uprox®

inductive sensor

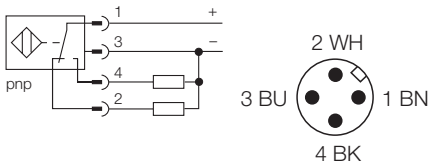
Bi5U-MT18M-VP4X-H1141

TURCK
Industrial Automation

Type	Bi5U-MT18M-VP4X-H1141
Ident-No.	1581256
Rated operating distance Sn	5 mm
Assured switching distance	≤ (0,81 x Sn) mm
Repetition accuracy	≤ 2 %
Temperature drift	≤ ± 10 % ≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
Hysteresis	3... 15 %
ambient temperature	-30 ... + 85 °C
Operating voltage	10... 65 V DC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage dip at I_e	≤ 1.8 V
Wire breakage / reverse polarity protection	yes / complete
Output function	4-wire, change-over, pnp
Insulation class	⧈
Switching frequency	≤ 2.5 kHz
Connection	connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Protection degree	IP67

- **factor 1 for all metals**
- **magnetic field immune**
- **extended temperature range**
- **high switching frequency**
- **4-wire DC, 10..0.65 VDC**
- **change-over, pnp output**
- **connector, M12 x 1**

Wiring diagram



Function principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. Due to a ferrite-less 3-coil system, uprox factor 1 sensors have distinct advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

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