

Compact from above directly in T-slot

Sensors for Pneumatic Cylinders

BMF 315K

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

The T-slot has established itself over the past years as the standard for pneumatic cylinders.

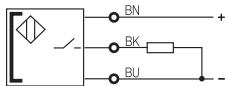
Advantages

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

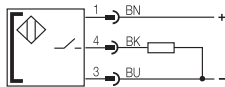
Wiring diagrams

NO

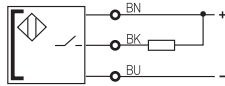
PNP/cable



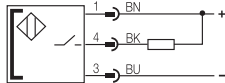
PNP/connector



NPN/cable

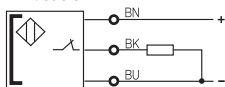


NPN/connector

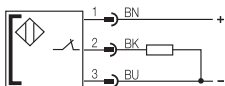


NC

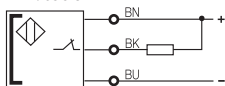
PNP/cable



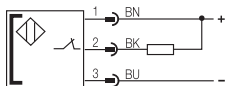
PNP/connector



NPN/cable



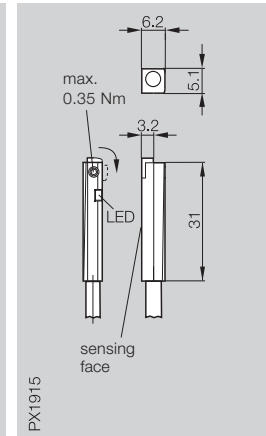
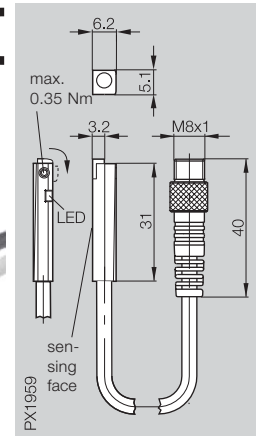
NPN/connector



| | |
|--------|---|
| Series | BMF 315K |
| Type | Connector M8x1 with rotatable union nut |

| |
|---|
| BMF 315K |
| Connector M8x1 with rotatable union nut |

| |
|---|
| BMF 315K |
| Connector M8x1 with rotatable union nut |



| | | | |
|-----|----|------------------------------|-----------------------|
| PNP | NO | BMF 315K-PS-C-2-SA2-S49-00,2 | BMF 315K-PS-C-2-PU-02 |
| | NC | BMF 315K-PO-C-2-SA2-S49-00,2 | BMF 315K-PO-C-2-PU-02 |

| | |
|------------------------------|-----------------------|
| BMF 315K-PS-C-2-SA2-S49-00,2 | BMF 315K-PS-C-2-PU-02 |
| BMF 315K-PO-C-2-SA2-S49-00,2 | BMF 315K-PO-C-2-PU-02 |

| | |
|-----------------------|-----------------------|
| BMF 315K-PS-C-2-PU-02 | BMF 315K-PO-C-2-PU-02 |
| BMF 315K-PO-C-2-PU-02 | BMF 315K-PO-C-2-PU-02 |

| | | | |
|-----|----|------------------------------|-----------------------|
| NPN | NO | BMF 315K-NS-C-2-SA2-S49-00,2 | BMF 315K-NS-C-2-PU-02 |
| | NC | BMF 315K-NO-C-2-SA2-S49-00,2 | BMF 315K-NO-C-2-PU-02 |

| | |
|------------------------------|-----------------------|
| BMF 315K-NS-C-2-SA2-S49-00,2 | BMF 315K-NS-C-2-PU-02 |
| BMF 315K-NO-C-2-SA2-S49-00,2 | BMF 315K-NO-C-2-PU-02 |

| | |
|-----------------------|-----------------------|
| BMF 315K-NS-C-2-PU-02 | BMF 315K-NO-C-2-PU-02 |
| BMF 315K-NO-C-2-PU-02 | BMF 315K-NO-C-2-PU-02 |

| | | |
|---|----------------------------------|---------------|
| Rated operating field strength H _n | 1.2 kA/m | 1.2 kA/m |
| Assured operating field strength H _a | ≥ 2 kA/m | ≥ 2 kA/m |
| Hysteresis of H _n | ≤ 45 % | ≤ 45 % |
| Temperature drift of turn-on point of 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. | ≤ 15 mA | ≤ 15 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 | PA 66 | PA 66 |
| Connection | 0.2 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.



3.1

Connectors selection guide page 3.0.7 ...

5

Connectors ... page 5.2 ...



BMF 307-HW-73 -115
BMF 307-HW-73 -255
Mounting brackets suitable for BMF 307 and BMF 315

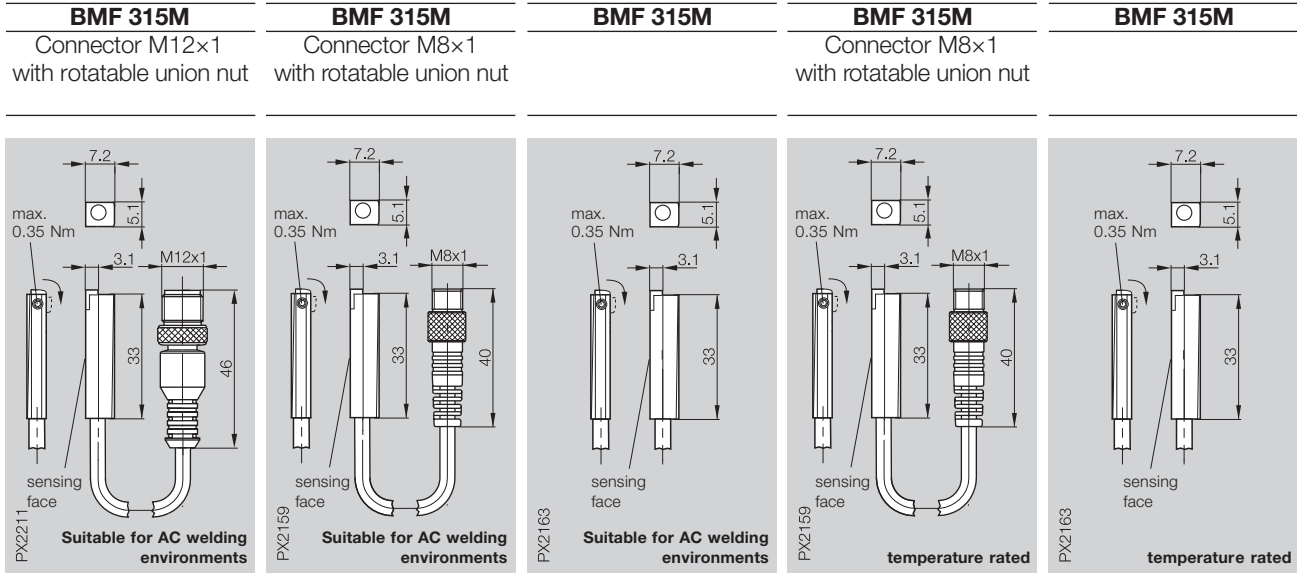


Please order accessories separately see page 5.74

from above directly in T-slot

Sensors for Pneumatic Cylinders

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



BMF 315M-PS-W-2-S04-00,3 BMF 315M-PS-W-2-S49-00,3 BMF 315M-PS-W-2-PU-02 BMF 315M-PS-D-2-SA3-S49-00,3 BMF 315M-PS-D-2-SA3-PU-02

| | | | | |
|----------------------------------|----------------------------------|--------------------------------|----------------------------------|--------------------------------|
| 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 |
| yes | yes | yes | yes | yes |
| yes | yes | yes | yes | yes |
| -25...+85 °C | -25...+85 °C | -25...+85 °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 |
| 0.3 m cable (PUR) with connector | 0.3 m cable (PUR) with connector | 2 m Cable PUR | 0.3 m cable (PUR) with connector | 2 m Cable PUR |
| cULus | cULus | 3x0.1 mm ² cULus | cULus | 3x0.1 mm ² cULus |
| BKS- 19 | BKS- 48 | | BKS- 48 | |



3.1

Connectors selection
guide
page 3.0.7 ...

5

Connectors ...
page 5.2 ...

