

## GENERAL CHARACTERISTICS

The flow of the F-series have been designed to allow an easy flow control and a safe signal in the absence of flow. The electric part is physically separate from the mechanical and the actuation of the contact takes place magnetically. The electric head, in case of need, can be replaced without removing the instrument from its installation.

- Fixed set point
- Easy replacement of the electrical contact
- Low pressure drop
- Versions for vertical or horizontal operation
- Use of liquids and gases



|    |                                                                                   |                                                                        |
|----|-----------------------------------------------------------------------------------|------------------------------------------------------------------------|
| GV |  | Vertical mounting with flow direction from bottom to top               |
| GO |  | Horizontal or vertical mounting with flow direction from bottom to top |

## AVAILABLE SET POINTS

Tab.1

|                      |                 | GV    |      |               |   |     |   |     | GO    |     |               |     |     |     |    |       |    |    |
|----------------------|-----------------|-------|------|---------------|---|-----|---|-----|-------|-----|---------------|-----|-----|-----|----|-------|----|----|
| DN                   | Setting<br>Code | l/min |      | Body - Piston |   |     |   |     | l/min |     | Body - Piston |     |     |     |    | Q max |    |    |
|                      |                 | On    | Off  | FO            |   | FV  |   | FS  | On    | Off | FO            |     | FV  |     | FS | l/min |    |    |
| 06<br>08<br>10<br>15 | 0,3             | 0,33  | 0,3  | 136           | N | 136 | V | -   |       |     |               |     |     |     |    | 10    |    |    |
|                      | 0,5             | 0,6   | 0,55 | 13            | N | 13  | V | -   |       |     |               |     |     |     |    | 10    |    |    |
|                      | 0,8             | 0,8   | 0,7  | 13            | P | -   | - | -   | 0,7   | 0,6 | 137           | N   | -   | -   | -  | 10    |    |    |
|                      | 1               | 1,1   | 0,9  | 12            | P | 125 | V | 13  | F     | 0,9 | 0,7           | 136 | N   | 137 | V  | -     | 15 |    |
|                      | 1,5             | 1,5   | 1,2  | 11            | P | 12  | V | 12  | F     | 1,5 | 0,6           | 134 | N   | 134 | V  | -     | 15 |    |
|                      | 2               | 2,1   | 1,6  | 10            | P | 115 | V | 11  | F     | 2   | 1             | 132 | N   | 132 | V  | -     | 15 |    |
|                      | 2,5             | 2,6   | 2    | 09            | P | 11  | V | 10  | F     | 2,5 | 1,3           | 13  | N   | 13  | V  | -     | 15 |    |
|                      | 3               | 3,1   | 2,2  | 09            | F | -   | - | 09  | F     | 3,3 | 1,7           | 125 | N   | 125 | V  | 13    | F  | 20 |
|                      | 4               | 4     | 2,8  | C11           | B | -   | - | 115 | S     | 4,1 | 2,5           | 116 | P   | 123 | V  | 12    | F  | 20 |
|                      | 5               | 5     | 3,4  | 112           | B | -   | - | -   | 5     | 2,5 | 12            | N   | 12  | V   | -  | -     | 20 |    |
|                      | 6               | 6,2   | 4,8  | 11            | B | -   | - | -   | 6     | 3,2 | 10            | P   | 115 | V   | 11 | F     | 20 |    |
|                      | 7               |       |      |               |   |     |   |     | 7,1   | 4   | 09            | P   | 11  | V   | 10 | F     | 20 |    |
|                      | 8               |       |      |               |   |     |   |     | 8,3   | 4,4 | 11            | B   | -   | -   | -  | 20    |    |    |
| 9                    |                 |       |      |               |   |     |   | 8,6 | 4,1   | 09  | F             | 09  | F   | 09  | F  | 20    |    |    |
| 20<br>25<br>32       | 5               | 5,2   | 3,4  | 235           | N | 235 | V | -   |       |     |               |     |     |     |    | 60    |    |    |
|                      | 15              | 14,4  | 14   | C21           | B | -   | - | -   |       |     |               |     |     |     |    | 70    |    |    |
|                      | 20              | 19,2  | 18,4 | C22           | S | -   | - | C22 | S     |     |               |     |     |     |    |       | 70 |    |

|    |        |          |           |                   |       |             |         |
|----|--------|----------|-----------|-------------------|-------|-------------|---------|
| DN | Thread | Parallel | UNI 228/1 | Setting tolerance | ± 15% | ΔP (Q max.) | 0,5 bar |
|----|--------|----------|-----------|-------------------|-------|-------------|---------|

## MATERIALS

Tab.2

|        | Code | Description         | P max<br>bar | T max<br>°C |
|--------|------|---------------------|--------------|-------------|
| Body   | O    | Nickel plated brass | 150          | 110         |
|        | S    | AISI 316            | 150          | 110         |
|        | V    | PVC                 | 10           | 60          |
|        |      |                     |              |             |
| Piston | B    | Plated brass        | -            | -           |
|        | F    | PVDF                | -            | -           |
|        | N    | Nylon               | -            | -           |
|        | P    | Polypropylene       | -            | -           |
|        | V    | PVC                 | -            | -           |
|        | S    | AISI 316            | -            | -           |

## ELECTRICAL DATA

Tab.3

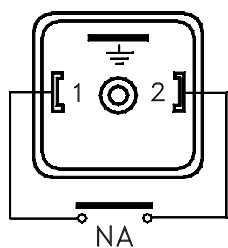
|   |           |                          |             |
|---|-----------|--------------------------|-------------|
| 3 | NA - NC * | 300Vca/Vcc-0,5A-70VA-50W | GV<br>06÷15 |
|   | NA        | 300Vca/Vcc-0,5A-70VA-50W | GV<br>20÷32 |
|   | NA        | 300Vca/Vcc-0,5A-70VA-50W | GO<br>06÷15 |
| 7 | SPDT      | 150Vca/Vcc-0,5A-20VA-20W | GV<br>GO    |

\* Selectable by moving electric head NA ↔ NC  
Only for DN06 - DN08 - DN10 - DN15 vertical mounting

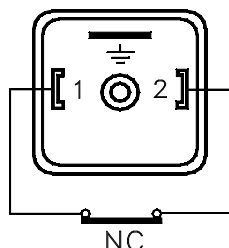
|            |                   |
|------------|-------------------|
| Connection | Plug - DIN 43650A |
| Protection | IP65              |

### WIRING

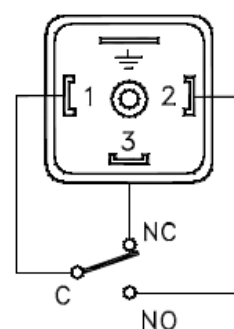
Tab.4



NA



NC

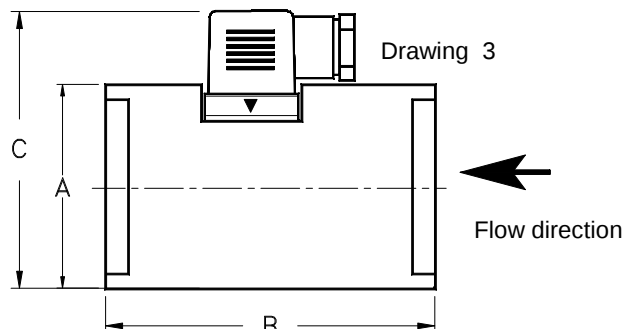
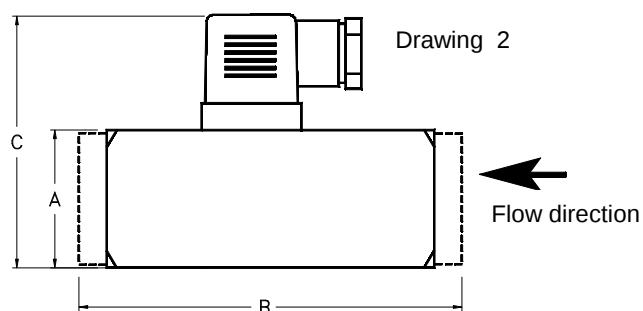
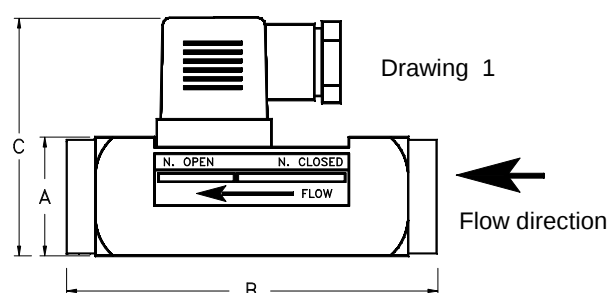


SPDT

### DIMENSIONS AND WEIGHT

Tab.5

| DN | Dimensions mm. |     |    | Kg   | Drawing |    |
|----|----------------|-----|----|------|---------|----|
|    | A              | B   | C  |      | GV      | GO |
| 06 | 30             | 93  | 63 | 0,55 | 1       | 2  |
| 08 | 30             | 93  | 63 | 0,55 | 1       | 2  |
| 10 | 30             | 93  | 63 | 0,55 | 1       | 2  |
| 15 | 30             | 79  | 63 | 0,5  | 1       | 2  |
| 20 | 40             | 110 | 74 | 0,85 | 2       | -  |
| 25 | 40             | 95  | 74 | 0,8  | 2       | -  |
| 32 | 60             | 95  | 80 | 1,4  | 3       | -  |



### MOUNTING

Carefully observe the flow direction shown by the arrow on the body of the switch.

In the case of vertical mounting the flow direction must always point upwards. Before installation, bleed the system to prevent any impurities interfere stagnant and / or block the internal piston. In the presence of impurities in the fluid is recommended for installation upstream of the flow of a filter in the magnetic trap (see bulletin of magnetic trap Filter ZV).

Always make sure that the switch is not mounted in direct contact with ferromagnetic surfaces that interfere with the proper functioning of the instrument.

### NOMENCLATURE

| F | V | 1,5 | 15 | GV | 3 | 12V | IP65 |         | Name - Type                     |
|---|---|-----|----|----|---|-----|------|---------|---------------------------------|
| • |   |     |    |    |   |     |      | Tab.1   | Body material                   |
|   | • |     |    |    |   |     |      | Tab.2   | Setting code                    |
|   |   | •   |    |    |   |     |      | Tab.1-5 | Process connections - DN        |
|   |   |     | •  |    |   |     |      | Tab.1   | Mounting                        |
|   |   |     |    | •  |   |     |      | Tab.3   | Switch type                     |
|   |   |     |    |    | • |     |      | Tab.1-2 | Piston code and piston material |
|   |   |     |    |    |   | •   |      | Tab.3   | Protection class                |
|   |   |     |    |    |   |     | •    |         |                                 |