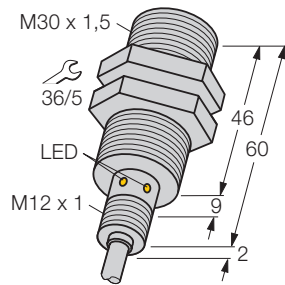
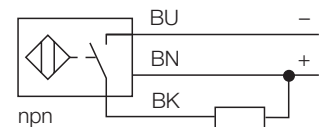


## Inductive sensor for harsh environmental conditions Bi12-EM30WD-AN6X



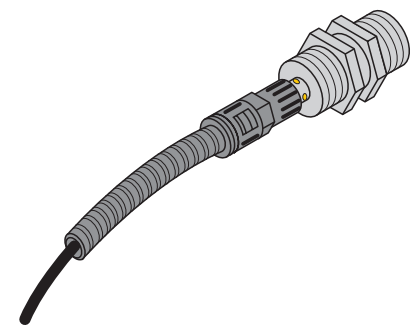
- threaded barrel, M30 x 1,5
- stainless steel, 1.4301
- degree of protection IP68 - IP69K
- front cap made of PVDF
- resistant to cleaning agents
- resistant to cooling lubricants, cutting and grinding oils
- Viton O-ring seal
- suited for applications in the food industry
- 3-wire DC, 10...30 VDC
- normally open npn output
- cable connection

### Wiring diagram



### Function principles

TURCK offers fully impermeable sensors with resistance to cleaning agents, cooling lubricants and cutting and grinding oils for application in the food industry and machine engineering. TURCK's inductive sensors for extremely hostile industrial environments not only meet, but even exceed the requirements of protection degree IP68 and IP69. These robust sensors are securely protected by means of a PVDF front cap, a special Viton seal and a stainless steel housing.



<b>Type</b>	Bi12-EM30WD-AN6X
Ident-No.	4614543
<b>Rated operating distance <math>S_n</math></b>	12 mm
Mounting mode	flush
Hysteresis (switching distance)	3... 15 %
Min. repeat accuracy	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Operating temperature	-25 ... + 85 °C
<b>Rated operational voltage (DC) <math>U_B</math></b>	10... 30 VDC
Max. ripple	$\leq 10 \%$ $U_{pp}$
Rated operational current (DC) $I_e$	$\leq 200$ mA
No-load current $I_0$	$\leq 15$ mA
Max. OFF-state current	$\leq 0,1$ mA
Max. switching frequency	$\leq 1$ kHz
Rated insulation voltage	$\leq 0,5$ kV
Output function	3-wire, normally open, NPN
Short-circuit protection	yes, cyclic
Max. voltage drop at $I_e$	$\leq 1,8$ V
Wire breakage / reverse polarity protection	yes / complete
<b>Housing style</b>	threaded barrel; M30 x 1,5
Dimensions	66 mm
Housing material	metal, A2 1.4301 (AISI 304)
Active face	plastic, PVDF
Rated pressure on frontcap	$\leq 10$ bar
Max. fixing torque of coupling nut	100 Nm
Wiring	cable
Cable	$\varnothing 5,2$ , LifYY, PVC, 2 m
Cable cross section	3 x 0,34 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP68 - IP69K
<b>Switching status indication</b>	LED yellow

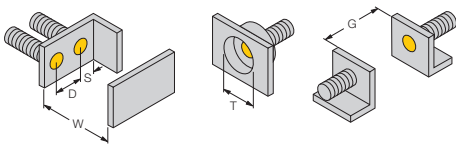
## Inductive sensor for harsh environmental conditions Bi12-EM30WD-AN6X

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Mounting instructions	minimum gap
Gap D	2 x B
Gap W	3 x Sn
Gap T	3 x B
Gap S	1,5 x B
Gap G	6 x Sn

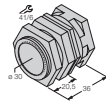
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**Diameter of active face B**                       $\varnothing$  30 mm



## Inductive sensor for harsh environmental conditions Bi12-EM30WD-AN6X

### Accessories

Typ	Ident-No.	Description	Dimension drawing
QM-30	6945103	quick-mount fixing clamp with dead-stop; material: chrome-plated brass external thread M36 x 1,5.	
BST-30B	6947216	fixing clamp with dead-stop; material: PA6	