DS4 Standard

957650077

DS4-10-0450-S12-JE

DETECTION AND MEASUREMENT AREA SENSOR

OVERVIEW

Versatile area sensors for detecting and measuring in various industrial applications. Conveniently configured using IO-Link and wirelessly programmable through AppGUI for detailed parameter adjustments and advanced setups.

TECHNICAL FEATURES

Detection properties

Nominal sensing distance	0.2…7 m Transparent objects (T = 0…50 °C; H ≤ 1.5 m): 10% (0.35 - 1.5 m) 20% (0.35 - 2.5 m) 30 % (0.35 - 4 m)
Beams space	10 mm
controlled height	450 mm
number of rays	45
Sensitivity adjustment	remote teach, IO-Link, AppGUI
Detection capability	10 mm (with Teach-In), 14 mm (without Teach-In)

Features and performances

Detection capability	0

Application

Description	DS4-10-0450-S12-JE 10mm H=450mm Eth

Outputs

Output type	PNP or NPN or Push-Pull , 0…10 V, 4..20 mA, IO-Link, Ethernet TCP/IP
Output Function	Light array for detection and measurement

Electrical data

Operating Voltage	19.2...28.8 Vdc
No-Load supply current	360 mA (emitter and receiver)
Leakage current	100 mA
Output voltage drop	2.5 V @ IL=100 mA
Time delay before availability	2.35 s
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Emission	Infrared (850 nm) Emitter + Receiver
Impulsive Overvoltage Protection	Yes
Protection against inductive loads	Yes

Mechanical data

Material	Aluminium / PBT
Housing material	Aluminium
Optic window material	PMMA
Weight	1.4 Kg/m (single bar, without package)

Connections	M12 5 poles + 200 mm length cable TPU (TX), M12 8 poles + 200 mm length cable TPU (RX), M12 4 poles D code + 150 mm length cable TPU (ETH)
Active Head Material	PMMA
Storage temperature	-30…+70 °C
Humidity	15…95 % (without freeze)

Test/Approvals

Shocks and vibrations	10 mm / 3g, 5 … 150 Hz frequency, (EN 60068-2-6 / Class 3M7 IEC TR 60721-4-3); 25g x 6 ms x 600 (EN 60068-2-27 / Class 3M7 IEC TR 60721-4-3)

Accessories

Supplied Accessories	Fixing brakets

Generical Data

Dimensions	35 x 40 x 459
Operating Temperature	-30…+50°C (without freeze)
Mechanical Protection	IP65 IP67

HMI/UI

LED indicators	TX: Green (Power ON), Yellow (Emission range) Red (Test, failure, Firmware ongoing update), Blue (Emission range, Firmware update completed) RX: Green (Power ON), Yellow (Status output, Connection and teach-in active) Red (Hardware Errors, Invalid con

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