

ONLINE DATA SHEET
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Photoelectric sensors
V18, Photoelectric proximity sensor, energetic

VTE18-4P4440



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V18, Photoelectric proximity sensor, energetic

Model Name > VTE18-4P4440
Part No. > 6013299





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

Sensor/detection principle:	Photoelectric proximity sensor, energetic
Housing design (light emission):	Cylindrical, angled, angled 90°
Housing length:	75 mm
Thread diameter (housing):	M18 x 1
Optical axis:	radial
Sensing range max.:	5 mm ... 400 mm [1]
Sensing range:	5 mm ... 350 mm
Type of light:	Infrared light
Light source:	LED [2]
Light spot (distance):	20 mm (400 mm)
Sensitivity adjustment:	Potentiometer, 270°
Angle of dispersion:	2.8 °

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

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC [1]
Residual ripple:	≤ 10 % [2]
Power consumption:	≤ 30 mA [3]
Output type:	PNP, Light/dark-switching, Selectable via L/D control wire, open collector [4]
Output current Imax.:	100 mA
Response time:	≤ 2 ms [5]
Switching frequency:	250 Hz [6]
Electrical connection:	Connector M12, 4-pin

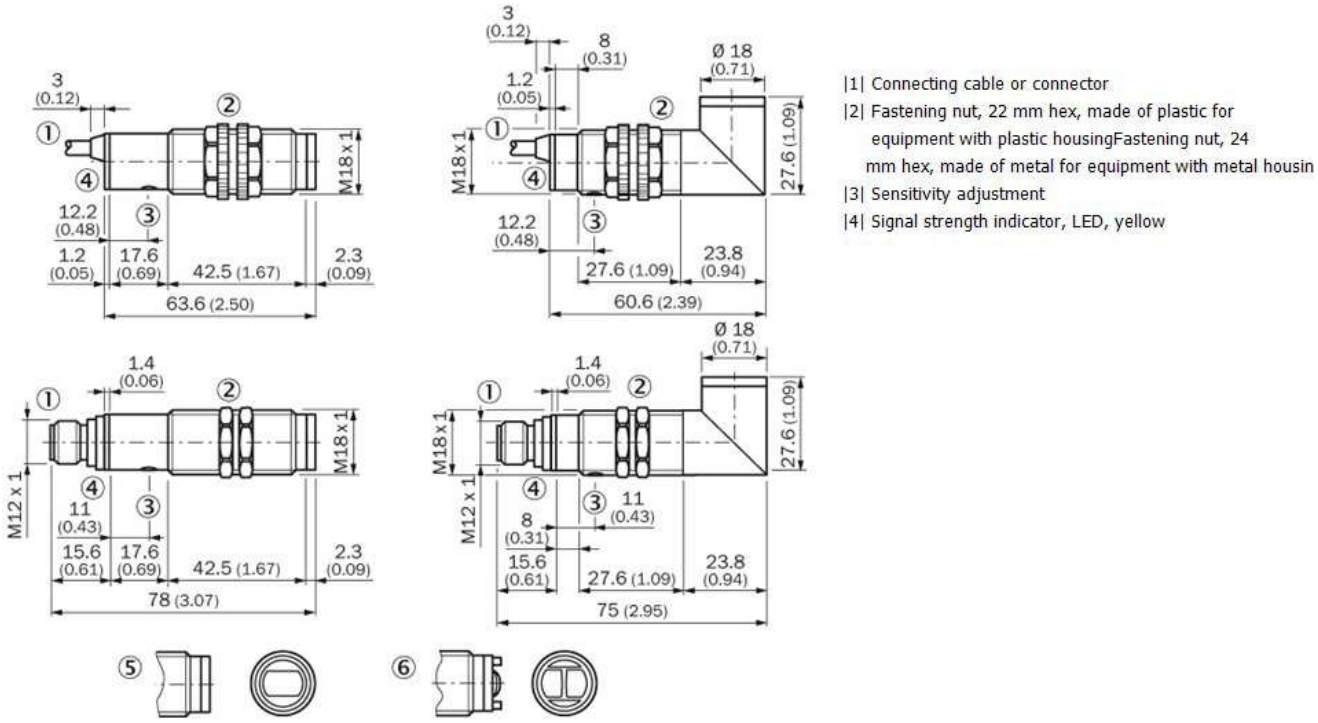
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Circuit protection::::	A, B, C, D [7) 8) 9) 10)]
Protection class:	III
Weight:	120 g
Housing material:	Nickel-plated brass
Optics material:	PMMA
Enclosure rating:	IP 67
Ambient temperature operation:	-25 °C ... 70 °C
UL File-No.:	UL No. NMFT2.E175606

Control wire open: dark-switching D.ON;

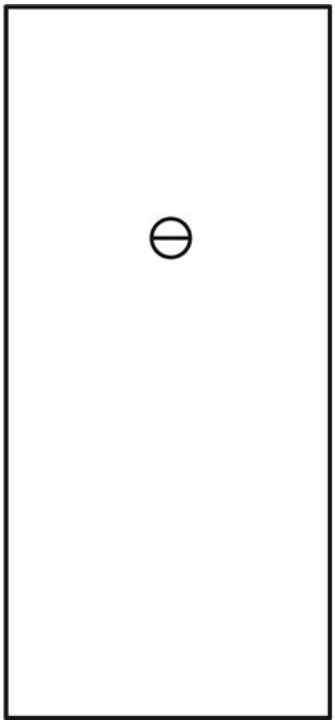
[1)] Limit values [2)] May not exceed or fall short of V_S tolerances [3)] Without load [4)] Control wire open: dark-switching D.ON [5)] Signal transit time with resistive load [6)] With light/dark ratio 1:1 [7)] A = V_S connections reverse-polarity protected [8)] B = inputs and output reverse-polarity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

Dimensional drawing

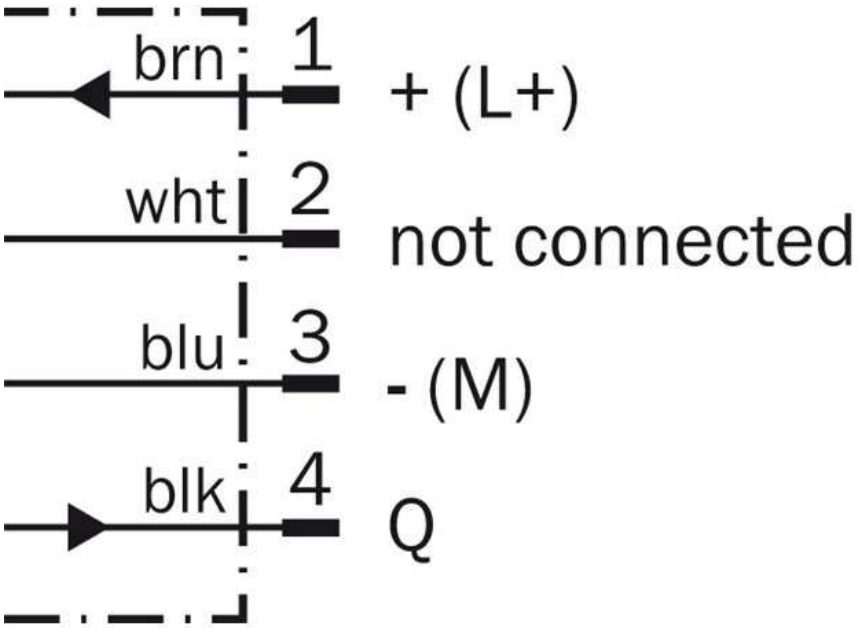


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Adjustments possible

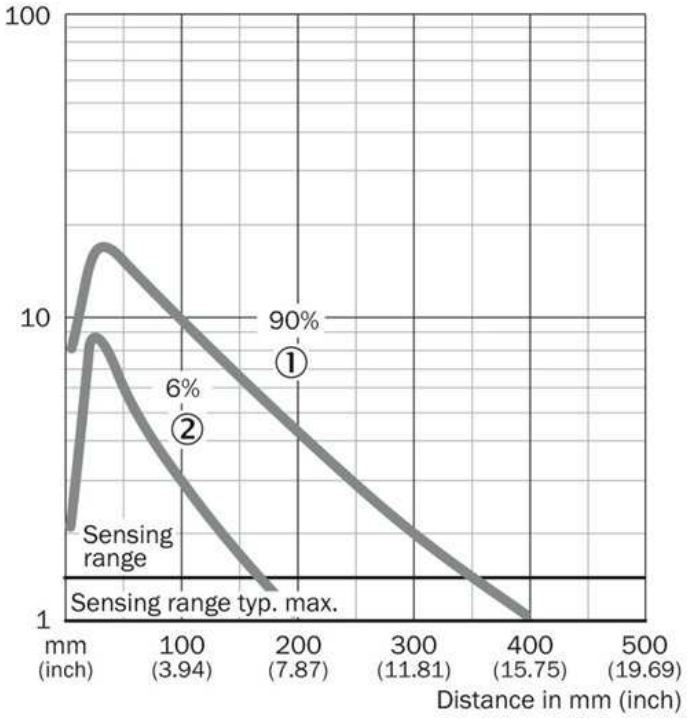


Connection diagram



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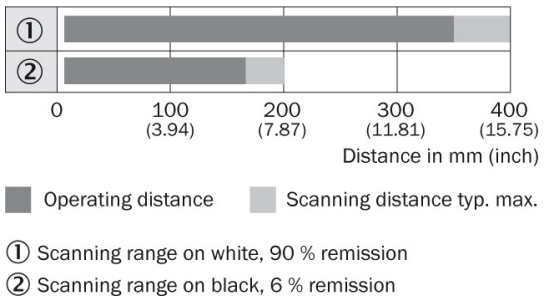
Characteristic curve



Connection type



Sensing range diagram



① Scanning range on white, 90 % remission
② Scanning range on black, 6 % remission

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