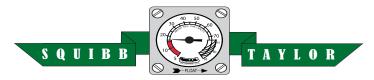
Squibb Taylor Gauge Catalog 2008







Flow Indicator

ISO 9001:2000 REGISTERED

Application

Indicates direction of flow of compatible liquids in pipelines at working pressures up to 500 psig [34 Bar]. The indicator must be installed in pipeline tees.

General Information & Features*

The head, centershaft, support tube, bearings and vane in these indicators are made of 300 Series stainless steel. Magnets are nickel-plated Alnico, and the threaded mounting adapters are forged steel.







Model Numbers

Pipe Size	Includes	Item Number	Part Number		
2"	5305 Adapter - 2" NPT	5520-2	130050		
2 1/2"	5305 Adapter - 2" NPT	5520 - 2 1/2"*	130055		
3″	5305 Adapter - 2" NPT	5520-3**	130060		

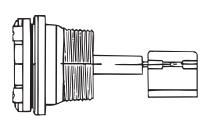
^{*}Requires a 2 1/2" x 2" Reducing Bushing **Requires a 3" x 2" Reducing Bushing

Part Numbers

Item Number	Part Number
5520R Dial	130046
5520-2" Flapper Only	130065
5520-2 1/2" Flapper Only	130070
5520-3" Flapper Only	130075

NOTE: Torque mounting bolts to 140"/150" in./lb., [16,4Nm]

^{*} Materials and specifications are subject to change without notice.
Pressure ratings subject to change due to temperature and other environmental considerations.







Master Visible Liquid-Level Gauges

ISO 9001:2000 REGISTERED

Application

The Master Series[™] liquid-level gauges are designed to accurately determine the percentage of total tank volume for most liquids in stationary-storage applications. UL listed for LP Gas and NH₃ service.

General Information & Features*

These Taylor™ Gauges are available in four basic models:

Model LT — Incorporates 4" [100 mm] dial and is designed for top mounting. **Model MT** — Incorporates 8" [200 mm] dial and is designed for top mounting.

Model LE — Incorporates 4" [100 mm] dial and is designed for side, end or angle mounting. **Model ME** — Incorporates an 8" [200 mm] dial and is designed for side, end or angle mounting.

The large, easy-to-read dials are also easy to remove and replace. Materials of construction vary depending on the types of liquids to be gauged. Many different optional features are available to meet your specific needs.

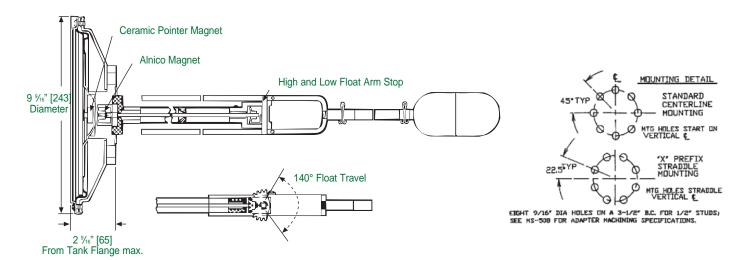
Taylor™ gauges are designed for working pressures ranging from atmospheric to 450 [31 Bar] psig.

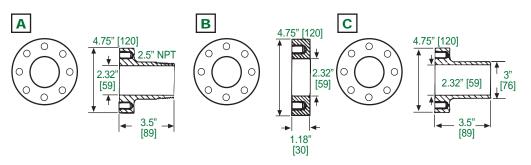
For instructions on how to install the Taylor Master Visible™ Gauge, see #115-820T Taylor Master Visible™ Liquid-Level Gauge Installation Instructions.

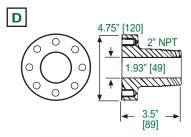
Prefix Number Application None Industrial LP-gas and NH3 ME (LPG and NH3 only dials optional) D Double head (liquified CO2) RM Mobile service (Specify 4" or 8" Dial) V Vertical tanks Straddle mounting (bolt holes straddle vertical centerline) Χ Υ Fits through 2" schedule 80 coupling Suffix Number Gauge Materials plated steel and stainless steel -11 -12 stainless steel or better

^{*} Materials and specifications are subject to change without notice.
Pressure ratings subject to change due to temperature and other environmental considerations.

Master Visible Liquid-Level Gauges







3.5" [89] Bolt Circle Adapters for Magnetel™ Gauges

Taylor Machining Standard MS-508T

Part #	Mates With	Туре	Material	Thread	Dimensions	
5331		2 ½" NPT			Reference dwg. A	
5330	Style B	Welding	Forged Steel		Reference dwg. B	
5332				½"-13UNC-2B	Reference dwg. C	
5329	Style B	2" NPT sch. 80			Reference dwg. D	

NOTE: The dimensions of the threaded neck on this adapter are equivalent to Schedule 80 pipe.

When Ordering, Specify:

- 1. Liquid to be gauged and specific gravity.
- **2.** Inside diameter of tank, head style: ellipsoidal, semi-ellipsoidal or hemispherical.
- **3.** Complete model number desired {example ME????(A or B)-11}.
- **4.** If a dial other than standard is required, furnish drawing and/or details.
- **5.** Furnish tank drawings whenever ordering gauges for angle-mounting or for installation in vertical tanks.
- **6.** Tank mounting flange, if required (see chart above).

CAUTION: For LP Gas or NH₃ applications requiring 2" NPT connection, specify "A" Series Master Visible™

NOTE: "B" Style Series gauges will fit through 2" pipe coupling but will NOT fit through 2" pipe nipple.





TAYLOR Taylor RoadMaster Liquid-Level Gauges

ISO 9001:2000 REGISTERED

Application

The RM Series Road Master gauges were designed to withstand the vibration and shock inherent in mobile service. Their service life in over-the-road and off-road transports, carrying liquids ranging from LP-gas to crude oil, is unsurpassed. These gauges allow a continuous reading between 5% and 95% of tank contents.

General Information & Features*

The RM Series Road Master gauges are to be installed in the side or end of mobile tanks at the centerline. They are equipped with a spring controlled shock absorber on the float arm which substantially reduces the stress that quickly destroys conventional gauges. Angle mounting gauges are also available.

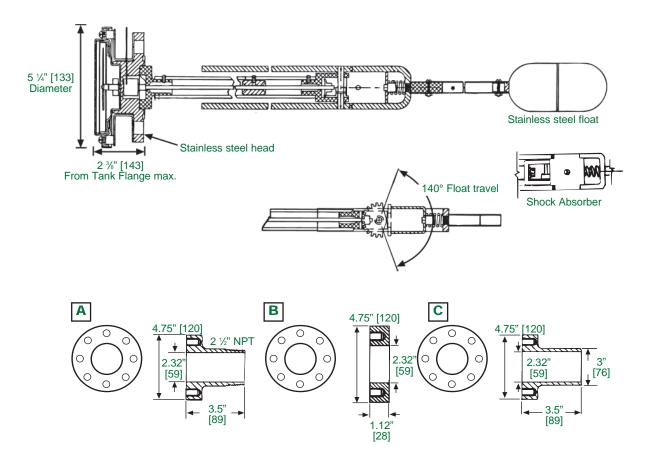
The standard model incorporates a 4" [100 mm] dial with an available 8" [200 mm] dial. When necessary, the dials are easily replaceable.

The RM Series Road Master gauges are designed for working pressures ranging from atmospheric to 450 [31 Bar] psig.



Liquid-Level Gauge

Taylor RoadMaster Liquid-Level Gauges



3.5" [89] Bolt Circle Adapters for RoadMaster Gauges

Part #	Mates With	Туре	Material	Thread	Dimensions		
5331		2 ½" NPT			Reference dwg. A		
5330	RM Series	Welding	Forged Steel	½"-13UNC-2B	Reference dwg. B		
5334		3" NPT]		Reference dwg. C		

When Ordering, Specify:

- 1. Liquid to be gauged and specific gravity.
- **2.** Inside diameter of tank heads, ellipsoidal, semi-ellipsoidal or hemispherical.
- **3.** If a dial other than standard is required, furnish drawing and/or details.
- **4.** Furnish tank drawings whenever ordering gauges for angle-mounting or for installation in vertical tanks.
- **5.** If tank mounting flange is required, order separately from chart above.





Magnetic Liquid-Level Gauges For NH³ With Chemical Additives

ISO 9001:2000 REGISTERED

Application

This magnetic liquid-level gauge is especially designed for use in NH₃ with chemical additives. Gauges are available for all tanks and any mounting position.

General Information & Features

These gauges are built to the highest standards of manufacturing and thoroughly field tested. The magnetic construction permits the complete sealing-off of the inside liquid from the outside gauge head and dial. This eliminates many hazards and permits dial replacement quickly without loss of liquid by simply removing two screws. All dial capsules are easy-to-read, hermetically sealed, vacuum tested and eliminate fogging. Dial pointers are silicone dampened. These gauges are UL listed for NH₂ or LPG service.

Taylor's rugged gear drive is standard with shrouded stainless steel beveled gears especially designed to shed and work out any loose particles which might affect action. From the hermetically-sealed dial to the one-piece head, body and fusion welded float, each gauge is especially suitable for additive application and will provide long trouble-free service in even the most severe use. Mounting may be accomplished in all desired positions where circumstances permit.



Magnetic Liquid-Level Gauges For NH₃ With Chemical Additives

General Specifications*

Temperature Range

Standard range is -40°F to 158°F, -40C to 70C

Accuracy

Dependent on proper sizing of gauge and tank configuration. When equipped with Junior dial, overall accuracy is ±5%, Senior dial is ±3%.

Shock & Vibration

Suitable for mobile service applications

Working Pressure

450 psig [31 Bar]

UL Listing

UL listed for NH₃ service

Materials of Construction

Counterbalance & Support Tube

Stainless steel.

Gasket

Neoprene.

Mounting Screws

Stainless steel.

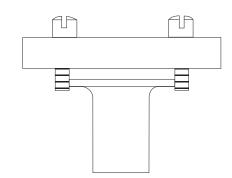
All Other Components

Stainless steel, except for nickel plated alnico magnet.

When Ordering, Specify:

- 1. Gauge head size, Senior.
- 2. Tank diameter as shown on nameplate.
- 3. Mounting location (top, side, end or angle).
- **4.** If gauge is angle mounted, state degree of angle above or below the horizontal centerline.
- **5.** If gauge is end mounted, state the shape of the tank head, hemispherical or semi-ellipsoidal.
- **6.** The "H" dimension (distance in inches from the surface of the tank to the gasket surface on the riser).

To order replacement gauge, simply furnish the information stamped on one of the sides, as shown in the example.



Specifications subject to change without notice.
 Ratings subject to change due to temperature and other environmental considerations.







Magnetic Liquid-Level Gauges For Anhydrous Ammonia Service

ISO 9001:2000 REGISTERED

General Information & FeaturesJunior Models

These Junior gauges are supplied as standard with a direct-reading percentage dial, a Neoprene gasket and four zinc-plated steel head screws ($\frac{1}{2}$ " - 28 x $\frac{1}{2}$ " long) for attachment to a flange with a 2 $\frac{1}{2}$ " bolt circle.

Senior Models

These Senior gauges are supplied as standard with a Neoprene gasket and 4 zinc-plated steel head screws ($\frac{5}{6}$ " - 24 x $\frac{7}{6}$ ") for attachment to a flange with a 2 $\frac{7}{6}$ " bolt circle.



Senior Models	Description						
AA	For top mounting						
AB	Below mount						
AC	For angle mounting						
AD	For side or end mounting						

Junior Models	Description						
ВА	For top mounting						
ВВ	Below mount						
ВС	For angle mounting						
BD	For side or end mounting						

Magnetic Liquid-Level Gauges For Anhydrous Ammonia Service

General Specifications*

Temperature Range

Standard range is -40°F to 158°F, -40C to 70C

Accuracy

Dependent on proper sizing of gauge and tank configuration. When equipped with Jr. dial, overall accuracy is $\pm 5\%$, Sr. dial is $\pm 3\%$

Shock & Vibration

Suitable for mobile service applications

Maximum Pressure

375 psi [25,8 Bar]

UL Listing

UL listed for NH3 service

Materials of Construction*

Head & Gear Housing

Aluminum die casting.

Centershaft Bearings, Gear, Pinion, Cross Stud, Bearing, Float Bulb & Dial Screws Stainless steel.

Support, Centershaft & Float Rod

Tempered aluminum.

Counterweight

Lead.

Magnets

Alnico.

Gasket

Neoprene.

Head Screws

Zinc-plated steel, stainless steel screws optional.

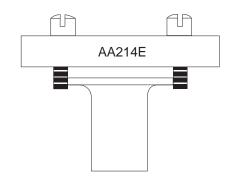
Direct Reading Dials

Hermetically sealed polycarbonate.

When ordering, specify:

- 1. Gauge head size, Junior or Senior.
- 2. Tank diameter as shown on nameplate.
- 3. Mounting location (top, side, end or angle).
- 4. If gauge is angle mounted, state degree of angle above or below the horizontal centerline.
- 5. If gauge is end mounted, state the shape of the tank head, hemispherical or semi-ellipsoidal.
- 6. The "H" dimension (distance in inches from the surface of the tank to the gasket surface on the riser).

To order replacement gauge, simply furnish the information stamped the side of the gauge head, as shown in the example.





CAUTION: For applications where NH3 may include small amounts of water or chemical additives, see model AA-Stainless Steel with improved corrosion resistancee.





^{*} Materials and specifications are subject to change without notice.
Pressure ratings subject to change due to temperature and other environmental considerations.



The Eliminator™ Rotogauge Replacement

For LP Gas & NH₃ Service

ISO 9001:2000 REGISTERED

Application

The Eliminator™ direct-reading float gauge is a direct replacement for 1" NPT rotary-type dip-tube gauges in LP and NHstorage tanks. These gauges are designed for larger tanks up to 84" [2134mm] in diameter. The Eliminator™ is not intended for use in filling tanks - its use is restricted to tanks with fixed liquid level gauges, used to determine when the maximum fill level has been reached. The eliminator can be used in mobile applications up to 60" [1828mm] in diameter.†

How To Do The Conversion

- **1.** After the storage tank has been evacuated, remove the rotary gauge from the 1" NPT opening at the centerline of the head. Clean and re-tap the female threads.
- 2. Remove the two screws from the bezel. Put the bezel, screws and dial chamber aside for the moment. Remove the four mounting screws holding the gauge head to the adapter.
- **3.** Insert the lower portion of the replacement gauge, including the float bulb, float arm, gear housing and counterbalance, into the tank opening.
- **4.** Apply three wraps of ½" [12mm] wide Teflon tape, or other suitable thread sealant, to the 1" NPT threads on the steel adapter through which the gauge support passes.
- **5.** Screw the adapter into the tank opening to achieve a leak-tight joint, and align the gauge mounting holes in the horizontal plane.
- 6. Using the gasket and four mounting screws supplied, attach the gauge to the adapter fingertight. Be sure the gauge is right side up, the bracket tab for locating dial chamber should be on the right. Torque the mounting screws evenly to 140/150 lb.in., [16,4Nm] using a cross pattern.
- 7. Reattach the 4" dial chamber and bezel to the Senior™ gauge head brackets using the two screws supplied.
- **8.** If you end up with the dial chamber upside down, you cannot solve the problem by rotating the bracket. You must rotate the entire gauge 180°.

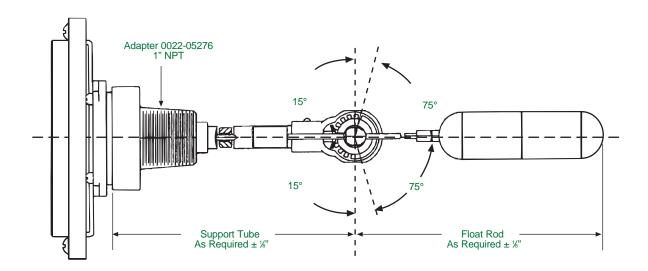


Part #	Fits Tank Size I.D.
Stationary P6293-T4400 Mobile	Up Thru 44" [1210]
Stationary P6293-T6000 Mobile	44.1" Thru 60" [1210] - [1524]
Stationary P6293-T7200	60.1" Thru 72" [1524] - [1829]
No Warranty PM6293-T7200 Mobile	60" Thru 72" [1524] - [1829]
Stationary P6293-T8400	72.1" Thru 84" [1829] - [2134]

[†]Any Eliminator installed in a mobile tank greater than 60" is excluded from the Taylor Gauge Limited Warranty and cannot be reworked.

Eliminator™ Rotogauge Replaceme

The Eliminator™ Rotogauge Replacement for LP Gas & NH' Service



Materials of Construction*

Head, Gears, Gear Housing, Cross Stud, Bearings & Float

Stainless steel.

Centershaft, Float Rod, & Support Tube

Stainless steel.

Drive Magnet

Alnico.

Gasket

Spiral wound, teflon filled, stainless steel.

Adapter

Cold-rolled steel.

Counterweight

Stainless steel.

When ordering, specify:

- 1. Model number.
- 2. Tank I.D.
- 3. Shape of the head.

WARNING: Carefully ensure that gauge and adapter are adequately protected from damage that might cause leakage of tank contents.





^{*} Materials and specifications are subject to change without notice.
Pressure ratings subject to change due to temperature and other environmental considerations.



1" Magnetic Liquid-Level Gauges For LP Gas Service

ISO 9001:2000 REGISTERED

Application

Gauging LP Gas levels in ASME tanks and DOT Cylinders.

General Information & Features

This series of 1" MNPT (Junior Dial) gauges come sandard with a forged brass head.

Now with R3D.

The Taylor Remote Ready Dial, R³D, is a magnetically-driven, Hall Effect compatible dial. Dials are utilized on stationary applications where direct reading plus an electrical signal to a remote fuel level monitor may be required.

Taylor's Hall Effect Module is designed to snap-fit into the recess in the Remote Ready Dial lens. Once installed, the module can provide ratiometric voltage output proportional to the liquid volume inside the tank.

Model Selection Chart

Model	Head Material	Mounting	Dial Type		
HA	Brass	Тор	R³D Direct Read		





1" Magnetic Liquid-Level Gauges For LP Gas Service

General Specifications*

Temperature Range

Extremes are -40°F to 158°F, -40C to 70C.

Working pressure

375 psig [25, 8 Bar].

Accuracy

Dependent on proper sizing of gauge and tank configuration. With direct-reading dials, overall accuracy is ±5%. Hall Effect Module output is within ±4% of indicated reading.

Approvals

Gauge is UL listed for LP Gas service applications. R³D Module is UL Classified as intrinsically safe.

When ordering, specify:

- **1.** Specify tank diameter (shown on tank nameplate).
- 2. Specify the gauge mounting location.
- 3. State the type of cylinder, horizontal or vertical.
- 4. Specify the "H" dimension.

To order replacement gauge, simply furnish the information stamped on the hex wrenching flats, as shown in the example.

Materials of Construction*

Head

Brass forging with optional Zinc head.

Centershaft Bearings, Pinion Gear, Cross Stud & Bearing, Sector Gear

Stainless steel.

Gear Housing

Acetal.

Support, Centershaft, & Float Rod

Tempered aluminum.

Float

Nitrile rubber.

Counterweight

Lead or plated steel.

Magnet

Alnico.

Direct Reading Dials

Hermetically sealed polycarbonate.

R³D Direct Reading Dial

Hermetically sealed polycarbonate.



Typical 1" gauge

Dials are attached to head with two screws.



^{*} Materials and specifications are subject to change without notice.

Pressure ratings subject to change due to temperature and other environmental considerations.



Junior and Senior Liquid-Level Gauges For LP Gas Service

ISO 9001:2000 REGISTERED

Application

Junior gauges are supplied standard with Buna-N gasket and four zinc-plated steel mounting screws ($\frac{1}{4}$ " — 28 x $\frac{1}{4}$ ") for attachment to a gauge adapter with 2.03" [51,5] diameter bolt circle.

Junior gauges used on above or below ground ASME storage tanks are equipped with direct reading percentage dials. Junior Gauge Models used on ASME motor fuel tanks are equipped with direct-reading fractional dials.

All Senior gauges come equipped with Buna-N gaskets and four zinc plated steel mounting screws,

(%6" — 24 x %"), for attachment to a gauge adapter with 2.5" [63,5] diameter bolt circle. Senior gauges used on above ground ASME storage tanks are equipped with direct-reading percentage dials.

Senior gauges with stainless steel heads may be used on above ground horizontal or vertical ASME storage tanks over 3500 [13250 liters] gallon capacity and are equipped with cap screws, teflon-filled, stainless steel gaskets, stronger magnets and direct-reading 4" diameter percentage dials. Tank drawings must be furnished for all vertical tanks so we can recommend computer generated gauge adapter placement to correspond with an assortment of standard dials and dial sets calibrated for vertical tanks.



Junior **Description** Models JA For top mounting JB Below ground mounting JC For angle mounting JD For side or end mounting JJ Diesel end mounting JU Universal mounting All above models available with brass head

Senior Models	Description							
SA	For top mounting							
SB	For below mounting							
sc	For angle mounting							
SD	For side or angle mounting							

Junior Liquid-Level Gauges For LP Gas Service

General Specifications*

Temperature Range

Standard range is -40°F to 158°F, -40C to 70C.

Accuracy

Dependent on proper sizing of gauge and tank configuration. When equipped with Jr.™ dial, overall accuracy is ±5%, Sr.™ dial is ±3%, TwinSite® sender is ±5%, 4" dial is ±3%.

Humidity

For high humidity below ground or under chassis applications, brass, stainless steel, or painted aluminum heads are recommended.

Shock & Vibration

Suitable for mobile service applications.

Power

0.5 watts maximum dissipation for TwinSite® versions.

Working Pressure

375 psi. [25,8 Bar]

Approvals

Gauges are UL listed for LP Gas service applications.

When ordering, specify:

- 1. Gauge head size, Junior or Senior, or model #.
- 2. Tank diameter as shown on nameplate.
- 3. Mounting location (top, side, end or angle).
- **4.** If gauge is angle mounted, state angle.
- **5.** If gauge is end mounted, state the shape of the tank head, hemispherical or semi-ellipsoidal.
- **6.** The "H" dimension, the distance in inches from the surface of the tank to the gauge gasket surface.

To order replacement gauge, simply furnish the information stamped on one of the flat sections on the side of the gauge head as shown in the example.

Note: For installation instructions see MS-501/502 (mounting standard).

Materials of Construction*

Head

Aluminum die casting standard. Brass and Stainless steel optional.

Gear Housing

Zinc die-casting or acetal.

Centershaft Bearings, Gear, Pinion, Cross Stud & Bearing, & Dial Screws

Stainless steel.

Support, Centershaft & Float Rod

Tempered aluminum.

Float Bulb

Nitrile rubber or one piece aluminum.

Counterweight

Lead.

Magnet

Alnico.

Gasket

Buna-N standard. Optional Spiral wound, teflon-filled, or stainless steel.

Head Screws

Zinc-plated steel or optional stainless steel.

Junior Direct Reading Dials & TwinSite® Senders

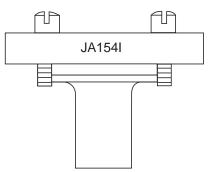
Ultrasonically sealed polycarbonate.

Senior Dials

Aluminum with acrylic or polycarbonate crystal, sealed with rubber gasket.

4" Dials

Aluminum with glass crystal, sealed with a rubber gasket.



Note: Gauge head will also be stamped with model number.

^{*} Materials and specifications are subject to change without notice.
Pressure ratings subject to change due to temperature and other environmental considerations.







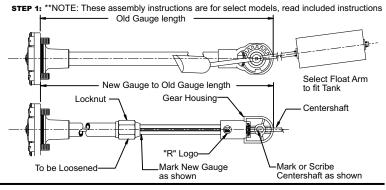
The "One" Gauge™ Adjustable Liquid-Level Gauge

ISO 9001:2000 REGISTERED

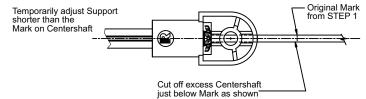


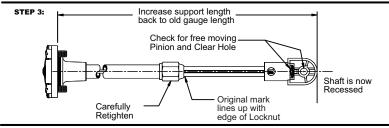
The "One" Gauge[™] Adjustable Liquid-Level Gauge

Assembly Instructions

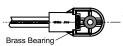


STEP 2:



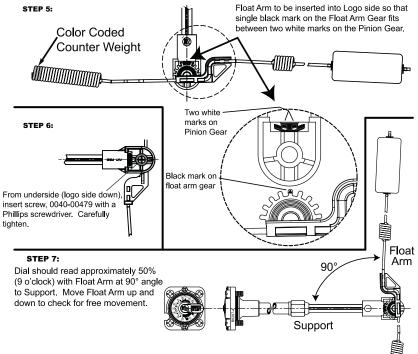






Before attaching Float Assembly, turn Support Assembly Logo side down. Insert Brass Bearing, 0109-00495, into Gear Housing.

Turn Support Assembly Logo side up again.



NOTE:

Materials and specifications are subject to change without notice.

Pressure ratings subject to change due to temperature and other environmental considerations.

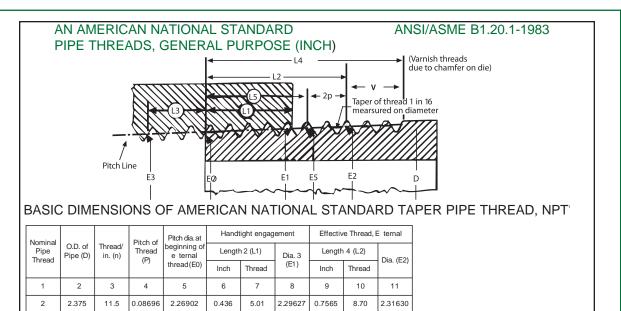




MASTER Gauge Adapter Machining Standard

2.79062

9.10



Nominal Pipe Si e	Length, L1 Plane to			Ma eup Le ernal Threa		anish Thread ()		Overall Length	Nominal Complete E ternal Threads		Height of Thread	Increase in Dia./ Thread	Basic Minor Dia. at Small
	(L2-L1)	Lengt	h (L3)			,	E ternal						
Sie	Inch	Thread	Inch	Thread	Dia. (E3)	Inch	Thread	Thread (L4)	Length (L5)	Dia. (E5)	(H)	(0.0625/n)	End of Pipe (0)
1	12	13	14	15	16	17	18	19	20	21	22	23	24
2	0.3205	3.69	0.2609	3	2.25272	0.3017	3.47	1.0582	0.5826	2.30543	0.06957	0.00543	2.1995
2.5	0.4555	3.64	0.2500	2	2.70391	0.4337	3.47	1.5712	0.8875	2.77500	0.10000	0.00781	2.6195

5.46

2.76216

1.1375

- 1. Basic dimensions of the American National Standard Taper Pipe Thread are given in inches to 4 or 5 decimal places. While this implies a greater degree of precision than is ordinarily attained, these dimensions are the basis of the gauge dimensions and are so expressed for the purpose of eliminating errors in computations.
- 2. Also length of thin ring gauge and length from gauging notch to small end of plug gauge.
- 3. Also pitch diameter at gauging notch (handtight plane).

0.12500

2.71953

0.682

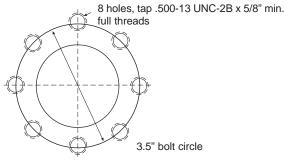
4. Also length of plug gauge.

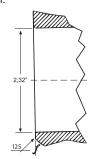
2.5

2.875

- 5. The length L5 from the end of the pipe determines the plane beyond which the thread form is incomplete at the crest. The next 2 threads are complete at the root. At this plane, the cone formed by the crests of the thread intersects the cylinder forming the external surface of the pipe. L5=L2-2p
- 6. Given as information for use in selecting tap drills.
- 7. Military Specification MIL-P-7105 gives the wrench makeup as three threads for sizes 3 & smaller.
- 8. Reference dimension.

NOTE: Q MOUNT STANDARD, STRADDLE MOUNT REQUIRES SPECIAL GAUGE CONSTRUC-TION.





Note.

Materials and specifications are subject to change without notice.

Pressure ratings subject to change due to temperature and other environmental considerations.

03/05/08





