

**Description of Charts**

The following charts list the full lift pressure recovery factors  $F_L$  and the valve recovery coefficient  $K_M$  for 1/4" through 1" globe style Research Control® Valves. These factors should be utilized when using computer sizing programs or when calculating maximum allowable P, cavitation, flashing, noise, etc.  $F_L$  and  $K_M$  will be lower for angle style valves.

**Pressure Recovery Factors****1/4" Research Control® Valves**

SIZE	TRIM	Cv	FL	Km
1/4"	F	0.32	0.96	0.92
1/4"	G	0.20	0.96	0.92
1/4"	H	0.13	0.96	0.92
1/4"	I	0.08	0.97	0.94
1/4"	J	0.05	0.97	0.94

**Pressure Recovery Factors****1/2" Research Control® Valves**

SIZE	TRIM	Cv	FL	Km
1/2"	A	2.50	0.90	0.81
1/2"	B	2.00	0.92	0.85
1/2"	C	1.25	0.91	0.83
1/2"	D	0.80	0.91	0.83
1/2"	E	0.50	0.93	0.86
1/2"	F	0.32	0.93	0.86
1/2"	G	0.20	0.94	0.88
1/2"	H	0.13	0.95	0.90
1/2"	I	0.08	0.96	0.91
1/2"	J	0.05	0.96	0.92

**Pressure Recovery Factors****3/4" Research Control® Valves**

SIZE	TRIM	Cv	FL	Km
3/4"	4	4.00	0.89	0.79
3/4"	3.5	3.50	0.89	0.79
3/4"	A	2.50	0.90	0.81
3/4"	B	2.00	0.92	0.85
3/4"	C	1.25	0.91	0.83
3/4"	D	0.80	0.91	0.83
3/4"	E	0.50	0.93	0.86
3/4"	F	0.32	0.93	0.86
3/4"	G	0.20	0.94	0.88
3/4"	H	0.13	0.95	0.90
3/4"	I	0.08	0.96	0.91
3/4"	J	0.05	0.96	0.92

**Pressure Recovery Factors****1" Research Control® Valves**

SIZE	TRIM	Cv	FL	Km
1"	6	6.00	0.85	0.72
1"	5	5.00	0.86	0.74
1"	4.5	4.50	0.87	0.76
1"	4	4.00	0.89	0.79
1"	3.5	3.50	0.89	0.79
1"	A	2.50	0.90	0.81
1"	B	2.00	0.92	0.85
1"	C	1.25	0.91	0.83
1"	D	0.80	0.91	0.83
1"	E	0.50	0.93	0.86
1"	F	0.32	0.93	0.86
1"	G	0.20	0.94	0.88
1"	H	0.13	0.95	0.90
1"	I	0.08	0.96	0.91
1"	J	0.05	0.96	0.92

**NOTE:**

For intervals smaller than "J", use  $F_L = 0.98$ .  
The values listed for  $F_L$  are based on tests performed according to ANSI/ISA-S75.02-1988.

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