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.

The RegO® automatic cylinder filling system is designed for use with these scales only:

FAIRBANKS-MORSE SCALES

New Style - 1280A Double Beam Scale or Single Beam Scales 1124A and 1174A.

Old Style - 1280 Double Beam Scale or Single Beam Scale 1123 with or without Howe No. 12108 "Over or Under" Indicator.

HOWE SCALES

(with or without Howe No. 8325 Balance Indicator)

- -No. 54X Wood Pillar and Shelf Scale.
- -No. 57 Steel Pillar and Shelf Scale (single beam).
- -No. 57X Steel Pillar and Shelf Scale (double beam).

Features

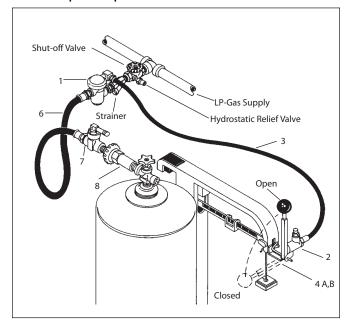
- Completely self-contained with no electrical source or wiring required.
- · Works hydraulically, like brakes on a car.
- · Filling stops automatically when cylinders reach pre-set weight.
- · Up to four stations can be handled by one individual.

How It Works

The scale beam weight is adjusted to the desired filled weight and the empty cylinder is placed on the scale. The loading hose is connected to the cylinder valve, and the lever on the master cylinder is moved to the vertical position. When the quick-acting valve on the loading hose is opened, the cylinder will rapidly fill. The master cylinder lever is designed to trip, move to a horizontal position and automatically shut off the control valve as soon as the scale reaches the pre-set filled weight.

Components may be ordered separately with piping done by the installer. Two completely assembled manifold configurations are also available.

Hydraulic self-contained system. No external power required.





Hydraulic System Components

Key No.	Description	Size	Part No.			
Assembly	y for Fairbanks-Morse. Includes items 1 thru 8 below.		7194MD			
Assembly	Assembly for Howe. Includes items 1 thru 8					
1	Propane Control Valve	½" NPT Female, with ½" NPT Female Hydraulic Connection	7177			
2	Master Cylinder, with Actuator Lever	1/2" NPT Hydraulic Connection	7188			
3	Hydraulic Hose Assembly	3/16" I.D. with 1/4" NPT Male Ends, 431/2" 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-3A			
	Bracket Kit for Howe Scales, Complete with Screws, Washers, Nuts and Instructions	-	7194H-3			
5	Can of Hydraulic Fluid, Complete with Filling Spout	1½ ounce	7188-21			
6	Propane Filling Hose Assembly	½" I.D., with ½" NPT Male Ends. 50½" Overall Length	7193D			
7	Quick-acting Shut Off Valve	½" NPT INlet X ¼" NPT Outlet	7901TB			
8*	Soft Nose Cylinder Connector	1/4" NPT Male X POL Male	7193D-10			

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	1/4" M. NPT	M. POL (CGA 510)	Brass & Stainless Steel
7193U-10	Filling of DOT Cylinders with Type I Connections	74 IVI. INF I	Type 1 Connection (15/16" M. ACME)	Brass





Connector for DOT Cylinder Filling Adapter

The 7193T-10 Connector is designed for use on the 7193D-10 Filling Adapters. Connector allows quick connection to the Type I 15/16 M. ACME threads for operators that fill both POL and Type I 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 (15/16" M. ACME)	Brass



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	Outlet	Body	Accessories
rait Number	Application	Connection	Connection	Material	Adapter
7193L-10A	Filling of Fork Lift Cylinders*	1/4" M. NPT	11/4" 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	1/4" F. NPT	Quick Disconnect Yoke*	Brass and Steel

^{*} For use with RegO® 7141M check connector.

Gritrol Fuel Line Filters

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

Part Number	Inlet Connection	Outlet Connection
12802	1/4" F. NPT	1/4" M. NPT





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	Service	Connection	Actuation	Accessories
Number	Service	Connection	Actuation	Warning Plate Kit
3165C	LP-Gas Only		Knurled	
3165S	LF-Gas Only	14" M. NPT	Slotted	2550-40P
TSS3169	LP-Gas & NH ₃		Tee Handle	



2550-40P



3165S

TSS3169

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", 3/16" 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	Service	Connecti	Actuation	Dip Tube	Accessories
Number	Service	on Actuation	Length	Warning Plate Kit	
3165CF*			Knurled	*	
3165CF12.0	LP-Gas Only	1⁄4" M.	Kilulieu		2550-40P
3165SF12.0		NPT	Slotted	12"	2000-40P
TA3169F12.0	LP-Gas & NH3		Tee Handle		

^{*} Dip tube must be ordered separately. Add to suffix. Example: 11" Dip Tube = 3165CF11.0.



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 1/8" M.NPT, it can be installed at any convenient level

	Part Number	Contianer Connection	Service Connection	Liquid Level Vent
ĺ	A2805C	34" M. NPT	1/4" F. NPT for Gauge Mounting	Knurled*

^{*} Has 1/8" F. NPT opening for installing separate dip tube.

Needle Valves

These valves are high quality, "true" throttling valves. Unlike most socalled 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 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	1/4" M. NPT	1/4" M. NPT		
1316WA	9/16" - 18 L.H.	1/8" M. NPT	1 9/ ₁₆ "	1¾"
1318WA	716 - IO L.Π.	1/4" M. NPT	1	

Part Number	Inlet End	Outlet End	
V-332	¼" female pipe	1/4" female pipe	
V-333	¼" male pipe	¼" male pipe	
V-334	¼" female pipe	¼" male pipe	
V-335	¼" male pipe	1/4" female pipe	
V-3055	¼" female pipe	¼" male pipe	
V-880P	Squeeze valve w/ adjustable pilot		









1224