

MODELS-4503, 4901, 4906



Differential Pressure Gauges

APPLICATIONS

Differential pressures are commonly used in industrial process systems. Differential pressure gauges have two inlet ports, each connected to one of the volumes whose pressure is to be monitored. In effect, such a gauge performs the mathematical operation of subtraction through mechanical means, obviating the need for an operator or control system to watch two separate gauges and determine the difference in readings.

STANDARD SPECIFICATION

Sizes

100 and 150mm

Case/ Bezel

AISI 316 Stainless Steel
Bezel Stainless Steel (Bayonet type)
Weatherproof Construction (IP 66)

Socket & Element

AISI 316 Stainless Steel (Standard)
Options available (see individual data sheets)

Movement

Stainless Steel Construction

Blowout Protection

Blow-out device (EN 837-1 S1)

Dial

White Anodised Aluminium (Black Printing)

Pointer

Black Aluminium

Window

Laminated Safety Glass

Traceability

All instruments are individually calibrated and have an unique Serial Number. Calibration Certificates are issued for each gauge

Certification available on request

- Certificate of Conformity Traceable to National Standards
- Group Certification (Pressure Test Calibration Statement)

Safety

All units are manufactured to comply with EN 837-1, S1 Blowout device specification and other regulatory standards including PED 2014/68/EU.

Installation instructions

Refer to EN 837-2 and our [Guidance On Use of Equipment](#) data sheet.

Accuracy class

2% Accuracy

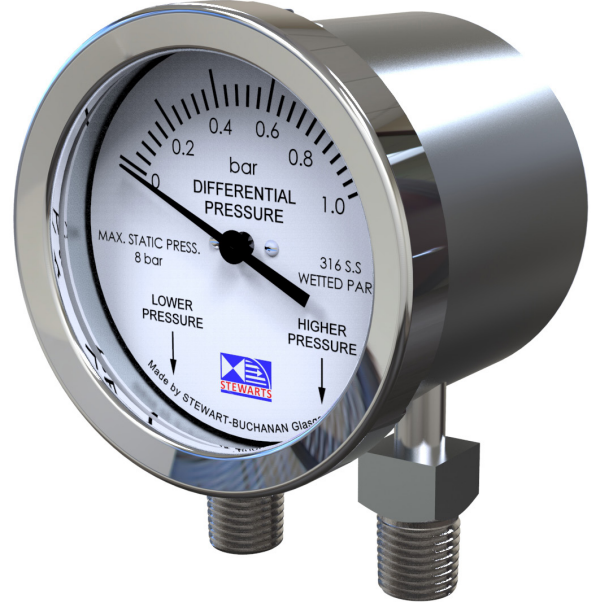
Scale Range

Working Ranges & Max Static Pressure
See individual data sheets

Pressure Connection Thread

1/8", 1/4", 3/8", 1/2" NPT, BSP, BSPT

Model-4503



Model-4503 Stainless Steel Case & Bourdon Tube Element
Model-4901 Stainless Steel Case & Single Diaphragm Element
Model-4906 Stainless Steel Case & Opposed Diaphragm Element

Operating Temperature Range EN837

-20° to 60°C (-4°F to 140°F)

Options for lower/higher operating ranges (Contact Sales)

Temperature Error

Additional error when temperature changes from reference
Temperature of 20°C (68°F) ±0.4% for every 10°C (18°F) rising or Falling % of span

Optional Extras

- Monel according to ISO 15156 / NACE MR-01-75 wetted parts
- Optional dial materials & Custom markings
- Other pressure connections
- Perspex window
- Customer logo printed on dial
- Safety Pattern Type with Baffle wall, EN837-1, S3 (Dimensions available on request)

Further options on request

Available with a wide range of accessories

Syphons, Snubbers, Overrange gauge protectors, Valves, Manifolds, Diaphragm seals, Swivel adaptors, etc ensures that STEWARTS can provide you with the right product to suit any individual application or requirement.

Stewarts - USA, LLC

6786 Tipperary, Houston, Texas 77061 USA
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Web: www.STEWARTSUSA.com



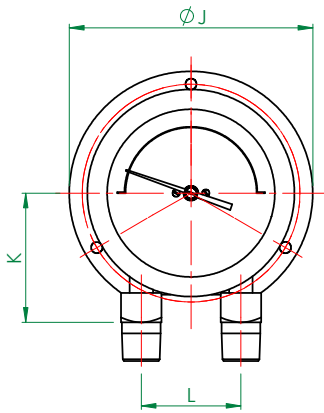
Ordering Parameters, Please state the following: SIZE, MODEL NO, SCALE RANGE, CONNECTION, PRESSURE MEDIUM & OPTIONAL EXTRAS

DATA SHEET REF: Diff-REV01-18

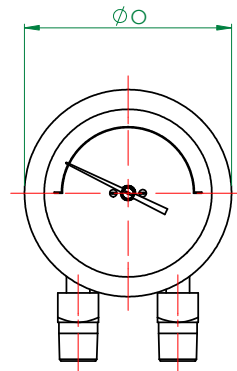
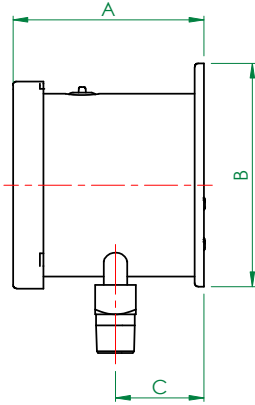
Specifications and dimensions in this leaflet, are subject to change without prior notice.

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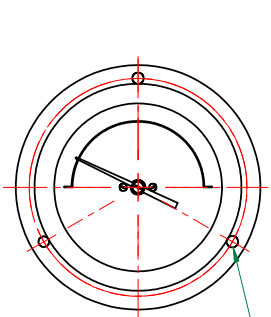
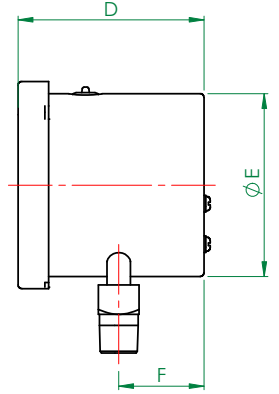
Model-4503 Stainless Steel Case & Bourdon Tube Element



**MODEL 4503/PCS
SURFACE MOUNTED**

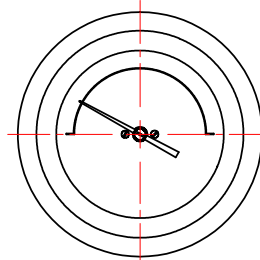
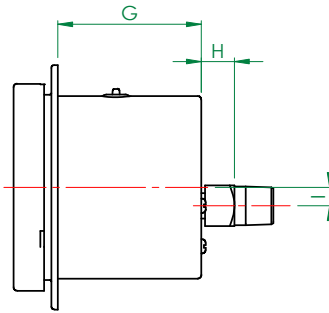


**MODEL 4503/PCD
DIRECT MOUNTED (STANDARD)**

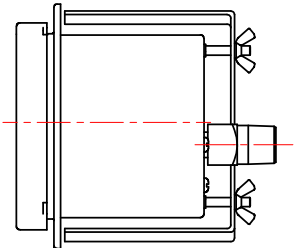


3 HOLES Ø"M"
ON "N" PCD @120°

**MODEL 4503/PCSF
FLUSH MOUNTED SCREW FIXING**



**MODEL 4503/PCCF
FLUSH MOUNTED CLAMP FIXING**



NOTE: Model Nos
Suffix model 4503 with mounting
style shown above. i.e - PCS, PCD, etc

General Arrangement Dimensions in mm, to ± 1 mm

Dim	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Panel cut-out
Dial \varnothing 4" (100mm)	104	121	48	100	99	46	78	18	10	132	70	54	6	118	112	105
6" (150mm)	104	184	45	101	159	47	72	18	10	196	103	54	6	178	161	165

SCALE RANGE

Delta P range: Min 0.3 bar
Max 100 bar

Static pressure Max 600 bar (Able to withstand full MSP on one side only)

(Maximum ratio DP to static 10 : 1)

MEASURING ELEMENT

St/St Bourdon Tubes (Standard)
Monel to ISO 15156 / NACE MR0175 (Option Available)

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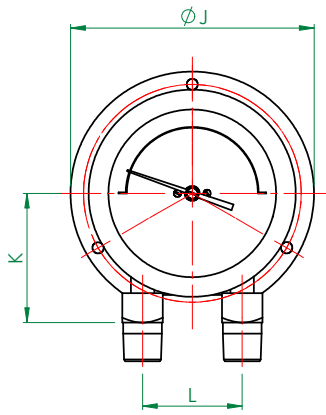
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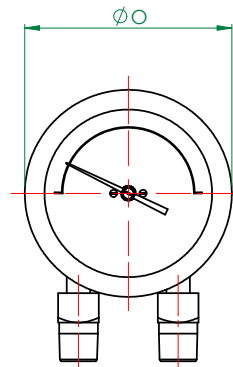
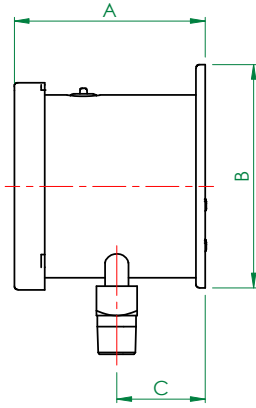


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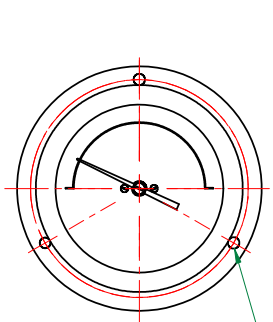
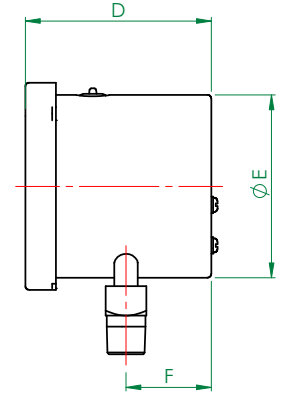
Model-4901 Stainless Steel Case & Single Diaphragm Element



**MODEL 4901/PCS
SURFACE MOUNTED**

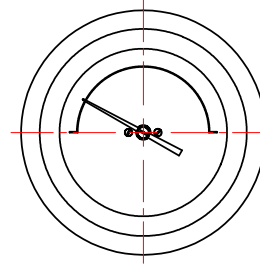
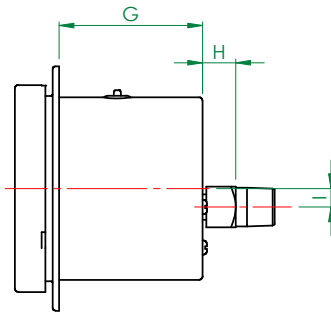


**MODEL 4901/PCD
DIRECT MOUNTED (STANDARD)**

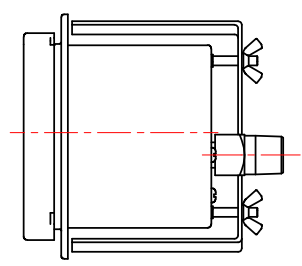


3 HOLES Ø"M"
ON "N" PCD @120°

**MODEL 4901/PCSF
FLUSH MOUNTED SCREW FIXING**



**MODEL 4901/PCCF
FLUSH MOUNTED CLAMP FIXING**



NOTE: Model Nos
Suffix model 4901 with mounting
style shown above. i.e - PCS, PCD, etc

General Arrangement Dimensions in mm, tol' ± 1mm

Dim	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Panel cut-out
Dial Ø 4" (100mm)	104	121	48	100	99	46	78	18	10	132	70	54	6	118	112	105
6" (150mm)	104	184	45	101	159	47	72	18	10	196	103	54	6	178	161	165

SCALE RANGE

Delta P range: Min 100 mbar
Max 2 bar

Static pressure Max 25 bar

MEASURING ELEMENT

St/St Diaphragm (Standard)
Monel to ISO 15156 / NACE MR0175 (Option Available)

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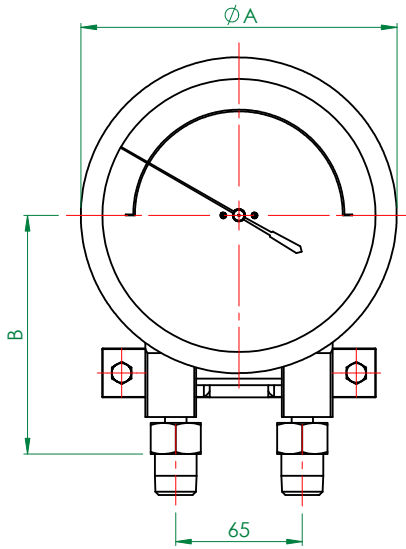
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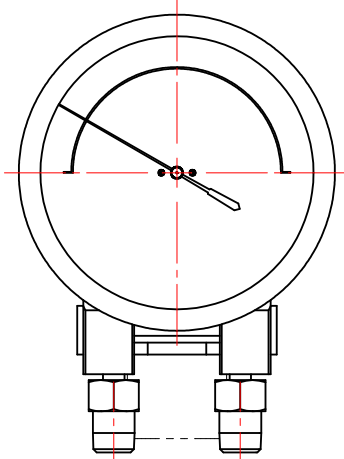
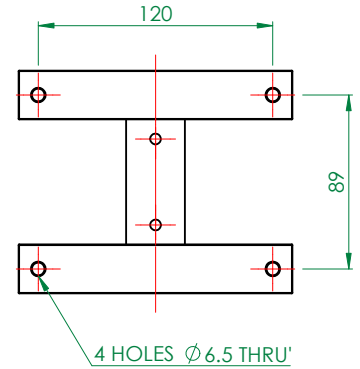
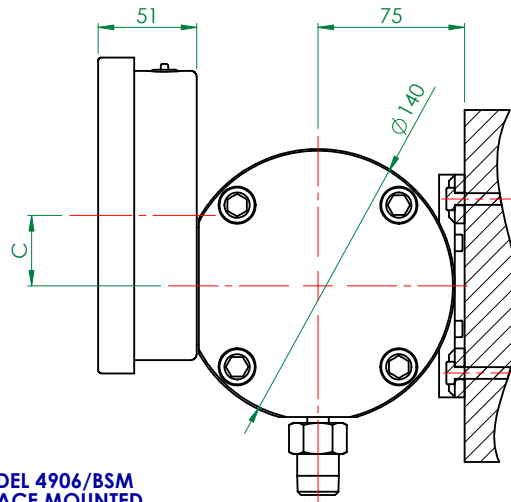


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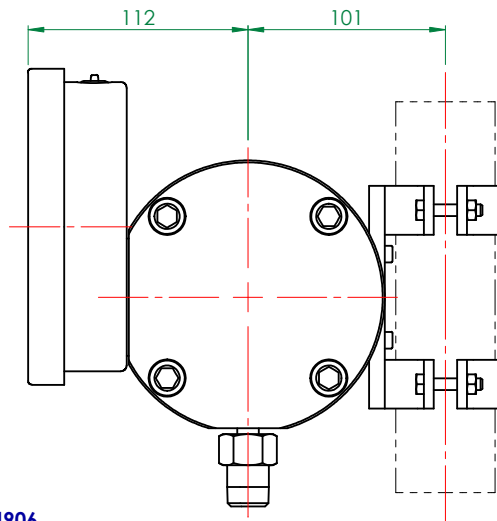
Model-4906 Stainless Steel Case & Opposed Diaphragm Element



**MODEL 4906/BSM
SURFACE MOUNTED**



**MODEL 4906
YOKE MOUNTED**



General Arrangement Dimensions in mm, tol' ± 1 mm			
Dim	A	B	C
4" (100mm)	112	101	16
6" (150mm)	162	122	36

SCALE RANGE

Delta P range: Min 100 mbar
Max 25 bar

Static pressure Max 220 bar (Able to withstand full MSP on one side only)

MEASURING ELEMENT

St/St DP cell (Standard).
ISO 15156 / NACE MR0175 (Options Available)
Monel, Hastelloy C276, Inconel 625, Incoloy 825.

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