

3-Way On/Off and Shut-off Valves

DVTXX2016X012

Specifications

For other materials or modifications, please consult TESCO.

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: Vespel®, PEEK

10,000 psig / 690 bar

Body: 316 Stainless Steel

Seat: Vespel®, 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 PH Stainless Steel,
Brass (Brass bodies only)

Seat

ETFE (Tefzel®), CTFE, PEEK, Polyimide (Vespel®)

O-Ring

Nitrile, Buna-N, FFKM, Perfluoroelastomer (Kalrez®), FKM
(Viton®-A), Ethylene Propylene, Urethane

Back-up Rings

PTFE for PCTFE and ETFE (Tefzel®) seats

PCTFE for PEEK and Polyimide (Vespel®) seats

OTHER

Weight

5 lbs / 2.3 kg

Teflon®, Kalrez®, Tefzel®, Vespel® 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

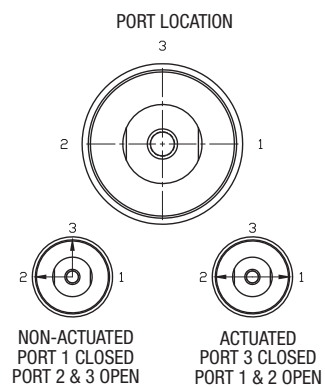
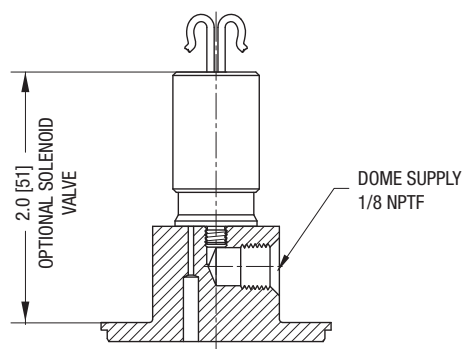
- Component pressure cycle testing
- Two source selector valve
- Fill and dump applications (e.g. airbag canister filling, gas spring filling)
- Emergency shutoff
- Pneumatic and hydraulic applications

Features and Benefits

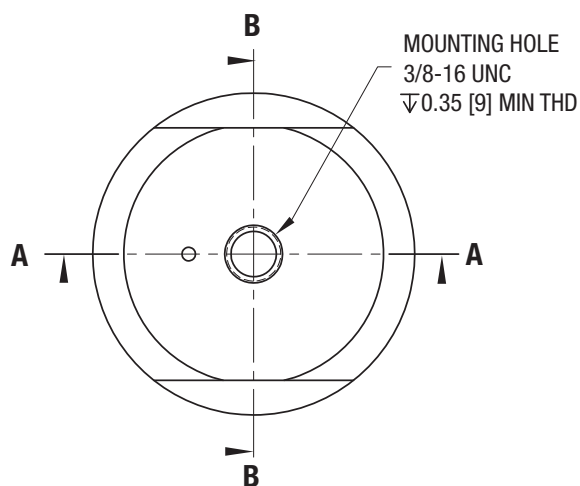
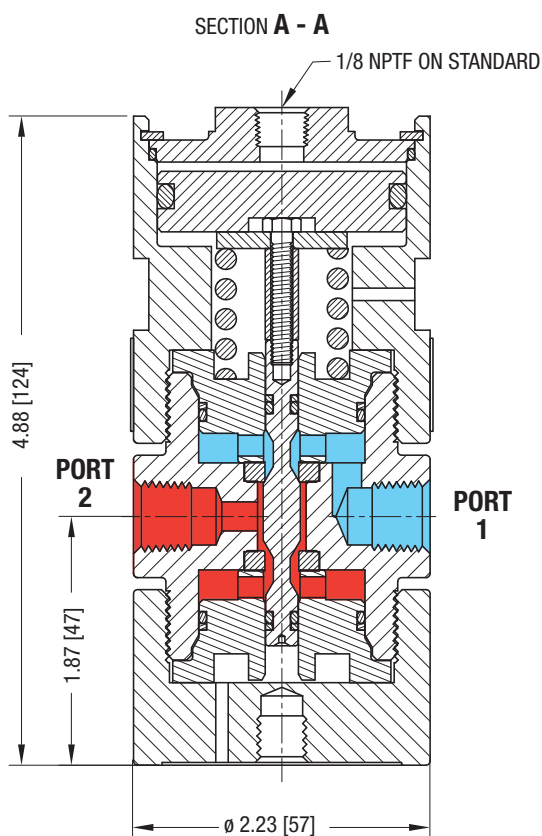
- 1/4" and 3/8" ports
- $C_v = 0.75$
- Balanced main valve
- Solenoid valve is optional
- 2 position, 3-way
- Leak tight integrity - Class VI shutoff (bubble-tight)

VT SERIES

VT Series 3-Way Valve Drawing

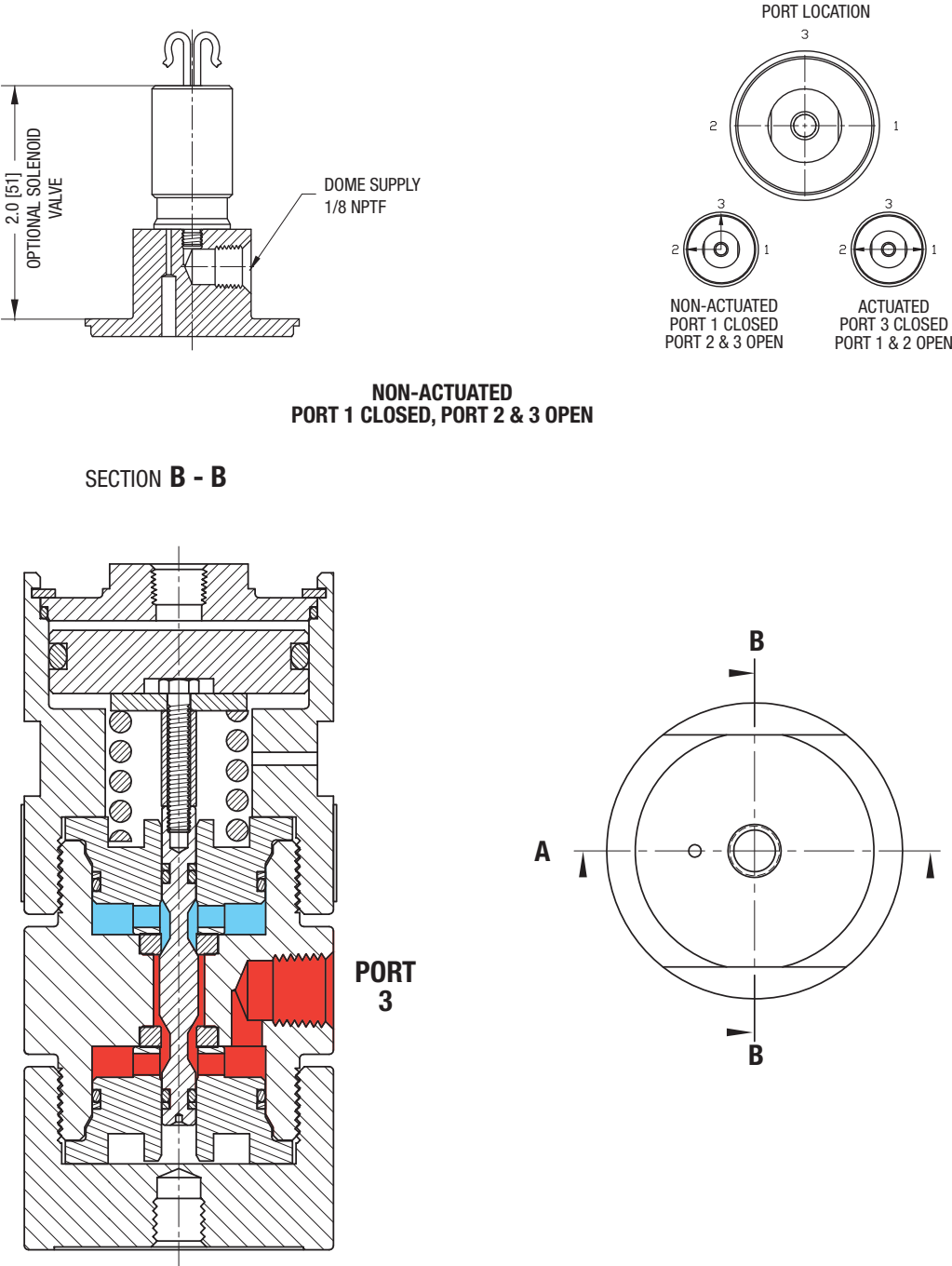


**NON-ACTUATED
PORT 1 CLOSED, PORT 2 & 3 OPEN**



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

VT Series 3-Way Valve Drawing



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

VT SERIES

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 – ETFE (Tefzel®)	Nitrile, Buna-N	Brass body 3500 psig 241 bar	-40°F to 165°F -40°C to 74°C	9 – None C – CCL V – Solenoid valve 24 Volt DC W – Solenoid valve 12 Volt DC	A – 1/4" NPTF C – 3/8" NPTF E – 1/4" SAE J – 3/8" SAE	A – 1/4" NPTF C – 3/8" NPTF E – 1/4" SAE J – 3/8" SAE	A – 1/4" NPTF C – 3/8" NPTF E – 1/4" SAE J – 3/8" SAE
		AK – ETFE (Tefzel®)	Kalrez®**		20°F to 250°F -7°C to 121°C				
		AV – ETFE (Tefzel®)	FKM (Viton®-A)	316 Stainless Steel body 3500 psig 241 bar	-15°F to 250°F -26°C to 121°C				
		AE – ETFE (Tefzel®)	Ethylene Propylene		-40°F to 250°F -40°C to 121°C				
		AU – ETFE (Tefzel®)	Urethane		-40°F to 165°F -40°C to 74°C				
		CB – PCTFE	Nitrile, Buna-N	Brass body 3500 psig 241 bar	-40°F to 165°F -40°C to 74°C				
		CK – PCTFE	Kalrez®**		20°F to 165°F -7°C to 74°C				
		CV – PCTFE	FKM (Viton®-A)	316 Stainless Steel body 3500 psig 241 bar	-15°F to 165°F -26°C to 74°C				
		CE – PCTFE	Ethylene Propylene		-40°F to 165°F -40°C to 74°C				
		CU – PCTFE	Urethane		-40°F to 165°F -40°C to 74°C				
		PB – PEEK	Nitrile, Buna-N	Brass body 6000 psig 414 bar	-40°F to 165°F -40°C to 74°C				
		PK – PEEK	Kalrez®**		20°F to 250°F -7°C to 121°C				
		PV – PEEK	FKM (Viton®-A)	316 Stainless Steel body 10,000 psig 690 bar	-15°F to 250°F -26°C to 121°C				
		PE – PEEK	Ethylene Propylene		-40°F to 250°F -40°C to 121°C				
		PU – PEEK	Urethane		-40°F to 165°F -40°C to 74°C				
		VB – Polyimide (Vespel®)	Nitrile, Buna-N	Brass body 6000 psig 414 bar	-40°F to 165°F -40°C to 74°C				
		VK – Polyimide (Vespel®)	Kalrez®**		20°F to 250°F -7°C to 121°C				
		VV – Polyimide (Vespel®)	FKM (Viton®-A)	316 Stainless Steel body 10,000 psig 690 bar	-15°F to 250°F -26°C to 121°C				
		VE – Polyimide (Vespel®)	Ethylene Propylene		-40°F to 250°F -40°C to 121°C				
		VU – Polyimide (Vespel®)	Urethane		-40°F to 165°F -40°C to 74°C				

* Brass body is limited to +200 °F (93 °C) maximum.

**FKM, Perfluoroelastomer (Kalrez®)