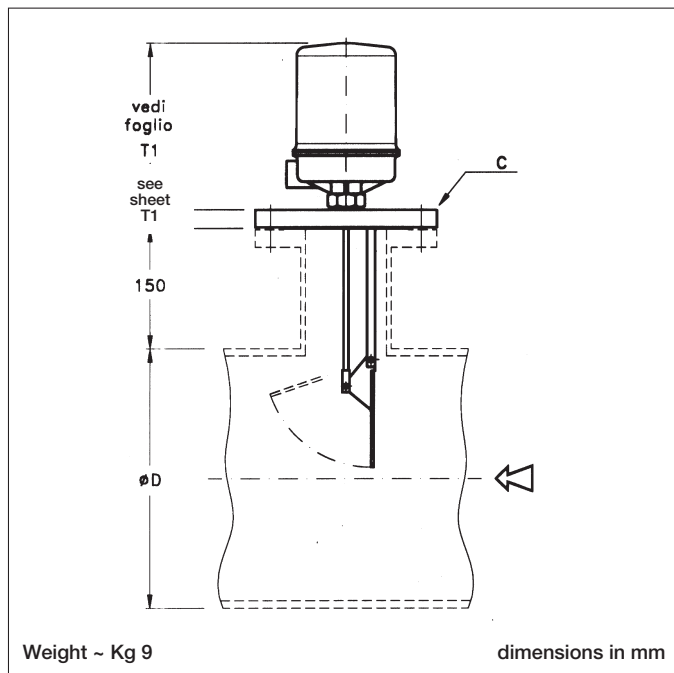


PL SERIES FLOW ALARM SWITCHES

Paddle type flow switch for water, with max. or min. flow alarm, with a single switching unit, and with output on SPDT switch.

TECHNICAL DATA

- horizontal mounting
- single switching unit (on request, two SPDT switches with simultaneous action can be supplied)
- fixed set point
- fixed differential
- repeatability of set point $\pm 5\%$
- max. temperature 135°C
- pressure: see rating for flanges
- max. pressure drop 500 mm H₂O
- used for pipe of min. DN 100
- special versions made for air flow



| CONNECTION "C" | MODEL | PIPE Sch.40 / SET m3/h | | | | | | PIPE Sch.80 / SET m3/h | | | | | | PIPE Sch.120 / SET m3/h | | | | | | DIFFERENT. | FLUID | SET m/sec |
|--|-------|------------------------|----------|-----------|------------|------------|-------------|------------------------|----------|-----------|------------|------------|-------------|-------------------------|----|----|------------|------------|-------------|------------|------------------|--------------|
| | | Ø D | | | | | | Ø D | | | | | | Ø D | | | | | | | | |
| | | 3" | 4" | 6" | 8" | 10" | 12" | 3" | 4" | 6" | 8" | 10" | 12" | 3" | 4" | 6" | 8" | 10" | 12" | | | |
| FLANGE UNI DN 80-100 / ANSI 3"-4" | PL-11 | | | 7 40 | 12 70 | 18 110 | 26 156 | | | 6 36 | | 16 93 | 25 151 | | | | 9 57 | 15 90 | | 25% | H ₂ O | 0,1 0,6 |
| | PL-12 | | 12 27 | 27 60 | 46 105 | 73 165 | 104 234 | | 11 24 | 24 54 | | 62 140 | 101 227 | | | | 38 35 | 60 135 | | 20% | H ₂ O | 0,4 0,9 |
| | PL-13 | | 12 30 | 27 67 | 46 116 | 73 183 | 104 260 | | 11 27 | 24 61 | | 62 156 | 101 252 | | | | 38 94 | 60 150 | | 20% | H ₂ O | 0,4 1 |
| | PL-14 | | 33 80 | 74 181 | 128 314 | 201 494 | 286 702 | | 29 72 | 67 163 | | 171 421 | 277 680 | | | | 104 254 | 165 404 | | 20% | H ₂ O | 1,1 2,7 |
| | PL-15 | | | | 268 470 | 465 813 | 732 1281 | 1040 1820 | | | 242 424 | | 623 1091 | 1007 1763 | | | | 377 659 | 599 1048 | | 20% | AIR |
| FLANGE UNI DN 50 / ANSI 2" THREAD GAS-M / NPT-M 2" - 3" | PL-16 | | 9 21 | 20 47 | 35 81 | 55 128 | 78 182 | | 8 19 | 18 42 | | 47 109 | 76 176 | | | | 28 66 | 45 105 | | 25% | H ₂ O | 0,3 0,7 |
| | PL-17 | 7 15 | 12 27 | 27 60 | 46 105 | 73 165 | 104 234 | 6 14 | 11 24 | 24 54 | | 62 140 | 101 227 | | | | 38 85 | 60 135 | | 20% | H ₂ O | 0,4 0,9 |
| | PL-18 | 12 24 | 21 41 | 47 94 | 81 163 | 128 256 | 182 364 | 11 21 | 19 37 | 42 85 | | 109 218 | 176 353 | | | | 66 132 | 105 210 | | 20% | H ₂ O | 0,7 1,4 |
| | PL-19 | | 35 71 | 81 161 | 139 279 | 220 439 | 312 624 | | 32 64 | 73 145 | | 187 374 | 302 604 | | | | 113 226 | 180 359 | | 25% | H ₂ O | 1,2 2,4 |
| | PL-20 | | | | 302 537 | 523 929 | 823 1464 | 1170 2079 | | | 272 484 | | 701 1247 | 1133 2014 | | | | 424 754 | 673 1197 | | 20% | AIR |

Process connection with higher sizes can be supplied, on request.

MATERIALS

| CODE FOR: | Materials | Carbon steel | AISI 304 | AISI 316 |
|-----------|---------------------|--------------|----------|----------|
| | Body | A | I | J |
| | Paddle and leverage | - | - | 2 |

SWITCHES

| Type | Mercury switch | Dry microswitch | | | | | Pneumatic switch* |
|-------------|---------------------------------------|---------------------------------------|------------------|---|--|---|----------------------------|
| Load rating | 220 V a. c. 10 A 110 V d. c. 1,5 A | 250 V a. c. 10 A 125 V d. c. 0,5 A | 125 V d. c. 10 A | 250 V a. c. 10 A 125 V d. c. 0,5 A waterproof | 125 V a. c. 1 A 28 V d. c. 1 A waterproof with gold contacts | 250 V a. c. 1A 24 V d.c. 3A sealed with inert gas | Output: 0 ÷ 40 psi max. |
| CODE | VD | M2 | M3 | M4 | M6 | M14 | PNA (aluminium) |

*Air inlet and output connection 1/4" NPT-F - No bleed type

ENCLOSURES

| Type | Waterproof | Explosion-proof | <p>The (WP) enclosures can be supplied whit gland or with a 3 or 7 pole connector as per MIL stand-ards.</p> <p>The (EP) enclosures can be supplied whit explosion-proof gland.</p> <p>1) CESI certificate N. 02-ATEX-126</p> |
|-----------------------|---|--|---|
| Material | Aluminium | Aluminium | |
| Electrical Connection | 1/2" NPT-F/GAS 3/4" NPT-F/GAS ISO M20X1.5 | 1/2" UNI 6125/NPT-F 3/4" UNI 6125/NPT-F ISO M20X1.5 | |
| Protection degree | IP 66 | ATEX II 2 G Ex d IIC T6 o T5 Gb ATEX II 1/2 D Ex ta/tb IIIC T85° o T100° C Da/Db IP 66 | |
| CODE | WP | EP | |

HOW TO ORDER

Example: PL 11 - A - 2 - M2 - WP

PL 11 model
 A body in carbon steel
 2 paddle and internal leverage in AISI 316
 M2 dry microswitch 250 V a.c. - 10 A
 WP waterproof enclosure

The following data are required: temperature, pressure, working flow rate and required set point.