



DM

DM3/0N-1AAN

Photo.M12,NPN-NO/NC,Cable,Diffuse

TECHNICAL FEATURES

Detection properties

Nominal sensing distance	100mm
Thermal drift of Sr	≤10% Sr
Repeat Accuracy	5%
Sensitivity adjustment	Teach-in

Application

Function Principle	Diffuse reflection (short distance, ≤200mm)
Notes	white target Kodak 90% 100 x 100mm
Optic position	Axial

Outputs

Output type	NPN L/D Selectable

Output Function	L/D Selectable
Switching frequency	400Hz
Response time	1,25ms

Electrical data

Operating Voltage	10...30VDC
No-Load supply current	≤ 30mA
Load current	≤100mA
Leakage current	≤10μA
Output voltage drop	≤2V@Iload=100mA
Max ripple content	≤10%
LED indicators	Yellow (status output)
Time delay before availability	≤150ms
Short-circuit protection	Yes
Reverse Polarity Protection	Yes
Emission	LED Infrared (880nm)
Interference to external light	3.000lux (incandescent lamp), 10.000lux (sunlight)
Impulsive Overvoltage Protection	Yes

Mechanical data

Housing material	Nickel plated brass / PBT cable exit
------------------	--------------------------------------

Connections	M12 plug
-------------	----------

Active Head Material	PMMA
----------------------	------

Diameter/Dimension	M12
--------------------	-----

Test/Approvals

Approvals	CE cULus Ex: II 3G Ex nA IIC T6 Gc II 3D Ex tc IIIB T85°C Dc
-----------	--

EMC compatibility	EN 60947-5-2
-------------------	--------------

Shocks and vibrations	Vibration IEC 60068-2-6 / Shock IEC 60068-2-27
-----------------------	--

Accessories

Supplied Accessories	nuts M12 x 1
----------------------	--------------

Generical Data

Dimensions	M12x1/L=54,5mm
------------	----------------

Operating Temperature	- 25°C...+ 70°C (Without freeze)
-----------------------	----------------------------------

Mechanical Protection	IP67
-----------------------	------

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**
09/08/2026
23:52:41