

General Description: Parker VQ Series Needle Valves are the right combination of performance and value for manual or pneumatic on-off control in moderate pressure and temperature applications. The manual version employs a toggle handle for quick action at pressures up to 300 psig. Compact double acting, normally closed, and normally open pneumatically actuated versions of this valve are ideal for automatic control at pressures up to 600 psig.

MANUAL TOGGLE**Features:**

- Quick acting
- Inline and angle patterns
- Available with CPI™, A-LOK®, male and female NPT end connections
- Panel mountable
- 316 stainless steel and brass body construction
- Stem seal materials -
 - Fluorocarbon Rubber
 - Buna-N Rubber
 - Ethylene Propylene Rubber
 - Highly Fluorinated Fluorocarbon Rubber

Specifications:

Pressure Ratings at all Temperatures:	300 psig CWP
Temperature Ratings:	PTFE Stem Tip: -20° F to 200° F
	PCTFE Stem Tip: -65° F to 200° F

ACTUATED VALVE**Features:**

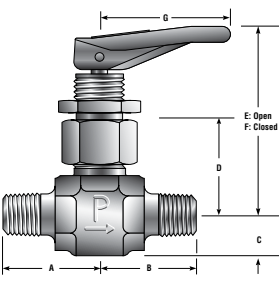
- Available in normally open, normally closed, and double acting models
- Inline and angle patterns
- Available with CPI™, A-LOK®, male and female NPT end connections
- Mounting bracket standard
- 316 stainless steel and brass body construction
- Stem seal materials -
 - Fluorocarbon Rubber
 - Buna-N Rubber
 - Ethylene Propylene Rubber
 - Highly Fluorinated Fluorocarbon Rubber
- 100% factory tested

Specifications:

Pressure Rating at all temperatures:	
Size V4 Normally Closed:	600 psig CWP
Size V6 Normally Closed:	500 psig CWP
Normally Open:	450 psig CWP
Double Acting:	450 psig CWP
Temperature Ratings -	
PTFE Stem Tip:	-20 °F to 200 °F
PCTFE Stem Tip:	-65 °F to 200 °F

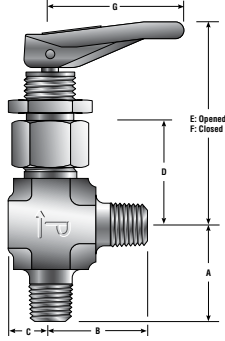
NEEDLE VALVES

VQ SERIES - V4



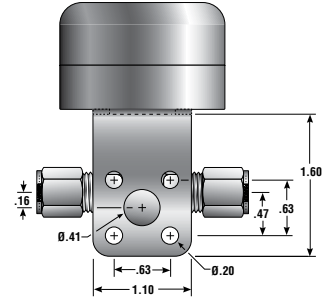
Model Shown: 4M-V4LQ-SSP

Panel Hole
Diameter:
V4: 0.52
Max. Panel
Thickness:
V4: 0.25



Model Shown: 4M-V4AQ-EPR-SSP

V4 VALVE MOUNTING BRACKET

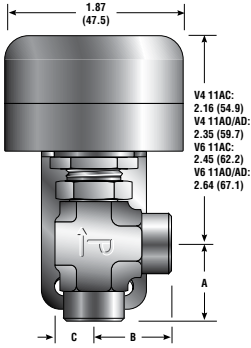


Part No.	End Connections		Flow Data			Dimensions						
	Inlet (Port 1)	Outlet (Port 2)	Orifice (in.)	C _v	X _T ⁺	A [†] (in.)	B [†] (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)
2A-V4LQ	1/8" Compression A-LOK®	A-LOK®	0.078	0.14	0.52	1.10	1.10	0.41	0.93	2.88	1.84	1.25
2A-V4AQ	1/8" Compression A-LOK®	A-LOK®	0.078	0.15	0.50	1.10	1.10	0.41	0.93	2.88	1.84	1.25
2F-V4LQ	1/8" Female NPT	A-LOK®	0.176	0.36	0.71	0.81	0.81	0.41	0.93	2.88	1.84	1.25
2F-V4AQ	1/8" Female NPT	A-LOK®	0.176	0.49	0.64	0.81	0.81	0.41	0.93	2.88	1.84	1.25
2M-V4LQ	1/8" Male NPT	A-LOK®	0.125	0.30	0.50	0.81	0.81	0.41	0.93	2.88	1.84	1.25
2M-V4AQ	1/8" Male NPT	A-LOK®	0.125	0.35	0.55	0.81	0.81	0.41	0.93	2.88	1.84	1.25
2Z-V4LQ	1/8" Compression CPI™	A-LOK®	0.078	0.14	0.52	1.10	1.10	0.41	0.93	2.88	1.84	1.25
2Z-V4AQ	1/8" Compression CPI™	A-LOK®	0.078	0.15	0.50	1.10	1.10	0.41	0.93	2.88	1.84	1.25
4A-V4LQ	1/4" Compression A-LOK®	A-LOK®	0.176	0.36	0.71	1.15	1.15	0.41	0.93	2.88	1.84	1.25
4A-V4AQ	1/4" Compression A-LOK®	A-LOK®	0.176	0.49	0.64	1.15	1.15	0.41	0.93	2.88	1.84	1.25
4M-V4LQ	1/4" Male NPT	A-LOK®	0.176	0.36	0.71	0.94	0.94	0.41	0.93	2.88	1.84	1.25
4M-V4AQ	1/4" Male NPT	A-LOK®	0.176	0.49	0.64	0.94	0.94	0.41	0.93	2.88	1.84	1.25
4Z-V4LQ	1/4" Compression CPI™	A-LOK®	0.176	0.36	0.71	1.15	1.15	0.41	0.93	2.88	1.84	1.25
4Z-V4AQ	1/4" Compression CPI™	A-LOK®	0.176	0.49	0.64	1.15	1.15	0.41	0.93	2.88	1.84	1.25
6A-V4LQ	3/8" Compression A-LOK®	A-LOK®	0.176	0.36	0.71	1.17	1.17	0.41	0.93	2.88	1.84	1.25
6A-V4AQ	3/8" Compression A-LOK®	A-LOK®	0.176	0.49	0.64	1.17	1.17	0.41	0.93	2.88	1.84	1.25
6Z-V4LQ	3/8" Compression CPI™	A-LOK®	0.176	0.36	0.71	1.17	1.17	0.41	0.93	2.88	1.84	1.25
6Z-V4AQ	3/8" Compression CPI™	A-LOK®	0.176	0.49	0.64	1.17	1.17	0.41	0.93	2.88	1.84	1.25

* Tested in accordance with ISA S75.02. Gas flow will be choked when P₁ - P₂ / P₂ = X_T.
† For CPI™ and A-LOK®, dimensions are measured with nuts in the finger tight position.

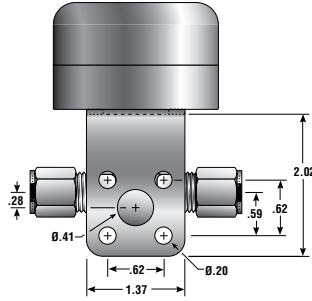
NEEDLE VALVES

VQ SERIES - V6



Panel Hole Diameter:
V6: 0.65
Max. Panel Thickness:
V6: 0.35

V6 VALVE MOUNTING BRACKET



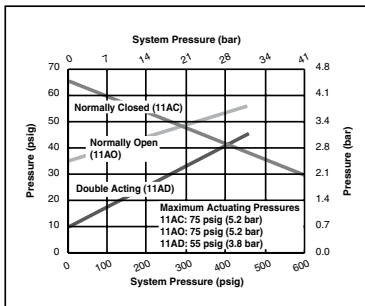
Model Shown: 4F-V6AQ-11AOA-B

Part No.	End Connections		Flow Data			Dimensions						
	Inlet (Part 1)	Outlet (Part 2)	Orifice (in.)	C _v	X _T *	A† (in.)	B† (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)
4F-V6LQ	1/4" Female NPT		0.250	0.83	0.70	1.00	1.00	0.53	1.07	3.45	2.13	1.60
4F-V6AQ	1/4" Female NPT		0.250	0.92	0.68	1.00	1.00	0.53	1.07	3.45	2.13	1.60
6A-V6LQ	3/8" Compression A-LOK®		0.250	0.83	0.70	1.29	1.29	0.53	1.07	3.45	2.13	1.60
6A-V6AQ	3/8" Compression A-LOK®		0.250	0.92	0.68	1.29	1.29	0.53	1.07	3.45	2.13	1.60
6Z-V6LQ	3/8" Compression CPI™		0.250	0.83	0.70	1.29	1.29	0.53	1.07	3.45	2.13	1.60
6Z-V6AQ	3/8" Compression CPI™		0.250	0.92	0.68	1.29	1.29	0.53	1.07	3.45	2.13	1.60
8A-V6LQ	1/2" Compression A-LOK®		0.250	0.83	0.70	1.37	1.37	0.53	1.07	3.45	2.13	1.60
8A-V6AQ	1/2" Compression A-LOK®		0.250	0.92	0.68	1.37	1.37	0.53	1.07	3.45	2.13	1.60
8Z-V6LQ	1/2" Compression CPI™		0.250	0.83	0.70	1.37	1.37	0.53	1.07	3.45	2.13	1.60
8Z-V6AQ	1/2" Compression CPI™		0.250	0.92	0.68	1.37	1.37	0.53	1.07	3.45	2.13	1.60

* Tested in accordance with ISA S75.02. Gas flow will be choked when $P_2 - P_1 / P_1 = X_T$.

† For CPI™ and A-LOK®, dimensions are measured with nuts in the finger tight position

MINIMUM ACTUATING PRESSURES



MANUAL TOGGLE VALVES

HOW TO ORDER

VQ SERIES

The correct part number is easily derived from the following number sequence. The six product characteristics required are coded as shown below. *Note: If the inlet and outlet ports are the same, eliminate the outlet port designator.

EXAMPLE: 4Z * - V4LQ K - BN - SSP

① ② ③ ④ ⑤ ⑥
 Inlet Outlet Valve Stem Stem Body
 Port Port Series Tip Seal Material

Describes a V4 Series inline pattern toggle valve equipped with 1/4" CPITM compression inlet and outlet ports, PCTFE stem tip, Buna-N rubber stem seal, and stainless steel construction with panel mounting nut.

① Inlet Port	② Outlet Port	③ Valve Series	④ Stem Tip	⑤ Stem Seal	⑥ Body Material
2A, 2F, 2M, 2Z, 4A, 4M, 4Z, 6A, 6Z		V4LQ V4AQ	Blank - PTFE	Blank - Fluorocarbon Rubber BN - Buna-N Rubber EPR - Ethylene Propylene Rubber KZ- Highly Fluorinated Fluorocarbon Rubber	SSP - Stainless Steel with Panel Nut
4F, 6A, 6Z, 8A, 8Z		V6LQ V6AQ	K - PCTFE		BP - Brass with Panel Nut

ACTUATED VALVES

HOW TO ORDER

VQ SERIES

The correct part number is easily derived from the following number sequence. The seven product characteristics required are coded as shown below. *Note: If the inlet and outlet ports are the same, eliminate the outlet port designator.

EXAMPLE: 4M 4A - V4AQ - - 11AC - B

① ② ③ ④ ⑤ ⑥ ⑦
 Inlet Outlet Valve Stem Stem Actuator Body
 Port Port Series Tip Seal Type Material

Describes a V4 Series pneumatically actuated (normally closed) angle pattern valve equipped with a 1/4" MNPT inlet port, a 1/4" A-LOK® compression outlet port, PTFE stem tip, Fluorocarbon rubber stem seal, brass construction with mounting bracket.

① Inlet Port	② Outlet Port	③ Valve Series	④ Stem Tip	⑤ Stem Seal	⑥ Actuator Type	⑦ Body Material
2A, 2F, 2M, 2Z, 4A, 4M, 4Z, 6A, 6Z		V4LQ V4AQ	Blank - PTFE	Blank - Fluorocarbon Rubber BN - Buna-N Rubber EPR - Ethylene Propylene Rubber KZ- Highly Fluorinated Fluorocarbon Rubber	11AC - Normally Closed 11AD - Normally Open 11AD - Double Acting	SSP - Stainless Steel
4F, 6A, 6Z, 8A, 8Z		V6LQ V6AQ	K - PCTFE			BP - Brass