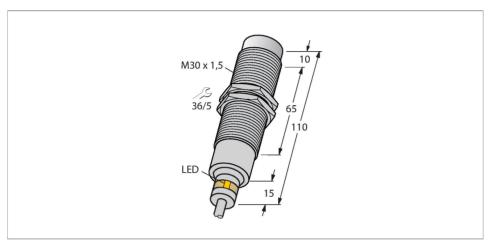


# NI15-EM30D-VP6X/S120 Inductive Sensor – For Harsh Environments and Temperatures up to 120°C



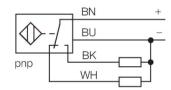
#### Technical data

Туре	NI15-EM30D-VP6X/S120
ID no.	4617410
Special version	S120 corresponds to: Maximum ambient temperature = 120 °C
Rated switching distance	15 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ± 10 %
	≤ ± 20 %, ≥ +70 °C
Hysteresis	315 %
Ambient temperature	-25+120 °C
Operating voltage	1030 VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
DC rated operational current	≤ 200 mA
Rated operational current	See derating curve
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I <sub>e</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete

#### **Features**

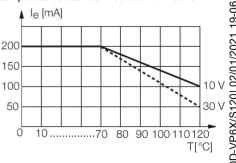
- ■Threaded barrel, M30 x 1.5
- Stainless steel, 1.4571
- ■Viton sealing ring
- Protection class IP68/IP69K
- ■For temperatures up to +120 °C
- ■PTFE front cap
- Climate-proof
- Resistance to cooling lubricants, cutting and grinding oils
- Suitable for applications in the food industry
- ■DC 4-wire, 10...30 VDC
- Changeover contact, PNP output
- Cable connection

### Wiring diagram



### Functional principle

TURCK offers leak-proof sensors for the food industry and machine engineering that are resistant to cleaning agents, cooling lubricants, cutting and grinding oils. They are made for rough environmental conditions and not only meet but even exceed the requirements of the protection classes IP68 and IP69. Special versions are available for ambient temperatures between -60°C and +250°C.



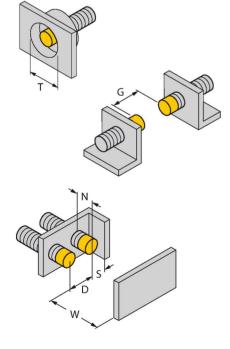


## Technical data

Output function	4-wire, Complementary contact, PNP
Switching frequency	0.1 kHz
Design	Threaded barrel, M30 × 1.5
Dimensions	110 mm
Housing material	Stainless steel, 1.4571 (AISI 316Ti)
Active area material	Plastic, PTFE
End cap	Plastic, PTFE
Admissible pressure on front cap	≤ 10 bar
Max. tightening torque of housing nut	75 Nm
Electrical connection	Cable
Cable quality	Ø 3.7 mm, PTFE, FEP, 2 m
Core cross-section	4 x 0.25 mm²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68 IP69K
Switching state	LED, Yellow

# Mounting instructions

#### Mounting instructions/Description

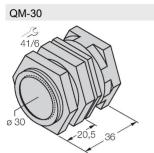


Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	20 mm
Diameter active area B	Ø 30 mm



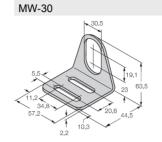
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### Accessories



Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

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Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)