



Rotary control valve with tight shut-off and high grade rubber seat

508V



Features and benefits

Except for the rubber seat ring, the 508V has the same design principle as the 507V. Excellent controllability is achieved by having the innovative teethed disc seating at a certain angle. The 508V has a reinforced core rubber seat ring allowing it to be used for high pressure service up to 1.6MPa with complete tight shut-off.

Rubber seat ring with a "control cosine curve" profile

Taking into consideration the cosine curve profile rubber seat ring incorporated into our models 700G and 702Z, we developed a new type of seat ring for exclusive use in the 508V. The 508V has a reinforced core rubber seat ring incorporated with a "control cosine curve" profile for sizes between 50mm and 200mm. This seat ring design ensures a tight shut-off up to a working pressure of 1.6MPa. The 508V available in sizes between 250mm and 350mm has a similar seat ring design profile, but the seat ring is backed up by a precisely formed metal core which is encapsulated inside the rubber. This design enables the control valve to function under severe conditions of high velocity, a large differential pressure or a high vacuum. (The maximum allowable shut-off pressure id 1.0MPa)

No additional stop valve, less installation space and more economical

Because of its reliable sealing effect against a high differential pressure, the 508V does not require an additional stop valve. You save on installation space and benefit from the excellent



cost effective features of our rotary control valve.

Satisfies both JIS and ISO standards for extended applications

The 508V is available in different flange specifications. Also, its face-toface dimension meets both JIS and ISO requirements. Therefore this model is applicable for various industrial applications worldwide.







508V

Model 507V is the high temperature version of our rotary control valve designed for exclusive use in the regulation of fluids.

General Description

With a specially designed rubber seat ring, Model 508V ensures tight shut-off and eliminates the need for any additional stop valve required by conventional control valves. The high performance characteristics of this model originate from its unique design with a teeth and gull-wing shaped disc that touches the seat at a certain angle (Fig.1). The teeth are arranged on the circumference of the disc towards either direction of flow. The 'touchat-anangle' disc assists the reduction of seating and unseating torque and facilitates smooth control of the valve. Other benefits include high rangeability, low noise level and anticavitation. The face-to-face dimension meets both JIS and ISO standards so the 508V is applicable for various industrial fields including airconditioning systems.



Standard Specification

Valve nominal size		50, 80, 100, 150, 200mm	250, 300, 350mm	400, 450, 500, 600mm
Face-to-face dimensions#1		JIS B 2002 Series 46 / ISO 5752 Basic Series 20 Wafer butterfly valve (short)		
Flange accommodation		JIS: 5K/10K/16K/20K, ANSI 150lb, DIN NP 10/16, BS 4504 PN 10/16, BS10 'E', 'F', JIS G 5524, 5527	JIS: 10K/16K, ANSI 150lb, DIN NP 10/16, BS 4504 PN 10/16, BS10 'E', 'F', JIS G 5524, 5527	JIS: 10K, ANSI 150lb, DIN NP 10/16, BS 4504 PN 10/16, JIS G 7.5, 5527
Service temperature #2		-20 to 120 degrees C (NBR: -10 to 80 degrees C) -10 to 80 degrees C (*EPDM: 20 to 120 degrees C)		-10 to 80 degrees C (*EPDM: - 20 to 120 degrees C)
Max. working pressure		1.6MPa (NBR: 1.0MPa)	1.0MPa	
Body test pressure		2.4MPa (NBR: 1.5MPa)	1.5MPa	
Seat leak pressure		1.8MPa (NBR: 1.1MPa)	1.1MPa	
Flow characteristics		Nearly equal percent		
Rangeability		100:1		
Standard materi- als	Body	FCD450 (No fluid exposure)		
	Disc	SCS14	SCS13	
	Stem	SUS420J2 (No fluid exposure)		
	Seat ring	*EPDMcore-reinforced (Option-NBRcore-reinforced)		NBR core-reinforced (Option - *EPDM core-reinforced)

#1 350mm only : JIS B 2002 Series 47 / ISO Basic Series 25 (Medium)

*EPDM seat must not be used in applications which contain oil.