



## PRESSURE GAUGES

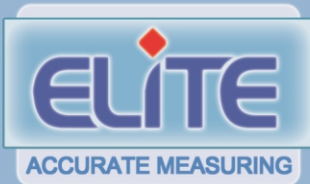


**KUNSHAN ELITE INSTRUMENTS CO.,LTD**

**ISO 9001 COMPANY**

**PRESSURE GAUGE | THERMOMETER | DIAPHRAGM SEAL | ACCESSORIES**

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# PRESSURE GAUGES

**ALL OPTIONS -NO EXTRA COST  
EVERYTHING STANDARD**

Ranges  
available up  
to 60,000 psi



ATEX APPROVED  
AS PER 2014/34/EU

- Bourdon Tube & Socket - SS 316L, NACE MR 0175
- Bourdon Tube - Seamless Tube
- Tig Welding - Approved by TUV
- Leak Testing - Helium Leak Tested
- Movement - Silicone Jelly Movement
- Dial - White Aluminum
- Window - Safety Glass
- Gasket - NBR
- Blow Out Disc - Temperature Compensated
- IP Protection - IP 66

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## SPECIAL FEATURES

Economical Version  
 General Purpose Applications  
 Standard Followed: ASME-B.40.1/EN837-1

## SPECIFICATIONS

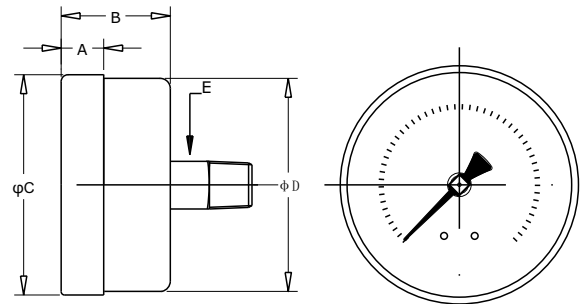
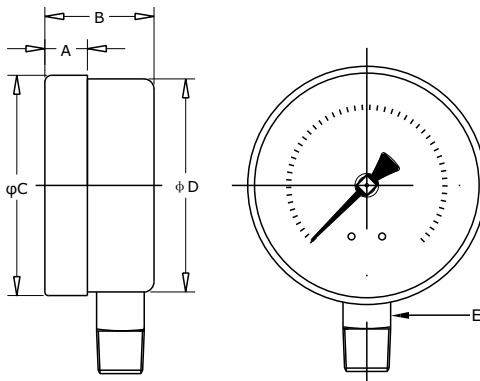
Ambient Temperature: -4°F(-20°C) to+150°F(+65°C)  
 Process Temperature: Max. 250°F(120°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 120% of Max. Scale Value  
 Case: Steel, Powder Coated  
 Joints: Alloy Brazing/Soldering  
 Socket: Copper Alloy  
 Bourdon: Copper Alloy  
 Movement: Copper Alloy  
 Dial: Aluminum  
 Pointer: Fixed  
 Window: Sheet Glass  
 Ranges: Vacuum to 6000psi



## ACCURACY AS PER ASME B.40.1

1.5"/2" : 3-2-3 (Grade B)  
 2.5"/3"/4" : 2-1-2 (Grade A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.4"	1.0"	1.5"	1.5"	0.4"	0.18
2"	0.4"	1.1"	2.0"	2.0"	0.6"	0.22
2.5"	0.4"	1.1"	2.5"	2.5"	0.6"	0.29
3"	0.5"	1.3"	3.0"	3.0"	0.7"	0.62
4"	0.9"	1.5"	4.0"	4.0"	0.9"	0.82
6"	0.8"	1.87"	6.3"	6.2"	0.87"	2.20
10"	0.68"	2"	9.84"	9.74"	0.87"	3.50

NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.4"	1.1"	1.5"	1.5"	0.4"	0.18
2"	0.4"	1.1"	2.0"	2.0"	0.6"	0.22
2.5"	0.4"	1.1"	2.5"	2.5"	0.6"	0.29
3"	0.5"	1.3"	3.0"	3.0"	0.7"	0.62
4"	0.9"	1.5"	4.0"	4.0"	0.9"	0.82



## HOW TO ORDER

Example

### NOMINAL SIZE

B	C	D	E	F	H	J
1.5"	2"	2.5"	3"	4"	6"	10"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 4 CENTER BACK
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 1BM** 1/8" BSP(M)
- 1NM** 1/8" NPT(M)
- 1TM** 1/8" BSPT(M)
- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 2TM** 1/4" BSPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 3TM** 3/8" BSPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4TM** 1/2" BSPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160
CODE	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26
RANGE (psi)	200	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000

E13

### OPTIONAL EXTRAS

- SG** OXYGEN SERVICE (FOR DRY VERSION)
- SF** MOVEMENT WITH DAMPENING JELLY
- RH** CUSTOM DESIGNED DIAL
- ZB** RECEIVER RANGE
- ZC** FREON RANGE (WITH TEMPERATURE SCALE)
- ZD** AMMONIA RANGE (WITH TEMPERATURE SCALE)
- SW** DIAL TAG MARKING
- RW** PLEXI GLASS
- RZ** TOUGHENED GLASS
- SY** AISI 316SS TAG PLATE
- SJ** MAXIMUM READING POINTER WITH PLEXI GLASS (FOR DRY VERSION)
- ZM** ELECTRO POLISHED CASE & BEZEL
- CK** EPOXY PAINTED CASE & BEZEL
- SQ** CASE WITH ROLLING TYPE BEZEL
- FK** INTEGRAL DAMPENING SCREW (BRASS)
- GH** MATERIAL TEST CERTIFICATES
- PW** FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS

XX

**Ordering Example: P-01-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

Economical Version  
 General Purpose Applications  
 Standard Followed: ASME-B.40.1/EN837-1

## SPECIFICATIONS

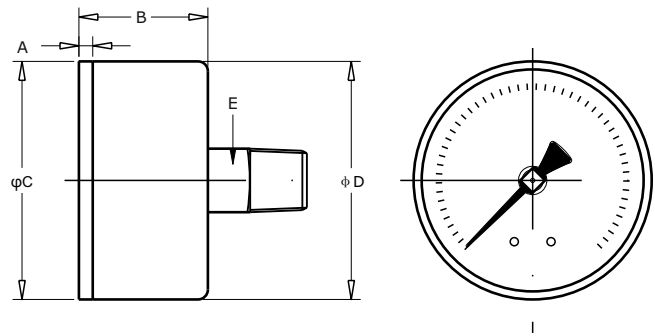
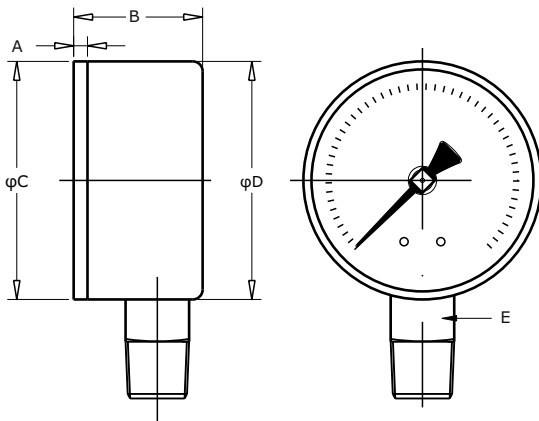
Ambient Temperature: -4°F(-20°C) to +150°F(+65°C)  
 Process Temperature: Max. 250°F(120°C)  
 Operating Pressure Range: 75% of scale Value  
 Over Pressure Limit: 120% of Max. scale Value  
 Case: ABS Plastic Case  
 Joints: Alloy Brazing/Soldering  
 Socket: Copper Alloy  
 Bourdon: Copper Alloy  
 Movement: Copper Alloy  
 Dial: Aluminum  
 Pointer: Fixed  
 Window: Snap-in Plastic Lens  
 Ranges: Vacuum to 1500psi



## ACCURACY AS PER ASME B.40.1

1.5"/2" : 3-2-3 (Grade B)  
 2.5"/3"/4" : 2-1-2 (Grade A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.1"	1.0"	1.6"	1.6"	0.43"	0.18
2"	0.1"	1.1"	2.1"	2.1"	0.55"	0.22
2.5"	0.1"	1.1"	2.4"	2.4"	0.55"	0.29
4"	0.14"	1.2"	3.9"	3.9"	0.55"	0.82

NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.1"	1.0"	1.6"	1.6"	0.43"	0.18
2"	0.1"	1.1"	2.1"	2.1"	0.55"	0.22
2.5"	0.1"	1.1"	2.4"	2.4"	0.55"	0.29
3"	0.14"	1.2"	3.9"	3.9"	0.55"	0.82

## HOW TO ORDER

Example

### NOMINAL SIZE

B	C	D	E	F
1.5"	2"	2.5"	3"	4"

X

### TYPE OF MOUNTING

- 2 BOTTOM
- 4 CENTER BACK

X

### GAUGE CONNECTION

- 1BM** 1/8" BSP(M)
- 1NM** 1/8" NPT(M)
- 1TM** 1/8" BSPT(M)
- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 2TM** 1/4" BSPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 3TM** 3/8" BSPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4TM** 1/2" BSPT(M)
- 4MM** M20 X 1.5(M)

XXX

\*\*\*Please consult factory for any special connections

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60
CODE	E12	E13	E14	E15	E16	E17	E18	E19	E20	E21	
RANGE (psi)	100	160	200	300	400	500	600	800	1000	1500	

E13

### OPTIONAL EXTRAS

- |  |   |
|--|---|
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)       | <b>RW</b> PLEXI GLASS   |
| <b>SF</b> MOVEMENT WITH DAMPENING JELLY          | <b>RZ</b> TOUGHENED GLASS   |
| <b>RH</b> CUSTOM DESIGNED DIAL                   | <b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS (FOR DRY VERSION)          |
| <b>ZB</b> RECEIVER RANGE                         | <b>FK</b> INTEGRAL DAMPENING SCREW (BRASS)                                    |
| <b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)   | <b>GH</b> MATERIAL TEST CERTIFICATES  |
| <b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE) | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/INTERNATIONAL STANDARDS |
| <b>SW</b> DIAL TAG MARKING                       |   |
| <b>SY</b> AISI 316SS TAG PLATE                   |   |

XX

**Ordering Example: P-02-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

- Aluminum solid front case
- Blow out back
- Standard followed ASME-B.40.1
- SS 316L Socket & Bourdon
- Helium Leak Tested
- Built in Stabilizer Movement
- Ready For Oxygen Use
- Internal Vacuum /Over Pressure Stop
- IP 55

## SPECIFICATIONS

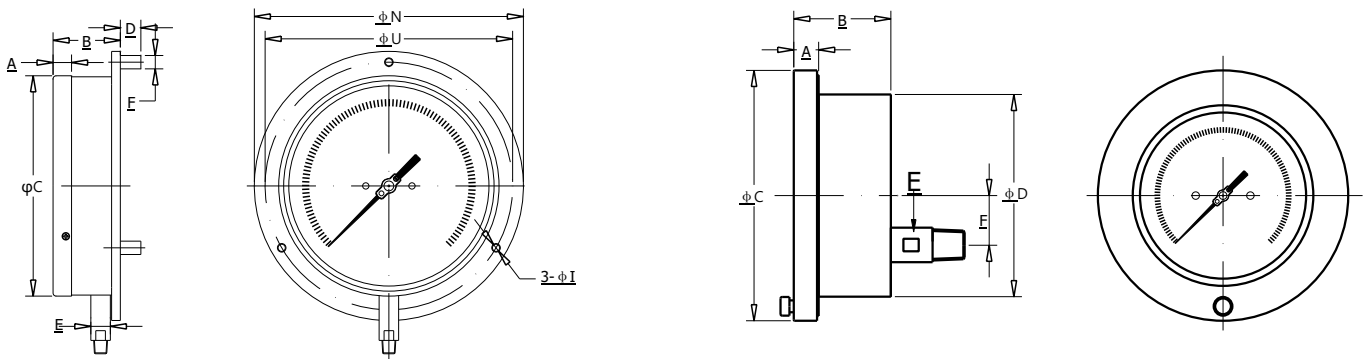
- Ambient Temperature: -4°F(-20°C)To 150°F (+65°C)
- Process Temperature: Max. 392°F(200°C)
- Operating Pressure Range: 75% of scale value
- Over Pressure Limit: 125% of Max. scale value
- Case: Aluminum
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L
- Bourdon: AISI 316L
- Movement: AISI 304
- Dial: Aluminum
- Pointer: Micro Zero Adjustable
- Window: PC lens
- Ranges: Vacuum to 10,000psi



## ACCURACY AS PER ASME B.40.:

- 4.5"/6"/8.5" : 0.5 (Grade 2A)
- 8.5" : 1-1-1 (Grade 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	D	F	φN	φU	φI	E	Weight (lbs)
8.5"	0.85"	2.4"	8.5"	0.8"	0.5"	10.3"	9.4"	0.25"	0.75"	5.07

NS	A	B	φC	φD	E	F	Weight (lbs)
4.5"	0.6"	2.4"	6.1"	5.0"	0.8"	1.2"	1.43
6"	0.7"	2.7"	7.6"	5.0"	0.8"	1.2"	2.25



## HOW TO ORDER

### NOMINAL SIZE

G	H	I
4.5"	6"	8.5"

Example

X

### TYPE OF MOUNTING

- 2 BOTTOM
- 5 LOWER BACK WITH FRONT FLANGE

X

### GAUGE CONNECTION

- 2BM** 1/4"BSP(M)
- 2NM** 1/4"NPT(M)
- 2TM** 1/4"BSPT(M)
- 3BM** 3/8"BSP(M)
- 3NM** 3/8"NPT(M)
- 3TM** 3/8"BSPT(M)
- 4BM** 1/2"BSP(M)
- 4NM** 1/2"NPT(M)
- 4TM** 1/2"BSPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10,000

E13

### OPTIONAL EXTRAS

- |  |   |
|--|---|
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)                                   | <b>RW</b> PLEXI GLASS   |
| <b>OA</b> ACCURACY + 0.5% OF F.S.<br>(Dry version & Maximum Reading Pointer) | <b>RZ</b> TOUGHENED GLASS   |
| <b>TI</b> MONEL BOURDON & SOCKET (MONEL VERSION)                             | <b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FOR DRY VERSION            |
| <b>TF</b> TESTED TO NACE STANDARD  | <b>CK</b> EPOXY PAINTED CASE & BEZEL  |
| <b>TB</b> HELIUM LEAK TEST   | <b>SX</b> SS TAG PLATE  |
| <b>SD</b> AISI 316 SS MOVEMENT   | <b>SA</b> INTERNAL OVERPRESSURE STOP  |
| <b>SF</b> MOVEMENT WITH DAMPENING JELLY                                      | <b>SB</b> INTERNAL VACUUM STOP  |
| <b>SI</b> KNIFE EDGE POINTER   | <b>ZL</b> OVER RANGE PROTECTION   |
| <b>RG</b> ANTI PARALLAX MIRROR BAND DIAL                                     | <b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)                              |
| <b>RH</b> CUSTOM DESIGNED DIAL   | <b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)                                    |
| <b>ZB</b> RECEIVER RANGE   | <b>GH</b> MATERIAL TEST CERTIFICATES  |
| <b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)                               | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/INTERNATIONAL STANDARDS |
| <b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)                             |   |
| <b>SW</b> DIAL TAG MARKING   |   |
| <b>SY</b> AISI 316SS TAG PLATE   |   |

XX

**Ordering Example: P-03-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

- Stainless Steel Case Welded to socket
- Dry or liquid filled version
- Standard followed ASME-B.40.1/EN837-1
- Helium Leak Tested
- Built in Stabilizer Movement
- Ready For Oxygen Use
- Internal Vacuum /Over Pressure Stops
- IP 66



## SPECIFICATIONS

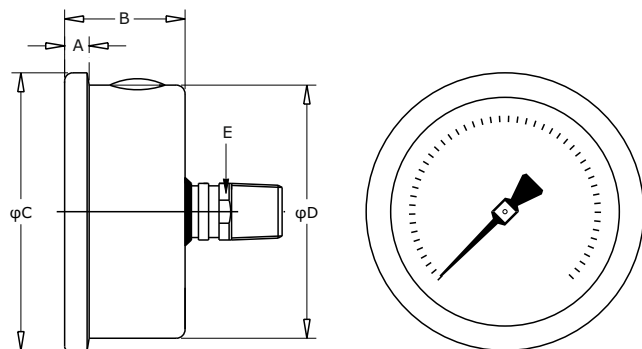
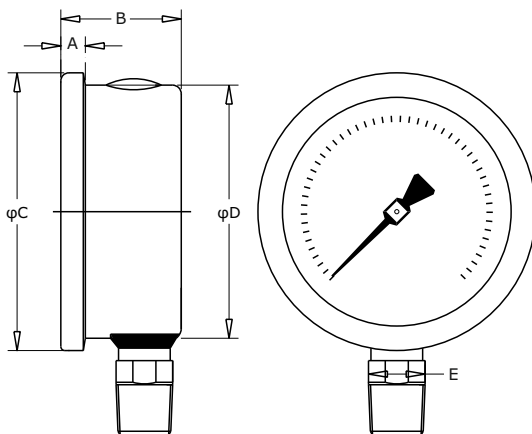
- Ambient Temperature: -4°F(-20°C)to+150°F(+65°C)
- Process Temperature: Max. 392°F(200°C)
- Operating Pressure Range: 75% of scale value
- Over Pressure Limit: 125% of Max. scale Value
- Case & Bezel: SS304 Crimped
- Joints: Tig Argon Arc Welding
- Protection: IP 66
- Gasket: NBR
- Socket: AISI 316L

- Bourdon: AISI 316L
- Movement: AISI 304
- Dial: Aluminum
- Pointer: Fixed
- Window: PC Lens
- Gasket: NBR
- Ranges: Vacuum to 10,000psi

## ACCURACY AS PER ASME B.40.1

- 1.5"/2" : 3-2-3 (Grade B)
- 2.5"/3"/4" : 2-1-2 (Grade A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.2"	1.0"	1.8"	1.6"	0.43"	0.18
2"	0.2"	1.2"	2.2"	2.0"	0.55"	0.26
2.5"	0.3"	1.2"	2.7"	2.4"	0.55"	0.40
3"	0.3"	1.4"	3.4"	3.1"	0.67"	0.73
4"	0.3"	1.9"	4.3"	3.9"	0.87"	1.32

NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.2"	1.0"	1.8"	1.6"	0.43"	0.18
2"	0.2"	1.2"	2.2"	2.0"	0.55"	0.26
2.5"	0.3"	1.2"	2.7"	2.4"	0.55"	0.40
3"	0.3"	1.4"	3.4"	3.1"	0.67"	0.73

## HOW TO ORDER

Example

### NOMINAL SIZE

B	C	D	E	F
1.5"	2"	2.5"	3"	4"

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 4 CENTER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 1BM** 1/8" BSP(M)
- 1NM** 1/8" NPT(M)
- 1TM** 1/8" BSPT(M)
- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 2TM** 1/4" BSPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 3TM** 3/8" BSPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10,000

E13

### OPTIONAL EXTRAS

- |   |  |
|---|--|
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)                          | <b>CK</b> EPOXY PAINTED CASE & BEZEL   |
| <b>TI</b> MONEL BOURDON & SOCKET (MONEL VERSION)                    | <b>SQ</b> CASE WITH ROLLING TYPE BEZEL   |
| <b>TF</b> TESTED TO NACE STANDARD                                   | <b>OS</b> CASE WITH BAYONET TYPE BEZEL   |
| <b>TB</b> HELIUM LEAK TEST  | <b>PS</b> AISI 316 SS CASE & BEZEL   |
| <b>SD</b> AISI 316 SS MOVEMENT                                      | <b>KA</b> ON-OFF TYPE VENT PLUG  |
| <b>SF</b> MOVEMENT WITH DAMPENING JELLY                             | <b>SX</b> SS TAG PLATE   |
| <b>RI</b> 25mm BOD  | <b>SY</b> AISI 316SS TAG PLATE   |
| <b>RH</b> CUSTOM DESIGNED DIAL                                      | <b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)                               |
| <b>ZB</b> RECEIVER RANGE  | <b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)                                     |
| <b>AT</b> ATEX (AS PER 2014/34/EU)                                  | <b>FS</b> FILLABLE LIQUID SILICON OIL  |
| <b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)                      | <b>FG</b> FILLABLE LIQUID GLYCERINE  |
| <b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)                    | <b>ZZ</b> DIELECTRIC OIL FILLED  |
| <b>SW</b> DIAL TAG MARKING  | <b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED                                   |
| <b>RW</b> PLEXI GLASS   | <b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED                                |
| <b>RX</b> SHATTERPROOF /SAFETY GLASS                                | <b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED                               |
| <b>RZ</b> TOUGHENED GLASS   | <b>QA</b> DAMPENING LIQUID SILICON OIL FILLED                                  |
| <b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION | <b>GH</b> MATERIAL TEST CERTIFICATES   |
| <b>ZM</b> ELECTRO POLISHED CASE & BEZEL                             | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS |

XX

Ordering Example: P-04-X-X-XXX-(E13)-XX

## SPECIAL FEATURES

- Phenolic Case With Solid Front Design
- Blow out back
- Standard followed ASME-B.40.1
- Helium Leak Tested
- Built in Stabilizer Movement
- Ready For Oxygen Use
- Internal Vacuum /Over Pressure Stops
- IP 66



## SPECIFICATIONS

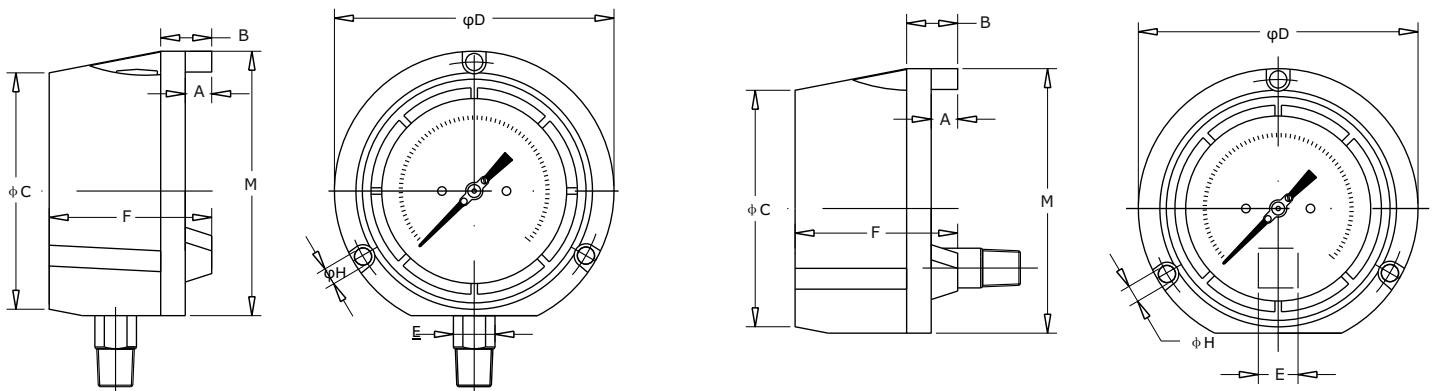
- Ambient Temperature: -4F(-20°C) to+150F(+65°C)
- Process Temperature: Max. 392F(200°C)
- Operating Pressure Range: 75% of scale value
- Over Pressure Limit: 150% of Max. scale value
- Case & Bezel: Phenolic
- Joints: Tig Argon Arc Welding
- Protection: IP 66
- Socket: AISI 316L

- Bourdon: AISI 316L
- Movement: AISI 304
- Dial: Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Gasket: Viton
- Ranges: Vacuum to 40,000psi

## ACCURACY AS PER ASME B.40.1

4.5" : 0.5-0.5-0.5 (Grade 2A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	F	φG	φH	M	Weight (lbs)
4.5"	0.6"	1.0"	5.1"	5.8"	0.87"	3.4"	5.4"	0.2"	5.6"	2.38

NS	A	B	φC	φD	E	F	φG	φH	M	Weight (lbs)
4.5"	0.6"	1.0"	5.1"	5.8"	0.87"	3.4"	5.4"	0.2"	5.6"	2.38



## HOW TO ORDER

### NOMINAL SIZE

G

4.5"

Example

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 3 LOWER BACK

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 2TM** 1/4" BSPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 3TM** 3/8" BSPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4TM** 1/2" BSPT(M)
- 4MM** M20 X 1.5(M)
- 9UM** 9/16" UNF(M)
- 2HF** 1/4" HP(F)

XXX

\*\*\*Please consult factory for any special connections

### RANGE

CODE	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20
RANGE (psi)	15	30	60	100	160	200	300	400	500	600	800	1000
CODE	E21	E22	E23	E24	E25	E26	E27	E28	E29	E30	E31	E32
RANGE (psi)	1500	2000	3000	4000	5000	6000	7500	10,000	15,000	20,000	30,000	40,000

E13

### OPTIONAL EXTRAS

- SG** OXYGEN SERVICE (FOR DRY VERSION)
- TI** MONEL BOURDON & SOCKET (MONEL VERSION)
- TF** TESTED TO NACE STANDARD
- TB** HELIUM LEAK TEST
- SD** AISI 316 SS MOVEMENT
- SF** MOVEMENT WITH DAMPENING JELLY
- SI** KNIFE EDGE POINTER
- RG** ANTI PARALLAX MIRROR BAND DIAL
- RH** CUSTOM DESIGNED DIAL
- ZB** RECEIVER RANGE
- AT** ATEX (AS PER 2014/34/EU)
- ZC** FREON RANGE (WITH TEMPERATURE SCALE)
- ZD** AMMONIA RANGE (WITH TEMPERATURE SCALE)
- SW** DIAL TAG MARKING
- RW** PLEXI GLASS
- RX** SHATTERPROOF /SAFETY GLASS
- RZ** TOUGHENED GLASS
- SY** AISI 316SS TAG PLATE
- SJ** MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION
- SX** SS TAG PLATE
- SA** INTERNAL OVERPRESSURE STOP
- SB** INTERNAL VACUUM STOP
- ZL** OVER RANGE PROTECTION
- QB** INTEGRAL DAMPENING SCREW (AISI 316 SS)
- FL** INTEGRAL DAMPENING SCREW (MONEL)
- FS** FILLABLE LIQUID SILICON OIL
- FG** FILLABLE LIQUID GLYCERINE
- ZZ** DIELECTRIC OIL FILLED
- PX** DAMPENING LIQUID FLOUROLUBE FILLED
- PY** DAMPENING LIQUID GLYCERINE OIL FILLED
- PZ** DAMPENING LIQUID MINERAL LIQUID FILLED
- QA** DAMPENING LIQUID SILICON OIL FILLED
- GH** MATERIAL TEST CERTIFICATES
- PW** FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS

XX

\*\*\*Please consult factory for any special connections

**Ordering Example: P-05-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

Standard Followed ASME-B 40.1 / EN837-3  
 Wetted Parts AISI 316L Stainless Steel  
 Helium Leak Tested  
 External Zero Adjustable  
 Ready For Oxygen Service  
 IP 65

## SPECIFICATIONS

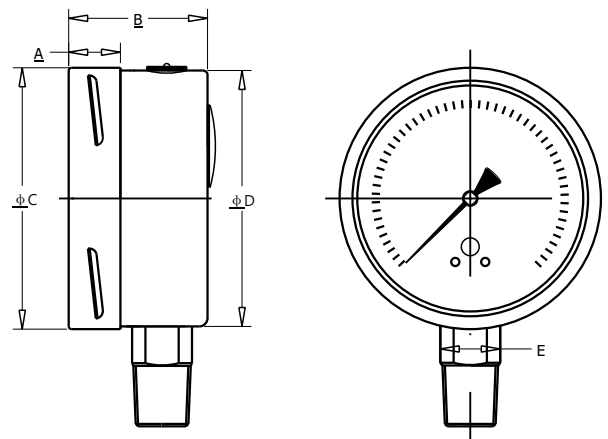
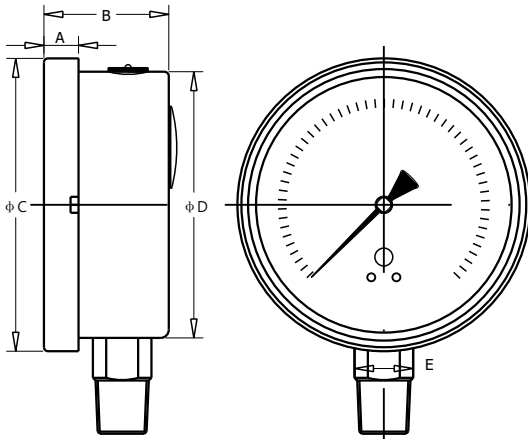
Ambient Temperature: -4°F(-20°C) to +150°F(+65°C)  
 Process Temperature: Max. 212°F(100°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 110% of Max. Scale Value  
 Case: AISI 304SS  
 Joints: Tig Argon Arc Welding  
 Socket: AISI 316L SS  
 Capsule: AISI 316L SS  
 Movement: AISI 304 SS  
 Dial: Aluminum  
 Pointer: Fixed  
 Window: Safety Glass  
 Ranges: -250-0"wc to 0-250"wc



## ACCURACY AS PER ASME B.40.1

2.5"/3"/4"/4.5"/6" : 2-1-2 (Grade A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.6"	2.8"	2.6"	0.6"	0.57
3"	0.5"	1.6"	3.3"	3"	0.6"	0.75
4.5"	0.6"	1.87"	5"	4.5"	0.87"	1.50

\*2.5" & 3" without BOD.

NS	A	B	φC	φD	E	Weight (lbs)
4"	0.6"	1.9"	4"	3.9"	0.87"	1.32
6"	0.6"	1.9"	6.3"	6.2"	0.87"	2.64

\*2.5" & 3" without BOD.

## HOW TO ORDER

Example

### NOMINAL SIZE

D	E	F	G	H
2.5"	3"	4"	4.5"	6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 4 CENTER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP (M)
- 2NM** 1/4" NPT (M)
- 3BM** 3/8" BSP (M)
- 3NM** 3/8" NPT (M)
- 4BM** 1/2" BSP (M)
- 4NM** 1/2" NPT (M)
- 4MM** M20 X 1.5 (M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	LPE1	LPE2	LPE3	LPE4	LPE5	LPE6	LPE7
RANGE (°WC)	-250-0	-160-0	-100-0	-60-0	-30-0	-15-0	-10-0
CODE	LPE8	LPE9	LPE10	LPE11	LPE12	LPE13	LPE14
RANGE (°WC)	-250-0	-160-0	-100-0	-60-0	-30-0	-15-0	-10-0

LPE9

### OPTIONAL EXTRAS

- |  |   |
|--|---|
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)                             | <b>ZM</b> ELECTRO POLISHED CASE & BEZEL   |
| <b>TF</b> TESTED TO NACE STANDARD                                      | <b>CK</b> EPOXY PAINTED CASE & BEZEL  |
| <b>TB</b> HELIUM LEAK TEST   | <b>OS</b> CASE WITH BAYONET TYPE BEZEL  |
| <b>SD</b> AISI 316 SS MOVEMENT   | <b>PS</b> AISI 316 SS CASE & BEZEL  |
| <b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP<br>(AISI 316 SS)   | <b>KA</b> ON-OFF TYPE VENT PLUG   |
| <b>RG</b> ANTI PARALLAX MIRROR BAND DIAL                               | <b>SX</b> SS TAG PLATE  |
| <b>RH</b> CUSTOM DESIGNED DIAL   | <b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)                                  |
| <b>AT</b> ATEX (AS PER 2014/34/EU)                                     | <b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)  |
| <b>SW</b> DIAL TAG MARKING   | <b>FS</b> FILLABLE LIQUID SILICON OIL   |
| <b>RW</b> PLEXI GLASS  | <b>QA</b> DAMPENING LIQUID SILICON OIL FILLED                                     |
| <b>RX</b> SHATTERPROOF /SAFETY GLASS                                   | <b>GH</b> MATERIAL TEST CERTIFICATES  |
| <b>RZ</b> TOUGHENED GLASS  | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/<br>INTERNATIONAL STANDARDS |
| <b>SJ</b> MAXIMUM READING POINTER WITH PLEXI<br>GLASS FILLABLE VERSION | <b>SY</b> AISI 316SS TAG PLATE  |

XX

**Ordering Example: P-06-X-X-XXX-(LPE9)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Cost Effective
- Build in Stabilizer Movement
- Dry or Liquid Version
- 40mm Temperature Compensated Blow Out Disc
- IP 65

## SPECIFICATIONS

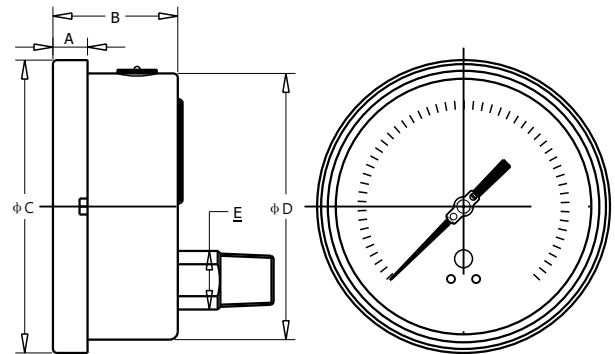
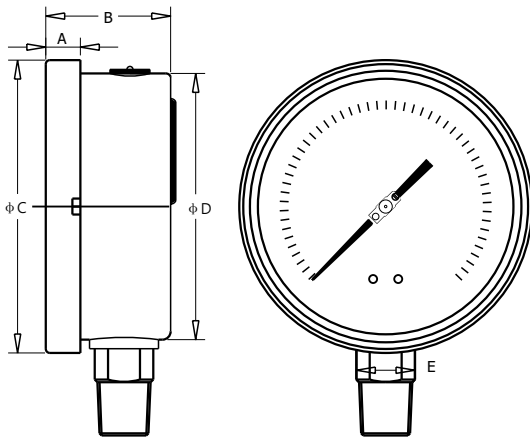
- Ambient Temperature: -4°F(-20°C) to +150°F(+65°C)
- Process Temperature: Max. 248°F(120°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max. Scale Value
- Case: AISI 304 SS
- Joints: Alloy Brazing/Soldering
- Socket: Copper Alloy
- Bourdon: Copper Alloy
- Movement: Copper Alloy
- Dial: Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 6,000PSI



## ACCURACY AS PER ASME B.40.1

4"/4.5"/6" 1-1-1 GRADE 1A )

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
4"	0.5"	1.87"	4.4"	4"	0.87"	1.28
4.5"	0.6"	1.87"	5"	4.5"	0.87"	1.50
6"	0.6"	1.87"	6.4"	5.9"	0.87"	2.21

NS	A	B	φC	φD	E	Weight (lbs)
4"	0.5"	1.87"	4.4"	4"	0.87"	1.28
4.5"	0.6"	1.87"	5"	4.5"	0.87"	1.50
6"	0.6"	1.87"	6.4"	5.9"	0.87"	2.21



## HOW TO ORDER

Example

### NOMINAL SIZE

F	G	H
4"	4.5"	6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 4 CENTER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160
CODE	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26
RANGE (psi)	200	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000

E13

### OPTIONAL EXTRAS

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)</li> <li><b>OA</b> ACCURACY + 0.5% OF F.S.</li> <li><b>SF</b> MOVEMENT WITH DAMPENING JELLY</li> <li><b>SI</b> KNIFE EDGE POINTER</li> <li><b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET &amp; 'U' CLAMP (AISI 316 SS)</li> <li><b>RG</b> ANTI PARALLAX MIRROR BAND DIAL</li> <li><b>RH</b> CUSTOM DESIGNED DIAL</li> <li><b>ZB</b> RECEIVER RANGE</li> <li><b>AT</b> ATEX (AS PER 2014/34/EU)</li> <li><b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)</li> <li><b>SW</b> DIAL TAG MARKING</li> <li><b>RW</b> PLEXI GLASS</li> <li><b>RX</b> SHATTERPROOF /SAFETY GLASS</li> <li><b>RZ</b> TOUGHENED GLASS</li> <li><b>SY</b> AISI 316SS TAG PALET</li> <li><b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION</li> </ul> | <ul style="list-style-type: none"> <li><b>ZM</b> ELECTRO POLISHED CASE &amp; BEZEL</li> <li><b>CK</b> EPOXY PAINTED CASE &amp; BEZEL</li> <li><b>PS</b> AISI 316 SS CASE &amp; BEZEL</li> <li><b>KA</b> ON-OFF TYPE VENT PLUG</li> <li><b>SX</b> SS TAG PLATE</li> <li><b>SA</b> INTERNAL OVERPRESSURE STOP</li> <li><b>SB</b> INTERNAL VACUUM STOP</li> <li><b>ZL</b> OVER RANGE PROTECTION</li> <li><b>FK</b> INTEGRAL DAMPENING SCREW (BRASS)</li> <li><b>FS</b> FILLABLE LIQUID SILICON OIL</li> <li><b>FG</b> FILLABLE LIQUID GLYCERINE</li> <li><b>ZZ</b> DIELECTRIC OIL FILLED</li> <li><b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED</li> <li><b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED</li> <li><b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED</li> <li><b>QA</b> DAMPENING LIQUID SILICON OIL FILLED</li> <li><b>GH</b> MATERIAL TEST CERTIFICATES</li> <li><b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS</li> </ul> |
|--|--|

XX

**Ordering Example: P-07-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1
- Phenolic Case With Solid Front Design
- Blow Out Back
- Wetted Parts AISI 316L Stainless Steel
- External Zero Adjustable
- Ready For Oxygen Service
- IP 65

## SPECIFICATIONS

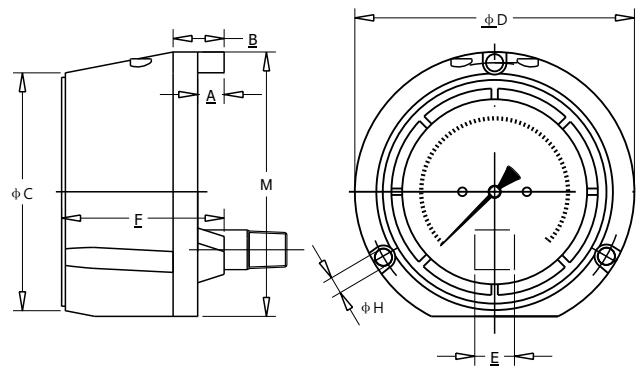
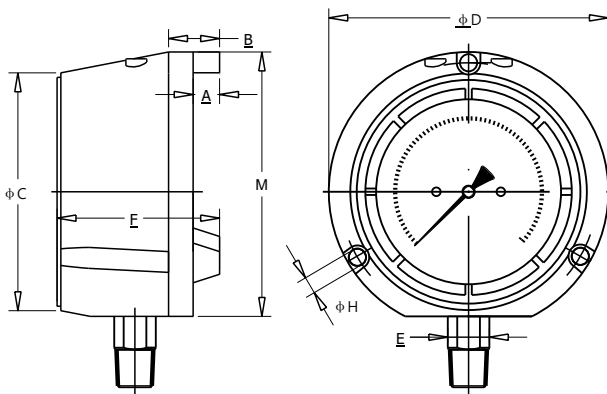
- Ambient Temperature: -4°F (-20°C) to +150°F (+65°C)
- Process Temperature: Max. 248°F (120°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 110% of Max. Scale Value
- Case: Phenolic
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Capsule: AISI 316L SS
- Movement: AISI 304 SS
- Dial: Aluminum
- Pointer: Fixed
- Window: Safety Glass
- Range: -250-0"wc to 0-250"wc



## ACCURACY AS PER ASME B.40.1

4.5" 2-1-2 GRADE A )

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	Weight (lbs)
4.5"	0.5"	1"	5"	6"	
E	F	φG	φH	M	2.2
0.87"	3.2"	5.5"	0.3"	5.6"	

NS	A	B	φC	φD	Weight (lbs)
4.5"	0.6"	1"	5.1"	5.8"	
E	F	φG	φH	M	2.2
0.87"	3.4"	5.4"	0.2"	5.6"	

## HOW TO ORDER

Example

### NOMINAL SIZE

G  
4.5"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 3 LOWER BACK

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	LPE1	LPE2	LPE3	LPE4	LPE5	LPE6	LPE7
RANGE ( °WC )	-250-0	-160-0	-100-0	-60-0	-30-0	-15-0	-10-0
CODE	LPE8	LPE9	LPE10	LPE11	LPE12	LPE13	LPE14
RANGE ( °WC )	-250-0	-160-0	-100-0	-60-0	-30-0	-15-0	-10-0

LPE9

### OPTIONAL EXTRAS

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li><b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)</li> <li><b>TI</b> MONEL BOURDON &amp; SOCKET (MONEL VERSION)</li> <li><b>TF</b> TESTED TO NACE STANDARD</li> <li><b>TB</b> HELIUM LEAK TEST</li> <li><b>SD</b> AISI 316 SS MOVEMENT</li> <li><b>SI</b> KNIFE EDGE POINTER</li> <li><b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET &amp; 'U' CLAMP (AISI 316 SS)</li> <li><b>RG</b> ANTI PARALLAX MIRROR BAND DIAL</li> <li><b>RH</b> CUSTOM DESIGNED DIAL</li> <li><b>SW</b> DIAL TAG MARKING</li> </ul> | <ul style="list-style-type: none"> <li><b>RW</b> PLEXI GLASS</li> <li><b>RX</b> SHATTERPROOF /SAFETY GLASS</li> <li><b>RZ</b> TOUGHENED GLASS</li> <li><b>SX</b> SS TAG PLATE</li> <li><b>SY</b> AISI 316 SS TAG PLATE</li> <li><b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)</li> <li><b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)</li> <li><b>FS</b> FILLABLE LIQUID SILICON OIL</li> <li><b>QA</b> DAMPENING LIQUID SILICON OIL FILLED</li> <li><b>GH</b> MATERIAL TEST CERTIFICATES</li> <li><b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS</li> </ul> |
|--|---|

XX

**Ordering Example: P-08-X-X-XXX-(LPE9)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Stainless Steel Case With Solid Front Design
- Wetted Parts AISI 316L Stainless Steel
- Build in Stabilizer Movement
- Dry or Liquid Version
- Silicone fillable version availability
- NACE MR 0175 Compliance
- Helium Leak Tested
- Laser Welded Case Design
- Ready For Oxygen Service
- Internal Vacuum/ Over pressure Stops
- IP 66



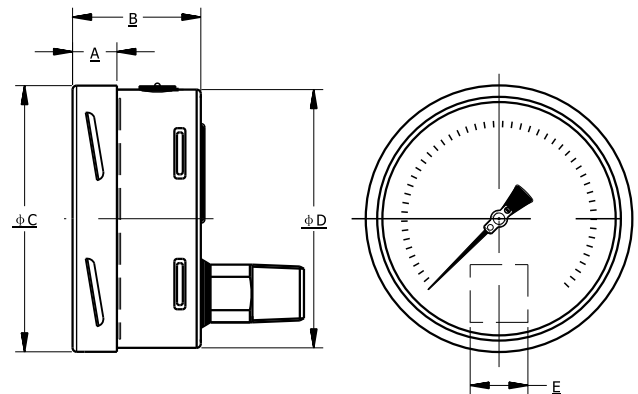
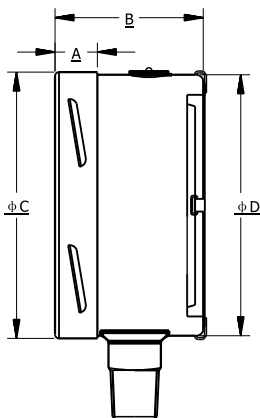
## SPECIFICATIONS

- Ambient Temperature: -4 °F (-20°C) to +150°F (+65°C)
- Process Temperature: Max. 392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max. Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Dial: Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 10,000PSI

## ACCURACY AS PER ASME B.40.1

- 2.5" 2-1-2 GRADE A )
- 4"/4.5"/6" 1-1-1 GRADE 1A )

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.7"	2.5"	2.4"	0.6"	0.44
4"	0.6"	2.2"	4"	3.9"	0.87"	1.50
4.5"	0.6"	2.2"	5"	4.5"	0.87"	2.12
6"	0.6"	2.2"	6.3"	6.2"	0.87"	2.91

NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.4"	2.5"	2.4"	0.6"	0.44
4"	0.6"	2"	4"	3.9"	0.87"	1.50



## HOW TO ORDER

### NOMINAL SIZE

D	F	G	H
2.5"	4"	4.5"	6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4"BSP(M)
- 2NM** 1/4"NPT(M)
- 3BM** 3/8"BSP(M)
- 3NM** 3/8"NPT(M)
- 4BM** 1/2"BSP(M)
- 4NM** 1/2"NPT(M)
- 4MM** M20 X 1.5(M)
- 9UM** 9/16"UNF(M)
- 2UF** 1/4"HP(F)

XXX

\*\*\*Please consult factory for any special connections

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10000

E13

### OPTIONAL EXTRAS

- |   |  |
|---|--|
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)                          | <b>ZM</b> ELECTRO POLISHED CASE & BEZEL  |
| <b>OA</b> ACCURACY + 0.5% OF F.S.                                   | <b>CK</b> EPOXY PAINTED CASE & BEZEL   |
| <b>TI</b> MONEL BOURDON & SOCKET (MONEL VERSION)                    | <b>PS</b> AISI 316 SS CASE & BEZEL   |
| <b>TF</b> TESTED TO NACE STANDARD                                   | <b>KA</b> ON-OFF TYPE VENT PLUG  |
| <b>TB</b> HELIUM LEAK TEST  | <b>SX</b> SS TAG PLATE   |
| <b>SD</b> AISI 316 SS MOVEMENT                                      | <b>SY</b> AISI 316 SS TAG PLATE  |
| <b>SF</b> MOVEMENT WITH DAMPENING JELLY                             | <b>SA</b> INTERNAL OVERPRESSURE STOP   |
| <b>SI</b> KNIFE EDGE POINTER  | <b>SB</b> INTERNAL VACUUM STOP   |
| <b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP (AISI 316 SS)   | <b>ZL</b> OVER RANGE PROTECTION  |
| <b>RG</b> ANTI PARALLAX MIRROR BAND DIAL                            | <b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)                               |
| <b>RH</b> CUSTOM DESIGNED DIAL                                      | <b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)                                     |
| <b>ZB</b> RECEIVER RANGE  | <b>FS</b> FILLABLE LIQUID SILICON OIL  |
| <b>AT</b> ATEX (AS PER 2014/34/EU)                                  | <b>FG</b> FILLABLE LIQUID GLYCERINE  |
| <b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)                      | <b>ZZ</b> DIELECTRIC OIL FILLED  |
| <b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)                    | <b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED                                   |
| <b>SW</b> DIAL TAG MARKING  | <b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED                                |
| <b>RW</b> PLEXI GLASS   | <b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED                               |
| <b>RX</b> SHATTERPROOF /SAFETY GLASS                                | <b>QA</b> DAMPENING LIQUID SILICON OIL FILLED                                  |
| <b>RZ</b> TOUGHENED GLASS   | <b>GH</b> MATERIAL TEST CERTIFICATES   |
| <b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS |

XX

**Ordering Example: P-09-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Stainless Steel Case With Solid Front Design
- Wetted Parts AISI 316L Stainless Steel
- Build in Stabilizer Movement
- Dry or Liquid Version
- Silicone fillable version availability
- NACE MR 0175 Compliance
- Helium Leak Tested
- Laser Welded Design
- External Zero Adjustable
- Ready For Oxygen Service
- Internal Vacuum/ Over Pressure Stops
- IP 66



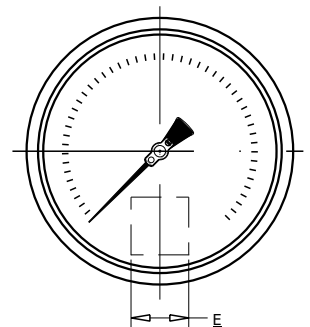
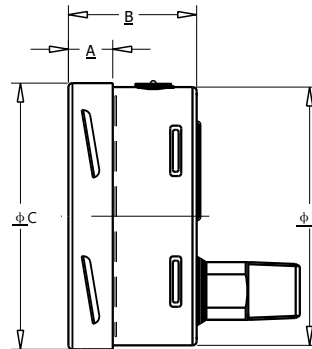
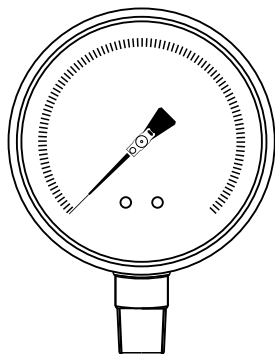
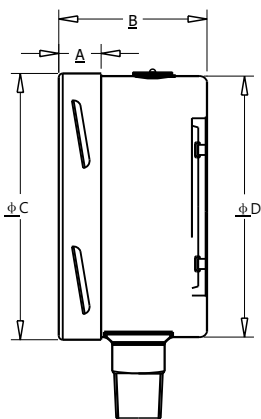
## SPECIFICATIONS

- Ambient Temperature: -4°F (-20°C) to +150°F (+65°C)
- Process Temperature: Max.392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max.Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Dial: Anti Parallax Mirror Dial
- Pointer: Knife-Edge Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 10,000 psi

## ACCURACY AS PER ASME B.40.1

4"/6" : 0.25-0.25-0.25 (GRADE 3A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
4"	0.6"	2.2"	4"	3.9"	0.87"	1.50
6"	0.7"	2.5"	6.3"	6.3"	0.87"	2.65

NS	A	B	φC	φD	E	Weight (lbs)
4"	0.6"	2"	4"	3.9"	0.87"	1.32
6"	0.6"	2"	6"	6"	0.87"	2.65

## HOW TO ORDER

Example

### NOMINAL SIZE

F H  
4" 6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

XXX

\*\*\*Please consult factory for any special connections

### RANGE

E13

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10000

### OPTIONAL EXTRAS

XX

- OA** ACCURACY + 0.5% OF F.S.
- TI** MONEL BOURDON & SOCKET (MONEL VERSION)
- TF** TESTED TO NACE STANDARD
- TB** HELIUM LEAK TEST
- SD** AISI 316 SS MOVEMENT
- SF** MOVEMENT WITH DAMPENING JELLY
- SI** KNIFE EDGE POINTER
- FN** 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP (AISI 316 SS)
- RG** ANTI PARALLAX MIRROR BAND DIAL
- RH** CUSTOM DESIGNED DIAL
- SW** DIAL TAG MARKING
- RW** PLEXI GLASS
- RX** SHATTERPROOF /SAFETY GLASS
- RZ** TOUGHENED GLASS
- SJ** MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION
- ZM** ELECTRO POLISHED CASE & BEZEL
- CK** EPOXY PAINTED CASE & BEZEL
- OS** CASE WITH BAYONET TYPE BEZEL
- PS** AISI 316 SS CASE & BEZEL
- KA** ON-OFF TYPE VENT PLUG
- SX** SS TAG PLATE
- SY** AISI 316 SS TAG PLATE
- SA** INTERNAL OVERPRESSURE STOP
- SB** INTERNAL VACUUM STOP
- ZL** OVER RANGE PROTECTION
- QB** INTEGRAL DAMPENING SCREW (AISI 316 SS)
- FL** INTEGRAL DAMPENING SCREW (MONEL)
- GH** MATERIAL TEST CERTIFICATES
- PW** FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS

Ordering Example: **P-10-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Wetted Parts AISI 316L Stainless Steel
- Build in Stabilizer Movement
- Dry or Liquid Version
- NACE MR 0175 Compliance
- Helium Leak Tested
- 40mm Temperature Compensated Blow Out Disc
- Internal Vacuum/ Over Pressure Stops
- IP 66



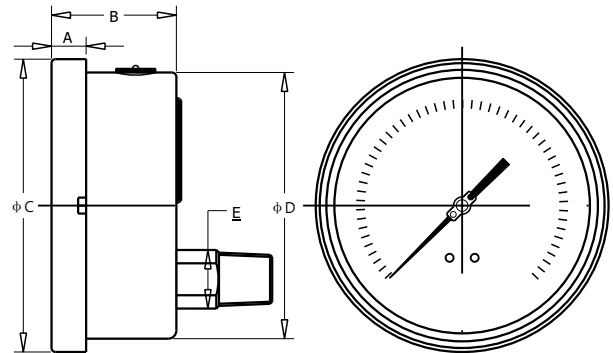
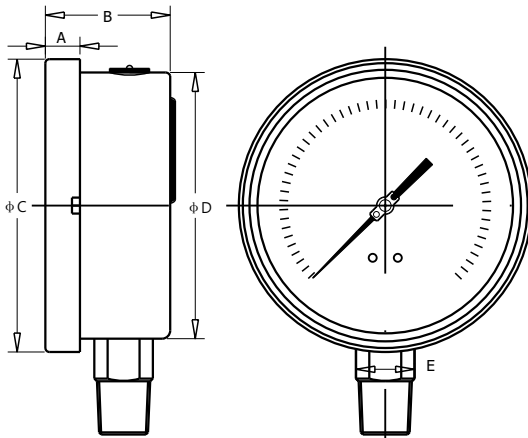
## SPECIFICATIONS

- Ambient Temperature: -4°F(-20°C) to +150°F(+65°C)
- Process Temperature: Max. 392°F(200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max. Scale Value
- Case: AISI 304SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Dial: Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 10,000PSI

## ACCURACY AS PER ASME B.40.1

4"/4.5"/6" : 1-1-1 (GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
4"	0.5"	1.87"	4.4"	4"	0.87"	1.32
4.5"	0.6"	1.87"	5"	4.5"	0.87"	1.50
6"	0.6"	1.87"	6.4"	5.9"	0.87"	2.65

NS	A	B	φC	φD	E	Weight (lbs)
4"	0.5"	1.87"	4.4"	4"	0.87"	1.32
4.5"	0.6"	1.87"	5"	4.5"	0.87"	1.50
6"	0.6"	1.87"	6.4"	5.9"	0.87"	2.65

## HOW TO ORDER

Example

### NOMINAL SIZE

F	G	H
4"	4.5"	6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10000

E13

### OPTIONAL EXTRAS

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li><b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)</li> <li><b>OA</b> ACCURACY + 0.5% OF F.S.</li> <li><b>TI</b> MONEL BOURDON &amp; SOCKET (MONEL VERSION)</li> <li><b>TF</b> TESTED TO NACE STANDARD</li> <li><b>TB</b> HELIUM LEAK TEST</li> <li><b>SD</b> AISI 316 SS MOVEMENT</li> <li><b>SF</b> MOVEMENT WITH DAMPENING JELLY</li> <li><b>RI</b> 25mm BOD</li> <li><b>SI</b> KNIFE EDGE POINTER</li> <li><b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET &amp; 'U' CLAMP (AISI 316 SS)</li> <li><b>RG</b> ANTI PARALLAX MIRROR BAND DIAL</li> <li><b>RH</b> CUSTOM DESIGNED DIAL</li> <li><b>ZB</b> RECEIVER RANGE</li> <li><b>AT</b> ATEX (AS PER 2014/34/EU)</li> <li><b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)</li> <li><b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)</li> <li><b>SW</b> DIAL TAG MARKING</li> <li><b>RW</b> PLEXI GLASS</li> <li><b>RX</b> SHATTERPROOF /SAFETY GLASS</li> <li><b>RZ</b> TOUGHENED GLASS</li> <li><b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION</li> </ul> | <ul style="list-style-type: none"> <li><b>ZM</b> ELECTRO POLISHED CASE &amp; BEZEL</li> <li><b>CK</b> EPOXY PAINTED CASE &amp; BEZEL</li> <li><b>SQ</b> CASE WITH ROLLING TYPE BEZEL</li> <li><b>OS</b> CASE WITH BAYONET TYPE BEZEL</li> <li><b>PS</b> AISI 316 SS CASE &amp; BEZEL</li> <li><b>KA</b> ON-OFF TYPE VENT PLUG</li> <li><b>SX</b> SS TAG PLATE</li> <li><b>SY</b> AISI 316SS TAG PLATE</li> <li><b>SA</b> INTERNAL OVERPRESSURE STOP</li> <li><b>SB</b> INTERNAL VACUUM STOP</li> <li><b>ZL</b> OVER RANGE PROTECTION</li> <li><b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)</li> <li><b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)</li> <li><b>FS</b> FILLABLE LIQUID SILICON OIL</li> <li><b>FG</b> FILLABLE LIQUID GLYCERINE</li> <li><b>ZZ</b> DIELECTRIC OIL FILLED</li> <li><b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED</li> <li><b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED</li> <li><b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED</li> <li><b>QA</b> DAMPENING LIQUID SILICON OIL FILLED</li> <li><b>GH</b> MATERIAL TEST CERTIFICATES</li> <li><b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS</li> </ul> |
|---|--|

XX

**Ordering Example: P-11-X-X-XXX-(E13)-XX**



## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Wetted Parts MONEL
- Build in Stabilizer Movement
- Dry or Liquid Version
- NACE MR 0175 Compliance
- Helium Leak Tested
- 40mm Temperature Compensated Blow Out Disc
- Internal Vacuum/ Over Pressure Stops
- IP 66



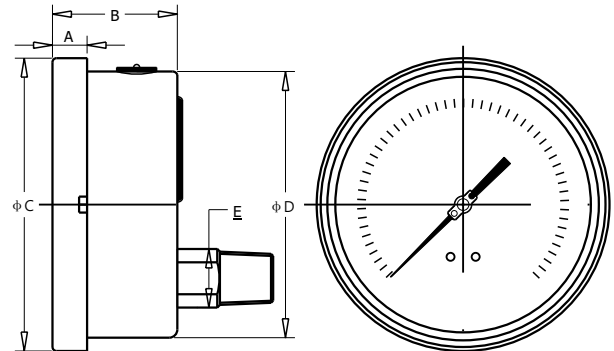
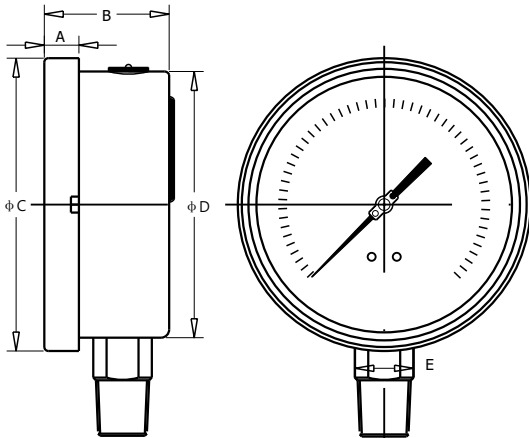
## SPECIFICATIONS

- Ambient Temperature: -4°F (-20°C) to +150°F (+65°C)
- Process Temperature: Max. 392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max. Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: MONEL
- Bourdon: MONEL
- Movement: AISI 304SS
- Dial: Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 10,000PSI

## ACCURACY AS PER ASME B.40.1

- 2.5" / 3" : 2-1-2 (GRADE A)
- 4" / 4.5" / 6" 1-1-1 GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.5"	2.7"	2.5"	0.55"	0.40
3"	0.4"	1.5"	3.5"	3.2"	0.67"	0.62
4"	0.5"	1.87"	4.4"	4"	0.87"	1.32
4.5"	0.6"	1.87"	5"	4.5"	0.87"	1.50
6"	0.6"	1.87"	6.4"	5.9"	0.87"	2.65

\*2.5" & 3" without BOD.

NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.4"	1.5"	2.7"	2.4"	0.6"	0.40
3"	0.4"	1.5"	3.5"	3.2"	0.67"	0.62
4"	0.5"	1.87"	4.4"	4"	0.87"	1.32
4.5"	0.6"	1.87"	5"	4.5"	0.87"	1.50
6"	0.6"	1.87"	6.4"	5.9"	0.87"	2.65

\*2.5" & 3" without BOD.

## HOW TO ORDER

Example

### NOMINAL SIZE

D	E	F	G	H
2.5"	3"	4"	4.5"	6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)
- 4UM** 9/16" UNF(M)
- 4UF** 1/4" HPM(F)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10000

E13

### OPTIONAL EXTRAS

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li><b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)</li> <li><b>OA</b> ACCURACY + 0.5% OF F.S.</li> <li><b>TI</b> MONEL BOURDON &amp; SOCKET (MONEL VERSION)</li> <li><b>TF</b> TESTED TO NACE STANDARD</li> <li><b>TB</b> HELIUM LEAK TEST</li> <li><b>SD</b> AISI 316 SS MOVEMENT</li> <li><b>SF</b> MOVEMENT WITH DAMPENING JELLY</li> <li><b>RI</b> 25mm BOD</li> <li><b>SI</b> KNIFE EDGE POINTER</li> <li><b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET &amp; 'U' CLAMP (AISI 316 SS)</li> <li><b>RG</b> ANTI PARALLAX MIRROR BAND DIAL</li> <li><b>RH</b> CUSTOM DESIGNED DIAL</li> <li><b>ZB</b> RECEIVER RANGE</li> <li><b>AT</b> ATEX (AS PER 2014/34/EU)</li> <li><b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)</li> <li><b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)</li> <li><b>SW</b> DIAL TAG MARKING</li> <li><b>RW</b> PLEXI GLASS</li> <li><b>RX</b> SHATTERPROOF /SAFETY GLASS</li> <li><b>RZ</b> TOUGHENED GLASS</li> <li><b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION</li> </ul> | <ul style="list-style-type: none"> <li><b>ZM</b> ELECTRO POLISHED CASE &amp; BEZEL</li> <li><b>CK</b> EPOXY PAINTED CASE &amp; BEZEL</li> <li><b>SQ</b> CASE WITH ROLLING TYPE BEZEL</li> <li><b>OS</b> CASE WITH BAYONET TYPE BEZEL</li> <li><b>PS</b> AISI 316 SS CASE &amp; BEZEL</li> <li><b>KA</b> ON-OFF TYPE VENT PLUG</li> <li><b>SX</b> SS TAG PLATE</li> <li><b>SY</b> AISI 316 SS TAG PLATE</li> <li><b>SA</b> INTERNAL OVERPRESSURE STOP</li> <li><b>SB</b> INTERNAL VACUUM STOP</li> <li><b>ZL</b> OVER RANGE PROTECTION</li> <li><b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)</li> <li><b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)</li> <li><b>FS</b> FILLABLE LIQUID SILICON OIL</li> <li><b>FG</b> FILLABLE LIQUID GLYCERINE</li> <li><b>ZZ</b> DIELECTRIC OIL FILLED</li> <li><b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED</li> <li><b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED</li> <li><b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED</li> <li><b>QA</b> DAMPENING LIQUID SILICON OIL FILLED</li> <li><b>GH</b> MATERIAL TEST CERTIFICATES</li> <li><b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS</li> </ul> |
|---|---|

XX

**Ordering Example: P-12-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

Stainless Steel Case & Measuring System  
 Flanged Or Screwed Connection  
 Standard Followed AMSE -B.40.1 / EN837-3  
 Oil Filled Vibration Proof Type is Optional  
 IP:65

## SPECIFICATIONS

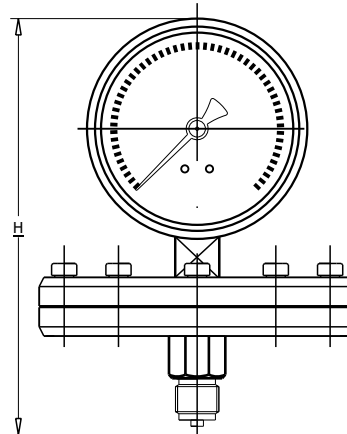
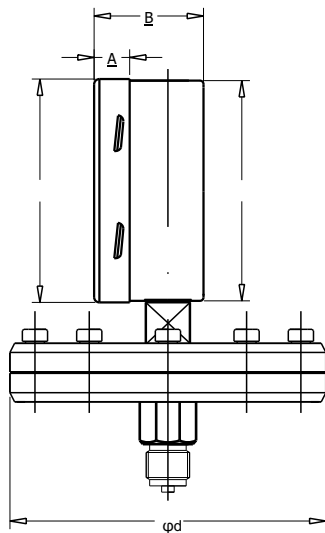
Ambient Temperature: -4°F(-20°C) to +150°F (+65°C)  
 Process Temperature: Max.212°F (+100°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 125% of Max.Scale Value  
 Case: AISI 304 SS  
 Joints: Tig Argon Arc Welding  
 Socket: AISI 316L SS  
 Diaphragm: AISI 316L SS  
 Movement: AISI 304 SS  
 Dial:Aluminum  
 Pointer: Micro Zero Adjustable  
 Window: Safety Glass  
 Range: 15"WC-200psi



## ACCURACY AS PER ASME B.40.1

4"/6" : 2-1-2 (GRADE A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φd	SW	H	Weight (lbs)
4"	0.7"	1.97"	4.4"	4"	0.9"	7.3"	6.62
6"	0.7"	1.97"	6.4"		0.9"	9.6"	7.76
4"	0.7"	1.97"	4.4"	6"	0.9"	7.3"	6.62
6"	0.7"	1.97"	6.4"		0.9"	9.6"	7.76

## HOW TO ORDER

Example

### NOMINAL SIZE

F H  
4" 6"

X

### TYPE OF MOUNTING

2 BOTTOM

X

### GAUGE CONNECTION

**2BM** 1/4" BSP(M)  
**2NM** 1/4" NPT(M)  
**3BM** 3/8" BSP(M)  
**3NM** 3/8" NPT(M)  
**4BM** 1/2" BSP(M)  
**4NM** 1/2" NPT(M)  
**4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### ELECTRIC CONTACTS

**A) SINGLE INSULATED MAGNETIC SNAP ACTION TYPE\***  
 (230 V AC, 1 Amp. ) (48 V DC, 0.5 Amp)

**B) INDUCTIVE TYPE (220 V AC, 0.4 Amp. )**

**RJ** Single; NORMALLY CLOSED(1NC)  
**RK** Double; NORMALLY CLOSED+NORMALLY OPEN(1NC+1NO)  
**RL** Single; NORMALLY OPEN(1NO)  
**RM** Double; NORMALLY OPEN+NORMALLY CLOSED(1NO+1NC)  
**RN** Double; NORMALLY CLOSED(BOTH NC)  
**RO** Double; NORMALLY OPEN(BOTH NO)  
**RU** BOOSTER WITH RELAY FOR CURRENT UPTO 5 Amp  
**RA** SPDT  
**RC** DPDT

**YW** Single; NORMALLY OPEN(1NO)  
**YV** Single; NORMALLY CLOSED(1NC)  
**YX** Double; NORMALLY CLOSED+NORMALLY OPEN(1NC+1NO)  
**YY** Double; NORMALLY OPEN(BOTH NO)  
**YZ** Double; NORMALLY CLOSED(BOTH NC)  
**ZA** Double; NORMALLY OPEN+NORMALLY CLOSED(1NO+1NC)

\*FOR DOUBLE INSULATED ELECTRICAL CONTACTS, CONSULT FACTORY FOR PRICE & DELIVERY.

X

### DIAPHRAGM

**UJ** AISI 316L SS(Standard)      **UR** TITANIUM      **UL** HASTELLOY'C  
**UM** MONEL      **UQ** TANTALUM

X

### RANGE

CODE	LPE7	LPE8	LPE9	LPE10	LPE11	LPE12	
RANGE ( "WC )	15"WC	30"WC	35"WC	60"WC	100"WC	160"WC	
CODE	LPE13	LPE14	LPE15	LPE16	LPE17	LPE18	LPE19
RANGE ( psi )	10psi	15psi	30psi	60psi	100psi	160psi	200psi

LPE9

### OPTIONAL EXTRAS

**SD** AISI 316 SS MOVEMENT      **ZM** ELECTRO POLISHED CASE & BEZEL  
**RG** ANTI PARALLAX MIRROR BAND DIAL      **CK** EPOXY PAINTED CASE & BEZEL  
**RH** CUSTOM DESIGNED DIAL      **OS** CASE WITH BAYONET TYPE BEZEL  
**SW** DIAL TAG MARKING      **PS** AISI 316 SS CASE & BEZEL  
**RW** PLEXI GLASS      **SX** SS TAG PLATE  
**RX** SHATTERPROOF /SAFETY GLASS      **GH** MATERIAL TEST CERTIFICATES  
**RZ** TOUGHENED GLASS      **PW** FIVE POINT CALIBRATION CERTIFICATE NATIONAL/  
**SY** AISI 316 SS TAG PLATE      INTERNATIONAL STANDARDS

XX

Ordering Example: P-13-X-X-XXX-X-X-(LPE9)-XX

## SPECIAL FEATURES

Stainless Steel Case & Measuring System  
 Static Pressure Up to 6000 psi  
 Dry Or Liquid Filled  
 Standard Followed AMSE -B.40.1 / EN837-3  
 IP:65

## SPECIFICATIONS

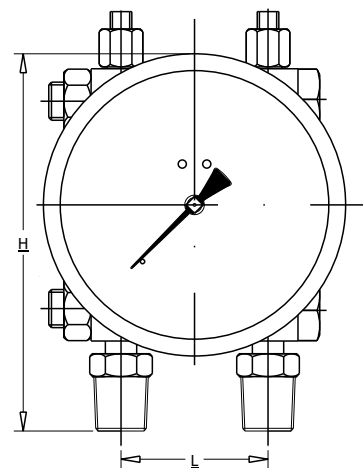
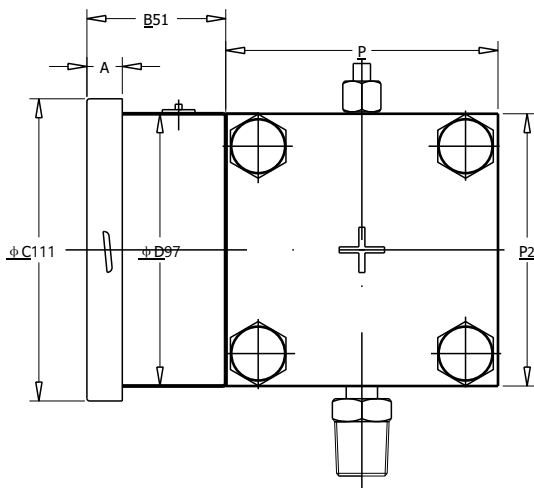
Ambient Temperature: -4°F(-20°C)to+150°F(+65°C)  
 Process Temperature: Max.212°F (+100°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 125% of Max. Scale Value  
 Case: AISI 304 SS  
 Joints: Tig Argon Arc Welding  
 Socket: AISI 316L SS  
 Diaphragm: AISI 316L SS  
 Movement: AISI 304 SS  
 Dial: Aluminum  
 Pointer: Micro Zero Adjustable  
 Window: Safety Glass  
 Range: 15"WC-160PSI



## ACCURACY AS PER ASME B.40.1

4"/6" : 3-1-3 (GRADE B)  
 4"/6" : 2-1-2 (GRADE A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	P	P2	P2	L	Weight (lbs)
4"	0.5"	2"	4.4"	3.8"	4"	4"	5.6"	2"	6.6
6"	0.6"	2.2"	5.9"	5.8"	4"	4"	6.2"	2"	17.6

## HOW TO ORDER

### NOMINAL SIZE

F H  
4" 6"

Example

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 9 2" PIPE/YOKE MOUNTING WITH BOTTOM ENTRY

X

### GAUGE CONNECTION

- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### SEAL CHAMBER (\*Consult Factory for Specification, Price and Delivery)

- |                                  |                        |                          |
|----------------------------------|------------------------|--------------------------|
| <b>TK</b> AISI 304SS             | <b>TX</b> MONEL        | <b>TZ</b> PVC*           |
| <b>TM</b> AISI 316L SS           | <b>TT</b> HASTELLOY C' | <b>UA</b> PVDF*          |
| <b>TL</b> AISI 316L SS(Standard) | <b>UD</b> TANTALUM     | <b>TY</b> POLYPROPELENE* |
| <b>UH</b> TITANIUM               |                        |                          |

X

### DIAPHRAGM

- |                                  |                    |                       |
|----------------------------------|--------------------|-----------------------|
| <b>UJ</b> AISI 316L SS(Standard) | <b>UR</b> TITANIUM | <b>UL</b> HASTELLOY'C |
| <b>UM</b> MONEL                  | <b>UQ</b> TANTALUM |                       |

X

### FILLING FLUIDS (\*Consult Factory for Specification, Price and Delivery)

- |  |                                       |
|--|---------------------------------------|
| <b>US</b> FLUROLUBE 4.2[-45 to 175°C]            | <b>UY</b> SILICON DC 704(10 to 337°C) |
| <b>UT</b> FLUROLUBE 6.3[-40 to 235°C]            | <b>UZ</b> SILICON DC 710(7 to 371°C)  |
| <b>UU</b> FLUROLUBE FS-5[-28 to 148°C]           | <b>VA</b> SYLTHERM 800(-40 to 315°C)  |
| <b>UV</b> FOOD GRADE OIL[-20 to 140°C]           | <b>VB</b> SYLTHERM XLT(-100 to 260°C) |
| <b>UX</b> SILICON DC 200[-40 to 205°C](Standard) | <b>VC</b> HALOCARBON OIL*             |

X

### RANGE

CODE	LPE7	LPE8	LPE9	LPE10	LPE11	LPE12
RANGE ( "WC )	15"WC	30"WC	35"WC	60"WC	100"WC	160"WC
CODE	LPE13	LPE14	LPE15	LPE16	LPE17	LPE18
RANGE ( psi )	10psi	15psi	30psi	60psi	100psi	160psi

LPE9

### OPTIONAL EXTRAS

- |   |  |
|---|--|
| <b>TI</b> MONEL DIAPHRAGM & CHAMBER (MONEL VERSION)                 | <b>CK</b> EPOXY PAINTED CASE & BEZEL   |
| <b>TF</b> TESTED TO NACE STANDARD                                   | <b>OS</b> CASE WITH BAYONET TYPE BEZEL   |
| <b>TB</b> HELIUM LEAK TEST  | <b>PS</b> AISI 316 SS CASE & BEZEL   |
| <b>SD</b> AISI 316 SS MOVEMENT                                      | <b>KA</b> ON-OFF TYPE VENT PLUG  |
| <b>SI</b> KNIFE EDGE POINTER  | <b>SX</b> SS TAG PLATE   |
| <b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP (AISI 316 SS)   | <b>SY</b> AISI 316 SS TAG PLATE  |
| <b>RG</b> ANTI PARALLAX MIRROR BAND DIAL                            | <b>FS</b> FILLABLE LIQUID SILICON OIL  |
| <b>RH</b> CUSTOM DESIGNED DIAL                                      | <b>FG</b> FILLABLE LIQUID GLYCERINE  |
| <b>SW</b> DIAL TAG MARKING  | <b>ZZ</b> DIELECTRIC OIL FILLED  |
| <b>RW</b> PLEXI GLASS   | <b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED                                   |
| <b>RX</b> SHATTERPROOF / SAFETY GLASS                               | <b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED                                |
| <b>RZ</b> TOUGHENED GLASS   | <b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED                               |
| <b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION | <b>QA</b> DAMPENING LIQUID SILICON OIL FILLED                                  |
| <b>ZM</b> ELECTRO POLISHED CASE & BEZEL                             | <b>GH</b> MATERIAL TEST CERTIFICATES   |
|   | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS |

XX

Ordering Example: P-14-X-X-XXX-X-X-X-(LPE9)-XX



**SPECIAL FEATURES**

- Standard Followed ASME-B 40.1 / EN837-1
- Anti Parallax Mirror Band
- External Zero Adjustable
- Internal Vacuum/ Overpressure Stops
- Calibration Certificate With Traceability To National / International Standard
- IP 66

**SPECIFICATIONS**

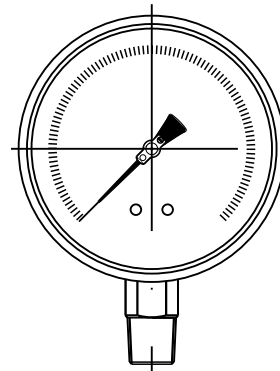
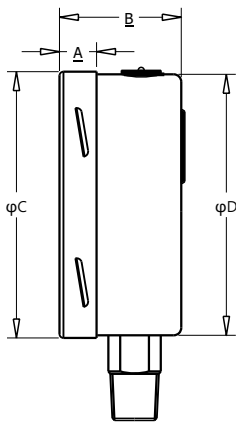
- Ambient Temperature: -4°F (-20°C) to + 150°F (+65°C)
- Process Temperature: Max.150°F (+65°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max. Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Dial: Anti Parallax Mirror Dial
- Pointer: Knife-Edge Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 10,000PSI



**ACCURACY AS PER ASME B.40.1**

6"/8"/10": 0.25% (GRADE 3A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
6"	0.7"	2"	6.3"	6.2"	0.87"	2.65
8"	0.7"	2"	8"	7.6"	0.87"	3.97
10"	0.7"	2"	10"	9.7"	0.87"	4.85

**HOW TO ORDER**

Example

**NOMINAL SIZE**

H	I	J
6"	8"	10"

X

**TYPE OF MOUNTING**

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET

X

**GAUGE CONNECTION**

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

**RANGE**

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10000

E13

**OPTIONAL EXTRAS**

- OA** ACCURACY + 0.5% OF F.S.
- TI** MONEL BOURDON & SOCKET (MONEL VERSION)
- TF** TESTED TO NACE STANDARD
- TB** HELIUM LEAK TEST
- SD** AISI 316 SS MOVEMENT
- SF** MOVEMENT WITH DAMPENING JELLY
- SI** KNIFE EDGE POINTER
- FN** 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP (AISI 316 SS)
- RG** ANTI PARALLAX MIRROR BAND DIAL
- RH** CUSTOM DESIGNED DIAL
- SW** DIAL TAG MARKING
- RW** PLEXI GLASS
- RX** SHATTERPROOF /SAFETY GLASS
- RZ** TOUGHENED GLASS
- SJ** MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION
- ZM** ELECTRO POLISHED CASE & BEZEL
- CK** EPOXY PAINTED CASE & BEZEL
- OS** CASE WITH BAYONET TYPE BEZEL
- PS** AISI 316 SS CASE & BEZEL
- KA** ON-OFF TYPE VENT PLUG
- SX** SS TAG PLATE
- SY** AISI 316 SS TAG PLATE
- SA** INTERNAL OVERPRESSURE STOP
- SB** INTERNAL VACUUM STOP
- ZL** OVER RANGE PROTECTION
- QB** INTEGRAL DAMPENING SCREW (AISI 316 SS)
- FL** INTEGRAL DAMPENING SCREW (MONEL)
- GH** MATERIAL TEST CERTIFICATES
- PW** FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS

XX

**Ordering Example: P-15-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Cost Effective
- Build in Stabilizer Movement
- Dry or Liquid Version
- Ready For Oxygen Service
- IP 65

## SPECIFICATIONS

- Ambient Temperature: -4°F (-20°C) to + 150°F(+65°C)
- Process Temperature: Max.248°F (120°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max. Scale Value
- Case: AISI 304 SS
- Joints: Alloy brazing/Soldering
- Socket: Copper Alloy
- Bourdon: Copper Alloy
- Movement: Copper Alloy
- Dial: Aluminum
- Pointer: Fixed
- Window: PC lens
- Range: Vacuum to 6000 psi

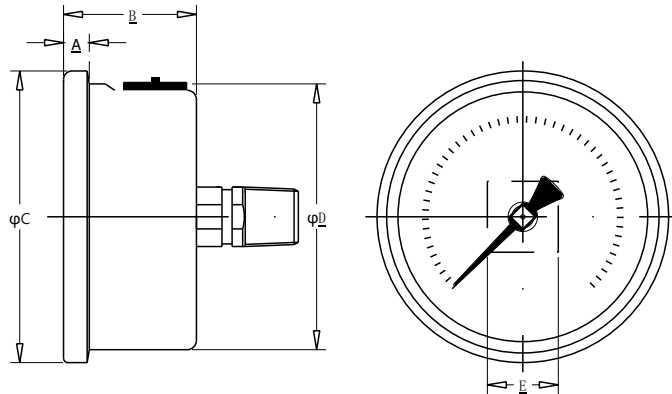
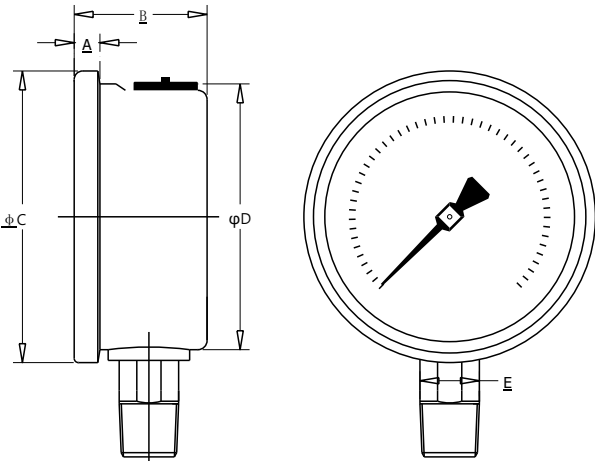


## ACCURACY AS PER ASME B.40.1

1.5"/2"                    3-2-3 GRADE B )

2.5"/3"/4"                : 2-1-2 GRADE A )

\*Please consult factory for better accuracy availability.



	NS	NS	A	B	φC	φD	E	Weight (lbs)
Crimped type	1.5"	0.2"	1"	1.84"	1.6"	0.43"	0.18	
	2"	0.24"	1.16"	2.3"	2"	0.55"	0.26	
	2.5"	0.24"	1.22"	2.68"	2.44"	0.55"	0.40	
	3"	0.27"	1.37"	3.43"	3"	0.67"	0.60	
	4"	0.32"	1.85"	4.3"	4"	0.87"	1.32	
Bayonet type	2.5"	0.5"	1.4"	2.68"	2.44"	0.55"	0.40	
	3"	0.43"	1.4"	3.5"	3.15"	0.67"	0.60	
	4"	0.5"	1.87"	4.4"	4"	0.87"	1.32	

	NS	NS	A	B	φC	φD	E	Weight (lbs)
Crimped type (CBM)	1.5"	0.2"	1"	1.74"	1.6"	0.43"	0.18	
	2"	0.24"	1.16"	2.3"	2"	0.55"	0.26	
	2.5"	0.24"	1.22"	2.68"	2.44"	0.55"	0.40	
	3"	0.27"	1.37"	3.43"	3"	0.67"	0.60	
Bayonet type (LBM)	2.5"	0.5"	1.4"	2.68"	2.44"	0.55"	0.40	
	3"	0.47"	1.4"	3.3"	3"	0.55"	0.60	
	4"	0.5"	1.87"	4.4"	4"	0.87"	1.32	

## HOW TO ORDER

Example

### NOMINAL SIZE

B	C	D	E	F
1.5"	2"	2.5"	3"	4"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160
CODE	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26
RANGE (psi)	200	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000

E13

### OPTIONAL EXTRAS

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)</li> <li><b>OA</b> ACCURACY + 0.5% OF F.S.</li> <li><b>SF</b> MOVEMENT WITH DAMPENING JELLY</li> <li><b>RI</b> 25mm BOD</li> <li><b>SI</b> KNIFE EDGE POINTER</li> <li><b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET &amp; 'U' CLAMP (AISI 316 SS)</li> <li><b>RG</b> ANTI PARALLAX MIRROR BAND DIAL</li> <li><b>RH</b> CUSTOM DESIGNED DIAL</li> <li><b>ZB</b> RECEIVER RANGE</li> <li><b>AT</b> ATEX (AS PER 2014/34/EU)</li> <li><b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)</li> <li><b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)</li> <li><b>SW</b> DIAL TAG MARKING</li> <li><b>RW</b> PLEXI GLASS</li> <li><b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION</li> <li><b>ZM</b> ELECTRO POLISHED CASE &amp; BEZEL</li> </ul> | <ul style="list-style-type: none"> <li><b>CK</b> EPOXY PAINTED CASE &amp; BEZEL</li> <li><b>SQ</b> CASE WITH ROLLING TYPE BEZEL</li> <li><b>OS</b> CASE WITH BAYONET TYPE BEZEL</li> <li><b>PS</b> AISI 316 SS CASE &amp; BEZEL</li> <li><b>KA</b> ON-OFF TYPE VENT PLUG</li> <li><b>SX</b> SS TAG PLATE</li> <li><b>SY</b> AISI 316SS TAG PLATE</li> <li><b>FK</b> INTEGRAL DAMPENING SCREW (BRASS)</li> <li><b>FS</b> FILLABLE LIQUID SILICON OIL</li> <li><b>FG</b> FILLABLE LIQUID GLYCERINE</li> <li><b>ZZ</b> DIELECTRIC OIL FILLED</li> <li><b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED</li> <li><b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED</li> <li><b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED</li> <li><b>QA</b> DAMPENING LIQUID SILICON OIL FILLED</li> <li><b>GH</b> MATERIAL TEST CERTIFICATES</li> <li><b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS</li> </ul> |
|--|--|

XX

**Ordering Example: P-16-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Pressure Relieving Back For Increased Safety
- Stainless Steel Case With Solid Front Design
- Wetted Parts AISI 316L Stainless Steel
- Build in Stabilizer Movement
- Dry or Liquid Version
- Silicone fillable version availability
- NACE MR 0175 Compliance
- Helium Leak Tested
- Laser Welded Design
- Ready For Oxygen Service
- Internal Vacuum/ Over Pressure Stops
- IP 66

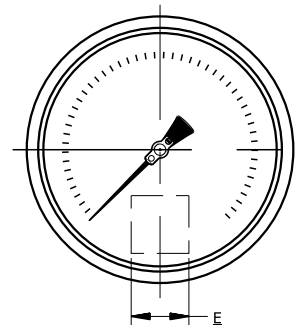
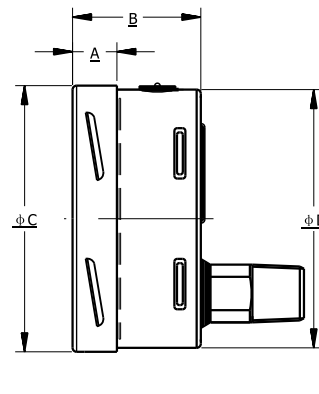
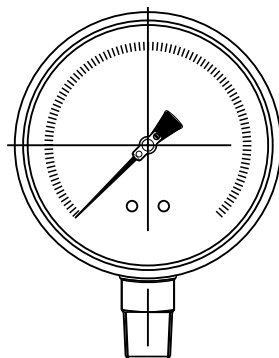
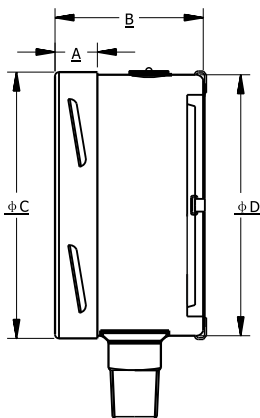


## SPECIFICATIONS

- Ambient Temperature: -4 °F (-20°C) to +150°F (+65°C)
- Process Temperature: Max. 392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: not suitable
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Dial: Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 600PSI

## ACCURACY AS PER ASME B.40.1

- 4"/4.5"/6" : 1-1-1 (GRADE 1A ) For Range Scale Only &
- 4-3-4 (GRADE C) For End Scale Only (End scale covered with triangle)



NS	A	B	φC	φD	E	Weight (lbs)
4"	0.6"	2.2"	4"	3.9"	0.87"	1.50
4.5"	0.6"	2.2"	5"	4.5"	0.87"	2.12
6"	0.6"	2.2"	6.3"	6.2"	0.87"	2.91

NS	A	B	φC	φD	E	Weight (lbs)
4"	0.6"	2"	4"	3.9"	0.87"	1.50

## HOW TO ORDER

### NOMINAL SIZE

F	G	H
4"	4.5"	6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

XXX

\*\*\*Please consult factory for any special connections

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9
RANGE (mbar/"WC)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15
CODE	E10	E11	E12	E13	E14	E15	E16	E17	E18
RANGE (mbar/"WC)	30	60	100	160	200	300	400	500	600

E13

### OPTIONAL EXTRAS

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li><b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)</li> <li><b>OA</b> ACCURACY + 0.5% OF F.S.</li> <li><b>TI</b> MONEL BOURDON &amp; SOCKET (MONEL VERSION)</li> <li><b>TF</b> TESTED TO NACE STANDARD</li> <li><b>TB</b> HELIUM LEAK TEST</li> <li><b>SD</b> AISI 316 SS MOVEMENT</li> <li><b>SF</b> MOVEMENT WITH DAMPENING JELLY</li> <li><b>SI</b> KNIFE EDGE POINTER</li> <li><b>RG</b> ANTI PARALLAX MIRROR BAND DIAL</li> <li><b>RH</b> CUSTOM DESIGNED DIAL</li> <li><b>ZB</b> RECEIVER RANGE</li> <li><b>AT</b> ATEX (AS PER 2014/34/EU)</li> <li><b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)</li> <li><b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)</li> <li><b>SW</b> DIAL TAG MARKING</li> <li><b>RW</b> PLEXI GLASS</li> <li><b>RX</b> SHATTERPROOF /SAFETY GLASS</li> <li><b>RZ</b> TOUGHENED GLASS</li> <li><b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS</li> <li><b>ZM</b> ELECTRO POLISHED CASE &amp; BEZEL</li> </ul> | <ul style="list-style-type: none"> <li><b>CK</b> EPOXY PAINTED CASE &amp; BEZEL</li> <li><b>PS</b> AISI 316 SS CASE &amp; BEZEL</li> <li><b>OS</b> CASE WITH BAYONET TYPE BEZEL</li> <li><b>KA</b> ON-OFF TYPE VENT PLUG</li> <li><b>SX</b> SS TAG PLATE</li> <li><b>SY</b> AISI 316SS TAG PLATE</li> <li><b>SA</b> INTERNAL OVERPRESSURE STOP</li> <li><b>SB</b> INTERNAL VACUUM STOP</li> <li><b>ZL</b> OVER RANGE PROTECTION</li> <li><b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)</li> <li><b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)</li> <li><b>FS</b> FILLABLE LIQUID SILICON OIL</li> <li><b>FG</b> FILLABLE LIQUID GLYCERINE</li> <li><b>ZZ</b> DIELECTRIC OIL FILLED</li> <li><b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED</li> <li><b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED</li> <li><b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED</li> <li><b>QA</b> DAMPENING LIQUID SILICON OIL FILLED</li> <li><b>GH</b> MATERIAL TEST CERTIFICATES</li> <li><b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS</li> </ul> |
|--|---|

XX

Ordering Example: P-09-X-X-XXX-(E13)-XX



## SPECIAL FEATURES

Standard Followed ASME-B 40.1 / EN837-1  
 Forged Brass Case  
 Rugged Construction  
 Dry or Liquid Version  
 IP 65

## SPECIFICATIONS

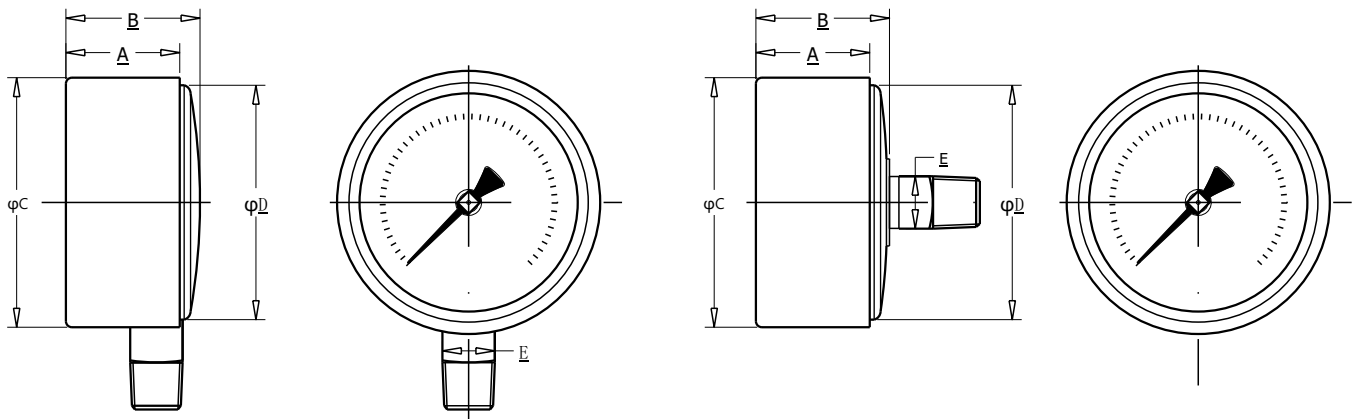
Ambient Temperature: -4°F(-20°C) to + 150°F (+65°C)  
 Process Temperature: Max.248°F (120°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 125% of Max.Scale Value  
 Case: Forged brass  
 Joints: Alloy brazing/Soldering  
 Socket: Copper Alloy  
 Bourdon: Copper Alloy  
 Movement: Copper Alloy  
 Dial: Aluminum  
 Pointer: Fixed  
 Window: PC Lens  
 Range: Vacuum to 6000PSI



## ACCURACY AS PER ASME B.40.1

2.5" : 2-1-2(GRADE A )

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
2.5"	1.2"	1.46"	2.58"	2.4"	0.55"	0.75

NS	A	B	φC	φD	E	Weight (lbs)
2.5"	1.2"	1.46"	2.58"	2.4"	0.55"	0.75

## HOW TO ORDER

Example

### NOMINAL SIZE

D

2.5"

X

### TYPE OF MOUNTING

- 2 BOTTOM
- 4 CENTER BACK
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
RANGE ( psi )	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160
CODE	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26
RANGE ( psi )	200	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000

E13

### OPTIONAL EXTRAS

- |  |   |
|--|---|
| <b>SF</b> MOVEMENT WITH DAMPENING JELLY    | <b>FS</b> FILLABLE LIQUID SILICON OIL   |
| <b>RH</b> CUSTOM DESIGNED DIAL             | <b>FG</b> FILLABLE LIQUID GLYCERINE   |
| <b>SW</b> DIAL TAG MARKING                 | <b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED                                   |
| <b>RW</b> PLEXI GLASS                      | <b>QA</b> DAMPENING LIQUID SILICON OIL FILLED                                     |
| <b>SQ</b> CASE WITH ROLLING TYPE BEZEL     | <b>GH</b> MATERIAL TEST CERTIFICATES  |
| <b>SX</b> SS TAG PLATE                     | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/<br>INTERNATIONAL STANDARDS |
| <b>SY</b> AISI 316SS TAG PLATE             |   |
| <b>FK</b> INTEGRAL DAMPENING SCREW (BRASS) |   |

XX

**Ordering Example: P-18-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-3
- Compact Design
- External Zero Adjustable
- Ready For Oxygen Service
- IP 65

## SPECIFICATIONS

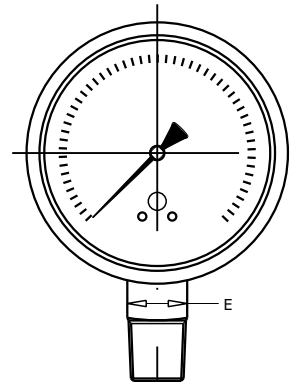
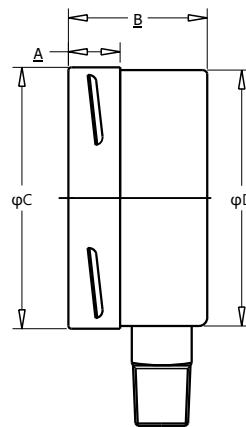
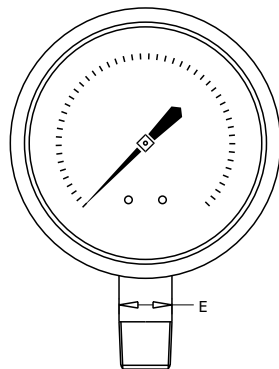
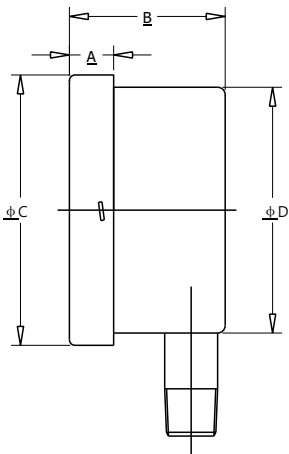
- Ambient Temperature: -4°F(-20°C) to + 150°F(+65°C)
- Process Temperature: Max.212°F (100°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: Not Suitable
- Case: AISI 304 SS
- Joints: Alloy brazing/Soldering
- Socket: Copper Alloy
- Capsule: Copper Alloy
- Movement: Copper Alloy
- Dial: Aluminum
- Pointer: Fixed
- Window: Sheet Glass
- Range: -250"WC - 0 to 0-250"WC



## ACCURACY AS PER ASME B.40.1

2.5"/4"/6" 2-1-2 GRADE A )

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.6"	2.8"	2.6"	0.6"	0.26

NS	A	B	φC	φD	E	Weight (lbs)
4"	0.6"	1.9"	4"	3.9"	0.87"	1.50
6"	0.6"	1.9"	6.3"	6.2"	0.87"	2.65

## HOW TO ORDER

Example

### NOMINAL SIZE

D	F	H
2.5"	4"	6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 4 CENTER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	LPE1	LPE2	LPE3	LPE4	LPE5	LPE6	LPE7
RANGE (*WC)	-250-0	-160-0	-100-0	-60-0	-30-0	-15-0	-10-0
CODE	LPE8	LPE9	LPE10	LPE11	LPE12	LPE13	LPE14
RANGE (*WC)	-250-0	-160-0	-100-0	-60-0	-30-0	-15-0	-10-0

LPE9

### OPTIONAL EXTRAS

- |  |  |
|--|--|
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)                           | <b>RX</b> SHATTERPROOF /SAFETY GLASS       |
| <b>SF</b> MOVEMENT WITH DAMPENING JELLY                              | <b>RZ</b> TOUGHENED GLASS                  |
| <b>RI</b> 25mm BOD   | <b>ZM</b> ELECTRO POLISHED CASE & BEZEL    |
| <b>SI</b> KNIFE EDGE POINTER   | <b>CK</b> EPOXY PAINTED CASE & BEZEL       |
| <b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP<br>(AISI 316 SS) | <b>OS</b> CASE WITH BAYONET TYPE BEZEL     |
| <b>RG</b> ANTI PARALLAX MIRROR BAND DIAL                             | <b>PS</b> AISI 316 SS CASE & BEZEL         |
| <b>RH</b> CUSTOM DESIGNED DIAL                                       | <b>KA</b> ON-OFF TYPE VENT PLUG            |
| <b>AT</b> ATEX (AS PER 2014/34/EU)                                   | <b>SX</b> SS TAG PLATE                     |
| <b>SW</b> DIAL TAG MARKING   | <b>SY</b> AISI 316SS TAG PLATE             |
| <b>RW</b> PLEXI GLASS  | <b>FK</b> INTEGRAL DAMPENING SCREW (BRASS) |

XX

**Ordering Example: P-19-X-X-XXX-(LPE9)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-3
- Wetted Parts AISI 316L Stainless Steel
- Build in Stabilizer Movement
- Diaphragm Seal Integrally Built With Gauge
- Dry or Liquid Version
- NACE MR 0175 Compliance
- Helium Leak Tested
- Provides Best Hygiene Factor
- IP 65

## SPECIFICATIONS

- Ambient Temperature: -4°F(-20°C) to + 150°F(+65°C)
- Process Temperature: Max.212°F (100°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max.Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Diaphragm: AISI 316L SS
- Sanitary Seal: 1 1/2" in AISI 316 SS
- Dial: Aluminum
- Pointer: Fixed/Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 600psi

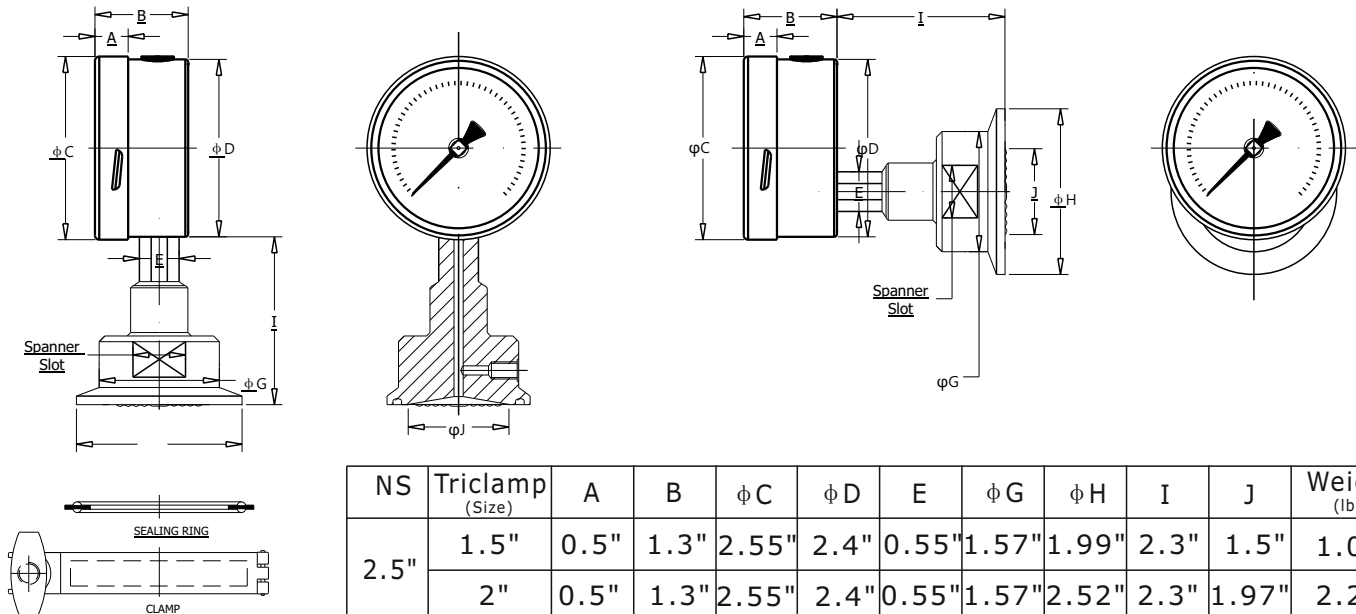


## ACCURACY AS PER ASME B.40.1

2.5"/3" 2-1-2 (GRADE A)

4" : 1-1-1 (GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	Triclamp (Size)	A	B	φC	φD	E	φG	φH	I	J	Weight (lbs)
2.5"	1.5"	0.5"	1.3"	2.55"	2.4"	0.55"	1.57"	1.99"	2.3"	1.5"	1.01
	2"	0.5"	1.3"	2.55"	2.4"	0.55"	1.57"	2.52"	2.3"	1.97"	2.29
3"	1.5"	0.5"	1.5"	3.1"	3.05"	0.67"	1.57"	1.99"	2.3"	1.5"	1.56
	2"	0.5"	1.5"	3.1"	3.05"	0.67"	1.57"	2.52"	2.3"	1.97"	2.54
4"	1.5"	0.6"	1.9"	4"	3.9"	0.87"	1.57"	1.99"	2.3"	1.5"	1.81
	2"	0.6"	1.9"	4"	3.9"	0.87"	1.57"	2.52"	2.3"	1.97"	3.26

## HOW TO ORDER

Example

### NOMINAL SIZE

D	E	F
2.5"	3"	4"

X

### TYPE OF MOUNTING

- 2 BOTTOM
- 3 LOWER BACK
- 4 CENTER BACK

X

### SANITARY SEAL (For 1" size sanitary seal, consult factory for drawing, price and delivery.)

- YO** 2" SANITARY SEAL IN AISI 316SS **YP** 2 1/2" SANITARY SEAL IN AISI 316 SS
- YN** 1 1/2" SANITARY SEAL IN AISI 316SS (Standard)

XXX

### BODY

- CL** AISI 316SS (Standard) **CM** AISI 316L SS

XX

### DIAPHRAGM

- UJ** AISI 316L (Standard)

XX

### FILLING FLUIDS

- UV** FOOD GRADE OIL(-20 TO 140 / -4 TO 284 Standard)

XX

### CLAMP

- ZO** 1 1/2" CLAMP IN AISI 304 **ZQ** 2 1/2" CLAMP IN AISI 304
- ZP** 2" CLAMP IN AISI 304

XX

### GASKET (SEALING RING)

- FX** 1 1/2" SILICON GASKET **FZ** 2 1/2" SILICON GASKET
- FY** 2" SILICON GASKET

XX

### BOTTOM MATING PART

- KB** 2 1/2" SANITARY SEAL IN AISI 316 **KD** 2 1/2" SANITARY SEAL IN AISI 316
- KD** 1 1/2" SANITARY SEAL IN AISI 316

XX

### RANGE

E13

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15
CODE	E10	E11	E12	E13	E14	E15	E16	E17	E18
RANGE (psi)	30	60	100	160	200	300	400	500	600

### OPTIONAL EXTRAS AS PER P-25

XX

**Ordering Example: P-20-X-X-XXX-XX-XX-XX-XX-XX-XX-(E13)-XX**



## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Wetted Parts AISI 316L Stainless Steel
- Build in Stabilizer Movement
- Dry or Liquid Version
- NACE MR 0175 Compliance
- Helium Leak Tested
- External Zero Adjustable
- 40mm Temperature Compensated Blow Out Disc
- Internal Vacuum/ Over Pressure Stops
- High Range from 15,000 psi
- IP 66

## SPECIFICATIONS

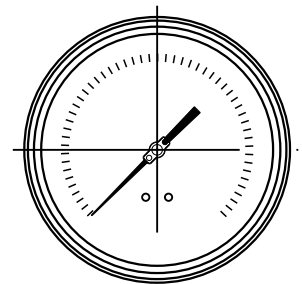
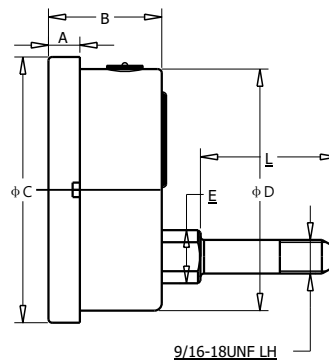
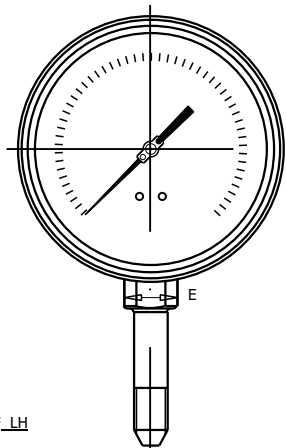
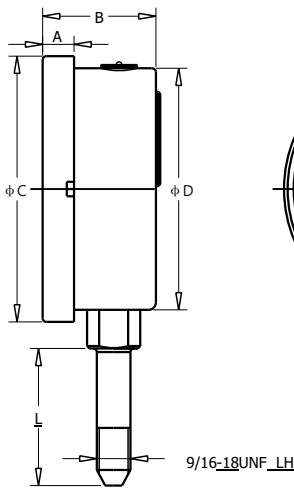
- Ambient Temperature: -4°F (-20°C) to +150°F (+65°C)
- Process Temperature: Max. 212°F (100°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max. Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Dial: Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: 15,000psi-60,000psi



## ACCURACY AS PER ASME B.40.1

- 2.5" : 2-1-2 (GRADE A)
- 4"/4.5"/6" : 1-1-1 (GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	L	Weight (lbs)
2.5"	0.4"	1.5"	2.7"	2.4"	0.5"	1.3"	0.40
4"	0.5"	1.87"	4.4"	4"	0.87"	2.5"	1.32
4.5"	0.6"	1.87"	5"	4.5"	0.87"	2.5"	1.41
6"	0.6"	1.87"	6.4"	5.9"	0.87"	2.5"	2.65

NS	A	B	φC	φD	E	L	Weight (lbs)
2.5"	0.4"	1.5"	2.7"	2.4"	0.5"	1.3"	0.40
4"	0.5"	1.87"	4.4"	4"	0.87"	2.5"	1.32
4.5"	0.6"	1.87"	5"	4.5"	0.87"	2.5"	1.41
6"	0.6"	1.87"	6.4"	5.9"	0.87"	2.5"	2.65

## HOW TO ORDER

Example

### NOMINAL SIZE

D	F	G	H
2.5"	4"	4.5"	6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4"BSP(M)
- 2NM** 1/4"NPT(M)
- 3BM** 3/8"BSP(M)
- 3NM** 3/8"NPT(M)
- 4BM** 1/2"BSP(M)
- 4NM** 1/2"NPT(M)
- 4MM** M20 X 1.5(M)
- 4UM** 9/16"UNF(M)
- 2HF** 1/4"HP(F)
- 2HM** 1/4"HP(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E29	E30	E31	E32	E33
RANGE ( psi )	15000	20000	25000	30000	35000
CODE	E34	E35	E36	E37	
RANGE ( psi )	40000	50000	55000	60000	

E29

### OPTIONAL EXTRAS

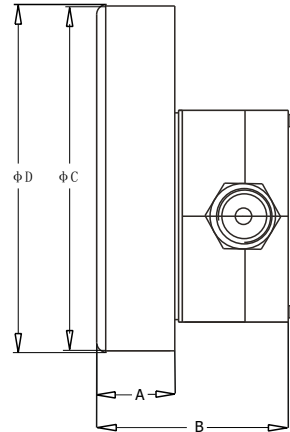
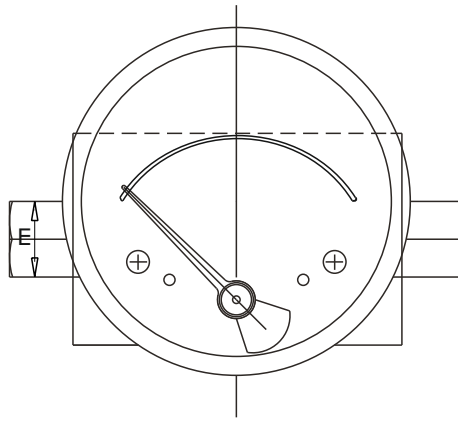
- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li><b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)</li> <li><b>OA</b> ACCURACY + 0.5% OF F.S.</li> <li><b>TI</b> MONEL BOURDON &amp; SOCKET (MONEL VERSION)</li> <li><b>TF</b> TESTED TO NACE STANDARD</li> <li><b>TB</b> HELIUM LEAK TEST</li> <li><b>SD</b> AISI 316 SS MOVEMENT</li> <li><b>SF</b> MOVEMENT WITH DAMPENING JELLY</li> <li><b>RI</b> 25mm BOD</li> <li><b>SI</b> KNIFE EDGE POINTER</li> <li><b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET &amp; 'U' CLAMP (AISI 316 SS)</li> <li><b>RG</b> ANTI PARALLAX MIRROR BAND DIAL</li> <li><b>RH</b> CUSTOM DESIGNED DIAL</li> <li><b>ZB</b> RECEIVER RANGE</li> <li><b>AT</b> ATEX (AS PER 2014/34/EU)</li> <li><b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)</li> <li><b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)</li> <li><b>SW</b> DIAL TAG MARKING</li> <li><b>RW</b> PLEXI GLASS</li> <li><b>RX</b> SHATTERPROOF /SAFETY GLASS</li> <li><b>RZ</b> TOUGHENED GLASS</li> <li><b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION</li> </ul> | <ul style="list-style-type: none"> <li><b>ZM</b> ELECTRO POLISHED CASE &amp; BEZEL</li> <li><b>CK</b> EPOXY PAINTED CASE &amp; BEZEL</li> <li><b>SQ</b> CASE WITH ROLLING TYPE BEZEL</li> <li><b>OS</b> CASE WITH BAYONET TYPE BEZEL</li> <li><b>PS</b> AISI 316 SS CASE &amp; BEZEL</li> <li><b>KA</b> ON-OFF TYPE VENT PLUG</li> <li><b>SX</b> SS TAG PLATE</li> <li><b>SY</b> AISI 316SS TAG PLATE</li> <li><b>SA</b> INTERNAL OVERPRESSURE STOP</li> <li><b>SB</b> INTERNAL VACUUM STOP</li> <li><b>ZL</b> OVER RANGE PROTECTION</li> <li><b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)</li> <li><b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)</li> <li><b>FS</b> FILLABLE LIQUID SILICON OIL</li> <li><b>FG</b> FILLABLE LIQUID GLYCERINE</li> <li><b>ZZ</b> DIELECTRIC OIL FILLED</li> <li><b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED</li> <li><b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED</li> <li><b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED</li> <li><b>QA</b> DAMPENING LIQUID SILICON OIL FILLED</li> <li><b>GH</b> MATERIAL TEST CERTIFICATES</li> <li><b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS</li> </ul> |
|---|--|

XX

**Ordering Example: P-21-X-X-XXX-(E29)-XX**

## SPECIFICATIONS

Accuracy	±3% Of The FSD (Ascending)
Migration	Minor From High To Low Port
Range	0-0.25 to 0-10bar/psi or psi/kPa Dual Scale
First Marking On The Scale	15% Of The FSD
Sensing Element	Magnetic Piston With Compression Spring
Wetted Parts	SS316,SS 302 Compression Spring,Seals & Ceramic Magnet
Case Material & Dial Size	Stainless Steel (SS 304):2.5",3.5",4.0" Engineering Polymer:2.5" Bayonet:4.0"
Mounting	Direct,Front Flange,2"Pipe & Surface Mounting
Maximum Working Pressure	100,250 & 400 bar
Maximum Process Temperature	0 to 80°C (32 to175°F)
Enclosure	Engineering Polymer
Seals	Buna-N & Viton
Window	Float Glass(std.),Toughened Glass,Acrylic & Safety Glass
Connection	1/4"BSP(F) Std. Optional 1/4"NPT(F)
Porting	In-line
Over Range Protection	Up To The Max.Working Pressure From High & Low Side
Protection For Gauge & Switch	IP 65



NS	A	B	φC	φD	E
2.5"	0.75"	1.73"	2.5"	2.6"	2.7"
3.5"	0.75"	1.73"	3.1"	3.1"	3.3"
4"	0.75"	1.73"	4.0"	4"	4.1"

## HOW TO ORDER

- 1.Series** P-22
- 2.Type** G Gauge  
GS Gauge + Switch
- 3.Body Material** S SS-316 Enclosed In Polymer Casing
- 4.Dial Size** 2.5 2.5"(63mm)  
3.5 3.5"(80mm)  
4.0 4.0"(100mm)
- 5.Connection** 4B 1/4"BSP(F)(Std.) 4N 1/4"NPT(F)  
ZZ Special Connection Sizes Using Adaptor
- 6.Porting** 1 In-Line
- 7.Case** S4 SS 304(Std.) S6 SS 316  
F4 SS 304 Flange  
EP Engineering Polymer(Available In 2.5" Only)
- 8.Window** BF Bayonet(Available In 4.0" Safety Glass Only)  
F Glass(std.) A Acrylic  
T Toughened glass L Safety glass
- 9.Seals/Diaphragm** B Buna-N(std.) V Viton

### 10.Switch

- 0: NONE
- 1: ONE SPST,with a DIN plug
- 3: TWO SPSTs with DIN Plug

+

SPST Specification (AC/DC Max.)			
1 Standard	2	3	4
10 VA	40 VA	100 VA	60 VA
100 V	230 V	300 V	240 V
0.5 Amp	1 Amp	1 Amp	3 Amp
Adjustable	Adjustable	Adjustable	Adjustable

- 5: ONE SPDT, with DIN Plug
- 7: TWO SPDTs with DIN Plug

+

SPDT Specification (AC/DC Max.)			
1 Standard	2	3	4
3 VA	5 VA	5 VA	60 VA
30 V	125 V	175 V	400 V
0.3 Amp	0.25 Amp	0.25 Amp	1 Amp
Adjustable	Adjustable	Adjustable	Factory set

Example: Switch selection 11 is : 1 ONE SPST with DIN PLUG , with switch specifications 10 VA ,100V ,0.5 Amp

### 11.Range

Standard Ranges:(Other Ranges & Units On Request)

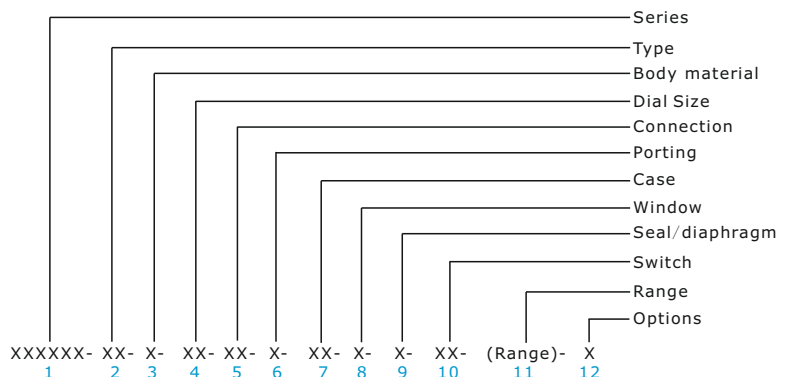
Bar	0.25	0.4	0.6	1.0	1.6	2.0	2.5	3.0	4.0	6.0	10.0
psi	3.5	6.0	9.0	15	24	30	36	45	60	90	140

### 12.Options

- 0 None
- 250 Max.Working Pressure 250bar
- 400 Max.Working Pressure 400bar
- A Glycerine\*
- B Red Follower Pointer On Acrylic Window\*
- C Customer Logo
- D Dual Scale
- E Colour Band(Available In Single Scale Only)
- F Filter Mesh In(+) Connection
- G Reverse Port\*\*
- S Silicone Oil\*
- M1 2" Horizontal Pipe Mounting Bracket
- M2 Surface Mounting Bracket
- M3 2" vertical pipe Mounting Bracket
- M4 Engineering Polymer Mounting Bracket

\*Affects Accuracy

\*\*Pointer Moves From Right To Left



## SPECIAL FEATURES

Economy Version  
 Black Steel Case And Plastic  
 Chrome Plated Block Valve  
 Standard Followed AMSE -B.40.1/EN837-1  
 IP:52

## SPECIFICATIONS

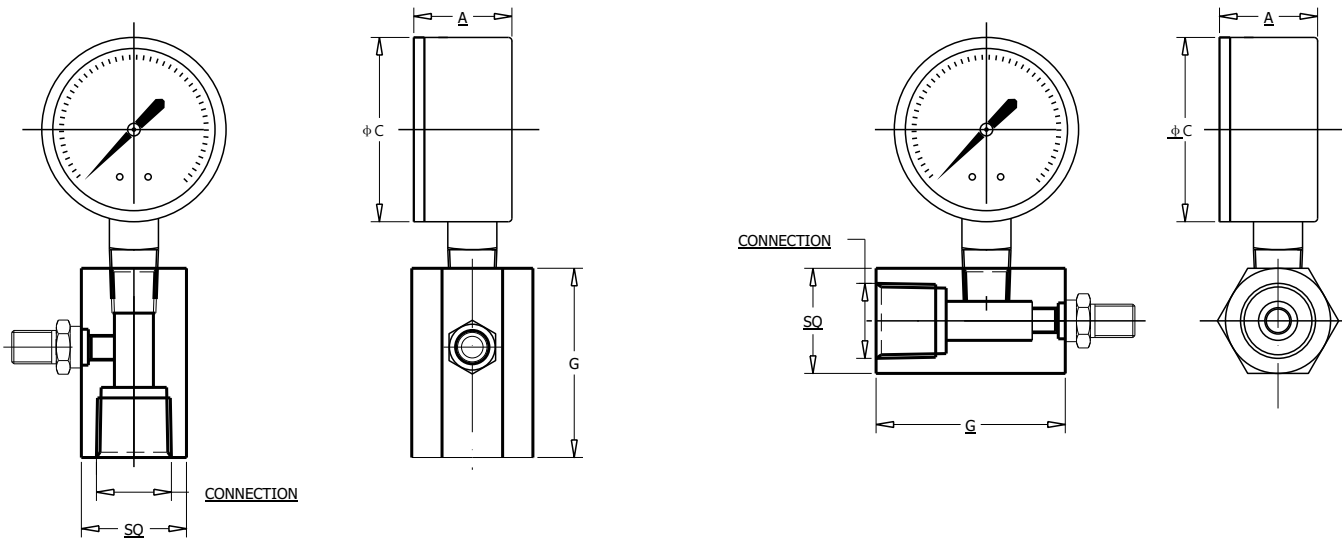
Ambient Temperature: -4°F (-20°C) to + 150°F (+65°C)  
 Process Temperature: Max.248°F (120°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 125% of Max.Scale Value  
 Case: Black Steel Case  
 Joints: Alloy Brazing/Soldering  
 Socket: Copper Alloy  
 Bourdon: Copper Alloy  
 Movement: Copper Alloy  
 Block:Chrome Plated Steel Block  
 Dial: Aluminum  
 Pointer: Fixed  
 Window: Snap-in Plastic lens  
 Range: 15psi to 300psi



## ACCURACY AS PER ASME B.40.1

2" 3-2-3 GRADE B )

\*Please consult factory for better accuracy availability.



CONNECTION	A	φC	E	G	SQ	Weight (lbs)
1/2"NPT	1.1"	2"	0.55"	2.13"	1.18"	0.71
3/4"NPT	1.1"	2"	0.55"	2.13"	1.18"	0.71
1"NPT	1.1"	2"	0.55"	2.13"	1.42"	0.71

CONNECTION	A	φC	E	G	SQ	Weight (lbs)
1/2"NPT	1.1"	2"	0.55"	2.13"	1.18"	0.71
3/4"NPT	1.1"	2"	0.55"	2.13"	1.18"	0.71
1"NPT	1.1"	2"	0.55"	2.13"	1.42"	0.71

## HOW TO ORDER

Example

### NOMINAL SIZE

C  
2"

X

### TYPE OF MOUNTING

2 BOTTOM

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 2TM** 1/4" BSPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)

\*\*\*Please consult factory for any special connections

XXX

### BLOCK MOUNTING

**V** Vertical

**H** Horizontal

XXX

### BLOCK CONNECTION

**8NF** 1" NPT(F)

**6NF** 3/4" NPT(F)

**4NF** 1/2" NPT(F) STANDARD

XXX

### RANGE

E13

CODE	E9	E10	E11	E12
RANGE ( psi )	15	30	60	100
CODE	E13	E14	E15	
RANGE ( psi )	160	200	300	

**Ordering Example: P-23-X-X-XXX-XX-XX-(E13)**



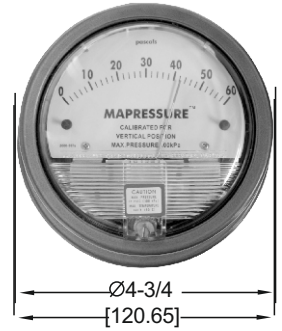
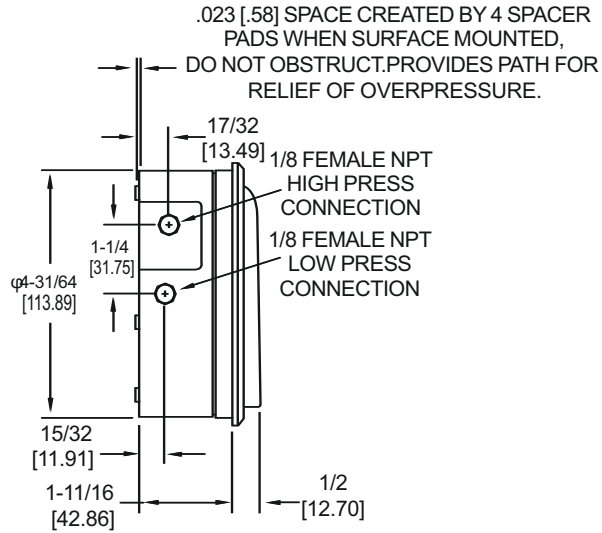
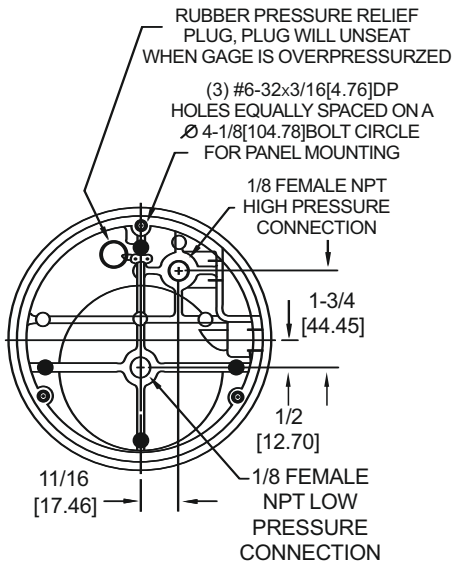
**SPECIAL FEATURES**

- Die Cast Aluminum
- And Chrome body Part After
- 168 Hours Salt Bath Test
- The Final Coating Of Dark Gray Exterior
- Indicate Low Air Or Non-Corrosive gas
- Pressure-eighter Positive
- Negative(vacuum) Of Differential
- The Design Resists Shock
- Vibration and Over-pressures
- No Manometer Fluid To Evaporate
- Freeze Or Cause Toxic Or Leving Problems



**SPECIFICATIONS**

- Dimension: 4-3/4"dia.x2-3/16"Deep
- Weight: 1 lb.2oz.(510g)
- Fonished: Back Dark Gary Enamel
- Connection: 1/8"NPT(F) Hight And Low Pressure Taps Duplicated,One Pair Siad And One Pair Back
- Accuracy: +4% Of Full Scale,At 70°F(21. 1°C)
- Pressure Rating: 15 psi(1.03bar)
- Ambient Temperature: 20-140°F (-7-60°C)
- Standard Gage Accessories: 1/8"NPT(M)Plugs For Duplicate Pressure Taps
- 1/8"NPT(M)Pipe Threat To Rubber Tubing Adapters
- And Three Flush Monting Adapters With Screws



## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Wetted Parts AISI 316L Stainless Steel
- Build in Stabilizer Movement
- Dry or Liquid Version
- NACE MR 0175 Compliance
- Helium Leak Tested
- 40mm Temperature Compensated Blow Out Disc
- Internal Vacuum/ Over Pressure Stops
- IP 66



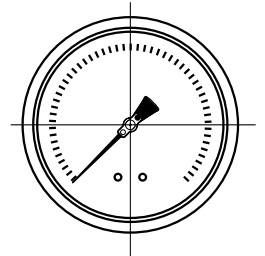
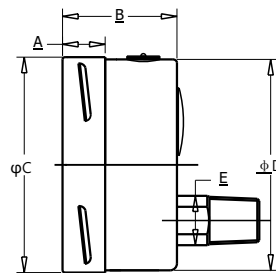
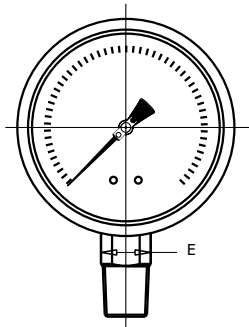
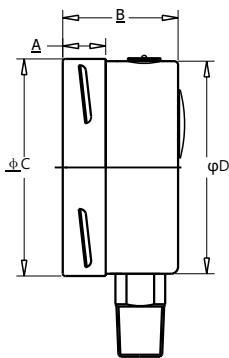
## SPECIFICATIONS

- Ambient Temperature: -4°F (-20°C) to +150°F(+65°C)
- Process Temperature: Max.392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max.Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Dial: Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 10,000psi

## ACCURACY AS PER ASME B.40.1

- 2.5"/3" : 2-1-2 (GRADE A)
- 4"/6"/8"/10" : 1-1-1 (GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.3"	2.5"	2.44"	0.55"	0.40
3"	0.55"	1.56"	3.1"	3"	0.67"	0.60
4"	0.67"	1.93"	3.95"	3.9"	0.87"	1.32
6"	0.68"	1.97"	6.34"	6.2"	0.87"	2.64
8"	0.68"	2"	7.87"	7.64"	0.87"	3.97
10"	0.68"	2"	9.84"	9.74"	0.87"	4.85

NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.3"	2.5"	2.44"	0.55"	0.40
3"	0.55"	1.56"	3.1"	3"	0.67"	0.60
4"	0.67"	1.93"	3.95"	3.9"	0.87"	1.32
6"	0.68"	1.97"	6.34"	6.2"	0.87"	2.64
8"	0.68"	2"	7.87"	7.64"	0.87"	3.97
10"	0.68"	2"	9.84"	9.74"	0.87"	4.85

Example

## HOW TO ORDER

### NOMINAL SIZE

D	E	F	H	I	J
2.5"	3"	4"	6"	8"	10"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 4 CENTER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)
- 4TM** 1/2" BSPT(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10000

E13

### OPTIONAL EXTRAS

- SG** OXYGEN SERVICE (FOR DRY VERSION)
- OA** ACCURACY + 0.5% OF F.S.
- TI** MONEL BOURDON & SOCKET (MONEL VERSION)
- TF** TESTED TO NACE STANDARD
- TB** HELIUM LEAK TEST
- SD** AISI 316 SS MOVEMENT
- SF** MOVEMENT WITH DAMPENING JELLY
- RI** 25mm BOD
- SI** KNIFE EDGE POINTER
- FN** 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP (AISI 316 SS)
- RG** ANTI PARALLAX MIRROR BAND DIAL
- RH** CUSTOM DESIGNED DIAL
- ZB** RECEIVER RANGE
- AT** ATEX (AS PER 2014/34/EU)
- ZC** FREON RANGE (WITH TEMPERATURE SCALE)
- ZD** AMMONIA RANGE (WITH TEMPERATURE SCALE)
- SW** DIAL TAG MARKING
- RW** PLEXI GLASS
- RX** SHATTERPROOF /SAFETY GLASS
- RZ** TOUGHENED GLASS
- SJ** MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION
- ZM** ELECTRO POLISHED CASE & BEZEL
- CK** EPOXY PAINTED CASE & BEZEL
- SQ** CASE WITH ROLLING TYPE BEZEL
- PS** AISI 316 SS CASE & BEZEL
- KA** ON-OFF TYPE VENT PLUG
- SX** SS TAG PLATE
- SY** AISI 316SS TAG PLATE
- SA** INTERNAL OVERPRESSURE STOP
- SB** INTERNAL VACUUM STOP
- ZL** OVER RANGE PROTECTION
- QB** INTEGRAL DAMPENING SCREW (AISI 316 SS)
- FL** INTEGRAL DAMPENING SCREW (MONEL)
- FS** FILLABLE LIQUID SILICON OIL
- FG** FILLABLE LIQUID GLYCERINE
- ZZ** DIELECTRIC OIL FILLED
- PX** DAMPENING LIQUID FLUOROLUBE FILLED
- PY** DAMPENING LIQUID GLYCERINE OIL FILLED
- PZ** DAMPENING LIQUID MINERAL LIQUID FILLED
- QA** DAMPENING LIQUID SILICON OIL FILLED
- GH** MATERIAL TEST CERTIFICATES
- PW** FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS

XX

**Ordering Example: P-25-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Wetted Parts MONEL
- Build in Stabilizer Movement
- Dry or Liquid Version
- NACE MR 0175 Compliance
- Helium Leak Tested
- 40mm Temperature Compensated Blow Out Disc
- Internal Vacuum/ Over Pressure Stops
- IP 66



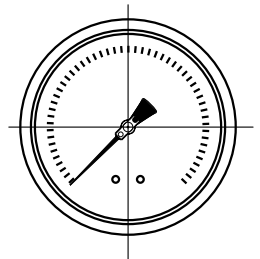
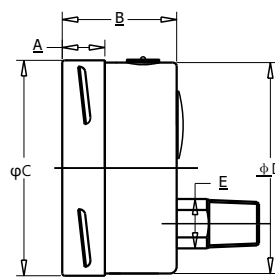
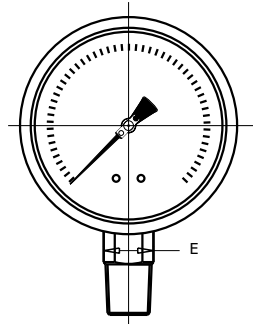
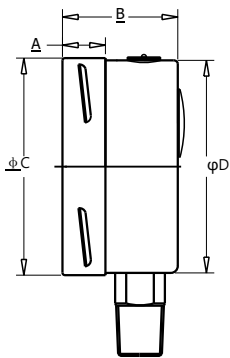
## SPECIFICATIONS

- Ambient Temperature: -4°F(-20°C) to +150°F(+65°C)
- Process Temperature: Max.392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max.Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: MONEL
- Bourdon: MONEL
- Movement: AISI 304 SS
- Dial:Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 10,000psi

## ACCURACY AS PER ASME B.40.1

- 2.5"/3" : 2-1-2 (GRADE A)
- 4"/4.5"/6"/8"/10" : 1-1-1 (GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.3"	2.5"	2.44"	0.55"	0.40
3"	0.55"	1.56"	3.1"	3"	0.67"	0.60
4"	0.67"	1.93"	3.95"	3.9"	0.87"	1.32
6"	0.68"	1.97"	6.34"	6.2"	0.87"	2.64
8"	0.68"	2"	7.87"	7.64"	0.87"	3.97
10"	0.68"	2"	9.84"	9.74"	0.87"	4.85

NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.3"	2.5"	2.44"	0.55"	0.40
3"	0.55"	1.56"	3.1"	3"	0.67"	0.60
4"	0.67"	1.93"	3.95"	3.9"	0.87"	1.32
6"	0.68"	1.97"	6.34"	6.2"	0.87"	2.64
8"	0.68"	2"	7.87"	7.64"	0.87"	3.97
10"	0.68"	2"	9.84"	9.74"	0.87"	4.85

Example

## HOW TO ORDER

NOMINAL SIZE	D	E	F	G	H	I	J
	2.5"	3"	4"	4.5"	6"	8"	10"

X

## TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

## GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)

\*\*\*Please consult factory for any special connections

XXX

## RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (mbar/°WC)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (mbar/°WC)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10000

E13

## OPTIONAL EXTRAS

- |   |  |
|---|--|
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)                          | <b>ZM</b> ELECTRO POLISHED CASE & BEZEL  |
| <b>OA</b> ACCURACY + 0.5% OF F.S.                                   | <b>CK</b> EPOXY PAINTED CASE & BEZEL   |
| <b>TF</b> TESTED TO NACE STANDARD                                   | <b>SQ</b> CASE WITH ROLLING TYPE BEZEL   |
| <b>TB</b> HELIUM LEAK TEST  | <b>PS</b> AISI 316 SS CASE & BEZEL   |
| <b>SD</b> AISI 316 SS MOVEMENT                                      | <b>KA</b> ON-OFF TYPE VENT PLUG  |
| <b>SF</b> MOVEMENT WITH DAMPENING JELLY                             | <b>SX</b> SS TAG PLATE   |
| <b>RI</b> 25mm BOD  | <b>SY</b> AISI 316SS TAG PLATE   |
| <b>SI</b> KNIFE EDGE POINTER  | <b>SA</b> INTERNAL OVER PRESSURE STOP  |
| <b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP (AISI 316 SS)   | <b>SB</b> INTERNAL VACUUM STOP   |
| <b>RG</b> ANTI PARALLAX MIRROR BAND DIAL                            | <b>ZL</b> OVER RANGE PROTECTION  |
| <b>RH</b> CUSTOM DESIGNED DIAL                                      | <b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)                               |
| <b>ZB</b> RECEIVER RANGE  | <b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)                                     |
| <b>AT</b> ATEX (AS PER 2014/34/EU)                                  | <b>FS</b> FILLABLE LIQUID SILICON OIL  |
| <b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)                      | <b>FG</b> FILLABLE LIQUID GLYCERINE  |
| <b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)                    | <b>ZZ</b> DIELECTRIC OIL FILLED  |
| <b>SW</b> DIAL TAG MARKING  | <b>PX</b> DAMPENING LIQUID FLUOROLUBE FILLED                                   |
| <b>RW</b> PLEXI GLASS   | <b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED                                |
| <b>RX</b> SHATTERPROOF /SAFETY GLASS                                | <b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED                               |
| <b>RZ</b> TOUGHENED GLASS   | <b>QA</b> DAMPENING LIQUID SILICON OIL FILLED                                  |
| <b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION | <b>GH</b> MATERIAL TEST CERTIFICATES   |
|   | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS |

XX

**Ordering Example: P-26-X-X-XXX-(E13)-XX**



### SPECIAL FEATURES

- Wetted Parts AISI 316L Stainless Steel
- Dry or Liquid Version
- NACE MR 0175 Compliance
- Helium Leak Tested
- Internal Vacuum/ Over Pressure Stops
- IP:65

### SPECIFICATIONS

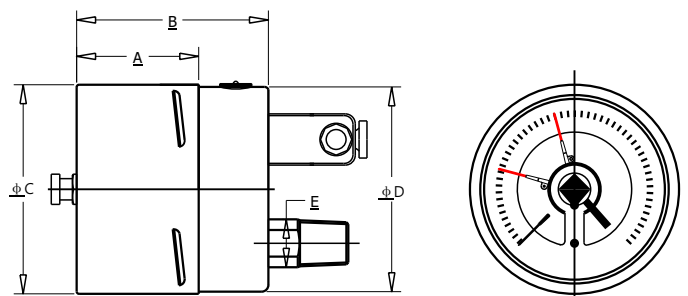
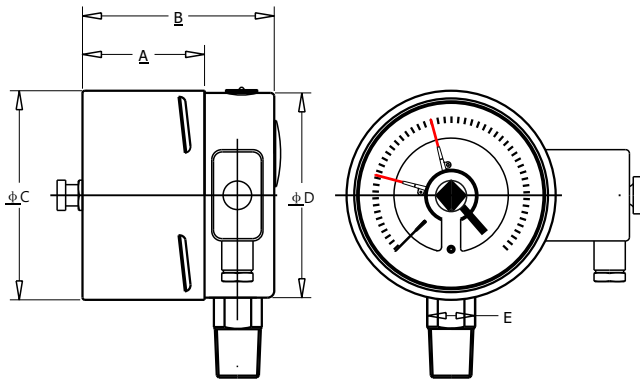
- Ambient Temperature: -4°F (-20°C) to +150°F(+65°C)
- Process Temperature: Max.392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max.Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Dial:Aluminum
- Pointer: Fixed
- Contact: Silver-Nickel
- Window: Safety Glass
- Range: Vacuum to 10,000PSI



### ACCURACY AS PER ASME B.40.1

4"/6" : 1-1-1 (GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
4"	2.2"	3.46"	3.95"	3.9"	0.87"	2.50
6"	2.13"	3.4"	6"	5.87"	0.87"	3.20

NS	A	B	φC	φD	E	Weight (lbs)
4"	2.2"	3.46"	3.95"	3.9"	0.87"	2.50



## SPECIAL FEATURES

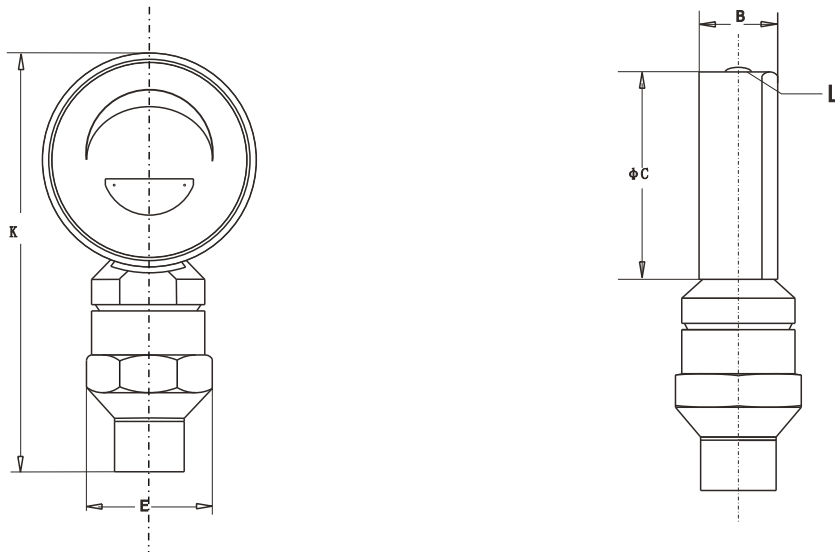
- Provide accurate Pressure Reading
- and Built In Dampening
- Liquid Filled Gauge Minimized Vibration
- And Wear To Gauge Movement
- Quick And Accurate Response To Pressure Changes
- The Stationery Dial And Moving Pointer Is Easy Seen

## SPECIFICATIONS

- Ambient Temperature: -77°F(-25°C) to + 131°F(+55°C)
- Operating Pressure Range: 75% of Scale Value
- Fork: Stainless Steel
- Movement: Brass
- Dial: Aluminum
- Pointer: Fixed
- Window: Perspex
- Case filling: Glycerine Filled
- Case&ring: Gun Metal Casting, Weather Proof Gray Hammertone
- Mounting & Entry: Direct With Bottom
- Sensing Element: AISI 316L SS Diaphragm
- Chamber Material: Stainless Steel
- Sealing Fluid: Silicon Oil
- Mud Protection: Neoprene Rubber Pad
- Process Connection: 2" NPT(M)
- Process Conn. Material: Mild Steel, Anti-Corrosion Treated
- Accuracy: 3-2-3 (Grade B)  
2-1-2 (Grade A)



Example



NS	K	B	φC	L	E
4"	7.0"	2.09"	4.9"	0.89"	2.56"
6"	6.8"	2.17"	6.3"	0.85"	2.76"

## HOW TO ORDER

### SERIES

P-31

X

### TYPE OF MOUNTING

2 BOTTOM

XX

### GAUGE CONNECTION

- 12BM** 1 1/2" BSP(M)
- 12NM** 1 1/2" NPT(M)
- JA** 2" BSP(M)
- JS** 2" NPT(M)

XX

### RANGE

7MPa	16MPa	25MPa	35MPa	40MPa	60MPa	80MPa	100MPa
------	-------	-------	-------	-------	-------	-------	--------

XXX

\*\*\*Please consult factory for any special connections

**Ordering Example: P-31-X-XX-XX**

**SPECIAL FEATURES**

All Welded Media Chamber  
 Static Pressure Up To 600 psi  
 Overload Safety Ensured by All Metal Construction  
 Standard Followed ASME -B.40.1 / EN837-3  
 IP:66

**SPECIFICATIONS**

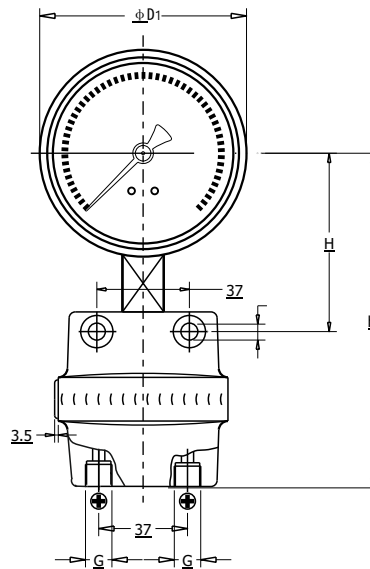
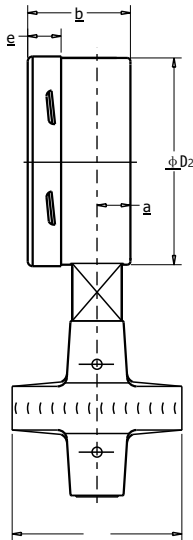
Ambient Temperature: -4°F (-20°C) to +150°F(+65°C)  
 Process Temperature: Max.212°F (+100°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 125% of Max.Scale Value  
 Case: AISI 304 SS  
 Joints: Tig Argon Arc Welding  
 Chamber: AISI 316 SS  
 Diaphragm: AISI 316L SS  
 Movement: AISI 304 SS  
 Dial:Aluminum  
 Pointer: Micro Zero Adjustable  
 Window: Safety Glass  
 Range: Vacuum to 15"WC-160psi



**ACCURACY AS PER ASME B.40.1**

4"/6" : 2-1-2 (GRADE A)

\*Please consult factory for better accuracy availability.



NS	Scale range	a	b	φD1	φD2	φd	e	G	h+1	H	Weight (lbs)
4"	≤0.25bar	0.61"	1.95"	4.0"	3.9"	5.5"	0.7"	G1/4"	6.3"	3.5"	4.01
4"	0.25bar	0.61"	1.95"	4.0"	3.9"	3.1"	0.7"	G1/4"	6.7"	3.4"	4.01
6"	≤0.25bar	0.61"	1.95"	6.3"	6.3"	5.5"	0.7"	G1/4"	7.5"	4.7"	4.94
6"	>0.25bar	0.61"	1.95"	6.3"	6.3"	3.1"	0.7"	G1/4"	7.9"	4.6"	4.94

Example

**HOW TO ORDER**

**NOMINAL SIZE**

F H  
4" 6"

X

**TYPE OF MOUNTING**

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM

X

**GAUGE CONNECTION**

- 2BF** 1/4" BSP(F)
- 2NF** 1/4" NPT(F)(Standard)

\*\*\*Please consult factory for any special connections

XXX

**DIAPHRAGM**

- UJ** AISI 316L SS(Standard)
- UJ** MONEL

XX

**SEAL CHAMBER**

- RB** AISI 316 SS(Standard)
- RD** MONEL

XX

**FILLING FLUIDS**

- UX** SILICON DC 200 (-40 TO 205°C/-40 TO 401 °F) (Standard)

X

**RANGE**

LPE9

CODE	LPE7	LPE8	LPE9	LPE10	LPE11	LPE12
RANGE ( "WC )	15"WC	30"WC	35"WC	60"WC	100"WC	160"WC
CODE	LPE13	LPE14	LPE15	LPE16	LPE17	LPE18
RANGE ( psi )	10psi	15psi	30psi	60psi	100psi	160psi

**OPTIONAL EXTRAS**

XX

- TI** MONEL DIAPHRAGM & CHAMBER (MONEL VERSION)
- TF** TESTED TO NACE STANDARD
- TB** HELIUM LEAK TEST
- SD** AISI 316 SS MOVEMENT
- SI** KNIFE EDGE POINTER
- FN** 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP (AISI 316 SS)
- RG** ANTI PARALLAX MIRROR BAND DIAL
- RH** CUSTOM DESIGNED DIAL
- SW** DIAL TAG MARKING
- RW** PLEXI GLASS
- RX** SHATTERPROOF /SAFETY GLASS
- RZ** TOUGHENED GLASS
- SJ** MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION
- ZM** ELECTRO POLISHED CASE & BEZEL
- CK** EPOXY PAINTED CASE & BEZEL
- OS** CASE WITH BAYONET TYPE BEZEL
- PS** AISI 316 SS CASE & BEZEL
- KA** ON-OFF TYPE VENT PLUG
- SX** SS TAG PLATE
- SY** AISI 316SS TAG PLATE
- FS** FILLABLE LIQUID SILICON OIL
- FG** FILLABLE LIQUID GLYCERINE
- ZZ** DIELECTRIC OIL FILLED
- PX** DAMPENING LIQUID FLUOROLUBE FILLED
- PY** DAMPENING LIQUID GLYCERINE OIL FILLED
- PZ** DAMPENING LIQUID MINERAL LIQUID FILLED
- QA** DAMPENING LIQUID SILICON OIL FILLED
- GH** MATERIAL TEST CERTIFICATES
- PW** FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS

**Ordering Example: P-32-X-X--XX-XX-X-(LPE9)-XX**



### SPECIAL FEATURES

- Phenolic Case With Solid Front Design
- Blow Out Back
- With Diaphragm Seal
- Standard Followed ASME -B.40.1
- Helium Leak Tested
- Built In Stabilizer Movement
- Ready For Oxygen Use
- Internal Vacuum /Over Pressure Stop
- IP:66



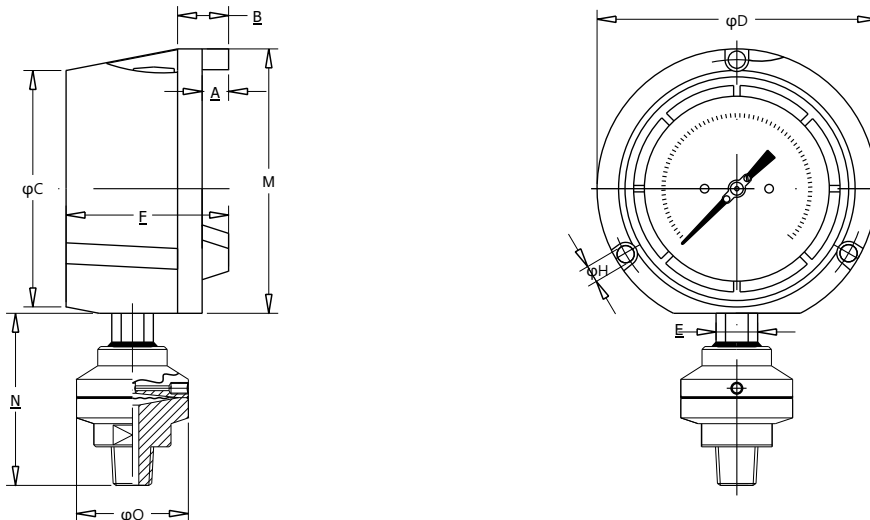
### SPECIFICATIONS

- Ambient Temperature: -4°F(-20°C) to + 150°F(+65°C)
- Process Temperature: Max.392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 150% of Max.Scale Value
- Case: Phenolic
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Diaphragm: AISI 316L SS
- Movement: AISI 304 SS
- Dial:Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 6,000psi

### ACCURACY AS PER ASME B.40.1

4.5" 0.5-0.5-0.5 GRADE 2A )

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	F	φG	φH	M	N	φO	Weight (lbs)
4.5"	0.6"	1"	5.1"	5.8"	0.87"	3.4"	5.4"	0.2"	5.6"	3.3"	2"	3.26

**HOW TO ORDER**

Example

**NOMINAL SIZE**

G

X

**TYPE OF MOUNTING**

4.5"

X

**2 BOTTOM SEAL BODY**

XXX

**CL** AISI 316 SS (Standard)

**CM** AISI 316L SS

**DIAPHRAGM**

XX

**UJ** AISI 316 SS (Standard)

**UM** MONEL

**UR** TITANIUM

**UQ** TANTALUM

**UL** HASTELLOY "C"

**UP** SILVER

**UW** INCONEL 600

**PROCESS CONNECTION**

XX

**WE** 1/4" BSP(F)(Standard)

**WC** 3/8" BSP(F)

**WD** 1/2" BSP(F)

**WJ** 3/4" BSP(F)

**WI** 1/4" NPT(F)

**WH** 1/2" NPT(F)

**WL** 3/4" NPT(F)

**WY** 1/4" NPT(M)

**WA** 1/2" NPT(M)

**WK** 3/4" NPT(M)

**WS** 1/4" BSP(M)

**WT** 3/8" BSP(M)

**WU** 1/2" BSP(M)(Standard)

**WF** 3/4" BSP(M)

NOTE: Connections like metric, PT/PF/Flaired/UNF/G/R etc can be provided on request.

**FILLING FLUIDS** (\*Consult factory for specifications, price and delivery.)

XX

**US** FLUOROLUBE 4.2[-45 to 175°C]

**UT** FLUOROLUBE 6.3[-40 to 235°C]

**UU** FLUOROLUBE FS-5[-28 to 148°C]

**UV** FOOD GRADE OIL[-20 to 140°C]

**UX** SILICON DC 200[-40 to 205°C] (Standard)

**UY** SILICON DC 704[10 to 337 ]

**UZ** SILICON DC 710[7 to 371 ]

**VA** SYLTHERM 800[-40 to 315 ]

**VB** SYLTHERM 800[-40 to 315 ]

**VC** SYLTHERM XLT[-100 to 260 ]  
HALOCARBON OIL\*

**REMOTE MOUNTING** (With capillary of Max. Up to 2 Mtrs.)

X

SPECIFY IN METERS (eg. 1.5=1.5 METERS 2.0=2 METERS)

**CAPILLARY**

X

**PE** AISI 304 SS

**PG** AISI 316 SS

**CAPILLARY COVERED WITH ARMOUR** (Applicable with PE or PG if selected)

XXX

**PF** AISI 304 SS

**PH** AISI 316 SS

**PI** PVC

**RANGE**

E13

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160
CODE	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26
RANGE (psi)	200	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000

**OPTIONAL EXTRAS AS PER P-05**

XX

Ordering Example: P-33-X-X-XXX-XX-XX-XX-X-X-XXX-(E13)-XX

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Wetted Parts AISI 316L Stainless Steel
- Build in Stabilizer Movement
- Dry or Liquid Version
- NACE MR 0175 Compliance
- Helium Leak Tested
- 40mm Temperature Compensated Blow Out Disc
- Internal Vacuum/ Over Pressure Stops
- High Range from 15,000 psi
- IP 66

## SPECIFICATIONS

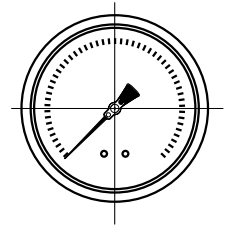
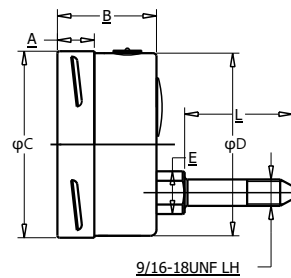
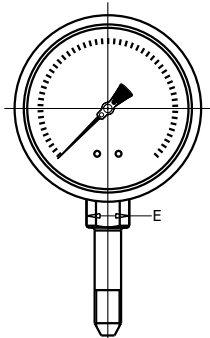
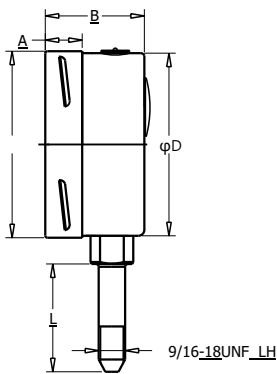
- Ambient Temperature: -4°F (-20°C) to + 150°F(+65°C)
- Process Temperature: Max.392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max.Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Movement: AISI 304 SS
- Dial:Aluminum
- Pointer: Micro Zero Adjustable
- Window: Safety Glass
- Range: 15,000 to 60,000 PSI



## ACCURACY AS PER ASME B.40.1

- 2.5"/3" : 2-1-2 (GRADE A)
- 4"/6"/8"/10" : 1-1-1 (GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	L	Weight (lbs)
2.5"	0.5"	1.3"	2.5"	2.44"	0.55"	1.3"	0.44
3"	0.55"	1.56"	3.1"	3"	0.67"	2.5"	0.64
4"	0.67"	1.93"	3.95"	3.9"	0.87"	2.5"	1.37
6"	0.68"	1.97"	6.34"	6.2"	0.87"	2.5"	2.29
8"	0.68"	2"	7.87"	7.64"	0.87"	2.5"	4.01
10"	0.68"	2"	9.84"	9.74"	0.87"	2.5"	4.89

NS	A	B	φC	φD	E	L	Weight (lbs)
2.5"	0.5"	1.3"	2.5"	2.44"	0.55"	1.3"	0.44
3"	0.55"	1.56"	3.1"	3"	0.67"	2.5"	0.64
4"	0.67"	1.93"	3.95"	3.9"	0.87"	2.5"	1.37
6"	0.68"	1.97"	6.34"	6.2"	0.87"	2.5"	2.29
8"	0.68"	2"	7.87"	7.64"	0.87"	2.5"	4.01
10"	0.68"	2"	9.84"	9.74"	0.87"	2.5"	4.89

## HOW TO ORDER

### NOMINAL SIZE

D	E	F	H	I	J
2.5"	3"	4"	6"	8"	10"

Example

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)
- 4UM** 9/16" UNF(M)
- 2HF** 1/4" HP(F)
- 2HM** 1/4" HP(F)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E29	E30	E31	E32	E33
RANGE (psi)	15000	20000	25000	30000	35000
CODE	E34	E35	E36	E37	
RANGE (psi)	40000	50000	55000	60000	

E13

### OPTIONAL EXTRAS

- |   |  |
|---|--|
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)                          | <b>ZM</b> ELECTRO POLISHED CASE & BEZEL  |
| <b>OA</b> ACCURACY + 0.5% OF F.S.                                   | <b>CK</b> EPOXY PAINTED CASE & BEZEL   |
| <b>TI</b> MONEL BOURDON & SOCKET (MONEL VERSION)                    | <b>SQ</b> CASE WITH ROLLING TYPE BEZEL   |
| <b>TF</b> TESTED TO NACE STANDARD                                   | <b>OS</b> CASE WITH BAYONET TYPE BEZEL   |
| <b>TB</b> HELIUM LEAK TEST  | <b>PS</b> AISI 316 SS CASE & BEZEL   |
| <b>SD</b> AISI 316 SS MOVEMENT                                      | <b>KA</b> ON-OFF TYPE VENT PLUG  |
| <b>SF</b> MOVEMENT WITH DAMPENING JELLY                             | <b>SX</b> SS TAG PLATE   |
| <b>RI</b> 25mm BOD  | <b>SY</b> AISI 316SS TAG PLATE   |
| <b>SI</b> KNIFE EDGE POINTER  | <b>SA</b> INTERNAL OVERPRESSURE STOP   |
| <b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET & 'U' CLAMP (AISI 316 SS)   | <b>SB</b> INTERNAL VACUUM STOP   |
| <b>RG</b> ANTI PARALLAX MIRROR BAND DIAL                            | <b>ZL</b> OVER RANGE PROTECTION  |
| <b>RH</b> CUSTOM DESIGNED DIAL                                      | <b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)                               |
| <b>ZB</b> RECEIVER RANGE  | <b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)                                     |
| <b>AT</b> ATEX (AS PER 2014/34/EU)                                  | <b>FS</b> FILLABLE LIQUID SILICON OIL  |
| <b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)                      | <b>FG</b> FILLABLE LIQUID GLYCERINE  |
| <b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)                    | <b>ZZ</b> DIELECTRIC OIL FILLED  |
| <b>SW</b> DIAL TAG MARKING  | <b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED                                   |
| <b>RW</b> PLEXI GLASS   | <b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED                                |
| <b>RX</b> SHATTERPROOF /SAFETY GLASS                                | <b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED                               |
| <b>RZ</b> TOUGHENED GLASS   | <b>QA</b> DAMPENING LIQUID SILICON OIL FILLED                                  |
| <b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION | <b>GH</b> MATERIAL TEST CERTIFICATES   |
|   | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS |

XX

Ordering Example: P-34-X-X-XXX-(E13)-XX

## SPECIAL FEATURES

- Standard Followed ASME-B 40.1 / EN837-1
- Cost Effective
- Build in Stabilizer Movement
- Dry or Liquid Version
- 40mm Temperature Compensated Blow Out Disc
- IP 65

## SPECIFICATIONS

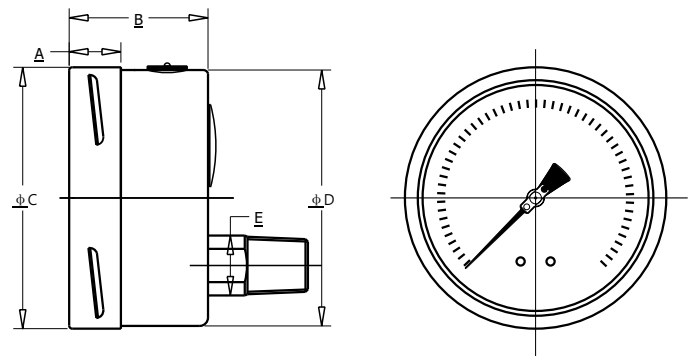
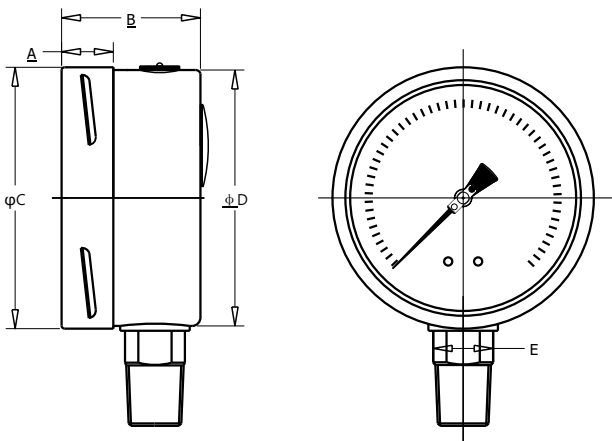
- Ambient Temperature: -4°F (-20°C) to +150°F(+65°C)
- Process Temperature: Max.248°F (120°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max.Scale Value
- Case: AISI 304 SS
- Joints: Alloy brazing/Soldering
- Socket: Copper Alloy
- Bourdon: Copper Alloy
- Movement: Copper Alloy
- Dial: Aluminum
- Pointer: Fixed/Micro Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 6,000 psi



## ACCURACY AS PER ASME B.40.1

- 2.5"/3" : 2-1-2 (GRADE A)
- 4"/6" : 1-1-1 (GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.36"	2.5"	2.44"	0.55"	0.40
3"	0.55"	1.56"	3.1"	3"	0.67"	0.60
4"	0.67"	1.93"	3.95"	3.9"	0.87"	0.41
6"	0.68"	1.97"	6.34"	6.2"	0.87"	2.65

NS	A	B	φC	φD	E	Weight (lbs)
2.5"	0.5"	1.3"	2.5"	2.44"	0.55"	0.40
3"	0.55"	1.56"	3.1"	3"	0.55"	0.60
4"	0.67"	1.93"	3.95"	3.9"	0.87"	0.41
6"	0.68"	1.97"	6.34"	6.2"	0.87"	2.65

Example

## HOW TO ORDER

### NOMINAL SIZE

D	E	F	H
2.5"	3"	4"	6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 4 CENTER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 4TM** 1/2" BSPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160
CODE	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26
RANGE (psi)	200	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000

E13

### OPTIONAL EXTRAS

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)</li> <li><b>OA</b> ACCURACY + 0.5% OF F.S.</li> <li><b>SF</b> MOVEMENT WITH DAMPENING JELLY</li> <li><b>SI</b> KNIFE EDGE POINTER</li> <li><b>FN</b> 2" PIPE/YOKE MOUNTING BRACKET &amp; 'U' CLAMP (AISI 316 SS)</li> <li><b>RG</b> ANTI PARALLAX MIRROR BAND DIAL</li> <li><b>RH</b> CUSTOM DESIGNED DIAL</li> <li><b>ZB</b> RECEIVER RANGE</li> <li><b>AT</b> ATEX (AS PER 2014/34/EU)</li> <li><b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)</li> <li><b>SW</b> DIAL TAG MARKING</li> <li><b>RW</b> PLEXI GLASS</li> <li><b>RX</b> SHATTERPROOF /SAFETY GLASS</li> <li><b>RZ</b> TOUGHENED GLASS</li> <li><b>SY</b> AISI 316SS TAG PLATE</li> <li><b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION</li> </ul> | <ul style="list-style-type: none"> <li><b>ZM</b> ELECTRO POLISHED CASE &amp; BEZEL</li> <li><b>CK</b> EPOXY PAINTED CASE &amp; BEZEL</li> <li><b>PS</b> AISI 316 SS CASE &amp; BEZEL</li> <li><b>KA</b> ON-OFF TYPE VENT PLUG</li> <li><b>SX</b> SS TAG PLATE</li> <li><b>SA</b> INTERNAL OVERPRESSURE STOP</li> <li><b>SB</b> INTERNAL VACUUM STOP</li> <li><b>ZL</b> OVER RANGE PROTECTION</li> <li><b>FK</b> INTEGRAL DAMPENING SCREW (BRASS)</li> <li><b>FS</b> FILLABLE LIQUID SILICON OIL</li> <li><b>FG</b> FILLABLE LIQUID GLYCERINE</li> <li><b>ZZ</b> DIELECTRIC OIL FILLED</li> <li><b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED</li> <li><b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED</li> <li><b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED</li> <li><b>QA</b> DAMPENING LIQUID SILICON OIL FILLED</li> <li><b>GH</b> MATERIAL TEST CERTIFICATES</li> <li><b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS</li> </ul> |
|--|--|

XX

**Ordering Example: P-34-X-X-XXX-(E13)-XX**



## SPECIAL FEATURES

- CE Approved Transmitter
- Local Display With 4 To 20mA Output
- Stainless Steel Case & Measuring System
- Helium leak tested
- Standard Followed ASME -B.40.1 / EN837-1
- IP:54

## SPECIFICATIONS

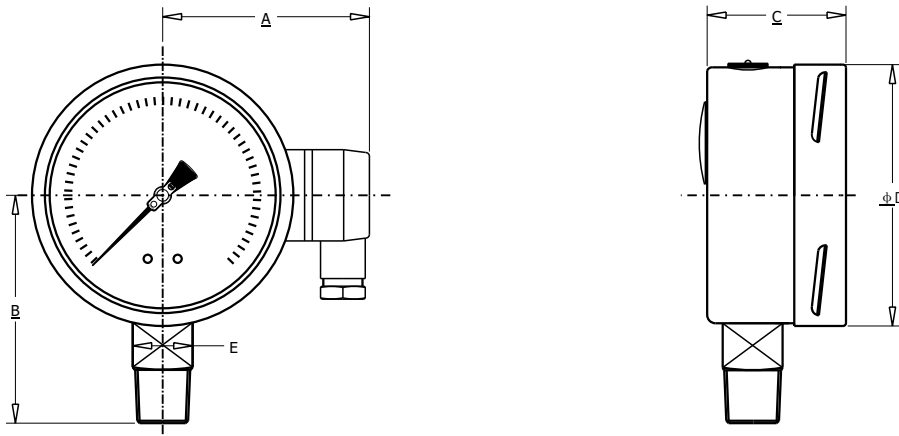
- Ambient Temperature: -4°F(-20°C) to + 150°F (+65°C)
- Process Temperature: Max.392°F (200°C)
- Operating Pressure Range: 75% of Scale Value
- Over Pressure Limit: 125% of Max.Scale Value
- Case: AISI 304 SS
- Joints: Tig Argon Arc Welding
- Socket: AISI 316L SS
- Bourdon: AISI 316L SS
- Dial:Aluminum
- Pointer: Mirco Zero Adjustable
- Window: Safety Glass
- Range: Vacuum to 7500psi
- Signal Output: 4-20mA DC(2-lime)  
1-5V. DC(3-lime)
- Working Voltage: 24V.DC
- Element: Ceramic Sensor
- Junction Box: PVC



## ACCURACY AS PER ASME B.40.1

4"/6" : 1-1-1 (GRADE 1A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
4"	5.59"	3.23"	1.97"	3.98"	0.87"	1.56
6"	7.4"	4.6"	1.97"	5.87"	0.87"	2.72

## HOW TO ORDER

Example

### NOMINAL SIZE

F H  
4 " 6"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM

X

### GAUGE CONNECTION

- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

XXX

\*\*\*Please consult factory for any special connections

### RANGE

E13

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
RANGE ( psi )	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160
CODE	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E26	E27
RANGE ( psi )	200	300	400	500	600	800	1000	1500	2000	3000	4000	6000	7500

### OPTIONAL EXTRAS

XX

- PS** AISI 316 CASE & BEZEL
- PW** FIVE POINT CALIBRATION CERTIFICATE
- PU** CALIBRATION CERTIFICATE TRACEABLE TO NATIONAL/INTERNATIONAL STANDARDS
- QB** INTEGRAL DAMPENING SCREW(AISI 316SS)
- RH** CUSTOM DESIGNED DIAL
- SU** BRASS MOVEMENT
- RW** PLEXI GLASS
- RX** SHATTERPROOF/SAFETY GLASS
- RZ** TOUGHENED
- SW** DIAL TAG MARKING
- GH** MATERIAL TEST CERTIFICATES
- SX** SS TAG PLATE
- SY** AISI 316SS TAG PLATE

Ordering Example: **P-36-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

Stainless Steel Case & Measuring System  
 316 L SS/304 SS Wetted Parts Welded With Case  
 Helium Leak Tested Ready For Oxygen Use  
 Standard Followed ASME -B.40.1  
 IP:66

## SPECIFICATIONS

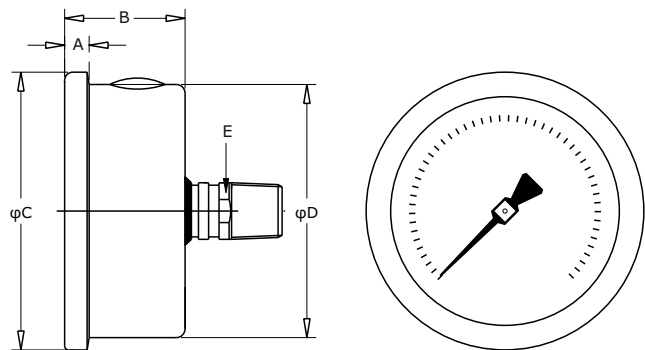
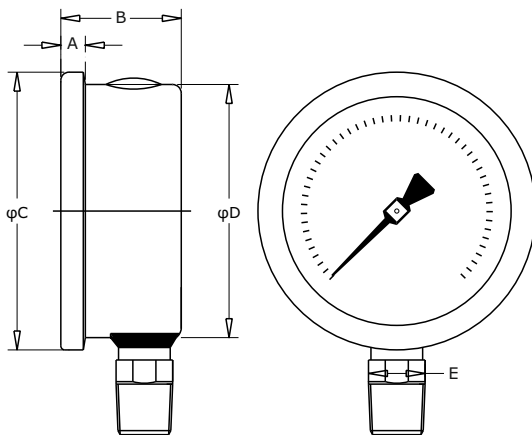
Ambient Temperature: -4°F(-20°C) to + 150°F (+65°C)  
 Process Temperature: Max.392°F (200°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 125% of Max.Scale Value  
 Case: AISI 304 SS  
 Joints: Tig Argon Arc Welding  
 Socket: AISI 304 SS  
 Bourdon: AISI 316L SS  
 Movement: Brass  
 Dial: Aluminum  
 Pointer: Fixed  
 Window: PC Lens  
 Range: Vacuum to 10,000psi



## ACCURACY AS PER ASME B.40.1

1.5"/2" : 3-2-3 (Grade B)  
 2.5"/3"/4" : 2-1-2 (Grade A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.2"	1.0"	1.8"	1.6"	0.43"	0.18
2"	0.2"	1.2"	2.2"	2.0"	0.55"	0.26
2.5"	0.3"	1.2"	2.7"	2.4"	0.55"	0.40
3"	0.3"	1.4"	3.4"	3.1"	0.67"	0.73
4"	0.3"	1.9"	4.3"	3.9"	0.87"	1.32

NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.2"	1.0"	1.8"	1.6"	0.43"	0.18
2"	0.2"	1.2"	2.2"	2.0"	0.55"	0.26
2.5"	0.3"	1.2"	2.7"	2.4"	0.55"	0.40
3"	0.3"	1.4"	3.4"	3.1"	0.67"	0.73

## HOW TO ORDER

Example

### NOMINAL SIZE

B	C	D	E	F
1.5"	2"	2.5"	3"	4"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 4 CENTER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK CONNECTION WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 1BM** 1/8" BSP(M)
- 1NM** 1/8" NPT(M)
- 1TM** 1/8" BSPT(M)
- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 2TM** 1/4" BSPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 3TM** 3/8" BSPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10,000

E13

### OPTIONAL EXTRAS

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)</li> <li><b>TI</b> MONEL BOURDON &amp; SOCKET (MONEL VERSION)</li> <li><b>TF</b> TESTED TO NACE STANDARD</li> <li><b>TB</b> HELIUM LEAK TEST</li> <li><b>SD</b> AISI 316 SS MOVEMENT</li> <li><b>SF</b> MOVEMENT WITH DAMPENING JELLY</li> <li><b>RI</b> 25mm BOD</li> <li><b>RH</b> CUSTOM DESIGNED DIAL</li> <li><b>ZB</b> RECEIVER RANGE</li> <li><b>AT</b> ATEX (AS PER 2014/34/EU)</li> <li><b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)</li> <li><b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)</li> <li><b>SW</b> DIAL TAG MARKING</li> <li><b>RW</b> PLEXI GLASS</li> <li><b>RX</b> SHATTERPROOF /SAFETY GLASS</li> <li><b>RZ</b> TOUGHENED GLASS</li> <li><b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS FILLABLE VERSION</li> <li><b>ZM</b> ELECTRO POLISHED CASE &amp; BEZEL</li> </ul> | <ul style="list-style-type: none"> <li><b>CK</b> EPOXY PAINTED CASE &amp; BEZEL</li> <li><b>SQ</b> CASE WITH ROLLING TYPE BEZEL</li> <li><b>OS</b> CASE WITH BAYONET TYPE BEZEL</li> <li><b>PS</b> AISI 316 SS CASE &amp; BEZEL</li> <li><b>KA</b> ON-OFF TYPE VENT PLUG</li> <li><b>SX</b> SS TAG PLATE</li> <li><b>SY</b> AISI 316SS TAG PLATE</li> <li><b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)</li> <li><b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)</li> <li><b>FS</b> FILLABLE LIQUID SILICON OIL</li> <li><b>FG</b> FILLABLE LIQUID GLYCERINE</li> <li><b>ZZ</b> DIELECTRIC OIL FILLED</li> <li><b>PX</b> DAMPENING LIQUID FLUOROLUBE FILLED</li> <li><b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED</li> <li><b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED</li> <li><b>QA</b> DAMPENING LIQUID SILICON OIL FILLED</li> <li><b>GH</b> MATERIAL TEST CERTIFICATES</li> <li><b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS</li> </ul> |
|--|--|

XX

**Ordering Example: P-37-X-X-XXX-(E13)-XX**

## SPECIAL FEATURES

Economic Type  
 Oxygen Clean Service Version  
 Standard Followed ASME -B.40.1 / EN837-1  
 IP:53

## SPECIFICATIONS

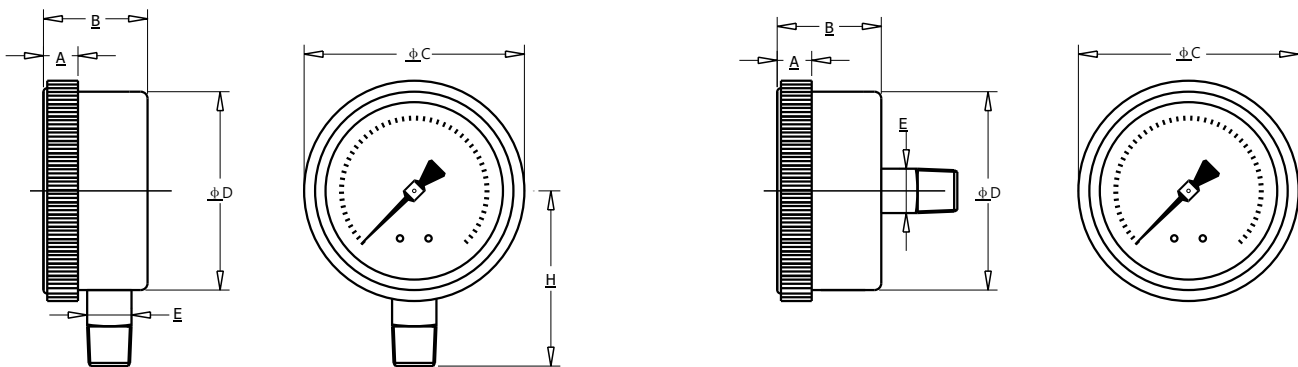
Ambient Temperature: -4°F (-20°C) to +150°F(+65°C)  
 Process Temperature: Max.250°F (120°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 120% of Max.Scale Value  
 Case: Steel Powder Coated  
 Joints: Alloy Brazing/Soldering  
 Socket: Copper Alloy  
 Bourdon: Copper Alloy  
 Movement: Copper Alloy  
 Dial:Aluminum  
 Pointer: Fixed  
 Window: Twist-on plastic lens  
 Range: Vacuum to 6000psi



## ACCURACY AS PER ASME B.40.1

2" : 3-2-3 (Grade B)  
 2.5" 2-1-2 (Grade A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	H	Weight (lbs)
2"	0.37"	1.1"	2.2"	2"	0.55"	2"	0.22
2.5"	0.45"	1.18"	2.6"	2.4"	0.55"	2.3"	0.26

NS	A	B	φC	φD	E	Weight (lbs)
2"	0.37"	1.1"	2.2"	2"	0.55"	0.22
2.5"	0.45"	1.14"	2.6"	2.4"	0.55"	0.26

## HOW TO ORDER

Example

### NOMINAL SIZE

C	D
2 "	2.5 "

X

### TYPE OF MOUNTING

2 BOTTOM  
4 CENTER BACK

X

### GAUGE CONNECTION

**2BM** 1/4" BSP(M)  
**2NM** 1/4" NPT(M)  
**3BM** 3/8" BSP(M)  
**3NM** 3/8" NPT(M)  
**4BM** 1/2" BSP(M)  
**4NM** 1/2" NPT(M)  
**4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160
CODE	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26
RANGE (psi)	200	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000

E13

### OPTIONAL EXTRAS

<b>SF</b> MOVEMENT WITH DAMPENING JELLY	<b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS (FOR DRY VERSION)
<b>RH</b> CUSTOM DESIGNED DIAL	<b>ZM</b> ELECTRO POLISHED CASE & BEZEL
<b>ZB</b> RECEIVER RANGE	<b>CK</b> EPOXY PAINTED CASE & BEZEL
<b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)	<b>SQ</b> CASE WITH ROLLING TYPE BEZEL
<b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE )	<b>FK</b> INTEGRAL DAMPENING SCREW (BRASS)
<b>SW</b> DIAL TAG MARKING	<b>GH</b> MATERIAL TEST CERTIFICATES
<b>RW</b> PLEXI GLASS	<b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS
<b>RZ</b> TOUGHENED GLASS	
<b>SY</b> AISI 316SS TAG PLATE	

XX

**Ordering Example: P-38-X-X-XXX-(E13)-XX**



## SPECIAL FEATURES

Stainless Steel Case Welded To Socket  
 Dry or Liquid Filled Version  
 Standard Followed :  
 NSF/ANSI 61 Section 8-2016  
 NSF/ANSI 372-2016  
 Helium Leak Tested  
 Ready For Oxygen Use  
 NSF Certificate for drinking water application  
 IP:66



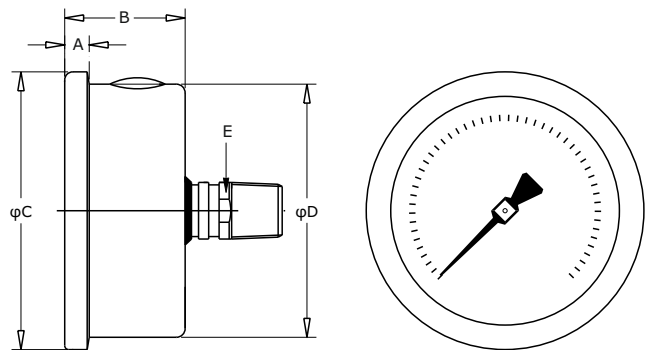
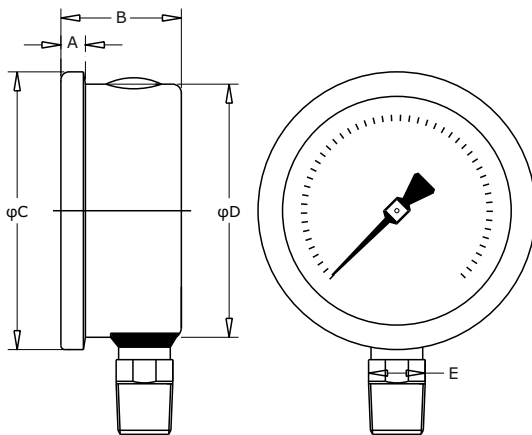
## SPECIFICATIONS

Ambient Temperature: -4°F(-20°C) to + 150°F(+65°C)  
 Process Temperature: Max.392°F (200°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 125% of Max.Scale Value  
 Case: AISI 304 SS Crimped Type  
 Joints: Tig Argon Arc Welding  
 Socket: AISI 304 SS  
 Bourdon: AISI 316L SS  
 Movement: Brass  
 Dial: Aluminum  
 Pointer: Fixed  
 Window: PC lens  
 Range: Vacuum to 10,000psi

## ACCURACY AS PER ASME B.40.1

1.5"/2" : 3-2-3 (Grade B)  
 2.5"/3"/4" : 2-1-2 (Grade A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.2"	1.0"	1.8"	1.6"	0.43"	0.18
2"	0.2"	1.2"	2.2"	2.0"	0.55"	0.26
2.5"	0.3"	1.2"	2.7"	2.4"	0.55"	0.40
3"	0.3"	1.4"	3.4"	3.1"	0.67"	0.73
4"	0.3"	1.9"	4.3"	3.9"	0.87"	1.32

NS	A	B	φC	φD	E	Weight (lbs)
1.5"	0.2"	1.0"	1.8"	1.6"	0.43"	0.18
2"	0.2"	1.2"	2.2"	2.0"	0.55"	0.26
2.5"	0.3"	1.2"	2.7"	2.4"	0.55"	0.40
3"	0.3"	1.4"	3.4"	3.1"	0.67"	0.73

## HOW TO ORDER

Example

### NOMINAL SIZE

B	C	D	E	F
1.5"	2"	2.5"	3"	4"

X

### TYPE OF MOUNTING

- 1 WALL/SURFACE/PROJECTION MOUNTING WITH BOTTOM
- 2 BOTTOM
- 3 LOWER BACK
- 4 CENTER BACK
- 5 LOWER BACK WITH FRONT FLANGE
- 6 LOWER BACK WITH MOUNTING BRACKET
- 7 CENTER BACK WITH FRONT FLANGE
- 8 CENTER BACK WITH MOUNTING BRACKET

X

### GAUGE CONNECTION

- 1BM** 1/8" BSP(M)
- 1NM** 1/8" NPT(M)
- 1TM** 1/8" BSPT(M)
- 2BM** 1/4" BSP(M)
- 2NM** 1/4" NPT(M)
- 2TM** 1/4" BSPT(M)
- 3BM** 3/8" BSP(M)
- 3NM** 3/8" NPT(M)
- 3TM** 3/8" BSPT(M)
- 4BM** 1/2" BSP(M)
- 4NM** 1/2" NPT(M)
- 4MM** M20 X 1.5(M)

\*\*\*Please consult factory for any special connections

XXX

### RANGE

CODE	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14
RANGE (psi)	-30"hg	-30"hg-15	-30"hg-30	-30"hg-60	-30"hg-100	-30"hg-160	-30"hg-200	-30"hg-300	15	30	60	100	160	200
CODE	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28
RANGE (psi)	300	400	500	600	800	1000	1500	2000	3000	4000	5000	6000	7500	10,000

E13

### OPTIONAL EXTRAS

- |  |  |
|--|--|
| <b>SG</b> OXYGEN SERVICE (FOR DRY VERSION)         | <b>CK</b> EPOXY PAINTED CASE & BEZEL   |
| <b>TI</b> MONEL BOURDON & SOCKET (MONEL VERSION)   | <b>SQ</b> CASE WITH ROLLING TYPE BEZEL   |
| <b>TF</b> TESTED TO NACE STANDARD                  | <b>OS</b> CASE WITH BAYONET TYPE BEZEL   |
| <b>TB</b> HELIUM LEAK TEST                         | <b>PS</b> AISI 316 SS CASE & BEZEL   |
| <b>SD</b> AISI 316 SS MOVEMENT                     | <b>KA</b> ON-OFF TYPE VENT PLUG  |
| <b>SF</b> MOVEMENT WITH DAMPENING JELLY            | <b>SX</b> SS TAG PLATE   |
| <b>RI</b> 25mm BOD                                 | <b>SY</b> AISI 316SS TAG PLATE   |
| <b>RH</b> CUSTOM DESIGNED DIAL                     | <b>QB</b> INTEGRAL DAMPENING SCREW (AISI 316 SS)                               |
| <b>ZB</b> RECEIVER RANGE                           | <b>FL</b> INTEGRAL DAMPENING SCREW (MONEL)                                     |
| <b>AT</b> ATEX (AS PER 2014/34/EU)                 | <b>FS</b> FILLABLE LIQUID SILICON OIL  |
| <b>ZC</b> FREON RANGE (WITH TEMPERATURE SCALE)     | <b>FG</b> FILLABLE LIQUID GLYCERINE  |
| <b>ZD</b> AMMONIA RANGE (WITH TEMPERATURE SCALE)   | <b>ZZ</b> DIELECTRIC OIL FILLED  |
| <b>SW</b> DIAL TAG MARKING                         | <b>PX</b> DAMPENING LIQUID FLOUROLUBE FILLED                                   |
| <b>RW</b> PLEXI GLASS                              | <b>PY</b> DAMPENING LIQUID GLYCERINE OIL FILLED                                |
| <b>RX</b> SHATTERPROOF /SAFETY GLASS               | <b>PZ</b> DAMPENING LIQUID MINERAL LIQUID FILLED                               |
| <b>RZ</b> TOUGHENED GLASS                          | <b>QA</b> DAMPENING LIQUID SILICON OIL FILLED                                  |
| <b>SJ</b> MAXIMUM READING POINTER WITH PLEXI GLASS | <b>GH</b> MATERIAL TEST CERTIFICATES   |
| <b>FILLABLE VERSION</b>                            | <b>PW</b> FIVE POINT CALIBRATION CERTIFICATE NATIONAL/ INTERNATIONAL STANDARDS |
| <b>ZM</b> ELECTRO POLISHED CASE & BEZEL            |  |

XX

Ordering Example: P-39-X-X-XXX-(E13)-XX

## SPECIAL FEATURES

Economic Version  
 RANGE 0-300 psi  
 Standard Followed ASME -B.40.1 / EN837-1  
 Fire sprinkler systems application  
 IP:53

## SPECIFICATIONS

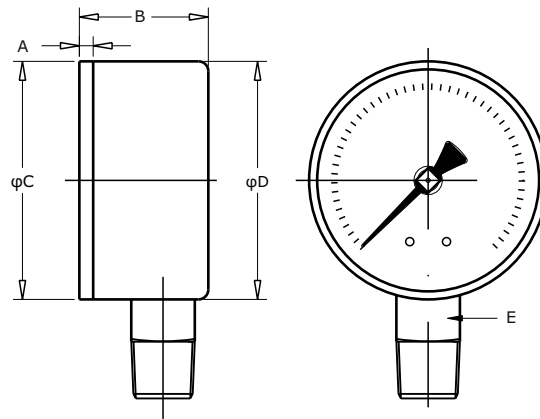
Ambient Temperature: -4°F(-20°C) to +150°F(+65°C)  
 Process Temperature: Max.250°F (120°C)  
 Operating Pressure Range: 75% of Scale Value  
 Over Pressure Limit: 120% of Max.Scale Value  
 Case: ABS Plastic Case  
 Joints: Alloy Brazing/Soldering  
 Socket: Copper Alloy  
 Bourdon: Copper Alloy  
 Movement: Copper Alloy  
 Dial:Aluminum  
 Pointer: Fixed  
 Window: Snap in Plastic Lens  
 Range: 300psi



## ACCURACY AS PER ASME B.40.1

4" 2-1-2 (GRADE A)

\*Please consult factory for better accuracy availability.



NS	A	B	φC	φD	E	Weight (lbs)
4"	0.14"	1.2"	3.9"	3.9"	0.55"	0.82

## SPECIAL FEATURES

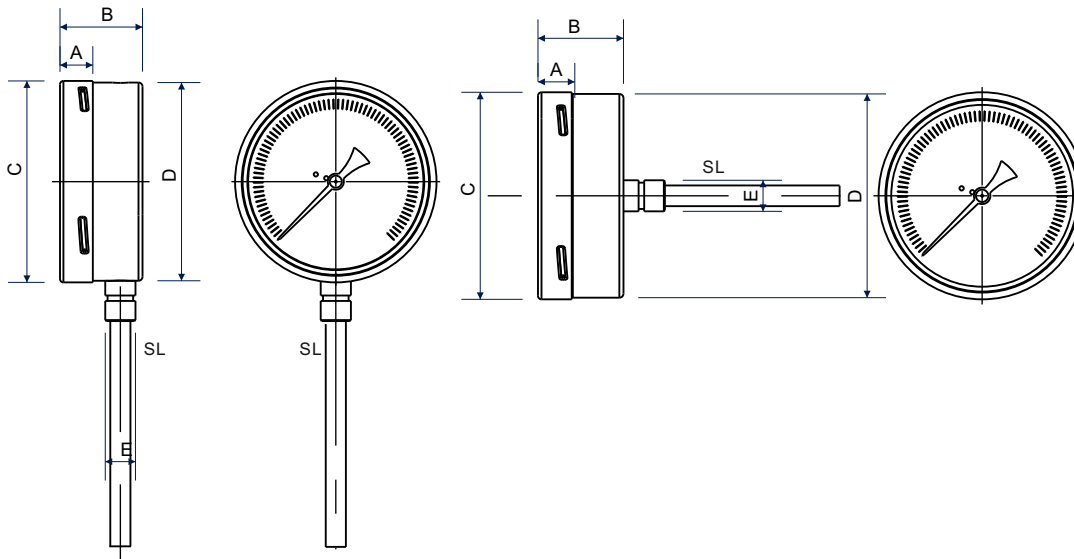
Inert Gas Filled Expansion System.  
 Stainless Steel Case & Stem  
 With or Without Thermowell  
 Standard Followed EN 13190.

## SPECIFICATIONS

Accuracy : Class 1 as per EN 13190  
 Ambient Temperature: -13°F (-25°C) to 149°F (65°C)  
 Operating Pressure : 25bar (Without Thermowell)  
 Stem Diameter: 10mm  
 Case & Bezel: AISI 304 SS (Bayonet Type)  
 Stem Connection: AISI 316 SS  
 Joint: Tig Argon Arc Welding  
 Protection: IP 65  
 Dial: Aluminium  
 Pointer: Aluminium  
 Window: Safety Glass  
 Gasket: NBR

## APPLICATIONS

All Stainless Steel Inert Gas Filled Thermometers  
 Areas suitable for Corrosive Media / Environments  
 In Process Industry Like Chemical , Food , Pharmaceutical,  
 Pulp & Paper Refinery, Cement & Many More.



## RANGE TABLE

Nominal Range, Measuring Range & Limits of Error as per En13190		
Nominal Range(°C)	Measuring Range(°C)	Limits of Error(+°C)
-20 to +40	-10 to +30	1
-20 to +60	-10 to +50	1
-20 to +120	-10 to +110	2
-30 to +30	-20 to +20	1
-30 to +50	-20 to +40	1
-30 to +70	-20 to +60	1
-40 to +40	-30 to +30	1
-40 to +60	-30 to +50	1
-100 to +60	-80 to +40	2
0 to 60	10 to 50	1
0 to 80	10 to 70	1
0 to 100	10 to 90	1
0 to 120	10 to 110	2
0 to 160	20 to 140	2
0 to 200	20 to 180	2
0 to 250	30 to 220	2.5
0 to 300	30 to 270	5
0 to 400	50 to 350	5
0 to 500	50 to 450	5
0 to 600	100 to 500	10

NS	A (Inch) mm	B (Inch) mm	φC (Inch) mm	φD (Inch) mm	φE (Inch) mm	Weight (lbs) Kg
2.5"	(0.47) 12	(1.53) 39	(2.5) 63.4	(2.44) 62	(0.59) 15	
4"	(3.87) 98.3	(3.87) 98.3	(3.87) 98.3	(3.87) 98.3	(3.87) 98.3	

NS	A (Inch) mm	B (Inch) mm	φC (Inch) mm	φD (Inch) mm	φE (Inch) mm	Weight (lbs) Kg
2.5"	(0.47) 12	(1.53) 39	(2.5) 63.4	(2.44) 62	(0.59) 15	
4"	(3.87) 98.3	(3.87) 98.3	(3.87) 98.3	(3.87) 98.3	(3.87) 98.3	

## HOW TO ORDER

NOMINAL SIZE	D	F	G	H
	2.5 "(63mm)	4"(100mm)	5"(125mm)	6"(160mm)

## TYPE OF MOUNTING

- |  |  |
|--|--|
| 1 WALL /SURFACE /PROJECTION MOUNTING WITH BOTTOM ENTRY | 5 LOWER BACK ENTRY WITH FRONT FLANGE     |
| 2 DIRECT BOTTOM ENTRY                                  | 8 EVERY ANGLE BACK ENTRY                 |
| 3 DIRECT LOWER BACK ENTRY                              | 9 LOWER BACK ENTRY WITH MOUNTING BRACKET |

## PROCESS CONNECTION

- |                                  |                       |
|----------------------------------|-----------------------|
| <b>4BM</b> 1/2"BSP(M) (Standard) | <b>6BM</b> 3/4"BSP(M) |
| <b>4NM</b> 1/2"NPT(M)            | <b>4MM</b> M20X1.5(M) |
| <b>4TM</b> 1/2"BSPT(M)           |                       |

Note : Connections like Metric /PT/Flaried/UNF/G/R Etc can be provided on request.

\*\*\*Please consult factory for any special connections

## PROCESS CONNECTION TYPE

- |                      |                 |                            |
|----------------------|-----------------|----------------------------|
| <b>ZI</b> Adjustable | <b>ZJ</b> Fixed | <b>KJ</b> Revolving/Swivel |
|----------------------|-----------------|----------------------------|

## STEM DIAMETER

- |               |                        |               |                 |                |                |
|---------------|------------------------|---------------|-----------------|----------------|----------------|
| <b>1U</b> 6mm | <b>2M</b> 1/4"(6.35mm) | <b>2C</b> 8mm | <b>2I</b> 9.5mm | <b>2J</b> 10mm | <b>2K</b> 12mm |
|---------------|------------------------|---------------|-----------------|----------------|----------------|

## STEM LENGTH (BELOW THREAD)

- Minimum Stem Length : 120 mm  
 Maximum Stem Length : 600 mm  
 Stem Diameter : 10 mm

## RANGE

Refer Range Table

## TYPE

- |                           |                          |
|---------------------------|--------------------------|
| <b>A1</b> With Rigid Stem | <b>A2</b> With Capillary |
|---------------------------|--------------------------|

## CAPILLARY LENGTH (Max up to 25Mtrs.)

In Meters (Eg.1.5=1.5 Meters , 2.0=2 Meters)

## CAPILLARY LENGTH (Minimum Curve Radius 50 m/m)

**PE** AISI 304 SS

## OPTIONAL EXTRAS

- PS** AISI 316SS CASE & BEZEL\*\*  
**PW** FIVE POINT CALIBRATION CERTIFICATE  
**QA** DAMPENING LIQUID SILICON OIL (-45/200 C)  
**PY** DAMPENING LIQUID GLYCERINE (UP TO 100 C) EXCEPT ELECTRICAL CONTACT  
**SJ** MAXIMUM READING POINTER WITH PLEXI GLASS ( FOR DRY VERSION OF 100mm to 150mm)  
**GH** MATERIAL TEST CERTIFICATE

- RH** CUSTOM DESIGN DIAL  
**RX** SHATTERPROOF /SAFETY GLASS  
**RZ** TOUGHENED GLASS  
**SW** DIAL TAG MARKING  
**SX** SS TAG PLATE THERMOWELL

\*Gasket & Filling plug of NBR. Consult factory for Viton.  
 \*\*Available for NS 100mm to 150mm.Consult with Factory for Minimum order quantity and delivery.  
 \*Material Certificate according to EN 10204 3.1 B

## ELECTRIC CONTACTS ( FOR NS 100 & 150 mm Only) (CE APPROVED)

( WITH IP PROTECTION UP TO Ip55 & WINDOW POLYCARBONATE DOME TYPE)

**A) SINGLE INSULATED MAGNETIC SNAP ACTION TYPE\* (230 V AC, 1 Amp.) (48 V DC, 0.5 Amp.)**

- RJ** SINGLE; NORMALLY CLOSED (1 NC)  
**RK** DOUBLE; NORMALLY CLOSED+ NORMALLY OPEN (1NC + 1NO)  
**RL** SINGLE; NORMALLY OPEN (1 NO)  
**RM** DOUBLE; NORMALLY OPEN + NORMALLY CLOSED (1 NO + 1 NC)  
**RN** DOUBLE; NORMALLY CLOSED (BOTH NC)  
**RO** DOUBLE; NORMALLY OPEN ( BOTH NO)  
**RU** BOOSTER WITH RELAY FOR CURRENT UPTO 5 Amp.

**B) INDUCTIVE TYPE (220 V AC, 0.4 Amp.)**

- YW** SINGLE; NORMALLY OPEN ( 1 NO)  
**YV** SINGLE; NORMALLY CLOSED ( 1 NC)  
**YX** DOUBLE; NORMALLY CLOSED + NORMALLY OPEN (1NC + 1 NO)  
**YY** DOUBLE; NORMALLY OPEN (BOTH NO)  
**YZ** DOUBLE; NORMALLY CLOSED (BOTH NC)  
**ZA** DOUBLE; NORMALLY OPEN + NORMALLY CLOSED (1 NO + 1 NC)

\*For Double Insulated Electrical Contacts , Consult Factory for Price & Delivery .

**Ordering Example: T-01-X-X-XXX-XX-XX-100mm-0/100°C-XX-3Mtr-XX-XX-XX-XX**

## SPECIAL FEATURES

- Stainless Steel Case & Stem
- Bottom/Back/Every Angle Entry
- Silicon Oil Filled ( Optional)
- With or Without Thermowell
- External Zero Adjustable (Optional)
- Standard Followed En13190.

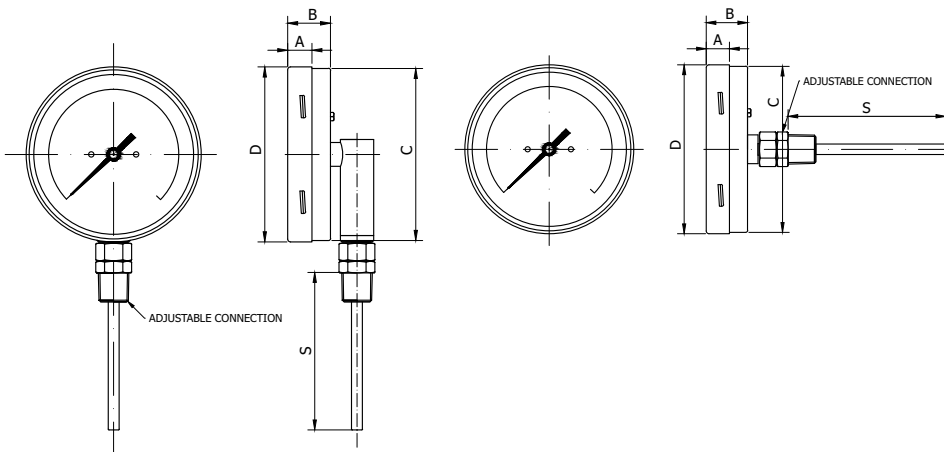
## SPECIFICATIONS

- Accuracy : 1 as per EN 13190
- Ambient Temperature: -13°F (-25°C) to 108°F (60°C)
- Operating Pressure : 25bar (Without Thermowell)
- Stem Diameter: 8mm
- Case & Bezel: AISI 304 SS (Bayonet Type)
- Stem Connection: AISI 316 SS
- Joint: Tig Argon Arc Welding
- Sensing Element: Coiled Bimetal
- Protection: IP 65(EN 60529/IEC529)
- Dial: Aluminium
- Pointer: Aluminium
- Window: Safety Glass
- Gasket: NBR



## APPLICATIONS

- Chemical / Refinery / Fertilizer / Petrochemicals /
- Pharmaceutical / Power / Cement / Sugar /
- Food & Beverages / Pulp & Paper & Allied
- Process Industries which are having Corrosive Media / Environment.

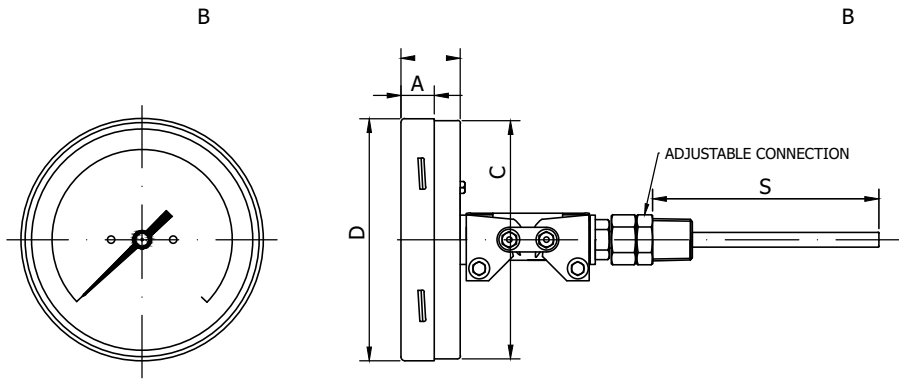


NS	A	B	C	D
63	13	23.5	62	63.5
80	13.5	26	78	80
100	13.5	26	99	100
125	18	29	126	128
160	18	29	157	160

NS	A	B	C	D
50	5.5	12.5	52	57
63	13	23.5	62	63.5
80	13.5	26	78	80
100	13.5	26	99	100
125	18	29	126	128
160	18	29	157	160

Nominal Range, Measuring Range & Limits of Error as per En13190		
Nominal Range(°C)	Measuring Range(°C)	Limits of Error(+/-°C)
-20 to +40	-10 to +30	1
-20 to +60	-10 to +50	1
-20 to +120	-10 to +110	2
-30 to +30	-20 to +20	1
-30 to +50	-20 to +40	1
-30 to +70	-20 to +60	1
-40 to +40	-30 to +30	1
-40 to +60	-30 to +50	1
-100 to +60	-80 to +40	2
0 to 60	10 to 50	1
0 to 80	10 to 70	1
0 to 100	10 to 90	1
0 to 120	10 to 110	2
0 to 160	20 to 140	2
0 to 200	20 to 180	2
0 to 250	30 to 220	2.5
0 to 300	30 to 270	5
0 to 400	50 to 350	5
0 to 500	50 to 450	5
0 to 600	100 to 500	10





NS	A	B	C	D	
63	13	23.5	62		
80	13.5	26	78	80	
100	13.5	26	99	100	
125	18	29	126	128	
160	18	29	157	160	

## HOW TO ORDER

Example

NOMINAL SIZE	D	E	F	G	H
	2.5 "(63mm)	3"(80mm)	4"(100mm)	5"(125mm)	6"(150mm)

T-02

X

## TYPE OF MOUNTING

- 2 BOTTOM ENTRY THROUGH ELBOW
- 4 DIRECT CENTER BACK ENTRY
- 8 EVERY ANGLE BACK ENTRY

X

## PROCESS CONNECTION

<b>3BM</b> 3/8" BSP(M) ( Stem Dia.Max. 9.5 & 10mm)	<b>4MM</b> M20X1.5 (M) ( Stem Dia.Max.12mm)	<b>5NM</b> 3/4" NPT (M)	XXX
<b>4BM</b> 1/2" BSP(M) ( Stem Dia.Max. 12mm)	<b>4YN</b> 1 1/2" TRICLOVER ** ( Stem Dia.Max. 12mm)	<b>6BM</b> 1" BSP(M)	
<b>4NM</b> 1/2" NPT(M) ( Stem Dia.Max. 12mm)	<b>5BM</b> 3/4" NPT(M)	<b>6NM</b> 1" NPT(M)	

\*\*\*Please consult factory for any special connections \*\*\*Without Clamp & Bottom mating part.

## PROCESS CONNECTION TYPE

<b>ZI</b> Adjustable	<b>ZJ</b> Fixed	<b>KJ</b> Revolving/Swivel	XX
----------------------	-----------------	----------------------------	----

## STEM DIAMETER

<b>1U</b> 6mm	<b>2M</b> 1/4"(6.35mm)	<b>2C</b> 8mm	<b>2I</b> 9.5mm	<b>2J</b> 10mm	<b>2K</b> 12mm	XX
---------------	------------------------	---------------	-----------------	----------------	----------------	----

## STEM LENGTH (BELOW THREAD)

Minimum Stem Length : 60 mm	100mm
Maximum Stem Length : 1000 mm	

## RANGE

Refer Range Table	0/100°C
-------------------	---------

## OPTIONAL EXTRAS

<b>PS</b> AISI 316SS CASE & BEZEL**	<b>RS</b> EXTERNAL ZERO ADJUSTMENT	
<b>PW</b> FIVE POINT CALIBRATION CERTIFICATE	<b>RX</b> SAFETY GLASS	
<b>QA</b> DAMPENING LIQUID SILICON OIL (-45/200 C)	<b>RZ</b> TOUGHENED GLASS	
<b>PY</b> DAMPENING LIQUID GLYCERINE (UP TO 100° C) EXCEPT ELECTRICAL CONTACT	<b>SX</b> SS TAG PLATE	63.5
<b>RH</b> CUSTOM DESIGN DIAL	<b>GH</b> MATERIAL TEST CERTIFICATE AS PER En10204 3.1#	XX
<b>SW</b> DIAL TAG MARKING		

Ordering Example: T-02-X-X-XXX-XX-XX-100mm-0/100°C-XX

## HOW TO ORDER

NOMINAL SIZE	D	E	F	G	H
	2.5 "(63mm)	3"(80mm)	4"(100mm)	5"(125mm)	6"(150mm)

## TYPE OF MOUNTING

- 2 DIRECT BOTTOM ENTRY
- 4 DIRECT CENTER BACK ENTRY
- 8 EVERY ANGLE BACK ENTRY
- 14 BOTTOM ENTRY THROUGH ELBOW

## PROCESS CONNECTION

<b>3BM</b> 3/8"BSP(M) ( Stem Dia.Max. 9.5 & 10mm)	<b>4MM</b> M20X1.5 (M) ( Stem Dia.Max.12mm)	<b>5NM</b> 3/4" NPT (M)
<b>4BM</b> 1/2"BSP(M) ( Stem Dia.Max. 12mm)	<b>4YN</b> 1 1/2"TRICLOVER ** ( Stem Dia.Max. 12mm)	<b>6BM</b> 1" BSP(M)
<b>4NM</b> 1/2"NPT(M) ( Stem Dia.Max. 12mm)	<b>5BM</b> 3/4"NPT(M)	<b>6NM</b> 1"NPT(M)

Note : Connections like Metric /PT/Flaried/UNF/G/R Etc can be provided on request.

\*\*\*Please consult factory for any special connections \*\*\*Without Clamp & Bottom mating part.

## PROCESS CONNECTION TYPE

<b>ZI</b> Adjustable	<b>ZJ</b> Fixed	<b>KJ</b> Revolving/Swivel
----------------------	-----------------	----------------------------

## STEM DIAMETER

<b>1U</b> 6mm	<b>2M</b> 1/4"(6.35mm)	<b>2C</b> 8mm	<b>2I</b> 9.5mm	<b>2J</b> 10mm	<b>2K</b> 12mm
---------------	------------------------	---------------	-----------------	----------------	----------------

## STEM LENGTH (BELOW THREAD)

Please Specify In mm ( Refer Scale for Minimum & Maximum Stem Lengths)

## RANGE

Refer Range Table

## OPTIONAL EXTRAS

<b>PS</b> AISI 316SS CASE & BEZEL**	<b>RS</b> EXTERNAL ZERO ADJUSTMENT
<b>PW</b> FIVE POINT CALIBRATION CERTIFICATE	<b>RX</b> SAFETY GLASS
<b>QA</b> DAMPENING LIQUID SILICON OIL (-45/200 C)	<b>RZ</b> TOUGHENED GLASS
<b>PY</b> DAMPENING LIQUID GLYCERINE (UP TO 100° C) EXCEPT ELECTRICAL CONTACT	<b>SX</b> SS TAG PLATE
<b>RH</b> CUSTOM DESIGN DIAL	<b>GH</b> MATERIAL TEST CERTIFICATE AS PER En10204 3.1#
<b>SW</b> DIAL TAG MARKING	

\*Gasket & Filling Plug for NBR

#Material Test Certificate will be provided for wetted parts only with chemical composition testing.

**Ordering Example: T-02-X-X-XXX-XX-XX-100mm-0/100°C-XX**

Example

T-02

X

X

XXX

XX

XX

100mm

0/100°C

XX

## **SPECIAL FEATURES**

Resist to High Temperature & Excessive Vibration System  
Robust Construction  
Corrosion Wear & Tear Proof  
Silicon Oil Filled  
Accurate & Reliable

## **SPECIFICATIONS**

Accuracy : 1 as per EN 13190  
Ambient Temperature: -72°F (-40°C) to 180°F (100°C)  
Process Temperature: Max 117°F(65°C)  
Stem Diameter: 12mm  
Case & Bezel: Die Cast Aluminium  
Stem Connection: AISI 304 SS  
Joint: Tig Argon Arc Welding  
Protection: IP 65  
Dampening Liquid: Silicon Oil  
Dial: Aluminium  
Pointer: Aluminium  
Window: Sheet Glass  
Gasket & Filling Plug: NBR



## **APPLICATIONS**

This Nitrogen Filled Thermometer is the most widely specified Instrument for measuring Exhaust gas temperature in Diesel Engines. The Nitrogen Filled System is both reliable & accurate as well as environment friendly. The Instrument are protected against vibration using Silicon to ensure maximum life under the most severe conditions. The Instrument field applications are Refinery , Diesel, Power Generation, Sets ,Power, Pulp & Paper , Shipping , Offshore, DG Sets , Oil Engines & Allied Process Industries.

## HOW TO ORDER

### NOMINAL SIZE

F

4"(100mm)

### TYPE OF MOUNTING

2 DIRECT BOTTOM ENTRY

### PROCESS CONNECTION

**4BM** 1/2"BSP(M)

**6BM** 3/4"BSP(M) STANDARD

**4NM** 1/2" NPT (M)

### PROCESS CONNECTION TYPE

**ZI** ADJUSTABLE ( STANDARD)

### STEM LENGTH

200mm

250mm

300mm

400mm

600mm

### RANGE (STANDARD)

+50 TO 650°C WITH °F SCALE ( Limits of Error +-10°C as per EN 13190)

### OPTIONAL EXTRAS

**PW** FIVE POINT CALIBRATION CERTIFICATE

**SX** SS TAG PLATE

**RH** CUSTOM DESIGN DIAL

**SW** DIAL TAG MARKING

**GH** MATERIAL TEST CERTIFICATE\*

#Material Test Certificate will be provided for wetted parts only with chemical composition testing.

Example

T-03

X

X

XXX

XX

200mm

50 TO  
650°C

XX

**Ordering Example: T-03-X-X-XXX-XX-XX-200mm-50 TO 650°C-XX**

## SPECIAL FEATURES

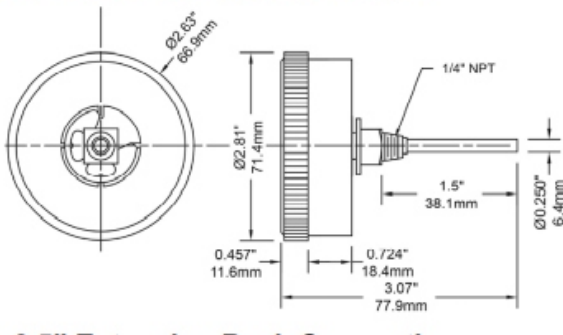
- Single Port Installation for Pressure and Temperature Measurement
- Cost Effective
- Excellent For HVAC Industry
- Rustproof Design

## SPECIFICATIONS

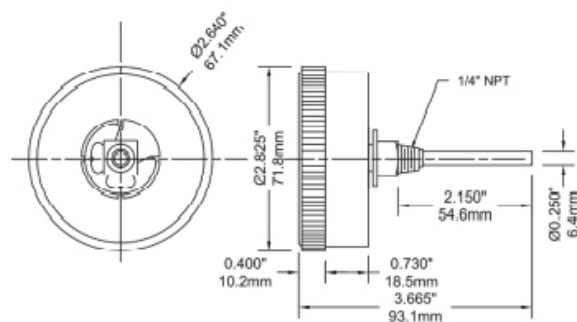
- Accuracy : 1.6
- Case & Bezel: ABS Plastic
- Pressure Element : Bourdon(Copper Alloy)
- Temperature Element: Bi-Metal Strip Coiled
- Stem Diameter: 6mm (Standard)
- Stem Material: AISI SS316
- Dial: Aluminium
- Pointer: Aluminium
- Movement: Copper Alloy



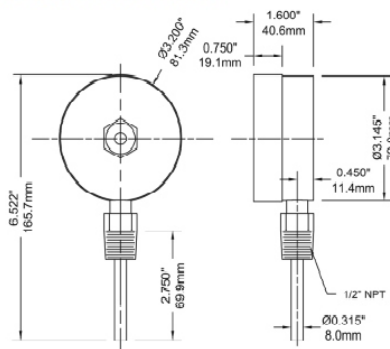
**2.5" Back Connection, 1" Stem**



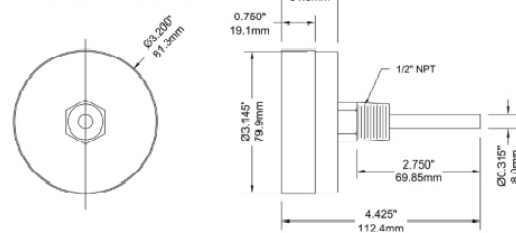
**2.5" Back Connection**



**3" Bottom Connection**



**3" Back Connection**



**HOW TO ORDER**

Example

T-04

**TYPE OF MOUNTING**

2 DIRECT BOTTOM ENTRY                      4 DIRECT CENTER BACK ENTRY

X

**PROCESS CONNECTION**

**3BM** 3/8" BSP(M) STANDARD            **3JM** 3/8" PF (M)

XXX

**STEM LENGTH ( BELOW THREAD)**

Please specify in mm ( Stem Length 65mm to 150mm)

100mm

**PRESSURE RANGE IN KG/CM<sup>2</sup>**

06 0 to 6    07 0 to 7    10 0 to 10    16 0 to 16    21 0 to 21    25 0 to 25    40 0 to 40

XX

**TEMPERATURE RANGE IN °C**

50 0 to 50°C                      100 0 to 100°C                      150 0 to 150°C

XX

**OPTIONAL EXTRAS**

**PW** FIVE POINT CALIBRATION CERTIFICATE            **SX** SS TAG PLATE  
**RH** CUSTOM DESIGN DIAL                                      **SW** DIAL TAG MARKING

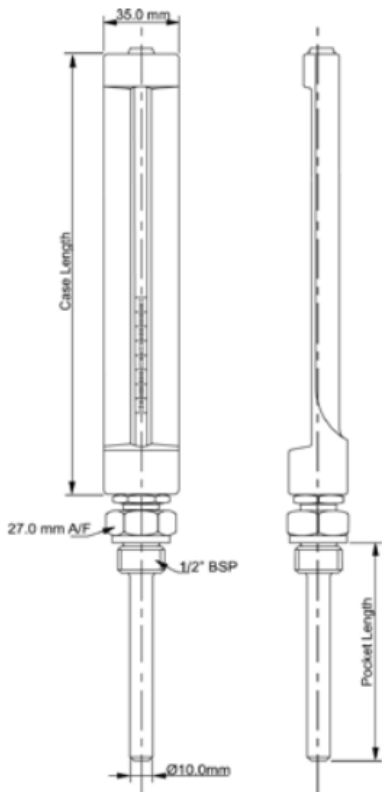
XX

**Ordering Example: T-04-X-XXX-100mm-XX-XX-XX**

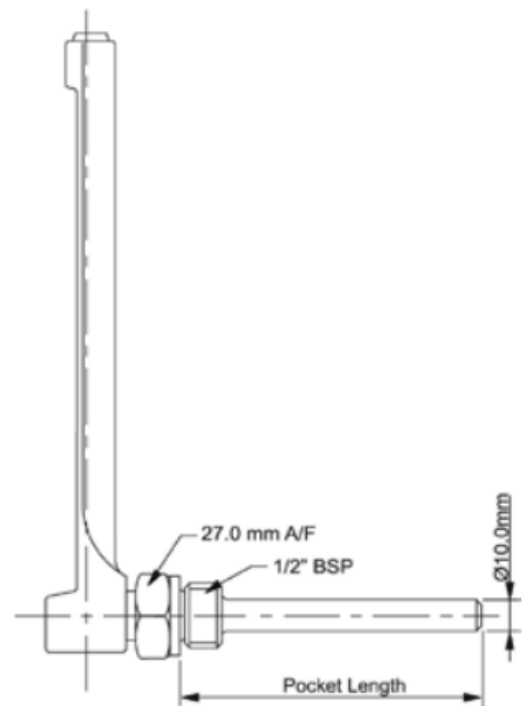
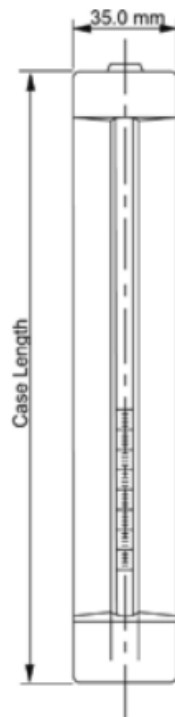


## SPECIFICATIONS

Case Length : 100mm, 150mm, 200mm  
 Case Material: Aluminium with Golden Plated  
 Color : Blue  
 Type: Straight & Angle  
 Stem Material : Brass or Steel  
 Stem Diameter : 10mm  
 Stem Length : 30mm, 40mm, 50mm, 100mm, 150mm  
 Union : G1/2", M22X1.5, M27X2  
 Scale : Single Scale °C  
 Accuracy: +-2.0%  
 Range : -30+50°C, 0+50°C, 0+100°C, 0+120°C,  
 0+160°C, 0+200°C, 0+600°C



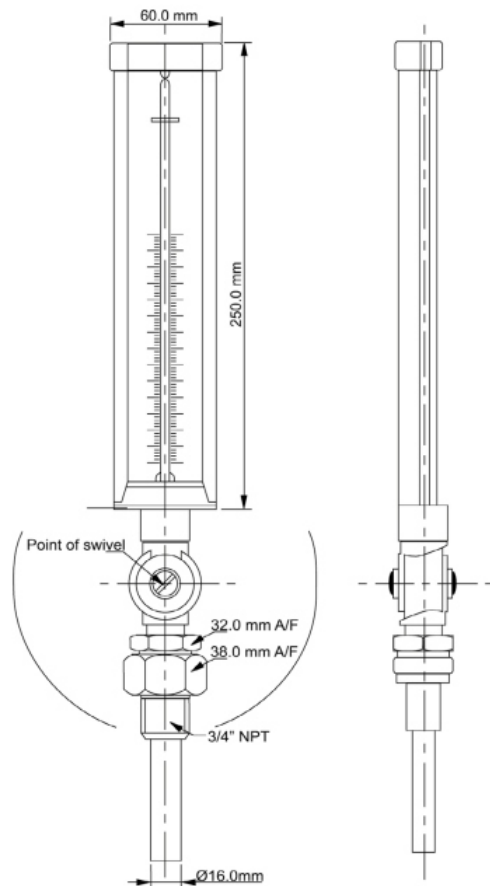
**BOTTOM ENTRY**



**BACK ENTRY**

## SPECIFICATIONS

- Case Material: 7" & 9" Plastic or Aluminium
- Window : Glass
- Dial : V-Shaped Aluminium
- Tube : Blue or Red Liquid Filled
- Type : Adjustable angle connection/Straight Connection
- Stem : Aluminium 0.433"(11mm),3.5"(89mm)
- Standard Union : 1-1/4" UNF BRASS
- Scale : Single or Double Scale
- Accuracy: +-2.0%
- Range : -40-110F / -40-40°C
  - 0-120F / -15-45°C
  - 0-160F / -10-70°C
  - 30-180F / 0-80°C
  - 30-240F / 0-110°C
  - 30-300F / 0-150°C
  - 50-400F / 20-200°C
  - 50-550F / 25-275°C
  - or Customize
- Thermowell : Brass



## SPECIAL FEATURES

### Robust Tow Piece Design

The Diaphragm is welded to the Body to ensure separation of the filling fluid from the process medium.

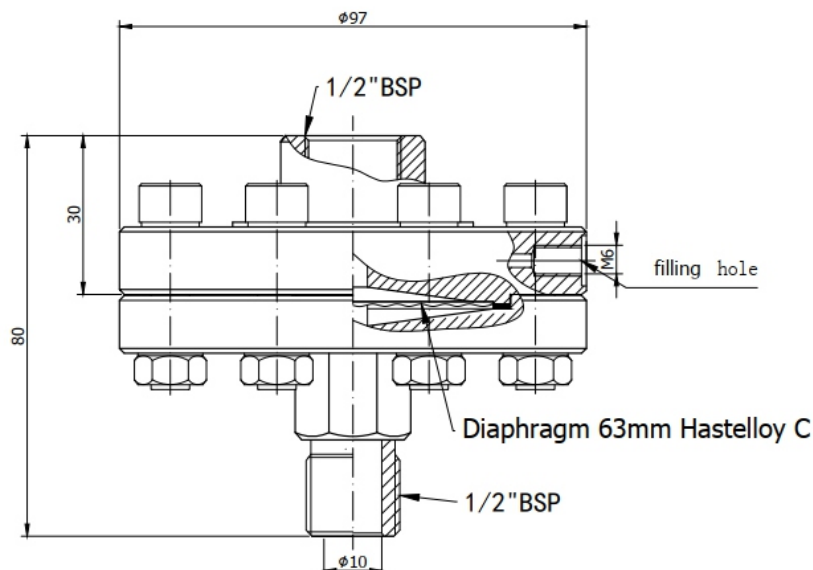
## SPECIFICATIONS

- Range: -1 kg/cm<sup>2</sup> to 400 kg/cm<sup>2</sup> (Standard)
- Process Temperature: -40°C to 200°C or as per fill fluid
- Instrument Connection: 1/2" BSP (F)
- Process Connection: 1/2" BSP (M)
- Fill Liquid: Silicon Oil-DC 200
- Diaphragm: AISI 316L SS
- Top Chamber: AISI 316 SS
- Bottom Chamber: AISI 316 SS
- Nuts / Bolts: AISI 304 SS
- Sealing Gasket: PTFE max 250°/ **Inconel silver plated for 400°C max**



## 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 high Temperature.



Example

## HOW TO ORDER

### BASIC MODEL

### RANGE

S06 -1 to 0 kg/cm<sup>2</sup> & 0 to 70 kg/cm<sup>2</sup> (Standard)      **S07** 100 kg/cm<sup>2</sup> to 400 kg/cm<sup>2</sup>      XXX

## INSTRUMENT CONNECTION

**VN** 1/4"BSP(F)    **VP** 3/8"BSP(F)    **VL** 1/2"BSP(F)    **VM** 1/2"NPT(F)(Standard)    **VO** 1/4"NPT(F)      XX

### TOP CHAMBER

**XW** AISI 304 SS (Standard)    **YA** AISI SS316L SS    **XY** AISI 316 SS      XX

### DIAPHRAGM

**UJ** AISI 316L SS (Standard)    **UL** HASTELLOU 'C'    **UR** TITANIUM    **UW** INCONEL 600      XX  
**UM** MONEL    **UP** SILVER\*    **UQ** TANTALUM

### SEALING GASKET

**VI** PTFE (Standard)    **YR** METAL    **YQ** Inconel Silver Plate for Max 400°C (High Temp.Oil)      XX

### BOTTOM CHAMBER (\*Refer Pressure v/s Temperature table below.)

**TK** AISI 304 SS    **TT** HASTELLOU 'C'      XX  
**TM** AISI 316 SS(Standard)    **UD** TANTALUM  
**TL** AISI 316L SS    **TZ** PVC\*  
**UH** TITANIUM    **UA** PVDF\*  
**TX** MONEL    **TY** POLYPROPELENE\*

MOC OF BOTTOM CHAMBER	PRESSURE V/S TEMPERATURE					
	20°C	40°C	60°C	80°C	100°C	120°C
PVDF	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	7 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	2 kg/cm <sup>2</sup>
PP	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	6 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>	NA
PVC	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>	NA	NA

## PROCESS CONNECTION

**WE** 1/4"BSP(F)    **WI** 1/4"NPT(F)    **WY** 1/4"NPT(M)    **WS** 1/4"BSP(M)    **WR** M20X1.5(M)      XX  
**WC** 3/8"BSP(F)    **WH** 1/2"NPT(F)    **WA** 1/2"NPT(M)(Standard)    **WT** 3/8"BSP(M)(Standard)    **WP** M33X1.5(M)  
**WD** 1/2"BSP(F)    **WL** 3/4"NPT(F)    **WK** 3/4"NPT(M)    **WU** 1/2"BSP(M)(Standard)  
**WJ** 3/4"BSP(F)    **WF** 3/4"BSP(M)

## PROTECTION ON WETTED PARTS

**VS** PTFE LINING ON BOTTOM CHAMBER -2mm THICK (Max.Up to 150°C)      XX  
**VV** PTFE PROTECTION FOR DIAPHRAGM (Max.Up to 150°C max up to 100 bar)  
**VZ** PTFE COATING ON DIAPHRAGM (Max.Up to 315°C)

### FILLING LIQUID (\*Consult factory for specifications , price and delivery)

**US** FLUROLUBE 4.2 [-45 to 175°C]    **UX** SILICON DC 200[-40 to 205°C](Standard)    **VB** SYL THERM XLT [-100 to 260°C]      XX  
**UT** FLUROLUBE 6.3 [-40 to 235°C]    **UY** SILICON DC 704 [10 to 337°C]    **VC** HALOCARBON OIL\*  
**UU** FLUROLUBE FS-5 [-28 to 148°C]    **UZ** SILICON DC 710 [7 to 371°C]  
**UV** FOOD GRADE OIL [-20 to 140°C]    **VA** SYL THERM 800 [-40 to 315°C]

## REMOTE MOUNTING (With Capillary of Max. Up to 15 Mtrs.)

SPECIFY IN METERS (e.g 1.5=1.5 METERS 2.0=2 METERS)      3Mtr.

### CAPILLARY

**PE** AISI 304 SS    **PG** AISI 316 SS      XX

### CAPILLARY COVERED WITH ARMOUR

**PF** AISI 304 SS    **PH** AISI 316 SS    **PI** PVC      XX

### OTHER OPTIONS

**TB** HELIUM LEAK TEST    **TC** DRY SEAL ONLY WITHOUT INSTRUMENT    **GH** MATERIAL TEST CERTIFICATE\*      XX

## SPECIAL FEATURES

**Robust Tow Piece Design**  
 The Diaphragm is welded to the Body to ensure separation of the filling fluid from the process medium.

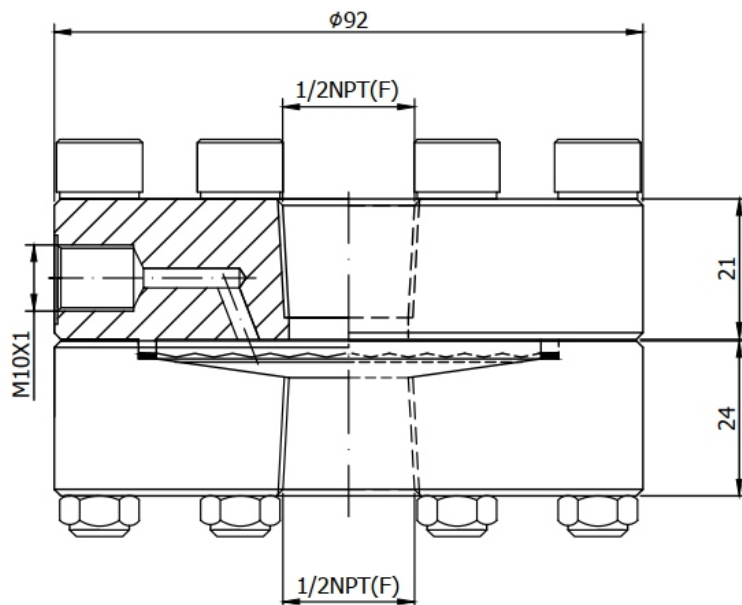
## SPECIFICATIONS

- Range: -1 kg/cm<sup>2</sup> to 400 kg/cm<sup>2</sup> (Standard)
- Process Temperature: -40°C to 200°C or as per fill fluid
- Instrument Connection: 1/2"NPT (F)
- Process Connection: 1/2"NPT (M)
- Fill Liquid: Silicon Oil-DC 200
- Diaphragm: AISI 316L SS
- Top Chamber: AISI 304 SS
- Bottom Chamber: AISI 316 SS
- Nuts / Bolts: AISI 304 SS
- Sealing Gasket: PTFE max 250°/ Inconel silver plated for 400°C max



## 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 high Temperature.



## HOW TO ORDER

### BASIC MODEL

D-02

### RANGE

**S06** -1 to 0 kg/cm<sup>2</sup> & 0 to 70 kg/cm<sup>2</sup> (Standard)      **S07** 100 kg/cm<sup>2</sup> to 400 kg/cm<sup>2</sup>

XXX

### INSTRUMENT CONNECTION

**VN** 1/4"BSP(F)    **VP** 3/8"BSP(F)    **VL** 1/2"BSP(F)    **VM** 1/2"NPT(F)(Standard)    **VO** 1/4"NPT(F)

XX

### TOP CHAMBER

**XW** AISI 304 SS (Standard)    **YA** AISI SS316L SS    **XY** AISI 316 SS

XX

### DIAPHRAGM (\*Range up to 21 kg/cm<sup>2</sup>)

**UJ** AISI 316L SS (Standard)    **UL** HASTELLOTT 'C'    **UR** TITANIUM    **UW** INCONEL 600  
**UM** MONEL    **UP** SILVER\*    **UQ** TANTALUM

XX

### SEALING GASKET

**VI** PTFE (Standard)    **YR** METAL    **YQ** Inconel Silver Plate for Max 400°C (High Temp.Oil)

XX

### BOTTOM CHAMBER

**TK** AISI 304 SS    **TT** HASTELLOTT 'C'  
**TM** AISI 316 SS(Standard)    **UD** TANTALUM  
**TL** AISI 316L SS    **TZ** PVC\*  
**UH** TITANIUM    **UA** PVDF\*  
**TX** MONEL    **TY** POLYPROPELENE\*

MOC OF BOTTOM CHAMBER	PRESSURE V/S TEMPERATURE					
	20°C	40°C	60°C	80°C	100°C	120°C
PVDF	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	7 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	2 kg/cm <sup>2</sup>
PP	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	6 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>	NA
PVC	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>	NA	NA

XX

### PROCESS CONNECTION

**WE** 1/4"BSP(F)    **WI** 1/4"NPT(F)    **WY** 1/4"NPT(M)    **WS** 1/4"BSP(M)    **WR** M20X1.5(M)  
**WC** 3/8"BSP(F)    **WH** 1/2"NPT(F)    **WA** 1/2"NPT(M)(Standard)    **WT** 3/8"BSP(M)(Standard)    **WP** M33X1.5(M)  
**WD** 1/2"BSP(F)    **WL** 3/4"NPT(F)    **WK** 3/4"NPT(M)    **WU** 1/2"BSP(M)(Standard)  
**WJ** 3/4"BSP(F)    **WF** 3/4"BSP(M)

XX

### PROTECTION ON WETTED PARTS

**VS** PTFE LINING ON BOTTOM CHAMBER -2mm THICK (Max.Up to 150°C)  
**VV** PTFE PROTECTION FOR DIAPHRAGM (Max.Up to 150°C max up to 100 bar)  
**VZ** PTFE COATING ON DIAPHRAGM (Max.Up to 315°C)

XX

### FILLING LIQUID (\*Consult factory for specifications , price and delivery)

**US** FLUROLUBE 4.2 [-45 to 175°C]    **UX** SILICON DC 200[-40 to 205°C](Standard)    **VB** SYLTERM XLT [-100 to 260°C]  
**UT** FLUROLUBE 6.3 [-40 to 235°C]    **UY** SILICON DC 704 [10 to 337°C]    **VC** HALOCARBON OIL\*  
**UU** FLUROLUBE FS-5 [-28 to 148°C]    **UZ** SILICON DC 710 [7 to 371°C]  
**UV** FOOD GRADE OIL [-20 to 140°C]    **VA** SYLTERM 800 [-40 to 315°C]

XX

### REMOTE MOUNTING (With Capillary of Max. Up to 15 Mtrs.)

SPECIFY IN METERS (e.g 1.5=1.5 METERS 2.0=2 METERS)

3Mtr.

### CAPILLARY

**PE** AISI 304 SS    **PG** AISI 316 SS

XX

### CAPILLARY COVERED WITH ARMOUR (Applicable with PE or PG if selected)

**PF** AISI 304 SS    **PH** AISI 316 SS    **PI** PVC

XX

### OTHER OPTIONS

**TB** HELIUM LEAK TEST    **TC** DRY SEAL ONLY WITHOUT INSTRUMENT    **GH** MATERIAL TEST CERTIFICATE\*

XX

Ordering Example: **D-02-XXX-XX-XX-XX-XX-XX-XX-XX-XX-3 Mtr-XX-XX-XX**



## SPECIAL FEATURES

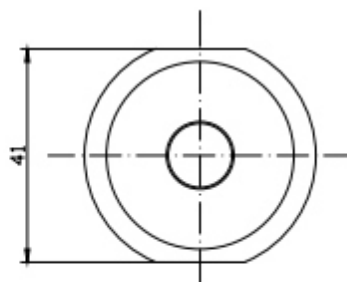
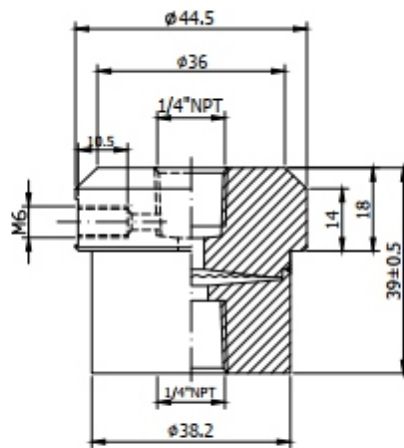
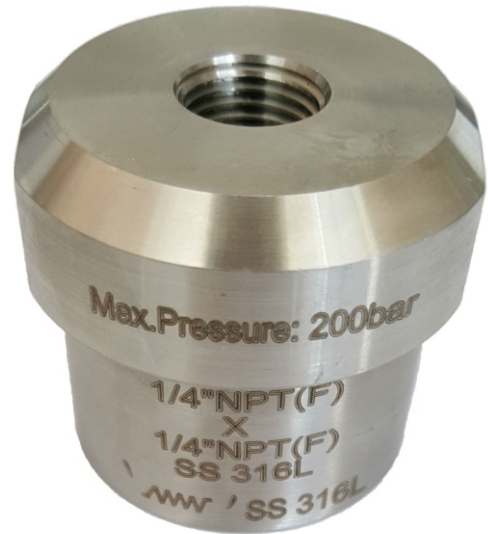
Compact Design  
 Low Cost Version  
 The Diaphragm is welded to the Body  
 To ensure separation of the filling fluid  
 from the process medium.

## SPECIFICATIONS

Process Temperature: -40°C to 200°C or as per fill fluid  
 Instrument Connection: 1/4"NPT (F)  
 Process Connection: 1/4"NPT (M)  
 Fill Liquid: Silicon Oil-DC 200  
 Diaphragm: AISI 316L SS  
 Body: AISI316 SS

## 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 high Temperature.



## HOW TO ORDER

### BASIC MODEL

Example

D-03

### INSTRUMENT CONNECTION

**VN** 1/4"BSP(F)      **VO** 1/4"NPT(F)

XX

### BODY

**CL** AISI 316 SS

XX

### DIAPHRAGM

**UJ** AISI 316L SS (Standard)

XX

### PROCESS CONNECTION

<b>WE</b> 1/4"BSP(F)	<b>WI</b> 1/4"NPT(F)	<b>WY</b> 1/4"NPT(M)	<b>WS</b> 1/4"BSP(M)	<b>WR</b> M20X1.5(M)
<b>WC</b> 3/8"BSP(F)	<b>WH</b> 1/2"NPT(F)	<b>WA</b> 1/2"NPT(M)(Standard)	<b>WT</b> 3/8"BSP(M)(Standard)	<b>WP</b> M33X1.5(M)
<b>WD</b> 1/2"BSP(F)	<b>WL</b> 3/4"NPT(F)	<b>WK</b> 3/4"NPT(M)	<b>WU</b> 1/2"BSP(M)(Standard)	
<b>WJ</b> 3/4"BSP(F)			<b>WF</b> 3/4"BSP(M)	

XX

### FILLING LIQUID

<b>US</b> FLUROLUBE 4.2 [-45 to 175°C]	<b>UX</b> SILICON DC 200[-40 to 205°C] <sup>(Standard)</sup>	<b>VB</b> SYLTHERM XLT [-100 to 260°C]
<b>UT</b> FLUROLUBE 6.3 [-40 to 235°C]	<b>UY</b> SILICON DC 704 [10 to 337°C]	<b>VC</b> HALOCARBON OIL*
<b>UU</b> FLUROLUBE FS-5 [-28 to 148°C]	<b>UZ</b> SILICON DC 710 [7 to 371°C]	
<b>UV</b> FOOD GRADE OIL [-20 to 140°C]	<b>VA</b> SYLTHERM 800 [-40 to 315°C]	

XX

### OTHER OPTIONS

**TB** HELIUM LEAK TEST      **TC** DRY SEAL ONLY WITHOUT INSTRUMENT      **GH** MATERIAL TEST CERTIFICATE\*

XX

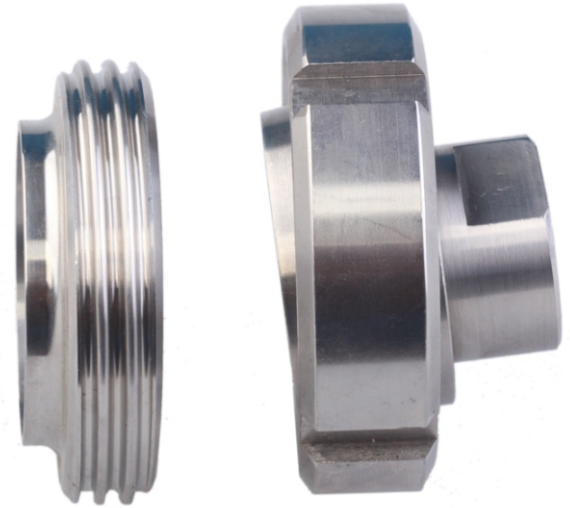
**Ordering Example: D-03-XX-XX-XX-XX-XX-XX**

## SPECIAL FEATURES

All SS316L Construction  
Quick Connect and Disconnect  
Matching DIN , SMS , RJT Standard.

## SPECIFICATIONS

Range: Refer range table with nominal sizes.  
Process Temperature: -20°C to 140°C or as per fill fluid  
Instrument Connection: 1/2"NPT (F)  
Process Connection: As per DIN 11851, SMS, RJT, IDF  
Fill Liquid: Silicon Oil-DC 200  
Mounting: Direct (Without Capillary)  
Diaphragm: AISI 316L SS  
Unit Nut: AISI 316 SS  
Body: AISI 316 SS  
Fill Fluid: Food Grade Oil

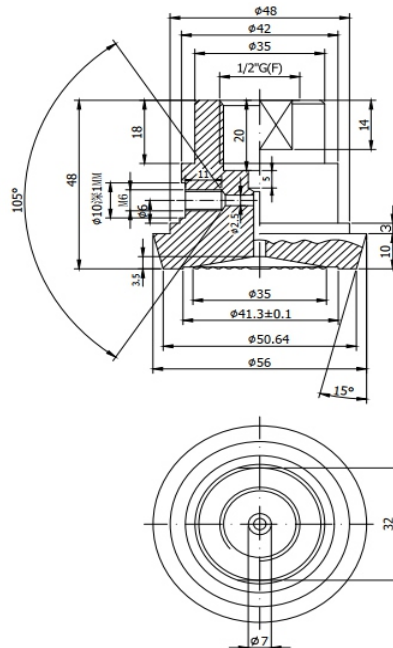


## APPLICATIONS

Diaphragm seals are provided in the Instruments like Pressure Guages ,Switches, Transmitters in order to Isolate the sensing element from the main service due to it's corrosive ,Viscous and Sedimented nature and avoid clogging and solidification.

This seals are specially designed for applications where high purity in the process is essential Typically in Food, Beverages, Dairy and Pharmaceutical Industries.

### DIN 40



Example

## HOW TO ORDER

### BASIC MODEL

D-04

### FLOATING RING (FEMALE): SIZE & TYPE

<b>KH</b>	(25*, 32, 40, 50 mm)	DIN	<b>KJ</b>	(1 1/2", 2")	RJT	XX(1 1/2")
<b>KI</b>	(1", 1 1/2", 2")	SMS	<b>KK</b>	(1", 1 1/2", 2")	IDF / ISS	

### PROCESS CONNECTION

<b>M</b>	MALE	<b>F</b>	FEMALE	XX
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### INSTRUMENT CONNECTION

<b>VN</b>	1/4"BSP(F)	<b>VO</b>	1/4"NPT(F)	XX
<b>VL</b>	1/2"BSP(F)	<b>VM</b>	1/2"NPT(F)(Standard)	

### DIAPHRAGM

<b>UJ</b>	AISI 316L SS (Standard)	XX
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### FILLING FLUID

<b>UV</b>	FOOD GRADE OIL [-20 TO 140°C/ -4 TO 284°F] (Standard)	XX
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### BODY

<b>CL</b>	AISI 316 SS (Standard)	<b>CM</b>	AISI 316L SS	XX
-----------	------------------------	-----------	--------------	----

### BOTTOM MATING PART [\*Instrument Connection 1/4" BSP (F)]

<b>KL</b>	(25*, 32, 40, 50 mm)	DIN	<b>KN</b>	(1 1/2", 2")	RJT	XX(1 1/2")
<b>KM</b>	(1", 1 1/2", 2")	SMS	<b>KO</b>	(1", 1 1/2", 2")	IDF / ISS	

### OTHER OPTIONS

<b>TB</b>	HELIUM LEAK TEST	<b>TC</b>	DRY SEAL ONLY WITHOUT INSTRUMENT	<b>GH</b>	MATERIAL TEST CERTIFICATE*	XX
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Ordering Example: **D-04-XX (1 1/2")-X-XX-XX-XX-XX-XX (1 1/2")-1 Mtr-XX-XX-XX**



Example

## HOW TO ORDER

### BASIC MODEL

D-05

### BODY

**CL** AISI 316 SS (Standard)      **CM** AISI 316L SS

XX

### DIAPHRAGM

**UJ** AISI 316L SS (Standard)

XX

### INSTRUMENT CONNECTION

**VN** 1/4"BSP(F)(Standard)    **VP** 3/8"BSP(F)    **VO** 1/4"NPT(F)  
**VL** 1/2"BSP(F)                **VM** 1/2"NPT(F)

XX

### PROCESS CONNECTION

**WU** 1/2"BSP(M)    **WW** 1"BSP(M)    **WX** 1 1/2"BSP(M)    **WB** 2"BSP(M)    **WF** 3/4"BSP(Standard)  
**WA** 1/2"NPT(M)    **XC** 1"NPT(M)    **XD** 1 1/2"NPT(M)    **XE** 2"NPT(M)    **XB** 3/4"NPT

XX

### FILLING FLUID

**US** FLUROLUBE 4.2 [-45 to 175°C]      **UY** SILICON DC 704 [10 to 337°C]  
**UT** FLUROLUBE 6.3 [-45 to 235°C]      **UZ** SILICON DC 710 [7 to 371°C]  
**UU** FLUROLUBE FS-5 [-28 to 148°C]      **VA** SYLTHERM 800 [-40 to 315°C]  
**UV** FOOD GRADE OIL [-20 to 140°C]      **VB** SYLTHERM XLT [-100 to 260°C]  
**UX** SILICON DC 200 [-40 to 205°C] (Standard)    **VC** HALOCARBON OIL\*

XX

### FILLING FLUID

**TB** HELIUM LEAK TEST    **TC** DRY SEAL ONLY WITHOUT INSTRUMENT    **GH** MATERIAL TEST CERTIFICATE\*

XX

**Ordering Example: D-05-XX-XX-XX-XX-XX-XX**



## SPECIAL FEATURES

All SS 316 Construction  
 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.

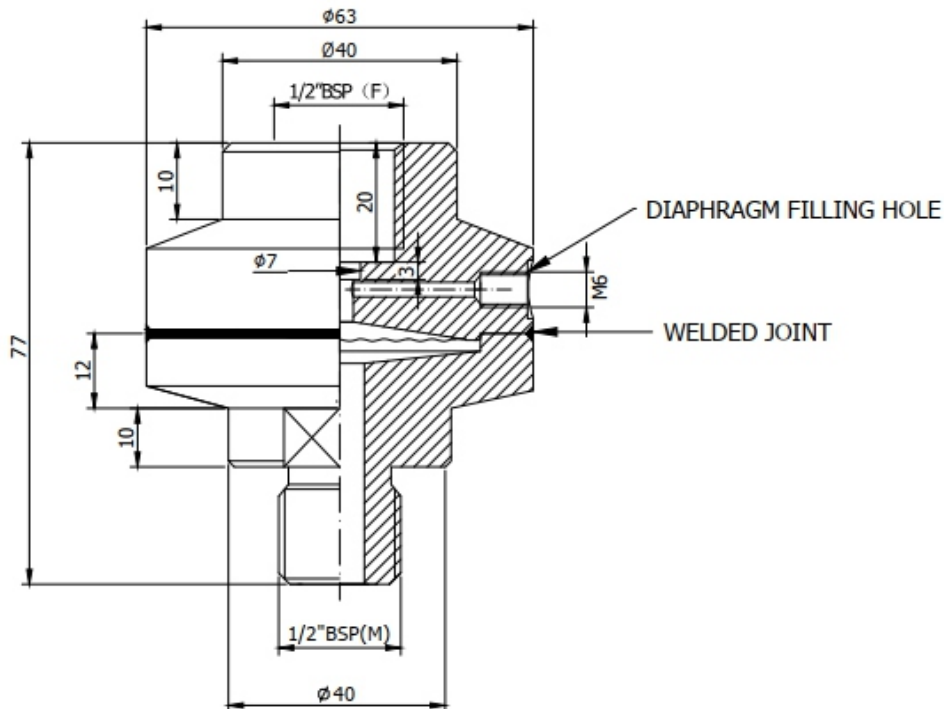
## SPECIFICATIONS

Range: -1 kg/cm<sup>2</sup> to 400 kg/cm<sup>2</sup>  
 Process Temperature: -40°C to 200°C or as per fill fluid  
 Instrument Connection: 1/2" BSP (F)  
 Process Connection: 1/2" BSP (M)  
 Fill Fluid: Silicon Oil-DC 200  
 Mounting: Direct (Without Capillary)  
 Diaphragm: AISI 316L SS  
 Body: AISI 316 SS



## 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 high temperature.



## HOW TO ORDER

### BASIC MODEL

Example

D-06

### INSTRUMENT CONNECTION

<b>VN</b> 1/4"BSP(F)	<b>VP</b> 3/8"BSP(F)	<b>VO</b> 1/4"NPT(F)	XX
<b>VL</b> 1/2"BSP(F)(Standard)	<b>VM</b> 1/2"NPT(F)		

### BODY

<b>CL</b> AISI 316 SS (Standard)	<b>CM</b> AISI 316L SS	XX
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### DIAPHRAGM

<b>UJ</b> AISI 316L SS (Standard)	XX
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### PROCESS CONNECTION

<b>WE</b> 1/4"BSP(F)(Standard)*	<b>WI</b> 1/4"NPT(F)	<b>WY</b> 1/4"NPT(M)	<b>WS</b> 1/4"BSP(M)	XX
<b>WC</b> 3/8"BSP(F)	<b>WH</b> 1/2"NPT(F)	<b>WA</b> 1/2"NPT(M)	<b>WT</b> 3/8"BSP(M)	
<b>WD</b> 1/2"BSP(F)	<b>WL</b> 3/4"NPT(F)	<b>WK</b> 3/4"NPT(M)	<b>WF</b> 3/4"BSP(M)	
<b>WJ</b> 3/4"BSP(F)	<b>WU</b> 1/2"BSP(M)(Standard)			

### FILLING FLUID

<b>US</b> FLUROLUBE 4.2 [-45 to 175°C]	<b>UY</b> SILICON DC 704 [10 to 337°C]	XX
<b>UT</b> FLUROLUBE 6.3 [-45 to 235°C]	<b>UZ</b> SILICON DC 710 [7 to 371°C]	
<b>UU</b> FLUROLUBE FS-5 [-28 to 148°C]	<b>VA</b> SYLTHERM 800 [-40 to 315°C]	
<b>UV</b> FOOD GRADE OIL [-20 to 140°C]	<b>VB</b> SYLTHERM XLT [-100 to 260°C]	
<b>UX</b> SILICON DC 200 [-40 to 205°C] (Standard)	<b>VC</b> HALOCARBON OIL*	

### REMOTE MOUNTING

SPECIFY IN METERS (e.g 1.5= 1.5 METERS 2.0 = 2 METERS) 2Mtrs

### CAPILLARY

<b>PE</b> AISI 304 SS	<b>PG</b> AISI 316 SS	XX
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### CAPILLARY COVERED WITH ARMOUR

<b>PF</b> AISI 304 SS	<b>PH</b> AISI 316 SS	<b>PI</b> PVC	XX
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### OTHER OPTIONS

<b>TB</b> HELIUM LEAK TEST	<b>TC</b> DRY SEAL ONLY WITHOUT INSTRUMENT	<b>GH</b> MATERIAL TEST CERTIFICATE*	XX
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**Ordering Example: D-06-XXX-XX-XX-XX-XX-2 Mtr-XX-XX-XX**



## HOW TO ORDER

### BASIC MODEL

Example

D-07

### RANGE

**S16** -1 to 0 & 0 to 40kg/cm2 (Standard)

XXX

### SANITARY SEAL

**YN** 1 1/2" Sanitary Seal in AISI 316 SS (Standard)

XX

**YO** 2" Sanitary Seal in AISI 316 SS

**YP** 2 1/2" Sanitary Seal in AISI 316 SS

### INSTRUMENT CONNECTION

**VO** 1/4"NPT(F)

**VN** 1/4"BSP(F)(Standard)\*

**VP** 3/8"BSP(F)

XX

**VM** 1/2"NPT(F)

**VL** 1/2"BSP(F)(Standard)

### BODY

**CL** AISI 316 SS (Standard)

**CM** AISI 316L SS

XX

### BOTTOM MATING PARTS

**KB** 1 1/2" Sanitary Seal in AISI 316 SS

XX

**KC** 2" Sanitary Seal in AISI 316 SS

**KD** 2 1/2" Sanitary Seal in AISI 316 SS

### END CONNECTION OF BOTTOM MATING PART

**3BM** 3/8"BSP(M)

**4NM** 1/2"NPT(M)\*

XX

**4BM** 1/2"BSP(M)

**4ZB** 1/2"PIPE(M)(PlainEnd)

### DIAPHRAGM

**UJ** AISI 316L (Standard)

XX

### FILLING FLUID

**UV** FOOD GRADE OIL [-20 to 140°C/ -4 to 284°F] (Standard)

XX

### CLAMP

**ZO** 1 1/2" CLAMP AISI 304 SS

**ZQ** 2 1/2" CLAMP AISI 304 SS

XX

**ZP** 2" CLAMP AISI 304 SS

### GASKET (SEALING RING)

**FX** 1 1/2" SILICON GASKET

**FZ** 2 1/2" SILICON GASKET

XX

**FY** 2" SILICON GASKET

### OTHER OPTIONS

**TB** HELIUM LEAK TEST

**TC** DRY SEAL ONLY WITHOUT INSTRUMENT

**GH** MATERIAL TEST CERTIFICATE\*

XX

Ordering Example: **D-07-XXX-XX-XX-XX-XX-XX-XX-XX-XX-1 Mtr-XX-XX-XX**

## SPECIAL FEATURES

Continuous Duty  
"I" Section Extension to Facilitate smaller flange sizes suitable for Anti Corrosive Protection.

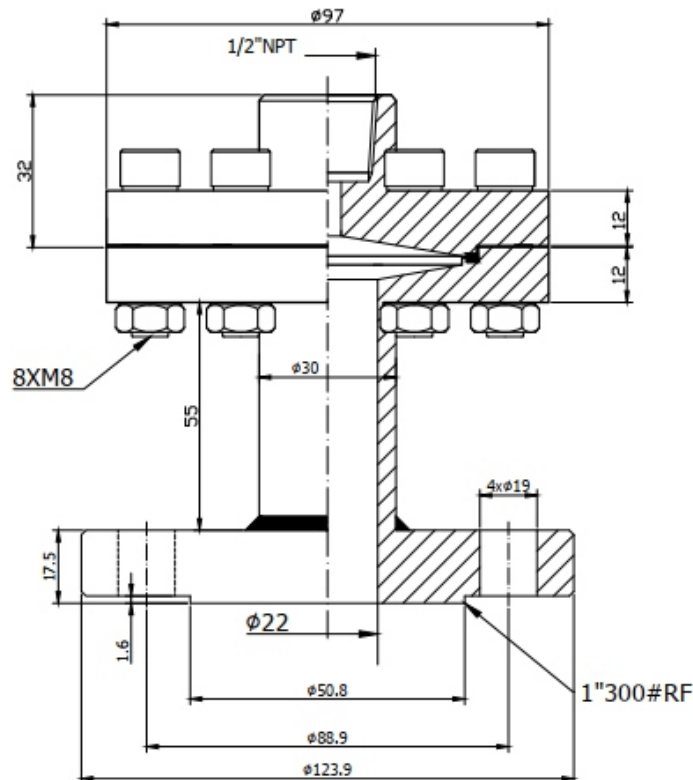
## SPECIFICATIONS

Range: -1 kg/cm<sup>2</sup> to 100 kg/cm<sup>2</sup>  
 Process Temperature: -40°C to 200°C without PTFE Lined  
 Instrument Connection: 1/2"NPT(F)  
 Process Connection: Flange (as per DIN/BS/ANSI/JIS) 125-250 AARH  
 Fill Fluid: Silicon Oil-DC 200  
 Diaphragm: AISI 316L SS  
 Top Chamber: AISI 316 SS  
 Bottom Chamber("I"Section): AISI 316 SS Flange (As per DIN/BS/ANSI/JIS)  
 Nut,Bolts: AISI 304 SS  
 Sealing Gasket: PTFE



## APPLICATIONS

Diaphragm seals are provided in the Instrument like Pressure Gauges ,Switches, Transmitters in order to isolate the sensing element from the main service due to It's Corrosive ,Viscous and Sedimented nature and to avoid clogging and solidification. This can be widely used with anti corrosive treatment/ protection & various flanged sizes.



Example

## HOW TO ORDER

### BASIC MODEL

D-08

### RANGE

**S21** -1 to 0 kg/cm<sup>2</sup> & 0 to 100 kg/cm<sup>2</sup> (Standard)

XXX

### INSTRUMENT CONNECTION

**VP** 3/8"BSP(F) **VL** 1/2"BSP(F) **VM** 1/2"NPT(F)(Standard)

XX

### TOP CHAMBER

**XW** AISI 304 SS (Standard) **YA** AISI SS316L SS **XY** AISI 316 SS **YC** CARBON STEEL

XX

### DIAPHRAGM

**UJ** AISI 316L SS (Standard) **UL** HASTELLOY 'C' **UR** TITANIUM  
**UM** MONEL **UP** SILVER **UQ** TANTALUM

XX

### SEALING GASKET

**VI** PTFE (Standard) **YR** METAL **YQ** Inconel Silver Plate for Max 400°C (High Temp.Oil)

XX

### BOTTOM CHAMBER ( I SECTION)

**TK** AISI 304 SS **TT** HASTELLOY 'C'  
**TM** AISI 316 SS(Standard) **TN** CARBON STEEL  
**TL** AISI 316L SS **TZ** PVC\*  
**UH** TITANIUM **UA** PVDF\*  
**TX** MONEL **TY** POLYPROPELENE\*

MOC OF BOTTOM CHAMBER	PRESSURE V/S TEMPERATURE					
	20°C	40°C	60°C	80°C	100°C	120°C
PVDF	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	7 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	2 kg/cm <sup>2</sup>
PP	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	6 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>	NA
PVC	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>	NA	NA

XX

### PROCESS CONNECTION

As per DIN / BS / ANSI / JIS (Select Code from Flange Table.)

XX

### NUTS-BOLTS

**XQ** AISI 304SS **XR** AISI 316SS

XX

### PROTECTION ON WETTED PARTS

**VS** PTFE LINING ON BOTTOM CHAMBER("I"SECTION) -2mm THICK (Max.Up to 150°C)  
**VV** PTFE PROTECTION FOR DIAPHRAGM (Max.Up to 150°C max up to 100 bar)  
**VZ** PTFE COATING ON DIAPHRAGM (Max.Up to 315°C)

XX

### FILLING LIQUID

**US** FLUROLUBE 4.2 [-45 to 175°C] **UX** SILICON DC 200[-40 to 205°C](Standard) **VB** SYL THERM XLT [-100 to 260°C]  
**UT** FLUROLUBE 6.3 [-40 to 235°C] **UY** SILICON DC 704 [10 to 337°C] **VC** HALOCARBON OIL\*  
**UU** FLUROLUBE FS-5 [-28 to 148°C] **UZ** SILICON DC 710 [7 to 371°C]  
**UV** FOOD GRADE OIL [-20 to 140°C] **VA** SYL THERM 800 [-40 to 315°C]

XX

### REMOTE MOUNTING (With Capillary of Max. Up to 15 Mtrs.)

SPECIFY IN METERS (e.g 1.5=1.5 METERS 2.0=2 METERS)

3Mtr.

### CAPILLARY

**PE** AISI 304 SS **PG** AISI 316 SS

XX

### CAPILLARY COVERED WITH ARMOUR (Applicable with PE or PG if selected)

**PF** AISI 304 SS **PH** AISI 316 SS **PI** PVC

XX

### OTHER OPTIONS

**TB** HELIUM LEAK TEST **TC** DRY SEAL ONLY WITHOUT INSTRUMENT **GH** MATERIAL TEST CERTIFICATE\*

XX

Ordering Example: D-08-XXX-XX-XX-XX-XX-XXX-XX-XX-XX-3 Mtr-XX-XX-XX



## SPECIAL FEATURES

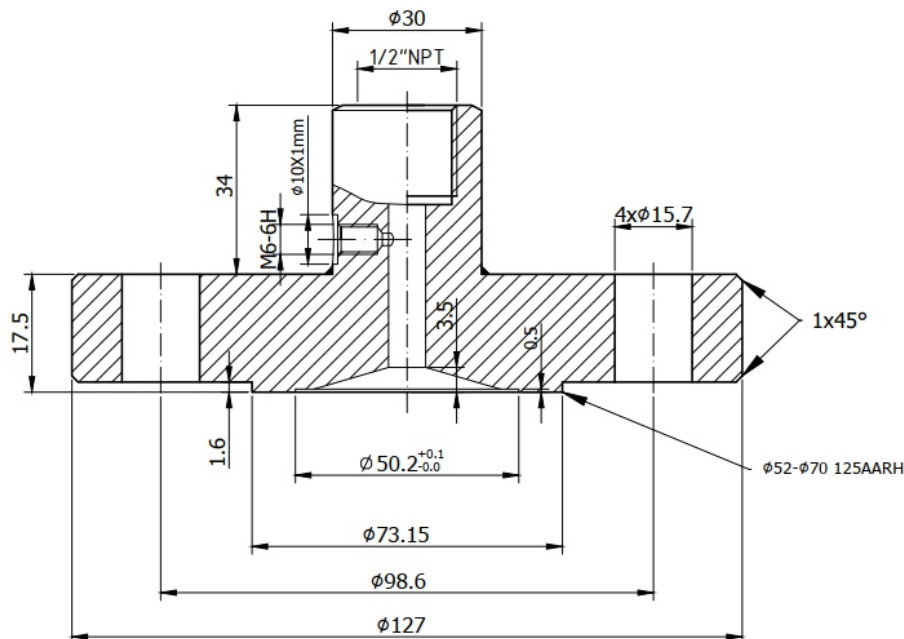
Flush Diaphragm  
Easy Flushing (Through Flushing Ring)  
Most Suitable for Slurry , Corrosive & High  
Viscous Service Flushing Ring, Flange &  
Diaphragm are available in various  
Type of SS & Exotic Materials.

## SPECIFICATIONS

Range: -1 kg/cm<sup>2</sup> to 0 & 0 to 250 kg/cm<sup>2</sup>\*  
Process Temperature: -40°C to 200°C or as per fill fluid  
Instrument Connection: 1/2"NPT(F)  
Process Connection: Flange (as per DIN/BS/ANSI/JIS) 125-250 AARH  
Diaphragm: AISI 316L SS  
Flange: AISI 316 SS  
Fill Fluid: Silicon Oil -DC 200  
Sealing Gasket: PTFE

## APPLICATIONS

Diaphragm seals are provided in the Instrument like  
Pressure Gauges ,Switches, Transmitters in order to  
isolate the sensing element from the main service  
due to It's Corrosive ,Viscous and Sedimented nature  
and to avoid clogging and solidification.  
These kind of seals are widely used in the Viscous  
& Corrosive services where flushing is required  
periodically & frequently.





Example

## HOW TO ORDER

### BASIC MODEL

D-09

### RANGE

**S21** -1 to 0 kg/cm<sup>2</sup> & 0 to 100 kg/cm<sup>2</sup> (Standard)

XXX

### INSTRUMENT CONNECTION

**VP** 3/8"BSP(F) **VL** 1/2"BSP(F) **VM** 1/2"NPT(F)(Standard)

XX

### TOP CHAMBER

**XW** AISI 304 SS (Standard) **YA** AISI SS316L SS **XY** AISI 316 SS **YC** CARBON STEEL

XX

### DIAPHRAGM

**UJ** AISI 316L SS (Standard) **UL** HASTELLOY 'C' **UR** TITANIUM  
**UM** MONEL **UP** SILVER **UQ** TANTALUM

XX

### SEALING GASKET

**VI** PTFE (Standard) **YR** METAL **YQ** Inconel Silver Plate for Max 400°C (High Temp.Oil)

XX

### BOTTOM CHAMBER ( I SECTION)

**TK** AISI 304 SS **TT** HASTELLOY 'C'  
**TM** AISI 316 SS(Standard) **TN** CARBON STEEL  
**TL** AISI 316L SS **TZ** PVC\*  
**UH** TITANIUM **UA** PVDF\*  
**TX** MONEL **TY** POLYPROPELENE\*

MOC OF BOTTOM CHAMBER	PRESSURE V/S TEMPERATURE					
	20°C	40°C	60°C	80°C	100°C	120°C
PVDF	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	7 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	2 kg/cm <sup>2</sup>
PP	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	6 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>	NA
PVC	10 kg/cm <sup>2</sup>	10 kg/cm <sup>2</sup>	4 kg/cm <sup>2</sup>	1 kg/cm <sup>2</sup>	NA	NA

XX

### PROCESS CONNECTION

As per DIN / BS / ANSI / JIS (Select Code from Flange Table.)

XX

### NUTS-BOLTS

**XQ** AISI 304SS **XR** AISI 316SS

XX

### PROTECTION ON WETTED PARTS

**VS** PTFE LINING ON BOTTOM CHAMBER('I' SECTION) -2mm THICK (Max.Up to 150°C)  
**VV** PTFE PROTECTION FOR DIAPHRAGM (Max.Up to 150°C max up to 100 bar)  
**VZ** PTFE COATING ON DIAPHRAGM (Max.Up to 315°C)

XX

### FILLING LIQUID

**US** FLUROLUBE 4.2 [-45 to 175°C] **UX** SILICON DC 200[-40 to 205°C](Standard) **VB** SYL THERM XLT [-100 to 260°C]  
**UT** FLUROLUBE 6.3 [-40 to 235°C] **UY** SILICON DC 704 [10 to 337°C] **VC** HALOCARBON OIL\*  
**UU** FLUROLUBE FS-5 [-28 to 148°C] **UZ** SILICON DC 710 [7 to 371°C]  
**UV** FOOD GRADE OIL [-20 to 140°C] **VA** SYL THERM 800 [-40 to 315°C]

XX

### REMOTE MOUNTING (With Capillary of Max. Up to 15 Mtrs.)

SPECIFY IN METERS (e.g 1.5=1.5 METERS 2.0=2 METERS)

3Mtr.

### CAPILLARY

**PE** AISI 304 SS **PG** AISI 316 SS

XX

### CAPILLARY COVERED WITH ARMOUR (Applicable with PE or PG if selected)

**PF** AISI 304 SS **PH** AISI 316 SS **PI** PVC

XX

### OTHER OPTIONS

**TB** HELIUM LEAK TEST **TC** DRY SEAL ONLY WITHOUT INSTRUMENT **GH** MATERIAL TEST CERTIFICATE\*

XX

Ordering Example: D-09-XXX-XX-XX-XX-XX-XXX-XX-XX-XX-3 Mtr-XX-XX-XX

## SPECIAL FEATURES

Welded Diaphragm  
Most suitable for Slurry & Corrosive Service  
Flushing Ring , Flange & Diaphragm are available in various type of SS & Exotic Materials.

## SPECIFICATIONS

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)\*

Process Temperature: Max.150°C for PTFE Lined  
-40°C to 200°C or without PTFE Lined

Instrument Connection: 1/2"NPT(F)

Process Connection: Flange (as per DIN/BS/ANSI/JIS) 125-250 AARH

Fill Fluid: Silicon Oil-DC 200

Diaphragm: AISI 316L SS

Top Chamber: AISI 316 SS

Flange: AISI 316 SS



## APPLICATIONS

Diaphragm seals are provided in the Instrument like Pressure Gauges ,Switches, Transmitters in order to isolate the sensing element from the main service due to It's Corrosive ,Viscous and Sedimented nature and to avoid clogging and solidification.

These kind of seals are widely used in the Viscous & Corrosive services where flushing is required periodically & frequently.

## HOW TO ORDER

### BASIC MODEL

Example

D-10

### SEAL TYPE

**S26** -1 to 0 kg/cm2 & 0 to 250 kg/cm2 (Non PTFE Lined) (Standard)\* **S27** -1 to 0 kg/cm2 & 0 to 40 kg/cm2(PTFE Lined)

XXX

### INSTRUMENT CONNECTION

**VP** 3/8"BSP(F) **VL** 1/2"BSP(F) **VM** 1/2"NPT(F)(Standard)

XX

### TOP CHAMBER

**XW** AISI 304 SS (Standard) **YA** AISI SS316L SS **XY** AISI 316 SS **YC** CARBON STEEL

XX

### DIAPHRAGM

**UJ** AISI 316L SS (Standard) **UL** HASTELLOY 'C' **UR** TITANIUM **KE** PTFE\*  
**UM** MONEL **UP** SILVER **UQ** TANTALUM

XX

### FLANGE MATERIAL

**TK** AISI 304 SS **TN** CARBON STEEL **UH** TITANIUM **TM** AISI 316 SS (Standard)  
**TL** AISI 316L SS **TX** MONEL **TT** HASTELLOY C **TM** TANTALUM

XX

### PROCESS CONNECTION

As per DIN / BS / ANSI / JIS (Select Code from Flange Table.)

XXX

### PROTECTION ON WETTED PARTS

**VS** PTFE LINING ON BOTTOM CHAMBER("I"SECTION) -2mm THICK (Max.Up to 150°C)  
**VV** PTFE PROTECTION FOR DIAPHRAGM (Max.Up to 150°C max up to 100 bar)  
**VZ** PTFE COATING ON DIAPHRAGM (Max.Up to 315°C)

XX

### FILLING LIQUID

**US** FLUROLUBE 4.2 [-45 to 175°C] **UX** SILICON DC 200[-40 to 205°C](Standard) **VB** SYL THERM XLT [-100 to 260°C]  
**UT** FLUROLUBE 6.3 [-40 to 235°C] **UY** SILICON DC 704 [10 to 337°C] **VC** HALOCARBON OIL\*  
**UU** FLUROLUBE FS-5 [-28 to 148°C] **UZ** SILICON DC 710 [7 to 371°C]  
**UV** FOOD GRADE OIL [-20 to 140°C] **VA** SYL THERM 800 [-40 to 315°C]

XX

### REMOTE MOUNTING (With Capillary of Max. Up to 15 Mtrs.)

SPECIFY IN METERS (e.g 1.5=1.5 METERS 2.0=2 METERS)

3Mtr.

### CAPILLARY

**PE** AISI 304 SS **PG** AISI 316 SS

XX

### CAPILLARY COVERED WITH ARMOUR (Applicable with PE or PG if selected)

**PF** AISI 304 SS **PH** AISI 316 SS **PI** PVC

XX

### OTHER OPTIONS

**TB** HELIUM LEAK TEST **TC** DRY SEAL ONLY WITHOUT INSTRUMENT **GH** MATERIAL TEST CERTIFICATE\*

XX

**Ordering Example: D-10-XXX-XX-XX-XX-XX-XXX-XX-XX-3 Mtr-XX-XX-XX**



## HOW TO ORDER

### BASIC MODEL

Example

D-11

### INSTRUMENT CONNECTION

**VP** 3/8"BSP(F)    **VL** 1/2"BSP(F)    **VM** 1/2"NPT(F)(Standard)

XX

### DIAPHRAGM

**UJ** AISI 316L SS (Standard)    **UL** HASTELLOY 'C'    **UM** MONEL

XX

### BODY

**CN** MONEL    **CO** HASTELLOY 'C'    **CM** AISI 316L SS    **CL** AISI 316 SS (Standard)

XX

### BODY LENGTH (Standard: 50mm & Max. Up to 200mm)

Specify IN mm (e.g 50mm, 100mm, 150mm & 200mm)

100mm

### PROCESS CONNECTION

Select the code from Flange Table.

XXX

### FLANGE MATERIAL

**TL** AISI 316L SS    **TX** MONEL    **TT** HASTELLOY C    **TM** AISI 316 SS (Standard)

XX

### PROTECTION ON WETTED PARTS

**VZ** PTFE COATING ON DIAPHRAGM (Max.Up to 315°C)

XX

### FILLING LIQUID (\*Consult factory for specifications , price and delivery)

**US** FLUROLUBE 4.2 [-45 to 175°C]    **UX** SILICON DC 200[-40 to 205°C]<sub>(Standard)</sub>    **VB** SYLTHERM XLT [-100 to 260°C]

XX

**UT** FLUROLUBE 6.3 [-40 to 235°C]    **UY** SILICON DC 704 [10 to 337°C]    **VC** HALOCARBON OIL\*

**UU** FLUROLUBE FS-5 [-28 to 148°C]    **UZ** SILICON DC 710 [7 to 371°C]

**UV** FOOD GRADE OIL [-20 to 140°C]    **VA** SYLTHERM 800 [-40 to 315°C]

### REMOTE MOUNTING (With Capillary of Max. Up to 15 Mtrs.)

SPECIFY IN METERS (e.g 1.5=1.5 METERS 2.0=2 METERS)

3Mtr.

### CAPILLARY

**PE** AISI 304 SS    **PG** AISI 316 SS

XX

### CAPILLARY COVERED WITH ARMOUR (Applicable with PE or PG if selected)

**PF** AISI 304 SS    **PH** AISI 316 SS    **PI** PVC

XX

### OTHER OPTIONS

**TB** HELIUM LEAK TEST    **TC** DRY SEAL ONLY WITHOUT INSTRUMENT    **GH** MATERIAL TEST CERTIFICATE\*

XX

**Ordering Example: D-11-XX-XX-XX-100mm-XXX-XX-XX-XX-3 Mtr-XX-XX-XX**

## SPECIAL FEATURES

All Stainless Steel Construction  
Continuous Duty  
Easy to Clean  
Available with Anti Vibration Spring

## SPECIFICATIONS

Range: 1 kg/cm<sup>2</sup> to 40 kg/cm<sup>2</sup>\*  
Process Temperature: -40°C to 200°C or as per fill fluid  
Instrument Connection: 1/2"NPT(F)  
Process Connection: As per diagram below  
Mounting: Direct (Without Spring & Capillary)  
Diaphragm: AISI 316L SS  
Body & Floating Ring: AISI 316 SS  
Fill Fluid: Silicon Oil -DC 200



## APPLICATIONS

Diaphragm seals are provided in the Instrument like Pressure Gauges ,Switches, Transmitters in order to isolate the sensing element from the main service due to It's Corrosive ,Viscous and Sedimented nature and to avoid clogging and solidification. These kind of seals are widely used in the Viscous & Corrosive services where flushing is required periodically & frequently.

## HOW TO ORDER

### BASIC MODEL

Example

D-12

### INSTRUMENT CONNECTION

**VO** 1/4"NPT(F)    **VP** 3/8"BSP(F)    **VL** 1/2"BSP(F)    **VM** 1/2"NPT(F)(Standard)

XX

### ANTI VIBRATION SPRING

**EA2** BOTTOM MOUNTING    **EA3** 90° ANGULAR MOUNTING (BACK MOUNTING)

XXX

### BODY & FLOATING RING

**CL** AISI 316 SS (Standard)    **CM** AISI 316L SS

XX

### DIAPHRAGM

**UJ** AISI 316L SS (Standard)

XX

### PROTECTION ON WETTED PARTS

**VZ** PTFE COATING ON DIAPHRAGM (Max.Up to 315°C)

XX

### FILLING FLUID

**US** FLUROLUBE 4.2 [-45 to 175°C]    **UX** SILICON DC 200[-40 to 205°C](Standard)    **VB** SYLTHERM XLT [-100 to 260°C]  
**UT** FLUROLUBE 6.3 [-40 to 235°C]    **UY** SILICON DC 704 [10 to 337°C]    **VC** HALOCARBON OIL\*  
**UU** FLUROLUBE FS-5 [-28 to 148°C]    **UZ** SILICON DC 710 [7 to 371°C]  
**UV** FOOD GRADE OIL [-20 to 140°C]    **VA** SYLTHERM 800 [-40 to 315°C]

XX

### REMOTE MOUNTING (With Capillary of Max. Up to 2 Mtrs.)

SPECIFY IN METERS (e.g 1.5=1.5 METERS 2.0=2 METERS)

1 Mtr.

### CAPILLARY

**PE** AISI 304 SS    **PG** AISI 316 SS

XX

### CAPILLARY COVERED WITH ARMOUR (Applicable with PE or PG if selected)

**PF** AISI 304 SS    **PH** AISI 316 SS    **PI** PVC

XX

### OTHER OPTIONS

**TB** HELIUM LEAK TEST    **TC** DRY SEAL ONLY WITHOUT INSTRUMENT    **GH** MATERIAL TEST CERTIFICATE\*  
**KF** SPECIAL CONNECTION (Please provide Drawings)

XX

**Ordering Example: D-12-XX-XXX-XX-XX-XX-XX-1 Mtr-XX-XX-XX**



### AS PER DIN 2527

DN	PN	CODE	DN	PN	CODE
40	6	A41	65	6	A61
	10	A42		10	A62
	16	A43		16	A63
	25	A44		25	A64
	40	A45		40	A65
	64	A46		64	A66
	100	A47		100	A67
	160	A48		160	A68
	250	A49		250	A69
	400	A50		400	A70
50	6	A51	80	6	A71
	10	A52		10	A72
	16	A53		16	A73
	25	A54		25	A74
	40	A55		40	A75
	64	A56		64	A76
	100	A57		100	A77
	160	A58		160	A78
	250	A59		250	A79
	400	A60		400	A80

### AS PER DIN 2642

DN	PN	CODE
40	10	A95
50		A96
65		A97
80		A98

### AS PER DIN 2633

DN	PN	CODE
40	16	A86
50		A87
65		A88
80		A89

### AS PER DIN 2635

DN	PN	CODE
40	40	B05
50		B06
65		B07
80		B08

### AS PER JIS-B 2210

NOMINAL SIZE	RATING / CLASS	CODE
40A	5K	B72
	10K	B73
	40K	B74

### AS PER BS-10

NOMINAL SIZE	TABLE	CODE
1 1/2"	D	C09
	E	C10
	F	C11
	H	C12
	J	C13
	K	C14
2"	D	C15
	E	C16
	F	C17
	H	C18
	J	C19
	K	C20

NOMINAL SIZE	RATING / CLASS	CODE
50A	5K	B75
	10K	B76
	40K	B77
65A	5K	B78
	10K	B79
	40K	B80
80A	5K	B81
	10K	B82
	40K	B83

### AS PER ANSIB 16.5

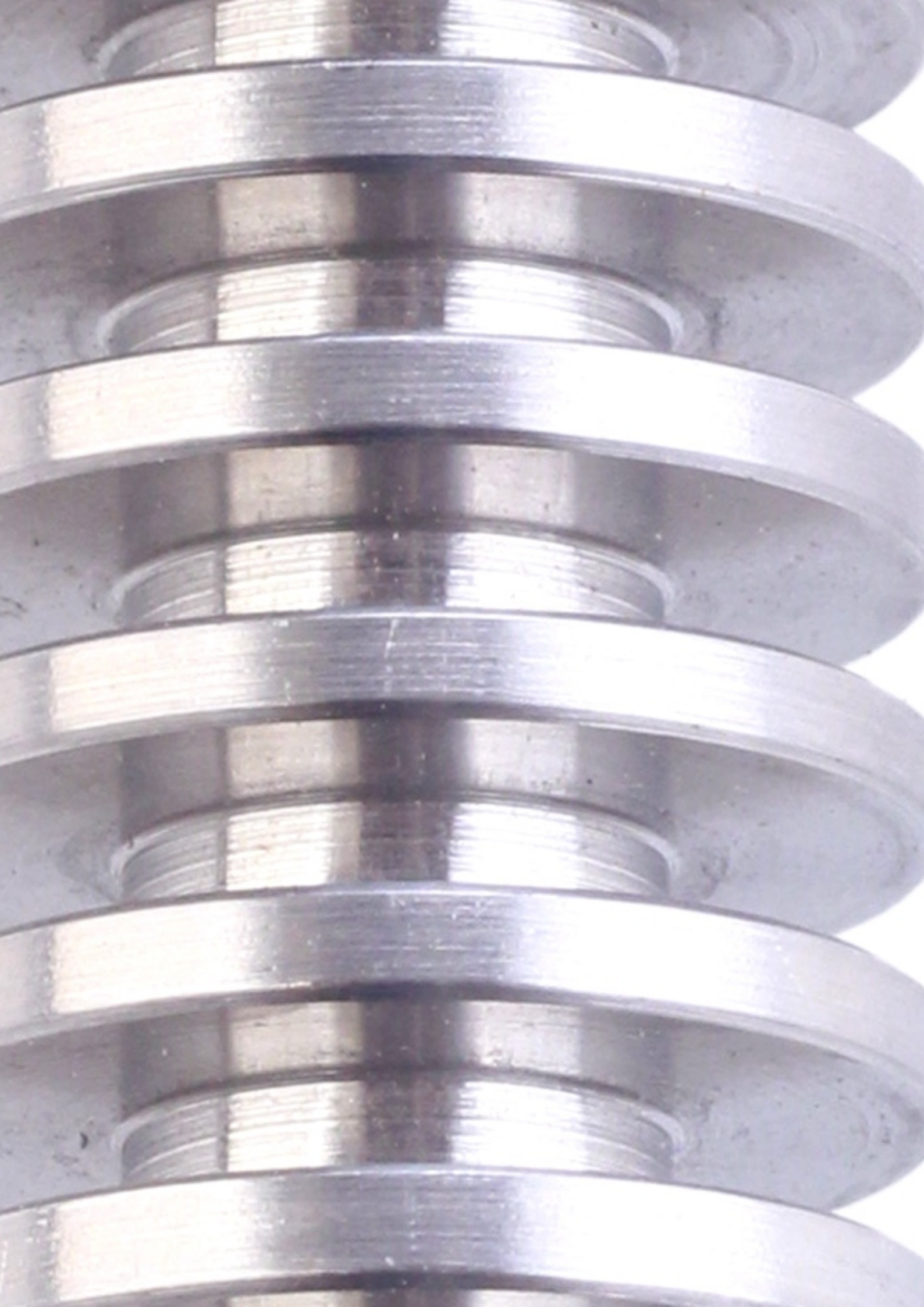
NOMINAL SIZE	RATING / CLASS	CODE	NOMINAL SIZE	RATING / CLASS	CODE
1 1/2"	150	B33	2 1/2"	150	B45
	300	B34		300	B46
	600	B35		600	B47
	900	B36		900	B48
	1500	B37		1500	B49
	2500	B38		2500	B50
2"	150	B39	3"	150	B51
	300	B40		300	B52
	600	B41		600	B53
	900	B42		900	B54
	1500	B43		1500	B55
	2500	B44		2500	B56

NOMINAL SIZE	TABLE	CODE
2 1/2"	D	C21
	E	C22
	F	C23
	H	C24
	J	C25
	K	C26
3"	D	C27
	E	C28
	F	C29
	H	C30
	J	C31
	K	C32

**RAISED FACE: A2**  
**FLAT FACE : A3**

## HOW TO ORDER

e.g For Flange Size of 1 1/2" as per BS-10 Table with raised Face:C10.A2



## HOW TO ORDER

### BASIC MODEL

Example

AC-01

### TYPE

**CT1** PERFORATED      **CT2** FIN TYPE      **CT3** CAPILLARY

XXX

### BODY

**KM** AISI 316L SS      **KV** CARBON STEEL      **KX** TITANIUM  
**KY** HASTELLOY C      **KW** MONEL      **CT** ANSI 316 SS (Standard)

XX

### CONNECTION

**2BM.2BF** 1/4" BSP (M X F)      **3BM.3BF** 3/8" BSP (M X F)      **4BM.4BF** 1/2" BSP (M X F)  
**2NM.2NF** 1/4" NPT (M X F)      **3NM.3NF** 3/8" NPT (M X F)      **4NM.4NF** 1/2" BSP (M X F)

XXX-XXX

**Ordering Example: AC-01-XXX-XX-XXX.XXX**

---

## SPECIAL FEATURES

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)

---

## STANDARD VERSION

Body: AISI 316 SS  
Handle: AISI 316 SS  
Working Temperature: Up to 180°C  
Gasket Seal: PTFE  
Nominal Pressure: 100 kg/cm<sup>2</sup>

---

## APPLICATIONS

Hydraulic Machines, Compressors, Process Plants, Clean Air, Gases & Non Crystallized Liquids.

---

Example

## HOW TO ORDER

AC-02

## BASIC MODEL

## TYPE

**KS** 2 WAY-ROUND BAR      **KU** 3 WAY-ROUND BAR      **KT** 3 WAY-ROUND BAR

XX

## BODY

**KM** AISI 316L SS      **KV** CARBON STEEL      **KX** TITANIUM  
**KY** HASTELLOY C      **KW** MONEL      **CT** ANSI 316 SS (Standard)

XX

## SIZE & END CONNECTION [ INLET X OUTLET ]

**NF** 1/4" (F X F) (Standard)      **NI** 3/8" (F X F) (Standard)      **NL** 1/2" (F X F) (Standard)  
**NG** 1/4" (M X F)      **NJ** 3/8" (M X F)      **NM** 1/2" (M X F)  
**NH** 1/4" (M X M)      **NK** 3/8" (M X M)      **NN** 1/2" (M X M)

XX

In case of 3 Way Gauge Cock ,One Connection will be Male & Another Two will be Female.

**Example:NM: 1/2" (M X F) Means 1/2" (M X F X F)**

## THREAD TYPE

**GU** BSP      **GV** NPT

XX

## OPTIONAL EXTRAS

**GH** Material Test Certificate      **GI** Vent Hole

XX

**Ordering Example: AC-02-XX-XX-XX-XX-XX**

## SPECIAL FEATURES

---

Nominal Pressure up to 400 bar  
7 different selectable setting ranges  
over pressure up to 600 bar  
below types & Piston type models.

## STANDARD VERSION

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Overload Protector Type: E01 Bellow Type  
E02 Piston Type

Adjustable Range: E01 600 mbar to 4 bar  
E02 6 bar to 400 bar

“O”Ring: Viton

Maximum Working Pressure: 400 bar

Operating Temperature: -40°C to 120°C

Material of Construction: AISI 316 SS

## APPLICATIONS

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Designed to protect pressure instruments from over pressure exceeding the specified pressure range by sudden & 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 & Off Shore.

---

## HOW TO ORDER

### BASIC MODEL

Example

AC-03

### ADJUSTABLE RANGE

**CQ** AISI 304 SS                      **CP** BRASS                      **CL** AISI 316 SS (Standard)

XXX  
OR  
XXX/XXX

#### RANGE TABLE

TYPE	RANGE
E01	600 mbar to 1.5 bar
E01	1 to 4 bar
E02	4 to 16 bar
E02	10 to 40 bar
E02	30 to 80 bar
E02	60 to 160 bar
E02	100 to 400 bar

**Note :** Specify required Range or Adjustable Range while ordering.  
Otherwise the protector will be set to first value of adjustable range table.

### BODY

**KM** AISI 316L SS              **KV** CARBON STEEL              **KX** TITANIUM  
**KY** HASTELLOY C              **KW** MONEL                      **CT** ANSI 316 SS (Standard)

XX

### PROCESS CONNECTION

**2BM.2BF** 1/4" BSP (M X F)              **3NM.3NF** 3/8" NPT (M X F)  
**2NM.2NF** 1/4" NPT (M X F)              **4BM.4BF** 1/2" BSP(M X F)(Standard)  
**3BM.3BF** 3/8" BSP (M X F)              **4NM.4NF** 1/2" NPT (M X F)(Standard)

XXX.XXX

### OPTIONS

**GH** Material Test Certificate\*\*              **SG** Oxygen Service\*  
**TF** Tested to NACE Standard

XX

**Ordering Example: AC-03-XXX OR XXX/XXX -XX-XXX.XXX-XX**



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## SPECIAL FEATURES

With Double Flushing Ports.  
Suitable with Flanged, Pancake or Inline diaphragm Seals.  
Available in all Exotic Materials Grades.

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## STANDARD VERSION

Flange Size: 2" to 5" as per ANSI B 16.5  
Material: AISI 316 SS  
Number of Ports : Two  
Port Connection: 1/4" NPT (F) with male plug  
sealing face: Raised Face

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## APPLICATIONS

The Flushing Ring is designed to be sandwiched between the process flange & the Diaphragm Seal. Material collected in front Diaphragm can be flushed out through the flushing ports.

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## HOW TO ORDER

Example

### BASIC MODEL

AC-04

### FLUSHING RING MATERIAL

<b>KM</b> AISI 316L SS	<b>KV</b> CARBON STEEL	<b>KX</b> TITANIUM
<b>KY</b> HASTELLOY C	<b>KW</b> MONEL	<b>CT</b> ANSI 316 SS (Standard)

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### FLUSHING PORTS ( WITH TWO MALE PLUGS )

<b>VF</b> 1/4"NPT (F) Standard	<b>VD</b> 1/2"NPT(F)
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### SEALING FACE

<b>A2</b> RAISED FACE	<b>A3</b> FLAT FACE
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**Note :** Other Sealing face can be provided on request. Please specify in notes.

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### OPTIONS

<b>GH</b> Material Test Certificate**
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**Ordering Example: AC-04-XX-XX-XX-XX**

## **SPECIAL FEATURES**

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Designed to protect Pressure Instruments from sudden Pressure changes & Fluctuation.

## **STANDARD VERSION**

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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

## **APPLICATIONS**

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Hydraulic Machines, Compressors, Process Plants,  
Clean Air, Gases & Non Crystallized Liquids.

---

## HOW TO ORDER

### BASIC MODEL

Example

AC-05

### BODY

<b>KM</b> AISI 316L SS	<b>KV</b> CARBON STEEL	<b>KX</b> TITANIUM
<b>KY</b> HASTELLOY C	<b>KW</b> MONEL	<b>CT</b> ANSI 316 SS (Standard)

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\*In case of wetted parts of Brass ,Max,Pressure shall be 250kg/cm2

### CONNECTION

<b>2BM.2BF</b> 1/4" BSP (M X F)	<b>3BM.3BF</b> 3/8" BSP (M X F)	<b>4BM.4BF</b> 1/2" BSP (M X F)(Standard)
<b>2NM.2NF</b> 1/4" NPT (M X F)	<b>3NM.3NF</b> 3/8" NPT(M X F)	<b>4NM.4NF</b> 1/2" NPT(M X F)(Standard)
<b>2TM.2TF</b> 1/4" BSPT (M X F)	<b>3TM.3TF</b> 3/8" BSPT (M X F)	<b>4TM.4TF</b> 1/2" BSPT (M X F)
		<b>4MM.4MF</b> M20 X 1.5 (M X F)

XXX.XXX

### OPTIONAL EXTRAS

<b>SG</b> OXYGEN SERVICE	<b>GH</b> MATERIAL TEST CERTIFICATES*	<b>TF</b> TESTED TO NACE STANDARDS
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**Ordering Example: AC-05-XX-XXX.XXX-XX**

## SPECIAL FEATURES

Pigtoil, Coil and "U" Type Shapes  
 Maximum Temperature up to 400°C  
 Nominal Pressure up to 160 bar  
 Tig Welded & Hydro Tested  
 Made with Seamless Pipe.

## APPLICATIONS

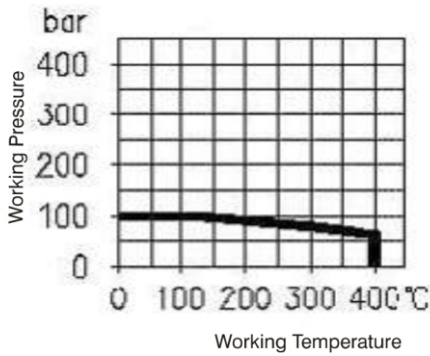
Siphons are used mainly to protect Pressure Instruments, Gauges, Switches and Transmitters directly coming in contact with high temperature process fluids or vapours. These are mounted between process and Pressure Instrument, They reduce process pulsation and generate cooling effect to save the Instrument.

## SPECIFICATIONS

BODY MATERIAL
AISI 316 Stainless Steel

PIPE SIZE
1/2" , Schedule 40

OPERATING PRESSURE
100 bar at 120°C



### PIGTAIL TYPE

Form	Body Material	Size	Pressure Rating (Bar)	Temp. Rating
	Steel, Sch.40	1/4" NPT	34.47	204.44
	AISI 316 SS	1/4" NPT	34.47	204.44

### COIL TYPE

Form	Body Material	Size	Pressure Rating (Bar)	Temp. Rating (°C)
	Steel, Sch.40	1/4" NPT	34.47	204.44
	Steel, Sch.80	1/4" NPT	34.47	204.44
	Steel, Sch.80	1/2" NPT	206.84	204.44
	Steel, Sch.160	1/2" NPT	249.59	371.11
	AISI 316 SS Steel, Sch 80	1/2" NPT	182.71	260
	AISI 316 SS Steel, Sch 160	1/2" NPT	386.1	260

## HOW TO ORDER

### BASIC MODEL (WITH PLAIN END)

Example

AC-06

## TYPE

**MR** COIL TYPE                      **MS** PIGTAIL TYPE                      **MT** 'U' TYPE

XX

## BODY

**CR** CARBON STEEL (RED OXIDE PAINTED)\*      **CL** AISI 304 SS      **CL** AISI 316 SS(Standard)  
**CS** MILD STEEL (CHROME PLATED)\*              **CM** AISI 316L SS

XX

## PIPE SIZE & SCHEDULE

Pipe Size	Schedule
1/4"	40, 80 & 160
3/8"	40, 80 & 160
1/2"	40, 80 & 160

(1/4-40)

## CONNECTION TYPE

**MU** SWIVEL FEMALE CONNECTION\*      **MV** ADAPTOR FOR MALE OR FEMALE THREADING  
**CZ** MALE THREAD ON PIPE

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## CONNECTION

<b>2BM.2BF</b> 1/4" BSP (M X F)	<b>2BM.2BM</b> 1/4" BSP (M X M)	<b>2BF.2BF</b> 1/4" BSP (F X F)
<b>2NM.2NF</b> 1/4" NPT (M X F)*	<b>2NM.2NM</b> 1/4" NPT (M X M)	<b>2NF.2NF</b> 1/4" NPT (F X F)*
<b>3BM.3BF</b> 3/8" BSP (M X F)	<b>3BM.3BM</b> 3/8" BSP (M X M)	<b>3BF.3BF</b> 3/8" BSP (F X F)
<b>3NM.3NF</b> 3/8" NPT (M X F)*	<b>3NM.3NM</b> 3/8" NPT (M X M)	<b>3NF.3NF</b> 3/8" NPT (F X F)*
<b>4BM.4BF</b> 1/2" BSP (M X F)(Standard)	<b>4BM.4BM</b> 1/2" BSP (M X M)	<b>4BF.4BF</b> 1/2" BSP (F X F)*
<b>4NM.4NF</b> 1/2" NPT (M X F)(Standard)*	<b>4NM.4NM</b> 1/2" NPT (M X M)	<b>4NF.4NF</b> 1/2" NPT (F X F)*
<b>4NM.PE</b> 1/2" NPT (M)X PLAIN END		

XXX.XXX

## OPTIONS

**PV** WITH IBR APPROVAL      **GH** MATERIAL TEST CERTIFICATES      **CW** MARKING BY LASER  
**CX** MARKING BY ENGRAVING

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**Ordering Example: AC-06-XX-XX- (1/4-40)-XX-XXX.XXX-XX**

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## **SPECIAL FEATURES**

Curved Type Polycarbonate Lens  
Maximum Drag Pointer With Key  
0.39" (10mm) Pointer Arm  
DIN Case & American Bayonet Case  
Versions For Options

## **SPECIFICATIONS**

Material: Polycarbonate (PC)  
Type: Curved Type  
Pointer: Aluminum Red Painted With Key  
Pointer Arm: 0.39" (10mm) Customer Can Cut As Request

## **STANDARD VERSION NOMINAL SIZE**

NOMINAL SIZE: 2.5" (63mm) & 4" (100mm)

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## SPECIAL FEATURES

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Fabricated From Bar Stock  
Stand For Manufacturing  
Followed-PTC 19.3  
Thermowell Available In Exotic Materials  
Such As Hastelloy-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 Damage due to  
process parameters.

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**FLANGED CONNECTION CODES**
**AS PER DIN 2527**

DN	PN	CODE
10	6	A01
	10	A02
	16	A03
	25	A04
	40	A05
	64	A06
	100	A07
	160	A08
	250	A09
	400	A10
15	6	A11
	10	A12
	16	A13
	25	A14
	40	A15
	64	A16
	100	A17
	160	A18
	250	A19
	400	A20
20	6	A21
	10	A22
	16	A23
	25	A24
	40	A25
25	6	A26
	10	A27
	16	A28
	25	A29
	40	A30
	64	A31
	100	A32
	160	A33
	250	A34
400	A35	

DN	PN	CODE
32	6	A36
	10	A37
	16	A38
	25	A39
	40	A40
40	6	A41
	10	A42
	16	A43
	25	A44
	40	A45
	64	A46
	100	A47
	160	A48
	250	A49
	400	A50
50	6	A51
	10	A52
	16	A53
	25	A54
	40	A55
	64	A56
	100	A57
	160	A58
	250	A59
	400	A60

**AS PER DIN 2642**

DN	PN	CODE
10	10	A90
15		A91
20		A92
25		A93
32		A94
40		A95
50		A96
65		A97
80		A98

DN	PN	CODE
65	6	A61
	10	A62
	16	A63
	25	A64
	40	A65
	64	A66
	100	A67
	160	A68
	250	A69
	400	A70
80	6	A71
	10	A72
	16	A73
	25	A74
	40	A75
	64	A76
	100	A77
	160	A78
	250	A79
	400	A80

**AS PER DIN 2633**

DN	PN	CODE
10	16	A81
15		A82
20		A83
25		A84
32		A85
40		A86
50		A87
65		A88
80		A89

**AS PER DIN 2635**

DN	PN	CODE
10	40	A99
15		B01
20		B02
25		B03
32		B04
40		B05
50		B06
65		B07
80	B08	

**FLANGED CONNECTION CODES**
**AS PER ANSI B 16.5**

NOMINAL SIZE	RATING/ CLASS	CODE	NOMINAL SIZE	RATING/ CLASS	CODE	NOMINAL SIZE	RATING/ CLASS	CODE	NOMINAL SIZE	RATING/ CLASS	CODE
1/2"	150	B09	1"	150	B21	1 1/2"	150	B33	2 1/2"	150	B45
	300	B10		300	B22		300	B34		300	B46
	600	B11		600	B23		600	B35		600	B47
	900	B12		900	B24		900	B36		900	B48
	1500	B13		1500	B25		1500	B37		1500	B49
	2500	B14		2500	B26		2500	B38		2500	B50
3/4"	150	B15	1 1/4"	150	B27	2"	150	B39	3"	150	B51
	300	B16		300	B28		300	B40		300	B52
	600	B17		600	B29		600	B41		600	B53
	900	B18		900	B30		900	B42		900	B54
	1500	B19		1500	B31		1500	B43		1500	B55
	2500	B20		2500	B32		2500	B44		2500	B56

**AS PER JIS - B 2210**

NOMINAL SIZE	RATING/ CLASS	CODE
10	5K	B57
	10K	B58
	40K	B59
15	5K	B60
	10K	B61
	40K	B62
20	5K	B63
	10K	B64
	40K	B65

NOMINAL SIZE	RATING/ CLASS	CODE
25	5K	B66
	10K	B67
	40K	B68
32	5K	B69
	10K	B70
	40K	B71
40	5K	B72
	10K	B73
	40K	B74

NOMINAL SIZE	RATING/ CLASS	CODE
50	5K	B75
	10K	B76
	40K	B77
65	5K	B78
	10K	B79
	40K	B80
80	5K	B81
	10K	B82
	40K	B83

**AS PER BS-10**

NOMINAL SIZE	TABLE	CODE	NOMINAL SIZE	TABLE	CODE	NOMINAL SIZE	TABLE	CODE	NOMINAL SIZE	TABLE	CODE
1/2"	D	B84	1"	D	B96	1 1/2"	D	C09	2 1/2"	D	C21
	E	B85		E	B97		E	C10		E	C22
	F	B86		F	B98		F	C11		F	C23
	H	B87		H	B99		H	C12		H	C24
	J	B88		J	C01		J	C13		J	C25
	K	B89		K	C02		K	C14		K	C26
3/4"	D	B90	1 1/4"	D	C03	2"	D	C15	3"	D	C27
	E	B91		E	C04		E	C16		E	C28
	F	B92		F	C05		F	C17		F	C29
	H	B93		H	C06		H	C18		H	C30
	J	B94		J	C07		J	C19		J	C31
	K	B95		K	C08		K	C20		K	C32

**A2 RAISED FACE**
**A3 FLAT FACE**
**A4 RING TYPE JOINT**
**HOW TO ORDER**

e.g FOR FLANGE SIZE OF 1 1/2" AS PER BS-10 TABLE E WITH RAISED FACE : C10.A2

NOTE: PLEASE MENTION SEPARATELY FINISH OF THE FLANGE

## HOW TO ORDER

### BASIC MODEL

### MATERIAL

<b>TN</b> CARBON STEEL	<b>TM</b> AISI 316 SS	<b>GR</b> AISI 446 SS	<b>GQ</b> INCONEL 600
<b>TK</b> AISI 304 SS	<b>TZ</b> INCOLY 800HT	<b>TX</b> MONEL 400	<b>TT</b> HASTEALLOY 'C'
<b>UH</b> TITANIUM	<b>UD</b> TANTALUM	<b>TY</b> ALLOY 20	

FOR OTHER MATERIALS PLEASE REFER MATERIAL GUIDE

### INSTRUMENT CONNECTION

<b>VP</b> 3/8" BSP (F)	<b>VL</b> 1/2" BSP (F)	<b>GE</b> 1" BSP (F)	<b>4MF</b> M20 X 1.5 (F)	<b>VN</b> 1/4" BSP (F)
<b>VQ</b> 3/8" NPT (F)	<b>VM</b> 1/2" NPT (F)	<b>GF</b> 1" NPT (F)	<b>4JF</b> 1/2" PF (F)	<b>IV</b> 1/4" PT (F)
<b>GC</b> 3/4" BSP (F)	<b>GD</b> 3/4" NPT (F)	<b>4QF</b> 1/2" PT (F)	<b>VO</b> 1/4" NPT (F)	<b>IW</b> 1/4" PF (F)

FOR OTHER CONNECTIONS CONTACT FACTORY

### FLANGE CONNECTION

SEE FLANGE TABLE

### BORE DIAMETER "d"

**d** INDICATE BORE DIAMETER IN mm  
e.g: FOR 6.5 mm-d 6.5

### OUTER DIAMETER "D"

**D** INDICATE BORE DIAMETER IN mm  
e.g: FOR 22 mm-D 22

### THERMOWELL INSERTION LENGTH "U"

**U** INDICATE INSERTION LENGTH IN mm AS-UXXX  
e.g: FOR 300 mm-U 300

### LAGGING/ EXTENSION LENGTH "H"

**H** INDICATE INSERTION LENGTH IN mm AS-UXXX  
e.g: FOR 50 mm-H 50

### FINISHED HEAD DIAMETER "HD"

**HD** INDICATE HEX DIAMETER IN mm  
e.g: FOR 28 mm-HD 28

**HR** INDICATE ROUND DIAMETER IN mm  
e.g: FOR 28 mm-HR 28

**NOTE TIP THICKNESS (6mm)**

### OPTIONS

**GG** PLUG AND CHAIN OF SS      **GH** MATERIAL TEST CERTIFICATES\*

### COATING/ LINING ON THERMOWELL

<b>GI</b> TEFLON COATING	<b>GK</b> RUBBER LINING	<b>GM</b> HASTEALLOY C OVERLAY
<b>GJ</b> TUNGSTEN CARBIDE COATING	<b>GL</b> GLASS LINING	<b>GN</b> TITANIUM OVERLAY

FOR OTHER EXOTIC MATERIALS CONTACT FACTORY

### TESTS & CERTIFICATES

<b>SY</b> BORE CONCENTRICITY TEST	<b>TA</b> DRY PENETRATION TEST FOR WELD JOINTS	<b>PV</b> IBR CERTIFICATION
<b>GO</b> HYDRO TEST AT 100 kg/cm2 (FROM INSIDE AND OUTSIDE)	<b>TG</b> CRACK DETECTION ULTRA SONIC TEST	<b>TE</b> RADIOGRAPHY TEST FOR THERMOWELLS
<b>GP</b> WAKE FREQUENCY CALCULATION AS PER PTC 19.3		

**NOTE:** Due to continuous changes the specification may vary from time to time.

**Ordering Example: EI-1-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX**

## **SPECIAL FEATURES**

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Fabricated From Bar Stock  
Stand For Manufacturing  
Followed-PTC 19.3  
Thermowell Available In Exotic Materials  
Such As Hastelloy-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 Damage due to  
process parameters.

---

## HOW TO ORDER

### BASIC MODEL

### MATERIAL

<b>TN</b> CARBON STEEL	<b>TM</b> AISI 316 SS	<b>GR</b> AISI 446 SS	<b>GQ</b> INCONEL 600
<b>TK</b> AISI 304 SS	<b>TZ</b> INCOLY 800HT	<b>TX</b> MONEL 400	<b>TT</b> HASTEALLOY 'C'
<b>UH</b> TITANIUM	<b>UD</b> TANTALUM	<b>TY</b> ALLOY 20	

FOR OTHER MATERIALS PLEASE REFER MATERIAL GUIDE

### INSTRUMENT CONNECTION

<b>VP</b> 3/8" BSP (F)	<b>VL</b> 1/2" BSP (F)	<b>GE</b> 1" BSP (F)	<b>4MF</b> M20 X 1.5 (F)	<b>VN</b> 1/4" BSP (F)
<b>VQ</b> 3/8" NPT (F)	<b>VM</b> 1/2" NPT (F)	<b>GF</b> 1" NPT (F)	<b>4JF</b> 1/2" PF (F)	<b>IV</b> 1/4" PT (F)
<b>GC</b> 3/4" BSP (F)	<b>GD</b> 3/4" NPT (F)	<b>4QF</b> 1/2" PT (F)	<b>VO</b> 1/4" NPT (F)	<b>IW</b> 1/4" PF (F)

FOR OTHER CONNECTIONS CONTACT FACTORY

### PROCESS CONNECTION

<b>WT</b> 3/8" BSP (M)	<b>WU</b> 1/2" BSP (M)	<b>WW</b> 1" BSP (M)	<b>4MM</b> M20 X 1.5 (M)
<b>WZ</b> 3/8" NPT (M)	<b>XA</b> 1/2" NPT (M)	<b>XC</b> 1" NPT (M)	<b>4JM</b> 1/2" PF (M)
<b>WV</b> 3/4" BSP (M)	<b>XB</b> 3/4" NPT (M)	<b>4QM</b> 1/2" PT (M)	

FOR OTHER CONNECTIONS CONTACT FACTORY

### BORE DIAMETER "d"

**d** INDICATE BORE DIAMETER IN mm  
e.g: FOR 6.5 mm-d 6.5

### OUTER DIAMETER "D"

**D** INDICATE BORE DIAMETER IN mm  
e.g: FOR 22 mm-D 22

### THERMOWELL INSERTION LENGTH "U"

**U** INDICATE INSERTION LENGTH IN mm AS-UXXX  
e.g: FOR 300 mm-U 300

### LAGGING/ EXTENSION LENGTH "H"

**H** INDICATE INSERTION LENGTH IN mm AS-UXXX  
e.g: FOR 50 mm-H 50

### FINISHED HEAD DIAMETER "HD"

**HD** INDICATE HEX DIAMETER IN mm  
e.g: FOR 28 mm-HD 28

**HR** INDICATE ROUND DIAMETER IN mm  
e.g: FOR 28 mm-HR 28

**NOTE TIP THICKNESS (6mm)**

### OPTIONS

**GG** PLUG AND CHAIN OF SS      **GH** MATERIAL TEST CERTIFICATES\*

### COATING/ LINING ON THERMOWELL

<b>GI</b> TEFLON COATING	<b>GK</b> RUBBER LINING	<b>GM</b> HASTEALLOY C OVERLAY
<b>GJ</b> TUNGSTEN CARBIDE COATING	<b>GL</b> GLASS LINING	<b>GN</b> TITANIUM OVERLAY

FOR OTHER EXOTIC MATERIALS CONTACT FACTORY

### TESTS & CERTIFICATES

<b>SY</b> BORE CONCENTRICITY TEST	<b>TA</b> DRY PENETRATION TEST FOR WELD JOINTS	<b>PV</b> IBR CERTIFICATION
<b>GO</b> HYDRO TEST AT 100 kg/cm2 (FROM INSIDE AND OUTSIDE)	<b>TG</b> CRACK DETECTION ULTRA SONIC TEST	<b>TE</b> RADIOGRAPHY TEST FOR THERMOWELLS

**GP** WAKE FREQUENCY CALCULATION AS PER PTC 19.3

**NOTE:** Due to continuous changes the specification may vary from time to time.

**Ordering Example: EI-2-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX**

## **SPECIAL FEATURES**

---

Fabricated From Bar Stock  
Stand For Manufacturing  
Followed-PTC 19.3  
Thermowell Available In Exotic Materials  
Such As Hastelloy-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 Damage due to  
process parameters.

---



**FLANGED CONNECTION CODES**
**AS PER DIN 2527**

DN	PN	CODE
10	6	A01
	10	A02
	16	A03
	25	A04
	40	A05
	64	A06
	100	A07
	160	A08
	250	A09
	400	A10
15	6	A11
	10	A12
	16	A13
	25	A14
	40	A15
	64	A16
	100	A17
	160	A18
	250	A19
	400	A20
20	6	A21
	10	A22
	16	A23
	25	A24
	40	A25
25	6	A26
	10	A27
	16	A28
	25	A29
	40	A30
	64	A31
	100	A32
	160	A33
	250	A34
400	A35	

DN	PN	CODE
32	6	A36
	10	A37
	16	A38
	25	A39
	40	A40
40	6	A41
	10	A42
	16	A43
	25	A44
	40	A45
	64	A46
	100	A47
	160	A48
	250	A49
	400	A50
50	6	A51
	10	A52
	16	A53
	25	A54
	40	A55
	64	A56
	100	A57
	160	A58
	250	A59
	400	A60

**AS PER DIN 2642**

DN	PN	CODE
10	10	A90
15		A91
20		A92
25		A93
32		A94
40		A95
50		A96
65		A97
80		A98

DN	PN	CODE
65	6	A61
	10	A62
	16	A63
	25	A64
	40	A65
	64	A66
	100	A67
	160	A68
	250	A69
	400	A70
80	6	A71
	10	A72
	16	A73
	25	A74
	40	A75
	64	A76
	100	A77
	160	A78
	250	A79
	400	A80

**AS PER DIN 2633**

DN	PN	CODE
10	16	A81
15		A82
20		A83
25		A84
32		A85
40		A86
50		A87
65		A88
80		A89

**AS PER DIN 2635**

DN	PN	CODE
10	40	A99
15		B01
20		B02
25		B03
32		B04
40		B05
50		B06
65		B07
80		B08

**FLANGED CONNECTION CODES**
**AS PER ANSI B 16.5**

NOMINAL SIZE	RATING/ CLASS	CODE	NOMINAL SIZE	RATING/ CLASS	CODE	NOMINAL SIZE	RATING/ CLASS	CODE	NOMINAL SIZE	RATING/ CLASS	CODE
1/2"	150	B09	1"	150	B21	1 1/2"	150	B33	2 1/2"	150	B45
	300	B10		300	B22		300	B34		300	B46
	600	B11		600	B23		600	B35		600	B47
	900	B12		900	B24		900	B36		900	B48
	1500	B13		1500	B25		1500	B37		1500	B49
	2500	B14		2500	B26		2500	B38		2500	B50
3/4"	150	B15	1 1/4"	150	B27	2"	150	B39	3"	150	B51
	300	B16		300	B28		300	B40		300	B52
	600	B17		600	B29		600	B41		600	B53
	900	B18		900	B30		900	B42		900	B54
	1500	B19		1500	B31		1500	B43		1500	B55
	2500	B20		2500	B32		2500	B44		2500	B56

**AS PER JIS - B 2210**

NOMINAL SIZE	RATING/ CLASS	CODE
10	5K	B57
	10K	B58
	40K	B59
15	5K	B60
	10K	B61
	40K	B62
20	5K	B63
	10K	B64
	40K	B65

NOMINAL SIZE	RATING/ CLASS	CODE
25	5K	B66
	10K	B67
	40K	B68
32	5K	B69
	10K	B70
	40K	B71
40	5K	B72
	10K	B73
	40K	B74

NOMINAL SIZE	RATING/ CLASS	CODE
50	5K	B75
	10K	B76
	40K	B77
65	5K	B78
	10K	B79
	40K	B80
80	5K	B81
	10K	B82
	40K	B83

**AS PER BS-10**

NOMINAL SIZE	TABLE	CODE	NOMINAL SIZE	TABLE	CODE	NOMINAL SIZE	TABLE	CODE	NOMINAL SIZE	TABLE	CODE
1/2"	D	B84	1"	D	B96	1 1/2"	D	C09	2 1/2"	D	C21
	E	B85		E	B97		E	C10		E	C22
	F	B86		F	B98		F	C11		F	C23
	H	B87		H	B99		H	C12		H	C24
	J	B88		J	C01		J	C13		J	C25
	K	B89		K	C02		K	C14		K	C26
3/4"	D	B90	1 1/4"	D	C03	2"	D	C15	3"	D	C27
	E	B91		E	C04		E	C16		E	C28
	F	B92		F	C05		F	C17		F	C29
	H	B93		H	C06		H	C18		H	C30
	J	B94		J	C07		J	C19		J	C31
	K	B95		K	C08		K	C20		K	C32

**A2 RAISED FACE**
**A3 FLAT FACE**
**A4 RING TYPE JOINT**
**HOW TO ORDER**

e.g FOR FLANGE SIZE OF 1 1/2" AS PER BS-10 TABLE E WITH RAISED FACE : C10.A2

NOTE: PLEASE MENTION SEPARATELY FINISH OF THE FLANGE

## HOW TO ORDER

### BASIC MODEL

EI 3

### MATERIAL

<b>TN</b> CARBON STEEL	<b>TM</b> AISI 316 SS	<b>GR</b> AISI 446 SS	<b>GQ</b> INCONEL 600
<b>TK</b> AISI 304 SS	<b>TZ</b> INCOLY 800HT	<b>TX</b> MONEL 400	<b>TT</b> HASTEALLOY 'C'
<b>UH</b> TITANIUM	<b>UD</b> TANTALUM	<b>TY</b> ALLOY 20	<b>TL</b> AISI 316L

XX

### INSTRUMENT CONNECTION

<b>VP</b> 3/8" BSP (F)	<b>VL</b> 1/2" BSP (F)	<b>GE</b> 1" BSP (F)	<b>4MF</b> M20 X 1.5 (F)	<b>VN</b> 1/4" BSP (F)
<b>VQ</b> 3/8" NPT (F)	<b>VM</b> 1/2" NPT (F)	<b>GF</b> 1" NPT (F)	<b>4JF</b> 1/2" PF (F)	<b>IV</b> 1/4" PT (F)
<b>GC</b> 3/4" BSP (F)	<b>GD</b> 3/4" NPT (F)	<b>4QF</b> 1/2" PT (F)	<b>VO</b> 1/4" NPT (F)	<b>IW</b> 1/4" PF (F)

XX

FOR OTHER CONNECTIONS CONTACT FACTORY

### FLANGE CONNECTION

SEE FLANGE TABLE

XX

### BORE DIAMETER "d"

**d** INDICATE BORE DIAMETER IN mm  
e.g: FOR 6.5 mm-d 6.5

XX

### TAPER STARTING AT

**0** JUST BELOW FLANGE  
- DISTANCE BELOW FLANGE [PLEASE MENTION IN mm]

XX

### OUTSIDE MAJOR DIAMETER "DA"

**DA** e.g FOR MAJOR DIAMETER OF 20mm ,PLEASE MENTION DA20

XX

### OUTSIDE MINOR DIAMETER "DB"

**DA** e.g FOR MINOR DIAMETER OF 15mm ,PLEASE MENTION DA20

XX

### THERMOWELL INSERTION LENGTH "U"

**U** INDICATE INSERTION LENGTH IN mm AS-UXXX  
e.g: FOR 300 mm-U 300

XX

### LAGGING/ EXTENSION LENGTH "H"

**H** INDICATE INSERTION LENGTH IN mm AS-UXXX  
e.g: FOR 50 mm-H 50

XX

### FINISHED HEAD DIAMETER "HD"

**HD** INDICATE HEX DIAMETER IN mm  
e.g: FOR 28 mm-HD 28

**HR** INDICATE ROUND DIAMETER IN mm  
e.g: FOR 28 mm-HR 28

XX

**NOTE TIP THICKNESS (6mm)**

### OPTIONS

<b>GG</b> PLUG AND CHAIN OF SS	<b>GH</b> MATERIAL TEST CERTIFICATES*	<b>IX</b> SPANNER FLAT FOR ROUND HEAD
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XX

### COATING/ LINING ON THERMOWELL

<b>GI</b> TEFLON COATING	<b>GK</b> RUBBER LINING	<b>GM</b> HASTEALLOY C OVERLAY
<b>GJ</b> TUNGSTEN CARBIDE COATING	<b>GL</b> GLASS LINING	<b>GN</b> TITANIUM OVERLAY

FOR OTHER EXOTIC MATERIALS CONTACT FACTORY

XX

### TESTS & CERTIFICATES

<b>SY</b> BORE CONCENTRICITY TEST	<b>TA</b> DRY PENETRATION TEST FOR WELD JOINTS	<b>PV</b> IBR CERTIFICATION
<b>GO</b> HYDRO TEST AT 100 kg/cm2 (FROM INSIDE AND OUTSIDE)	<b>TG</b> CRACK DETECTION ULTRA SONIC TEST	<b>TE</b> RADIOGRAPHY TEST FOR THERMOWELLS
<b>GP</b> WAKE FREQUENCY CALCULATION AS PER PTC 19.3		<b>TF</b> NACE

XX

**NOTE:** Due to continuous changes the specification may vary from time to time.

**Ordering Example: EI-3-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX**

## **SPECIAL FEATURES**

---

Fabricated From Bar Stock  
Stand For Manufacturing  
Followed-PTC 19.3  
Thermowell Available In Exotic Materials  
Such As Hastelloy-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 Damage due to  
process parameters.

---

## HOW TO ORDER

### BASIC MODEL

#### MATERIAL

<b>TN</b> CARBON STEEL	<b>TM</b> AISI 316 SS	<b>GR</b> AISI 446 SS	<b>GQ</b> INCONEL 600
<b>TK</b> AISI 304 SS	<b>TZ</b> INCOLY 800HT	<b>TX</b> MONEL 400	<b>TT</b> HASTEALLOY 'C'
<b>UH</b> TITANIUM	<b>UD</b> TANTALUM	<b>TY</b> ALLOY 20	

#### INSTRUMENT CONNECTION

<b>VP</b> 3/8" BSP (F)	<b>VL</b> 1/2" BSP (F)	<b>GE</b> 1" BSP (F)	<b>4MF</b> M20 X 1.5 (F)	<b>VN</b> 1/4" BSP (F)
<b>VQ</b> 3/8" NPT (F)	<b>VM</b> 1/2" NPT (F)	<b>GF</b> 1" NPT (F)	<b>4JF</b> 1/2" PF (F)	<b>IV</b> 1/4" PT (F)
<b>GC</b> 3/4" BSP (F)	<b>GD</b> 3/4" NPT (F)	<b>4QF</b> 1/2" PT (F)	<b>VO</b> 1/4" NPT (F)	<b>IW</b> 1/4" PF (F)

FOR OTHER CONNECTIONS CONTACT FACTORY

#### PROCESS CONNECTION

<b>WT</b> 3/8" BSP (M)	<b>WU</b> 1/2" BSP (M)	<b>WW</b> 1" BSP (M)	<b>4MM</b> M20 X 1.5 (M)
<b>WZ</b> 3/8" NPT (M)	<b>XA</b> 1/2" NPT (M)	<b>XC</b> 1" NPT (M)	<b>4JM</b> 1/2" PF (M)
<b>WV</b> 3/4" BSP (M)	<b>XB</b> 3/4" NPT (M)	<b>4QM</b> 1/2" PT (M)	

FOR OTHER CONNECTIONS CONTACT FACTORY

#### BORE DIAMETER "d"

**d** INDICATE BORE DIAMETER IN mm  
e.g: FOR 6.5 mm-d 6.5

#### TAPER STARTING AT

**0** JUST BELOW THREADS  
- DISTANCE BELOW THREADS [PLEASE MENTION IN mm]

#### OUTSIDE MAJOR DIAMETER

**DA** e.g FOR MAJOR DIAMETER OF 20mm ,PLEASE MENTION DA 20

#### OUTSIDE MINOR DIAMETER

**DA** e.g FOR MINOR DIAMETER OF 15mm ,PLEASE MENTION DB 15

#### THERMOWELL INSERTION LENGTH "U"

**U** INDICATE INSERTION LENGTH IN mm AS-UXXX  
e.g: FOR 300 mm-U 300

#### LAGGING/ EXTENSION LENGTH "H"

**H** INDICATE INSERTION LENGTH IN mm AS-UXXX  
e.g: FOR 50 mm-H 50

#### FINISHED HEAD DIAMETER "HD"

**HD** INDICATE HEX DIAMETER IN mm  
e.g: FOR 28 mm-HD 28

**HR** INDICATE ROUND DIAMETER IN mm  
e.g: FOR 28 mm-HR 28

**NOTE TIP THICKNESS (6mm)**

#### OPTIONS

**GG** PLUG AND CHAIN OF SS      **GH** MATERIAL TEST CERTIFICATES\*

#### COATING/ LINING ON THERMOWELL

<b>GI</b> TEFLON COATING	<b>GK</b> RUBBER LINING	<b>GM</b> HASTEALLOY C OVERLAY
<b>GJ</b> TUNGSTEN CARBIDE COATING	<b>GL</b> GLASS LINING	<b>GN</b> TITANIUM OVERLAY

FOR OTHER EXOTIC MATERIALS CONTACT FACTORY

#### TESTS & CERTIFICATES

<b>SY</b> BORE CONCENTRICITY TEST	<b>TA</b> DRY PENETRATION TEST FOR WELD JOINTS	<b>PV</b> IBR CERTIFICATION
<b>GO</b> HYDRO TEST AT 100 kg/cm2 (FROM INSIDE AND OUTSIDE)	<b>TG</b> CRACK DETECTION ULTRA SONIC TEST	<b>TE</b> RADIOGRAPHY TEST FOR THERMOWELLS

**GP** WAKE FREQUENCY CALCULATION AS PER PTC 19.3

**NOTE:** Due to continuous changes the specification may vary from time to time.

**Ordering Example: EI-4-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX-XX**

Example

EI 4

XX

XX

XX

XX

XX

XX

XX

XX

XX

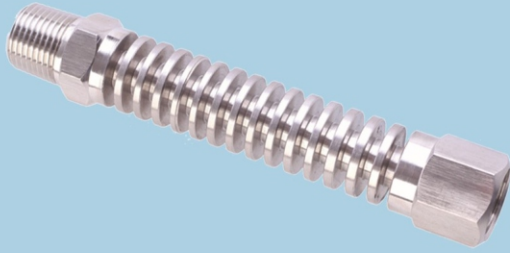
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XX

XX

XX

# ACCESSORIES



**AC-01  
COOLING TOWER**

Min. Pressure: -30inHg  
Max. Pressure : 6,000psi



**AC-02  
GAUGE COCK**

Min. Pressure: -30inHg  
Max. Pressure : 230 psi  
and 1,500 psi as option



**AC-03  
GAUGE SAVER**

Min. Pressure: -30inHg  
Max. Pressure :10,000 psi



**AC-04  
FLUSHING RING**

Min. Pressure: -30inHg  
Max. Pressure :6,000 psi



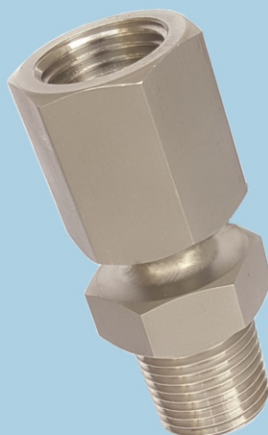
**AC-05  
PULSATION DAMPENER**

Min. Pressure: -30inHg  
Max. Pressure :6,000 psi



**AC-06  
SIPHON**

Min. Pressure: -30inHg  
Max. Pressure :1,500 psi



**AC-07  
SWIVEL ADAPTOR**

Min. Pressure: -30inHg  
Max. Pressure :6,000 psi



**AC-08  
CURVED PC LENS WITH  
RED DRAG POINTER**

Size: 2.5" & 4"

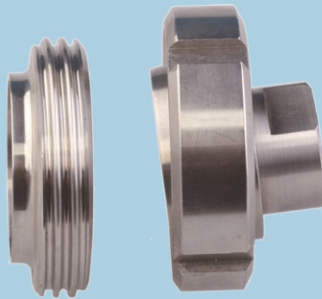


# DIAPHRAGM SEALS

- All wetted parts SS 316L confirming to NACE MR 0175
- All diaphragm are laser welded with body
- All Sanitary seals are confirming to sanitary applications
- All the seals are helium leak tested
- Connected with gauges in MONEL ,HASTELLOY C 276,TITANIUM, TANTALUM,INCONEL 600,SILIVER
- We offer diaphragm seals till 400 bar



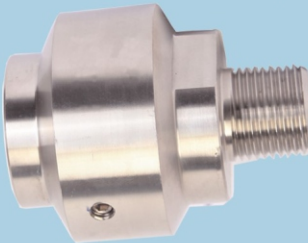
**D-02**  
**DIRECT COUPLE TYPE**  
 Min Pressure :-30inHg  
 Max.Pressure:6,000 psi



**D-04**  
**FLUSH DIAPHRAGM SANITARY TYPE**  
 Min Pressure :-30inHg  
 Max.Pressure:600 psi



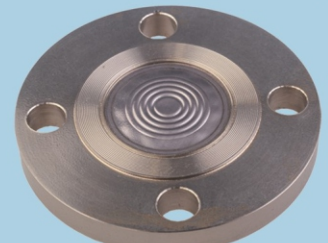
**D-05**  
**SCREWED FLUSH TYPE**  
 Min Pressure :-30inHg  
 Max.Pressure: 900 psi



**D-06**  
**HEAVY DUTY MINI SEAL**  
 Min Pressure :-30inHg  
 Max.Pressure:9,000 psi



**D-07**  
**SANITARY SEAL,CLAMP TYPE**  
 Min Pressure :-30inHg  
 Max.Pressure:600 psi



**D-09**  
**DIRECT FLANGED FLUSHING TYPE**  
 Min Pressure :-30inHg  
 Max.Pressure:4,000 psi



**D-08**  
**FLANGE," I " SECTION TYPE**  
 Min Pressure :-30inHg  
 Max.Pressure:6,000 psi



**D-11**  
**EXTENDED NECK TYPE**  
 Min Pressure :-30inHg  
 Max.Pressure:4,000 psi

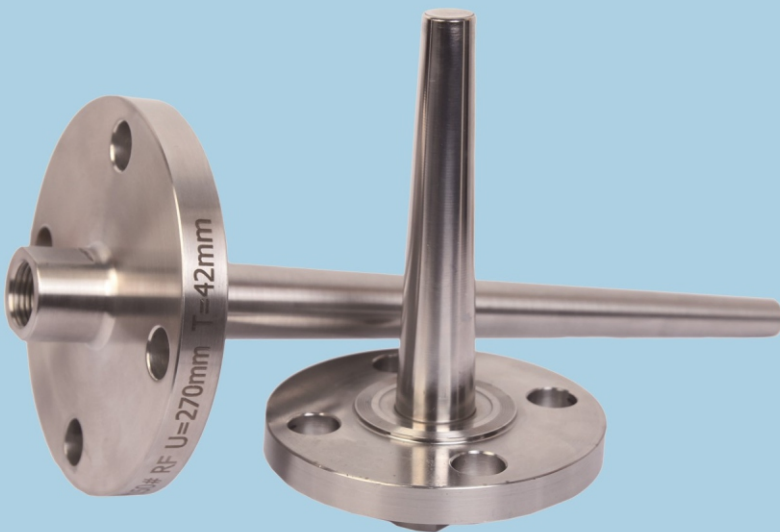


**D-12**  
**PULP SEAL,FLOATING RING TYPE**  
 Min Pressure :-30inHg  
 Max.Pressure:600 psi



# THERMOWELLS

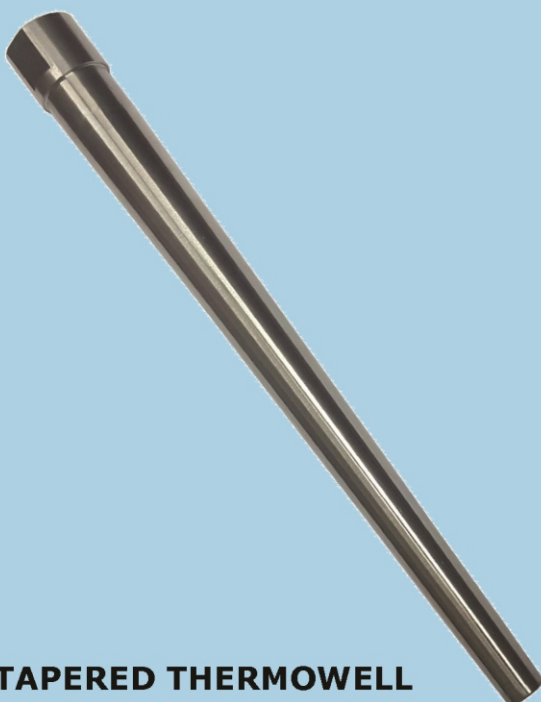
- Manufacture from BAR STOCK
- Design Standard : PTC 19.3
- Available material: SS316L ,HASTELLOY C,MONEL,TITANIUM,TANTALUM, INCONEL 600
- Protection Coating: Available with PTFE for acid applications.
- Leak Testing : Helium gas and Hydro static pressure internal and external



**FLANGE THERMOWELL**



**STRAIGHT THERMOWELL**



**TAPERED THERMOWELL**



**STEPPED THERMOWELL**

## ABOUT US:

Kunshan Elite Instruments is a world class manufacturer of measuring instruments and accessories, including pressure gauges, thermometers, level gauges, pressure switches, RTD's, thermocouples and thermowells. We specialize in working together with our customers to develop comprehensive solutions in measurement technology and integrating those solutions into their processes.

Established in 2010, Elite Instruments delivers over 2 million quality products to over 50 countries every year Worldwide, over 6 million ELITE measuring instruments are currently in use.

Headquartered in China, Kunshan Elite Instruments Company Ltd. also has locations in Singapore and India to better serve our customers,

Elite serves a wide variety of industries worldwide, including:

1. Oil and Gas
2. Chemical and Petrochemical
3. Food and Pharmaceutical
4. Water and Wastewater
5. Engineering and Process

Elite also specializes in developing custom built OEM products as per customer requirements.

Our proficient team of engineers will work to bring your custom design to life, or work with you to create new products designed meet your exact needs.

Our customers have testified that the Quality, workmanship, appearance and packaging of Elite products are second to none.

Elite Instruments is ISO 9001 :2008 certified with many products holding ATEX approval, per 2014/34/EU Our state of the art production, testing and warehouse facilities ensure Elite exceeds customer expectations for quality and delivery. Please visit our website [www.elite-instrument.com](http://www.elite-instrument.com) or send your enquires to [sales@elite-instrument.com](mailto:sales@elite-instrument.com)

**Please visit youtube page :**  
<https://youtu.be/72MgbJNO5fw>

## LASER WELDING MACHINE



## STATIC PRESSURE TESTING



## HELIUM LEAK TESTING



## DEAD WEIGHT TESTER -(0.008%)





# ELITE WORLD WIDE



## ■ Manufacturing Units

### KUNSHAN ELITE INSTRUMENTS CO.,LTD

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 Email:snreddy@elite-instrument.com

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 Email: vijaya.s@elite-instrument.com

## ISO Certificate



Local Dealer / Stockist

