



Photoelectric sensors
V18, Photoelectric proximity sensor, energetic

VTE18-4P8212



Model Name > **VTE18-4P8212**
Part No. > **6013117**



Illustration may differ

At a glance

- Cylindrical M18 housing
- Three sensing distances of 200 mm, 400 mm or 800 mm
- 3- or 4-wire
- Straight or right-angle housing
- Metal or plastic housing

Your benefits

- Simple, standardized design ensures easy mounting, alignment and replacement
- Compact, space-saving design easily fits in tight application spaces



Features

Sensing range max.:	10 mm ... 800 mm ¹⁾
Sensing range:	10 mm ... 700 mm
Housing design (light emission):	Cylindrical, straight, straight
Light source:	LED ²⁾
Type of light:	Infrared light
Sensitivity adjustment:	Potentiometer, 270°
Housing length:	63.6 mm
Thread diameter (housing):	M18 x 1
Sensor/detection principle:	Photoelectric proximity sensor, energetic
Light spot (distance):	40 mm (800 mm)
Optical axis:	Axial

¹⁾ Object with 90 % reflectance (referred to standard white DIN 5033) ²⁾ Average service life 100,000 h at Ta = +25 °C

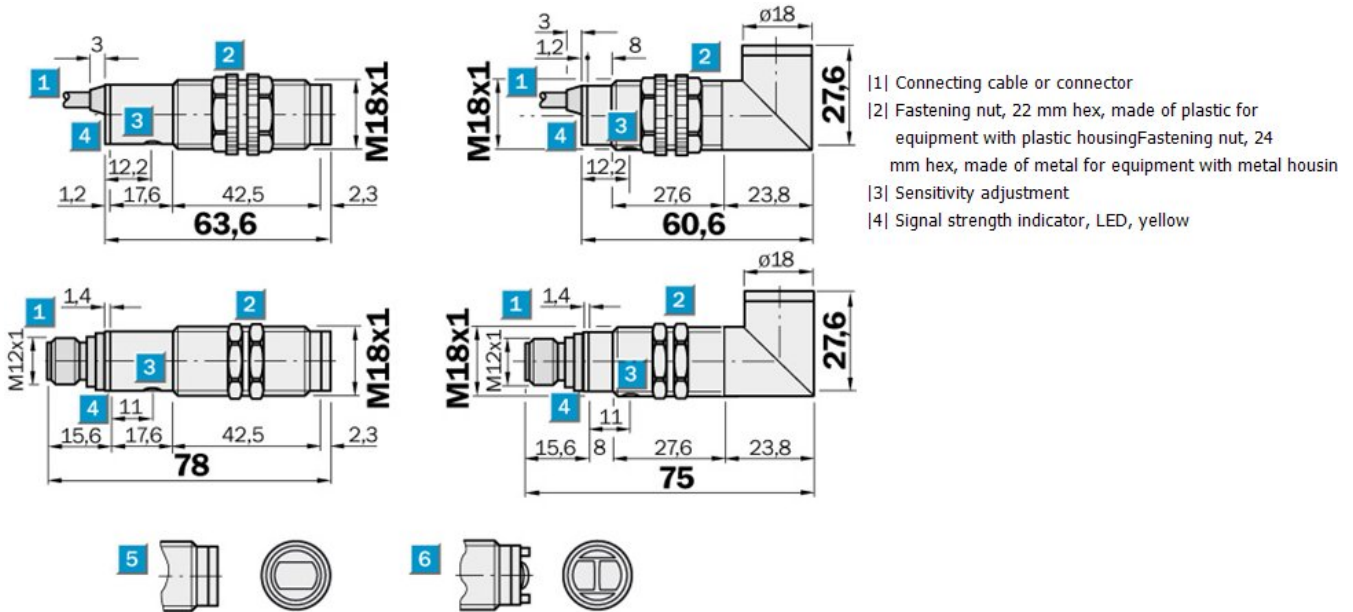
Mechanics/electronics

Enclosure rating:	IP 67
Supply voltage:	10 V DC ... 30 V DC ¹⁾
Residual ripple:	≤ 10 % ²⁾
Power consumption:	≤ 30 mA ³⁾
Switching output:	PNP, Light/dark-switching, Selectable via L/D control wire, open collector
Output current I _{max.} :	100 mA
Response time:	≤ 2 ms ⁵⁾
Switching frequency:	250 Hz ⁶⁾
Connection type:	Cable, 4-wire, 2 m ⁷⁾

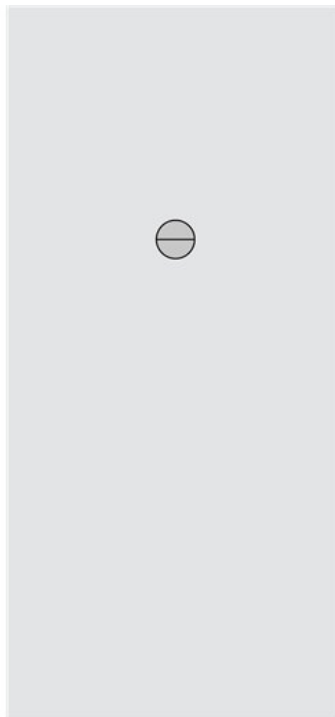
Cable material:	PVC
Conductor size:	0.14 mm ²
Cable diameter:	5 mm
Protection class:	III
Circuit protection:::	A, B, C, D ^{8) 9) 10) 11)}
Weight:	120 g
Housing material:	Nickel-plated brass
Optics material:	PMMA
Ambient operating temperature:	-25 °C ... 70 °C
Special device:	-
Angle of dispersion:	2.8 °
UL File-No.:	UL No. NMFT2.E175606

1) Limit values 2) May not exceed or fall short of V_S 3) Without load 4) Control wire open: dark-switching D.ON 5) Signal transit time with resistive load 6) With light/dark ratio 1:1 7) Do not bend below 0 °C 8) A = V_S connections reverse-polarity protected 9) B = inputs and output reverse-polarity protected 10) C = interference suppression 11) D = outputs overcurrent and short-circuit protected

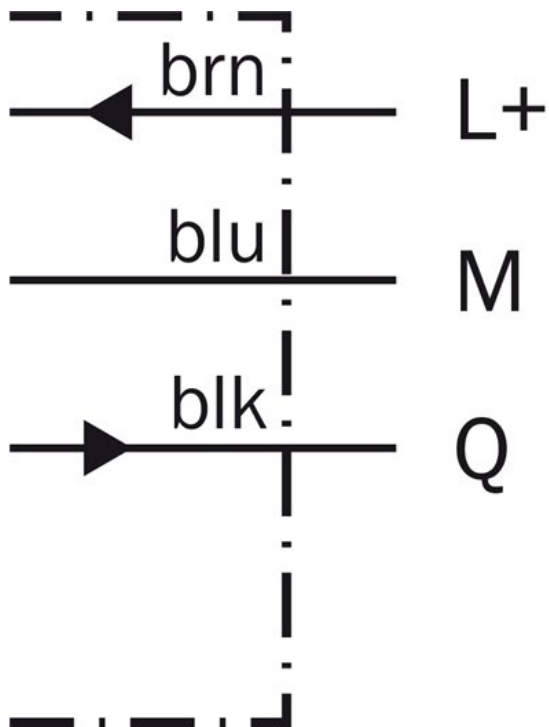
Dimensional drawing



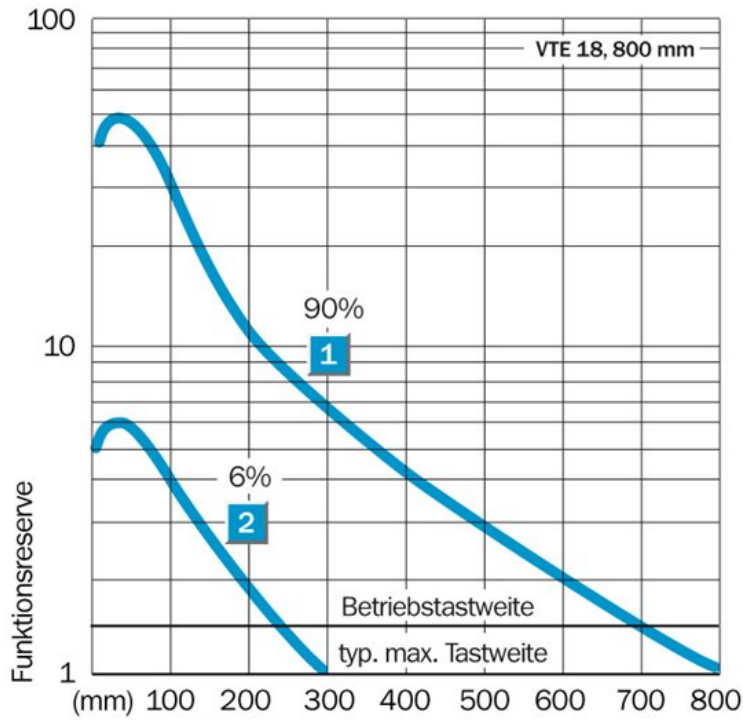
Adjustments possible



Connection diagram



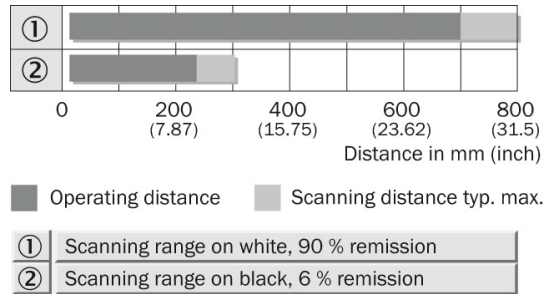
Characteristic curve



Connection type



Sensing range diagram



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