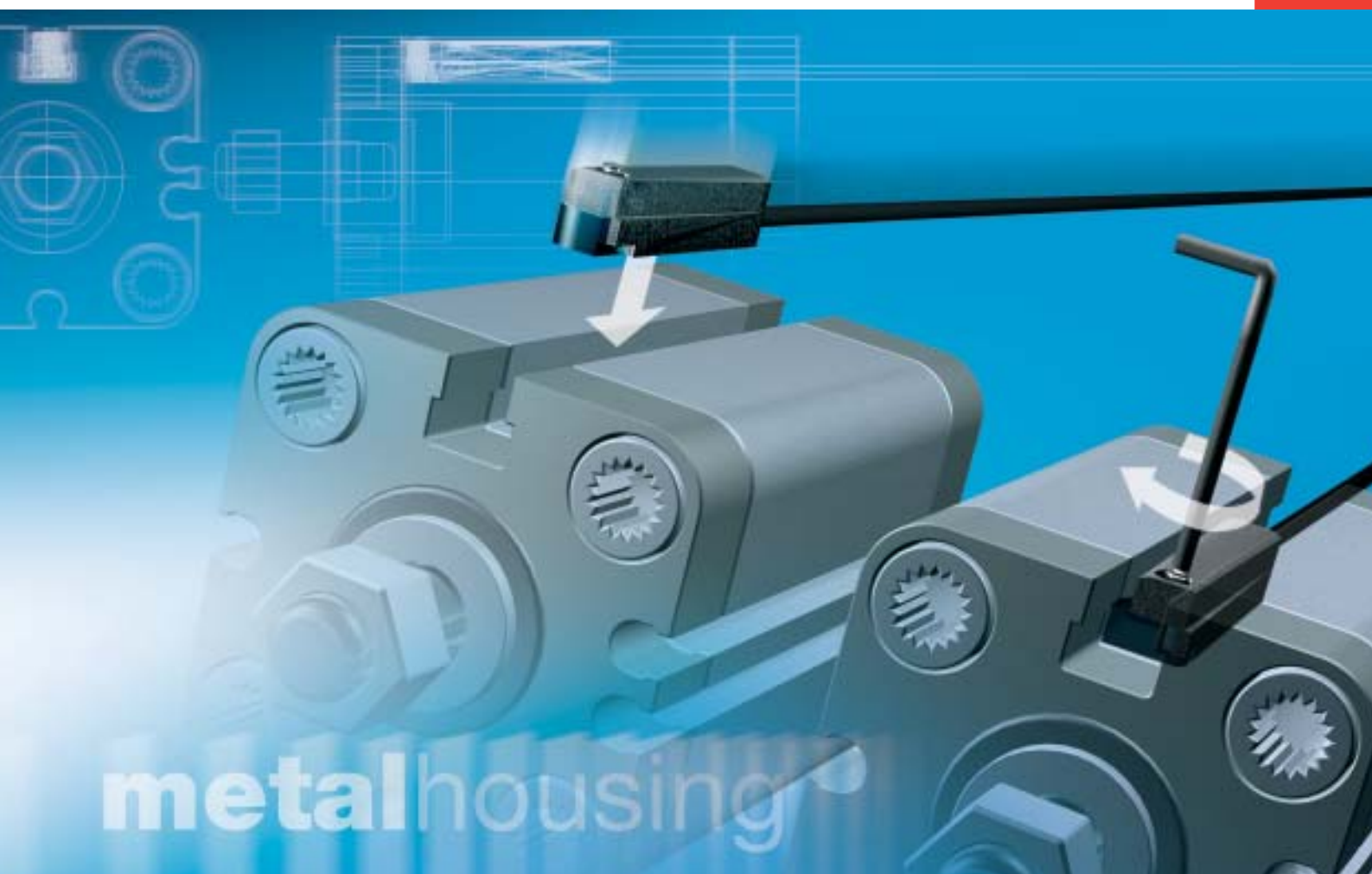


BALLUFF

Sensors for Pneumatic Cylinders BMF 315M
... in weld-immune or high-temperature applications



metal housing

BMF 315M – the first choice for pneumatic cylinders with T-slot

The T-slot has now become established as the standard slot type for pneumatic cylinders.

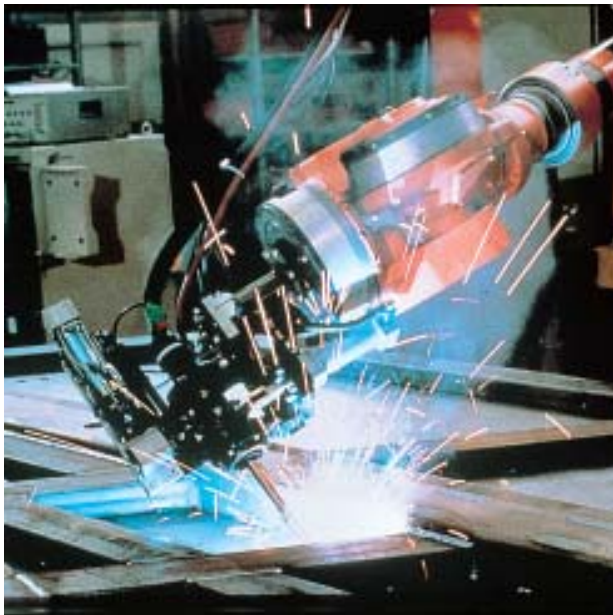
To shorten assembly time, the ability install from above is increasingly demanded.

The BMF 315M meets every requirement and stands out with its reliable switching characteristics and functional reserve.

For especially demanding applications you can choose between **weld immune** or **temperature rated** versions.

Advantages

- Proven electronics from the BMF line of sensors
- Can be installed in the T-slot from above
- Rugged, compact, low-profile housing
- Aluminum housing
- Extremely reliable switching behavior



Series
Type



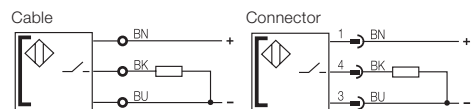
PNP	Normally-open
Rated operating field strength H _n	
Assured operating field strength H _a	
Noise field strength max.	
Noise field frequency	
Hysteresis of H _n	
Temperature drift of turn-on point of H _n	
On delay	
Off delay	
Supply voltage U _B	
Voltage drop U _d	
Rated insulation voltage U _i	
Rated operational current I _o	
No-load supply current I _o max.	
Off-state current I _r	
Protected against polarity reversal	
Short circuit protected	
Load capacity	
Ambient temperature range T _a	
Utilization category	
Degree of protection per IEC 60529	
Housing material	
Connection	
No. of wires × conductor cross section	
Approvals	
Recommended connector	

Please add the cable length to the ordering code for sensors with **cable!**
Standard length 3 m = 03

Please add the cable length to the ordering code for sensors with **cable and connector!**
Standard length 0.2 m = 00,2

Wiring diagrams

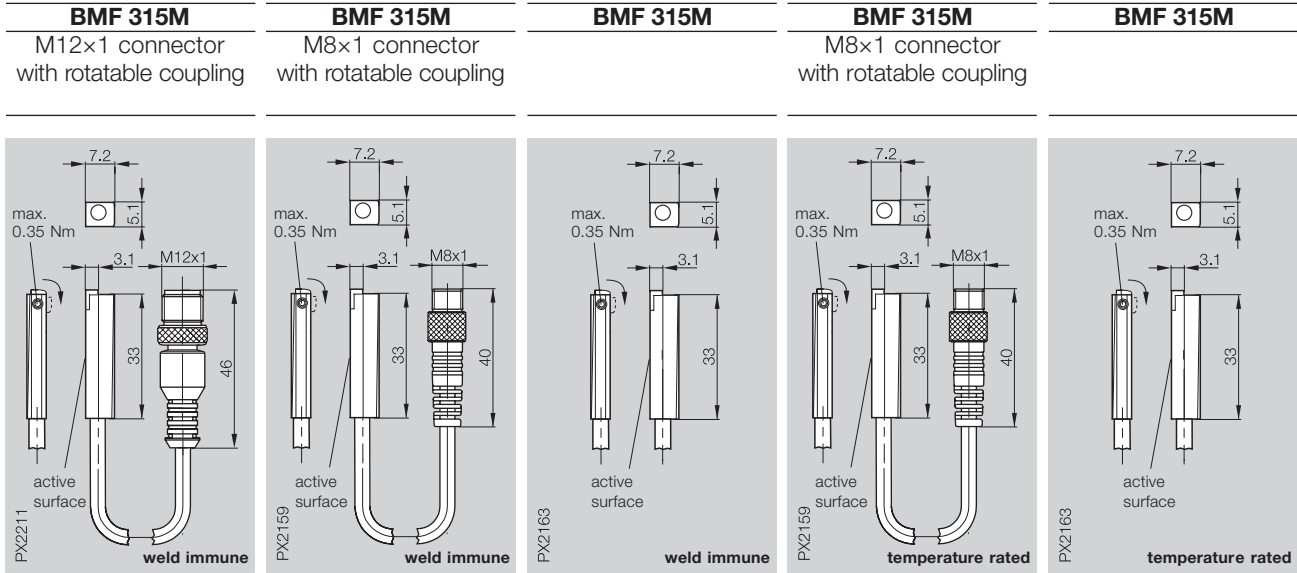
Normally-open



... für T-slot

Sensors for Pneumatic Cylinders

BMF 315M for welding applications or use up to 105 °C

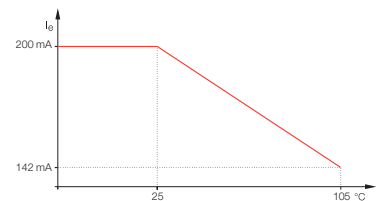


BMF 315M-PS-W-2-S04-	BMF 315M-PS-W-2-S49-	BMF 315M-PS-W-2-PU-	BMF 315M-PS-D-2-SA3-S49-	BMF 315M-PS-D-2-SA3-PU-
----------------------	----------------------	---------------------	--------------------------	-------------------------

1.2 kA/m	1.2 kA/m	1.2 kA/m	1.2 kA/m	1.2 kA/m
≥ 2 kA/m	≥ 2 kA/m	≥ 2 kA/m	≥ 2 kA/m	≥ 2 kA/m
200 kA/m	200 kA/m	200 kA/m		
50...60 Hz	50...60 Hz	50...60 Hz		
≤ 45 %	≤ 45 %	≤ 45 %	≤ 45 %	≤ 45 %
≤ 0.3 %/°C	≤ 0.3 %/°C	≤ 0.3 %/°C	≤ 0.3 %/°C	≤ 0.3 %/°C
≤ 50 ms	≤ 50 ms	≤ 50 ms	≤ 0.05 ms	≤ 0.05 ms
≤ 50 ms	≤ 50 ms	≤ 50 ms	≤ 0.05 ms	≤ 0.05 ms
10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC
≤ 4 V	≤ 4 V	≤ 4 V	≤ 3.1 V	≤ 3.1 V
75 V DC	75 V DC	75 V DC	75 V DC	75 V DC
200 mA	200 mA	200 mA	200 mA*	200 mA*
≤ 20 mA	≤ 20 mA	≤ 20 mA	≤ 15 mA	≤ 15 mA
≤ 80 µA	≤ 80 µA	≤ 80 µA	≤ 80 µA	≤ 80 µA
yes	yes	yes	yes	yes
yes	yes	yes	yes	yes
≤ 1 µF	≤ 1 µF	≤ 1 µF	≤ 1 µF	≤ 1 µF
-25...+70 °C	-25...+70 °C	-25...+70 °C	-25...+105 °C	-25...+105 °C
DC 13	DC 13	DC 13	DC 13	DC 13
IP 67	IP 67	IP 67	IP 67	IP 67
Al	Al	Al	Al	Al
cable with connector, PUR	cable with connector, PUR	cable, PUR 3x0.1 mm ²	cable with connector, PUR	cable, PUR 3x0.1 mm ²
cULus BKS-B/S 19	cULus BKS-B/S 48	cULus	cULus BKS-B/S 48	cULus

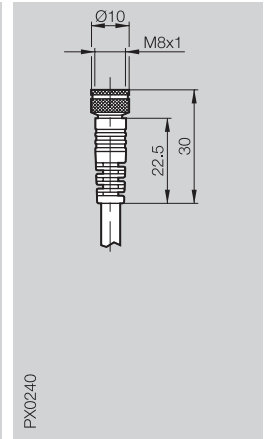
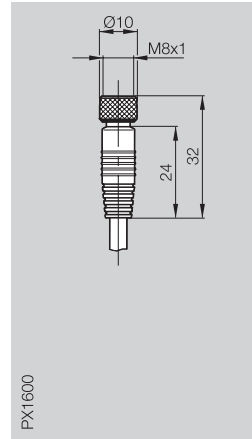
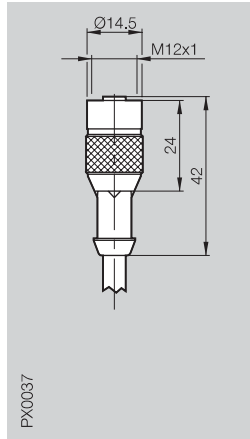
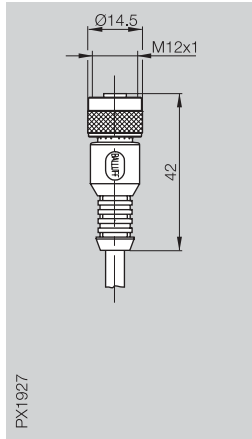


*Temperature load curve



Connectors

Connector Type	BKS-B 19 straight female	BKS-S 19 straight female	BKS-B 48 straight female	BKS-S 48 straight female
Application	S 4 sensors	S 4 sensors	S 4 sensors	S 4 sensors



no LED, NO	BKS-B 19-1-__	BKS-S 19-1-__	BKS-B 48-1-__	BKS-S 48-__
no LED, NO or NC				
with LED, NO PNP	BKS-B 19-4-__	BKS-S 19-4-__		
Manufacturer	Balluff	Lumberg	Balluff	Lumberg
Supply voltage U_B	10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC
Cable	molded-on PVC/PUR	molded-on PVC/PUR	molded-on PVC/PUR	molded-on PVC/PUR
No. of wires × cross-section	3×0.34 mm ²	3×0.34 mm ²	3×0.25 mm ²	3×0.34 mm ²
Degree of protection IEC 60529	IP 67	IP 68 per BWN Pr. 20	IP 67	IP 67
Ambient temperature range T_a	-25...+85 °C	-25...+70 °C	-20...+85 °C	-25...+90 °C

For **connectors** please append cable material and length to ordering code!
PVC, standard length 3 m = 03
PUR, standard length 3 m = PU-03

Connector
BKS- 48



Connector
BKS- 19



For more sensors see main catalog "The Sensor Line" on CD-ROM or online!



www.balluff.com

Balluff GmbH
Schurwaldstrasse 9
73765 Neuhausen a.d.F.
Germany
Phone +49 (0) 71 58/1 73-0
Fax +49 (0) 71 58/50 10
E-Mail: balluff@balluff.de