

BALLUFF
sensors worldwide

GlobalProx

The GlobalProx range increases in popularity



12× PNP Normally-open
12× PNP Normally-closed
12× NPN Normally-open
12× NPN Normally-closed

12× Flush
12× Non-flush

12× Metal
12× Plastic

12× Cable
12× Connector

8× M12
8× M18
8× M30



96 Variants



GlobalProx

BCS00K9
BCS00LK
BCS00LL
BCS00LM
BCS00LN
BCS00LP
BCS00LR
BCS00LT
BCS00LU
BCS00LW
BCS00LY
BCS00LZ
BCS00M0
BCS00M1
BCS00M2
BCS00M3
BCS00M4
BCS00M5
BCS00M6
BCS00M7
BCS00M8
BCS00M9
BCS00MA
BCS00MC
BCS00ME
BCS00MF
BCS00MH
BCS00MJ
BCS00MK
BCS00ML
BCS00MM
BCS00MN
BCS00MR
BCS00MT
BCS00MU
BCS00MW
BCS00MY
BCS00MZ
BCS00N0
BCS00N1
BCS00N2
BCS00N3
BCS00N4
BCS00N5
BCS00N6
BCS00N7
BCS00N8
BCS00N9
BCS00NA
BCS00NC
BCS00NE
BCS00NF
BCS00NH
BCS00NJ
BCS00NK
BCS00NL
BCS00NM
BCS00NN
BCS00NP
BCS00NR
BCS00NT
BCS00NU
BCS00NV
BCS00NY
BCS00NZ
BCS00P0
BCS00P1
BCS00P2
BCS00P3
BCS00P4
BCS00P5
BCS00P6
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BCS00P9
BCS00PA
BCS00PC
BCS00PE
BCS00PF
BCS00PH
BCS00PJ
BCS00PK
BCS00PL
BCS00PM
BCS00PN
BCS00PP
BCS00PR
BCS00PT
BCS00PU
BCS00PV
BCS00PW
BCS00R0

Capacitive Sensors

The GlobalProx range increases in popularity

more added value

The new capacitive BCS range is a worldwide standard with an outstanding price/performance ratio that enjoys global availability and can be used anywhere in the world.

- M12, M18 and M30 designs
- Flush models for object detection
- Non-flush models for level detection
- Cable and M12 plug variants
- Stainless steel and plastic variants available

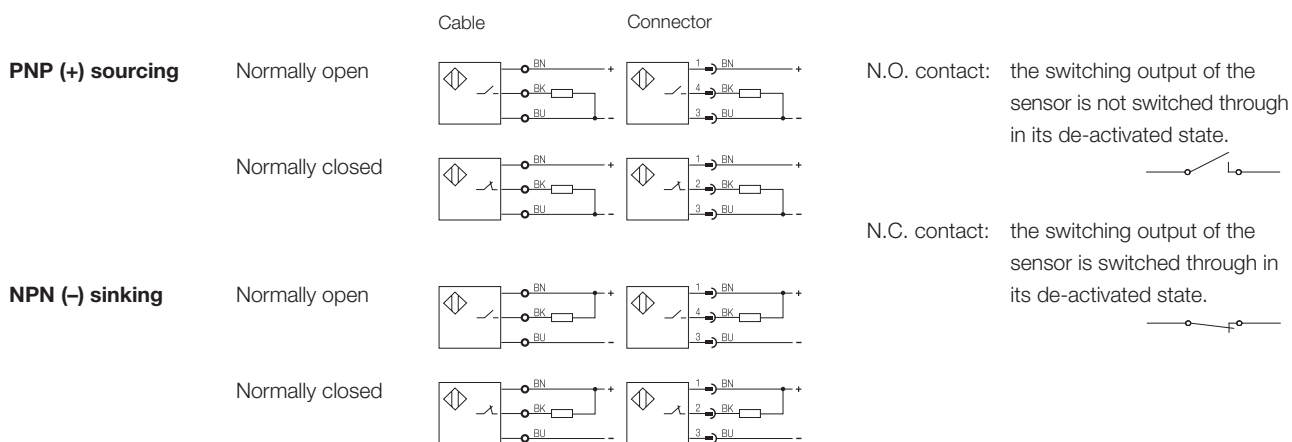


Capacitive object detection made easy with the new GlobalProx series



Capacitive level detection made easy with the new GlobalProx series

Operating voltage U_o	10...30 V DC
Voltage drop U_a at I_o	≤ 1.5 V
Rated insulation voltage U_i (protection class)	75 V DC
Output current max.	100 mA
No-load supply current I_o max.	≤ 15 mA
Reverse polarity/short-circuit protected	Yes/Yes
Temperature drift of s_n (-5°C ... $+55^\circ\text{C}$)	20 %
Ambient temperature range T_a	-25°C ... $+85^\circ\text{C}$
Switching frequency f	100 Hz
Power indicator	Green LED
Output function indicator	Yellow LED
Degree of protection as per IEC 60529	IP 67



GlobalProx

Capacitive Sensors

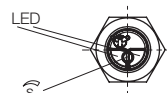
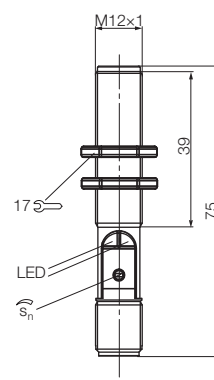
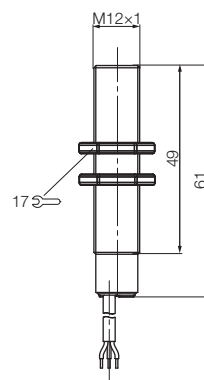
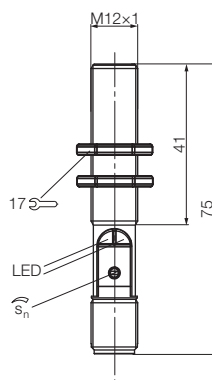
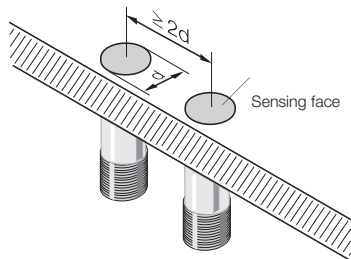
Object detection



Size	M12x1		M12x1	M12x1
Mounting	Flush		Flush	Flush
Rated switching distance s_n	1...4 mm		1...4 mm	1...4 mm
PNP NO	Ordering code	BCS00P0	BCS00K9	BCS00PJ
	Part number	BCS M12B4G2-PSC04D-S04K	BCS M12B4I1-PSC04D-EP02	BCS M12BBG2-PSC04D-S04K
PNP NC	Ordering code	BCS00P1	BCS00P8	BCS00PK
	Part number	BCS M12B4G2-POC04D-S04K	BCS M12B4I1-POC04D-EP02	BCS M12BBG2-POC04D-S04K
NPN NO	Ordering code	BCS00P2	BCS00P9	BCS00PL
	Part number	BCS M12B4G2-NSC04D-S04K	BCS M12B4I1-NSC04D-EP02	BCS M12BBG2-NSC04D-S04K
NPN NC	Ordering code	BCS00P3	BCS00PA	BCS00PM
	Part number	BCS M12B4G2-NOC04D-S04K	BCS M12B4I1-NOC04D-EP02	BCS M12BBG2-NOC04D-S04K
Material	Housing	V2A	V2A	PBT
	Sensing face	PBT	PBT	PBT
	Cover	PA 12/PBT	PA 12	PA 12/PBT
Connection	M12 connector, 4-pin, A-coded		2 m cable PUR, 3x0.34 mm ²	M12 connector, 4-pin, A-coded

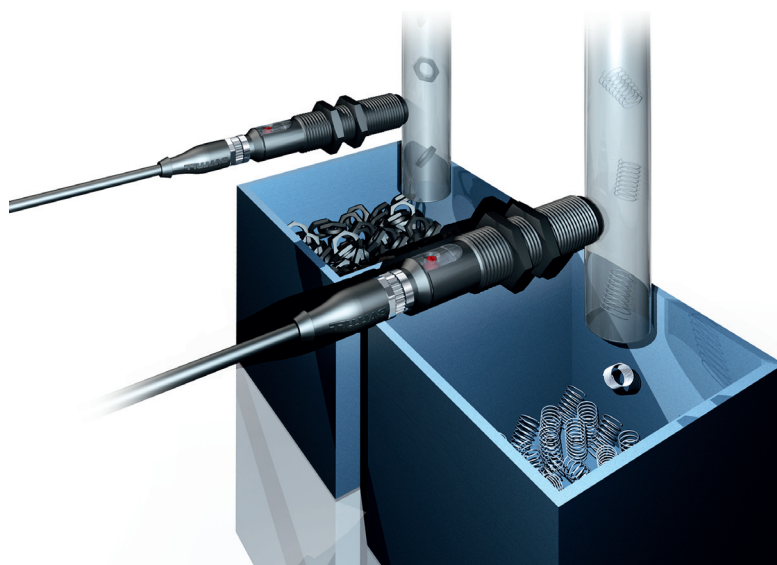
Flush-mount (shielded) proximity switches

... can be installed with their sensing faces flush to the metal. The distance between two proximity switches (in row mounting) must be $\geq 2d$.



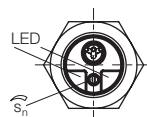
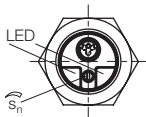
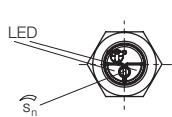
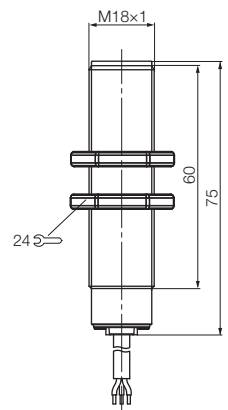
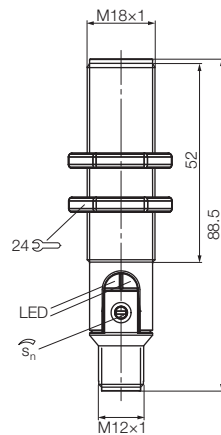
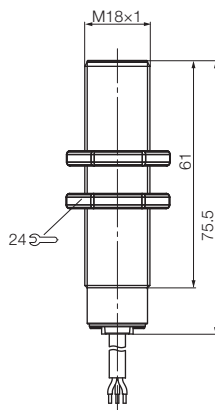
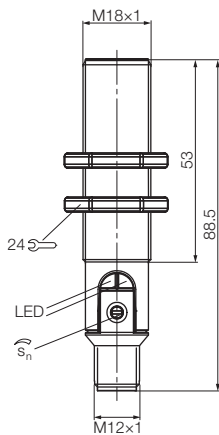
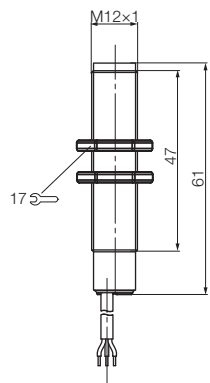
- Further enhanced EMC protection
- All sensors available in plastic or V2A housing
- M12 plug and cable variants
- Easily accessible potentiometer for adaptation to the application
- Flush, also in completely plastic housing

The new capacitive sensors for object detection combine versatility with maximum EMC protection. The complete series incorporates M12, M18 and M30 variants in a plastic and stainless steel housing. All devices are easily adapted to the relevant application using a potentiometer. The flush switching characteristics enable large switching distances, even when detecting plastic components.



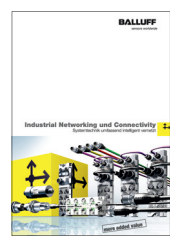
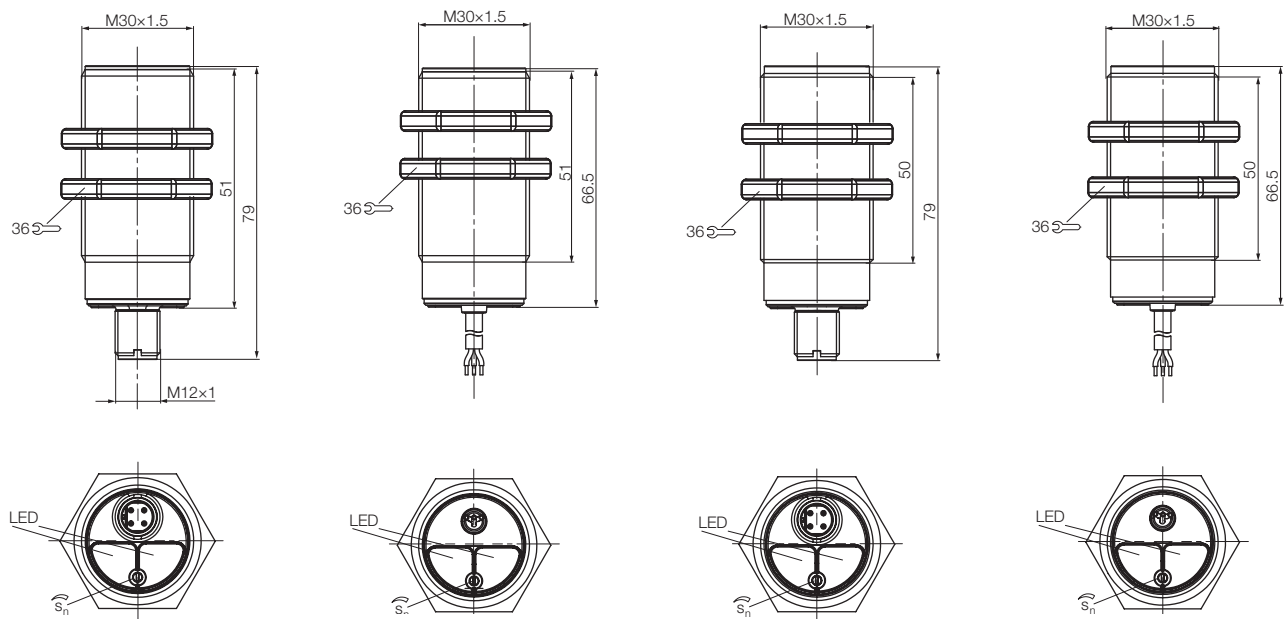


M12×1	M18×1	M18×1	M18×1	M18×1
Flush	Flush	Flush	Flush	Flush
1...4 mm	2...8 mm	2...8 mm	2...8 mm	2...8 mm
BCS00PU	BCS00MF	BCS00LK	BCS00M8	BCS00NZ
BCS M12BBI1-PSC04D-EP02	BCS M18B4I3-PSC80D-S04K	BCS M18B4N1-PSC80D-EP02	BCS M18BBI3-PSC80D-S04K	BCS M18BBN1-PSC80D-EP02
BCS00PW	BCS00M4	BCS00LR	BCS00MH	BCS00M1
BCS M12BBI1-POC04D-EP02	BCS M18B4I3-POC80D-S04K	BCS M18B4N1-POC80D-EP02	BCS M18BBI3-POC80D-S04K	BCS M18BBN1-POC80D-EP02
BCS00PY	BCS00M5	BCS00LN	BCS00MJ	BCS00M2
BCS M12BBI1-NSC04D-EP02	BCS M18B4I3-NSC80D-S04K	BCS M18B4N1-NSC80D-EP02	BCS M18BBI3-NSC80D-S04K	BCS M18BBN1-NSC80D-EP02
BCS00PZ	BCS00M6	BCS00LP	BCS00MK	BCS00M3
BCS M12BBI1-NOC04D-EP02	BCS M18B4I3-NOC80D-S04K	BCS M18B4N1-NOC80D-EP02	BCS M18BBI3-NOC80D-S04K	BCS M18BBN1-NOC80D-EP02
PBT	V2A	V2A	PBT	PBT
PBT	PBT	PBT	PBT	PBT
PA 12	PA 12/PBT	PA 12	PA 12/PBT	PA 12
2 m cable PUR, 3×0.34 mm²	M12 connector, 4-pin, A-coded	2 m cable PUR, 3×0.34 mm²	M12 connector, 4-pin, A-coded	2 m cable PUR, 3×0.34 mm²





M30×1.5 Flush 2...15 mm BCS00MR BCS M30B4I2-PSC15D-S04K BCS00MT BCS M30B4I2-POC15D-S04K BCS00MU BCS M30B4I2-NSC15D-S04K BCS00MW BCS M30B4I2-NOC15D-S04K V2A PBT PA 12/PBT M12 connector, 4-pin, A-coded	M30×1.5 Flush 2...15 mm BCS00N2 BCS M30B4I1-PSC15D-EP02 BCS00N3 BCS M30B4I1-POC15D-EP02 BCS00N4 BCS M30B4I1-NSC15D-EP02 BCS00N5 BCS M30B4I1-NOC15D-EP02 V2A PBT PA 12/PBT 2 m cable PUR, 3×0.34 mm²	M30×1.5 Flush 2...15 mm BCS00NA BCS M30BBI2-PSC15D-S04K BCS00NC BCS M30BBI2-POC15D-S04K BCS00NE BCS M30BBI2-NSC15D-S04K BCS00NF BCS M30BBI2-NOC15D-S04K PBT PBT PA 12/PBT M12 connector, 4-pin, A-coded	M30×1.5 Flush 2...15 mm BCS00NM BCS M30BBI1-PSC15D-EP02 BCS00NN BCS M30BBI1-POC15D-EP02 BCS00NP BCS M30BBI1-NSC15D-EP02 BCS00NR BCS M30BBI1-NOC15D-EP02 PBT PBT PA 12/PBT 2 m cable PUR, 3×0.34 mm²
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For more information on connectors refer to our „Industrial Networking and Connectivity“ catalog or visit us online at www.balluff.com

Capacitive Sensors

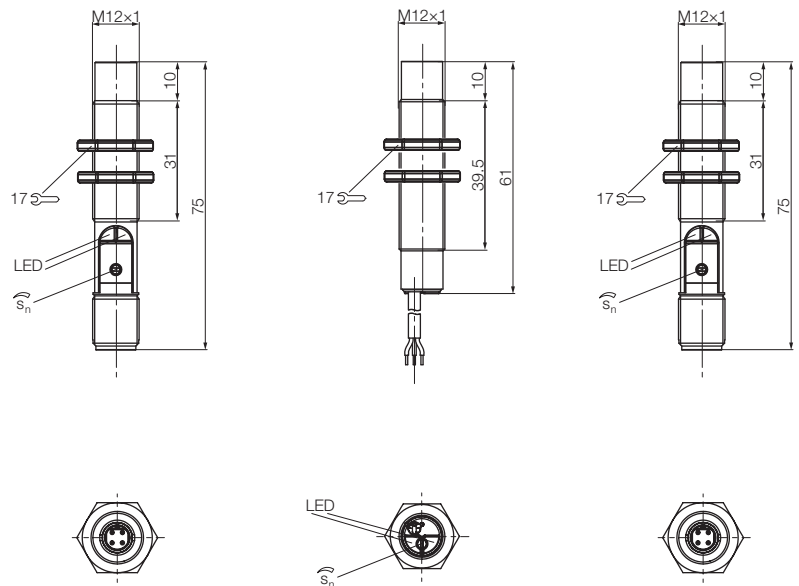
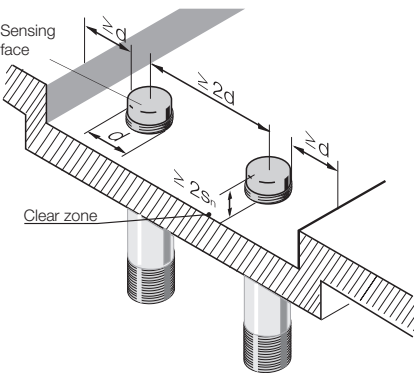
Level detection



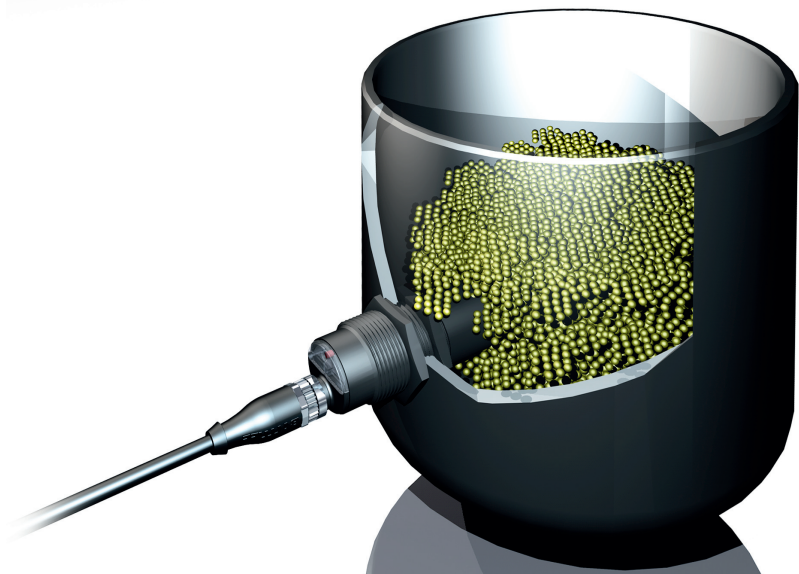
Size	M12×1		M12×1	M12×1
Mounting	Non-flush		Non-flush	Non-flush
Rated switching distance s_n	1...8 mm		1...8 mm	1...8 mm
PNP NO	Ordering code	BCS00P4	BCS00PC	BCS00PN
	Part number	BCS M12B4E2-PSC80H-S04K	BCS M12B4G1-PSC80H-EP02	BCS M12BBE2-PSC80H-S04K
PNP NC	Ordering code	BCS00P5	BCS00PE	BCS00PP
	Part number	BCS M12B4E2-POC80H-S04K	BCS M12B4G1-POC80H-EP02	BCS M12BBE2-POC80H-S04K
NPN NO	Ordering code	BCS00P6	BCS00PF	BCS00PR
	Part number	BCS M12B4E2-NSC80H-S04K	BCS M12B4G1-NSC80H-EP02	BCS M12BBE2-NSC80H-S04K
NPN NC	Ordering code	BCS00P7	BCS00PH	BCS00PT
	Part number	BCS M12B4E2-NOC80H-S04K	BCS M12B4G1-NOC80H-EP02	BCS M12BBE2-NOC80H-S04K
Material	Housing	V2A	V2A	PBT
	Sensing face	PBT	PBT	PBT
	Cover	PA 12/PBT	PA 12	PA 12/PBT
Connection	M12 connector, 4-pin, A-coded		2 m cable PUR, 3x0.34 mm²	M12 connector, 4-pin, A-coded

Unshielded proximity switches

The sensing face must extend $\geq 2s_n$ from the metallic installation medium. The distance between two proximity switches must be $\geq 2d$.

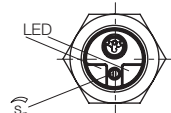
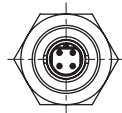
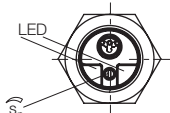
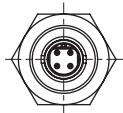
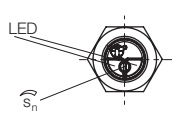
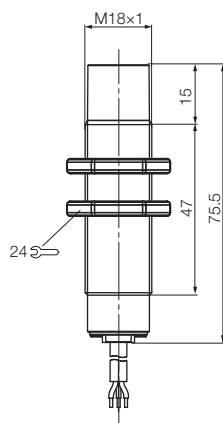
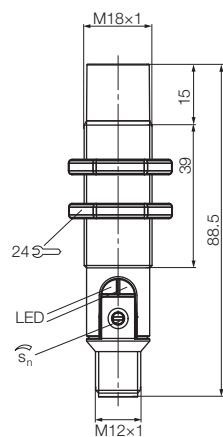
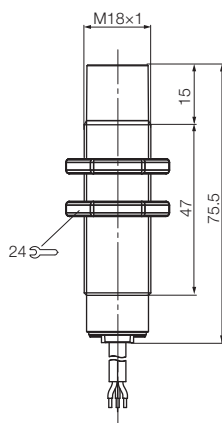
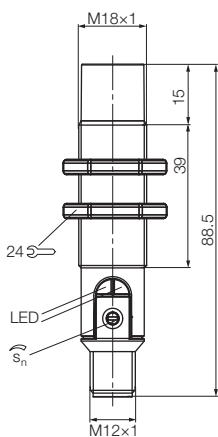
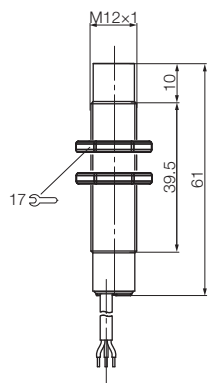


- Further enhanced EMC protection
- All sensors available in plastic or V2A housing
- M12 plug and cable variants
- Easily accessible potentiometer for perfect adaptation to the application
- Improved adhesion compensation

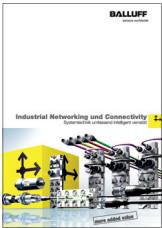




M12×1	M18×1	M18×1	M18×1	M18×1
Non-flush	Non-flush	Non-flush	Non-flush	Non-flush
1...8 mm	2..15 mm	2..15 mm	2..15 mm	2..15 mm
BCS00R0	BCS00ME	BCS00M7	BCS00LM	BCS00LL
BCS M12BBG1-PSC80H-EP02	BCS M18B4G2-PSC15H-S04K	BCS M18B4H1-PSC15H-EP02	BCS M18BBG2-PSC15H-S04K	BCS M18BBH1-PSC15H-EP02
BCS00R1	BCS00ML	BCS00M9	BCS00LT	BCS00LY
BCS M12BBG1-POC80H-EP02	BCS M18B4G2-POC15H-S04K	BCS M18B4H1-POC15H-EP02	BCS M18BBG2-POC15H-S04K	BCS M18BBH1-POC15H-EP02
BCS00R2	BCS00MM	BCS00MA	BCS00LU	BCS00LZ
BCS M12BBG1-NSC80H-EP02	BCS M18B4G2-NSC15H-S04K	BCS M18B4H1-NSC15H-EP02	BCS M18BBG2-NSC15H-S04K	BCS M18BBH1-NSC15H-EP02
BCS00R3	BCS00MN	BCS00MC	BCS00LW	BCS00M0
BCS M12BBG1-NOC80H-EP02	BCS M18B4G2-NOC15H-S04K	BCS M18B4H1-NOC15H-EP02	BCS M18BBG2-NOC15H-S04K	BCS M18BBH1-NOC15H-EP02
PBT	V2A	V2A	PBT	PBT
PBT	PBT	PBT	PBT	PBT
PA 12	PA 12/PBT	PA 12	PA 12/PBT	PA 12
2 m cable PUR, 3×0.34 mm²	M12 connector, 4-pin, A-coded	2 m cable PUR, 3×0.34 mm²	M12 connector, 4-pin, A-coded	2 m cable PUR, 3×0.34 mm²



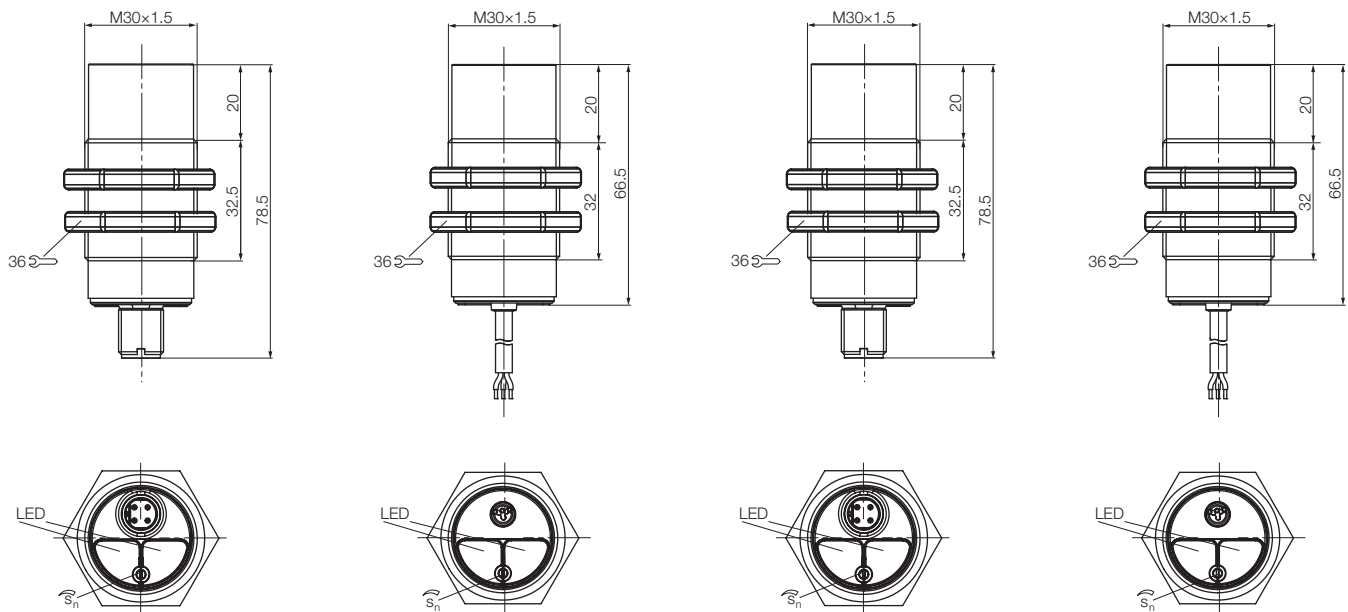
The new capacitive sensors for level detection combine versatility with maximum EMC protection. The complete series incorporates M12, M18 and M30 variants in a plastic and stainless steel housing. All devices are easily adapted to the relevant application using a potentiometer. Non-flush switching characteristics ensure more effective compensation for adhesions that come into contact with the material.



For more information on connectors refer to our „Industrial Networking and Connectivity“ catalog or visit us online at www.balluff.com



M30×1.5	M30×1.5	M30×1.5	M30×1.5
Non-flush	Non-flush	Non-flush	Non-flush
1...25 mm	1...25 mm	1...25 mm	1...25 mm
BCS00MY	BCS00N6	BCS00NH	BCS00NT
BCS M30B4E2-PSC25H-S04K	BCS M30B4E1-PSC25H-EP02	BCS M30BBE2-PSC25H-S04K	BCS M30BBE1-PSC25H-EP02
BCS00MZ	BCS00N7	BCS00NJ	BCS00NU
BCS M30B4E2-POC25H-S04K	BCS M30B4E1-POC25H-EP02	BCS M30BBE2-POC25H-S04K	BCS M30BBE1-POC25H-EP02
BCS00N0	BCS00N8	BCS00NK	BCS00NW
BCS M30B4E2-NSC25H-S04K	BCS M30B4E1-NSC25H-EP02	BCS M30BBE2-NSC25H-S04K	BCS M30BBE1-NSC25H-EP02
BCS00N1	BCS00N9	BCS00NL	BCS00NY
BCS M30B4E2-NOC25H-S04K	BCS M30B4E1-NOC25H-EP02	BCS M30BBE2-NOC25H-S04K	BCS M30BBE1-NOC25H-EP02
V2A	V2A	PBT	PBT
PBT	PBT	PBT	PBT
PA 12/PBT	PA 12/PBT	PA 12/PBT	PA 12/PBT
M12 connector, 4-pin, A-coded	2 m cable PUR, 3×0.34 mm ²	M12 connector, 4-pin, A-coded	2 m cable PUR, 3×0.34 mm ²



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