

**The first quick-connect system requiring no changes on the sensor side!**

There is a whole range of quick-connect systems for M12 connectors on the market, but they all have the same problem. To truly make use of the benefits of the system, you have to make changes to the mating piece. Different systems mean different mating pieces, since the systems are of course not compatible with each other. This makes things difficult for the customer and his applications.

The new MQ12 eliminates this problem completely. MQ12 can be used for any commonly available M12 sensor, no ifs, buts or maybes!

Simply plug it in and fix with a quarter turn – that's it! This means the system can be

directly inserted in existing applications and is a 1:1 replacement for today's standard cables. The MQ12 is advantageous especially in applications for warehousing, assembly and conveying, where large numbers of sensors are used.

**By reducing the connection time by up to 80%, the time expenditure for the overall installation is drastically reduced.**

**Technical benefits**

- High shock and vibration resistance
- Degree of protection IP 67
- Available for various cable materials (PUR, PVC)

Connector	
Version	
Application	

no LED,	NO	
no LED,	complementary	
with LED,	NO	
with LED,	complementary	

Supply voltage $U_B$	
Cable	
No. of wires x cross-section	
Degree of protection per IEC 60529	
Ambient temperature range $T_a$	

View of female side

Other cable lengths and cable qualities on request.

**Ordering example**

PUR, length 1 m = BKS-S212-1/S214-PU-01  
PUR, length 2 m = BKS-S213-3-PU-02



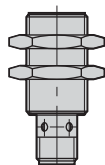
# Quick-Connect System MQ12 Accessories

DC connectors,  
DC connection cables  
MQ12 connection (S4)

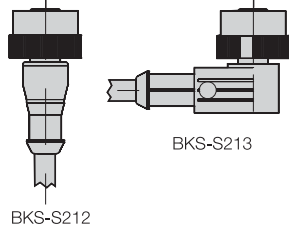
<b>BKS-S212</b> straight female	<b>BKS-S213</b> angle female	<b>BKS-S212- /S214</b> straight female/ straight male	<b>BKS-S213- /S214</b> angle female/ straight male
Plug sensors S4	Plug sensors S4	Plug sensors S4	Plug sensors S4
BKS-S212-1-PU-02 BKS-S212-3-PU-02	BKS-S213-1-PU-02 BKS-S213-3-PU-02	BKS-S212-1/S214-PU-01 BKS-S212-3/S214-PU-01	BKS-S213-3/S214-PU-01 BKS-S213-4/S214-PU-01 BKS-S213-8/S214-PU-01
max. 250 V AC/DC 2 m molded-on PUR 3x0.34 mm <sup>2</sup> /4x0.25 mm <sup>2</sup> IP 65/IP 67* -20...+80 °C	max. 250 V AC/DC 2 m molded-on PUR 3x0.34 mm <sup>2</sup> /4x0.25 mm <sup>2</sup> IP 65/IP 67* -20...+80 °C	10...30 V DC 1 m molded-on PUR 3x0.34 mm <sup>2</sup> IP 65/IP 67* -20...+80 °C	10...30 V DC 1 m molded-on PUR 3x0.34 mm <sup>2</sup> /4x0.25 mm <sup>2</sup> IP 65/IP 67* -20...+80 °C

\*when plugged together/locked

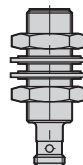
**Sensors with connector**  
**Ordering code endings S4**



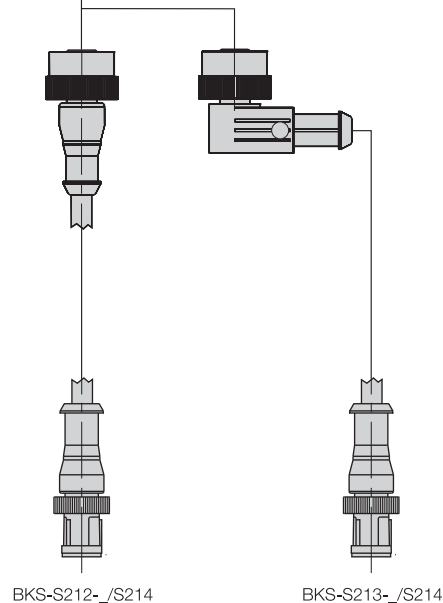
**Connector with mounting thread M12x1**



**Sensors with connector**  
**Ordering code endings S4**



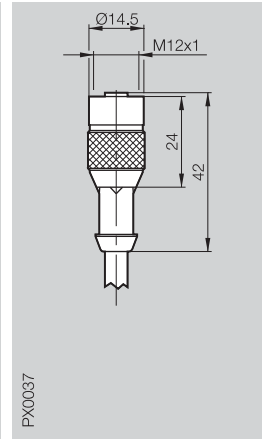
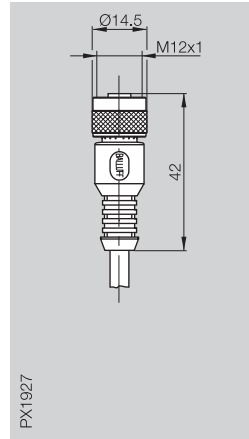
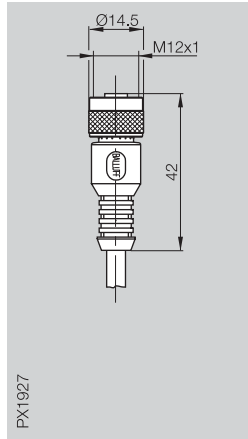
**Connection cable with mounting thread M12x1/M12x1**



## 5

**Connectors**  
Splitter boxes with accessories  
Electrical devices  
Fasteners  
Tools

Connector	<b>BKS-B 19</b>	<b>BKS-B 19</b>	<b>BKS-S 19</b>
Version	straight female	straight female	straight female
Application	Plug sensors S4	Plug sensors S4	Plug sensors S4



no LED, NO	BKS-B 19-1-03	BKS-B 19-1-PU2-03	BKS-S 19-1-PU-03
no LED, NC			
no LED, complementary	BKS-B 19-3-05		BKS-S 19-3-PU-03
with 2 LED's, NO, PNP	BKS-B 19-4-05		BKS-S 19-4-PU-03
with 2 LED's, NC, PNP			
with 2 LED's, NO, NPN			
with 2 LED's, NC, NPN			
with 2 LED's, complementary PNP			BKS-S 19-8-PU-03
with 2 LED's, complementary NPN			BKS-S 19-9-PU-03
with 3 LED's, complementary PNP			
no LED, NO, 2-pin, non-polarized			BKS-S 19-11-PU-03
no LED, NC, 2-pin, polarized/non-polarized			BKS-S 19-12-PU-05
no LED, NO, 2 pins, polarized			BKS-S 19-13-PU-05
no LED, complementary shielded			BKS-S 19-14-PU-05*

Supply voltage $U_B$	10...30 V DC	10...55 V DC	10...30 V DC
Cable	3 m/5 m molded-on PVC	3 m molded-on PUR	3 m/5 m molded-on PUR
No. of wires × cross-section	3×0.34 mm <sup>2</sup> /4×0.25 mm <sup>2</sup>	3×0.34 mm <sup>2</sup>	3×0.34 mm <sup>2</sup> /4×0.34 mm <sup>2</sup>
Degree of protection per IEC 60529	IP 67	IP 67	IP 68 per BWN Pr. 20
Ambient temperature range $T_a$	-25...+85 °C	<b>-25...+120 °C</b>	-25...+70 °C

View of female side			
---------------------	--	--	--

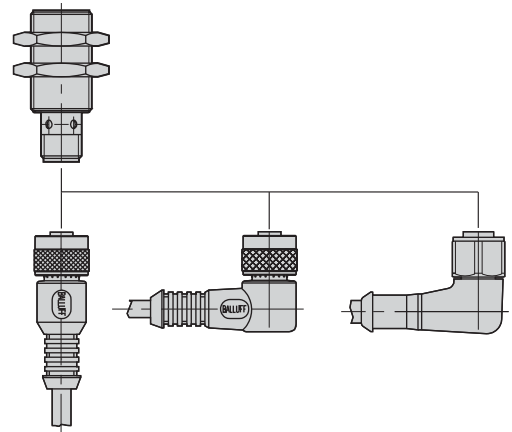
Other cable lengths and cable qualities on request.

**Ordering examples**

PVC, length 3 m = BKS-B 19-1-03  
PUR, length 3 m = BKS-S 20-1-PU-03

**Sensors with connector**  
**Ordering code endings S4**

**Connector with mounting thread**  
**M12×1**



BKS-B 19/  
BKS-S 19

BKS-B 20/  
BKS-S 20

BKS-S 20E

\*Shield through knurled ring!

# M12 Accessories

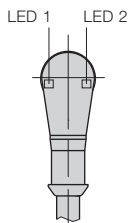
DC connectors  
M12 connection (S4)

BKS-B 20 angle female	BKS-B 20 angle female	BKS-S 20 angle female	BKS-S 20E angle female	BKS-S260-3-02 straight female
Plug sensors S4	Plug sensors S4	Plug sensors S4	Plug sensors S4	Plug sensors S4
BKS-B 20-1-03	BKS-B 20-1-PU2-03	BKS-S 20-1-PU-03 BKS-S 20-2-PU-05 BKS-S 20-3-PU-03 BKS-S 20-4-PU-03 BKS-S 20-5-PU-03 BKS-S 20-6-PU-03 BKS-S 20-7-PU-05 BKS-S 20-8-PU-03 BKS-S 20-9-PU-05 BKS-S 20-10-PU-05 BKS-S 20-11-PU-03 BKS-S 20-12-PU-05 BKS-S 20-13-PU-05	BKS-S 20E-4-PU-03      BKS-S 20E-8-PU-03	BKS-S260-3-02
10...30 V DC	10...55 V DC	10...30 V DC	10...30 V DC	10...30 V DC
3 m molded-on PVC/PUR	3 m molded-on PUR	3 m/5 m molded-on PUR	3 m molded-on PUR	2 m molded-on PVC
3x0.34 mm <sup>2</sup> /4x0.25 mm <sup>2</sup>	3x0.34 mm <sup>2</sup>	3x0.34 mm <sup>2</sup> /4x0.34 mm <sup>2</sup>	3x0.34 mm <sup>2</sup> /4x0.34 mm <sup>2</sup>	4x0.34 mm <sup>2</sup>
IP 67	IP 67	IP 68 per BWN Pr. 20	IP 68 per BWN Pr. 20	IP 68/IP 69K*
-25...+85 °C	<b>-25...+120 °C</b>	-25...+70 °C	-25...+90 °C	-40...+85 °C**

\*when plugged together/locked

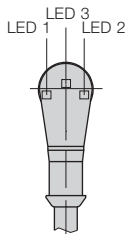
\*\*short-time 105 °C

## Connectors with 2 LED's



Color and function:  
LED 1: yellow (NO)  
LED 2: green (Power)

## with 3 LED's

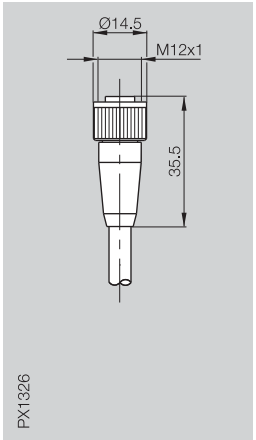
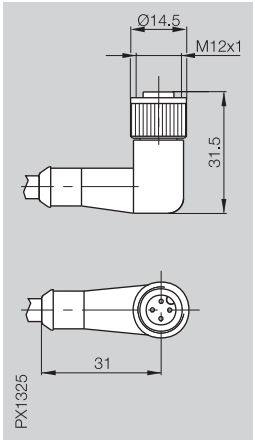
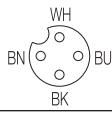
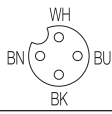


Color and function:  
LED 1: yellow (NO)  
LED 2: green (Power)  
LED 3: white (NC)

# 5

## Connectors

Splitter boxes with accessories  
Electrical devices  
Fasteners  
Tools

Connector Version	<b>BKS-S 23</b> straight female	<b>BKS-S 24</b> angle female			
Application	Plug sensors S4	Plug sensors S4			
					
no LED, NO	BKS-S 23-1-05				
no LED, complementary	BKS-S 23-3-05	BKS-S 24-3-03			
no LED, 5 pins					
no LED, 8-pin shielded					
Supply voltage U <sub>B</sub>	10...30 V DC	10...30 V DC			
Cable	5 m molded-on PVC	3 m molded-on PVC			
No. of wires × cross-section	3×0.34 mm <sup>2</sup> /4×0.25 mm <sup>2</sup>	3×0.34 mm <sup>2</sup> /4×0.25 mm <sup>2</sup>			
Degree of protection per IEC 60529	IP 67	IP 67			
Ambient temperature range T <sub>a</sub>	<b>-40...+105 °C</b>	<b>-40...+105 °C</b>			
View of female side					

Other cable lengths and cable qualities on request.

**Ordering examples**

PVC, length 3 m = BKS-S 23-1-03  
PUR, length 3 m = BKS-S139-PU-03

**Sensors with connector**  
**Ordering code endings S4**

**Connector with mounting thread**  
**M12×1**

