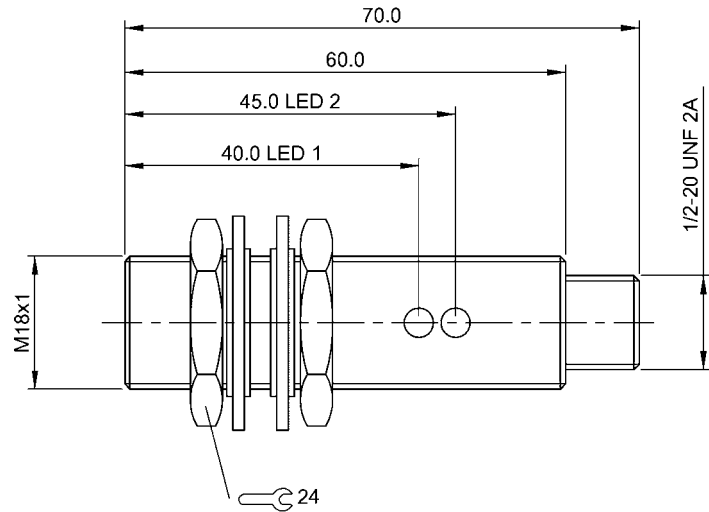


Inductive Sensors
BES M18MN-USU80B-S21G
 Order Code: BES02ZE

BALLUFF



Basic features

Approval/Conformity	CE cULus WEEE
Basic standard	IEC 60947-5-2

Display/Operation

Function indicator	yes
Power indicator	yes

Electrical connection

Connection	1/2"-20 UNF-2A-Male, 3-pin
Polarity reversal protected	not relevant
Protection against device mix-ups	no
Short-circuit protection	yes

Electrical data

Min. operating current I_m	4 mA
Operating voltage U_b	20...300 VDC/20...250 VAC
Rated insulation voltage U_i	250 V AC
Rated operating current I_e	300 mA
Rated operating voltage U_e AC	110 V
Rated short circuit current	100 A
Residual current I_r max.	800 μ A
Switching frequency	30 Hz
Utilization category	AC-140 DC -13
Voltage drop static max.	8 V

Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g_n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Interface

Switching output	normally open (NO)
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Material

Housing material	Brass, nickel-plated
Material sensing surface	PBT

Mechanical data

Dimension	$\varnothing$ 18 x 70 mm
Installation	for flush mounting
Mounting length	60.00 mm
Size	M18x1
Tightening torque	30 Nm

Range/Distance

Assured operating distance S_a	6.4 mm
Hysteresis H max. (% of S_r)	15.0 %
Rated operating distance S_n	8 mm
Real switching distance s_r	8 mm
Switching distance marking	■
Tolerance S_r	± 10 %

Remarks

LED 1: Function
LED 2: Operating voltage

Connector Drawings



Wiring Diagrams

