



Model AB-QM Pressure Independent Balance and Control Valve

CONTROL VALVE SUBMITTAL, 5" and 6" valves, ANSI FLANGED

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PROJECT _____	ARCHITECT/ENGINEER _____
SUPPLIER _____	CONTRACTOR _____
ORDER NO. _____	

APPROVALS			
AGENCY	REPRESENTATIVE	DATE	NOTES
ARCHITECT			
ENGINEER			
CONTRACTOR 1			
CONTRACTOR 2			
(OTHER)			
NOTE	COMMENT		



5" AB-QM w/
AME55QM actuator

Description

The AB-QM temperature control valve provides pressure independent regulation of flow while also providing flow limiting system balance. The unique differential pressure regulator dynamically adjusts to normal changes in system pressure from valves opening and closing or changing of pump speed.

- Constant differential pressure across control valve, resulting in 100% valve authority
- Balancing valve dynamic adjustment to maintain constant flow
- Variety of actuator signal combinations: Modulating, 3-point floating
- Adjustment collar and locking mechanism for flow setting

Model	Number	Unit Tag	Qty
5"			
6"			

Specification

The valve shall be pressure independent and control pressure across the control valve orifice. The regulation of pressure shall be through an integrated EPDM diaphragm design, stainless steel spring, pressure control disc and require no internal maintenance or replaceable cartridges. Pressure control seat shall be brass construction with vulcanized EPDM. The adjustment method shall indicate percentage of valve flow range and utilize spring locked mechanism for adjustment. The valve assembly shall provide 100% control valve authority and maintain a linear flow characteristic. The valve shall accurately control the flow with an operating pressure differential range of 4 to 60psi for valve sizes 5" and 6". Verification of the pressure regulator and flow rate shall be provided by three PT locations on the valve.

Nominal Diameter	5"	6"
Code No.	003Z0905	003Z0906
Max. Flow (GPM)	395	640
Connection	ANSI Flange, Flat Face (ANSI Standard B16.1)	
Connection rating	ANSI Class 125	
Controlled ΔP range	4 thru 60 psi (0.28 thru 4.0 bar)	
Differential pressure loss of open valve	4.0 psi	
Control valve characteristics	Linear	
Max. close off differential pressure (across the valve)	232 psi, with actuator	
Max. static (hold) pressure	300 psi (20 bar)	
Medium temperature	15°F to 250°F (-10°C to 120°C)	
Allowable fluid	Water and secondary refrigerant additives such as glycol	
Shut off function	Acc. to ISO 5208 class A - no visible leakage	



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Electric Actuator for 5" & 6" ABQM Valves

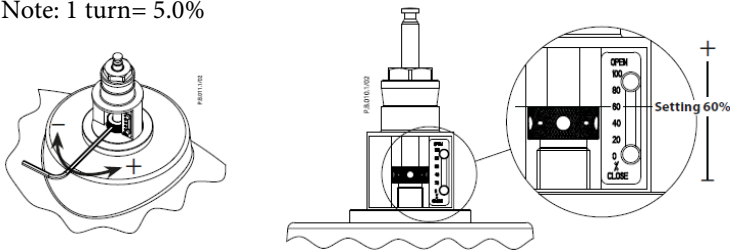
Style	Code No.	Power	Input Signal			Output Signal (0-10VDC)	Safety Function	
			On/Off	Floating	Modulating		Up	Down
AME55 QM	082H3078	24Vac		•	•	•		
AME658 SU	082G3450	24Vac		•	•	•	•	
AME658 SD	082G3448	24Vac		•	•	•		•

Available battery backup assembly for safety function, AM-PBU 25, code no. 082H7090

Flow Adjustment

On site flow adjustment of the valve can be done by inserting an Allen key within the knurled setter and rotating it to the appropriate flow rate percentage.

Note: 1 turn = 5.0%

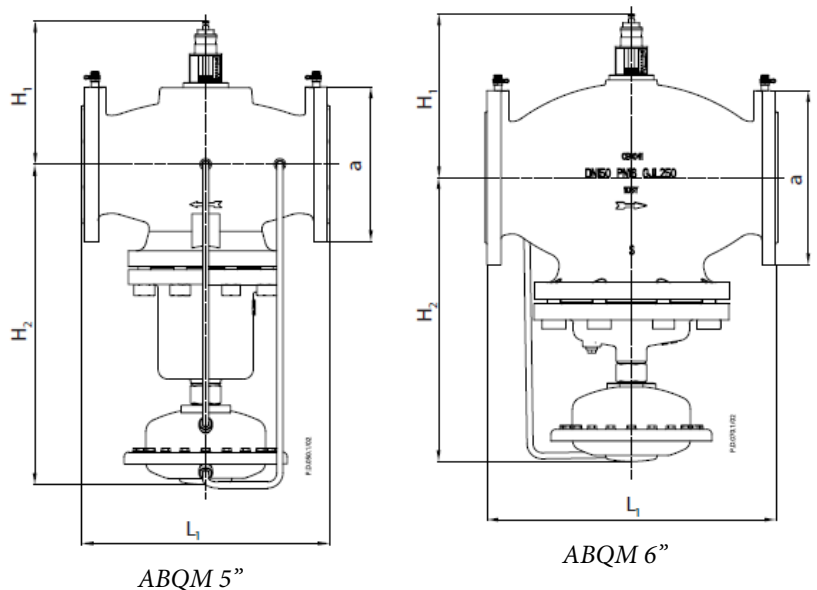


Contact With Water

Valve Size	5" & 6"
Body	Grey cast iron A48 No.35A
Membrane	W.Nr.1.4571; Stainless steel
Diaphragm O-Ring	EPDM
Springs	ASTM-316N
Cone (Pc)	ASTM-316L
Seat (Pc)	ASTM-420
Cone (Cv)	ASTM-316L
Seat (Cv)	ASTM-420
Screw	ASTM-1055
Flat Gasket	Non asbestos

Max. Flow	Flow (GPM)	
	5", ANSI	6", ANSI
Setting	5", ANSI	6", ANSI
40%	158	256
45%	178	288
50%	198	320
55%	217	352
60%	237	384
65%	257	416
70%	277	448
75%	296	480
80%	316	512
85%	336	544
90%	356	576
95%	375	608
100%	395	640

Valve size	Dimensions, in (mm)				Weight lb (kg)
	L1	H1	H2	a	
5"	15.8 (400)	9.1 (232)	20.4 (518)	10.0 (255)	188 (85.3)
6"	18.9 (480)	10.6 (268)	18.3 (465)	11.0 (280)	304 (138)



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Head Office:
Danfoss Inc.
Mississauga, ON CANADA

Tel: 888.326.3677 option 3 Fax: 416.352.5981
www.heating.danfoss.us

USA Office:
Danfoss Inc.
Baltimore, MD USA