



DS60-P21111

Dx60

TIME-OF-FLIGHT SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
DS60-P21111	1016361

Other models and accessories → www.sick.com/Dx60

Detailed technical data

Features

Measuring range	80 mm ... 6,000 mm, 90% remission factor ¹⁾ 80 mm ... 4,600 mm, 18% reflection factor ¹⁾ 80 mm ... 2,400 mm, 6% remission factor ¹⁾
Target	Natural objects
Response time	10 ms
Switching frequency	50 Hz
Light source	Laser, infrared
Typ. light spot size (distance)	60 mm x 60 mm (at 6 m)
Additional function	Invertable digital output
Average laser service life (at 25 °C)	50,000 h
General notes	
Life cycle phase	Discontinued

¹⁾ Teach-in from 200 ... 6,000 mm.

Electronics

Supply voltage U_B	DC 18 V ... 30 V ¹⁾
Power consumption	≤ 3 W ²⁾
Ripple	≤ 5 V _{pp} ³⁾
Enclosure rating	IP67 (EN 60529)
Protection class	II

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

²⁾ Without load.

³⁾ May not fall short of or exceed V_S tolerances.

Mechanics

Connection type	Male connector, M12, 5-pin
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Ambient data

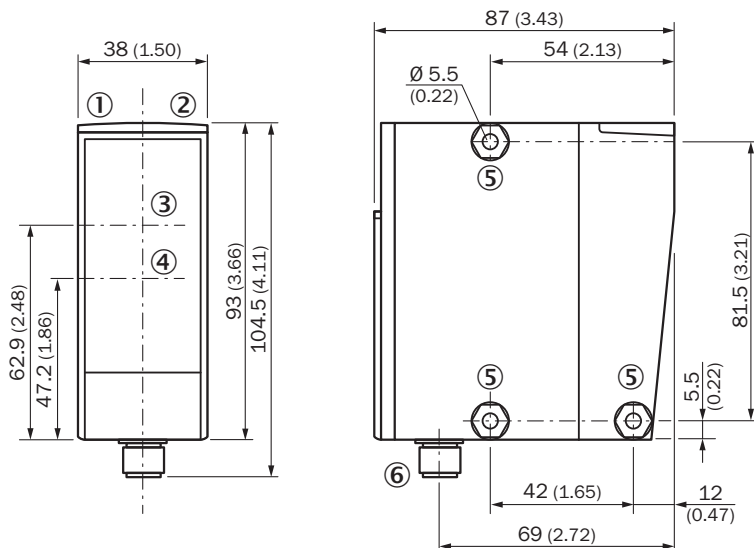
Ambient temperature, operation	-25 °C ... +55 °C
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Ambient temperature, storage	-25 °C ... +75 °C
Electromagnetic compatibility (EMC)	EN 61000-6-2 EN 60947-5-2

Classifications

ECLASS 5.0	27270801
ECLASS 5.1.4	27270801
ECLASS 6.0	27270801
ECLASS 6.2	27270801
ECLASS 7.0	27270801
ECLASS 8.0	27270801
ECLASS 8.1	27270801
ECLASS 9.0	27270801
ECLASS 10.0	27270801
ECLASS 11.0	27270801
ECLASS 12.0	27270916
ETIM 5.0	EC001825
ETIM 6.0	EC001825
ETIM 7.0	EC001825
ETIM 8.0	EC001825
UNSPSC 16.0901	41111613

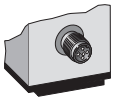
Dimensional drawing



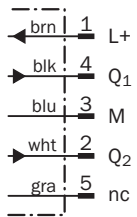
Dimensions in mm (inch)

- ① status indicator digital output 1
- ② status indicator switching output 2
- ③ optical axis, sender
- ④ optical axis, receiver
- ⑤ Mounting hole, Ø 5.2 mm
- ⑥ Plug, M12, 5-pin

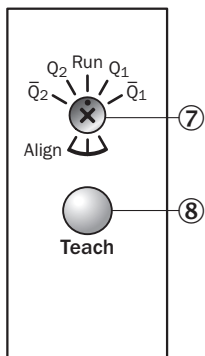
Connection type Male connector M12, 5-pin



Connection diagram



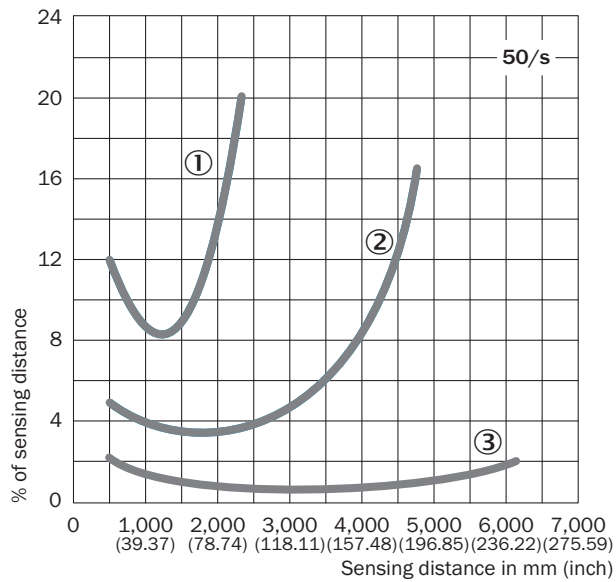
Adjustment possible



⑦ rotary switch

⑧ Control element

Sensing distance



- ① 6 % / 90 %
- ② 18 % / 90 %
- ③ 90 % / 90 %

Recommended accessories

Other models and accessories → www.sick.com/Dx60

	Brief description	Type	part no.
Mounting systems			
	Description: Mounting bracket Material: Steel Details: Steel, zinc coated Items supplied: Without mounting hardware	BEF-WN-DS60	4032937
reflectors and optics			
	Description: "Diamond grade" reflective tape, self-adhesive, can be assembled from the sheet Dimensions: 74.9 cm 91.4 cm Ambient operating temperature: -34 °C ... +70 °C	REF-DG-K	4019634

	Brief description	Type	part no.
connectors and cables			
	Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A15-020VB5XLEAX	2096215
	Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A15-050VB5XLEAX	2096216
	Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A15-100VB5XLEAX	2096217
	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A15-020VB5XLEAX	2096239
	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A15-050VB5XLEAX	2096240
	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A15-100VB5XLEAX	2096241
	Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A15-C60VB5XLEAX	2145573
	Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A15-010VB5XLEAX	2145574
	Connection type head A: Female connector, M12, 5-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 3 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YG2A15-030VB5XLEAX	2145575
	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A15-C60VB5XLEAX	2145570
	Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 3 m, 5-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones	YF2A15-030VB5XLEAX	2145572

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

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