

OPENING SENSOR, A CONTACT 4S-300/NFA2P

Grade 2

1. DESCRIPTIVE NOTICE

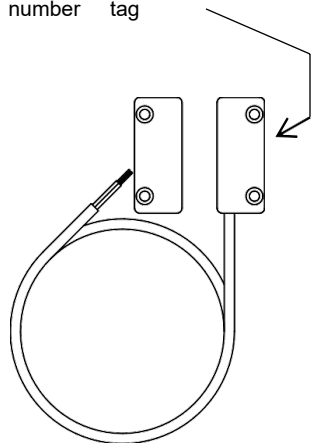
1.1. GENERAL

- The 4S-300/NFA2P, is a contact aperture detector designed to be protruded. 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, waterproofing and technical characteristics make it possible to use them in a harsh climate environment.
- S-SPC reference spacing plates may enhance the case containing the contact and/or case containing the magnet.

1.2. DESCRIPTION

- The white plastic case containing the magnet. measure: 39 x 14.5 x 9 mm (product weight 9.1g).
- The white plastic case containing the detection contact measures: 39 x 14.5 x 9 mm (product weight 53.7g).
 - 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.
 - It is spotted by an identification tag.
- The white plastic S-SPC spacing plate measures 40 x 15 x 1.5 mm.

Serial number tag



1.3. TECHNICAL FEATURES

1.3.1 Electrical Features

Cable Resistance: 95 mΩ/m

1.3.1.1 Detection loop

- Cutting power: 10 VA.
- Contact resistance: 560m Ω

1.3.1.2 Self-protection loop

- Contact resistance: 560mΩ

1.3.2. Environment.

- Operating temperature: -25 degrees to 70degrees Celsius
 - Relative humidity: 6 cycles at 55 degrees C with 95% HR.
 - Protection Index: IP 43 IK 04
 - Environment Class III

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

NOTE: S-SPC reference spacing plates should be used when mounting the contact or magnet on a ferrous surface.

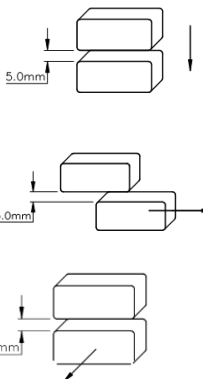
1st column: contact case and magnet case attached to wooden support.

3rd column: contact case and S-SPC reference spacing plate attached to the magnet case iron support and the S-SPC reference spacing plate attached to the iron support.

Y AXIS	Wood	SOFT IRON	Sweet Iron flat
min at closing	6	N/A	6
Max at opening (Typ.)	20	N/A	12

X AXIS	Wood	SOFT IRON	Sweet Iron flat
min At Closing	8	N/A	6
max at opening (Typ.)	16	N/A	10

Z AXIS	Wood	SOFT IRON	SWEET IRON plate
Min at closing	13	N/A	7
Max at opening (Typ.)	28	N/A	22



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

2. INSTALLATION NOTICE

2.1. CHOICE OF LOCATION

- Choose the location of the detector so that you can insert the wiring junction (in a room, for example).
- The case containing the sensor must be fixed 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 (see above).
- Use S-SPC reference spacing plates to possibly enhance the case containing the contact and/or the case holding the magnet so that they are attached to the same plane.
- 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 loved one on the X and Z axis

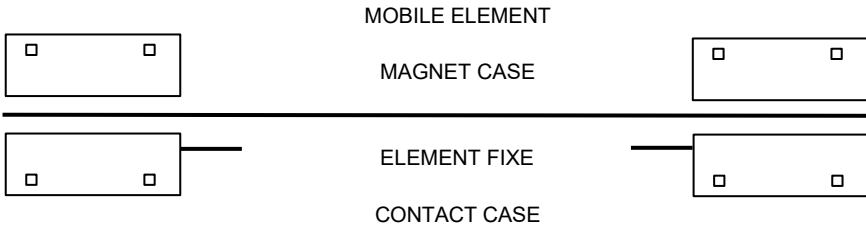
2.2. FIXATION

- Sensor box: Attach the sensor case and any S-SPC spacing plates to the fixed part of the exit to be protected. Use two screws \square 2.5 mm with a fresh head: mini length 20 mm - 1.5 mm per S-SPC plate.

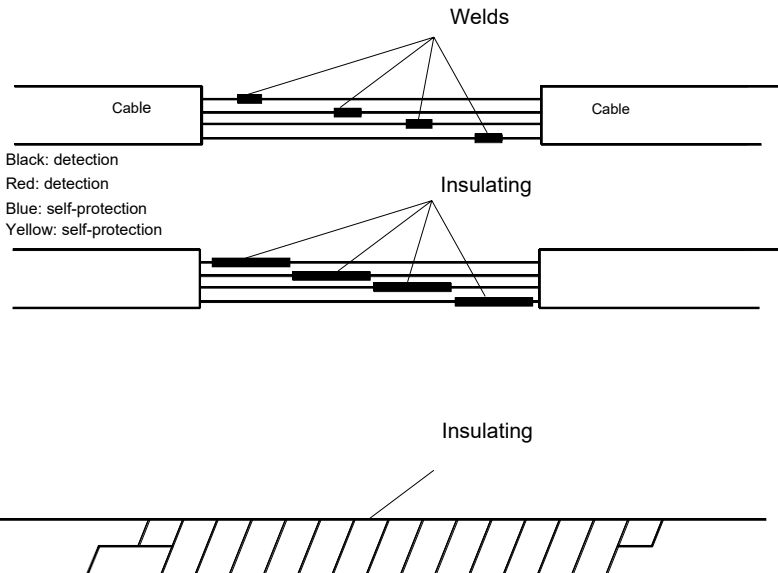
- Magnet box: Attach the magnet case and any S-SPC spacing plates to the moving part next to the case containing the sensor. Use two screws \square 2.5 mm with a fresh head: mini length 20 mm - 1.5 mm per S-SPC plate.

NOTE: The screws used must be protected from oxidation. Zinged, 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. CONNECTING SCHEMATICS (SEE EXPLANATIONS_PAGE_4)



2.4. CONNECTIONS (SEE SCHEMATICS)

- Use a four-conductor cable.
- The detection contact of the 4S-300/NFA2P (tracking: red wire and black wire) is to be connected in series in a detection loop of the alarm center used.
- The 4S-300/NFA2P self-monitoring loop (tracking: blue wire and yellow wire) is to be connected in series in the self-protection loop of the plant used.
- Make spurs, weld, and insulate (with electrician tape) one by one the wires of 4S-300/NFA2P on the wires of the cable.
- Isolate with duct tape between the sheaths of the two cables.
- Embedded the wiring connections thus formed.

3. COMMISSIONING NOTICES

3.1. OPERATING TEST

With the installation's wiring complete, open the 4S-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. DEFINITIVE FIXING OF THE DEVICE

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 a little glue on the detector site.
- Place a drop of glue on the screw fillets and re-feed them.

4. EMPLOY NOTICE

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

5. MAINTENANCE INSTRUCTIONS

The 4S-300/NFA2P aperture detector does not require any special maintenance. Its operation will be checked by the installer at the same time as that of the alarm plant.

AFNOR CERTIFICATION CErt CNPP.

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Certification repository:
NF EN50131-2-6:2008, RTC 50131-2-6:2015, NF324-H58
Certificate number: 2121000003