

PRESSURE REDUCING VALVE

Type GP-2000, GP-2000EN / Steam

YOSHITAKE



Screwed type



Flanged type

Pilot type

External sensing

Diaphragm

Built-in strainer

FEATURES

1. Large-size diaphragm and external sensing method control reduced pressure more stably.
2. Since the Cv value is high, flow capability and control capability are significantly improved, one or two sizes smaller than the regular nominal size can be applied.
3. Spherical main valve offers great sealability and great reduction of valve seat leakage (compliant with ANSI Class IV).
4. Pressure management at low pressure (0.02 MPa or less) is available. (GP-2000L)*2

SPECIFICATIONS

Model	GP-2000		GP-2000EN ***
Application	Steam		
Reduced pressure sensing method	External sensing *1		
Inlet pressure	0.1-2.0 MPa	0.1-1.0 MPa	0.1-2.0 MPa
Reduced pressure	0.02-0.15 MPa 0.1-1.4 MPa *2 1.3-1.7 MPa	0.02-0.15 MPa *2 0.1-0.85 MPa	0.02-0.15 MPa 0.1-1.4 MPa 1.3-1.7 MPa
	85% or less of inlet pressure (gauge pressure)		
Minimum differential pressure	0.05 MPa		
Maximum pressure reduction ratio	20:1		
Maximum temperature	220°C		
Valve seat leakage	0.1% or less of rated flow rate		
Material	Body	Ductile cast iron	
	Main valve	Stainless steel	
	Valve seat	Stainless steel	
	Pilot valve	Stainless steel	
	Pilot valve seat	Stainless steel	
	Diaphragm	Stainless steel	
Reduced pressure sensing pipe	Copper pipe Ø 8-2 m		
Connection	JIS Rc screwed	JIS 20K RF flanged	JIS 10K FF flanged EN PN25 flanged

*1 External sensing is standard. When installing the pressure reducing valve, be sure to connect the provided sensing pipe and joint.

Unless the sensing pipe is connected, the valve will not operate.

(Available with internal sensing type (nominal size: 15A to 100A) in different specifications. Note that Cv value of internal sensing type is lower than that of external sensing type.)

*2 Available with the GP-2000L, reduced pressure of 0.01 to 0.02 MPa, from 15A to 100A, inlet pressure of 0.1 to 0.5 MPa and maximum pressure reduction of 50:1.

· Available with external pilot type.

· Available with ASME flanged.

*** Stock Item



PRESSURE REDUCING VALVE

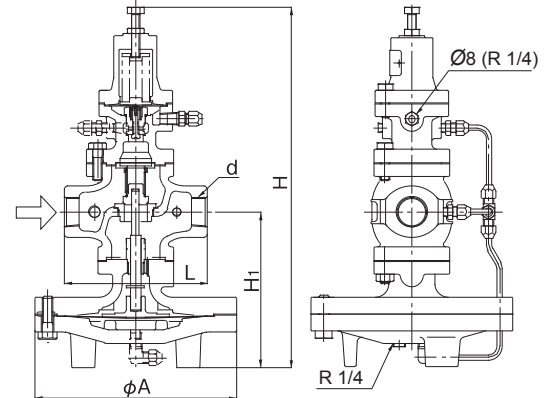
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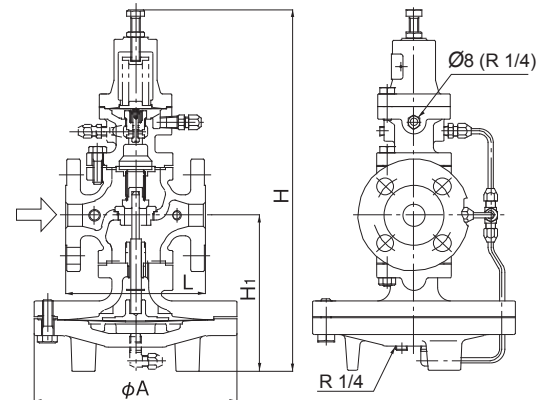
DIMENSIONS (MM) AND WEIGHTS (KG)

· Screwed type						
Nominal size	d	L	H1	H	A	Weight
15A	Rc 1/2	150	170	398	200	14.0
20A	RC 3/4	150	170	398	200	14.0
25A	Rc 1	160	175	404	226	18.5
32A	Rc 1-1/4	180	192	434	226	21.5
40A	Rc 1-1/2	180	192	434	226	21.5
50A	Rc 2	230	216	498	276	33.0

* Available with NPT connection.

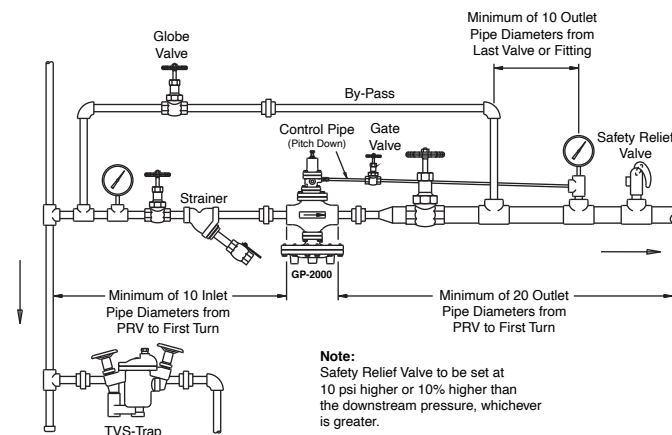


· Flanged type (PN25)					
Nominal size	L	H1	H	A	Weight
15A	150	170	398	200	15.7
20A	150	170	398	200	16.4
25A	160	175	404	226	20.8
32A	180	192	434	226	24.7
40A	200	192	434	226	25.6
50A	230	216	498	276	38.1
65A	290	251	552	352	66.7
80A	310	264	575	352	73.0
100A	350	321	658	401	114.3
125A	400	321	658	401	115
150A	480	414	814	502	234
200A	469	414	814	502	242

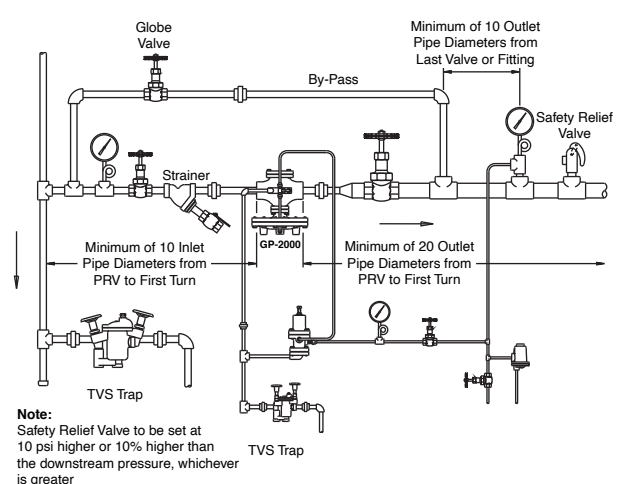


Typical Single Stage Reduction Installation (For Steam)

Integral Mount



Remote Mount



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ALPHA GROUP

GP-2000 FLOW RATE TABLE

(kg/h)

P ₁ (MPa)	P ₂ (MPa)	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A
2.0	0.1-0.9	1,260	1,814	2,746	3,603	4,737	8,064	13,608	17,640	27,216	28,224	56,700	58,968
	1	1,232	1,775	2,687	3,525	4,634	7,889	13,330	17,280	26,661	27,648	55,543	57,765
	1.2	1,136	1,636	2,477	3,250	4,273	7,273	12,290	15,931	24,580	25,490	51,208	53,257
	1.4	1,012	1,458	2,207	2,896	3,808	6,481	10,952	14,197	21,904	22,715	45,633	47,459
1.8	0.1-0.8	1,140	1,641	2,485	3,260	4,286	7,296	12,312	15,960	24,624	25,536	51,300	53,352
	0.9	1,113	1,603	2,426	3,183	4,185	7,125	12,039	15,606	24,078	24,969	50,162	52,169
	1	1,067	1,537	2,327	3,053	4,014	6,832	11,544	14,965	23,089	23,944	48,102	50,026
	1.2	954	1,374	2,081	2,730	3,590	6,111	10,325	13,385	20,651	21,416	43,024	44,745
	1.4	803	1,157	1,751	2,298	3,021	5,143	8,690	11,265	17,380	18,024	36,210	37,658
1.6	0.1-0.7	1,020	1,468	2,223	2,917	3,835	6,528	11,016	14,280	22,032	22,848	45,900	47,736
	1	893	1,286	1,947	2,554	3,358	5,716	9,658	12,520	19,317	20,033	40,245	41,855
	1.3	664	956	1,448	1,900	2,498	4,253	7,186	9,315	14,378	14,905	29,943	31,141
1.4	0.1-0.6	900	1,296	1,962	2,574	3,384	5,760	9,720	12,600	19,440	20,160	40,500	42,120
	1	702	1,011	1,531	2,009	2,642	4,497	7,599	9,851	15,199	15,762	31,664	32,931
	1.1	620	893	1,352	1,773	2,331	3,969	6,706	8,694	13,413	13,910	27,945	29,062
1.2	0.1-0.5	780	1,123	1,700	2,230	2,932	4,992	8,424	10,920	16,848	17,472	35,100	36,504
	1	477	687	1,040	1,365	1,795	3,055	5,162	6,692	10,325	10,708	21,512	22,372
1.0	0.1-0.4	660	950	1,438	1,887	2,481	4,224	7,128	9,240	14,256	14,784	29,700	30,888
	0.5	635	914	1,385	1,817	2,388	4,066	6,870	8,906	13,740	14,249	28,626	29,771
	0.8	435	627	950	1,246	1,638	2,789	4,713	6,109	9,426	9,775	19,637	20,423
0.9	0.1-0.4	600	864	1,308	1,716	2,256	3,840	6,480	8,400	12,960	13,440	27,000	28,080
	0.5	551	793	1,201	1,576	2,072	3,528	5,961	7,728	11,923	12,364	24,840	25,833
	0.7	413	595	901	1,182	1,554	2,646	4,471	5,796	8,942	9,273	18,630	19,375
0.8	0.1-0.3	540	777	1,177	1,544	2,030	3,456	5,832	7,560	11,664	12,096	24,300	25,272
	0.5	462	665	1,007	1,322	1,738	2,958	4,998	6,480	9,997	10,368	20,828	21,662
0.7	0.1-0.3	480	691	1,046	1,372	1,804	3,072	5,184	6,720	10,368	10,752	21,600	22,464
	0.5	364	525	794	1,042	1,371	2,333	3,943	5,111	7,886	8,178	16,430	17,087
0.6	0.1-0.2	420	604	915	1,201	1,579	2,688	4,536	5,880	9,072	9,408	18,900	19,656
	0.3	395	570	862	1,132	1,488	2,533	4,280	5,549	8,561	8,878	17,836	18,550
	0.5	248	357	541	710	934	1,590	2,686	3,482	5,373	5,572	11,195	11,643
0.5	0.1-0.2	360	518	784	1,029	1,353	2,304	3,888	5,040	7,776	8,064	16,200	16,848
	0.3	308	443	671	881	1,158	1,972	3,332	4,320	6,665	6,912	13,885	14,441
	0.4	228	329	498	653	859	1,462	2,471	3,203	4,943	5,126	10,298	10,710
0.4	0.05-0.15	300	432	654	858	1,128	1,920	3,240	4,200	6,480	6,720	13,500	14,040
	0.3	206	297	450	591	777	1,323	2,235	2,898	4,471	4,636	9,315	9,687
0.3	0.05-0.1	240	345	523	686	902	1,536	2,592	3,360	5,184	5,376	10,800	11,232
	0.2	182	262	397	521	685	1,166	1,971	2,555	3,943	4,089	8,215	8,543
0.2	0.05	180	259	392	515	677	1,152	1,944	2,520	3,888	4,032	8,100	8,424
	0.1	154	221	335	440	579	986	1,666	2,160	3,332	3,456	6,942	7,220
0.1	0.05	91	131	198	260	342	583	985	1,277	1,971	2,044	4,107	4,271



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