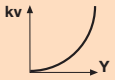
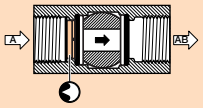
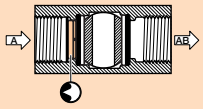
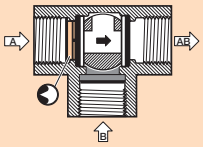
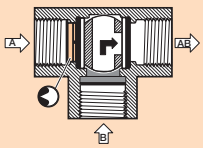
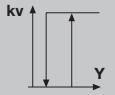
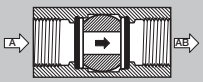
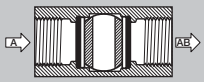
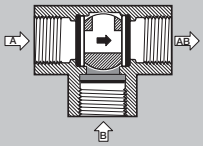
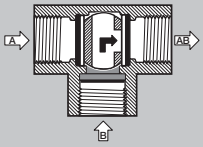
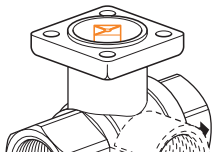
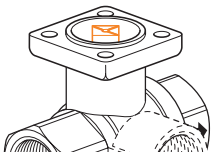
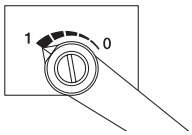
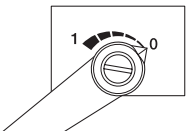
Specified directions of flow

Characterized control valves  		A-AB open		A-AB closed	2-way R2..
		A-AB open		A-AB closed	3-way R3..
Open-close ball valves  		A-AB open		A-AB closed	2-way R2..
		A-AB open		A-AB closed	3-way R3..
Stem position corresponding to ball valve flow direction				A-AB closed	For 2-way and 3-way ball valves
Actuator position corresponding to ball valve flow direction		Actuator 100%		Actuator 0% A-AB closed	

Flow characteristics of characterized control valves

2-way

The flow characteristic is equal-percentage, with a characteristic factor of n(ep) 3.2 or 3.9. This ensures stable control behavior in the elevated part–load range. In the lower part of the opening range between 0 and 30% working range the characteristic is linear. This ensures excellent control behavior in the lower part-load range too. The working range between 0 and 100% corresponds to an angle of rotation between 15 and 85°.

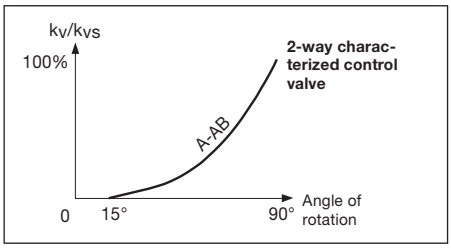
Between 0 and 15° angle of rotation the characterized control valves function as tight-sealing shut-off devices.

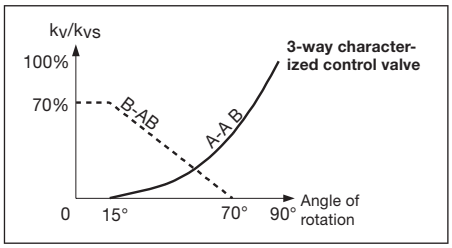
3-way

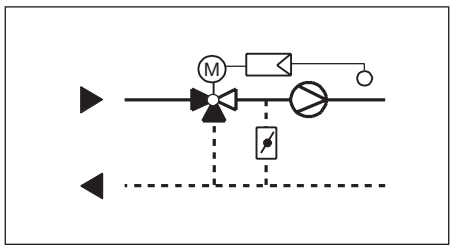
The characteristic of control path A–AB is the same as that for 2-way characterized control valves. **The bypass flow rate (B–AB) is 70% of the k_{vs} value of the control path (A–AB). The bypass has a linear characteristic.**

Note:

Owing to its ball design, the 3-way characterized control valve is only partially suitable for conventional supply temperature control systems. It is therefore advisable to design this kind of temperature control system as a double mixing circuit (see diagram below). There are no restrictions on mixing circuits for air heaters or injection circuits.







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