

Inductive Sensors

DC 3-wire
 $\varnothing$ 4 mm
 s_n 1.5 mm

$\varnothing$ 4 mm

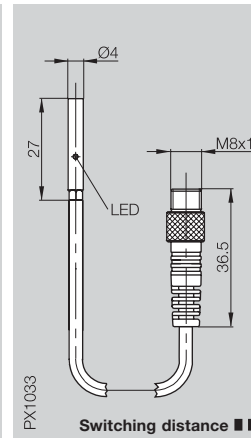
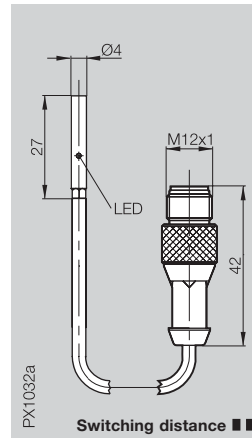
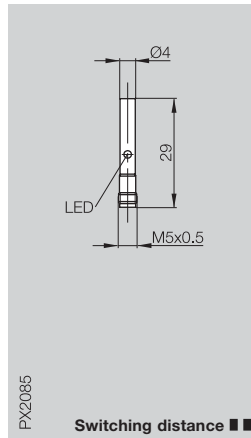
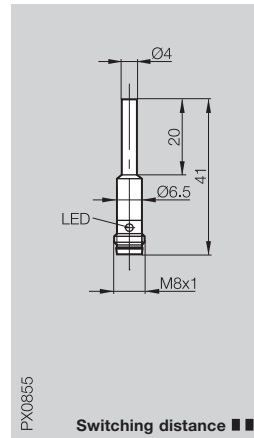
Housing size
Mounting (see notes starting p. 1.0.11)
Rated operating distance s_n
Assured operating distance s_a

$\varnothing$ 4 mm
flush
1.5 mm
0...1.2 mm

$\varnothing$ 4 mm
flush
1.5 mm
0...1.2 mm

$\varnothing$ 4 mm
flush
1.5 mm
0...1.2 mm

$\varnothing$ 4 mm
flush
1.5 mm
0...1.2 mm



PNP	NO	①
	NC	②

BES 516-3007-G-E5-C-S49
BES 516-3017-G-E5-C-S49

BES G04EC-PSC15B-S26G
BES G04EC-POC15B-S26G

BES 516-3007-G-E4-C-S4-
BES 516-3017-G-E4-C-S4-

BES 516-3007-G-E4-C-S49-

NPN	NO	④
	NC	⑤

BES 516-3008-G-E5-C-S49
BES 516-3018-G-E5-C-S49

BES G04EC-NSC15B-S26G
BES G04EC-NOC15B-S26G

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BES 516-3008-G-E4-C-S49-

Rated operational voltage U_e
Supply voltage U_B
Voltage drop U_d at I_e
Rated insulation voltage U_i
Rated operational current I_e
No-load supply current I_0 max.
Off-state current I_r
Polarity reversal protected
Short circuit protected
Permissible load capacitance

24 V DC
10...30 V DC
≤ 3 V
75 V DC
100 mA
≤ 12 mA
≤ 80 μ A
yes
yes
≤ 0.1 μ F

24 V DC
10...30 V DC
≤ 3 V
75 V DC
100 mA
≤ 12 mA
≤ 80 μ A
yes
yes
≤ 0.1 μ F

24 V DC
10...30 V DC
≤ 3 V
75 V DC
100 mA
≤ 12 mA
≤ 80 μ A
yes
yes
≤ 0.1 μ F

24 V DC
10...30 V DC
≤ 3 V
75 V DC
100 mA
≤ 12 mA
≤ 80 μ A
yes
yes
≤ 0.1 μ F

Repeat accuracy R
Ambient temperature range T_a
Frequency of operating cycles f
Utilization category
Function indicator

≤ 5 %
-25...+70 °C
1800 Hz
DC 13
yes

≤ 5 %
-25...+70 °C
1800 Hz
DC 13
yes

≤ 5 %
-25...+70 °C
1800 Hz
DC 13
yes

≤ 5 %
-25...+70 °C
1800 Hz
DC 13
yes

Degree of protection per IEC 60529

IP 67

IP 67

IP 67

IP 67

Housing material
Material of sensing face
Connection
No. of wires $\times$ cross-section
Approval
Recommended connector

Stainless steel
POM
Connector
cULus
BKS-_ 48/BKS-_ 49

Stainless steel
POM
Connector
cULus
BKS-B 25/BKS-B 26

Stainless steel
POM
Cable with connector
cULus
BKS-_ 19

Stainless steel
POM
Cable with connector
cULus
BKS-_ 48

① Wiring diagrams see page 1.0.6
 Switching distance ■■ see page 1.0.10

For sensors with **cable** please append cable material and length to ordering code!
 PUR, standard length 5 m = PU-05

For sensors with **cable and connector** please append cable length to ordering code!
 PUR, standard length 0.2 m = 00,2



Ø 4 mm, M5

Inductive Sensors

DC 3-wire
Ø 4 mm, M5
s_n 0.8 mm, 1.5 mm

1.1

Ø 4 mm flush 1.5 mm 0...1.2 mm	Ø 4 mm flush 1.5 mm 0...1.2 mm	M5x0.5 flush 0.8 mm 0...0.6 mm	M5x0.5 flush 0.8 mm 0...0.6 mm	M5x0.5 flush 0.8 mm 0...0.6 mm
BES 516-3007-G-E4-C-S26-	BES 516-3007-G-E4-C- BES 516-3017-G-E4-C-	BES 516-3005-E5-C-S49 BES 516-3022-E5-C-S49	BES M05EC-PSC08B-S26G BES M05EC-POC08B-S26G	BES 516-3005-E4-C-S49-
	BES 516-3008-G-E4-C- BES 516-3018-G-E4-C-	BES 516-3006-E5-C-S49	BES M05EC-NSC08B-S26G	
24 V DC 10...30 V DC ≤ 3 V 75 V DC 100 mA ≤ 12 mA ≤ 80 µA yes yes ≤ 0.1 µF	24 V DC 10...30 V DC ≤ 3 V 75 V DC 100 mA ≤ 12 mA ≤ 80 µA yes yes ≤ 0.1 µF	24 V DC 10...30 V DC ≤ 3 V 75 V DC 100 mA ≤ 12 mA ≤ 80 µA yes yes ≤ 0.1 µF	24 V DC 10...30 V DC ≤ 3 V 75 V DC 100 mA ≤ 12 mA ≤ 80 µA yes yes ≤ 0.1 µF	24 V DC 10...30 V DC ≤ 3 V 75 V DC 100 mA ≤ 12 mA ≤ 80 µA yes yes ≤ 0.1 µF
≤ 5 % -25...+70 °C 1800 Hz DC 13 yes	≤ 5 % -25...+70 °C 1800 Hz DC 13 yes	≤ 5 % -25...+70 °C 3000 Hz DC 13 yes	≤ 5 % -25...+70 °C 3000 Hz DC 13 yes	≤ 5 % -25...+70 °C 3000 Hz DC 13 yes
IP 67	IP 67	IP 67	IP 67	IP 67
Stainless steel POM Cable with connector	Stainless steel POM Cable 3x0.14 mm ² cULus	Stainless steel POM Connector	Stainless steel POM Connector	Stainless steel POM Cable with connector
cULus BKS-B 25	cULus	cULus BKS-_ 48/BKS-_ 49	cULus BKS-B 25/BKS-B 26	cULus BKS-_ 48



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Connectors,
holders ...
page 6.2 ...

Inductive Sensors

DC 3-wire
M5
s_n 0.8 mm, 1.5 mm

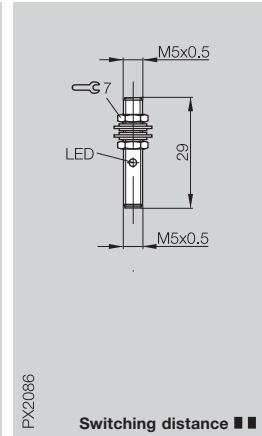
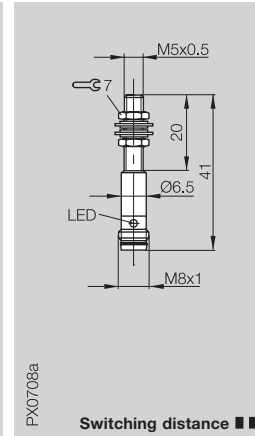
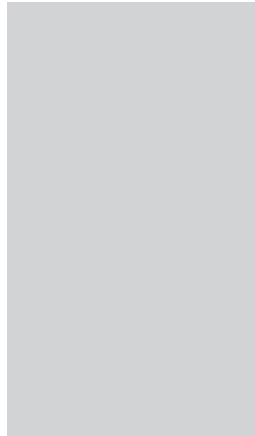
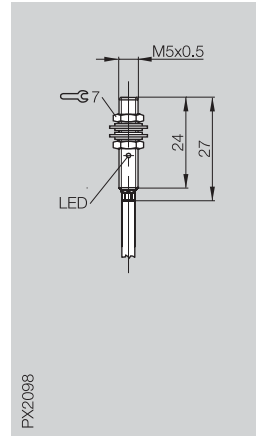
M5

Housing size
Mounting (see notes starting p. 1.0.11)
Rated operating distance s _n
Assured operating distance s _a

M5x0.5
flush
0.8 mm
0...0.6 mm

M5x0.5
flush
1.5 mm
0...1.2 mm

M5x0.5
flush
1.5 mm
0...1.2 mm



PNP	NO	①
	NC	②

BES 516-3005-E4-C-

BES 516-3005-G-E5-C-S49
BES 516-3022-G-E5-C-S49

BES M05EC-PSC15B-S26G
BES M05EC-POC15B-S26G

NPN	NO	④
	NC	⑤

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BES 516-3006-G-E5-C-S49
BES 516-3023-G-E5-C-S49

BES M05EC-NSC15B-S26G
BES M05EC-NOC15B-S26G

Rated operational voltage U _e	24 V DC
Supply voltage U _B	10...30 V DC
Voltage drop U _d at I _e	≤ 3 V
Rated insulation voltage U _i	75 V DC
Rated operational current I _e	100 mA
No-load supply current I ₀ max.	≤ 12 mA
Off-state current I _r	≤ 80 µA
Polarity reversal protected	yes
Short circuit protected	yes
Permissible load capacitance	≤ 0.1 µF

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24 V DC
10...30 V DC
≤ 3 V
75 V DC
100 mA
≤ 12 mA
≤ 80 µA
yes
yes
≤ 0.1 µF

24 V DC
10...30 V DC
≤ 3 V
75 V DC
100 mA
≤ 12 mA
≤ 80 µA
yes
yes
≤ 0.1 µF

Repeat accuracy R	≤ 5 %
Ambient temperature range T _a	-25...+70 °C
Frequency of operating cycles f	3000 Hz
Utilization category	DC 13
Function indicator	yes

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≤ 5 %
-25...+70 °C
1800 Hz
DC 13
yes

≤ 5 %
-25...+70 °C
1800 Hz
DC 13
yes

Degree of protection per IEC 60529

IP 67

IP 67

IP 67

Housing material	Stainless steel
Material of sensing face	POM
Connection	Cable
No. of wires × cross-section	3×0.14 mm ²
Approval	cULus
Recommended connector	

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Stainless steel
POM
Connector
cULus
BKS- 48/BKS- 49

Stainless steel
POM
Connector
cULus
BKS-B 25/BKS-B 26

① Wiring diagrams see page 1.0.6
Switching distance ■■ see page 1.0.10

For sensors with **cable** please append cable material and length to ordering code!
PUR, standard length 5 m = PU-05

For sensors with **cable and connector** please append cable length to ordering code!
PUR, standard length 0.2 m = 00,2



M5x0.5

flush

1.5 mm

0...1.2 mm

M5x0.5

flush

1.5 mm

0...1.2 mm

M5x0.5

flush

1.5 mm

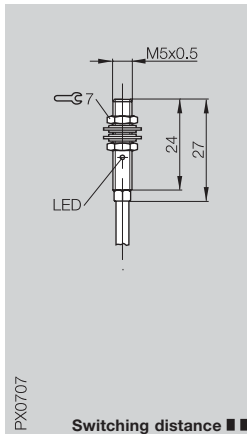
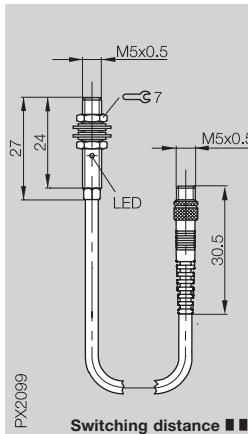
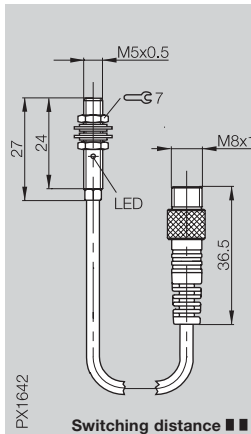
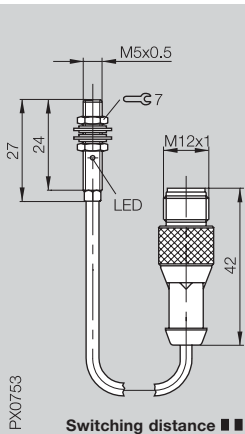
0...1.2 mm

M5x0.5

flush

1.5 mm

0...1.2 mm

**1.1**

BES 516-3005-G-E4-C-S4-

BES 516-3005-G-E4-C-S49-

BES 516-3005-G-E4-C-S26-

BES 516-3005-G-E4-C-
BES 516-3022-G-E4-C-BES 516-3006-G-E4-C-
BES 516-3023-G-E4-C-24 V DC
10...30 V DC

≤ 3 V

75 V DC

100 mA

≤ 12 mA

≤ 80 µA

yes

yes

≤ 0.1 µF

≤ 5 %
-25...+70 °C

1800 Hz

DC 13

yes

IP 67

Stainless steel
POM

Cable with connector

cULus
BKS-_ 1924 V DC
10...30 V DC

≤ 3 V

75 V DC

100 mA

≤ 12 mA

≤ 80 µA

yes

yes

≤ 0.1 µF

≤ 5 %
-25...+70 °C

1800 Hz

DC 13

yes

IP 67

Stainless steel
POM

Cable with connector

cULus
BKS-_ 4824 V DC
10...30 V DC

≤ 3 V

75 V DC

100 mA

≤ 12 mA

≤ 80 µA

yes

yes

≤ 0.1 µF

≤ 5 %
-25...+70 °C

1800 Hz

DC 13

yes

IP 67

Stainless steel
POM

Cable with connector

cULus
BKS-B 2524 V DC
10...30 V DC

≤ 3 V

75 V DC

100 mA

≤ 12 mA

≤ 80 µA

yes

yes

≤ 0.1 µF

≤ 5 %
-25...+70 °C

1800 Hz

DC 13

yes

IP 67

Stainless steel
POM

Cable

3x0.14 mm²

cULus

**6**Connectors,
holders ...
page 6.2 ...