



Precision Monitoring Devices Helping You Stay in Control

An Overview

Stainless Steel Pressure Gauge : SP



Nominal Size : 100, 150, 200 and 250 mm
Compliance to latest EN837-1
Std. ranges : 0 to 0.6 kg/cm²...700 kg/cm²
Overload capacity upto 130 % of FSD
Protection to IP67
Accuracy class $\pm 1.0\%$ of FS
Stainless steel casing
Dry or liquid filled version
External zero adjustment (optional)
Socket to case : TIG argon welded
CE marking as per PED 97/23/EC

Solid Front Pressure Gauge : SF



Nominal Size 100 and 150 mm
Compliance to latest EN837-1
Std. ranges : 0 to 0.6 kg/cm²...700 kg/cm²
Overload capacity upto 130 % of FSD
Protection to IP67
Accuracy class $\pm 1.0\%$ FS
Stainless Steel Casing
Dry or Liquid Filled Version
External Zero adjustment (Optional)
Socket to case : TIG Argon Welded
CE Marking as per PED 97/23/EC

Forbes Marshall Hyderabad production unit specialises in manufacture of high quality, sturdy and reliable mechanical Instrumentations such as Pressure Gauges, Dial thermometers and circular chart Recorders for Pressure, Temperature.

These products have a three decade reputation for quality and reliability. Our manufacturing process for our products is committed by quality control testing procedures endorsed by ISO 9001 certification.

Forbes Marshall's factory is been certified by National Accreditation Board for Testing and Calibration Laboratory (NABL) in the field of Mechanical Calibration.

Polypropylene Case Pressure Gauge : PP



Nominal Size 115 mm
Compliance to ASME - B 40.1, Grade 2A
Std. ranges : 0 to 0.6 kg/cm²...700 kg/cm²
Overload capacity upto 130 % of FSD
Protection to IP67
Accuracy class $\pm 1.0\%$ FS
Polypropylene case with SS316L measuring system
Dry or Liquid Filled Version
Solid front design features baffle wall interposed between the sensing system, the window and a pressure relieving back for increased safety

Electric Contact Pressure Gauge : EP



Nominal Size : 100 and 150 mm
Compliance to latest EN837-1
Std. ranges : 0 to 0.6 kg/cm²...700 kg/cm²
Overload capacity upto 130 % of FSD
Accuracy class $\pm 1\%$ FS (contact accuracy 2.5%)
Stainless Steel Casing
Dry unfilled version
Socket to case : TIG argon welded

**Low Pressure Sensing
Schaffer Diaphragm
Pressure Gauge : SH**



Nominal Size : 100, 150 mm
 Compliance to latest EN837-3
 Std. ranges : 0 to 250 mmWc...6000 mmWc
 Overload capacity upto 125 % of FSD
 Protection to IP67
 Accuracy class $\pm 1.6\%$ to 2% of FS
 Stainless Steel Casing
 Dry unfilled version
 Socket to case : TIG argon welded

**Low Pressure Sensing
Capsule Gauge : CG**



Nominal Size : 100, 150 mm
 Compliance to latest EN837-3
 Std. ranges : 0 to 250 mmWc...6000 mmWc
 Overload capacity upto 110 % of FSD
 Protection to IP67
 Accuracy class $\pm 1.6\%$ to $\pm 2\%$ FS
 Stainless Steel Casing
 Dry unfilled version

**General Purpose
Pressure Gauge : GP
For Hydraulic Applications**



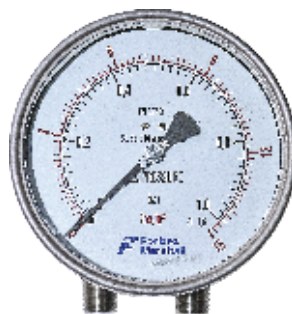
Nominal Size : 63 mm
 Compliance to latest EN837-1
 Std. ranges : 0 to 0.6 kg/cm²...700 kg/cm²
 Overload capacity upto 130 % of FSD
 Accuracy class $\pm 1.6\%$ FS
 Stainless Steel Casing
 Dry or Liquid Filled Version
 Socket to case : TIG Argon Welded

**Commercial
Pressure Gauge : MS**



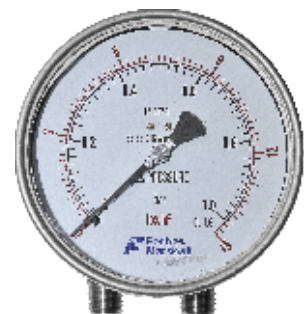
Nominal Size : 40, 50, 63, 100 and 150 mm
 Compliance to latest EN837-1
 Std. ranges : 0 to 0.6 kg/cm²...700 kg/cm²
 Overload capacity upto 130 % of FSD
 Accuracy class $\pm 2\%$ FS
 Draw Steel With black powder Coating
 Dry unfilled version

**Single Diaphragm
Differential Pressure
Gauge : SD**



Nominal Size : 100, 150 mm
 Compliance to latest EN837-3
 Std. ranges : 0 to 250 mmwc...10 kg/cm²
 Static pressure max upto 40 Bar
 Also available with contacts
 Protection to IP67
 Accuracy class $\pm 1.6\%$ FS
 Stainless steel casing
 Dry or liquid filled version

**Double Diaphragm
Differential Pressure
Gauge : DD**



Nominal Size : 100, 150 mm
 Compliance to latest EN837-3
 Std. ranges : 0 to 250 mmwc...10 kg/cm²
 Static pressure max upto 100 Bar
 others on request
 Also available with contacts
 Protection to IP67
 Accuracy class $\pm 1.6\%$ FS
 Stainless steel casing
 Dry or liquid filled version

Double Diaphragm Differential Pressure Gauge With Electrical Contact : DDE

Nominal Size : 100 and 150 mm
Compliance to latest EN837-3
Std. ranges : 0 to 250 mmwc...10 kg/cm²
Overload capacity upto 110 % of FSD
Protection to IP67
Accuracy class $\pm 1.6\%$ FS
Stainless steel casing
Dry unfilled version

Single Diaphragm Differential Pressure Gauge With Electrical Contact : SDE

Nominal Size : 100 and 150 mm
Compliance to latest EN837-3
Std. ranges : 0 to 250 mmwc...10 kg/cm²
Overload capacity upto 110 % of FSD
Protection to IP67
Accuracy class $\pm 1.6\%$ FS
Stainless steel casing
Dry unfilled version

Test (Master Gauge) : MG

Nominal Size : 150 mm
Compliance to latest EN837-1
Std. ranges : 0 to 2.5... 700 kg/cm²
Overload capacity upto 130 % of FSD
Accuracy class $\pm 0.25\%$ FS
Standard Casing with Berillium Copper / SS316 Bourdon with Jewel Bearing movement
Dry unfilled version

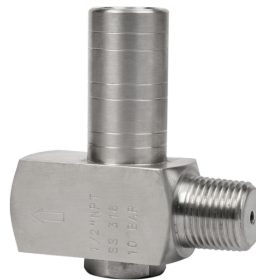
Accessories

Snubber



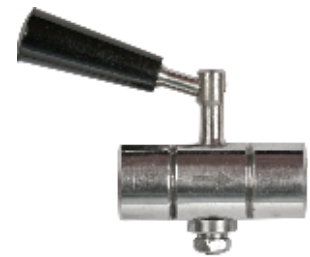
Working Pressure : Upto 6000 Psi
Connection : 1/2" NPT (F x M) as std.
Material : SS316/SS316L/Monel etc.

Gauge Saver



Connection : 1/2" NPT (F x M) as std.
Material : SS316/SS316L/Monel etc.

Gauge Cock



2-way / 3-way Construction
Connection : 1/2" NPT (F x M) as std.
Material : SS316/SS316L etc.
With/without Bleed Hole

Syphon



Construction : Pigtail / Coil / U-Type
Connection : 1/2" NPT (F x M) as std.
Material : SS316/SS316L/Monel etc.
IBR as Optional

Manifolds



Construction: 2-way ,3-way ,4-way and 5-way
Connection : 1/2" NPT (F x F) as std.
Material : SS316/SS316L/Monel etc.

Needle Valve



Working Pressure : Upto 6000 Psi
Connection : 1/2" NPT (F x F) as std.
Material : SS316/SS316L etc.

Temperature Gauges

Bimetallic Temperature Gauge : TG-BM



Nominal Size : 100 and 150 mm

Compliance to latest EN13190

Std. Ranges : -20°C to 400°C

Overload capacity 110 % of FSD

Protection to IP67

Accuracy class : Tolerance class 1 as per EN 13190

High repeatability, low hysteresis

Stainless Steel Casing

Dry or Liquid Filled Version

External Zero adjustment (Optional)

Gas Filled Temperature Gauge : TG-GF



Nominal Size : 100 and 150 mm

Compliance to latest EN13190

Std. Ranges : -20°C to 600°C

Overload capacity 110 % of FSD

Protection to IP67

Accuracy class : Tolerance class 1 as per EN 13190

High repeatability, low hysteresis

Stainless Steel Casing

Dry or Liquid Filled Version

Electrical Contact Filled Temperature Gauge : TG-ECGF



Nominal Size : 100 and 150 mm

Compliance to latest EN13190

Std. Ranges : -20°C to 600°C

Overload capacity 110 % of FSD

Protection to IP67

Accuracy class : Tolerance class 1 as per EN 13190 (contact accuracy 2.5%)

High repeatability, low hysteresis

Stainless Steel Casing

Dry or Liquid Filled Version

RTD



No. of Elements : Simplex / Duplex

Element Type : PT-100

Range : -200 to 450 Deg. Cel.

Accuracy : Class A / Class B (As per IEC-60751 / DIN 43760)

Wire Configuration : 2 / 3 / 4 Wire (SIMPLEX) / (DUPLEX)

Sheath Material : SS316

Sheath Dia. : 6 mm

Total Stem Length (L) : As per customer requirement.

Thermocouple



No. of Elements : Simplex / Duplex

Element Type : J/K/N/R/S/B/T/E

Range : Please Specify to Select suitable Element Type

Hot Junction Type : Grounded / Un-Grounded

Accuracy : Class I / Class II (As per IEC-584.2 / ANSI MC 96.1)

Wire Configuration : 2 Wire (SIMPLEX) / 4 Wire (DUPLEX)

Sheath Material : SS316 / Other's on request

Sheath Dia. : 6 mm / Other's on request

Total Stem Length (L) : As per customer requirement.

Accessories

Thermowell Screwed - TS



Design as Per ASME PTC 19.3

Type : Barstock / Fabricated

Construction : Straight, Full taper, Stepped and Partial Taper

Stem Material : SS316 / Others on request

Head : Round with Spanner Slots / Hexagonal

Note : Single piece barstock thermowell available upto 600mm, above 600mm options available in multiple barstock and fabricated from pipe.

Thermowell Flanged - TF



Design as Per ASME PTC 19.3

Type-Barstock / Fabricated

Construction : Straight, Full taper, Stepped and Partial Taper

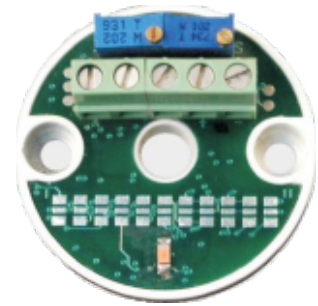
Stem Material : SS316 / Others on request

Head : Round

Note : Single piece barstock thermowell available upto 600mm, above 600mm options available in multiple barstock and fabricated from pipe.

Transmitters

Temperature Transmitter



Solder Jumpers for : Span, Zero, Upscale/down Scale

Output Range 4~20 mA/20~4 mA for selection

Multirange : 8 SPAN ranges, 25 to 600°C / 45 to 1080 F°

4 ZERO ranges, -100 to +70 °C / -148 to +158 °F

Accuracy : 0.1% temperature linear 4~20 mA output

Transmitters

Pressure Transmitters Features (FM-PT219)



Ceramic core element

Low cost

Compact structure

Simple installation

Measuring ranges from 0 to 1 bar, 0 to 600 bar

Measuring accuracy of + 0.5%FS (+ 0.2% optional)

High accuracy, high stability

The output of pressure transducers is 4 to 20mA / 0 to 5V (or) 1 to 5 V.

Wide operating temperature range

Pressure Transmitters Flush Diaphragm Flush Or TC end Type Pressure Transmitter



Multi-structures, material safety, oil proof, high performance of stability & reliability

Multi-output forms, a wide measurement range

Wide range of power supply and output

Protection of reversed circuit

Stainless steel

Pressure Transmitters Pressure Transmitter with local display (FM-PT216)



Piezo-resistive sensor

Unique conductive seal that eliminates internal wire bonding thus enhancing reliability

Zero & full scale adjusters are provided under the top cover

Used in areas requiring exact pressure measurement

Low hysteresis and long term stability

Accuracy 0.5%

Output 4-20mA / 1.5V / 0.5V

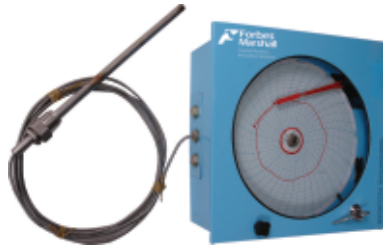
Recorders

Circular Chart Recorders (CCR398)



Pressure / Temperature / Compound
With Temperature Transmitter as option
Chart Size 250 mm
230 VAC 50 Hz Power Supply
Single / Dual pen
Surface mounting bottom connection / Flush
mounting back connection
With / without display
24 hours / 7 days chart drive

Mechanical Circular Chart Recorders (Pressure/ Temperature) (PR,TR,CR)



Single Pen / Double Pen
Pressure / Temperature / Compound
Chart size 250mm
Surface bottom connection
1.0% of Fs
Compliance to EN837-1
24 hours / 7 days chart drive

Test Pumps and Service

Comparison Test Pumps



Ranges: 0-40 kg
0-400 kg
760mmHg to 0

Services: Filling



Seal Replacement / Filling for all types
makes of Transmitters

Services: Calibration



For Pressure & Temp Gauges
NABL Accredited Laboratory for Pressure and
Temperature calibration.



Trusted Partners.
Innovative Solutions.

Forbes Marshall is a leader in process efficiency and energy conservation for Process Industry, with over seven decades of experience building steam engineering and control instrumentation solutions. Our unique complementary expertise enables us to engineer customised systems that improve manufacturing processes, conserve energy and are environmentally sustainable. We offer our customers a comprehensive range of services, products and solutions for utilities and process control. We are present in over 50 locations globally, with 5 manufacturing facilities. Our knowledge, innovative solutions, reliable products and global presence make us a trusted partner.

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FORBES MARSHALL ARCA
CODEL INTERNATIONAL

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