



CONTROL VALVE, 1/2" thru 1 1/4" VALVE BODIES					
DATE:	SPECIFICATION SECTION:			PAGE:	of
PROJECT	ARCHITECT/ENGINEER	AGENCY	REPRESENTATIVE	DATE	NOTES
		ARCHITECT			
SUPPLIER	CONTRACTOR	ENGINEER			
		CONTRACTOR 1			
		CONTRACTOR 2			
		OTHER			
ORDER NO.		NOTE	COMMENT		



AB-QM

*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: ON/OFF, Modulating, 3 point floating
- Straightforward setting ring for flow adjustment

Model	Number	Unit Tag	Qty
1/2" LF			
1/2"			
3/4"			
1"			
1 1/4"			

Nominal Diameter	1/2" LF	1/2"	3/4"	1"	1 1/4"
Code No.	<b>003Z1321</b>	<b>003Z1332</b>	<b>003Z1333</b>	<b>003Z1334</b>	<b>003Z1335</b>
Max. Flow (gpm)	1.2	5.0	7.5	12.0	17.5
Connection (Tailpcs ordered separately)	External Thread, NPSM				
Tailpieces	MNPT / F.Solder tailpcs with union nut and gasket / press fit				
Controlled Δp range	2.3 - 60psi (0.16-4.0 bar)	5 thru 60psi (0.34 thru 4.0 bar)			
Differential pressure loss of open valve	2.3 psi	5.0 psi			
Control valve characteristics	Linear				
Max. close off Δp (across the valve)	Dependent on actuator selected for valve size				
Max. static (hold) pressure	300 psi (20 bar)				
Medium temperature	15°F to 250°F (-10°C to 120°C)				
Allowable fluid	Water and water mixture for closed heating and cooling systems				
Leakage	Class 4, metal to metal				

*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. The valve shall be of a back seated globe design to allow service of packing under pressure for without leakage for valves up to 1-1/4". Pressure control seat shall be brass construction with vulcanized EPDM. The adjustment mechanism shall be located beneath the protective cap and it shall indicate percentage of valve flow range. 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 5 to 60psi for valve sizes 1/2" to 1-1/4" and 2.3 to 60 psi for the 1/2" low flow.