

**END CONNECTIONS:**

- FNPT SWT¹
 FNPT (Line) & SWT (Coil)¹

LINE & COIL SIZE:

- 1/2"
 3/4" L
 1"
 1-1/4"
 1-1/2"
 2"

BALL & STEM:

- Nickel-plated brass ball & brass stem
 Stainless Steel ball & stem (Isolator S only)

HOSE OPTIONS (FNPT COIL)**Swivel Type:**

- MNPT SWT

Length:

- 12" 18" 24" 36"

SPECIFICATIONS

Ball Valve (Optional): Forged brass ball valve with nickel plated full port ball with Teflon seals and Teflon packing. Valve is fully assembled. PSI/Temperature Rating: 300 PSI / 250F.

SpeedSet™: Forged DZR Brass (CW602N) manual balance valve with orifice plate and 30% Glass Filled PA-66 handwheel with four full turns and built-in memory stop². Valve has FNPT connections. Valve body has two ports with Pressure/Temperature Test Valves. Valve is fully assembled. PSI/Temperature Rating: 362 PSI / 248°F.

Isolator S: Ball valve and integrated strainer. Valve housing is forged brass with field repairable dual Teflon and EPDM o-ring seal stem. Strainer is 20 mesh stainless steel and can be removed from housing without disturbing pipe connections for inspection or replacement. Valve includes one fixed (FNPT or SWT) connection and one union (FNPT or SWT) connection. Union end includes union nut and EPDM o-ring. Body has one port with combination Pressure/Temperature Test Valves & Manual Air Vent (CPTA). Assembly includes drain valve with 3/4" hose connection with cap. Valve is fully assembled. PSI/Temperature Rating: 400 PSI / 250°F.

Drain Valve: Rated 275 PSI / 250°F. Brass housing, Nickel plated ball. 3/4" NPSH hose connection.

Pressure/Temperature Test Valve: Rated 1000 PSI / 350°F. Brass Housing, Nordel Seal.

Combination Pressure/Test Valve & Manual Air Vent (CPTA): Pressure/Temperature Test Valve works in conjunction with valve body feature to function as Manual Air Vent. Requires both components to operate as manual air vent.

NOTES

¹ Sweat Adapter used on SpeedSet and/or on optional Ball Valve on return side

² S3 Allen Key or T15 Torx Bit tool required to set memory stop.

MODEL NUMBER SELECTION

Size	Model Number- FNPT	Model Number- SWT	Model Number- (Line: FNPT; Coil: SWT)	Model Number- Optional BV FNPT	Model Number- Optional BV SWT	Model Number- Optional BV (Line: FNPT; Coil: SWT)
1/2"	CPP1SEE	CPP1SLL	CPP1SEL	CVP1SEE	CVP1SLL	CVP1SEL
3/4" L	CPP1SFF	CPP1SMM	CPP1SFM	CVP1SFF	CVP1SMM	CVP1SFM
1"	CPP1SHH	CPP1SNN	CPP1SHN	CVP1SHH	CVP1SNN	CVP1SHN
1-1/4"	CPP1SJJ	CPP1SKK	CPP1SJK	CVP1SJJ	CVP1SKK	CVP1SJK
1-1/2"	CPP1SKK	CPP1SWW	CPP1SKW	CVP1SKK	CVP1SWW	CVP1SKW
2"	CPP1SRR	CPP1SYY	CPP1SRY	CVP1SRR	CVP1SYY	CVP1SRY

NOTES:

- Standard CPPs include nickel-plated brass ball and brass stem in Isolator S. For optional stainless steel ball and stem change "CPP" to "CPS" or "CVP" to "CVS" in model number.

FLOW RATES

SIZE	FLOW GPM ⁽³⁾ @4 FT/SEC	Cv ⁽⁴⁾							ORIFICE Vf ⁵	GPM RANGE FOR 1"-100" W.C. ΔP	GPM RANGE FOR 1"-300" W.C. ΔP
		1	1.5	2	2.5	3	3.5	4 ⁶			
1/2"	3.8	0.34	0.53	0.73	0.98	1.47	1.9	2.16	.483	0.48 – 4.9	0.48 – 8.4
3/4"	6.7	0.46	0.68	0.92	1.72	2.44	3.24	3.63	1.010	1.0 – 10.1	1.0 – 17.5
1"	10.8	1.06	1.55	2.05	2.65	3.95	5.57	6.46	1.867	1.9 – 18.7	1.9 – 32.5
1-1/4"	18.7	0.83	1.35	4.07	7.62	10.18	11.68	12.48	3.668	3.7 – 36.5	3.7 – 63.5
1-1/2"	25.4	1.48	2.54	5.78	11.43	16.76	19.42	20.92	5.733	5.7 – 57.5	5.7 – 99.4
2"	41.9	2.25	6.42	13.87	21.39	27.17	30.75	33.64	9.489	9.5 – 95.0	9.5 – 164.5

NOTES

³ The generally accepted upper limit as recommended by ASHRAE to prevent pipe noise is 4 ft/sec.

⁴ Cv is the GPM of water at 1 PSID drop through the valve at the specific setting. Cv's are used to calculate the permanent pressure drop across valve for pump sizing. $PSID=(Flow/Cv)^2$.

⁵ Vf is used to set valve or for flow measurement. $INCHES H_2O=(Flow/Vf)^2$

⁶ Setting 4 is a full open valve