



PILOT INFLUENCED PRESSURE REDUCERS

PILOT ACTIVATED PRESSURE REDUCERS

GENERAL FEATURES

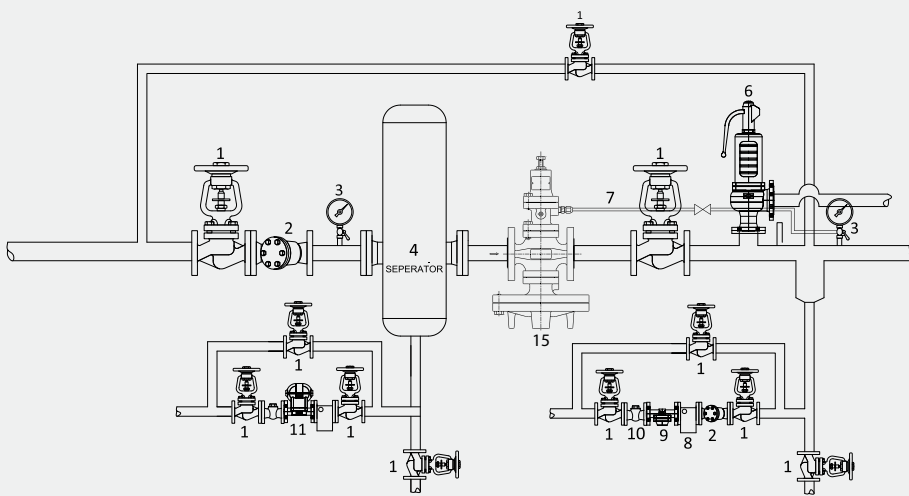
If the desired pressure for any process is less than the incoming pressure, pressure reducing valve is used to set the desired pressure.

It is not advisable to drop more than 10/1 in the pressure reducing valve. In such cases, it is better to use two pressure reducers in series.

In order to obtain dry and clean steam before the pressure reducer, the condensate which has formed as a result of steam on the steam separator and separators must be discharged.

If it is a sensitive process, it is appropriate to use safety valve after pressure reducer.

The pressure reducing valve application should be as follows.



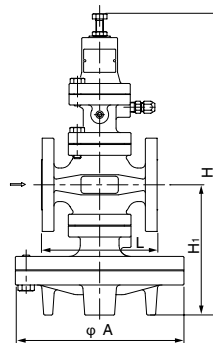
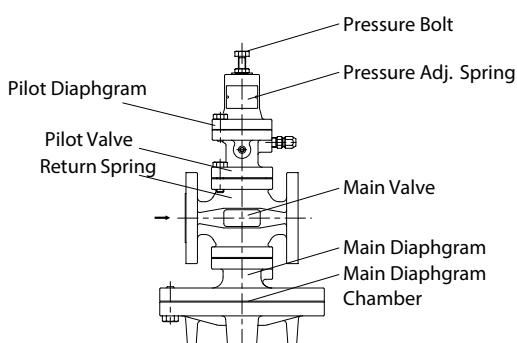
1. Bellow Sealed Valve
2. Strainer
3. Manometer
4. Steam Separator
5. Pressure Reducer
6. Safety Valve
7. Singal Line
8. Steamtrap Control Body
9. Bimetallic Steamtrap
10. Checkvalve
11. Float type Steamtrap
12. Termostatic Control Valve
13. Termometer
14. Ball Valve
15. Yoshitake Pressure Reducer Valve

WORKING PRINCIPLE

Adjustment bolt; the adjustment spring and the pilot diaphragm press to open the pilot valve. The control steam which is taken after the valve with copper pipe, goes through the steam valve orifice. The pressure under the main diaphragm increases when the flow rate through the pilot valve exceeds the flow rate through the pilot valve exceeds the flow rat through the control hole. This pressure defeats the pressure of the return spring and opens the main valve.

The steam passing through the main valve raises the outlet pressure. This pressure is transmitted from the control pipe to the bottom of pilot diaphragm. The valve is closed when the diaphragm's offset pressure balance the adjustment spring's downward pressure. To obtain the desired outlet pressure acting on the main diaphragm.

When steam is not needed, outlet pressure rises and pilot valve closes. In this case, the pressure under the main diaphragm drops and closes the main valve.



Nominal Dia.	L	H1	H	A	Weight
15	146 (142)	170	398	200	155.5 (15.3)
20	146 (142)	170	398	200	16.0 (15.8)
25	156 (152)	175	404	226	21.0 (20.6)
32	176 (172)	192	434	226	24.0 ((23.6)
40	196 (192)	192	434	226	24.5 (24.1)
50	222 (218)	216	498	276	36.0 (35.8)
65	282 (278)	251	552	352	64.5 (64.2)
80	302 (294)	264	575	352	71.5 (68.8)
100	342 (330)	321	658	401	111.0 (106.9)
125	400 (388)	321	658	401	115.0 (112.0)
150	465 (453)	414	814	502	234.3 (230.0)
200	469 (469)	414	814	502	242.0 (238.0)

* Values indicated in parentheses above are JIS 10K FF flanged diameters.

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ADVANTAGES

- It is not influenced by inlet pressure and flow rate changes.
- Sensitive outlet is the best choice for pressure control.
- Suitable for steam, compressed air and similar gases.
- Possibility to adjust between 0.2 - 14 bar with 2 different spring.
- Easy installation and disassembly feature
- Very easy to adjust.

Body:	GG-25 Cast Iron
Main Valve, Pilot Valve, Diaphragm:	Stainless Steel
Max. Temperature:	220°C
Max. Pressure:	PN 25
Ayar Sahası:	(0,2-1,5 bar) / (1-14 bar)
Spring Colour:	Yellow (0,2-1,5 bar) / Green (1-14 bar)
Diameter:	DN 15 - DN 150

GP-2000 FLOW RATE TABLE (KG/H)

P inlet (bar)	P outlet (bar)	15 mm	20 mm	25 mm	32 mm	40 mm	50 mm	65 mm	80 mm	100 mm	125 mm	150 mm	200 mm
20	1-9	1.260	1.814	2.746	3.603	4.737	8.064	15.120	19.656	30.240	31.500	63.000	65.520
	10	1.232	1.775	2.687	3.525	4.634	7.889	14.792	19.230	29.584	30.817	61.635	64.100
	12	1.136	1.636	2.477	3.250	4.273	7.273	13.637	17.729	27.275	28.412	56.824	59.097
	14	1.012	1.458	2.207	2.896	3.808	6.481	12.153	15.799	24.306	25.319	50.638	52.664
18	1-8	1.140	1.641	2.485	3.260	4.286	7.296	13.680	17.784	27.360	28.500	57.000	59.280
	9	1.113	1.603	2.426	3.183	4.185	7.125	13.359	17.367	26.718	27.832	55.664	57.890
	10	1.067	1.537	2.327	3.053	4.014	6.832	12.810	16.653	25.621	26.688	53.377	55.512
	12	954	1.374	2.081	2.730	3.590	6.111	11.458	14.895	22.916	23.871	47.742	49.652
16	14	803	1.157	1.751	2.298	3.021	5.143	9.643	12.536	19.287	20.090	40.181	41.788
	1-7	1.020	1.468	2.223	2.917	3.835	6.528	12.240	15.912	24.480	25.500	51.000	53.040
	10	893	1.286	1.947	2.554	3.358	5.716	10.718	13.933	21.436	22.329	44.659	46.445
14	13	664	956	1.448	1.900	2.498	4.253	7.974	10.366	15.949	16.613	33.227	34.556
	1-6	900	1.296	1.962	2.574	3.384	5.760	10.800	14.040	21.600	22.500	45.000	46.800
	10	702	1.011	1.531	2.009	2.642	4.497	8.433	10.962	16.866	17.568	35.137	36.543
12	11	620	893	1.352	1.773	2.331	3.969	7.442	9.675	14.884	15.504	31.009	32.250
	1-5	780	1.123	1.700	2.230	2.932	4.992	9.360	12.168	18.720	19.500	39.000	40.560
10	10	477	687	1.040	1.365	1.795	3.055	5.729	7.447	11.458	11.935	23.871	24.826
	1-4	660	950	1.438	1.887	2.481	4.224	7.920	10.296	15.840	16.500	33.000	34.320
	5	635	914	1.385	1.817	2.388	4.066	7.623	9.911	15.247	15.883	31.766	33.036
9	8	435	627	950	1.246	1.638	2.789	5.229	6.798	10.459	10.895	21.791	22.663
	1-4	600	864	1.308	1.716	2.256	3.840	7.200	9.360	14.400	15.000	30.000	31.200
	5	551	793	1.201	1.576	2.072	3.528	6.615	8.600	13.230	13.782	27.564	28.666
8	7	413	595	901	1.182	1.554	2.646	4.961	6.450	9.923	10.336	20.673	21.500
	1-3	540	777	1.177	1.544	2.030	3.456	6.480	8.424	12.960	13.500	27.000	28.080
	5	462	665	1.007	1.322	1.738	2.958	5.547	7.211	11.094	11.556	23.113	24.037
7	1-3	480	691	1.046	1.372	1.804	3.072	5.760	7.488	11.520	12.000	24.000	24.960
	5	364	525	794	1.042	1.371	2.333	4.375	5.688	8.751	9.115	18.231	18.961
6	1-2	420	604	915	1.201	1.579	2.688	5.040	6.552	10.080	10.500	21.000	21.840
	3	395	570	862	1.132	1.488	2.533	4.750	6.175	9.500	9.896	19.793	20.584
	5	248	357	541	710	934	1.590	2.981	3.875	5.963	6.211	12.423	12.919
5	1-2	360	518	784	1.029	1.353	2.304	4.320	5.616	8.640	9.000	18.000	18.720
	3	308	443	671	881	1.158	1.972	3.698	4.807	7.396	7.704	15.408	16.025
	4	228	329	498	653	859	1.462	2.742	3.565	5.485	5.713	11.427	11.884
4	0,2-1,5	300	432	654	858	1.128	1.920	3.600	4.680	7.200	7.500	15.000	15.600
	3	206	297	450	591	777	1.323	2.480	3.225	4.961	5.168	10.336	10.750
3	0,2-1	240	345	523	686	902	1.536	2.880	3.744	5.760	6.000	12.000	12.480
	2	182	262	397	521	685	1.166	2.187	2.844	4.375	4.557	9.115	9.480
2	0,2	180	259	392	515	677	1.152	2.160	2.808	4.320	4.500	9.000	9.360
	1	154	221	335	440	579	986	1.849	2.403	3.698	3.852	7.704	8.012
1	0,2	91	131	198	260	342	583	1.093	1.422	2.187	2.278	4.557	4.740

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