

1) Teach-In button, 2) Sensing surface, 3) Output 1 active, 4) Output 2 active, 5) LED Power, 6) Null point



Basic features

Application	Pneumatic cylinder with T-slot. For dimensions, see sketch in product view.
Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Not incl. in scope of delivery	Offset screwdriver
Principle of operation	Magnetic field sensor
Scope of delivery	Cable clip for T-slot
Teach function	2 switching points

Display/Operation

Function indicator	yes
Power indicator	yes

Electrical connection

Cable	PUR, 865 mm
Cable diameter D	2.40 mm
Conductor cross-section	0.07 mm ²
Number of conductors	4
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.02 µF
No-load current I_o max., undamped	10 mA
Operating voltage U_b	10...30 VDC
Rated insulation voltage U_i	75 V DC
Rated operating current I_e	100 mA
Rated operating voltage U_e DC	24 V
Rated short circuit current	100 A
Residual current I_r max.	10 µA
Ripple max. (% of U_e)	15 %
Turn-off delay t_{off} max.	25 ms
Turn-on delay t_{on} max.	25 ms
Utilization category	DC -13
Voltage drop static max.	1.5 V

Environmental conditions

Ambient temperature	-25...80 °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
ESD	2A (4 kV)
Emission	Group 1, Class B
IP rating	IP67

Functional safety

MTTF (40 °C)	320 a
---------------------	-------

Magnetic Sensors
BMF 235K-H-PS-C-A2-PU-00,87
Order Code: BMF00MK



Interface

Process data cycle min.	2.6 ms
Switching output	PNP normally open (NO)

Material

Clamping screw material	Bronze
Housing material	PA 12
Material jacket	PUR
Material sensing surface	PA 12

Mechanical data

Dimension	23.5 x 6.2 x 5 mm
Mounting part	can be installed in T-slot from above
Tightening torque clamping screw	0.4 Nm

Range/Distance

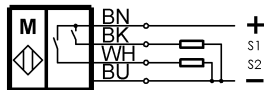
Reproducibility	0.2 mm
Teach range	-30...30 mm
Teach range max.	30 mm
Teach range min.	-30 mm

Remarks

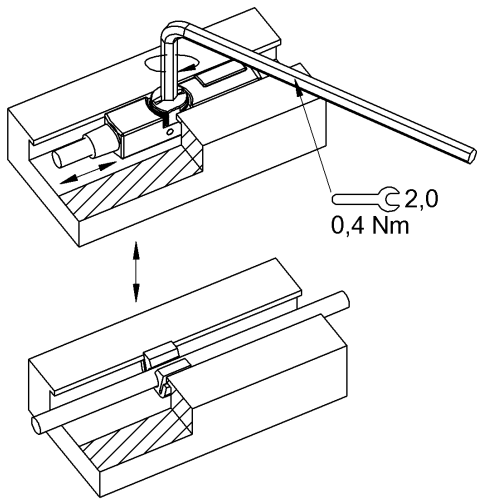
Please refer to manual at balluff.com.
 Effective operating current I_e for thermally coupled installation of operating part on metal.
 Teach-In must be performed only when installed.
 Do not press key using a pointed tool.
 The sensor is functional again after the overload has been eliminated.
 For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

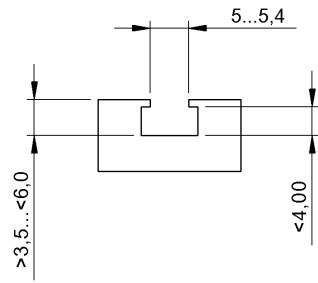
Wiring Diagrams



Help Views



2)



Innensechskantschlüssel 2,0 mm: max.
Anzugsmoment 0,4 Nm
Schraubendreher 4x0,8 mm: max.
Anzugsmoment 0,4 Nm