

TOGGLE VALVES

STV Series

FEATURES

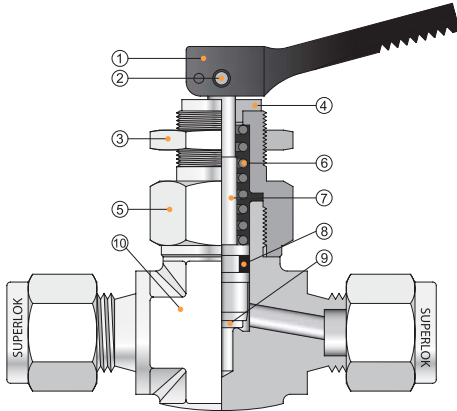
- Compact design.
- Quick acting.
- Orifice sizes from 0.080 to 0.250 in.(2.0 to 6.4 mm).
- Flow coefficients (Cv) from 0.11 to 0.70.
- Straight, angle flow patterns.
- **SUPERLOK** tube fitting, male and female NPT, and Combination of end connections.
- Each and every valve is tested at the factory.



TECHNICAL DATA

| Series | Orifice in.(mm) | Pressure - Temperature Rating | |
|--------|-----------------|--------------------------------|-----------------------------|
| | | Temperature °F (°C) | Working Pressure psig (bar) |
| STV1 | 0.080(2.0) | -20 to 200 °F (-28 to 93°C) | 300psig(20.6bar) |
| STV2 | 0.125(3.2) | | |
| STV3 | 0.250(6.4) | | 200psig(13.7bar) |

MATERIALS OF CONSTRUCTION



| No. | Component | Material |
|-----|---------------|-----------------|
| 1 | Handle | Nylon |
| 2 | Roll Pin | SS304 |
| 3 | Lock Nut | SS316 |
| 4 | Handle Washer | Nylon |
| 5 | Packing Nut | SS316 |
| 6 | Spring | Stainless Steel |
| 7 | Stem | SS316 |
| 8 | O-Ring | Viton |
| 9 | Stem Tip | PTFE |
| 10 | Body | SS316 |

ORDERING INFORMATION

STV2 -
 M
4N -
 N -
 B
1
2
3
4
5

1. Valve Type

- *Straight Type
- STV1:Orifice 2mm
- STV2:Orifice 3.2mm
- STV3:Orifice 6.4mm
- *Angle Type
- STV1A:Orifice 2mm
- STV2A:Orifice 3.2mm
- STV3A:Orifice 6.4mm

2. Port Type

- S: SUPERLOK Tube Fitting
- M: Male Pipe Thread
- F: Female Pipe Thread

4. O-Ring Material

- Nil: Viton
- N: NBR
- K: Kalez

3. Port Size

- Pipe Thread Designation

| Size (inch) | 1/8 | 1/4 |
|-------------|-----|-----|
| ISO Tapered | 2R | 4R |
| NPT | 2N | 4N |

- Tube O.D Designation

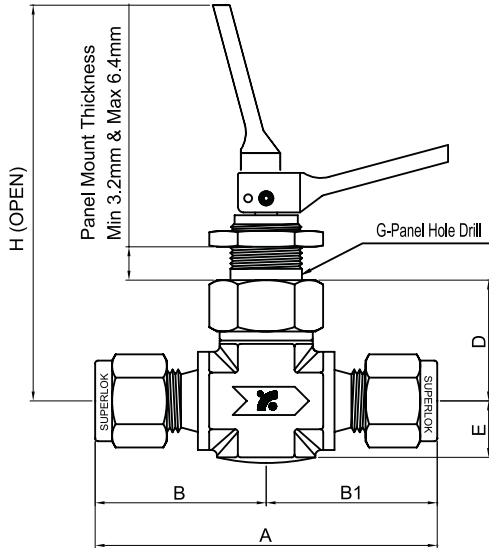
| Tube O.D (inch) | 1/8 | 1/4 | 3/8 | 1/2 |
|-----------------|-----|-----|-----|-----|
| Designation | 2 | 4 | 6 | 8 |
| Tube O.D (mm) | 3 | 6 | 10 | 12 |
| Designation | 3M | 6M | 10M | 12M |

5. Body Material

- Nil: 316 Stainless Steel
- B: Brass

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STRAIGHT TYPE



ANGLE TYPE

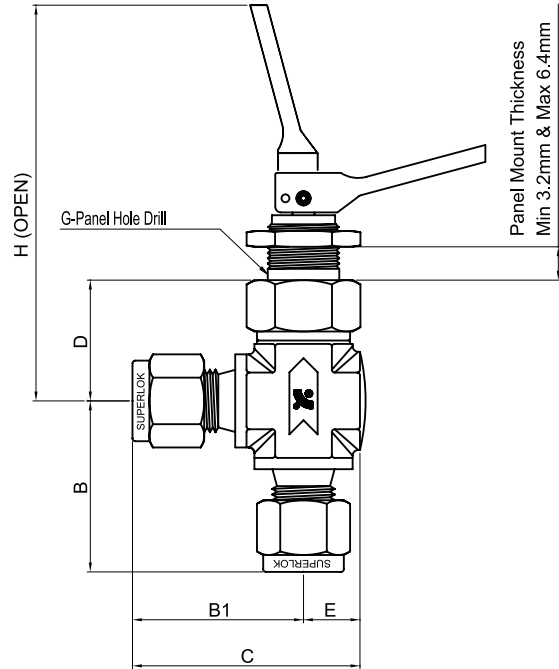


TABLE OF DIMENSIONS

| Part Number | Orifice (mm) | Cv | End Connection | | Dimensions (mm) | | | | | | | | |
|-------------|--------------|-----|----------------|-----------------|-----------------|------|------|------|------|------|------|------|------|
| | | | Inlet | Outlet | A | B | B1 | C | D | E | G | H | |
| STV1 | M2N | 2.0 | 0.11 | 1/8" Male NPT | | 38.1 | 19.0 | 19.0 | 27.0 | 23.4 | 7.9 | 13.5 | 72.9 |
| | M2N-S2 | | | 1/8" Male NPT | 1/8" Superlok | 43.9 | 19.0 | 24.9 | 32.8 | | | | |
| | S2 | | | 1/8" Superlok | | 49.8 | 24.9 | 24.9 | 32.8 | | | | |
| | S3M | | | 3mm Superlok | | 49.8 | 24.9 | 24.9 | 32.8 | | | | |
| STV2 | F2N | 3.2 | 0.2 | 1/8" Female NPT | | 41.4 | 20.6 | 20.6 | 30.2 | 21.8 | 9.5 | 13.5 | 71.4 |
| | M2N | | | 1/8" Male NPT | | 43.7 | 21.8 | 21.8 | 31.2 | | | | |
| | M4N | | | 1/4" Male NPT | | 49.8 | 24.9 | 24.9 | 34.5 | | | | |
| | M4N-S4 | | | 1/4" Male NPT | 1/4" Superlok | 53.6 | 24.9 | 28.7 | 38.1 | | | | |
| | M2N-F2N | | | 1/8" Male NPT | 1/8" Female NPT | 41.4 | 20.6 | 20.6 | 30.2 | | | | |
| | S4 | | | 1/4" Superlok | | 57.4 | 28.7 | 28.7 | 38.1 | | | | |
| | S6M | | | 6mm Superlok | | 57.4 | 28.7 | 28.7 | 38.1 | | | | |
| | S8M | | | 8mm Superlok | | 56.4 | 28.2 | 28.2 | 37.6 | | | | |
| STV3 | F4N | 6.4 | 0.7 | 1/4" Female NPT | | 53.8 | 26.9 | 26.9 | 39.6 | 26.9 | 12.7 | 16.8 | 90.4 |
| | M6N | | | 3/8" Male NPT | | 57.2 | 28.4 | 28.4 | 41.1 | | | | |
| | S6 | | | 3/8" Superlok | | 65.5 | 32.8 | 32.8 | 45.5 | | | | |
| | S8 | | | 1/2" Superlok | | 71.7 | 35.6 | 35.6 | 48.9 | | | | |
| | S10M | | | 10mm Superlok | | 69.1 | 34.5 | 34.5 | 47.2 | | | | |
| | S12M | | | 12mm Superlok | | 74.2 | 37.1 | 37.1 | 49.8 | | | | |

Dimension, shown on the above table, are measured with SUPERLOK nut in the finger-tight where applicable .
All dimension are for reference only, subject to change.