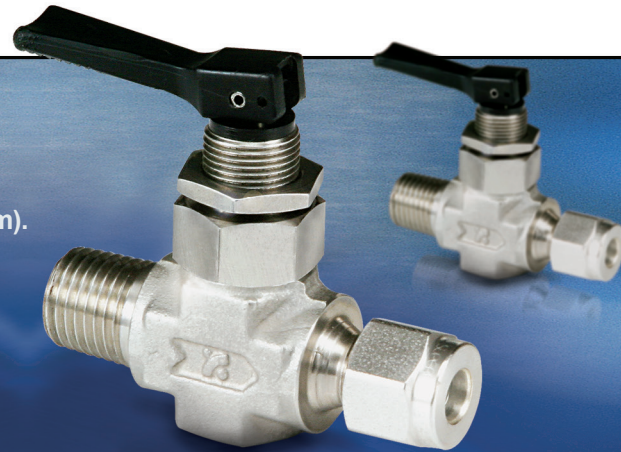


# TOGGLE VALVES

STV Series

## FEATURES

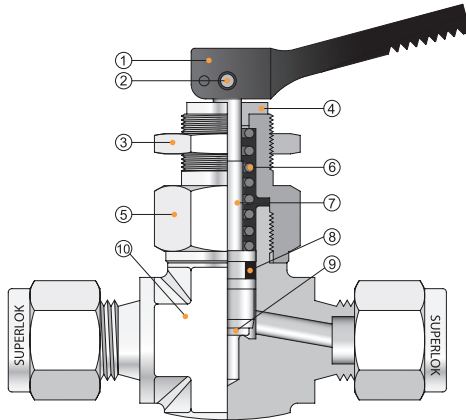
- Compact design.
- Quick acting.
- Orifice sizes from 0.080 to 0.250 in.(2.0 to 6.4 mm).
- Flow coefficients (Cv) from 0.11 to 0.70.
- Straight, angle flow patterns.
- **SUPERLOK** tube fitting, male and female NPT, and Combination of end connections.
- Each and every valve is tested at the factory.



## 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<br>(-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      | Stainless Steel 304 |
| 3   | Lock Nut      | A276-316            |
| 4   | Handle Washer | Nylon               |
| 5   | Packing Nut   | A276-316            |
| 6   | Spring        | Stainless Steel     |
| 7   | Stem          | A276-316            |
| 8   | O-Ring        | Viton               |
| 9   | Stem Tip      | PTFE                |
| 10  | Body          | A182-F316           |

## ORDERING INFORMATION

**STV2 - M 4N - N - B**

1                      2                      3                      4                      5

### 1. Valve Type

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

### 2. Port Type

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

### 4. O-Ring Material

- Blank: Viton
- N: NBR
- K: Kalez

### 3. Port Size

- Pipe Thread Designation

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

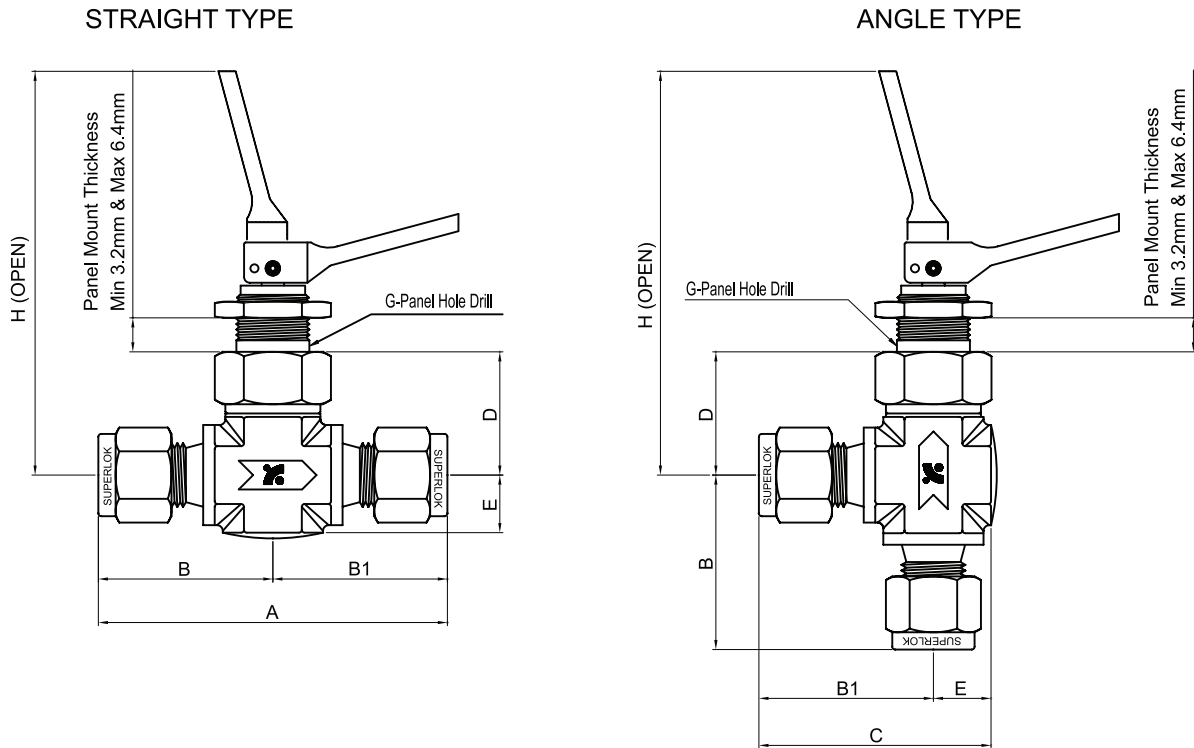
- Tube O.D Designation

| 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

- Blank: 316 Stainless Steel
- B: Brass

# TOGGLE VALVES STV Series



**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.  
 ISO Tapered Threads are available upon request.