

Enclosures:

Cast Aluminum:
Oven baked powder coating
hammertone grey

**Also available in
SS 316**

Wheaterproof IP 66 -
EN 60529 - Eex-d IICT6

(Nema 4X) -

Repeatability:
typical 0.2% of Full Scale

Range & Scale
Standard unit: **Bar**
Optional: **PSI / Kg / Pa**

Standard process connetion:
1/4" NPT (F) or BSP (F)

Standard Diaphragm/O-ring:

D..L/ M: Buna N / Buna N

D..H: TCP/ Buna N

For wetted parts:
more possibilities available,
see full catalogue



Ranges for Differential switches

| RANGE CODE | ADJUSTABLE DIFF. RANGE ¹⁾ | | TYPICAL DEADBAND ¹⁾ | | MAX. STATIC PRESSURE | | MAX. VERRANGE PRESSURE | | PROOF PRESSURE | |
|----------------|--------------------------------------|------|--------------------------------|------|----------------------|-----|------------------------|-----|----------------|-----|
| | mBar / Bar | | mBar / Bar | | Bar | | Bar | | Bar | |
| D 302 L | 12 - 75 ²⁾ | mBar | 7 | mBar | 30 | Bar | 30 ³⁾ | Bar | 35 | Bar |
| D 304 L | 22 - 180 | mBar | 8 | mBar | | | | | | |
| D 306 L | 25 - 450 | mBar | 11 | mBar | | | | | | |
| D 309 L | 35 - 1250 | mBar | 15 | mBar | 10 | Bar | 140 ⁴⁾ | Bar | 140 | Bar |
| D 402 M | 0.3 - 1.0 | Bar | 0.15 | Bar | | | | | | |
| D 404 M | 0.5 - 2.5 | Bar | 0.2 | Bar | | | | | | |
| D 406 M | 1.0 - 6.0 | Bar | | | | | | | | |
| D 408 M | 1.0 - 14.5 | Bar | 0.8 | Bar | 100 | Bar | 200 ⁴⁾ | Bar | 200 | Bar |
| D 506 M | 5 - 20 | Bar | | | | | | | | |
| D 508 M | 10 - 50 | Bar | | | | | | | | |
| D 608 M | 10 - 70 | Bar | 1.5 | Bar | 140 | Bar | 200 ⁴⁾ | Bar | 200 | Bar |
| D 352 H | 80 - 160 | mBar | 25 | mBar | | | | | | |
| D 354 H | 100 - 500 | mBar | 35 | mBar | 200 | Bar | 200 ⁴⁾ | Bar | 200 | Bar |
| D 356 H | 120 - 1450 | mBar | 50 | mBar | | | | | | |
| D 359 H | 150 - 3450 | mBar | 75 | mBar | | | | | | |

NOTES:

- ¹⁾ Ranges and deadbands are given at 50% of Max. Static pressure.
All differential pressure sensors are sensitive to static pressure, both for setpoint and deadband.
- ²⁾ Range only with L1 micro switch.
- ³⁾ D...L can withstand a differential pressure P-low max. 1 bar above P-High.
- ⁴⁾ D...M, D...H can sustain full High and Low-side reversal.

IN THE FOLLOWING TABLE THE ESTIMATED INFLUENCE FOR INCREASING STATIC PRESSURE IS GIVEN.

| SENSOR | SETPOINT | DEADBAND |
|--------------|----------------|------------------|
| D...L | - 0.7 mBar/Bar | = - 0.1 mBar/Bar |
| D...M | = + 3 mBar/Bar | + 10 mBar/Bar |
| D...H | - 2 mBar/Bar | = - 0.4 mBar/Bar |

Example: D...H-type Diff. setpoint: 1 bar (1000 mbar). If static pressure increases 10 bar
Diff.setpoint will be (10 x - 2 mbar) = - 20 mbar less = 980 mbar.

NOTE: For differential application outside above ranges contact Riels@Instruments Srl



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Making the modelcode: Follow steps 1 to 5

1 Selection of enclosure type.

| Conduit | Material | Enclosure code |
|------------|-----------|----------------|
| 3/4" NPT F | Aluminium | W3 |
| M20x1.5 | SS 316 | W8 |
| 3/4" NPT F | SS 316 | W9 |

2 Selection of range code, see front page.

3 Selection of process connection.

| Size | Material | Code |
|-----------|--------------|------------|
| 1/4"NPT F | SS316 * | S1N |
| 1/4"BSP F | SS316 * | S1B |
| 1/4"NPT F | Aluminium ** | A1N |
| 1/4"BSP F | Aluminium ** | A1B |
| 1/2"NPT M | SS316 | S7N |

* Only for D..H, D..D and D..M available
 ** D.. L: A1N or A1B For low side only.
 High side: Only "L"-sensor connection

Proces connection according to NACE standard are available.
 Contact Riels@Instruments Srl.

4 Selection of wetted parts *

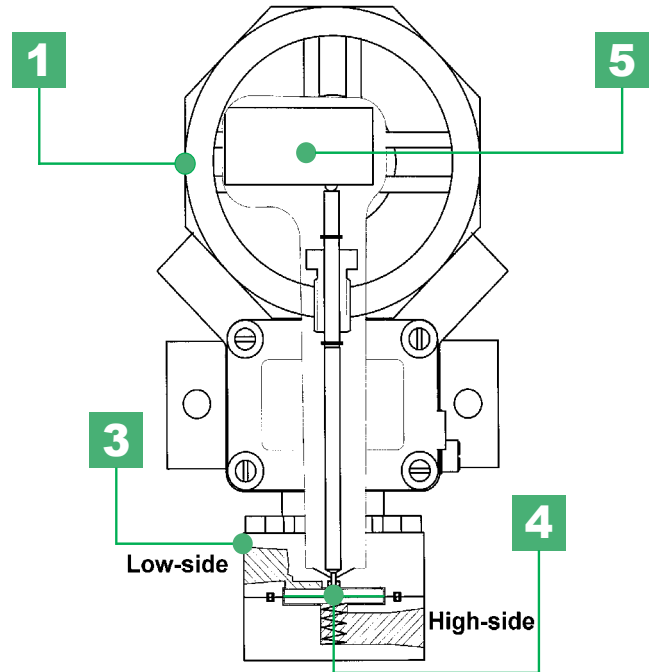
| Diaphragm | O-ring | Code |
|-----------|--------|--------------|
| Buna N | Buna N | B1 ** |
| Viton | Viton | V2 ** |
| SS316 | Buna N | S1 |
| SS316 | Viton | S2 |
| SS316 | Teflon | S4 ** |
| SS316 | EPDM | S6 |
| SS316 | Welded | S0 ** |

** Not possible for D..H. (P1 = Standard for D..H)

*** WETTED PARTS ARE NOT GUARANTEED,**
 against corrosion or permeation since processes vary from plant to plant and concentration of harmful fluids, gasses or solids vary from time to time in a given process. Empirical experience by users should be the final guide and alternate materials based on this are generally available. The diaphragm / O-Ring combinations are for process temperatures of -5°C to +90°C, unless otherwise indicated. For process temperatures beyond these limits, please contact Riels@Instruments Srl

Accessories:

2" Pipe mount bracket set available.
Contents :
 2 x Bracket +
 2 x bolts M8 x 100 mm + nut
Disclaimer :
 This pipe mount bracket is solely intended for use in combination with Riels@Instruments Srl. Foundation vibrations, as well as process vibrations, can disturb the proper functioning of the mounted instrument, the use of this bracket does not prevent or diminishes such occurrence.



5 Selection of microswitches.

| Rating: | | Use: | Switch Code |
|-----------|--------------------|---|-------------------------|
| VAC. | VDC. ³⁾ | | |
| 480/ 15A | 28/ 0.5A | Standard | K1 ²⁾ |
| 480/ 10A | 28/ 0.5A | Standaard for L-serie | L1 ²⁾ |
| 480/ 15A | 125/ 0.5A | Normal DC-service | U1 ²⁾ |
| 125/ 1A | 28/ 0.5A | For use in H ₂ S environment and/or for (EEx)i applications. ³⁾ | G1 ** |
| 250/ 0.1A | 30/ 0.1A | | Y1 ¹⁾ |
| 250/ 0.1A | 30/ 0.1A | Environmental proof (IP 67) | O1 ¹⁾ |
| 250/ 2A | 30/ 2A | | N1 ¹⁾ |

1) For D.P.D.T action, second code figure should be specified as "2"

For example: Y1 = S.P.D.T./ Y2 = D.P.D.T

2) VDE certified acc. to DIN EN 61 058-1:1992+A1:1993.

3) Indicated ratings are for resistive DC load only.

** DC Rating not U.L. listed, although experience and third party testing confirm the D.C Voltage ratings. Contact Riels@Instruments Srl

6 Selection of options.

| Description | Option code |
|--|-------------|
| Cable gland | C |
| Vacuum Protection Plate | M |
| Stainless steel tag key ringed to enclosure (Tag has 2 lines - 16 charaters per line) | S |

* Not possible for D..H. (Standard for D..L)