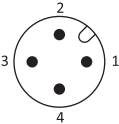


OP18-TK SERIES

ARTICLE PROPERTIES

SENSOR TYPE	Photoelectric sensor	CONNECTION TYPES (see table)
SIZE	M18x1	<ul style="list-style-type: none"> • Cable PVC, 0.34 mm², 2 m** • M12 connector
OPERATING DISTANCE	See table	
DETECTION MODE	Diffuse reflective vitreous body detect	

** Other cable lengths are available on request

TECHNICAL DATA

OPERATING VOLTAGE	10 ... 30 V DC	LOAD CURRENT	≤ 100 mA
RIPPLE VOLTAGE	≤ 10 %	HOUSING MATERIAL	PC + PBT
LIGHT SOURCE	Infrared light (850 nm)	VOLTAGE WITHSTANDING	1000 V/AC, 50/60 Hz, 60 s
LIGHT SPOT SIZE	∅ 15 mm (100 mm)	REVERSE POLARITY PROTECTION	Yes
OUTPUT	PNP / NPN	OVERLOAD RESISTANCE	Yes
FREQUENCY	See table	SHORT CIRCUIT PROTECTION	Yes
CURRENT CONSUMPTION	≤ 15 mA	MTTF	359 years

ENVIRONMENTAL CONDITIONS

OPERATING ENVIRONMENT HUMIDITY	35 % to 85 % RH (no condensation)	INSULATION IMPEDENCE	≥ 50 MΩ (500 V DC)
PROTECTION CLASS	IP67	SHOCK RESISTANCE (EN 60068-2-27)	500 m/s ² (50 G) 3 times X, Y, Z respectively
STORAGE TEMPERATURE	-25 ... +65 °C	IMPACT RESISTANCE (EN 60068-2-6)	Complex amplitude 1.5 mm 10 ... 50 Hz (2hr X, Y, Z respectively)
AMBIENT TEMPERATURE	-40 ... +70 °C	ANTI-AMBIENT LIGHT	≤ 5000 Lux

STANDARDS AND DIRECTIVES

EMC DIRECTIVE 2014/30/EU	EN IEC 60947-5-2
ROHS DIRECTIVE 2011/65/EU	EN IEC 63000

APPROVALS



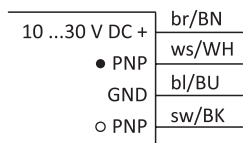
OP18-TK SERIES

DETECTION MODE DIFFUSE REFLECTIVE VITREOUS BODY DETECT

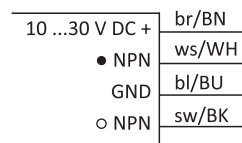
Article number	Operating distance	Light source	Frequency	Output (wiring diagram)	Switching mode	Connection	Dimensions
OP18-TK50VP6	50 mm	Infrared	100 Hz	PNP (WD1)	L.O + D.O	2 m cable	see Fig. 1
OP18-TK50VN6	50 mm	Infrared	100 Hz	NPN (WD2)	L.O + D.O	2 m cable	see Fig. 1
OP18-TK50VP6Q	50 mm	Infrared	100 Hz	PNP (WD3)	L.O + D.O	M12 connector	see Fig. 2
OP18-TK50VN6Q	50 mm	Infrared	100 Hz	NPN (WD4)	L.O + D.O	M12 connector	see Fig. 2
OP18-TK100VP6	100 mm	Infrared	100 Hz	PNP (WD1)	L.O + D.O	2 m cable	see Fig. 1
OP18-TK100VN6	100 mm	Infrared	100 Hz	NPN (WD2)	L.O + D.O	2 m cable	see Fig. 1
OP18-TK100VP6Q	100 mm	Infrared	100 Hz	PNP (WD3)	L.O + D.O	M12 connector	see Fig. 2
OP18-TK100VN6Q	100 mm	Infrared	100 Hz	NPN (WD4)	L.O + D.O	M12 connector	see Fig. 2

WIRING DIAGRAMS

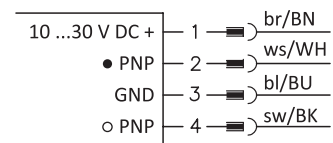
WD1 PNP / Light on | Dark on



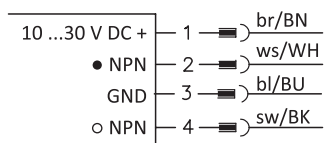
WD2 NPN / Light on | Dark on



WD3 PNP / Light on | Dark on



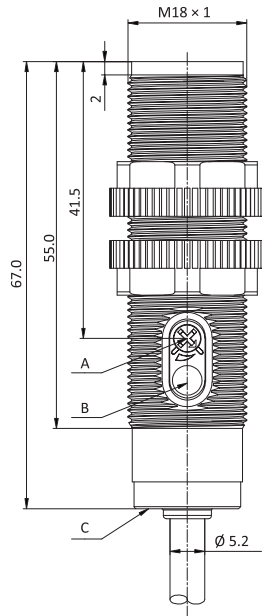
WD4 NPN / Light on | Dark on



OP18-TK SERIES

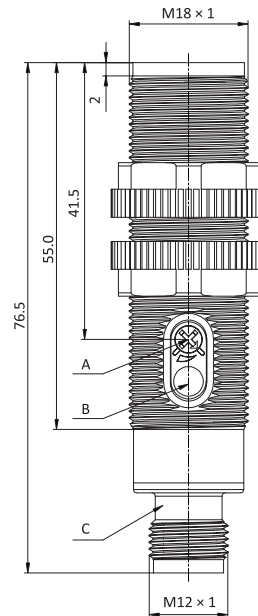
DIMENSIONS

Fig. 1 OP18 with cable



- A Sensitivity regulation
- B Steady state indicator
- C Output indicator

Fig. 2 OP18 with M12 connector



- A Sensitivity regulation
- B Steady state indicator
- C Output indicator

OP18-TK SERIES

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