

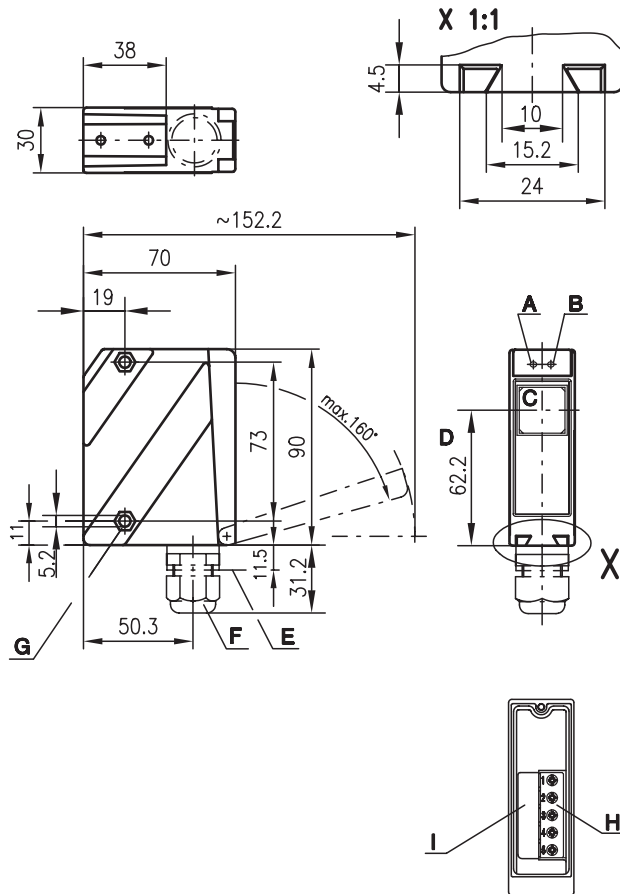


SRK 96

Protective retro-reflective photoelectric sensors



Dimensioned drawing



- A Indicator diode green
- B Indicator diode yellow
- C Transmitter/receiver
- D Optical axis
- E Device plug M12
- F Screwed cable gland M16x1.5 for Ø 5 ... 10mm
- G Countersinking for SK nut M5, 4.2mm deep
- H Connection terminals
- I Cable entry

0.5 ... 7m



- Protective retro-reflective photoelectric sensor category 2 (testing) with high performance reserve in visible red light and infrared light
- Robust metal housing with glass cover, protection class IP 67 for industrial application
- Activation input for function testing and interlinking
- 2 LEDs for status display when commissioning and in operation.
- Connection via M12 connector or terminal compartment

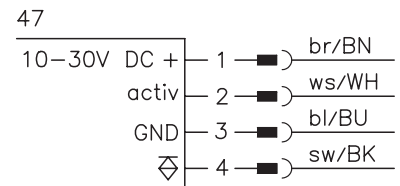
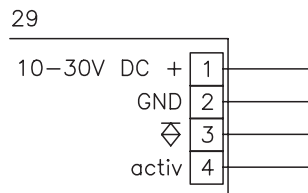


Accessories:

(available separately)

- Mounting systems (BT 96, UMS 96, BT 450.1-96)
- M12 connectors (KD ...)
- Reflector PTKS 50x50, 20x40, 100x100
- Test-monitoring units:
 - TNT 32 (Part No. 500 20476)
 - TNT 33 (Part No. 500 28158)
 - TNT 34 (Part No. 500 81023)
 - TNT 35 (Part No. 500 33058)
 - TMC 66 (Part No. 500 82121)
- Connection cable for series connection of several sensors (BK7 KB-4-SRK 96-600-4)

Electrical connection



We reserve the right to make changes • sis_b01e.fm

Specifications

Optical data

Typ. operating range limit ¹⁾	0.5 ... 7m
Operating range ²⁾ with reflector	0.5 ... 6m PTKS 50x50, PTKS 20x40, PTKS 100x100
Light source	red light laser diode
Wavelength	670nm
Laser warning notice	see remarks

Timing

Sensor switching frequency	100Hz
Sensor response time	6ms
Delay before start-up	≤ 200ms

Electrical data

Operating voltage U _B	10 ... 30VDC (incl. residual ripple)
Residual ripple	≤ 15% of U _B
Bias current	≤ 40mA
Switching output	PNP transistor
Function characteristics	light switching
Signal voltage high/low	≥ (U _B -2V) ≤ 2V
Output current	max. 100mA

Indicators

LED green	ready
LED yellow	light path free
LED yellow flashing	light path free, no performance reserve

Mechanical data

Housing	diecast zinc, yellow
Optics cover	glass
Weight	380g
Connection type	terminals or M12 connector

Environmental data

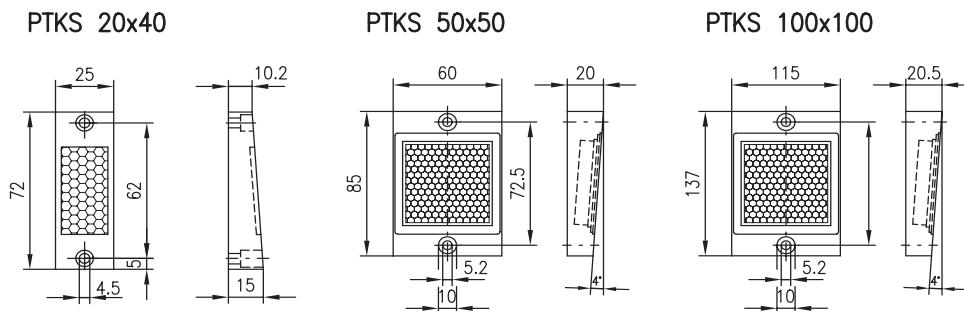
Ambient temp. (operation/storage)	-10°C ... +50°C/-30°C ... +60°C
Protective circuit ³⁾	1, 2, 3, 4
VDE safety class ⁴⁾	II, all-insulated
Protection class	IP 67
Standards applied	IEC 60947-5-2

Options

Activation input activ	≥ 8V/≤ 2V
Transmitter active/not active	10KΩ ± 10%
Input resistance	12ms + response time test monitoring unit
Testing time	

- 1) Typ. operating range limit: max. attainable range without performance reserve
- 2) Operating range: recommended range with performance reserve
- 3) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs, 4=interference blanking
- 4) Rating voltage 250VAC

Dimensioned drawing - reflector



Order guide

with M12 connector
with terminal connection

Designation	Part No.
SRK 96M/P-1210-T2-47	500 60919
SRK 96M/P-1210-T2-29	500 60918

Tables

Reflectors	Operating range
PTKS 100x100	0.5 ... 6m
PTKS 50x50	0.5 ... 6m
PTKS 20x40	0.5 ... 4m

Remarks

- The protective retro-reflective photoelectric sensor SRK 96... only works in connection with the special reflectors PTKS 50x50, PTKS 20x40 or PTKS 100x100
- The reflectors have to be installed in the correct position.
- The protective retro-reflective photoelectric sensor is a contactless active protective device only in connection with a safety-relevant control system, in which the cyclical testing of transmitter and receiver is carried out according to EN 61496-1, category 2 (testing).
- The power supply unit used to operate the photoelectric sensor has to be able to compensate for changes and interruptions of the supply voltage acc. to EN 61496-1.

LASERSTRAHLUNG / LASER LIGHT
NICHT IN DEN STRAHL BLICKEN
DO NOT STARE INTO BEAM
LASERKLASSE 2
CLASS 2 LASER PRODUCT
IEC 60825-1-am2 (2001-01)

SRK 96
Pulse duration 9.5µs
Quiescent period 548µs
P_{max} ≤ 1.2mW ± 10%
λ = 670nm