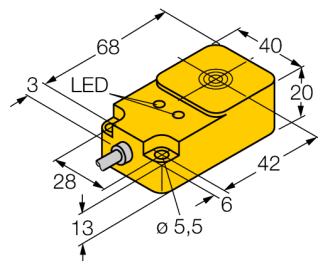


Inductive sensor

Bi15-Q20-ADZ32X2

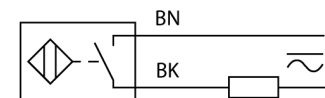
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- Rectangular, height 20 mm
- Active face on top
- Plastic, PBT-GF30-V0
- AC 2-wire, 20...250 VAC
- DC 2-wire, 10...300 VDC
- NO contact
- Cable connection

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Type	Bi15-Q20-ADZ32X2
Ident-No.	4256250
Ident-No (TUSA)	M4256250
Rated operating distance Sn	15 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	$\leq 2\%$
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	20...250 VAC
Operating voltage	10...300VDC
AC rated operational current	≤ 100 mA
DC rated operational current	≤ 100 mA
Frequency	$\geq 50... \leq 60$ Hz
Residual current	≤ 1.7 mA
Rated insulation voltage	≤ 1.5 kV
Surge current	≤ 1 A (≤ 10 ms max. 5 Hz)
Short-circuit protection	yes/ latching
Voltage drop at I_n	≤ 6 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	2-wire, NO contact
Smallest operating current I_m	≤ 3 mA
Switching frequency	0.02 kHz
Design	rectangular, Q20
Dimensions	68x 40x 20 mm
Housing material	Plastic, PBT-GF30-V0
Connection	cable
Cable quality	5.2 mm, grey, LifYY-11Y, PUR, 2 m
Cable cross section	2 x 0.34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Operating voltage	LED green
Switching state	LED red

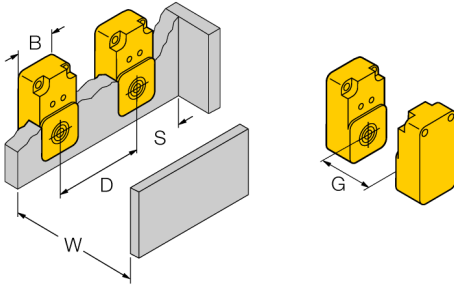
Inductive sensor Bi15-Q20-ADZ32X2

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Mounting instructions	minimum distances
Distance D	1.5 x B
Distance W	3 x Sn
Distance S	1 x B
Distance G	6 x Sn

Width of the active face B	40 mm
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**Inductive sensor
Bi15-Q20-ADZ32X2**



Accessories

Type code	Ident-No.		Dimension drawing
MH-Q20MONTAGEHÜLSEN	6950010	Mounted with active face downwards, for Q20	
MW-Q14/Q20	6945006	Mounting bracket for rectangular Q14 or Q20; material VA 1.4301	