



AA1

AA1/CN-3A

Ind.d3,NPN-NC,Cable,Sch-LD
Ø 3 CYLINDRICAL MINIATURIZED INDUCTIVE SENSORS

OVERVIEW

- Complete range of cylindrical ultraminiaturized inductive sensors Ø 3
- IP67 protection degree



TECHNICAL FEATURES

Detection properties

Nominal sensing distance	1mm
Operanting distance	0...0,81mm
Standard target	3x3mm FE360
Correction Factor	copper: $0,33 \pm 10\%$ / aluminium: $0,29 \pm 10\%$ / brass: $0,35 \pm 10\%$ / stainless steel: $0,71 \pm 10\%$
Thermal drift of Sr	< 10%
Repeat Accuracy	< 5% (UB 24V Ta=23°C ±5°C)

Hysteresis	1 ... 20%
------------	-----------

Application

Description	Ø3 standard flush mount
-------------	-------------------------

Functions	Proximity
-----------	-----------

Outputs

Output type	NPN
-------------	-----

Output Function	NC
-----------------	----

Switching frequency	3,5kHz
---------------------	--------

Electrical data

Operating Voltage	10...30Vdc
-------------------	------------

No-Load supply current	≤ 10mA
------------------------	--------

Load current	≤ 100mA
--------------	---------

Leakage current	≤ 10μA
-----------------	--------

Output voltage drop	≤ 1,5V @100mA
---------------------	---------------

Max ripple content	≤ 10%
--------------------	-------

LED indicators	Yellow LED output state
----------------	-------------------------

Time delay before availability	≤ 50ms
--------------------------------	--------

Short-circuit protection	Yes
--------------------------	-----

Reverse Polarity Protection	Yes
-----------------------------	-----

Impulsive Overvoltage Protection	Yes
Protection against inductive loads	Yes

Mechanical data

Dimensions	Ø3 / L = 22mm
Mounting	Shielded
Material	AISI303 Stainless Steel
Housing material	AISI303 Stainless Steel
Weight	30g
Connections	2m PUR Cable
Active Head Material	PBT
Operating temperature	-25°C...+70°C
Diameter/Dimension	Ø3

Test/Approvals

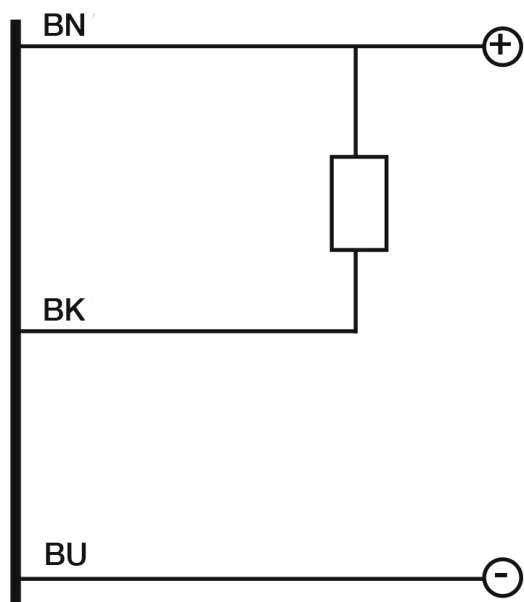
Approvals	CE UL
EMC compatibility	IEC 60947-5-2
Shocks and vibrations	Vibration IEC 60068-2-6 / Shock IEC 60068-2-27
Degree of protection	IP67

Generical Data

Dimensions	Ø3 / L = 22mm
Operating Temperature	-25°C...+70°C
Mechanical Protection	IP67

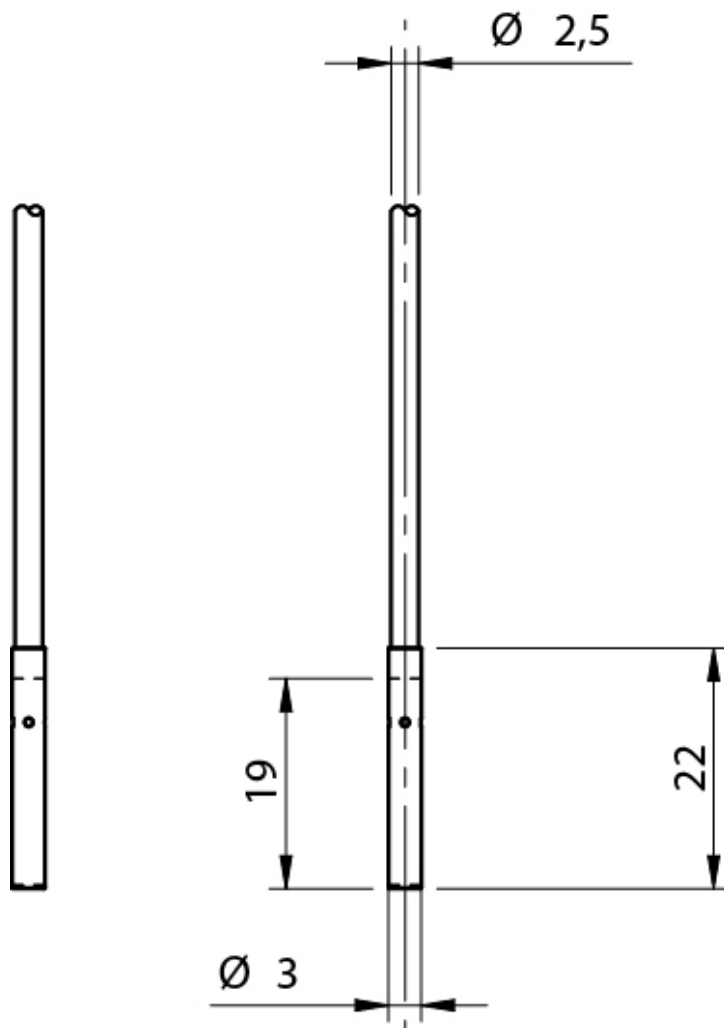
CONNECTIONS

Eletrical diagram

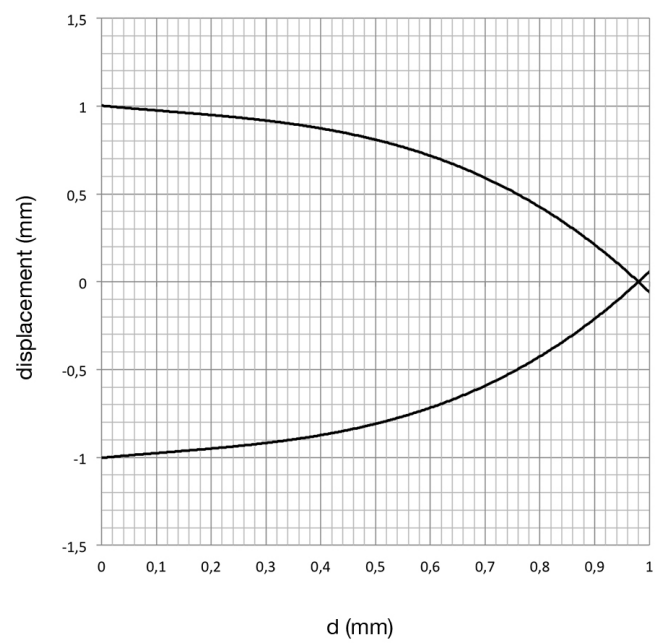


OTHERS

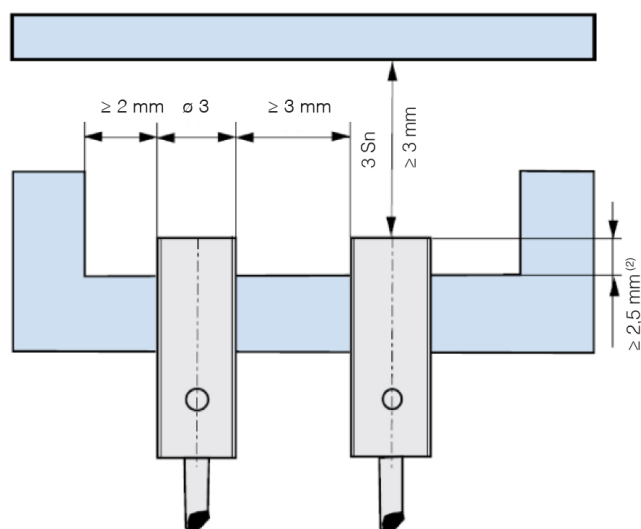
Dimensions



Response curves



Installation



⁽²⁾ $\geq 3 \text{ mm}$ without ferro-magnetic material

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**
06/08/2026
18:08:58