



Flowrite™ 599 Series Valve and Actuator Assembly Selection

Description

This Technical Bulletin will aid in the selection of a Flowrite 599 Series valve and actuator assembly. Begin with the graph of water capacity and the chart of close-off pressures to select a valve and actuator according to specifications. Use Tables 1 through 7 to identify product numbers.

These tables show all the possible combinations of the Flowrite 599 Series valves and compatible actuators that can be ordered as complete valve assemblies from the factory.

The dimensions of all valves and the service envelope required for each actuator are included in Tables 8 through 12.

How to Use the Selection Graphs

Use Figure 1, the water capacity graph, to select a valve. Locate the specified flow rate on the vertical axis. Follow across on the horizontal line to the point of intersection with the specified pressure drop. Choose the valve size from the heavy diagonal lines across the graph.

Use Figures 2 and 3, the close-off pressure graphs, to select an actuator. First locate the graph for the valve action and actuator power source specified. Locate the bar that represents the valve line size. The top of the bar indicates the maximum close-off pressure for tight close-off. Use the legend at the bottom of the graph to identify the actuator.

How To Use The Valve Tables

Tables have been organized to help select a valve and actuator combination using additional specifications.

Moving from left to right, identify the valve assembly needed. Continue to the right to match the valve to a desired actuator.

A valve and actuator assembly part number is determined by combining the actuator prefix code with the suffix of the valve product number.

NOTES:

1. No valve will combine with all actuators.
2. The symbol “—” indicates a combination that is a special order.
3. A shaded space with the symbol “X” indicates an inappropriate combination.

Valve Tables

1/2 to 2-inch Valves	
Two-Way, NC, Linear characteristic	Table 1
Two-Way, NC, Equal % characteristic	Table 2
Two-Way, NO, Linear characteristic	Table 3
Two-Way, NO, Equal % characteristic	Table 4
Three-Way, Mixing, Equal % characteristic	Table 5
2-1/2 to 6-inch Valves	
ANSI 125, Two-Way and Three-Way	Table 6
ANSI 250, Two-Way and Three-Way	Table 7

Selection Example**Specification**

Select a two-way normally closed valve and actuator assembly for an ANSI 125 piping system that will deliver 500 gpm (113 m³/h) chilled water with an equal percentage flow characteristic with no more than 5 psi (35 kPa) pressure drop across the fully open valve.

The valve shall be operated by a 24 Vac powered, 0 to 10 Vdc control signal, spring return electronic actuator, and must close off tightly against a pump head pressure of 15 psi (1 bar).

Valve Sizing

Use Figure 1, the water capacity graph, to begin valve sizing.

1. Locate 500 gpm (113 m³/h) on the vertical axis to find the required flow.
 2. Read across the horizontal axis to find 5 psi (35 kPa), the maximum allowable pressure drop across the open valve.
 3. Select a 5-inch (125 mm) 250 Cv (214 Kvs) line size valve because the point of intersection falls close to the 5-inch line.
-

Actuator selection

Use Figures 2 and 3, the close-off pressure graphs, to choose an actuator.

1. Locate the graph for electronic actuators for NC valves in the upper left side of the figure.
 2. Locate the bar for 5-inch valves. The black bar represents an SKB/C actuator.
 3. Notice that the SKB/C has the sufficient force to provide tight close-off against more than 20 psi (1.4 bar) differential. For a 5-inch valve, select a SKC actuator with a 40 mm stroke.
-

Product Number Selection

Use Table 6 for ANSI Class 125 valves. Begin at the left and select the specifications necessary.

1. Select a two-way, normally closed, equal percentage flow characteristic according to the specifications.
-

Selection Example, Continued

2. Select bronze trim for the low pressure water application and standard packing for chilled water.
3. Select the 5-inch line size determined from the sizing example above. Note the 40 mm stroke of the valve. The valve part number is 599-05993.
4. Read across the top of the table to Electronic-hydraulic, 40 mm, and 24 Vac, 0-10 Vdc control signal.
 The actuator part number is SKC62.
 The actuator code number is 294.
5. Read down the column to determine the valve and actuator assembly product number is 294-05993.

NOTE: The valve and actuator can be ordered separately by using the part numbers from Steps 3 and 4.

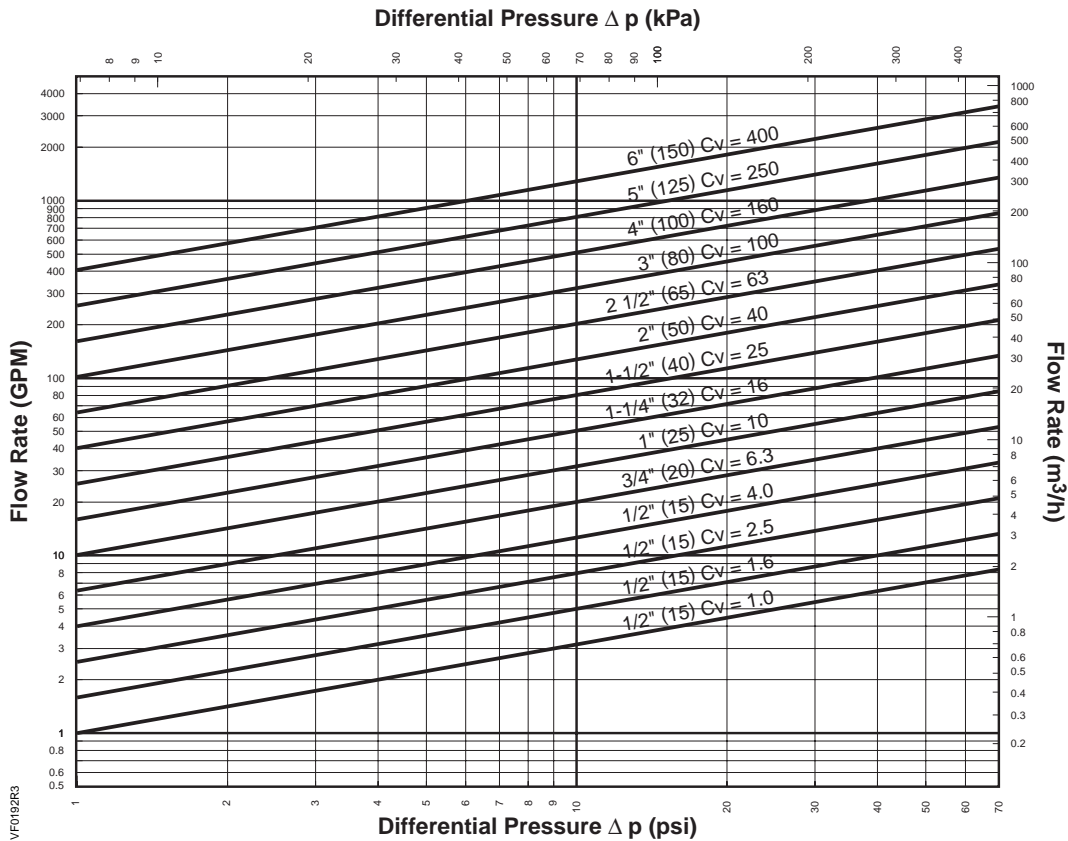


Figure 1. Water Capacity Graph.

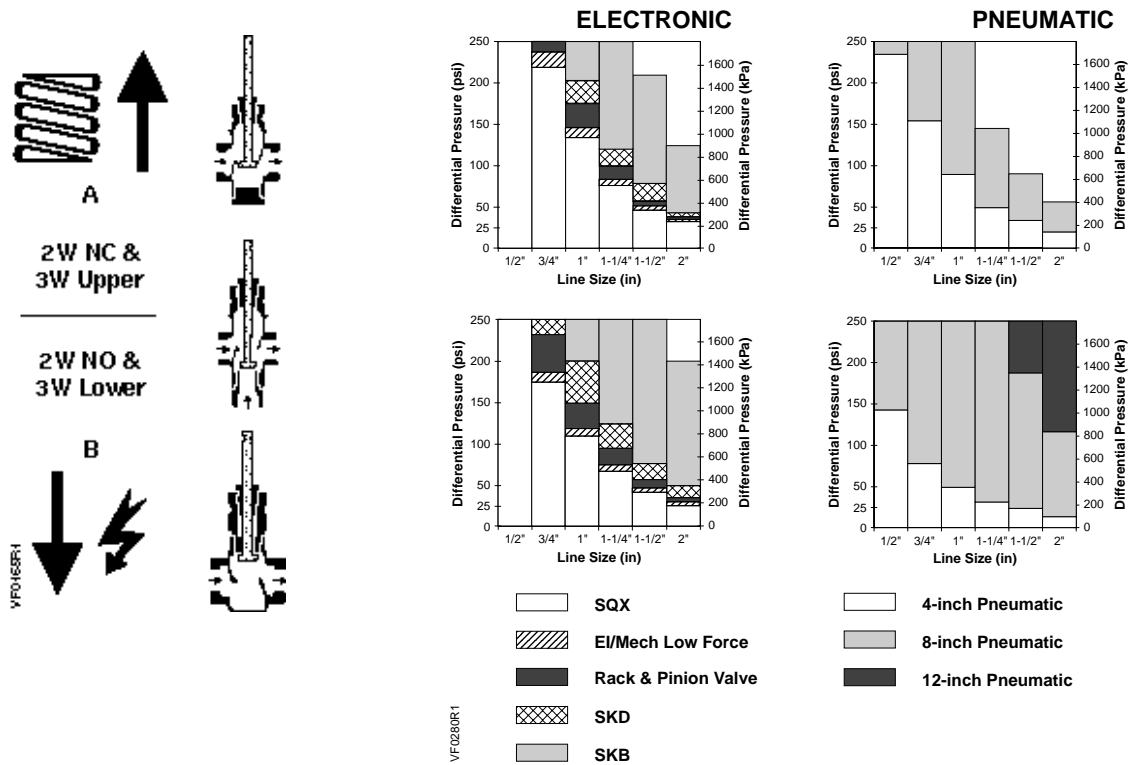


Figure 2. Close-off Pressures for 1/2 through 2-Inch Valves.

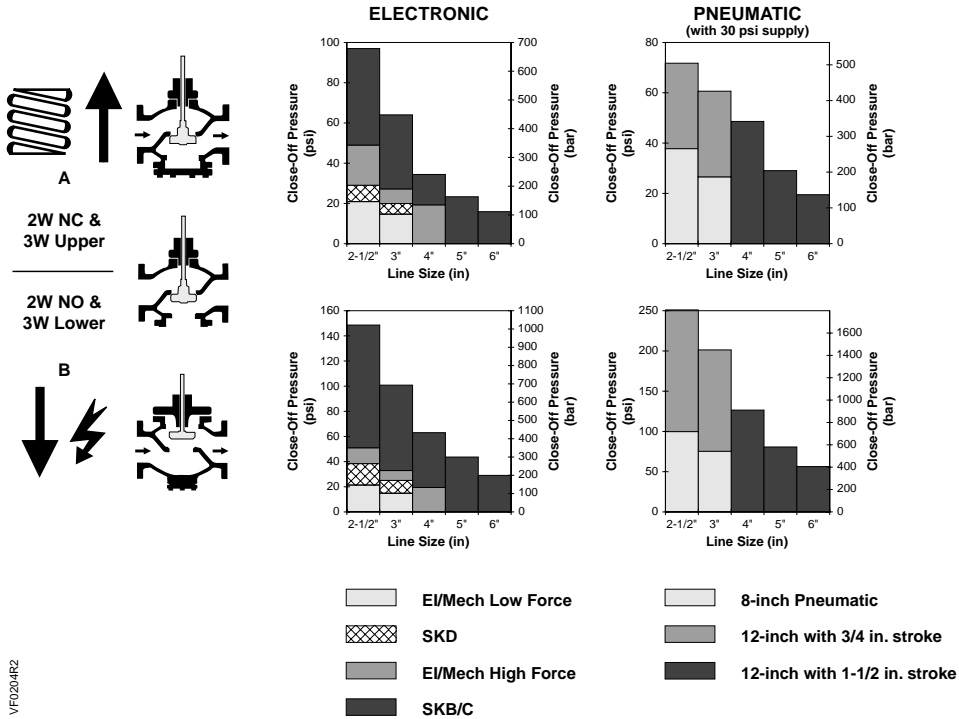


Figure 3. Close-off Pressures for 2-1/2 through 6-Inch Valves.

**Table 1. 1/2 to 2-Inch, Two-Way, Normally Closed (NC), Linear Valves
 (Technical Instructions 155-184P25).**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Pneumatic						Pneumatic with Factory Mounted Position Relay				
								Description	4-inch 3-8 psi (21-55 kPa)	4-inch 5-10 psi (34-69 kPa)	4-inch 10-15 psi (69-103 kPa)	8-inch	8-inch Hi-Temp	12-inch	8-inch	8-inch Hi-Temp	12-inch with Positioner		
			Technical Instructions	155-183P25	155- 183P25	155-183P25	155-161P25	155-161P25	155-162P25	155-161P25	155-161P25	155-162P25							
			Actuator Assembly	599-01081	599-01082	599-01083	599-01050	599-01051	599-01010	599-01050	599-01051	599-01010							
			Valve Assembly	Actuator Code 268	Actuator Code 269	Actuator Code 270	Actuator Code 277	Actuator Code 278	Actuator Code 279	Actuator Code 283	Actuator Code 284	Actuator Code 285							
Cv	Kvs	In	mm																
Standard	FxF		1	0.9	0.5	15	20	599-03018	—	—	270-03018	277-03018	—	—	283-03018	—	—		
			1.6	1.4	0.5	15	20	599-03019	—	—	270-03019	277-03019	—	—	283-03019	—	—		
			2.5	2.2	0.5	15	20	599-03020	—	—	270-03020	277-03020	—	—	283-03020	—	—		
			4	3.4	0.5	15	20	599-03021	—	—	270-03021	277-03021	—	—	283-03021	—	—		
			6.3	5.4	0.75	20	20	599-03022	—	—	270-03022	277-03022	—	—	283-03022	—	—		
			10	8.6	1	25	20	599-03023	—	—	270-03023	277-03023	—	279-03023	283-03023	—	285-03023		
			16	14	1.25	32	20	599-03024	—	—	270-03024	277-03024	—	279-03024	283-03024	—	285-03024		
			25	22	1.5	40	20	599-03025	—	—	270-03025	277-03025	—	279-03025	283-03025	—	285-03025		
	40	34	2	50	20	599-03026	—	—	270-03026	277-03026	—	279-03026	283-03026	—	285-03026				
	FxFUF			1	0.9	0.5	15	20	599-03027	—	—	270-03027	277-03027	—	—	283-03027	—	—	
				1.6	1.4	0.5	15	20	599-03028	—	—	270-03028	277-03028	—	—	283-03028	—	—	
				2.5	2.2	0.5	15	20	599-03029	—	—	270-03029	277-03029	—	—	283-03029	—	—	
				4	3.4	0.5	15	20	599-03030	—	—	270-03030	277-03030	—	—	283-03030	—	—	
				6.3	5.4	0.75	20	20	599-03031	—	—	270-03031	277-03031	—	—	283-03031	—	—	
				10	8.6	1	25	20	599-03032	—	—	270-03032	277-03032	—	279-03032	283-03032	—	285-03032	
	FxFUM			1	0.9	0.5	15	20	599-03225	—	—	270-03225	277-03225	—	—	283-03225	—	—	
				1.6	1.4	0.5	15	20	599-03226	—	—	270-03226	277-03226	—	—	283-03226	—	—	
				2.5	2.2	0.5	15	20	599-03227	—	—	270-03227	277-03227	—	—	283-03227	—	—	
				4	3.4	0.5	15	20	599-03228	—	—	270-03228	277-03228	—	—	283-03228	—	—	
				6.3	5.4	0.75	20	20	599-03229	—	—	270-03229	277-03229	—	—	283-03229	—	—	
	UFxFUF			10	8.6	1	25	20	599-03230	—	—	270-03230	277-03230	—	279-03230	283-03230	—	285-03230	
				16	14	1.25	32	20	599-03033	—	—	270-03033	277-03033	—	279-03033	283-03033	—	285-03033	
				25	22	1.5	40	20	599-03034	—	—	270-03034	277-03034	—	279-03034	283-03034	—	285-03034	
	Hi-Temp	FxF		1	0.9	0.5	15	20	599-03072	—	—	270-03072	277-03072	278-03072	—	283-03072	284-03072	—	
				1.6	1.4	0.5	15	20	599-03073	—	—	270-03073	277-03073	278-03073	—	283-03073	284-03073	—	
				2.5	2.2	0.5	15	20	599-03074	—	—	270-03074	277-03074	278-03074	—	283-03074	284-03074	—	
				4	3.4	0.5	15	20	599-03075	—	—	270-03075	277-03075	278-03075	—	283-03075	284-03075	—	
				6.3	5.4	0.75	20	20	599-03076	—	—	270-03076	277-03076	278-03076	—	283-03076	284-03076	—	
				10	8.6	1	25	20	599-03077	—	—	270-03077	277-03077	278-03077	279-03077	283-03077	284-03077	285-03077	
				16	14	1.25	32	20	599-03078	—	—	270-03078	277-03078	278-03078	279-03078	283-03078	284-03078	285-03078	
				25	22	1.5	40	20	599-03079	—	—	270-03079	277-03079	278-03079	279-03079	283-03079	284-03079	285-03079	
		40	34	2	50	20	599-03080	—	—	270-03080	277-03080	278-03080	279-03080	283-03080	284-03080	285-03080			
		FxFUF			1	0.9	0.5	15	20	599-03081	—	—	270-03081	277-03081	278-03081	—	283-03081	284-03081	—
					1.6	1.4	0.5	15	20	599-03082	—	—	270-03082	277-03082	278-03082	—	283-03082	284-03082	—
					2.5	2.2	0.5	15	20	599-03083	—	—	270-03083	277-03083	278-03083	—	283-03083	284-03083	—
					4	3.4	0.5	15	20	599-03084	—	—	270-03084	277-03084	278-03084	—	283-03084	284-03084	—
					6.3	5.4	0.75	20	20	599-03085	—	—	270-03085	277-03085	278-03085	—	283-03085	284-03085	—
					10	8.6	1	25	20	599-03086	—	—	270-03086	277-03086	278-03086	279-03086	283-03086	284-03086	285-03086
		FxFUM			1	0.9	0.5	15	20	599-03243	—	—	270-03243	277-03243	278-03243	—	283-03243	284-03243	—
					1.6	1.4	0.5	15	20	599-03244	—	—	270-03244	277-03244	278-03244	—	283-03244	284-03244	—
2.5					2.2	0.5	15	20	599-03245	—	—	270-03245	277-03245	278-03245	—	283-03245	284-03245	—	
4					3.4	0.5	15	20	599-03246	—	—	270-03246	277-03246	278-03246	—	283-03246	284-03246	—	
6.3					5.4	0.75	20	20	599-03247	—	—	270-03247	277-03247	278-03247	—	283-03247	284-03247	—	
UFxFUF				10	8.6	1	25	20	599-03248	—	—	270-03248	277-03248	278-03248	279-03248	283-03248	284-03248	285-03248	
				16	14	1.25	32	20	599-03087	—	—	270-03087	277-03087	278-03087	279-03087	283-03087	284-03087	285-03087	
				25	22	1.5	40	20	599-03088	—	—	270-03088	277-03088	278-03088	279-03088	283-03088	284-03088	285-03088	
40		34	2	50	20	599-03089	—	—	270-03089	277-03089	278-03089	279-03089	283-03089	284-03089	285-03089				

* F = Female NPT, UF = Union Female, UM = Union Male connection, — = Special Order, X = Inappropriate combination.

**Table 1a. 1/2 to 2-Inch, Two-Way, Normally Closed (NC), Linear Valves
 (Technical Instructions 155-184P25), Continued.**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Electro-Hydraulic						
								Description	24 Vac						
									0-10V 4-20mA SR	3-Pos NSR	3-Pos SR	3-Pos SR	3-Pos SR	0-10V 4-20mA SR	
									Technical Instructions	155-180P25	155-181P25	155-181P25	155-171P25	155-171P25	155-163P25
									Actuator Assembly	SKD62U	SKD82.50U	SKD82.51U	SKB82.51U	SKB82.50U	SKB62U
Valve Assembly	Actuator Code 274	Actuator Code 275	Actuator Code 276	Actuator Code 289	Actuator Code 290	Actuator Code 291									
Stainless Steel	Standard	FxF	1	0.9	0.5	15	20	599-03018	274-03018	275-03018	276-03018	—	—	—	
			1.6	1.4	0.5	15	20	599-03019	274-03019	275-03019	276-03019	—	—	—	
			2.5	2.2	0.5	15	20	599-03020	274-03020	275-03020	276-03020	—	—	—	
			4	3.4	0.5	15	20	599-03021	274-03021	275-03021	276-03021	—	—	—	
			6.3	5.4	0.75	20	20	599-03022	274-03022	275-03022	276-03022	—	—	—	
			10	8.6	1	25	20	599-03023	274-03023	275-03023	276-03023	289-03023	290-03023	291-03023	
			16	14	1.25	32	20	599-03024	274-03024	275-03024	276-03024	289-03024	290-03024	291-03024	
			25	22	1.5	40	20	599-03025	274-03025	275-03025	276-03025	289-03025	290-03025	2903025	
			40	34	2	50	20	599-03026	274-03026	275-03026	276-03026	290-03026	290-03026	291-03026	
			FXUF	1	0.9	0.5	15	20	599-03027	274-03027	275-03027	276-03027	—	—	—
		1.6		1.4	0.5	15	20	599-03028	274-03028	275-03028	276-03028	—	—	—	
		2.5		2.2	0.5	15	20	599-03029	274-03029	275-03029	276-03029	—	—	—	
		4		3.4	0.5	15	20	599-03030	274-03030	275-03030	276-03030	—	—	—	
		6.3		5.4	0.75	20	20	599-03031	274-03031	275-03031	276-03031	—	—	—	
		10		8.6	1	25	20	599-03032	274-03032	275-03032	276-03032	289-03032	290-03032	291-03032	
		FXUM		1	0.9	0.5	15	20	599-03225	274-03225	275-03225	276-03225	—	—	—
				1.6	1.4	0.5	15	20	599-03226	274-03226	275-03226	276-03226	—	—	—
				2.5	2.2	0.5	15	20	599-03227	274-03227	275-03227	276-03227	—	—	—
				4	3.4	0.5	15	20	599-03228	274-03228	275-03228	276-03228	—	—	—
			6.3	5.4	0.75	20	20	599-03229	274-03229	275-03229	276-03229	—	—	—	
	UFxUF	10	8.6	1	25	20	599-03230	274-03230	275-03230	276-03230	289-03230	290-03230	291-03230		
		16	14	1.25	32	20	599-03033	274-03033	275-03033	276-03033	289-03033	290-03033	291-03033		
		25	22	1.5	40	20	599-03034	274-03034	275-03034	276-03034	289-03034	290-03034	291-03034		
		40	34	2	50	20	599-03035	274-03035	275-03035	276-03035	289-03035	290-03035	291-03035		
		Hi-Temp	FxF	1	0.9	0.5	15	20	599-03072	274-03072	275-03072	276-03072	—	—	—
	1.6			1.4	0.5	15	20	599-03073	274-03073	275-03073	276-03073	—	—	—	
	2.5			2.2	0.5	15	20	599-03074	274-03074	275-03074	276-03074	—	—	—	
	4			3.4	0.5	15	20	599-03075	274-03075	275-03075	276-03075	—	—	—	
	6.3			5.4	0.75	20	20	599-03076	274-03076	275-03076	276-03076	—	—	—	
	10			8.6	1	25	20	599-03077	274-03077	275-03077	276-03077	289-03077	290-03077	291-03077	
	16			14	1.25	32	20	599-03078	274-03078	275-03078	276-03078	289-03078	290-03078	291-03078	
	25			22	1.5	40	20	599-03079	274-03079	275-03079	276-03079	298-03079	290-03079	291-03079	
	40			34	2	50	20	599-03080	274-03080	275-03080	276-03080	298-03080	290-03080	291-03080	
	FXUF			1	0.9	0.5	15	20	599-03081	274-03081	275-03081	276-03081	—	—	—
			1.6	1.4	0.5	15	20	599-03082	274-03082	275-03082	276-03082	—	—	—	
			2.5	2.2	0.5	15	20	599-03083	274-03083	275-03083	276-03083	—	—	—	
			4	3.4	0.5	15	20	599-03084	274-03084	275-03084	276-03084	—	—	—	
			6.3	5.4	0.75	20	20	599-03085	274-03085	275-03085	276-03085	—	—	—	
			10	8.6	1	25	20	599-03086	274-03086	275-03086	276-03086	289-03086	290-03086	291-03086	
			FXUM	1	0.9	0.5	15	20	599-03243	274-03243	275-03243	276-03243	—	—	—
1.6				1.4	0.5	15	20	599-03244	274-03244	275-03244	276-03244	—	—	—	
2.5				2.2	0.5	15	20	599-03245	274-03245	275-03245	276-03245	—	—	—	
4				3.4	0.5	15	20	599-03246	274-03246	275-03246	276-03246	—	—	—	
6.3	5.4			0.75	20	20	599-03247	274-03247	275-03247	276-03247	—	—	—		
UFxUF	10	8.6	1	25	20	599-03248	274-03248	275-03248	276-03248	289-03248	290-03248	291-03248			
	16	14	1.25	32	20	599-03087	274-03087	275-03087	276-03087	289-03087	290-03087	291-03087			
	25	22	1.5	40	20	599-03088	274-03088	275-03088	276-03088	289-03088	290-03088	291-03088			
	40	34	2	50	20	599-03089	274-03089	275-03089	276-03089	289-03089	290-03089	291-03089			

* F = Female NPT, UF = Union Female, UM = Union Male connection, — = Special Order, X = Inappropriate combination.

**Table 1b. 1/2 to 2-Inch, Two-Way, Normally Closed (NC), Linear Valves
 (Technical Instructions 155-184P25), Continued.**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type		Electro-Mechanical						
								Description	24 Vac							
									0-10V 4-20 mA NSR	3-Pos, 120 sec, NSR	3-Pos, 30 sec, NSR	0-10V, Lo, NSR	0-10V, Lo, SR	0-10V, SR	2-Pos, SR	
									Technical Instructions	155- 182P25	155- 186P25	155- 186P25	155- 172P25	155- 172P25	155- 541P25	155- 541P25
Actuator Assembly	SOX62U	SOX82.00U	SOX82.03U	599-10021	599-10022	599-03609	599-03611									
Valve Assembly	Actuator Code 271	Actuator Code 272	Actuator Code 273	Actuator Code 295	Actuator Code 296	Actuator Code 298	Actuator Code 299									
Stainless Steel	Standard	FxF	1	0.9	0.5	15	20	599-03018	271-03018	272-03018	273-03018	295-03018	296-03018	298-03018	299-03018	
			1.6	1.4	0.5	15	20	599-03019	271-03019	272-03019	273-03019	295-03019	296-03019	298-03019	299-03019	
			2.5	2.2	0.5	15	20	599-03020	271-03020	272-03020	273-03020	295-03020	296-03020	298-03020	299-03020	
			4	3.4	0.5	15	20	599-03021	271-03021	272-03021	273-03021	295-03021	296-03021	298-03021	299-03021	
			6.3	5.4	0.75	20	20	599-03022	271-03022	272-03022	273-03022	295-03022	296-03022	298-03022	299-03022	
			10	8.6	1	25	20	599-03023	271-03023	272-03023	273-03023	295-03023	296-03023	298-03023	299-03023	
			16	14	1.25	32	20	599-03024	271-03024	272-03024	273-03024	295-03024	296-03024	298-03024	299-03024	
			25	22	1.5	40	20	599-03025	271-03025	272-03025	273-03025	295-03025	296-03025	298-03025	299-03025	
		40	34	2	50	20	599-03026	271-03026	272-03026	273-03026	295-03026	296-03026	298-03026	299-03026		
		FxUF	1	0.9	0.5	15	20	599-03027	271-03027	272-03027	273-03027	295-03027	296-03027	298-03027	299-03027	
			1.6	1.4	0.5	15	20	599-03028	271-03028	272-03028	273-03028	295-03028	296-03028	298-03028	299-03028	
			2.5	2.2	0.5	15	20	599-03029	271-03029	272-03029	273-03029	295-03029	296-03029	298-03029	299-03029	
			4	3.4	0.5	15	20	599-03030	271-03030	272-03030	273-03030	295-03030	296-03030	298-03030	299-03030	
			6.3	5.4	0.75	20	20	599-03031	271-03031	272-03031	273-03031	295-03031	296-03031	298-03031	299-03031	
			10	8.6	1	25	20	599-03032	271-03032	272-03032	273-03032	295-03032	296-03032	298-03032	299-03032	
			FxUM	1	0.9	0.5	15	20	599-03225	271-03225	272-03225	273-03225	295-03225	296-03225	298-03225	299-03225
				1.6	1.4	0.5	15	20	599-03226	271-03226	272-03226	273-03226	295-03226	296-03226	298-03226	299-03226
		2.5		2.2	0.5	15	20	599-03227	271-03227	272-03227	273-03227	295-03227	296-03227	298-03227	299-03227	
		4		3.4	0.5	15	20	599-03228	271-03228	272-03228	273-03228	295-03228	296-03228	298-03228	299-03228	
		6.3		5.4	0.75	20	20	599-03229	271-03229	272-03229	273-03229	295-03229	296-03229	298-03229	299-03229	
		10		8.6	1	25	20	599-03230	271-03230	272-03230	273-03230	295-03230	296-03230	298-03230	299-03230	
		UFxUF	16	14	1.25	32	20	599-03033	271-03033	272-03033	273-03033	295-03033	296-03033	298-03033	299-03033	
			25	22	1.5	40	20	599-03034	271-03034	272-03034	273-03034	295-03034	296-03034	298-03034	299-03034	
			40	34	2	50	20	599-03035	271-03035	272-03035	273-03035	295-03035	296-03035	298-03035	299-03035	
			Hi-Temp	FxF	1	0.9	0.5	15	20	599-03072	271-03072	272-03072	273-03072	295-03072	296-03072	298-03072
		1.6			1.4	0.5	15	20	599-03073	271-03073	272-03073	273-03073	295-03073	296-03073	298-03073	299-03073
		2.5			2.2	0.5	15	20	599-03074	271-03074	272-03074	273-03074	295-03074	296-03074	298-03074	299-03074
		4			3.4	0.5	15	20	599-03075	271-03075	272-03075	273-03075	295-03075	296-03075	298-03075	299-03075
		6.3			5.4	0.75	20	20	599-03076	271-03076	272-03076	273-03076	295-03076	296-03076	298-03076	299-03076
		10			8.6	1	25	20	599-03077	271-03077	272-03077	273-03077	295-03077	296-03077	298-03077	299-03077
		16			14	1.25	32	20	599-03078	271-03078	272-03078	273-03078	295-03078	296-03078	298-03078	299-03078
		25			22	1.5	40	20	599-03079	271-03079	272-03079	273-03079	295-03079	296-03079	298-03079	299-03079
		40		34	2	50	20	599-03080	271-03080	272-03080	273-03080	295-03080	296-03080	298-03080	299-03080	
		FxUF		1	0.9	0.5	15	20	599-03081	271-03081	272-03081	273-03081	295-03081	296-03081	298-03081	299-03081
				1.6	1.4	0.5	15	20	599-03082	271-03082	272-03082	273-03082	295-03082	296-03082	298-03082	299-03082
				2.5	2.2	0.5	15	20	599-03083	271-03083	272-03083	273-03083	295-03083	296-03083	298-03083	299-03083
				4	3.4	0.5	15	20	599-03084	271-03084	272-03084	273-03084	295-03084	296-03084	298-03084	299-03084
				6.3	5.4	0.75	20	20	599-03085	271-03085	272-03085	273-03085	295-03085	296-03085	298-03085	299-03085
				10	8.6	1	25	20	599-03086	271-03086	272-03086	273-03086	295-03086	296-03086	298-03086	299-03086
				FxUM	1	0.9	0.5	15	20	599-03243	271-03243	272-03243	273-03243	295-03243	296-03243	298-03243
1.6	1.4		0.5		15	20	599-03244	271-03244	272-03244	273-03244	295-03244	296-03244	298-03244	299-03244		
2.5	2.2	0.5	15		20	599-03245	271-03245	272-03245	273-03245	295-03245	296-03245	298-03245	299-03245			
4	3.4	0.5	15		20	599-03246	271-03246	272-03246	273-03246	295-03246	296-03246	298-03246	299-03246			
6.3	5.4	0.75	20		20	599-03247	271-03247	272-03247	273-03247	295-03247	296-03247	298-03247	299-03247			
10	8.6	1	25		20	599-03248	271-03248	272-03248	273-03248	295-03248	296-03248	298-03248	299-03248			
UFxUF	16	14	1.25	32	20	599-03087	271-03087	272-03087	273-03087	295-03087	296-03087	298-03087	299-03087			
	25	22	1.5	40	20	599-03088	271-03088	272-03088	273-03088	295-03088	296-03088	298-03088	299-03088			
	40	34	2	50	20	599-03089	271-03089	272-03089	273-03089	295-03089	296-03089	298-03089	299-03089			

* F = Female NPT, UF = Union Female, UM = Union Male connection, — = Special Order, X = Inappropriate combination.

**Table 2. 1/2 to 2-Inch, Two-Way, Normally Closed (NC), Equal Percentage Valves
 (Technical Instructions 155-184P25).**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Pneumatic						Pneumatic with Factory Mounted Position Relay				
								Description	4-inch 3-8 psi (21-55 kPa)	4-inch 5-10 psi (34-69 kPa)	4-inch 10-15 psi (69-103 kPa)	8-inch	8-inch Hi-Temp	12-inch	8-inch	8-inch Hi-Temp	12-inch with Positioner		
			Technical Instructions	155-183P25				155-161P25		155-162P25	155-161P25		155-162P25						
			Actuator Assembly	599-01081	599-01082	599-01083		599-01050	599-01051	599-01010	599-01050	599-01051	599-01010						
			Valve Assembly	Actuator Code 268	Actuator Code 269	Actuator Code 270		Actuator Code 277	Actuator Code 278	Actuator Code 279	Actuator Code 283	Actuator Code 284	Actuator Code 285						
Cv	Kvs	In	mm																
Bronze	FXF	1	0.9	0.5	15	20	599-03180	—	—	270-03180	277-03180	—	—	—	—	283-03180	—	—	
		1.6	1.4	0.5	15	20	599-03181	—	—	270-03181	277-03181	—	—	—	—	283-03181	—	—	
		2.5	2.2	0.5	15	20	599-03182	—	—	270-03182	277-03182	—	—	—	—	283-03182	—	—	
		4	3.4	0.5	15	20	599-03183	—	—	270-03183	277-03183	—	—	—	—	283-03183	—	—	
		6.3	5.4	0.75	20	20	599-03184	—	—	270-03184	277-03184	—	—	—	—	283-03184	—	—	
		10	8.6	1	25	20	599-03185	—	—	270-03185	277-03185	—	—	279-03185	283-03185	—	—	285-03185	
		16	14	1.25	32	20	599-03186	—	—	270-03186	277-03186	—	—	279-03186	283-03186	—	—	285-03186	
		25	22	1.5	40	20	599-03187	—	—	270-03187	277-03187	—	—	279-03187	283-03187	—	—	285-03187	
	40	34	2	50	20	599-03188	—	—	270-03188	277-03188	—	—	279-03188	283-03188	—	—	285-03188		
	FXUF	1	0.9	0.5	15	20	599-03189	—	—	270-03189	277-03189	—	—	—	—	283-03189	—	—	
		1.6	1.4	0.5	15	20	599-03190	—	—	270-03190	277-03190	—	—	—	—	283-03190	—	—	
		2.5	2.2	0.5	15	20	599-03191	—	—	270-03191	277-03191	—	—	—	—	283-03191	—	—	
		4	3.4	0.5	15	20	599-03192	—	—	270-03192	277-03192	—	—	—	—	283-03192	—	—	
		6.3	5.4	0.75	20	20	599-03193	—	—	270-03193	277-03193	—	—	—	—	283-03193	—	—	
		10	8.6	1	25	20	599-03194	—	—	270-03194	277-03194	—	—	279-03194	283-03194	—	—	285-03194	
	FXUM	1	0.9	0.5	15	20	599-03279	—	—	270-03279	277-03279	—	—	—	—	283-03279	—	—	
		1.6	1.4	0.5	15	20	599-03280	—	—	270-03280	277-03280	—	—	—	—	283-03280	—	—	
		2.5	2.2	0.5	15	20	599-03281	—	—	270-03281	277-03281	—	—	—	—	283-03281	—	—	
		4	3.4	0.5	15	20	599-03282	—	—	270-03282	277-03282	—	—	—	—	283-03282	—	—	
		6.3	5.4	0.75	20	20	599-03283	—	—	270-03283	277-03283	—	—	—	—	283-03283	—	—	
		10	8.6	1	25	20	599-03284	—	—	270-03284	277-03284	—	—	279-03284	283-03284	—	—	285-03284	
	UFxUF	16	14	1.25	32	20	599-03195	—	—	270-03195	277-03195	—	—	279-03195	283-03195	—	—	285-03195	
		25	22	1.5	40	20	599-03196	—	—	270-03196	277-03196	—	—	279-03196	283-03196	—	—	285-03196	
		40	34	2	50	20	599-03197	—	—	270-03197	277-03197	—	—	279-03197	283-03197	—	—	285-03197	
	FXF	1	0.9	0.5	15	20	599-03126	—	—	270-03126	277-03126	—	—	—	—	283-03126	—	—	
		1.6	1.4	0.5	15	20	599-03127	—	—	270-03127	277-03127	—	—	—	—	283-03127	—	—	
		2.5	2.2	0.5	15	20	599-03128	—	—	270-03128	277-03128	—	—	—	—	283-03128	—	—	
		4	3.4	0.5	15	20	599-03129	—	—	270-03129	277-03129	—	—	—	—	283-03129	—	—	
6.3		5.4	0.75	20	20	599-03130	—	—	270-03130	277-03130	—	—	—	—	283-03130	—	—		
10		8.6	1	25	20	599-03131	—	—	270-03131	277-03131	—	—	279-03131	283-03131	—	—	285-03131		
16		14	1.25	32	20	599-03132	—	—	270-03132	277-03132	—	—	279-03132	283-03132	—	—	285-03132		
25		22	1.5	40	20	599-03133	—	—	270-03133	277-03133	—	—	279-03133	283-03133	—	—	285-03133		
FXUF	1	0.9	0.5	15	20	599-03135	—	—	270-03135	277-03135	—	—	—	—	283-03135	—	—		
	1.6	1.4	0.5	15	20	599-03136	—	—	270-03136	277-03136	—	—	—	—	283-03136	—	—		
	2.5	2.2	0.5	15	20	599-03137	—	—	270-03137	277-03137	—	—	—	—	283-03137	—	—		
	4	3.4	0.5	15	20	599-03138	—	—	270-03138	277-03138	—	—	—	—	283-03138	—	—		
	6.3	5.4	0.75	20	20	599-03139	—	—	270-03139	277-03139	—	—	—	—	283-03139	—	—		
	10	8.6	1	25	20	599-03140	—	—	270-03140	277-03140	—	—	279-03140	283-03140	—	—	285-03140		
FXsUM	1	0.9	0.5	15	20	599-03261	—	—	270-03261	277-03261	—	—	—	—	283-03261	—	—		
	1.6	1.4	0.5	15	20	599-03262	—	—	270-03262	277-03262	—	—	—	—	283-03262	—	—		
	2.5	2.2	0.5	15	20	599-03263	—	—	270-03263	277-03263	—	—	—	—	283-03263	—	—		
	4	3.4	0.5	15	20	599-03264	—	—	270-03264	277-03264	—	—	—	—	283-03264	—	—		
	6.3	5.4	0.75	20	20	599-03265	—	—	270-03265	277-03265	—	—	—	—	283-03265	—	—		
	10	8.6	1	25	20	599-03266	—	—	270-03266	277-03266	—	—	279-03266	283-03266	—	—	285-03266		
UFxUF	16	14	1.25	32	20	599-03141	—	—	270-03141	277-03141	—	—	279-03141	283-03141	—	—	285-03141		
	25	22	1.5	40	20	599-03142	—	—	270-03142	277-03142	—	—	279-03142	283-03142	—	—	285-03142		
	40	34	2	50	20	599-03143	—	—	270-03143	277-03143	—	—	279-03143	283-03143	—	—	285-03143		

* F = Female NPT, UF = Union Female, UM = Union Male connection, — = Special Order, X = Inappropriate combination.

Table 2a. 1/2 to 2-Inch, Two-Way, Normally Closed (NC), Equal Percentage Valves (Technical Instructions 155-184P25), Continued.

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Electro-Hydraulic						
									24 Vac						
			Cv	Kvs	In	mm	Description	0-10V 4-20 mA SR	3-Pos NSR	3-Pos, SR	3-Pos SR	3-Pos SR	0-10V 4-20 mA SR		
								Technical Instructions	155-180P25	155-181P25	155-181P25	155-171P25	155-171P25	155-163P25	
Actuator Assembly	SKD62U	SKD82.50 U	SKD82.51 U	SKB82.51 U	SKB82.50 U	SKB62U									
Valve Assembly	Actuator Code 274	Actuator Code 275	Actuator Code 276	289	290	291									
Bronze	EXF	Standard	1	0.9	0.5	15	20	599-03180	274-03180	275-03180	276-03180	—	—	—	
			1.6	1.4	0.5	15	20	599-03181	274-03181	275-03181	276-03181	—	—	—	
			2.5	2.2	0.5	15	20	599-03182	274-03182	275-03182	276-03182	—	—	—	
			4	3.4	0.5	15	20	599-03183	274-03183	275-03183	276-03183	—	—	—	
			6.3	5.4	0.75	20	20	599-03184	274-03184	275-03184	276-03184	—	—	—	
			10	8.6	1	25	20	599-03185	274-03185	275-03185	276-03185	289-03185	290-03185	291-03185	
			16	14	1.25	32	20	599-03186	274-03186	275-03186	276-03186	289-03186	290-03186	291-03186	
			25	22	1.5	40	20	599-03187	274-03187	275-03187	276-03187	289-03187	290-03187	291-03187	
			40	34	2	50	20	599-03188	274-03188	275-03188	276-03188	289-03188	290-03188	291-03188	
			1	0.9	0.5	15	20	599-03189	274-03189	275-03189	276-03189	—	—	—	
			1.6	1.4	0.5	15	20	599-03190	274-03190	275-03190	276-03190	—	—	—	
			2.5	2.2	0.5	15	20	599-03191	274-03191	275-03191	276-03191	—	—	—	
			4	3.4	0.5	15	20	599-03192	274-03192	275-03192	276-03192	—	—	—	
			6.3	5.4	0.75	20	20	599-03193	274-03193	275-03193	276-03193	—	—	—	
	10	8.6	1	25	20	599-03194	274-03194	275-03194	276-03194	289-03194	290-03194	291-03194			
	1	0.9	0.5	15	20	599-03279	274-03279	275-03279	276-03279	—	—	—			
	1.6	1.4	0.5	15	20	599-03280	274-03280	275-03280	276-03280	—	—	—			
	2.5	2.2	0.5	15	20	599-03281	274-03281	275-03281	276-03281	—	—	—			
	4	3.4	0.5	15	20	599-03282	274-03282	275-03282	276-03282	—	—	—			
	6.3	5.4	0.75	20	20	599-03283	274-03283	275-03283	276-03283	—	—	—			
	10	8.6	1	25	20	599-03284	274-03284	275-03284	276-03284	289-03284	290-03284	291-03284			
	16	14	1.25	32	20	599-03195	274-03195	275-03195	276-03195	289-03195	290-03195	291-03195			
	25	22	1.5	40	20	599-03196	274-03196	275-03196	276-03196	289-03196	290-03196	291-03196			
	40	34	2	50	20	599-03197	274-03197	275-03197	276-03197	289-03197	290-03197	291-03197			
	Stainless Steel	EXF	Standard	1	0.9	0.5	15	20	599-03126	274-03126	275-03126	276-03126	—	—	—
				1.6	1.4	0.5	15	20	599-03127	274-03127	275-03127	276-03127	—	—	—
				2.5	2.2	0.5	15	20	599-03128	274-03128	275-03128	276-03128	—	—	—
				4	3.4	0.5	15	20	599-03129	274-03129	275-03129	276-03129	—	—	—
6.3				5.4	0.75	20	20	599-03130	274-03130	275-03130	276-03130	—	—	—	
10				8.6	1	25	20	599-03131	274-03131	275-03131	276-03131	289-03131	290-03131	291-03131	
16				14	1.25	32	20	599-03132	274-03132	275-03132	276-03132	289-03132	290-03132	291-03132	
25				22	1.5	40	20	599-03133	274-03133	275-03133	276-03133	289-03133	290-03133	291-03133	
40				34	2	50	20	599-03134	274-03134	275-03134	276-03134	289-03134	290-03134	291-03134	
1				0.9	0.5	15	20	599-03135	276-03135	275-03135	276-03135	—	—	—	
1.6				1.4	0.5	15	20	599-03136	276-03136	275-03136	276-03136	—	—	—	
2.5				2.2	0.5	15	20	599-03137	276-03137	275-03137	276-03137	—	—	—	
4				3.4	0.5	15	20	599-03138	276-03138	275-03138	276-03138	—	—	—	
6.3				5.4	0.75	20	20	599-03139	276-03139	275-03139	276-03139	—	—	—	
10		8.6	1	25	20	599-03140	276-03140	275-03140	276-03140	289-03140	290-03140	291-03140			
1		0.9	0.5	15	20	599-03261	276-03261	275-03261	276-03261	—	—	—			
1.6		1.4	0.5	15	20	599-03262	276-03262	275-03262	276-03262	—	—	—			
2.5		2.2	0.5	15	20	599-03263	276-03263	275-03263	276-03263	—	—	—			
4		3.4	0.5	15	20	599-03264	276-03264	275-03264	276-03264	—	—	—			
6.3		5.4	0.75	20	20	599-03265	276-03265	275-03265	276-03265	—	—	—			
10		8.6	1	25	20	599-03266	276-03266	275-03266	276-03266	289-03266	290-03266	291-03266			
16		14	1.25	32	20	599-03141	276-03141	275-03141	276-03141	289-03141	290-03141	291-03141			
25		22	1.5	40	20	599-03142	276-03142	275-03142	276-03142	289-03142	290-03142	291-03142			
40		34	2	50	20	599-03143	276-03143	275-03143	276-03143	289-03143	290-03143	291-03143			

* F = Female NPT, UF = Union Female, UM = Union Male connection. — = Special Order, X = Inappropriate combination.

**Table 2b. 1/2 to 2-Inch, Two-Way, Normally Closed (NC), Equal Percentage Valves
 (Technical Instructions 155-184P25), Continued.**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Electro-Mechanical							
								Description	24 Vac							
									0-10V 4-20 mA NSR	3-Pos, 120 sec, NSR	3-Pos, 30 sec, NSR	0-10V, Lo, NSR	0-10V, Lo, SR	0-10V, SR	2.2P, SR	
									Technical Instructions	155- 182P25	155- 186P25	155- 186P25	155- 172P25	155- 172P25	155- 541P25	155- 541P25
Actuator Assembly	SOX62U	SOX82.00U	SOX82.03U	599-10021	599-10022	599-03609	599- 03611									
Valve Assembly	Actuator Code 271	Actuator Code 272	Actuator Code 273	Actuator Code 295	Actuator Code 296	Actuator Code 298	Actuator Code 299									
Bronze	EXF	Standard	1	0.9	0.5	15	20	599-03180	271-03180	272-03180	273-03180	295-03180	296-03180	298-03180	299-03180	
			1.6	1.4	0.5	15	20	599-03181	271-03181	272-03181	273-03181	295-03181	296-03181	298-03181	299-03181	
			2.5	2.2	0.5	15	20	599-03182	271-03182	272-03182	273-03182	295-03182	296-03182	298-03182	299-03182	
			4	3.4	0.5	15	20	599-03183	271-03183	272-03183	273-03183	295-03183	296-03183	298-03183	299-03183	
			6.3	5.4	0.75	20	20	599-03184	271-03184	272-03184	273-03184	295-03184	296-03184	298-03184	299-03184	
			10	8.6	1	25	20	599-03185	271-03185	272-03185	273-03185	295-03185	296-03185	298-03185	299-03185	
			16	14	1.25	32	20	599-03186	271-03186	272-03186	273-03186	295-03186	296-03186	298-03186	299-03186	
			25	22	1.5	40	20	599-03187	271-03187	272-03187	273-03187	295-03187	296-03187	298-03187	299-03187	
			40	34	2	50	20	599-03188	271-03188	272-03188	273-03188	295-03188	296-03188	298-03188	299-03188	
			1	0.9	0.5	15	20	599-03189	271-03189	272-03189	273-03189	295-03189	296-03189	298-03189	299-03189	
			1.6	1.4	0.5	15	20	599-03190	271-03190	272-03190	273-03190	295-03190	296-03190	298-03190	299-03190	
			2.5	2.2	0.5	15	20	599-03191	271-03191	272-03191	273-03191	295-03191	296-03191	298-03191	299-03191	
			4	3.4	0.5	15	20	599-03192	271-03192	272-03192	273-03192	295-03192	296-03192	298-03192	299-03192	
			6.3	5.4	0.75	20	20	599-03193	271-03193	272-03193	273-03193	295-03193	296-03193	298-03193	299-03193	
	10	8.6	1	25	20	599-03194	271-03194	272-03194	273-03194	295-03194	296-03194	298-03194	299-03194			
	1	0.9	0.5	15	20	599-03279	271-03279	272-03279	273-03279	295-03279	296-03279	298-03279	299-03279			
	1.6	1.4	0.5	15	20	599-03280	271-03280	272-03280	273-03280	295-03280	296-03280	298-03280	299-03280			
	2.5	2.2	0.5	15	20	599-03281	271-03281	272-03281	273-03281	295-03281	296-03281	298-03281	299-03281			
	4	3.4	0.5	15	20	599-03282	271-03282	272-03282	273-03282	295-03282	296-03282	298-03282	299-03282			
	6.3	5.4	0.75	20	20	599-03283	271-03283	272-03283	273-03283	295-03283	296-03283	298-03283	299-03283			
	10	8.6	1	25	20	599-03284	271-03284	272-03284	273-03284	295-03284	296-03284	298-03284	299-03284			
	16	14	1.25	32	20	599-03195	271-03195	272-03195	273-03195	295-03195	296-03195	298-03195	299-03195			
	25	22	1.5	40	20	599-03196	271-03196	272-03196	273-03196	295-03196	296-03196	298-03196	299-03196			
	40	34	2	50	20	599-03197	271-03197	272-03197	273-03197	295-03197	296-03197	298-03197	299-03197			
	Stainless Steel	EXF	Standard	1	0.9	0.5	15	20	599-03126	271-03126	272-03126	273-03126	295-03126	296-03126	298-03126	299-03126
				1.6	1.4	0.5	15	20	599-03127	271-03127	272-03127	273-03127	295-03127	296-03127	298-03127	299-03127
				2.5	2.2	0.5	15	20	599-03128	271-03128	272-03128	273-03128	295-03128	296-03128	298-03128	299-03128
				4	3.4	0.5	15	20	599-03129	271-03129	272-03129	273-03129	295-03129	296-03129	298-03129	299-03129
6.3				5.4	0.75	20	20	599-03130	271-03130	272-03130	273-03130	295-03130	296-03130	298-03130	299-03130	
10				8.6	1	25	20	599-03131	271-03131	272-03131	273-03131	295-03131	296-03131	298-03131	299-03131	
16				14	1.25	32	20	599-03132	271-03132	272-03132	273-03132	295-03132	296-03132	298-03132	299-03132	
25				22	1.5	40	20	599-03133	271-03133	272-03133	273-03133	295-03133	296-03133	298-03133	299-03133	
40				34	2	50	20	599-03134	271-03134	272-03134	273-03134	295-03134	296-03134	298-03134	299-03134	
1				0.9	0.5	15	20	599-03135	271-03135	272-03135	273-03135	295-03135	296-03135	298-03135	299-03135	
1.6				1.4	0.5	15	20	599-03136	271-03136	272-03136	273-03136	295-03136	296-03136	298-03136	299-03136	
2.5				2.2	0.5	15	20	599-03137	271-03137	272-03137	273-03137	295-03137	296-03137	298-03137	299-03137	
4				3.4	0.5	15	20	599-03138	271-03138	272-03138	273-03138	295-03138	296-03138	298-03138	299-03138	
6.3				5.4	0.75	20	20	599-03139	271-03139	272-03139	273-03139	295-03139	296-03139	298-03139	299-03139	
10		8.6	1	25	20	599-03140	271-03140	272-03140	273-03140	295-03140	296-03140	298-03140	299-03140			
1		0.9	0.5	15	20	599-03261	271-03261	272-03261	273-03261	295-03261	296-03261	298-03261	299-03261			
1.6		1.4	0.5	15	20	599-03262	271-03262	272-03262	273-03262	295-03262	296-03262	298-03262	299-03262			
2.5		2.2	0.5	15	20	599-03263	271-03263	272-03263	273-03263	295-03263	296-03263	298-03263	299-03263			
4		3.4	0.5	15	20	599-03264	271-03264	272-03264	273-03264	295-03264	296-03264	298-03264	299-03264			
6.3		5.4	0.75	20	20	599-03265	271-03265	272-03265	273-03265	295-03265	296-03265	298-03265	299-03265			
10		8.6	1	25	20	599-03266	271-03266	272-03266	273-03266	295-03266	296-03266	298-03266	299-03266			
16		14	1.25	32	20	599-03141	271-03141	272-03141	273-03141	295-03141	296-03141	298-03141	299-03141			
25		22	1.5	40	20	599-03142	271-03142	272-03142	273-03142	295-03142	296-03142	298-03142	299-03142			
40		34	2	50	20	599-03143	271-03143	272-03143	273-03143	295-03143	296-03143	298-03143	299-03143			

* F = Female NPT, UF = Union Female, UM = Union Male connection. — = Special Order, X = Inappropriate combination.

**Table 3. 1/2 to 2-Inch, Two-Way, Normally Open (NO), Linear Valves
 (Technical Instructions 155-184P25).**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Pneumatic						Pneumatic with Factory Mounted Position Relay									
									Description	4-Inch			8-Inch			8-inch Hi-Temp	12-Inch	8-inch	8-inch Hi-Temp	12-inch with Positioner				
										3-8 psi (21-55 kPa)	5-10 psi (34-69 kPa)	10-15 psi (69-103 kPa)	Standard	8-inch Hi-Temp	12-Inch									
										Technical Instructions	155-183P25	155-183P25	155-183P25	155-161P25	155-161P25						155-162P25	155-161P25	155-161P25	155-162P25
										Actuator Assembly	599-01081	599-01082	599-01083	599-01050	599-01051						599-01010	599-01050 and 599-00426	599-01051 and 599-00426	599-01010
Valve Assembly	Actuator Code 268	Actuator Code 269	Actuator Code 270	Actuator Code 277	Actuator Code 278	Actuator Code 279	Actuator Code 283	Actuator Code 284	Actuator Code 285															
Stainless Steel	Standard	FxF	1	0.9	0.5	15	20	599-03000	268-03000	—	—	277-03000	—	—	283-03000	—	—							
			1.6	1.4	0.5	15	20	599-03001	268-03001	—	—	277-03001	—	—	283-03001	—	—							
			2.5	2.2	0.5	15	20	599-03002	268-03002	—	—	277-03002	—	—	283-03002	—	—							
			4	3.4	0.5	15	20	599-03003	268-03003	—	—	277-03003	—	—	283-03003	—	—							
			6.3	5.4	0.75	20	20	599-03004	268-03004	—	—	277-03004	—	—	283-03004	—	—							
			10	8.6	1	25	20	599-03005	268-03005	—	—	277-03005	—	279-03005	283-03005	—	285-03005							
			16	14	1.25	32	20	599-03006	268-03006	—	—	277-03006	—	279-03006	283-03006	—	285-03006							
			25	22	1.5	40	20	599-03007	268-03007	—	—	277-03007	—	279-03007	283-03007	—	285-03007							
		40	34	2	50	20	599-03008	268-03008	—	—	277-03008	—	279-03008	283-03008	—	285-03008								
		FXUF	1	0.9	0.5	15	20	599-03009	268-03009	—	—	277-03009	—	—	283-03009	—	—							
			1.6	1.4	0.5	15	20	599-03010	268-03010	—	—	277-03010	—	—	283-03010	—	—							
			2.5	2.2	0.5	15	20	599-03011	268-03011	—	—	277-03011	—	—	283-03011	—	—							
			4	3.4	0.5	15	20	599-03012	268-03012	—	—	277-03012	—	—	283-03012	—	—							
			6.3	5.4	0.75	20	20	599-03013	268-03013	—	—	277-03013	—	—	283-03013	—	—							
			10	8.6	1	25	20	599-03014	268-03014	—	—	277-03014	—	279-03014	283-03014	—	285-03014							
			FXUM	1	0.9	0.5	15	20	599-03216	268-03216	—	—	277-03216	—	—	283-03216	—	—						
				1.6	1.4	0.5	15	20	599-03217	268-03217	—	—	277-03217	—	—	283-03217	—	—						
		2.5		2.2	0.5	15	20	599-03218	268-03218	—	—	277-03218	—	—	283-03218	—	—							
		4		3.4	0.5	15	20	599-03219	268-03219	—	—	277-03219	—	—	283-03219	—	—							
		6.3		5.4	0.75	20	20	599-03220	268-03220	—	—	277-03220	—	—	283-03220	—	—							
		10		8.6	1	25	20	599-03221	268-03221	—	—	277-03221	—	279-03221	283-03221	—	285-03221							
		UFxFUF	16	14	1.25	32	20	599-03015	268-03015	—	—	277-03015	—	279-03015	283-03015	—	285-03015							
			25	22	1.5	40	20	599-03016	268-03016	—	—	277-03016	—	279-03016	283-03016	—	285-03016							
			40	34	2	50	20	599-03017	268-03017	—	—	277-03017	—	279-03017	283-03017	—	285-03017							
	Hi-Temp		FxF	1	0.9	0.5	15	20	599-03054	268-03054	—	—	277-03054	278-03054	—	283-03054	284-03054	—						
		1.6		1.4	0.5	15	20	599-03055	268-03055	—	—	277-03055	278-03055	—	283-03055	284-03055	—							
		2.5		2.2	0.5	15	20	599-03056	268-03056	—	—	277-03056	278-03056	—	283-03056	284-03056	—							
		4		3.4	0.5	15	20	599-03057	268-03057	—	—	277-03057	278-03057	—	283-03057	284-03057	—							
		6.3		5.4	0.75	20	20	599-03058	268-03058	—	—	277-03058	278-03058	—	283-03058	284-03058	—							
		10		8.6	1	25	20	599-03059	268-03059	—	—	277-03059	278-03059	279-03059	283-03059	284-03059	285-03059							
		16		14	1.25	32	20	599-03060	268-03060	—	—	277-03060	278-03060	279-03060	283-03060	284-03060	285-03060							
		25		22	1.5	40	20	599-03061	268-03061	—	—	277-03061	278-03061	279-03061	283-03061	284-03061	285-03061							
		40	34	2	50	20	599-03062	268-03062	—	—	277-03062	278-03062	279-03062	283-03062	284-03062	285-03062								
		FXUF	1	0.9	0.5	15	20	599-03063	268-03063	—	—	277-03063	278-03063	—	283-03063	284-03063	—							
			1.6	1.4	0.5	15	20	599-03064	268-03064	—	—	277-03064	278-03064	—	283-03064	284-03064	—							
			2.5	2.2	0.5	15	20	599-03065	268-03065	—	—	277-03065	278-03065	—	283-03065	284-03065	—							
			4	3.4	0.5	15	20	599-03066	268-03066	—	—	277-03066	278-03066	—	283-03066	284-03066	—							
			6.3	5.4	0.75	20	20	599-03067	268-03067	—	—	277-03067	278-03067	—	283-03067	284-03067	—							
			10	8.6	1	25	20	599-03068	268-03068	—	—	277-03068	278-03068	279-03068	283-03068	284-03068	285-03068							
			FxFSUM	1	0.9	0.5	15	20	599-03234	268-03234	—	—	277-03234	278-03234	—	283-03234	284-03234	—						
	1.6			1.4	0.5	15	20	599-03235	268-03235	—	—	277-03235	278-03235	—	283-03235	284-03235	—							
	2.5	2.2		0.5	15	20	599-03236	268-03236	—	—	277-03236	278-03236	—	283-03236	284-03236	—								
	4	3.4		0.5	15	20	599-03237	268-03237	—	—	277-03237	278-03237	—	283-03237	284-03237	—								
	6.3	5.4		0.75	20	20	599-03238	268-03238	—	—	277-03238	278-03238	—	283-03238	284-03238	—								
	10	8.6		1	25	20	599-03239	268-03239	—	—	277-03239	278-03239	279-03239	283-03239	284-03239	285-03239								
	UFxFUF	16	14	1.25	32	20	599-03069	268-03069	—	—	277-03069	278-03069	279-03069	283-03069	284-03069	285-03069								
		25	22	1.5	40	20	599-03070	268-03070	—	—	277-03070	278-03070	279-03070	283-03070	284-03070	285-03070								
		40	34	2	50	20	599-03071	268-03071	—	—	277-03071	278-03071	279-03071	283-03071	284-03071	285-03071								

* F = Female NPT, UF = Union Female, UM = Union Male connection. = Special Order, X = Inappropriate combination.

**Table 3a. 1/2 to 2-Inch, Two-Way, Normally Open (NO), Linear Valves
 (Technical Instructions 155-184P25), Continued.**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Electro-Hydraulic						
								Description	24 Vac						
									0-10V 4-20 mA SR	3-Pos NSR	3-Pos, SR	3-Pos, SR	3-Pos SR	0-10V 4-20 mA SR	
									Technical Instructions	155- 180P25	155- 181P25	155- 181P25	155- 171P25	155- 171P25	155- 163P25
									Actuator Assembly	SKD62U	SKD82.50 U	SKD82.51 U	SKB82.51U	SKB82.50U	SKB62U
Valve Assembly	Actuator Code 274	Actuator Code 275	Actuator Code 276	Actuator Code 289	Actuator Code 290	Actuator Code 291									
Standard	FxF	1	0.9	0.5	15	20	599-03000	274-03000	275-03000	276-03000	—	—	—		
		1.6	1.4	0.5	15	20	599-03001	274-03001	275-03001	276-03001	—	—	—		
		2.5	2.2	0.5	15	20	599-03002	274-03002	275-03002	276-03002	—	—	—		
		4	3.4	0.5	15	20	599-03003	274-03003	275-03003	276-03003	—	—	—		
		6.3	5.4	0.75	20	20	599-03004	274-03004	275-03004	276-03004	—	—	—		
		10	8.6	1	25	20	599-03005	274-03005	275-03005	276-03005	289-03005	290-03005	291-03005		
		16	14	1.25	32	20	599-03006	274-03006	275-03006	276-03006	289-03006	290-03005	291-03005		
		25	22	1.5	40	20	599-03007	274-03007	275-03007	276-03007	289-03007	290-03007	291-03007		
		40	34	2	50	20	599-03008	274-03008	275-03008	276-03008	289-03008	290-03008	291-03008		
		1	0.9	0.5	15	20	599-03009	274-03009	275-03009	276-03009	—	—	—		
	1.6	1.4	0.5	15	20	599-03010	274-03010	275-03010	276-03010	—	—	—			
	2.5	2.2	0.5	15	20	599-03011	274-03011	275-03011	276-03011	—	—	—			
	4	3.4	0.5	15	20	599-03012	274-03012	275-03012	276-03012	—	—	—			
	6.3	5.4	0.75	20	20	599-03013	274-03013	275-03013	276-03013	—	—	—			
	10	8.6	1	25	20	599-03014	274-03014	275-03014	276-03014	289-03014	290-03014	290-03014			
	1	0.9	0.5	15	20	599-03216	274-03216	275-03216	276-03216	—	—	—			
	1.6	1.4	0.5	15	20	599-03217	274-03217	275-03217	276-03217	—	—	—			
	2.5	2.2	0.5	15	20	599-03218	274-03218	275-03218	276-03218	—	—	—			
	4	3.4	0.5	15	20	599-03219	274-03219	275-03219	276-03219	—	—	—			
	6.3	5.4	0.75	20	20	599-03220	274-03220	275-03220	276-03220	—	—	—			
	10	8.6	1	25	20	599-03221	274-03221	275-03221	276-03221	289-03221	290-03221	291-03221			
	16	14	1.25	32	20	599-03015	274-03015	275-03015	276-03015	289-03015	290-03015	291-03015			
	25	22	1.5	40	20	599-03016	274-03016	275-03016	276-03016	289-03016	290-03016	291-03016			
	40	34	2	50	20	599-03017	274-03017	275-03017	276-03017	289-03017	290-03017	291-03017			
	Stainless Steel	FxF	1	0.9	0.5	15	20	599-03054	274-03054	275-03054	276-03054	—	—	—	
			1.6	1.4	0.5	15	20	599-03055	274-03055	275-03055	276-03055	—	—	—	
			2.5	2.2	0.5	15	20	599-03056	274-03056	275-03056	276-03056	—	—	—	
			4	3.4	0.5	15	20	599-03057	274-03057	275-03057	276-03057	—	—	—	
			6.3	5.4	0.75	20	20	599-03058	274-03058	275-03058	276-03058	—	—	—	
			10	8.6	1	25	20	599-03059	274-03059	275-03059	276-03059	289-03059	290-03059	291-03059	
			16	14	1.25	32	20	599-03060	274-03060	275-03060	276-03060	289-03060	290-03060	291-03060	
			25	22	1.5	40	20	599-03061	274-03061	275-03061	276-03061	289-03061	290-03061	291-03061	
			40	34	2	50	20	599-03062	274-03062	275-03062	276-03062	289-06062	290-03062	291-03062	
			1	0.9	0.5	15	20	599-03063	274-03063	275-03063	276-03063	—	—	—	
		1.6	1.4	0.5	15	20	599-03064	274-03064	275-03064	276-03064	—	—	—		
		2.5	2.2	0.5	15	20	599-03065	274-03065	275-03065	276-03065	—	—	—		
		4	3.4	0.5	15	20	599-03066	274-03066	275-03066	276-03066	—	—	—		
		6.3	5.4	0.75	20	20	599-03067	274-03067	275-03067	276-03067	—	—	—		
		10	8.6	1	25	20	599-03068	274-03068	275-03068	276-03068	289-03068	290-03068	291-03068		
		1	0.9	0.5	15	20	599-03234	274-03234	275-03234	276-03234	—	—	—		
1.6		1.4	0.5	15	20	599-03235	274-03235	275-03235	276-03235	—	—	—			
2.5		2.2	0.5	15	20	599-03236	274-03236	275-03236	276-03236	—	—	—			
4		3.4	0.5	15	20	599-03237	274-03237	275-03237	276-03237	—	—	—			
6.3		5.4	0.75	20	20	599-03238	274-03238	275-03238	276-03238	—	—	—			
10		8.6	1	25	20	599-03239	274-03239	275-03239	276-03239	289-03239	290-03239	291-03239			
16		14	1.25	32	20	599-03069	274-03069	275-03069	276-03069	289-03069	290-03069	291-03069			
25		22	1.5	40	20	599-03070	274-03070	275-03070	276-03070	289-03070	290-03070	291-03070			
40		34	2	50	20	599-03071	274-03071	275-03071	276-03071	289-03070	290-03070	291-03070			
Hi-Temp		FxF	1	0.9	0.5	15	20	599-03063	274-03063	275-03063	276-03063	—	—	—	
			1.6	1.4	0.5	15	20	599-03064	274-03064	275-03064	276-03064	—	—	—	
			2.5	2.2	0.5	15	20	599-03065	274-03065	275-03065	276-03065	—	—	—	
			4	3.4	0.5	15	20	599-03066	274-03066	275-03066	276-03066	—	—	—	
			6.3	5.4	0.75	20	20	599-03067	274-03067	275-03067	276-03067	—	—	—	
		10	8.6	1	25	20	599-03068	274-03068	275-03068	276-03068	289-03068	290-03068	291-03068		
		FxsUM	1	0.9	0.5	15	20	599-03234	274-03234	275-03234	276-03234	—	—	—	
			1.6	1.4	0.5	15	20	599-03235	274-03235	275-03235	276-03235	—	—	—	
			2.5	2.2	0.5	15	20	599-03236	274-03236	275-03236	276-03236	—	—	—	
			4	3.4	0.5	15	20	599-03237	274-03237	275-03237	276-03237	—	—	—	
6.3			5.4	0.75	20	20	599-03238	274-03238	275-03238	276-03238	—	—	—		
10		8.6	1	25	20	599-03239	274-03239	275-03239	276-03239	289-03239	290-03239	291-03239			
UFxU		16	14	1.25	32	20	599-03069	274-03069	275-03069	276-03069	289-03069	290-03069	291-03069		
		25	22	1.5	40	20	599-03070	274-03070	275-03070	276-03070	289-03070	290-03070	291-03070		
		40	34	2	50	20	599-03071	274-03071	275-03071	276-03071	289-03070	290-03070	291-03070		

* F = Female NPT, UF = Union Female, UM = Union Male connection. — = Special Order, X = Inappropriate combination.

**Table 3b. 1/2 to 2-Inch, Two-Way, Normally Open (NO), Linear Valves
(Technical Instructions 155-184P25), Continued.**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Electro-Mechanical							
								Description	24 Vac							
									0-10V 4-20 mA NSR	3-Pos, 120 sec, NSR	3-Pos, 30 sec, NSR	0-10V, Lo, NSR	0-10V, Lo, SR	0-10V, SR	2-Pos, SR	
									Technical Instructions	155- 186P25	155- 186P25	155-186P25	155-172P25	155-172P25	155-541P25	155-541P25
									Actuator Assembly	SOX62U	SOX82.00U	SOX82.03U	599-10021	599-10022	599-03609	599-03611
Valve Assembly	Actuator Code 271	Actuator Code 272	Actuator Code 273	Actuator Code 295	Actuator Code 296	Actuator Code 298	Actuator Code 299									
Stainless Steel	Standard	FXF	1	0.9	0.5	15	20	599-03000	271-03000	272-03000	273-03000	295-03000	296-03000	298-03000	299-03000	
			1.6	1.4	0.5	15	20	599-03001	271-03001	272-03001	273-03001	295-03001	296-03001	298-03001	299-03001	
			2.5	2.2	0.5	15	20	599-03002	271-03002	272-03002	273-03002	295-03002	296-03002	298-03002	299-03002	
			4	3.4	0.5	15	20	599-03003	271-03003	272-03003	273-03003	295-03003	296-03003	298-03003	299-03003	
			6.3	5.4	0.75	20	20	599-03004	271-03004	272-03004	273-03004	295-03004	296-03004	298-03004	299-03004	
			10	8.6	1	25	20	599-03005	271-03005	272-03005	273-03005	295-03005	296-03005	298-03005	299-03005	
			16	14	1.25	32	20	599-03006	271-03006	272-03006	273-03006	295-03006	296-03006	298-03006	299-03006	
			25	22	1.5	40	20	599-03007	271-03007	272-03007	273-03007	295-03007	296-03007	298-03007	299-03007	
			40	34	2	50	20	599-03008	271-03008	272-03008	273-03008	295-03008	296-03008	298-03008	299-03008	
			1	0.9	0.5	15	20	599-03009	271-03009	272-03009	273-03009	295-03009	296-03009	298-03009	299-03009	
			1.6	1.4	0.5	15	20	599-03010	271-03010	272-03010	273-03010	295-03010	296-03010	298-03010	299-03010	
			2.5	2.2	0.5	15	20	599-03011	271-03011	272-03011	273-03011	295-03011	296-03011	298-03011	299-03011	
		4	3.4	0.5	15	20	599-03012	271-03012	272-03012	273-03012	295-03012	296-03012	298-03012	299-03012		
		6.3	5.4	0.75	20	20	599-03013	271-03013	272-03013	273-03013	295-03013	296-03013	298-03013	299-03013		
		10	8.6	1	25	20	599-03014	271-03014	272-03014	273-03014	295-03014	296-03014	298-03014	299-03014		
		1	0.9	0.5	15	20	599-03216	271-03216	272-03216	273-03216	295-03216	296-03216	298-03216	299-03216		
		1.6	1.4	0.5	15	20	599-03217	271-03217	272-03217	273-03217	295-03217	296-03217	298-03217	299-03217		
		2.5	2.2	0.5	15	20	599-03218	271-03218	272-03218	273-03218	295-03218	296-03218	298-03218	299-03218		
		4	3.4	0.5	15	20	599-03219	271-03219	272-03219	273-03219	295-03219	296-03219	298-03219	299-03219		
		6.3	5.4	0.75	20	20	599-03220	271-03220	272-03220	273-03220	295-03220	296-03220	298-03220	299-03220		
		10	8.6	1	25	20	599-03221	271-03221	272-03221	273-03221	295-03221	296-03221	298-03221	299-03221		
		16	14	1.25	32	20	599-03015	271-03015	272-03015	273-03015	295-03015	296-03015	298-03015	299-03015		
		25	22	1.5	40	20	599-03016	271-03016	272-03016	273-03016	295-03016	296-03016	298-03016	299-03016		
		40	34	2	50	20	599-03017	271-03017	272-03017	273-03017	295-03017	296-03017	298-03017	299-03017		
	1	0.9	0.5	15	20	599-03054	271-03054	272-03054	273-03054	295-03054	296-03054	298-03054	299-03054			
	1.6	1.4	0.5	15	20	599-03055	271-03055	272-03055	273-03055	295-03055	296-03055	298-03055	299-03055			
	2.5	2.2	0.5	15	20	599-03056	271-03056	272-03056	273-03056	295-03056	296-03056	298-03056	299-03056			
	4	3.4	0.5	15	20	599-03057	271-03057	272-03057	273-03057	295-03057	296-03057	298-03057	299-03057			
	6.3	5.4	0.75	20	20	599-03058	271-03058	272-03058	273-03058	295-03058	296-03058	298-03058	299-03058			
	10	8.6	1	25	20	599-03059	271-03059	272-03059	273-03059	295-03059	296-03059	298-03059	299-03059			
	16	14	1.25	32	20	599-03060	271-03060	272-03060	273-03060	295-03060	296-03060	298-03060	299-03060			
	25	22	1.5	40	20	599-03061	271-03061	272-03061	273-03061	295-03061	296-03061	298-03061	299-03061			
	40	34	2	50	20	599-03062	271-03062	272-03062	273-03062	295-03062	296-03062	298-03062	299-03062			
	1	0.9	0.5	15	20	599-03063	271-03063	272-03063	273-03063	295-03063	296-03063	298-03063	299-03063			
	1.6	1.4	0.5	15	20	599-03064	271-03064	272-03064	273-03064	295-03064	296-03064	298-03064	299-03064			
	2.5	2.2	0.5	15	20	599-03065	271-03065	272-03065	273-03065	295-03065	296-03065	298-03065	299-03065			
	4	3.4	0.5	15	20	599-03066	271-03066	272-03066	273-03066	295-03066	296-03066	298-03066	299-03066			
	6.3	5.4	0.75	20	20	599-03067	271-03067	272-03067	273-03067	295-03067	296-03067	298-03067	299-03067			
	10	8.6	1	25	20	599-03068	271-03068	272-03068	273-03068	295-03068	296-03068	298-03068	299-03068			
	1	0.9	0.5	15	20	599-03234	271-03234	272-03234	273-03234	295-03234	296-03234	298-03234	299-03234			
	1.6	1.4	0.5	15	20	599-03235	271-03235	272-03235	273-03235	295-03235	296-03235	298-03235	299-03235			
	2.5	2.2	0.5	15	20	599-03236	271-03236	272-03236	273-03236	295-03236	296-03236	298-03236	299-03236			
	4	3.4	0.5	15	20	599-03237	271-03237	272-03237	273-03237	295-03237	296-03237	298-03237	299-03237			
	6.3	5.4	0.75	20	20	599-03238	271-03238	272-03238	273-03238	295-03238	296-03238	298-03238	299-03238			
	10	8.6	1	25	20	599-03239	271-03239	272-03239	273-03239	295-03239	296-03239	298-03239	299-03239			
	16	14	1.25	32	20	599-03069	271-03069	272-03069	273-03069	295-03069	296-03069	298-03069	299-03069			
	25	22	1.5	40	20	599-03070	271-03070	272-03070	273-03070	295-03070	296-03070	298-03070	299-03070			
	40	34	2	50	20	599-03071	271-03071	272-03071	273-03071	295-03071	296-03071	298-03071	299-03071			

* F = Female NPT, UF = Union Female, UM = Union Male connection. — = Special Order, X = Inappropriate combination.

Table 4. 1/2 to 2-Inch, Two-Way, Normally Open (NO), Equal Percentage Valves (Technical Instructions 155-184P25).

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Pneumatic						Pneumatic with Factory Mounted Position Relay		
			Cv	Kvs	In	mm		Description	4-inch 3-8 psi (21-55 kPa)	4-inch 5-10 psi (34-69 kPa)	4-inch 10-15 psi (69-103 kPa)	8-inch	8-inch Hi-Temp	12-inch	8-inch	8-inch Hi-Temp	12-inch with Positioner
								Technical Instructions	155-183P25	155-183P25	155-183P25	155-161P25	155-161P25	144-162P25	155-161P25	155-161P25	155-162P25
								Actuator Assembly	599-01081	599-01082	599-01083	599-01050	599-01051	599-01010	599-01050	599-01051	599-01010
								Valve Assembly	Actuator Code 268	Actuator Code 269	Actuator Code 270	Actuator Code 277	Actuator Code 278	Actuator Code 279	Actuator Code 283	Actuator Code 284	Actuator Code 285
Bronze	FXF	Standard	1	0.9	0.5	15	20	599-03162	268-03162	—	—	277-03162	—	—	—	283-03162	—
			1.6	1.4	0.5	15	20	599-03163	268-03163	—	—	277-03163	—	—	—	283-03163	—
			2.5	2.2	0.5	15	20	599-03164	268-03164	—	—	277-03164	—	—	—	283-03164	—
			4	3.4	0.5	15	20	599-03165	268-03165	—	—	277-03165	—	—	—	283-03165	—
			6.3	5.4	0.75	20	20	599-03166	268-03166	—	—	277-03166	—	—	—	283-03166	—
			10	8.6	1	25	20	599-03167	268-03167	—	—	277-03167	—	279-03167	—	283-03167	285-03167
			16	14	1.25	32	20	599-03168	268-03168	—	—	277-03168	—	279-03168	—	283-03168	285-03168
			25	22	1.5	40	20	599-03169	268-03169	—	—	277-03169	—	279-03169	—	283-03169	285-03169
			40	34	2	50	20	599-03170	268-03170	—	—	277-03170	—	279-03170	—	283-03170	285-03170
			1	0.9	0.5	15	20	599-03171	268-03171	—	—	277-03171	—	—	—	283-03171	—
			1.6	1.4	0.5	15	20	599-03172	268-03172	—	—	277-03172	—	—	—	283-03172	—
			2.5	2.2	0.5	15	20	599-03173	268-03173	—	—	277-03173	—	—	—	283-03173	—
			4	3.4	0.5	15	20	599-03174	268-03174	—	—	277-03174	—	—	—	283-03174	—
			6.3	5.4	0.75	20	20	599-03175	268-03175	—	—	277-03175	—	—	—	283-03175	—
			10	8.6	1	25	20	599-03176	268-03176	—	—	277-03176	—	279-03176	—	283-03176	285-03176
			1	0.9	0.5	15	20	599-03270	268-03270	—	—	277-03270	—	—	—	283-03270	—
	1.6	1.4	0.5	15	20	599-03271	268-03271	—	—	277-03271	—	—	—	283-03271	—		
	2.5	2.2	0.5	15	20	599-03272	268-03272	—	—	277-03272	—	—	—	283-03272	—		
	4	3.4	0.5	15	20	599-03273	268-03273	—	—	277-03273	—	—	—	283-03273	—		
	6.3	5.4	0.75	20	20	599-03274	268-03274	—	—	277-03274	—	—	—	283-03274	—		
	10	8.6	1	25	20	599-03275	268-03275	—	—	277-03275	—	279-03275	—	283-03275	285-03275		
	16	13.8	1.25	32	20	599-03276	268-03276	—	—	277-03276	—	279-03276	—	283-03276	285-03276		
	16	14	1.25	32	20	599-03177	268-03177	—	—	277-03177	—	279-03177	—	283-03177	285-03177		
	25	22	1.5	40	20	599-03178	268-03178	—	—	277-03178	—	279-03178	—	283-03178	285-03178		
	40	34	2	50	20	599-03179	268-03179	—	—	277-03179	—	279-03179	—	283-03179	285-03179		
	1	0.9	0.5	15	20	599-03108	268-03108	—	—	277-03108	—	—	—	283-03108	—		
	1.6	1.4	0.5	15	20	599-03109	268-03109	—	—	277-03109	—	—	—	283-03109	—		
	2.5	2.2	0.5	15	20	599-03110	268-03110	—	—	277-03110	—	—	—	283-03110	—		
	4	3.4	0.5	15	20	599-03111	268-03111	—	—	277-03111	—	—	—	283-03111	—		
	6.3	5.4	0.75	20	20	599-03112	268-03112	—	—	277-03112	—	—	—	283-03112	—		
	10	8.6	1	25	20	599-03113	268-03113	—	—	277-03113	—	279-03113	—	283-03113	285-03113		
	16	14	1.25	32	20	599-03114	268-03114	—	—	277-03114	—	279-03114	—	283-03114	285-03114		
	25	22	1.5	40	20	599-03115	268-03115	—	—	277-03115	—	279-03115	—	283-03115	285-03115		
	40	34	2	50	20	599-03116	268-03116	—	—	277-03116	—	279-03116	—	283-03116	285-03116		
	1	0.9	0.5	15	20	599-03117	268-03117	—	—	277-03117	—	—	—	283-03117	—		
	1.6	1.4	0.5	15	20	599-03118	268-03118	—	—	277-03118	—	—	—	283-03118	—		
	2.5	2.2	0.5	15	20	599-03119	268-03119	—	—	277-03119	—	—	—	283-03119	—		
	4	3.4	0.5	15	20	599-03120	268-03120	—	—	277-03120	—	—	—	283-03120	—		
	6.3	5.4	0.75	20	20	599-03121	268-03121	—	—	277-03121	—	—	—	283-03121	—		
	10	8.6	1	25	20	599-03122	268-03122	—	—	277-03122	—	279-03122	—	283-03122	285-03122		
1	0.9	0.5	15	20	599-03252	268-03252	—	—	277-03252	—	—	—	283-03252	—			
1.6	1.4	0.5	15	20	599-03253	268-03253	—	—	277-03253	—	—	—	283-03253	—			
2.5	2.2	0.5	15	20	599-03254	268-03254	—	—	277-03254	—	—	—	283-03254	—			
4	3.4	0.5	15	20	599-03255	268-03255	—	—	277-03255	—	—	—	283-03255	—			
6.3	5.4	0.75	20	20	599-03256	268-03256	—	—	277-03256	—	—	—	283-03256	—			
10	8.6	1	25	20	599-03257	268-03257	—	—	277-03257	—	279-03257	—	283-03257	285-03257			
16	14	1.25	32	20	599-03123	268-03123	—	—	277-03123	—	279-03123	—	283-03123	285-03123			
25	22	1.5	40	20	599-03124	268-03124	—	—	277-03124	—	279-03124	—	283-03124	285-03124			
40	34	2	50	20	599-03125	268-03125	—	—	277-03125	—	279-03125	—	283-03125	285-03125			

* F = Female NPT, UF = Union Female, UM = Union Male connection. — = Special Order, X = Inappropriate combination.

**Table 4a. 1/2 to 2-Inch, Two-Way, Normally Open (NO), Equal Percentage Valves
(Technical Instructions 155-184P25), Continued.** Bronze Stainless

Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Electro-Hydraulic			Electro-Mechanical							
							Description	24V, 0-10V 4-20 mA SR	24V, 3P NSR	24V, 3P, SR	24V, 0-10V 4-20mA NSR	24V, 3P, 120 sec., NSR	24V, 3P, 30 sec, NSR	24V, 0- 10V, Lo, NSR	24V, 0- 10V, Lo, SR	24V, 0- 10V, SR	24V, 2P, SR	
		Technical Instructions	155- 180P25	155- 181P25	155- 181P25		155- 182P25	155- 186P25	155- 186P25	155- 172P25	155- 172P25	155- 541P25	155- 541P25					
		Actuator Assembly	SKD62U	SKD82.50 U	SKD82.51 U		SOX62U	SOX82.00U	SOX82.03U	599-10021	599-10022	599-03609	599-03611					
		Cv	Kvs	In	mm	Valve Assembly	Actuator Code 274	Actuator Code 275	Actuator Code 276	Actuator Code 271	Actuator Code 272	Actuator Code 273	Actuator Code 295	Actuator Code 296	Actuator Code 298	Actuator Code 299		
Standard	FxF	1	0.9	0.5	15	20	599-03162	274-03162	275-03162	276-03162	271-03162	272-03162	273-03162	295-03162	296-03162	298-03162	299-03162	
		1.6	1.4	0.5	15	20	599-03163	274-03163	275-03163	276-03163	271-03163	272-03163	273-03163	295-03163	296-03163	298-03163	299-03163	
		2.5	2.2	0.5	15	20	599-03164	274-03164	275-03164	276-03164	271-03164	272-03164	273-03164	295-03164	296-03164	298-03164	299-03164	
		4	3.4	0.5	15	20	599-03165	274-03165	275-03165	276-03165	271-03165	272-03165	273-03165	295-03165	296-03165	298-03165	299-03165	
		6.3	5.4	0.75	20	20	599-03166	274-03166	275-03166	276-03166	271-03166	272-03166	273-03166	295-03166	296-03166	298-03166	299-03166	
		10	8.6	1	25	20	599-03167	274-03167	275-03167	276-03167	271-03167	272-03167	273-03167	295-03167	296-03167	298-03167	299-03167	
		16	14	1.25	32	20	599-03168	274-03168	275-03168	276-03168	271-03168	272-03168	273-03168	295-03168	296-03168	298-03168	299-03168	
		25	22	1.5	40	20	599-03169	274-03169	275-03169	276-03169	271-03169	272-03169	273-03169	295-03169	296-03169	298-03169	299-03169	
		40	34	2	50	20	599-03170	274-03170	275-03170	276-03170	271-03170	272-03170	273-03170	295-03170	296-03170	298-03170	299-03170	
		FxUF	1	0.9	0.5	15	20	599-03171	274-03171	275-03171	276-03171	271-03171	272-03171	273-03171	295-03171	296-03171	298-03171	299-03171
	1.6		1.4	0.5	15	20	599-03172	274-03172	275-03172	276-03172	271-03172	272-03172	273-03172	295-03172	296-03172	298-03172	299-03172	
	2.5		2.2	0.5	15	20	599-03173	274-03173	275-03173	276-03173	271-03173	272-03173	273-03173	295-03173	296-03173	298-03173	299-03173	
	4		3.4	0.5	15	20	599-03174	274-03174	275-03174	276-03174	271-03174	272-03174	273-03174	295-03174	296-03174	298-03174	299-03174	
	6.3		5.4	0.75	20	20	599-03175	274-03175	275-03175	276-03175	271-03175	272-03175	273-03175	295-03175	296-03175	298-03175	299-03175	
	10		8.6	1	25	20	599-03176	274-03176	275-03176	276-03176	271-03176	272-03176	273-03176	295-03176	296-03176	298-03176	299-03176	
	FxsUM		1	0.9	0.5	15	20	599-03270	274-03270	275-03270	276-03270	271-03270	272-03270	273-03270	295-03270	296-03270	298-03270	299-03270
			1.6	1.4	0.5	15	20	599-03271	274-03271	275-03271	276-03271	271-03271	272-03271	273-03271	295-03271	296-03271	298-03271	299-03271
			2.5	2.2	0.5	15	20	599-03272	274-03272	275-03272	276-03272	271-03272	272-03272	273-03272	295-03272	296-03272	298-03272	299-03272
			4	3.4	0.5	15	20	599-03273	274-03273	275-03273	276-03273	271-03273	272-03273	273-03273	295-03273	296-03273	298-03273	299-03273
		6.3	5.4	0.75	20	20	599-03274	274-03274	275-03274	276-03274	271-03274	272-03274	273-03274	295-03274	296-03274	298-03274	299-03274	
		10	8.6	1	25	20	599-03275	274-03275	275-03275	276-03275	271-03275	272-03275	273-03275	295-03275	296-03275	298-03275	299-03275	
		16	13.8	1.25	32	20	599-03276	274-03276	275-03276	276-03276	271-03276	272-03276	273-03276	295-03276	296-03276	298-03276	299-03276	
		UFxUF	16	14	1.25	32	20	599-03177	274-03177	275-03177	276-03177	271-03177	272-03177	273-03177	295-03177	296-03177	298-03177	299-03177
			25	22	1.5	40	20	599-03178	274-03178	275-03178	276-03178	271-03178	272-03178	273-03178	295-03178	296-03178	298-03178	299-03178
			40	34	2	50	20	599-03179	274-03179	275-03179	276-03179	271-03179	272-03179	273-03179	295-03179	296-03179	298-03179	299-03179
	FxUF		1	0.9	0.5	15	20	599-03108	274-03108	275-03108	276-03108	271-03108	272-03108	273-03108	295-03108	296-03108	298-03108	299-03108
			1.6	1.4	0.5	15	20	599-03109	274-03109	275-03109	276-03109	271-03109	272-03109	273-03109	295-03109	296-03109	298-03109	299-03109
			2.5	2.2	0.5	15	20	599-03110	274-03110	275-03110	276-03110	271-03110	272-03110	273-03110	295-03110	296-03110	298-03110	299-03110
			4	3.4	0.5	15	20	599-03111	274-03111	275-03111	276-03111	271-03111	272-03111	273-03111	295-03111	296-03111	298-03111	299-03111
			6.3	5.4	0.75	20	20	599-03112	274-03112	275-03112	276-03112	271-03112	272-03112	273-03112	295-03112	296-03112	298-03112	299-03112
			10	8.6	1	25	20	599-03113	274-03113	275-03113	276-03113	271-03113	272-03113	273-03113	295-03113	296-03113	298-03113	299-03113
			16	14	1.25	32	20	599-03114	274-03114	275-03114	276-03114	271-03114	272-03114	273-03114	295-03114	296-03114	298-03114	299-03114
		25	22	1.5	40	20	599-03115	274-03115	275-03115	276-03115	271-03115	272-03115	273-03115	295-03115	296-03115	298-03115	299-03115	
		40	34	2	50	20	599-03116	274-03116	275-03116	276-03116	271-03116	272-03116	273-03116	295-03116	296-03116	298-03116	299-03116	
		FxUF	1	0.9	0.5	15	20	599-03117	274-03117	275-03117	276-03117	271-03117	272-03117	273-03117	295-03117	296-03117	298-03117	299-03117
	1.6		1.4	0.5	15	20	599-03118	274-03118	275-03118	276-03118	271-03118	272-03118	273-03118	295-03118	296-03118	298-03118	299-03118	
	2.5		2.2	0.5	15	20	599-03119	274-03119	275-03119	276-03119	271-03119	272-03119	273-03119	295-03119	296-03119	298-03119	299-03119	
	4		3.4	0.5	15	20	599-03120	274-03120	275-03120	276-03120	271-03120	272-03120	273-03120	295-03120	296-03120	298-03120	299-03120	
	6.3		5.4	0.75	20	20	599-03121	274-03121	275-03121	276-03121	271-03121	272-03121	273-03121	295-03121	296-03121	298-03121	299-03121	
	10		8.6	1	25	20	599-03122	274-03122	275-03122	276-03122	271-03122	272-03122	273-03122	295-03122	296-03122	298-03122	299-03122	
	FxsUM		1	0.9	0.5	15	20	599-03252	274-03252	275-03252	276-03252	271-03252	272-03252	273-03252	295-03252	296-03252	298-03252	299-03252
			1.6	1.4	0.5	15	20	599-03253	274-03253	275-03253	276-03253	271-03253	272-03253	273-03253	295-03253	296-03253	298-03253	299-03253
			2.5	2.2	0.5	15	20	599-03254	274-03254	275-03254	276-03254	271-03254	272-03254	273-03254	295-03254	296-03254	298-03254	299-03254
			4	3.4	0.5	15	20	599-03255	274-03255	275-03255	276-03255	271-03255	272-03255	273-03255	295-03255	296-03255	298-03255	299-03255
		6.3	5.4	0.75	20	20	599-03256	274-03256	275-03256	276-03256	271-03256	272-03256	273-03256	295-03256	296-03256	298-03256	299-03256	
		10	8.6	1	25	20	599-03257	274-03257	275-03257	276-03257	271-03257	272-03257	273-03257	295-03257	296-03257	298-03257	299-03257	
		UFxUF	16	14	1.25	32	20	599-03123	274-03123	275-03123	276-03123	271-03123	272-03123	273-03123	295-03123	296-03123	298-03123	299-03123
			25	22	1.5	40	20	599-03124	274-03124	275-03124	276-03124	271-03124	272-03124	273-03124	295-03124	296-03124	298-03124	299-03124
			40	34	2	50	20	599-03125	274-03125	275-03125	276-03125	271-03125	272-03125	273-03125	295-03125	296-03125	298-03125	299-03125

* F = Female NPT, UF = Union Female, UM = Union Male connection. — = Special Order, X = Inappropriate combination.

**Table 5. 1/2 to 2-Inch Three-Way Valves (Equal Percentage NC/Linear NO)
 (Technical Instructions 155-185P25).**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Pneumatic					Pneumatic with Factory Mounted Position Relay				
								Description	4-inch 3-8 psi (21-55 kPa)	4-inch 5-10 psi (34-69 kPa)	4-inch 10-15 psi (69-103 kPa)	8-inch	8-inch Hi-Temp	8-inch	8-inch Hi-Temp			
			Technical Instructions	155-183P25	155-183P25	155-183P25		155-161P25	155-161P25	155-161P25	155-161P25							
			Actuator Assembly	599-01081	599-01082	599-01083		599-01050	599-01051	599-01050	599-01051							
			Valve Assembly	Actuator Code 268	Actuator Code 269	Actuator Code 270		Actuator Code 277	Actuator Code 278	Actuator Code 283	Actuator Code 284							
Bronze	Standard	FxF	1	0.9	0.5	15	20	599-03198	268-03198	269-03198	270-03198	277-03198	—	283-03198	—			
			1.6	1.4	0.5	15	20	599-03199	268-03199	269-03199	270-03199	277-03199	—	283-03199	—			
			2.5	2.2	0.5	15	20	599-03200	268-03200	269-03200	270-03200	277-03200	—	283-03200	—			
			4	3.4	0.5	15	20	599-03201	268-03201	269-03201	270-03201	277-03201	—	283-03201	—			
			6.3	5.4	0.75	20	20	599-03202	268-03202	269-03202	270-03202	277-03202	—	283-03202	—			
			10	8.6	1	25	20	599-03203	268-03203	269-03203	270-03203	277-03203	—	283-03203	—			
			16	14	1.25	32	20	599-03204	268-03204	269-03204	270-03204	277-03204	—	283-03204	—			
			25	22	1.5	40	20	599-03205	268-03205	269-03205	270-03205	277-03205	—	283-03205	—			
			40	34	2	50	20	599-03206	268-03206	269-03206	270-03206	277-03206	—	283-03206	—			
			UFxUF	1	0.9	0.5	15	20	599-03207	268-03207	269-03207	270-03207	277-03207	—	283-03207	—		
				1.6	1.4	0.5	15	20	599-03208	268-03208	269-03208	270-03208	277-03208	—	283-03208	—		
				2.5	2.2	0.5	15	20	599-03209	268-03209	269-03209	270-03209	277-03209	—	283-03209	—		
				4	3.4	0.5	15	20	599-03210	268-03210	269-03210	270-03210	277-03210	—	283-03210	—		
				6.3	5.4	0.75	20	20	599-03211	268-03211	269-03211	270-03211	277-03211	—	283-03211	—		
		10		8.6	1	25	20	599-03212	268-03212	269-03212	270-03212	277-03212	—	283-03212	—			
		16		14	1.25	32	20	599-03213	268-03213	269-03213	270-03213	277-03213	—	283-03213	—			
		25		22	1.5	40	20	599-03214	268-03214	269-03214	270-03214	277-03214	—	283-03214	—			
		40		34	2	50	20	599-03215	268-03215	269-03215	270-03215	277-03215	—	283-03215	—			
		Stainless Steel		Standard	FxF	1	0.9	0.5	15	20	599-03144	268-03144	269-03144	270-03144	277-03144	—	283-03144	—
						1.6	1.4	0.5	15	20	599-03145	268-03145	269-03145	270-03145	277-03145	—	283-03145	—
						2.5	2.2	0.5	15	20	599-03146	268-03146	269-03146	270-03146	277-03146	—	283-03146	—
						4	3.4	0.5	15	20	599-03147	268-03147	269-03147	270-03147	277-03147	—	283-03147	—
						6.3	5.4	0.75	20	20	599-03148	268-03148	269-03148	270-03148	277-03148	—	283-03148	—
			10			8.6	1	25	20	599-03149	268-03149	269-03149	270-03149	277-03149	—	283-03149	—	
			16			14	1.25	32	20	599-03150	268-03150	269-03150	270-03150	277-03150	—	283-03150	—	
			25			22	1.5	40	20	599-03151	268-03151	269-03151	270-03151	277-03151	—	283-03151	—	
			40			34	2	50	20	599-03152	268-03152	269-03152	270-03152	277-03152	—	283-03152	—	
			UFxUF			1	0.9	0.5	15	20	599-03153	268-03153	269-03153	270-03153	277-03153	—	283-03153	—
1.6	1.4					0.5	15	20	599-03154	268-03154	269-03154	270-03154	277-03154	—	283-03154	—		
2.5	2.2					0.5	15	20	599-03155	268-03155	269-03155	270-03155	277-03155	—	283-03155	—		
4	3.4					0.5	15	20	599-03156	268-03156	269-03156	270-03156	277-03156	—	283-03156	—		
6.3	5.4					0.75	20	20	599-03157	268-03157	269-03157	270-03157	277-03157	—	283-03157	—		
10	8.6				1	25	20	599-03158	268-03158	269-03158	270-03158	277-03158	—	283-03158	—			
16	14				1.25	32	20	599-03159	268-03159	269-03159	270-03159	277-03159	—	283-03159	—			
25	22				1.5	40	20	599-03160	268-03160	269-03160	270-03160	277-03160	—	283-03160	—			
40	34				2	50	20	599-03161	268-03161	269-03161	270-03161	277-03161	—	283-03161	—			

* F = Female NPT, UF = Union Female, UM = Union Male connection, — = Special Order, X = Inappropriate combination.

**Table 5a. 1/2 to 2-Inch Three-Way Valves (Equal Percentage NC/Linear NO)
 (Technical Instructions 155-185P25), Continued.**

Trim	Packing	Connection *	Flow Rate		Line Size		Stroke	Type	Electro-Hydraulic			Electro-Mechanical						
								Description	24V, 0-10V 4-20mA SR	24V, 3P NSR	24V, 3P, SR	24V, 0-10V 4-20mA NSR	24V, 3P, 120 sec., NSR	24V, 3P, 30 sec., NSR	24V, 0-10V, Lo, NSR	24V, 0-10V, Lo, SR	24V, 0-10V, SR	24V, 2P, SR
			Technical Instructions	155-180P25	155-181P25	155-181P25	155-182P25	155-186P25	155-186P25	155-172P25	155-172P25	155-541P25	155-541P25					
			Actuator Assembly	SKD62U	SKD82.50 U	SKD82.51 U	SQX62U	SQX82.00U	SQX82.03U	599-10021	599-10022	599-03609	599-03611					
Cv	Kvs	In	mm	Valve Assembly	Actuator Code 274	Actuator Code 275	Actuator Code 276	Actuator Code 271	Actuator Code 272	Actuator Code 273	Actuator Code 295	Actuator Code 296	Actuator Code 298	Actuator Code 299				
Bronze	Standard	FXF	1	0.9	0.5	15	20	599-03198	274-03198	275-03198	276-03198	271-03198	272-03198	273-03198	295-03198	296-03198	298-03198	299-03198
			1.6	1.4	0.5	15	20	599-03199	274-03199	275-03199	276-03199	271-03199	272-03199	273-03199	295-03199	296-03199	298-03199	299-03199
			2.5	2.2	0.5	15	20	599-03200	274-03200	275-03200	276-03200	271-03200	272-03200	273-03200	295-03200	296-03200	298-03200	299-03200
			4	3.4	0.5	15	20	599-03201	274-03201	275-03201	276-03201	271-03201	272-03201	273-03201	295-03201	296-03201	298-03201	299-03201
			6.3	5.4	0.75	20	20	599-03202	274-03202	275-03202	276-03202	271-03202	272-03202	273-03202	295-03202	296-03202	298-03202	299-03202
			10	8.6	1	25	20	599-03203	274-03203	275-03203	276-03203	271-03203	272-03203	273-03203	295-03203	296-03203	298-03203	299-03203
			16	14	1.25	32	20	599-03204	274-03204	275-03204	276-03204	271-03204	272-03204	273-03204	295-03204	296-03204	298-03204	299-03204
			25	22	1.5	40	20	599-03205	274-03205	275-03205	276-03205	271-03205	272-03205	273-03205	295-03205	296-03205	298-03205	299-03205
			40	34	2	50	20	599-03206	274-03206	275-03206	276-03206	271-03206	272-03206	273-03206	295-03206	296-03206	298-03206	299-03206
			1	0.9	0.5	15	20	599-03207	274-03207	275-03207	276-03207	271-03207	272-03207	273-03207	295-03207	296-03207	298-03207	299-03207
			1.6	1.4	0.5	15	20	599-03208	274-03208	275-03208	276-03208	271-03208	272-03208	273-03208	295-03208	296-03208	298-03208	299-03208
			2.5	2.2	0.5	15	20	599-03209	274-03209	275-03209	276-03209	271-03209	272-03209	273-03209	295-03209	296-03209	298-03209	299-03209
			4	3.4	0.5	15	20	599-03210	274-03210	275-03210	276-03210	271-03210	272-03210	273-03210	295-03210	296-03210	298-03210	299-03210
			6.3	5.4	0.75	20	20	599-03211	274-03211	275-03211	276-03211	271-03211	272-03211	273-03211	295-03211	296-03211	298-03211	299-03211
	10	8.6	1	25	20	599-03212	274-03212	275-03212	276-03212	271-03212	272-03212	273-03212	295-03212	296-03212	298-03212	299-03212		
	16	14	1.25	32	20	599-03213	274-03213	275-03213	276-03213	271-03213	272-03213	273-03213	295-03213	296-03213	298-03213	299-03213		
	25	22	1.5	40	20	599-03214	274-03214	275-03214	276-03214	271-03214	272-03214	273-03214	295-03214	296-03214	298-03214	299-03214		
	40	34	2	50	20	599-03215	274-03215	275-03215	276-03215	271-03215	272-03215	273-03215	295-03215	296-03215	298-03215	299-03215		
	1	0.9	0.5	15	20	599-03144	274-03144	275-03144	276-03144	271-03144	272-03144	273-03144	295-03144	296-03144	298-03144	299-03144		
	1.6	1.4	0.5	15	20	599-03145	274-03145	275-03145	276-03145	271-03145	272-03145	273-03145	295-03145	296-03145	298-03145	299-03145		
	2.5	2.2	0.5	15	20	599-03146	274-03146	275-03146	276-03146	271-03146	272-03146	273-03146	295-03146	296-03146	298-03146	299-03146		
	4	3.4	0.5	15	20	599-03147	274-03147	275-03147	276-03147	271-03147	272-03147	273-03147	295-03147	296-03147	298-03147	299-03147		
	6.3	5.4	0.75	20	20	599-03148	274-03148	275-03148	276-03148	271-03148	272-03148	273-03148	295-03148	296-03148	298-03148	299-03148		
	10	8.6	1	25	20	599-03149	274-03149	275-03149	276-03149	271-03149	272-03149	273-03149	295-03149	296-03149	298-03149	299-03149		
	16	14	1.25	32	20	599-03150	274-03150	275-03150	276-03150	271-03150	272-03150	273-03150	295-03150	296-03150	298-03150	299-03150		
	25	22	1.5	40	20	599-03151	274-03151	275-03151	276-03151	271-03151	272-03151	273-03151	295-03151	296-03151	298-03151	299-03151		
	40	34	2	50	20	599-03152	274-03152	275-03152	276-03152	271-03152	272-03152	273-03152	295-03152	296-03152	298-03152	299-03152		
	1	0.9	0.5	15	20	599-03153	274-03153	275-03153	276-03153	271-03153	272-03153	273-03153	295-03153	296-03153	298-03153	299-03153		
1.6	1.4	0.5	15	20	599-03154	274-03154	275-03154	276-03154	271-03154	272-03154	273-03154	295-03154	296-03154	298-03154	299-03154			
2.5	2.2	0.5	15	20	599-03155	274-03155	275-03155	276-03155	271-03155	272-03155	273-03155	295-03155	296-03155	298-03155	299-03155			
4	3.4	0.5	15	20	599-03156	274-03156	275-03156	276-03156	271-03156	272-03156	273-03156	295-03156	296-03156	298-03156	299-03156			
6.3	5.4	0.75	20	20	599-03157	274-03157	275-03157	276-03157	271-03157	272-03157	273-03157	295-03157	296-03157	298-03157	299-03157			
10	8.6	1	25	20	599-03158	274-03158	275-03158	276-03158	271-03158	272-03158	273-03158	295-03158	296-03158	298-03158	299-03158			
16	14	1.25	32	20	599-03159	274-03159	275-03159	276-03159	271-03159	272-03159	273-03159	295-03159	296-03159	298-03159	299-03159			
25	22	1.5	40	20	599-03160	274-03160	275-03160	276-03160	271-03160	272-03160	273-03160	295-03160	296-03160	298-03160	299-03160			
40	34	2	50	20	599-03161	274-03161	275-03161	276-03161	271-03161	272-03161	273-03161	295-03161	296-03161	298-03161	299-03161			

* F = Female NPT, UF = Union Female, UM = Union Male connection, — = Special Order, X = Inappropriate combination.

Table 6. 2-1/2 to 6-Inch Flanged Valves, ANSI Class 125.

Port	Action	Characteristic	Trim	Packing	Flow Rate		Line Size		Stroke	Type	Pneumatic				Pneumatic with Factory Mounted Position Relay				
					Cv	Kvs	In	mm		Stroke	20 mm		40 mm		20 mm		40 mm		
										Description	8-inch	8-inch Hi-Temp	12-inch	12-inch	8-inch	8-inch Hi-Temp	12-inch	12-inch	
										Technical Instructions	155-161P25	155-161P25	155-162P25	155-162P25	155-161P25	155-161P25	155-162P25	155-162P25	
										Actuator Assembly	599-01050	599-01051	599-01010	599-01000	599-01050 and 599-00426	599-01051 and 599-00425	599-01010 and 599-00423	599-01000 and 599-00423	
Valve Assembly	Actuator Code 277	Actuator Code 278	Actuator Code 279	Actuator Code 281	Actuator Code 283	Actuator Code 284	Actuator Code 285	Actuator Code 287											
2-Way Tech. Instr. 155-159P25	Normally Closed (NC)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05970	277-05970	—	279-05970	X	283-05970	—	285-05970	X	
					100	86	3	80	20	599-05971	277-05971	—	279-05971	X	283-05971	—	285-05971	X	
					160	140	4	100	40	599-05972	X	X	X	281-05972	X	X	X	287-05972	
					250	215	5	125	40	599-05973	X	X	X	281-05973	X	X	X	287-05973	
					400	340	6	150	40	599-05974	X	X	X	281-05974	X	X	X	287-05974	
					63	54	2.5	65	20	599-05990	277-05990	—	279-05990	X	283-05990	—	285-05990	X	
		100	86	3	80	20	599-05991	277-05991	—	279-05991	X	283-05991	—	285-05991	X				
		160	140	4	100	40	599-05992	X	X	X	281-05992	X	X	X	287-05992				
		250	215	5	125	40	599-05993	X	X	X	281-05993	X	X	X	287-05993				
		400	340	6	150	40	599-05994	X	X	X	281-05994	X	X	X	287-05994				
		63	54	2.5	65	20	599-06070	277-06070	—	279-06070	X	283-06070	—	285-06070	X				
		100	86	3	80	20	599-06071	277-06071	—	279-06071	X	283-06071	—	285-06071	X				
	160	140	4	100	40	599-06072	X	X	X	281-06072	X	X	X	287-06072					
	250	215	5	125	40	599-06073	X	X	X	281-06073	X	X	X	287-06073					
	400	340	6	150	40	599-06074	X	X	X	281-06074	X	X	X	287-06074					
	63	54	2.5	65	20	599-06050	277-06050	278-06050	279-06050	X	283-06050	284-06050	285-06050	X					
	100	86	3	80	20	599-06051	277-06051	278-06051	279-06051	X	283-06051	284-06051	285-06051	X					
	160	140	4	100	40	599-06052	X	X	X	281-06052	X	X	X	287-06052					
	250	215	5	125	40	599-06053	X	X	X	281-06053	X	X	X	287-06053					
	400	340	6	150	40	599-06054	X	X	X	281-06054	X	X	X	287-06054					
	2-Way Tech. Instr. 155-159P25	Normally Open (NO)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05960	277-05960	—	279-05960	X	283-05960	—	285-05960	X
						100	86	3	80	20	599-05961	277-05961	—	279-05961	X	283-05961	—	285-05961	X
						160	140	4	100	40	599-05962	X	X	X	281-05962	X	X	X	287-05962
						250	215	5	125	40	599-05963	X	X	X	281-05963	X	X	X	287-05963
400						340	6	150	40	599-05964	X	X	X	281-05964	X	X	X	287-05964	
63						54	2.5	65	20	599-05980	277-05980	—	279-05980	X	283-05980	—	285-05980	X	
100			86	3	80	20	599-05981	277-05981	—	279-05981	X	283-05981	—	285-05981	X				
160			140	4	100	40	599-05982	X	X	X	281-05982	X	X	X	287-05982				
250			215	5	125	40	599-05983	X	X	X	281-05983	X	X	X	287-05983				
400			340	6	150	40	599-05984	X	X	X	281-05984	X	X	X	287-05984				
63			54	2.5	65	20	599-06060	277-06060	—	279-06060	X	283-06060	—	285-06060	X				
100			86	3	80	20	599-06061	277-06061	—	279-06061	X	283-06061	—	285-06061	X				
160		140	4	100	40	599-06062	X	X	X	281-06062	X	X	X	287-06062					
250		215	5	125	40	599-06063	X	X	X	281-06063	X	X	X	287-06063					
400		340	6	150	40	599-06064	X	X	X	281-06064	X	X	X	287-06064					
63		54	2.5	65	20	599-06040	277-06040	278-06040	279-06040	X	283-06040	284-06040	285-06040	X					
100		86	3	80	20	599-06041	277-06041	278-06041	279-06041	X	283-06041	284-06041	285-06041	X					
160		140	4	100	40	599-06042	X	X	X	281-06042	X	X	X	287-06042					
250		215	5	125	40	599-06043	X	X	X	281-06043	X	X	X	287-06043					
400		340	6	150	40	599-06044	X	X	X	281-06044	X	X	X	287-06044					
3-Way Tech. Instr. 155-160P25		Mixing	Linear	Stainless Steel	Standard	63	54	2.5	65	20	599-06165	277-06165	—	279-06165	X	283-06165	—	285-06165	X
						100	86	3	80	20	599-06166	277-06166	—	279-06166	X	283-06166	—	285-06166	X
						160	140	4	100	40	599-06167	X	X	X	281-06167	X	X	X	287-06167
						250	215	5	125	40	599-06168	X	X	X	281-06168	X	X	X	287-06168
	400					340	6	150	40	599-06169	X	X	X	281-06169	X	X	X	287-06169	
	63					54	2.5	65	20	599-06160	277-06160	—	279-06160	X	283-06160	—	285-06160	X	
	100	86	3	80	20	599-06161	277-06161	—	279-06161	X	283-06161	—	285-06161	X					
	160	140	4	100	40	599-06162	X	X	X	281-06162	X	X	X	287-06162					
	250	215	5	125	40	599-06163	X	X	X	281-06163	X	X	X	287-06163					
	400	340	6	150	40	599-06164	X	X	X	281-06164	X	X	X	287-06164					

Spring start point for valve assemblies with pneumatic actuators: NO = 3 to 8 psi (21 to 55 kPa), NC = 10 to 15 psi (69 to 103 kPa), 3-Way = 8 to 13 psi (55 to 90 kPa), — = Special Order, X = Inappropriate combination.

Table 6a. 2-1/2 to 6-Inch Flanged Valves, ANSI Class 125, Continued.

Port	Action	Characteristic	Trim	Packing	Flow aRate		Line Size		Stroke	Type	Electronic-Hydraulic						
										Stroke	20 mm						
										Description	24V, 3-Pos, SR	24V, 3-Pos, NSR	24V, 0-10V, 4-20mA, SR	24V, 3-Pos, SR	24V, 3-Pos, NSR	24V, 0-10V, 4-20mA, SR	
										Technical Instructions	155-181P25	155-181P25	155-180P25	155-171P25	155-171P25	155-16325	
Actuator Assembly	SKD82.51U	SKD82.50U	SKD62U	SKB82.51U	SKB82.50U	SKB62U											
Valve Assembly	Actuator Code 276	Actuator Code 275	Actuator Code 274	Actuator Code 289	Actuator Code 290	Actuator Code 291											
2-Way Tech. Instr. 155-159P25	Normally Closed (NC)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05970	276-05970	275-05970	274-05970	289-05970	290-05970	291-05970	
					100	86	3	80	20	599-05971	276-05971	275-05971	274-05971	289-05971	290-05971	291-05971	
					160	140	4	100	40	599-05972	X	X	X	X	X	X	
					250	215	5	125	40	599-05973	X	X	X	X	X	X	
					400	340	6	150	40	599-05974	X	X	X	X	X	X	
					63	54	2.5	65	20	599-05990	276-05990	275-05990	274-05990	289-05990	290-05990	291-05990	
		100	86	3	80	20	599-05991	276-05991	275-05991	274-05991	289-05991	290-05991	291-05991				
		160	140	4	100	40	599-05992	X	X	X	X	X	X				
		250	215	5	125	40	599-05993	X	X	X	X	X	X				
		400	340	6	150	40	599-05994	X	X	X	X	X	X				
		63	54	2.5	65	20	599-06070	276-06070	275-06070	274-06070	289-06070	290-06070	291-06070				
		100	86	3	80	20	599-06071	276-06071	275-06071	274-06071	289-06071	290-06071	291-06071				
	160	140	4	100	40	599-06072	X	X	X	X	X	X					
	250	215	5	125	40	599-06073	X	X	X	X	X	X					
	400	340	6	150	40	599-06074	X	X	X	X	X	X					
	63	54	2.5	65	20	599-06050	276-06050	275-06050	274-06050	289-06050	290-06050	291-06050					
	100	86	3	80	20	599-06051	276-06051	275-06051	274-06051	289-06051	290-06051	291-06051					
	160	140	4	100	40	599-06052	X	X	X	X	X	X					
	250	215	5	125	40	599-06053	X	X	X	X	X	X					
	400	340	6	150	40	599-06054	X	X	X	X	X	X					
	Normally Open (NO)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05960	276-05960	275-05960	274-05960	289-05960	290-05960	291-05960	
					100	86	3	80	20	599-05961	276-05961	275-05961	274-05961	289-05961	290-05961	291-05961	
					160	140	4	100	40	599-05962	X	X	X	X	X	X	
					250	215	5	125	40	599-05963	X	X	X	X	X	X	
400					340	6	150	40	599-05964	X	X	X	X	X	X		
63					54	2.5	65	20	599-05980	276-05980	275-05980	274-05980	289-05980	290-05980	291-05980		
100			86	3	80	20	599-05981	276-05981	275-05981	274-05981	289-05981	290-05981	291-05981				
160			140	4	100	40	599-05982	X	X	X	X	X	X				
250			215	5	125	40	599-05983	X	X	X	X	X	X				
400			340	6	150	40	599-05984	X	X	X	X	X	X				
63			54	2.5	65	20	599-06060	276-06060	275-06060	274-06060	289-06060	290-06060	291-06060				
100			86	3	80	20	599-06061	276-06061	275-06061	274-06061	289-06061	290-06061	291-06061				
160		140	4	100	40	599-06062	X	X	X	X	X	X					
250		215	5	125	40	599-06063	X	X	X	X	X	X					
400		340	6	150	40	599-06064	X	X	X	X	X	X					
63		54	2.5	65	20	599-06040	276-06040	275-06040	274-06040	289-06040	290-06040	291-06040					
100		86	3	80	20	599-06041	276-06041	275-06041	274-06041	289-06041	290-06041	291-06041					
160		140	4	100	40	599-06042	X	X	X	X	X	X					
250		215	5	125	40	599-06043	X	X	X	X	X	X					
400		340	6	150	40	599-06044	X	X	X	X	X	X					
3-Way Tech. Instr. 155-160P25		Mixing	Linear	Stainless Steel	Standard	63	54	2.5	65	20	599-06165	276-06165	275-06165	274-06165	289-06165	290-06165	291-06165
						100	86	3	80	20	599-06166	276-06166	275-06166	274-06166	289-06166	290-06166	291-06166
						160	140	4	100	40	599-06167	X	X	X	X	X	X
						250	215	5	125	40	599-06168	X	X	X	X	X	X
	400					340	6	150	40	599-06169	X	X	X	X	X	X	
	63					54	2.5	65	20	599-06160	276-06160	275-06160	274-06160	289-06160	290-06160	291-06160	
	100	86	3	80	20	599-06161	276-06161	275-06161	274-06161	289-06161	290-06161	291-06161					
	160	140	4	100	40	599-06162	X	X	X	X	X	X					
	250	215	5	125	40	599-06163	X	X	X	X	X	X					
	400	340	6	150	40	599-06164	X	X	X	X	X	X					

— = Special Order, X = Inappropriate combination.

Table 6b. 2-1/2 to 6-Inch Flanged Valves, ANSI Class 125, Continued.

Port	Action	Characteristic	Trim	Packing	Flow Rate		Line Size		Stroke	Type	Electronic-Hydraulic			Electronic-Mechanical			
					Cv	Kvs	In	mm		Stroke	40 mm			20 mm		40 mm	
										Description	24V, 3-Pos, SR	24V, 3-Pos, NSR	24V, 0-10V, 4-20mA, SR	24V, 0-10V	24V, 0-10V	24V, 0-10V	
										Technical Instructions	155-171P25	155-171P25	155-163P25	155-172P25	155-172P25	155-172P25	
Actuator Assembly	SKC82.61U	SKC82.60U	SKC62U	Lo NSR 599-10021	Lo NSR 599-10022	Hi NSR 599-10023											
Valve Assembly	Actuator Code 292	Actuator Code 293	Actuator Code 294	Actuator Code 295	Actuator Code 296	Actuator Code 297											
2-Way Tech. Instr. 155-159P25	Normally Closed (NC)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05970	X	X	X	295-05970	296-05970	X	
					100	86	3	80	20	599-05971	X	X	X	295-05971	296-05971	X	
					160	140	4	100	40	599-05972	292-05972	293-05972	294-05972	X	X	297-05972	
					250	215	5	125	40	599-05973	292-05973	293-05973	294-05973	X	X	X	
					400	340	6	150	40	599-05974	292-05974	293-05974	294-05974	X	X	X	
					63	54	2.5	65	20	599-05990	X	X	X	295-05990	296-05990	X	
		100	86	3	80	20	599-05991	X	X	X	295-05991	296-05991	X				
		160	140	4	100	40	599-05992	292-05992	293-05992	294-05992	X	X	297-05992				
		250	215	5	125	40	599-05993	292-05993	293-05993	294-05993	X	X	X				
		400	340	6	150	40	599-05994	292-05994	293-05994	294-05994	X	X	X				
		63	54	2.5	65	20	599-06070	X	X	X	295-06070	296-06070	X				
		100	86	3	80	20	599-06071	X	X	X	295-06071	296-06071	X				
	160	140	4	100	40	599-06072	292-06072	293-06072	294-06072	X	X	297-06072					
	250	215	5	125	40	599-06073	292-06073	293-06073	294-06073	X	X	X					
	400	340	6	150	40	599-06074	292-06074	293-06074	294-06074	X	X	X					
	63	54	2.5	65	20	599-06050	X	X	X	295-06050	296-06050	X					
	100	86	3	80	20	599-06051	X	X	X	295-06051	296-06051	X					
	160	140	4	100	40	599-06052	292-06052	293-06052	294-06052	X	X	297-06052					
	250	215	5	125	40	599-06053	292-06053	293-06053	294-06053	X	X	X					
	400	340	6	150	40	599-06054	292-06054	293-06054	294-06054	X	X	X					
	Normally Open (NO)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05960	X	X	X	295-05960	296-05960	X	
					100	86	3	80	20	599-05961	X	X	X	295-05961	296-05961	X	
					160	140	4	100	40	599-05962	292-05962	293-05962	294-05962	X	X	297-05962	
					250	215	5	125	40	599-05963	292-05963	293-05963	294-05963	X	X	X	
400					340	6	150	40	599-05964	292-05964	293-05964	294-05964	X	X	X		
63					54	2.5	65	20	599-05980	X	X	X	295-05980	296-05980	X		
100			86	3	80	20	599-05981	X	X	X	295-05981	296-05981	X				
160			140	4	100	40	599-05982	292-05982	293-05982	294-05982	X	X	297-05982				
250			215	5	125	40	599-05983	292-05983	293-05983	294-05983	X	X	X				
400			340	6	150	40	599-05984	292-05984	293-05984	294-05984	X	X	X				
63			54	2.5	65	20	599-06060	X	X	X	295-06060	296-06060	X				
100			86	3	80	20	599-06061	X	X	X	295-06061	296-06061	X				
160		140	4	100	40	599-06062	292-06062	293-06062	294-06062	X	X	297-06062					
250		215	5	125	40	599-06063	292-06063	293-06063	294-06063	X	X	X					
400		340	6	150	40	599-06064	292-06064	293-06064	294-06064	X	X	X					
63		54	2.5	65	20	599-06040	X	X	X	295-06040	296-06040	X					
100		86	3	80	20	599-06041	X	X	X	295-06041	296-06041	X					
160		140	4	100	40	599-06042	292-06042	293-06042	294-06042	X	X	297-06042					
250		215	5	125	40	599-06043	292-06043	293-06043	294-06043	X	X	X					
400		340	6	150	40	599-06044	292-06044	293-06044	294-06044	X	X	X					
3-Way Tech. Instr. 155-160P25		Mixing	Linear	Stainless Steel	Standard	63	54	2.5	65	20	599-06165	X	X	X	295-06165	296-06165	X
						100	86	3	80	20	599-06166	X	X	X	295-06166	296-06166	X
						160	140	4	100	40	599-06167	292-06167	293-06167	294-06167	X	X	297-06167
						250	215	5	125	40	599-06168	292-06168	293-06168	294-06168	X	X	X
	400					340	6	150	40	599-06169	292-06169	293-06169	294-06169	X	X	X	
	63					54	2.5	65	20	599-06160	X	X	X	295-06160	296-06160	X	
	100	86	3	80	20	599-06161	X	X	X	295-06161	296-06161	X					
	160	140	4	100	40	599-06162	292-06162	293-06162	294-06162	X	X	297-06162					
	250	215	5	125	40	599-06163	292-06163	293-06163	294-06163	X	X	X					
	400	340	6	150	40	599-06164	292-06164	293-06164	294-06164	X	X	X					

— = Special Order, X = Inappropriate combination.

Table 7. 2-1/2 to 6-Inch Flanged Valves, ANSI Class 250.

Port	Action	Characteristic	Trim	Packing	Flow Rate		Line Size		Stroke	Type	Pneumatic				Pneumatic with Factory Mounted Position Relay			
										Stroke	20 mm		40 mm		20 mm		40 mm	
										Description	8-inch	8-inch Hi-Temp	12-inch	12-inch	8-inch	8-inch Hi-Temp	12-inch	12-inch
										Technical Instructions	155-161P25	155-161P25	155-162P25	155-162P25	155-161P25	155-161P25	155-162P25	155-162P25
		Cv	Kvs	In	mm	Actuator Assembly	599-01050	599-01051	599-01010	599-01000	599-01050 & 599-00426	599-01051 & 599-00425	599-01010 & 599-00423	599-01000 & 599-00423				
						Valve Assembly	Actuator Code 277	Actuator Code 278	Actuator Code 279	Actuator Code 281	Actuator Code 283	Actuator Code 284	Actuator Code 285	Actuator Code 287				
2-Way Tech. Instr. 155-159P25	Normally Closed (NC)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05930	277-05930	—	279-05930	X	283-05930	—	285-05930	X
					100	86	3	80	20	599-05931	277-05931	—	279-05931	X	283-05931	—	285-05931	X
					160	140	4	100	40	599-05932	X	X	X	281-05932	X	X	X	287-05932
					250	215	5	125	40	599-05933	X	X	X	281-05933	X	X	X	287-05933
					400	340	6	150	40	599-05934	X	X	X	281-05934	X	X	X	287-05934
					63	54	2.5	65	20	599-05950	277-05950	—	279-05950	X	283-05950	—	285-05950	X
		100	86	3	80	20	599-05951	277-05951	—	279-05951	X	283-05951	—	285-05951	X			
		160	140	4	100	40	599-05952	X	X	X	281-05952	X	X	X	287-05952			
		250	215	5	125	40	599-05953	X	X	X	281-05953	X	X	X	287-05953			
		400	340	6	150	40	599-05954	X	X	X	281-05954	X	X	X	287-05954			
		63	54	2.5	65	20	599-06150	277-06150	—	279-06150	X	283-06150	—	285-06150	X			
		100	86	3	80	20	599-06151	277-06151	—	279-06151	X	283-06151	—	285-06151	X			
	160	140	4	100	40	599-06152	X	X	X	281-06152	X	X	X	287-06152				
	250	215	5	125	40	599-06153	X	X	X	281-06153	X	X	X	287-06153				
	400	340	6	150	40	599-06154	X	X	X	281-06154	X	X	X	287-06154				
	63	54	2.5	65	20	599-06130	277-06130	278-06130	279-06130	X	283-06130	284-06130	285-06130	X				
	100	86	3	80	20	599-06131	277-06131	278-06131	279-06131	X	283-06131	284-06131	285-06131	X				
	160	140	4	100	40	599-06132	X	X	X	281-06132	X	X	X	287-06132				
	250	215	5	125	40	599-06133	X	X	X	281-06133	X	X	X	287-06133				
	400	340	6	150	40	599-06134	X	X	X	281-06134	X	X	X	287-06134				
	63	54	2.5	65	20	599-06140	277-06140	—	279-06140	X	283-06140	—	285-06140	X				
	100	86	3	80	20	599-06141	277-06141	—	279-06141	X	283-06141	—	285-06141	X				
	160	140	4	100	40	599-06142	X	X	X	281-06142	X	X	X	287-06142				
	250	215	5	125	40	599-06143	X	X	X	281-06143	X	X	X	287-06143				
400	340	6	150	40	599-06144	X	X	X	281-06144	X	X	X	287-06144					
63	54	2.5	65	20	599-06120	277-06120	278-06120	279-06120	X	283-06120	284-06120	285-06120	X					
100	86	3	80	20	599-06121	277-06121	278-06121	279-06121	X	283-06121	284-06121	285-06121	X					
160	140	4	100	40	599-06122	X	X	X	281-06122	X	X	X	287-06122					
250	215	5	125	40	599-06123	X	X	X	281-06123	X	X	X	287-06123					
400	340	6	150	40	599-06124	X	X	X	281-06124	X	X	X	287-06124					
3-Way Tech. Instr. 155-160P25	Normally Open (NO)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05920	277-05920	—	279-05920	X	283-05920	—	285-05920	X
					100	86	3	80	20	599-05921	277-05921	—	279-05921	X	283-05921	—	285-05921	X
					160	140	4	100	40	599-05922	X	X	X	281-05922	X	X	X	287-05922
					250	215	5	125	40	599-05923	X	X	X	281-05923	X	X	X	287-05923
					400	340	6	150	40	599-05924	X	X	X	281-05924	X	X	X	287-05924
					63	54	2.5	65	20	599-05940	277-05940	—	279-05940	X	283-05940	—	285-05940	X
	100	86	3	80	20	599-05941	277-05941	—	279-05941	X	283-05941	—	285-05941	X				
	160	140	4	100	40	599-05942	X	X	X	281-05942	X	X	X	287-05942				
	250	215	5	125	40	599-05943	X	X	X	281-05943	X	X	X	287-05943				
	400	340	6	150	40	599-05944	X	X	X	281-05944	X	X	X	287-05944				
	63	54	2.5	65	20	599-06160	277-06160	—	279-06160	X	283-06160	—	285-06160	X				
	100	86	3	80	20	599-06161	277-06161	—	279-06161	X	283-06161	—	285-06161	X				
160	140	4	100	40	599-06162	X	X	X	281-06162	X	X	X	287-06162					
250	215	5	125	40	599-06163	X	X	X	281-06163	X	X	X	287-06163					
400	340	6	150	40	599-06164	X	X	X	281-06164	X	X	X	287-06164					
Mixing	Linear	Stainless Steel	Standard	63	54	2.5	65	20	599-06170	277-06170	—	279-06170	X	283-06170	—	285-06170	X	
				100	86	3	80	20	599-06171	277-06171	—	279-06171	X	283-06171	—	285-06171	X	
				160	140	4	100	40	599-06172	X	X	X	281-06172	X	X	X	287-06172	
				250	215	5	125	40	599-06173	X	X	X	281-06173	X	X	X	287-06173	
				400	340	6	150	40	599-06174	X	X	X	281-06174	X	X	X	287-06174	
				63	54	2.5	65	20	599-06175	277-06175	—	279-06175	X	283-06175	—	285-06175	X	
100	86	3	80	20	599-06176	277-06176	—	279-06176	X	283-06176	—	285-06176	X					
160	140	4	100	40	599-06177	X	X	X	281-06177	X	X	X	287-06177					
250	215	5	125	40	599-06178	X	X	X	281-06178	X	X	X	287-06178					
400	340	6	150	40	599-06179	X	X	X	281-06179	X	X	X	287-06179					

Spring start point for valve assemblies with pneumatic actuators: NO = 3 to 8 psi (21 to 55 kPa), NC = 10 to 15 psi (69 to 103 kPa), 3-Way = 8 to 13 psi (55 to 90 kPa), — = Special Order, X = Inappropriate combination.

Table 7a. 2-1/2 to 6-Inch Flanged Valves, ANSI Class 250, Continued.

Port	Action	Characteristic	Trim	Packing	Flow Rate		Line Size		Stroke	Type	Electronic-Hydraulic					
					Cv	Kvs	In	mm		Stroke	20 mm					
										Description	24V, 3-Pos, SR	24V, 3-Pos, NSR	24V, 0-10V, 4-20 mA, SR	24V, 3-Pos, SR	24V, 3-Pos, NSR	24V, 0-10V, 4-20 mA, SR
										Technical Instructions	155-181P25	155-181P25	155-180P25	155-171P25	155-171P25	155-16325
Actuator Assembly	SKD82.51U	SKD82.50U	SKD62U	SKB82.51U	SKB82.50U	SKB62U										
Valve Assembly	Actuator Code 276	Actuator Code 275	Actuator Code 274	Actuator Code 289	Actuator Code 290	Actuator Code 291										
2-Way Tech. Instr. 155-159P25	Normally Closed (NC)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05930	276-05930	275-05930	274-05930	289-05930	290-05930	291-05930
					100	86	3	80	20	599-05931	276-05931	275-05931	274-05931	289-05931	290-05931	291-05931
					160	140	4	100	40	599-05932	X	X	X	X	X	X
					250	215	5	125	40	599-05933	X	X	X	X	X	X
					400	340	6	150	40	599-05934	X	X	X	X	X	X
		Bronze	63	54	2.5	65	20	599-05950	276-05950	275-05950	274-05950	289-05950	290-05950	291-05950		
			100	86	3	80	20	599-05951	276-05951	275-05951	274-05951	289-05951	290-05951	291-05951		
			160	140	4	100	40	599-05952	X	X	X	X	X	X		
			250	215	5	125	40	599-05953	X	X	X	X	X	X		
			400	340	6	150	40	599-05954	X	X	X	X	X	X		
	Linear	Stainless Steel	63	54	2.5	65	20	599-06150	276-06150	275-06150	274-06150	289-06150	290-06150	291-06150		
			100	86	3	80	20	599-06151	276-06151	275-06151	274-06151	289-06151	290-06151	291-06151		
			160	140	4	100	40	599-06152	X	X	X	X	X	X		
			250	215	5	125	40	599-06153	X	X	X	X	X	X		
			400	340	6	150	40	599-06154	X	X	X	X	X	X		
	Hi-Temp	63	54	2.5	65	20	599-06130	276-06130	275-06130	274-06130	289-06130	290-06130	291-06130			
		100	86	3	80	20	599-06131	276-06131	275-06131	274-06131	289-06131	290-06131	291-06131			
		160	140	4	100	40	599-06132	X	X	X	X	X	X			
		250	215	5	125	40	599-06133	X	X	X	X	X	X			
		400	340	6	150	40	599-06134	X	X	X	X	X	X			
Normally Open (NO)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05920	276-05920	275-05920	274-05920	289-05920	290-05920	291-05920	
				100	86	3	80	20	599-05921	276-05921	275-05921	274-05921	289-05921	290-05921	291-05921	
				160	140	4	100	40	599-05922	X	X	X	X	X	X	
				250	215	5	125	40	599-05923	X	X	X	X	X	X	
				400	340	6	150	40	599-05924	X	X	X	X	X	X	
		Bronze	63	54	2.5	65	20	599-05940	276-05940	275-05940	274-05940	289-05940	290-05940	291-05940		
			100	86	3	80	20	599-05941	276-05941	275-05941	274-05941	289-05941	290-05941	291-05941		
			160	140	4	100	40	599-05942	X	X	X	X	X	X		
			250	215	5	125	40	599-05943	X	X	X	X	X	X		
			400	340	6	150	40	599-05944	X	X	X	X	X	X		
	Linear	Stainless Steel	63	54	2.5	65	20	599-06140	276-06140	275-06140	274-06140	289-06140	290-06140	291-06140		
			100	86	3	80	20	599-06141	276-06141	275-06141	274-06141	289-06141	290-06141	291-06141		
			160	140	4	100	40	599-06142	X	X	X	X	X	X		
			250	215	5	125	40	599-06143	X	X	X	X	X	X		
			400	340	6	150	40	599-06144	X	X	X	X	X	X		
	Hi-Temp	63	54	2.5	65	20	599-06120	276-06120	275-06120	274-06120	289-06120	290-06120	291-06120			
		100	86	3	80	20	599-06121	276-06121	275-06121	274-06121	289-06121	290-06121	291-06121			
		160	140	4	100	40	599-06122	X	X	X	X	X	X			
		250	215	5	125	40	599-06123	X	X	X	X	X	X			
		400	340	6	150	40	599-06124	X	X	X	X	X	X			
3-Way Tech. Instr. 155-160P25	Mixing	Linear	Stainless Steel	Standard	63	54	2.5	65	20	599-06175	276-06175	275-06175	274-06175	289-06175	290-06175	291-06175
					100	86	3	80	20	599-06176	276-06176	275-06176	274-06176	289-06176	290-06176	291-06176
					160	140	4	100	40	599-06177	X	X	X	X	X	X
					250	215	5	125	40	599-06178	X	X	X	X	X	X
					400	340	6	150	40	599-06179	X	X	X	X	X	X
	Bronze	63	54	2.5	65	20	599-06170	276-06170	275-06170	274-06170	289-06170	290-06170	291-06170			
		100	86	3	80	20	599-06171	276-06171	275-06171	274-06171	289-06171	290-06171	291-06171			
		160	140	4	100	40	599-06172	X	X	X	X	X	X			
		250	215	5	125	40	599-06173	X	X	X	X	X	X			
		400	340	6	150	40	599-06174	X	X	X	X	X	X			

— = Special Order, X = Inappropriate combination.

Table 7b. 2-1/2 to 6-Inch Flanged Valves, ANSI Class 250, Continued.

Port	Action	Characteristic	Trim	Packing	Flow Rate		Line Size		Stroke	Type	Electronic-Hydraulic			Electronic-Mechanical			
					Cv	Kvs	In	mm		Stroke	40 mm			20 mm		40 mm	
										Description	24V, 3-Pos, SR	24V, 3-Pos, NSR	24V, 0-10V, 4-20 mA, SR	24V, 0-10V	24V, 0-10V	24V, 0-10V	
										Technical Instructions	155-171P25	155-171P25	155-163P25	155-172P25	155-172P25	155-172P25	
Actuator Assembly	SKC82.61U	SKC82.60U	SKC62U	Lo NSR 599-10021	Lo NSR 599-10022	Hi NSR 599-10023											
Valve Assembly	Actuator Code 292	Actuator Code 293	Actuator Code 294	Actuator Code 295	Actuator Code 296	Actuator Code 297											
2-Way Tech. Instr. 155-159P25	Normally Closed (NC)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05930	X	X	X	295-05930	296-05930	X	
					100	86	3	80	20	599-05931	X	X	X	295-05931	296-05931	X	
					160	140	4	100	40	599-05932	292-05932	293-05932	294-05932	X	X	297-05932	
					250	215	5	125	40	599-05933	292-05933	293-05933	294-05933	X	X	X	
					400	340	6	150	40	599-05934	292-05934	293-05934	294-05934	X	X	X	
					63	54	2.5	65	20	599-05950	X	X	X	295-05950	296-05950	X	
		100	86	3	80	20	599-05951	X	X	X	295-05951	296-05951	X				
		160	140	4	100	40	599-05952	292-05952	293-05952	294-05952	X	X	297-05952				
		250	215	5	125	40	599-05953	292-05953	293-05953	294-05953	X	X	X				
		400	340	6	150	40	599-05954	292-05954	293-05954	294-05954	X	X	X				
		63	54	2.5	65	20	599-06150	X	X	X	295-06150	296-06150	X				
		100	86	3	80	20	599-06151	X	X	X	295-06151	296-06151	X				
	160	140	4	100	40	599-06152	292-06152	293-06152	294-06152	X	X	297-06152					
	250	215	5	125	40	599-06153	292-06153	293-06153	294-06153	X	X	X					
	400	340	6	150	40	599-06154	292-06154	293-06154	294-06154	X	X	X					
	63	54	2.5	65	20	599-06130	X	X	X	295-06130	296-06130	X					
	100	86	3	80	20	599-06131	X	X	X	295-06131	296-06131	X					
	160	140	4	100	40	599-06132	292-06132	293-06132	294-06132	X	X	297-06132					
	250	215	5	125	40	599-06133	292-06133	293-06133	294-06133	X	X	X					
	400	340	6	150	40	599-06134	292-06134	293-06134	294-06134	X	X	X					
	Normally Open (NO)	Equal Percentage	Stainless Steel	Standard	63	54	2.5	65	20	599-05920	X	X	X	295-05920	296-05920	X	
					100	86	3	80	20	599-05921	X	X	X	295-05921	296-05921	X	
					160	140	4	100	40	599-05922	292-05922	293-05922	294-05922	X	X	297-05922	
					250	215	5	125	40	599-05923	292-05923	293-05923	294-05923	X	X	X	
400					340	6	150	40	599-05924	292-05924	293-05924	294-05924	X	X	X		
63					54	2.5	65	20	599-05940	X	X	X	295-05940	296-05940	X		
100			86	3	80	20	599-05941	X	X	X	295-05941	296-05941	X				
160			140	4	100	40	599-05942	292-05942	293-05942	294-05942	X	X	297-05942				
250			215	5	125	40	599-05943	292-05943	293-05943	294-05943	X	X	X				
400			340	6	150	40	599-05944	292-05944	293-05944	294-05944	X	X	X				
63			54	2.5	65	20	599-06140	X	X	X	295-06140	296-06140	X				
100			86	3	80	20	599-06141	X	X	X	295-06141	296-06141	X				
160		140	4	100	40	599-06142	292-06142	293-06142	294-06142	X	X	297-06142					
250		215	5	125	40	599-06143	292-06143	293-06143	294-06143	X	X	X					
400		340	6	150	40	599-06144	292-06144	293-06144	294-06144	X	X	X					
63		54	2.5	65	20	599-06120	X	X	X	295-06120	296-06120	X					
100		86	3	80	20	599-06121	X	X	X	295-06121	296-06121	X					
160		140	4	100	40	599-06122	292-06122	293-06122	294-06122	X	X	297-06122					
250		215	5	125	40	599-06123	292-06123	293-06123	294-06123	X	X	X					
400		340	6	150	40	599-06124	292-06124	293-06124	294-06124	X	X	X					
3-Way Tech. Instr. 155-160P25		Mixing	Linear	Stainless Steel	Standard	63	54	2.5	65	20	599-06175	X	X	X	295-06175	296-06175	X
						100	86	3	80	20	599-06176	X	X	X	295-06176	296-06176	X
						160	140	4	100	40	599-06177	292-06177	293-06177	294-06177	X	X	297-06177
						250	215	5	125	40	599-06178	292-06178	293-06178	294-06178	X	X	X
	400					340	6	150	40	599-06179	292-06179	293-06179	294-06179	X	X	X	
	63					54	2.5	65	20	599-06170	X	X	X	295-06170	296-06170	X	
	100	86	3	80	20	599-06171	X	X	X	295-06171	296-06171	X					
	160	140	4	100	40	599-06172	292-06172	293-06172	294-06172	X	X	297-06172					
	250	215	5	125	40	599-06173	292-06173	293-06173	294-06173	X	X	X					
	400	340	6	150	40	599-06174	292-06174	293-06174	294-06174	X	X	X					

— = Special Order, X = Inappropriate combination.

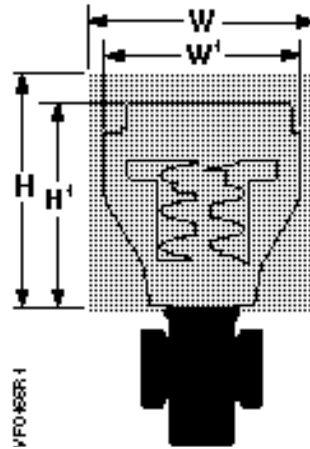
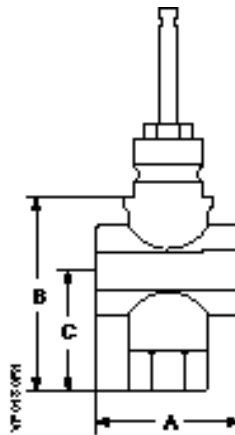


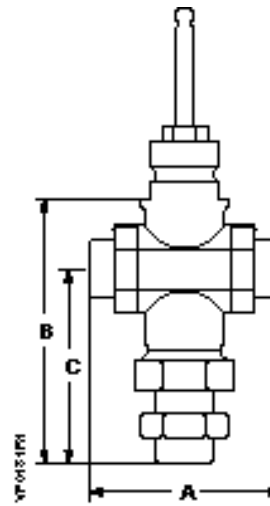
Figure 4. Actuator Dimensions. See Table 8.

Table 8. Dimensions of the Actuator and Recommended Service Envelope.
 Dimensions in Inches (Millimeters).

Actuator	Actuator Prefix Code	Actual Height of Actuator H1	Service Height H	Actual Width or Diameter of Actuator W1	Service Width W
4-inch Pneumatic	268, 269, 270	5-3/4 (146)	14 (350)	5-1/2 (137) diameter	18 (450)
8-inch Pneumatic	277, 278, 283, 284	14-1/8 (359)	26 (660)	8-3/4 (222) diameter	21 (533)
12-inch Pneumatic	279, 281, 285, 287	17-7/8 (454)	30 (762)	15-1/8 (384) diameter	27 (686)
SKB/C with handle closed	289, 290, 291, 292, 293, 294	14-3/4 (375)	22-3/4 (578)	7 (178) width x 8-15/16 (226) depth	25 (635)
SKD	274, 275, 276	11-13/16 (300)	19-3/4 (500)	5 (127) width x 6-5/8 (169) depth	14-1/2 (360)
SQX	271, 272, 273	8-7/8 (226)	17 (430)	5-17/32 (140) width x 4-3/8 (111) depth	13-1/2 (340)
EI/Mech with linkage	295, 296, 297	11 (280)	22 (559)	5-3/4 (144) width x 8-7/8 (225) depth	25-3/4 (654)



FxF
 Female NPT x Female NPT



UFxUF
 Union Female x Union Female

Table 9. 1/2 to 2-Inch Three-Way Valve Dimensions.

Valve	Valve Size Inches (mm)	Dimensions in Inches (mm)						Weight lb (kg)	
		FxF NPT x NPT			UFxUF Female Union x Female Union			FxF	UFxUF
		A	B	C	A	B	C		
3-Way	1/2 (15)	2-7/8 (72)	4-5/16 (110)	2-11/16 (68)	4-11/16 (119)	6-1/4 (159)	4-5/8 (117)	3 (1.4)	4 (1.8)
	3/4 (20)	3-3/8 (85)	4-5/16 (110)	2-3/4 (69)	6-3/8 (163)	6-15/16 (176)	5-1/4 (134)	4 (1.8)	6 (2.7)
	1 (25)	3-15/16 (100)	4-1/2 (114)	2-7/8 (72)	7-1/16 (180)	7 (178)	5-3/8 (136)	5 (2.3)	7 (3.2)
	1-1/4 (32)	4-15/16 (125)	4-5/8 (116)	2-15/16 (74)	7-1/2 (190)	6-3/4 (170)	5-1/16 (129)	7 (3.2)	11 (5)
	1-1/2 (40)	5-1/8 (130)	4-5/8 (117)	3 (76)	7-13/16 (199)	6-15/16 (176)	5-5/16 (135)	9 (4.1)	13 (5.9)
	2 (50)	6-1/4 (158)	4-3/4 (121)	3-3/16 (81)	9-1/16 (231)	7-3/16 (182)	5-9/16 (141)	13 (5.9)	19 (8.6)

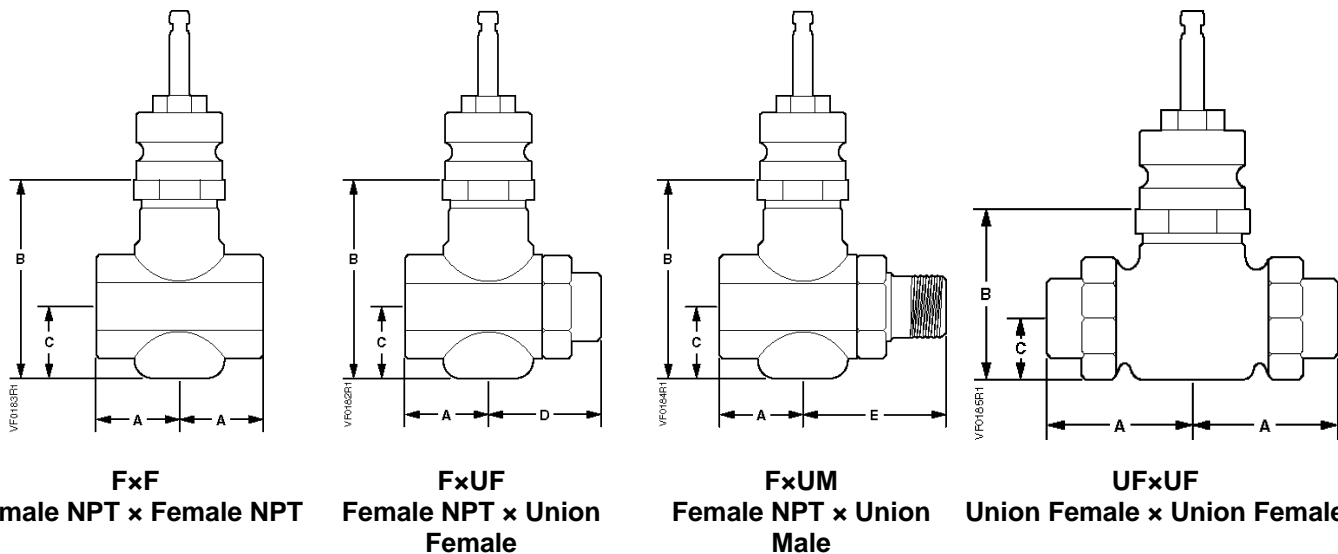
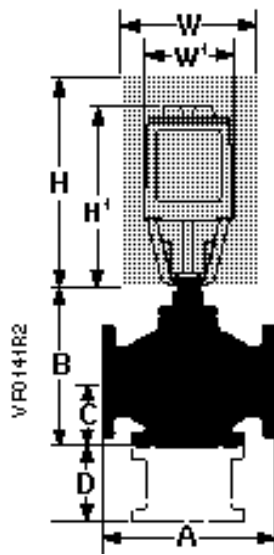


Table 10. 1/2 to 2-Inch Two-Way Valve Dimensions.

Valve Action	Valve Size inch (mm)	A		B	C	D FxUF	E FxUM	Weight lb (kg)			
		FxF, FxUF, and FxUM	UFxUF					FxF	FxUF	FxUM	UFxUF
Normally Closed	1/2 (15)	1-7/16 (36)	—	3-13/16 (97)	2-3/16 (55)	2-5/16 (59)	2-7/8 (73)	3 (1.4)	4 (1.8)	4 (1.8)	—
	3/4 (20)	1-11/16 (43)	—	3-13/16 (97)	2-3/16 (55)	2-5/8 (67)	3-3/16 (81)	4 (1.8)	4 (1.8)	5 (2.3)	—
	1 (25)	2 (50)	—	3-13/16 (97)	2-3/16 (55)	3 (76)	3-1/2 (89)	5 (2.3)	5 (2.3)	5 (2.3)	—
	1-1/4 (32)	2-1/2 (62)	3-3/4 (95)	3-13/16 (97)	2-3/16 (55)	—	—	7 (3.2)	—	—	9 (4.1)
	1-1/2 (40)	2-9/16 (65)	3-15/16 (99)	3-7/8 (99)	2-1/4 (58)	—	—	8 (3.6)	—	—	11 (5)
	2 (50)	3-1/8 (79)	4-9/16 (115)	4-3/16 (106)	2-9/16 (65)	—	—	16 (7.3)	—	—	16 (7.3)
Normally Open	1/2 (15)	1-1/16 (36)	—	2-15/16 (74)	1-1/4 (31)	2-5/16 (59)	2-7/8 (73)	3 (1.4)	3 (1.4)	3 (1.4)	—
	3/4 (20)	1-11/16 (43)	—	3-15/16 (99)	1-7/16 (36)	2-5/8 (67)	3-3/16 (81)	4 (1.8)	4 (1.8)	5 (2.3)	—
	1 (25)	2 (50)	—	3-3/4 (96)	1-1/4 (32)	3 (76)	3-1/2 (89)	5 (2.3)	6 (2.7)	6 (2.7)	—
	1-1/4 (32)	2-1/2 (62)	3-3/4 (95)	4-1/8* (104)	1-5/8* (40)	—	4-3/8 (111)	7 (3.2)	—	8 (3.6)	9 (4.1)
	1-1/2 (40)	2-9/16 (65)	3-15/16 (99)	4-1/4* (109)*	1-3/4* (44)*	—	—	9 (4.1)	—	—	11 (5)
	2 (50)	3-1/8 (79)	4-9/16 (115)	4-9/16* (116)*	2* (51)*	—	—	13 (5.9)	—	—	16 (7.3)

* This dimension is determined by the union nut.

Table 11. 2-1/2 through 6-Inch Three-Way Valve Dimensions.



Nominal Valve Size Inches (mm)	Dimensions in Inches (Millimeters)					Weight lb (kg)	
	A		B	C	D	ANSI Class 125	ANSI Class 250
	ANSI Class 125	ANSI Class 250					
2-1/2 (65)	10-7/8 (276.4)	11-1/2 (292)	9-3/8 (239.2)	3-3/4 (95)	6-1/2 (165)	104 (47)	117 (53)
3 (80)	11-3/4 (298.5)	12-1/2 (318)	10-3/4 (272)	4-3/8 (111)	7 (178)	114 (52)	132 (60)
4 (100)	13-7/8 (352.4)	14-1/2 (368)	12-1/2 (317.6)	5-1/8 (131.6)	7-1/2 (191)	146 (66)	174 (79)
5 (125)	15-3/4 (400)	16-5/8 (422)	13-3/4 (349.2)	5-3/4 (146.2)	8-1/2 (216)	170 (77)	215 (99)
6 (150)	17-3/4 (451)	18-5/8 (473)	15-1/2 (393)	6-5/8 (167)	9-1/2 (241)	199 (90)	261 (119)

Figure 5. 2-1/2 through 6-inch Dimensions.
 See Tables 8, 11, and 12.

Table 12. 2-1/2 through 6-Inch Two-Way Valve Dimensions.

Valve Action	Nominal Valve Size Inches (mm)	ANSI Class 125				ANSI Class 250			
		Dimensions in Inches (mm)			Weight lb (kg)	Dimensions in Inches (mm)			Weight lb (kg)
		A	B	C		A	B	C	
Normally Closed	2-1/2 (65)	10-7/8 (276)	10-5/8 (269)	4-7/8 (125)	107 (48)	11-1/2 (292)	11 (279)	5-3/8 (135)	120 (55)
	3 (80)	11-3/4 (299)	11-15/16 (303)	5-5/8 (142)	117 (53)	12-1/2 (318)	12-7/16 (315)	6 (154)	136 (62)
	4 (100)	13-7/8 (352)	13-15/16 (354)	6-5/8 (168)	154 (70)	14-1/2 (368)	14-3/8 (364)	7 (178)	184 (84)
	5 (125)	15-3/4 (400)	15-1/4 (388)	7-1/2 (185)	175 (79)	16-5/8 (422)	15-3/4 (399)	7-3/4 (196)	221 (101)
	6 (150)	17-3/4 (451)	17-1/16 (433)	8-3/16 (207)	210 (95)	18-5/8 (473)	17-1/2 (444)	8-5/8 (218)	275 (125)
Normally Open	2-1/2 (65)	10-7/8 (276)	11 (281)	4-7/8 (123)	107 (49)	11-1/2 (292)	11 (281)	4-7/8 (123)	121 (55)
	3 (80)	11-3/4 (299)	12-1/4 (312)	5-5/16 (135)	118 (53)	12-1/2 (318)	12-1/4 (312)	5-5/16 (135)	139 (63)
	4 (100)	13-7/8 (352)	13-9/16 (345)	6-5/16 (160)	153 (70)	14-1/2 (368)	13-5/8 (344.7)	6-5/16 (160)	183 (83)
	5 (125)	15-3/4 (400)	15-3/16 (385)	7 (177)	176 (80)	16-5/8 (422)	15-3/16 (385)	7 (177)	222 (101)
	6 (150)	17-3/4 (451)	16-3/4 (426)	7-7/8 (200)	211 (96)	18-5/8 (473)	16-3/4 (426)	7-7/8 (200)	277 (126)

Information in this publication is based on current specifications. The company reserves the right to make changes in specifications and models as design improvements are introduced. Flowrite is a registered trademark of Siemens Building Technologies, Inc. Product or company names mentioned herein may be the trademarks of their respective owners. © 2008 Siemens Building Technologies, Inc.