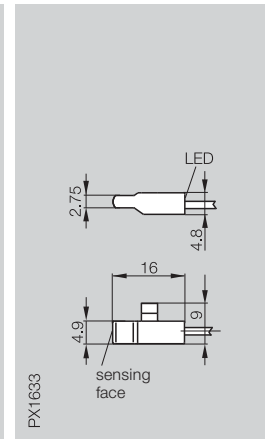
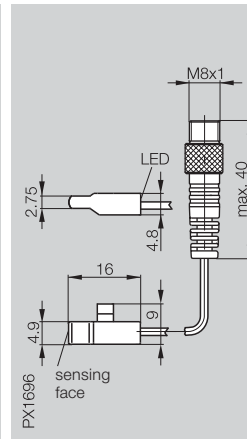
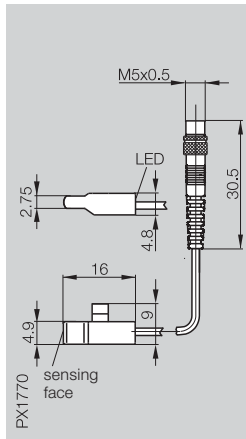


Series	<b>BMF 103</b>	<b>BMF 103</b>	<b>BMF 103</b>
Type	Connector M5×0.5 with rotatable union nut	Connector M8×1 with rotatable union nut	

The sensor for positioning monitoring on miniature grippers and miniature cylinders with C- or T-slot. Highly precise switching response for monitoring even the smallest piston movements.



PNP	NO	BMF 103K-PS-C-2A-S26-00,3	BMF 103K-PS-C-2A-SA2-S49-00,3	BMF 103K-PS-C-2A-PU-02
	NC		BMF 103K-PO-C-2A-SA2-S49-00,3	BMF 103K-PO-C-2A-PU-02
NPN	NO		BMF 103K-NS-C-2A-SA2-S49-00,3	BMF 103K-NS-C-2A-PU-02
	NC			
Rated operating field strength  H <sub>n</sub>		1.2 kA/m	1.2 kA/m	1.2 kA/m
Assured operating field strength  H <sub>a</sub>		≥ 2 kA/m	≥ 2 kA/m	≥ 2 kA/m
Hysteresis of  H <sub>n</sub>		≤ 45 %	≤ 45 %	≤ 45 %
Temperature drift of turn-on point of  H <sub>n</sub>		≤ 0.3 %/°C	≤ 0.3 %/°C	≤ 0.3 %/°C
Turn-on delay		≤ 0.07 ms	≤ 0.07 ms	≤ 0.07 ms
Turn-off delay		≤ 0.07 ms	≤ 0.07 ms	≤ 0.07 ms
Supply voltage U <sub>B</sub>		10...30 V DC	10...30 V DC	10...30 V DC
Voltage drop U <sub>d</sub>		≤ 2.5 V	≤ 2.5 V	≤ 2.5 V
Rated insulation voltage U <sub>i</sub>		75 V DC	75 V DC	75 V DC
Rated operational current I <sub>e</sub>		100 mA	100 mA	100 mA
No-load supply current I <sub>0</sub> max.		≤ 5 mA	≤ 5 mA	≤ 5 mA
Polarity reversal protected		yes	yes	yes
Short circuit protected		yes	yes	yes
Ambient temperature range T <sub>a</sub>		-25...+70 °C	-25...+70 °C	-25...+70 °C
Utilization category		DC 13	DC 13	DC 13
Degree of protection per IEC 60529		IP 67	IP 67	IP 67
Housing material		LCP	LCP	LCP
Connection		0.3 m cable (PUR) with connector	0.3 m cable (PUR) with connector	2 m Cable PUR
No. of wires × cross-section				3×0.10 mm <sup>2</sup>
Approval		cULus	cULus	cULus
Recommended connector		BKS-_ 25	BKS-_ 48	

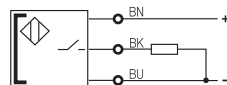
Other cable lengths on request.



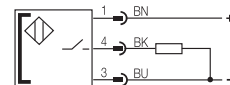
### Wiring diagrams

#### NO

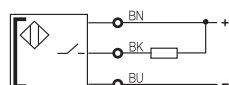
PNP/cable



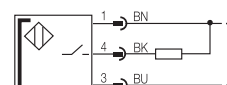
PNP/connector



NPN/cable

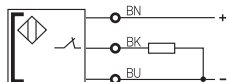


NPN/connector

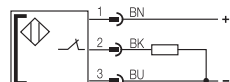


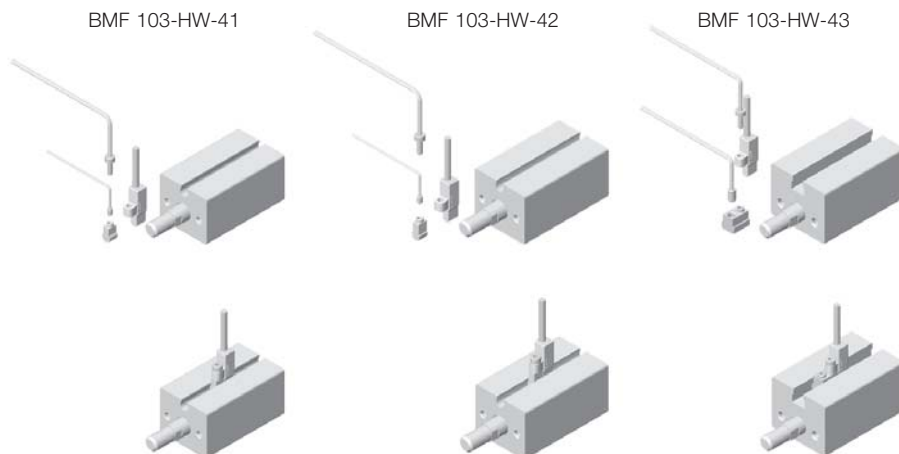
#### NC

PNP/cable



PNP/connector





### Advantages

Switchpoint can be adjusted in seconds! Turn screw one revolution, adjust position, tighten.



Switchpoint cannot be lost. Even if you replace the sensor, the adjusted switchpoint is determined by the mounting bracket, not the sensor.



Ordering code	Advantages	Cylinder type	Mounting brackets
<b>BMF 103-HW-41</b>		C-slot e.g. SMC	
<b>BMF 103-HW-42</b>		C-slot Festo slot-10	
<b>BMF 103-HW-43</b>		T-slot e.g. Festo slot-8, Bosch, SMC	
<b>BMF 103-HW-85</b>		C-slot e.g. SMC, Bimba	
<b>BMF 103-HW-87</b>		C-slot e.g. Festo	

**3.1**  
Connectors selection guide page 3.0.7 ...

**5**  
Connectors ... page 5.2 ...

Cable clip for routing on request

Hex Key Set

BMF Hex Key

Please order accessories separately see page 5.74