordering code Part number	BCS00AE BCS M18B4M-NOC80C-EV02	BCS004E BCS M18VVG2-NOC80C-S04G
NPN NO/NC selectable	Ordering code Part number		
Supply voltage U_s	10...35 V DC	10...35 V DC	10...35 V DC
Voltage drop U_d at I_o	≤ 1.5 V	≤ 1.5 V	≤ 1.5 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.	≤ 10 mA	≤ 10 mA	≤ 10 mA
Reverse polarity/short circuit protected	yes/yes	yes/yes	yes/yes
Ambient temperature range T_a	$-30...+70$ °C	$-30...+60$ °C	$-30...+60$ °C
Switching frequency f	100 Hz	100 Hz	100 Hz
Power indicator			
Output function indicator	LED yellow	LED yellow	LED yellow
Degree of protection per IEC 60529	IP 67	IP 67	IP 67
Material	Housing: V2A Sensing face: PBT Cover: PBT	PVC PVC PA	PVC PVC PBT
Wiring	2 m cable PVC, 3x0.25 mm ²	M12 connector, 4-pin, A-coded	2 m cable PVC, 3x0.25 mm ²



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.

