



Transponder safety switches TR4 Direct Sensor & actuator

TR4-SBM03P



Model Name > [TR4-SBM03P](#)
Part No. > [6025090](#)

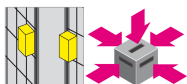


At a glance

- Response range of up to 25 mm
- Sensor and actuator up to enclosure rating IP 69K
- Multicoded and unique coded sensors
- Up to performance level PL e (EN ISO 13849)
- Two OSSD safety outputs for direct connection of sensors to a single safety controller
- Safe series connection of up to 30 sensors possible
- LED status indicator
- Boundary area indication and magnetic retaining force (both optional)

Your benefits

- High level of prevention against tampering due to individually coded actuator (depending on type)
- High level of machine availability due to high tolerances for door misalignment and boundary area indication
- High level of machine reliability due to resistance to shocks and vibrations
- Cascadability of up to 30 sensors saves costs
- Just one safety switch in conjunction with a suitable safety module makes it possible to solve applications up to PL e and Cat. 4 (EN ISO 13849)
- Long service life due to durable and low-maintenance design
- Fast diagnostics via LED status indicator
- The devices are easy to clean, making them suitable for contaminated areas or environments with strict hygiene standards



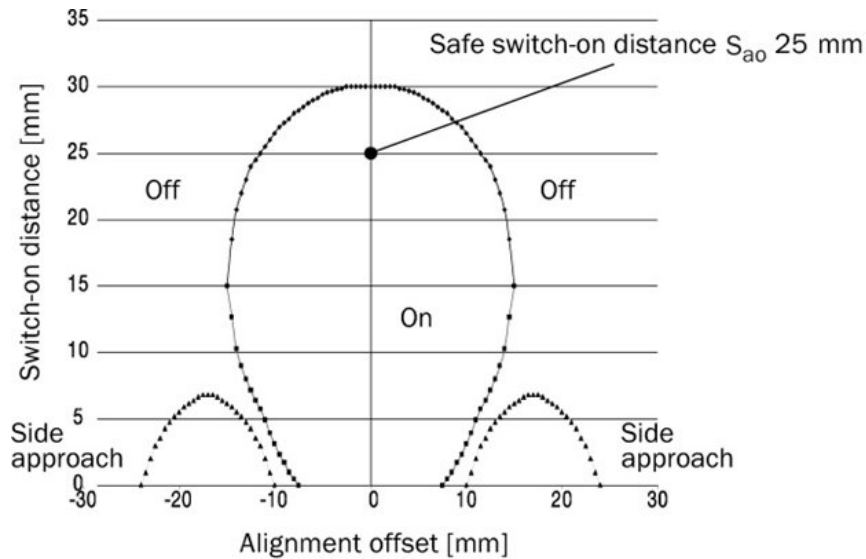
Technical data

Coding:	Multicoded
Safety integrity level:	SIL3 (IEC 61508)
Category:	Category 4 (EN ISO 13849)
Performance level:	PL e (EN ISO 13849)
PFHd:	1.119 * 1E-09 (EN ISO 13849)
Electrical life:	10* 1E 06 switching cycles
TM (mission time):	20 a (EN ISO 13849)
Classification in compliance with IEC/EN 60947-5-3:	PDF-M
Housing material:	Valox® DR48
Enclosure rating:	IP 69K (DIN 40050-9), NEMA 12, NEMA 13, NEMA 3, NEMA 4X
Protection class:	III (EN 50178)

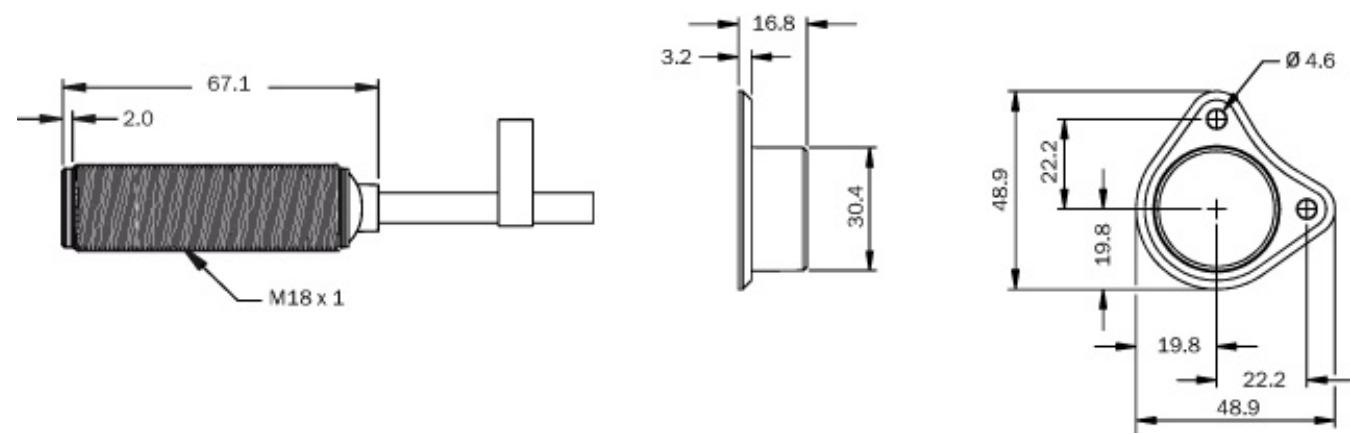
Ambient operating temperature from ... to:	-10 °C ... 55 °C
Connection type:	Cable
Cable length:	3 m
Type of output:	Semiconductor (OSSD)
Number of safe outputs:	2
Response time:	60 ms ¹⁾
Supply voltage typical, from, to:	24 V DC, 20.4 V DC, 26.4 V DC
Safe switch on distance S_{ao} :	25 mm
Status display:	✓
Boundary area indication:	-
Magnetic retaining force:	-
Housing diameter (sensor/actuator):	M18/M30
Weight:	237 g

¹⁾ In a cascade each downstream safety switch increases the response time of the system. Other response times see operating instructions.

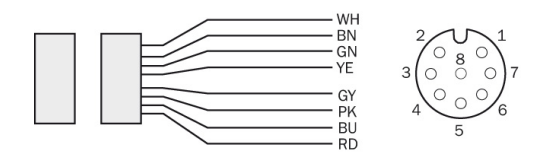
Response range



Dimensional drawing



Connection diagram



Pin	Wire color	Designation	Description
1	White	Out Aux	Aux output (not safe)
2	Brown	+ 24 V DC	Voltage supply 24 V DC
3	Green	N. c.	Not connected
4	Yellow	In B	Enable input for channel B
5	Gray	Out A	Safety output A
6	Pink	Out B	Safety output B
7	Blue	0 V	Voltage supply 0 V DC
8	Red	In A	Enable input for channel A

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