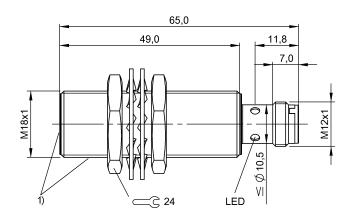
# BES M18EI-PSC72B-S04G-S01

Order Code: BES02NK





### 1) Pressure resistant area









Basic features
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Additional features Approval/Conformity	Housing resistant to weld spatter CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Display/Operation	
Function indicator Power indicator	yes no
Electrical connection	
Connection Polarity reversal protected Protection against device mix-ups Short-circuit protection	M12x1-Male, 4-pin, A-coded yes yes yes

# Electrical data

Min. operating current Im  No-load current Io max., damped 6 mA  No-load current Io max., undamped 2 mA  Operating voltage Ub 1030 VDC  Output resistance Ra 100.0 kOhm  Rated insulation voltage Ui 75 V DC  Rated operating current Ie 200 mA  Rated operating voltage Ue DC 24 V  Rated short circuit current 100 A  Ready delay tv max. 23 ms  Residual current Ir max. 10 µA  Ripple max. (% of Ue) 10 %  Switching frequency 350 Hz  Utilization category Voltage drop static max. 20 mA	Load capacitance max. at Ue	1.0 µF
No-load current Io max., undamped 2 mA  Operating voltage Ub 1030 VDC  Output resistance Ra 100.0 kOhm  Rated insulation voltage Ui 75 V DC  Rated operating current Ie 200 mA  Rated operating voltage Ue DC 24 V  Rated short circuit current 100 A  Ready delay tv max. 23 ms  Residual current Ir max. 10 µA  Ripple max. (% of Ue) 10 %  Switching frequency 350 Hz  Utilization category DC -13	'	'
Operating voltage Ub 1030 VDC Output resistance Ra 100.0 kOhm Rated insulation voltage Ui 75 V DC Rated operating current le 200 mA Rated operating voltage Ue DC 24 V Rated short circuit current 100 A Ready delay tv max. 23 ms Residual current Ir max. 10 µA Ripple max. (% of Ue) 10 % Switching frequency 350 Hz Utilization category DC -13	No-load current Io max., damped	6 mA
Output resistance Ra  Rated insulation voltage Ui  Rated operating current le  Rated operating voltage Ue DC  Rated short circuit current  Ready delay tv max.  Residual current Ir max.  Ripple max. (% of Ue)  Switching frequency  Utilization category  100.0 kOhm  75 V DC  24 V  24 V  23 ms  Round  100 A  100	No-load current lo max., undamped	2 mA
Rated insulation voltage Ui Rated operating current le Rated operating voltage Ue DC Rated short circuit current 100 A Ready delay tv max. Residual current Ir max. Ripple max. (% of Ue) 10 % Switching frequency Utilization category  75 V DC 200 mA 200 mA 200 mA 2100 A	Operating voltage Ub	1030 VDC
Rated operating current le 200 mA Rated operating voltage Ue DC 24 V Rated short circuit current 100 A Ready delay tv max. 23 ms Residual current Ir max. 10 µA Ripple max. (% of Ue) 10 % Switching frequency 350 Hz Utilization category DC -13	Output resistance Ra	100.0 k0hm
Rated operating voltage Ue DC  Rated short circuit current  100 A  Ready delay tv max.  23 ms  Residual current Ir max.  10 µA  Ripple max. (% of Ue)  10 %  Switching frequency  350 Hz  Utilization category  DC -13	Rated insulation voltage Ui	75 V DC
Rated short circuit current  Ready delay tv max.  Residual current Ir max.  Ripple max. (% of Ue)  Switching frequency  Utilization category  100 A  23 ms  10 µA  10 %  Switching frequency  350 Hz  DC -13	Rated operating current le	200 mA
Ready delay tv max. 23 ms Residual current Ir max. 10 µA Ripple max. (% of Ue) 10 % Switching frequency 350 Hz Utilization category DC -13	Rated operating voltage Ue DC	24 V
Residual current Ir max. 10 µA  Ripple max. (% of Ue) 10 %  Switching frequency 350 Hz  Utilization category DC -13	Rated short circuit current	100 A
Ripple max. (% of Ue) 10 % Switching frequency 350 Hz Utilization category DC -13	Ready delay tv max.	23 ms
Switching frequency 350 Hz Utilization category DC -13	Residual current Ir max.	10 μΑ
Utilization category DC -13	Ripple max. (% of Ue)	10 %
	Switching frequency	350 Hz
Voltage drop static max. 2.0 V	Utilization category	DC -13
	Voltage drop static max.	2.0 V

#### Environmental conditions

MTTF (40 °C)	770 a
Functional safety	
IP rating	IP67
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms
Contamination scale	3
Ambient temperature	-2570 °C
Environmental condition	115

# BES M18EI-PSC72B-S04G-S01 Order Code: BES02NK



#### Interface

Switching output PNP normally open (NO)

#### Material

Housing materialStainless steel, PTFE coatedMaterial sensing surfaceStainless steel

#### Mechanical data

DimensionØ 18 x 65 mmInstallationfor flush mountingMounting length49.00 mmPressure rating max.40 bar

Pressure rating, note Pressure-resistant

 $\begin{tabular}{lll} Size & M18x1 \\ Tightening torque & 25 Nm $\pm 10 \% \\ \end{tabular}$ 

#### Range/Distance

Assured operating distance Sa Hysteresis H max. (% of Sr) Rated operating distance Sn Real switching distance sr Repeat accuracy max. (% of Sr) Switching distance marking Temperature drift max. (% of Sr) Tolerance Sr 

#### Remarks

With connector, e.g. BKS-S 20-... total length = switch length +18 mm.

When installing in non-ferromagnetic metals, the distance x must be considered. This dimension x is described in the document "BES 2SN STEELFACE". Since the nuts supplied are made of non-ferromagnetic metal, the specified dimension x also applies here. Mounting, where the nuts are close to the active surface, is not intended

The sensor is functional again after the overload has been eliminated.

Optical irregularities on the coating have no effect on function.

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.

# **Connector Drawings**



# Wiring Diagrams

