Honeywell

5000 Series Zone Valves

V8043 QUICKFIT®

SUBMITTAL SHEET

APPLICATION

Use this valve in closed loop hydronic systems that do not contain dissolved oxygen in system water, such as fresh water from frequent source of makeup water. Valve designed for cycling (not constantly powered on) applications.

QuickFit® actuator provides an easy snap on and off connection to the valve assembly.

SPECIFICATIONS

Application: Hydronic Conrol

Type: 2 Position

Body Pattern: Two-way, Straight-Through

Voltage: 24 Vac

Power Consumption: 7.2 Va

Frequency: 60 Hz

De-engergized Position: Normally Closed

Maximum Ambient Temperature: 125 F (52 C)

Nominal Timing (sec, min): 15 sec

Static Pressure: 300 Psi (2068 kPa)

Warranty: 3 year limited warranty

MODELS

V8043 (Straight-Through, Normally Closed) V8043A: Leadwires V8043E: Leadwires and End Switch V8043F: Terminal Board and End Switch

Valve Materials

Body	Brass
Stem	Stainless Steel
Seat	Brass
Packing O-Ring	EPDM Rubber
Ball Plug	Buna-N (NBR) Rubber Ball

Actuator Materials

Case	Brass
Cover	Stainless Steel
Sector Gears	Brass

Job Name ____

Engineer _

Mechanical Contractor ____

Contractor's P.O. No.

Representative _

Notes



Dimensions

Product Number		Dimensions						
Floudet Number	Α	В	С	D	Е			
V8043A5011	3 1/2"	4"	3 1/8"	2 3/8"	5 1/4"			
V8043A5029	3 1/2"	4"	3 1/2"	2 3/8"	5 1/4"			
V8043E5004	3 1/2"	4"	3 1/8"	2 3/8"	5 1/4"			
V8043E5012	3 1/2"	4"	3 1/2"	2 3/8"	5 1/4"			
V8043E5020	3 1/2"	4"	3 11/16"	2 3/8"	5 1/4"			
V8043E5061	3 1/2"	4"	3 1/2"	2 3/8"	5 1/4"			
V8043E5079	3 1/2"	4"	3 11/16"	2 3/8"	5 1/4"			
V8043F5036	3 1/2"	4"	3 1/2"	2 3/8"	5 1/4"			
V8043F5051	3 1/2"	4"	3 11/16"	2 3/8"	5 1/4"			
V8043F5093	3 1/2"	4"	3 1/2"	2 3/8"	5 1/4"			

Maximum Close-Off Pressure & Capacity

Product number		Max Pr	essure	Capacity	
Product number		Psi	kPa	Cv	Κv
V8043A5011		20	138	3.5	3
V8043A5029		20	138	3.5	3
V8043E5004		20	138	3.5	3
V8043E5012		20	138	3.5	3
V8043E5020		20	138	3.5	3
V8043E5061		8	55	8	6.9
V8043E5079		8	55	8	6.9
V8043F5036		20	138	3.5	3
V8043F5051		20	138	3.5	3
V8043F5093		8	55	8	6.9



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Notes Notes Notes

Approval Service

Tag No.



BALL VALVE

The 5000 Series Zone Valves use a NBR rubber ball instead of a flange to create a seal. Using a ball versus the traditional flange provides a new sealing surface each time the valve operates, producing a quality seal and significantly increasing service life.





TO ALLOW LET-BY

3. BALL ROLLS INTO PORT; STOPS SMALL FLOW: NEW SEAT EACH CYCLE

ADDITIONAL SPECIFICATIONS

Actuator Electrical Rating: 24Vac 60 Hz, 0.30 A Current Draw; 5 W, 7.2 VA maximum

End Switch Rating: 120 V, 4.4 A running with 26.4 A inrush (60Hz). Pilot duty 50 VA at 24 V

Humidity Rating: 5-95% RH (non-condensing)

Atmosphere: non-corrosive, non-explosive

Timing:

V8043: Open or close in 15 seconds max.

Fluid Temperature Range: 50 F to 200 F (10 C to 93 C)

Maual Opener: Manual opener allows opening the valve in case of power failer. Valve returns to automatic position when power is restored.

Approvals:

Canadian Standards Association: CSA C/US Underwriters Laboratories, Inc.

MOUNTING

The valve can be mounted in any position on a vertical line. See the figure below. If the valve is mounted horizontally, the powerhead must be even with or above the center line of the piping. Make sure to leave enough room above the powerhead to remove the cover for servicing.



SERVICING 1000 SERIES ZONE VALVES

Install a 5000 Series actuator on a 1000 series valve body. The 5000 Series replacement actuator is backward compatible with the 1000 series zone valve.



For install instructions refer to literature number 67-7184.

V8043 5000 Series Part Numbers

Product	Pipe	Connection	Electrical	End	Manual
Number	Size	Туре	Connections	Switch	Opener
V8043A5011	1/2"	Sweat	18 in. leads (457 mm leads)	_	Yes
V8043A5029	3/4"	Sweat	18 in. leads (457 mm leads)	_	Yes
V8043E5004	1/2"	Sweat	18 in. leads (457 mm leads)	SPST	Yes
V8043E5012	3/4"	Sweat	18 in. leads (457 mm leads)	SPST	Yes
V8043E5020	1"	Sweat	18 in. leads (457 mm leads)	SPST	Yes
V8043E5061	3/4"	Sweat	18 in. leads (457 mm leads)	SPST	Yes
V8043E5079	1"	Sweat	18 in. leads (457 mm leads)	SPST	Yes
V8043F5036	3/4"	Sweat	Screw Terminal Block	SPST	Yes
V8043F5051	1"	Sweat	Screw Terminal Block	SPST	Yes
V8043F5093	3/4"	Sweat	Screw Terminal Block	SPST	Yes

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Honeywell

1000 Series Zone Valves V8043 LOW VOLTAGE NORMALLY OPEN/CLOSED

SUBMITTAL SHEET

APPLICATION

Use this valve in closed loop hydronic systems that do not contain dissolved oxygen in system water, such as fresh water from frequent source of makeup water. Valve designed for cycling (not constantly powered on) applications.

SPECIFICATIONS

Application: Hydronic Conrol

Type: 2 Position

Body Pattern: Two-way, Straight-Through

Voltage: 24 Vac

Power Consumption: 7.7 Va

Nominal Timing (sec, min): 15 sec

Static Pressure: 125 Psi (862 kPa)

Maximum Ambient Temperature: 125 F (52 C)

Warranty: 1 year limited warranty

Normally Open Models

Valve Action	Spring Return to Open
Fluid Temperature Range	40 F to 200 F (5 C to 93 C)
Frequency	60 Hz
Manual Opener	No

Normally Closed Models

Valve Action	Spring Return to Close
Fluid Temperature Range	50 F to 200 F (10 C to 93 C)
Frequency	50 Hz, 60 Hz
Manual Opener	Yes

Materials

Body	Brass
Stem	Stainless Steel
Seat	Brass
Packing O-Ring	EPDM Rubber
Ball Plug	Buna-N (NBR) Rubber Ball

Job Name
Engineer
Mechanical Contractor
Contractor's P.O. No.
Representative
Notes





Dimensions

Connection Type		Dimensions						
Connection Type	Α	В	С	D	E			
1/2" Sweat	3 1/2"	4"	3 1/8"	2 3/8"	5 1/4"			
3/4" Sweat	3 1/2"	4"	3 1/2"	2 3/8"	5 1/4"			
1" Sweat	3 1/2"	4"	3 11/16"	2 3/8"	5 1/4"			
1/2" Flare	3 1/2"	4"	4 11/16"	2 3/8"	5 1/4"			
1/2" Inverted Flare	3 1/2"	4"	3 5/8"	2 3/8"	5 1/4"			
1/2" Threaded	3 1/2"	4"	3 23/32"	2 3/8"	5 1/4"			
3/4" Threaded	3 1/2"	4"	3 23/32"	2 3/8"	5 1/4"			
1" Threaded	3 1/2"	4"	3 23/32"	2 3/8"	5 1/4"			

Maximum Close-Off Pressure & Capacity

Connection Type	Max Pr	ressure	Capacity	
	Psi	kPa	Cv	Κv
1/2" Sweat	20	138	3.5	3
3/4" Sweat	20	138	3.5	3
3/4" Sweat - V804E1061, V804F1093 only	8	55	8	6.9
1" Sweat	20	138	3.5	3
1" Sweat - V804E1079, V804F1101 only	8	55	8	6.9
1/2" Flare	20	138	3.5	3
1/2" Inverted Flare	20	138	3.5	3
1/2" Threaded	20	138	3.5	3
3/4" Threaded	20	138	3.5	3
1" Threaded	20	138	3.5	3
1" Threaded - V804E1137 only	6.5	45	10	8.6

Model(s)

	 Qty.	 Notes	
Service			

BALL VALVE

The 1000 Series Zone Valves use a NBR rubber ball instead of a flange to create a seal. Using a ball versus the traditional flange provides a new sealing surface each time the valve operates, producing a quality seal and significantly increasing service life.



ADDITIONAL SPECIFICATIONS

Changeover Aquastat® Control: 120V, 3.0 A with 10.0 A inrush

End Switch: 120 V, 4.4 A running with 26.4 A inrush (60Hz). Pilot duty 50 VA at 24 V.

Humidity Rating: 5-95% RH (non-condensing).

Atmosphere: non-corrosive, non-explosive

Timing:

V8043: Open or close in 15 seconds max.

Maual Opener: Manual opener (on all except the straighthrough, normally open valves) allows opening the valve in case of power failer. Valve returns to automatic position when power is restored.

Approvals:

Underwriters Laboratories Inc. Listed: V4043A, B; V8043A, B, E, J; V8044A, B, E; File MH11826. Vol. 1, dated 2-22-88.

MOUNTING

The valve can be mounted in any position on a vertical line. See the figure below. If the valve is mounted horizontally, the powerhead must be even with or above the center line of the piping. Make sure to leave enough room above the powerhead to remove the cover for servicing.



POWERHEAD REMOVAL

Converting V8043 valve body for use with a new powerhead does not require removal of the valve body from the pipeline.



For install instructions refer to literature number 60-2133 on page 9.

V8043 Zone Valve Models

Connection Type	OS Number	Size	End Switch	Electrical Connections
	V8043A1011	1/2"	N	18 in. leads (457 mm leads)
Sweat	V8043E1004	1/2"	Y	18 in. leads (457 mm leads)
	V8043F1028	1/2"	Ŷ	Screw Terminal Block
	V8043B1019	1/2"	N	18 in. leads (457 mm leads)
	V8043A1029	3/4"	N	18 in. leads (457 mm leads)
	V8043E1012	3/4"	Y	18 in. leads (457 mm leads)
	V8043E1061	3/4"	Y	18 in. leads (457 mm leads)
	V8043F1036	3/4"	Y	18 in. leads (457 mm leads)
	V8043F1093	3/4"	Y	Screw Terminal Block
	V8043B1027	3/4"	N	18 in. leads (457 mm leads)
	V8043A1037	1"	N	18 in. leads (457 mm leads)
	V8043E1020	1"	Y	18 in. leads (457 mm leads)
	V8043E1079	1"	Y	18 in. leads (457 mm leads)
	V8043F1051	1"	Y	18 in. leads (457 mm leads)
	V8043F1101	1"	Y	Screw Terminal Block
Flare	V8043A1003	1/2"	N	19 in loads (457 mm loads)
Flate	V0043A1003	1/2	IN	18 in. leads (457 mm leads)
Inverted Flare	V8043A1193	1/2"	Ν	18 in. leads (457 mm leads)
	V8043E1129	1/2"	Y	18 in. leads (457 mm leads)
Threaded	V8043A1227	1/2"	N	18 in. leads (457 mm leads)
	V8043E1145	3/4"	Y	18 in. leads (457 mm leads)
	V8043B1076	3/4"	N	18 in. leads (457 mm leads)
	V8043E1137	1"	Y	18 in. leads (457 mm leads)

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