



Transponder safety switches TR4 Direct Sensor & actuator

TR4-SBM01C



Model Name > [TR4-SBM01C](#)
Part No. > [6035190](#)

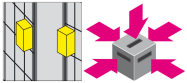


At a glance

- 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



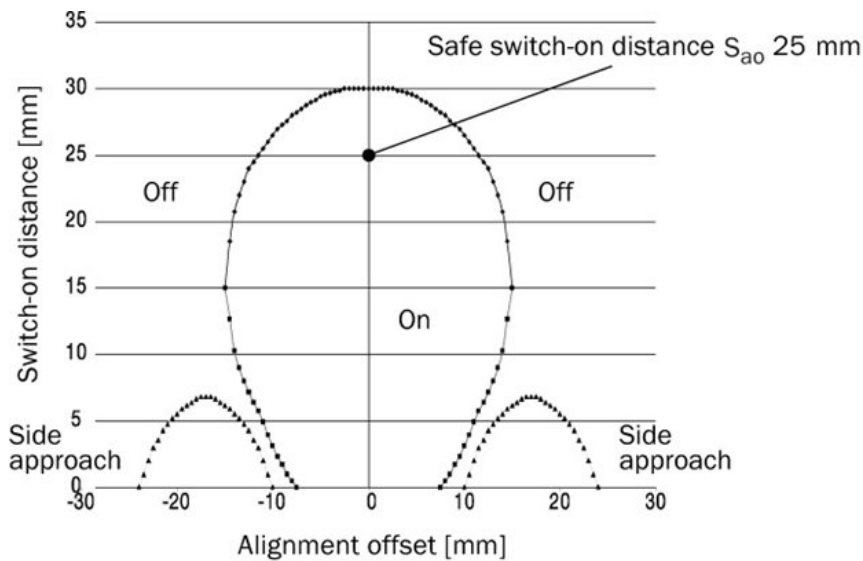
Technical data

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)

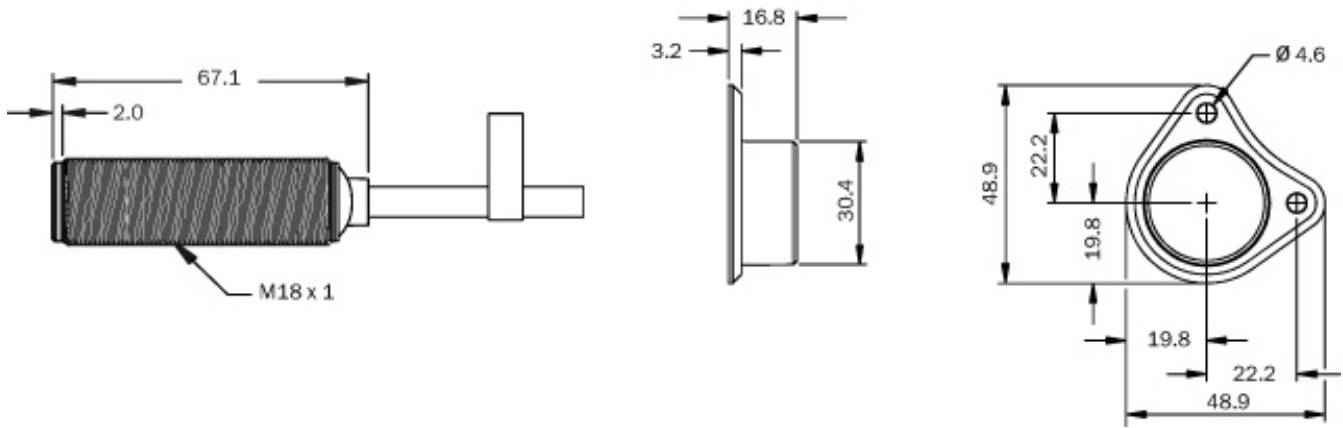
Ambient operating temperature from ... to:	-10 °C ... 55 °C
Connection type:	Cable with plug M12, 8-pin
Cable length:	0.2 m
Type of output:	Semiconductor (OSSD)
Number of safe outputs:	2
Response time:	60 ms ¹⁾
Supply voltage typical, from, to:	24 V DC, 20.4 V DC, 26.4 V DC
Safe switch on distance S_{ao} :	25 mm
Status display:	✓
Boundary area indication:	-
Magnetic retaining force:	-
Housing diameter (sensor/actuator):	M18/M30
Weight:	79 g

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

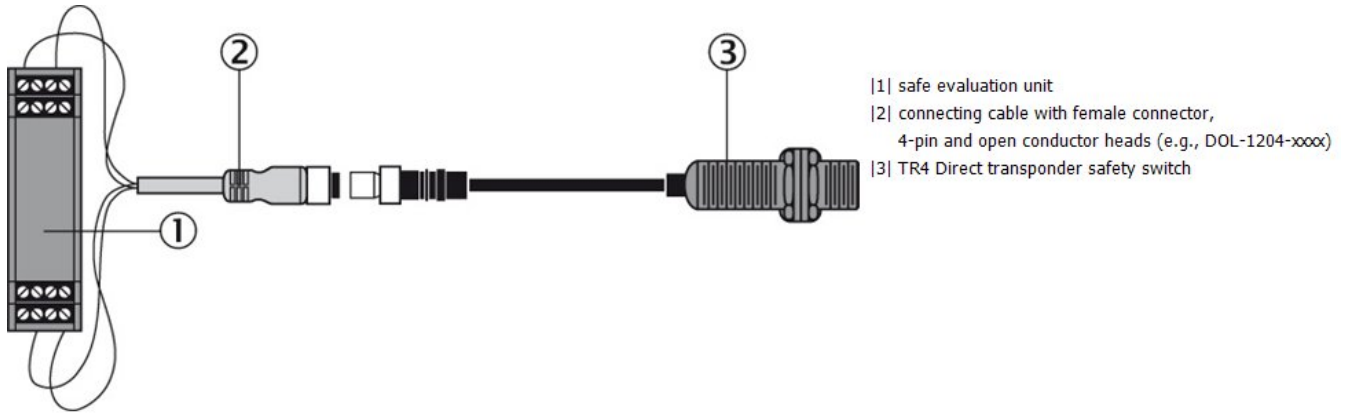
Response range



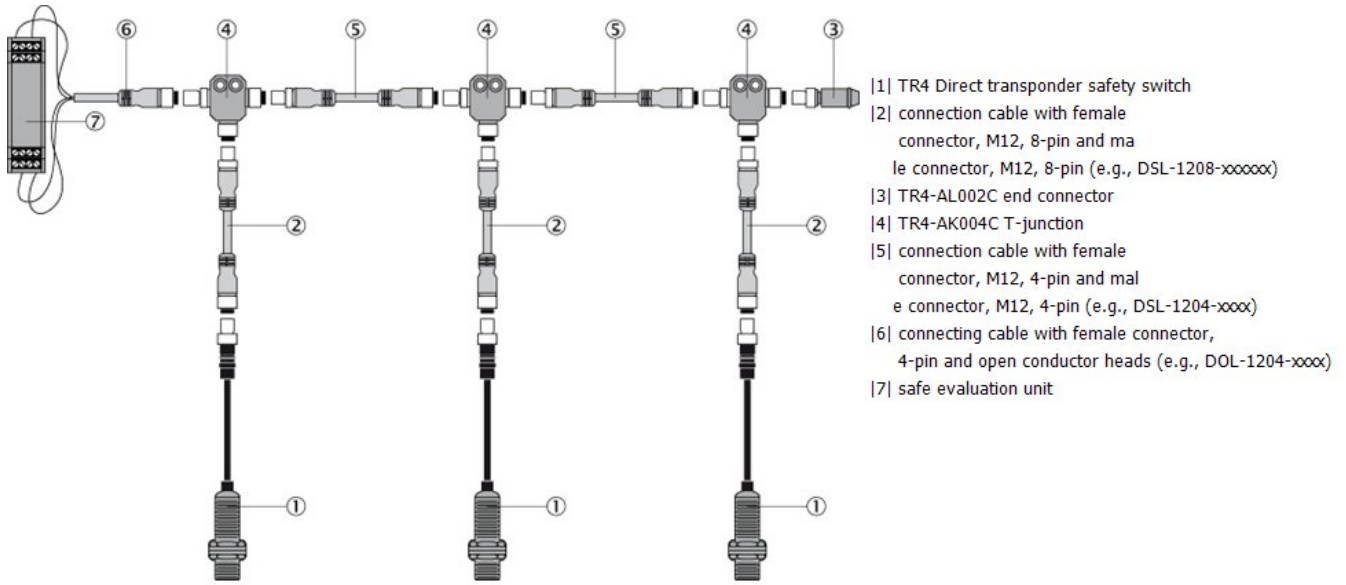
Dimensional drawing



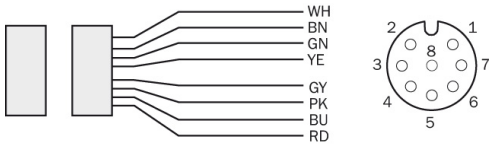
Connection single sensor



Connection in series



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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