

**BALLUFF**  
*sensors worldwide*

**GlobalProx**

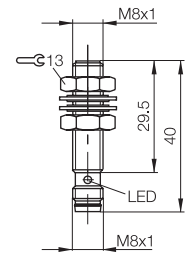
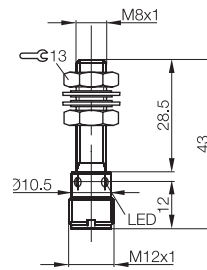
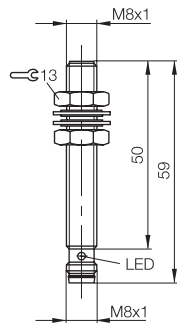
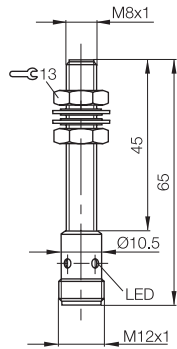
... the complete series of standard sensors



**more added value**

**GlobalProx**

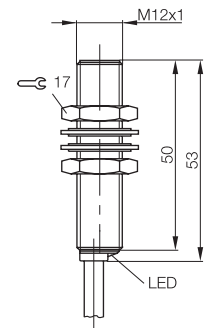
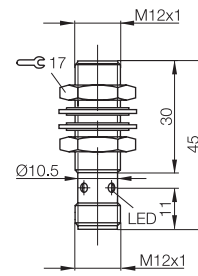
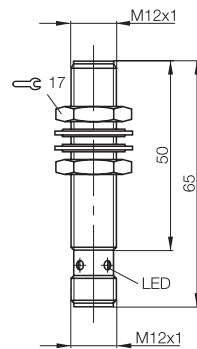
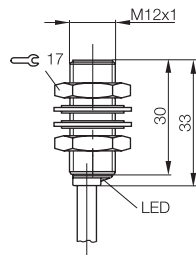
Housing size	<b>M8x1</b>	<b>M8x1</b>	<b>M8x1 Shorty</b>	<b>M8x1 Shorty</b>
Mounting	flush	flush	flush	flush
Rated operating distance $s_n$	<b>1.5 mm</b>	<b>1.5 mm</b>	<b>1.5 mm</b>	<b>1.5 mm</b>
Assured operating distance $s_a$	0...1.2 mm	0...1.2 mm	0...1.2 mm	0...1.2 mm



## DC 3-wire

PNP	Normally open	BES M08MH1-PSC15B-S04G	BES M08MI-PSC15B-S49G	BES M08EE-PSC15B-S04G-003	BES M08EE-PSC15B-S49G-003
	Normally closed	BES M08MH1-POC15B-S04G		BES M08EE-POC15B-S04G-003	BES M08EE-POC15B-S49G-003
NPN	Normally open	BES M08MH1-NSC15B-S04G	BES M08MI-NSC15B-S49G	BES M08EE-NSC15B-S04G-003	BES M08EE-NSC15B-S49G-003
	Normally closed	BES M08MH1-NOC15B-S04G		BES M08EE-NOC15B-S04G-003	BES M08EE-NOC15B-S49G-003

Housing size	<b>M12x1 Shorty</b>	<b>M12x1</b>	<b>M12x1 Shorty</b>	<b>M12x1</b>
Mounting	flush	flush	flush	flush
Rated operating distance $s_n$	<b>2 mm</b>	<b>4 mm</b>	<b>4 mm</b>	<b>4 mm</b>
Assured operating distance $s_a$	0...1.6 mm	0...3.2 mm	0...3.2 mm	0...3.2 mm



## DC 3-wire

PNP	Normally open	BES M12MD-PSC20B-BP02-003	BES M12MI-PSC40B-S04G	BES M12ME-PSC40B-S04G-003	BES M12MI-PSC40B-BV02
	Normally closed	BES M12MD-POC20B-BP02-003	BES M12MI-POC40B-S04G	BES M12ME-POC40B-S04G-003	BES M12MI-POC40B-BV02
NPN	Normally open	BES M12MD-NSC20B-BP02-003	BES M12MI-NSC40B-S04G	BES M12ME-NSC40B-S04G-003	BES M12MI-NSC40B-BV02
	Normally closed	BES M12MD-NOC20B-BP02-003	BES M12MI-NOC40B-S04G	BES M12ME-NOC40B-S04G-003	

Switching distance ■■

Switching distance ■■

Switching distance ■■

Switching distance ■■ = 2x switching distance compared with standard switching distance per EN 60947-5-2.  
Standard cable length 2 m. Other cable lengths and PUR quality on request.

# GlobalProx

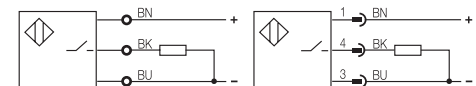
- Short and medium housings M8 to M30
- Flush and non-flush mount housings
- Cable and connector versions
- Standard and extended switching distance

**more added value**

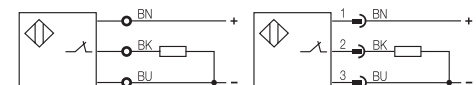
- Standardize your inductive sensors
- Worldwide availability and application, global standard
- Ideal price/performance ratio

### 3-wire

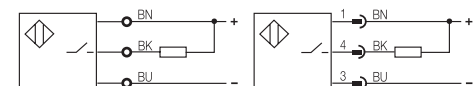
PNP normally open



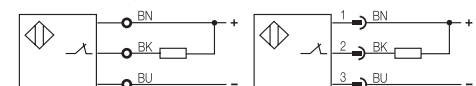
PNP normally closed



NPN normally open



NPN normally closed



M8x1	M8x1 Shorty	M8x1	M8x1	M8x1 Shorty	M8x1 Shorty
flush	flush	flush	flush	flush	flush
<b>1.5 mm</b>	<b>1.5 mm</b>	<b>2 mm</b>	<b>2 mm</b>	<b>2 mm</b>	<b>2 mm</b>
0...1.2 mm	0...1.2 mm	0...1.6 mm	0...1.6 mm	0...1.6 mm	0...1.6 mm

		Switching distance ■■	Switching distance ■■	Switching distance ■■	Switching distance ■■
BES M08MI-PSC15B-BV02	BES M08EF-PSC15B-BP02-003	BES M08MH1-PSC20B-S04G	BES M08MI-PSC20B-S49G	BES M08EE-PSC20B-S04G-003	BES M08EE-PSC20B-S49G-003
BES M08MI-POC15B-BV02	BES M08EF-POC15B-BP02-003			BES M08EE-POC20B-S04G-003	BES M08EE-POC20B-S49G-003
BES M08MI-NSC15B-BV02	BES M08EF-NSC15B-BP02-003	BES M08MH1-NSC20B-S04G	BES M08MI-NSC20B-S49G	BES M08EE-NSC20B-S04G-003	BES M08EE-NSC20B-S49G-003
	BES M08EF-NOC15B-BP02-003			BES M08EE-NOC20B-S04G-003	BES M08EE-NOC20B-S49G-003

M12x1 Shorty	M12x1	M12x1 Shorty	M12x1	M18x1	M18x1
flush	non-flush	non-flush	non-flush	flush	flush
<b>4 mm</b>	<b>8 mm</b>	<b>8 mm</b>	<b>8 mm</b>	<b>5 mm</b>	<b>5 mm</b>
0...3.2 mm	0...6.5 mm	0...6.5 mm	0...6.5 mm	0...4.1 mm	0...4.1 mm

		Switching distance ■■	Switching distance ■■		
BES M12MD-PSC40B-BP02-003	BES M12MG-PSC80F-S04G	BES M12MD-PSC80F-S04G	BES M12MG-PSC80F-BV02	BES M18MI-PSC50B-S04G	BES M18MI-PSC50B-S04K
BES M12MD-POC40B-BP02-003	BES M12MG-POC80F-S04G	BES M12MD-POC80F-S04G	BES M12MG-POC80F-BV02		BES M18MI-POC50B-S04K
BES M12MD-NSC40B-BP02-003	BES M12MG-NSC80F-S04G	BES M12MD-NSC80F-S04G	BES M12MG-NSC80F-BV02		BES M18MI-NSC50B-S04K
BES M12MD-NOC40B-BP02-003	BES M12MG-NOC80F-S04G	BES M12MD-NOC80F-S04G	BES M12MG-NOC80F-BV02		BES M18MI-NOC50B-S04K

Housing size	M18x1	M30x1.5	M30x1.5	M30x1.5 Shorty
Mounting	non-flush	flush	flush	flush
Rated operating distance $s_n$	<b>16 mm</b>	<b>10 mm</b>	<b>10 mm</b>	<b>10 mm</b>
Assured operating distance $s_a$	0...12.8 mm	0...8.1 mm	0...8.1 mm	0...8.0 mm

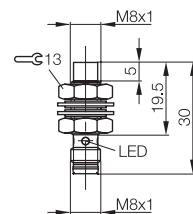
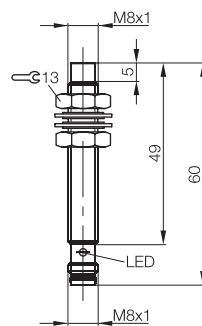
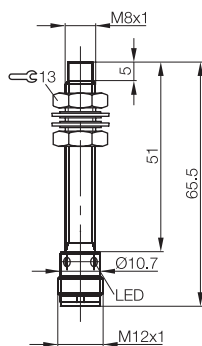
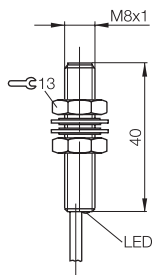
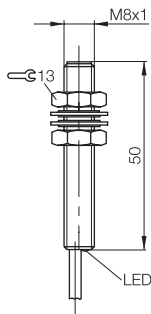
	Switching distance ■■			
	BES M18MG-PSC16F-BV02	BES M30MI-PSC10B-S04G	BES M30MI-PSC10B-S04K	BES M30ME-PSC10B-S04G-003
	BES M18MG-POC16F-BV02		BES M30MI-POC10B-S04K	BES M30ME-POC10B-S04G-003
	BES M18MG-NSC16F-BV02		BES M30MI-NSC10B-S04K	BES M30ME-NSC10B-S04G-003
	BES M18MG-NOC16F-BV02		BES M30MI-NOC10B-S04K	

## DC 3-wire

PNP	Normally open	BES M18MG-PSC16F-BV02	BES M30MI-PSC10B-S04G	BES M30MI-PSC10B-S04K	BES M30ME-PSC10B-S04G-003
	Normally closed	BES M18MG-POC16F-BV02		BES M30MI-POC10B-S04K	BES M30ME-POC10B-S04G-003
NPN	Normally open	BES M18MG-NSC16F-BV02		BES M30MI-NSC10B-S04K	BES M30ME-NSC10B-S04G-003
	Normally closed	BES M18MG-NOC16F-BV02		BES M30MI-NOC10B-S04K	

<b>M8x1</b> flush <b>2 mm</b> 0...1.6 mm	<b>M8x1 Shorty</b> flush <b>2 mm</b> 0...1.6 mm	<b>M8x1</b> non-flush <b>4 mm</b> 0...3.2 mm	<b>M8x1</b> non-flush <b>4 mm</b> 0...3.2 mm	<b>M8x1 Shorty</b> non-flush <b>4 mm</b> 0...3.2 mm
---	--	---	---	--



Switching distance ■■

Switching distance ■■

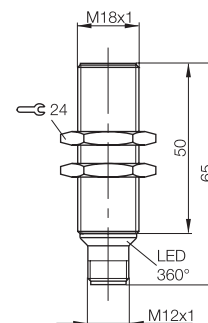
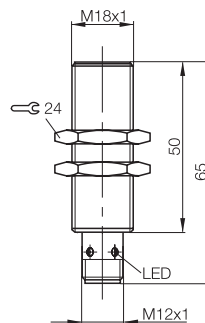
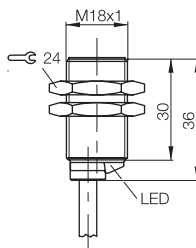
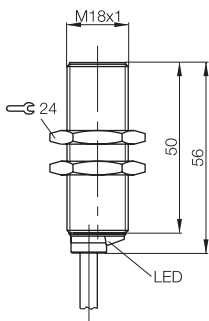
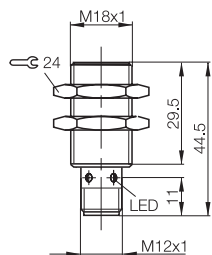
Switching distance ■■

Switching distance ■■

Switching distance ■■

BES M08MI-PSC20B-BV02	BES M08EF-PSC20B-BP02-003	BES M08EH-PSC40F-S04G	BES M08EH-PSC40F-S49G	BES M08EB-PSC40F-S49G
BES M08MI-NSC20B-BV02	BES M08EF-NSC20B-BP02-003	BES M08EH-POC40F-S04G	BES M08EH-POC40F-S49G	BES M08EB-POC40F-S49G
BES M08MI-NOC20B-BV02	BES M08EF-NOC20B-BP02-003	BES M08EH-NSC40F-S04G	BES M08EH-NSC40F-S49G	BES M08EB-NSC40F-S49G
	BES M08EF-NOC20B-BP02-003	BES M08EH-NOC40F-S04G	BES M08EH-NOC40F-S49G	BES M08EB-NOC40F-S49G

<b>M18x1 Shorty</b> flush <b>5 mm</b> 0...4.1 mm	<b>M18x1</b> flush <b>5 mm</b> 0...4.1 mm	<b>M18x1 Shorty</b> flush <b>5 mm</b> 0...4.0 mm	<b>M18x1</b> flush <b>8 mm</b> 0...6.5 mm	<b>M18x1</b> flush <b>8 mm</b> 0...6.5 mm
---	--	---	--	--

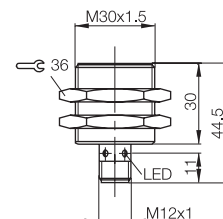
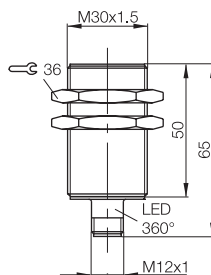
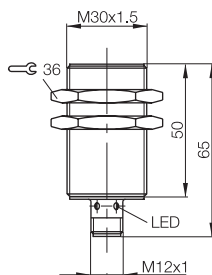
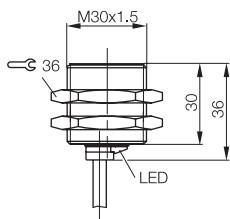
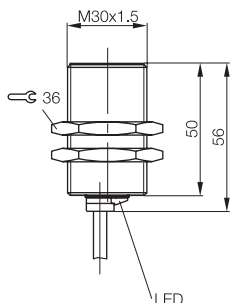


Switching distance ■■

Switching distance ■■

BES M18ME-PSC50B-S04G-003	BES M18MI-PSC50B-BV02	BES M18MD-PSC50B-BP02-003	BES M18MI-PSC80B-S04G	BES M18MI-PSC80B-S04K
BES M18ME-POC50B-S04G-003	BES M18MI-POC50B-BV02	BES M18MD-POC50B-BP02-003		BES M18MI-POC80B-S04K
BES M18ME-NSC50B-S04G-003	BES M18MI-NSC50B-BV02	BES M18MD-NSC50B-BP02-003	BES M18MI-NSC80B-S04G	BES M18MI-NSC80B-S04K
			BES M18MI-NOC80B-S04G	

<b>M30x1.5</b> flush <b>10 mm</b> 0...8.1 mm	<b>M30x1.5 Shorty</b> flush <b>10 mm</b> 0...8.1 mm	<b>M30x1.5</b> flush <b>15 mm</b> 0...12.2 mm	<b>M30x1.5</b> flush <b>15 mm</b> 0...12.2 mm	<b>M30x1.5 Shorty</b> flush <b>15 mm</b> 0...12.0 mm
---	--	--	--	---



Switching distance ■■

Switching distance ■■

Switching distance ■■

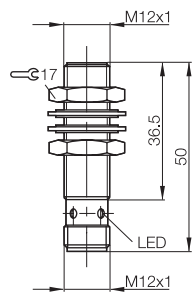
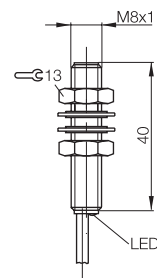
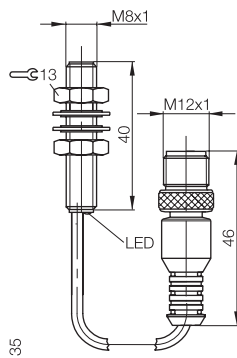
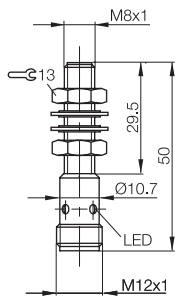
BES M30MI-PSC10B-BV02	BES M30MD-PSC10B-BP02-003	BES M30MI-PSC15B-S04G	BES M30MI-PSC15B-S04K	BES M30ME-PSC15B-S04G-003
BES M30MI-POC10B-BV02			BES M30MI-POC15B-S04K	BES M30ME-POC15B-S04G-003
BES M30MI-NSC10B-BV02	BES M30MD-NSC10B-BP02-003		BES M30MI-NSC15B-S04K	
BES M30MI-NOC10B-BV02			BES M30MI-NOC15B-S04K	

<b>M8x1</b> non-flush <b>4 mm</b> 0...3.2 mm	<b>M8x1 Shorty</b> non-flush <b>4 mm</b> 0...3.2 mm	<b>M12x1</b> flush <b>2 mm</b> 0...1.6 mm	<b>M12x1 Shorty</b> flush <b>2 mm</b> 0...1.6 mm	<b>M12x1</b> flush <b>2 mm</b> 0...1.6 mm
Switching distance ■■	Switching distance ■■			
BES M08EG-PSC40F-BV02	BES M08ED-PSC40F-BV02	BES M12MI-PSC20B-S04G	BES M12ME-PSC20B-S04G-003	BES M12MI-PSC20B-BV02
BES M08EG-POC40F-BV02	BES M08ED-POC40F-BV02	BES M12MI-POC20B-S04G	BES M12ME-POC20B-S04G-003	BES M12MI-POC20B-BV02
BES M08EG-NSC40F-BV02	BES M08ED-NSC40F-BV02	BES M12MI-NSC20B-S04G	BES M12ME-NSC20B-S04G-003	BES M12MI-NSC20B-BV02
BES M08EG-NOC40F-BV02	BES M08ED-NOC40F-BV02	BES M12MI-NOC20B-S04G	BES M12ME-NOC20B-S04G-003	

<b>M18x1 Shorty</b> flush <b>8 mm</b> 0...6.4 mm	<b>M18x1</b> flush <b>8 mm</b> 0...6.5 mm	<b>M18x1 Shorty</b> flush <b>8 mm</b> 0...6.4 mm	<b>M18x1</b> non-flush <b>16 mm</b> 0...13 mm	<b>M18x1</b> non-flush <b>16 mm</b> 0...12.8 mm
Switching distance ■■	Switching distance ■■	Switching distance ■■	Switching distance ■■	Switching distance ■■
BES M18ME-PSC80B-S04G-003	BES M18MI-PSC80B-BV02	BES M18MD-PSC80B-BP02-003	BES M18MG2-PSC16F-S04G-003	BES M18MG-PSC16F-S04K
BES M18ME-POC80B-S04G-003		BES M18MD-POC80B-BP02-003	BES M18MG2-POC16F-S04G-003	BES M18MG-POC16F-S04K
BES M18ME-NSC80B-S04G-003	BES M18MI-NSC80B-BV02	BES M18MD-NSC80B-BP02-003		BES M18MG-NSC16F-S04K
				BES M18MG-NOC16F-S04K

<b>M30x1.5</b> flush <b>15 mm</b> 0...12.2 mm	<b>M30x1.5 Shorty</b> flush <b>15 mm</b> 0...12.0 mm	<b>M30x1.5</b> non-flush <b>30 mm</b> 0...24.0 mm	<b>M30x1.5</b> non-flush <b>30 mm</b> 0...24.3 mm	<b>M30x1.5</b> non-flush <b>30 mm</b> 0...24.3 mm
Switching distance ■■	Switching distance ■■	Switching distance ■■	Switching distance ■■	Switching distance ■■
BES M30MI-PSC15B-BV02	BES M30MD-PSC15B-BP02-003	BES M30MF2-PSC30F-S04G-003	BES M30MM-PSC30F-S04K	BES M30MM-PSC30F-BV02
BES M30MI-POC15B-BV02	BES M30MD-POC15B-BP02-003	BES M30MF2-POC30F-S04G-003	BES M30MM-POC30F-S04K	BES M30MM-POC30F-BV02
	BES M30MD-NSC15B-BP02-003		BES M30MM-NSC30F-S04K	BES M30MM-NSC30F-BV02
			BES M30MM-NOC30F-S04K	BES M30MM-NOC30F-BV02

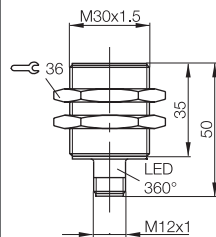
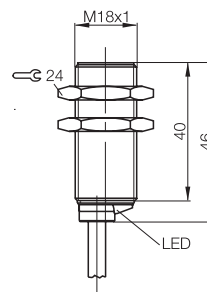
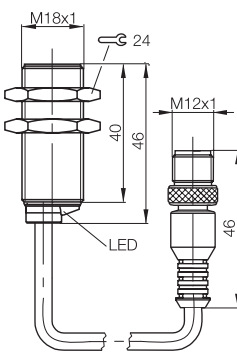
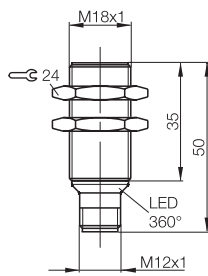
Housing size	<b>M8x1</b>	<b>M8x1</b>	<b>M8x1</b>	<b>M12x1</b>
Mounting	flush	flush	flush	flush
Rated operating distance $s_n$	<b>2 mm</b>	<b>2 mm</b>	<b>2 mm</b>	<b>3 mm</b>
Assured operating distance $s_a$	0...1.6 mm	0...1.6 mm	0...1.6 mm	0...2.4 mm



## DC 2-wire

		Switching distance ■■	Switching distance ■■	Switching distance ■■	Switching distance ■■
Normally open	polarized	BES M08ME1-GSC20B-S04G	BES M08MG-GSC20B-BP00,3-GS04	BES M08MG-GSC20B-BV02	BES M12MF-GSC30B-S04G
Normally open	non-polarized	BES M08ME1-USC20B-S04G		BES M08MG-USC20B-BV02	BES M12MF-USC30B-S04G

Housing size	<b>M18x1</b>	<b>M18x1</b>	<b>M18x1</b>	<b>M30x1.5</b>
Mounting	flush	flush	flush	flush
Rated operating distance $s_n$	<b>7 mm</b>	<b>7 mm</b>	<b>7 mm</b>	<b>15 mm</b>
Assured operating distance $s_a$	0...5.7 mm	0...5.7 mm	0...5.7 mm	0...12.2 mm



## DC 2-wire

		Switching distance ■■	Switching distance ■■	Switching distance ■■	Switching distance ■■
Normally open	polarized	BES M18MF-GSC70B-S04K	BES M18MG-GSC70B-BP00,3-GS04	BES M18MG-GSC70B-BV02	BES M30MF-GSC15B-S04K
Normally open	non-polarized	BES M18MF-USC70B-S04K		BES M18MG-USC70B-BV02	BES M30MF-USC15B-S04K

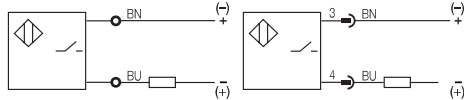
Switching distance ■■ = 2x switching distance compared with standard switching distance per EN 60947-5-2.  
Standard cable length 2 m. Other cable lengths and PUR quality on request.

### 2-wire

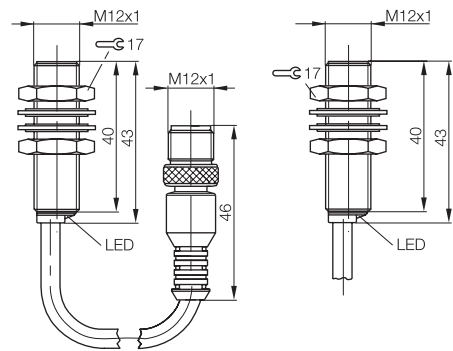
Normally open, polarized (GSC)



Normally open, non-polarized (USC)



<b>M12x1</b>	<b>M12x1</b>
flush	flush
<b>3 mm</b>	<b>3 mm</b>
0...2.4 mm	0...2.4 mm



Switching distance ■■

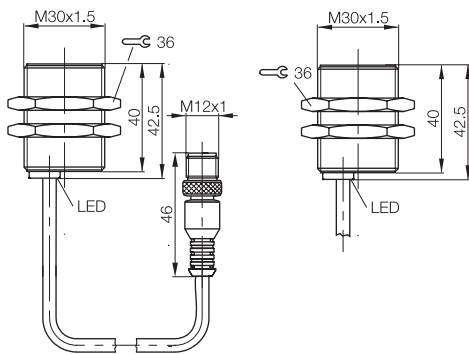
Switching distance ■■

BES M12MG-GSC30B-BP00,3-GS04

BES M12MG-GSC30B-BV02

BES M12MG-USC30B-BV02

<b>M30x1.5</b>	<b>M30x1.5</b>
flush	flush
<b>15 mm</b>	<b>15 mm</b>
0...12.2 mm	0...12.2 mm



Switching distance ■■

Switching distance ■■

BES M30MF-GSC15B-BP00,3-GS04

BES M30MF-GSC15B-BV02

BES M30MF-USC15B-BV02

**more added value**

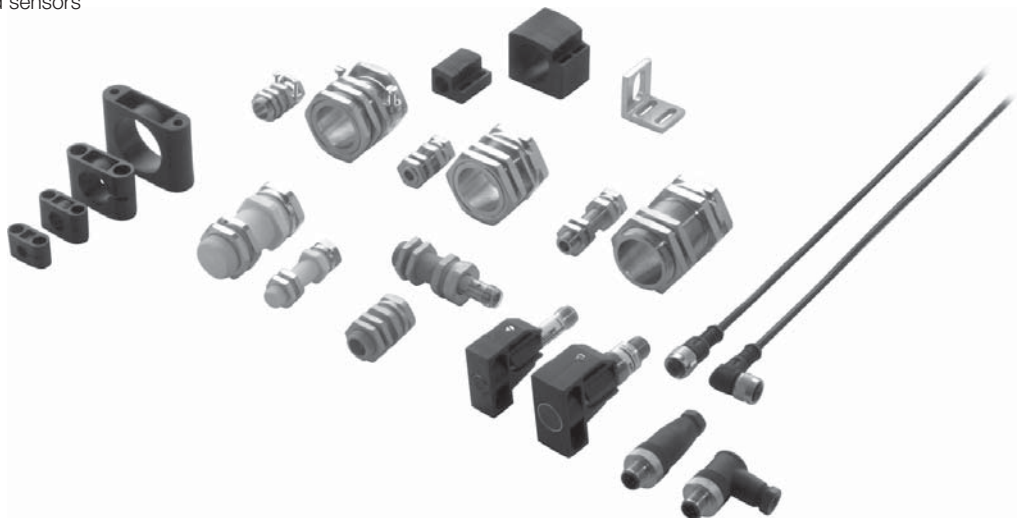
- Standardize your inductive sensors
- Worldwide availability and application, global standard
- Ideal price/performance ratio

# aiPprox

# GlobalProx

## The accessories family

- The complete series of standard sensors
- Clamping holders
- Clamps
- Mounting cuffs
- Connectors



For installation notes, accessories and detailed technical data see the main "Object Detection" catalog, our CD-ROM, DVD-ROM or go online! Accessories can also be found in the most recent "Accessories" catalog.



■ [www.balluff.com](http://www.balluff.com)

Balluff GmbH  
Schurwaldstrasse 9  
73765 Neuhausen a.d.F.  
Germany  
Phone +49 7158 173-0  
Fax +49 7158 5010  
[balluff@balluff.de](mailto:balluff@balluff.de)  
■ [www.balluff.com](http://www.balluff.com)