

Magnetic proximity sensors

MM 08 series, sensing range 60 mm

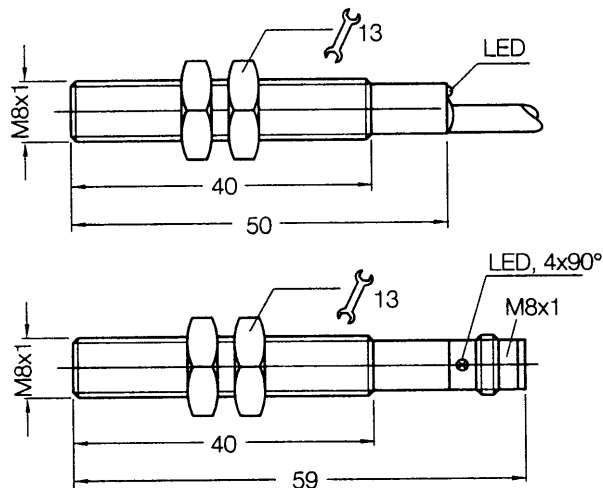
DC 3-wire, metal housing

Dimensions in mm

Features



- Can be installed flush and non-flush in metal
- Sensing range up to 60 mm
- PNP or NPN output
- High switching frequency
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M8 x 1 mm
- Cable or connector
- Enclosure rating IP 67
- LED status indicator

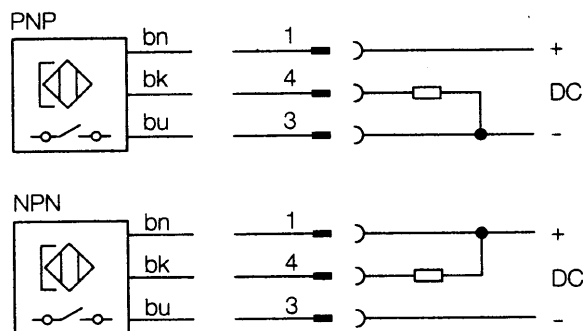


Accessories

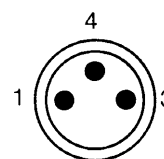
Round connectors

Magnets

Connection diagram



Wire colour		Contact	Assignment
bn	brown	1	+ V DC
bk	black	4	NO
bu	blue	3	- V DC



Electrical and mechanical data

Operating voltage U_b	10 ... 30 V DC	Wire-break protection	yes
Ripple U_{pp}	$\leq 10\%$ of U_b	Short-circuit protection	yes
Voltage drop U_d (at I_a max.)	≤ 1.5 V	Reverse polarity protection	yes
Power consumption (without load)	≤ 10 mA	Power-up pulse suppression	yes
Continuous current I_a	≤ 300 mA	Enclosure rating to EN 60529	IP 67
Time delay before availability t_v	≤ 2 ms	Shock and vibration stress	30 g, 11 ms 10 to 55 Hz, 1 mm
Hysteresis H	1% - 10% of s_r	Ambient temperature T_a	- 25 ... + 75 °C
Repeatability R (U_b and T_a constant)	$\leq 1\%$ of s_r	Housing material	Brass, nickel-plated, plastic
Temperature drift	$\pm 10\%$ of s_r	Tightening torque	0.8 Nm (with plastic nuts, included in package) 2.0 Nm (with metal nuts)
EMC	to EN 60 947-5-2	Connection cable	PUR-PVC, 3 x 0.25 mm ²

Selection table

Sensing range s_n^* mm	Magnetic alignment	Switching output	Output function	Switching frequency f in Hz	Connection	Type	Order number
60	Axial	PNP		5000	Cable 2 m	MM08-60APS-ZU0	7900264
60	Axial	PNP		5000	Connector M8 x 1 mm	MM08-60APS-ZT0	7900266

* Sensing range s_n based on installation in non-magnetizable material using magnet M 4.0

Output NPN on request

Sensing ranges (Typical values)

Magnet type	Sensing range s_n Any installation type (flush or non-flush) in non-magnetizable material	Sensing range s_n Flush installation in magnetizable material (e.g. iron)
M 1.0	23 mm	12 mm
M 2.0	24 mm	10 mm
M 3.0	36 mm	15 mm
M 4.0	60 mm	20 mm
M 5.0 / 5.1	68 mm	25 mm