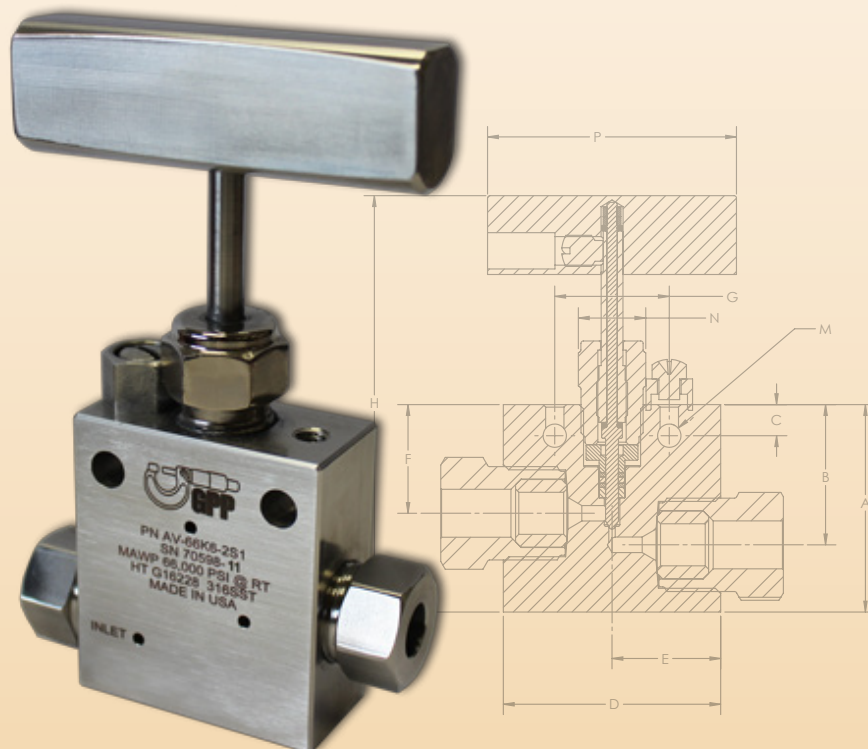


AV VALVES

- 2-Way Angle Valve
- 2-Way Straight Valve
- 3-Way 1 On Pressure
- 3-Way 2 On Pressure
- V-stem
- Metering
- Regulating
- Bi-directional



**Dimensions are subject to change and are considered reference.*

HAND VALVE PART NUMBERING MATRIX



		CONNECTION VARIATIONS									
Assembly	VALVE TYPE	PRESSURE (psi)		Size (inch)		Valve Type	Valve Stem	Actuator	Material		
A	V VALVE	66k	66,000	4	1/4	2A	1	Blank	A4	304 ANN	
		20k	20,000	6	3/8	2S	2	1	A6	316 ANN	
		30k	30,000	9	9/16	31	3	2	C4	304 CW	
		43k	43,000	12	3/4	32	4	3	Blank	316 CW	
				16	1			4	D4	17-4	
								5	D5	15-5	
								6	H	HASTELLOY	
								7	I	INCONEL	
								8			
								9			

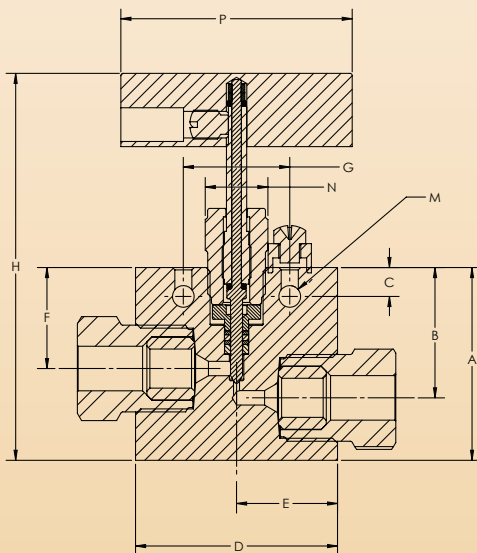
- 2A 2-Way Angle Valve
- 2S 2-Way Straight Valve
- 31 3-Way 1 On Pressure
- 32 3-Way 2 On Pressure

- 1 V-stem
- 2 Metering
- 3 Regulating
- 4 Bi-directional

- 0 Standard Hand Valve
- 1 Air Actuated Valve Less Acuator
- 2 Normally Open Air to Close 5" (ATC)
- 3 Normally Closed Air to Open 5" (ATO)
- 4 Normally Open Air to Close 8" (ATC)
- 5 Normally Closed Air to Open 8" (ATO)
- 6* Double Acting 5"
- 7* Double Acting 8"
- 8* 2x Double Acting
- 9* Double Acting Hydraulic

*Actuators 6, 7, 8 & 9 are custom designs to meet specific customer requirements.

EXAMPLE



Part Number AV-66K6-2S1:
Assembly Valve
 66,000 PSI, 3/8", 2-Way Straight, V-Stem
 Standard Handle

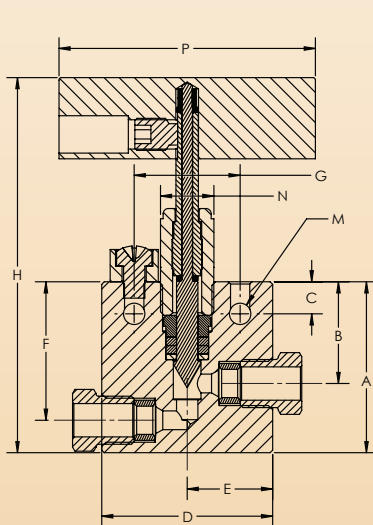
*Dimensions are subject to change and are considered reference.

MEDIUM PRESSURE VALVES

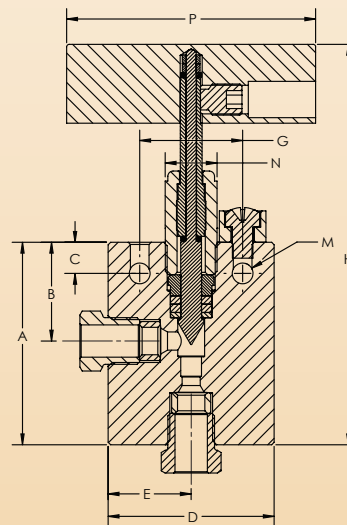
2-WAY STRAIGHT

2-WAY ANGLE

PART NUMBER	NOMINAL TUBING OD	PRESSURE RATING psi (bar)	MIN. OPENING	DIMENSIONS - INCHES (mm)											BLOCK THK.
				A	B	C	D	E	F	G	H	M	N	P	
2-Way Straight															
AV-20K4-2S1	1/4	20,000	0.125	2.00	1.19	0.38	2.00	1.00	1.62	1.25	4.69	0.22	0.75	3.00	0.75
	(6.35)	(1379.31)	(3.18)	(50.80)	(30.23)	(9.65)	(50.80)	(25.40)	(41.15)	(31.75)	(119.13)	(5.59)	(19.05)	(76.20)	(19.05)
AV-20K6-2S1	3/8	20,000	0.219	2.00	1.19	0.38	2.00	1.00	1.62	1.25	4.63	0.22	0.75	3.00	0.75
	(9.53)	(1379.31)	(5.56)	(50.80)	(30.23)	(9.65)	(50.80)	(25.40)	(41.15)	(31.75)	(117.60)	(5.59)	(19.05)	(76.20)	(19.05)
AV-20K9-2S1	9/16	20,000	0.312	2.88	1.75	0.50	2.50	1.25	2.38	1.38	5.93	0.34	1.00	4.00	1.00
	(14.29)	(1379.31)	(7.92)	(73.15)	(44.45)	(12.70)	(63.50)	(31.75)	(60.45)	(35.05)	(150.62)	(8.64)	(25.40)	(101.60)	(25.40)
AV-20K12-2S1	3/4	20,000	0.438	3.75	2.25	0.63	3.00	1.50	3.00	1.75	7.00	0.44	1.13	10.25	1.38
	(19.05)	(1379.31)	(11.13)	(95.25)	(57.15)	(16.00)	(76.20)	(38.10)	(76.20)	(44.45)	(177.80)	(11.18)	(28.58)	(260.35)	(35.05)
AV-20K16-2S1	1	20,000	0.562	4.63	2.81	1.13	4.12	2.06	3.75	2.50	9.00	0.56	1.63	10.25	1.75
	(25.4)	(1379.31)	(14.27)	(117.60)	(71.37)	(28.70)	(104.65)	(52.32)	(95.25)	(63.50)	(228.60)	(14.22)	(41.28)	(260.35)	(44.45)
2-Way Angle															
AV-20K4-2A1	1/4	20,000	0.125	2.44	1.19	0.38	2.00	1.00		1.25	4.81	0.22	0.75	3.00	0.75
	(6.35)	(1379.31)	(3.18)	(61.98)	(30.23)	(9.65)	(50.80)	(25.40)		(31.75)	(122.17)	(5.59)	(19.05)	(76.20)	(19.05)
AV-20K6-2A1	3/8	20,000	0.219	2.44	1.19	0.38	2.00	1.00		1.25	4.81	0.22	0.75	3.00	0.75
	(9.53)	(1379.31)	(5.56)	(61.98)	(30.23)	(9.65)	(50.80)	(25.40)		(31.75)	(122.17)	(5.59)	(19.05)	(76.20)	(19.05)
AV-20K9-2A1	9/16	20,000	0.312	3.38	1.75	0.50	2.50	1.25		1.38	6.43	0.34	1.00	4.00	1.00
	(14.29)	(1379.31)	(7.92)	(85.85)	(44.45)	(12.70)	(63.50)	(31.75)		(35.05)	(163.32)	(8.64)	(25.40)	(101.60)	(25.40)
AV-20K12-2A1	3/4	20,000	0.438	4.25	2.25	0.63	3.00	1.50		1.75	7.50	0.44	1.12	10.25	1.38
	(19.05)	(1379.31)	(11.13)	(107.95)	(57.15)	(16.00)	(76.20)	(38.10)		(44.45)	(190.50)	(11.18)	(28.45)	(260.35)	(35.05)
AV-20K16-2A1	1	20,000	0.562	5.12	2.81	1.13	4.12	2.06		2.50	9.00	0.56	1.62	10.25	1.75
	(25.4)	(1379.31)	(14.27)	(130.05)	(71.37)	(28.70)	(104.65)	(52.32)		(63.50)	(228.60)	(14.22)	(41.15)	(260.35)	(44.45)



2-Way Straight



2-Way Angle

**Dimensions are subject to change and are considered reference.*

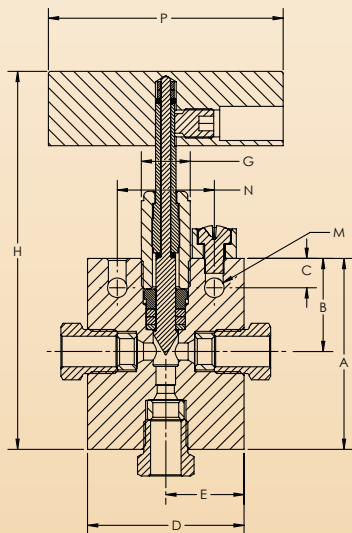
MEDIUM PRESSURE VALVES

3-WAY/1 on Pressure

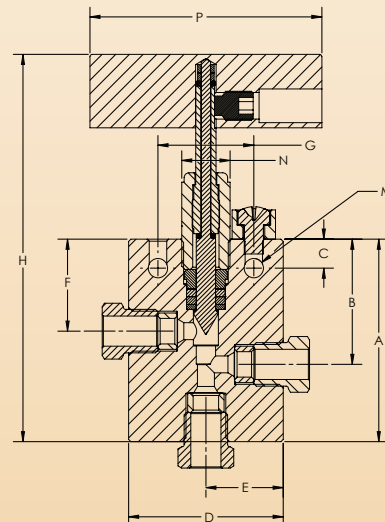
3-WAY/2 on Pressure



PART NUMBER	NOMINAL TUBING OD	PRESSURE RATING psi (bar)	MIN. OPENING	DIMENSIONS - INCHES (mm)											BLOCK THK.	
				A	B	C	D	E	F	G	H	M	N	P		
3-Way/1 on Pressure																
AV-20K4-311	1/4	20,000	0.125	2.44	1.19	0.38	2.00	1.00			1.25	4.81	0.22	0.75	3.00	0.75
	(6.35)	(1379.31)	(3.18)	(61.98)	(30.23)	(9.65)	(50.80)	(25.40)			31.75	(122.17)	(5.59)	(19.05)	(76.20)	(19.05)
AV-20K6-311	3/8	20,000	0.219	2.44	1.19	0.38	2.00	1.00			1.25	4.81	0.22	0.75	3.00	0.75
	(9.53)	(1379.31)	(5.56)	(61.98)	(30.23)	(9.65)	(50.80)	(25.40)			31.75	(122.17)	(5.59)	(19.05)	(76.20)	(19.05)
AV-20K9-311	9/16	20,000	0.312	3.38	1.75	0.50	2.50	1.25			1.38	6.31	0.34	1.00	4.00	1.00
	(14.29)	(1379.31)	(7.92)	(85.85)	(44.45)	(12.70)	(63.50)	(31.75)			35.05	(160.27)	(8.64)	(25.40)	(101.60)	(25.40)
AV-20K12-311	3/4	20,000	0.438	4.25	2.25	0.63	3.00	1.50			1.75	7.50	0.44	1.12	10.25	1.38
	(19.05)	(1379.31)	(11.13)	(107.95)	(57.15)	(16.00)	(76.20)	(38.10)			44.45	(190.50)	(11.18)	(28.45)	(260.35)	(35.05)
AV-20K16-311	1	20,000	0.562	5.12	2.81	1.13	4.12	2.06			2.50	9.09	0.56	1.62	10.25	1.75
	(25.4)	(1379.31)	(14.27)	(130.05)	(71.37)	(28.70)	(104.65)	(52.32)			63.50	(230.89)	(14.22)	(41.15)	(260.35)	(44.45)
3-Way/2 on Pressure																
AV-20K4-321	1/4	20,000	0.125	2.63	1.63	0.38	2.00	1.00	1.19		1.25	5.00	0.22	0.75	3.00	0.75
	(6.35)	(1379.31)	(3.18)	(66.80)	(41.40)	(9.65)	(50.80)	(25.40)	(30.23)		31.75	(127.00)	(5.59)	(19.05)	(76.20)	(19.05)
AV-20K6-321	3/8	20,000	0.219	2.63	1.63	0.38	2.00	1.00	1.19		1.25	5.00	0.22	0.75	3.00	0.75
	(9.53)	(1379.31)	(5.56)	(66.80)	(41.40)	(9.65)	(50.80)	(25.40)	(30.23)		31.75	(127.00)	(5.59)	(19.05)	(76.20)	(19.05)
AV-20K9-321	9/16	20,000	0.312	3.63	2.38	0.50	2.50	1.25	1.75		1.38	6.51	0.34	1.00	4.00	1.00
	(14.29)	(1379.31)	(7.92)	(92.20)	(60.45)	(12.70)	(63.50)	(31.75)	(44.45)		35.05	(165.35)	(8.64)	(25.40)	(101.60)	(25.40)
AV-20K12-321	3/4	20,000	0.438	4.63	3.00	0.63	3.00	1.50	2.25		1.75	7.88	0.44	1.12	10.25	1.38
	(19.05)	(1379.31)	(11.13)	(117.60)	(76.20)	(16.00)	(76.20)	(38.10)	(57.15)		44.45	(200.15)	(11.18)	(28.45)	(260.35)	(35.05)
AV-20K16-321	1	20,000	0.562	5.88	3.75	1.13	4.12	2.06	2.81		2.50	9.75	0.56	1.62	10.25	1.75
	(25.4)	(1379.31)	(14.27)	(149.35)	(95.25)	(28.70)	(104.65)	(52.32)	(71.37)		63.50	(247.65)	(14.22)	(41.15)	(260.35)	(44.45)



3-Way/1 on Pressure



3-Way/2 on Pressure

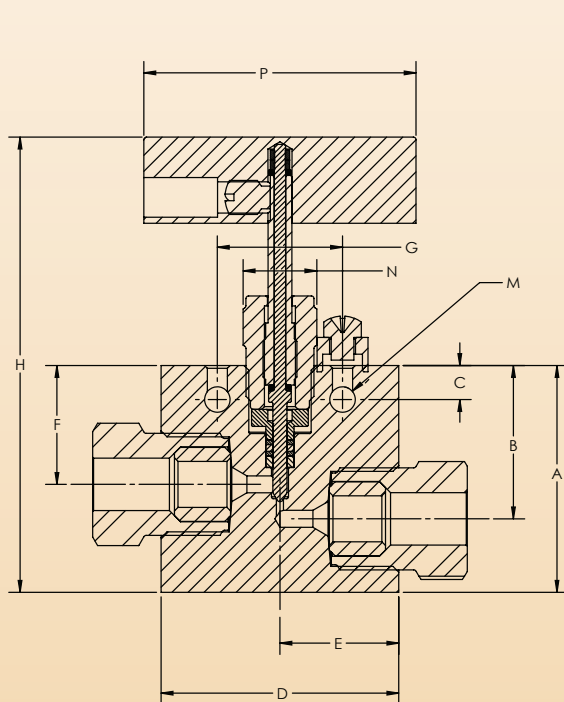
**Dimensions are subject to change and are considered reference.*

HIGH PRESSURE VALVES

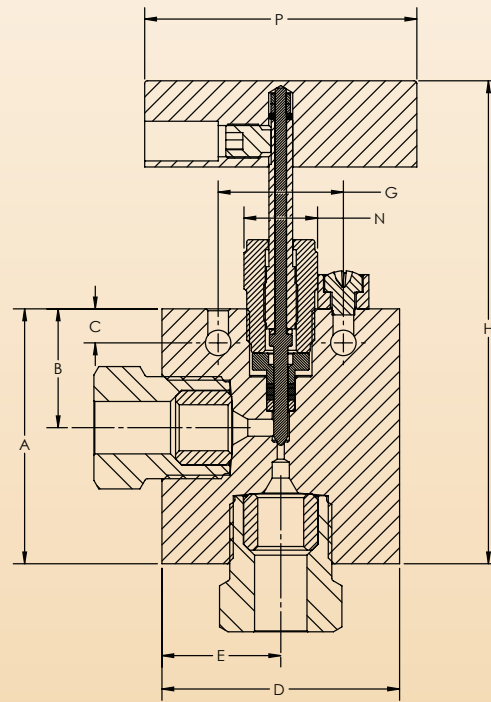
2-WAY STRAIGHT

2-WAY ANGLE

PART NUMBER	NOMINAL TUBING OD	PRESSURE RATING psi (bar)	MIN. OPENING	DIMENSIONS - INCHES (mm)											BLOCK THK.
				A	B	C	D	E	F	G	H	M	N	P	
2-Way Straight															
AV-66K4-2S1	1/4	66,000	0.062	2.12	1.69	0.38	2.00	1.00	1.31	1.38	4.75	0.22	1.00	3.00	1.00
	(6.35)	(4551.72)	(1.57)	(55.85)	(42.93)	(9.65)	(50.80)	(25.40)	(33.27)	(35.05)	(120.65)	(5.59)	(25.40)	(76.20)	(25.40)
AV-66K6-2S1	3/8	66,000	0.062	2.25	1.69	0.38	2.00	1.00	1.31	1.38	4.87	0.22	1.00	3.00	1.00
	(9.53)	(4551.72)	(1.57)	(57.15)	(42.93)	(9.65)	(50.80)	(25.40)	(33.27)	(35.05)	(123.70)	(5.59)	(25.40)	(76.20)	(25.40)
AV-66K9-2S1	9/16	66,000	0.078	2.50	1.75	0.38	2.62	1.31	1.31	1.38	5.13	0.28	1.00	3.00	1.50
	(14.29)	(4551.72)	(1.98)	(63.50)	(45.45)	(9.65)	(66.55)	(33.27)	(33.27)	(35.05)	(130.30)	(7.11)	(25.40)	(76.20)	(38.10)
2-Way Angle															
AV-66K4-2A1	1/4	66,000	0.062	2.38	1.31	0.38	2.00	1.00		1.38	5.00	0.22	1.00	3.00	1.00
	(6.35)	(4551.72)	(1.57)	(60.45)	(33.27)	(9.65)	(50.80)	(25.40)		(35.05)	(127.00)	(5.59)	(25.40)	(76.20)	(25.40)
AV-66K6-2A1	3/8	66,000	0.062	2.62	1.31	0.38	2.00	1.00		1.38	5.25	0.22	1.00	3.00	1.00
	(9.53)	(4551.72)	(1.57)	(66.55)	(33.27)	(9.65)	(50.80)	(25.40)		(35.05)	(133.35)	(5.59)	(25.40)	(76.20)	(25.40)
AV-66K9-2A1	9/16	66,000	0.078	2.81	1.31	0.38	2.62	1.31		1.38	5.44	0.28	1.00	3.00	1.50
	(14.29)	(4551.72)	(1.98)	(71.37)	(33.27)	(9.65)	(66.55)	(33.27)		(35.05)	(138.18)	(7.11)	(25.40)	(76.20)	(38.10)



2-Way Straight



2-Way Angle

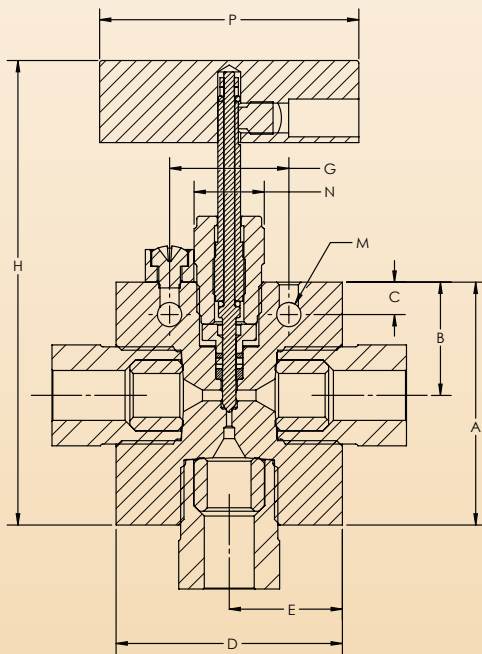
**Dimensions are subject to change and are considered reference.*

HIGH PRESSURE VALVES

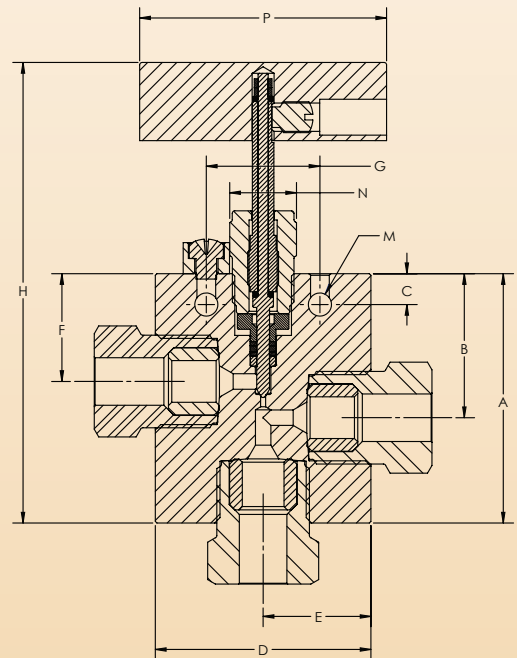
3-WAY/1 on Pressure

3-WAY/2 on Pressure

PART NUMBER	NOMINAL TUBING OD	PRESSURE RATING psi (bar)	MIN. OPENING	DIMENSIONS - INCHES (mm)											BLOCK THK.	
				A	B	C	D	E	F	G	H	M	N	P		
3-Way/1 on Pressure																
AV-66K4-311	1/4	66,000	0.062	2.38	1.31	0.38	2.00	1.00			1.38	5.00	0.22	1.00	3.00	1.00
	(6.35)	(4551.72)	(1.57)	(60.45)	(33.27)	(9.65)	(50.80)	(25.40)			(35.05)	(127.00)	(5.59)	(25.40)	(76.20)	(25.40)
AV-66K6-311	3/8	66,000	0.062	2.62	1.31	0.38	2.00	1.00			1.38	5.25	0.22	1.00	3.00	1.00
	(9.53)	(4551.72)	(1.57)	(66.55)	(33.27)	(9.65)	(50.80)	(25.40)			(35.05)	(133.35)	(5.59)	(25.40)	(76.20)	(25.40)
AV-66K9-311	9/16	66,000	0.078	2.81	1.31	0.38	2.62	1.31			1.38	5.44	0.28	1.00	3.00	1.50
	(14.29)	(4551.72)	(1.98)	(71.37)	(33.27)	(9.65)	(66.55)	(33.27)			(35.05)	(138.18)	(7.11)	(25.40)	(76.20)	(38.10)
3-Way/2 on Pressure																
AV-66K4-321	1/4	66,000	0.062	2.38	1.69	0.38	2.00	1.00	1.31	1.38	5.125	0.22	1.00	3.00	1.00	
	(6.35)	(4551.72)	(1.57)	(60.45)	(42.93)	(9.65)	(50.80)	(25.40)	(33.27)	(35.05)	(130.18)	(5.59)	(25.40)	(76.20)	(25.40)	
AV-66K6-321	3/8	66,000	0.062	2.75	1.69	0.38	2.00	1.00	1.31	1.38	5.38	0.22	1.00	3.00	1.00	
	(9.53)	(4551.72)	(1.57)	(68.86)	(42.93)	(9.65)	(50.80)	(25.40)	(33.27)	(35.05)	(136.65)	(5.59)	(25.40)	(76.20)	(25.40)	
AV-66K9-321	9/16	66,000	0.078	3.03	1.75	0.38	2.62	1.31	1.31	1.38	5.5	0.28	1.00	3.00	1.50	
	(14.29)	(4551.72)	(1.98)	(76.96)	(45.45)	(9.65)	(66.55)	(33.27)	(33.27)	(35.05)	(139.70)	(7.11)	(25.40)	(76.20)	(38.10)	



3-Way/1 on Pressure



3-Way/2 on Pressure

**Dimensions are subject to change and are considered reference.*