

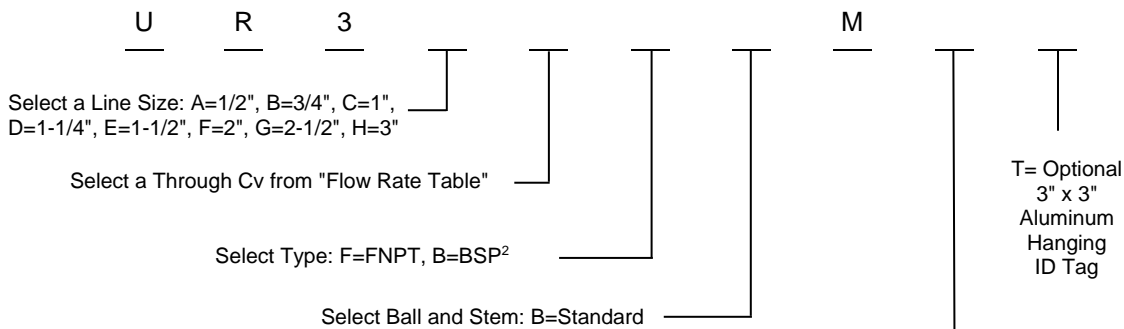
**SPECIFICATIONS**

- Static Pressure/Temp:** 360 PSI / -22°F to 250°F
- Service:** Chilled water, hot water, up to 50% Glycol, or contact factory for additional fluids.
- Flow Optimizer:** Glass Filled Polymer
- Body Material:** Forged Brass ASTM B283-06
- End Connections:** Brass – NPT or BSP
- Field Repairable Stem:** Dual Teflon seals and EPDM O-ring
- Stem Seals:** EPDM O-Rings
- Ball Valve:** Nickel-plated brass ball
- Ball Seals:** Teflon Seals with EPDM O-Rings
- Angle of Rotation:** 0-90°
- Installation:** Valve can be installed in mixing or diverting installations.

**DIMENSIONS & WEIGHTS (NOMINAL) (measured in inches and lbs unless noted)**

SIZE	MODEL NO.	THROUGH Cv	A:LENGTH		B:HEIGHT		C:LENGTH		D:DEPTH (NOT SHOWN)	E: HANDLE	F:HEIGHT		G:HEIGHT		WEIGHT
			FNPT	BSP	FNPT	BSP	FNPT	BSP			FNPT	BSP	FNPT	BSP	
1/2"	UR3A_	0.33, 0.59, 1.0, 2.4, 4.3, 8.0	2.7	2.7	3.4	3.4	7.0	7.0	3.0	2.0	9.5	9.5	2.0	2.0	1.6
3/4"	UR3B_	0.40, 0.66, 1.3, 2.4, 3.8, 7.0, 11.0	2.8	2.8	3.4	3.4	6.5	6.5	3.0	2.0	8.9	8.9	2.0	2.0	1.6
1"	UR3C_	0.40, 0.65, 1.3, 2.3, 3.5, 10.0	2.8	2.8	3.4	3.4	7.3	7.3	3.0	2.0	9.6	9.6	2.1	2.1	1.6
		8.6	3.0	3.0	3.9	3.9	6.8	6.8			9.9	9.9	2.4	2.4	2.3
		4.5, 14.9, 22.3, 30.8	4.3	4.3	4.1	4.1	7.8	7.8			10.9	10.9	3.3	3.3	3.6
1-1/4"	UR3D_	4.1, 8.7, 19.4	3.0	3.0	3.9	3.9	6.8	6.8	3.0	2.0	9.9	9.9	2.4	2.4	3.3
		12.7, 26.8, 34.1	3.6	3.6	4.1	4.1	7.3	7.3			10.4	10.4	2.8	2.8	3.5
1-1/2"	UR3E_	4.0, 8.3, 13.4, 32.0	3.4	3.4	4.1	4.1	7.8	7.8	3.0	2.0	10.9	10.9	2.7	2.7	3.6
		23.5, 61.1	4.0	4.0	4.6	4.6	7.3	7.3			11.1	11.1	3.2	3.2	5.2
2"	UR3F_	23.9, 38.2, 56.7	4.0	4.0	4.6	4.6	7.3	7.3	3.0	2.0	11.1	11.1	3.2	3.2	5.2
		82.6, 108.5	5.0	5.0	5.9	5.9	7.8	7.8			12.4	12.4	3.8	3.8	8.5
2-1/2"	UR3G_	38.1, 74.1, 99.5	5.3	5.3	5.9	5.9	7.8	7.8	3.0	2.0	12.4	12.4	4.1	4.1	9.1
3"	UR3H_	75, 100, 125, 150, 175, 200	9.4	9.4	4.5	N/A <sup>2</sup>	10.1	10.1	7.1	2.0	12.3	12.3	2.8	N/A <sup>2</sup>	23.0

**MODEL NUMBER SELECTION**



Insert Actuator Model Number. If Actuator is supplied by others, insert "1" for Neptronic, "2" for Johnson Controls, "3" for Schneider Electric, "4" for Honeywell, "5" for Siemens, "6" for Belimo, "7" for KMC Controls

**NOTES**

<sup>1</sup> Valve shown is 1/2" to 2-1/2". 3" valve has bypass port in Z plane.

<sup>2</sup> Not available in 3" size.

Replaces form F-4306

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THROUGH Cv SELECTION AND FLOW RATE TABLE (GPM)

LINE SIZE	MODEL NO.	THROUGH Cv	FULL <sup>3</sup> PORT	CLOSE OFF <sup>4</sup> ΔP	FLOWRATE (GPM) @ DIFFERENTIAL PRESSURE (PSI)											
					2-Position HVAC Apps		HVAC Modulating Apps									
					0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	7.0	10.0
1/2"	UR3A	A=0.33		50 PSI	0.2	0.33	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.9	1.0
	UR3A	B=0.59			0.4	0.59	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.3	1.6	1.9
	UR3A	C=1.0			0.7	1.0	1.2	1.4	1.6	1.7	1.9	2.0	2.1	2.2	2.6	3.2
	UR3A	D=2.4			1.7	2.4	2.9	3.4	3.8	4.2	4.5	4.8	5.1	5.4	6.3	7.6
	UR3A	E=4.3			3.0	4.3	5.3	6.1	6.8	7.4	8.0	8.6	9.1	9.6	11.4	13.6
	UR3A	F=8.0			5.7	8.0	9.8	11.3	12.6	13.9	15.0	16.0	17.0	17.9	21.2	25.3
3/4"	UR3B	A=0.40		50 PSI	0.3	0.40	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.1	1.3
	UR3B	B=0.66			0.5	0.66	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.7	2.1
	UR3B	C=1.3			0.9	1.3	1.6	1.8	2.1	2.3	2.4	2.6	2.8	2.9	3.4	4.1
	UR3B	D=2.4			1.7	2.4	2.9	3.4	3.8	4.2	4.5	4.8	5.1	5.4	6.3	7.6
	UR3B	E=3.8			2.7	3.8	4.7	5.4	6.0	6.6	7.1	7.6	8.1	8.5	10.1	12.0
	UR3B	G=7.0			4.9	7.0	8.6	9.9	11.1	12.1	13.1	14.0	14.8	15.7	18.5	22.1
	UR3B	F=11.0	•		7.8	11.0	13.5	15.6	17.4	19.1	20.6	22.0	23.3	24.6	29.1	34.8
1"	UR3C	A=0.40		50 PSI	0.3	0.40	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.1	1.3
	UR3C	B=0.65			0.5	0.65	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.7	2.1
	UR3C	C=1.3			0.9	1.3	1.6	1.8	2.1	2.3	2.4	2.6	2.8	2.9	3.4	4.1
	UR3C	D=2.3			1.6	2.3	2.8	3.3	3.6	4.0	4.3	4.6	4.9	5.1	6.1	7.3
	UR3C	E=3.5			2.5	3.5	4.3	4.9	5.5	6.1	6.5	7.0	7.4	7.8	9.3	11.1
	UR3C	F=10.0			7.1	10.0	12.2	14.1	15.8	17.3	18.7	20.0	21.2	22.4	26.5	31.6
	UR3C	G=8.6			6.1	8.6	10.5	12.1	13.6	14.9	16.1	17.2	18.2	19.2	22.7	27.2
	UR3C	H=22.3			15.8	22.3	27.3	31.5	35.3	38.6	41.7	44.6	47.3	49.9	59.0	70.5
	UR3C	J=14.9			10.5	14.9	18.2	21.1	23.6	25.8	27.9	29.8	31.6	33.3	39.4	47.1
	UR3C	K=4.5			3.2	4.5	5.5	6.4	7.1	7.8	8.4	9.0	9.5	10.1	11.9	14.2
UR3C	M=30.8		21.8	30.8	37.7	43.6	48.7	53.3	57.6	61.6	65.3	68.9	81.5	97.4		
1-1/4"	UR3D	B=19.4	•	40 PSI	13.7	19.4	23.8	27.4	30.7	33.6	36.3	38.8	41.2	43.4	51.3	61.3
	UR3D	C=12.7			9.0	12.7	15.6	18.0	20.1	22.0	23.8	25.4	26.9	28.4	33.6	40.2
	UR3D	D=4.1			2.9	4.1	5.0	5.7	6.4	7.0	7.6	8.1	8.6	9.1	10.7	12.8
	UR3D	E=8.7			6.1	8.7	10.6	12.3	13.7	15.0	16.2	17.3	18.4	19.4	22.9	27.4
	UR3D	F=34.1	•		24.1	34.1	41.8	48.2	53.9	59.1	63.8	68.2	72.3	76.2	90.2	107.8
	UR3D	G=26.8			19.0	26.8	32.8	37.9	42.4	46.4	50.1	53.6	56.9	59.9	70.9	84.7
1-1/2"	UR3E	A=13.4		40 PSI	9.5	13.4	16.4	18.9	21.1	23.2	25.0	26.7	28.4	29.9	35.4	42.3
	UR3E	B=4.0			2.8	4.0	4.9	5.7	6.4	7.0	7.5	8.1	8.5	9.0	10.7	12.7
	UR3E	C=8.3			5.8	8.3	10.1	11.7	13.1	14.3	15.5	16.5	17.5	18.5	21.9	26.1
	UR3E	D=32.0	•		22.6	32.0	39.2	45.3	50.6	55.5	59.9	64.0	67.9	71.6	84.7	101.3
	UR3E	E=23.5			16.6	23.5	28.8	33.3	37.2	40.8	44.0	47.1	49.9	52.6	62.3	74.4
	UR3E	F=61.1			43.2	61.1	74.8	86.4	96.6	105.8	114.3	122.2	129.6	136.6	161.6	193.2
2"	UR3F	A=23.9		40 PSI	16.9	23.9	29.3	33.8	37.8	41.4	44.7	47.8	50.7	53.4	63.2	75.6
	UR3F	B=56.7			40.1	56.7	69.4	80.2	89.7	98.2	106.1	113.4	120.3	126.8	150.0	179.3
	UR3F	C=38.2			27.0	38.2	46.8	54.0	60.4	66.2	71.5	76.4	81.0	85.4	101.1	120.8
	UR3F	D=108.5			76.7	108.5	132.9	153.4	171.6	187.9	203	217	230	243	287	343
	UR3F	E=82.6			58.4	82.6	101.2	116.8	130.6	143.1	154.5	165.2	175.2	184.7	219	261
2-1/2"	UR3G	A=38.1		40 PSI	26.9	38.1	46.7	53.9	60.2	66.0	71.3	76.2	80.8	85.2	100.8	120.5
	UR3G	C=74.1			52.4	74.1	90.8	104.8	117.2	128.3	138.6	148.2	157.2	165.7	196.1	234
	UR3G	B=99.5	•		70.4	99.5	121.9	140.7	157.3	172.3	186.1	199.0	211	223	263	315
3"	UR3H	A=75.0		70 PSI	53.0	75.0	91.9	106.1	118.6	129.9	140.3	150.0	159.1	167.7	198.4	237
	UR3H	B=100.0			70.7	100.0	122.5	141.4	158.1	173.2	187.1	200	212	223	264	316
	UR3H	C=125.0			88.4	125.0	153.1	176.8	197.6	216	234	250	265	279	331	395
	UR3H	D=150.0			106.0	150.0	183.7	212	237	260	281	300	318	335	397	474
	UR3H	E=175.0			123.7	175.0	214	247	277	303	327	350	371	391	463	553
	UR3H	F=200.0	•		141.4	200	245	283	316	346	374	400	424	447	529	632

NOTES

<sup>3</sup> These valves are full port and do not have the Optimizer insert.

<sup>4</sup> Close-Off Pressures measured with 35 in-lb. actuator. The "Close Off Pressure" is the maximum allowable pressure drop across the valve body when the valve is fully closed. (Do not use actuators with torques higher than 90 in-lbs)

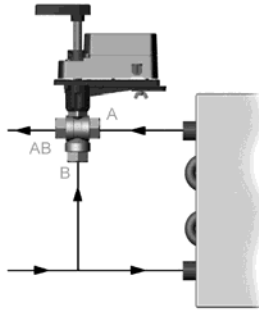
<sup>5</sup> The Cv is the gallons of water per minute (gpm) at 60°F that the valve will pass at 1 PSI pressure drop. Hence the 1.0 PSI pressure differential column in the table above is equivalent to the Cv value.

Replaces form F-4306

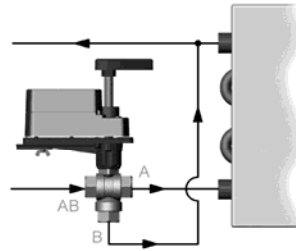
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**PIPING CONFIGURATIONS**

Our 3-Way ball allows the same 3-Way valve to be installed in either a mixing or diverting configuration without sacrificing any performance or Cv. (Valve shown is 1/2"-2-1/2". 3" valve has bypass port in Z plane.)



**Mixing** — fluid enters through two inlets (A, B) and exits through one outlet (AB)



**Diverting** — fluid enters through one inlet (AB) and exits through two outlets (A, B)