

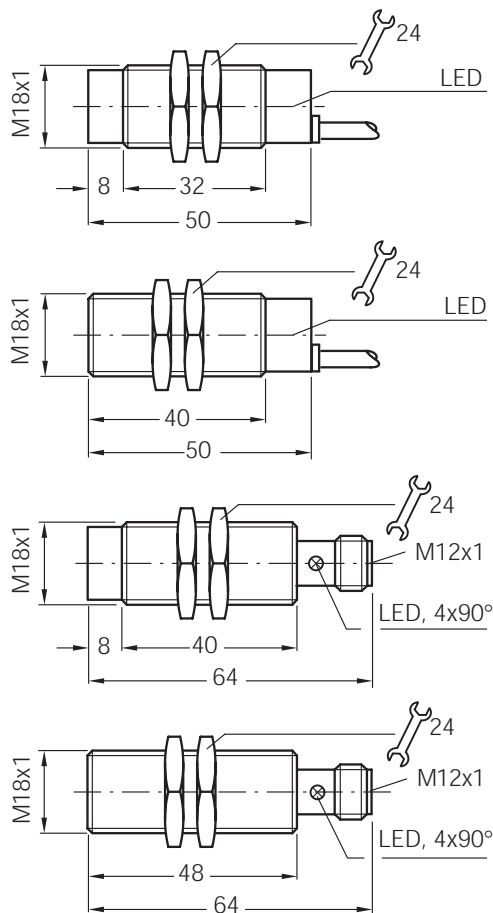


Inductive proximity sensors

IM 18 series, sensing range 5 / 8 mm

DC 2-wire, metal housing

Dimensions in mm



Features

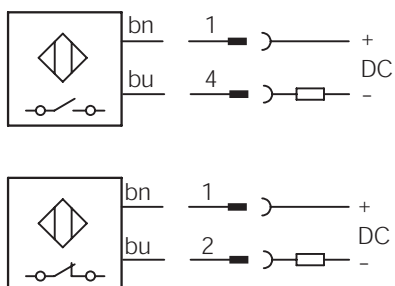


- Can be installed flush or non-flush in metal
- Normally open function
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Cable or connector
- Enclosure rating IP 67
- LED-status indicator

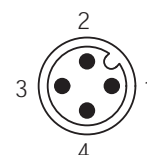
Accessories

Round connector
Mounting bracket

Connection diagram



Wire colour	Contact	Assignment
bn brown	1	+ V DC
bu blue	2/4	- V DC



Electrical and mechanical data

Operating voltage U_b	10 ... 30 V DC	Short-circuit protection (pulsed)	yes
Ripple U_{pp}	$\leq 10\%$	Reverse polarity protection	yes
Voltage drop U_d (at I_a max)	≤ 2.8 V	Enclosure rating to EN 60529	IP 67
Load current	≥ 3 mA	Shock and vibration stress	30 g, 11 ms 10 bis 55 Hz, 1 mm
Continuous current I_a	≤ 100 mA	Ambient temperature T_a	- 25 ... + 70 °C
Off state current	≤ 0.8 mA	Housing material	Brass nickel-plated, plastic
Time delay before availability t_v	≤ 50 ms	Tightening torque	30 Nm
Hysteresis H	2% - 10% of s_r	Connection cable	PVC, 2 x 0.34 mm ²
Repeatability R (U_b and T_a constant)	$\leq 2\%$ of s_r		
Temperature drift	$\pm 10\%$ of s_r		
EMC	to EN 60 947-5-2		

Selection table

Sensing range s_n mm	Installation in metall	Output function	Switching frequency f in Hz	Connection	Type	Order number
5			300	Cable 2 m	IM18-05BDS-ZW1	6020318
5			300	Connector M12 x 1 mm	IM18-05BDS-ZC1	6020320
8			300	Cable 2 m	IM18-08NDS-ZW1	6020322
8			300	Connector M12 x 1 mm	IM18-08NDS-ZC1	6020324

Normally closed function available on request