

GENERAL CHARACTERISTICS



The principle of operation of these instruments is based on the drive of one or more magnetic reed contacts, placed inside of the measuring rod, by one or more floats. The only moving element is the float that moves, for buoyancy, along the measuring rod, this guarantees extreme robustness and a limited need for maintenance.

- **Stainless steel – AISI 316**
- Up to 6 switch points.
- Working pressure up to 50 bars depending on the used float.
- Operating ambient temperature -30/+55°C UR 90%.
- Standard working temperature 105°C.
- Executions up to 180°C on request.
- Minimum degree of protection IP65.
- Built-in temperature sensors, on request.
PT – PTC – NTC – Thermostat.
- ATEX Constructions (See Multipoint E – Multipoint I series)



FLOATS

Tab.1



| Material | Stainless steel – AISI 316 | | | | | | | |
|--------------------|-------------------------------|----|------|----|-----------|---|-----------|---|
| Specific gravity | 0,75 | | 0,55 | | 0,65 | | 0,7 | |
| Contact type | 3 | 7D | 3 | 7D | 4 | 7 | 4 | 7 |
| Max N. of contacts | 6 | 4 | 6 | 4 | 6 | 6 | 6 | 6 |
| Max. bar | 30 | | 10 | | 10 | | 50 | |
| Max. °C - Class | L = 105°C | | | | | | | |
| On request | N = 130°C - S1 and S2 outputs | | | | R = 150°C | | H = 180°C | |

ELECTRICAL CONTACTS

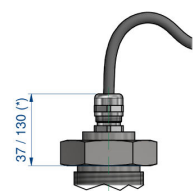
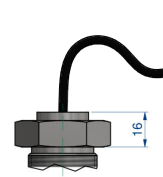
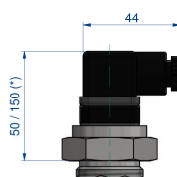
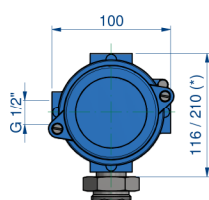
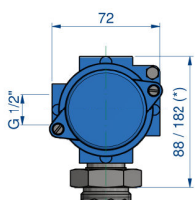
Tab.2

| TYPE | | POWER | | VOLTAGE | | CURRENT | |
|------|----|-------|----|---------|-----|---------|-----|
| | | VA | W | AC | DC | AC | DC |
| SPST | 3 | 70 | 50 | 300 | 350 | 0,5 | 0,7 |
| SPST | 4 | 80 | 80 | 250 | 250 | 1,3 | 1,3 |
| SPDT | 7 | 60 | 60 | 230 | 230 | 1 | 1 |
| SPDT | 7D | 20 | 20 | 150 | 150 | 0,5 | 0,5 |

ELECTRICAL OUTPUT

Tab.3

| W1 | W2 | S1 – S2 | C1 – C2 – T1 | P1 – P2 |
|------------------|-------------------|--|---|------------------------------------|
| IP65 Housing | IP65 Housing | DIN IP65 Plug | Cable – Leads | Cable-gland |
| Max. 5 terminals | Max. 18 terminals | S1 DIN43650 29x29 S2 DIN43650 15x15 | C1 Cable L = 1,5m C2 Cable L = 3,0m T1 Leads L = 1,5m | P1 Brass IP68 P2 Polyamide IP67 |



With heatsink - see overall dimension (°) W1 – W2 = Temperature class H S1– S2– P1 = Temperature class R – H

PROCESS CONNECTIONS

Tab.4

| Installation from inside C-P-T output | | | | Float type | Installation from outside – available thread and flanges | | | | | | |
|--|------------|------------|------------|------------|--|--------------|--------------|----------|----------------|----------------|--------------|
| 06 1/8" | 08 1/4" | 10 3/8" | 15 1/2" | | 25 1" | 32 1 1/4" | 40 1 1/2" | 50 2" | FSHX Flange | FSPX Flange | DN Flange |
| All type of floats All type of thread | | | | S29 | G | G-C-N | - | - | • | • | • |
| | | | | S32 | G | G-C-N | - | - | • | • | • |
| | | | | S41 | - | - | G-C-N | G-C-N | - | - | • |
| | | | | S52 | - | - | - | G-C-N | - | - | • |

Male thread

| G | C | N |
|-----------------------|--------------------|----------------|
| Parallel UNI 228/1 | Conical UNI 7/1 | Conical NPT |

Available materials

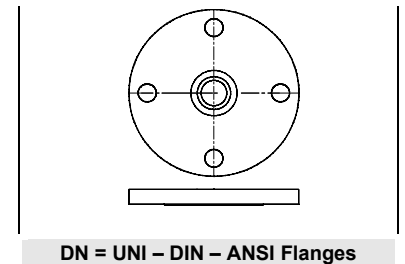
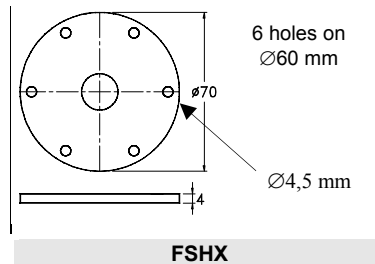
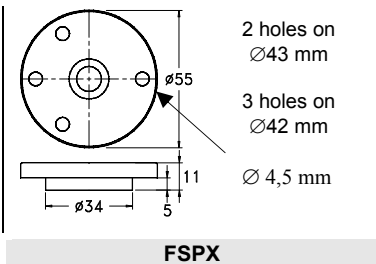
| S | T |
|----------|------------------------|
| AISI-316 | AISI-304 On request |

DN - Available materials

| C | S |
|-------|----------|
| Steel | AISI-316 |

FLANGES

Dimensions in mm.



WIRING

Tab.5

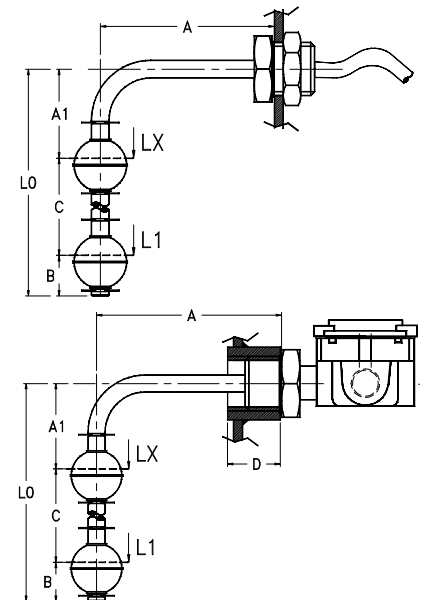
| I | Independent | Separately wired contacts | 1 | NO | Contacts status in no level conditions |
|---|-------------|------------------------------------|---|------|--|
| C | Common | Common wired contacts | 2 | NC | |
| S | Custom | Contacts wired on customer request | 3 | SPDT | |

SWITCH POINTS

Tab.6

The switch points L1 ÷ L6 are measured from the axis of the fitting or flange connection.
General tolerances on switch points ± 3 mm.

| | Dimensions in mm. | | | | | | | |
|---------------------|-------------------|----|-----|----|-----|----|-----|----|
| | S29 | | S32 | | S41 | | S52 | |
| A min. | 60 | 60 | 80 | 80 | 80 | 80 | 80 | 80 |
| A1 min. | 60 | 60 | 80 | 80 | 80 | 80 | 80 | 80 |
| B | 25 | 25 | 35 | 40 | 40 | 40 | 40 | 40 |
| C | 45 | 45 | 65 | 75 | 75 | 75 | 75 | 75 |
| D max ▶ | 24 | 24 | 36 | 36 | 36 | 36 | 36 | 36 |
| Contacts type | 3 | 7D | 3 | 7D | 4 | 7 | 4 | 7 |
| Max. N. of contacts | 6 | 4 | 6 | 4 | 6 | 6 | 6 | 6 |



OPTION - Built-in temperature sensor

On request, it is possible to install a temperature sensor located at the bottom of the rod inside the instrument.

| PT100 - PT1000 | PTC | NTC | TRM (Thermostat) |
|--------------------------------|----------------------------|-------------------------------------|--|
| EN 60751 - IEC 751 | Resistance at 25°C ≤ 500 Ω | Resistance at 25°C 2-5-10-50-100 KΩ | 40°C ÷ 120°C - 10°C step |
| Class B - (Class A on request) | Temperature 60°C ÷ 120°C | Precision ± 5% / ± 3% (on request) | Precision ± 5% Differential 10°C ± 4°C |

NOMENCLATURE

| L2 | S41 | 4 | 0350/0100 | S | 50 | G | S | W1 | L | I22 | L1÷L4 | |
|----|-----|---|-----------|---|----|---|---|----|---|-----|-------|--|
| • | | | | | | | | | | | | Number of contacts L1÷L4 |
| | • | | | | | | | | | | | Tab.1 Float |
| | | • | | | | | | | | | | Tab.2 Electrical contact |
| | | | • | | | | | | | | | - Length L0 in mm. / Length A in mm. (See drawing) |
| | | | | • | | | | | | | | Tab.4 Rod material |
| | | | | | • | | | | | | | Tab.4 Process connection dimension |
| | | | | | | • | | | | | | Tab.4 Process connection thread |
| | | | | | | | • | | | | | Tab.4 Process connection material |
| | | | | | | | | • | | | | Tab.3 Electrical output |
| | | | | | | | | | • | | | Tab.1 Temperature class |
| | | | | | | | | | | • | | Tab.5 Wiring and contact status |
| | | | | | | | | | | | • | Tab.6 Switch points (mm) |