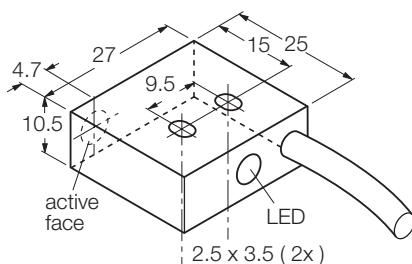


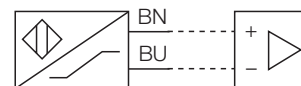
Inductive sensor

Bi2-Q11S-Y1X



- rectangular, height 11mm
- side active face
- plastic, PBT-GF30-V0
- 2-wire DC, nom. 8.2 VDC
- output according to DIN EN 60947-5-6 (NAMUR)
- cable connection

Wiring diagram



Function principles

Inductive proximity switches are designed for wear-free non-contact detection of metal objects. For this they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Type	Bi2-Q11S-Y1X
Ident-No.	4012131
Rated operating distance S_n	2 mm
Mounting mode	flush
Hysteresis (switching distance)	1... 10 %
Min. repeat accuracy	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Operating temperature	-25 ... + 70 °C
Voltage	nom. 8,2 VDC
Current consumption (off-state)	$\geq 2,1 \text{ mA}$
Current consumption (on-state)	$\leq 1,2 \text{ mA}$
Max. switching frequency	$\leq 1 \text{ kHz}$
Output function	2-wire, NAMUR
Approval according to	KEMA 02 ATEX 1090X
Internal inductivity (L_i) / capacitance (C_i)	150 nF / 150 μH *
Marking of device	* Value for pre-fixed cable up to 30m (Ex) II 2 G EEx ia IIC T6 (max. $U_i = 15 \text{ V}$, $I_i = 60 \text{ mA}$, $P_i = 200 \text{ mW}$)
Housing style	rectangular; Q11S
Dimensions	25 x 27 x 10,5 mm
Housing material	plastic, PBT-GF30-V0
Active face	plastic, PBT-GF30-V0
Wiring	cable
Cable	$\varnothing 5,2$, LifYY, PVC, 2 m
Cable cross section	2 x 0,34 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67
Switching status indication	LED yellow

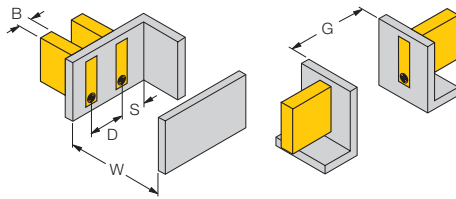
Inductive sensor

Bi2-Q11S-Y1X

Mounting instructions

	minimum gap
Gap D	$2 \times B$
Gap W	$3 \times S_n$
Gap S	$1 \times B$
Gap G	$6 \times S_n$

Width of active face B10,5 mm



Inductive sensor

Bi2-Q11S-Y1X

Accessories

Typ	Ident-No.	Description	Dimension drawing
IM1-22EX-R/24VDC	7541210	Isolating switching amplifier, two channels; input for NAMUR signals; optional wire-break and short-circuit monitoring function; selectable normally open or normally closed performance; removeable terminal blocks; 18 mm wide; supply voltage 24 VDC; further isolating switching amplifiers in our "Interface Technology" catalogue.	