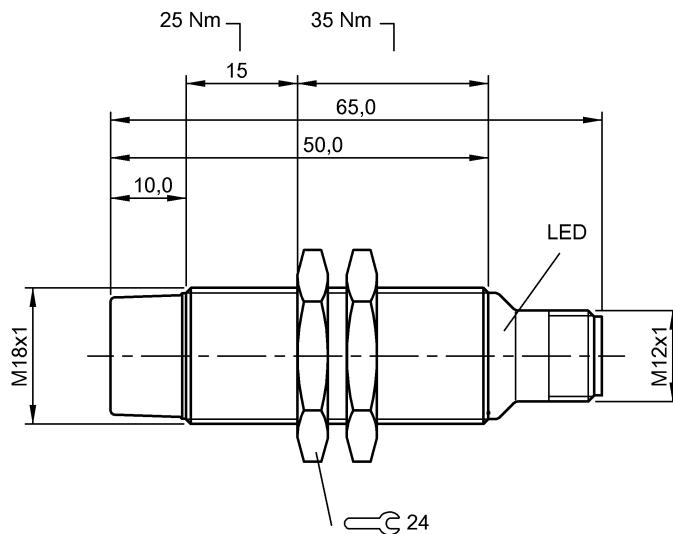


**BES M18MG-PSC16F-S04K**  
**Ordering code: BES0070**

**Inductive sensor**  
**M18x65 mm**  
**GlobalProx**

**DC, direct current**  
**PNP/Normally open (NO)**  
**Sn = 16 mm**  
**Non embeddable**

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*sensors worldwide*



**Characteristic data**

|                                       |             |
|---------------------------------------|-------------|
| Eff. switching distance $S_r$         | 16,00 mm    |
| Tolerance $S_r$                       | $\pm 10 \%$ |
| Assured operating distance $S_a$      | 13,00 mm    |
| Hysteresis $H$ max. (in % of $S_r$ )  | 20 %        |
| Repeat accur. $R$ max. (% of $S_r$ )  | 5 %         |
| Ambient temperature                   | -25...70 °C |
| Temp. drift max. (% of $S_r$ )        | 10%         |
| Switching freq. $f$ max.              | 800 Hz      |
| Ready delay $t_v$ max.                | 20 ms       |
| Utilisation category                  | DC 13       |
| Function indicator                    | Yes         |
| Power-on indicator                    | No          |
| Short-circuit protected               | Yes         |
| Degree of protection as per IEC 60529 | IP67        |
| Protection class                      | II          |
| Protected against polarity reversal   | Yes         |
| Protected against reverse connection  | Yes         |

**Electrical data**

|                                   |          |
|-----------------------------------|----------|
| Operating voltage                 |          |
| Rated operating voltage $U_e$ DC  | 24,0 V   |
| Ripple max. (% of $U_e$ )         | 15 %     |
| Voltage drop static max.          | 2,5 V    |
| Rated insulation voltage $U_i$    | 250 AC V |
| Effective operating current $I_e$ | 200 mA   |
| No-load current $I_0$ damped      | 10 mA    |
| No-load current $I_0$ undamped    | 3 mA     |

|                                   |             |
|-----------------------------------|-------------|
| Off-state current $I_r$ max.      | 10 $\mu$ A  |
| Minimum operating current $I_m$   | 0 mA        |
| Rated short circuit current       | 100 A       |
| Output resistance $R_a$           | 33.0k + D   |
| Load capacitance max. (at $U_e$ ) | 0,5 $\mu$ F |
| Principle of operation            | Inductive   |

**Mechanical data**

|                          |                                |
|--------------------------|--------------------------------|
| Housing material         | CuZn                           |
| Surface protection       | Nickel-free coating            |
| Sensing surface material | PBT                            |
| Tightening torque max.   | 25 Nm / 35 Nm                  |
| Mounting length          | 40 mm                          |
| Connection type          | Connector                      |
| Connector type           | M12x1-S04                      |
| Shock rating             | Shock, half-sinus, 30 gn, 11ms |
| Vibration rating         | 55 Hz, 1 mm ampl., 3x30 min    |
| Degree of contamination  | 3                              |

**Basic data**

|                |               |
|----------------|---------------|
| Basic standard | IEC 60947-5-2 |
|----------------|---------------|

**Remarks**

The sensor is functional again after the overload has been eliminated.  
With connector, e.g. BKS-S 20-... total length = switch length +18 mm.  
Unshielded: See installation instructions for inductive sensors with extended switching distance 853924.



Definitions see main catalog

subject to change

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