



Transponder safety switches TR4 Direct Sensor & actuator

TR4-SEM01C



Model Name > [TR4-SEM01C](#)
Part No. > [6044644](#)

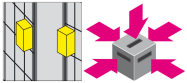


At a glance

- 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



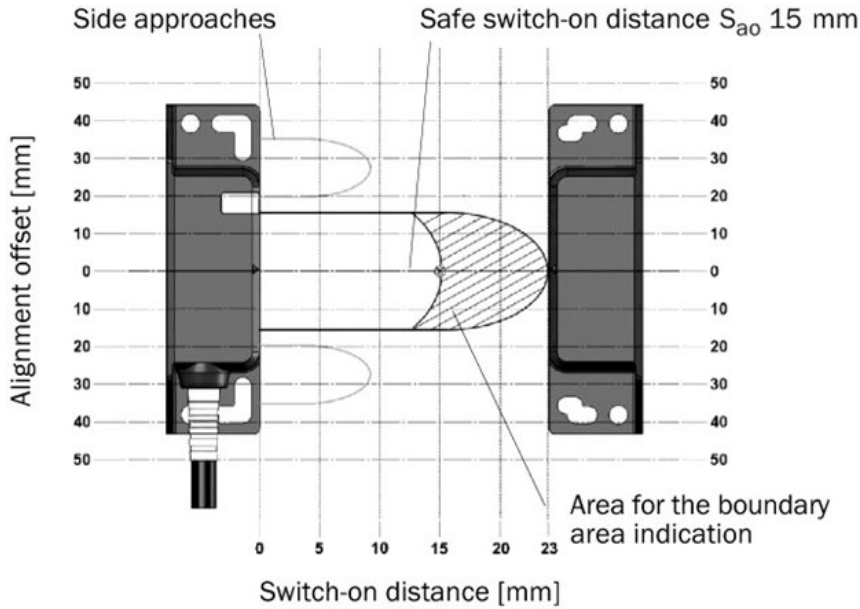
Technical data

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)

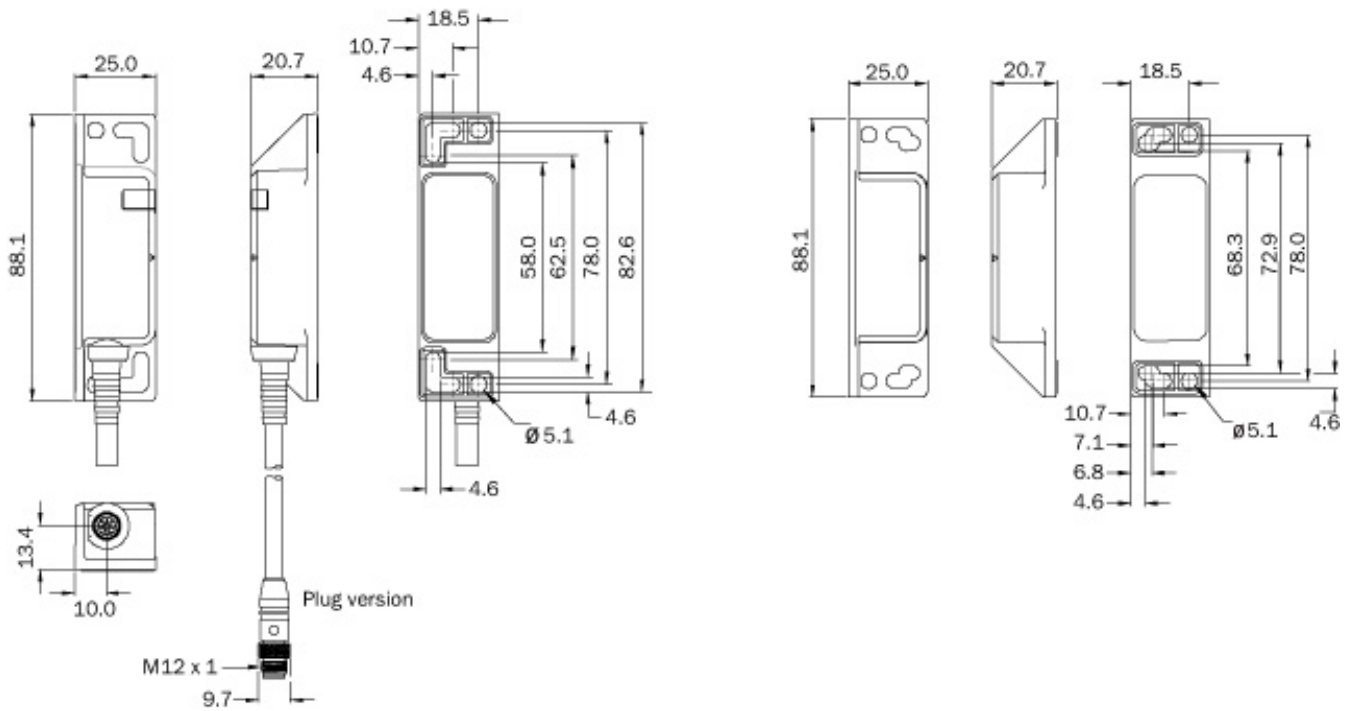
Ambient operating temperature from ... to:	-10 °C ... 55 °C
Connection type:	Cable with plug M12, 8-pin
Cable length:	0.2 m
Type of output:	Semiconductor (OSSD)
Number of safe outputs:	2
Response time:	60 ms ¹⁾
Supply voltage typical, from, to:	24 V DC, 20.4 V DC, 26.4 V DC
Safe switch on distance S_{a0} :	15 mm
Status display:	✓
Boundary area indication:	✓
Magnetic retaining force:	-
Dimensions (W x H x D):	25 mm x 88 mm x 20 mm
Weight:	112 g

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

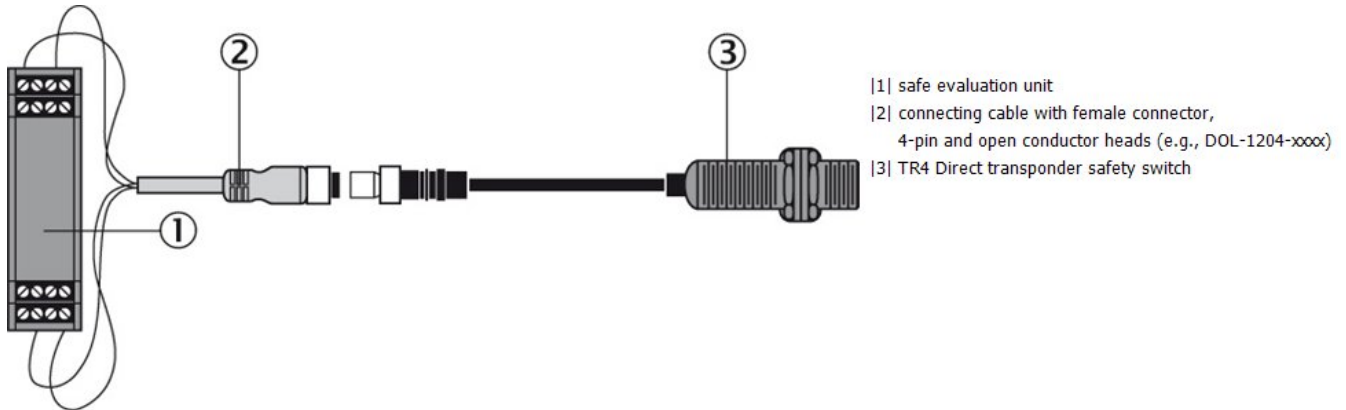
Response range



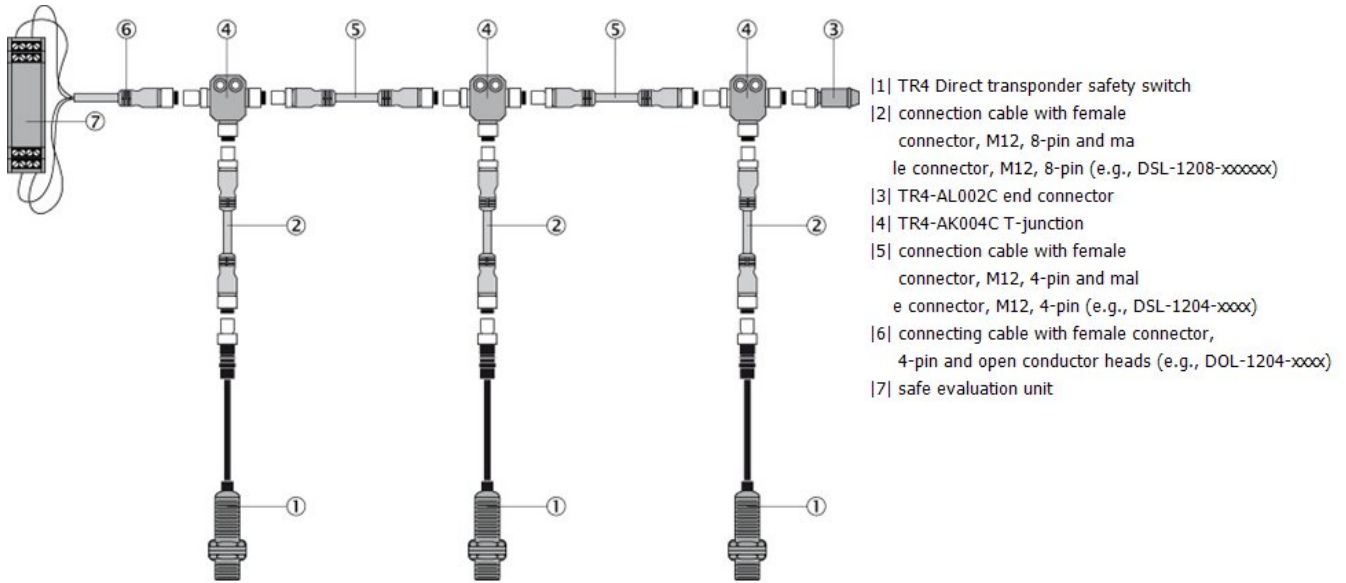
Dimensional drawing



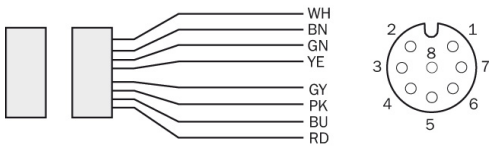
Connection single sensor



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

Australia

Phone +61 3 9457 0600
1800 334 802 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail sac@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Ceská Republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail kundenservice@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6801000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 3358 1341
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederlands

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail austefjord@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail admin@sicksgp.com.sg

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886-2-2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 8865 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 800-325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com