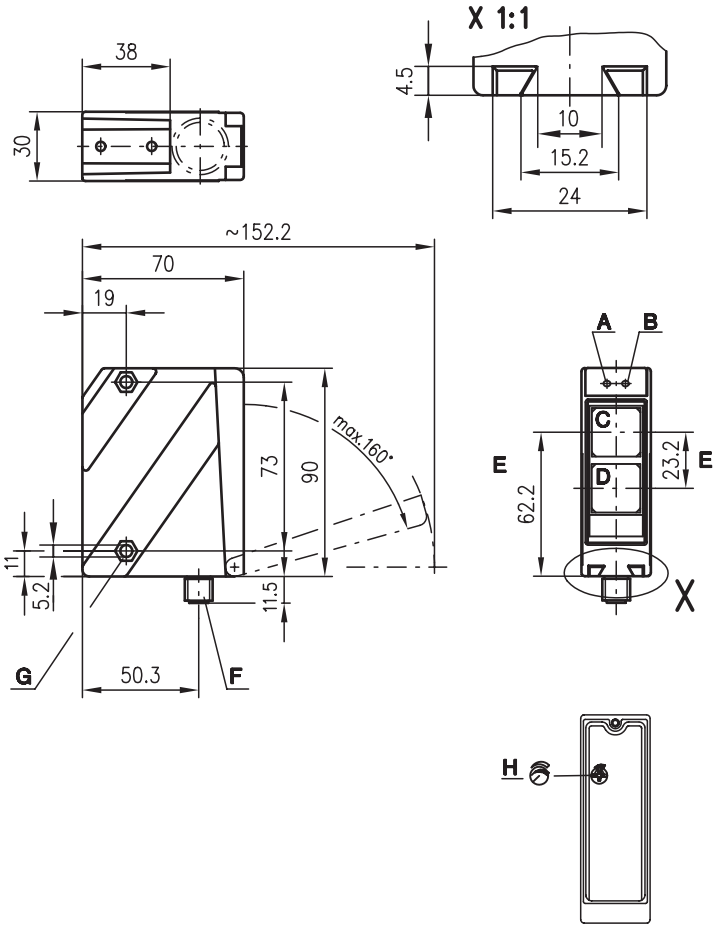
PRK 96 Retro-reflective photoelectric sensors with polarisation filter



18m

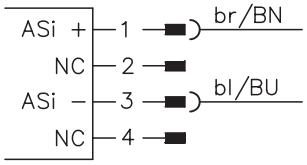
- Metal housing with glass cover, protection class IP 67/IP 69K for industrial application
- Access to all sensor functions via an AS-interface without additional wiring
- Sensitivity adjustment and ready indicator for optimal adaptation to the application
- Common conductor for both power and data reduces installation work

Dimensioned drawing



A Indicator diode green
B Indicator diode yellow
C Receiver
D Transmitter
E Optical axis
F Device plug M12x1
G Countersinking for SK nut M5, 4.2 deep
H Sensitivity adjustment

Electrical connection



Accessories:

(available separately)

- Mounting systems (BT 96, BT 96.1, UMS 96, BT 450.1-96)
- M12 connectors (KD …)
- Ready-made cables (K-D …)
- Spark extinction
- Reflectors and reflective tapes

AS-i Accessories:

(available separately)

- Bus terminals
- AS-i ribbon cable
- Address programming device
- Coupling modules
- Intermediate cables etc.

We reserve the right to make changes • 96_b10e.fm

Specifications

Optical data

Typ. operating range limit (TK(S) 100x100) [1]	18m
Operating range [2]	see tables
Light source	LED (modulated light)
Wavelength	660nm (visible red light, polarised)

Timing

Sensor switching frequency	1000Hz
Sensor response time	0.5ms
Delay before start-up	≤ 200ms

Electrical data

Operating voltage U_B	26.5 … 31.6V (according to AS-i specification)
Bias current	≤ 40mA per sensor

Indicators

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

Mechanical data — **Metal housing**

Housing	diecast zinc
Optics cover	glass
Weight	380g
Connection type	M12 connector

Environmental data

Ambient temp. (operation/storage)	-20°C … +55°C/-40°C … +55°C
Protective circuit [3]	1, 4
VDE safety class [4]	II, all-insulated
Protection class	IP 67, IP 69K [5]
LED class	1 (acc. to EN 60825-1)
Standards applied	IEC 60947-5-2

AS-i data for receiver

I/O code	1
ID code	1
Address	programmed by the user in the range of 1 to 31 (default=0)
Cycle time acc. to AS-i specification	5ms
AS-i standard according to profile	S-1.1

1) Typ. operating range limit: max. attainable range without performance reserve
2) Operating range: recommended range with performance reserve
3) 1=transient protection, 4=interference blanking
4) Rating voltage 250VAC
5) IP 69K test acc. to DIN 40050 part 9 simulated, high pressure cleaning conditions without the use of additives, acids and bases are not part of the test

Assignment: data bits

		Programming (host level)	
D_0	**Switching output**	Ø no reflection	System input
		1 reflection	
D_1	**Warning output autoControl**	Ø active	System input
		1 not active	
D_2	**Ready output**	Ø sensor not ready	System input
		1 sensor ready	
*D_3	**Activation input**	Ø transmitter on	System output
		1 transmitter off	

Assignment: parameter bits

		Programming (host level)	
*P_0	**NC**	Ø	System parameter
		1	
*P_1	**Light/dark switching**	Ø dark switching	System parameter
		1 light switching	
*P_2	**NC**	Ø	System parameter
		1	
*P_3	**NC**	Ø	System parameter
		1	

* default = 1

Order guide

	Designation	Part No.
18m	PRK 96M/A-3410-44	500 82067

Tables

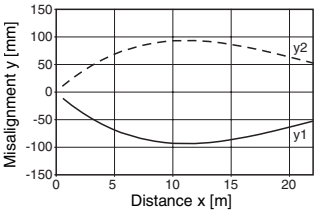
	Reflectors		Operating range
1	TK(S)	100x100	0.3 … 15m
2	MTK(S)	50x50	0.3 … 11m
3	TK(S)	30x50	0.3 … 6m
4	TK(S)	20x40	0.3 … 5m
5	TK(S)	82	0.3 … 11m
6	Tape 2	100x100	0.3 … 6m

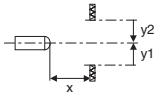
1	0.1							15	18
2	0.1						11		12
3	0.1					6		7.5	
4	0.1				5		6		
5	0.1						11		11.5
6	0.1					6		7.5	

Operating range [m]
Typ. operating range limit [m]

Diagrams

Typ. response behaviour (TKS 100x100)





Remarks