

DL50-2B215252

SICK AG · Dx50

FEATURES

Retro-reflective measurement up to 50 m on reflective tape Advanced HDDM™ time-of-flight technology offering high measuring rate up to 3 kHz Dual interface: Simultaneous digital push-pull switching / IO-Link V1.1 and analog output Extended operating temperature range -40 °C to +65 °C without requiring internal heater Dual IP65 and IP67 enclosure protection rating for harsh industrial environments

General Identification

Part Number:

1065662

Product Sub-Series / Family:

Dx50-2 Next Generation Distance Sensor

Measurement Principle:

HDDM™ (High Definition Distance Measurement) Optical Time-of-Flight

Technical & Optical Parameters

Measuring / Protective Range:

200 mm ... 50,000 mm (On Diamond Grade reflective tape)

Light Source:

Visible red laser diode (wavelength 658 nm; Class 2 per IEC 60825-1:2014)

Laser Class:

Class 2 (IEC 60825-1:2014, 658 nm, average power < 1 mW)

Response Time:

0.83 ms ... 75 ms (Configurable via speed settings)

Repeatability:

≥ 0.5 mm ... 5 mm

Measurement Accuracy:

Typ. ± 7 mm

Interface & Electrical Specifications

Output & Communication Interface:

Digital Output Q1: 1x Push-Pull (PNP/NPN) / IO-Link V1.1; Analog Output QA: 1x Configurable (4 mA ... 20 mA, ≤ 450 Ω / 0 V ... 10 V, ≥ 50 kΩ, 16-bit); Multifunctional input (MF)

Supply Voltage:

DC 10 V ... 30 V (Reverse-polarity protected; Limit values; max. 8 A)

Power Consumption:

≤ 2.1 W

Electrical Connection:

Male connector M12, 5-pin

Mechanical & Environmental Specifications

Ambient Temperature, Operation:

-40 °C ... +65 °C

Ambient Temperature, Storage:

-40 °C ... +75 °C

Enclosure Protection Rating:

IP65, IP67 (EN 60529)

Physical Dimensions (W x H x D):

36.2 mm x 67.3 mm x 58 mm

Housing Material:

Zinc die-cast (ZNAL4CU1) with acrylic glass (PMMA) optical window

Device Weight:

Approx. 235 g