

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 shutoff

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.

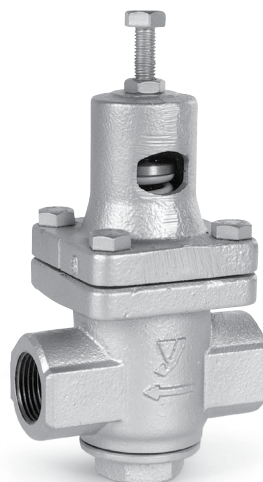
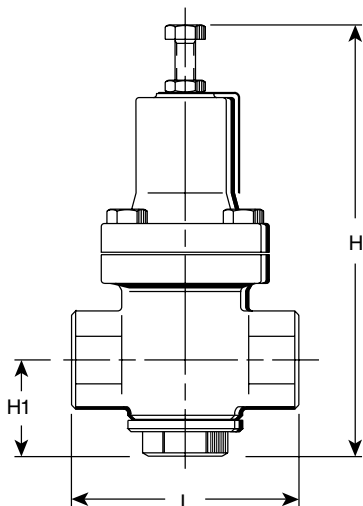
GD-45 Specifications

Service	Inlet Pressure psig (barg)	Reduced Pressure psig (barg)	Minimum Differential psig (barg)	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 - 60 (0.5 - 4.0) 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 _i	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

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

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.

Pressure and
Temperature Controls