

Control Valve Data Sheet



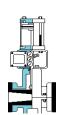
Email Your Inquiry to support@redvalve.com or Fax to 412.279.7878

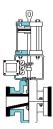
Please complete the form to define the project and operating parameters. Include as much information as possible. Shaded areas are required.

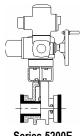
CUSTOMER			PHONE		
CONTACT PERSON	EN		EMAIL		
PROJECT REFERENCE	DELIVERY REQUIRED		DRAWING APPROVAL		
LINE SIZE	BODY MATERIAL		FLANGE CLASS DRILLING		
PIPE SCH.					
MODEL	SLEEVE MATERI	AL		FLOW MEDIUM (describe):	
FLOW DATA	MINIMUM FLOW TO BE CONTROLLED	NORMAL FLOW TO BE CONTROLLED	MAXIMUM FLOW TO BE CONTROLLED	SHUTOFF YES NO	
Q (Flow Rate in U.S. GPM)				ANSI/FCI LEAKAGE CLASS	
P1 (Inlet Pressure at Controlled Flow Rate) psig					
P2 (Outlet Pressure at Controlled Flow Rate) psig					
SPECIFIC GRAVITY				According to ANSI/FCI Spec 70-2.	
INLET TEMPERATURE (°F)					
Cν (Flow Coeff.)				The information on classifications can be	
ΔP MAX (calculated)				found on next page.	
MAX ALLOWABLE APPROACH VELOCITY (fg	os)				
SLEEVE STYLE					
ACTUATOR	TYPE		FUNCTION		
TYPE SPECIFICATION			AIR TO:		
Plant Air Supply: psi min.					
Voltage: V Frequency: Hz Phase:		AIR FAILS, VALV	/E 10:		
Hydraulic Pressure: psi min.					
Please use separate form for each control valve.					
PREPARED BY:				DATE:	
CUSTOMER APPROVAL:				DATE:	

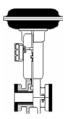
Control Valve Styles

Click on Valve Photos to View Data Sheets





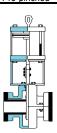


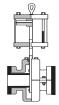


BODY STYLE	Series 5200	Series 5200 D-Port	Series 5200E Electrically Actuated	Series 5200 Diaphragm Actuated
Sizes	1" - 4"	6" - 48"	1" - 48"	1" - 3"
Flange	ANSI B16.1 Class 125	ANSI B16.1 Class 125	ANSI B16.1 Class 125	ANSI B16.1 Class 125

Sizes	1" - 4"	6" - 48"	1" - 48"	1" - 3"
Flange Drilling	ANSI B16.1 Class 125 ANSI B16.5 Class 150			
Body Materials	Ductile Iron A536-65-45-12	Ductile Iron A536-65-45-12	Ductile Iron A536-65-45-12	Ductile Iron A536-65-45-12
Class of Shutoff*	Class V	Class V	Class V	Class V
Actuator	ATO/ATC	ATO/ATC	Pneumatic	ATO/ATC
	ATO/FCS	ATO/FCS	Hydraulic	ATO/FCS
	ATC/FOS	ATC/FOS	Electric	ATC/FOS
			Modulating	
Cv	Pre-pinched	Pre-pinched	Pre-pinched	Pre-pinched









BODY				
STYLE	Series 5300	Series 5400	Series 5700	Series 9000
Sizes	2" - 48"	4" - 48"	2" - 48"	1" - 12"
Flange Drilling	ANSI B16.1 Class 125 ANSI B16.5 Class 150	ANSI B16.1 Class 125 ANSI B16.5 Class 150	ANSI B16.1 Class 125 ANSI B16.5 Class 150	ANSI B16.1 Class 125 ANSI B16.5 Class 150
Body Materials	Steel, fabricated Stainless Steel fabricated	Ductile Iron A536-65-45-12	Ductile Iron A536-65-45-12	Ductile Iron A536-65-45-12
Class of Shutoff*	Class V	Class V	Class V	Class IV
Actuator	Pneumatic	Pneumatic	Pneumatic	Manual
	Hydraulic	Hydraulic	Hydraulic	Hydraulic
	Electric	Electric	Electric	Electric
	Modulating		Modulating	Modulating
Cv	Pre-pinched	Centerline pinch	Centerline pinch	Pre-pinched

^{*} See following page for leakage class information



Control Valve Seat Leakage Classifications

Per Information in ANSI/FCI 70-2-2006

	TABLE 1			
Leakage Class	Maximum Seat Leakage	Test Medium	Test Pressure	Test Procedure
I				By agreement between user and seller, no test required
II	0.5% of rated capacity	Air or water at 50-125 °F (10-51 °C)	45-60 psig or max operating differential, whichever is lower	Type A
III	0.1% of rated capacity	Air or water at 50-125 °F (10-51 °C)	45-60 psig or max operating differential, whichever is lower	Type A
IV	0.01% of rated capacity	Air or water at 50-125 °F (10-51 °C)	45-60 psig or max operating differential, whichever is lower	Type A
V	0.0005 ml per minute of water per inch of port diameter per psi differential	Water at 50-125 °F (10-51 °C)	Max service pressure drop across valve plug; not to exceed ANSI body rating	Туре В
VI	Not to exceed amounts in Table 2	Air or nitrogen at 50-125 °F (10-51 °C)	50 psig or max rated differential pressure across valve plug, whichever is lower	Type C

- Type A: Leakage flow and pressure data accurate to +/- 10% of reading; pressure applied to valve inlet with outlet open to atmosphere or connected to low head loss measuring device; full normal closing thrust from actuator
- Type B: Leakage flow and pressure data accurate to +/- 10% of reading after letting leakage flow stabilize; pressure applied to valve inlet after filling entire body cavity and connected plumbing and stroking valve plug closed; net actuator thrust to be specified max;
- Type C: Pressure applied to inlet with outlet connected to suitable measuring device; actuator adjusted to operating conditions specified with full normal closing thrust; allow sufficient time for leakage flow to stabilize

TABLE 2* *directly from ANSI/FCI 70-2-2006, p. 3				
Nominal Seat Diameter				
Millimeters (Inches)	ml per Minute	Bubbles per Minute		
≤ 25 (≤ 1)	0.15	1		
38 (1.5)	0.30	2		
51 (2)	0.45	3		
64 (2.5)	0.60	4		
76 (3)	0.90	6		
102 (4)	1.70	11		
152 (6)	4.00	27		
203 (8)	6.75	45		
250 (10)	11.1			
300 (12)	16.0			
350 (14)	21.6			
400 (16)	28.4			