



Photoelectric sensors
W27-2 AS-i, Photoelectric proximity sensor,
Background suppression

WT27-2Z230



SICK
Sensor Intelligence.

Photoelectric sensors W27-2 AS-i, Photoelectric proximity sensor, Background suppression

Model Name > [WT27-2Z230](#)
Part No. > [1015099](#)



Illustration may differ

At a glance

- Integrated AS-i chip
- Models with visible red light or IR light for larger sensing ranges
- Precise adjustment of background suppression sensing range
- Optional front screen heating

Your benefits

- Less cabling and lower costs due to AS-i technology
- Precise background suppression for reliable detection of multi-colored objects
- Front screen heating reduces condensation from forming on the front lens, thus reducing maintenance costs and downtime



Features

Sensor/detection principle:	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D):	24.6 mm x 80 mm x 53.5 mm
Housing design (light emission):	Rectangular
Sensing range max.:	100 mm ... 1,000 mm ¹⁾
Sensing range:	100 mm ... 1,000 mm
Type of light:	Visible red light
Light source:	LED ²⁾
Light spot (distance):	15 mm (500 mm)
Adjustment of operating distance:	Potentiometer

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

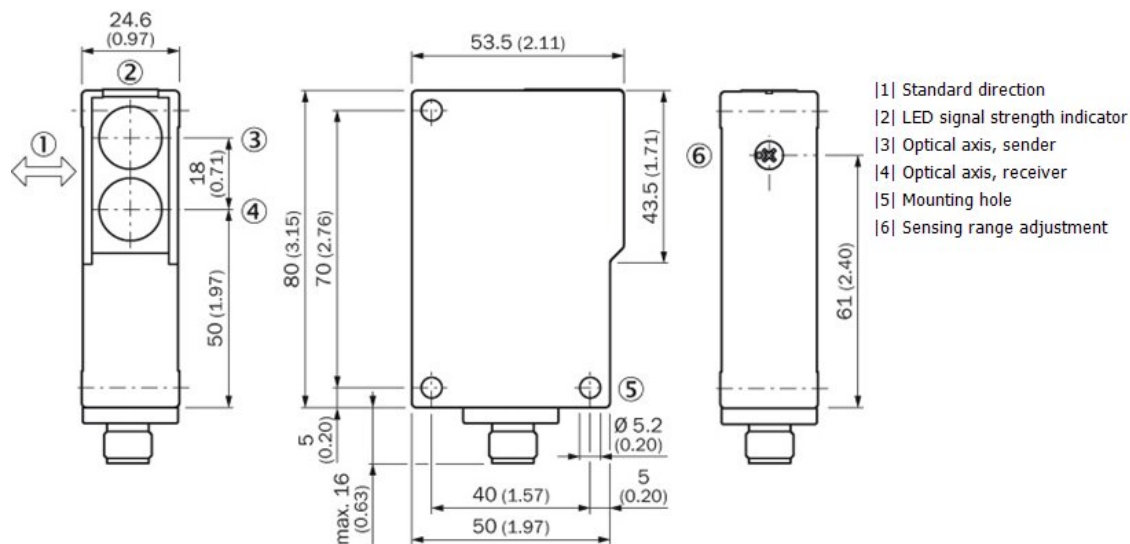
Mechanics/electronics

Supply voltage:	26.5 V DC ... 31.6 V DC ¹⁾
Ripple:	≤ 5 % ²⁾
Power consumption:	≤ 30 mA ³⁾
Response time:	< 2 ms ⁴⁾
Switching frequency:	250 Hz ⁵⁾
Connection type:	Connector M12, 4-pin
Circuit protection:	A, C ^{6) 7)}
Protection class:	II
Weight:	100 g
AS-Interface-Chip:	✓

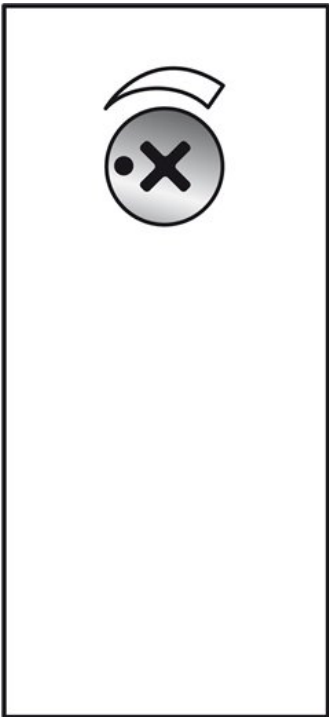
AS-Interface Profil:	S 1.1
Housing material:	ABS
Enclosure rating:	IP 67
Ambient operating temperature:	-40 °C ... 60 °C
Ambient storage temperature:	-40 °C ... 75 °C
UL File-No.:	UL No. NRKH.E147756

¹⁾ Limit values ²⁾ May not exceed or fall short of V_S tolerances ³⁾ Without load ⁴⁾ Signal transit time with resistive load ⁵⁾ With light/dark ratio 1:1 ⁶⁾ $A = V_S$
 connections reverse-polarity protected ⁷⁾ C = interference suppression

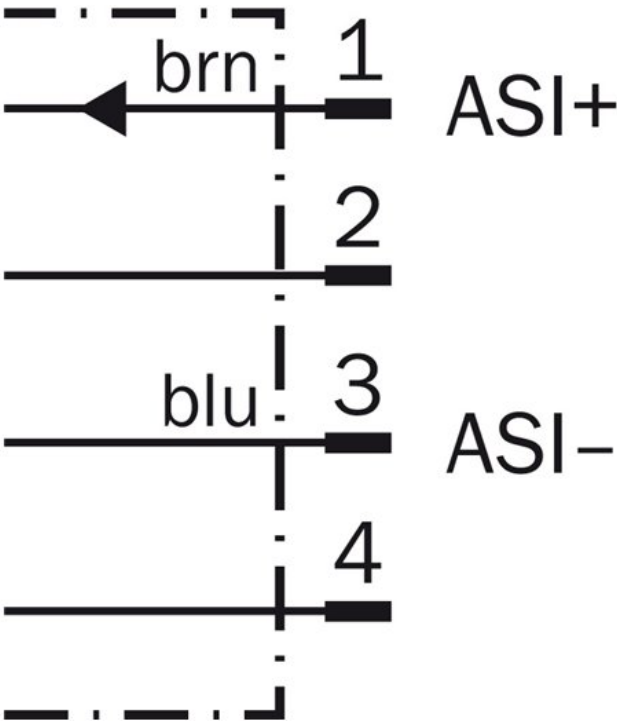
Dimensional drawing



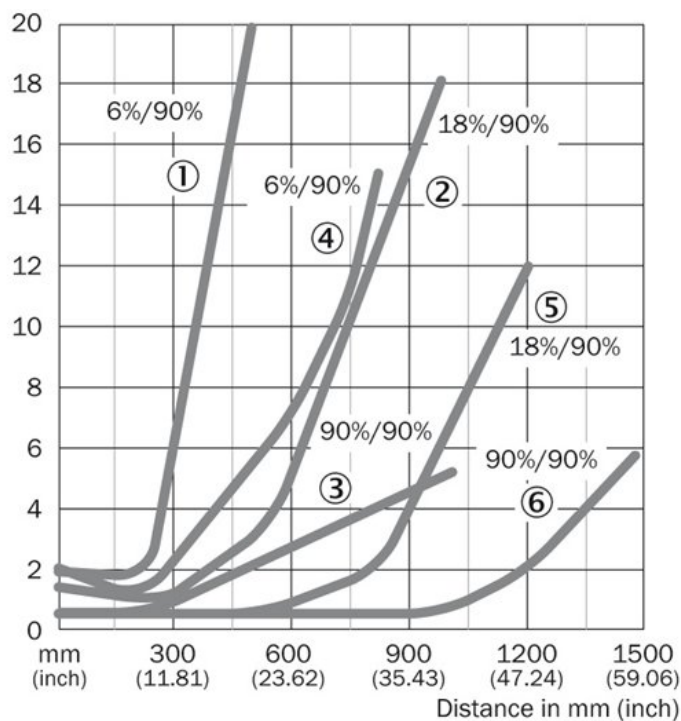
Adjustments possible



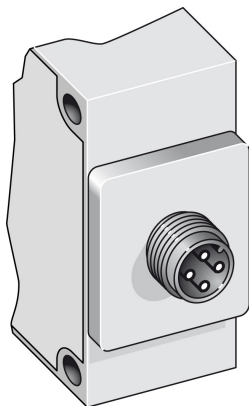
Connection diagram



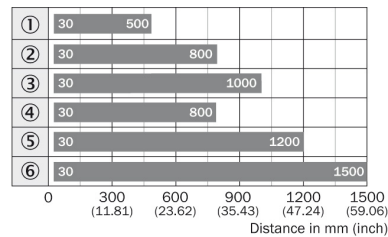
Characteristic curve



Connection type



Sensing range diagram



■ Sensing range

- ① Sensing range on black[®] red light
- ② Sensing range on gray[®] red light
- ③ Sensing range on white[®] red light
- ① Sensing range on black[®] infrared light
- ② Sensing range on gray[®] infrared light
- ③ Sensing range on white[®] infrared light

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