



Model AB-QM Pressure Independent Balance and Control Valve

CONTROL VALVE SUBMITTAL, 8" and 10", ISO valves

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<u>PROJECT</u> <u>SUPPLIER</u> <u>ORDER NO.</u>	<u>ARCHITECT/ENGINEER</u> <u>CONTRACTOR</u>
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APPROVALS			
AGENCY	REPRESENTATIVE	DATE	NOTES
ARCHITECT			
ENGINEER			
CONTRACTOR 1			
CONTRACTOR 2			
(OTHER)			
NOTE	COMMENT		



*ABQM 8" valve w/
AME85QM 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
8"			
10"			

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 8" and 10".

Nominal Diameter	8"	10"
Code No.	003Z0707	003Z0708
Max. Flow (GPM)	836	1232
Connection	ISO Flange (EN 1092-2) and gasket <i>(ISO flanges & gaskets ordered separately)</i>	
Connection rating	ANSI Class 125 (PN16)	
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	
Leakage	Class 4, metal to metal	



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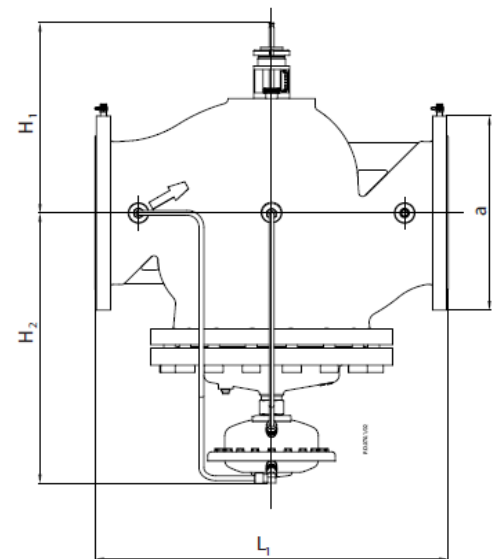
Electric Actuator for 8" & 10" ABQM Valves

Style	Code No.	Power	Input Signal			Output Signal (0-10VDC)
			On/Off	Floating	Modulating	
AME85 QM	082G1453	24Vac		•	•	•
Available battery backup assembly for safety function, AM-PBU 25, code no. 082H7090						

Contact With Water

Valve Size	8" & 10"
Body	Ductile iron EN-GJL-250 (GG25)
Membrane	EPDM
Diaphragm O-Ring	EPDM
Springs	W. Nr. 1.4310; Stainless steel
Cone (Pc)	W.Nr.1.4021; Stainless steel
Seat (Pc)	W.Nr.1.4027; Stainless steel
Cone (Cv)	W.Nr.1.4021; Stainless steel
Seat (Cv)	W.Nr. 1.4027; Stainless steel
Screw	W.Nr.1.1181; Stainless steel
Flat Gasket	Non asbestos

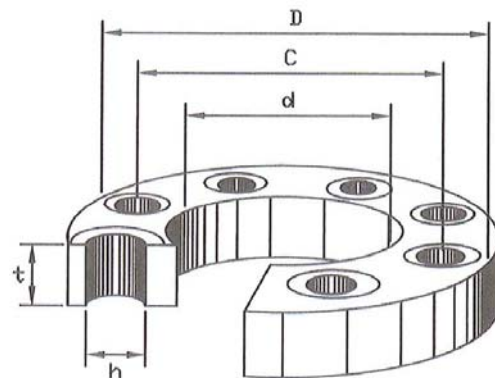
Valve size	Dimensions, in (mm)				Weight lb (kg)
	L1	H1	H2	a (ISO flange)	
8"	23.62 (600)	15.79 (401)	19.01 (483)	13.39 (340)	483 (219)
10"	28.74 (730)	15.63 (397)	21.00 (533)	15.94 (405)	754 (342)



ABQM 8" & 10"

ISO Flange Dimensions, in (mm)

Flange Size	8"	10"
DN Size	200	250
Outside Diameter, <i>D</i>	13.39 (340)	15.94 (405)
Inside Diameter, <i>d</i>	8.73 (221.8)	10.87 (276.2)
# of Bolt Holes	12	
Bolt Hole Diameter, <i>h</i>	0.87 (22)	1.02 (26)
Bolt Circle, <i>C</i>	11.61 (295)	13.98 (355)
Flange Thickness, <i>t</i>	0.94 (24)	1.02 (26)
Bolt Size	0.79 (M20)	0.94 (M24)



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