

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 (+/-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 2" - 6" sizes.

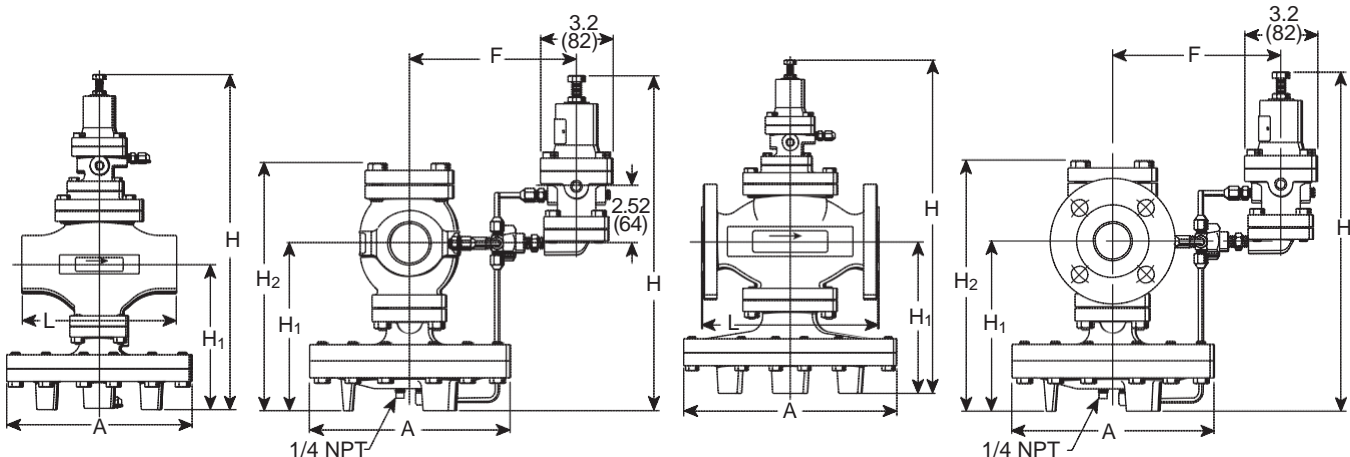
For a fully detailed certified drawing, refer to:
GP-2000 CDY #1008
GP-2000 Flanged CDY #1007

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)	Yellow	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	3 - 21 (.21 - 1.4)	Yellow							
	15 - 300 (1 - 20) 300 lb. Flanged	15 - 200 (1 - 13.8)	Green							

*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#	lb		kg	lb	kg	lb
1/2	15	5-15/16	150	-	-	-	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	-	-	-	-	-	-	5.0
3/4	20	5-15/16	150	-	-	-	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	-	-	-	-	-	-	7.2
1	25	6-5/16	160	-	-	-	8-15/16	226	7-1/16	179	15-15/16	404	14-7/16	367	6-15/16	175	10	254	44	19	-	-	-	-	-	-	10.9
1-1/4	32	7-1/8	180	-	-	-	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	-	-	-	-	-	-	14.3
1-1/2	40	7-1/8	180	-	-	-	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	-	-	-	-	-	-	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	

For capacities see page PTC-37.



All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.

GP-2000R

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)		Green							
	300 lb Flanged 3 - 200 (.21 - 13.8)	Brown								

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

GP-2000R Dimensions

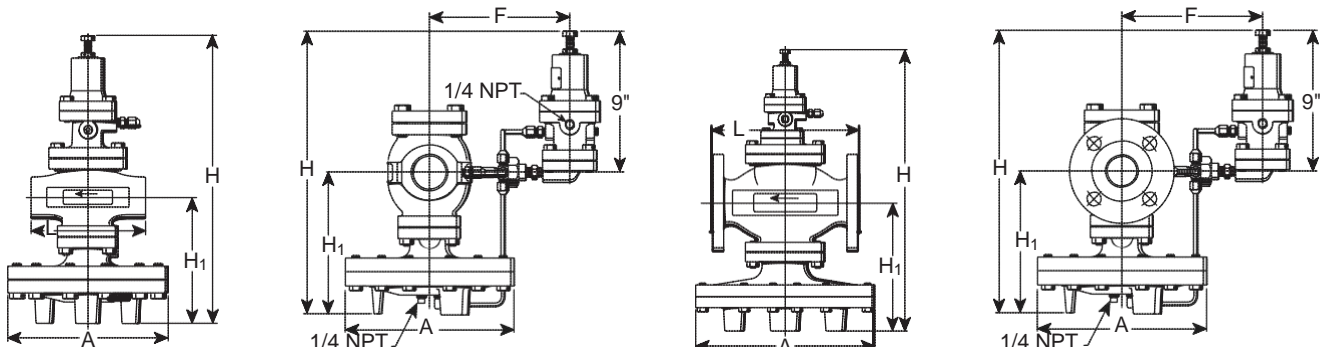
Size	Face-to-Face "L"								A		F		H Integral		H Remote		H ₁	
	NPT		150#		300#													
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
1/2	15	5-15/16	150	-	-	-	-	7-15/16	200	6-7/8	176	15-3/4	398	14-1/4	362	6-3/4	170	
3/4	20	5-15/16	150	-	-	-	-	7-15/16	200	6-7/8	176	15-3/4	398	14-1/4	362	6-3/4	170	
1	25	6-5/16	160	-	-	-	-	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	-	-	-	-	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	-	-	-	-	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	

GP-2000R Weights

Size	Weight								C _v
	NPT		150#		300#				
in	mm	lb	kg	lb	kg	lb	kg		
1/2	15	34	14	-	-	-	-	5	
3/4	20	34	14	-	-	-	-	7.2	
1	25	44	19	-	-	-	-	10.9	
1-1/4	32	51	22	-	-	-	-	14.3	
1-1/2	40	51	22	-	-	-	-	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	

For capacities see page PTC-37.

Pressure and Temperature Controls



All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.



GP-2000, 2000K-1, 3 & 6, GD-2000K, GP-2000R, GP-11S

Capacities for Steam

GP-2000, GP-2000K-1, GP-2000K-3, GP-2000K-6, GD-2000K, GP-2000R, GP-11S Capacities—Steam lb/hr

		lb/hr									
Inlet	Outlet	Connection Size									
		in									
psig	psig	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6
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
75	3 - 22	639	920	1,392	1,827	2,401	4,088	7,664	9,963	15,328	31,934
	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
100	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
	85	595	857	1,298	1,703	2,239	3,811	7,145	9,289	14,291	29,773
125	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
150	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
175	7 - 55	1,194	1,720	2,604	3,416	4,491	7,644	14,333	18,633	28,666	59,722
	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
200	8 - 67	1,408	2,028	3,070	4,027	5,295	9,012	16,898	21,968	33,796	70,409
	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
250	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
	170	1,149	1,655	2,506	3,287	4,322	7,356	13,792	17,930	27,585	57,468
300	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
350	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
425	12 - 105	2,049	2,951	4,468	5,861	7,706	13,116	24,593	31,971	49,186	102,472
	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
500	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
	200	2,042	2,941	4,452	5,841	7,679	13,070	24,507	31,859	49,014	102,112
600	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
	200	2,416	3,479	5,267	6,910	9,084	15,462	28,991	37,688	57,982	120,796
750	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
	248	2,656	3,825	5,791	7,597	9,987	17,000	—	—	—	—
900	225	2,886	4,156	6,292	8,254	10,852	18,471	—	—	—	—
	200	3,095	4,457	6,748	8,853	11,639	19,811	—	—	—	—
	18 - 160	3,118	4,490	6,798	8,918	11,724	19,956	—	—	—	—
1100	248	3,702	5,331	8,071	10,588	13,921	23,695	—	—	—	—
	225	3,870	5,574	8,438	11,070	14,553	24,771	—	—	—	—
	22 - 195	3,759	5,414	8,196	10,752	14,135	24,060	—	—	—	—

Pressure and Temperature Controls

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

GP-2000, 2000K-1, 3 & 6, GD-2000K, GP-2000R, GP-11S



Capacities for Steam continued

GP-2000, GP-2000K-1, GP-2000K-3, GP-2000K-6, GD-2000K, GP-2000R, GP-11S Capacities—Steam (kg/hr)											
		kg/hr									
Inlet	Outlet	Connection Size									
		mm									
bar		15	20	25	32	40	50	65	80	100	150
1.03	0.55	91	131	199	261	343	584	1,095	1,423	2,189	4,561
	0.21	114	164	248	325	427	727	1,363	1,772	2,726	5,679
1.38	0.90	100	143	217	285	374	637	1,194	1,553	2,389	4,977
	0.21	142	205	310	407	534	910	1,706	2,218	3,412	7,108
1.72	1.24	107	154	234	307	403	686	1,287	1,673	2,573	5,361
	.21 - .34	154	222	336	440	579	985	1,848	2,402	3,695	7,698
2.07	1.59	114	165	249	327	430	732	1,373	1,784	2,745	5,719
	.21 - .48	173	250	378	496	652	1,109	2,080	2,704	4,161	8,668
2.76	2.28	128	184	278	365	479	816	1,530	1,989	3,060	6,376
	1.72	114	165	249	327	430	732	1,373	1,784	2,745	5,719
	.21 - .83	173	250	378	496	652	1,109	2,080	2,704	4,161	8,668
3.45	2.90	128	184	278	365	479	816	1,530	1,989	3,060	6,376
	2.07	179	258	391	513	674	1,147	2,151	2,796	4,301	8,961
	.21 - 1.17	212	305	462	607	798	1,358	2,546	3,309	5,091	10,607
4.14	3.52	148	214	324	425	558	950	1,781	2,315	3,562	7,421
	3.10	148	214	324	425	558	950	1,781	2,315	3,562	7,421
	2.41	223	321	486	637	838	1,426	2,673	3,475	5,347	11,139
	.21 - 1.5	251	361	547	718	943	1,606	3,011	3,914	6,022	12,546
5.17	4.34	213	307	465	611	803	1,366	2,562	3,330	5,123	10,673
	3.79	269	387	586	769	1,011	1,721	3,227	4,195	6,454	13,446
	3.10	319	459	695	912	1,199	2,041	3,826	4,974	7,653	15,943
6.89	.27 - 2.1	348	501	758	995	1,308	2,226	4,175	5,427	8,349	17,394
	5.86	270	389	589	772	1,016	1,729	3,241	4,213	6,482	13,505
	5.17	340	490	742	974	1,280	2,179	4,086	5,311	8,171	17,023
8.62	4.14	415	597	904	1,186	1,559	2,653	4,975	6,467	9,949	20,728
	.34 - 2.9	445	641	970	1,272	1,673	2,847	5,338	6,939	10,676	22,242
	7.31	335	482	730	958	1,260	2,144	4,020	5,226	8,040	16,750
10.34	6.89	380	547	828	1,086	1,428	2,431	4,558	5,925	9,116	18,991
	5.17	510	735	1,112	1,459	1,918	3,265	6,121	7,957	12,242	25,504
	.48 - 3.7	542	780	1,181	1,550	2,037	3,467	6,502	8,452	13,003	27,090
12.07	8.76	400	576	872	1,143	1,503	2,559	4,798	6,237	9,596	19,991
	6.89	563	811	1,227	1,610	2,117	3,603	6,755	8,782	13,510	28,147
	.55 - 4.6	639	920	1,392	1,827	2,402	4,088	7,665	9,964	15,330	31,937
13.79	10.20	465	669	1,013	1,329	1,747	2,973	5,575	7,247	11,150	23,229
	8.62	611	880	1,332	1,748	2,298	3,912	7,335	9,535	14,670	30,562
	6.89	720	1,036	1,569	2,058	2,706	4,606	8,636	11,226	17,271	35,982
15.51	.62 - 5.5	736	1,059	1,604	2,104	2,766	4,709	8,828	11,477	17,657	36,785
	11.72	521	751	1,137	1,491	1,960	3,337	6,256	8,133	12,512	26,067
	10.34	656	945	1,430	1,876	2,466	4,198	7,872	10,233	15,744	32,799
17.24	8.62	776	1,118	1,693	2,221	2,920	4,970	9,318	12,113	18,636	38,825
	.68 - 6.3	833	1,199	1,815	2,381	3,131	5,329	9,992	12,990	19,984	41,633
	13.17	586	844	1,278	1,676	2,204	3,751	7,033	9,143	14,066	29,305
18.96	12.07	698	1,005	1,521	1,996	2,624	4,466	8,374	10,887	16,749	34,894
	10.34	829	1,194	1,808	2,372	3,119	5,309	9,954	12,940	19,907	41,473
	.82 - 7.24	930	1,339	2,027	2,659	3,495	5,950	11,155	14,502	22,311	46,481
20.00	13.79	737	1,062	1,607	2,109	2,773	4,719	8,849	11,503	17,697	36,869
	12.07	879	1,266	1,917	2,515	3,306	5,627	10,551	13,716	21,102	43,962
	10.34	987	1,421	2,152	2,823	3,711	6,316	11,843	15,396	23,687	49,347
24.13	.89 - 8.06	1,027	1,478	2,238	2,936	3,860	6,570	12,319	16,015	24,638	51,329
	13.79	926	1,334	2,019	2,649	3,483	5,929	11,116	14,451	22,233	46,318
	12.07	1,043	1,502	2,273	2,982	3,921	6,674	12,514	16,268	25,028	52,141
29.30	.96 - 8.96	1,124	1,618	2,449	3,213	4,224	7,191	13,482	17,527	26,965	56,177
	13.79	1,096	1,578	2,389	3,134	4,120	7,013	13,150	17,095	26,300	54,793
	12.07	1,196	1,722	2,607	3,420	4,497	7,654	14,351	18,656	28,702	59,796
GP-11S Only	1.03 - 9.79	1,220	1,758	2,661	3,491	4,589	7,811	14,646	19,040	29,292	61,024
	17.10	1,205	1,735	2,627	3,446	4,530	—	—	—	—	—
	15.51	1,309	1,885	2,854	3,744	4,922	—	—	—	—	—
GP-11S Only	13.79	1,404	2,022	3,061	4,016	5,279	—	—	—	—	—
	1.24 - 11.02	1,414	2,037	3,083	4,045	5,318	—	—	—	—	—
	17.10	1,679	2,418	3,661	4,803	6,314	—	—	—	—	—
GP-11S Only	15.51	1,756	2,528	3,827	5,021	6,601	—	—	—	—	—
	1.52 - 13.4	1,705	2,456	3,717	4,877	6,412	—	—	—	—	—

Pressure and Temperature Controls

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