

# VT Series

## 3-Way On/Off and Shut-off Valves

DVTXX2016X012

### Specifications

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

##### Operating Pressure

**3500 psig / 241 bar**

**Body:** Brass, 316 Stainless Steel

**Seat:** Tefzel® ETFE, CTFE

**6000 psig / 414 bar**

**Body:** Brass

**Seat:** VespeI®, PEEK

**10,000 psig / 690 bar**

**Body:** 316 Stainless Steel

**Seat:** VespeI®, PEEK

##### Design Proof Pressure

150% maximum rated

##### Leakage

**Internal:** Bubble-tight

**External:** Bubble-tight

##### Operating Temperature

See Part Number Selector

##### Flow Capacity

$C_v = 0.75$

##### Actuation Pressure

**Minimum:** 80 psig / 5.5 bar

**Maximum:** 110 psig / 7.6 bar

#### MEDIA CONTACT MATERIALS

##### Body

Brass, 316 Stainless Steel

##### Metallic Trim

316 Stainless Steel, 17-4 Stainless Steel, Brass (Brass bodies only)

##### Seat

Tefzel® ETFE, CTFE, PEEK, VespeI®

##### O-Ring

Buna-N, Kalrez®, Viton®, Ethylene Propylene (E.P.), Urethane

##### Back-up Rings

Teflon® for CTFE and Tefzel® seats

CTFE for PEEK and VespeI® seats

#### OTHER

##### Weight

5 lbs / 2.3 kg

Teflon®, Kalrez®, Tefzel®, VespeI® and Viton® are registered trademarks of E.I. du Pont de Nemours and Company.



TESCOM VT Series 3-way air-operated valve provides high cycle life in a compact design.

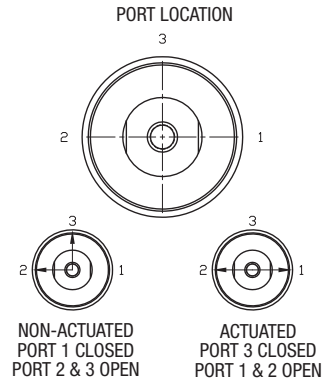
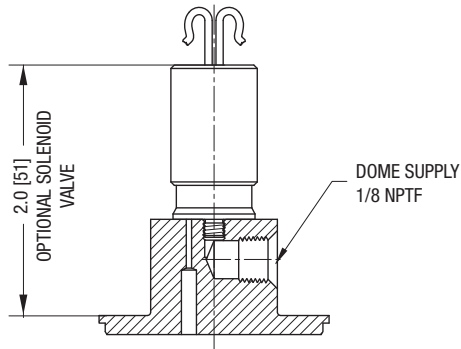
### Applications

- Component pressure cycle testing
- Two source selector valve
- Fill and dump applications (e.g. airbag canister filling, gas spring filling)
- Emergency shutoff
- Pneumatic and hydraulic applications

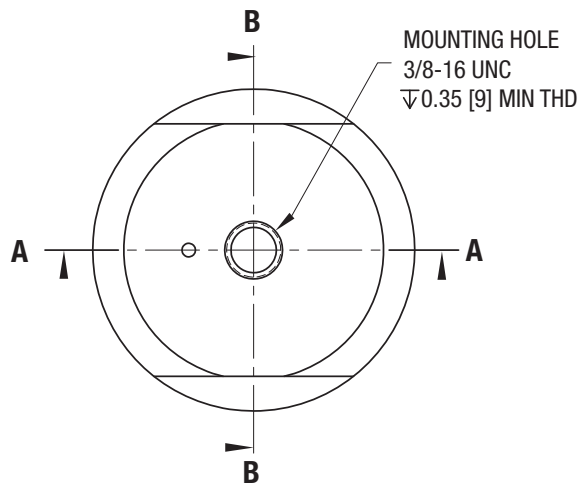
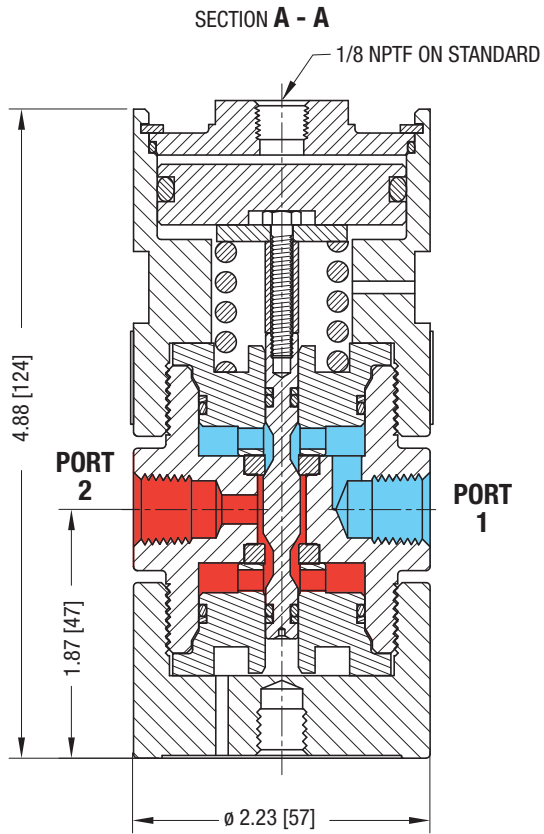
### Features and Benefits

- 1/4" and 3/8" ports
- $C_v = 0.75$
- Balanced main valve
- Solenoid valve is optional
- 2 position, 3-way
- Leak tight integrity - Class VI shutoff (bubble-tight)

VT Series 3-Way Valve Drawing

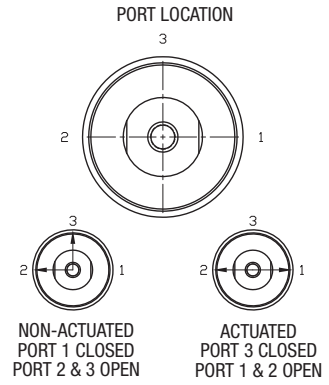
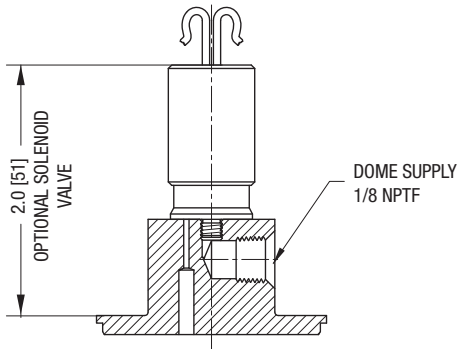


**NON-ACTUATED  
PORT 1 CLOSED, PORT 2 & 3 OPEN**



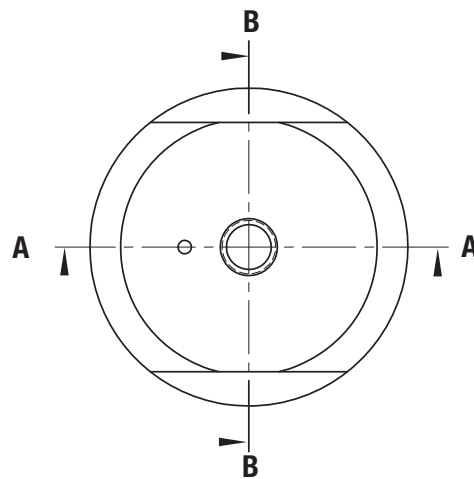
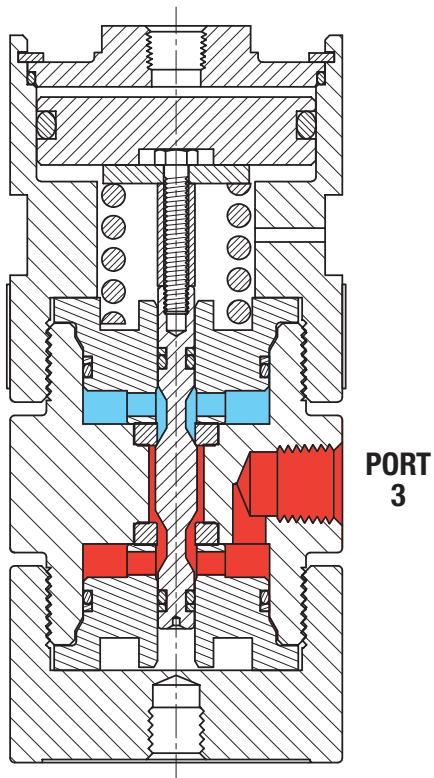
All dimensions are reference & nominal  
Metric [millimeter] equivalents are in brackets

# VT Series 3-Way Valve Drawing



**NON-ACTUATED  
PORT 1 CLOSED, PORT 2 & 3 OPEN**

## SECTION B - B



All dimensions are reference & nominal  
Metric [millimeter] equivalents are in brackets

## VT Series 3-Way Valve Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

VT	6	AB				9	A	A	A
BASIC SERIES	BODY MATERIAL	SEAT MATERIAL	O-RING MATERIAL	MAXIMUM OPERATING PRESSURE	OPERATING TEMPERATURE	OPTIONS	1 PORT LOCATION SIZE AND TYPE	2 PORT LOCATION SIZE AND TYPE	3 PORT LOCATION SIZE AND TYPE
VT	1 – Brass 6 – 316 Stainless Steel	AB – Tefzel® ETFE	Buna-N	Brass body 3500 psig 241 bar	-40°F to 165°F -40°C to 74°C	<b>9</b> – None  <b>C</b> – CCL  <b>V</b> – Solenoid valve 24 Volt DC  <b>W</b> – Solenoid valve 12 Volt DC	<b>A</b> – 1/4" NPTF <b>C</b> – 3/8" NPTF <b>E</b> – 1/4" SAE <b>J</b> – 3/8" SAE	<b>A</b> – 1/4" NPTF <b>C</b> – 3/8" NPTF <b>E</b> – 1/4" SAE <b>J</b> – 3/8" SAE	<b>A</b> – 1/4" NPTF <b>C</b> – 3/8" NPTF <b>E</b> – 1/4" SAE <b>J</b> – 3/8" SAE
		AK – Tefzel® ETFE	Kalrez®		20°F to 250°F -7°C to 121°C				
	AV – Tefzel® ETFE	Viton®	316 Stainless Steel body 3500 psig 241 bar	-15°F to 250°F -26°C to 121°C					
	AE – Tefzel® ETFE	E.P.		-40°F to 250°F -40°C to 121°C					
	AU – Tefzel® ETFE	Urethane	Brass body 3500 psig 241 bar	-40°F to 165°F -40°C to 74°C					
	CB – CTFE	Buna-N		-40°F to 165°F -40°C to 74°C					
	CK – CTFE	Kalrez®	20°F to 165°F -7°C to 74°C						
	CV – CTFE	Viton®	316 Stainless Steel body 3500 psig 241 bar	-15°F to 165°F -26°C to 74°C					
	CE – CTFE	E.P.		-40°F to 165°F -40°C to 74°C					
	CU – CTFE	Urethane	Brass body 3500 psig 241 bar	-40°F to 165°F -40°C to 74°C					
	PB – PEEK	Buna-N		-40°F to 165°F -40°C to 74°C					
	PK – PEEK	Kalrez®	6000 psig 414 bar	20°F to 250°F -7°C to 121°C					
	PV – PEEK	Viton®	316 Stainless Steel body 10,000 psig 690 bar	-15°F to 250°F -26°C to 121°C					
	PE – PEEK	E.P.		-40°F to 250°F -40°C to 121°C					
	PU – PEEK	Urethane	Brass body 6000 psig 414 bar	-40°F to 165°F -40°C to 74°C					
	VB – Vespel®	Buna-N		-40°F to 165°F -40°C to 74°C					
	VK – Vespel®	Kalrez®	20°F to 250°F -7°C to 121°C						
	VV – Vespel®	Viton®	316 Stainless Steel body 10,000 psig 690 bar	-15°F to 250°F -26°C to 121°C					
	VE – Vespel®	E.P.		-40°F to 250°F -40°C to 121°C					
	VU – Vespel®	Urethane	Brass body 6000 psig 414 bar	-40°F to 165°F -40°C to 74°C					



**WARNING!** Do not attempt to select, install, use or maintain this product until you have read and fully understood the *TESCOM Safety, Installation and Operation Precautions*.