

Mini Size – Maxi Performance

... inductive Sensors \varnothing 3 mm, \varnothing 4 mm, M5 with switching distances up to 5 mm



Generous switching distance in the smallest package for even more

- Function reserve
- Flexibility of application

Features

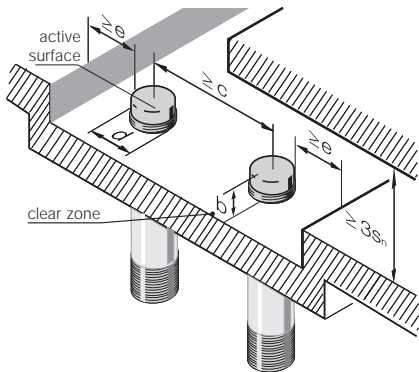
- Non-flush: 3 mm and 5 mm switching distance
- Integrated function indication
- Stainless steel housing

Non-flush mountable proximity switches

... are distinguished by their "caps", since the metal housing does not extend up to the active surface.

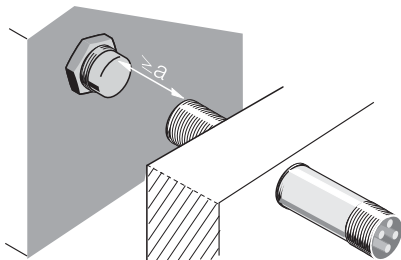
The active surface must extend $\geq b$ from the surrounding metallic installation medium.

The distance to opposing metal surfaces must be $\geq 3s_n$ and the distance between two sensors $\geq c$.



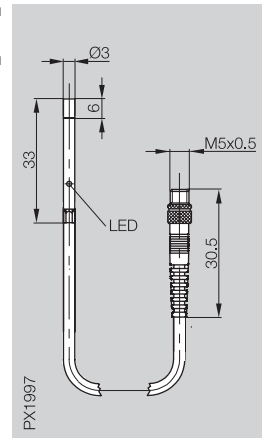
Opposing installation of 2 sensors

... requires a minimum distance of $\geq a$ between the active surfaces.



d	Ø 3 mm	Ø 4 mm	M5
a	20 mm	45 mm	45 mm
b	10 mm	15 mm	15 mm
c	30 mm	40 mm	40 mm
e	10 mm	20 mm	20 mm

Housing size	Ø 3 mm
Mounting	non-flush
Rated operating distance s_n	3 mm
Assured operating distance s_a	0...2.4 mm



PNP	Normally-open Normally-closed	BES 516-3048-G-E4-C-S26-00,3
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NPN	Normally-open	
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Rated operational voltage U_e	24 V DC
Supply voltage U_B	21.6...26.4 V DC
Voltage drop U_d at I_e	≤ 2.5 V
Rated insulation voltage U_i	75 V DC
Rated operational current I_e	50 mA
No-load supply current I_0 max.	≤ 10 mA
Off-state current I_r	≤ 10 μ A
Protected against polarity reversal	yes
Short circuit protected	yes
Load capacity	≤ 0.5 μ F

Repeat accuracy R	≤ 15 %
Ambient temperature range T_a	0...+70 °C
Frequency of operating cycle f	3000 Hz
Utilization category	DC 13
Function indication	yes

Degree of protection per IEC 60529	IP 67
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Housing material	stainless steel
Material of sensing face	POM
Connection	0.3 m cable with connector, PUR

No. of wires \times conductor cross section	
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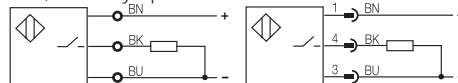
Approval	cULus
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Recommended connector	BKS-B 25
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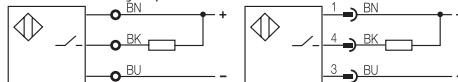
Please add the cable length to the ordering code for sensors with **cable!**
Standard length 5 m = 05

Wiring diagrams

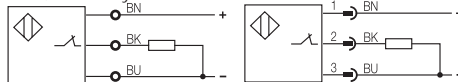
PNP, normally-open



NPN, normally-open

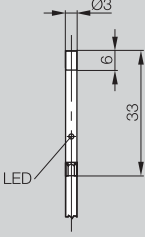
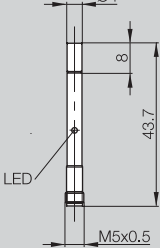
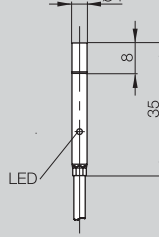
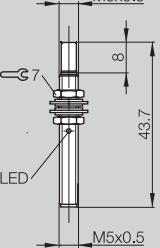
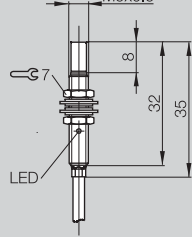


PNP, normally-closed



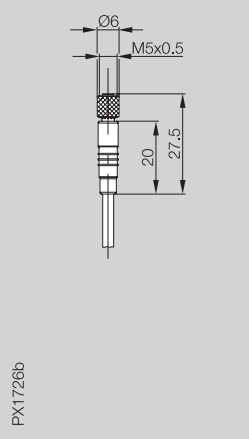
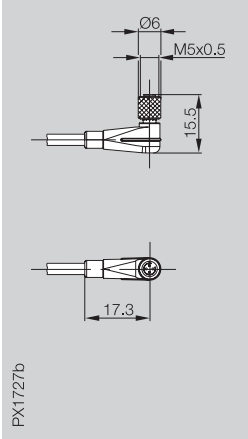
Inductive Sensors

DC 3-Wire
 \varnothing 3 mm, \varnothing 4 mm, M5
 S_n 3 mm, 5 mm

\varnothing 3 mm non-flush 3 mm 0...2.4 mm	\varnothing 4 mm non-flush 5 mm 0...4.1 mm	\varnothing 4 mm non-flush 5 mm 0...4.1 mm	M5x0.5 non-flush 5 mm 0...4.1 mm	M5x0.5 non-flush 5 mm 0...4.1 mm
				
PX1756	PX2151	PX2152	PX2163	PX2154
BES 516-3048-G-E4-C-PU-	BES G04ED-PSC50F-S26G BES G04ED-POC50F-S26G	BES G04ED-PSC50F-EP BES G04ED-POC50F-EP	BES M05ED-PSC50F-S26G BES M05ED-POC50F-S26G	BES M05ED-PSC50F-EP BES M05ED-POC50F-EP
	BES G04ED-NSC50F-S26G	BES G04ED-NSC50F-EP	BES M05ED-NSC50F-S26G	BES M05ED-NSC50F-EP
24 V DC 21.6...26.4 V DC ≤ 2.5 V 75 V DC 50 mA ≤ 10 mA ≤ 10 μ A yes yes ≤ 0.5 μ F	24 V DC 10...30 V DC ≤ 2.5 V 75 V DC 100 mA ≤ 10 mA ≤ 10 μ A yes yes ≤ 0.5 μ F	24 V DC 10...30 V DC ≤ 2.5 V 75 V DC 100 mA ≤ 10 mA ≤ 10 μ A yes yes ≤ 0.5 μ F	24 V DC 10...30 V DC ≤ 2.5 V 75 V DC 100 mA ≤ 10 mA ≤ 10 μ A yes yes ≤ 0.5 μ F	24 V DC 10...30 V DC ≤ 2.5 V 75 V DC 100 mA ≤ 10 mA ≤ 10 μ A yes yes ≤ 0.5 μ F
≤ 15 % 0...+70 °C 3000 Hz DC 13 yes	≤ 10 % -25...+70 °C 3000 Hz DC 13 yes	≤ 10 % -25...+70 °C 3000 Hz DC 13 yes	≤ 10 % -25...+70 °C 3000 Hz DC 13 yes	≤ 10 % -25...+70 °C 3000 Hz DC 13 yes
IP 67	IP 67	IP 67	IP 67	IP 67
stainless steel POM cable, PUR	stainless steel POM connector	stainless steel POM cable, PUR	stainless steel POM connector	stainless steel POM cable, PUR
3x0.09 mm ² cULus	cULus BKS-B 25/BKS-B 26	3x0.14 mm ² cULus	cULus BKS-B 25/BKS-B 26	3x0.14 mm ² cULus



Connectors

Connector Type	BKS-B 25 straight	BKS-B 26 angle
Application	S26 sensors	S26 sensors
		
No LED, normally-open	BKS-B 25-1-PU-__	BKS-B 26-1-PU-__
No LED, complementary	BKS-B 25-3-PU-__	BKS-B 26-3-PU-__
Manufacturer	Balluff	Balluff
Supply voltage U_B	30 V AC/DC	30 V AC/DC
Cable	molded-on PUR	molded-on PUR
No. of wires × conductor cross section	3×0.14 mm ² /4×0.14 mm ²	3×0.14 mm ² /4×0.14 mm ²
Degree of protection per IEC 60529	IP 67	IP 67
Ambient temperature range T_a	-25...+85 °C	-25...+85 °C

Please add the cable length to the ordering code!
Standard length 3 m = 03



For more sensors see main catalog "The Sensor Line" on CD-ROM or online!

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