## MULTIPOINT

## 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. - Up to 6 m length.
- Working pressure up to 50 bars depending on the used float.
- Operating ambient temperature $-30 /+55^{\circ} \mathrm{C}$ UR $90 \%$
- Standard working temperature $105^{\circ} \mathrm{C}$
- Executions up to $180^{\circ} \mathrm{C}$ on request.
- Minimum degree of protection IP65
- Built-in temperature sensors, on request. PT - PTC - NTC - Thermostat.
- ATEX $\langle x\rangle$ constructions (See Multipoint $E-$ Multipoint I series)


## ce RI,R



## FLOATS

Tab. 1


## Material

Specific gravity
Contact type
Max N. of contacts
Max. bar

|  |  |
| :--- | :--- |
| 0,75 | 0,55 |

Stainless steel - AISI 316

Max. ${ }^{\circ} \mathrm{C}$ - Class
On request

$$
\mathbf{N}=130^{\circ} \mathrm{C}-\mathrm{S} 1 \text { and } \mathrm{S} 2 \text { outputs }
$$

0,6


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 IP65 Housing | W2 <br> IP65 Housing | S1-S2 DIN IP65 Plug | $\begin{aligned} & \text { C1 - C2 - T1 } \\ & \text { Cable - Leads } \end{aligned}$ |  |  | P1 - P2 <br> Cable-gland |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Max. 5 terminals | Max. 18 terminals | S1 DIN43650 $29 \times 29$ <br> S2 DIN43650 $15 \times 15$ | $\begin{aligned} & \mathrm{C} 1 \\ & \mathrm{C} 2 \\ & \mathrm{~T} 1 \end{aligned}$ | Cable Cable Leads | $\begin{aligned} & \mathrm{L}=1,5 \mathrm{~m} \\ & \mathrm{~L}=3,0 \mathrm{~m} \\ & \mathrm{~L}=1,5 \mathrm{~m} \end{aligned}$ | $\begin{aligned} & \text { P1 } \\ & \text { P2 } \end{aligned}$ | Brass IP68 <br> Polyamide IP67 |
|  |  |  |  |  | $\div$ | $\stackrel{\text { \% }}{\text { ¢ }}$ |  |
| With heatsink - see ove | nsion (*) W1 - W2 | $\mathbf{W} \mathbf{1}-\mathbf{W} \mathbf{2}=$ Temperature class $\mathbf{H}$ | S1-S2-P1 $=$ Temperature class $\mathbf{R} \mathbf{- H}$ |  |  |  |  |

PROCESS CONNECTIONS
Tab. 4

| Installation from inside C-P-T output |  |  |  |
| :---: | :---: | :---: | :---: |
| 06 | 08 | 10 | 15 |
| $1 / 8$ " | $1 / 4$ " | $3 / 8$ " | $1 / 2$ " |

All type of floats
All type of thread

| Float type | Installation from outside - available thread and flanges |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 25 \\ & 1^{\prime \prime} \end{aligned}$ | $\begin{gathered} 32 \\ 11 / 4^{\prime \prime} \end{gathered}$ | $\begin{gathered} 40 \\ 11 / 2 " \end{gathered}$ | $\begin{aligned} & 50 \\ & 2 " \end{aligned}$ | FSHX <br> Flange | FSPX <br> Flange | $\begin{gathered} \text { DN } \\ \text { Flange } \end{gathered}$ |
| S29 | G | G-C-N | - | - | - | - | - |
| S32 | G | G-C-N | - | - | - | - | - |
| S41 | - | - | G-C-N | G-C-N | - | - | - |
| S52 | - | - | - | G-C-N | - | - | $\bullet$ |
| S100 | - | - | - | - | - | - | - |

## Male thread

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

## Available materials

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

## DN - Available materials

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

FLANGES Dimensions in mm.



DN = UNI - DIN - ANSI Flanges

| WIR |  | 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
A Flanged connection
A1 Threaded connection
The switch points $\mathrm{L} 1 \div \mathrm{L} 6$ are measured from the stop of the fitting or flange connection.
General tolerances on switch points $\pm 3 \mathrm{~mm}$.

|  | Minimum distance in mm. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | S29 |  | S32 |  | S41 |  | S52 |  | S100 |
| A | 20 |  | 20 |  | 30 |  | 35 |  | 60 |
| A1 | 40 |  | 40 |  | 50 |  | 55 |  | - |
| B | 25 |  | 25 |  | 35 |  | 40 |  | 70 |
| C | 45 |  | 45 |  | 65 |  | 75 |  | 125 |
| Contact type | 3 | 7D | 3 | 7D | 4 | 7 | 4 | 7 | 7 |
| Max. N. of contacts | 6 | 4 | 6 | 4 |  |  |  |  | 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 $25^{\circ} \mathrm{C} \leq 500 \Omega$ | Resistance at $25^{\circ} \mathrm{C} 2-5-10-50-100 \mathrm{~K} \Omega$ | $40^{\circ} \mathrm{C} \div 120^{\circ} \mathrm{C}-10^{\circ} \mathrm{C}$ step |  |
| Class B - (Class A on request) | Temperature $60^{\circ} \mathrm{C} \div 120^{\circ} \mathrm{C}$ | Precision $\pm 5 \% / \pm 3 \%$ (on request) | Precision $\pm 5 \%$ | Differential $10^{\circ} \mathrm{C} \pm 4^{\circ} \mathrm{C}$ |

## NOMENCLATURE



## MULTIPOINT S

## Request form

External mounting
Internal mounting


