

# Copper Connection Butterfly Valve Series 608N



## Approvals/Listings:

UL Classified in accordance with ANSI/NSF 61 for ambient +86°F/+30°C and hot +180°F/+82°C potable water service and ANSI/NSF 372.

See Victaulic Publication [02.06](#) for more details.

## Product Description:

Victaulic Series 608N butterfly valves are designed for pressures ranging from full vacuum to 300 psi/2065 kPa and for bi-directional, dead end services to full working pressure. This grooved end valve is joined to a copper tube system by utilizing Style 607 couplings. The valve features a patented seat design that creates full 360° sealing. The pressure-enhanced seat compresses to form a larger sealing area as the pressure increases. The seat design also contributes to low breakaway torque.

## Material Specifications:

**Body:** Brass castings conforming to UNS C87850

**Disc:** Aluminum-bronze casting conforming to UNS C95500

## Seat Material:

**Grade “CHP” Fluoroelastomer** (Blue/Copper color code). Temperature range -20°F to +250°F / -29°C to +121°C.

May be specified for cold and hot water service within the specified temperature range plus a variety of dilute acids, air, and many chemical services. UL Classified in accordance with ANSI/NSF 61 for ambient +86°F/+30°C and hot +180°F/+82°C potable water service and ANSI/NSF 372.<sup>1</sup> See Victaulic Publication [02.06](#) for more details.

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

NOTE: When connecting butterfly valves to Style 641 Vic-Flange® adapters please contact Victaulic.

**Drive Hub Adapter:** Steel - black enamel coated

**Stem / Lower Nut Seals:** EPDM

**Trim:** (Stem / Lower Nut) 316SS

**Operator Bracket:** Steel - black enamel coated

**Bracket Bolts/Washers:** Steel - zinc plated

**Operator:** (specify choice)

**2½ – 6"/66.7 – 155.6 mm**

**Manual lever lock/ininitely variable handle with memory stop:** Steel - black enamel coated

**Manual gear operator with handwheel:**

Chain Wheel (Optional)

## Job/Owner

System No.	
Location	

## Contractor

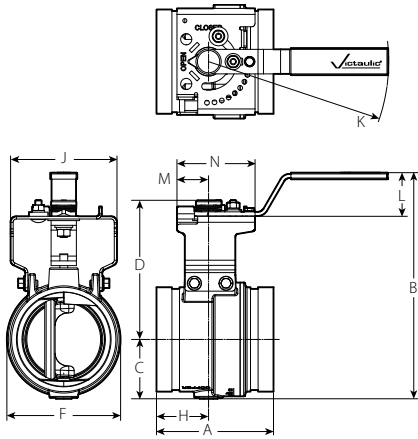
Submitted By	
Date	

## Engineer

Spec Section	
Paragraph	
Approved	
Date	

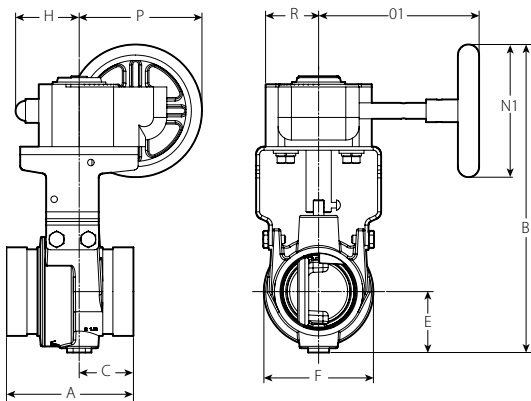
**Dimensions:**

**Series 608N With Lever Lock Handle**



Nominal Size inches mm	Dimensions											Approx. Weight Each lbs. kg
	A	B	C	D	F	H	J	K	L	M	N	
2 1/2 66.7	3.77 95.8	7.8 198.1	1.81 46.0	4.9 124.5	3.25 82.6	1.61 40.9	4.21 106.9	7.2 182.9	1.7 43.2	1.25 31.8	3.09 78.5	5.29 2.4
3 79.4	3.77 95.8	8.5 215.9	2.1 53.3	5.3 134.6	4 101.6	1.61 40.9	4.21 106.9	7.2 182.9	1.7 43.2	1.25 31.8	3.09 78.5	5.7 2.6
4 104.8	4.63 117.6	8.9 226.1	2.35 59.7	5.5 139.7	4.5 114.3	2.06 52.3	4.21 106.9	7.2 182.9	1.7 43.2	1.25 31.8	3.09 78.5	7.78 3.5
6 155.6	5.88 149.4	12.2 309.9	3.34 84.8	7.7 195.6	6.3 160.0	2.5 63.5	6.88 174.8	10.7 271.8	2.6 66.0	1.88 47.8	5.13 130.3	19.77 9.0

**Series 608N With Gear Operator**



Nominal Size inches mm	Dimensions										Approx. Weight Each lbs. kg
	A	B	C	E	F	H	N1	O1	P	R	
2 1/2 66.7	3.77 95.8	9.1 231.1	1.61 40.9	1.81 46.0	3.25 82.6	1.89 48.0	3.94 100.1	4.76 120.9	3.64 92.5	1.57 39.9	7.1 3.2
3 79.4	3.77 95.8	9.8 248.9	1.61 40.9	2.1 53.3	4 101.6	1.89 48.0	3.94 100.1	4.76 120.9	3.64 92.5	1.57 39.9	7.5 3.4
4 104.8	4.63 117.6	10.3 261.6	2.06 52.3	2.35 59.7	4.5 114.3	1.89 48.0	3.94 100.1	4.76 120.9	3.64 92.5	1.57 39.9	10.5 4.8
6 155.6	5.88 149.4	13.2 335.3	2.5 63.5	3.34 84.8	6.3 160.0	2.2 55.9	4.92 125.0	7.2 182.9	4.43 112.5	1.97 50.0	4.5 2.0

**Flow Data:**

$C_v/K_v$  values for flow of water at +60°F/+16°C with a fully open valve are shown in the table below.

**Formulas for  $C_v/K_v$  values:**

$$\Delta P = \frac{Q^2}{C_v^2}$$

$$Q = C_v \times \sqrt{\Delta P}$$

**Where:**

Q = Flow (GPM)

$\Delta P$  = Pressure Drop (psi)

$C_v$  = Flow Coefficient

$$\Delta P = \frac{Q^2}{K_v}$$

$$Q = K_v \times \sqrt{\Delta P}$$

**Where:**

Q = Flow (m<sup>3</sup>/h)

$\Delta P$  = Pressure Drop (bar)

$K_v$  = Flow Coefficient

Valve Size inches mm	$C_v/K_v$
	Full Open
2 ½ 66.7	113 98
3 79.4	276 238
4 104.8	383 330
6 155.6	1029 887

**Installation**

Reference should always be made to the I-600 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at [www.victaulic.com](http://www.victaulic.com).

**Warranty**

Refer to the Warranty section of the current Price List or contact Victaulic for details.

**Note**

This product shall be manufactured by Victaulic or to Victaulic specifications. 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.

**Trademarks**

Victaulic is a registered trademark of Victaulic Company.