

Advanced Measuring Industrial Instruments Company

Setting the standards of quality in precision instrumentation through a solid tradition of product and service excellence



### About Us

Advanced Industrial Measuring Instruments (AMI) is a 100% Saudi-owned Company that was established in the year 1994 as a trading and service company for industrial instruments, and it is a subsidiary of Al-Mutawa Holding that was established in the year 1948. Ever since its inception, AMI has set a quality standard serving the biggest oil company in the world Saudi Aramco, and successfully achieved a remarkable standing and a high level of consumer satisfaction.

In 2001, **AMI** moved to Jubail Industrial City, one of the leading Petrochemical complexes in the world, with an aim of starting its second phase plan as a first Saudi-Owned Company for the production of pressure and temperature gauges on a land size of 2, 500 sq. m.

In order to uphold its quality standard and continue on the path of development, **AMI** has implemented QMS and become an ISO-Certified manufacturer. This could not have been accomplished without an expert and dedicated team that has been chosen very painstakingly to work and grow together.

**AMI** is now very well-known for its quality pressure and temperature gauges throughout the Kingdom of Saudi Arabia, and it endeavors to continue its level best to expand its products portfolio and geographical presence to meet the customers' requirements and expectations through a philosophy of building a long-term partnership that consists of **AMI**, Employees, Suppliers and Customers.



## Vision and Mission

#### Vision

Aim to be one of the highly recognized companies with profitable business in Saudi Arabia for manufacturing and supplying Industrial Instruments.

#### **Mission**

Committed to provide quality products and Unique service to meet our valuable customers' requirement and satisfaction. We strive to achieve this through effective executive plans that are set by the professional inspiring management and implemented by the dedicated competent team.

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#### **Special Features**

- Economical version
- General purpose application
- Accuracy +/- 1.6% (for NS 63, 80, 100, 150 & 250mm)
- Accuracy +/- 2.5% (for NS 40 & 50mm)

#### **Applications**

F. R. L. Units, Water, Air, Hydraulic, Pneumatics, Valve positioner, Sugar mills and Allied process industries.

#### **Standard version**

Nominal size: 40, 50, 63, 80, 100, 150 and 250 mm



# **Utility Pressure Gauge** *Bourdon Type*

P-01

#### P-02

# **Utility Pressure Gauge** *ABS Case Bourdon Type*



- Economical version
- General purpose application
- Accuracy +/- 1.6% (for NS 63, 80, 100, 150 & 250mm)
- Accuracy +/- 2.5% (for NS 40 & 50mm)

#### **Applications**

F. R. L. Units, Water, Air, Hydraulic, Pneumatics, Valve Positioner, Sugar Mills and Allied Process Industries.

#### **Standard version**

Nominal size: 40, 50, 63, 80, 100, 150 and 250 mm



### Pressure Gauges



#### **Special Features**

- Aluminium case with SS measuring system
- Wetted parts AISI 316L stainless steel
- Accuracy ± 0.5% F.S.
- Solid front design features baffle wall interposed between the sensing system, the window and a pressure relieving back for increased safety standard followed ANSI/ASME- B 40.1

#### **Applications**

Suitable for high pressure gas, corrosive/hazardous environment that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 115 and 150 mm



**Aluminium Gauge (Front Flange Panel Mount Type)** *Bourdon Type* 

P-03

P-04

All SS Pressure Gauge
Bourdon Type



#### **Special Features**

- Stainless steel case and measuring system
- Rugged construction
- Dry or liquid filled
- Standard followed in general EN 837-1
- Accuracy +/- 1.6% (for NS 63 & 80mm)
- Accuracy +/- 2.5% (for NS 40 & 50mm)

#### **Applications**

Food & Beverage, pharmaceutical, chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydrocleaning machines, presses, engine compressors.

Turbines, diesel engines, hydraulic equipments, refrigerating plants and gaseous/ liquid media that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 40, 50, 63 and 80 mm



# Pressure Gauges **\{**



#### **Special Features**

- Phenolic case with SS measuring system
- Wetted part AISI 316L stainless steel, Monel 400, Hastelloy C-625
- Accuracy± 0.5% F.S.
- Solid front design features baffle wall interposed between the sensing system, the window and a pressure relieving back for increased safety
- Standard followed ANSI/ASME- B 40.1

#### **Applications**

Suitable for high pressure gas, corrosive / hazardous environment that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 115 mm (4 1/2")



**Phenolic Case Pressure Gauge (4 1/2")** *Solid Front* 

P-05

P-06

All SS Pressure Gauge

Capsule Type

#### **Special Features**

- Compact design
- Provision for zero adjustment
- Standard followed in general EN 837-3
- Accuracy +/- 1.6% of F.S

#### **Applications**

Low pressure draft measurement, food and beverages, pharmaceutical, conventional, nuclear power plants, clean air, gaseous, low viscous liquid and non corrosive media that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 63, 100, 125 and 150 mm



## Pressure Gauges



#### **Special Features**

- Cost effective
- Dry or liquid filled
- Standard followed in general EN 837-1
- Accuracy +/- 1.0% of F.S

#### **Applications**

Pneumatics, hydraulics, pumps, compressors, diesel engines and gaseous / liquid media that will not obstruct the pressure system.

#### Standard version

Nominal Size: 100, 115 and 150 mm



# SS Case Brass Pressure Gauge Bourdon Type

P-07

ourdon Type

Phenolic Case Pressure Gauge (4 1/2")

Low Pressure Solid Front

P-08

#### **Special Features**

- Phenolic case with SS measuring system
- Wetted parts AISI 316L stainless steel
- Solid front design features baffle wall interposed between the sensing system, the window and a pressure relieving back for increased safety
- Standard followed ANSI/ASME- B 40.1
- Accuracy +/- 1.6% of F.S

#### **Applications**

Suitable for high pressure gas, corrosive / hazardous environment that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 115 mm (4 1/2")



# Pressure Gauges **\**



#### **Special Features**

Solid front design features baffle wall interposed between the sensing system and the window and a pressure relieving back for increased safety. EN 837-1 stainless steel blow off back

#### **Applications**

- Suitable for high pressure gas, corrosive/hazardous environment that will not obstruct the pressure system.
- Accuracy +/- 1.6% (for NS 63mm) and +/- 1.0% (for 100 & 150mm)

#### Standard version

Nominal Size: 63, 100 and 150mm

**All SS Pressure Gauge** Solid Front

P-09

#### P-10

**SS** Case Test Gauge Solid Front



#### **Special Features**

- Solid front design features baffle wall interposed between the sensing system and the window and a pressure relieving back for increased safety.
- Stainless steel case and high precision measuring system
- High resolution dial
- Anti parallax mirror band (eye friendly)
- Socket directly welded to case
- Standard followed in general EN 837-1
- Calibration certificate with traceability to national / international standards.
- Accuracy +/- 0.25% of F.S (At 20 deg C)

#### **Applications**

Calibration / testing in laboratory, fits for various process industries and all gaseous / liquid media that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 150 mm



### Pressure Gauges



### All SS Pressure Gauge Bourdon Type

#### **Special Features**

- External zero adjustment (Optional)
- Stainless steel case and measuring system
- Socket directly welded to case
- Dry and liquid filled version
- Standard followed in general EN 837-1 For NS 100, 150 & 250 mm)
- CE marking (as per PED 97/23/EC, For NS 100 and 150mm)
- Accuracy +/- 1.0 % of F.S

#### **Applications**

Food and beverage, pharmaceutical, cryogenics, chemical & petrochemical industries, conventional & nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines refrigerating plants. Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 100, 125, 150, 200 and 250mm

P-11

P-13

### **SS Case Low and High Pressure Gauge**

Diaphragm Type



- CE approved electrical contacts
- Stainless steel case and measuring system
- Flanged or screwed connection
- Standard followed in general EN 837-3
- Accuracy +/- 1.6% of F.S.

#### **Applications**

Suitable for clean air, corrosive environments and gaseous and liquid media with optional flange connection for viscous and contaminated media

#### **Standard version**

Nominal Size: 100 and 150 mm



## Pressure Gauges **\(\)**



# SS Case Test Gauge Bourdon Type

#### **Special Features**

- Stainless steel case and high precision measuring system
- High resolution dial
- Anti parallax mirror band (eye friendly)
- Socket directly welded to case
- Standard followed in general EN 837-1
- Calibration certificate with traceability to national/international standards.
- Accuracy +/- 0.25% of F. S. (at 20 deg C)

#### **Applications**

Calibration / testing in laboratory, fits for various process industries and all gaseous / liquid media that will not obstruct the pressure system.

#### Standard version

Nominal Size: 150, 200 and 250 mm

P-15

#### P-16

### SS Case Brass Pressure Gauge

Bourdon Type



- Stainless steel case
- Rugged construction
- Dry or liquid filled
- Standard followed in general EN 837-1
- Accuracy +/- 1.6% of F.S. (for NS 63, 80 & 100 mm)
- Accuracy +/- 2.5% of F.S. (for NS 40 & 50 mm)

#### **Applications**

Oil, water, pneumatics, hydraulics, pump, compressors, diesel engines and gaseous/liquid media that will not obstruct the pressure system.

#### Standard version

Nominal Size: 40, 50, 63, 80 and 100 mm



### Pressure Gauges



#### **Special Features**

- Stainless steel case and ring
- Compact design
- Provision for zero adjustment
- Standard followed in general EN 837-3
- Accuracy +/- 1.6% of F.S.

#### **Applications**

Low pressure draft measurement, food and beverages, Pharmaceutical, conventional, nuclear power plants, clean air, gaseous, low viscous liquid and non corrosive media that will not obstruct the pressure system.

#### Standard version

Nominal Size: 63, 100, 125 and 150 mm

Scale Ranges: 0 .... 25mbar to 0 .... 600mbar or other

equivalent unit of pressure and vacuum.

SS Case Brass Pressure Gauge

Capsule Type

P-19

#### P-20

### **All SS Sanitary Pressure Gauge**

Diaphragm Type

#### **Special Features**

- Stainless steel case and measuring system
- Dry or liquid filled
- Diaphragm seal integrally built with gauge.
- Reduces the effect of vibration / pulsation
- Provides best hygiene factor
- Standard followed EN 837-3
- Accuracy +/- 1.6% of F.S.

#### **Applications**

These instruments are designed for sanitary, food, process and Pharmaceutical and Paint industry. Bacterial and fungal accumulates which contaminate the process are eliminated.

The mirror finishing of the components assures the best hygiene.

#### Standard version

Nominal Size: 50 and 63 mm



# Pressure Gauges **\{**



# All SS Pressure Gauge Bourdon Type (Din Case)

#### **Special Features**

- Stainless steel case and measuring system
- Socket directly welded to case
- Protection IP 65 / IP 66
- Dry or fillable version
- Accuracy upto 0.5%
- Standard followed in general EN 837-1
- Standard Accuracy +/- 1.0% fo F.S. (for NS 100 & 150mm) and
- +/- 1.6% of F.S. (for NS 63mm)

#### **Applications**

Food and beverage, pharmaceutical, cryogenics, chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants. Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 63, 100 and 150 mm

P-25

P-27

**All SS Pressure Gauge** 

Electric Contact Type (High Case Version)



#### **Special Features**

- CE approved electrical contacts
- Stainless steel case and measuring system
- Filled version available
- Standard followed in general EN 837-1
- Accuracy +/-1.0% of F.S.

#### **Applications**

To control the electrical operation of compressors, pumps, motors, presses, hydraulic and pneumatic equipments, chemicals and petrochemical plants.

#### **Standard version**

Nominal Size: 100 mm

Scale Ranges: 0 .... 1, 0 to 0 .... 1600 bar or other

equivalent unit of pressure or vacuum



## Pressure Gauges



### All SS Pressure Gauge High Pressure Solid Front

#### **Special Features**

- Solid front design features baffle wall interposed between the sensing system and the window and a pressure relieving back for increased safety. EN837-1 stainless steel blow off back.
- Accuracy +/- 1.0% of F.S. (for NS 100 & 150mm)

#### **Applications**

Suitable for high pressure gas, corrosive / hazardous environment that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 63, 100 and 150mm

P-34

#### P-35

### **SS Case Brass Pressure Gauge**

Bordon Type (Din Case)



#### **Special Features**

- Stainless steel case
- Protection IP 65 / IP 66
- Dry or fillable version
- Standard followed in general EN 837-1
- Accuracy +/- 1.6% of F.S.

#### **Applications**

Pneumatics, hydraulics, pumps, compressors, diesel engines and gaseous / liquid media that will not obstruct the pressure system.

#### **Standard version**

Nominal Size: 63, 100 and: 150 mm

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### Differential Pressure Gauges (





#### **Special Features**

- CE approved electrical contacts
- Case and measuring system in SS
- Static pressure upto 200 kg/cm2
- Single side static pressure sustainable
- Accuracy class +/- 1.6% of F.S.
- Standard followed in general EN 837-3

#### **Applications**

Chemicals / refinery / nuclear / aerospace / fertilizer / petrochemicals / pharmaceutical / power / cement / sugar / food and beverages / pulp paper and allied process industries.

#### **Standard version**

Nominal Size: 100 and 150 mm



**Differential Pressure Gauge** Double Diaphragm Type

P-14

## **11 Temperature Gauge**





## **Industrial Thermometer**

Filled System

#### **Special Features**

- CE approved electrical contacts.
- Inert gas filled expansion system.
- Stainless steel case and stem
- With or without thermowell
- Standard followed EN 13190.
- Accuracy +/- 1.0% of F.S.

#### **Applications**

All stainless steel inert gas filled thermometers are suitable for corrosive media / environments in process industry like chemical, food and pharmaceutical, pulp and paper, refinery, cement and many more.

#### **Standard version**

Nominal Size: 100, 125, 150, 200 and 250 mm

T-01

### T-02

### **Special Features**

- Stainless steel case and stem
- Bottom / Back / Every Angle Entry
- Silicon oil filled (optional)
- With or without thermowell
- External zero adjustment (optional)
- Standard followed EN 13190.
- Accuracy +/- 1.0% of F.S.

#### **Applications**

Chemicals / refinery / fertilizer / petrochemicals / pharmaceutical / power / cement / sugar / food beverages / pulp and paper and allied process industries which are having corrosive media / environment.

#### **Standard version**

Nominal Size: 63, 80, 100, 125 and 150 mm

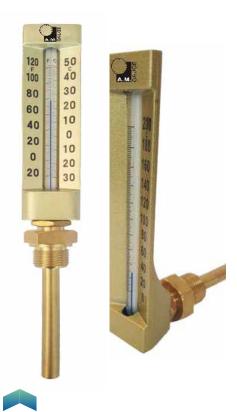
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### **Industrial Thermometer** Bimetal Type





# Temperature Gauge **\{**



**Specifications** 

Case length: 110mm, 150mm, 200mm

Case material: Aluminium with golden plated

Color: Blue

Type: Straight or Angle Stem material: Brass or Steel

Stem diameter: 10mm

Stem length (L): 30mm, 40mm, 50mm, 100mm, 150mm

Union: G1/2", M22x1.5, M27x2

Scale: Single scale °C

Accuracy:  $\pm 2.0\%$ 

Range: -30to50°C, 0to50°C, 0to100°C, 0to120°C,

0to160°C, 0to200°C, 0to600°C

**Glass Industrial Thermometer** 

**T-05** 





#### **Special Features**

- Stainless steel construction
- Suitable for clean air, gases and non crystallized liquids

#### **Applications**

Cooling towers are used mainly to protect pressure instruments, gauges, switches and transmitters directly coming in contact with high temperature process fluids or vapours filled with condensation fluids. These are mounted between process and pressure instrument. They reduce process pulsation, act as heat dispenser and generate cooling effect to save instrument from working at dangerous temperature.

#### **Standard Version**

Operating temperature Type CT1 & CT2 - Up to 220°C

Type CT3- Up to 150°C

Process connection 1/2" BSP (M)
Instrument connection 1/2" BSP (M)
Material of connection AISI 316 SS

**AC-01** 

#### **AC-02**

Gauge Cock
Vent Hole Type



- PTFE adjustable packing installed below operating
- Threads to prevent media contamination or
- Lubricant washout of operating threads
- Spindle for longer durable operation
- With air vent hole (optional)

#### **Applications**

Hydraulic machines, compressors, process plants, Clean air, gases and non crystallized liquids.

#### **Specifications**

Body AISI316 SS
Handle AISI316 SS
Working temperature Up to 180°C
Gasket seal PTFE
Nominal pressure 100 kg/cm2

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#### **Special Features**

- Nominal pressure up to 400 bar
- 7 Different selectable setting ranges
- Over pressure up to 600 bar
- Bellow type and piston type models

#### **Applications**

Designed to protect pressure instruments from over pressure exceeding the specified pressure range by sudden and excessive pressure fluctuation from surge or spike. This device blocks the higher pressure exceeding the allowed value, until it comes back to normal, when system pressure becomes normal. Hence this device safeguards the pressure instruments, gauges, switches or transmitters by blocking extra high pressure. Widely used in mechanical engineering and plant construction, power stations, mining, environmental technology, chemical and petrochemical, on shore and off shore.



Overload protector type E01: Bellow type; E 02: Piston type

Adjustable range E01: 200 mbar to 4 bar; E 02: 6bar to 400mbar

'O' Ring Viton
Maximum working pressure 600 bar

Operating temperature -40°C to 120°C Material of construction AISI 316 SS



All Stainless Steel

AC-03

#### AC-04

### **Flushing Ring**

#### **Special Features**

- With double flushing ports.
- Suitable with flanged, pancake or inline diaphragm seals.
- Available in all exotic material grades.

#### **Applications**

The flushing ring is designed to be sandwitched between the process flange and the diaphragm seal. Material collected in front of diaphragm can be flushed out through the flushing ports.

#### Standard version

(Compatible Models: 04-01, 04-02, 04-09, 04-10, 04-11 and 04-13)

Flange size E01: Bellow type; E 02: Piston type

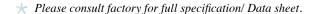
Material E01: 200 mbar to 4 bar; E 02: 6bar to 400mbar

Number of ports Two

Port connection 1/4" NPT (F) with male plug

Sealing face Raised face









#### **Special Features**

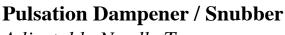
Designed to protect pressure instruments from sudden pressure changes and fluctuation.

#### **Applications**

Hydraulic machines, compressors, process plants, clean air, gases and non crystallized liquids.

#### **Specification**

Working pressure	Up to 400 kg/cm <sup>2</sup>
Working temperature	-20°C to 120°C
Instrument connection	1/2" NPT (F)
Process connection	1/2" NPT (M)
Material	AISI 316 SS



Adjustable Needle Type

**AC-05** 

**AC-06** 

**Siphon** All Stainless Steel



#### **Special Features**

- Pigtail, Coil and "U" type shapes
- Maximum temperature up to 400°C
- Nominal pressure up to 160 bar

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- Tig welded and hydro tested
- Made with seamless pipes

#### **Applications**

Siphons are used mainly to protect pressure instruments, gauges, switches and transmitters directly coming in contact with high temperature process fluids or vapours. These are mounted between process and pressure instrument. They reduce process pulsation and generate cooling effect to save the instrument.

#### **Specification**

**Body Material** Pipe Size **Operating Pressure AISI 316** 1/2" 100 bar at 120oC Stainless Steel Schedule 40







#### **Special Features**

This 360° swivel connection (swivel adapter) enables the simple orientation of pressure measuring instruments. The measuring instrument can be turned through a 360° range.

#### **Applications**

Hydraulic machines, compressors, process plants, clean air, gases and non crystalized liquids.

#### **Specification**

Working pressure	Up to 400 kg/cm <sup>2</sup>
Working temperature	- 20°C to 120°C
Instrument connection	1/2" NPT (F)
Process connection	1/2" NPT (M)
Material	AISI 316 SS



**AC-07** 

#### M-08

Two Valve Manifolds



#### **2VT Special Features**

With threaded vertical port inlet and female outlet. The vent/test connection is positioned on the front side. The venting bonnet is positioned on the right hand side and the isolating bonnet on left hand side.

#### Standard version specifications of Series 2VT

Body	SS 316
Stem	SS 316
Valve assembly	SS 316
T bar handle	SS 304

6000 PSI / BAR Maximum working pressure

240°C Maximum working temperature Packing **PTFE** 

Type of stem Type CT; Stem with conical metal tip Drain port 1/4" NPT [F]; provided with SS 316 plug Bracket mounting holes 2 Nos. (Not available in Series 2VT, 2VTF) Provided on stem tip and female threads of valve. Hard Chrome plating





#### **5VD Special Features**

- Series for differential pressure gauges with 2 inlets NPT female at bottom and 2 outlets with rotating nuts
- on top side. Also available in 50mm tap spacings Series 5VD50.

#### Standard version specifications of Series 5VD

SS 316 Stem SS 316 Valve assembly SS 316 "T" bar handle SS 304

Maximum working pressure 6000 PSI / 400 bar

Maximum working temperature 240°C Packing PTFE

Type of stem Type CT; Stem with conical metal tip Drain port 1/4" NPT [F]; provided with SS 316 plug

Bracket mounting holes 2 Nos.

Hard Chrome plating Provided on stem tip Bracket mounting holes 4 Nos. With 12 mm 10.

#### **Five Valve Manifolds**

**M-26** 

#### M-27

#### **Five Valve Manifolds**



With threaded vertical port inlets and outlets. The vent/test ports are positioned on the bottom and top of the body. The isolating bonnets are positioned on the left and right hand side and the venting and equalizing bonnets are positioned on the front side. Specially designed for remote mounting to field meters. differential transmitters and chart recorders on gas service allowing fail safe configuration preventing pressure loss from the high to low pressure Impulse lines.



SS 316 Body Stem SS 316 Valve assembly SS 316 'T' bar handle SS 304 Maximum working pressure 6000 PSI / BAR

Maximum working 240°C temperature Packing **PTFE** 

Type CT; Stem with conical metal tip Type of stem Drain port 1/4" NPT [F]; provided with SS 316 plug

Bracket mounting holes 2 Nos.

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Hard Chrome plating Provided on stem tip Bracket mounting holes 4 Nos. With 12 mm ID



# Diaphragm Seals 【



- Diaphragm directly welded to top chamber
- Easy to clean
- Easy to change process connection / bottom chamber

#### **Applications**

Diaphragm seals are designed to isolate the sensing element of pressure gauges and pressure switches from process fluids that they may be corrosive, viscous, sedimentous and / or with a high temperature. The diaphragm is welded to the body to ensure separation of the filling fluid from the process medium.

#### Standard version

(Compatible Models: 01-03, 01-05, 01-08, 01-09, 01-12, 01-15, 02-01, 02-05, 02-09, 02-10, 02-15 and 02-20)

Seal type S01=-1 to  $0 \text{ kg/cm}^2 \& 0$  to  $70 \text{ kg/cm}^2$  (Standard)

 $S02 = 100 \text{ kg/cm}^2 \text{ to } 250 \text{ kg/cm}^2$ 



**Diaphragm Seal** Slip Ring Coupled Type

**D-01** 

D-02

**Diaphragm Seal** Direct Coupled Type



- Robust lwo piece design the diaphragm is welded to the body to ensure separation of the filling fluid from the process medium
- All SS construction

#### **Applications**

Diaphragm seals are designed to isolate the sensing element of pressure gauges and pressure switches from process fluids that they may be corrosive, viscous, sedimentous and / or with a high temperature.

#### Standard version

(Compatible Models: 01-03, 01-05, 01-08, 01-09, 01-12, 01-17, 02-01, 02-05, 02-06, 02-07, 02-15 and 02-20)

S06=-1 to  $0 \text{ kg/cm}^2 \& 0$  to  $70 \text{ kg/cm}^2$  (Standard) Seal type

 $S07 = 100 \text{ kg/cm}^2 \text{ to } 400 \text{ kg/cm}^2$ 



### Diaphragm Seals



#### **Special Features**

- All stainless steel construction
- Compact design
- Low cost version
- The diaphragm is welded to the body to ensure separation of the filling fluid from the process medium

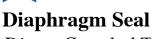
#### **Applications**

Diaphragm seals are designed to isolate the sensing element of pressure gauges and pressure switches from process fluids that they may be corrosive, viscous, sedimentous and / or with a high temperature.

#### **Standard version**

(Compatible Models: 01-04 and 01-20 (NS 50 and 63mm)

Range 1 kg/cm<sup>2</sup> to 21 kg/cm<sup>2</sup>



Direct Coupled Type (Compact Design)

**D-03** 

**D-04** 

**Diaphragm Seal** 

Flush Diaphragm, Sanitary Type

#### **Special Features**

- All 316 stainless steel
- Quick connect and disconnect
- Matching DIN, SMS, RTJ standards

#### **Applications**

Diaphragm seals are provided in the instruments like pressure gauges, switches, transmitters in order to isolate the sensing element from the main service due to its corrosive, viscous and sedimented nature and to avoid clogging and solidification. These seals are specilly designed for applications where high purity in the process is essential.- Typically in food, beverages, dairy and pharmaceutical industries.



#### Standard version

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(Compatible Models: 01-04 (NS 50 and 63 mm) 01-12 (NS 100 and 150 mm) 01-09 and 02-05

# Diaphragm Seals **{**



# **Diaphragm Seal**Screwed Flush Type

#### **Special Features**

- All SS 316 material
- One piece construction
- Flush diaphragm

#### **Applications**

Diaphragm seals are provided in the instruments like pressure gauges, switches, transmitters in order to isolate the sensing element from the main service due to its corrosive, viscous and sedimented nature and to avoid clogging and solidification.

#### **Standard version**

(Compatible Models: 01-04 (NS 63 mm), 01-12 (NS 100 mm) and 0-22

**D-05** 

#### **D-06**

### **Diaphragm Seal** *Heavy Duty Mini Seal*



#### **Special Features**

- All AISI 316 SS material
- · Light weight
- Economical
- Ideal choice for high pressure
- The diaphragm is welded to the body to ensure separation of the filling fluid from the process medium.

#### **Applications**

Diaphragm seals are designed to isolate the sensing element of pressure gauges and pressure switches from process fluids that they may be corrosive, viscous, sedimentous and / or with a high temperature.

#### **Standard version**

(Compatible Models: 01-03, 01-05, 01-08, 01-09, 01-12, 01-18, 02-01, 02-05, 02-09, 02-10, 02-15 and 02-20)

Seal type S11=-1 kg/cm<sup>2</sup> to 0 & 0 to 21 kg/cm<sup>2</sup> (Standard)

S12= 25 kg/cm<sup>2</sup> to 70 kg/cm<sup>2</sup> S13= 100 kg/cm<sup>2</sup> to 400 kg/cm<sup>2</sup> S14= 250 kg/cm<sup>2</sup> to 600 kg/cm<sup>2</sup>



### Diaphragm Seals



### **Diaphragm Seal** Sanitary Seal (Clamp Type)

#### **Special Features**

- Quick connect and disconnect
- For hygiene applications
- Easy to clean

#### **Applications**

Diaphragm seals are provided in the instruments like pressure gauges, switches, transmitters in order to isolate the sensing element from the main service due to its corrosive, viscous and sedimented nature and to avoid clogging and solidification.

These seals are used in applications where purity in process is essential - typically in food, dairy beverages and pharmaceutical industries.

#### **Standard version**

(Compatible Model: 01-12 (NS 100 mm to 150 mm)

Seal type S16=-1 to 0 & 0 to 40 kg/cm<sup>2</sup> (Standard)

S17= -1 to 0 & 0 to 40 kg/cm<sup>2</sup> (Dry seal only)

D-07

**D-08** 

**Diaphragm Seal**Flange - "I" Section Type



#### **Special Features**

- Continuous duty
- "I" section extension to facilitate smaller flange sizes
- Suitable for anti corrosive protection

#### **Applications**

Diaphragm seals are provided in the insmuments like pressure gauges, switches, transmitters in order to isolate the sensing element from the main service due to its corrosive, viscous and sedimented nature and to avoid clogging and solidification. This can be widely used with anti corrosive treatment / protection and various flanged sizes.

#### **Standard version**

(Preferable For Flange Size 1" and below)

 $(Compatible\ Models:\ 01-03,\ 01-05,\ 01-08,\ 01-09,\ 01-12,\ 01-18,\ 02-01,$ 

02-05, 02-09, 02-10, 02-15 and 02-20)

Seal type S21=-1 to 0 kg/cm<sup>2</sup> & 0 to 70 kg/cm<sup>2</sup> (Standard)

 $S22 = 100 \text{ kg/cm}^2 \text{ to } 400 \text{ kg/cm}^2$ 



# Diaphragm Seals **\{**

#### **Special Features**

- Flush diaphragm
- Easy flushing (through flushing ring)
- Most suitable for slurry, corrosive and high viscous service
- Flushing ring, flange and diaphragm are available in various type of SS and exotic materials.



#### **Applications**

Diaphragm seals are provided in the instruments like pressure gauges, switches, transmitters in order to isolate the sensing element from the main service due to its corrosive, viscous and sediwmented nature and to avoid clogging and solidification. These kind of seals are widely used in the viscous and corrosive services where flushing is required periodically and frequently.

#### **Standard version**

(For range size 1½" and above)

(Compatible Models: 01-03, 01-05, 01-08, 01-09, 01-12, 01-18, 02-01, 02-05, 02-09, 02-10, 02-15 and 02-20)

Range  $-1 \text{ kg/cm}^2 \text{ 0 & 0 to } 250 \text{ kg/cm}^2 \text{ (Standard)}$ 

D-09



D-10

**Diaphragm Seal**Direct Flanged Insert Type



- Welded diaphragm
- Most suitable for slurry and corrosive service
- Flushing ring, flange and diaphragm are available in various type of SS and exotic materials.

#### **Applications**

Diaphragm seals are provided in the instruments like pressure gauges, switches, transmitters in order to isolate the sensing element from the main service due to its corrosive, viscous and sedimented nature and to avoid clogging and solidification. These kind of seals are widely used in the viscous and corrosive services where flushing is required periodically and frequently.



#### **Standard version**

(For flange size 1½" and above)

(Compatible: Models: 01-03, 01-05, 01-08, 01-09, 01-12, 01-18, 02-01, 02-05, 01-09, 02-10, 02-15 and 02-20)

Seal type S26= -1 to 0 kg/cm<sup>2</sup> & 0 to 250 kg/cm<sup>2</sup> (Non PTFE Lined)\* (Standard)

S27=-1 to 0 kg/cm<sup>2</sup> & 0 to 40 kg/cm<sup>2</sup> (PTFE Lined)\*

## Diaphragm Seals



**Diaphragm Seal** *Extended Neck Type* 

#### **Special Features**

- All SS 316 construction
- Ideal for slurry / high viscous fluids
- Flange and diaphragm are available in various type of SS and exotic materials.

#### **Applications**

Diaphragm seals are provided in the instruments like Pressure gauges, switches, transmitters in order to isolate the sensing element from the main service due to its corrosive, viscous and sedimented nature and to avoid clogging and solidification. These kind of seals are widely used in the viscous and corrosive services where flushing is required periodically and frequently.

#### **Standard version**

(Compatible Model: 01-12; NS 100 and 150 mm)

Range 1 kg/cm<sup>2</sup> to 250 kg/cm<sup>2</sup>

D-11

D-12

Diaphragm Seal

Pulp Seal (Floating Ring Type)



- All stainless steel construction
- Continuous duty
- Easy to clean
- Available with anti vibration sprii

#### **Applications**

Diaphragm seals are provided in the instruments like pressure gauges, switches, transmitters in order to isolate the sensing element from the main service due to its corrosive, viscous and sedimented nature and to avoid clogging and solidification. These kind of seals are widely used in the viscous and corrosive services where flushing is required periodically and frequently.

#### **Standard version**

(Compatible Model: 01-12; NS 100 mm and 150 mm)

(Compatible Models: 01-03, 01-05, 01-08, 01-09, 01-12, 01-18, 02-01, 02-05,

02-09, 02-10, 02-15 and 02-20)

Range 1 kg/cm<sup>2</sup> to 40 kg/cm<sup>2</sup>



### Thermowells **\**



#### **Special Features**

- Fabricated from bar stock
- Standard for manufacturing followed- PTC 19.3
- Thermowell available in exotic materials such as hastalloy-c, tantalum, monel, titanium, inconel 600 etc
- Thermowells are used as an accessory with temperature instruments, sensors, to protect its basic sensing element from corrosive and mechanical damages due to process parameters



**Thermowells**Flanged Tapered Type

E-13

E-12

Thermowells
Straight Screw Type



#### **Special Features**

- Fabricated from Bar Stock
- Standard for manufacturing
- Followed PTC 19.3
- Thermowell available in exotic materials such as hastalloy-c, tantalum, monel, titanium, inconel 600 etc
- Thermowells are used as an accessory with temperature instruments, sensors, to protect its basic sensing element from corrossive and machanical damages due to process parameters



### **Thermowells**



#### **Special Features**

- Fabricated from bar stock
- Standard for manufacturing followed- PTC 19.3
- Thermowell available in exotic materials such as hastalloy-c, tantalum, monel, titanium, inconel 600 etc
- Thermowells are used as an accessory with temperature instruments, sensors, to protect its basic sensing element from corrosive and mechanical damages due to process parameters



**Thermowells** 

Flanged Straight Type

E-11

#### E-14

### **Thermowells** Tapered Screw Type



#### **Special Features**

- Fabricated from Bar Stock
- Standard for manufacturing

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- Followed PTC 19.3
- Thermowell available in exotic materials such as hastalloy-c, tantalum, monel, titanium, inconel 600 etc
- Thermowells are used as an accessory with temperature instruments, sensors, to protect its basic sensing element from corrossive and machanical damages due to process parameters









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