



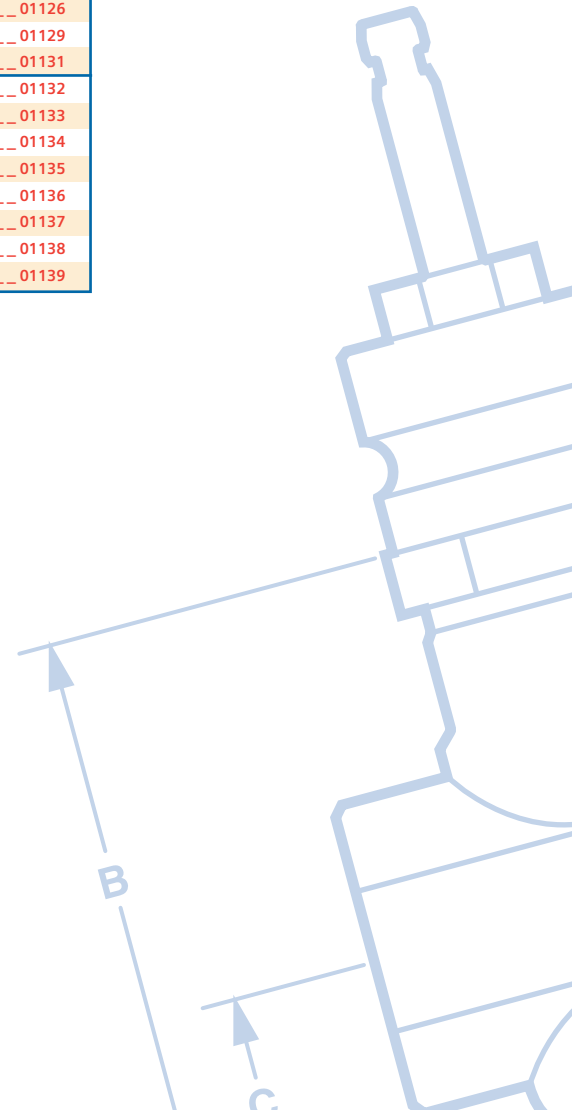
# 1/2 to 1" Powermite MZ



## Electronic

Actuator			Fail-in-Place		Part No.	
			3P	0-10 V		
Valve Body						
			SSB81U	SSB61U		
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 254	APC 255	Close-off psi (kPa)	
2-way	Normally Closed	0.4 (0.24)	1/2 (15)	70 (482)	70 (482)	--- 01100
		0.63 (0.54)	1/2 (15)	70 (482)	70 (482)	--- 01102
		1 (0.85)	1/2 (15)	70 (482)	70 (482)	--- 01104
		1.6 (1.37)	1/2 (15)	70 (482)	70 (482)	--- 01106
		2.5 (2.14)	1/2 (15)	40 (276)	40 (276)	--- 01108
	4 (3.42)	1/2 (15)	40 (276)	40 (276)	--- 01110	
	6.3 (5.38)	3/4 (20)	30 (207)	30 (207)	--- 01112	
	10 (8.55)	1 (25)	30 (207)	30 (207)	--- 01114	
	Normally Open	0.4 (0.24)	1/2 (15)	60 (414)	60 (414)	--- 01115
		0.63 (0.54)	1/2 (15)	60 (414)	60 (414)	--- 01117
1 (0.85)		1/2 (15)	60 (414)	60 (414)	--- 01119	
1.6 (1.37)		1/2 (15)	60 (414)	60 (414)	--- 01121	
2.5 (2.14)		1/2 (15)	35 (241)	35 (241)	--- 01123	
4 (3.42)		1/2 (15)	35 (241)	35 (241)	--- 01126	
6.3 (5.38)		3/4 (20)	30 (207)	30 (207)	--- 01129	
10 (8.55)	1 (25)	30 (207)	30 (207)	--- 01131		
3-way	Mixing	0.4 (0.24)	1/2 (15)	70 (482)	70 (482)	--- 01132
		0.63 (0.54)	1/2 (15)	70 (482)	70 (482)	--- 01133
		1 (0.85)	1/2 (15)	70 (482)	70 (482)	--- 01134
		1.6 (1.37)	1/2 (15)	70 (482)	70 (482)	--- 01135
		2.5 (2.14)	1/2 (15)	40 (276)	40 (276)	--- 01136
		4 (3.42)	1/2 (15)	40 (276)	40 (276)	--- 01137
		6.3 (5.38)	3/4 (20)	30 (207)	30 (207)	--- 01138
10 (8.55)	1 (25)	30 (207)	30 (207)	--- 01139		

Complete Assembly  
APC + Part No.  
Valve Body Only  
599 + Part No.



# 1/2 to 1" Powermite MT



## Pneumatic

Actuator			Fail-Safe						
			3-8 psi (21-55 kPa)		8-13 psi (55-90 kPa)		10-15 psi (69-103 kPa)		
Valve Body				Part No.		Part No.		Part No.	
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 257		APC 258		APC 256		
			Close-off psi (kPa)						
2-way	Normally Closed	0.4 (0.34)	1/2 (15)	40 (276)	25702000B	95 (655)	25802000C	120 (827)	25602000
		0.63 (0.54)	1/2 (15)	40 (276)	25702002B	95 (655)	25802002C	120 (827)	25602002
		1 (0.85)	1/2 (15)	40 (276)	25702004B	95 (655)	25802004C	120 (827)	25602004
		1.6 (1.37)	1/2 (15)	40 (276)	25702006B	95 (655)	25802006C	120 (827)	25602006
		2.5 (2.14)	1/2 (15)	28 (193)	25702008B	50 (345)	25802008C	65 (448)	25602008
	Normally Open	4 (3.42)	1/2 (15)	28 (193)	25702010B	50 (345)	25802010C	65 (448)	25602010
		6.3 (5.38)	3/4 (20)	18 (124)	25702012B	40 (276)	25802012C	50 (345)	25602012
		10 (8.55)	1 (25)	18 (124)	25702014B	40 (276)	25802014C	50 (345)	25602014
		0.4 (0.34)	1/2 (15)	95 (655)	25702030	45 (310)	25802030C	20 (138)	25602030A
		0.63 (0.54)	1/2 (15)	95 (655)	25702032	45 (310)	25802032C	20 (138)	25602032A
3-way	Mixing*	1 (0.85)	1/2 (15)	40 (276)	25702034	45 (310)	25802034C	20 (138)	25602034A
		1.6 (1.37)	1/2 (15)	95 (655)	25702036	45 (310)	25802036C	20 (138)	25602036A
		2.5 (2.14)	1/2 (15)	45 (310)	25702038	25 (172)	25802038C	10 (69)	25602038A
		4 (3.42)	1/2 (15)	45 (310)	25702041	25 (172)	25802041C	10 (69)	25602041A
		6.3 (5.38)	3/4 (20)	35 (241)	25702044	10 (69)	25802044C	—	25602044A
		10 (8.55)	1 (25)	35 (241)	25702046	10 (69)	25802046C	—	25602046A
		0.4 (0.34)	1/2 (15)	40 (276)	25702064B	95 (655)	25802064	120 (827)	25602064A
0.63 (0.54)	1/2 (15)	40 (276)	25702065B	95 (655)	25802065	120 (827)	25602065A		
1 (0.85)	1/2 (15)	40 (276)	25702066B	95 (655)	25802066	120 (827)	25602066A		
1.6 (1.37)	1/2 (15)	40 (276)	25702067B	95 (655)	25802067	120 (827)	25602067A		
2.5 (2.14)	1/2 (15)	28 (193)	25702068B	50 (345)	25802068	65 (448)	25602068A		
4 (3.42)	1/2 (15)	28 (193)	25702069B	50 (345)	25802069	65 (448)	25602069A		
6.3 (5.38)	3/4 (20)	18 (124)	25702070B	40 (276)	25802070	50 (345)	25602070A		
10 (8.55)	1 (25)	18 (124)	25702071B	40 (276)	25802071	50 (345)	25602071A		

These selection tables only contain FXF end connections with brass trim and equal percentage flow characteristics.

For complete selection, refer to the current edition of *Master HVAC Products Catalog*.

**Complete Assembly**  
APC + Part No.  
**Valve Body Only**  
599 + Part No.

### Table Note








\*Values are for the upper port NC.

Values in chart are for 15 psi supplied to the actuator.

# 1/2 to 1-1/2" Powermite MT



## Electronic

Actuator			Fail-in-Place			Fail-Safe				Part No.			
			3P	0-10 V		3P	0-10 V						
Valve Body													
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 259	APC 261	APC 264	APC 260	APC 266	APC 262	APC 265				
			Close-off psi (kPa)										
2-way	Normally Closed	0.4 (0.24)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	---	02000	
		0.63 (0.54)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	---	02002
		1 (0.85)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	---	02004
		1.6 (1.37)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	---	02006
		2.5 (2.14)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	---	02008
		4 (3.42)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	50 (345)	---	02010
		6.3 (5.38)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	---	02012
		10 (8.55)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	---	02014
	Normally Open	16 (13.8)	21 (145)	21 (145)	21 (145)	21 (145)	21 (145)	21 (145)	21 (145)	21 (145)	---	02085	
		25 (21.5)	—	—	13 (90)	—	13 (90)	—	13 (90)	---	02088		
		0.4 (0.34)	120 (828)	120 (828)	160 (1103)	120 (828)	160 (1103)	120(828)	160 (1103)	---	02030		
		0.63 (0.54)	120 (828)	120 (828)	160 (1103)	120 (828)	160 (1103)	120(828)	160 (1103)	---	02032		
		1 (0.85)	120 (828)	120 (828)	160 (1103)	120 (828)	160 (1103)	120(828)	160 (1103)	---	02034		
		1.6 (1.37)	120 (828)	120 (828)	160 (1103)	120 (828)	160 (1103)	120(828)	160 (1103)	---	02036		
		2.5 (2.14)	65 (448)	65 (448)	85 (586)	65 (448)	85 (586)	65 (448)	85 (586)	---	02038		
		4 (3.42)	65 (448)	65 (448)	85 (586)	65 (448)	85 (586)	65 (448)	85 (586)	---	02041		
3-way	Mixing*	6.3 (5.38)	55 (379)	55 (379)	70 (482)	55 (379)	70 (482)	55 (379)	70 (482)	---	02044		
		10 (8.55)	55 (379)	55 (379)	70 (482)	55 (379)	70 (482)	55 (379)	70 (482)	---	02046		
		16 (13.8)	20 (138)	20 (138)	28 (193)	20 (138)	28 (193)	20 (138)	28 (193)	---	02084		
		25 (21.5)	10 (68)	10 (68)	14 (96)	10 (68)	14 (96)	10 (68)	14 (96)	---	02087		
		0.4 (0.34)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	---	02064		
		0.63 (0.54)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	---	02065		
		1 (0.85)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	---	02066		
1.6 (1.37)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	95 (655)	---	02067				
2.5 (2.14)	50 (345)	50 (345)	50 (345)	55 (379)	50 (345)	50 (345)	50 (345)	---	02068				
4 (3.42)	50 (345)	50 (345)	50 (345)	55 (379)	50 (345)	50 (345)	50 (345)	---	02069				
6.3 (5.38)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	---	02070				
10 (8.55)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	40 (276)	---	02071				
16 (13.8)	10 (69)	10 (69)	10 (69)	10 (69)	10 (69)	10 (69)	10 (69)	---	02086				
25 (21.5)	—	—	7 (48)	—	7 (48)	—	7 (48)	---	02089				

**Complete Assembly**  
**APC + Part No.**  
**Valve Body Only**  
**599 + Part No.**

### Table Note

\*Values are for the upper port NC.  
 Values in chart are for 15 psi supplied to the actuator.  
 For Fail-in-Place actuators at 0V valve is closed.

These selection tables only contain FXF end connections with brass trim and equal percentage flow characteristics.

For complete selection, refer to the current edition of *Master HVAC Products Catalog*.

# 1/2 to 2" Flowrite 599 Series



## Pneumatic

Actuator			Spring Return							Part No.	
			4" 3-8 psi (21-55 kPa)	4" 5-10 psi (34-69 kPa)	4" 10-15 psi (69-103 kPa)	8"	8" High Temp.	8" with Positioner	8" High Temp. with Positioner		
Valve Body											
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 268	APC 269	APC 270	APC 277	APC 278	APC 283	APC 284		
Close-off psi (kPa)											
2-way	Normally Closed	1 (0.9)	1/2 (15)	*	*	236 (1627)	250 (1724)	*	250 (1724)	*	--- 03180
		1.6 (1.4)	1/2 (15)	*	*	236 (1627)	250 (1724)	*	250 (1724)	*	--- 03181
		2.5 (2.2)	1/2 (15)	*	*	236 (1627)	250 (1724)	*	250 (1724)	*	--- 03182
		4 (3.4)	1/2 (15)	*	*	236 (1627)	250 (1724)	*	250 (1724)	*	--- 03183
		6.3 (5.4)	3/4 (20)	*	*	155 (1069)	250 (1724)	*	250 (1724)	*	--- 03184
		10 (8.6)	1 (25)	*	*	91 (627)	250 (1724)	*	250 (1724)	*	--- 03185
		16 (14)	1-1/4 (32)	*	*	52 (359)	148 (1020)	*	148 (1020)	*	--- 03186
	25 (22)	1-1/2 (40)	*	*	32 (331)	92 (634)	*	92 (634)	*	--- 03187	
	40 (34)	2 (50)	*	*	20 (138)	55 (379)	*	55 (379)	*	--- 03188	
	Normally Open	1 (0.9)	1/2 (15)	142 (979)	*	*	250 (1724)	—	250 (1724)	—	--- 03162
		1.6 (1.4)	1/2 (15)	142 (979)	*	*	250 (1724)	—	250 (1724)	—	--- 03163
		2.5 (2.2)	1/2 (15)	142 (979)	*	*	250 (1724)	—	250 (1724)	—	--- 03164
		4 (3.4)	1/2 (15)	142 (979)	*	*	250 (1724)	—	250 (1724)	—	--- 03165
		6.3 (5.4)	3/4 (20)	80 (552)	*	*	231 (1593)	—	231 (1593)	—	--- 03166
10 (8.6)		1 (25)	52 (359)	*	*	150 (1034)	—	150 (1034)	—	--- 03167	
16 (14)		1-1/4 (32)	32 (221)	*	*	93 (641)	—	93 (641)	—	--- 03168	
25 (22)	1-1/2 (40)	20 (138)	*	*	60 (414)	—	60 (414)	—	--- 03169		
40 (34)	2 (50)	12 (83)	*	*	37 (255)	—	37 (255)	—	--- 03170		
3-way	Mixing	1 (0.9)	1/2 (15)	*	236 (1627)	*	250 (1724)	—	250 (1724)	—	--- 03198
		1.6 (1.4)	1/2 (15)	*	236 (1627)	*	250 (1724)	—	250 (1724)	—	--- 03199
		2.5 (2.2)	1/2 (15)	*	236 (1627)	*	250 (1724)	—	250 (1724)	—	--- 03200
		4 (3.4)	1/2 (15)	*	236 (1627)	*	250 (1724)	—	250 (1724)	—	--- 03201
		6.3 (5.4)	3/4 (20)	*	155 (1069)	*	250 (1724)	—	250 (1724)	—	--- 03202
		10 (8.6)	1 (25)	*	91 (627)	*	250 (1724)	—	250 (1724)	—	--- 03203
		16 (14)	1-1/4 (32)	*	52 (359)	*	148 (1020)	—	148 (1020)	—	--- 03204
		25 (22)	1-1/2 (40)	*	32 (331)	*	92 (634)	—	92 (634)	—	--- 03205
40 (34)	2 (50)	*	20 (138)	*	55 (379)	—	55 (379)	—	--- 03206		

### Ordering Note

Order valve and actuator separately.

**Complete Assembly**

**APC + Part No.**

**Valve Body Only**

**599 + Part No.**

These selection tables only contain FXF end connections with brass trim and equal percentage flow characteristics.

For complete selection, refer to the current edition of *Master HVAC Products Catalog*.






# 1/2 to 2" Flowrite 599 Series



These selection tables only contain FxF end connections with brass trim and equal percentage flow characteristics.

For complete selection, refer to the current edition of *Master HVAC Products Catalog*.

## Electronic NSR






Actuator			Non-Spring Return					Part No.
			3P 30 sec.	3P 120 sec.	3P	0-10 V/4-20 mA	0-10 V	
Valve Body			 SQX82.03U	 SQX82.00U	 SKD82.50U	 SQX62U	 599-10022	
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 273	APC 272	APC 275	APC 271	APC 295	↓
			Close-off psi (kPa)					
2-way	Normally Closed	1 (0.9) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03180
		1.6 (1.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03181
		2.5 (2.2) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03182
		4 (3.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03183
		6.3 (5.4) 3/4 (20)	221 (1524)	221 (1524)	250 (1724)	221 (1524)	238 (1640)	--- 03184
		10 (8.6) 1 (25)	130 (896)	130 (896)	203 (1400)	130 (896)	140 (965)	--- 03185
		16 (14) 1-1/4 (32)	75 (517)	75 (517)	117 (807)	75 (517)	81 (558)	--- 03186
	25 (22) 1-1/2 (40)	46 (317)	46 (317)	73 (503)	46 (317)	50 (345)	--- 03187	
	40 (34) 2 (50)	28 (193)	28 (193)	44 (303)	28 (193)	31 (214)	--- 03188	
	Normally Open	1 (0.9) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03162
		1.6 (1.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03163
		2.5 (2.2) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03164
		4 (3.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03165
		6.3 (5.4) 3/4 (20)	173 (1193)	173 (1193)	250 (1724)	173 (1193)	186 (1282)	--- 03166
10 (8.6) 1 (25)		112 (772)	112 (772)	201 (1386)	112 (772)	121 (834)	--- 03167	
16 (14) 1-1/4 (32)		69 (476)	69 (476)	124 (855)	69 (476)	75 (517)	--- 03168	
25 (22) 1-1/2 (40)	44 (303)	44 (303)	80 (552)	44 (303)	48 (331)	--- 03169		
40 (34) 2 (50)	27 (186)	27 (186)	49 (338)	27 (186)	30 (207)	--- 03170		
3-way	Mixing	1 (0.9) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03198
		1.6 (1.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03199
		2.5 (2.2) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03200
		4 (3.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03201
		6.3 (5.4) 3/4 (20)	221 (1524)	221 (1524)	250 (1724)	221 (1524)	238 (1640)	--- 03202
		10 (8.6) 1 (25)	130 (896)	130 (896)	203 (1400)	130 (896)	140 (965)	--- 03203
		16 (14) 1-1/4 (32)	75 (517)	75 (517)	117 (807)	75 (517)	81 (558)	--- 03204
25 (22) 1-1/2 (40)	46 (317)	46 (317)	73 (503)	46 (317)	50 (345)	--- 03205		
40 (34) 2 (50)	28 (193)	28 (193)	44 (303)	28 (193)	31 (214)	--- 03206		

**Complete Assembly**  
APC + Part No.  
**Valve Body Only**  
599 + Part No.

# 1/2 to 2" Flowrite 599 Series



## Electronic SR

Actuator			Spring Return					Part No.
			2P	3P	0-10 V	0-10 V/4-20 mA	0-10 V	
Valve Body								
			599-03611	SKD82.51U	599-03609	SKD62U	599-10022	
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC	APC	APC	APC	APC	
			299	276	298	274	296	
			Close-off psi (kPa)					
2-way	Normally Closed	1 (0.9) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03180
		1.6 (1.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03181
		2.5 (2.2) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03182
		4 (3.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03183
		6.3 (5.4) 3/4 (20)	221 (1524)	221 (1524)	221 (1524)	221 (1524)	238 (1640)	--- 03184
		10 (8.6) 1 (25)	130 (896)	130 (896)	130 (896)	130 (896)	140 (965)	--- 03185
		16 (14) 1-1/4 (32)	75 (517)	75 (517)	75 (517)	75 (517)	81 (558)	--- 03186
	25 (22) 1-1/2 (40)	46 (317)	46 (317)	46 (317)	46 (317)	50 (345)	--- 03187	
	40 (34) 2 (50)	28 (193)	28 (193)	28 (193)	28 (193)	31 (214)	--- 03188	
	Normally Open	1 (0.9) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03162
		1.6 (1.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03163
		2.5 (2.2) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03164
		4 (3.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03165
		6.3 (5.4) 3/4 (20)	173 (1193)	250 (1724)	173 (1193)	250 (1724)	186 (1282)	--- 03166
10 (8.6) 1 (25)		112 (772)	201 (1386)	112 (772)	201 (1386)	121 (834)	--- 03167	
16 (14) 1-1/4 (32)		69 (476)	124 (855)	69 (476)	124 (855)	75 (517)	--- 03168	
25 (22) 1-1/2 (40)	44 (303)	80 (552)	44 (303)	80 (552)	48 (331)	--- 03169		
40 (34) 2 (50)	27 (186)	49 (338)	27 (186)	49 (338)	30 (207)	--- 03170		
3-way	Mixing	1 (0.9) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03198
		1.6 (1.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03199
		2.5 (2.2) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03200
		4 (3.4) 1/2 (15)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	250 (1724)	--- 03201
		6.3 (5.4) 3/4 (20)	221 (1524)	250 (1724)	221 (1524)	250 (1724)	238 (1640)	--- 03202
		10 (8.6) 1 (25)	130 (896)	203 (1400)	130 (896)	203 (1400)	140 (965)	--- 03203
		16 (14) 1-1/4 (32)	75 (517)	117 (807)	75 (517)	117 (807)	81 (558)	--- 03204
		25 (22) 1-1/2 (40)	46 (317)	73 (503)	46 (317)	73 (503)	50 (345)	--- 03205
40 (34) 2 (50)	28 (193)	44 (303)	28 (193)	44 (303)	31 (214)	--- 03206		

These selection tables only contain FxF end connections with brass trim and equal percentage flow characteristics.





For complete selection, refer to the current edition of *Master HVAC Products Catalog*.





# 2-1/2 to 6" Flowrite 599 Series ANSI 125



These selection tables only contain flange end connections with standard bronze trim and equal percentage flow characteristics.

For complete selection, refer to the current edition of *Master HVAC Products Catalog*.

Pneumatic			Spring Return				Part No.
			20 mm Stroke		40 mm Stroke		
Actuator			8"	8" Hi-Temp.	12"	12"	Part No.
							
Valve Body			599-01050	599-01051	599-01010	599-01000	
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 277	APC 278	APC 279	APC 281	
			Close-off psi (kPa)				
2-way	Normally Closed	63 (54) 2-1/2 (65)	36 (248)	*	114 (786)	—	--- 05990
		100 (86) 3 (80)	23 (158)	*	74 (610)	—	--- 05991
		160 (140) 4 (100)	—	—	—	46 (317)	--- 05992
		250 (215) 5 (125)	—	—	—	29 (199)	--- 05993
		400 (340) 6 (150)	—	—	—	20 (137)	--- 05994
2-way	Normally Open	63 (54) 2-1/2 (65)	31 (213)	*	95 (655)	—	--- 05980
		100 (86) 3 (80)	20 (138)	*	63 (434)	—	--- 05981
		160 (140) 4 (100)	—	—	—	40 (275)	--- 05982
		250 (215) 5 (125)	—	—	—	26 (179)	--- 05983
		400 (340) 6 (150)	—	—	—	18 (124)	--- 05984
3-way	Mixing	63 (54) 2-1/2 (65)	36 (248)	*	114 (786)	—	--- 06160
		100 (86) 3 (80)	23 (158)	*	74 (610)	—	--- 06161
		160 (140) 4 (100)	—	—	—	46 (317)	--- 06162
		250 (215) 5 (125)	—	—	—	29 (199)	--- 06163
		400 (340) 6 (150)	—	—	—	20 (137)	--- 06164

Pneumatic w/ Factory-Mounted Positioner			Spring Return				Part No.
			20 mm Stroke		40 mm Stroke		
Actuator			8" with positioner	8" Hi-Temp. with positioner	12" with positioner	12" with positioner	Part No.
							
Valve Body			599-01050	599-01051	599-01010	599-01000	
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 283	APC 284	APC 285	APC 287	
			Close-off psi (kPa)				
2-way	Normally Closed	63 (54) 2-1/2 (65)	36 (248)	*	114 (786)	—	--- 05990
		100 (86) 3 (80)	23 (158)	*	74 (610)	—	--- 05991
		160 (140) 4 (100)	—	—	—	46 (317)	--- 05992
		250 (215) 5 (125)	—	—	—	29 (199)	--- 05993
		400 (340) 6 (150)	—	—	—	20 (137)	--- 05994
2-way	Normally Open	63 (54) 2-1/2 (65)	31 (213)	*	95 (655)	—	--- 05980
		100 (86) 3 (80)	20 (138)	*	63 (434)	—	--- 05981
		160 (140) 4 (100)	—	—	—	40 (275)	--- 05982
		250 (215) 5 (125)	—	—	—	26 (179)	--- 05983
		400 (340) 6 (150)	—	—	—	18 (124)	--- 05984
3-way	Mixing	63 (54) 2-1/2 (65)	36 (248)	*	114 (786)	—	--- 06160
		100 (86) 3 (80)	23 (158)	*	74 (610)	—	--- 06161
		160 (140) 4 (100)	—	—	—	46 (317)	--- 06162
		250 (215) 5 (125)	—	—	—	29 (199)	--- 06163
		400 (340) 6 (150)	—	—	—	20 (137)	--- 06164

**Complete Assembly**  
APC + Part No.

**Valve Body Only**  
599 + Part No.

**Ordering Note**  
\*Order valve and actuator separately.

# 2-1/2 to 6" Flowrite 599 Series ANSI 125



These selection tables only contain flange end connections with standard trim and equal percentage flow characteristics.

For complete selection, refer to the current edition of *Master HVAC Products Catalog*.

Electronic			Non-Spring Return					Part No.		
Actuator / Valve Body			3P			0-10 V				
			SKD82.50U	SKB82.50U	SKC82.60U	Lo	Hi			
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 275	APC 290	APC 293	APC 295	APC 297			
			Close-off psi (kPa)							
2-way	Normally Closed	63 (54) 2-1/2 (65)	34 (234)	97 (668)	—	50 (344)	—	---05990		
		100 (86) 3 (80)	22 (152)	63 (434)	—	32 (220)	—	---05991		
		160 (140) 4 (100)	—	—	39 (268)	—	20 (137)	---05992		
		250 (215) 5 (125)	—	—	25 (172)	—	—	---05993		
		400 (340) 6 (150)	—	—	17 (117)	—	—	---05994		
		63 (54) 2-1/2 (65)	38 (262)	153 (518)	—	48 (330)	—	---05980		
	Normally Open	100 (86) 3 (80)	25 (172)	101 (342)	—	32 (220)	—	---05981		
		160 (140) 4 (100)	—	—	65 (448)	—	21 (144)	---05982		
		250 (215) 5 (125)	—	—	42 (289)	—	—	---05983		
		400 (340) 6 (150)	—	—	29 (199)	—	—	---05984		
		3-way	Mixing	63 (54) 2-1/2 (65)	34 (234)	34 (234)	—	50 (344)	—	---06160
				100 (86) 3 (80)	22 (152)	22 (152)	—	32 (220)	—	---06161
160 (140) 4 (100)	—			—	39 (268)	—	20 (137)	---06162		
250 (215) 5 (125)	—			—	25 (172)	—	—	---06163		
400 (340) 6 (150)	—			—	17 (117)	—	—	---06164		

**Complete Assembly**  
APC + Part No.  
**Valve Body Only**  
599 + Part No.

Electronic			Spring Return							Part No.		
Actuator / Valve Body			3P			0-10 V/4-20 mA		0-10 V	0-10 V/4-20 mA			
			SKD82.51U	SKB82.51U	SKC82.61U	SKD62U	SKB62U	599-10022	SKC62U			
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 276	APC 289	APC 292	APC 274	APC 291	APC 296	APC 294			
			Close-off psi (kPa)									
2-way	Normally Closed	63 (54) 2-1/2 (65)	34 (234)	97 (668)	—	34 (234)	97 (668)	24 (165)	—	---05990		
		100 (86) 3 (80)	22 (152)	63 (434)	—	22 (152)	63 (434)	15 (103)	—	---05991		
		160 (140) 4 (100)	—	—	39 (268)	—	—	—	39 (268)	—	---05992	
		250 (215) 5 (125)	—	—	25 (172)	—	—	—	—	25 (172)	---05993	
		400 (340) 6 (150)	—	—	17 (117)	—	—	—	—	17 (117)	---05994	
		63 (54) 2-1/2 (65)	38 (262)	153 (518)	—	38 (262)	153 (518)	23 (158)	—	—	---05980	
	Normally Open	100 (86) 3 (80)	25 (172)	101 (342)	—	25 (172)	101 (342)	16 (110)	—	—	---05981	
		160 (140) 4 (100)	—	—	65 (448)	—	—	—	65 (448)	—	---05982	
		250 (215) 5 (125)	—	—	42 (289)	—	—	—	42 (289)	—	---05983	
		400 (340) 6 (150)	—	—	29 (199)	—	—	—	29 (199)	—	---05984	
		3-way	Mixing	63 (54) 2-1/2 (65)	34 (234)	97 (668)	—	34 (234)	97 (668)	24 (165)	—	---06160
				100 (86) 3 (80)	22 (152)	63 (434)	—	22 (152)	63 (434)	15 (103)	—	---06161
160 (140) 4 (100)	—			—	39 (268)	—	—	—	39 (268)	—	---06162	
250 (215) 5 (125)	—			—	25 (172)	—	—	—	25 (172)	—	---06163	
400 (340) 6 (150)	—			—	17 (117)	—	—	—	17 (117)	—	---06164	

# 2-1/2 to 6" Flowrite 599 Series ANSI 250



These selection tables only contain flange end connections with standard trim and equal percentage flow characteristics.

For complete selection, refer to the current edition of *Master HVAC Products Catalog*.

### Complete Assembly





APC + Part No.





Valve Body Only

599 + Part No.

### Ordering Note

\*Order valve and actuator separately.

Pneumatic			Spring Return				Part No.
			20 mm Stroke		40 mm Stroke		
Actuator			8"	8" Hi-Temp.	12"	12"	↓
							
Valve Body			599-01050	599-01051	599-01010	599-01000	
Action	Flow Rate C <sub>v</sub> (Kvs)	Line Size in. (mm)	APC 277	APC 278	APC 279	APC 281	
			Close-off psi (kPa)				
2-way	Normally Closed	63 (54) 2-1/2 (65)	36 (248)	*	114 (786)	—	--- 05950
		100 (86) 3 (80)	23 (158)	*	74 (610)	—	--- 05951
		160 (140) 4 (100)	—	—	—	46 (317)	--- 05952
		250 (215) 5 (125)	—	—	—	29 (199)	--- 05953
		400 (340) 6 (150)	—	—	—	20 (137)	--- 05954
	Normally Open	63 (54) 2-1/2 (65)	31 (213)	*	95 (655)	—	--- 05940
		100 (86) 3 (80)	20 (138)	*	63 (434)	—	--- 05941
		160 (140) 4 (100)	—	—	—	40 (275)	--- 05942
		250 (215) 5 (125)	—	—	—	26 (179)	--- 05943
		400 (340) 6 (150)	—	—	—	18 (124)	--- 05944
3-way	Mixing	63 (54) 2-1/2 (65)	36 (248)	*	114 (786)	—	--- 06170
		100 (86) 3 (80)	23 (158)	*	74 (610)	—	--- 06171
		160 (140) 4 (100)	—	—	—	46 (317)	--- 06172
		250 (215) 5 (125)	—	—	—	29 (199)	--- 06173
		400 (340) 6 (150)	—	—	—	20 (137)	--- 06174

Pneumatic w/ Factory Mounted Positioner			Spring Return				Part No.
			20 mm Stroke		40 mm Stroke		
Actuator			8" with positioner	8" Hi-Temp. with positioner	12" with positioner	12" with positioner	↓
							
Valve Body			599-01050	599-01051	599-01010	599-01000	
Action	Flow Rate C <sub>v</sub> (Kvs)	Line Size in. (mm)	APC 283	APC 284	APC 285	APC 287	
			Close-off psi (kPa)				
2-way	Normally Closed	63 (54) 2-1/2 (65)	36 (248)	*	114 (786)	—	--- 05950
		100 (86) 3 (80)	23 (158)	*	74 (610)	—	--- 05951
		160 (140) 4 (100)	—	—	—	46 (317)	--- 05952
		250 (215) 5 (125)	—	—	—	29 (199)	--- 05953
		400 (340) 6 (150)	—	—	—	20 (137)	--- 05954
	Normally Open	63 (54) 2-1/2 (65)	31 (213)	*	95 (655)	—	--- 05940
		100 (86) 3 (80)	20 (138)	*	63 (434)	—	--- 05941
		160 (140) 4 (100)	—	—	—	40 (275)	--- 05942
		250 (215) 5 (125)	—	—	—	26 (179)	--- 05943
		400 (340) 6 (150)	—	—	—	18 (124)	--- 05944
3-way	Mixing	63 (54) 2-1/2 (65)	36 (248)	*	114 (786)	—	--- 06170
		100 (86) 3 (80)	23 (158)	*	74 (610)	—	--- 06171
		160 (140) 4 (100)	—	—	—	46 (317)	--- 06172
		250 (215) 5 (125)	—	—	—	29 (199)	--- 06173
		400 (340) 6 (150)	—	—	—	20 (137)	--- 06174

# 2-1/2 to 6" Flowrite 599 Series ANSI 250



## Electronic

Actuator			Non-Spring Return					Part No.
			3P			0-10 V		
Valve Body								
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 275	APC 290	APC 293	APC 295	APC 297	
			Close-off psi (kPa)					
2-way Normally Closed	63 (54)	2-1/2 (65)	34 (234)	97 (668)	—	50 (344)	—	---05950
	100 (86)	3 (80)	22 (152)	63 (434)	—	32 (220)	—	---05951
	160 (140)	4 (100)	—	—	39 (268)	—	20 (137)	---05952
	250 (215)	5 (125)	—	—	25 (172)	—	—	---05953
	400 (340)	6 (150)	—	—	17 (117)	—	—	---05954
2-way Normally Open	63 (54)	2-1/2 (65)	38 (262)	153 (518)	—	48 (330)	—	---05940
	100 (86)	3 (80)	25 (172)	101 (342)	—	32 (220)	—	---05941
	160 (140)	4 (100)	—	—	65 (448)	—	21 (144)	---05942
	250 (215)	5 (125)	—	—	42 (289)	—	—	---05943
	400 (340)	6 (150)	—	—	29 (199)	—	—	---05944
3-way Mixing	63 (54)	2-1/2 (65)	34 (234)	97 (668)	—	50 (344)	—	---06170
	100 (86)	3 (80)	22 (152)	63 (434)	—	32 (220)	—	---06171
	160 (140)	4 (100)	—	—	39 (268)	—	20 (137)	---06172
	250 (215)	5 (125)	—	—	25 (172)	—	—	---06173
	400 (340)	6 (150)	—	—	17 (117)	—	—	---06174

These selection tables only contain flange end connections with standard trim and equal percentage flow characteristics.

For complete selection, refer to the current edition of *Master HVAC Products Catalog*.

**Complete Assembly**  
APC + Part No.  
**Valve Body Only**  
599 + Part No.

## Electronic

Actuator			Spring Return					Part No.		
			3P			0-10 V/4-20 mA			0-10 V	0-10 V/4-20 mA
Valve Body										
Action	Flow Rate Cv (Kvs)	Line Size in. (mm)	APC 276	APC 289	APC 292	APC 274	APC 291	APC 296	APC 294	
			Close-off psi (kPa)							
2-way Normally Closed	63 (54)	2-1/2 (65)	34 (234)	97 (668)	—	34 (234)	97 (668)	24 (165)	—	---05950
	100 (86)	3 (80)	22 (152)	63 (434)	—	22 (152)	63 (434)	15 (103)	—	---05951
	160 (140)	4 (100)	—	—	39 (268)	—	—	—	39 (268)	---05952
	250 (215)	5 (125)	—	—	25 (172)	—	—	—	25 (172)	---05953
	400 (340)	6 (150)	—	—	17 (117)	—	—	—	17 (117)	---05954
2-way Normally Open	63 (54)	2-1/2 (65)	38 (262)	153 (518)	—	38 (262)	153 (518)	23 (158)	—	---05940
	100 (86)	3 (80)	25 (172)	101 (342)	—	25 (172)	101 (342)	16 (110)	—	---05941
	160 (140)	4 (100)	—	—	65 (448)	—	—	—	65 (448)	---05942
	250 (215)	5 (125)	—	—	42 (289)	—	—	—	42 (289)	---05943
	400 (340)	6 (150)	—	—	29 (199)	—	—	—	29 (199)	---05944
3-way Mixing	63 (54)	2-1/2 (65)	34 (234)	97 (668)	—	34 (234)	97 (668)	24 (165)	—	---06170
	100 (86)	3 (80)	22 (152)	63 (434)	—	22 (152)	63 (434)	15 (103)	—	---06171
	160 (140)	4 (100)	—	—	39 (268)	—	—	—	39 (268)	---06172
	250 (215)	5 (125)	—	—	25 (172)	—	—	—	25 (172)	---06173
	400 (340)	6 (150)	—	—	17 (117)	—	—	—	17 (117)	---06174