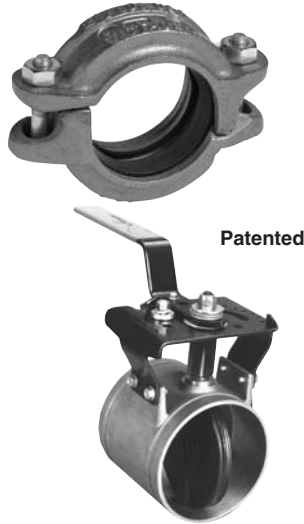


Australian Standard Copper Products

PRODUCT DESCRIPTION



The Victaulic copper connection system is a concept for joining copper tubing, and is available to join Australian Standard (AS-1432) copper tubing sizes DN 50 - DN 150 (2 - 6") Tables A, B and D.

The system uses a proven pressure-responsive synthetic rubber gasket to seal on the outside diameter of the tubing. This means no heat is required and no lead is used. The Style 606-AS coupling housing surrounds the gasket gripping into grooves rolled into the tubing. The housing is isolated from the fluid, but provides the gripping strength for pressure ratings up to 2450 kPa (355 psi) depending on the type of copper tubing and size.

Victaulic Series 608-AS butterfly valves are designed to provide bubble-tight shut-off to 2000 kPa (290 psi). This grooved end valve is quickly and easily joined to the piping system by utilizing Style 606-AS couplings. The valve features a double-seal disc design with a resilient elastomeric coating bonded to the ductile iron disc core. The disc drive hub is integrally cast as part of the disc and can be actuated by a manual lever or gear, pneumatic, electric or hydraulic operators. Series 608-AS is suitable for dead end service to full working pressure.

Sealing and positive shut-off are accomplished by a double ring seal which is integrally molded on the disc. This results in superior sealing performance at low torque levels.

Victaulic has designed tools for grooving AS-1432 copper tubing. Tools must be equipped only with Victaulic rolls designed specifically for grooving AS-1432 Australian copper tubing. For in-place grooving of tubing, the VE26AC is available. **DO NOT use rolls intended for steel pipe.**

For compatible copper fittings and flange adapters, contact your Victaulic distributor.

PERFORMANCE

Style 606-AS Australian Standard Coupling

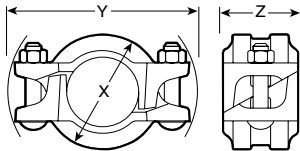
The Victaulic copper connection system has been thoroughly tested on Types A, B and D copper tubing to establish the pressure ratings shown in the adjacent table.

Pipe – mm/in.		Type "A" to AS-1432		Type "B" to AS-1432		Type "D"	
Nominal Size	Actual Size	Max. Joint Wk. Press. kPa/PSI	Max. Perm. End Load N/Lbs.	Max. Joint Wk. Press. kPa/PSI	Max. Perm. End Load N/Lbs.	Max. Joint Wk. Press. kPa/PSI	Max. Perm. End Load N/Lbs.
DN 50	50,8 2.00	2450 355	4940 1110	1790 260	3650 820	650 94	1290 290
DN 65	63,5 2.50	1960 284	6230 1400	1450 210	4580 1030	650 94	2050 460
DN 80	76,1 3.00	2030 294	9250 2080	1620 235	7390 1660	650 94	2940 660
DN 100	101,6 4.00	1520 220	12280 2760	1210 176	9790 2200	650 94	5250 1180
DN 125	127,0 5.00	1210 176	15300 3440	970 141	12230 2750	650 94	8190 1840
DN 150	152,4 6.00	1310 190	24165 5370	1000 145	18450 4100	650 94	11790 2650

Refer to notes on page 3.

DIMENSIONS

Style 606-AS Australian Standard Copper Coupling



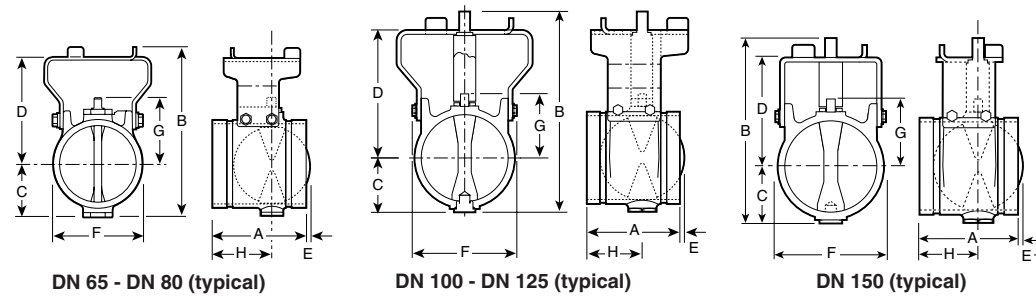
Tubing – mm/in.		Dimensions – mm/in.			Bolt/Nut No. - Size Inches		Pipe End Separation mm/in.*	Aprx. Weight Ea. kg/Lbs.
Nom. Size	Actual Size	X	Y	Z				
DN 50	50,8 2.00	77,4 3.05	122,3 4.81	45,7 1.80	2 - 3/8	X 2 Lg.	0,76 0.03	0,63 1.4
DN 65	63,5 2.50	89,8 3.54	134,8 5.31	45,7 1.80	2 - 3/8	X 2 Lg.	0,76 0.03	0,86 1.9
DN 80	76,1 3.00	102,9 4.05	164,6 6.48	45,7 1.80	2 - 1/2	X 2 3/4 Lg.	0,76 0.03	0,91 2.0
DN 100	101,6 4.00	131,8 5.19	188,9 7.44	49,2 1.94	2 - 1/2	X 2 3/4 Lg.	4,39 0.17	1,41 3.1
DN 125	127,0 5.00	158,8 6.25	233,8 9.20	49,4 1.95	2 - 5/8	X 3 1/4 Lg.	4,60 0.18	2,16 4.8
DN 150	152,4 6.00	184,1 7.25	256,9 10.11	49,4 1.95	2 - 5/8	X 3 1/4 Lg.	4,60 0.18	2,52 5.6

* For field installations only. Style 606-AS is essentially rigid and does not accommodate expansion and contraction.

WARNING: Piping systems must always be depressurized before attempting disassembly and removal of any Victaulic piping products.

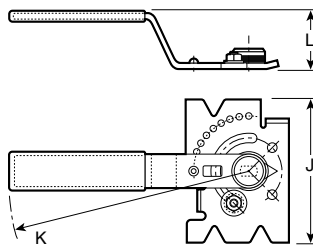
DIMENSIONS

Series 608-AS Australian Standard Butterfly Valve



Tubing – mm/in.		Dimensions – mm/in.								Aprx. Wgt. Ea. w/o Oper. kg/Lbs.
Nominal Size	Actual Size	End to End A	Overall Height B	C	D	E	F	G	H	
DN 65	63,5 2.50	96 3.77	151,9 5.98	43,9 1.73	98,0 3.86	–	63,5 2.50	55,4 2.18	59,0 2.31	1,9 4.1
DN 80	76,1 3.00	96 3.77	164,1 6.46	50,8 2.00	103,4 4.07	–	76,2 3.00	62,0 2.44	59,0 2.31	2,2 4.8
DN 100	101,6 4.00	118 4.63	226,3 8.91	67,3 2.65	129,3 5.09	–	101,6 4.00	79,5 3.13	71,0 2.79	4,8 9.5
DN 125	127,0 5.00	149 5.88	249,4 9.82	77,7 3.06	142,5 5.61	9,7 0.38	142,2 5.60	99,2 3.63	100,1 3.94	5,9 13
DN 150	152,4 6.00	150 5.91	273,6 10.77	90,2 3.55	156,2 6.15	23,6 0.93	152,4 6.00	103,9 4.09	101,3 3.99	8,2 18.0

Lever Lock/Infinitely Variable Handle



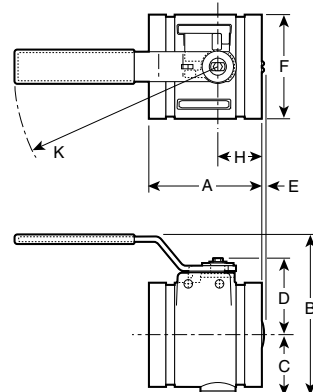
DN 65 - DN 150

Tubing – mm/in.		Dimensions – mm/in.			Aprx. Wgt. Ea. kg/Lbs.
Nom. Size	Act. Size	J	K	L	
DN 65	63,5 2.50	107 4.20	180 7.08	43 1.70	0,7 1.5
DN 80	76,1 3.00	107 4.20	180 7.08	43 1.70	0,7 1.5
DN 100	101,6 4.00	175 6.88	267 10.50	64 2.50	0,7 1.5
DN 125	127,0 5.00	175 6.88	267 10.50	64 2.50	0,7 1.5
DN 150	152,4 6.00	175 6.88	305 12.00	64 2.50	0,7 1.5

NOTE: Handles for DN 65 - DN 150 (2½" - 6") valves come complete with hardware for both lever lock and infinitely variable handle plus memory stop.

Two-Position Handle

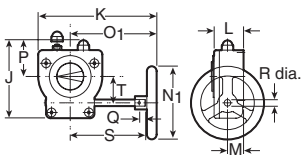
(DN 65 - DN 80 only)



Tubing mm/Inches		Dimensions millimeters/Inches													No. Turns to Close	Aprx. Wgt. Ea. kg Lbs.
Nom. Size	Act. Size	J	K	L	M	Handwheel		Chain Wheel		P	Q	R	S	T		
						N ₁	O ₁	N ₂	O ₂							
DN 65	63,5 2.50	132 5.19	235 9.25	60 2.38	29 1.13	102 4.00	143 5.63	102 4.00	210 8.25	56 2.19	10 0.38	16 0.63	127 5.00	46 1.83	7	2,0 4.5
DN 80	76,1 3.00	132 5.19	235 9.25	60 2.38	29 1.13	102 4.00	143 5.63	102 4.00	210 8.25	56 2.19	10 0.38	16 0.63	127 5.00	46 1.83	7	2,0 4.5
DN 100	101,6 4.00	132 5.19	235 9.25	60 2.38	29 1.13	102 4.00	143 5.63	102 4.00	210 8.25	56 2.19	10 0.38	16 0.63	127 5.00	46 1.83	7	2,0 4.5
DN 125	127,0 5.00	132 5.19	235 9.25	60 2.38	29 1.13	102 4.00	143 5.63	102 4.00	210 8.25	56 2.19	10 0.38	16 0.63	127 5.00	46 1.83	7	2,0 4.5
DN 150	152,4 6.00	132 5.19	235 9.25	60 2.38	29 1.13	203 8.00	180 7.09	229 9.00	210 8.25	56 2.19	10 0.38	16 0.63	127 5.00	46 1.83	7	2,0 4.5

DIMENSIONS

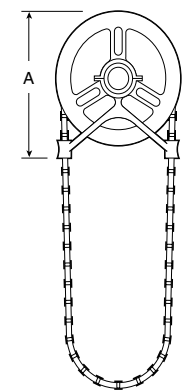
Gear Operator



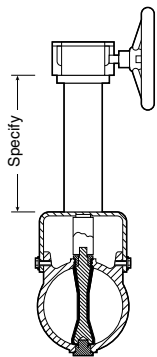
Tubing – mm/in.		Dimensions – millimeters/inches											No. Turns to Close	Aprx. Wgt. Each kg/Lbs.
Nom. Size	Act. Size	J	K	L	M	Handwheel		P	Q	R	S	T		
						N ₁	O ₁							
DN 65	63.5	111	144	46	21	100	104	45	14	12	95	43	10	1.8
	2.50	4.35	5.67	1.81	0.83	4.00	4.09	1.70	0.55	0.47	3.74	1.67		
DN 80	76.1	111	144	46	21	100	104	45	14	12	95	43	10	1.8
	3.00	4.35	5.67	1.81	0.83	4.00	4.09	1.70	0.55	0.47	3.74	1.67		

ACCESSORIES

Chain wheel



Stem Extensions



Stem extensions are used for remote operations of the valve. Lever, gear or power actuators can be attached to the top of the extension.

All extension components are carbon steel (stainless steel also available).

Specify extension length per drawing and identify valve by figure number to which the extension will be attached.

Drive Hub Extension Insulation

Series 608-AS valves with bracket-mounted handles, operators or actuators are available with factory-installed (removable) blown urethane insulation around the drive hub extension. This option provides a fully internally-insulated bracket over the drive hub leaving only normal external areas to be insulated.

NOTES

* Working Pressure and End Load are total, from all internal and external loads, based on Australian Standard copper tubing of the table indicated, standard roll grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

† For field installation only. Style 606-AS is essentially rigid and does not accommodate expansion or contraction.

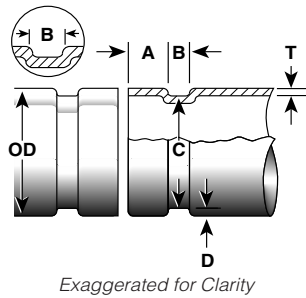
§ Sizing of actuator is dependent upon service. Contact Victaulic for details.

@ Number of bolts required equals number of housing segments.

WARNING: Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.

GROOVE SPECIFICATIONS

Australian Standard Copper Tubing



1	2		3	4	5	6	7
Nominal Size mm	Actual Outside Dia. mm/Inches		Dimensions millimeters/inches				
	Min.	Max.	Gasket Seat "A" ± 0.8 ± 0.03	Groove Width "B" $+ 0.8/-0$ $+0.03/-0$	Groove Diameter "C" $+ 0/-0.5$ $+0/-0.020$	Groove Depth "D" Ref. Only	Max. Allow. Flare Diameter
DN 50	50,67 1.995	50,80 2.000	15,87 0.625	7,6 0.300	48,23 1.899	1,25 0.049	53,06 2.089
DN 65	63,35 2.494	63,50 2.500	15,87 0.625	7,6 0.300	60,88 2.397	1,27 0.050	65,83 2.592
DN 80	76,02 2.993	76,10 3.000	15,87 0.625	7,6 0.300	73,56 2.896	1,27 0.050	78,51 3.091
DN 100	101,35 3.990	101,60 4.000	15,87 0.625	7,6 0.300	98,78 3.889	1,35 0.053	103,88 4.090
DN 125	126,75 4.990	127,00 5.000	15,87 0.625	7,6 0.300	123,67 4.869	1,60 0.063	128,77 5.070
DN 150	152,10 5.988	152,40 6.000	15,87 0.625	7,6 0.300	149,05 5.868	1,60 0.063	154,66 6.089

NOTE: Always refer to Tool Operating Instructions and Groove Specification notes before proceeding with pipe preparation.

MATERIAL SPECIFICATIONS

COUPLING

Body: Ductile iron conforming to ASTM A-395, grade 65-45-15, and ASTM A-536, grade 65-45-12.

Housing Coating: Copper colored alkyd enamel.

Gasket (and Disc Coating) (Specify choice on order):

- **Grade "E" FlushSeal® EPDM**
EPDM (Copper color code). Temperature range -30°F to $+230^{\circ}\text{F}$ (-34°C to $+110^{\circ}\text{C}$). Recommended for hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL classified in accordance with ANSI/NSF 61 for cold $+86^{\circ}\text{F}$ ($+30^{\circ}\text{C}$) and hot $+180^{\circ}\text{F}$ ($+82^{\circ}\text{C}$) potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES.
- **Optional: Grade "T" FlushSeal® nitrile**
Nitrile gaskets available for oil services. Contact Victaulic for details.

*Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets are not recommended. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific gasket service recommendations and for a listing of services which are not recommended.

BUTTERFLY VALVE

Body: Bronze per CDA-836 (85-5-5-5)

Disc: Ductile iron to ASTM A-536

Disc Coating (Specify choice): Refer to Gasket under coupling data.

Drive Hub Adapter: Steel, black enamel coated

Upper Bearing/Lower Trunnion Seals: Same as Disc Coating

Trim: (Upper Bearing/Lower Trunnion) Electroless nickel coated 416 stainless steel

Operator Bracket: Steel, black enamel coated

Bracket Bolts/Washers: Steel, zinc plated

Operator (specify choice):

- **Two-position detent manual handle:** Steel, black enamel coated
- **Manual lever lock/ininitely variable handle with memory stop:** Steel, black enamel coated
- **Manual gear operator with handwheel:**
 - **Optional:** Memory Stop
 - **Optional:** Chain wheel

Electric actuator §

Pneumatic actuator §

This product shall be manufactured by Victaulic Company. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.