



**Model Number**

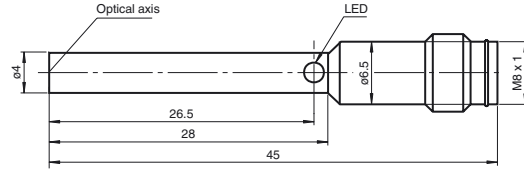
**KT9-50/25/98a/102**

Diffuse mode sensor  
with 3-pin, M8 x 1 connector

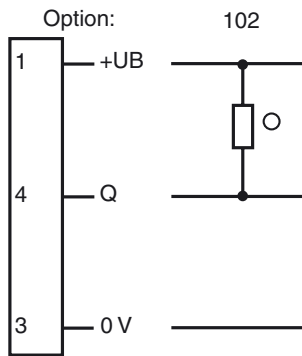
**Features**

- High operating distance up to 50 mm
- Very small housing
- Complete device, no amplifier needed
- Voltage range 10 V ... 30 V DC, output current 100 mA short-circuit protected
- Optical parts made of glass, easy cleaning
- Degree of protection IP67

**Dimensions**



**Electrical connection**



○ = Light on  
● = Dark on

**Pinout**



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

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**Technical data****General specifications**

Detection range	0 ... 50 mm
Reference target	standard white, 100 mm x 100 mm
Light source	LED
Light type	modulated infrared light
Optical face	frontal
Ambient light limit	10000 Lux

**Indicators/operating means**

Function indicator	switching state, LED yellow
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**Electrical specifications**

Operating voltage	$U_B$	10 ... 30 V DC
Ripple		10 %
No-load supply current	$I_0$	≤ 15 mA
Time delay before availability	$t_v$	≤ 20 ms

**Output**

Switching type	light on	
Signal output	1 switch output NPN	
Switching voltage	max. 30 V DC	
Switching current	max. 100 mA	
Switching frequency	$f$	≤ 250 Hz
Response time		≤ 3 ms

**Ambient conditions**

Ambient temperature	0 ... 55 °C (32 ... 131 °F)
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**Mechanical specifications**

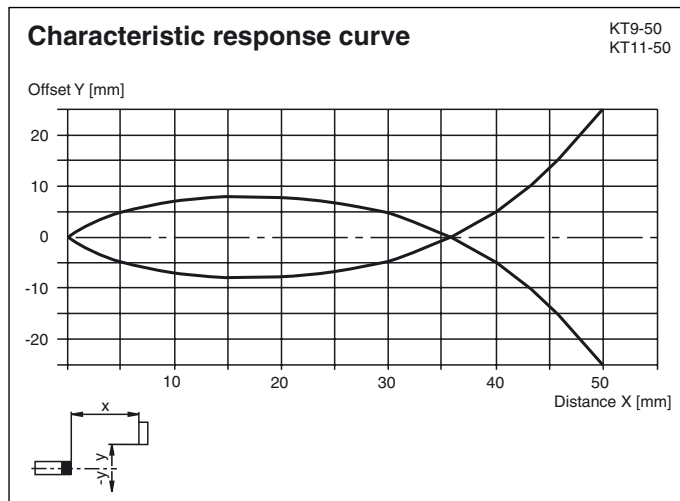
Degree of protection	IP67
Connection	M8 x 1 connector, 3-pin
Material	
Housing	Stainless steel 1.4305 / AISI 303
Optical face	Scratch resistant mineral glass lens
Mass	9 g

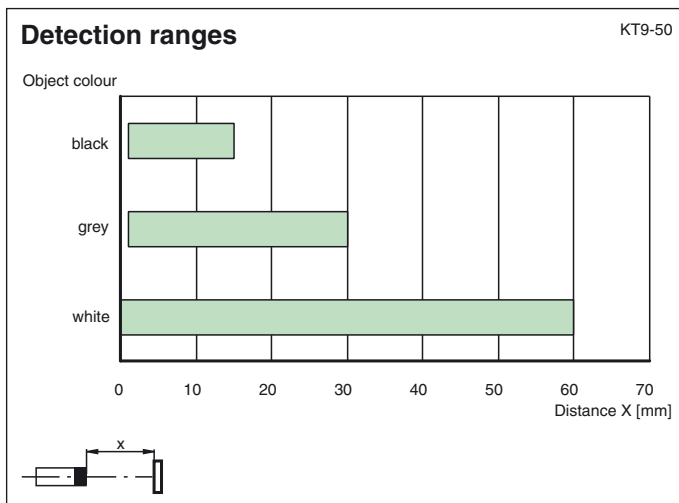
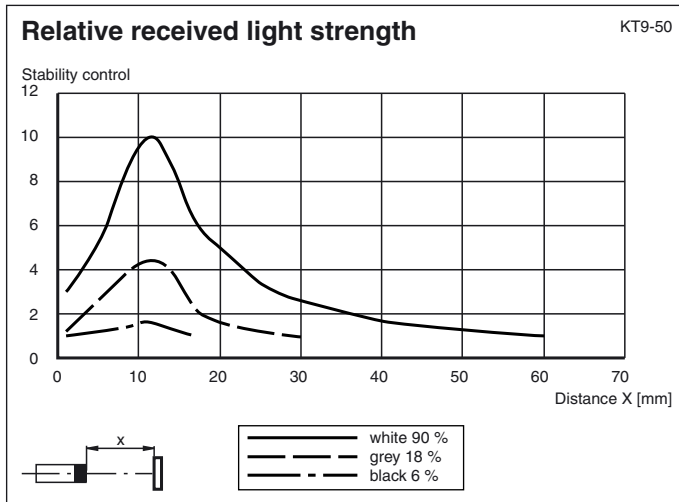
**Compliance with standards and directives**

Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007

**Accessories****V3-WM-2M-PUR**

Cable socket, M8, 3-pin, PUR cable

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)**Curves/Diagrams**



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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