



DS4 Base

957650049

DS4-10-0450-B05-JA

DETECTION AND MEASUREMENT AREA SENSOR

OVERVIEW

Basic version of detection and measurement area sensors designed for simple applications. Reliable performance and ease of use ensure detection and measurement in industrial applications.



TECHNICAL FEATURES

Detection properties

Nominal sensing distance	0.2...7 m
Beams space	10 mm
controlled height	450 mm
number of rays	45
Sensitivity adjustment	High/Low emission (input emitter)

Features and performances

Detection capability	14 mm
----------------------	-------

Application

Description	DS4-10-0450-B05-JA Base 10mm H=450mm
-------------	--------------------------------------

Outputs

Output type	PNP or NPN or Push-Pull , 0...10V, 4..20mA IO-Link
-------------	--

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 5 poles + 200 mm length cable TPU (RX)
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 mm
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), Blue (Emission range) RX: Green (Power ON), Yellow (Status output, Connection
----------------	--

Active) Red (Hardware Errors, module occupied)

**Datasensing
S.r.l.**

Strada S.Caterina, 235
41122 Modena (MO)
Tel. 059 420411
Fax 059 253973
E-mail
info@datasensing.com

**date of
printing**
10/08/2026
09:30:41