

### For Steam, Air and Non-Corrosive Gas Service

The GD-45 is a compact, high-performance, direct-acting valve. Inexpensive to buy and use, it is ideal for those moderate flow applications that do not justify the higher cost of pilot-controlled valves.

The GD-45 is well-suited for laundry and dry-cleaning equipment, hospital equipment, tire molds, humidifiers, small heaters, and applications in food processing. It provides tight, quick, easy installation.

#### Quick, easy installation

- Lightweight and compact
- Piping supports the valve of ductile iron for greater durability and higher inlet pressure
- Screwed connections
- No external sensing lines or parts needed
- Maximum turndown ratio 10:1
- ANSI Class IV Shutt off

#### Simple selection

- 1/2", 3/4" and 1"
- Match pipe size normally
- Three pressure range springs (for best control when ranges overlap, use smaller range spring)

#### Long life/easy maintenance

- Highly resilient phosphor-bronze bellows
- Hardened stainless-steel working parts
- Integral strainer (removable for cleaning) for protection from wear or dirt
- Teflon gaskets used at all joints for improved leakage prevention

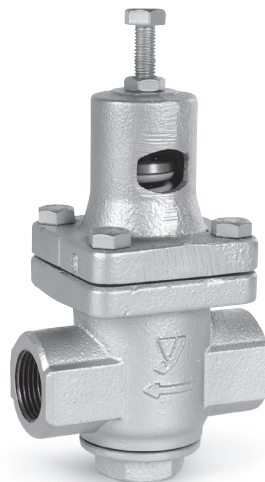
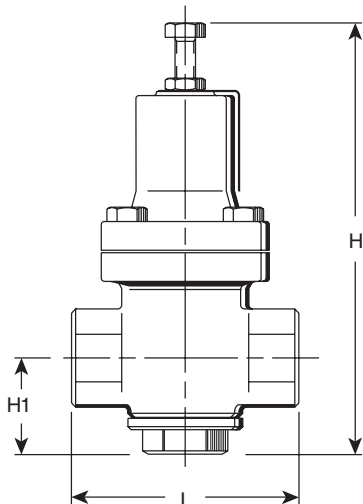
For a fully detailed certified drawing, refer to CDY #1090.

Pressure and Temperature Controls

GD-45 Specifications							
Service	Inlet Pressure psig (bar)	Reduced Pressure psig (bar)	Minimum Differential psig (bar)	Maximum Temperature °F (°C)	Materials		
					Body	Valve/Seat	Bellows
Steam, Air Non-Corrosive Gases	15 - 300 (1 - 20)	3 - 15 (.21 - 1.0) Yellow	7 (.48)	450 (232)	ASTM A536 Ductile Iron	Hardened Stainless Steel AISI 420	Phosphor Bronze ASTM B103
		7 - 80 (.48 - 5.5) Blue					
		50 - 140 (3.4 - 9.6) Green					

GD-45 Dimensions and Weights						
Symbol	Connection Size					
	in	mm	in	mm	in	mm
	1/2	15	3/4	20	1	25
L	4-3/8	111	4-3/8	111	4-3/8	111
H <sub>1</sub>	1-7/8	47	1-7/8	47	1-7/8	47
H	8-1/2	216	8-1/2	216	8-1/2	216
Wt, lb (kg)	7 (3.2)					
Cv	1.3		1.5		2.5	

NOTE: GD-45 capacities cannot be determined with a formula—consult capacity tables. Reference note under formula key on page 275.



GD-45 Capacities—Steam					GD-45 Capacities—Steam				
		lb/hr					kg/hr		
Inlet	Outlet	Connection Size			Inlet	Outlet	Connection Size		
		in					mm		
psig		1/2	3/4	1	bar		15	20	25
C <sub>v</sub> Factor		1.3	1.5	2.5	C <sub>v</sub> Factor		1.3	1.5	2.5
15	7	49	56	92	1.0	.5	22	25	42
20	13	53	61	105	1.4	.9	24	28	48
	7	42	55	63		.5	19	25	35
30	23	62	71	112	2.0	1.6	28	32	51
	15	53	60	101		1.0	24	27	46
40	3	33	40	60	2.8	.2	15	18	27
	32	99	121	187		2.2	45	55	85
50	20	79	97	159	3.4	1.4	36	44	72
	4	40	55	77		.3	18	25	35
60	40	130	143	242	4.0	2.8	59	65	110
	20	99	115	187		1.4	45	52	85
80	5	48	62	88	5.5	.3	22	28	40
	48	137	154	265		3.3	62	70	120
100	40	150	165	289	6.9	2.8	68	75	131
	18	90	104	170		1.2	41	47	77
120	6	55	73	99	8.3	.4	25	33	45
	64	176	205	342		4.4	80	93	155
150	54	187	225	353	10.3	3.7	85	102	160
	23	121	137	220		1.6	55	62	100
180	8	60	77	108	12.4	.5	27	35	49
	80	203	242	397		5.5	92	110	180
200	66	225	262	437	13.8	4.5	102	119	198
	40	198	231	375		2.8	90	105	170
225	10	68	79	132	15.5	.7	31	36	60
	96	231	276	452		6.6	105	125	205
250	70	276	311	518	17.2	4.8	125	141	235
	45	240	267	450		3.1	109	121	204
300	12	110	121	198	20	.8	50	55	90
	120	287	333	551		8.3	130	151	250
150	85	364	421	705	13.8	5.9	165	191	320
	55	298	353	595		3.8	135	160	270
180	15	132	165	254	15.5	1.0	60	75	115
	140	408	485	794		9.7	185	220	360
200	115	430	507	860	17.2	8.0	195	230	390
	70	386	430	739		4.8	175	195	335
225	18	165	187	309	20	1.2	75	85	140
	140	461	518	871		9.7	209	235	395
250	115	474	540	904	15.5	8.0	215	245	410
	80	430	496	827		5.5	195	225	375
300	20	209	242	386	17.2	1.4	95	110	175
	140	485	573	948		9.7	220	260	430
225	115	496	584	961	20	8.0	225	265	436
	85	463	540	904		5.9	210	245	410
250	23	254	298	496	15.5	1.6	115	135	225
	140	525	606	1,014		9.7	238	275	460
300	120	551	584	1,038	17.2	8.3	250	265	471
	70	463	529	893		4.8	210	240	405
300	25	276	320	529	20	1.7	125	145	240
	140	528	616	1,023		9.7	240	280	465
300	120	551	627	1,038	15.5	8.3	250	285	477
	70	484	550	913		4.8	220	250	415
300	30	319	352	583	20	2.0	145	160	265

Pressure and Temperature Controls

NOTE: For air capacities scfm, multiply steam capacities (lb/hr) by 0.36. For air capacities m3/hr, multiply steam capacities (kg/hr) by 1.35. Maximum pressure reduction ratio 10:1.