



P1000 Pressure Independent Valve

P1000



- Rated for Chilled Water, Hot Water, 60% Glycol solutions
- Chrome-plated ball and brass stem
- Equal percentage flow characteristics
- 0 to 212°F (-18 to 100°C) fluid temperature rating
- -22 to 122°F (-30 to 50°C) ambient temperature rating
- Differential pressure operating range 5 to 50 psi
- NPT end connections
- 600 psi static pressure rating 1/2 through 1 in.
- 400 psi static pressure rating 1-1/4 through 2 in.
- Flow accuracy 5% from 5 to 50 PSID

Non-Spring Return



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Spring Return

Valve	Size in.	GPM	Closeoff psig	24 VAC				Valve	Size in.	Flow Rate GPM	Closeoff psig	0 to 10 VDC Proportional Control, 24 VAC Supply M2204-HGA-2, M2215-HGA2			
				No Pressure Taps		With Two Pressure Taps						Spring Return Open		Spring Return Closed	
				Floating VA2104-AGA-2	0 to 10 VDC Proportional VA2104-HGA-2	Floating VA2104-AGA-2	0 to 10 VDC Proportional VA2120-HGA-2					Without Pressure Taps	With Pressure Taps	Without Pressure Taps	With Pressure Taps
P124xA00	1/2	0.5	200	P1241A00+21LAGA	P1241A00+21LHGA	P1242A00+21LAGA	P1242A00+21LHGA	P124xA00*	1/2	0.5	200	P1241A00+22LHGA	P1242A00+22LHGA	P1241A00+24LHGA	P1242A00+24LHGA
P124xA01*		1		P1241A01+21LAGA	P1241A01+21LHGA	P1242A01+21LAGA	P1242A01+21LHGA	P124xA01*		1		P1241A01+22LHGA	P1242A01+22LHGA	P1241A01+24LHGA	P1242A01+24LHGA
P124xA015*		1.5		P1241A01521LAGA	P1241A01521LHGA	P1242A01521LAGA	P1242A01521LHGA	P124xA015*		1.5		P1241A01522LHGA	P1242A01522LHGA	P1241A01524LHGA	P1242A01524LHGA
P124xA02*		2		P1241A02+21LAGA	P1241A02+21LHGA	P1242A02+21LAGA	P1242A02+21LHGA	P124xA02*		2		P1241A02+22LHGA	P1242A02+22LHGA	P1241A02+24LHGA	P1242A02+24LHGA
P124xA03*		3		P1241A03+21LAGA	P1241A03+21LHGA	P1242A03+21LAGA	P1242A03+21LHGA	P124xA03*		3		P1241A03+22LHGA	P1242A03+22LHGA	P1241A03+24LHGA	P1242A03+24LHGA
P124xA04*		4		P1241A04+21LAGA	P1241A04+21LHGA	P1242A04+21LAGA	P1242A04+21LHGA	P124xA04*		4		P1241A04+22LHGA	P1242A04+22LHGA	P1241A04+24LHGA	P1242A04+24LHGA
P124xA05*		5		P1241A05+21LAGA	P1241A05+21LHGA	P1242A05+21LAGA	P1242A05+21LHGA	P124xA05*		5		P1241A05+22LHGA	P1242A05+22LHGA	P1241A05+24LHGA	P1242A05+24LHGA
P124xB06*	3/4	6	200	P1241B06+21LAGA	P1241B06+21LHGA	P1242B06+21LAGA	P1242B06+21LHGA	P124xB06*	3/4	6	200	P1241B06+22LHGA	P1242B06+22LHGA	P1241B06+24LHGA	P1242B06+24LHGA
P124xB07*		7		P1241B07+21LAGA	P1241B07+21LHGA	P1242B07+21LAGA	P1242B07+21LHGA	P124xB07*		7		P1241B07+22LHGA	P1242B07+22LHGA	P1241B07+24LHGA	P1242B07+24LHGA
P124xB08*		8		P1241B08+21LAGA	P1241B08+21LHGA	P1242B08+21LAGA	P1242B08+21LHGA	P124xB08*		8		P1241B08+22LHGA	P1242B08+22LHGA	P1241B08+24LHGA	P1242B08+24LHGA
P124xB09*		9		P1241B09+21LAGA	P1241B09+21LHGA	P1242B09+21LAGA	P1242B09+21LHGA	P124xB09*		9		P1241B09+22LHGA	P1242B09+22LHGA	P1241B09+24LHGA	P1242B09+24LHGA
P124xB10*		10		P1241B10+21LAGA	P1241B10+21LHGA	P1242B10+21LAGA	P1242B10+21LHGA	P124xB10*		10		P1241B10+22LHGA	P1242B10+22LHGA	P1241B10+24LHGA	P1242B10+24LHGA
P124xC12*	1	12	200	P1241C12+21LAGA	P1241C12+21LHGA	P1242C12+21LAGA	P1242C12+21LHGA	P124xC12*	1	12	200	P1241C12+22LHGA	P1242C12+22LHGA	P1241C12+24LHGA	P1242C12+24LHGA
P124xC14*		14		P1241C14+21LAGA	P1241C14+21LHGA	P1242C14+21LAGA	P1242C14+21LHGA	P124xC14*		14		P1241C14+22LHGA	P1242C14+22LHGA	P1241C14+24LHGA	P1242C14+24LHGA
P124xC16*		16		P1241C16+21LAGA	P1241C16+21LHGA	P1242C16+21LAGA	P1242C16+21LHGA	P124xC16*		16		P1241C16+22LHGA	P1242C16+22LHGA	P1241C16+24LHGA	P1242C16+24LHGA
P124xC18*		18		P1241C18+21LAGA	P1241C18+21LHGA	P1242C18+21LAGA	P1242C18+21LHGA	P124xC18*		18		P1241C18+22LHGA	P1242C18+22LHGA	P1241C18+24LHGA	P1242C18+24LHGA
P1242D18	1-1/4	18	200				P1242D18+21AHGA	P1242D18	1-1/4	18	200		P1242D18+22AHGA		P1242D18+24AHGA
P1242D20		20					P1242D20+21AHGA	P1242D20		20			P1242D20+22AHGA		P1242D20+24AHGA
P1242D22		22					P1242D22+21AHGA	P1242D22		22			P1242D22+22AHGA		P1242D22+24AHGA
P1242D24		24					P1242D24+21AHGA	P1242D24		24			P1242D24+22AHGA		P1242D24+24AHGA
P1242D26		26					P1242D26+21AHGA	P1242D26		26			P1242D26+22AHGA		P1242D26+24AHGA
P1242E26	1-1/2	26	200				P1242E26+21AHGA	P1242E26	1-1/2	26	200		P1242E26+22AHGA		P1242E26+24AHGA
P1242E28		28					P1242E28+21AHGA	P1242E28		28			P1242E28+22AHGA		P1242E28+24AHGA
P1242E30		30					P1242E30+21AHGA	P1242E30		30			P1242E30+22AHGA		P1242E30+24AHGA
P1242E33		33					P1242E33+21AHGA	P1242E33		33			P1242E33+22AHGA		P1242E33+24AHGA
P1242F33	2	33	200				P1242F33+21AHGA	P1242F33	2	33	200		P1242F33+22AHGA		P1242F33+24AHGA
P1242F36		36					P1242F36+21AHGA	P1242F36		36			P1242F36+22AHGA		P1242F36+24AHGA
P1242F40		40					P1242F40+21AHGA	P1242F40		40			P1242F40+22AHGA		P1242F40+24AHGA
P1242F44		44					P1242F44+21AHGA	P1242F44		44			P1242F44+22AHGA		P1242F44+24AHGA
P1242F48		48					P1242F48+21AHGA	P1242F48		48			P1242F48+22AHGA		P1242F48+24AHGA
P1242F52		52					P1242F52+21AHGA	P1242F52		52			P1242F52+22AHGA		P1242F52+24AHGA
P1242F56		56					P1242F56+21AHGA	P1242F56		56			P1242F56+22AHGA		P1242F56+24AHGA
P1242F60		60					P1242F60+21AHGA	P1242F60		60			P1242F60+22AHGA		P1242F60+24AHGA
P1242F65		65					P1242F65+21AHGA	P1242F65		65			P1242F65+22AHGA		P1242F65+24AHGA
P1242F70		70					P1242F70+21AHGA	P1242F70		70			P1242F70+22AHGA		P1242F70+24AHGA
P1242F75		75					P1242F75+21AHGA	P1242F75		75			P1242F75+22AHGA		P1242F75+24AHGA
P1242F80		80					P1242F80+21AHGA	P1242F80		80			P1242F80+22AHGA		P1242F80+24AHGA

* For a valve without pressure taps substitute "1" for "x", for a valve with pressure taps substitute "2" for "x"

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Sizing Valves



Some DDC Controllers require run time for proper operation. The table below gives the run time for the factory set operating range.

Size in.	Valve Code Number		Factory Flow Rate (GPM)	Running Time Seconds	
	No Pressure taps	With Pressure taps		VA2104-AGA-2	VA2104-HGA-2 VA2120-HGA-2 M2204-HGA-2 M2215-HGA-2
1/2	P1241A00	P1242A00	0.5	36	100
	P1241A01	P1242A01	1	60	100
	P1241A015	P1242A015	1.5	45	100
	P1241A02	P1242A02	2	51	100
	P1241A03	P1242A03	3	56	100
	P1241A04	P1242A04	4	63	100
3/4	P1241A05	P1242A05	5	68	100
	P1241B06	P1242B06	6	61	100
	P1241B07	P1242B07	7	64	100
	P1241B08	P1242B08	8	67	100
	P1241B09	P1242B09	9	69	100
	P1241B10	P1242B10	10	76	100
1	P1241C12	P1242C12	12	62	100
	P1241C14	P1242C14	14	67	100
	P1241C16	P1242C16	16	86	100
	P1241C18	P1242C18	18	67	100
1-1/4		P1242D18	18		100
		P1242D20	20		100
		P1242D22	22		100
		P1242D24	24		100
		P1242D26	26		100
1-1/2		P1242E26	26		100
		P1242E28	28		100
		P1242E30	30		100
		P1242E33	33		100
2		P1242F33	33		100
		P1242F36	36		100
		P1242F40	40		100
		P1242F44	44		100
		P1242F48	48		100
		P1242F52	52		100
		P1242F56	56		100
		P1242F60	60		100
		P1242F65	65		100
		P1242F70	70		100
		P1242F75	75		100
		P1242F80	80		100

P1000 Series Pressure Independent Valves are selected based on the required Gallons per Minute (GPM) of the coil. Select the valve that has a GPM rating equal to or slightly larger than the required flow.

Examples: For a requirement of a 1/2 in. valve with a flow requirement of 2.5 GPM and no pressure taps you would select a P1241A03 valve with the desired actuator.

For a requirement of a 1 in. valve with a flow requirement of 14 GPM and with pressure taps you would select a P1242C14 valve with the desired actuator.

Note: that each floating control valve has a flow adjustment which can be used to limit the flow when a closer setting is desired than the standard factory settings. The range of adjustment for each valve is given in the table below.

For valves with pressure taps, the factory flow rate can be confirmed by using the pressure flow data given below.

Size in.	Valve Code Number		Factory Flow Rate (GPM)	Floating Control, Field Adjustable Flow Range (GPM)	Different Pressure Drop across pressure taps at Factory Flow Rate
	No Pressure taps	With Pressure taps			
1/2	P1241A00	P1242A00	0.5	0.5 to 1.3	2.8
	P1241A01	P1242A01	1	0.5 to 1.3	2.5
	P1241A015	P1242A015	1.5	0.5 to 5.5	2.5
	P1241A02	P1242A02	2	0.5 to 5.5	2.5
	P1241A03	P1242A03	3	0.5 to 5.5	2.5
	P1241A04	P1242A04	4	0.5 to 5.5	2.3
3/4	P1241A05	P1242A05	5	0.5 to 5.5	2.0
	P1241B06	P1242B06	6	2 to 10	2.75
	P1241B07	P1242B07	7	2 to 10	2.5
	P1241B08	P1242B08	8	2 to 10	2.0
	P1241B09	P1242B09	9	2 to 10	2.0
	P1241B10	P1242B10	10	2 to 10	2.5
1	P1241C12	P1242C12	12	2 to 16	2.9
	P1241C14	P1242C14	14	2 to 16	2.6
	P1241C16	P1242C16	16	2 to 16	1.6
	P1241C18	P1242C18	18	6 to 19	1.4
1-1/4		P1242D18	18		3.5
		P1242D20	20		3.2
		P1242D22	22		3.0
		P1242D24	24		3.0
		P1242D26	26		3.4
1-1/2		P1242E26	26		3.5
		P1242E28	28		3.4
		P1242E30	30		3.2
		P1242E33	33		3.3
2		P1242F33	33		2.5
		P1242F36	36		2.4
		P1242F40	40		2.4
		P1242F44	44		3.8
		P1242F48	48		3.0
		P1242F52	52		2.7
		P1242F56	56		2.1
		P1242F60	60		1.9
		P1242F65	65		2.0
		P1242F70	70		2.0
	P1242F75	75		1.8	
	P1242F80	80		2.0	