

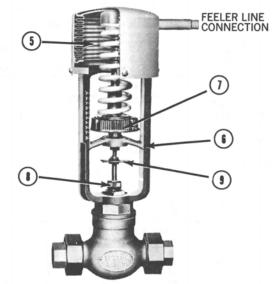
FEATURES

- Sizes 1/4" through 4" for inlet pressures up to 100 -1. 250 psi.
- 2. Selection of three range spans topped at 25, 40 and 55 psi. All-metal construction. High quality components from single manufacturer. Large two-ply seamless Robertshaw long life bellows.

- 3.4.5.6.7.8.9 Heavy-duty construction with cast iron frame. Setpoint adjustment wheel Teflon* chevron "Lifetime" stem packing. Quick-disconnect valve stem
- * Registered trade name of DuPont Company

Sales Manual Section 160 PRODUCT SPECIFICATION RP-1070/1073

Pressure Regulator or Pressure Relief Valve RP-1070-C /**RP-1073-C** Series



All metal construction for Modulating Control of Pressure

Regulator Number		RP-1070-Cl Pressure Regulator	RP-1070-C2 Pressure Relief Valve	RP-1073-C1, C2 Pressure Regulator	RP-1073-C3, C4 Pressure Relief Valve		
Valve See Valve Spec	Action	Direct-acting - closes on rising pressure.	Reverse-acting - opens on rising pressure	Direct-acting - closes on rising pressure	Reverse-acting -opens on rising Pressure		
Sheet for Further description	Sizes	1/4" through 1 1/2"	1/4" through 1 1/2"	1/4" through 4"	1/4" through 4"		
	Type*	1/4", 3/8", 1/2" single- seated type "A; " 3/4" thru 1 1/2", single-seated type "MA"	Same as RP-1070-C1 except size 3/4" thru 1 1/2" have double-seated type "FA"	1/4", 3/8", 1/2" single- seated type "A;" 3/4" thru 2", single-seated type "MA; " 2 1/2" thru 4", double-seated type "FA."	Same as RP-1073-C1, C2 accept sizes 3/4" thru 4" have double-sated type "FA."		
	Ends*	1/2" thru 1 1/2" screwed unions	1/2" thru 1 1/2" screwed unions	1/2" thru 1 1/2" screwed unions 2" thru 4", 125 lbs. ANSI flanges	1/2" thru 1 1/2" screwed unions 2" thru 4", 125 lbs. ANSI flanges		
	Trim	All sizes, Stainless Steel	1/4" thru 1/2", Stainless Steel; 3/4" thru 1 1/2", Monel	1/4" thru 4", Stainless Steel	1/4" thru 1/2", Stainless Steel; 3/4" thru 1 1/2", Monel; 2" - 4", stainless steel.		
	Stem	Stainless Steel. Quick- detach type	Stainless Steel Quick-detach type	Stainless Steel Quick-detach type	Stainless Steel Quick-detach type		
	Stem Packing	Teflon chevrons, spring loaded	Rubber U-Cup	Teflon chevrons, spring loaded	Rubber U-Cup		
	Body	Bronze	Bronze	1/4" thru 1 1/2", Bronze; 2" thru 4", Cast Iron	1/4" thru 1 1/2", Bronze; 2" thru 4", Cast Iron		
	Body Rating	250 psi	250 psi	1/4" thru 1 1/2", 250 psi; 2" thru 4", 125 psi	1/4" thru 1 1/2", 250 psi; 2" thru 4", 125 psi		
Materials	Frame	Cast Iron	Cast Iron	Cast Iron	Cast Iron		
For parts other than	Adj. Spring	Steel	Steel	Steel	Steel		
listed above.	Other Parts	Non-ferrous metals	Non-ferrous metals	Non-ferrous metals	Non-ferrous metals		
Pressure	Location	Top of head	Top of head	Side of Head	Side of head.		
Connection	Size	1/4" NPT	1/4" NPT	1/4" NPT	1/4" NPT		

DESCRIPTION OF CATALOGED REGULATORS

On 1/2" size with 1/4" and 3/8" reduced ports, the "A" type valve with threaded unions is cataloged.



DESCRIPTION

For Pressure Regulation										
Valve Size	Max.	Max.	Minimum	Pressure*	Direct-					
Inches	Supply	Setpoint	Setpoint	Change for	Acting					
		Pressure,	Pressure	Full Valve	Valve,					
	Lbs.	Lbs.	Lbs.	Stroke, Lbs.	Туре					
			(plus or		51.5					
			minus %							
			Initial							
			Pressure)							
NO. RP-1070-Cl										
Valve closes on rising pressure										
1/4	150	55	2.3 + 1.0%	4.6	А					
3/8	150	55	2.9+2.1%	5.7	А					
1/2	150	55	3.4 + 3.9%	6.8	А					
3/4	250	55	4.6 - 1.5%	9.1	MA					
1	250	55	5.7 - 1.5%	11.4	MA					
1 1/4	250	55	6.9 - 1.5%	13.7	MA					
1 1/2	250	55	8 - 1.5%	16	MA					
<u> </u>		NO. R	P-1073-Cl							
Valve closes on rising pressure.										
1/4	150	25	1 + 0.4%	2	А					
3/8	150	25	1.3 + 0.8%	2.5	А					
1/2	150	25	1.5 + 1.5%	3	А					
3/4	250	25	2 - 0.6%	4	MA					
1	250	25	2.5 - 0.6%	5	MA					
1 1/4	250	25	3 - 0.6%	6	MA					
1 1/2	250	25	3.5 - 0.6%	7	MA					
2	150	25	4.5 - 0.6%	9	MA					
2 1/2	100	25	3 + 3.5%	6	FA					
3	100	25	3.5 + 4.2%	7	FA					
4	100	25	4.5 + 5.7%	9	FA					
		NO. R	P-1073-C2							
		ve closes a	on rising press							
1/4	150	40	1.4 + 0.4%	2.7	Α					
3/8	150	40	1.7 + 0.8%	3.4	А					
1/2	150	40	2.1 + 1.5%	4.1	А					
3/4	250	40	2.8 - 0.6%	5.5	MA					
1	250	40	3.4 - 0.6%	6.8	MA					
1 1/4	250	40	4.1 - 0.6%	8.2	MA					
1 1/2	250	40	4.8 - 0.6%	9.6	MA					
2	150	40	6.2 - 0.6%	12.3	MA					
2 1/2	100	40	4.1 + 3.5%	8.2	FA					
3	100	40	4.8 + 4.2%	9.6	FA					
4	100	40	6.2 + 5.7%	12.3	FA					
• Amount of pressure change required at regulator head for valve to go										

• Amount of pressure change required at regulator head for valve to go from full open to full closed or vice versa. Control is modulating around setpoint.

HOW TO ORDER

Specify:

- 1. Quantity
- 2. Regulator number
- 3. Valve size, type, action, etc.
- 4. Medium through valve (steam, etc.)
- 5. Initial and reduced pressures (PSIG)
- 6. Special features desired.
- 7. Shipping and billing instructions

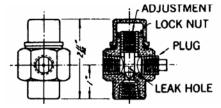
For Pressure Relief										
Valve	Max. Max.		Minimum	Pressure*	Reverse-					
Size,	Supply	Setpoint	Setpoint	Change for	Acting					
Inches	Pressur	Pressure,	Pressure	Full Valve	Valve,					
	е,	Lbs.	Lbs. minus	Stroke, Lbs.	Туре					
	Lbs.		% Initial							
-	NO. RP-1070-C2									
Valve opals on rising pressure										
1/4	150	55	2.3 - 1.0%	4.6	Α					
3/8	150	55	2.9-2.1%	5.7	А					
1/2	150	55	3.4 - 3.9%	6.8	А					
3/4	150	55	2.9 - 1.5%	5.7	FA					
1	150	55	3.4 - 2.3%	6.8	FA					
1 1/4	150	55	4.0 - 2.3%	8	FA					
1 1/2	150	55	4.6 - 2/9%	9.1	FA					
			RP-1073-C3							
		alve opens	s on rising pr	essure						
1/4	150	25	1.0 - 0.4%	2	Α					
3/8	150	25	1.3 - 0.8%	2.5	А					
1/2	150	25	1.5 - 1.5%	3	Α					
3/4	150	25	1.3 - 0.6%	2.5	FA					
1	150	25	1.5 - 0.9%	3	FA					
1 1/4	150	25	1.8 - 0.9%	3.5	FA					
1 1/2	150	25	2.0-1.1%	4	FA					
2	100	25	2.5 - 1.4%	5	FA					
2 1/2	100	25	3.0 - 3.5%	6	FA					
3	100	25	3.5 - 4.2%	7	FA					
4	100	25	4.5 - 5.7%	9	FA					
			P-1073-C4							
		alve opens	s on rising pr	essure.						
1/4	150	40	1.4 - 0.4%	2.7	А					
3/8	150	40	1.7 - 0.8%	3.4	А					
1/2	150	40	2.1 - 1.5%	4.1	Α					
3/4	150	40	1.7 - 0.6%	3.4	F A					
1	150	40	2.1 - 0.9%	4.1	FA					
1 1/4	150	40	2.4 - 0.9%	4.8	FA					
1 1/2	150	40	2.8 - 1.1%	5.5	FA					
2	100	40	3.4 - 2.8%	6.8	FA					
2 1/2	100	40	4.1 - 3.5%	8.2	FA					
3	100	40	4.8 - 4.2%	9.6	FA					
4	100	40	6.2 - 5.7%	12.3	FA					
	* A mount of processing above required at regulator head for value to go									

* Amount of pressure change required at regulator head for valve to go from full open to full closed or vice versa. Control is modulating around setpoint.

ADJUSTABLE ORIFICE NO. 94204-A1

Damps out rapid pressure fluctuations in feeler pipe... protects control bellows.

Always recommended but supplied only on order at extra cost.



All parts made of brass. 1/4" pipe connections. Pipe plug may be removed for installation of pressure gauge. No. 94204-A2 is available without leak hole.

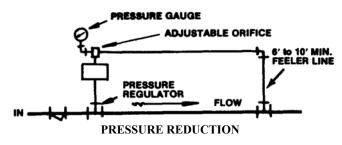
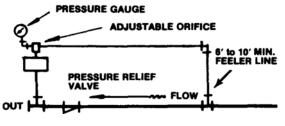


Figure 1 - Typical installation of a pressure regulator showing: feeler pipe connection, adjustable orifice and pressure gauge. Feeler pipe is connected to reduced pressure side of supply line at a point 6 ft. to 10 ft. minimum from regulator valve.



MODULATING PRESSURE RELIEF

Figure 2 - Shows an installation of a pressure relief valve. The feeler pipe is connected to the high pressure or upstream side of the supply line at a point 6 ft. to 10 ft. minimum from the regulator valve.

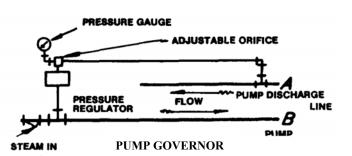
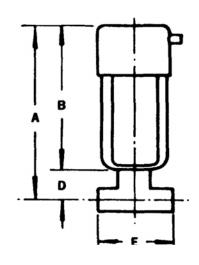


Figure 3 – Regulators can be used to protect a pump on a dual line system as a governor; single line system as a back pressure regulator; or recirculation loop as a downstream pressure relief back to pump intake. Illustrated as a pump governor on a steam-driven pump. Feeler line is connected to pump discharge line "A" so that pumped medium pressure determines the amount of steam supplied to the pump through line "B".



DIMENSIONS, SHIPPING WEIGHTS

End Connections		1/2" Screwed Unions			Screwed Unions				Flanged			
Valve Size, In.		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
Ship. Wt., Lbs.		26	26	26	28	32	36	42	48	95	120	150
Regulator No.			RP-1070-C1, RP-1073-C1, RP-1073-C2									
Direct-Actir	ng											
Valve, Type		А	A	A	MA	MA	MA	MA	MA	FA	FA	FA
No. RP-1070-C1	А	13 15/16	13 15/16	13 15/16	15 13/16	15 13/16	16	16 1/2				
	В	12 3/8	12 3/8	12 3/8	12 3/8	12 3/8	12 3/8	12 3/8				
No. RP-1073-CI	А	12 7/16	12-7/16	12 7/16	14 5/16	14 5/16	14 1/2	15	15 3/16	15 5/8	15 5/8	16 11/16
No. RP-1073-C2	В	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8
	D	1 9/16	1 9/16	1 9/16	3 7/16	3 7/16	3 5/8	4 1/8	4 15/16	4 3/4	4 3/4	5 13/ 16
	Е	4 3/4	4 3/4	4 3/4	6 15/16	7 1/8	7 1/2	8 1/2	7	7 3/4	8 5/8	10 1/4
Regulator N	lo.				RP	1070-C2, F	RP-1073-0	C3, RP-107	′3-C4			
Reverse-Acting												
Valve, Typ	e	А	А	A	FA	FA	FA	FA	FA	FA	FA	FA
No. RP-1070-C2	А	13 15/16	13 15/16	13 15/16	14 3/8	14 7/8	15	15 7/16				
	В	12 3/8	12 3/8	12 3/8	12 3/8	12 3/8	12 3/8	12 3/8				
No. RP-1073-C3	А	12 7/16	12 7/16	12 7/16	12 7/8	12 3/8	13 I/2	13 15/16	14 3/8	14 1/2	14 3/4	15 1/2
No. RP-1073-C4	В	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8	10 7/8
	D	1 9/16	1 9/16	1 9/16	2	2 1/2	2 5/8	3 1/16	3 1/2	3 5/8	3 7/8	4 5/8
	Е	4-3/4	4-3/4	4-3/4	6 3/16	7 1/4	7 7/8	8 13/16	7	7 3/4	8 5/8	10-1/4



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Q-4044 (5/02)