



**Model Number**

**KT10/33**

Diffuse mode sensor  
with 2 m fixed cable

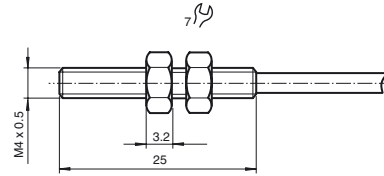
**Features**

- Miniature design in M4 housing
- Housing material: stainless steel
- Fastening nuts designed so that they cannot be over tightened
- Signal converters SU10... or SU11... are suitable to operate

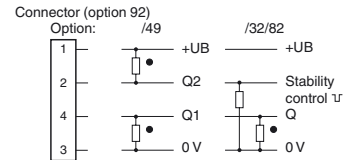
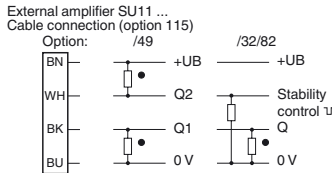
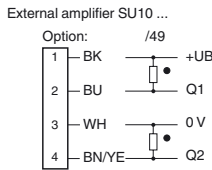
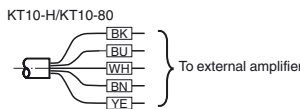
**Product information**

The KT10 series features high switching accuracy, color independence, are highly resistant to dust and solvents, have high sensing ranges, which ideally suits these sensors for applications in printing and packaging industry as well as in medical and pharmaceutical applications.

**Dimensions**



**Electrical connection**



○ = Light on  
● = Dark on

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## Technical data

### General specifications

Detection range	0 ... 80 mm
Adjustment range	40 ... 80 mm
Light source	IRED
Light type	modulated infrared light , 870 nm
Diameter of the light spot	15 mm at 80 mm detection range
Angle of divergence	approx. 10 °
Ambient light limit	70000 Lux

### Functional safety related parameters

MTTF <sub>d</sub>	63070 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Electrical specifications

Operating voltage	U <sub>B</sub>	see accessory: signal transformer
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### Output

Signal output	see accessory: signal transformer
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### Ambient conditions

Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Storage temperature	-20 ... 75 °C (-4 ... 167 °F)

### Mechanical specifications

Protection degree	IP65
Connection	fixed cable 2000 mm
Material	
Housing	Stainless steel 1.4305 / AISI 303
Optical face	glass
Cable	PVC
Cable	
Sheath diameter	2.9 mm
Color	black
Mass	20 g

### Compliance with standards and directives

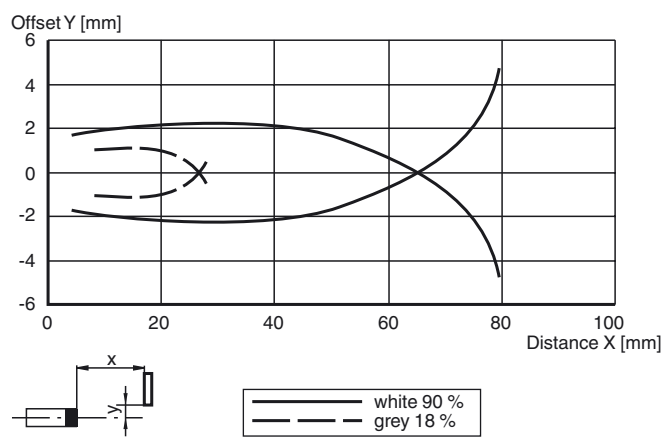
Standard conformity	
Product standard	EN 60947-5-2:2007 IEC 60947-5-2:2007
Shock and impact resistance	IEC / EN 60068. half-sine, 40 g in each X, Y and Z directions
Vibration resistance	IEC / EN 60068-2-6. Sinus. 10 -150 Hz, 5 g in each X, Y and Z directions

### Approvals and certificates

CCC approval	Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.
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## Curves/Diagrams

### Characteristic response curve



## Accessories

**SU11/40a/49/92**  
Signal transformer

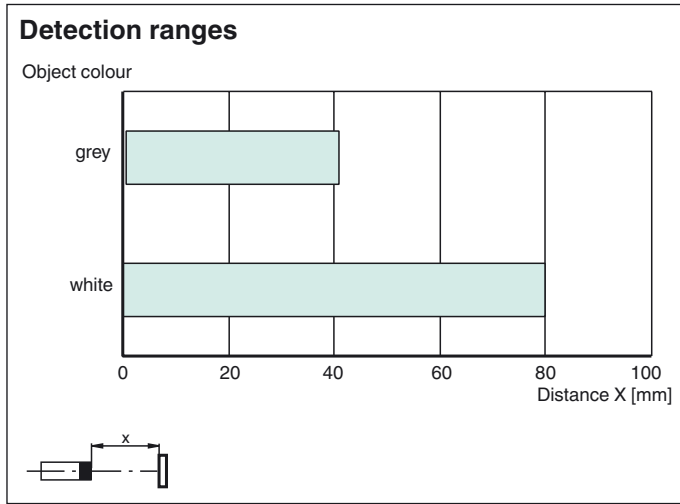
**SU11/32/40a/82b/92**  
Signal transformer

**SU11/40a/49/115**  
Signal transformer

**SU10/40a/49/116**  
Signal transformer

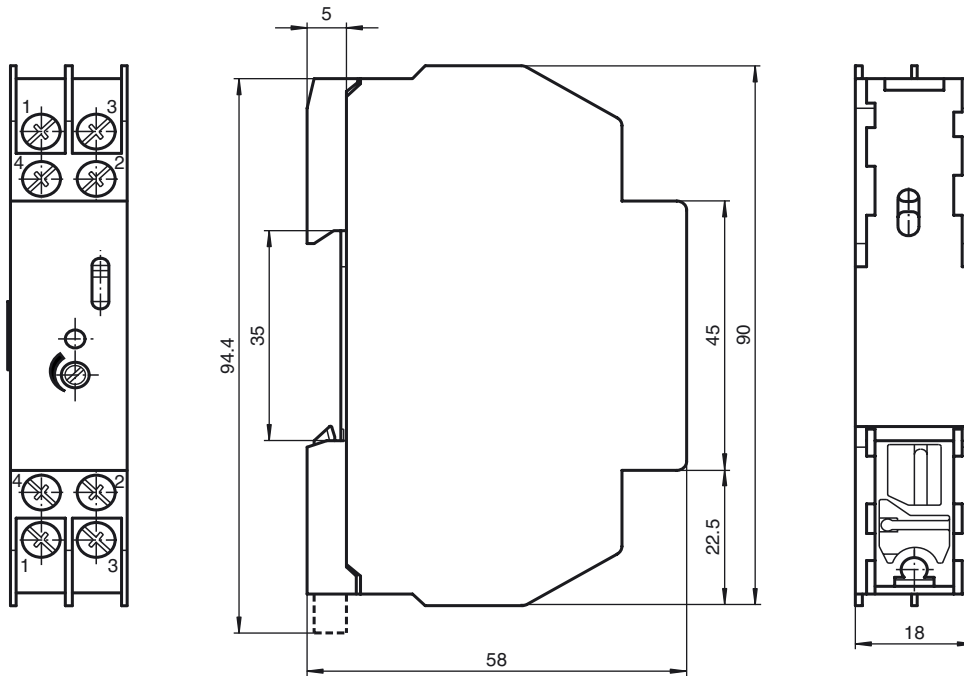
**BF 4**  
Mounting flange, 4 mm

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



### Dimensions of the signal converters

#### Signal converter SU10/40a/49/116



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Subject to modifications without notice

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

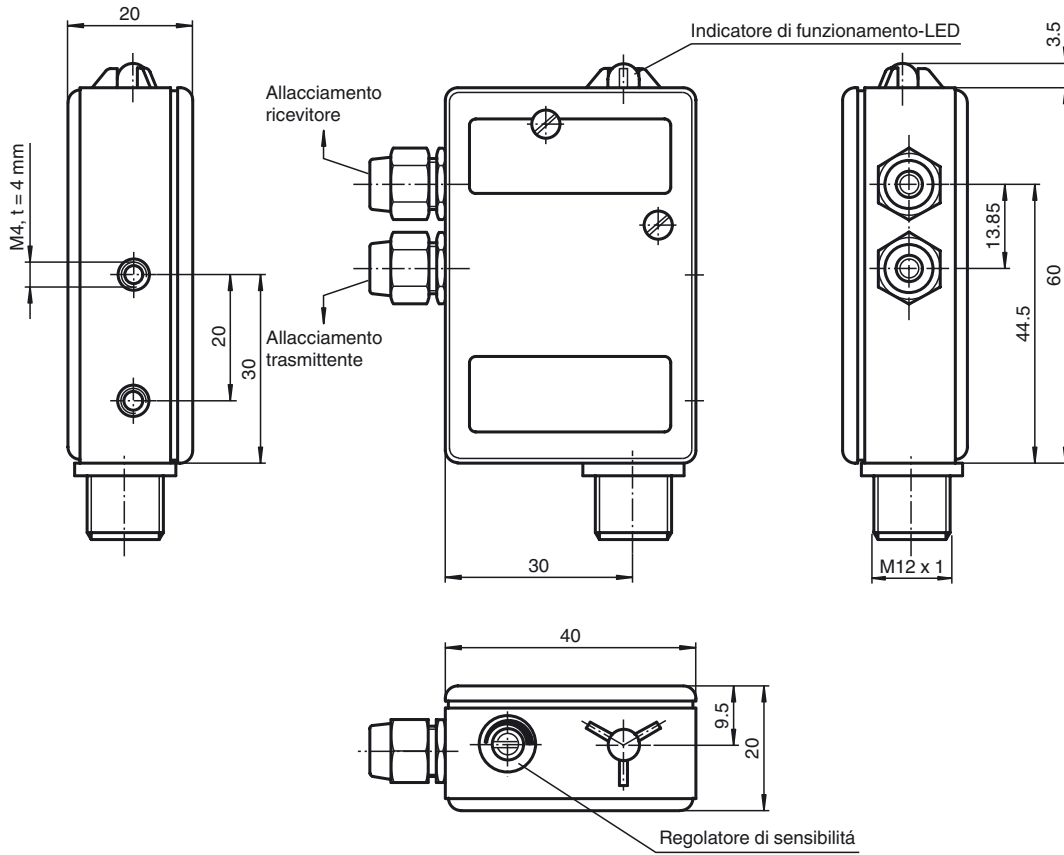
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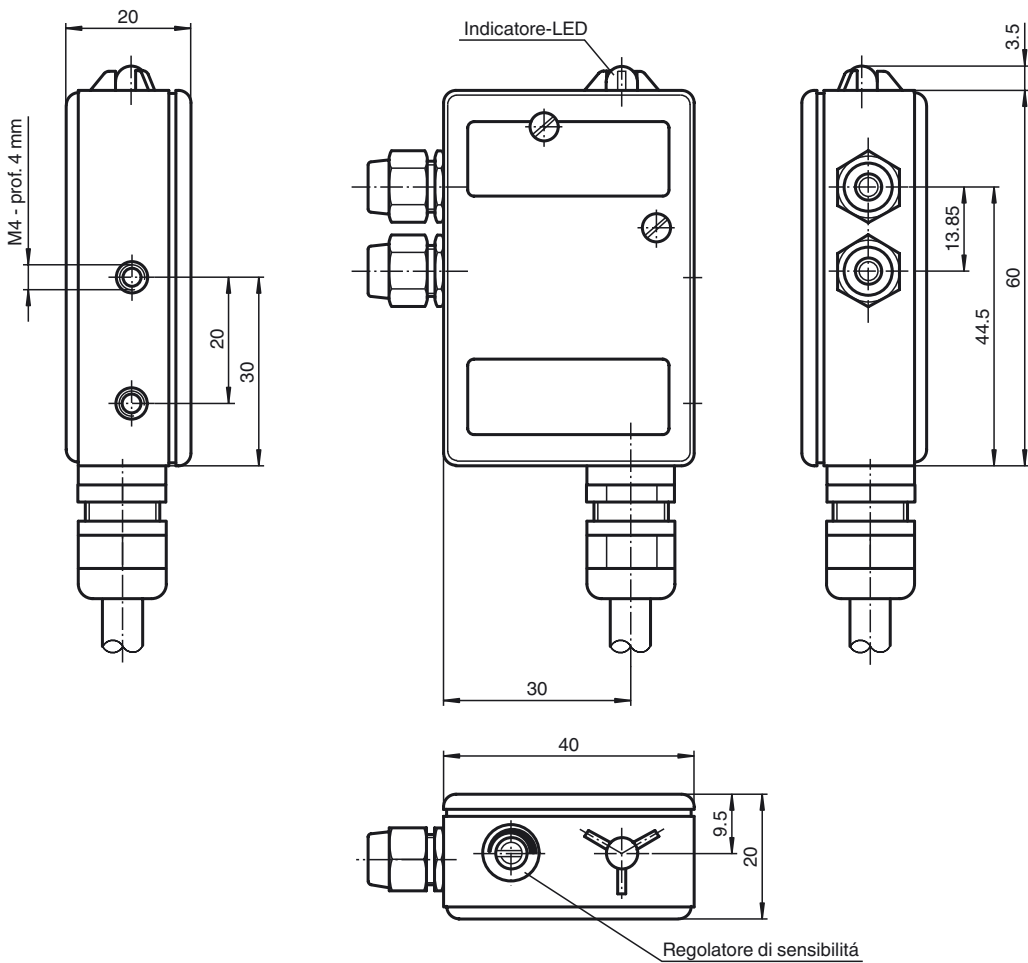
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Signal converter SU11/.../92



Signal converter SU11/.../115



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