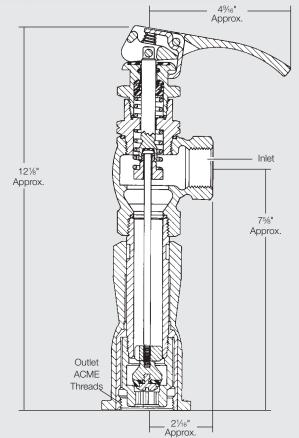
Quick-Acting Minimum Loss Hose-End Valves for Bobtail Delivery Trucks and Dispensing Stations

A7793 and A7797





Application

Designed to vastly reduce the amount of product vented when disconnecting bobtail delivery trucks, dispensing systems and anhydrous ammonia nurse tanks.

These valves provide instant, full-on flow at the flip of a handle. Shut-off is instant and the handle locks for added protection.

This "top of the line" hose-end valve is a fully contained unit that does not require additional filling adapters or connectors.

Features

- Minimizes product venting loss, when disconnecting, instantly by housing the seat disc at the bottom of the built-in ACME filling connector.
- Vents less than 1/500th of a gallon when disconnected.
- "V"-ring spring-loaded pressure seal design provides for dependable, leak-free operation. No packing to retighten or replace.
- Operator friendly. Contoured handle rotates a full 360° and large, easy to grip filling connector make the valve easy to handle.
- Self locking handle is operator opened and closed to prevent against accidental opening of the valve.

Materials

BodyDuctile Iron
"V"-RingTeflon
Stem Stainless Steel
Seat Disc Synthetic Elastomer
ACME Connector
Seal Housing Stainless Steel
Lever
Bonnet Cadmium Plated Steel

Part Number	Inlet Connection (F. NPT)	Outlet Connection (F. ACME)	Locking Handle	Flow At 1 PSIG (Cv) Pressure Drop* (GPM/Propane)
A7793	3/4"	13/4"	V	10.0
A7797	1"	1 5/4	Yes	16.0

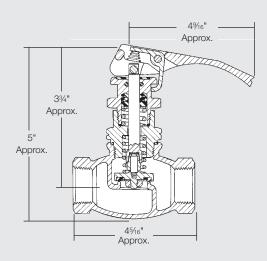
^{*} To obtain approximate flow at other than 1 PSIG pressure drop, multiply flow in table by square root of pressure drop. Example: A7797 @ 9 PSIG = 16.0 x $\sqrt{9}$ = 48.0 GPM/propane. For NH₃ flow, multiply propane flow by .90.

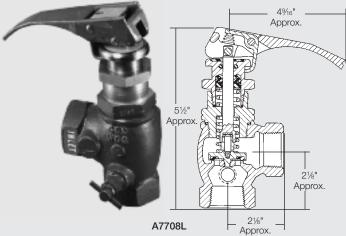


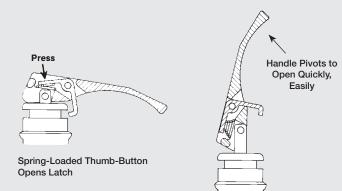
Quick-Acting Hose-End Valves for Bobtail Delivery Trucks and Dispensing Stations

A7707L and A7708L









Application

Designed especially for safe operator handling of LP-Gas in bobtail delivery truck, dispensing systems and anhydrous ammonia nurse tank service.

These valves provide instant, full-on flow at the flip of the handle and provide instant positive shut-off with a handle lock for added protection.

Features

- "V"-ring spring-loaded pressure stem seal provides for leak-proof operation. No packing to retighten or replace.
- Self locking handle is operator opened and closed to prevent against accidental opening of the valve.
- Large, contoured handle provides firm, comfortable grip.
- Full swivel handle rotates 360° so the valve can be operated from any angle.
- Built-in vent valve on the downstream side of the valve permits bleeding of trapped product to assure safe uncoupling.
- \bullet Can be used with a variety of RegO^{\circledR} filling adapter connectors.
- Swivel seat disc minimizes grinding on the body seat and assures longer service life.

Materials

Body	Ductile Iron
"V"-Rings	Teflon
Stem	
Seat Disc	Synthetic Elastomer
Valve Lever	Stainless Steel
Seal Housing	Stainless Steel
Bonnet	

										Accessories			
		Inlet &		Flow At	Filli	ng Connecto	ors*						
		Outlet		1 PSIG (Cv)	Extended	Com	pact						
Part Number	Body Design	Connection (F.NPT)	Locking Handle	Pressure Drop* (GPM/Propane)	Steel	Brass	Steel						
A7707L	Globe	1"	Yes	18.0	A7575L4	3175A	A3175A						
A7708L	Angle	'	res	22.0	A/5/5L4	3175A	A3175A						

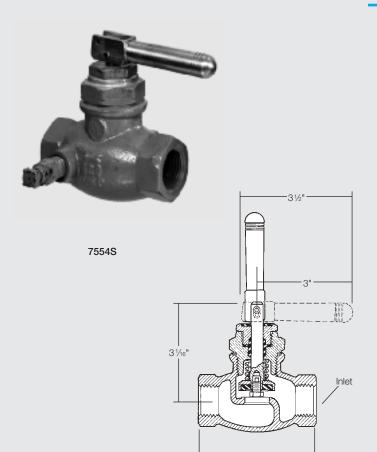
^{*} To obtain approximate flow at other than 1 PSIG pressure drop, multiply flow in table by square root of pressure drop. Example: A7708L @ 9 PSIG = $22.0 \times \sqrt{9} = 66.0 \text{ GPM/propane}$. For NH $_3$ flow, multiply propane flow by .90.

^{* *} See appropriate catalog section for additional information.

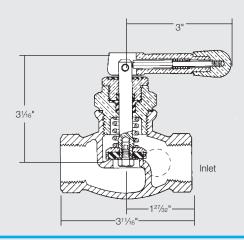


Quick-Acting Valves for Crop Driers and Charging Manifold Hoses

7554 Series







311/16"

Application

7554S Series valves provide instant shut-off and fast opening control on LP-Gas crop driers. They are also ideal for charging manifold hoses, stationary fuel transfer hoses and other applications requiring quick, positive shut-off. They are not for use with delivery truck hoses because the handle could snag on the ground and open the valve as the hose is reeled back to the truck.

7554L Series valves feature a locking handle device to help prevent accidental opening of the valve. It is ideal for all the same applications as the 7554S Series and may be used on delivery trucks as it incorporates the locking handle design.

Both valve series must be installed so that flow through the valve is opposite to that of a conventional globe valve. This allows the inlet flow to assist in closing the valve and prevents the valve from being opened by high pump pressures.

Features

- Quick-acting design speeds transfer operations, permitting rapid, one-handed opening and closing.
- Resilient seat disc provides positive shut-off.
- Flange seal stem design provides for leak-proof operation. No packing to retighten or replace.
- 7554L Series incorporates locking handle to prevent accidental opening of the valve.
- Vent valve installed on the downstream side of the valve permits bleeding of trapped product to assure safe uncoupling.
- Swivel seat disc minimizes grinding on the body seat and assures longer service life.

Materials

Body
Bonnet Brass
Handle Brass
Springs Stainless Steel
Stem Stainless Steel
Seat Disc Resilient Synthetic Rubber
Flange Ring Resilient Synthetic Rubber

Cracing into	iiiatioii		
Part Number	Inlet & Outlet Connection (F.NPT)	Locking Handle	Flow At 1 PSIG (Cv) Pressure Drop* (GPM/Propane)
7554SAV	1/2"	No	7.3
7554LAV	2	Yes	7.3
7554SV	3/4"	No	11.5
7554LV	4	Yes	11.5

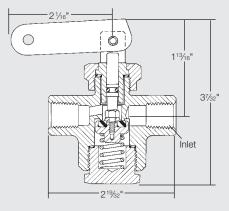
^{*} To obtain approximate flow at other than 1 PSIG pressure drop, multiply flow in table by square root of pressure drop. Example: 7554LV @ 9 PSIG = 11.5 X √9 = 34.5 GPM/propane.



Quick-Acting Valves for Cylinder Charging Hoses

7053T, A7553A, and 7901T Series







Application

Designed primarily for use on cylinder charging hoses to provide fast, convenient shut-off and fast opening.

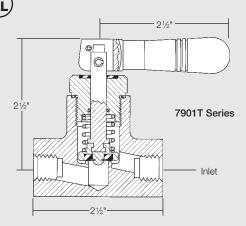
These valves must be installed so that flow through the valve is in the opposite direction to that of a conventional globe valve. This allows the inlet flow to assist in closing the valve, and even more important, helps prevent the valve from being forced open by high pump pressure.

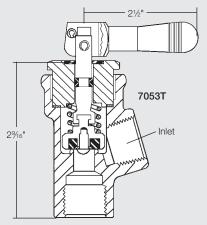
Features

- Quick-acting design speeds transfer operations.
- Permits easy, one-handed opening and closing of the valve.
- O-ring stem seal design.
- Provides quick, positive shut-off.

Materials

Forged Brass
Ductile Iron
Resilient Synthetic Rubber
Brass
Steel
Resilient Synthetic Rubber
Brass
Steel
Stainless Steel





Part Number	Inlet Connection (F.NPT)	Outlet Connection (F.NPT)	Body Material	Flow At 1 PSIG (CV) Pressure Drop* (GPM/Propane)
7901T	1/4"	1/4"	Brass	
A7553A	4	4	Ductilelron	
7901TA	3/8"	3/8"		1.05
7901TB		1/4"	Brass	1.95
7901TC	1/2"	1/2"	DIASS	
7053T		1/2"		

^{*} To obtain approximate flow at other than 1 PSIG pressure drop, multiply flow in table by square root of pressure drop. Example: 7901T @ 9 PSIG = 1.95 x $\sqrt{9}$ = 5.85 GPM/propane. For NH3 flow, multiply propane flow by .90.



General Information

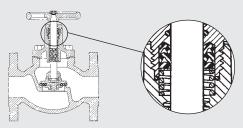
RegO® Globe and Angle Valves are designed and manufactured especially to meet the rigid requirements of the LP-Gas industry. The high quality construction and wide variety of sizes and styles also make them highly suited to many other industries such as anhydrous ammonia, chemical and petrochemical.

These ductile iron valves are available in both threaded and flanged connections. Threaded connections are available in $\frac{1}{2}$ " F. NPT to 3" F. NPT sizes. Flanged connections are available in $\frac{1}{2}$ ", 2" and 3" pipe sizes.

The ductile iron used in these valves has a 60,000 PSIG tensile strength which closely approaches that of steel castings. Its yield strength of 45,000 PSIG and elongation of 15% is also comparable to that of steel castings. These material features assure the ability of the valve body to withstand impact, wrenching stresses and thermal shock. This ductile iron conforms to ASTM specification A395.

RegO $^{\circledR}$ globe and angle valves are designed for working pressures up to 400 PSIG WOG and for operating temperatures from -40° F. to +160° F.

"V"-Ring Stem Seal



The "V"-ring spring-loaded pressure seal used in these RegO® globe and angle valves is the most effective stem seal yet developed. It should not be confused with conventional valve stem packing where the seal is obtained by compressing the packing around the stem by means of a packing gland with resultant hard operation and frequent packing replacement.

The wax like surface of the teflon "V"-ring seal and consequent low friction assures leak-tight performance for an indefinite period where periodic retightening of the packing is not required and the seal provides extra long service life.

In the RegO® "V"-ring design, the seal is effected by the pressure expanding the "V"-shape of the seal, forcing it against the stem and bonnet surfaces to prevent leakage. The higher the pressure within the valve, the more effective the seal becomes. A spring loaded washer under the "V"-rings keeps them in an expanded position to assure an effective seal under low pressure conditions. A wiper ring, located above

"V"-Ring Seal Globe and Angle Valves

the seal, keeps the seal free from grit, and/or other foreign material that may hamper operation.

Installation and Operation Note

Containers and pipe lines should be thoroughly cleaned before globe and angle valves are installed. Large particles of solid foreign matter can permanently damage the seating surface in the valve body, causing the valve to leak. Use a minimum amount of a suitable pipe dope on the male connecting threads as excess amounts may fall off and be carried into the valve, causing damage to the seat or other operating parts.

It is totally unnecessary to use excess force in opening or closing $\operatorname{RegO}^{\circledR}$ valves. The type of seat disc material used and the general design of these valves permits them to be opened and closed easily. Proper valve operation insures unusually long life.

Wrenches must never be used to operate valves equipped with handwheels and designed for hand operation.

Downstream Accessory Boss

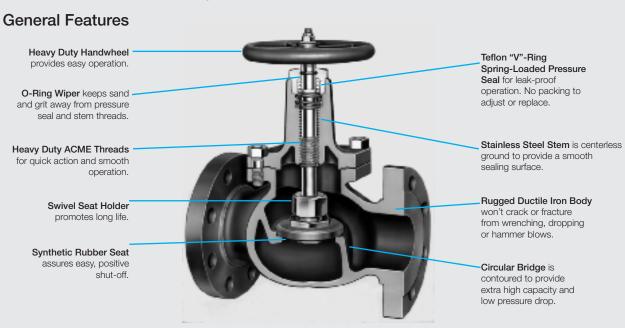
These RegO® valves incorporate a plugged ¼" F. NPT boss on the downstream side of the body for attaching either a hydrostatic relief valve or vent valve. Boss size on the 2" and 3" valves has been increased to allow a ¾" drilling for accommodation of a standard by-pass valve or jumper lines.

Hydrostatic Relief—When the design of the piping installation is such that liquid may be locked between two shut-off valves, a hydrostatic relief valve should be installed in the lines between the valves. The pressures which can develop due to temperature increase in a liquid-full line are tremendous and can easily damage the valves or piping unless a hydrostatic relief valve is installed.

Vent Valve—If the globe or angle valve is used as a shut-off valve on a loading hose, a vent valve should be installed in the downstream boss to allow liquid trapped beyond the shut-off valve to be vented before disconnecting the hose coupling.

Replace Gate Valves with Flanged Valves

Except for standard flange sizes, RegO® Flanged Globe and Angle Valves are smaller and lighter than contemporary valves, thus reducing price and shipping costs and making them far easier to install. RegO® face to face flange dimensions conform to gate valve dimensions, making replacement of most gate or plug valves with RegO® valves simple and easy.





"V"-Ring Seal Globe and Angle Valves for Bulk Storage Containers, Transports, Bobtails and Plant Piping

A7500 Series and TA7500 Series

Application

Specifically designed to assure positive shut-off and long, maintenancefree service life in liquid or vapor service on bulk storage containers, transports, bobtails, cylinder filling plants and plant piping.

The high quality construction and wide variety of sizes make them highly suited for use with LP-Gas, anhydrous ammonia and in the chemical and petrochemical industries.

Features

- "V"-ring spring-loaded pressure stem seal provides for leak-proof operation. No packing to retighten or replace.
- Circular bridge in the globe design and a dropped seat in the angle design achieve greater flow with less pressure drop.
- Swivel seat disc assembly minimizes the seat disc from grinding on the body seat. The seat disc stops rotating as soon as it touches the body seat. This feature provides for good seat alignment and assures long seat life.
- ¼" F. NPT plugged boss on the downstream side of the valve body allows attachment of a hydrostatic relief valve or vent valve.
- "V"-ring stem seal virtually eliminates hard to turn handles frequently encountered with packed type seals.
- Heavy duty rolled ACME stem threads provide quick action and long service life.

Materials

Body	Ductile Iron
Bonnet (7034, 7505-7508)	Steel
Bonnet (7509-7518)	Ductile Iron
Valve Stem	Stainless Steel
Wiper Ring	Synthetic Rubber
Seat Disc	See Ordering Chart
"V"-Rings	Teflon
Handwheel	Ductile Iron
Spring	Stainless Steel



TA7034



A7505AP



A7513AP





A/514AP



A7517AP

				-					
	Part N	lumber					1 PSIG	Acces	sories
Buna N S	Seat Discs	Teflon Se	eat Discs*	Inlet and Outlet	Port	Pressure Drop ((GPM/Propane)		Hydrostatic Relief	Vent
Globe	Angle	Globe	Angle	Connection			Angle	Valve	Valve
_	_	TA7034P	TA7034LP	1/2" F. NPT	3/4"	10.0	14.8		
A7505AP	A7506AP	TA7505AP	TA7506AP	3/4" F. NPT		12.0	17.7	1	
A7507AP	A7508AP	TA7507AP	_	1" F. NPT	1"	17.8	22.0]	
A7509BP	A7510BP	TA7509BP	TA7510BP	11/4" F. NPT	11/4"	36.5	54.0]	
A7511AP	A7512AP	TA7511AP	TA7512AP	11/2" F. NPT	11/2"	43.0	55.5	SS8001U	TSS3169
A7511FP	_	_		11/2" Flange*	1 1 72	46.0	_	3360010	1333109
A7513AP	A7514AP	TA7513AP		2" F. NPT	2"	75.0	88.5	1	
A7513FP	A7514FP	TA7513FP	TA7514FP	2" Flange*		78.0	133.0]	
A7517AP	A7518AP	TA7517AP	TA7518AP	3" F. NPT	31/8"	197.0	303.0		
A7517FP	A7518FP	TA7517FP	_	3" Flange*] 3"8	197.0	303.0		

^{*} Teflon seat discs on valves built to order.

^{***} To obtain approximate flow at other than 1 PSIG pressure drop, multiply flow in chart by square root of pressure drop. Example: 7514FP @ 9 PSIG = 133 x $\sqrt{9}$ = 399 GPM/propane. For NH $_3$ flow, multiple propane flow by .90.



^{* * 300#} ANSI R.F. Flange.

Globe and Angle Valve Dimensions

				Dimensions						
								Flanges		
Drawing	Valve Number (A or TA Prefix)	Inlet & Outlet	Port Diameter	А	В	С	D	E	F	G
	7034P	½" F. NPT	3/4"	43/4"		3 11/16"				
	7505AP	3/4" F. NPT	74		_	J /16				
A A	7507AP	1" F. NPT	1"			45/16"		_		
	7034LP	½" F. NPT	3/4"	474	13/4"		_			
C	7506AP	34" F. NPT	74		174	_				
⊢ _B —l	7508AP	1" F. NPT	1"		2"					
HG H	7509BP	11/4" F. NPT	11/4"	6¾"		47/8"		_		
A A	7511AP	1½" F. NPT	1½"	61¾16"		5¾16"	5¾6" — — — —			5 1/4"
	7513AP	2" F. NPT	2"	73/16"	_	5 1/8"			_	
C	7517AP	3" F. NPT	31/8"	131/4"		9"				9"
FG →	7510BP	11/4" F. NPT	11/4"	6 ¾"	2 1/4" 2 7/16" 2 11/16" 4"			_	_	
A	7512AP	1½" F. NPT	1½"	6 13/16"		_				51/4"
	7514AP	2" F. NPT	2"	7 3/16"			_			
FB-	7518AP	3" F. NPT	31/8"	11¾"					9"	
	7511FP	1½" Flange	1½"	7 %16"		7½"	61/8"	3/4"	2 7/8"	E 1/II
	7513FP	2" Flange	2"	8 7/16"	_	8½"	6½"	¹³ /16"	3 %"	5 1/4"
	7517FP	3" Flange	31/8"	131/4"		111/8"	81/4"	11/8"	5"	9"
	7514FP	2" Flange	2"	7½"	51⁄4"		6½"	¹³ / ₁₆ "	35%"	51/4"
	7518FP	3" Flange	31/8"	11¾"	61/4"		8½"	11/8"	5"	9 ¹¹

NOTE: Regarding 7505AP through 7510BP — the thread used for assembling the bonnet to the body of the valve is a left hand thread. We advise our customers to be cognizant of this assembly design in attempting to remove the bonnets of these valves in order to avoid serious damage to the valves.

Flange Dimensions

Dimensions and drilling conform to ANSI B16.5-1981: Class 300

	Valve Number (A or TA Prefix)	Size		Flange Drilling	D	Е	F	Н
H 222	7511FP	1½"*		%" Bolt Holes on a 4½" Bolt Circle Diameter	61/8"	¹³ ⁄16"	2%"	3/4"
F D	7513FP	2"	630	¾" Bolt Holes on a 5" Bolt Circle	6½"	7/8 "	35%"	13/16"
	7514FP	2		Diameter	0 /2	/*	3 78	716
	7517FP	3"*	6250	%" Bolt Holes on a 6%" Bolt Circle	81/4"	11/8"	5"	11/16"
E	7518FP	9		Diameter	0 /4	1 /8		1 /16

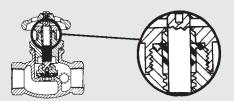
^{*} Reducing screwed flanges are available for reducing 1%" flange to 1 or 1%" pipe thread and 3" flange to 2%" pipe thread. Order from your local piping supplier.



Flange Seal Globe and Angle Valves

General Information

Globe and Angle Valves, incorporating the synthetic rubber flange seal design, operate on the same principle as the "V"-ring valves. Gas pressure in the valve is exerted against the synthetic rubber flange, forcing it tightly against the stem.



Leak-tight performance is assured and periodic adjustment is not required. The synthetic rubber construction provides smooth operating performance with long service life.

These valves all incorporate a plugged ¼" NPT side boss on the downstream side of the valve that can be equipped with a hydrostatic relief valve or vent valve.

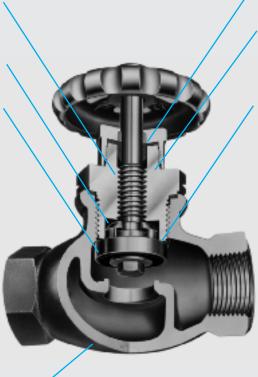
Please be familiar with the "Installation and Operation Note" and "Downstream Accessory Boss" section of the "V"-ring valve design general information before ordering these valves.

General Features

Rugged quick-acting ACME threads on stem. Threads are under flange ring . . . dust, sand and grit can't reach them.

Swivel seat cannot grind during valve opening or closing.

Synthetic Rubber Seat Disc



Nylon bearing surrounds stem to prevent galling.

Rubber flange ring stem seal effectively prevents gas escape. The higher the pressure, the tighter the seal.

Metal to metal back seat permits replacement of flange ring with valve in service.

Valve body made of shell molded ductile iron. Highly resistant to cracking or fracturing from wrenching, dropping or hammer blows. Bonnet and seal cap are steel on "A" prefix valves.



Flange Seal Globe and Angle Valves for Bulk Storage Containers, Filling Hoses and Plant Piping

7704, 7705 and 7706 Series

Application

Designed to assure positive shut-off and long maintenance-free service life in liquid or vapor service. Ideally suited for use on cylinder charging manifolds, truck filling hoses, bulk storage containers and plant piping.

The high quality construction and wide variety of sizes make them highly suited for use with LP-Gas, anhydrous ammonia and in the chemical and petrochemical industries.

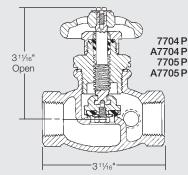
Features

- Available with either a brass bonnet and bronze stem for LP-Gas service or a steel bonnet and stainless steel stem for combined LP-Gas and anhydrous ammonia service.
- Flange seal stem provides for leak-proof operation. No packing to retighten or replace.
- Metal-to-metal back seat permits replacement of the flange ring with the valve in service.
- Plugged ¼" NPT boss on downstream side of valve accommodates hydrostatic relief valve or vent valve.
- Swivel seat disc minimizes grinding on the body seat and assures longer service life.
- "Dropped seat" body design of the angle valve provides high flow capacity.

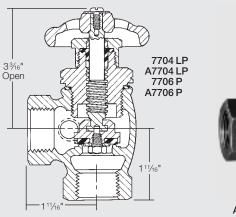
Materials

Body	Ductile Iron
Bonnet (7704, 05, 06)	Brass
Bonnet (A7704, 05, 06)	Steel
Stem (7704, 05, 06)	Bronze
Stem (A7704, 05, 06)	Stainless Steel
Flange Ring	Synthetic Rubber
Seat Disc	Synthetic Rubber





A7704P





				Flow At 1 PSIG		Accessories		
	art nber	Inlet Connection	Outlet Connection	Pressure	Drop (Cv) ropane)*	Hydrostatic Relief	Vent	
Globe	Angle	(F.NPT)	F. NPT	Globe Angle		Valve	Valve	
7704P	7704LP	1/ 11	1/ 11	7.0	10.0	7.0		
A7704P	A7704LP	1/2"	1/2"	7.3	12.3	SS8001J	TSS3169	
7705P	7706P	3/4"	3/4"	44.5	0000041	or SS80011		
A7705P	A7706P	J "4"	J 3/4"	11.5	11.5			

^{*} To obtain approximate flow at other than 1 PSIG pressure drop, multiply flow in table by square root of pressure drop. Example: A7704LP @ 9 PSIG =12.3 x $\sqrt{9}$ = 36.9 GPM/propane. For NH₃ flow, multiply propane flow by .90.



Flange Seal Liquid Transfer Angle Valves for Bulk Storage Containers

7550 and 7551 Series

Application

Designed especially for liquid transfer of LP-Gas from consumer bulk storage containers when used with a Chek-Lok $^{(\!R\!)}$ or equipped with an integral excess flow valve. May also be used for vapor LP-Gas service.

In NH₃ applicator tanks they may be used as a vapor bleeder valve or as a liquid withdrawal valve when installed in a coupling with a dip pipe.

These liquid transfer valves are equipped with an integral excess flow valve for liquid transfer directly from the tank fitting, or without an integral excess flow for LP-Gas transfer through a Check-Lok $^{\circledR}$.

When equipped with an integral excess flow valve (7550PX), the valve should be mounted in a forged steel 3000 lb. half coupling. When mounted in a 1 $\frac{1}{4}$ " x $\frac{3}{4}$ " NPT reducing coupling, the $\frac{3}{4}$ " female thread in this coupling must be full length — equivalent to a forged steel 3000 lb. half coupling.

The excess flow valve will not function properly if these specifications are not met. Refer to the Warning Bulletin in the Excess Flow Valve Section of this catalog.

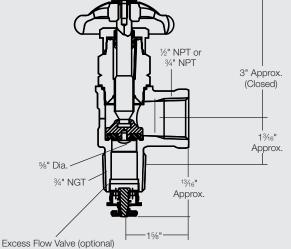
Features

- Flange seal stem design provides for leak-proof operation. No packing to retighten or replace.
- Large, unrestricted interior ports reduce pressure drop through the valve, increasing capacity and preventing cavitation.
- Resilient swivel seat disc assures longer seat life and easy, positive shut-off.
- Plugged ¼" NPT outlet boss accommodates hydrostatic relief valve or vent valve.
- Specifically designed for liquid transfer of LP-Gas with the $\mathsf{Chek}\text{-}\mathsf{Lok}^{\textcircled{\$}}.$

Materials

Body	(7550, 51)	Brass
-	(A7550, 51)	. Cadmium Plated Ductile Iron
Bonnet	(7550, 51)	Brass
	(A7550, 51)	Steel
Stem	(7550, 51)	Bronze
	(A7550, 51)	Stainless Steel
Flange F	Ring	Synthetic Rubber
Seat Dis	c	Synthetic Rubber





						Accessories***	
Part Number	Inlet Connection (M.NPT)	Outlet Connection (F.NPT)	Integral Excess Flow	Flow At 1PSIG (Cv) Pressure Drop* (GPM/Propane)	Excess Flow Approximate Closing Flow (GPM/Propane)**	Hydrostatic Relief Valve	Vent Valve
7550P		No 13.3			3127U	3165	
A7550P		3/4"	INO	13.3	-	SS8001J	TSS3169
7550PX	3/4"	J-4	Yes		16.0	3127U	3165
A7550PX	3/4		res	_	16.0	SS8001J	TSS3169
7551P	1/2" No 8.9	_	3127U	3165			
A7551P		···2	INO	8.9		SS8001J	TSS3169

^{*} To obtain approximate flow at other than 1 PSIG pressure drop, multiply flow in table by square root of pressure drop. Example: 7550P @ 9 PSIG = $13.3 \times \sqrt{9} = 39.9$ GPM/propane. For NH₃ flow, multiple propane flow by .90.

Chek-Lok® Accessories***				
Chek-Lok® Number	Adapter Number	For use with:		
7572FC	7572C-14	7550P, A7550P, 7551P, A7551P		
7580FC	75720-14	7550P, A7550P, 7551P, A7551P		
7590U	7590U-10	7550P, A7550P, 7551P, A7551P		
7591U	75500-10	7330F, A7330F, 7331F, A7331F		



^{* *} For NH₃ flow, multiply propane flow by .90.

^{* * *} For complete information, refer to appropriate sections of this catalog.

Application

Designed especially for transfer of LP-Gas and anhydrous ammonia in railroad tank car service.

The combined heavyweight ductile iron castings and precision machining provide ruggedness and superior performance in working pressures up to 400 PSIG.

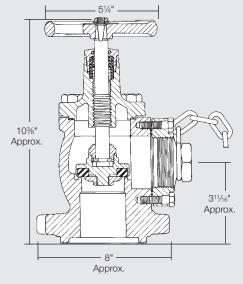
Features

- "V"-ring spring-loaded pressure seal design provides dependable, leak-free operation. No packing to retighten or replace.
- Wiper o-ring eliminates entrance of dirt and grit into stem area that can prohibit smooth operation.
- Heavy duty ACME stem threads give quick action and are hardened for long service life.
- Swivel seat reduces scoring of seat disc and provides positive shut-
- Full diameter seat provides greater flow capacity and low pressure drop.
- Plugged 1/4" NPT boss on downstream side of valve accommodates vent valve or hydrostatic relief valve.
- Equipped with a malleable iron plug and chain installed in the valve outlet.

Materials

BodyDuctile Iron
"V"-Rings Teflon
O-Ring Synthetic Rubber
Stem Stainless Steel
Bonnet
Seat Disc Teflon
Handwheel Cadmium Plated Ductile Iron





		Outlet Connection	Flow At 1 PSIG (Cv) Pressure Drop	Accessor	ies
Part Number	Inlet Connection	(F.NPT)	(GPM/Propane)	Hydrostatic Relief Valve	Vent Valve
TA7894P	Tank Car Flange	2"	112	SS8001U	TSS3169

^{*} To obtain approximate flow at other than 1 PSIG pressure drop, multiply flow in table by square root of pressure drop. Example: TA7894P @ 9 PSIG = 112 x \(\frac{1}{9} = 336 \) GPM/propane. For NH₃ flow, multiply propane flow by .90.



Multipurpose Valve for Filling of NH₃ Containers

A8016DBC

Application

Designed specifically for use as a manual filler valve on anhydrous ammonia applicator tanks. This valve incorporates an integral back check valve.

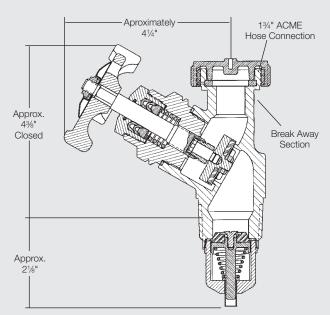
Features

- Positive seating back check valve opens for maximum flow at minimum pressure drop when filling regardless of the type of coupling in which the valve is installed.
- Back Check seat is fully contained in the tank coupling for maximum protection in the event of external damage to the valve.
- Resilient seat disc assembly is fully contained on three sides for bubble-tight shut-off and long service life.
- "V"-ring spring-loaded stem seal design requires no repacking or field adjustment.
- Specially machined break-away groove beneath ACME threads will shear-off with excessive pull on the hose and leave the valve body intact.
- Plugged ¼" NPT boss accommodates vent valve or hydrostatic relief valve.

Materials

BodyDuctile Iron
BonnetSteel
"V"-Rings Teflon
Stem Stainless Steel
Seat Disc Resilient Synthetic Rubber
Back Check Valve Stainless Steel, Steel, and Resilient Synthetic
Rubber
Springs Stainless Steel





		lala	Fillian	Filling Capacity	Accessories		
	Part Number	Inlet Connection (M.NPT)	Filling Connection (M.ACME)	At 20 PSIG Pressure Drop GPM/NH ₃	Hydrostatic Relief Valve	Vent Valve	
Ī	A8016DBC	11/4"	13/4"	95	SS8001J	TSS3169	

 $^{^{\}star}$ Determined at 9.5 to 12 PSIG differential.



^{* *} Determined at 100 PSIG inlet.

Designed specifically for use as a manual valve or vapor equalizing valve on anhydrous ammonia applicator and nurse tanks.

This valve incorporates an integral excess flow valve. When product is required, the valve must completely open and backseated to allow the excess flow valve to function properly as explained in the excess flow section of this catalog.

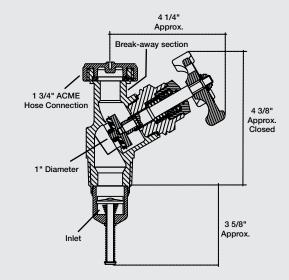
Features

- Positive-acting excess flow valve opens for maximum flow at minimum pressure drop when filling -- regardless of the type of coupling in which the valve is installed.
- Excess flow seat is fully contained in the tank coupling for maximum protection in the event of external damage to the valve.
- Resilient seat disc assembly is fully contained on three sides for bubble-tight shut-off and long service life.
- "V"-ring spring-loaded stem seal design requires no repacking or field adjustment.
- Specially machined break-away groove beneath ACME threads will shear-off with excessive pull on the hose and leave the valve body intact
- Plugged ¼" NPT boss accommodates vent valve or hydrostatic relief valve.

Materials

BodyDuctile Iron
BonnetSteel
"V"-Rings Teflon
Stem Stainless Steel
Seat Disc Resilient Synthetic Rubber
Excess Flow Valve Stainless SteelSteel Body
Springs Stainless Steel





Ordering Information

Part Number	Inlet Connection M. NPT	Filling Connection M. ACME	Filling Capacity at 20 PSIG Pressure Drop	Approximate Excess Flow Closing Flows		Accessories	
	IVI. INF I	W. ACIVIE	GPM/NH3	Liquid * GPM/NH3	Vapor ** CFH/NH3	Hydrostatic Relief Valve	Vent Valve
A8016DP	1 1/4"	1 3/4"	95	44	24,000	SS8001J	TSS3169

* Determined at 9.5 to 12 PSIG differential.





^{* *} Determined at 100 PSIG inlet.

Multipurpose Valves for Liquid Withdrawal of LP-Gas and NH₃ Containers

Application

Designed especially for use as a high capacity liquid withdrawal valve on LP-Gas and anhydrous ammonia containers.

These valves incorporate an integral excess flow valve. When product is required, the valve must be completely open and backseated to allow the excess flow valve to function properly as explained in the excess flow valve section of this catalog.

The A8017DH is equipped with a soft seated automatic differential back pressure check valve in the seat disc assembly. This allows any pressure build up in the liquid transfer line in excess of 10-15 psig above the container pressure to flow back into the container. The transfer hose is protected against excessive liquid or vapor pressure entrapment, which adds materially to the useful life of flexible hose. In addition to increasing hose service life, the equalizing valve adds substantially to the operating safety of liquid transfer systems.

Features

- Positive-acting excess flow valve opens for maximum flow at minimum pressure drop when filling regardless of the type of coupling in which the valve is installed.
- Excess flow seat is fully contained in the tank coupling for maximum protection in the event of external damage to the valve.
- Resilient seat disc assembly is fully contained on three sides for bubble-tight shut-off and long service life.
- "V"-ring spring loaded stem seal design requires no repacking or field adjustment.
- A8017DH has two plugged ¼" NPT ports, one on the top and the other on the side, accommodate either a vent valve or hydrostatic relief valve.
- A8020D has a alugged ¼" NPT port that accommodates vent valve, hydrostatic relief valve, or pressure gauge.
- A8017DH incorporates an automatic back check valve built into the shut-off valve, eliminating the need for a separate hydrostatic relief valve.

Materials

Body
Bonnet
Stem Stainless Steel
Seat Disc Synthetic Resilient Rubber
"V"-Rings Teflon
Excess Flow Valve Stainless Steel - Steel Body
Springs Stainless Steel

				Accessories	
Part Number	Inlet Connection (M.NPT)	Outlet Connection (F.NPT)	Approximate Excess Flow Liquid Closing Flow** (GPM/Propane)	Hydrostatic Relief Valve	Vent Valve
A8017DH*		4"	49	Not Required	
A8017DP	11/4"	'	55	CC0004 I	TSS3169
A8017DLP		3/4"	49	SS8001J	

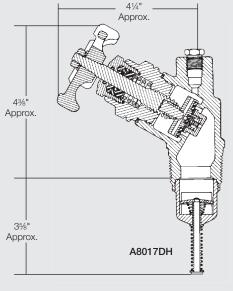
- * Built-in back pressure check valve incorporated into shut-off valve.
- * Determined at 11.5 to 13.5 PSIG differential for %" outlet and 9 to 12 PSIG differential for 1" outlet. For NH $_3$ flow, multiply by .90.

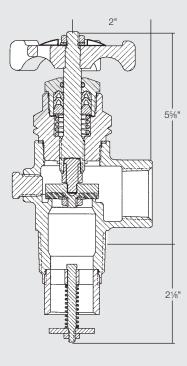
			Approximate Excess Flow Liquid Closing Flow*		Accessories	
Dowl	Inlet	Outlet			Hydrostatio	Vont
Part Number	Connection M. NPT	Connection F. NPT	GPM/Propane	GPM/NH3	Hydrostatic Relief Valve	Vent Valve
A8020D	11/4"	1"	78	70	SS8001J	TSS3169

^{*} Determined at 13 PSIG differential.











Multipurpose Valve for Filling and Liquid Transfer of NH₃ Containers

A8018DP

Application

Designed primarily for use as a combination filler and liquid withdrawal valve on three-opening applicator tanks or on nurse tanks.

This valve incorporates an integral excess flow valve. When product is required, the valve must be completely open and backseated to allow the excess flow valve to function properly as explained in the excess flow valve section of this catalog.

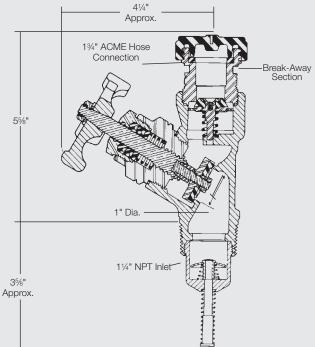
Features

- Functions as both a filler valve and liquid transfer valve, in one unit.
- Positive acting excess flow valve opens for maximum flow at minimum pressure drop when filling regardless of the type of coupling in which the valve is installed.
- Excess flow seat is fully contained in the tank coupling for maximum protection in the event of external damage to the valve.
- Specially machined break-away groove beneath ACME thread of filler valve will shear-off with excessive pull on the hose and leave the valve body intact.
- Triple guide filler valve check provides for dependable shut-off performance when filling ceases.
- Resilient seat disc assembly is fully contained on three sides for bubble-tight shut-off and long service life.
- "V"-ring spring loaded stem seal design requires no repacking or field adjustment.
- Plugged ¼" NPT boss accommodates vent valve or hydrostatic relief valve.

Materials

Body
BonnetSteel
Stem Stainless Steel
Seat Discs Synthetic Resilient Rubber
"V"-Rings Teflon
Excess Flow Valve Stainless Steel - Steel Body
Springs Stainless Steel





						Accessories	
_	Inlet	Outlet	Filling	Filling Capacity At 20 PSIG	Approximate Excess Flow		
Part Number	Connection (M.NPT)	Connection (F.NPT)	Connection (M.ACME)	Pressure Drop GPM/NH ₃	Liquid Closing Flow GPM/NH ₃ *	Hydrostatic Relief Valve	Vent Valve
A8018DP	11/4"	1"	13/4"	74	50	SS8001J	TSS3169

^{*} Determined at 9 to 12 PSIG differential.

