

Compact directly in T-slot

Sensors for Pneumatic Cylinders

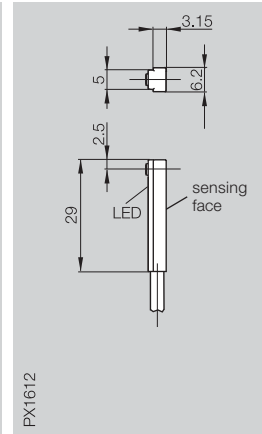
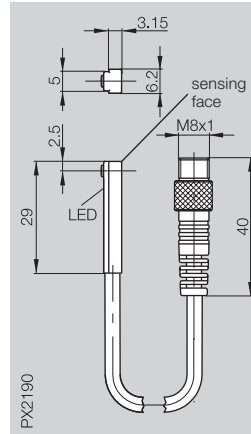
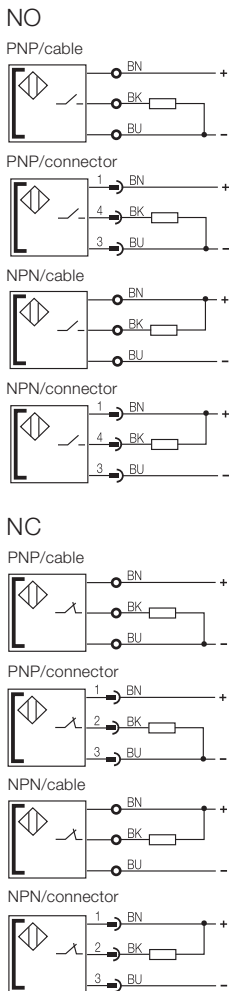
BMF 307

Series	BMF 307	BMF 307
Type	Connector M8x1 with rotatable union nut	

Advantages

- Non-contact, wear-free sensing of the piston position
- Desensitized to contamination
- Senses piston position through the cylinder wall
- Can be installed in T-slot cylinder without mounting bracket
e.g. Festo: ADVU, ADN, DRQ, DGP; SMC; Bosch.

Wiring diagrams



PNP	NO	BMF 307K-PS-C-2-SA2-S49-00,3	BMF 307K-PS-C-2-PU-02
	NC	BMF 307K-PO-C-2-SA2-S49-00,3	BMF 307K-PO-C-2-PU-02
NPN	NO	BMF 307K-NS-C-2-SA2-S49-00,3	BMF 307K-NS-C-2-PU-02
	NC	BMF 307K-NO-C-2-SA2-S49-00,3	BMF 307K-NO-C-2-PU-02

Rated operating field strength I_{H_n}	1.2 kA/m	1.2 kA/m
Assured operating field strength I_{H_a}	≥ 2 kA/m	≥ 2 kA/m
Hysteresis of I_{H_n}	≤ 45 %	≤ 45 %
Temperature drift of turn-on point of I_{H_n}	≤ 0.3 %/°C	≤ 0.3 %/°C
Turn-on delay	≤ 0.05 ms	≤ 0.05 ms
Turn-off delay	≤ 0.05 ms	≤ 0.05 ms
Supply voltage U_B	10...30 V DC	10...30 V DC
Voltage drop U_d	≤ 3.1 V	≤ 3.1 V
Rated insulation voltage U_i	75 V DC	75 V DC
Rated operational current I_b	200 mA*	200 mA*
No-load supply current I_0 max.	≤ 30 mA	≤ 30 mA
Polarity reversal protected	yes	yes
Short circuit protected	yes	yes
Ambient temperature range T_a	-25...+85 °C	-25...+85 °C
Utilization category	DC 13	DC 13
Degree of protection per IEC 60529	IP 67	IP 67
Housing material	LCP	LCP
Connection	0.3 m cable (PUR) with connector	2 m Cable PUR

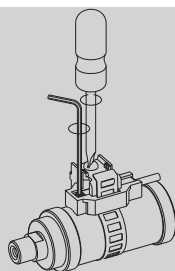
No. of wires x cross-section		3x0.14 mm ²
Approval	cULus	cULus

Recommended connector BKS-...48
*Temperature load curve see page 3.0.6

Other cable lengths on request.



Mounting brackets
BMF 307-HW-73-115/
BMF 307-HW-73 -255
page 3.1.16



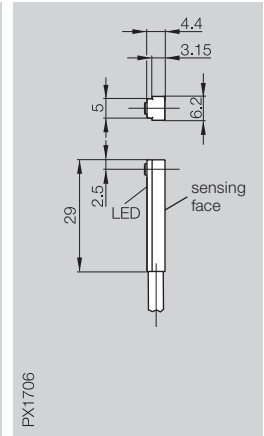
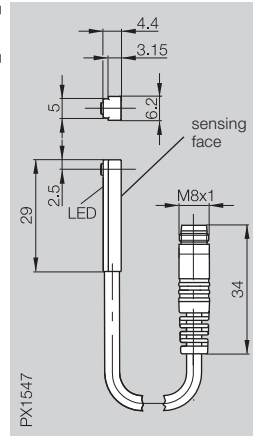
Please order accessories separately see page 5.74



The **reed switches BMF 307K-R-...** have an LED for function indication and as a setup aid. The recovery diode for switching an inductive load is already integrated. For sensing the piston position in pneumatic cylinders you can choose between electronic and mechanical cylinder switches. Select whichever one fits your application. We'll be glad to help you.

Can be installed in T-slot cylinder without mounting bracket e.g. Festo: ADVU, ADN, DRQ, DGP; SMC; Bosch. When using reed switches you should verify functionality on the pneumatic cylinder by means of pre-testing.

Series	BMF 307	BMF 307

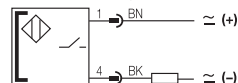


AC NO / DC NO polarized	BMF 307K-R-AS-L-3-S49-00,2	BMF 307K-R-AS-L-3-03
Sensed medium	Magnetic field	Magnetic field
Turn-on delay	≤ 0.7 ms	≤ 0.7 ms
Turn-off delay	≤ 0.2 ms	≤ 0.2 ms
Supply voltage U_B	4...30 V AC/DC	4...30 V AC/DC
Switching capacity max. reed contact	10 W	10 W
Rated operational current I_B	128 mA at 24 V AC/DC	128 mA at 24 V AC/DC
Minimum operating current I_m	3 mA	3 mA
Polarity reversal protected	no	no
Short circuit protected	no	no
Ambient temperature range T_a	-20...+70 °C	-20...+70 °C
Utilization category	AC 12/DC 12	AC 12/DC 12
Degree of protection per IEC 60529	IP 65	IP 65
Housing material	LCP	LCP
Connection	0.2 m cable (PUR) with connector	3 m cable, PVC
No. of wires × cross-section		2×0.14 mm ²
Recommended connector	BKS- 48	

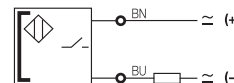


Wiring diagrams

Connector example BKS-48-1- _ _



Cable



Connect to ground on controller side!

**BMF 307-HW-73 -115
BMF 307-HW-73 -255**

"Well saddled!
BMT T-slot sensors on round cylinders!"
Mounting brackets suitable for BMF 307 and BMF 315

Piston Ø	Mounting bracket
8...25	BMF 307-HW-73-115
25...63	BMF 307-HW-73-255

