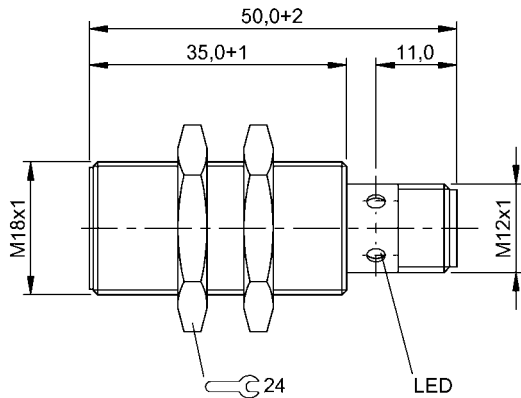


Inductive Sensors

BES M18MF1-PSC50A-S04G-W01

Order Code: BES02KA

BALLUFF



Display/Operation

Power indicator no

Electrical connection

Connection M12x1-Male, 4-pin, A-coded
Polarity reversal protected yes
Protection against device mix-ups yes
Short-circuit protection yes

Electrical data

Load capacitance max. at U_e 1 μ F
Magnetic field strength, interference field 100 kA/m
Min. operating current I_m 0 mA
No-load current I_o max., damped 15 mA
No-load current I_o max., undamped 10 mA
Operating voltage U_b 10...30 VDC
Protection class II
Rated insulation voltage U_i 250 V AC
Rated operating current I_e 200 mA
Rated operating voltage U_e DC 24 V
Rated short circuit current 100 A
Ready delay t_v max. 15 ms
Residual current I_r max. 80 μ A
Ripple max. (% of U_e) 10 %
Switching frequency 2500 Hz
Voltage drop static max. 2.5 V

Environmental conditions

Ambient temperature -25...70 °C
Contamination scale 3
IP rating IP67
Magnetic field immune magnetic field immune (AC/DC)

Interface

Switching output PNP normally open (NO)

Material

Housing material Brass, PTFE coated
Material sensing surface ceramic coated

Mechanical data

Dimension $\varnothing 18 \times 50$ mm
Installation for flush mounting
Mounting length 35.00 mm
Size M18x1

Range/Distance

Assured operating distance S_a 3.9 mm
Hysteresis H max. (% of S_r) 15.0 %
Rated operating distance S_n 5 mm
Real switching distance s_r 5 mm
Repeat accuracy max. (% of S_r) 5.0 %
Temperature drift max. (% of S_r) 10 %
Tolerance S_r ± 10 %

Connector Drawings



Wiring Diagrams

