# **COSSD** PRODUCT CATALOGUE

for



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2015 Product Catalog







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### 2015 Product Catalog

# **GTB Series Needle Valves**



Bar stock, hard seat 6,000psi

### Overview

The GTB series bar stock construction needle valves are intended to provide economical and long service life. Valves are available in 316 stainless steel and carbon steel with nickel zinc plate. GTB series are produced in 1/4", 1/2", and 3/4" NPT with malefemale and female-female threaded connections. The GTB packing consists of a Viton<sup>®</sup> O-ring and Teflon<sup>®</sup> back-up ring.

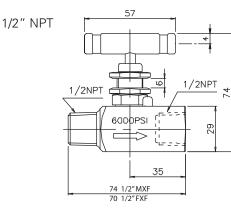


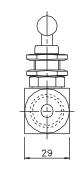
### Features

- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- The stem thread are rolled and lubricated to prevent galling and reduce operating torque.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination. This ensures smooth valve operation and long service life.
- Body to bonnet seal is metal to metal in constant compression, creating a reliable seal point to eliminate possible tensile breakage of bonnet and isolate the bonnet threads from process fluid corrosion.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- ▶ Low torque operating T-bar handle
- All valves are hydrostatically tested to 1.5 times maximum working pressure (9000psi) prior to shipment.
- The valves are Mill Test traceable.

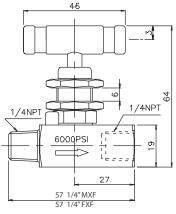
Part Number	Connections		Material	Max W.P.
	Inlet	Outlet		
GTB12MFC	1/2" MNPT	1/2" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTB12FFC	1/2" FNPT	1/2" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTB3412MFC	3/4" MNPT	1/2" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTB12MFSS	1/2" MNPT	1/2" FNPT	316SS	6,000 psi @ 100°F
GTB12FFSS	1/2" FNPT	1/2" FNPT	316SS	6,000 psi @ 100°F
GTB3412MFSS	3/4" MNPT	1/2" FNPT	316SS	6,000 psi @ 100°F
GTB14MFC	1/4" MNPT	1/4" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTB14FFC	1/4" FNPT	1/4" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTB14MFSS	1/4" MNPT	1/4" FNPT	316SS	6,000 psi @ 100°F
GTB14FFSS	1/4" FNPT	1/4" FNPT	316SS	6,000 psi @ 100°F

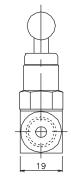


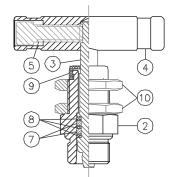


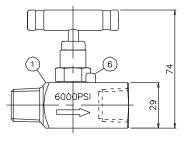


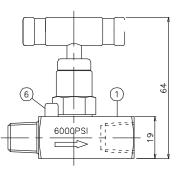












No.	Description	316SS	A108 carbon steel
1	Body	S316	A108 carbon steel
2	Bonnet	S316	A108 carbon steel
3	Stem	S316	S316
4	Handle	S303	A108 carbon steel
5	Fixing Screw	S302	A108 carbon steel
6	Lock Pin	S303	A108 carbon steel
7	O-ring	Viton®	Viton®
8	Back-up ring	Teflon®	Teflon®
9	Dust cap	NBR	NBR
10	Mountable Nuts*	S316	A108 carbon steel
			*Optional

### **GTH Series Needle Valves**



Hex stock, hard seat 6,000 and 10,000 psi

### Overview

The GTH series are machined from hexagonal bar stock and supplied in 316 stainless steel and carbon steel with nickel zinc plate. GTH series are produced in 1/2" and 3/4" NPT with male-female and female-female threaded connections. The GTH series are designed with a metal seat for severe working conditions.

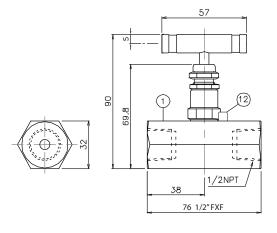


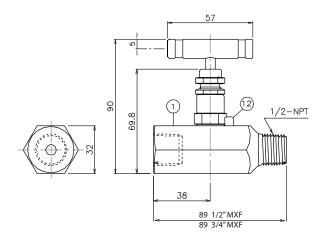
### Features

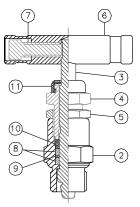
- Non-rotating stem plug moves axially into and out of the seat without rotation to eliminate seat galling.
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Valves are assembled with standard T-bar handles.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- ▶ Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test traceable.

Part Number	Connections		Material	Max W.P.
	Inlet	Outlet		
GTH12MFSS	1/2" MNPT	1/2" FNPT	316SS	6,000 psi @ 100°F
GTH12FFSS	1/2" FNPT	1/2" FNPT	316SS	6,000 psi @ 100°F
GTH3412MFSS	3/4" MNPT	1/2" FNPT	316SS	6,000 psi @ 100°F
GTH12MFSS10	1/2" MNPT	1/2" FNPT	316SS	10,000 psi @ 100°F
GTH12FFSS10	1/2" FNPT	1/2" FNPT	316SS	10,000 psi @ 100°F
GTH3412MFSS10	3/4" MNPT	1/2" FNPT	316SS	10,000 psi @ 100°F
GTH12MFC	1/2" MNPT	1/2" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTH12FFC	1/2" FNPT	1/2" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTH12MFC10	1/2" MNPT	1/2" FNPT	A108 carbon steel	10,000 psi @ 100°F
GTH12FFC10	1/2" FNPT	1/2" FNPT	A108 carbon steel	10,000 psi @ 100°F
GTH3412MFC10	3/4" MNPT	1/2" FNPT	A108 carbon steel	10,000 psi @ 100°F









No.	Description	316SS	A108 carbon steel
1	Body	S316	A108 carbon steel
2	Bonnet	S316	A108 carbon steel
3	Stem	S316	S316
4	Adjuster	S316	A108 carbon steel
5	Lock Nut	S316	A108 carbon steel
6	Handle	S303	A108 carbon steel
7	Fixing Screw	S302	A108 carbon steel
8	Packing	Teflon®	Teflon®
9	Washer	S316	A108 carbon steel
10	Pusher	S316	A108 carbon steel
11	Dust Cap	NBR	NBR
12	Lock Pin	S303	A108 carbon steel

# GTH Series Needle Valves



Hex stock, soft seat 6,000 psi

### Overview

The GTH series are machined from hexagonal Bar stock and supplied in 316 stainless steel and carbon steel with yellow zinc plate. GTH series are produced in 1/2", 3/4" and 1" NPT with malefemale and female-female threaded connections. The GTH soft seat series are designed with a Delrin<sup>®</sup> seat to ensure a tight shut off even in abrasive process conditions.



### Features

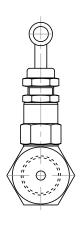
- ▶ Delrin<sup>®</sup> soft seat standard.
- Rodable straight thru process to instrument orifices.
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Valves are assembled with standard T-bar handles.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test Traceable.

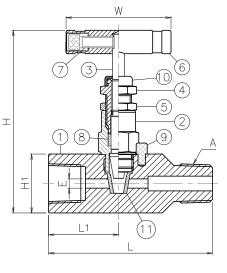
Part Number	Connections		Material	Max W.P.
	Inlet	Outlet		
GTH12MFSSD	1/2" MNPT	1/2" FNPT	316SS	6,000 psi @ 100°F
GTH12FFSSD	1/2" FNPT	1/2" FNPT	316SS	6,000 psi @ 100°F
GTH12MFCD	1/2" MNPT	1/2" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTH12FFCD	1/2" FNPT	1/2" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTH34MFSSD	3/4" MNPT	3/4" FNPT	316SS	6,000 psi @ 100°F
GTH34FFSSD	3/4" FNPT	3/4" FNPT	316SS	6,000 psi @ 100°F
GTH34MFCD	3/4" MNPT	3/4" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTH34FFCD	3/4" FNPT	3/4" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTH10MFSSD	1" MNPT	1" FNPT	316SS	6,000 psi @ 100°F
GTH10FFSSD	1" FNPT	1" FNPT	316SS	6,000 psi @ 100°F
GTH10MFCD	1" MNPT	1" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTH10FFCD	1" FNPT	1" FNPT	A108 carbon steel	6,000 psi @ 100°F

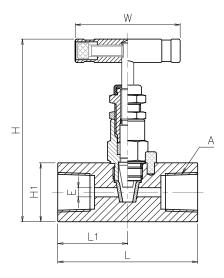
GTH Series Needle Valves Hex stock, soft seat 6,000 psi



### Dimensions







No.	Description	316SS	C.S. Valve
1	Body	S316	C.S
2	Bonnet	S316	C.S
3	Stem	S316	S316
4	Adjuster	S316	C.S
5	Lock Nut	S316	C.S
6	Handle	S303	C.S
7	Fixing Screw	S302	C.S
8	Packing	Teflon®	Teflon®
9	Locking Pin	S303	S303
10	Dust Cap	NBR	NBR
11	Soft Seat	Delrin®	Delrin®

Dim. Model	А	L	L1	Н	Н	E	W
GTH12MF	1/2" NPT	89	38	94	32	5	57
GTH12FF	1/2" NPT	76	38	94	32	5	57
GTH34MF	3/4" NPT	89	38	96	35	6	57
GTH34FF	3/4" NPT	76	38	96	35	6	57
GTH10MF	1" NPT	94	42.5	101	41	7	57
GTH10FF	1" NPT	85	42.5	101	41	7	57

# GT Series 90° Angle Valves



Soft seat 6,000 psi

### Overview

The GT Series 90° Angle Valves series are machined from either bar stock or forged materials and supplied in 316 stainless steel and carbon steel with nickel zinc plate. Our 90° Valves are available in 1/2" Npt and 1/4" NPT with male-female threaded connections. These soft seat valves are designed with a Delrin<sup>®</sup> seat to ensure a tight shut off, even in abrasive process conditions.

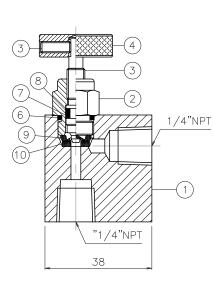


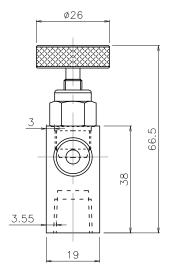
### Features

- ▶ Delrin<sup>®</sup> soft seat standard.
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- ▶ Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test Traceable.

Part Number	Connections		Connections Material	
	Inlet Outlet			
GTMNVFFCS90	1/4" FNPT	1/4" FNPT	A108 carbon steel	6,000 psi @ 100°F
GTFAMFSSD	1/2" MNPT 1/2" FNPT		316SS	6,000 psi @ 100°F

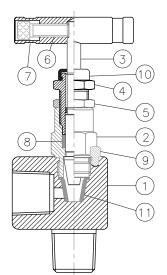


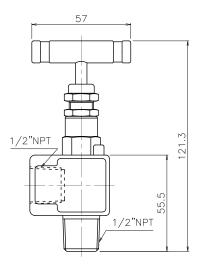


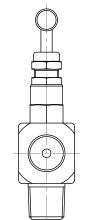


### GTMNVFFCS90

No.	Description	316SS Valve	C.S. Valve
1	Body	S316	C.S
2	Bonnet	S316	C.S
3	Stem	S316	S303
4	Handle	S316	C.S
5	Fixing Screw	S316	C.S
6	O-ring	Viton <sup>®</sup>	Viton®
7	O-ring	Viton <sup>®</sup>	Viton®
8	Back-up ring	PTFE	PTFE
9	Washer	S316	S316
10	Soft Seat	POM	NBR







### GTFAMFSSD

No.	Description	316SS Valve		
1	Body	S316		
2	Bonnet	S316		
3	Stem	S316		
4	Adjuster	S316		
5	Lock Nut	S316		
6	Handle	S303		
7	Fixing Screw	S302		
8	Packing	Teflon®		
9	Locking Pin	S303		
10	Dust Cap	NBR		
11	Soft Seat	POM		

### Mini Needle Valves

Bar stock, hard and soft seat 3,000 psi



### Overview

Gaugetech® mini bar stock construction needle valves are intended to provide an economical solution in situations where full size 1/4" valves would be restricted. Valves are available in 316 stainless steel and carbon steel with nickel zinc plate. With your choice of hard or soft seats, Gaugetech® Mini Valves are produced in 1/4" NPT malefemale and female-female threaded connections.

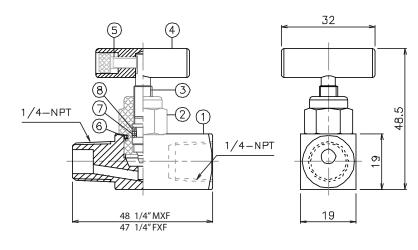


### Features

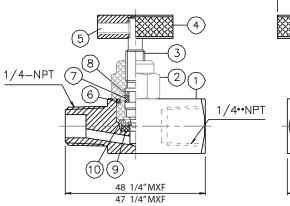
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Low torque operating T-bar handle on hard seat.
- Smooth operating knurled round handle on soft seat.
- All valves are hydrostatically tested to 1.5 times maximum working pressure (4500 psi) prior to shipment.
- The valves are Mill Test traceable.
- Valves are skin packaged for distributor display.

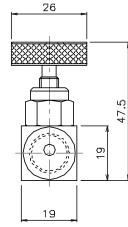
Part Number	Connections		Seat	Material	Max W.P.
	Inlet	Outlet			
GTMNVMFCH	1/4" MNPT	1/4" FNPT	Hard	A108 carbon steel	3,000 psi @ 100°F
GTMNVFFCH	1/4" FNPT	1/4" FNPT	Hard	A108 carbon steel	3,000 psi @ 100°F
GTMNVMFSH	1/4" MNPT	1/4" FNPT	Hard	316SS	3,000 psi @ 100°F
GTMNVFFSH	1/4" FNPT	1/4" FNPT	Hard	316SS	3,000 psi @ 100°F
GTMNVMFCS	1/4" MNPT	1/4" FNPT	Soft	A108 carbon steel	3,000 psi @ 100°F
GTMNVFFCS	1/4" FNPT	1/4" FNPT	Soft	A108 carbon steel	3,000 psi @ 100°F
GTMNVMFSS	1/4" MNPT	1/4" FNPT	Soft	316SS	3,000 psi @ 100°F
GTMNVFFSS	1/4" FNPT	1/4" FNPT	Soft	316SS	3,000 psi @ 100°F





No.	Description	316SS	A108 Carbon Steel
1	Body	S316	A108
2	Bonnet	S316	A108
3	Stem	S316	S316
4	Handle	S303	A108
5	Fixing Screw	S302	A108
6	O-ring	Viton®	Viton®
7	O-ring	Viton®	Viton®
8	Back-up ring	Teflon®	Teflon®





FΤ	SE	AT
	FΤ	FT SE

HARD SEAT

No.	Description	316SS	A108 Carbon Steel
1	Body	S316	A108
2	Bonnet	S316	A108
3	Stem	S316	S316
4	Handle	S303	C.S
5	Fixing Screw	S302	A108
6	O-ring	Viton®	Viton®
7	O-ring	Viton®	Viton®
8	Back-up ring	Teflon®	Teflon®
9	Washer	S316	S316
10	Soft Seat	Delrin®	Delrin®

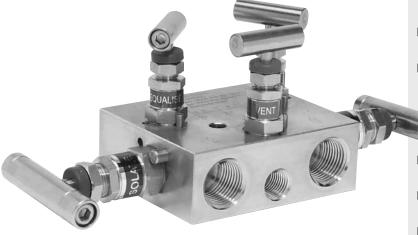
# GT5M 5 Valve Manifold

Soft seat, pipe to pipe 316SS and A108 Carbon Steel



### Overview

Gaugetech<sup>®</sup> five valve soft seat manifolds are supplied in 316L stainless steel and A108 carbon steel and are produced in 1/2" NPT female-female, pipe to pipe threaded connections. GT5M soft seat series valves are designed with a Delrin<sup>®</sup> seat to ensure a tight shut off even in abrasive process conditions.

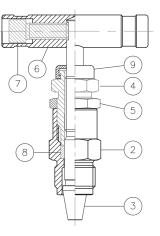


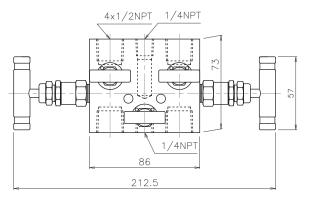
### Features

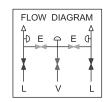
- ▶ Delrin<sup>®</sup> soft seat standard.
- Rodable 4.8mm straight thru instrument to process orifice.
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- ► Valves are assembled with standard T-bar handles.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- ► Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test Traceable.

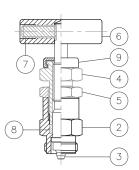
Part Number	Connections		Seat	Material	Max W.P.
	Inlet	Outlet			
GT5MSSD	1/2" FNPT	1/2" FNPT	soft	316SS	9,000 psi @ 100°F
GT5MCD	1/2" FNPT	1/2" FNPT	soft	A108 carbon steel	3,000 psi @ 200°F

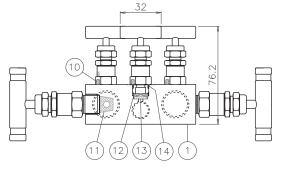












### SOFT SEAT

No.	Description	SS	A108 Carbon Steel
1	Body	S316L	A108
2	Bonnet	S316	A108
3	Stem	S316	A108
4	Adjuster	S316	A108
5	Lock Nut	S316	A108
6	Handle	S302	A108
7	Fixing Screw	S302	A108
8	Packing	Teflon®	Teflon®
9	Dust Cap	NBR	NBR
10	Locking Pin	S304	A108
11	Soft Seat	Delrin®	Delrin®
12	Washer	S316	A108
13	Soft Seat	Delrin®	Delrin®
14	O-ring	Aflas®	Aflas®

# GT5M 5 Valve Manifold



Hard seat, pipe to pipe 10,000 psi

### Overview

Gaugetech® five valve manifolds are supplied in 316L stainless steel and carbon steel with white zinc plate. GT5M series valves are produced in 1/2" NPT female-female, pipe to pipe threaded connections. The GT5M series are designed with a metal seat for severe working conditions.



### Features

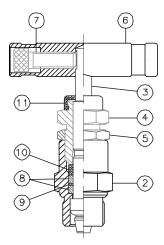
- Non-rotating stem plug moves axially into and out of the seat without rotation to eliminate seat galling.
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- ► Valves are assembled with standard T-bar handles.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- ▶ Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test Traceable.

Part Number	Connections		Seat	Material	Max W.P.
	Inlet	Outlet			
GT5MSSNRT	1/2" FNPT	1/2" FNPT	Hard	316SS	10,000 psi @ 100°F
GT5MCSNRT	1/2" FNPT	1/2" FNPT	Hard	A108 carbon steel	10,000 psi @ 100°F

### GT5M 5 Valve Manifold Hard seat, pipe to pipe 10,000 psi

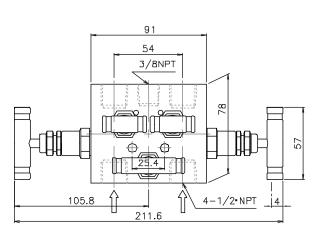


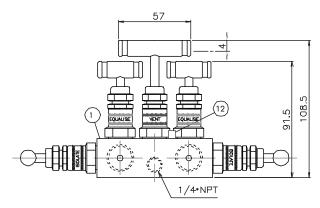
Dimensions



### HARD SEAT

No.DescriptionSSA108 Carbon Steel1BodyS316A1082BonnetS316A1083StemS316S3164AdjusterS316A1085Lock NutS316A1086HandleS303A1087Fixing ScrewS302A1088PackingTeflon*Teflon*
2         Bonnet         S316         A108           3         Stem         S316         S316           4         Adjuster         S316         A108           5         Lock Nut         S316         A108           6         Handle         S303         A108           7         Fixing Screw         S302         A108           8         Packing         Teflon®         Teflon®
Image: Solution of the second secon
4         Adjuster         S316         A108           5         Lock Nut         S316         A108           6         Handle         S303         A108           7         Fixing Screw         S302         A108           8         Packing         Teflon®         Teflon®
Figure         Sorre         Filse           5         Lock Nut         S316         A108           6         Handle         S303         A108           7         Fixing Screw         S302         A108           8         Packing         Teflon®         Teflon®
6HandleS303A1087Fixing ScrewS302A1088PackingTeflon®Teflon®
7     Fixing Screw     S302     A108       8     Packing     Teflon®     Teflon®
8 Packing Teflon® Teflon®
9 Washer S316 A108
10 Pusher S316 A108
11 Dust cap NBR NBR
12 Lock pin \$303 A108





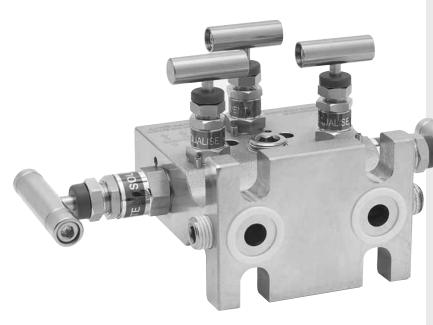
### GT5M 5 Valve Flanged Manifold

Soft seat, pipe to flange 316SS and A105 Carbon Steel



### Overview

The Gaugetech five valve soft seat flanged manifolds supplied in 316L stainless steel and A105 carbon steel are produced in 1/2" NPT female pipe threaded to flange. The GT5M soft seat series are designed with a Delrin<sup>®</sup> seat to ensure a tight shut off even in abrasive process conditions.



### Features

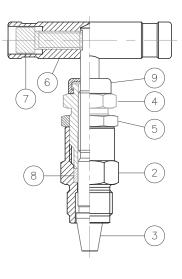
- ▶ Delrin<sup>®</sup> soft seat standard
- Rodable 4.8mm straight thru instrument to process orifice.
- ▶ The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Valves are assembled with standard T-bar handles.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- ▶ Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test Traceable.

Part Number	Connections		Seat	Material	Max W.P.
	Inlet	Outlet			
GT5MSDFLG	1/2" FNPT	Flanged	Soft	316SS	9,000 psi @ 100°F
GT5MCDFLG	1/2" FNPT	Flanged	Soft	A105 carbon steel	3,000 psi @ 100°F



316SS and A105 Carbon Steel

### Dimensions



8

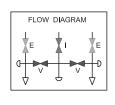
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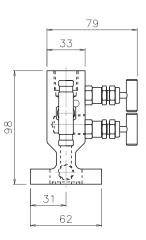
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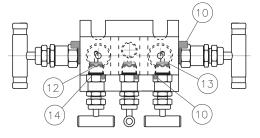
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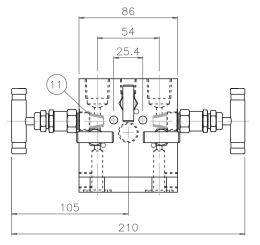
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3









No.	Description	SS	A105 Carbon Steel
1	Body	S316L	A105
2	Bonnet	S316	A105
3	Stem	S316	A105
4	Adjuster	S316	A105
5	Lock Nut	S316	A105
6	Handle	S303	A105
7	Fixing Screw	S302	A105
8	Packing	Teflon®	Teflon®
9	Dust cap	NBR	NBR
10	Locking pin	S304	A105
11	Soft seat	POM	POM
12	Washer	S316	A105
13	Soft seat	POM	POM
14	O-ring	Aflas®	Aflas®

GTHSPM 2 Valve Calibration Manifold GAUGETECH



Soft seat, pipe to pipe 316SS and A108 Carbon Steel

### Overview

Gaugetech<sup>®</sup> two valve manifolds are supplied in 316L stainless steel are produced in 1/2" NPT female-female, pipe to pipe threaded connections. GTH soft seat series valves are designed with a Delrin<sup>®</sup> seat to ensure a tight shut off even in abrasive process conditions.



### Features

- ▶ Delrin<sup>®</sup> soft seat standard.
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Valves are assembled with standard T-bar handles.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test Traceable.

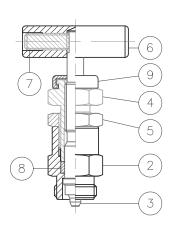
Part Number	Connections		Seat	Material	Max W.P.
	Inlet	Outlet			
GTHSPM12SSD	1/2" FNPT	1/2" FNPT	Soft	316SS	3,000 psi @ 200°F
GTHSPM12CD	1/2" FNPT	1/2" FNPT	Soft	A108	3,000 psi @ 200°F

GTHSPM 2 Valve Calibration Manifold GAUGETECH



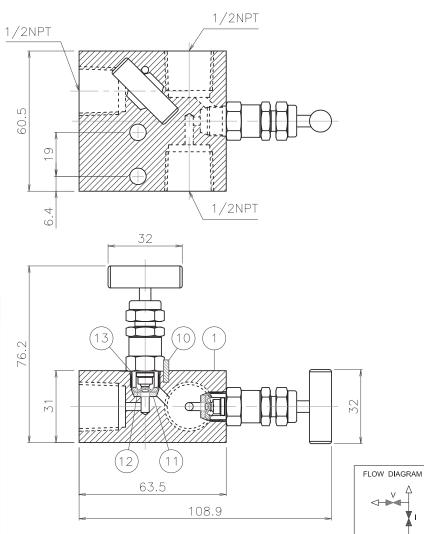
Soft seat, pipe to pipe 316SS and A108 Carbon Steel

Dimensions



SOFT SEAT

No.	Description	Stainless Steel	A108 Carbon Steel
1	Body	S316L	A108
2	Bonnet	S316	A108
3	Stem	S316	A108
4	Adjuster	S316	A108
5	Lock Nut	S316	A108
6	Handle	S303	A108
7	Fixing Screw	S302	A108
8	Packing	Teflon®	Teflon®
9	Dust cap	NBR	NBR
10	Locking pin	S304	A108
11	Soft seat	Delrin®	Delrin®
12	Washer	S316	A108
13	O-ring	Aflas®	Aflas®



Drawings are not to scale. Dimensions in millimeters.

Gaugetech Inc. • Edmonton, AB, Canada • Toll Free: 1.800.661.9039 • www.gaugetech.ca

### Multi-Port Gauge Valves



With optional bleed valve 316SS and Carbon Steel, 1/2" and 3/4" NPT

### Overview

Gaugetech® multi-port gauge valves are supplied in 316L stainless steel and carbon steel with white zinc plate. GTMPGV series valves are produced with a 1/2" or 3/4" MNPT process connection with 3 female 1/2" NPT Ports. The GTMPGV series are designed with a metal seat for severe working conditions. All multi-port valves come standard with reduced necks. The optional GTBV12- 1/2" NPT bleed valve may be ordered as required.



### Features

- Non-rotating stem plug moves axially into and out of the seat without rotation to eliminate seat galling.
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Valves are assembled with standard t-bar handles.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- ▶ Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test Traceable.

Part Number	Connections		Seat	Material	Max W.P.
	Inlet	Ports			
Gauge Valves					
GTMPGV12SH	1/2" MNPT	1/2" FNPT	Hard	316SS	
GTMPGV12SH10	1/2" MNPT	1/2" FNPT	Hard	316SS	
GTMPGV12CH	1/2" MNPT	1/2" FNPT	Hard	A108 carbon steel	
GTMPGV34SH	3/4" MNPT	1/2" FNPT	Hard	316SS	6,000 psi @ 100°F
GTMPGV34SH10	3/4" MNPT	1/2" FNPT	Hard	316SS	10,000 psi @ 100°F
GTMPGV34SSD	3/4" MNPT	1/2" FNPT	Soft	316SS	
Bleed Valves					
GTBV12	1/2" MNPT	N/A	N/A	316SS	
Hex Plug					
GTHP12	1/2" MNPT	N/A	N/A	316SS	

### Multi-Port Gauge Valves With optional bleed valve

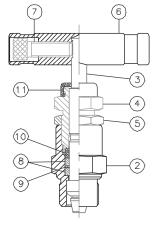
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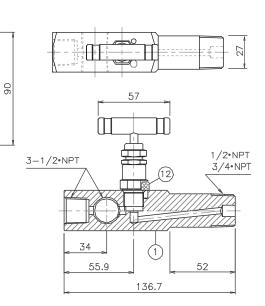
32



316SS and carbon steel, 1/2" and 3/4" NPT

### Dimensions





HARD SEAT

No.	Description	SS	A108 Carbon Steel
1	Body	S316	A108
2	Bonnet	S316	A108
3	Stem	S316	S316
4	Adjuster	S316	A108
5	Lock Nut	S316	A108
6	Handle	S303	A108
7	Fixing Screw	S302	A108
8	Packing	Teflon®	Teflon®
9	Washer	S316	A108
10	Pusher	S316	A108
11	Dustcap	NBR	NBR
12	Locking pin	S303	A108

# Chemical Injection Reversed Multi-Port Valve



Hard seat, 316SS, 1/2" NPT ports

### Overview

The Gaugetech® chemical injection valve has all the features of our multi-port gauge valve. The ports are reversed for special field applications which in turn can reduce the use of other valves when used instead of a standard multiport valve. GTMPCIV series are produced with a 1/2" MNPT process connection with female 1/2" NPT Ports. The GTMPCIV series are designed with a metal seat for severe working conditions.

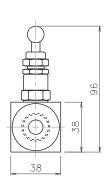


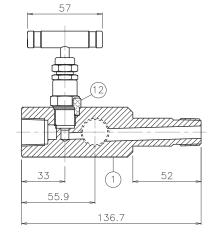
### Features

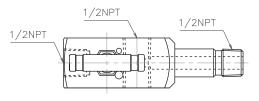
- Non-rotating stem plug moves axially into and out of the seat without rotation to eliminate seat galling.
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Valves are assembled with standard T-bar handles.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- ▶ Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test Traceable.

Part Number	Connections		Seat	Material	Max W.P.
	Inlet	Ports			
GTMPCIV12SH	1/2" MNPT	1/2" FNPT	Hard	316SS	10,000 psi @ 100°F









HARD SEAT

No.	Description	SS	A108 Carbon Steel
1	Body	S316	A108
2	Bonnet	S316	A108
3	Stem	S316	S316
4	Adjuster	S316	A108
5	Lock Nut	S316	A108
6	Handle	S303	A108
7	Fixing Screw	S302	A108
8	Packing	Teflon®	Teflon®
9	Washer	S316	A108
10	Pusher	S316	A108
11	Dustcap	NBR	NBR
12	Locking pin	S303	A108

# Block & Bleed Valves

Hard seat, 316SS, 1/2" NPT



### Overview

Gaugetech<sup>®</sup> Block & Bleed Valves are supplied in 316L stainless steel. GTHBB series valves are produced with a 1/2" MNPT process connection with female 1/2" NPT instrument connection. GTHBB series valves are designed with a metal seat for severe working conditions. All block & bleed valves come standard with 1/4" NPT side drain port.

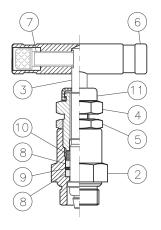


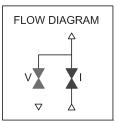
### Features

- Non-rotating stem plug moves axially into and out of the seat without rotation to eliminate seat galling.
- The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- Valves are assembled with standard t-bar handles.
- All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- ▶ Teflon<sup>®</sup> packing can be adjusted to increase valve life.
- Stem packing below the threads prevents lubricant washout and ensures no process contamination.
- The valves feature safety back seating to ensure a secondary stem seal.
- Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- All valves are hydrostatically tested to 1.5 times maximum working pressure prior to shipment.
- The valves are Mill Test Traceable.

Part Number	Connections		Seat	Material	Max W.P.
	Inlet	Ports			
GTHBB12MFSS	1/2" MNPT	1/2" FNPT	Hard	316SS	6,000 psi @ 100°F
GTHBB12MFSS10	1/2" MNPT	1/2" FNPT	Hard	316SS	10,000 psi @ 100°F
GTHBB12REVFMSS	1/2" FNPT	1/2" MNPT	Hard	316SS	6,000 psi @ 100°F
GTHBB34MFSS10	3/4" MNPT	1/2" FNPT	Hard	316SS	10,000 psi @ 100°F

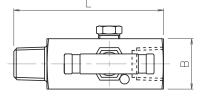


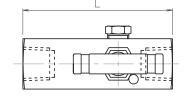


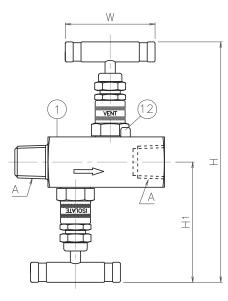


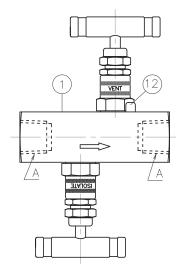
### HARD SEAT

No.	Description	SS
1	Body	S316
2	Bonnet	S316
3	Stem	S316
4	Adjuster	S316
5	Lock Nut	S316
6	Handle	S303
7	Fixing Screw	S302
8	Packing	Teflon®
9	Washer	S316
10	Pusher	S316
11	Dust cap	NBR
12	Locking pin	S303









Dim.	А	В	L	Н	H1	W
GTHBB12MFSS	1/2" NPT	32	91	152.5	76.3	57
GTHBB12MFSS10	1/2" NPT	32	91	152.5	76.3	57
GTHBB12REVFMSS	1/2" NPT	32	91	152.5	76.3	57

Notes

# Pressure Gauge Installation & Usage Guidelines



Users should become familiar with ASME B40.100 (Gauges – Pressure Indicating Dial Type – Elastic Element) before specifying pressure measuring gauges. This document – containing valuable information regarding gauge construction, accuracy, safety, selection and testing – may be ordered from: www.asme.org

### PRESSURE RANGE SELECTION

To ensure proper operation and long service life, the proper pressure range should be selected. For applications with constant, steady pressure, the measured pressure should be no more than 75% of the full scale range of the gauge. For applications with fluctuating pressure, the measured pressure should be no more than two-thirds of the full scale range of the gauge. In general, it is best to choose a range that is roughly 2X the average measured pressure. This gives over pressure protection and the highest accuracy.

### TEMPERATURE

Ambient Temperature: To ensure long life and accuracy, pressure gauges should preferably be used at an ambient temperature between -20 and +150°F (-30 to +65°C). At very low temperatures, standard gauges may exhibit slow pointer response. Above 150°F (65°C), the accuracy will be affected by approximately 1.5% per 100°F (38°C). The pressure gauge should not be used outside of its rated temperature limits as noted on the Data Sheet specific to that gauge. At temperatures above or below these limits, the gauge accuracy will be significantly reduced and the possibility of gauge failure may exist.

**High Temperatures or Corrosive Process Media:** In order to prevent hot media such as steam from entering the bourdon tube, a gauge siphon or pigtail filled with water should be installed between the gauge and the process line. A cooling tower may also be used to reduce the temperature effect on gauges. A chemical or a diaphragm seal should be used to protect gauges from corrosive media, or media that will plug the instrument.

### INSTALLATION

The pressure gauge should be installed where exposure to heat and vibration are minimal and where the dial can be easily read. Whenever possible, gauges should be located to minimize the effects of vibration, extreme ambient temperatures and moisture.

**Isolating Devices:** A shut-off valve such as a needle valve or gauge cock should be installed between the gauge and the process in order to be able to isolate the gauge for inspection or replacement without shutting down the process. The use of such devices is critical in times where start up pressures may temporarily exceed normal operating pressure. All isolating devices shall be opened slowly to prevent "slamming" of the bourdon tube. Care not taken during this time may damage the instrument. **Overload Protection:** An overload protector should be used in situations where the process media may spike or be susceptible to overpressure of the design range of the gauge. An overpressure device or overload protector may be installed to prevent damage to the instrument.

Threaded Connections: The tightening or loosening of gauge connections shall be done using the wrench flats on the gauge fitting. Using the gauge case to tighten or loosen pressure gauges will damage the gauge and may cause unrepairable damage to the instrument. Proper sealant tape or paste shall be used for sealing tapered threads like National Pipe Thread (NPT)

Vibration/Pulsation protection: If the pressure gauge is exposed to vibration or pulsating pressure or both, a liquid filled pressure gauge is recommended. The liquid dampens the effects of vibration making the pointer easier to read. Pressure dampeners, snubbers and or restrictor screws may be used to reduce pulsation. In extreme cases, a remotely mounted liquid filled gauge connected with a length of capillary line may be used.

**Pressure Gauge Safety:** Pressure media such as oxygen, acetylene, welding equipment, life support or diving equipment, boilers etc., may require pressure gauges of a construction complying with national standards or local codes. Selection of a pressure gauge for such media or applications must be carefully considered and specified when ordering.

**Storage:** Storage temperature should not exceed -4°F (-20°C) or 140°F (60°C) unless specified otherwise. Pressure gauges shall be stored in their original packaging until ready for use. Threads and gauge orifices shall be kept clean and free of debris until they are ready for installation.

**Maintenance:** If the accuracy of the gauge cannot be checked in place, the user can look for erratic or random pointer motion, readings that are suspect – especially indications of pressure when the user believes the true pressure is 0 psi. Any gauge which is obviously not working should be removed from service. Other indications include bent or unattached pointers due to extreme pressure pulsation or overpressure, broken windows which should be replaced to keep dirt out of the internals, leakage of gauge fill, case damage or cracks, any signs of process media leakage through the gauge, including its connection and/or discoloration of gauge fill that impedes readability.

# **Economy Pressure Gauges**



### Applications

Gaugetech<sup>®</sup> economy (utility) gauges are an inexpensive alternative for the broad commercial and industrial market. These gauges provide 3-2-3% accuracy for measuring water, oil, gas, or any medium not corrosive to brass or phosphor bronze.



### Specifications

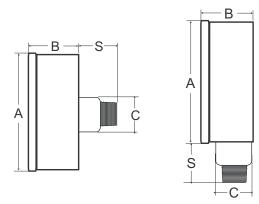
Ranges	Refer to chart
Dial Size	1.5", 2", 2.5", 4.5"
Accuracy	± 3%-2%-3% ASME B40.1 Grade B
Case	Black painted steel (dry only)
Socket	Phosphor bronze bourdon tube and brass socket
Lens	Glass
Connection	1/8" NPT available on 1.5" and 2" dial sizes
	1/4" NPT available on 2", 2.5" and 4.5" dial sizes
	Bottom or center back connections available on 1.5", 2" and 2.5" dial sizes
	4.5" dial size available with bottom connection only

# How to order

Dial Size	1.5″		2″			2	4.5″	
Connection Location	bottom	back	back	bottom	back	bottom	back	bottom
Connection NPT	1/8″	1/8″	1/8″	1/4″	1/4″	1/4″	1/4″	1/4″
Ranges (in stock):								
0-15 psi and 0-100 kPa	UT-1004L-09	UT-1004B-09	UT-2004B-09	MI-50-09	MI-50D-09	MI-63-09	MI-63D-09	MI-150-09
0-30 psi and 0-200 kPa	UT-1004L-10	UT-1004B-10	UT-2004B-10	MI-50-10	MI-50D-10	MI-63-10	MI-63D-10	MI-150-10
0-60 psi and 0-400 kPa	UT-1004L-11	UT-1004B-11	UT-2004B-11	MI-50-11	MI-50D-11	MI-63-11	MI-63D-11	MI-150-11
0-100 psi and 0-700 kPa	UT-1004L-12	UT-1004B-12	UT-2004B-12	MI-50-12	MI-50D-12	MI-63-12	MI-63D-12	MI-150-12
0-160 psi and 0-1100 kPa	UT-1004L-13	UT-1004B-13	UT-2004B-13	MI-50-13	MI-50D-13	MI-63-13	MI-63D-13	MI-150-13
0-200 psi and 0-1400 kPa	UT-1004L-14	UT-1004B-14	UT-2004B-14	MI-50-14	MI-50D-14	MI-63-14	MI-63D-14	MI-150-14

Other ranges available. Contact Gaugetech for details.





Dial Size	Connection	А	В	S	D
1.5″	1/8" NPT bottom	1.65	0.90	0.60	0.43
1.5″	1/8" NPT back	1.65	0.90	0.74	0.43
2″	1/8" NPT back	2.08	1.04	0.74	0.43
2″	1/4" NPT bottom	2.08	1.04	0.74	0.55
2″	1/4" NPT back	2.08	1.04	0.86	0.55
2.5″	1/4" NPT bottom	2.48	1.20	0.92	0.55
2.5″	1/4" NPT back	2.47	1.20	0.86	0.55
4.5″	1/4" NPT bottom	4.52	1.20	0.94	0.55

Dimensions in inches

Drawings are not to scale.

### GTG2510 Series (2.5"/63mm) **Brass Internal Pressure Gauges**



1/4"NPT Bottom or Center Back Mount

# Applications

Chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants, food and beverage, pharmaceutical industries. For measuring water, oil, gas or any medium not corrosive to brass or phosphor bronze



# Specifications

Accuracy	1.6% of full scale ASME B40.1 Grade A
Ambient temperature	- 25°C to + 65°C
Process temperature	Max 100°C (Dry) Max 65°C (Filled)
Operating pressure	75% of the scale value
Over pressure limit	25% of full scale value
Case	AISI 304 SS
Ring	AISI 304 SS, crimped ring
Bourdon Tube	Phosphor Bronze
Socket	Brass
Movement	Phosphor Bronze
Dial	Aluminum, black & red graduation on white background
Pointer	Aluminum, black
Window	Plexiglas
Fill	Glycerine (standard) Silicone (optional) Halocarbon (optional)
Gaskets/Vent/ Blow out Plugs	Neoprene
Standard Scale	psi/kPa (standard), special dials & scales available
Connection	1/4" NPT (standard)

# How to order

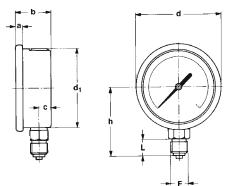
Bottom Mount: Center Back Mount: GTG2510A + Range Code GTG2510D + Range Code

Panel Mount Accessories: GTFF-2.5: Front Flange 304SS GTUC-2.5: U-Clamp

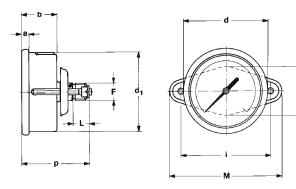
Range Code		Range Code		Range Code		Range Code	
01	30″Hg - 0	08	30″Hg-300 psi/kPa	15	0-300 psi/kPa	22	0-2000 psi/kPa
02	30″Hg-15 psi/kPa	09	0-15 psi/kPa	16	0-400 psi/kPa	23	0-3000 psi/kPa
03	30″Hg-30 psi/kPa	10	0-30 psi/kPa	17	0-500 psi/kPa	24	0-4000 psi/kPa
04	30″Hg-60 psi/kPa	11	0-60 psi/kPa	18	0-600 psi/kPa	25	0-5000 psi/kPa
05	30"Hg-100 psi/kPa	12	0-100 psi/kPa	19	0-800 psi/kPa	26	0-6000 psi/kPa
06	30"Hg-150 psi/kPa	13	0-160 psi/kPa	20	0-1000 psi/kPa	27	0-10,000 psi/kPa
07	30"Hg-200 psi/kPa	14	0-200 psi/kPa	21	0-1500 psi/kPa		

Ranges shown in bold are typically stocked in our warehouse.

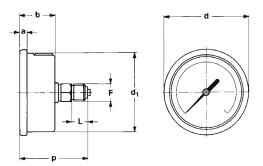




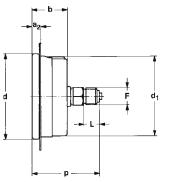
Lower Connection

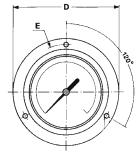


Flush Mounting, "U-Clamp" Back Connection



Flush Mounting Back Connection





Flush Mounting, Front Flange Back Connection

NS	А	A <sub>2</sub>	b	С	d	dı	Е	F	- 1	L	Μ	Ν	Р
63	6	7	30	9	68	61	75	13	71	12	90	38	56

### Accessories



Flange: GTFF-2.5

U-Clamp: GTUC-2.5

### **GTG1518 Series** (1.5"/40mm) Stainless Steel Pressure Gauges 1/8"NPT Bottom or Center Back Mount



### Applications

Chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants, food and beverage, pharmaceutical industries.



### Specifications

Accuracy	± 2%-1%-2% ASME B40.1 Grade A
Ambient temperature	- 25°C to 65°C
Process temperature	Max 100°C (Dry) Max 65°C (Filled)
Operating pressure	75% of the scale value
Over pressure limit	25% of full scale value
Case	AISI 304 SS
Ring	AISI 304 SS, crimped ring
Bourdon Tube	316 SS
Socket	AISI 316 SS
Movement	AISI 304 SS
Dial	Aluminum, black & red graduation on white background
Pointer	Aluminum, black
Window	Plexiglas
Fill	Glycerine (standard) Silicone (optional) Halocarbon (optional)
Gaskets/Vent/ Blow out Plugs	Neoprene
Standard Scale	psi/kPa (standard), special dials & scales available
Connection	1/8" NPT (standard)

### How to order

Bottom Mount: Center Back Mount: GTG1518 + Range Code GTG1518D + Range Code

Range Code		Range Code		Range Code		Range Code	
01	30″Hg - 0	11	0-60 psi/kPa	16	0-400 psi/kPa	22	0-2000 psi/kPa
03	30″Hg-30 psi/kPa	12	0-100 psi/kPa	17	0-500 psi/kPa	23	0-3000 psi/kPa
04	30″Hg-60 psi/kPa	13	0-160 psi/kPa	18	0-600 psi/kPa		
09	0-15 psi/kPa	14	0-200 psi/kPa	20	0-1000 psi/kPa		
10	0-30 psi/kPa	15	0-300 psi/kPa	21	0-1500 psi/kPa		

Ranges shown in bold are typically stocked in our warehouse.



40

4

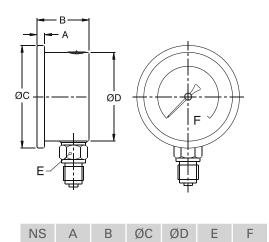
25

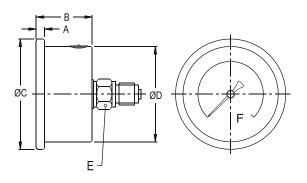
30

44

39

51





NS	А	В	ØC	ØD	Е	F
40	4	25	30	44	39	45

<b>_</b> .				<b>.</b>			
Drawings	are	not to	o scale.	Dimer	ISIONS	IN	millimeters.

### GTG2518 Series (2.5"/63mm) Stainless Steel Pressure Gauges 1/4"NPT Bottom or Center Back Mount



# Applications

Chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants, food and beverage, pharmaceutical industries



# Specifications

Accuracy	1.6% of full scale ASME B40.1 Grade A
Ambient temperature	- 25°C to 65°C
Process temperature	Max 100°C (Dry) Max 65°C (Filled)
Operating pressure	75% of the scale value
Over pressure limit	25% of full scale value
Case	AISI 304 SS
Ring	AISI 304 SS, crimped ring
Bourdon Tube	AISI 316 SS
Socket	AISI 316 SS
Movement	AISI 304 SS
Dial	Aluminum, black & red graduation on white background
Pointer	Aluminum, black
Window	Plexiglas
Fill	Glycerine (standard) Silicone (optional) Halocarbon (optional)
Gaskets/Vent/ Blow out Plugs	Neoprene
Standard Scale	psi/kPa (standard), special dials & scales available
Connection	1/4" NPT (standard)

### How to order

Bottom Mount: Center Back Mount:

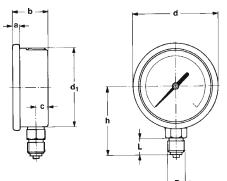
GTG2518A + Range Code GTG2518D + Range Code

Panel Mount Accessories: GTFF-2.5: Front Flange 304SS GTUC-2.5: U-Clamp

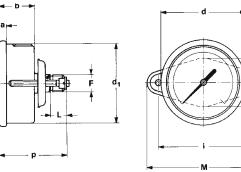
Range Code		Range Code		Range Code		Range Code	
01 02 03 04 05 06 07	<b>30"Hg - 0</b> 30"Hg-15 psi/kPa <b>30"Hg-30 psi/kPa</b> <b>30"Hg-60 psi/kPa</b> 30"Hg-100 psi/kPa <b>30"Hg-150 psi/kPa</b> 30"Hg-200 psi/kPa	08 09 10 11 12 13 14	30"Hg-300 psi/kPa 0-15 psi/kPa 0-30 psi/kPa 0-60 psi/kPa 0-100 psi/kPa 0-160 psi/kPa 0-200 psi/kPa	15 16 17 18 19 20 21	0-300 psi/kPa 0-400 psi/kPa 0-500 psi/kPa 0-600 psi/kPa 0-800 psi/kPa 0-1000 psi/kPa 0-1500 psi/kPa	22 23 24 25 26 27	0-2000 psi/kPa 0-3000 psi/kPa 0-4000 psi/kPa 0-5000 psi/kPa 0-6000 psi/kPa 0-10,000 psi/kPa

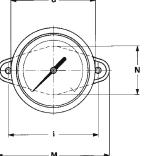
Ranges shown in bold are typically stocked in our warehouse.



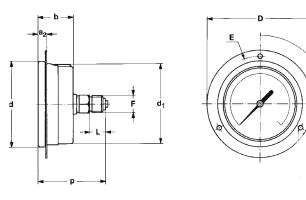


Lower Connection





Flush Mounting Back Connection



Flush Mounting, "U-Clamp" Back Connection

Flush Mounting, Front Flange Back Connection

NS	А	A <sub>2</sub>	b	С	d	dı	Е	F	1	L	M	Ν	Р
63	6	7	30	9	68	61	75	13	71	12	90	38	56

#### Accessories





Flange: GTFF-2.5

U-Clamp: GTUC-2.5

#### **GTG40 Series (4"/100mm)** Stainless Steel Pressure Gauges 1/2"NPT Bottom Mount



#### Applications

Chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants, food and beverage, pharmaceutical industries.



#### Specifications

Accuracy	±1.0% of full scale ASME B40.1 Grade 1A
Ambient temperature	-40°C to 65°C
Process temperature	Max 300°C (Dry) Max 65°C (Filled)
Operating pressure	75% of the scale value
Over pressure limit	25% of full scale value
Case	AISI 304 SS
Ring	AISI 304 SS, bayonet type
Bourdon Tube	AISI 316L SS
Socket	AISI 316L SS (directly welded to case)
Movement	AISI 304 SS
Welding	Tig argon arc welding
Protection	IP 55
Dial	Aluminum, black & red graduation on white background
Pointer	Aluminum, black colored micrometer zero adjustable
Window	Plexiglas
Fill	Glycerine/H <sub>2</sub> 0 (standard) Halocarbon (optional)
Gaskets/Vent/ Blow out Plugs	Neoprene
Standard Scale	psi/kPa (standard), special dials & scales available
Connection	1/2" NPT (standard) 1/4" NPT (optional)

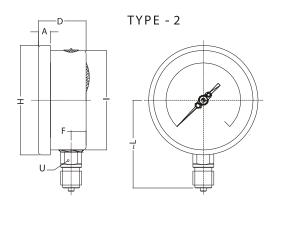
#### How to order

Standard Model Glycerine Filled: GTG4012 + Range Code

Range Code		Range Code		Range Code		Range Code	
01 02 03 04 05 06 07 08	<b>30"Hg - 0</b> 30"Hg-15 psi/kPa <b>30"Hg-30 psi/kPa</b> 30"Hg-60 psi/kPa 30"Hg-100 psi/kPa <b>30"Hg-150 psi/kPa</b> 30"Hg-200 psi/kPa <b>30"Hg-300 psi/kPa</b>	09 10 11 12 13 14 15 16	0-15 psi/kPa 0-30 psi/kPa 0-60 psi/kPa 0-100 psi/kPa 0-160 psi/kPa 0-200 psi/kPa 0-300 psi/kPa 0-400 psi/kPa	<ol> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> </ol>	0-500 psi/kPa 0-600 psi/kPa 0-800 psi/kPa 0-1000 psi/kPa 0-1500 psi/kPa 0-2000 psi/kPa 0-4000 psi/kPa	25 26 27 28 29	0-5000 psi/kPa 0-6000 psi/kPa 0-10,000 psi/kPa 0-15,000 psi/kPa 0-20,000 psi/kPa

Ranges shown in bold are typically stocked in our warehouse.





NS	А	D	F	Н	1	~L	U	WT(kg)
100	12	47	16.5	110.5	100	90	22	0.64

#### **GTG45 Series (4.5"/115mm)** Stainless Steel Pressure Gauges 1/2"NPT Bottom Mount



#### Applications

Chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants, food and beverage, pharmaceutical industries.



#### Specifications

Accuracy	±1.0% of full scale ASME B40.1 Grade 1A
Ambient temperature	-40°C to 65°C
Process temperature	Max 300°C (Dry) Max 65°C (Filled)
Operating pressure	75% of the scale value
Over pressure limit	25% of full scale value
Case	AISI 304 SS
Ring	AISI 304 SS, bayonet type
Bourdon Tube	AISI 316L SS
Socket	AISI 316L SS (directly welded to case)
Movement	AISI 304 SS
Welding	Tig argon arc welding
Protection	IP 55
Dial	Aluminum, black & red graduation on white background
Pointer	Aluminum, black colored micrometer zero adjustable
Window	Plexiglas
Fill	Glycerine/H <sub>2</sub> 0 (standard) Halocarbon (optional)
Gaskets/Vent/ Blow out Plugs	Neoprene
Standard Scale	psi/kPa (standard), special dials & scales available
Connection	1/2" NPT (standard)

#### How to order

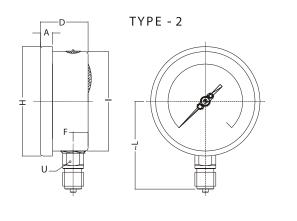
Standard Model Glycerine Filled: GTG4512 + Range Code

Range Code		Range Code		Range Code		Range Code	
01 02 03 04 05 06 07 08	<b>30"Hg - 0</b> 30"Hg-15 psi/kPa <b>30"Hg-30 psi/kPa</b> 30"Hg-60 psi/kPa 30"Hg-100 psi/kPa 30"Hg-150 psi/kPa 30"Hg-200 psi/kPa 30"Hg-200 psi/kPa	09 10 11 12 13 14 15 16	0-15 psi/kPa 0-30 psi/kPa 0-60 psi/kPa 0-100 psi/kPa 0-160 psi/kPa 0-200 psi/kPa 0-300 psi/kPa 0-400 psi/kPa	<ol> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> </ol>	0-500 psi/kPa 0-600 psi/kPa 0-800 psi/kPa 0-1000 psi/kPa 0-1500 psi/kPa 0-2000 psi/kPa 0-3000 psi/kPa	25 26 27 28 29	0-5000 psi/kPa 0-6000 psi/kPa 0-10,000 psi/kPa 0-15,000 psi/kPa 0-20,000 psi/kPa

Ranges shown in bold are typically stocked in our warehouse.

GAUGETECH

#### Dimensions



NS	А	D	F	Н		~L	U	WT(kg)
115	11.5	49	16.5	131	118.5	95	22	0.70





#### Applications

Chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants, food and beverage, pharmaceutical industries.



#### Specifications

Accuracy	±1.0% of full scale ASME B40.1 Grade 1A
Ambient temperature	-40°C to 65°C
Process temperature	Max 300°C (Dry) Max 65°C (Filled)
Operating pressure	75% of the scale value
Over pressure limit	25% of full scale value
Case	AISI 304 SS
Ring	AISI 304 SS, bayonet type
Bourdon Tube	AISI 316L SS
Socket	AISI 316L SS (directly welded to case)
Movement	AISI 304 SS
Welding	Tig argon arc welding
Protection	IP 55
Dial	Aluminum, black & red graduation on white background
Pointer	Aluminum, black colored micrometer zero adjustable
Window	Plexiglas
Fill	Glycerine/H <sub>2</sub> 0 (standard) Halocarbon (optional)
Gaskets/Vent/ Blow out Plugs	Neoprene
Standard Scale	psi/kPa (standard), special dials & scales available
Connection	1/2" NPT (standard) 1/4" NPT (optional)

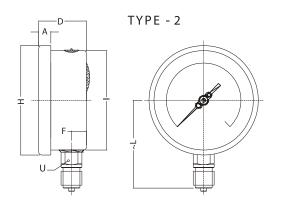
#### How to order

Standard Model Glycerine Filled: GTG6012 + Range Code

Range Code		Range Code		Range Code		Range Code	
01 02 03 04 05 06 07 08	30" Hg - 0 30" Hg-15 psi/kPa 30" Hg-30 psi/kPa 30" Hg-60 psi/kPa 30" Hg-100 psi/kPa 30" Hg-150 psi/kPa 30" Hg-200 psi/kPa 30" Hg-300 psi/kPa	09 10 11 12 13 14 15 16	0-15 psi/kPa 0-30 psi/kPa 0-60 psi/kPa 0-100 psi/kPa 0-160 psi/kPa 0-200 psi/kPa 0-300 psi/kPa 0-400 psi/kPa	<ol> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> </ol>	0-500 psi/kPa 0-600 psi/kPa 0-800 psi/kPa 0-1000 psi/kPa 0-1500 psi/kPa 0-2000 psi/kPa 0-4000 psi/kPa	25 26 27 28 29	0-5000 psi/kPa 0-6000 psi/kPa 0-10,000 psi/kPa 0-15,000 psi/kPa 0-20,000 psi/kPa

Ranges shown in bold are typically stocked in our warehouse.





NS	А	D	F	Н		~L	U	WT(kg)
125	15	119	16.5	129	125	110	22	.074

#### GTG40/45 Series (4"/100mm & 4.5"/115mm) 316 Stainless Steel Panel Mount Pressure Gauges



316 Stainless Steel Panel Mount Pressure Gauges 1/4"NPT Back Mount

#### Applications

Chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants, food and beverage, pharmaceutical industries.



#### Specifications

Accuracy	±1.0% of full scale ASME B40.1 Grade 1A
Ambient temperature	- 40°C to 65°C
Process temperature	Max 300°C (Dry) Max 65°C (Filled)
Operating pressure	75% of the scale value
Over pressure limit	25% of full scale value
Case	AISI 304 SS
Ring	AISI 304 SS, bayonet type
Bourdon Tube	AISI 316L SS
Socket	AISI 316L SS (directly welded to case)
Movement	AISI 304 SS
Welding	Tig argon arc welding
Protection	IP 55
Dial	Aluminum, black & red graduation on white background
Pointer	Aluminum, black colored micrometer zero adjustable
Window	Plexiglas
Fill	Glycerine/H <sub>2</sub> 0 (standard) Silicone (optional) Halocarbon (optional)
Gaskets/Vent/ Blow out Plugs	Neoprene
Standard Scale	psi/kPa (standard), special dials & scales available
Connection	1/4" NPT (standard)

#### How to order

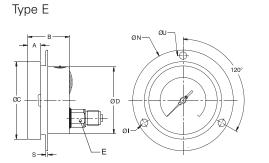
Glycerine Filled U-Clamp, 4" (100mm) : GTG4018B + range code (+ GTFF-4 for optional front flange mounting) Glycerine Filled U-Clamp, 4.5" (115mm): GTG4518B + range code (+ GTFF-4.5 for optional front flange mounting)

Range Code		Range Code		Range Code		Range Code	
01 02 03 04 05 06 07 08	<b>30"Hg - 0</b> 30"Hg-15 psi/kPa <b>30"Hg-30 psi/kPa</b> 30"Hg-60 psi/kPa 30"Hg-100 psi/kPa <b>30"Hg-150 psi/kPa</b> 30"Hg-200 psi/kPa <b>30"Hg-300 psi/kPa</b>	09 10 11 12 13 14 15 16	0-15 psi/kPa 0-30 psi/kPa 0-60 psi/kPa 0-100 psi/kPa 0-160 psi/kPa 0-200 psi/kPa 0-300 psi/kPa 0-400 psi/kPa	<ol> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> </ol>	0-500 psi/kPa 0-600 psi/kPa 0-800 psi/kPa 0-1000 psi/kPa 0-1500 psi/kPa 0-2000 psi/kPa 0-3000 psi/kPa	25 26 27 28 29	0-5000 psi/kPa 0-6000 psi/kPa 0-10,000 psi/kPa 0-15,000 psi/kPa 0-20,000 psi/kPa

Ranges shown in bold are typically stocked in our warehouse.

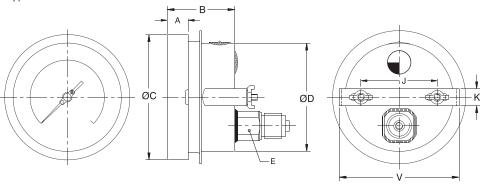
GAUGETECH

#### Dimensions



NS	А	В	ØC	ØD	Е	S	ØL	ØN	ØU
100	12.5	48	110	100	22	1	6	134	118
115	11	48	131	119	22	4	6	152	138

Туре В



NS	А	В	ØC	ØD	Е	J	К	V
100	12.5	48	110	100	22	66.5	16	106
115	11	48	131	119	22	80	16	129.5

#### GTG2518 Series (2.5"/63mm) GTG40 Series (4"/100mm)

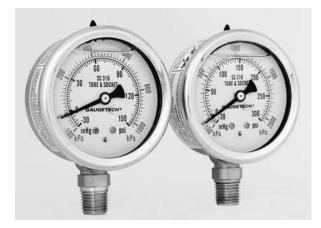
**AMMONIA** Stainless Steel Pressure Gauges 1/2"NPT Bottom Mount



#### Applications

Designed for refrigeration ammonia, Gaugetech® ammonia pressure gauges feature 316 stainless steel wetted parts and a 304 stainless steel case. These gauges are factory liquid filled for vibration service and are available in 2 1/2" and 4" sizes in various mounting configurations.





#### Specifications

Accuracy - 100mm	±1.0% of full scale ASME B40.1 Grade 1A
Accuracy - 63mm	1.6% of full scale ASME B40.1 Grade A
Case	AISI 304 SS
Ring	AISI 304 SS
Bourdon Tube	AISI 316L SS
Socket	AISI 316L SS (directly welded to case)
Movement	AISI 304 SS
Window	Plexiglas
Fill	Glycerine/H <sub>2</sub> O (standard)
Connection	1/4" NPT (standard)

For full specifications, refer to pages 34 and 36

#### How to order

#### GTG2518 (2.5"/63mm)

Bottom Mount: GTG2518A + Range Code Center Back Mount: GTG2518D + Range Code

Panel Mount Accessories: GTFF-2.5: Front Flange GTUC-2.5: U-Clamp

#### GTG40 (4"/100mm) Bottom Mount Outlet Plain Case: Bottom Outlet with Back Flange Wall Mount: Rear Outlet with Back Flange Wall Mount: Rear Outlet Plain Case or U-Clamp Panel: Rear Outlet Front Flange Panel:

GTG4014 + Range Code GTG4014 + Range Code + FLNG4 GTG4018B + Range Code + FLNG4\*\* GTG4018B + Range Code GTG4018B + Range Code + GTFF-4

Range Code

#### 06 30"Hg-150 psi/kPa/NH3 08 30"Hg-300 psi/kPa/NH3

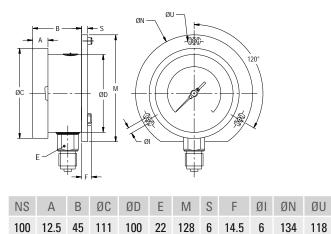
Ranges shown in bold are typically stocked in our warehouse. \*\*Not shown in drawings

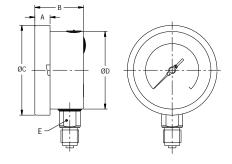
#### GTG2518 Series (2.5"/63mm) GTG40 Series (4"/100mm)

GAUGETECH

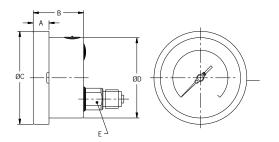
**AMMONIA** Stainless Steel Pressure Gauges 1/2"NPT Bottom Mount

#### Dimensions

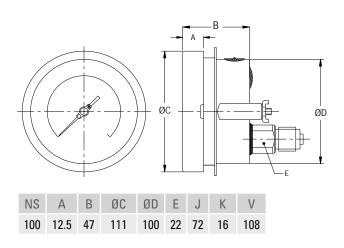


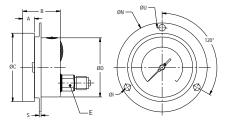


NS	А	В	ØC	ØD	Е
100	12.5	47	111	100	22



NS	А	В	ØC	ØD	Е
100	12.5	47	111	100	22





NS	А	В	ØC	ØD	Е	S	ØI	ØN	ØU
100	12.5	45	111	100	22	1	6	134	118

For 2.5/63mm drawings, please refer to page 35.

Drawings are not to scale. Dimensions in millimeters.

ØU



#### Applications

Chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants, food and beverage, pharmaceutical industries.



#### Specifications

Accuracy	±0.5% of full scale ASME B40.1 Grade 2A
Ambient temperature	-40°C to 65°C
Process temperature	Max +100°C Max +212°F
Operating pressure	75% of the scale value
Over pressure limit	25% of full scale value
Case	Black Phenolic, solid front, blow out back
Ring	AISI 304 SS, bayonet type
Bourdon Tube	AISI 316L SS
Socket	AISI 316L SS
Movement	AISI 304 SS
Welding	Tig argon arc welding
Protection	IP 67
Dial	Aluminum, black & red graduation on white background
Pointer	Aluminum, black colored micrometer zero adjustable
Window	Plexiglas
Fill	Glycerine/H <sub>2</sub> 0 (standard) Silicone (optional)
Gaskets/Vent/ Blow out Plugs	Buna N
Standard Scale	psi/kPa (standard), special dials & scales available
Connection	1/2" NPT (standard) 1/4" NPT (standard)

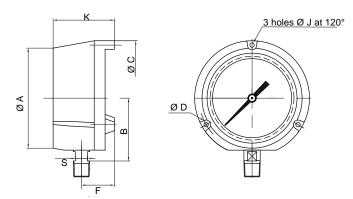
#### How to order

Standard Model Glycerine Filled: 1/2" GTG3012 + Range Code Standard Model Glycerine Filled: 1/4" GTG3014 + Range Code

Range Code		Range Code		Range Code		Range Code	
01 02 03 04 05 06 07 08	<b>30″Hg - 0</b> 30″Hg-15 psi/kPa <b>30″Hg-30 psi/kPa</b> 30″Hg-60 psi/kPa 30″Hg-100 psi/kPa 30″Hg-150 psi/kPa 30″Hg-200 psi/kPa 30″Hg-300 psi/kPa	09 10 11 12 13 14 15 16	0-15 psi/kPa 0-30 psi/kPa 0-60 psi/kPa 0-100 psi/kPa 0-160 psi/kPa 0-200 psi/kPa 0-300 psi/kPa 0-400 psi/kPa	<ol> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> </ol>	0-500 psi/kPa 0-600 psi/kPa 0-800 psi/kPa 0-1000 psi/kPa 0-1500 psi/kPa 0-2000 psi/kPa 0-4000 psi/kPa	<b>25</b> <b>26</b> <b>27</b> 28 29	0-5000 psi/kPa 0-6000 psi/kPa 0-10,000 psi/kPa 0-15,000 psi/kPa 0-20,000 psi/kPa

Ranges shown in bold are typically stocked in our warehouse.





mm	А	В	С	D	F	J	К	S
NS 130	129	102	148	137	38	5.6	73	15.9
4.5"	5 5/64"	4 1/64	5 53/64"	5 25/64"	1 1/2"	7/32	2 7/8"	5/8"

# Low Pressure Diaphragm Gauges Brass and Stainless Steel Version



#### Applications

Designed for use with air, gas, oil, water or any situation where pressure of less than 10 psi is to be measured.



#### Specifications

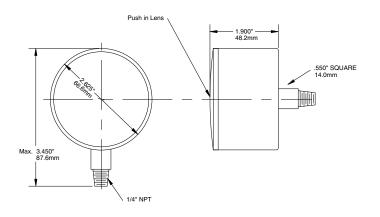
Ranges	Scales available in in/H <sub>2</sub> 0 or ounce/in <sup>2</sup>
Dial Size	2.5″
Accuracy	±2-1-2% - ANSI Grade A
Case	Black painted steel (dry only) or stainless steel (dry only)
Socket	Brass and/or stainless steel
Capsule	Brass and/or stainless steel diaphragm
Movement	Brass or stainless steel
Lens	Acrylic
Pointer	Aluminum
Dial	Aluminum
Connection	1/4" NPT lower or center back
Restrictor	Standard
Zero Adjust	Lower mount only

#### How to order

Dial Size	2.5″	2.5″
Wetted Parts	Brass	Stainless Steel
Mounting	1/4" NPT bottom	1/4" NPT bottom
Ranges (in stock):		
0-10 oz / 0-18"wc	83K-36	83K-36SS
0-14 oz / 0-25" wc	83K-37	83K-37SS
0-20 oz / 0-35" wc	83K-32	83K-32SS
0-35 oz / 0-60"wc	83K-33	83K-33SS
0-5 psi	83K-34	
0-10 psi	83K-35	
-10" - 10" wc / -5.6 - 5.6 oz		83K-41SS
-20" - 0 - 20" wc / -11.5 - 0 -11.5 oz		83K-42SS
-30" - 0 - 30" wc / -18 - 0 - 18 oz		83K-43SS

Other ranges available. Contact Gaugetech for details.







#### Applications

Chemical and petrochemical industries, conventional and nuclear power plants, pumps, hydro-cleaning machines, presses, engine compressors, turbines, diesel engines and refrigerating plants, food and beverage, pharmaceutical industries.



#### Specifications

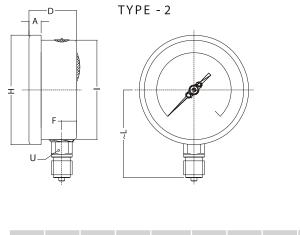
Accuracy	±1.0% of full scale ASME B40.1 Grade 1A
Ambient temperature	- 40°C to + 65°C
Process temperature	Max 150°C (Dry)
Operating pressure	75% of the scale value
Over pressure limit	110% of full scale value
Case	AISI 304 SS
Ring	AISI 304 SS, bayonet type
Capsule	AISI 316 SS
Socket	AISI 316L SS (directly welded to case)
Movement	AISI 304 SS
Welding	Tig argon arc welding
Protection	IP 65
Dial	Aluminum, black & red graduation on white background
Pointer	Aluminum, black colored micrometer zero adjustable
Window	Plexiglas Toughened Glass
Gaskets/Vent/ Blow out Plugs	Neoprene
Standard Scale	see ranges
Connection	1/2" NPT (standard) 1/4" NPT (optional)

#### How to order

Part Number	Range	Part Number	Range
GTLP-410	-5"-0-5" wc / -2.8-0-2.8 oz	GTLP-434	0-5 psi / 0-35 kPa
GTLP-430	0-10" wc / 0-6 oz	GTLP-437	0-25" wc / 0-14 oz
GTLP-431	0-15" wc / 0-9 oz	GTLP-440	-20"-0-20" wc / -11.5-0-11.5 oz
GTLP-432	0-40" wc / 0-23 oz	GTLP-460	-30"-0-30" wc / -18-0-18 oz
GTLP-433	0-60" wc / 0-35 oz		

Typically stocked in our warehouse. Other ranges available. Contact Gaugetech for details.





NS	А	D	F	Н	1	~L	U	WT(kg)
100	12	47	16.5	110.5	100	90	22	0.64

Pressure Gauges

# **Differential Pressure Indicators**



Piston Style

#### Applications

These piston instruments can indicate small values of differential pressure even when used at high line pressures. They provide instantaneous and continuous information regarding system conditions helping in eliminating premature servicing of equipment, avoid unscheduled down time of costly processes and detect abnormal system conditions.



## Specifications

Ranges	0-8, 0-20, 0-30, 0-50, 0-100 psiD/kPa, from stock Others available (on request)
Max Temperature	175°F / 80°C
Max Pressure	3000 psi Aluminum 6000 psi 316SS
Standard Ranges	0-5 psiD to 0-150 psiD
Wetted Materials	Aluminum or stainless steel
Seals	Buna-N or Viton®
Migration of Media	Minor
Accuracy	FSD Ascending +/-2%
Dial Size	3.5" Others available (on request)
Case	Stainless steel, weatherproof or stainless steel flanged, weatherproof
Connection	1/4 FNPT (standard) others available (on request)
Line Connection Location	In-line (standard) Back or bottom (on request)

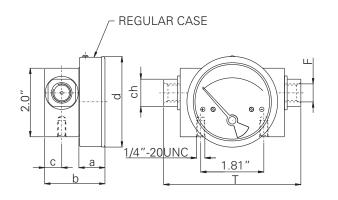
#### How to order

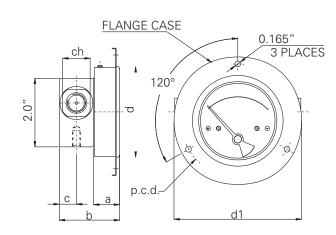
Dial Size	3.5" (in stock)	3.5" (in stock)
Case	Stainless steel	Stainless steel
Wetted Parts	Aluminum	Stainless steel
Seals	Buna-N	Viton®
Mounting	In-line	In-line
Connection	1/4" FNPT	1/4" FNPT
Ranges (in stock):		
0-8 psiD/kPaD	GTDPGA350-8PSID	GTDPGSS350-8PSID
0-20 psiD/kPaD	GTDPGA350-20PSID	GTDPGSS350-20PSID
0-30 psiD/kPaD	GTDPGA350-30PSID	GTDPGSS350-30PSID
0-50 psiD/kPaD	GTDPGA350-50PSID	GTDPGSS350-50PSID
0-100 psiD/kPaD	GTDPGA350-100PSID	GTDPGSS350-100PSID

Other ranges available. Contact Gaugetech for details.









DN	F	а	b	С	d*	dı	Т	ch	p.c.d
2.0″	1/4" NPT	0.70″	1.70″	0.5″	2.08"	3.11"	4.0"	0.75″ sq	2.72″
2.5″	1/4" NPT	0.75″	1.75″	0.5″	2.59"	3.66"	4.0″	0.75″ sq	3.26″
3.5″	1/4" NPT	0.75″	1.75″	0.5″	3.26″	4.29"	4.0"	0.75″ sq	3.89"
4.0″	1/4" NPT	0.75″	1.75″	0.5″	4.10"	5.15″	4.0″	0.75″ sq	4.76″
4.5″	1/4" NPT	0.75″	1.75″	0.5″	4.71″	5.74″	4.0″	0.75″ sq	5.35″
6.0″	1/4" NPT	0.75″	1.75″	0.5″	6.07"	7.12″	4.0″	0.75″ sq	6.73″
							хD		

\*Panel cut out = d + 0.04''

## **Diaphragm Seals**



#### Gaugetech Mini Seals

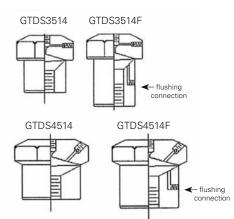
Gaugetech<sup>®</sup> Mini Seals are all-welded, gasketless, threaded off-line seals. The mini seal is an economical choice for isolation of smaller gauges or where high sensitivity is not required. All welded design, standard pressure rating of 2000 psi MWP.

#### **GT35 Series**

1 1/2" Dial through 3 1/2" dial sizes Pressure transducers and transmitters or other small displacement instruments

#### **GT45 Series**

All gauges through 4 1/2" dial size





#### Standard Fills

Fill	Temperature Range
Pure Glycerine (food grade)	+30 to +300°F
Silicone DC200-1000cs	+35 to +450°F
Mineral Oil (standard)	-30 to +200°F
Fluorolube FS-5	-40 to +500°F

#### How to order

Description	Model
1/4" NPTF Instrument with 1/4" NPTF Process	GTDS3514
1/4" NPTF Instrument with 1/4" NPTF Process with 1/4" NPT flushing port	GTDS3514F
1/4" NPTF Instrument with 1/4" NPTF Process	GTDS4514
1/4" NPTF Instrument with 1/4" NPTF Process with 1/4" NPT flushing port	GTDS4514F
1/4" NPTF Instrument with 1/2" NPTF Process	GTDS4512
1/4" NPTF Instrument with 1/2" NPTF Process with 1/4" NPT flushing port	GTDS4512F



#### Gaugetech Diaphragm Seals

Gaugetech<sup>®</sup> Full Size diaphragm seals are a multi-purpose seal that isolates the pressure instrument from viscous, abrasive and/or corrosive process fluids. A diaphragm seal may also be used to protect the instrument from hot process fluids.

We offer from stock standard 316SS housings and diaphragms with threaded female process connections in 1/2" and 1" NPT Female. The instrument connection is a standard 1/2" NPT Male.

## Other exotic materials and flanged connections are available through special order.



#### Standard Fills

Fill	Temperature Range
Pure Glycerine (food grade)	+30 to +300°F
Silicone DC200-1000cs	+35 to +450°F
Mineral Oil (standard)	-30 to +200°F
Fluorolube FS-5	-40 to +500°F

#### How to order

316SS Upper Housing with 316SS Diaphragm and a 316SS Lower Housing 2300 psi MWP

Description	Model
1/2" NPTF Instrument with 1/2" NPTF Process	GTDS1212
1/2" NPTF Instrument with 1/2" NPTF Process with 1/4" NPT flushing port	GTDS1212F
1/2" NPTF Instrument with 1" NPTF Process	GTDS121
1/2" NPTF Instrument with 1" NPTF Process with 1/4" NPT flushing port	GTDS121F

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#### Rear Connection Bi-metal Thermometers



#### Overview

Gaugetech<sup>®</sup> Bi-metal Thermometers are manufactured according to ASME B.40.3 under strict compliance with ISO 9000. The high polished 304 stainless steel case is corrosion resistant. Bi-metal coils are stress relieved and heat treated for maximum accuracy and fast response. Dial faces are concave assuring close proximity of the pointer to the figure intervals.

Silicone oil filling is highly recommended on applications where excess vibration may be present.

These instruments are used in pulp and paper, oil and gas, petrochemical, industrial and food processing industries.

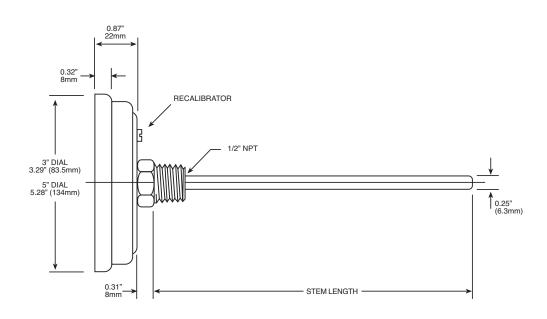
For applications where the process media may be corrosive or contained under pressure, the use of a Thermowell is required to prevent damage to the thermometer and facilitate its removal from the process. Thermowells are available in various lengths, connections, sizes and materials. Please consult the Thermowell section of this catalog.



## Specifications

Case and ring	304 SS, high polish, hermetically sealed to prevent fogging and exclusion of moisture, ensuring long life of internal components.
Gasket	Natural white rubber compatible with silicone filling.
Stem	304 SS, high polish, welded at tip and case, 1/4" (63mm) diameter for lengths to 24". Other dimensions and stem lengths available.
Coil	Bi-metallic, dampened with 100,000 c.s. silicone grease on ranges to 500°F. Heat treated and stress relieved to maintain a constant expansion ratio and specified accuracy.
Connection	304SS, adjustable angle, 1/2" NPT
Window	Food grade shatter proof glass, 0.16"(4mm) thick
Pointer	Balanced, black aluminum. Pointer flutter eliminated by application of 100,000 c.s. silicone grease to bimetal coil on ranges up to and including 500°F.
Dial	Aluminum, baked enamel finish, white background with black markings. Concave design with celcius on lower plane and fahrenheit on the upper. This allows close proximity of pointer to divisions on scale for accurate readings.
Recalibration	Hex head adjustment screw with screw driver slot allows the operator to re-zero the pointer for maximum accuracy in selected area of the 270° degree dial. Thermometer must be inserted at least 2.5″ (63.5mm) into agitated bath with a certified thermometer as a test comparison.
Over range	Bi-metal maybe be over or under ranged temporarily to 50% of full scale value.
Silicone filling	May be filled with silicone for severe vibration applications.
Accuracy	±1.0% Full Scale ASME B40.3 Grade A
Options	Other threaded connections, stem diameters and lengths, silicone filling and special dials.
Shipping weight	GT-32: 0.7 lbs (0.3kg) GT-52: 1.2 lbs (0.54kg)





Drawings are not to scale.

#### How to order

#### Models and Range codes shown in bold are typically stocked in our warehouse.

\* Not recomended for continuous service over 800°F (425°C)

* *	Specify	length	in	inches	(72″	maximum)	
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BASE PRODUCT RANGE OPTIONS								FAHRENHEIT CELSI				SIUS			
DIAL SIZE	STEM LENGTH**	PRODUCT CODE	DUAL SCALE				RENHEIT ONL	Y	CELCIUS ONLY (SPECIAL ORDER)			Figure Intervals	Minor Divisions	Figure Intervals	Minor Divisions
3"		<b>GT-39</b> <b>GT-312</b> GT-315 GT-318	RANGE CODE 01 02 03* 04 05 27 06 07	"FOUTER SCALE -100°F to 100°F -40°F to 160°F 25°F to 125°F 0°F to 200°F 20°F to 240°F 0°F to 240°F 50°F to 300°F 50°F to 400°F	"C INNER SCALE -75°C to 40°C -40°C to 70°C -5°C to 50°C -20°C to 95°C -10°C to 115°C -20°C to 120°C 10°C to 150°C 10°C to 205°C	RANGE CODE 01F 02F 03F* 04F 05F 27F 06F 06F 07F	-100°F to 10 -40°F to 11 25°F to 11 0°F to 21 20°F to 22 0°F to 22 50°F to 30 50°F to 4	00°F 60°F 25°F 00°F 40°F 50°F 00°F 00°F	RANGE CODE 01C 02C 03C* 04C 05C 27C 06C 07C	-75°C to 4 -40°C to 5 -5°C to 9 -20°C to 9 -20°C to 9 -20°C to 9 10°C to 9 10°C to 9	70°C 50°C 95°C 115°C 120°C 150°C 205°C	20° 20° 10° 20° 20° 50° 50°	2° 2° 1° 2° 2° 2° 5°	10° 10° 5° 10° 20° 20° 50°	1° 1° 1/2° 1° 2° 2° 2°
5″	4" (101.6mm)	<b>GT-59</b> <b>GT-512</b> GT-515 GT-518	Specify Add opt Example	50°F to 500°F 150°F to 750°F 200°F to 1000°F TO ORDER base product code ion code required. a: GTA-32-02-F ible Angle, 3″ dial,	e. Add range cod	·		50°F 200°F			400°C 550°C		5° 10° 10° •N mum Reg	50° 50° 100°	2° 5° 5° Pointer

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#### Adjustable Angle Bi-metal Thermometers



#### Overview

Gaugetech<sup>®</sup> Bi-metal Thermometers are manufactured according to ASME B.40.3 under strict compliance with ISO 9000. The high polished 304 stainless steel case is corrosion resistant. Bi-metal coils are stress relieved and heat treated for maximum accuracy and fast response. Dial faces are concave assuring close proximity of the pointer to the figure intervals.

Silicone oil filling is highly recommended on applications where excess vibration may be present.

These instruments are used in pulp and paper, oil and gas, petrochemical, industrial and food processing industries.

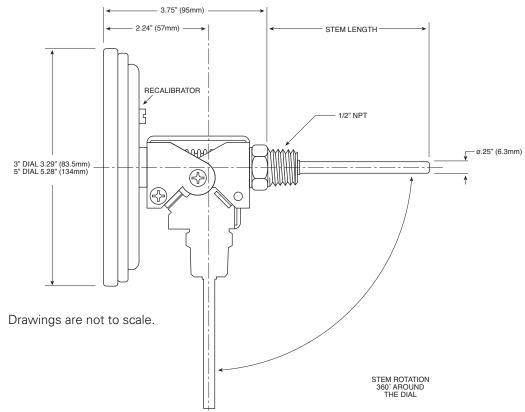
For applications where the process media may be corrosive or contained under pressure, the use of a Thermowell is required to prevent damage to the thermometer and facilitate its removal from the process. Thermowells are available in various lengths, connections, sizes and materials. Please consult the Thermowell section of this catalog.



## Specifications

Case and ring	304 SS, high polish, hermetically sealed to prevent fogging and exclusion of moisture, ensuring long life of internal components.
Gasket	Natural white rubber compatible with silicone filling.
Stem	304 SS, high polish, welded at tip and case, 1/4" (63mm) diameter for lengths to 24". Other dimensions and stem lengths available.
Coil	Bi-metallic, dampened with 100,000 c.s. silicone grease on ranges to 500°F. Heat treated and stress relieved to maintain a constant expansion ratio and specified accuracy.
Connection	304SS, adjustable angle, 1/2" NPT
Window	Food grade shatter proof glass, 0.16"(4mm) thick
Pointer	Balanced, black aluminum. Pointer flutter eliminated by application of 100,000 c.s. silicone grease to bimetal coil on ranges up to and including 500°F.
Dial	Aluminum, baked enamel finish, white background with black markings. Concave design with celcius on lower plane and fahrenheit on the upper. This allows close proximity of pointer to divisions on scale for accurate readings.
Recalibration	Hex head adjustment screw with screw driver slot allows the operator to re-zero the pointer for maximum accuracy in selected area of the 270° degree dial. Thermometer must be inserted at least 2.5″ (63.5mm) into agitated bath with a certified thermometer as a test comparison.
Over range	Bi-metal maybe be over or under ranged temporarily to 50% of full scale value.
Silicone filling	May be filled with silicone for severe vibration applications.
Accuracy	±1.0% Full Scale ASME B40.3 Grade A
Options	Other threaded connections, stem diameters and lengths, silicone filling and special dials.
Shipping weight	GTA-32: 1.1 lbs (0.5kg) GTA-52: 1.5 lbs (0.68kg)





#### How to order

#### Models and Range Codes shown in bold are typically stocked in our warehouse.

\* Not recomended for continuous service over 800°F (425°C)

** Specif	y length in	inches (72	" maximum)	
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	BASE PRODU	JCT		RANGE OPTIONS								FAHRENHEIT		CEL	SIUS
DIAL SIZE		PRODUCT CODE		DUAL SCAL	E		RENHEIT ONL	Y		CIUS ONLY PECIAL ORDER)		Figure Intervals	Minor Divisions	Figure Intervals	Minor Divisions
3″	,	GTA-39 GTA-312 GTA-315 GTA-318	RANGE CODE 01 02 03* 04 05 27 06 07 08	"FOUTER SCALE -100"F to 100"F -40"F to 160"F 25"F to 125"F 0"F to 200"F 20"F to 240"F 0"F to 250"F 50"F to 300"F 50"F to 300"F 50"F to 500"F	"C INNER SCALE -75°C to 40°C -40°C to 70°C -5°C to 50°C -20°C to 95°C -10°C to 115°C -20°C to 120°C 10°C to 150°C 10°C to 250°C 10°C to 260°C	RANGE CODE 01F 02F 03F* 04F 05F 27F 06F 07F	-100°F to 10 -40°F to 11 25°F to 11 0°F to 21 20°F to 22 0°F to 23 50°F to 30 50°F to 30 50°F to 45	00°F 60°F 25°F 00°F 40°F 50°F 00°F 00°F	RANGE CODE 01C 02C 03C* 04C 05C 27C 06C 07C 08C	-75°C to -40°C to -5°C to -20°C to -20°C to -20°C to 10°C to 10°C to 10°C to	70°C 50°C 95°C 115°C 120°C 150°C 205°C	20° 20° 20° 20° 50° 50° 50°	2° 2° 1° 2° 2° 2° 5°	10° 10° 5° 10° 20° 20° 50°	1° 1° 1/2° 1° 2° 2° 2°
5″	2.5" (63.5mm) 4" (101.6mm) 6" (152.4mm) 9" (228.6mm) 12" (304.8mm) 15" (381.0mm) 18" (457.2mm) 24" (609.6mm)	<b>GTA-56</b> <b>GTA-59</b> <b>GTA-512</b> GTA-515 GTA-518	09 10* HOW Specify Add opt Example	50°F to 500°F 150°F to 750°F 200°F to 1000°F <b>TO ORDER</b> base product code ion code required. e: GTA-32-02-F ble Angle, 3″ dial,	50°C to 400°C 100°C to 550°C e. Add range cod			50°F 000°F	09C* 10C* DITIONA	50°C to 100°C to	400°C 550°C		5° 10° 10° •N mum Reg	50° 50° 100°	2° 5° 5° Pointer

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## Thermowells



#### Overview

Thermowells are recommended for temperature instruments in process systems where pressure, velocity, or viscous, abrasive, and corrosive materials are present individually or in combination. A properly selected thermowell will protect the temperature instrument from damage resulting from these process variables.

Additionally, a thermowell enables removal of the temperature instrument for replacement, repair, or testing without affecting the process system. We stock a wide range of popular industry thermowells to suit industrial & bi-metal thermometers, thermocouples, RTD's & temperature recorders.

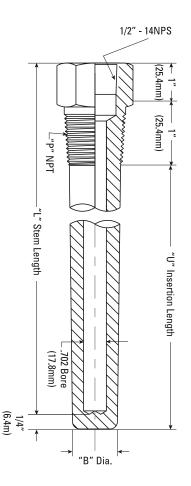
We welcome special inquiries on thermowells, please contact our sales desk.

#### Specifications

Туре	.260 Bore Standard Stepped .702 Bore Straight
Instrument Connection	1/2" FNPT
Process Connection	1/2" MNPT 3/4" MNPT 1" MNPT
Materials	316SS
Stem Lengths	2.5" 4" 6" 9" 12"

## Ordering & Dimensions

.702 Bore Testwell - Standard Straight									
Process Connection "P"	Model Number	Stem Length "L"		Insertion Length "U"		"B" Diameter		Overall Length	
Connection P	Number	in	mm	in	mm	in	mm	in	mm
	76210200	3.75	95	2	51	.825	21	4	102
3/4" NPT	76210400	4.75	120	3	76	.825	21	5	127
	76210600	5.75	146	4	102	.825	21	6	152
	78210200	3.75	95	2	51	1	25	4	102
1" NPT	78210400	4.75	120	3	76	1	25	5	127
	78210600	5.75	146	4	102	1	25	6	152



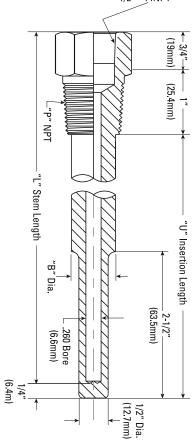
Drawing is not to scale.



## Ordering & Dimensions

.260 Bore Thermowells - Standard Stepped									
Process Connection "P"	Model Number	Ste Leng	em th "Ľ"	Inse Lengt		"B" Diameter		Ove Len	
connection 1	Number	in	mm	in	mm	in	mm	in	mm
	S12-025-304	2.5	64	1.25	32	-	-	2.75	70
	S12-025-316	2.5	64	1.25	32	-	-	2.75	70
	S12-040-304	4.0	102	2.5	64	-	-	4.25	108
	S12-040-316	4.0	102	2.5	64	-	-	4.25	108
1/2"- 14 - NPT	S12-060-304	6.0	152	4.5	114	0.63	16	6.25	159
In Stock	S12-060-316	6.0	152	4.5	114	0.63	16	6.25	159
	S12-090-304	9.0	229	7.5	191	0.63	16	9.25	235
	S12-090-316	9.0	229	7.5	191	0.63	16	9.25	235
	S12-120-304	12.0	305	10.5	267	0.63	16	12.25	311
	S12-120-316	12.0	305	10.5	267	0.63	16	12.25	311
	S34-025-304	2.5	64	1.25	32	-	-	2.75	70
	S34-025-316	2.5	64	1.25	32	-	_	2.75	70
	S34-040-304	4.0	102	2.5	64	-	_	4.25	108
	S34-040-316	4.0	102	2.5	64	-	-	4.25	108
3/4"- 14 - NPT	S34-060-304	6.0	152	4.5	114	0.75	19	6.25	159
In Stock	S34-060-316	6.0	152	4.5	114	0.75	19	6.25	159
	S34-090-304	9.0	229	7.5	191	0.75	19	9.25	235
	S34-090-316	9.0	229	7.5	191	0.75	19	9.25	235
	S34-120-304	12.0	305	10.5	267	0.75	19	12.25	311
	S34-120-316	12.0	305	10.5	267	0.75	19	12.25	311
	S10-025-304	2.5	64	1.25	32	-	-	2.75	70
	S10-025-316	2.5	64	1.25	32	_	_	2.75	70
	S10-040-304	4.0	102	2.5	64	-	-	4.25	108
	S10-040-316	4.0	102	2.5	64	-	-	4.25	108
1" 11 E NDT	S10-060-304	6.0	152	4.5	114	0.83	22	6.25	159
1"- 11.5 - NPT	S10-060-316	6.0	152	4.5	114	0.83	22	6.25	159
	S10-090-304	9.0	229	7.5	191	0.83	22	9.25	235
	S10-090-316	9.0	229	7.5	191	0.83	22	9.25	235
	S10-120-304	12.0	305	10.5	267	0.83	22	12.25	311
	S10-120-316	12.0	305	10.5	267	0.83	22	12.25	311

1/2" - <u>1</u>4NPT



Drawing is not to scale.

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#### Miscellaneous Thermometers

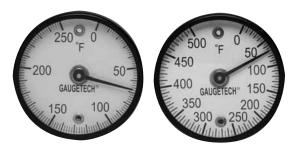


#### Dual Magnet Thermometers

Gaugetech<sup>®</sup> dual magnet-mount surface thermometers are specifically designed to measure surface temperature. Used on any horizontal surface or held magnetically to any magnetic surface. These instruments feature two magnets that act as the thermometer's base and hold the instrument in place on magnetic surfaces.

Part Number	Range
GTM02C	-70/70°C
GTM27C	-20/120°C
GTM27F	0/250°F
GTM08F	50/500F

Other ranges available upon request.



#### Glass Pocket Themometers

Gaugetech<sup>®</sup> liquid-in-glass 6" pocket test thermometer is useful for applications requiring fast and accurate temperature readings. These thermometers are popular for test wells as the thermometer has a 1/4" diameter. Each thermometer comes standard with a plastic pocket carrying case with clip.

Part Number	Range
GT100-1	-20/120°C
GT100-2	-40/70°C

Other ranges available upon request.





#### Bi-metal Pocket Thermometer

Gaugetech<sup>®</sup> bi-metal pocket test thermometers are useful for applications requiring fast and accurate temperature readings. These thermometers feature a easy to read 1.5" dial and are popular for use in the food, heating, air conditioning and refrigeration industries. Each thermometer comes standard with a plastic pocket carrying case with clip.

Part Number	Range
T160	-40/160° F+C
T220	0/220° F+C
T550	50/500F

Other ranges available upon request.



#### Accessories



## Gaugetech® Test Bar Manifold

Gaugetech<sup>®</sup> test bar manifolds are machined from bar stock and supplied in 316 stainless steel. With six 1/2" female threaded connections, these bars are suitable for a wide variety of testing and manifold applications. Use our GTH series needle valves and create the system that suits your needs. Gaugetech<sup>®</sup> test bar manifolds are designed with a 10,000 psi MWP.

Note: Needle valves and hex plugs must be purchased separately.

Part Number	NPT	MWP
GTHTM	1/2″	10,000 psi



## Gaugetech<sup>®</sup> In-Line Check Valve

Gaugetech<sup>®</sup> in-line check valves are machined from hex stock and supplied in 316 stainless steel and are available in 1/2" NPT with male-female threaded connections. These valves are designed with a 10,000 psi MWP and a 45 psi cracking pressure.

Part Number	NPT	MWP
GTCV12SS10	1/2"	10,000 psi

#### Internal Components:

Spring: Inconel X-750 Ball: Ceramic Seat: 100% Virgin PTFE (Teflon<sup>®</sup>)

## ▶ Gaugetech<sup>®</sup> Pressure Dampeners

Gaugetech<sup>®</sup> snubbers and pulsation dampeners are designed to protect instruments from pulsating pressures applications. Sudden pressure changes are dampened before reaching the instrument protecting it from high stress, making easier readings and helps prolong the life of the instrument.

Available in brass and 316SS, 1/4" and 1/2" NPT. Please consult our sales desk for further information on Gaugetech® pressure dampeners.





## Accessories



#### ▶ Gaugetech<sup>®</sup> Gauge Siphon

Gaugetech<sup>®</sup> gauge siphons are a cost effective way to maximize gauge life, made from solid bar stock to produce a compact rigid mount and easy installation. Produced in 316 stainless steel or carbon steel materials with 1/2" NPT and 1/4" NPT M x F available.

- Eliminate old style pigtail
- Reduces gauge shock or whip
- Compact closer installations
- Provides a thermal barrier between hot vapors and the instrument
- Freeze Protection: Filling the siphon with glycol, it forms a barrier to prevent freezing of instruments on wet air lines. Filling the siphon with kerosene it acts as a freeze protection for liquid service installations.

Part Number	NPT	Material
MP5C	1/2"	carbon steel
MP5SS	1/2"	316SS

#### Gaugetech<sup>®</sup> Finned Siphon

Gaugetech® finned gauge siphons are designed for steam. Up to 75% heat loss allows the instrument to work within its designed temperature rating. The finned gauge siphon serves to create a condensate barrier between the live steam and the pressure instrument. Low coefficient of conduction heat of standard materials allows for a predicable temperature of the instrument. 316 stainless steel and carbon steel available. 1/2" NPT M x F standard.

Part Number	NPT	Material
MP5FC	1/2"	carbon steel
MP5FSS	1/2"	316SS





#### Accessories



## Gaugetech Finned Cooling Tower

These finned cooling towers protect pressure instruments during high temperature applications. Ideal for use with pressure gauges, switches and transmitters where the process media temperature exceeds the rating of the instrument.

Part Number	Connection	Pressure Rating
GTCT12	1/2" NPT M x F	6000 psi



## ▶ P/T Plugs & Accessories

Pressure and temperature test plugs are a necessity to today's complex HVAC systems, providing access to process fluids and gases without disruption of the system.

- Measuring Pressure/Temperature/Flow Rate
- Sampling: Retrieve samples without disrupting system
- Bleeding: Bleed air from A/C Lines to increase efficiency
- Use of a single set of gauges to test or sample all points
- Plugs are available with brass or 304SS body materials with plug core materials of Neoprene® or Nordel® to suit the needs of the application
- 1/8", 1/4", 3/8" and 1/2" NPT male threads are available on all models
- Caps are standard on all P/T plugs

Gauge probes are used in conjunction with standard 1/4" NPT pressure gauges for testing pressures within the system utilizing the pressure/temperature plug. A standard pocket test thermometer may be used for temperature readings. Plug extensions and cap chains may be ordered as required.

Please consult our sales desk for further information on P/T plugs.





#### Overload Protectors

These devices are used to protect pressure gauges, pressure switches and other instruments from overpressure. If, due to occasional faults, the overpressure exceeds the maximum allowed value, the device automatically by-passes the instrument until the pressure value is back to normal. Connections are available in 1/4" and 1/2" NPT M x F 1/4" NPT. Set points available from 50 psi to 6000 psi.

Part Number	NPT	Material
MP4-8/9	1/2"	316SS





