



# OB-2000PT

## For Steam Service

The OB-2000PT is a diaphragm-operated externally piloted pressure/temperature combination regulator. It is used in applications where maximum pressure should be limited and the temperature of the heated medium is controlled using a single seated main valve. Temperature pilot and capillary unit

disconnect, making repairs or temperature range changes quick and easy. Available in sizes 1/2" through 4" and with a choice of four spring ranges, six temperature ranges and three capillary lengths.

**Table PTC-280-1. OB-2000PT Specifications**

Application	Inlet Pressure (barg)	Minimum Differential (barg)	Reduced Pressure (barg) Spring Color	Temperature Ranges (°C)	Temperature Accuracy (°C)	Capillary Length (m)
Steam	1 - 20	0,5	0,1 - 0,2 (yellow)* 0,2 - 1,4 (yellow) 1,0 - 14 (green)	-8 - 15	± 1°C From Set Point	2 3 5**
				10 - 36		
				30 - 62		
				55 - 94		
				80 - 127		
				115 - 183		

\* 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.

\*\* Standard length

**Table PTC-280-2. OB-2000PT Sensor and Accessory Specifications**

CAPILLARY		BULB		THERMAL WELL	
Material	Temperature Range (°C)	Material	Connection	Material	Connection
Copper Capillary Tube with 304 Stainless Steel Armor Shield	-8 - 15	Nickel Plated Copper	3/4" NPT	Brass or 304 Stainless Steel*	1" BSPT
	10 - 36				
	30 - 62				
	55 - 94				
	80 - 127				
	115 - 183				

\* Standard. Other material available upon request. See page PTC-276 for dimensional information.

**Note:** Capillary can withstand a maximum of 20°C above rated range. If desired set temperature is in temperature range overlap, select lower range.

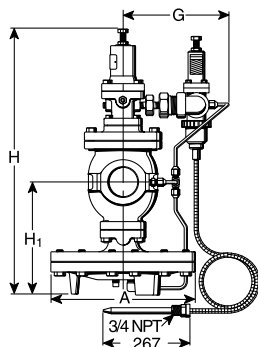
**Table PTC-280-3. OB-2000PT Dimensions and Weights**

Size	Face-to-Face		H	H <sub>1</sub>	A	G	Weight		Cv
	BSPT	PN 25/40					BSPT	PN 25/40	
	mm	mm					kg	kg	
15 - 1/2"	150	150	398	170	200	166	18	20	5,0
20 - 3/4"	150	150	398	170	200	166	18	21	7,2
25 - 1"	160	160	404	175	226	178	22	25	10,9
32 - 1 1/4"	180	180	434	192	226	185	26	29	14,3
40 - 1 1/2"	180	200	434	192	226	185	26	30	18,8
50 - 2"	230	230	498	216	276	166	37	42	32,0
65 - 2 1/2"	-	290	552	251	352	166	-	70	60,0
80 - 3"	-	310	575	264	352	166	-	77	78,0
100 - 4"	-	350	658	321	401	166	-	118	120,0

Shade indicates products that are CE Marked according to the PED (97/23/EC). All the other sizes comply with the Article 3.3 of the same directive.

**Note:** DN150 valve is available on request, but is not CE Marked.

For capacities see page PTC-281.



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

# OB-2000, OB-2000PT



Table PTC-281-1. OB-2000, OB-2000PT Capacities for Steam										
Inlet (barg)	Outlet (barg)	Connection Size								
		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
0,7*	0 - 0,2	96	138	209	274	360	613	1 150	1 495	2 300
1,4	0,9	99	143	217	284	374	637	1 195	1 554	2 390
	0,7	115	167	253	332	437	743	1 393	1 812	2 788
	0,0	142	205	310	406	535	910	1 707	2 219	3 414
1,7	1,2	107	154	233	307	403	686	1 286	1 672	2 573
	0 - 0,3	153	222	335	440	579	986	2 080	2 889	4 446
2,1	1,6	114	164	248	327	430	731	1 372	1 784	2 746
	0 - 0,5	173	249	278	496	652	1 109	2 080	2 889	4 446
2,8	2,3	127	183	277	364	479	816	1 530	1 966	3 060
	1,7	179	258	391	512	673	1 147	2 151	2 796	4 302
	0 - 0,8	212	305	462	607	798	1 811	2 546	3 536	5 441
3,5	2,9	148	213	323	424	558	945	1 781	2 343	3 563
	2,1	222	320	485	637	837	1 426	2 673	3 475	5 348
	0 - 1,2	251	362	547	717	944	1 606	3 011	4 183	6 435
4,0	3,5	169	243	369	484	636	1 083	2 031	2 641	4 064
	3,1	213	307	465	611	803	1 368	2 566	3 336	5 133
	2,4	265	382	579	759	998	1 700	3 188	4 144	6 376
	0 - 1,5	290	417	631	829	1 089	1 854	3 468	4 830	7 430
5,0	4,3	213	307	465	610	798	2 562	3 330	3 330	5 124
	3,7	268	387	586	769	1 011	3 227	4 196	4 196	6 455
	3,1	318	459	695	912	1 199	3 827	4 975	4 975	7 654
	0 - 2,1	348	501	758	995	1 308	4 175	5 799	5 799	8 877
7,0	7,3	269	388	588	772	1 015	1 015	1 728	4 214	6 487
	6,8	340	490	742	973	1 280	2 179	4 086	6 312	8 172
	5,1	414	567	903	1 185	1 558	2 653	4 975	6 468	9 952
	0 - 3,7	445	640	970	1 272	1 672	2 847	5 704	7 416	11 409
8,5	7,3	335	482	730	958	1 259	2 144	4 020	5 227	8 042
	6,8	379	546	828	1 086	1 428	2 431	4 558	5 926	9 105
	5,1	509	734	1 112	1 459	1 918	3 265	6 122	7 959	12 242
	0 - 3,7	541	780	1 181	1 549	2 037	3 468	6 947	9 032	13 897
10,5	8,7	399	571	871	1 143	1 503	2 559	4 799	6 238	9 598
	6,8	563	810	1 223	1 610	2 117	3 603	6 756	8 784	13 513
	0 - 4,6	638	920	1 392	1 827	2 402	4 089	8 191	10 648	16 382
12,0	10,1	464	668	1 012	1 328	1 747	2 973	5 576	7 249	11 152
	8,6	611	880	1 332	1 748	2 298	3 912	7 336	9 537	14 677
	6,8	719	1 036	1 568	2 056	2 706	4 606	8 637	11 229	17 275
	0 - 5,5	735	1 059	1 605	2 104	2 766	4 709	9 434	12 265	18 870
14,0	11,7	521	750	1 136	1 490	1 960	3 337	6 257	8 134	12 515
	10,3	656	944	1 430	1 876	2 466	4 199	7 873	10 235	15 747
	8,6	776	1 118	1 692	2 220	2 920	4 970	9 320	12 116	18 640
	0 - 6,3	833	1 199	1 815	2 382	3 131	5 330	10 678	13 881	21 357
15,5	13,1	586	843	1 277	1 676	2 204	3 751	6 828	9 145	14 069
	12,0	697	1 005	1 521	1 996	2 624	4 466	8 376	10 889	16 753
	10,3	829	1 194	1 808	2 372	3 119	5 309	9 955	12 942	19 912
	0 - 7,2	929	1 339	2 027	2 659	3 405	5 950	11 921	15 498	23 844
17,0	13,8	737	1 061	1 607	2 109	2 773	4 719	8 850	11 505	17 701
	12,0	879	1 266	1 917	2 514	3 304	5 628	10 553	13 719	21 107
	10,3	986	1 421	2 151	2 823	3 711	6 318	11 846	15 400	23 692
	0 - 8,0	1 026	1 478	2 238	2 936	3 861	6 571	13 165	17 114	26 331
19,0	13,8	1 096	1 578	2 389	3 135	4 121	7 015	13 153	17 099	22 238
	12,0	1 166	1 722	2 607	3 421	4 497	7 656	14 354	18 661	25 034
	10,3	1 277	1 840	2 785	3 653	4 803	8 176	15 330	19 929	27 250
	0 - 9,0	1 221	1 758	2 661	3 491	4 617	7 813	14 649	19 044	28 341
20,0	13,8	1 096	1 578	2 389	3 135	4 121	7 015	13 153	17 099	26 307
	12,0	1 166	1 722	2 607	3 421	4 497	7 656	14 354	18 661	28 709
	10,3	1 277	1 840	2 785	3 653	4 803	8 176	15 330	19 929	30 660
	0 - 9,8	1 221	1 758	2 661	3 491	4 617	7 813	14 649	19 044	29 754

\* Minimum inlet pressure for OB-2000PT is 1 barg because of the pressure pilot.

Pressure and Temperature Controls