

Seawater Service Pressure Relief Valve



- Fast Opening to Maintain Steady Line Pressure
- · Accommodates Wide Range of Flow Rates
- · Closes Gradually for Surge-Free Operation
- Adjustable Pressure Settings, Not Affected by Pressure At Valve Discharge

The Cla-Val Model 50-20 Seawater Service Pressure Relief Valve is designed specifically to automatically relieve excess pressure in fire protection pumping systems. Pilot controlled, it maintains constant system pressure at the pump discharge within very close limits as demands change.

Schematic Diagram

Item Description

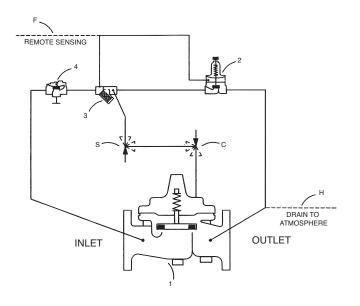
- 1 100S/2100S Hytrol Main Valve
- 2 CRL Pressure Relief Control
- 3 X44A Strainer & Orifice Assy
- 4 81-01 Check Valve

Optional Features

Item Description

- B CK2 Isolation Valves
- C CV Flow Control (Closing)
- F Remote Pilot Sensing
- H Drain to Atmosphere
- S CV Flow Control (Opening)

Please note that if the Model 50-20 is to be used on a continuous duty basis to maintain fire-system pressure, suitable back pressure must be provided on the valve to prevent cavitation damage. Consult the factory for details.



Specification

Sizes: Threaded Ends: 1 1/2" - 3"

Globe Flanged: 2" - 36" Angle Flanged: 2" - 16"

End Details: Cast Steel ANSI B16.5

Bronze ANSI B16.24 Stainless Steel ANSI B16.5 Ductile Iron ANSI B16.42

Pressure 150 Class 250 psi Max. Ratings: 300 Class 400 psi Max.

Temperature

Range: Water 180°F Max.

Materials: Main valve body & cover

Ductile Iron ASTM A-536*
Cast Steel ASTM A216-WCB*
Naval Bronze ASTM B61
Stainless Steel ASTM A743-CF-8M

Ni. AL. Bronze ASTM B148 Super Duplex SST

Main valve trim:

ASTM B61 Bronze Seat,

Monel Trim

Pilot control system:

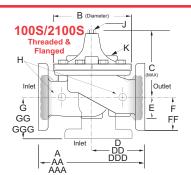
Cast Bronze with Monel Trim

Monel, Super Duplex Stainless Steel optional Stainless Steel 316 Tubing & Fittings

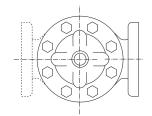
Adjustment 20 - 200 psi (150 class)

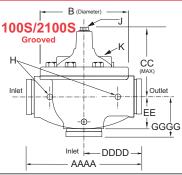
Ranges: 100 - 300 psi (300 class)

*The 50G-20 (globe) and 50A-20 (angle) in cast steel are supplied with standard internal and external epoxy coating



Model 50-20 Dimensions





	V 1														<u> </u>					
Valve Size (Inches)	1_	1 1/4	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	30	36		
A Threaded	7.25	7.25	7.25	9.38	11.00	12.50												_		
AA 150 ANSI			8.50	9.38	11.00	12.00	15.00	20.00	25.38	29.75	34.00	39.00	41.38	46.00	52.00	61.50	63.00	76.00		
AAA 300 ANSI			9.00	10.00	11.62	13.25	15.62	21.00	26.38	31.12	35.50	40.50	43.50	47.64	53.62	63.24	64.50	76.00		
AAAA Grooved End			8.50	9.00	11.00	12.50	15.00	20.00	25.38									_		
B Dia.	5.62	5.62	5.62	6.62	8.00	9.12	11.50	15.75	20.00	23.62	28.00	32.75	35.50	41.50	45.00	53.16	56.00	66.00		
C Max.	5.50	5.50	5.50	6.50	7.56	8.19	10.62	13.38	16.00	17.12	20.88	24.19	25.00	39.06	41.90	43.93	54.60	61.50		
CC Max. Grooved End			4.75	5.75	6.88	7.25	9.31	12.12	14.62									_		
D Threaded	3.25	3.25	3.25	4.75	5.50	6.25					_	_	_			_	_	_		
DD 150 ANSI		_	4.00	4.75	5.50	6.00	7.50	10.00	12.69	14.88	17.00	19.50	20.81	_	_	30.75	_	_		
DDD 300 ANSI	_	_	4.25	5.00	5.88	6.38	7.88	10.50	13.25	15.56	17.75	20.25	21.62	_	_	31.62	_	_		
DDDD Grooved End	_	_	_	4.75	_	6.00	7.50	_	_	_	_	_	_	_	_	_	_	_		
E	1.12	1.12	1.12	1.50	1.69	2.06	3.19	4.31	5.31	9.25	10.75	12.62	15.50	12.95	15.00	17.75	21.31	24.56		
EE Grooved End		_	2.00	2.50	2.88	3.12	4.25	6.00	7.56	_	_	_	_	_	_	_	_	_		
F 150 ANSI	_	_	2.50	3.00	3.50	3.75	4.50	5.50	6.75	8.00	9.50	10.50	11.75	15.00	16.50	19.25	22.50	25.60		
FF 300 ANSI		_	3.06	3.25	3.75	4.13	5.00	6.25	7.50	8.75	10.25	11.50	12.75	15.00	16.50	19.25	24.00	25.60		
G Threaded	1.88	1.88	1.88	3.25	4.00	4.50	_		_		_	_	_	_	_	_	_	_		
GG 150 ANSI			4.00	3.25	4.00	4.00	5.00	6.00	8.00	8.62	13.75	14.88	15.69			22.06		_		
GGG 300 ANSI	_		4.25	3.50	4.31	4.38	5.31	6.50	8.50	9.31	14.50	15.62	16.50			22.90	_	_		
GGGG Grooved End	_		_	3.25	_	4.25	5.00	_	_	_		_					_	_		
H NPT Body Tapping	.375	.375	.375	.375	.50	.50	.75	.75	11	11	11	1	1	1	11	11	2	2		
J NPT Cover Center Plug	.25	.25	.25	.50	.50	.50	.75	.75	1	1	1.25	1.5	2	1.5	1.5	1.5	2	2		
K NPT Cover Tapping	.375	.375	.375	.375	.50	.50	.75	.75	1	1	1	1	1	1	1	1	2	2		
Stem Travel	0.4	0.4	0.4	0.6	0.7	0.8	1.1	1.7	2.3	2.8	3.4	4.0	4.5	5.1	5.63	6.75	7.5	8.5		
Approx. Ship Wt. Lbs.	15	15	15	35	50	70	140	285	500	780	1165	1600	2265	2982	3900	6200	7703	11720		
Valve Size (mm)	25	32	40	50	65	80	100	150	200	250	300	350	400	450	500	600	750	900		
A Threaded	184	184	184	238	279	318	_	_	_	_	_	_	_	_	_	_	_	_		
A IIIIEdueu	104																			
AA 150 ANSI	— —	_	216	238	279	305	381	508	645	756	864	991	1051	1168	1321	1562	1600	1930		
					279 295	305 337	381 397	508 533	645 670	756 790	864 902	991 1029	1051 1105	1168 1210	1321 1362	1562 1606	1600 1638	1930 1930		
AA 150 ANSI	_	_	216	238																
AA 150 ANSI AAA 300 ANSI	_	_	216 229	238 254	295	337	397	533	670	790	902	1029	1105	1210	1362	1606	1638	1930		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End	_ _ _	_ _ _	216 229 216	238 254 228	295 279	337 318	397 381	533 508	670 645	790 —	902 —	1029 —	1105 —	1210 —	1362 —	1606 —	1638 —	1930 —		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia.	_ _ _ _ 143	_ _ _ _ 143	216 229 216 143	238 254 228 168	295 279 203	337 318 232	397 381 292	533 508 400	670 645 508	790 — 600	902 - 711	1029 - 832	1105 - 902	1210 - 1054	1362 - 1143	1606 - 1350	1638 - 1422	1930 — 1676		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max.	_ _ _ _ 143 140	_ _ _ 143 140	216 229 216 143 140	238 254 228 168 165	295 279 203 192	337 318 232 208	397 381 292 270	533 508 400 340	670 645 508 406	790 — 600 435	902 - 711 530	1029 - 832 614	1105 - 902 635	1210 - 1054 992	1362 - 1143 1064	1606 — 1350 1116	1638 - 1422 1387	1930 — 1676 1562		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End		_ _ _ 143 140 120	216 229 216 143 140 120	238 254 228 168 165 146	295 279 203 192 175	337 318 232 208 184	397 381 292 270 236	533 508 400 340 308	670 645 508 406 371	790 — 600 435 —	902 - 711 530 -	1029 - 832 614 -	1105 - 902 635 -	1210 - 1054 992 -	1362 — 1143 1064 —	1606 — 1350 1116 —	1638 - 1422 1387 -	1930 — 1676 1562 —		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded		- - 143 140 120 83	216 229 216 143 140 120 83	238 254 228 168 165 146 121	295 279 203 192 175 140	337 318 232 208 184 159	397 381 292 270 236	533 508 400 340 308	670 645 508 406 371	790 600 435 	902 711 530 	1029 - 832 614 -	1105 - 902 635 - -	1210 - 1054 992 - -	1362 - 1143 1064 - -	1606 - 1350 1116 - -	1638 - 1422 1387 - -	1930 — 1676 1562 —		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI	- - 143 140 - 83 -	- 143 140 120 83 -	216 229 216 143 140 120 83 102	238 254 228 168 165 146 121 121	295 279 203 192 175 140 140	337 318 232 208 184 159 152	397 381 292 270 236 —	533 508 400 340 308 — 254	670 645 508 406 371 —	790 600 435 378	902 - 711 530 - - 432	1029 - 832 614 - - 495	1105 902 635 528	1210 — 1054 992 — —	1362 — 1143 1064 — —	1606 1350 1116 781	1638 — 1422 1387 — —	1930 — 1676 1562 — —		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI	- - 143 140 - 83 -	- - 143 140 120 83 - -	216 229 216 143 140 120 83 102 108	238 254 228 168 165 146 121 121 127	295 279 203 192 175 140 140 149	337 318 232 208 184 159 152 162	397 381 292 270 236 — 191 200	533 508 400 340 308 — 254 267	670 645 508 406 371 — 322 337	790 — 600 435 — — 378 395	902 - 711 530 - - 432 451	1029 832 614 495 514	1105 902 635 528 549	1210 — 1054 992 — — —	1362 — 1143 1064 — — —	1606 — 1350 1116 — — 781 803	1638 - 1422 1387 - - - -	1930 — 1676 1562 — — —		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End	- - 143 140 - 83 - -	- - 143 140 120 83 - -	216 229 216 143 140 120 83 102 108	238 254 228 168 165 146 121 121 127 121	295 279 203 192 175 140 140 149	337 318 232 208 184 159 152 162 152	397 381 292 270 236 — 191 200 191	533 508 400 340 308 — 254 267	670 645 508 406 371 — 322 337	790 — 600 435 — — 378 395 —	902 	1029 	1105 902 635 528 549	1210 - 1054 992 - - - -	1362 — 1143 1064 — — —	1606 1350 1116 781 803 	1638 - 1422 1387 - - - -	1930 — 1676 1562 — — — —		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E	- - 143 140 - 83 - - - 29	- - 143 140 120 83 - - - 29	216 229 216 143 140 120 83 102 108 —	238 254 228 168 165 146 121 121 127 121 38	295 279 203 192 175 140 140 149 —	337 318 232 208 184 159 152 162 152 52	397 381 292 270 236 — 191 200 191 81	533 508 400 340 308 — 254 267 — 110	670 645 508 406 371 — 322 337 — 135	790 600 435 378 395 235	902 - 711 530 - - 432 451 - 273	1029 832 614 495 514 321	1105 902 635 528 549 394	1210 - 1054 992 - - - - - 329	1362 - 1143 1064 - - - - - 381	1606 1350 1116 781 803 451	1638 1422 1387 541	1930 — 1676 1562 — — — — — — — — — — — —		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E Grooved End	 143 140 83 29	 143 140 120 83 29	216 229 216 143 140 120 83 102 108 — 29	238 254 228 168 165 146 121 121 127 121 38 64	295 279 203 192 175 140 140 149 — 43 73	337 318 232 208 184 159 152 162 152 52 79	397 381 292 270 236 — 191 200 191 81 108	533 508 400 340 308 — 254 267 — 110 152	670 645 508 406 371 — 322 337 — 135	790 600 435 378 395 235	902 	1029 832 614 495 514 321	1105 902 635 528 549 394	1210 1054 992 329	1362 — 1143 1064 — — — — — 381	1606 1350 1116 781 803 451	1638 1422 1387 541	1930 — 1676 1562 — — — — — — 624 —		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E Grooved End F 150 ANSI	143 140 83 29	- - 143 140 120 83 - - - 29	216 229 216 143 140 120 83 102 108 — 29 52 64	238 254 228 168 165 146 121 121 127 121 38 64 76	295 279 203 192 175 140 140 149 — 43 73	337 318 232 208 184 159 152 162 152 52 79 95	397 381 292 270 236 — 191 200 191 81 108 114	533 508 400 340 308 	670 645 508 406 371 — 322 337 — 135 192 171	790 	902 - 711 530 - 432 451 - 273 - 241	1029 - 832 614 - 495 514 - 321 - 267	1105 	1210 1054 992 329 381	1362 	1606 - 1350 1116 - - 781 803 - 451 - 489	1638 - 1422 1387 - - - - - 541 - 572	1930 - 1676 1562 - - - - - 624 - 650		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E E Grooved End F 150 ANSI FF 300 ANSI	143 140 - 83 - - 29 -	- - 143 140 120 83 - - - 29	216 229 216 143 140 120 83 102 108 29 52 64 78	238 254 228 168 165 146 121 121 127 121 38 64 76	295 279 203 192 175 140 140 149 43 73 89	337 318 232 208 184 159 152 162 152 52 79 95	397 381 292 270 236 — 191 200 191 81 108 114 127	533 508 400 340 308 	670 645 508 406 371 — 322 337 — 135 192 171	790 - 600 435 - 378 395 - 235 - 203 222	902 	1029 	1105 	1210 1054 992 329 381 381	1362 	1606 1350 1116 781 803 451 489 489	1638 	1930 		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E E Grooved End F 150 ANSI FF 300 ANSI G Threaded	 143 140 83 29 48	- - 143 140 120 83 - - - 29 - 48	216 229 216 143 140 120 83 102 108 29 52 64 78	238 254 228 168 165 146 121 121 127 121 38 64 76 83 83	295 279 203 192 175 140 140 149 43 73 89 95 102	337 318 232 208 184 159 152 162 152 52 79 95 105	397 381 292 270 236 — 191 200 191 81 108 114 127	533 508 400 340 308 	670 645 508 406 371 — 322 337 — 135 192 171	790 - 600 435 - 378 395 - 235 - 203 222	902 	1029 	1105 	1210 1054 992 329 381 381	1362 	1606 1350 1116 781 803 451 489 489	1638 	1930 		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E EE Grooved End F 150 ANSI FF 300 ANSI G Threaded GG 150 ANSI	- - 143 140 - 83 - - - 29 - - 48	 143 140 120 83 29 48	216 229 216 143 140 120 83 102 108 - 29 52 64 78 48 102	238 254 228 168 165 146 121 121 127 127 121 38 64 76 83 83	295 279 203 192 175 140 140 149 - 43 73 89 95 102	337 318 232 208 184 159 152 162 152 52 79 95 105 114 102	397 381 292 270 236 — 191 200 191 81 108 114 127 — 127	533 508 400 340 308 - 254 267 - 110 152 140 159 - 152	670 645 508 406 371 — 322 337 — 135 192 171 191 — 203	790 - 600 435 - 378 395 - 235 - 203 222 - 219	902 	1029 	1105 	1210 	1362 — 1143 1064 — — — — — 381 — 419 419	1606 1350 1116 781 803 451 489 489 560	1638 1422 1387 541 572 610	1930 		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E EE Grooved End F 150 ANSI FF 300 ANSI G Threaded GG 150 ANSI GGG 300 ANSI	143 140 	 143 140 120 83 29 48 	216 229 216 143 140 120 83 102 108 - 29 52 64 78 48 102 102	238 254 228 168 165 146 121 127 121 38 64 76 83 83 83	295 279 203 192 175 140 140 149 43 73 89 95 102 110	337 318 232 208 184 159 152 162 152 52 79 95 105 114 102 111	397 381 292 270 236 — 191 200 191 108 114 127 — 127 135	533 508 400 340 308 - 254 267 - 110 152 140 159 - 152 165	670 645 508 406 371 — 322 337 — 135 192 171 191 — 203 216	790 - 600 435 - 378 395 - 235 - 203 222 - 219 236	902 	1029 	1105 	1210 	1362 	1606 1350 1116 781 803 451 489 489 560 582	1638 1422 1387 541 572 610	1930 		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E EG Grooved End F 150 ANSI FF 300 ANSI G Threaded GG 150 ANSI GGG 300 ANSI	143 140 	 143 140 120 83 29 48 	216 229 216 143 140 120 83 102 108 - 29 52 64 78 48 102 102 -	238 254 228 168 165 146 121 127 121 38 64 76 83 83 83 89 83	295 279 203 192 175 140 149 43 73 89 95 102 110	337 318 232 208 184 159 152 162 152 52 79 95 105 114 102 111 108	397 381 292 270 236 — 191 200 191 81 108 114 127 — 127 135 127	533 508 400 340 308 - 254 267 - 110 152 140 159 - 152 165 -	670 645 508 406 371 322 337 135 192 171 191 203 216 	790 - 600 435 - 378 395 - 235 - 203 222 - 219 236 -	902 	1029 	1105 	1210 1054 992 329 381 381 	1362 1143 1064 381 419 419 	1606 1350 1116 781 803 451 489 489 560 582	1638 1422 1387 541 572 610	1930 		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E EE Grooved End F 150 ANSI FF 300 ANSI G Threaded GG 150 ANSI GGG 300 ANSI GGGG Grooved End H NPT Body Tapping		 143 140 120 83 29 48 8 375	216 229 216 143 140 120 83 102 108 29 52 64 78 48 102 102 	238 254 228 168 165 146 121 121 127 121 38 64 76 83 83 83 83 83 89 83	295 279 203 192 175 140 140 - 43 73 89 95 102 102 110 - .50	337 318 232 208 184 159 152 162 152 52 79 95 105 114 102 111	397 381 292 270 236 — 191 200 191 81 108 114 127 — 127 135 127 .75	533 508 400 340 308 - 254 267 - 110 152 140 159 - 152 165 - .75	670 645 508 406 371 — 322 337 — 135 192 171 191 — 203 216 —	790 - 600 435 378 395 - 235 - 203 222 - 219 236 - 1	902 - 711 530 - - 432 451 - 273 - 241 260 - 349 368 - 1	1029 	1105 902 635 528 549 394 298 324 399 419 1	1210 	1362 1143 1064 381 419 419 1	1606 1350 1116 781 803 451 489 489 560 582 1	1638 1422 1387 541 572 610 2	1930 		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D 150 ANSI DDD 300 ANSI DDDD Grooved End E EE Grooved End F 150 ANSI FF 300 ANSI G Threaded GG 150 ANSI GGGG Grooved End H NPT Body Tapping J NPT Cover Center Plug		 143 140 120 83 29 9 48 375	216 229 216 143 140 120 83 102 108 - 29 52 64 78 48 102 102 - 	238 254 228 168 165 146 121 121 127 121 38 64 76 83 83 83 89 83 .375 .50	295 279 203 192 175 140 140 149 — 43 73 89 95 102 102 110 — 50 .50	337 318 232 208 184 159 152 162 152 52 79 95 105 114 102 111 108 .50	397 381 292 270 236 — 191 200 191 81 108 114 127 — 127 135 127 .75	533 508 400 340 308 - 254 267 - 110 152 140 159 - 152 165 - .75	670 645 508 406 371 - 322 337 - 135 192 171 191 - 203 216 - 1 1	790 - 600 435 - 378 395 - 235 - 203 222 - 219 236 - 1 1 1	902 	1029 	1105 	1210 	1362 	1606 	1638 - 1422 1387 572 610 2 2 2	1930 		
AA 150 ANSI AAA 300 ANSI AAAA Grooved End B Dia. C Max. CC Max. Grooved End D Threaded DD 150 ANSI DDD 300 ANSI DDDD Grooved End E EE Grooved End F 150 ANSI FF 300 ANSI G Threaded GG 150 ANSI GGG G000ved End H NPT Body Tapping J NPT Cover Center Plug K NPT Cover Tapping		 143 140 120 83 29 48 375 .25	216 229 216 143 140 83 102 108 - 29 52 64 78 48 102 102 - 375 .25	238 254 228 168 165 146 121 121 127 121 38 64 76 83 83 83 89 89 83 .375	295 279 203 192 175 140 140 149 — 43 73 89 95 102 102 110 — .50	337 318 232 208 184 159 152 162 152 52 79 95 105 114 102 111 108 .50	397 381 292 270 236 — 191 200 191 81 108 114 127 — 127 135 127 .75 .75	533 508 400 340 308 - 254 267 - 110 152 140 159 - 152 165 - .75 .75	670 645 508 406 371 - 322 337 - 135 192 171 191 - 203 216 - 1	790 - 600 435 - 378 395 - 235 - 203 222 - 219 236 - 1	902 	1029 	1105 	1210 	1362 	1606	1638 	1930 		

Valve Capacity

Valve Size (inches)	1	1 1/4	1 1/2	2	2 1/2	3	4	6	8	10	12	14	16	18	20	24	30	36
Max. Continuous GPM	55	93	125	210	300	460	800	1800	3100	4900	7000	8400	11000	14000	17000	25000	42000	50000
Max Surge GPM	120	210	280	470	670	1000	1800	4000	7000	11000	16000	19000	25000	31000	39000	56500	63000	85000

Purchase Specifications

The Fire Pump Pressure Relief Valve shall modulate to relieve excess pressure in a fire protection system. It shall maintain constant pressure in the system regardless of demand changes. It shall be pilot controlled and back pressure shall not affect its set point. It shall be actuated by line pressure through a pilot control system and open fast in order to maintain steady system pressure as system demand decreases. It shall close gradually to control surges and shall re-seat drip-tight within 5% of its pressure setting. The main valve shall be of the hydraulically-operated, pilot-controlled, diaphragm-type, globe or angle valve. It shall have a single, removable, teflon-coated seat. Internal and exter-

We recommend providing adequate space around valve for maintenance work.

nal epoxy coating, a stem guided at both ends, and a resilient disc with a rectangular cross section, being contained on 3 1/2 sides. No external packing glands shall be permitted and the diaphragm shall not be used as a seating surface. The pilot control shall be a direct-acting, adjustable, spring-loaded, diaphragm-type valve designed for modulating service to permit flow when controlling pressure exceeds spring setting. It shall be the MODEL 50G-20 (globe) or Model 50A-20 (angle) Pressure Relief Valve as manufactured by Cla-Val, Newport Beach, California.