Direct Acting

For Steam, Air and Non-Corrosive Gas Service

The simplest of all pressure reducing valves, the direct acting type operates with convoluted bellows. Since it is self-contained, it does not need an external sensing line downstream to operate. It is the smallest and most economical of the two types and is designed for low to moderate flows. Accuracy of direct acting PRVs is typically ±10%.

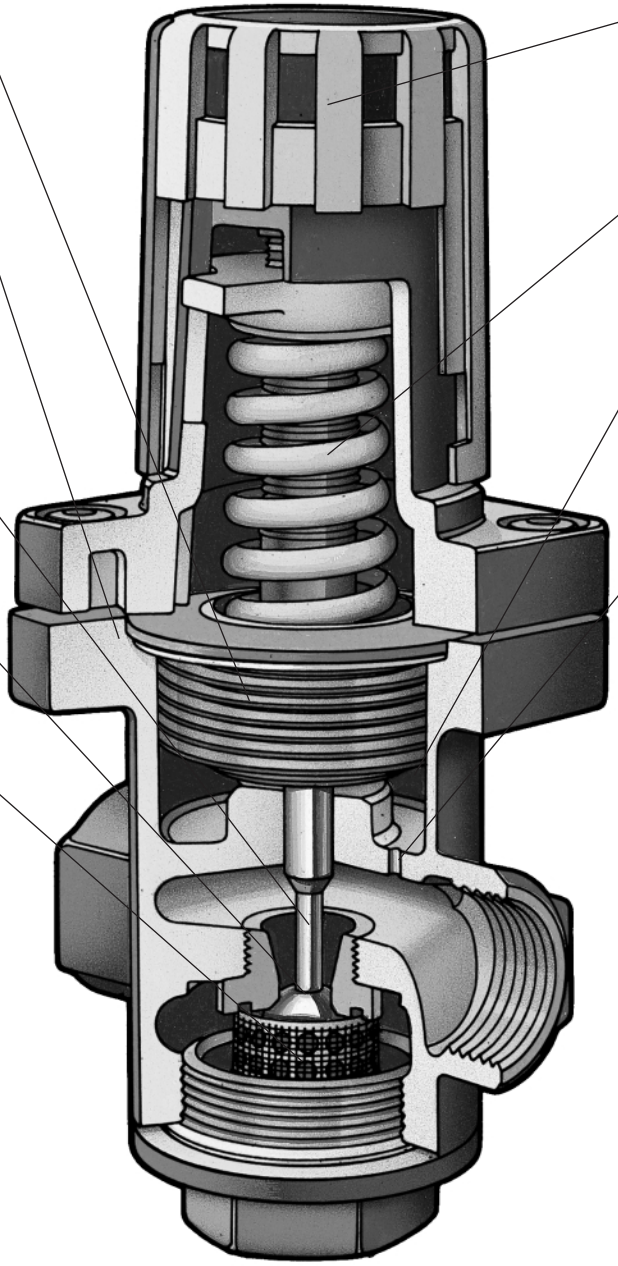
Convoluted phosphor bronze or stainless steel bellows allows smaller body size than conventional direct-acting diaphragm PRVs.

Bronze or stainless steel body for corrosion resistance.

Stainless steel stem and bronze or stainless steel body minimize the sticking common with conventional valves.

Hardened stainless steel valve and seat with spring return to assure tight shutoff.

Integral mesh strainer eliminates fouling due to dirt.



Plastic cap does not absorb heat so it will not burn an operator's hands. Permits changing of set pressure without tools. Simply lift cap and turn to desired setting.

Interchangeable range spring is easily changed to different pressure by removing four (4) cap screws.

Downstream pressure sensed outside the bellows vs. inside, which assures bellows integrity and longer bellows life.

Integral sensing port to eliminate piping of external sensing line.

GD-30/30S

For Steam, Air and Non-Corrosive Gases

The GD-30 is a compact, high performance direct acting valve. Economical to buy and use, it's ideal for those low to moderate flow applications where accuracy of ±10% is acceptable. The GD-30 is well suited for laundry and dry cleaning equipment, hospital equipment, tire molds, humidifiers, small heaters and applications in food processing. It provides tight shutoff for dead-end service on steam.

Table PTC-222-1. GD-30 Specifications

Application	Inlet Pressure (barg)	Reduced Pressure (barg)	Spring color	Minimum Differential (barg)	Maximum Temperature (°C)	Materials		
						Body	Valve/Seat	Bellows
Steam Air Non-corrosive gases	1 - 17	0,2 - 1,0	Yellow	0,5	210	Cast Bronze ASTM B584	Stainless Steel AISI 440/304	Phosphor Bronze*
		0,5 - 4,0	Blue					
		3,5 - 10,0	Green					

* Stainless steel optional.

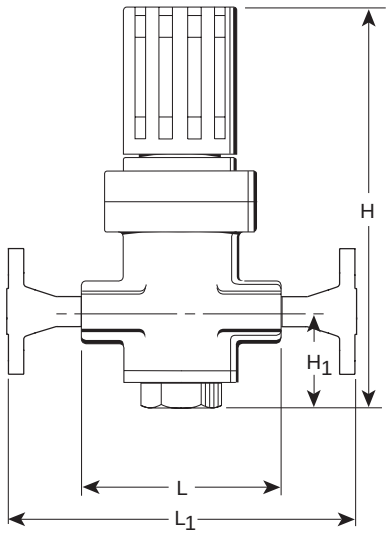
Table PTC-222-2. GD-30/30S Dimensions and Weights

Connection Size	1/2" - 15	3/4" - 20	1" - 25	1 1/2" - 40	2" - 50
L	80	85	95	140	150
L_1	150	150	160	272	288
H_1	47	47	47	77	77
H	190	190	190	307	307
Weight BSPT (kg)	1,9	1,9	2,0	8,1	8,5
Weight Flanged (kg)	3,5	4,0	4,5	12,8	15,1
Cv	1,3	1,5	2,5	5,6	8,5

Note: GD-30 capacities cannot be determined with a formula - consult capacity tables. Reference note inside of table PTC-236-1.
* GD-30S available in 1/2", 3/4" and 1" only.
All sizes comply with the article 3.3 of the PED (97/23/EC).

Table PTC-222-3. GD-30S Specifications

Application	Inlet Pressure (barg)	Reduced Pressure (barg)	Spring color	Minimum Differential (barg)	Maximum Temperature (°C)	Materials		
						Body	Valve/Seat	Bellows
Steam	1 - 21	0,2 - 1,0	Yellow	0,5	220	Stainless Steel AISI 304 (316 Optional)	Stainless Steel AISI 440/304	Stainless Steel AISI 316L
		0,5 - 4,0	Blue					
		3,6 - 10,0	Green					







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

Table PTC-223-1. GD-30/30S Capacities - Steam

Inlet Pressure	Outlet Pressure	Steam load (kg/h)											
		Connection Size											
bar		1/2"	DN15	3/4"	DN20	1"	DN25	1 1/2"	DN40	2"	DN50		
1	0,5	22		25		42		90		135			
1,5	0,9	24		28		48		98		150			
	0,5	19		25		35		82		120			
2	1,6	28		32		51		110		185			
	1,4	24		27		46		95		140			
	0,2	15		18		27		63		98			
3	2,2	45		55		85		185		280			
	1,4	36		44		72		150		235			
	0,3	18		25		35		72		120			
3,5	2,8	59		65		110		245		380			
	1,4	45		52		85		185		285			
	0,3	22		28		40		88		135			
4	3,3	62		70		120		265		408			
	2,8	68		75		131		280		440			
	1,2	41		47		77		170		265			
	0,4	25		33		45		100		150			
5,5	4,4	80		93		155		335		530			
	3,7	85		102		160		355		545			
	1,6	55		62		100		222		340			
	0,5	27		35		49		105		165			
7	5,5	92		110		180		392		615			
	4,5	102		119		198		435		665			
	2,8	90		105		170		380		580			
	0,7	31		36		60		135		215			
8,5	6,6	105		125		205		450		690			
	4,8	125		141		235		530		825			
	3,1	109		121		204		445		685			
	0,8	50		55		90		210		320			
10,5	8,3	130		151		250		550		845			
	5,9	165		191		320		695		1 075			
	3,8	135		160		270		580		910			
	1,0	60		75		115		255		385			
12,5	9,7	185		220		360		780		1 215			
	8,0	195		230		390		830		1 285			
	4,8	175		195		335		735		1 135			
	1,2	75		85		140		310		470			
14	9,7	209		235		395		900		1 390			
	8,0	215		245		410		910		1 400			
	5,9	195		225		375		825		1 275			
	1,6	95		110		175		385		590			
15,5	9,7	220		260		430		935		1 450			
	8,0	225		265		436		940		1 455			
	5,9	210		245		410		900		1 390			
	1,6	115		135		225		490		760			
17	9,7	238		275		460		1 010		1 560			
	8,3	250		265		471		1 020		1 575			
	4,8	210		240		405		880		1 360			
	1,7	125		145		240		520		815			
GD-30S Only	19	9,7	240	278		464							
		8,3	240	278		464							
		4,8	213	246		409							
		1,9	134	156		255							
	21	9,7	240	278		464							
		6,9	240	278		464							
		4,8	217	250		420							
		2,7	140	163		270							

Note : For air capacities in Nm³/h, multiply steam capacities by 1,2.
Maximum pressure reduction ratio 10:1.
Shade indicates capacities available with bronze GD-30 only.