



DP SERIES 370

Single diaphragm differential pressure gauges

■ DP 370

- ◆ ranges included between 160 mbar and 25 bar;
- ◆ static pressure 100 bar both ports;
- ◆ scale angle 270°;
- ◆ accuracy class 1,6.



made in
ITALY



PED 2014/68/EU
ATEX 2014/68/EU



TECHNICAL FEATURES

- **Nominal sizes**
 - 100 and 150.
- **Execution**
 - A... direct mounting;
 - B... surface mounting with clamp;
 - C... back panel flush mounting;
 - D... 2" pipe mounting;
 - ...D dry;
 - ...F liquid filled;
 - ...P fillable.
- **Casing**
 - case and ring in AISI 304 stainless steel (AISI 316 on request - option V61) with bayonet bezel.
- **Protection degree (according to EN 60529)**
 - IP 55 for execution D;
 - IP 67 for execution F and P.
- **Window**
 - glass for execution D;
 - methacrylate for execution F and P;
 - laminated safety glass (on request - option V17).
- **Casing filling liquid**
 - silicone fluid (standard).
- **Pressure connections (according to EN 837)**
 - AISI 316L stainless steel:
 - 1/4-18 NPT (1/4 NPT female) - standard;
 - G 1/2 B (1/2 Gas or BSP male) or 1/2-14 NPT EXT (1/2 NPT male) (on request - option V43).
- **Pressure element**
 - AISI 316L or Duratherm stainless steel diaphragm, according with selected ranges.
- **Static pressure**
 - for all scale ranges, apart from the pressure entry in both connections:
 - 100 bar (both ports).
- **Overpressure**
 - 2 x full scale value on one port.
- **Differential cell**
 - **material:**
 - AISI 316L stainless steel.
- **Diaphragm stop**
 - polyurethane resin.
- **Differential cell bolts and nuts**
 - di acciaio inox AISI 304.
- **Differential cell gaskets**
 - nitril rubber (NBR) standard;
 - FPM (Viton) on request.
- **Movement**
 - stainless steel.
- **Torsion shaft**
 - stainless steel.
- **Ranges (according to EN 837)**
 - **Scale ranges for pressure values between 160 mbar and 25 bar:**
 - see table C1 at page P04;
 - (divisions as per table C1 at page P04).
 - other graduations not normalized for single or double range (on request).
 - **Unit of pressure:**
 - mbar, bar, kPa, kg/cm² and psi for single or double range.
 - **Scale angle:**
 - 270 °.



note: scale angle is 180° with ranges and 0 ÷ 160 mbar for model DP 370.

- **Pointer**
 - aluminium with micrometer adjustment.
- **Dial**
 - white aluminium with black figures (for dial modifications see available options).

- **Accuracy**
(according to EN 837)
 - class 1,6 ($\pm 1,6\%$ of full scale deflection).

note1: accuracy indicated on the pressure gauge does not consider the interference of an eventually applied electric contact.

note2: il diaphragm seal can affect instrument accuracy according with the service conditions because of the pressure/temperature ratio.
- **Ambient temperature**
 - -30 ÷ +60 °C.
- **Operating temperature**
 - max 120 °C.

APPLICATIONS

- **Diaphragm seals**
(see FP series)
with stainless steel or exotic materials diaphragm, are applicable to the instruments with ranges included between 250 mbar and 25 bar; in this case the instrument can be identified by the number of the chosen model, adding the reference of the suitable diaphragm seal among those of FP series.
(identification FP...)
- **Electric contact (see CE series)**
the instrument can be identified by the number of the chosen model, adding the reference of the switching action as shown in tables of CE series. Differential pressure gauges equipped with electric contacts are available in dry execution only.
(identification CE...)
- **Accessories (see AM series)**
manifold valve.

OPTIONS

- **Maximum pointer**
to indicate the maximum pressure reached:
 - zero setting on the window (suitable also for liquid filled instruments).
(identification V11)
- **Window**
 - laminated safety glass.
(identification V17)
- **External zero adjustment**
(identification V20)
- **Oxygen service**
degreased for oxygen service.
(identification V31)
- **Accuracy class 1**
 - $\pm 1\%$ of full scale deflection hysteresis excluded (for dry execution only).
(identification V37)
- **Not standard connections**
(identification V42)
- **Male or female threaded pressure connections**
(according to EN 837)
 - G 1/2 B (1/2 Gas or BSP);
 - 1/2-14 NPT (1/2 NPT);
 - others (on request - option V42).
(identification V43)
- **Changes to the dial**
 - serial number;
(identification V50)
 - specific dial;
(identification V51)
 - red mark;
(identification V52)
 - writings;
(identification V53)
 - TAG number;
(identification V54)
 - dial without logo;
(identification V56)
 - double logo (Fantinelli + customer);
(identification V57)
 - customer's logo.
(identification V58)
- **Fluoride fluid**
as alternative to glycerine fluid for case filling and added to option V31.
(identification V60)
- **AISI 316 stainless steel case and ring**
as alternative to AISI 304 stainless steel.
(identification V61)
- **Solid front execution casing**
(identification V65)
- **Metal tag plate**
AISI 316 stainless steel for tag number.
(identification V82)

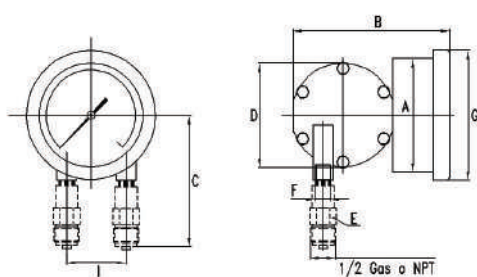


DOCUMENTATION

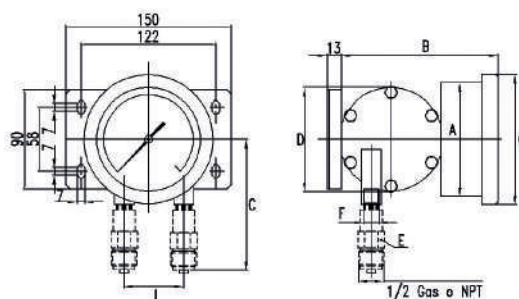
- **Fantinelli calibration certificate**
 rising pressure:
 - class 1; (**identification V92**) (**Hysteresis excluded**)
 - class 1,6. (**identification V93**)
- **Complementary documents**
 o certificate of compliance with the order EN 10204-2.2.
- o technical documentation including:
 - drawings and technical informations;
 - installation and maintenance instructions.
- o inspection and test certificate EN 10204-3.1.
- o material certificates
- o PED declaration.
- o ATEX declaration (II 2 G/D).

TECHNICAL INFORMATIONS

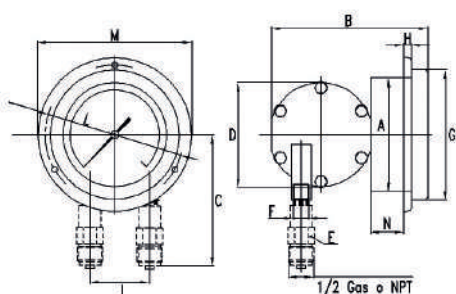
DP 370-A



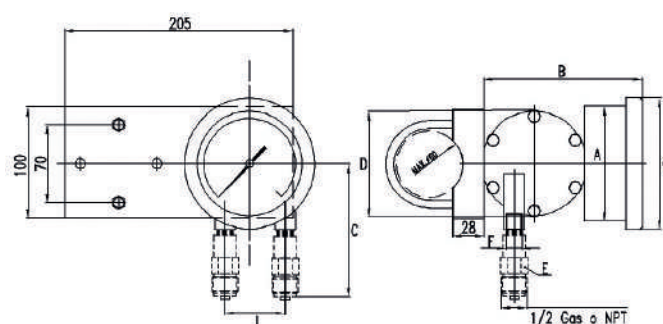
DP 370-B



DP 370-C



DP 370-D



DIMENSIONS TABLE

Model	Dial	A	B	C	D	E	F	G	H	I	L	M	N	Holes
DP 370	NS100	103	142	120	95	22	1/4"	118	7	54	126	140	27	Ø 5
	NS150	150	142	120	95	22	1/4"	166	7	54	178	192	27	Ø 5

WEIGHT TABLE

Model (Dry IP55/67)		NS100	NS150	Model (Filled IP67)		NS100	NS150
DP 370 AD/AP	kg	1,9	2,1	DP 370 AF	kg	2,2	2,8
DP 370 BD/BP	kg	2,2	2,4	DP 370 BF	kg	2,5	3,1
DP 370 CD/CP	kg	2,0	2,2	DP 370 CF	kg	2,3	2,9
DP 370 DD/DP	kg	2,5	2,7	DP 370 DF	kg	2,8	3,4

note: informations shown in this series may be changed at any time without prior notice.