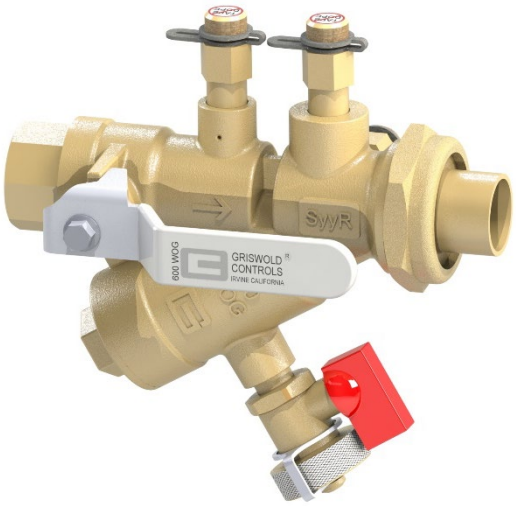
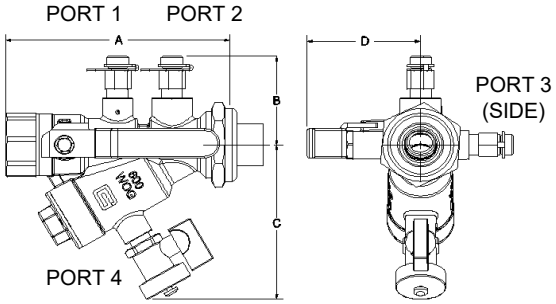
ACCESSIBLE CARTRIDGE



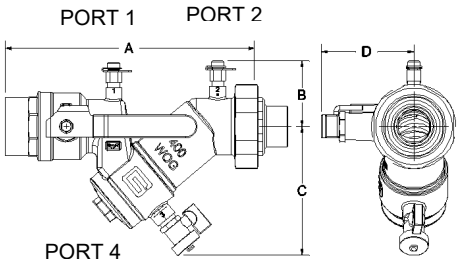
SPECIFICATIONS

PSI/Temperature Rating:	1/2"-1-1/2": 600 WOG 400 PSI / 250º F 1-1/2"L-2": 400 WOG 275 PSI / 250º F
Cartridge:	AISI Type 304 stainless steel AISI Type 17-7 PH stainless steel spring
Strainer:	20 mesh stainless steel
Body Material:	Forged DZR Brass
End Connections:	Brass – NPT, Sweat or QuickPress[1]
Ball Valve Seals:	Teflon
Union Seal:	EPDM O-Ring
Body Tappings[2]:	Port 1 and 2: Combination P/T Test Valve and Manual Air Vent (CPTA); Port 4: Drain, 1/4" in YY1, 1/2" in YY2 and YY3
Ball Valve:	Stainless Steel
Stem:	Brass (Optional: Stainless Steel)
Field Repairable Stem:	Dual Teflon seals and EPDM O-ring
Options:	Port 2: Bypass[3], Extension Option

1/2" – 1-1/2" Housing



1-1/2"L - 2" Housing



DIMENSIONS & WEIGHTS (NOMINAL)

All dimensions are for planning purposes only and may change without notice.

SIZE	A - FIXED END CONNECTION		UNION END CONNECTION[4]						B	C	D[5]	Cv[6]	WEIGHT (LBS.)
	FNPT	SWT	FNPT		MNPT		SWT						
1/2"	5.1	5.3	1/2",3/4":1.0	1":N/A[7]	1/2"-3/4":1.0	1":1.4	3/8",3/4": 1.0	1/2":0.7	1":1.3	2.2	3.8	1.2, 2.2, 2.8	8.4	2.6
3/4"	5.2	5.3												
1"	5.2	5.4										2.2, 2.8		
1"L	7.5	7.8	1",1-1/4",1-1/2":1.7		1",1-1/4",1-1/2":1.7[8]		1",1-1/4":1.7	1-1/2":1.4		2.5	4.8	2.3, 3.0	19.1	5.2
1-1/4"	7.2	7.3												
1-1/2"	7.1	7.5												
1-1/2"L	9.6	9.8	1-1/4",	2": N/A[7]	1",1-1/4":1.8	1-1/2", 2":1.6	1-1/4",2":1.6	1-1/2":1.7		2.6	5.3	2.5, 3.1	37	7.0
2"	9.5	10.1	1-1/2":1.6										40	9.0

For QuickPress connections add 3.1" (1/2") 3.6" (3/4"), 4.1" (1") to the FNPT length (A) listed for a valve.

NOTES

[1] Connections are compatible with popular press tools and are rated for maximum 200 PSI.
[2] Body Tappings for accessories are a leak proof metal to metal seal and do not require pipe dope or tape. Tape or dope should not be used.
[3] 1/2" Bypass is only available on 1/2" to 1" valve. 1"L to 1-1/2" valves have a bypass that is a line size tee.
[4] For overall length, add union end connection length to body length.
[5] Space Saver handle standard on 1/2"-3/4" valves. Standard handle on 1" to 2" valves and 1-1/2" extended handle in 1/2" to 2" is compatible with 1-1/2" insulation. Largest extended handle is compatible with 2" insulation.
[6] Cv's are based on housing with a clean 20 mesh strainer but without the cartridge. PSID=(GPM/Cv)^2.
[7] Tailpiece is not available for this size. Male tailpiece used with ASME B16.15 Class 125 coupling.
[8] 1-1/4"–1-1/2" valves can also take 1/2"–3/4" MNPT tailpieces.

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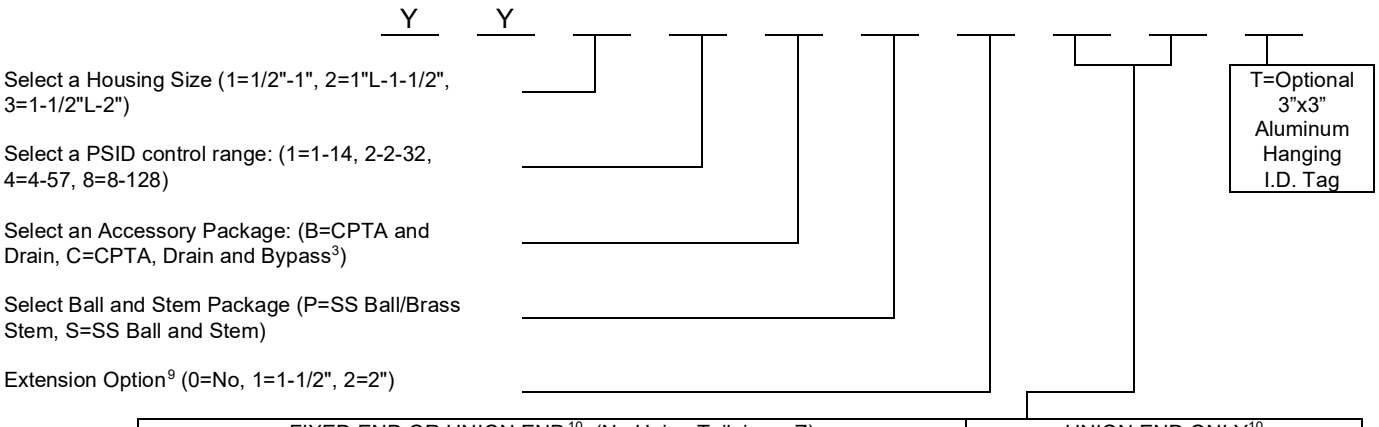
MODEL NUMBER SELECTION



	FIXED END OR UNION END[10] (No Union Tailpiece=Z)			UNION END ONLY[10]
Valve	Female Threaded	Female Sweat	QuickPress	Male Threaded
YY1	1/2"=E, 3/4"=F, 1"=G[11]	3/8"=K[12], 1/2"=L, 3/4"=M, 1"=N	1/2"=2, 3/4"=3, 1"=1	1/2"=H, 3/4"=I, 1"=J
YY2	1"=G, 1-1/4"=P, 1-1/2"=Q	1"=N, 1-1/4"=K, 1-1/2"=W	1-1/4"=4, 1-1/2"=5	1/2"=H, 3/4"=I, 1"=J, 1-1/4"=S, 1-1/2"=T
YY3	1-1/4"=P[12], 1-1/2"=Q, 2"=R[11]	1-1/4"=K[12], 1-1/2"=W, 2"=Y	2"=6	1-1/4"=S , 1-1/2"=T, 2"=U

FLOW RATES (+/-5%)

SIZE	MODEL NO.	HEAD LOSS IN FEET[13]	PSID RANGE[14]	GPM
1/2",3/4",1"	YY11	3.5	1-14	.33, .50, .67, 1.00, 1.33, 1.67, 2.00, 2.33, 2.67, 3.33, 4.00, 4.67, 5.00
	YY12	7.4	2-32	0.55, 0.75, 1.00, 1.25, 1.50, 1.75, 2.00, 2.25, 2.50, 2.75, 3.00, 3.50, 4.00, 5.00, 6.00, 7.00, 8.00
	YY14	13.4	4-57	.75, 1.00, 1.33, 2.00, 2.67, 3.33, 4.00, 4.67, 5.33, 6.67, 8.00, 9.33, 10.00
	YY18	30.0	8-128	1.10, 1.50, 2.00, 3.00, 4.00, 5.00, 6.00, 7.00, 8.00, 10.0, 12.0, 14.0, 16.0
1"L,1-1/4", 1-1/2"	YY21	3.5	1-14	5.33, 6.00, 6.67, 7.33, 8.00, 8.67, 9.33, 10.00, 10.67, 11.33, 12.00, 12.67, 13.33, 14.00, 14.67
	YY22	7.4	2-32	8.0, 9.0, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 20.0, 21.0, 22.0
	YY24	13.4	4-57	10.67, 12.0, 13.33, 14.67, 16.0, 17.33, 18.67, 20.00, 21.33, 22.67, 24.0, 25.33, 26.67, 28.0, 29.33
	YY28	30.0	8-128	16.0, 18.0, 20.0, 22.0, 24.0, 26.0, 28.0, 30.0, 32.0, 34.0, 36.0, 38.0, 40.0, 42.0, 44.0
1-1/2"L, 2"	YY31	3.5	1-14	12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38
	YY32	7.4	2-32	18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57
	YY34	13.4	4-57	24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76
	YY38	30.0	8-128	36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102, 108, 114

NOTES

[9] Extension Option includes handle cover and accessory extensions.
[10] Select the Fixed End First and the Union End Second.
[11] Tailpiece is not available for this size. Male tailpiece used with ASME B16.15 Class 125 coupling.
[12] Fixed end not available for this size. Union tailpiece only.
[13] Head Loss in Feet is provided for pump head calculations. (1 PSI = 2.307 Feet of Water)
[14] While valve will control the flow through the high end of PSID range, there is a limit to the maximum PSID across the cartridge before cavitation occurs. A conservative guide is: Maximum Allowable Pressure Drop = 0.5 (Inlet Pressure - Water Vapor Pressure). Cavitation is an effect that occurs when the fluid vaporizes as it goes through a port opening. As the fluid exits the port the vapor bubbles collapse back into a liquid state. The vapor bubbles imploding cause noise and vibration in the valve and can eventually destroy valves. This phenomenon is amplified when entrained air is in the system. If cavitation is a concern, then selecting a stiffer spring like 4-57 or 8-128 can help reduce risk.

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