

GP-1000

For Steam, Air and Non-Corrosive Gas

The GP-1000 Series valves are pilot-controlled for accurate regulation of pressure under wide-ranging flow. Internal pilot design eliminates external components and piping.

Internally piloted GP Series valves are capable of larger capacity and greater accuracy than direct acting valves.

Completely supported by piping, lightweight GP Series valves install easily with NPT or flanged connections. A stainless steel diaphragm, hardened stainless steel working parts and integral removable strainer team up to provide

high performance over a long, trouble-free service life. Valves are equipped with a single seated main valve, piston valve rings for longer life and an external adjusting screw with locking nut. All working parts are renewable in-line. ANSI Class IV Shutoff.

For a fully detailed certified drawing, refer to list below.

GP-1000 NPT	CD #2104
GP-1000 Flanged	CD #2105
GP-1000 SS/AS	CDY #1081

GP-1000													
Model Number	Pressure		Spring Color	Application	Maximum Temp. °F (°C)	Minimum Diff. psig (barg)	Body	Main Valve/ Valve Seat	Pilot Valve/Seat	Piston/Cylinder	Diaphragm		
	Inlet psig (barg)	Reduced psig (barg)											
NPT GP-1000	15 - 250 (1 - 17)	7 - 125 (.48 - 8.6)	Black	Steam	450 (232)	7 (.48)	Ductile Iron ASTM A536	Stainless Steel AISI 420	Stainless Steel AISI 403/420	Stainless Steel AISI 420/Stainless Steel AISI 403	Stainless Steel AISI 301		
		125 - 200 (8.6 - 13.8)	Green										
150 ANSI GP-1000	15 - 150 (1 - 10)	7 - 125 (.48 - 8.6)	Black					Air & Gas	175 (80)	Stainless Steel AISI 420/Brass w/NBR		Stainless Steel AISI 420/Brass w/NBR	Bronze/Bronze ASTM C36000
NPT GP-1000A	15 - 150 (1 - 10)	7 - 125 (.48 - 8.6)											
150 ANSI GP-1000A	15 - 150 (1 - 10)	7 - 125 (.48 - 8.6)											
GP-1000SS* GP-1000AS*	15 - 150 (1 - 10)	7 - 125 (.48 - 8.6)		Steam	450 (232)	Stainless Steel AISI 304	Stainless Steel AISI 420	Stainless Steel AISI 403/420	Stainless Steel AISI 420/Stainless Steel AISI 403				

NOTES: Sizes 2" (50 mm) and below are NPT connections. Sizes 2" (50 mm) and larger are flanged connections. Turndown ratio for GP-1000 20:1.

*GP-1000SS/GP-1000AS are available in 1/2" - 2" only and are flanged with NPT companion flanges.

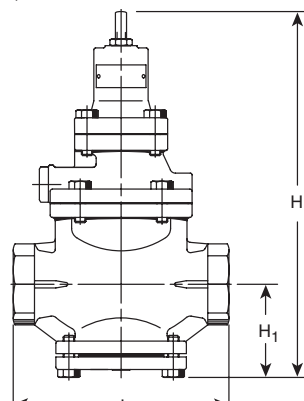
GP-1000, GP-1000A, GP-1000SS, GP-1000AS Dimensions and Weights																		
Symbol	Connection Size																	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
	1/2	15	3/4	20	1	25	1-1/4	32	1-1/2	40	2*	50	2-1/2	65	3	80	4	100
L	5-7/8	150	6-1/8	155	6-5/16	160	7-1/2	190	7-1/2	190	8-11/16	220	9-5/8	245	11-3/8	290	13	330
H	11-1/4	285	11-1/4	285	11-7/8	300	12-3/4	323	12-3/4	323	13-5/8	347	14	357	15-7/8	404	17-3/4	450
H ₁	2-1/2	64	2-1/2	64	2-5/8	67	3-1/4	82	3-1/4	82	3-11/16	93	4	100	4-13/16	122	5-9/16	144
Wt, lb (kg)	15-1/2 (7)		15-1/2 (7)		19 (8.5)		25-1/2 (12)		27-1/2 (12.5)		40 (18)		66 (30)		77 (35)		116 (53)	
C _v	1		2.3		4		6.5		9		16		25		36		64	

NOTES: GP-1000 is 1/2"-2" (20-50 mm) NPT, 2"- 4" (50-100 mm) ANSI 150 lb flanged.

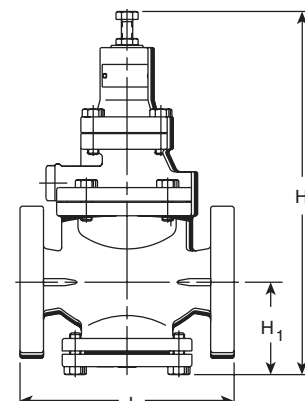
* "L" Dimension for 2" 150# flange is 8-11/16" (220 mm).



GP-1000



GP-1000 NPT 1/2" - 2"



GP-1000 150 FL 2" - 4"

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

Capacities for Steam, Air and Non-Corrosive Gas

GP-1000 Capacities—Steam										
lb/hr										
Inlet	Outlet	Connection Size								
		in								
psig		1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4
C _v Factor		1	2.3	4	6.5	9	16	25	36	64
15	8	40	93	161	261	362	644	1,005	1,448	2,574
	5	47	107	187	303	420	747	1,167	1,680	2,987
20	13	44	101	176	285	395	702	1,097	1,580	2,809
	5	60	138	240	390	540	960	1,500	2,160	3,839
30	23	50	116	202	328	454	807	1,261	1,816	3,228
	5 - 7	76	176	306	497	688	1,223	1,911	2,752	4,892
40	33	56	129	225	365	506	900	1,406	2,024	3,598
	25	79	182	316	514	711	1,264	1,976	2,845	5,057
	5 - 12	94	215	374	608	842	1,497	2,338	3,367	5,986
50	42	65	151	262	425	589	1,047	1,636	2,356	4,188
	30	98	226	393	638	884	1,572	2,456	3,536	6,287
	5 - 17	111	254	443	719	996	1,770	2,766	3,983	7,081
75	63	94	216	376	612	847	1,506	2,353	3,388	6,024
	45	141	323	562	914	1,265	2,249	3,515	5,061	8,998
	5 - 30	153	353	614	997	1,380	2,454	3,835	5,522	9,817
100	85	119	274	476	774	1,072	1,905	2,977	4,287	7,622
	70	162	374	650	1,056	1,462	2,599	4,061	5,847	10,395
	5 - 42	196	451	785	1,275	1,765	3,138	4,903	7,061	12,553
125	106	148	340	591	960	1,329	2,363	3,693	5,318	9,454
	100	167	385	670	1,089	1,507	2,680	4,187	6,029	10,718
	75	225	517	900	1,462	2,024	3,598	5,623	8,097	14,394
	7 - 55	239	549	956	1,553	2,150	3,822	5,972	8,600	15,289
150	125	183	421	733	1,191	1,649	2,931	4,580	6,595	11,724
	100	248	571	993	1,613	2,234	3,971	6,205	8,936	15,885
	80	283	651	1,132	1,839	2,547	4,528	7,074	10,187	18,111
	8 - 67	282	648	1,127	1,831	2,535	4,506	7,041	10,139	18,025
175	148	205	471	819	1,331	1,844	3,277	—	—	—
	125	270	620	1,078	1,752	2,426	4,312	—	—	—
	100	317	730	1,269	2,062	2,856	5,077	—	—	—
	9 - 80	324	746	1,298	2,109	2,919	5,190	—	—	—
200	170	230	529	919	1,494	2,069	3,678	—	—	—
	150	289	665	1,157	1,880	2,603	4,628	—	—	—
	125	342	787	1,369	2,225	3,081	5,478	—	—	—
	10 - 92	367	844	1,469	2,386	3,304	5,874	—	—	—
225	191	258	594	1,034	1,680	2,326	4,135	—	—	—
	175	308	708	1,231	2,000	2,769	4,923	—	—	—
	150	366	841	1,463	2,377	3,292	5,852	—	—	—
	12 - 105	410	943	1,640	2,664	3,689	6,558	—	—	—
250	200	325	748	1,301	2,113	2,926	5,202	—	—	—
	175	388	892	1,551	2,520	3,489	6,203	—	—	—
	150	435	1,001	1,741	2,829	3,916	6,963	—	—	—
	13 - 117	453	1,041	1,811	2,942	4,074	7,242	—	—	—

NOTE: For air capacities scfm, multiply steam capacities lb/hr by 0.36.

Capacities for Steam, Air and Non-Corrosive Gas

GP-1000 Capacities—Steam										
		kg/hr								
Inlet	Outlet	Connection Size								
		mm								
bar		15	20	25	32	40	50	65	80	100
C _v Factor		1	2.3	4	6.5	9	16	25	36	64
1.03	0.55	18	42	73	119	164	292	456	657	1,168
	0.34	21	49	85	138	191	339	529	762	1,355
1.38	0.90	20	46	80	129	179	319	498	717	1,274
	0.34	27	63	109	177	245	435	680	980	1,741
2.07	1.59	23	53	92	149	206	366	572	824	1,464
	.34 - .48	35	80	139	225	312	555	867	1,248	2,219
2.76	2.28	26	59	102	166	230	408	638	918	1,632
	1.72	36	82	143	233	323	574	896	1,290	2,294
	.34 - .83	42	98	170	276	382	679	1,061	1,527	2,715
3.45	2.90	30	68	119	193	267	475	742	1,069	1,900
	2.07	45	102	178	290	401	713	1,114	1,604	2,852
	.34 - 1.17	50	115	201	326	452	803	1,255	1,807	3,212
5.17	4.34	43	98	171	278	384	683	1,067	1,537	2,732
	3.10	64	147	255	415	574	1,020	1,594	2,296	4,081
	.34 - 2.1	70	160	278	452	626	1,113	1,739	2,505	4,453
6.89	5.86	54	124	216	351	486	864	1,350	1,945	3,457
	4.83	74	169	295	479	663	1,179	1,842	2,652	4,715
	.34 - 2.9	89	205	356	578	801	1,423	2,224	3,203	5,694
8.62	7.31	67	154	268	436	603	1,072	1,675	2,412	4,288
	6.89	76	175	304	494	684	1,215	1,899	2,735	4,862
	5.17	102	235	408	663	918	1,632	2,550	3,673	6,529
	.48 - 3.7	108	249	433	704	975	1,734	2,709	3,901	6,935
10.00	8.62	83	191	332	540	748	1,330	2,077	2,991	5,318
	6.89	113	259	450	732	1,013	1,801	2,815	4,053	7,206
	5.52	128	295	513	834	1,155	2,054	3,209	4,621	8,215
	.55 - 4.6	128	294	511	830	1,150	2,044	3,194	4,599	8,176
12.07	10.20	93	214	372	604	836	1,487	—	—	—
	8.62	122	281	489	795	1,100	1,956	—	—	—
	6.89	144	331	576	936	1,295	2,303	—	—	—
	.62 - 5.5	147	338	589	956	1,324	2,354	—	—	—
13.79	11.72	104	240	417	678	938	1,668	—	—	—
	10.34	131	302	525	853	1,181	2,099	—	—	—
	8.62	155	357	621	1,009	1,398	2,485	—	—	—
	.68 - 6.3	167	383	666	1,082	1,499	2,665	—	—	—
15.51	13.17	117	270	469	762	1,055	1,876	—	—	—
	12.07	140	321	558	907	1,256	2,233	—	—	—
	10.34	166	382	664	1,078	1,493	2,654	—	—	—
	.82 - 7.24	186	428	744	1,209	1,673	2,975	—	—	—
17.24	13.79	147	339	590	959	1,327	2,360	—	—	—
	12.07	176	404	703	1,143	1,583	2,814	—	—	—
	10.34	197	454	790	1,283	1,776	3,158	—	—	—
	.89 - 8.06	205	472	821	1,335	1,848	3,285	—	—	—

For air capacities m³/hr, multiply steam capacities kg/hr by 1.35.

For Steam Service

The GP-2000 is a high performance, externally piloted reducing valve for large capacity requirements. Typical use is on intermittent service, including applications such as heat exchangers, steam coils, rotating dryers, process equipment and heating systems. With a 20:1 rangeability and high C_v , the GP-2000 is reliable and accurate ($\pm 1\%$ of pressure set point from 5% to 100% of flow) over a long, trouble-free service life. Hardened stainless steel working parts

are renewable in-line. Single seated for dead-end service. Available with both NPT ($1/2"$ - $2"$) and flanged connections in $1/2"$ - $6"$ sizes. ANSI Class IV Shutoff.

For a fully detailed certified drawing, refer to:
GP-2000 **CDY #1008**
GP-2000 Flanged **CDY #1007**

GP-2000 Specifications

Application	Inlet Pressure psig (bar)	Reduced Pressure psig (bar)	Spring Color	Maximum Temperature °F (°C)	Minimum Differential psig (bar)	Materials				
						Body	Main Valve/Seat	Pilot Valve/Seat	Diaphragm	Color
Steam	NPT 15 - 300 (1 - 20)	*1.5 - 3 (.10 - .21) 3 - 21 (.21 - 1.4) 15 - 200 (1 - 13.8)	Yellow Yellow Green	450 (232)	7 (.48)	Ductile Iron ASTM A536	Stainless Steel AISI 420		Stainless Steel AISI 301	Dark Gray
	15 - 185 (1 - 13) 150 lb. Flanged									
	15 - 300 (1 - 20) 300 lb. Flanged									

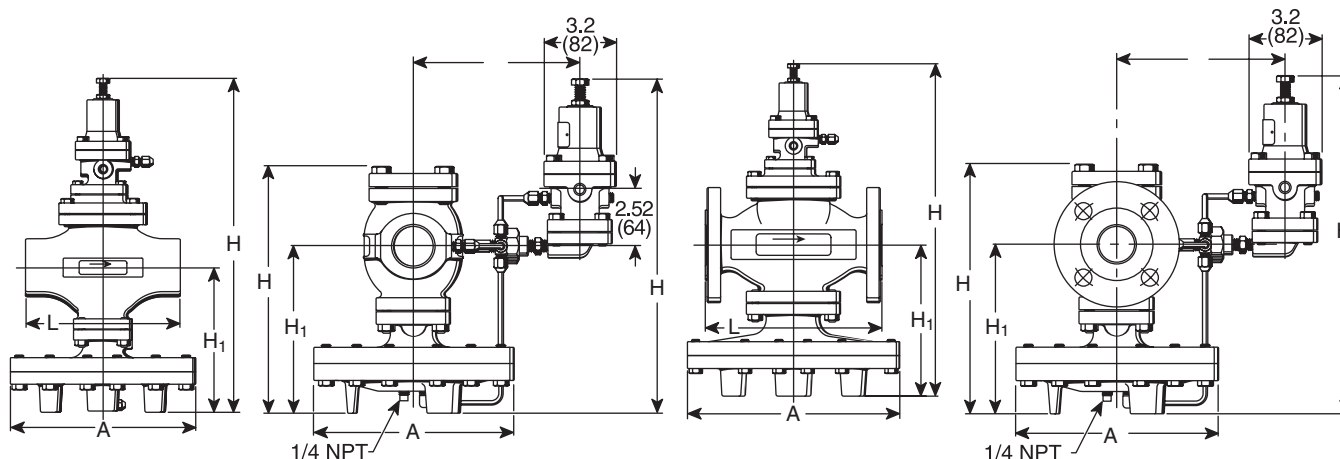
*NOTE: When using this spring range, remove one (1) pilot diaphragm. Capacities are reduced by 1/2 of capacity chart when this spring is being used.

GP-2000 Dimensions and Weights

Size		Face-to-Face “L”						A		F		H Integral		H Remote		H ₁		H ₂		Weight						C _v *
		NPT		150#		300#														NPT		150#		300#		
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	lb	kg	lb	kg	
1/2	15	5-15/16	150	5-9/16	141	5-3/4	147	7-15/16	200	6-7/8	176	15-3/4	398	14-1/4	362	6-3/4	170	9-5/8	244	34	14	36	15	42	19	5.0
3/4	20	5-15/16	150	5-1/2	140	5-3/4	147	7-15/16	200	6-7/8	176	15-3/4	398	14-1/4	362	6-3/4	170	9-5/8	244	34	14	36	15	42	19	7.2
1	25	6-5/16	160	5-3/4	147	6-1/4	159	8-15/16	226	7-1/16	179	15-15/16	404	14-7/16	367	6-15/16	175	10	254	44	19	48	20	54	23	10.9
1-1/4	32	7-1/8	180	6-1/2	166	7-1/16	179	8-15/16	226	7-7/16	188	17-1/8	434	15-1/8	384	7-5/8	192	11-1/8	283	51	22	53	22	59	25	14.3
1-1/2	40	7-1/8	180	7-7/16	189	7-15/16	202	8-15/16	226	7-7/16	188	17-1/8	434	15-1/8	384	7-5/8	192	11-1/8	283	51	22	55	23	61	26	18.8
2	50	9-1/8	230	8-9/16	217	9-1/8	232	10-15/16	276	7-11/16	195	19-5/8	498	16	406	8-1/2	216	12-5/8	321	75	33	81	36	84	36	32
2-1/2	65	—	—	10-15/16	278	11-1/2	292	13-13/16	352	8-5/16	211	21-3/4	552	17-5/16	440	9-13/16	251	14-3/4	375	—	—	142	65	150	65	60
3	80	—	—	11-3/4	298	12-7/16	315	13-13/16	352	8-3/4	222	22-5/8	575	17-15/16	456	10-7/16	264	15-3/4	400	—	—	155	69	166	72	78
4	100	—	—	13-1/2	343	14-1/8	359	15-13/16	401	9-7/16	239	25-15/16	658	20-1/8	511	12-5/8	321	19-1/4	489	—	—	247	112	264	119	120
6	150	—	—	18-1/8	460	19	483	19-3/4	502	—	—	31-3/4	806	—	—	16-1/4	414	26-1/2	673	—	—	507	230	553	252	250

*50% reduced port available for sizes $1/2"$ - $4"$. The C_v value should be divided by 2 to get reduced port C_v .

For capacities see page 305.





GP-2000CS Carbon Steel Body

For Steam Service

The GP-2000CS is a high performance, externally piloted reducing valve for large capacity requirements. Typical use is on intermittent service, including applications such as heat exchangers, steam coils, rotating dryers, process equipment and heating systems. With a 20:1 rangeability and high Cv, the GP-2000CS is reliable and accurate (+/-1% of pressure set point from 5% to 100% of flow) over a long, trouble-free service life. Stellite stainless steel working

parts are renewable in-line. Single seated for dead-end service. Available with both NPT (1/2" - 2") and flanged connections in 2" - 4" sizes.

For a fully detailed certified drawing, refer to:

GP-2000 CDY #1008
GP-2000 Flanged CDY #1007

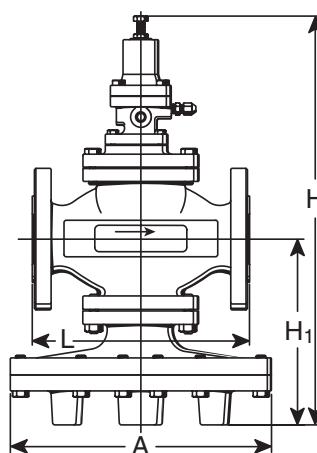
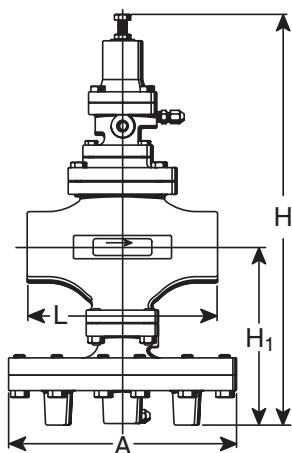
GP-2000GP-2000CS Specifications

Application	Inlet Pressure psig (bar)	Reduced Pressure psig (bar)	Spring Color	Maximum Temperature °F (°C)	Minimum Differential psig (bar)	Materials				
						Body	Main Valve/Seat	Pilot Valve/Seat	Diaphragm	Color
Steam	NPT 15 - 450 (1 - 31)	3 - 21 (.21 - 1.4)	Yellow	600°F (315°C)	7 (.48)	Carbon Steel WCB ASTM216 A216M-08	Stainless Steel 304 Stainless Steel Stellite	420 Stainless Steel	Stainless Steel AISI 301	Silver
	150 lb Flanged 15 - 140 (1 - 9.6)	15 - 200 (1 - 13.6)	Green							
	300 lb Flanged 15 - 450 (1 - 31)	190 - 300 (13.1 - 20.6)	Brown							

GP-2000CS Dimensions and Weights

Size		L						A		F		H Integral		H ₁		H ₂		Weight						C _v
		NPT		150#		300#												NPT		150#		300#		
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	lb	kg	lb	kg	
1/2	15	5-15/16	150	—	—	—	—	7-15/16	200	6-7/8	176	15-3/4	398	6-3/4	170	9-5/8	244	35	16	—	—	—	—	5.0
3/4	20	5-15/16	150	—	—	—	—	7-15/16	200	6-7/8	176	15-3/4	398	6-3/4	170	9-5/8	244	35	16	—	—	—	—	7.2
1	25	6-5/16	160	—	—	—	—	8-15/16	226	7-1/16	179	15-15/16	404	6-15/16	175	10	254	49	22	—	—	—	—	10.9
1-1/4	32	7-1/8	180	—	—	—	—	8-15/16	226	7-7/16	188	17-1/8	434	7-5/8	192	11-1/8	283	53	24	—	—	—	—	14.3
1-1/2	40	7-1/8	180	—	—	—	—	8-15/16	226	7-7/16	188	17-1/8	434	7-5/8	192	11-1/8	283	53	24	—	—	—	—	18.8
2	50	9-1/8	230	8-9/16	217	9-1/8	232	10-15/16	276	7-11/16	195	19-5/8	498	8-1/2	216	12-5/8	321	62	37	88	40	92	42	32
2-1/2	65	—	—	10-15/16	278	11-1/2	292	13-13/16	352	8-5/16	211	21-3/4	552	9-13/16	251	14-3/4	375	—	—	159	72	168	76	60
3	80	—	—	11-3/4	298	12-7/16	315	13-13/16	352	8-3/4	222	22-5/8	575	10-7/16	264	15-3/4	400	—	—	174	79	185	84	78
4	100	—	—	13-1/2	343	14-1/8	359	15-13/16	401	9-7/16	239	25-15/16	658	12-5/8	321	19-1/4	489	—	—	276	125	293	133	120

For capacities see page 305.



GP-2000L



For Steam Service

The GP-2000L is a high performance, externally piloted reducing valve for large capacity and low inlet pressure requirements. The GP-2000L is reliable and accurate (+/-1% of pressure set point from 5% to 100% of flow) over a long, trouble-free service life. Hardened stainless steel working

parts are renewable in-line. Single seated for dead-end service. Available with both NPT (1/2" - 2") and flanged connections in 1/2" - 4" sizes. ANSI Class IV Shutoff.

GP-2000L Specifications

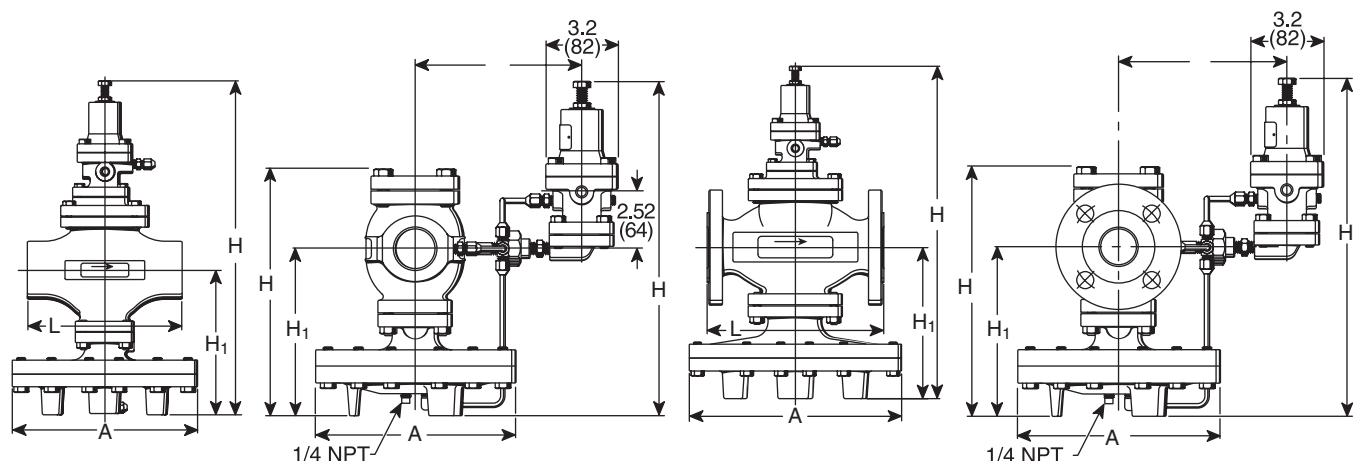
Application	Inlet Pressure psig (bar)	Reduced Pressure psig (bar)	Spring Color	Maximum Temperature °F (C)	Minimum Differential psig (bar)	Materials				
						Body	Main Valve/Seat	Pilot Valve/Seat	Diaphragm	Color
Steam	5 - 15 (.3 - 1)	2 - 12 (.13 - .8)	Yellow	450 (232)	3 (.21)	Ductile Iron ASTM A536	Stainless Steel AISI 420	Stainless Steel AISI 420	Stainless Steel AISI 301	Dark Gray

GP-2000L Dimensions and Weights

Size		Face-to-Face “L”						A		F		H Integral		H Remote		H ₁		H ₂		Weight						C _v *
		NPT		150#		300#														NPT		150#		300#		
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg	lb	kg	lb	kg	
1/2	15	5-15/16	150	5-9/16	141	5-3/4	147	7-15/16	200	6-7/8	176	15-3/4	398	14-1/4	362	6-3/4	170	9-5/8	244	34	14	36	15	42	19	5.0
3/4	20	5-15/16	150	5-1/2	140	5-3/4	147	7-15/16	200	6-7/8	176	15-3/4	398	14-1/4	362	6-3/4	170	9-5/8	244	34	14	36	15	42	19	7.2
1	25	6-5/16	160	5-3/4	147	6-1/4	159	8-15/16	226	7-1/16	179	15-15/16	404	14-7/16	367	6-15/16	175	10	254	44	19	48	20	54	23	10.9
1-1/4	32	7-1/8	180	6-1/2	166	7-1/16	179	8-15/16	226	7-7/16	188	17-1/8	434	15-1/8	384	7-5/8	192	11-1/8	283	51	22	53	22	59	25	14.3
1-1/2	40	7-1/8	180	7-7/16	189	7-15/16	202	8-15/16	226	7-7/16	188	17-1/8	434	15-1/8	384	7-5/8	192	11-1/8	283	51	22	55	23	61	26	18.8
2	50	9-1/8	230	8-9/16	217	9-1/8	232	10-15/16	276	7-11/16	195	19-5/8	498	16	406	8-1/2	216	12-5/8	321	75	33	81	36	84	36	32
2-1/2	65	—	—	10-15/16	278	11-1/2	292	13-13/16	352	8-5/16	211	21-3/4	552	17-5/16	440	9-13/16	251	14-3/4	375	—	—	142	65	150	65	60
3	80	—	—	11-3/4	298	12-7/16	315	13-13/16	352	8-3/4	222	22-5/8	575	17-15/16	456	10-7/16	264	15-3/4	400	—	—	155	69	166	72	78
4	100	—	—	13-1/2	343	14-1/8	359	15-13/16	401	9-7/16	239	25-15/16	658	20-1/8	511	12-5/8	321	19-1/4	489	—	—	247	112	264	119	120

*50% reduced port available for sizes 1/2" - 4". The C_v value should be divided by 2 to get reduced port C_v.

For capacities see page 315.



Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

For Steam Back Pressure Regulation

The GP-2000R is a high performance externally piloted throttling back pressure valve for large capacity applications. Typical applications would include those systems utilizing flash steam for low pressure heating or processes. The GP-2000R valves will function to maintain a constant upstream pressure. This valve is not a safety valve and should not be used for that purpose.

For a fully detailed certified drawing, refer to:

GP-2000R Threaded CDY #1018
GP-2000R Flanged CDY #1019

GP-2000R Specifications

Application	Inlet Pressure psig (bar)	Relieving Pressure psig (bar)	Spring Color	Maximum Temperature °F (°C)	Minimum Differential psig (bar)	Materials				
						Body	Main Valve/Seat	Pilot Valve/ Seat	Diaphragm	Color
Steam	NPT 3 - 200 (.21 - 13.8)	3 - 21 (.21 - 1.4)	Yellow	450 (232)	3 (.21)*	Ductile Iron ASTM A536	Stainless Steel AISI 420		Stainless Steel AISI 301	Dark Gray
	150 lb Flanged 3 - 185 (.21 - 13)	14 - 157 (1.0 - 11.0)	Green							
	300 lb Flanged 3 - 200 (.21 - 13.8)	143 - 200 (10 - 13.8)	Brown							

*If used for a 3-15 psig set point, outlet pressure must be 0 psig.

GP-2000R Dimensions

Size		Face-to-Face “L”						A		F		H Integral		H Remote		H ₁	
		NPT		150#		300#											
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
1/2	15	5-15/16	150	5-9/16	141	5-3/4	147	7-15/16	200	6-7/8	176	15-3/4	398	14-1/4	362	6-3/4	170
3/4	20	5-15/16	150	5-1/2	140	5-3/4	147	7-15/16	200	6-7/8	176	15-3/4	398	14-1/4	362	6-3/4	170
1	25	6-5/16	160	5-3/4	147	6-1/4	159	8-15/16	226	7-1/16	179	15-15/16	404	14-7/16	367	6-15/16	175
1-1/4	32	7-1/8	180	6-1/2	166	7-1/16	179	8-15/16	226	7-7/16	188	17-1/8	434	15-1/8	384	7-5/8	192
1-1/2	40	7-1/8	180	7-7/16	189	7-15/16	202	8-15/16	226	7-7/16	188	17-1/8	434	15-1/8	384	7-5/8	192
2	50	9-1/8	230	8-9/16	217	9-1/8	232	10-15/16	276	7-11/16	195	19-5/8	498	16	406	8-1/2	216
2-1/2	65	—	—	10-15/16	278	11-1/2	292	13-13/16	352	8-5/16	211	21-3/4	552	17-5/16	440	9-13/16	251
3	80	—	—	11-3/4	298	12-7/16	316	13-13/16	352	8-3/4	222	22-5/8	575	17-15/16	456	10-7/16	264
4	100	—	—	13-1/2	343	14-1/8	359	15-13/16	401	9-7/16	239	25-15/16	658	20-1/8	511	12-5/8	321
6	150	—	—	18-1/8	460	19	483	19-3/4	502	—	—	31-3/4	806	—	—	26-1/2	673

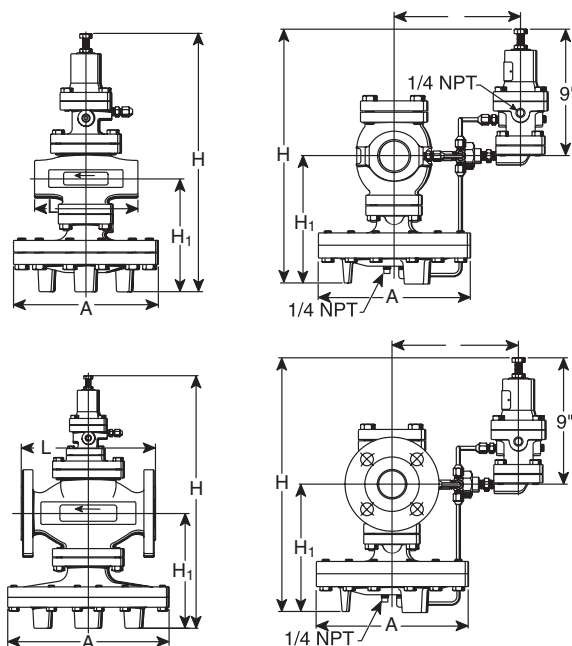
GP-2000R Weights

Size		Weight						C _v *
		NPT		150#		300#		
in	mm	lb	kg	lb	kg	lb	kg	
1/2	15	34	14	36	15	42	19	5
3/4	20	34	14	36	15	42	19	7.2
1	25	44	19	48	20	54	23	10.9
1-1/4	32	51	22	53	22	59	25	14.3
1-1/2	40	51	22	55	23	61	26	18.8
2	50	75	33	81	36	84	38	32
2-1/2	65	—	—	142	65	150	68	60
3	80	—	—	155	69	166	75	78
4	100	—	—	247	112	264	120	120
6	150	—	—	509	231	555	253	250

*50% reduced port available for sizes 1/2" - 4".

The C_v value should be divided by 2 to get reduced port C_v.

For capacities see page 305.



GP-2000, 2000K-1, 3 & 6, GD-2000K, GP-2000R, GP-2000CS



Capacities for Steam

Pressure and
Temperature Controls

GP-2000, GP-2000K-1, GP-2000K-3, GP-2000K-6, GD-2000K, GP-2000R, GP-2000CS Capacities—Steam lb/hr											
Inlet	Outlet	lb/hr									
		Connection Size									
		in									
psig		1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6
C _v Factor		5	7.2	10.9	14.3	18.8	32	60	78	120	250
15	8	201	290	438	575	756	1,287	2,413	3,137	4,826	10,055
	3	250	361	546	716	942	1,603	3,005	3,907	6,010	12,521
20	13	219	316	478	628	825	1,404	2,633	3,423	5,267	10,972
	3	313	451	683	896	1,178	2,006	3,761	4,889	7,521	15,669
25	18	236	340	515	676	889	1,513	2,837	3,688	5,673	11,819
	3 - 5	339	489	740	971	1,276	2,172	4,073	5,295	8,146	16,972
30	23	252	363	550	721	948	1,614	3,026	3,934	6,052	12,609
	3 - 7	382	550	833	1,093	1,437	2,446	4,586	5,962	9,172	19,109
40	33	281	405	613	804	1,057	1,799	3,373	4,385	6,747	14,056
	25	395	569	861	1,130	1,486	2,529	4,741	6,164	9,483	19,756
	3 - 12	468	673	1,020	1,338	1,758	2,993	5,612	7,296	11,224	23,384
50	42	327	471	713	936	1,230	2,094	3,927	5,105	7,853	16,361
	30	491	707	1,071	1,405	1,847	3,143	5,894	7,662	11,788	24,557
	3 - 17	553	797	1,206	1,582	2,080	3,540	6,638	8,630	13,276	27,659
60	51	373	537	814	1,067	1,403	2,389	4,479	5,823	8,958	18,662
	45	471	679	1,028	1,348	1,773	3,017	5,657	7,355	11,315	23,572
	35	586	843	1,277	1,675	2,202	3,748	7,027	9,135	14,053	29,278
	3 - 22	639	920	1,392	1,827	2,401	4,088	7,664	9,963	15,328	31,934
75	63	471	678	1,026	1,346	1,769	3,012	5,647	7,341	11,295	23,530
	55	593	854	1,292	1,696	2,229	3,794	7,114	9,249	14,229	29,643
	45	703	1,012	1,532	2,010	2,643	4,499	8,435	10,966	16,871	35,148
	4 - 30	767	1,104	1,672	2,193	2,884	4,908	9,203	11,964	18,406	38,347
100	85	595	857	1,298	1,703	2,239	3,811	7,145	9,289	14,291	29,773
	75	751	1,081	1,636	2,147	2,822	4,804	9,007	11,709	18,014	37,529
	60	914	1,316	1,992	2,614	3,436	5,849	10,967	14,257	21,934	45,696
	5 - 42	981	1,412	2,138	2,805	3,687	6,276	11,768	15,299	23,536	49,034
125	106	739	1,064	1,610	2,112	2,777	4,727	8,863	11,522	17,725	36,928
	100	837	1,206	1,825	2,395	3,149	5,359	10,048	13,063	20,097	41,869
	75	1,125	1,619	2,451	3,216	4,228	7,197	13,494	17,543	26,989	56,226
	7 - 55	1,194	1,720	2,604	3,416	4,491	7,644	14,333	18,633	28,666	59,722
150	127	881	1,269	1,922	2,521	3,314	5,641	10,577	13,751	21,155	44,072
	100	1,241	1,787	2,705	3,549	4,666	7,943	14,893	19,360	29,785	62,052
	8 - 67	1,408	2,028	3,070	4,027	5,295	9,012	16,898	21,968	33,796	70,409
175	148	1,024	1,475	2,233	2,929	3,851	6,555	12,291	15,978	24,581	51,211
	125	1,348	1,940	2,938	3,854	5,067	8,624	16,170	21,021	32,341	67,376
	100	1,587	2,285	3,459	4,537	5,965	10,154	19,038	24,750	38,076	79,325
	9 - 80	1,622	2,336	3,536	4,639	6,098	10,380	19,463	25,302	38,926	81,097
200	170	1,149	1,655	2,506	3,287	4,322	7,356	13,792	17,930	27,585	57,468
	150	1,446	2,083	3,153	4,136	5,438	9,256	17,354	22,560	34,708	72,309
	125	1,712	2,465	3,732	4,896	6,437	10,956	20,542	26,705	41,085	85,593
	10 - 92	1,836	2,643	4,002	5,250	6,902	11,748	22,028	28,637	44,056	91,784
225	191	1,292	1,861	2,817	3,695	4,858	8,270	15,505	20,157	31,011	64,606
	175	1,539	2,215	3,354	4,400	5,785	9,847	18,462	24,001	36,925	76,926
	150	1,829	2,633	3,986	5,230	6,876	11,703	21,944	28,527	43,887	91,431
	12 - 105	2,049	2,951	4,468	5,861	7,706	13,116	24,593	31,971	49,186	102,472
250	200	1,626	2,341	3,544	4,649	6,112	10,404	19,508	25,360	39,015	81,282
	175	1,938	2,791	4,226	5,544	7,288	12,406	23,261	30,239	46,521	96,919
	150	2,176	3,133	4,743	6,223	8,181	13,925	26,110	33,943	52,219	108,790
	13 - 117	2,263	3,259	4,934	6,473	8,510	14,484	27,158	35,306	54,316	113,159
275	200	2,042	2,941	4,452	5,841	7,679	13,070	24,507	31,859	49,014	102,112
	175	2,299	3,311	5,012	6,575	8,644	14,714	27,588	35,864	55,176	114,950
	14 - 130	2,477	3,567	5,400	7,084	9,313	15,852	29,723	38,640	59,446	123,847
300	200	2,416	3,479	5,267	6,910	9,084	15,462	28,991	37,688	57,982	120,796
	175	2,637	3,797	5,748	7,540	9,913	16,874	31,638	41,130	63,277	131,826
	15 - 142	2,691	3,875	5,866	7,695	10,117	17,220	32,288	41,975	64,576	134,534
350	248	2,656	3,825	5,791	7,597	9,987	17,000	31,864	41,423	63,728	—
	225	2,886	4,156	6,292	8,254	10,852	18,471	34,629	45,017	69,258	—
	200	3,095	4,457	6,748	8,853	11,639	19,811	37,135	48,276	74,270	—
	18 - 160	3,118	4,490	6,798	8,918	11,724	19,956	39,890	51,856	79,779	—
425	248	3,702	5,331	8,071	10,588	13,921	23,695	44,415	57,740	88,830	—
	225	3,870	5,574	8,438	11,070	14,553	24,771	46,439	60,370	92,877	—
	22 - 195	4,000	5,578	8,719	11,439	15,038	25,595	48,096	62,525	96,192	—

NOTE: Maximum pressure reduction 20:1, except for GD-2000K 10:1. Minimum pressure reduction is 85% of inlet pressure.

For 50% reduced port capacities, divide the capacity by 2.

50% reduced port available for sizes 1/2" - 4".

Designs, materials, weights and performance ratings are approximate and subject to change without notice. Visit armstronginternational.com for up-to-date information.

Capacities for Steam continued

GP-2000, GP-2000K-1, GP-2000K-3, GP-2000K-6, GD-2000K, GP-2000R, GP-2000CS Capacities—Steam (kg/hr)

Inlet	Outlet	kg/hr									
		Connection Size									
		mm									
bar		15	20	25	32	40	50	65	80	100	150
C _y Factor		5	7.2	10.9	14.3	18.8	32	60	78	120	250
1.03	0.55 0.21	91 114	131 164	199 248	261 325	343 427	584 727	1,095 1,363	1,423 1,772	2,189 2,726	4,561 5,679
1.38	0.90 0.21	100 142	143 205	217 310	285 407	374 534	637 910	1,194 1,706	1,553 2,218	2,389 3,412	4,977 7,108
1.72	1.24 .21 - .34	107 154	154 222	234 336	307 440	403 579	686 985	1,287 1,848	1,673 2,402	2,573 3,695	5,361 7,698
2.07	1.59 .21 - .48	114 173	165 250	249 378	327 496	430 652	732 1,109	1,373 2,080	1,784 2,704	2,745 4,161	5,719 8,668
2.76	2.28 1.72 .21 - .83	128 114 173	184 165 250	278 249 378	365 327 496	479 430 652	816 732 1,109	1,530 1,373 2,080	1,989 1,784 2,704	3,060 2,745 4,161	6,376 5,719 8,668
3.45	2.90 2.07 .21 - 1.17	128 179 212	184 258 305	278 391 462	365 513 607	479 674 798	816 1,147 1,358	1,530 2,151 2,546	1,989 2,796 3,309	3,060 4,301 5,091	6,376 8,961 10,607
4.14	3.52 3.10 2.41 .21 - 1.5	148 148 223 251	214 214 321 361	324 324 486 547	425 425 637 718	558 558 838 943	950 950 1,426 1,606	1,781 1,781 2,673 3,011	2,315 2,315 3,475 3,914	3,562 3,562 5,347 6,022	7,421 7,421 11,139 12,546
5.17	4.34 3.79 3.10 .27 - 2.1	213 269 319 348	307 387 459 501	465 586 695 758	611 769 912 995	803 1,011 1,199 1,308	1,366 1,721 2,041 2,226	2,562 3,227 3,826 4,175	3,330 4,195 4,974 5,427	5,123 6,454 7,653 8,349	10,673 13,446 15,943 17,394
6.89	5.86 5.17 4.14 .34 - 2.9	270 340 415 445	389 490 597 641	589 742 904 970	772 974 1,186 1,272	1,016 1,280 1,559 1,673	1,729 2,179 2,653 2,847	3,241 4,086 4,975 5,338	4,213 5,311 6,467 6,939	6,482 8,171 9,949 10,676	13,505 17,023 20,728 22,242
8.62	7.31 6.89 5.17 .48 - 3.7	335 380 510 542	482 547 735 780	730 828 1,112 1,181	958 1,086 1,459 1,550	1,260 1,428 1,918 2,037	2,144 2,431 3,265 3,467	4,020 4,558 6,121 6,502	5,226 5,925 7,957 8,452	8,040 9,116 12,242 13,003	16,750 18,991 25,504 27,090
10.34	8.76 6.89 .55 - 4.6	400 563 639	576 811 920	872 1,227 1,392	1,143 1,610 1,827	1,503 2,117 2,402	2,559 3,603 4,088	4,798 6,755 7,665	6,237 8,782 9,964	9,596 13,510 15,330	19,991 28,147 31,937
12.07	10.20 8.62 6.89 .62 - 5.5	465 611 720 736	669 880 1,036 1,059	1,013 1,332 1,569 1,604	1,329 1,748 2,058 2,104	1,747 2,298 2,706 2,766	2,973 3,912 4,606 4,709	5,575 7,335 8,636 8,828	7,247 9,535 11,226 11,477	11,150 14,670 17,271 17,657	23,229 30,562 35,982 36,785
13.79	11.72 10.34 8.62 .68 - 6.3	521 656 776 833	751 945 1,118 1,199	1,137 1,430 1,693 1,815	1,491 1,876 2,221 2,381	1,960 2,466 2,920 3,131	3,337 4,198 4,970 5,329	6,256 8,133 9,318 9,992	8,133 10,233 12,113 12,990	12,512 15,744 18,636 19,984	26,067 32,799 38,825 41,633
15.51	13.17 12.07 10.34 .82 - 7.24	586 698 829 930	844 1,005 1,194 1,339	1,278 1,521 1,808 2,027	1,676 1,996 2,372 2,659	2,204 2,624 3,119 3,495	3,751 4,466 5,309 5,950	7,033 8,374 9,954 11,155	9,143 10,887 12,940 14,502	14,066 16,749 19,907 22,311	29,305 34,894 41,473 46,481
17.24	13.79 12.07 10.34 .89 - 8.06	737 879 987 1,027	1,062 1,266 1,421 1,478	1,607 1,917 2,152 2,238	2,109 2,515 2,823 2,936	2,773 3,306 3,711 3,860	4,719 5,627 6,316 6,570	8,849 10,551 11,843 12,319	11,503 13,716 15,396 16,015	17,697 21,102 23,687 24,638	36,869 43,962 49,347 51,329
18.96	13.79 12.07 .96 - 8.96	926 1,043 1,124	1,334 1,502 1,618	2,019 2,273 2,449	2,649 2,982 3,213	3,483 3,921 4,224	5,929 6,674 7,191	11,116 12,514 13,482	14,451 16,268 17,527	22,233 25,028 26,965	46,318 52,141 56,177
20.00	13.79 12.07 1.03 - 9.79	1,096 1,196 1,220	1,578 1,722 1,758	2,389 2,607 2,661	3,134 3,420 3,491	4,120 4,497 4,589	7,013 7,654 7,811	13,150 14,351 14,646	17,095 18,656 19,040	26,300 28,702 29,292	54,793 59,796 61,024
24.13	17.10 15.51 13.79 1.24 - 11.02	1,205 1,309 1,404 1,414	1,735 1,885 2,022 2,037	2,627 2,854 3,061 3,083	3,446 3,744 4,016 4,045	4,530 4,922 5,279 5,318	7,711 8,379 8,986 9,052	14,453 14,668 16,844 18,094	18,789 20,419 21,898 23,521	28,907 31,415 33,689 36,187	— — — —
29.30	17.10 15.51 1.52 - 13.4	1,679 1,756 1,814	2,418 2,528 2,530	3,661 3,827 3,955	4,803 5,021 5,189	6,314 6,601 6,821	10,748 11,236 11,610	20,146 21,064 21,816	26,190 27,383 28,361	40,293 42,129 43,632	— — —

NOTE: Maximum pressure reduction 20:1, except for GD-2000K 10:1. Minimum pressure reduction is 85% of inlet pressure.

For 50% reduced port capacities, divide the capacity by 2.

50% reduced port available for sizes 15 - 100 mm.