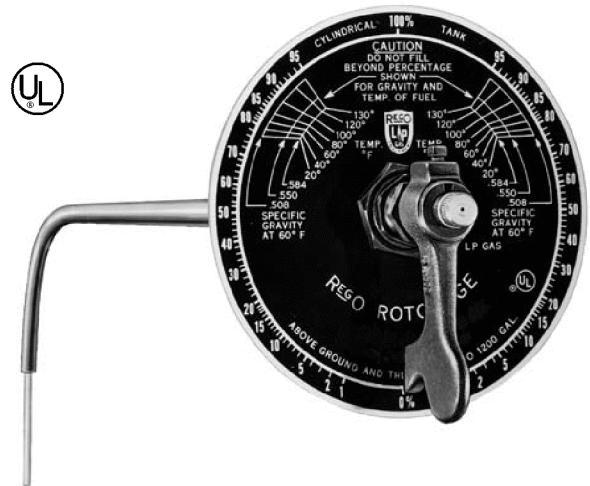


1" Rotogages® for Large Mobile and Stationary Containers

Rotogages® are designed to provide an accurate determination of LP-Gas or anhydrous ammonia container contents. They mount in a standard 1" NPT coupling on large mobile or stationary containers.

To operate the Rotogages®, the vent valve is opened and the dip tube rotated slowly from the container vapor space to the liquid space. The difference in appearance of the discharge indicates when the liquid level is reached. Dial readings then indicate the percentage of product in the container.



Rotogage® Dials

Part Number	Service	Container Size
A9091-18L	LP-Gas	All Sizes
A9091-18LX*	LP-Gas	Over 1200 U.S. gallons
A9091-18N	NH ₃	All Sizes

* Dial permits higher filling level, as per NFPA 58, (1983) Par. 4-5.2.1, Table 4-5.2.1

Rotogage® Ordering Information

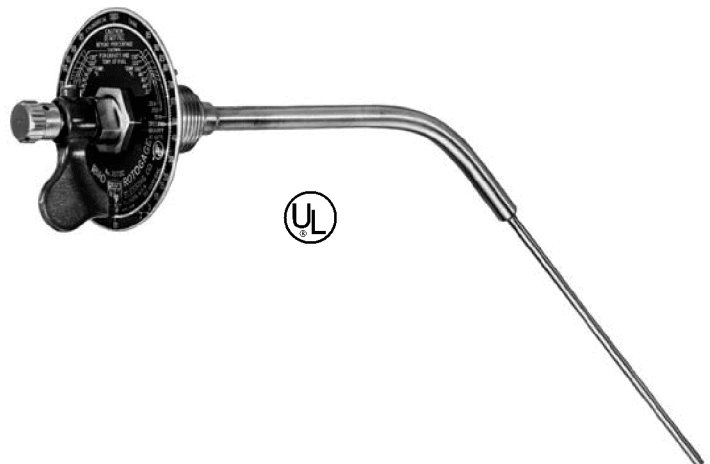
Part Number				For Container Inside Diameter			
For Use With LP-Gas		For Use With NH ₃		Ellipsoidal Heads		Hemispherical Heads	
For Mobile or Stationary Containers	For Stationary Containers Only	For Mobile or Stationary Containers	For Stationary Containers Only	Side Mounted	End Mounted	Side Mounted	End Mounted
9091RM24	-	AA9091RM24	-	30" - 45"	30" - 75"	30" - 45"	30" - 45"
9092RM36	-	AA9092RM36	-	46" - 61"	76" - 108"	46" - 61"	46" - 61"
9093TSM48*	9093RSM48	AA9093TSM48*	AA9093RSM48	62" - 79"	109" - 147"	62" - 79"	62" - 79"
9094TSM60*	9094RSM60	AA9094TSM60*	AA9094RSM60	80" - 99"	-	80" - 99"	80" - 99"
9095TSM72*	9095RSM72	AA9095TSM72*	AA9095RSM72	100" - 147"	-	100" - 147"	100" - 147"

* Supported Design

NOTE: The dip tube must be cut to the required length ($\frac{1}{2}$ of container inside diameter minus 5 $\frac{1}{8}$ ").

¾" Rotogages® for Small Stationary and Mobile LP-Gas Containers

Rotogages® are designed to provide accurate determination of LP-Gas container contents. They may be end or side mounted in a standard ¾" NPT coupling on stationary or mobile containers. To guarantee accurate measurement, they should not be used on stationary containers that exceed 60" I.D. or on mobile containers, subject to vibration, with an I.D. of more than 24".



Part Number		For Containers with Inside Diameter	Tank Connection	Valve Seat Orifice
Rotogage®	Dip Tube			
2070CO	2071-L25.7	Up to 40"	¾ M. NPT	No. 54 Drill Size
	2071-L39.7	Up to 60"		

NOTE: The dip tube must be cut to the required length ($\frac{1}{2}$ of container inside diameter minus $\frac{1}{2}$ "), when mounted on center line of tank.

Sight Flow Indicators for Bulk Plants

Designed to promote maximum pump efficiency, these indicators enable bulk plant operators to visually inspect liquid flow conditions. With glass on both sides of the indicator, flow can be observed from either side, even under some poor light conditions. The integral swing check also serves as a back-check valve to prevent reverse flow and product loss if the hose fails in a loading operation.

By installing an indicator on the upstream side of the plant pump, suction conditions can be observed and the pump speed adjusted to obtain the maximum possible flow rate without cavitation. Additionally, if an indicator is installed in the piping at the loading rack, just ahead of the loading hose, the operator can maintain a constant check on pump conditions.

Both installations are designed to allow for observation to provide maximum pump efficiency and assure safe plant pump operation.

In compressor operations a sight flow indicator installed in the liquid line will give a visual indication when the tank car or transport is emptied. Compressor operation can then be immediately reversed to start recovery of the vapor.



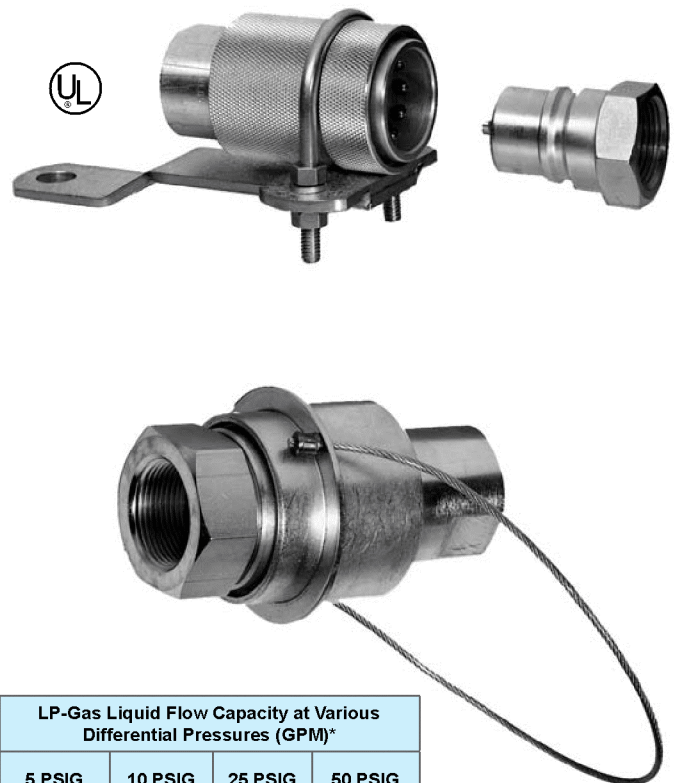
Part Number	Inlet/Outlet Connections	Length
A7794	2" F. NPT	5 3/4"
A7796	3" F. NPT	7 3/8"

Pull-Away Valves for Transfer Operations

Designed especially to provide pull-away protection for LP-Gas and anhydrous ammonia transfer operations including transport and delivery truck loading and unloading, engine fuel container filling and miscellaneous cylinder filling operations. When properly fastened to the inlet end of the discharge hose, the valve is designed to stop gas escape from both upstream and downstream lines in the event of a pull-away. An excessive tension pull causes the valve to automatically separate, closing two internal back pressure checks. Only a few cubic centimeters of gas escape at the instant of separation.

It is recommended that a convenient means be provided to safely remove the pressure from the line upstream of each coupling half to enable reassembly of the valve. To reassemble, simply push the male half firmly into the female half until the retaining balls slip into the retaining groove. Check for leaks after reassembly.

NOTE: It is recommended that pull-away valves be safety-tested at least monthly to confirm that they will separate properly in the event of a pull-away. Dry nitrogen or other inert gas is suggested for a source of pressure during such tests.



Part Number	Inlet/Outlet Connections NPT F.	Disconnect Force Approx-lbs	Reconnect Force Approx-lbs	Length Of Valve	LP-Gas Liquid Flow Capacity at Various Differential Pressures (GPM)*			
					5 PSIG	10 PSIG	25 PSIG	50 PSIG
A2141A6	3/4"	130	80	3 7/8"	11	16	25	36
A2141A6L**								
A2141A8	1"	75	50	4 9/16"	21	30	47	67
A2141A8L**								
A2141A10	1 1/4"	160	25	5 5/8"	52	75	120	170
A2141A16	2"	300	50	14 5/16"	250	350	550	750

* To Determine NH₃ liquid flow capacity, multiply by .80.

2" "Swing-Chek" ESVs for Bulk Plants

Especially designed for installation in liquid transfer lines at LP-Gas or anhydrous ammonia bulk plants to provide for quick shut-off of liquid or vapor flow in the event of an accidental pull-away or hose rupture, both of which can cause a fire.

Part Number	For Use Only With:	Inlet and Outlet Connections	Liquid Flow Capacity at 10 PSIG Pressure Drop (GPM)
6016	LP-Gas	2" F. NPT	475 (LP-Gas)
AA6016	NH ₃		427 (NH ₃)

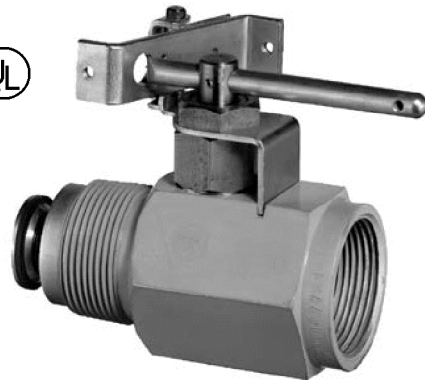
* Must be actuated pneumatically, manually by cable or by cable connection to pull-away valve.



1 1/4" ESV for LP-Gas Bulk Plants

Especially designed for installation in vapor transfer lines at LP-Gas bulk plants to provide for quick shut-off of vapor or liquid flow in the event of an accidental pull-away or hose rupture, both of which can cause a fire.

Part Number	For Use Only With:	Inlet Connections M. NPT	Outlet Connection F. NPT	Flow Capacity	
				Vapor At 100 PSIG and 10 PSIG Pressure Drop SCFH	Liquid at 10 PSIG Pressure Drop GPM
A7781AF	LP-Gas	1 1/4"	1 1/4"	26,000	55



ESV Remote Cable Controls

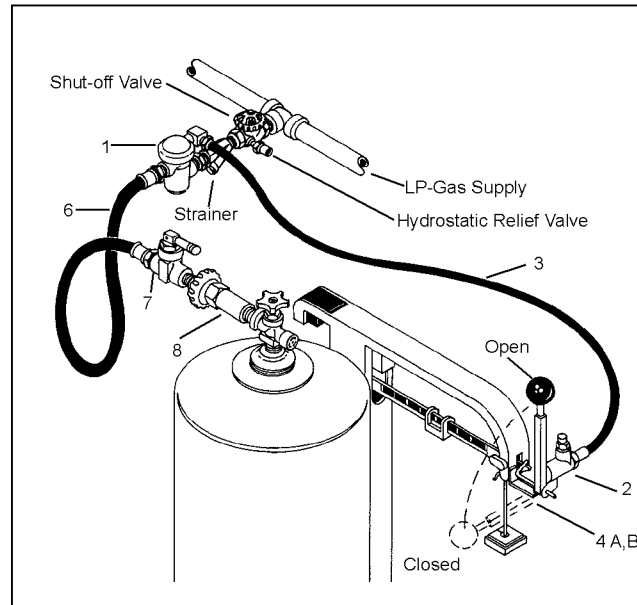
Part Number	Description
7606RM	Remote manual cable release kit. Permits manual closing of one or more ESVs from remote location.
7606RT	Remote thermal cable release kit. Provides high temperature closing of ESV. Required is ESV is more than 5 feet from nearest end of hose.
7606RM-1	100' roll of extra cable.
6016-60D	Pneumatic remote kit for 6016 and AA6016 ESV
6016-60C	Pneumatic remote open / remote close actuator

ESV Pneumatic Controls

Part Number	Description
7781AFP-1	Cylinder assembly kit to convert 7781AF ESVs to pneumatic shutdown.
7605APN-1	Cylinder assembly kit to convert 7605B ESVs to pneumatic shutdown.
7605PN-50	Pneumatic remote shutdown system kit, complete with 100' of tubing, fittings, 1 charging valve assembly and 1 remote shutdown valve assembly
7605APN-8A	Extra shutdown valve assembly
7605A-BT	100' roll of 1/4" pneumatic tubing.
7605AP-16	1/4" tubing tee, with nuts.
7605AP-15	1/8" NPT x 1/4" tubing, straight connector.

Hydraulic Automatic Cylinder Filling System

Designed to provide accurate, economical filling of LP-Gas DOT and fork lift cylinders by weight. Filling stops automatically as the total weight of the cylinder reaches the amount pre-set on the scale. One individual can efficiently handle up to four cylinder filling operations simultaneously, to maximize profits, increase efficiency and allow servicing of more customers.



Key No.	Description	Size	Part No.
Assembly for Fairbanks-Morse. Includes items 1 thru 8 below.			7194MD
Assembly for Howe. Includes items 1 thru 8			7194HD
1	Propane Control Valve	½" NPT Female, with ¼" NPT Female Hydraulic Connection	7177
2	Master Cylinder, with Actuator Lever	¼" NPT Hydraulic Connection	7188
3	Hydraulic Hose Assembly	¾" I.D. with ¼" NPT Male Ends, 43½" Overall Length	7194-1
1-3	Valve, Cylinder and Hose Assembly for Fairbanks-Morse Scales	-	7188MS
1-3	Valve, Cylinder and Hose Assembly for Howe Scales	-	7188HS
4A	Bracket Kit for Fairbanks Morse Scales, Complete with Screws, Washers, Nuts and Instructions	-	7194M-3K
4B	Bracket Kit for Howe Scales, Complete with Screws, Washers, Nuts and Instructions	-	7194H-3K
5	Can of Hydraulic Fluid, Complete with Filling Spout	1½ ounce	7188-21
6	Propane Filling Hose Assembly	½" I.D., with ¼" NPT Male Ends, 50½" Overall Length	7193-4
7	Quick-acting Shut Off Valve	½" NPT INlet X ¼" NPT Outlet	7901TB
8*	Soft Nose Cylinder Connector	¼" NPT Male X POL Male	7193D-10

* Any of the RegO® hose end adapters for cylinder filling may be used with these systems. See the "Hose End Adapters for Cylinder Filling" sections of this catalog for ordering information.

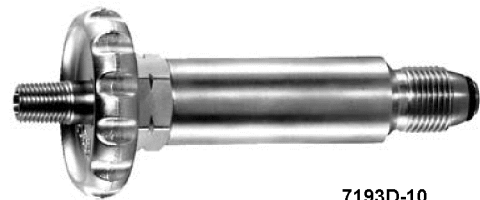
NOTE: Part No. 7188HS contains items 1, 2, 3, 4B and 5. Part No. 7188MS contains items 1, 2, 3, 4A and 5.

Hose End Adapters for DOT Cylinder Filling

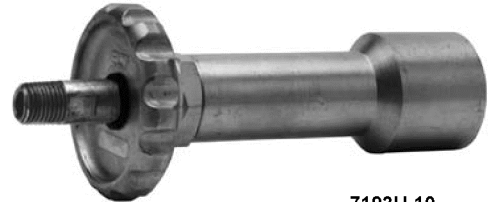
Designed to provide quick and easy filling of DOT cylinders with POL or Type I connections. This adapter may be used with hydraulic and electric automatic systems or with manual systems in conjunction with a RegO® 7901TB Quick Acting Shut-Off Valve.

These filling connectors have an extended connection on the handwheel, which makes it possible to connect the loading hose to valves on cylinders with fixed collars. The handwheel is well outside the collar for easy operation.

Part Number	Applications	Inlet Connection	Outlet Connection	Materials
7193D-10	Filling of DOT Cylinders with POL Connections	¼" M. NPT	M. POL (CGA 510)	Brass & Stainless Steel
7193U-10	Filling of DOT Cylinders with Type I Connections		Type 1 Connection (1" M. ACME)	Brass



7193D-10



7193U-10

Connector for DOT Cylinder Filling Adapter

The 7193T-10 is designed for use on the 7193D-10 Filling Adapters. Connector allows adapter to be used on the 1½" M. ACME & F. POL connections of Type 1 valves.

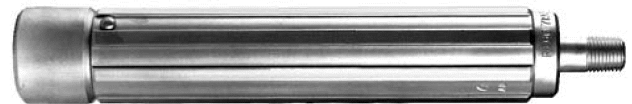
Part Number	Applications	Inlet Connection	Outlet Connection	Materials
7193T-10	Converts 7193D-10 Adapters from POL to a Type 1 Connection	M. POL CGA 510	Type 1 Connection (1½" M. ACME)	Brass



7193T-10

Hose End Adapter for Lift Truck Cylinder Filling

The 7193L-10A is designed to provide quick and easy attachment of the filling hose to DOT cylinders equipped with RegO® 7141M check connectors.



Part Number	Application	Inlet Connection	Outlet Connection	Body Material	Accessories
					Adapter
7193L-10A	Filling of Fork Lift Cylinders*	¼" M. NPT	1¼" F. ACME	Brass	5760A

* The 7193L-10A is intended to be permanently attached to the filling hose. A 5760A adapter enables the 7193L-10A to be attached to the POL connection on the 7193D-10 at regulator cylinder filling stations to allow for occasional filling of fork lift cylinders.

Lever Operated Hose End Adapter for Fork Lift Cylinder Filling

Designed to drastically reduce labor and time when continuously filling large numbers of lift truck cylinders equipped with RegO® 7141M check connectors.

Part Number	Application	Inlet Connection	Outlet Connection	Materials
7193K-10B	Lever Operated for Quick Filling of Fork Lift Cylinders	¼" F. NPT	Quick Disconnect Yoke*	Brass and Steel

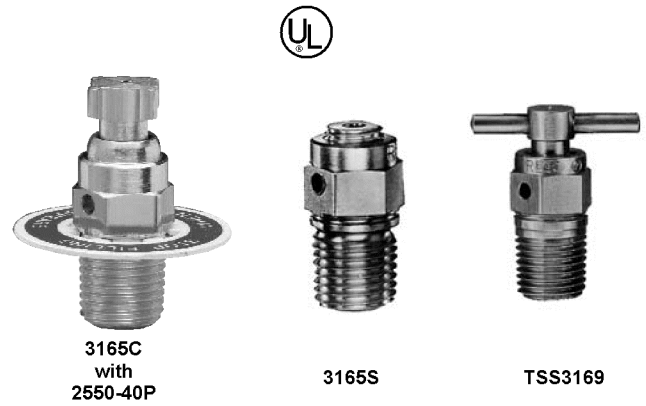


* For use with RegO® 7141M check connector.

Vent Valves

Especially designed to bleed off liquid or vapor pressures trapped in transfer lines. When installed in the downstream boss of RegO® globe and angle valves used at the end of a liquid transfer hose, the bleeder valve allows for the controlled venting of the product and indicates to the operator that the valves are closed and he can disconnect the coupling. They may also be used as a fixed liquid level gauge where the dip tube is part of the container.

Part Number	Service	Connection	Actuation	Accessories
				Warning Plate Kit
3165C	LP-Gas Only	¼" M. NPT	Knurled	2550-40P
3165S			Slotted	
TSS3169	LP-Gas & NH ₃		Tee Handle	



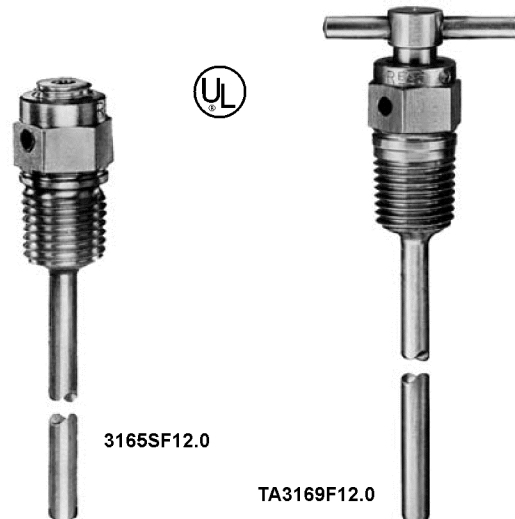
Fixed Liquid Level Gauges

Especially designed to provide a visible warning when containers are filled to the maximum permitted filling level. At the start of the filling operation, with the vent stem opened, the valve discharges vapor. When the maximum permitted filling level is reached, the valve discharges liquid. These valves are normally furnished with a 12", ⅜" O.D. dip tube and incorporate a No. 54 drill size orifice.

An optional instruction plate with "Stop Filling When Liquid Appears" may be ordered for use with these valves.

Part Number	Service	Connection	Actuation	Dip Tube Length	Accessories
				Warning Plate Kit	
3165CF*	LP-Gas Only	¼" M. NPT	Knurled	*	2550-40P
3165CF12.0			Slotted	12"	
3165SF12.0			Tee Handle		
TA3169F12.0	LP-Gas & NH ₃				

* Dip tube must be ordered separately. Add to suffix.
Example: 11" Dip Tube = 3165F11.0.



Spanner Wrench for ACME Connectors

This aluminum spanner wrench is especially designed for use with 2¼" and 3¼" ACME couplings, adapters and caps.

Part Number	For Use With ACME Connector Size
3195-50	2¼" & 3¼"



Combination Valve for Bulk Storage Containers

Designed for installation on bulk storage containers, this valve combines a pressure gauge mounting and provision for a fixed tube liquid level gauge.

The shut-off valve prevents the pressure gauge from being subjected to constant pressure, thereby prolonging its life and accuracy. The valve may be closed, and the vent valve opened to vent pressure from the gauge to permit replacement.

For fixed liquid level gauging, the valve can be mounted at the maximum permitted filling level. When equipped with a dip tube threaded $\frac{1}{8}$ " M.NPT, it can be installed at any convenient level.

Part Number	Container Connection	Service Connection	Liquid Level Vent
A2805C	$\frac{3}{4}$ " M. NPT	$\frac{1}{4}$ " F. NPT for Gauge Mounting	Knurled*

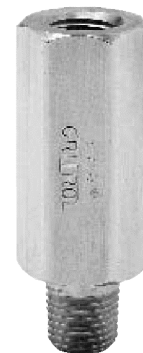
* Has $\frac{1}{8}$ " F. NPT opening for installing separate dip tube.



Gritrol® Fuel Line Filters

Designed especially for use in liquid motor fuel lines to trap foreign material which otherwise may damage precision components in the LP-Gas carburetion system. These filters incorporate an integral sintered metal filter element in a straight through design.

Part Number	Inlet Connection	Outlet Connection
12802	$\frac{1}{4}$ " F. NPT	$\frac{1}{4}$ " M. NPT



Pressure Gauges

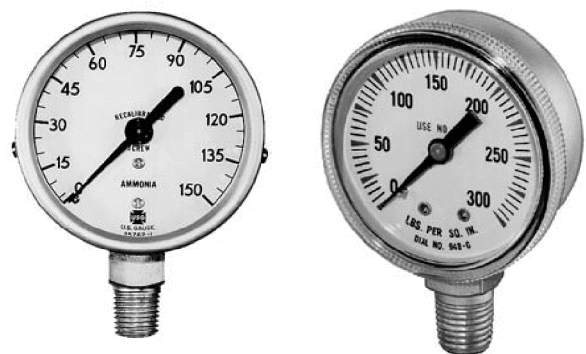
Especially designed in a variety of sizes and construction for the LP-Gas and anhydrous ammonia industry.

All RegO® pressure gauges have a $\frac{1}{4}$ " M. NPT connection unless otherwise noted.

Part Number	Service	Case Material	Maximum Pressure	Case Size	Increment Divisions	
2434A-2*	LP-Gas Only	Steel	35" w.c. and 20 oz. (Dual)	2½"	1" w.c. and 1 oz.	
3226A-3			30 PSIG			
2411		Brass	60 PSIG	2"	1 PSI	
5575						
5547		Steel	100 PSIG	2"	2 PSI	
5576						
1286		Brass	300 PSIG	2½"	5 PSI	
1178						
948		Steel	500 PSIG	2"	20 PSI	
948B						
1183		NH ₃ and LP-Gas	Steel	60 PSIG	2½"	5 lb.
A8060				150 PSIG		
A8150				400 PSIG		
A8400						

* 1/4" Hose Connection

** 1/8" M. NPT Connection



Needle Valves

These valves are high quality, "true" throttling valves. Unlike most so-called needle valves, both the body seat and stem are tapered to provide fine, precise control over a wide range of adjustment without stem galling.

The 1224 may be used as a small, inexpensive shut-off valve between a pressure gauge and bulk storage container to allow for convenient gauge replacement.

The 1314, 1316 and 1318 provide taper pipe thread by left hand hose connection threads and are useful in a wide range of torch and fuel burner applications where an accurate throttling action is required.



Part Number	Inlet Connection	Outlet Connection	Height	Length
1224WA	¼" M. NPT	¼" M. NPT	1 ⅝"	1¾"
1314WA	⅜" - 18 L.H.	⅜" M. NPT		
1316WA		¼" M. NPT		

Household Gas Detector/Alarm

The 100-HGD gas fume detection/alarm unit gives advance warning of gas leaks well below the hazard level (¼th the lowest explosive level). It provides the homeowner more time to take action to protect the family and remedy the problem.

Part Number	Description
100-HGD	Household Propane Gas Alarm

