

## MAGNETIC CONTACT 4HD-300/NFA2P Grade 2

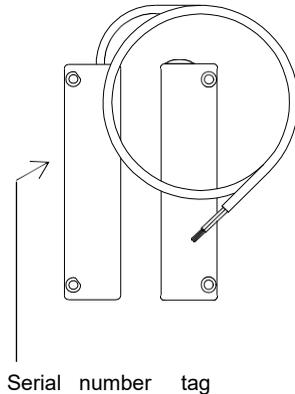
### 1. DESCRIPTIVE NOTICE

#### 1.1. GENERAL

- The 4HD-300/NFA2P is a magnetic contact designed to be mounted protruding. This detector is made up of two waterproof cases:
- A case containing a normally closed detection contact.
- A case containing a permanent magnet.
- The type of fastening: protruding
- Security against fraud at the opening,
- The role of the set is to provide alarm information in case of opening to protect windows, doors, or other exits.
- These devices must be placed inside the premises to be protected. Their robustness, its tight seal and their technical characteristics allow them to be used in a severe climatic environment.
- 4HD-SPC reference spacing plates allow the case containing the contact and/or case containing the magnet to be enhanced.

#### 1.2. DESCRIPTION

- The aluminum case containing the magnet measures 79.5 x 18.9 x 12.7 mm (Weight 51.1g).
- The aluminum case containing the detection contact measures 81 x 19 x 12.6 mm (Weight 95.6g).  
It contains:
  - A self-protection loop consisting of two wires.
  - A detection contact (closed off alarm, opened as an alarm) consisting of a reed bulb connected to two wires.
- The exit wires about 3m long are protected by a plastic sheath.
- The case containing the contact is identified by an identification tag.
- The aluminum HD-SPC spacing plate measures 79 x 19 x 3 mm.



#### 1.3. TECHNICAL FEATURES

##### 1.3.1 Electrical Features

Cable Resistance: 95mΩ/m

1.3.1.1 Detection loop:

- Cutting power: 10 VA
- Contact resistance: 560mΩ

1.3.1.2 Self-protection loop

- Contact resistance: 520mΩ

1.3.2. environment

- Operating temperature: -25C to 70C
- Relative humidity: 6 cycles at 55 degrees with 75% HR.
- Protection Index: IP 43 IK 07
- Environment Class III

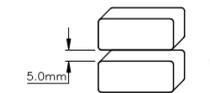
1.3.3. Functional distances contact/magnet case (in mm) depending on the support.

NOTE: 4HD-SPC spacing plates should be used when mounting the contact or magnet on a free surface.

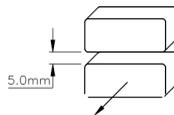
1st column: contact case and magnet case attached to wooden support.

3rd column: contact case and 4HD-SPC reference spacing plate attached to iron support,  
magnet case and 4HD-SPC reference spacing plate attached to iron support.

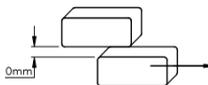
	A	B	C
<b>Y Axis</b>			
Min opening	18	N/A	6
Max opening (Typ.)	42	N/A	22
<b>X Axis</b>			
Min at closing	8	N/A	6
Max opening (Typ.)	20	N/A	18
<b>Z Axis</b>			
Min at closing	28	N/A	8
Max opening (Typ.)	53	N/A </td <td>40</td>	40
A	Wood		
B	Iron Plate		
C	Aluminum, Ferrous Metals, Plastic, Wood		



Sense of movement



Sense of movement



Sense of Displacement

- For these tests, the distances are measured between the two boxes.
- Contact changes immediately state when distances reach the above defined distances.

2.

INSTALLATION INSTRUCTIONS

2.1. CHOICE OF LOCATION

- Choose the location of the detector so that you can insert the wiring junction (in a molding, for example).
- The case containing the contact must be attached to the fixed part of the exit to be protected while the case containing the magnet must be attached to the moving part;
- The distance between the two cases must be less than the minimum distance at contact closure when the protected exit is closed (see above).
- Contact and magnet should be equipped with a minimum gap between them and ideally no more than about half of the total operating gap. See drawings above for typical positioning and orientation. Ensure the central positioning of a magnet housing on the X and Z axis
- Use 4HD-SPC reference spacing plates to possibly enhance the case containing the contact and/or case containing the magnet so that they are attached to the same plane.

## 2.2. INSTALLATION

### - Contact Housing:

Attach the sensor case and any 4HD-SPC spacing plates to the fixed part. Use two screws 4 mm with a fresh head; mini length 25 mm - 3 mm per 4HD-SPC plate used.

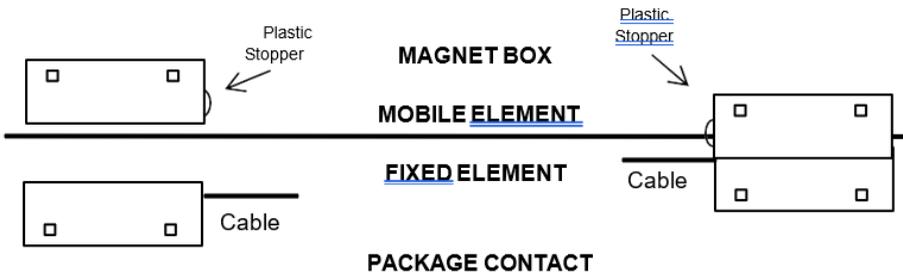
### - Magnet Housing:

Attach the magnet case and any 4HD-SPC spacing plates to the moving part next to the case containing the sensor. Use two screws 4 mm with a fresh head; mini length 25 mm - 3 mm per 4HD-SPC plate used.

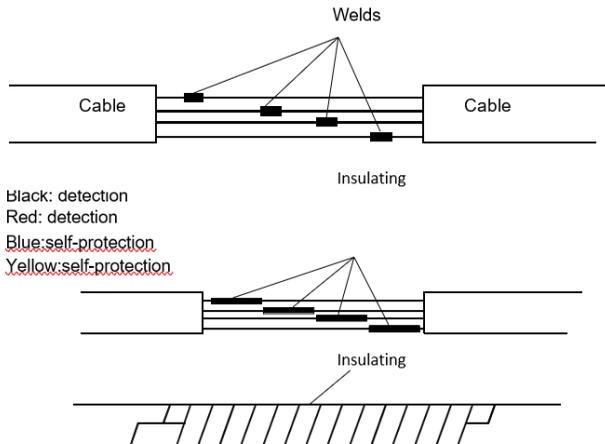
NOTE: The fixation screws used must be protected from oxidation. Anodised, stainless or chrome screws are recommended.

- Sense of assembly: take care to respect the orientation of the cases according to the diagram below. 2 possible positions: cable arrival to the right or left.

Find your way to the fastening screws. They must be on the furthest side of the fixed/moving part separation.



## 2.3. CONNECTION SCHEMATICS (SEE EXPLANATION PAGE 4)



## 2.4. CONNECTIONS (SEE SCHEMATICS)

- If the 4HD-300/NFA2P cable is too long, it is possible to cut it to the desired length.
- The detection contact of the 4HD-300/NFA2P (tracking: red and black wire) is to be connected in series in a detection loop of the alarm center used.
- The 4HD-300/NFA2P self-monitoring loop (tracking: blue and yellow/wires) is to be connected in a time in the self-protection loop of the installation.
- Use a four-conductor connection cable.
- Make sure the welds and insulate (with electrician tape) one by one the wires of the 4HD-300/NFA2P on the wires of the cable.
- Isolate with duct tape between the sheaths of the two cables.
- Embed the wiring connections thus formed.

## 3. COMMISSIONING NOTICES

### 3.1. OPERATING TEST

With the installation's wiring complete, open the 4HD-300/NFA2P-protected mobile element and find that the associated power plant has considered the opening of the loop on which the detector is connected.

### 3.2. PREFARED INSTALLATION

*For this operation, use a two-component ARALDITE epoxy glue (adhesive - hardener). Prefer the "fast hardening" version. See the instructions for this glue for the *modus operandi* and preparation.*

- After controlling the operation of the device disassemble the screws that attach the case containing the sensor.
- Place glue on the machine and reassemble the screws.

## 4. EMPLOYMENT NOTICE

The 4HD-300/NFA2P aperture detector is operated from the alarm panel to which it is connected. The 4HD-300/NFA2P, placed at level 3, is not accessible to the user.

## 5. MAINTENANCE INSTRUCTIONS

The 4HD-300/NFA2P aperture detector does not require any special maintenance. Its operation will be checked by the installer at the same time as the alarm panel to which it is connected.

AFNOR CERTIFICATION

Chert CNPP . .

[www.marque-nf.com](http://www.marque-nf.com)

[www.cnpp.com](http://www.cnpp.com)

Certification repository:

NF EN50131-2-6:2008, RTC 50131-2-6:2015, NF324-H58

Certificate number: 2121000005