

Series 2000 Main Valves

The Series 2000 Main valve is rugged and stable in response for trouble free, dependable operation over a wide range of conditions and applications.

- For continuous or dead end service within .01% leakage of the valve's rated capacity
- Packless construction eliminates many service problems
- Complete range of port sizes:
 - Full
 - Normal
 - Reduced
 - Low pressure {Models 2150 & 2250}
- High Pressure Models 2100, 2200 & 2300
- Positive travel stop and back up of diaphragm prevents over pressurizing from low pressure side
- Maintains accurate and stable control of pressure or temperature
- Two-ply stainless steel diaphragm provides greater accuracy of control over the entire capacity range and a longer life



For computer aided selection of steam specialties contact your local Hoffman Specialty Representative (see back cover for listing).

- Minimum differential pressure:
 - Model 2100, 2200 & 230015 psi (1.0 bar)
 - Model 2150, 22503 psi (.2 bar)
- Maximum differential pressure 150 psi (10.3 bar). A two stage reduction should be used for pressure drops greater than 150 psi (10.3 bar). Models 2150 & 2250 have maximum 30 psi differential pressure
- Maximum temperature 450°F (232°C)

Materials of Construction	
Part	Specifications
Body	Cast Iron ASTM A126-71
Stem	Stainless Steel ASTM A581, A582
Seat	Stainless Steel ASTM A582
Plug	Stainless Steel ASTM A582
Diaphragm	Stainless Steel ASTM A240
Gaskets	Non-asbestos ASTM F-104
Nuts/Bolts	ASTM A325 GRADE 5
Copper Tubing	ASTM B75 ALLOY 122

Selection Guide

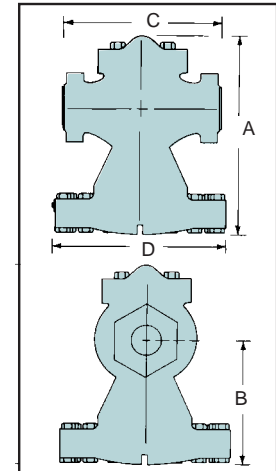
Main Valve Body Styles					
NPT Size in. (mm)	Model Number				
	2100 Screwed NPT max. pressure 250 psig (17.3 bar)	2150 Screwed NPT max. pressure 30 psig (2.1 bar)	2200 125 Flanged max. pressure 125 psig (8.6 bar)	2250 125 Flanged max. pressure 30 psig (2.1 bar)	2300 250 Flanged max. pressure 250 psig (17.3 bar)
½ (15)	X				
¾ (20)	X	X			
1 (25)	X	X			
1¼ (32)	X	X			
1½ (40)	X	X			
2 (50)	X	X	X	X	X
2½ (65)			X	X	X
3 (80)			X	X	X
4 (100)			X	X	X
6 (150)			X	X	X

Pressure and/or Temperature Pilot Operated Steam Regulators (continued)

Dimensions (Main Valves)

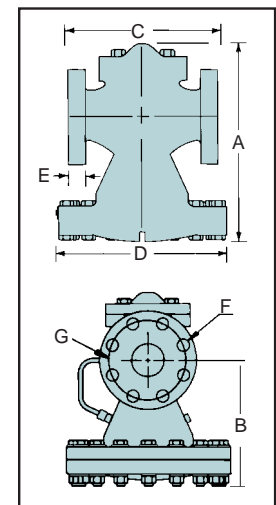
Model 2100 and 2150 Screwed NPT Ends — Maximum pressure 250 psig (17.3 bar)

NPT Valve Size in. (mm)	Dimensions in. (mm)			
	A	B	C	D
1/2 (15)	7 7/8 (200)	4 3/4 (121)	5 1/8 (130)	7 (178)
3/4 (20)	7 7/8 (200)	4 3/4 (121)	5 1/8 (130)	7 (178)
1 (25)	7 7/8 (200)	4 3/4 (121)	5 1/8 (130)	7 (178)
1 1/4 (32)	9 1/2 (241)	5 3/4 (146)	7 1/2 (191)	8 3/4 (222)
1 1/2 (40)	9 1/2 (241)	5 3/4 (146)	7 1/2 (191)	8 3/4 (222)
2 (50)	11 3/4 (298)	7 5/8 (194)	9 1/4 (235)	10 (254)



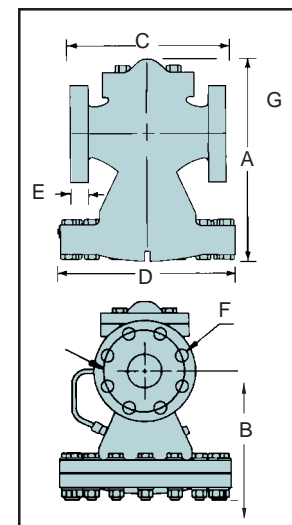
Model 2200 and 2250 Flanged Ends — Maximum pressure 125 psig (8.6 bar)

NPT Valve Size in. (mm)	Dimensions in. (mm)					Bolt Holes		
	A	B	C	D	E	Hole Dia. in. (mm) F	No. of holes	Bolt Circ. in. (mm) G
2 (50)	11 3/4 (298)	7 5/8 (194)	8 (203)	10 (254)	5/8 (16)	3/4 (19)	4	4 3/4 (121)
2 1/2 (65)	15 5/8 (397)	9 5/8 (244)	9 3/8 (238)	12 (305)	1 1/16 (17)	3/4 (19)	4	5 1/2 (140)
3 (80)	16 9/16 (421)	10 3/16 (259)	10 (254)	13 1/8 (333)	3/4 (19)	3/4 (19)	4	6 (152)
4 (100)	19 (483)	12 (305)	11 7/8 (302)	16 5/8 (422)	15/16 (23.8)	3/4 (19)	8	7 1/2 (191)
6 (150)	24 3/16 (614)	15 5/8 (397)	15 1/8 (384)	22 3/4 (578)	1 (25)	7/8 (22)	8	9 1/2 (241)



Model 2300 Flanged Ends — Maximum pressure 250 psig (17.3 bar)

NPT Valve Size in. (mm)	Dimensions in. (mm)					Bolt Holes		
	A	B	C	D	E	Hole Dia. in. (mm) F	No. of holes	Bolt Circ. in. (mm) G
2 (50)	11 3/4 (298)	7 5/8 (194)	8 1/2 (216)	10 (254)	7/8 (22)	3/4 (19)	8	5 (127)
2 1/2 (65)	15 5/8 (397)	9 5/8 (244)	10 (254)	12 (305)	1 (25)	7/8 (22)	8	5 7/8 (149)
3 (80)	16 9/16 (421)	10 3/16 (259)	10 3/4 (273)	13 1/8 (333)	1 1/8 (29)	7/8 (22)	8	6 5/8 (168)
4 (100)	19 (483)	12 (305)	12 1/2 (318)	16 5/8 (422)	1 1/4 (32)	7/8 (22)	8	7 7/8 (200)
6 (150)	24 3/16 (614)	15 5/8 (397)	16 (406)	22 3/4 (578)	1 (25)	7/8 (22)	12	10 5/8 (270)



Series 2000 Main Valves

Steam Capacities — Full Port lbs./hr. (kg/hr.)

Models 2100, 2200, 2300

Pressure psig (bar)		Main Valve Size									
IN	OUT††	½"(15)	¾"(20)	1"(25)	1¼"(32)	1½"(40)	2"(50)	2½"(65)	3"(80)	4"(100)	6"(150)
20† (1.4)	0-5 (0-0.34)	220 (100)	260 (118)	360 (163)	660 (299)	850 (386)	1200 (544)	2020 (916)	3000 (1361)	5160 (2341)	11870 (5384)
25† (1.7)	10 (0.7)	250 (113)	300 (136)	410 (186)	800 (363)	1000 (454)	1420 (644)	2300 (1043)	3300 (1497)	6200 (2812)	14000 (6350)
	0-5 (0-0.34)	260 (118)	410 (186)	470 (213)	900 (408)	1100 (499)	1730 (785)	2900 (1315)	4000 (1814)	7000 (3175)	16300 (7394)
30† (2.1)	15 (1.0)	290 (132)	320 (145)	460 (209)	950 (431)	1100 (499)	1900 (862)	3000 (1361)	3500 (1588)	6800 (3084)	14500 (6577)
	0-10 (0-0.7)	300 (136)	460 (209)	530 (240)	1100 (499)	1240 (562)	2060 (934)	3450 (1565)	4600 (2087)	8300 (3765)	18500 (8392)
40 (2.8)	25 (1.7)	320 (145)	410 (186)	650 (295)	1200 (544)	1150 (522)	1300 (590)	3250 (1474)	3800 (1724)	7500 (3402)	17200 (7802)
	0-20 (0-1.4)	370 (168)	480 (218)	720 (327)	1250 (567)	1500 (680)	2120 (962)	3800 (1724)	4800 (2177)	9400 (4264)	19650 (8913)
50 (3.5)	35 (2.4)	370 (168)	700 (318)	770 (349)	1250 (567)	1500 (680)	2500 (1134)	3500 (1588)	4800 (2177)	9500 (4309)	20000 (9072)
	30 (2.1)	410 (186)	760 (345)	850 (386)	1550 (703)	1850 (839)	2900 (1315)	4500 (2041)	5700 (2586)	11500 (5216)	23500 (10660)
	0-25 (0-1.7)	420 (191)	800 (363)	890 (404)	1650 (748)	2050 (930)	3050 (1383)	4900 (2223)	6500 (2948)	11900 (5398)	24200 (10977)
60 (4.2)	45 (3.1)	420 (191)	760 (345)	840 (381)	1350 (612)	1700 (771)	2700 (1225)	4400 (1996)	5800 (2631)	11000 (4990)	25800 (11703)
	40 (2.8)	450 (204)	850 (386)	1000 (454)	1650 (748)	2000 (907)	3050 (1383)	4800 (2177)	6800 (3084)	13500 (6124)	27500 (12474)
	35 (2.4)	470 (213)	920 (417)	1100 (499)	1750 (794)	2200 (998)	3250 (1474)	5600 (2540)	7400 (3357)	14000 (6350)	29000 (13154)
	0-30 (0-2.1)	480 (218)	980 (445)	1140 (517)	1850 (839)	2350 (1066)	3600 (1633)	5950 (2699)	8400 (3810)	14700 (6668)	30500 (13835)
75 (5.2)	55 (3.8)	550 (249)	830 (376)	1200 (544)	2000 (907)	2300 (1043)	3750 (1701)	5800 (2631)	8500 (3856)	15100 (6849)	31000 (14062)
	50 (3.5)	570 (259)	1060 (481)	1320 (599)	2250 (1021)	2560 (1161)	3900 (1769)	6100 (2767)	8900 (4037)	16300 (7394)	34000 (15422)
	45 (3.1)	580 (263)	1120 (508)	1380 (626)	2400 (1089)	2800 (1270)	4300 (1950)	6450 (2926)	9500 (4309)	17800 (8074)	37000 (16783)
	0-40 (0-2.8)	590 (268)	1200 (544)	1400 (635)	2600 (1179)	3200 (1452)	4500 (2041)	6750 (3062)	10000 (4536)	18100 (8210)	38800 (17600)
100 (6.9)	75 (5.2)	600 (272)	1150 (522)	1480 (671)	2500 (1134)	3100 (1406)	4900 (2223)	7800 (3538)	10800 (4899)	20500 (9299)	40800 (18507)
	60 (4.2)	670 (304)	1300 (590)	1800 (816)	3000 (1361)	3900 (1769)	5350 (2427)	8900 (4037)	12200 (5534)	21750 (9866)	48000 (21773)
	0-50 (0-3.5)	690 (313)	1480 (671)	1850 (839)	3400 (1542)	4400 (1996)	5850 (2654)	9100 (4128)	13500 (6124)	22960 (10415)	50000 (22680)
125 (8.6)	100 (6.9)	650 (295)	1300 (590)	1700 (771)	3150 (1429)	3550 (1610)	5300 (2404)	8650 (3924)	12200 (5534)	22000 (9979)	49200 (22317)
	75 (5.2)	750 (340)	1700 (771)	2000 (907)	4000 (1814)	4600 (2087)	6750 (3062)	10500 (4763)	15400 (6985)	26800 (12156)	61350 (27828)
	0-50 (0-3.5)	800 (363)	1770 (803)	2100 (953)	4200 (1905)	5600 (2540)	7500 (3402)	11400 (5171)	16800 (7620)	27720 (12574)	62600 (28395)
150 (10.3)	125 (8.6)	810 (367)	1600 (726)	2050 (930)	3800 (1724)	4450 (2019)	6200 (2812)	9900 (4491)	15000 (6804)	26200 (11884)	56700 (25719)
	100 (6.9)	930 (422)	1860 (844)	2450 (1111)	4500 (2041)	5350 (2427)	7500 (3402)	11900 (5398)	17800 (8074)	31000 (14061)	69300 (31434)
	0-75 (0-5.2)	950 (431)	2100 (953)	2700 (1225)	4900 (2223)	6150 (2790)	8000 (3629)	13200 (5988)	18600 (8437)	32950 (14946)	73800 (33475)
175 (12.1)	150 (10.3)	920 (417)	1850 (839)	2250 (1021)	4100 (1860)	5000 (2268)	6900 (3130)	11400 (5171)	16100 (7303)	28940 (13127)	63600 (28849)
	125 (8.6)	1050 (476)	2150 (975)	2700 (1225)	5000 (2268)	6200 (2812)	8600 (3901)	13300 (6033)	20220 (9172)	34800 (15785)	77000 (24927)
	100 (6.9)	1100 (499)	2280 (1034)	3000 (1361)	5500 (2495)	6900 (3130)	9500 (4309)	14700 (6668)	21900 (9934)	37500 (17010)	85000 (38556)
	0-75 (0-5.2)	1150 (522)	2400 (1089)	3100 (1406)	5800 (2631)	7400 (3357)	9750 (4423)	15600 (7076)	22070 (10011)	38000 (17237)	86000 (39010)
200 (13.8)	150 (10.3)	1130 (513)	2400 (1089)	2850 (1293)	5500 (2495)	6700 (3039)	9200 (4173)	14400 (6532)	22440 (10179)	38000 (17237)	84600 (38375)
	125 (8.6)	1200 (544)	2600 (1179)	3200 (1452)	6000 (2722)	7600 (3447)	10450 (4740)	15600 (7076)	25170 (11417)	43000 (19505)	95900 (43500)
	0-100 (0-6.9)	1250 (567)	2680 (1216)	3400 (1542)	6500 (2948)	7800 (3538)	11000 (4990)	16200 (7348)	25340 (11494)	43350 (19664)	97330 (44149)
225 (15.5)	175 (12.1)	1260 (572)	2480 (1125)	3080 (1397)	5980 (2713)	7180 (3257)	10150 (4604)	15850 (7189)	24300 (11022)	41221 (18697)	91600 (41549)
	150 (10.3)	1370 (621)	2790 (1266)	3540 (1606)	6840 (3103)	8370 (3797)	11600 (5262)	17770 (8060)	27250 (12360)	46200 (20956)	104600 (47446)
	0-125 (0-8.6)	1430 (649)	3000 (1361)	3770 (1710)	7200 (3266)	9120 (4137)	12200 (5534)	18450 (8368)	28300 (12836)	47980 (21763)	108600 (49260)
250 (17.3)	200 (13.8)	1350 (612)	2670 (1211)	3250 (1474)	6480 (2939)	7340 (3329)	10920 (4953)	17050 (7734)	20400 (9253)	44330 (20108)	98500 (44680)
	175 (12.1)	1480 (671)	3000 (1361)	3700 (1678)	7350 (3334)	8650 (3924)	12370 (5611)	19100 (8664)	29250 (13268)	49600 (22499)	112400 (50985)
	150 (10.3)	1550 (703)	3250 (1474)	4150 (1882)	7970 (3615)	9650 (4377)	13360 (6060)	20400 (9253)	31250 (14175)	53000 (24041)	120000 (54432)
	0-125 (0-8.6)	1550 (703)	3280 (1488)	4300 (1950)	8050 (3651)	9960 (4518)	13720 (6223)	20400 (9253)	31250 (14175)	53000 (24041)	120000 (54432)

Note: Capacity based on saturated steam at valve inlet. Pressure differential must be at least 15 psi (6.9 bar) for valve to operate.

†For inlet pressures below 30 psig (2.1 bar), refer to the Low Pressure Steam Capacity Chart.

††When the outlet steam pressure is 50% or less of the inlet pressure, always use the lowest outlet pressure shown in the capacity table.

Pressure and/or Temperature Pilot Operated Steam Regulators (continued)
Steam Capacities — Normal Port lbs./hr. (kg/hr.) Models 2100, 2200, 2300

Pressure psig (bar)		Main Valve Size									
IN	OUT††	½" (15)	¾" (20)	1" (25)	1¼" (32)	1½" (40)	2" (50)	2½" (65)	3" (80)	4" (100)	6" (150)
20† (1.4)	0-5 (0-0.34)	140 (64)	260 (118)	280 (127)	620 (281)	660 (299)	980 (445)	1480 (671)	2370 (1075)	3860 (1751)	9500 (4309)
25† (1.7)	10 (0.7)	160 (73)	300 (136)	300 (136)	700 (318)	800 (363)	1140 (517)	1700 (771)	2750 (1247)	4500 (2041)	10930 (4958)
	0-5 (0-0.34)	165 (75)	400 (181)	410 (186)	780 (354)	900 (408)	1290 (585)	1900 (862)	3600 (1633)	5100 (2313)	12900 (5851)
30† (2.1)	15 (1.0)	175 (79)	320 (145)	430 (195)	800 (363)	950 (431)	1250 (567)	1950 (885)	3100 (1406)	4800 (2177)	12500 (5670)
	0-10 (0-0.7)	185 (84)	460 (209)	460 (209)	920 (417)	1100 (499)	1530 (694)	2450 (1111)	4200 (1905)	5800 (2631)	14700 (6668)
40 (2.8)	25 (1.7)	200 (91)	360 (163)	410 (186)	950 (431)	1200 (544)	1550 (703)	2200 (998)	3650 (1656)	5600 (2540)	14000 (6350)
	0-20 (0-1.4)	221 (100)	480 (218)	480 (218)	1150 (522)	1250 (567)	1750 (794)	2600 (1179)	4100 (1860)	7000 (3175)	17500 (7938)
50 (3.5)	35 (2.4)	238 (108)	480 (218)	700 (318)	1150 (522)	1250 (567)	1950 (885)	2350 (1066)	4500 (2041)	5900 (2676)	16300 (7394)
	30 (2.1)	250 (113)	530 (240)	760 (345)	1400 (635)	1550 (703)	2100 (953)	2900 (1315)	5300 (2404)	7300 (3311)	19500 (8845)
	0-25 (0-1.7)	266 (121)	580 (263)	800 (363)	1460 (662)	1650 (748)	2400 (1089)	3500 (1588)	5600 (2540)	8400 (3810)	21200 (9616)
60 (4.2)	45 (3.1)	275 (125)	530 (240)	760 (345)	1300 (590)	1350 (612)	2100 (953)	3150 (1429)	4750 (2155)	8200 (3720)	18600 (8437)
	40 (2.8)	288 (131)	610 (277)	850 (386)	1600 (726)	1650 (748)	2300 (1043)	3600 (1633)	5500 (2495)	8700 (3946)	21500 (9752)
	35 (2.4)	310 (141)	660 (299)	920 (417)	1720 (780)	1750 (794)	2600 (1179)	3800 (1724)	6300 (2858)	9300 (4218)	22800 (10342)
	0-30 (0-2.1)	320 (145)	680 (308)	980 (445)	1820 (826)	1850 (839)	2700 (1225)	4200 (1905)	6900 (3130)	9900 (4491)	25500 (11567)
75 (5.2)	55 (3.8)	335 (152)	720 (327)	830 (376)	1990 (903)	2000 (907)	2850 (1293)	4150 (1882)	6700 (3039)	10200 (4627)	26200 (11884)
	50 (3.5)	351 (159)	750 (340)	1060 (481)	2030 (921)	2250 (1021)	3100 (1406)	4450 (2019)	7500 (3402)	10800 (4899)	28000 (12701)
	45 (3.1)	370 (168)	800 (363)	1120 (508)	2120 (962)	2400 (1089)	3350 (1520)	4700 (2132)	7800 (3538)	11900 (5398)	29000 (13154)
	0-40 (0-2.8)	385 (175)	860 (390)	1300 (590)	2200 (998)	2600 (1179)	3550 (1610)	4900 (2223)	8000 (3629)	12100 (5489)	31450 (14266)
100 (6.9)	75 (5.2)	440 (200)	900 (408)	1150 (522)	2450 (1111)	2500 (1134)	3700 (1678)	5300 (2404)	8700 (3946)	13200 (5988)	33000 (14969)
	60 (4.2)	460 (209)	980 (445)	1300 (590)	2750 (1247)	3000 (1361)	4650 (2109)	6000 (2722)	10000 (4536)	15200 (6895)	38000 (17237)
	0-50 (0-3.5)	475 (215)	1000 (454)	1480 (671)	2880 (1306)	3400 (1542)	4700 (2132)	6550 (2971)	10700 (4854)	16000 (7258)	39300 (17826)
125 (8.6)	100 (6.9)	525 (238)	1000 (454)	1300 (590)	2700 (1225)	3150 (1429)	4200 (1905)	6250 (2835)	10200 (4627)	15000 (6804)	38300 (17373)
	75 (5.2)	545 (247)	1200 (544)	1700 (771)	3250 (1474)	4000 (1814)	5400 (2449)	7600 (3447)	12500 (5670)	18300 (8301)	48900 (22181)
	0-50 (0-3.5)	570 (259)	1230 (558)	1770 (803)	3400 (1542)	4200 (1905)	5850 (2654)	8350 (3788)	13400 (6078)	19700 (8936)	50200 (22771)
150 (10.3)	125 (8.6)	565 (256)	1200 (544)	1600 (726)	3250 (1474)	3800 (1724)	5150 (2336)	7500 (3402)	11800 (5352)	17200 (7802)	44000 (19958)
	100 (6.9)	660 (299)	1400 (635)	1860 (844)	3850 (1746)	4500 (2041)	6300 (2858)	8650 (3924)	14400 (6532)	20800 (9435)	55600 (25220)
	0-75 (0-5.2)	680 (308)	1480 (671)	2100 (953)	4000 (1814)	4900 (2223)	6800 (3084)	9500 (4309)	15600 (7076)	22800 (10342)	59200 (26853)
175 (12.1)	150 (10.3)	636 (288)	1400 (635)	1850 (839)	3600 (1633)	4100 (1860)	5900 (2676)	8250 (3742)	13600 (6169)	18800 (8528)	49500 (22453)
	125 (8.6)	755 (342)	1570 (712)	2150 (975)	4360 (1978)	5000 (2268)	7000 (3175)	9700 (4400)	16650 (7552)	23200 (10524)	61000 (27670)
	100 (6.9)	800 (363)	1640 (744)	2280 (1034)	4600 (2087)	5500 (2495)	7600 (3447)	10600 (4808)	18500 (8392)	26000 (11794)	68000 (30845)
	0-75 (0-5.2)	810 (367)	1680 (762)	2400 (1089)	4650 (2109)	5800 (2631)	7900 (3583)	11250 (5103)	18820 (8537)	27200 (12338)	68300 (30981)
200 (13.8)	150 (10.3)	815 (370)	1650 (748)	2400 (1089)	4600 (2087)	5500 (2495)	7700 (3493)	10700 (4854)	18540 (8410)	25700 (11658)	66700 (30255)
	125 (8.6)	865 (392)	1850 (839)	2600 (1179)	5000 (2268)	6000 (2722)	8400 (3810)	11800 (5352)	21150 (9594)	29900 (13563)	76600 (34746)
	0-100 (0-6.9)	880 (399)	1900 (862)	2680 (1216)	5200 (2359)	6500 (2948)	8600 (3901)	12400 (5625)	21490 (9748)	30850 (13994)	77100 (34973)
225 (15.5)	175 (12.1)	910 (413)	1750 (794)	2480 (1125)	5150 (2336)	5980 (2713)	8260 (3747)	11800 (5352)	20080 (9108)	28200 (12792)	72220 (32759)
	150 (10.3)	983 (446)	2000 (907)	2790 (1266)	5730 (2599)	6840 (3103)	9250 (4196)	13420 (6087)	22900 (10387)	32370 (14683)	81700 (37059)
	0-125 (0-8.6)	1020 (463)	2050 (930)	3000 (1361)	5950 (2699)	7200 (3266)	9640 (4373)	14150 (6418)	24000 (10886)	34440 (15622)	86100 (39055)
250 (17.3)	200 (13.8)	980 (445)	1520 (689)	2670 (1211)	5500 (2495)	6480 (2939)	8850 (4014)	12890 (5947)	21970 (9966)	30300 (13744)	77660 (35227)
	175 (12.1)	1080 (490)	1880 (853)	3000 (1361)	6150 (2790)	7350 (3334)	9900 (4491)	14600 (6623)	25600 (11612)	34760 (15767)	87750 (39803)
	150 (10.3)	1130 (513)	2150 (975)	3250 (1474)	6600 (2994)	7970 (3615)	10640 (4826)	15620 (7085)	26250 (11907)	37500 (17010)	94600 (42911)
	0-125 (0-8.6)	1140 (517)	2250 (1021)	3280 (1488)	6650 (3016)	8050 (3651)	10680 (4844)	15750 (7144)	26500 (12020)	38000 (17237)	95000 (43092)

Note: Capacity based on saturated steam at valve inlet. Pressure differential must be at least 15 psi (6.9 bar) for valve to operate.

†For inlet pressures below 30 psig (2.1 bar), refer to the Low Pressure Steam Capacity Chart.

††When the outlet steam pressure is 50% or less of the inlet pressure, always use the lowest outlet pressure shown in the capacity table.

Steam Capacities — Reduced Port lbs./hr. (kg/hr.)

Models 2100, 2200, 2300

Pressure psig (bar)		Main Valve Size									
IN	OUT††	½" (15)	¾" (20)	1" (25)	1¼" (32)	1½" (40)	2" (50)	2½" (65)	3" (80)	4" (100)	6" (150)
20† (1.4)	0-5 (0-0.34)	50 (23)	220 (100)	280 (127)	480 (218)	620 (281)	860 (390)	1360 (617)	1840 (835)	3090 (1402)	7120 (3230)
25† (1.7)	10 (0.7)	57 (26)	250 (113)	300 (136)	550 (249)	700 (317)	970 (439)	1560 (708)	2100 (953)	3670 (1665)	8200 (3720)
	0-5 (0-0.34)	58 (26)	260 (118)	400 (181)	620 (281)	780 (353)	1080 (489)	1630 (739)	2240 (1016)	3940 (1787)	8500 (3856)
30† (2.1)	15 (1.0)	62 (28)	290 (132)	430 (195)	700 (318)	800 (363)	1100 (499)	1710 (776)	2400 (1089)	4000 (1814)	9500 (4309)
	0-10 (0-0.7)	65 (29)	300 (136)	460 (209)	780 (354)	920 (417)	1180 (535)	1835 (832)	2520 (1143)	4500 (2041)	10170 (4613)
40 (2.8)	25 (1.7)	72 (33)	320 (145)	360 (163)	730 (331)	950 (431)	1260 (572)	2050 (930)	2500 (1134)	4650 (2109)	10000 (4536)
	0-20 (0-1.4)	78 (35)	370 (168)	480 (218)	840 (381)	1150 (522)	1380 (626)	2250 (1021)	3000 (1361)	5400 (2449)	11500 (5216)
50 (3.5)	35 (2.4)	81 (37)	370 (168)	480 (218)	900 (408)	1150 (522)	1450 (658)	2300 (1043)	3200 (1452)	5200 (2359)	11100 (5035)
	30 (2.1)	93 (42)	410 (185)	530 (240)	1050 (476)	1400 (635)	1680 (762)	2700 (1225)	3520 (1597)	6100 (2767)	13000 (5897)
	0-25 (0-1.7)	100 (45)	420 (190)	580 (263)	1100 (499)	1460 (662)	1800 (816)	2800 (1270)	3700 (1678)	6640 (3012)	14000 (6350)
60 (4.2)	45 (3.1)	95 (43)	420 (191)	530 (240)	1000 (453)	1300 (590)	1650 (748)	2650 (1202)	3350 (1520)	5800 (2631)	14000 (6350)
	40 (2.8)	104 (47)	450 (204)	610 (277)	1100 (499)	1600 (726)	1850 (839)	3000 (1361)	3860 (1751)	6800 (3084)	15200 (6895)
	35 (2.4)	111 (50)	470 (213)	660 (299)	1150 (522)	1720 (780)	1970 (894)	3150 (1429)	4200 (1905)	7300 (3311)	15800 (7167)
	0-30 (0-2.1)	115 (52)	480 (218)	680 (308)	1200 (544)	1820 (826)	2200 (998)	3300 (1497)	4450 (2019)	7800 (3538)	17100 (7757)
75 (5.2)	55 (3.8)	118 (53)	550 (249)	720 (327)	1350 (612)	1900 (862)	2150 (975)	3400 (1542)	4800 (2177)	8000 (3629)	16200 (7348)
	50 (3.5)	127 (57)	570 (259)	750 (340)	1400 (635)	2030 (921)	2400 (1089)	3500 (1588)	5050 (2291)	8500 (3856)	16700 (7575)
	45 (3.1)	134 (60)	580 (264)	800 (363)	1430 (649)	2120 (962)	2550 (1157)	3650 (1656)	5300 (2404)	9100 (4128)	17800 (8074)
	0-40 (0-2.8)	138 (62)	590 (268)	860 (390)	1450 (658)	2200 (998)	2650 (1202)	3750 (1701)	5520 (2504)	9300 (4218)	20000 (9072)
100 (6.9)	75 (5.2)	151 (68)	600 (272)	900 (408)	1740 (789)	2450 (1111)	3100 (1406)	4300 (1950)	6200 (2812)	10400 (4717)	21200 (9616)
	60 (4.2)	174 (78)	670 (304)	990 (449)	1830 (830)	2750 (1247)	3450 (1565)	5000 (2268)	7000 (3175)	11300 (5126)	25000 (11340)
	0-50 (0-3.5)	177 (80)	690 (312)	1000 (454)	1870 (848)	2880 (1306)	3600 (1633)	5100 (2313)	7300 (3311)	11970 (5430)	27000 (12247)
125 (8.6)	100 (6.9)	175 (79)	650 (295)	1000 (453)	1900 (862)	2700 (1225)	3350 (1520)	4950 (2245)	7000 (3175)	12000 (5443)	24000 (10886)
	75 (5.2)	213 (97)	750 (340)	1200 (544)	2150 (975)	3250 (1474)	4300 (1950)	6000 (2722)	8350 (3788)	14000 (6350)	30000 (13608)
	0-50 (0-3.5)	215 (98)	800 (363)	1230 (558)	2200 (998)	3400 (1542)	4400 (1996)	6100 (2767)	8700 (3946)	14600 (6623)	32200 (14606)
150 (10.3)	125 (8.6)	198 (90)	810 (367)	1200 (544)	2300 (1043)	3250 (1474)	4100 (1860)	5750 (2608)	8000 (3629)	13600 (6169)	27800 (12610)
	100 (6.9)	240 (109)	930 (422)	1400 (635)	2750 (1247)	3850 (1746)	4800 (2177)	6900 (3130)	9500 (4309)	16300 (7399)	35700 (16194)
	0-75 (0-5.2)	254 (115)	950 (431)	1480 (671)	2760 (1252)	4000 (1814)	5200 (2359)	7100 (3221)	10400 (4717)	17200 (7802)	39500 (17917)
175 (12.1)	150 (10.3)	220 (100)	920 (417)	1400 (635)	2600 (1179)	3600 (1633)	4500 (2041)	6600 (2994)	9300 (4218)	15300 (6940)	31150 (14129)
	125 (8.6)	226 (103)	1050 (476)	1570 (712)	3000 (1361)	4360 (1978)	5320 (2413)	7600 (3447)	10800 (4898)	18200 (8255)	40150 (18212)
	100 (6.9)	290 (132)	1100 (499)	1640 (744)	3100 (1406)	4600 (2087)	5800 (2631)	7900 (3583)	11700 (5307)	19960 (9053)	45700 (20729)
	0-75 (0-5.2)	295 (134)	1150 (522)	1680 (762)	3200 (1452)	4650 (2109)	5800 (2631)	8000 (3629)	11750 (5329)	20100 (9117)	46400 (21047)
200 (13.8)	150 (10.3)	291 (132)	1130 (513)	1650 (748)	3100 (1406)	4600 (2087)	5800 (2630)	8400 (3810)	11380 (5162)	16900 (7666)	44500 (20185)
	125 (8.6)	327 (148)	1200 (544)	1850 (839)	3250 (1474)	5000 (2268)	6500 (2948)	9100 (4128)	13100 (5942)	20100 (9117)	52200 (23678)
	0-100 (0-6.9)	330 (150)	1250 (567)	1900 (862)	3300 (1497)	5200 (2359)	6800 (3084)	9100 (4128)	13300 (6033)	22600 (10251)	52500 (23814)
225 (15.5)	175 (12.1)	315 (143)	1260 (572)	1750 (794)	3150 (1429)	5150 (2336)	6400 (2903)	8800 (3992)	12330 (5593)	21500 (9752)	45800 (20775)
	150 (10.3)	355 (161)	1370 (621)	2000 (907)	3650 (1656)	5730 (2599)	7150 (3243)	9870 (4477)	14000 (6350)	24080 (10923)	53300 (24177)
	0-125 (0-8.6)	370 (168)	1430 (649)	2050 (930)	4020 (1823)	5950 (2699)	7500 (3402)	10300 (4672)	14760 (6695)	25400 (11521)	58640 (26599)
250 (17.2)	200 (13.8)	339 (154)	1350 (612)	1880 (853)	3400 (1542)	5500 (2495)	6850 (3107)	9090 (4123)	13260 (6015)	23110 (10483)	50400 (22861)
	175 (12.1)	380 (172)	1480 (671)	2150 (975)	3970 (1801)	6150 (2799)	7680 (3483)	10400 (4717)	15050 (6827)	25860 (11730)	58500 (26536)
	150 (10.3)	405 (184)	1550 (703)	2250 (1021)	4440 (2014)	6600 (2994)	8300 (3765)	11300 (5126)	16300 (7394)	27800 (12610)	63400 (28758)
	0-125 (0-8.6)	410 (186)	1550 (703)	2250 (1021)	4500 (2041)	6650 (3016)	8330 (3778)	11360 (5153)	16400 (7439)	28100 (12746)	64300 (29166)

Note: Capacity based on saturated steam at valve inlet. Pressure differential must be at least 15 psi (6.9 bar) for valve to operate.

†For inlet pressures below 30 psig (2.1 bar), refer to the Low Pressure Steam Capacity Chart.

††When the outlet steam pressure is 50% or less of the inlet pressure, always use the lowest outlet pressure shown in the capacity table.

Pressure and/or Temperature Pilot Operated Steam Regulators (continued)

Steam Capacities – Low Pressure lbs./hr. (kg/hr.)

Models 2150, 2250

Pressure psig (bar)		Main Valve Size								
IN	OUT	¾" (20)	1" (25)	1¼" (32)	1½" (40)	2" (50)	2½" (65)	3" (80)	4" (100)	6" (150)
5 (.35)	2 (.14)	100 (45)	200 (91)	450 (204)	500 (227)	750 (340)	950 (431)	1050 (476)	2350 (1066)	7600 (3447)
	0-1 (0-.07)	140 (64)	240 (109)	490 (222)	550 (249)	850 (386)	1075 (488)	1200 (544)	2500 (1134)	7700 (3493)
6 (.42)	3 (.21)	105 (48)	210 (95)	470 (213)	540 (245)	800 (363)	1075 (488)	1150 (522)	2400 (1089)	7700 (3493)
	0-1 (0-.07)	160 (73)	295 (134)	540 (245)	660 (299)	1050 (476)	1200 (544)	1350 (612)	2600 (1179)	8000 (3629)
7 (.49)	4 (.28)	115 (52)	215 (98)	485 (220)	570 (259)	870 (395)	1150 (522)	1300 (590)	2450 (1111)	7900 (3583)
	0-2 (0-.14)	175 (79)	325 (147)	560 (254)	760 (345)	1200 (544)	1300 (590)	1500 (680)	2800 (1270)	8300 (3765)
8 (.56)	5 (.35)	120 (54)	220 (100)	500 (227)	600 (272)	940 (426)	1200 (544)	1400 (635)	2550 (1157)	8150 (3697)
	0-3 (0-.21)	180 (82)	340 (154)	630 (286)	800 (363)	1250 (567)	1350 (612)	1550 (703)	3250 (1474)	9243 (4192)
9 (.62)	6 (.42)	125 (57)	230 (104)	520 (236)	630 (286)	1000 (454)	1350 (612)	1550 (703)	2800 (1270)	8400 (3810)
	4 (.28)	190 (86)	350 (159)	650 (295)	815 (370)	1320 (599)	1500 (680)	1800 (816)	3350 (1520)	9600 (4355)
	0-2 (0-.14)	230 (104)	405 (184)	720 (327)	940 (426)	1500 (680)	1600 (726)	1900 (862)	3550 (1610)	9700 (4400)
10 (0.7)	7 (.49)	130 (59)	240 (109)	540 (245)	670 (304)	1050 (476)	1500 (680)	1650 (748)	3000 (1361)	10300 (4672)
	5 (.35)	200 (91)	350 (159)	730 (331)	860 (390)	1400 (635)	1750 (794)	1900 (862)	3450 (1565)	11300 (5126)
	0-2 (0-.14)	250 (113)	420 (191)	820 (372)	1040 (472)	1600 (726)	1800 (816)	2100 (953)	3600 (1633)	12000 (5443)
12 (.83)	9 (.62)	140 (64)	250 (113)	570 (259)	700 (318)	1100 (499)	1750 (794)	1800 (816)	3300 (1497)	10700 (4854)
	7 (.49)	210 (95)	360 (163)	750 (340)	800 (363)	1460 (662)	2000 (907)	2300 (1043)	3600 (1633)	11200 (5080)
	5 (.35)	250 (113)	410 (186)	900 (408)	1050 (476)	1700 (771)	2150 (975)	2650 (1202)	4000 (1814)	12000 (5443)
	0-2 (0-.14)	300 (136)	480 (218)	940 (426)	1200 (544)	1850 (839)	2300 (1043)	2700 (1225)	4400 (1996)	12500 (5670)
15 (6.9)	12 (.83)	150 (68)	270 (122)	600 (272)	740 (336)	1170 (531)	1800 (816)	1900 (862)	3600 (1633)	11000 (4990)
	10 (.7)	215 (98)	385 (175)	800 (363)	920 (417)	1500 (680)	2250 (1021)	2550 (1157)	4200 (1905)	12500 (5670)
	8 (.56)	260 (118)	450 (204)	940 (426)	1100 (499)	1750 (794)	2400 (1089)	2900 (1315)	4800 (2177)	14000 (6350)
	5 (.35)	315 (143)	510 (231)	1000 (454)	1250 (567)	2020 (916)	2550 (1157)	3200 (1452)	5400 (2449)	14300 (6486)
	0-2.5 (0-.17)	345 (156)	540 (245)	1040 (472)	1360 (617)	2200 (998)	2600 (1179)	3300 (1497)	6000 (2722)	14500 (6577)
20 (1.4)	17 (1.2)	160 (73)	290 (132)	640 (290)	800 (363)	1300 (590)	1450 (658)	2000 (907)	3800 (1724)	14000 (6350)
	15 (1.0)	220 (100)	400 (181)	835 (379)	1140 (517)	1850 (839)	2000 (907)	3100 (1406)	5000 (2268)	16000 (7258)
	10 (.7)	360 (163)	600 (272)	1150 (522)	1420 (644)	2300 (1043)	2500 (1134)	3950 (1792)	7200 (3266)	16500 (7484)
	0-5 (0-.35)	400 (181)	670 (304)	1250 (567)	1630 (739)	2650 (1202)	2650 (1202)	4550 (2064)	7300 (3311)	17000 (7711)
25 (1.7)	22 (1.5)	170 (77)	320 (145)	670 (304)	870 (395)	1400 (635)	1750 (794)	2200 (998)	4000 (1814)	12000 (5443)
	20 (1.4)	230 (104)	420 (191)	865 (392)	1100 (499)	1800 (816)	2400 (1089)	3300 (1497)	6000 (2722)	14000 (6350)
	15 (1.0)	485 (220)	650 (295)	1215 (551)	1490 (676)	2400 (1089)	2700 (1225)	4000 (1814)	8200 (3720)	16500 (7484)
	10 (.7)	430 (195)	720 (327)	1325 (601)	1700 (771)	2800 (1270)	3000 (1361)	4600 (2087)	8300 (3765)	19500 (8845)
	0-5 (0-.35)	460 (209)	770 (349)	1380 (626)	1900 (862)	3100 (1406)	3200 (1452)	5000 (2268)	8300 (3765)	20000 (9072)
30 (2.1)	27 (1.9)	180 (82)	330 (150)	690 (313)	935 (424)	1500 (680)	2000 (907)	2200 (998)	4200 (1905)	12500 (5670)
	25 (1.7)	240 (109)	430 (195)	885 (401)	1225 (556)	1900 (862)	2450 (1111)	3380 (1533)	7020 (3184)	14700 (6668)
	20 (1.4)	490 (222)	670 (304)	1250 (567)	1550 (703)	2500 (1134)	2750 (1247)	4070 (1846)	8800 (3992)	17300 (7847)
	15 (1.0)	450 (204)	760 (345)	1375 (624)	1770 (803)	2950 (1338)	3150 (1429)	4660 (2114)	9080 (4119)	20000 (9072)
	0-10 (0-.7)	520 (236)	870 (395)	1575 (714)	2100 (953)	3400 (1542)	3600 (1633)	5480 (2486)	9300 (4218)	21300 (9662)

Capacity based on saturated steam at valve inlet. Maximum inlet pressure 30 psi (2.1 bar).

Capacity based on 1 psi (.07 bar) accuracy of control. Pressure differential must be at least 3 psi (.21 bar) in order for valve to operate.

Series 2000 Main Valve Ordering Information

Series 2000 main valves, pilots, wells, and hardware kits MUST BE ORDERED as separate line items.

Model Number	Part Number	Size in. (mm)	Port	End Connections	Maximum Pressure psig (bar)	Weight lbs. (kg)
2100	402439	½ (15)	Full	Screwed NPT	250 (17.3)	23 (10.4)
2100	402436	½ (15)	Normal	Screwed NPT	250 (17.3)	23 (10.4)
2100	402433	½ (15)	Reduced	Screwed NPT	250 (17.3)	23 (10.4)
2100	402442	¾ (20)	Full	Screwed NPT	250 (17.3)	23 (10.4)
2100	402457	¾ (20)	Normal	Screwed NPT	250 (17.3)	23 (10.4)
2100	402460	¾ (20)	Reduced	Screwed NPT	250 (17.3)	23 (10.4)
2100	402445	1 (25)	Full	Screwed NPT	250 (17.3)	23 (10.4)
2100	402463	1 (25)	Normal	Screwed NPT	250 (17.3)	23 (10.4)
2100	402466	1 (25)	Reduced	Screwed NPT	250 (17.3)	23 (10.4)
2100	402409	1¼ (32)	Full	Screwed NPT	250 (17.3)	44 (20)
2100	402469	1¼ (32)	Normal	Screwed NPT	250 (17.3)	44 (20)
2100	402472	1¼ (32)	Reduced	Screwed NPT	250 (17.3)	44 (20)
2100	402412	1½ (40)	Full	Screwed NPT	250 (17.3)	44 (20)
2100	402475	1½ (40)	Normal	Screwed NPT	250 (17.3)	44 (20)
2100	402478	1½ (40)	Reduced	Screwed NPT	250 (17.3)	44 (20)
2100	402448	2 (50)	Full	Screwed NPT	250 (17.3)	64 (29)
2100	402451	2 (50)	Normal	Screwed NPT	250 (17.3)	64 (29)
2100	402454	2 (50)	Reduced	Screwed NPT	250 (17.3)	64 (29)
2150	402664	¾ (20)	NA	Screwed NPT	30 (2.1)	22.5 (10.2)
2150	402667	1 (25)	NA	Screwed NPT	30 (2.1)	22.5 (10.2)
2150	402649	1¼ (32)	NA	Screwed NPT	30 (2.1)	42 (19)
2150	402652	1½ (40)	NA	Screwed NPT	30 (2.1)	42 (19)
2150	402655	2 (50)	NA	Screwed NPT	30 (2.1)	62 (28)
2200	402592	2 (50)	Full	Flanged	125 (8.6)	67 (30)
2200	402595	2 (50)	Normal	Flanged	125 (8.6)	67 (30)
2200	402598	2 (50)	Reduced	Flanged	125 (8.6)	67 (30)
2200	402541	2½ (65)	Full	Flanged	125 (8.6)	175 (79)
2200	402544	2½ (65)	Normal	Flanged	125 (8.6)	175 (79)
2200	402547	2½ (65)	Reduced	Flanged	125 (8.6)	175 (79)
2200	402523	3 (80)	Full	Flanged	125 (8.6)	215 (98)
2200	402526	3 (80)	Normal	Flanged	125 (8.6)	215 (98)
2200	402529	3 (80)	Reduced	Flanged	125 (8.6)	215 (98)
2200	402505	4 (100)	Full	Flanged	125 (8.6)	297 (135)
2200	402508	4 (100)	Normal	Flanged	125 (8.6)	297 (135)
2200	402511	4 (100)	Reduced	Flanged	125 (8.6)	297 (135)
2200	402487	6 (150)	Full	Flanged	125 (8.6)	535 (243)
2200	402490	6 (150)	Normal	Flanged	125 (8.6)	535 (243)
2200	402493	6 (150)	Reduced	Flanged	125 (8.6)	535 (243)
2250	402658	2 (50)	NA	Flanged	30 (2.1)	67 (30)
2250	400751	2½ (65)	NA	Flanged	30 (2.1)	175 (79)
2250	400752	3 (80)	NA	Flanged	30 (2.1)	215 (98)
2250	400754	4 (100)	NA	Flanged	30 (2.1)	297 (135)
2250	400757	6 (150)	NA	Flanged	30 (2.1)	535 (243)
2300	402601	2 (50)	Full	Flanged	250 (17.3)	70 (32)
2300	402604	2 (50)	Normal	Flanged	250 (17.3)	70 (32)
2300	402607	2 (50)	Reduced	Flanged	250 (17.3)	70 (32)
2300	402532	2½ (65)	Full	Flanged	250 (17.3)	181 (82)
2300	402535	2½ (65)	Normal	Flanged	250 (17.3)	181 (82)
2300	402538	2½ (65)	Reduced	Flanged	250 (17.3)	181 (82)
2300	402514	3 (80)	Full	Flanged	250 (17.3)	221 (100)
2300	402517	3 (80)	Normal	Flanged	250 (17.3)	221 (100)
2300	402520	3 (80)	Reduced	Flanged	250 (17.3)	221 (100)
2300	402496	4 (100)	Full	Flanged	250 (17.3)	305 (138)
2300	402499	4 (100)	Normal	Flanged	250 (17.3)	305 (138)
2300	402502	4 (100)	Reduced	Flanged	250 (17.3)	305 (138)
2300	402481	6 (150)	Full	Flanged	250 (17.3)	552 (250)
2300	400185	6 (150)	Normal	Flanged	250 (17.3)	552 (250)
2300	402484	6 (150)	Reduced	Flanged	250 (17.3)	552 (250)

Hardware Kit Ordering Information

One kit per main valve is required to connect the pilot valve(s).

Part Number	Description	Size in. (mm)	Wt. (Approx.) lbs. (kg)
400638	Kit used when main valve does not have a spring or air pressure pilot	½ - 2 (15-50mm)	2 (1.0)
400640	Kit used when main valve does not have a spring or air pressure pilot	2½ - 6 (65-150mm)	4 (2.0)
400641	Kit used when main valve has a spring or air pressure pilot	½ - 2 (15-50mm)	1 (0.5)
400643	Kit used when main valve has a spring or air pressure pilot	2½ - 6 (65-150 mm)	2 (1.0)