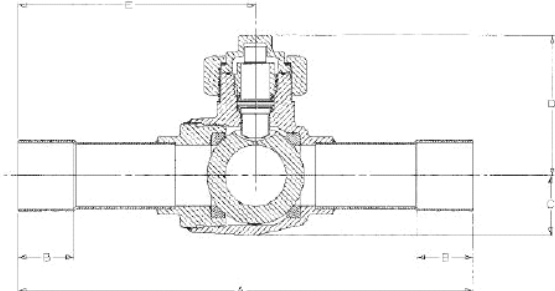


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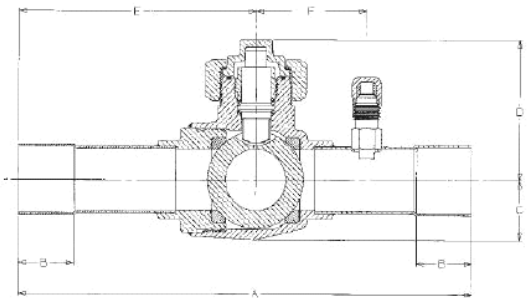
Integra-Seal Valves



WA Series



WAS Series



Robotically Welded Body Joint! Full Size Ports for Unrestricted Flow! The new line of Integra-Seal® ball valves employ the latest robotic welding technology. Every continuous welded body joint is 100% factory tested to ensure positively leak-free performance. Dual Teflon® ball seals surround a polished brass ball at each end. A secondary seal becomes effective if foreign material scores the primary seal . . . even in extremely unfavorable conditions such as compressor burnout – a Superior exclusive! Integra-Seal® ball valves are constructed using all forged brass body with copper tube extensions on all sizes. Mechanical internal forged stops ensure positive open or closed positions – another Superior exclusive! Full open to full close with 1½ turn.

All sizes incorporate a dual stem seal design utilizing Teflon packing compressed by an internal packing nut forming the primary seal. The unique seal cap design permits valve operation without removal of the seal cap and uses Teflon gaskets to provide a secondary seal – a third Superior exclusive! There are no synthetic "O" rings. Ball internal relief port design ensures shut-off in either direction of flow . . . even during evacuation of the system. Full flow ports in all sizes 3/8" through 3 1/8". All Integra-Seal® ball valves are nondirectional flow and may be installed in any position.

WA Series (Welded)

Mfg Part No	Dimensions (in)						Max Width (in)	Cv	ODS Connection Size (in)
	A	B	C	D	E	F			
586WA-6ST	6.50	0.31	0.56	1.80	3.44	1.75	1.38	3.60	3/8
586WA-8ST	6.50	0.38	0.56	1.80	3.44	1.75	1.38	7.40	1/2
586WA-10ST	6.50	0.50	0.56	1.80	3.44	1.75	1.38	14.60	5/8
587WA-12ST	6.56	0.63	0.73	1.96	3.46	NA	1.88	22.30	3/4
587WA-14ST	6.56	0.75	0.73	1.96	3.46	2.00	1.88	30.00	7/8
591WA-11ST	7.69	0.94	1.03	2.37	4.01	1.75	2.31	62.00	1-1/8
592WA-13ST	8.88	1.00	1.42	2.73	4.49	2.21	3.19	110.00	1-3/8
593WA-15ST	9.13	1.09	1.42	2.73	4.62	2.21	3.19	135.00	1-5/8
594WA-21ST	9.88	1.34	1.85	3.11	5.07	2.57	4.06	270.00	2-1/8
594WA-25ST	12.88	1.44	1.85	3.11	6.57	NA	4.06	250.00	2-5/8 Reduced Port
594WA-31ST	13.75	1.63	1.85	3.11	7.01	NA	4.06	240.00	3-1/8 Reduced Port

WAS Series (Welded with Access Fitting)

Mfg Part No	Dimensions (in)						Max Width (in)	Cv	ODS Connection Size (in)
	A	B	C	D	E	F			
586WAS-6ST	6.50	0.31	0.56	1.80	3.44	1.75	1.38	3.60	3/8
586WAS-8ST	6.50	0.38	0.56	1.80	3.44	1.75	1.38	7.40	1/2
586WAS-10ST	6.50	0.50	0.56	1.80	3.44	1.75	1.38	14.60	5/8
587WAS-14ST	6.56	0.75	0.73	1.96	3.46	2.00	1.88	30.00	7/8
591WAS-11ST	7.69	0.94	1.03	2.37	4.01	1.75	2.31	62.00	1-1/8
592WAS-13ST	8.88	1.00	1.42	2.73	4.49	2.21	3.19	110.00	1-3/8
593WAS-15ST	9.13	1.09	1.42	2.73	4.62	2.21	3.19	135.00	1-5/8
594WAS-21ST	9.88	1.34	1.85	3.11	5.07	2.57	4.06	270.00	2-1/8
595WAS-25ST	12.92	1.50	2.30	3.95	6.52	3.35	4.65	340.00	2-5/8 Full Port
596WAS-31ST	16.31	1.69	2.75	4.35	8.32	3.63	5.63	480.00	3-1/8 Full Port

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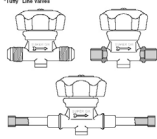


SUPERIOR REFRIGERATION

Line Valves - "Tuffy" Series



Diaphragm Packless Valves



All diaphragm packless valves contain metal diaphragms and backseat metal to metal when the valve is fully open. Controlled stem travel assures life-time diaphragm performance; balanced bearing surfaces and polished stem heads eliminate wear and assure smooth, easy operation. Flow is unrestricted. All OD solder connections for valves 7/8" and smaller are machined to an outside diameter equivalent to the next largest standard size of tubing.

Because of their unique construction, Superior diaphragm packless valves can be soldered into the line without disassembly. "Comfort grip" nylon hand wheels are furnished on all types of valves.

Vacuum Applications:

All Superior packless valves are excellent for vacuum service. 5/8" and smaller are regularly used for vacuums to 1 micron and the larger sizes are adequate for 10 microns.

Mfg Part No	Size
214-4	1/4" SAE
214-6	3/8" SAE
215-8	1/2" SAE
216-10	5/8" SAE
214-4S	1/4" ODS
214-6S	3/8" ODS
214-4ST	1/4" ODS Extended Ends
214-6ST	3/8" ODS Extended Ends
215-8ST	1/2" ODS Extended Ends
216-10ST	5/8" ODS Extended Ends

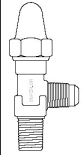
Packed Angle Valves



Packed line valves are designed for a multitude of uses in refrigeration systems. When installed properly, these handy, forged brass, packed angle valves provide easy accessibility, and serviceability for the refrigeration system. All packed angle valves are provided with a brass seal cap.

The 617A series charging and purging valves are designed to be installed on the branch or run of a solder-type tee. The valve can be readily positioned for easy access. These valves are shipped loosely assembled for easy removal of parts prior to soldering.

Packed Angle Valves - 600 Series



Mfg Part No	Connections	
	Bottom Inlet	Side Outlet
600A-4B	1/4" NPT/ODF	1/4" SAE
600A-4C	3/8" NPT/ODF	3/8" SAE
600A-6B	1/4" NPT/ODF	1/4" SAE
600A-6C	3/8" NPT/ODF	3/8" SAE

Packed Angle Charging and Purging Valves - 617A Series



Mfg Part No	Connections	
	Bottom Inlet	Side Outlet
617A-4S4	1/4" ODS	1/4" SAE
617A-6S4	3/8" ODS	1/4" SAE
617A-8S4	1/2" ODS	1/4" SAE

SUPERIOR REFRIGERATION

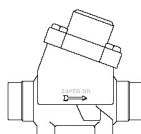
Albany, NY	518-489-0010	Rochester, NY	585-482-3876	Allentown, PA	610-437-9818	Scranton, PA	570-346-1565
Binghamton, NY	607-724-2451	Syracuse, NY	315-475-3131	Altoona, PA	814-941-7617	Stroudsburg, PA	570-424-5724
Buffalo, NY	716-853-1291	Utica, NY	315-732-4077	Erie, PA	814-459-4559	Wilkes-Barre, PA	570-824-8779
Middletown, NY	845-733-5666			Harrisburg, PA	717-558-0828	Williamsport, PA	570-323-4606

H-V Check Valves



Globe Check Valve

Line Check Valve



Horizontal or Vertical Installation

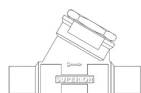
Globe check valves feature the time proven piston construction simplified for easy reassembly after soldering. The improved "C" series with special non-metallic bonnet gaskets and Teflon seat inserts permit the use of these valves in service temperatures as high as 400°F.

All H-V globe check valves are of all forged brass construction in the low pressure drop "Y" type design. Complete back pressure shutoff is achieved at low pressure. The angle style is forged brass or brass and copper construction, and parts are interchangeable with comparable size of line type.

Note: Bolted bonnets are loosely assembled after testing to allow easy disassembly for soldering.

Mfg Part No	Size (ODS)
805C-14S	7/8"
806C-11S	1-1/8"
808C-15S	1-5/8"
809C-21S	2-1/8"
884C-25S	2-5/8"
807C-13S	1-3/8"

Type 802B Check Valves Series



This "Y" type of valve for years has been the most popular design in the refrigeration industry. The internal parts can easily be removed and reassembled after soldering. This basic "Y" type design reduces pressure drop to a very low level.

The Teflon seat insert rapidly conforms to the cone type of seating surface in the body. This insures positive shut-off characteristics. This valve minimizes leakage even at the lowest back pressure. A specially designed secondary seat backs up the primary seat, after approximately 10,000 cycles of operation the secondary seat becomes effective. This is done to insure even better shut-off characteristics as the valve wears into service. Upon reassembly of the valve, positive shut-off between the body cap and the body is assured by means of a special gasket seal. All Superior check valves have Teflon seats. These valves may be installed in any position, except upside down.

Mfg Part No	Size (ODS)
802B-4S	1/4"
802B-6S	3/8"
802B-8S	1/2"
803B-10S	5/8"
804A-14S	7/8"

Pressure Relief Valves



A Series

Minimum setting for all relief valves listed is 150 psi. These "A" series pressure relief valves are all Teflon seated, permitting their use in applications of either high or low temperatures where many times the conventional rubber seated valves are completely unsatisfactory.

Part numbers indicate style and size of relief valve only - customer must specify pressure setting when ordering. Standard settings are 235, 300, 350, 400, 425, and 450 psig; settings from 150 up to 450 psig with certified discharge capacities are available at a slight additional cost.

Female Connection - Type 3030A/3060A



Mfg Part No	Port Diameter (in)	Connections	
		Inlet	Outlet
3030	7/16	1/2" NPT	1/2" FPT
3031	7/16	1/2" NPT	3/4" FPT
3045	7/16	3/4" NPT	3/4" FPT
3060	23/32	1" NPT	1" FPT
3075	23/32	1-1/4" NPT	1-1/4" FPT

Straight-thru - Type 3012A



Mfg Part No	Port Diameter (in)	Connections	
		Inlet	Outlet
3012	3/16	1/4" NPT	3/8" SAE
3014	3/16	3/8" NPT	3/8" SAE
3015	3/16	3/8" NPT	1/2" SAE
3016	9/32	3/8" NPT	1/2" SAE
3020	9/32	1/2" NPT	5/8" SAE

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