Our technology. Your success.
Pumps · Valves · Service

MIL 41000 / 71000 - Heavy Duty Cage Guided Control Valves

Standard sizes & rating
½" to 36" : ASME 150# to ASME 4500#
Seat leakage class (as per FCI 70.2)
Standard : Class III & Class IV
Optional : Class V

Applications

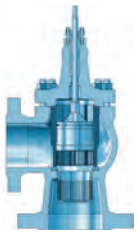
Utility / Captive Power Plants

- Feed water regulation
- Condensate pump recirculation
- Spray water control and block
- Deaerator pegging steam control
- Soot blower pressure reduction
- Heater drain etc.

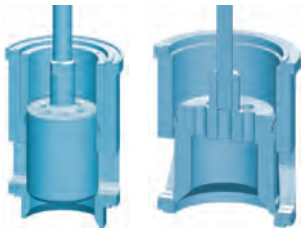
Hydrocarbon Processing

- Compressor anti-surge
- Gas gathering and metering stations
- Make-up hydrogen & hydrogen quench
- Cold & hot recycle gas control
- Reactor feed & stripping steam
- Reformed gas vent, hydrocarbons to flare, etc.

More information: www.ksb-mil.com



Typical MIL 71000 Angle body construction



MIL 41200/41300 with self-energised seals for tight shut- off

MIL 41100 / 41700 Unbalanced Trim combine the dual advantage of cage guiding and single seat leak tightness

MIL 41400 (Pilot plug) Valves for high temperature tight shut-off applications

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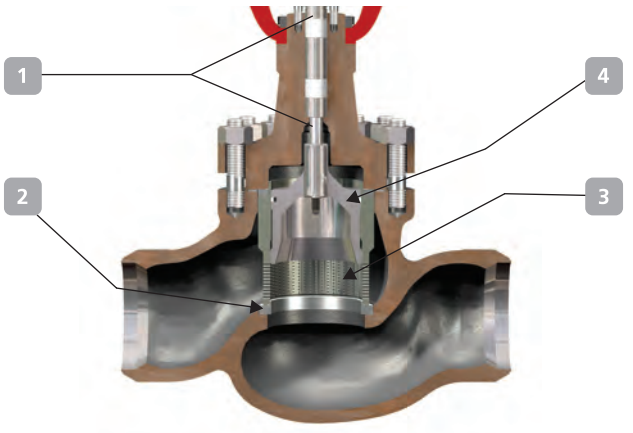
1. High allowable pressure drops
2. High capacity with low pressure recovery
3. Standardised high performance material
4. Clamped Seal ring to facilitate easy removal
5. Tight shut-off options
6. Anti-cavitation / low noise trims
7. Cryogenic applications
8. Optional angle body (MIL 71000)



1 Packing Box 2 Seat Ring 3 Cage 4 Valve plug

Model Decodification

1st - 2nd - 3rd - 4th - 5th - 6th - 7th -

Actuator Type	Body Series	Plug Type	Trim Type	Seat Type
20.Hand operated 37.Direct spring diaphragm 38.Reverse spring diaphragm 67.Direct piston cylinder 68.Reverse piston cylinder 90.Electrical actuator	41.Heavy duty cage guided globe control valve 71.Heavy duty cage guided angle control valve	0.Undefined 1.Low capacity unbalanced 2.With pressure-energised polymeric seal ring (static) 3.With pressure-energised polymeric seal ring (dynamic) 4.With auxiliary shut-off pilot plug 5.With metallic seal ring 6.With polymeric seal ring 7.High capacity unbalanced 8.With auxiliary shut-off pilot plug and soft seat 9.With graphite seal ring	0.Undefined 1.Linear 2.Equal % 3.Customised X.On-Off	0.Undefined 1.Standard 2.Single stage Lo-dB / Anti-cav 3.Multi-stage, with diffuser seat ring 4.Multi-stage, Lo-dB 5.Multistage directional diffuser 6.Multistage Anticav, FTO 7.Multistage Anticav, FTC 8.Low flow control 9.High pressure micro flow X.Multi stage with plug control

General Data

Body	Type	High capacity Globe or Angle	
	Recommended flow directions	Flow to Open (FTO)	Flow to Close (FTC)
		Unbalanced valves (411/41700) Pressure-energised seal rings (412/300) Balanced valves (415/6/900) (Gas/Steam) Single stage low noise valves (41002) Multi-stage Lo-dB valves (41004)	Unbalanced valves (411/41700) Auxiliary shut-off pilot plug (41400) Balanced valves (415/6/900) (Liquid) Single stage anti-cavitation valves (41002) Anti-cav / lo-dB valves with diffuser (41003)
Bonnet	Type	Stud bolted with moderately finned extension	
	Temperature range	Standard bonnet: -29° C to 566° C, Extension bonnet (AB): -30° C to -100° C, Cryogenic bonnet (CB): -101° C to -196°C	
Gland Seal	Type	Adjustable double sealed packing box with PTFE or Graphite moulded split rings	
	Option	Eco lock* (varying density for low emission, PTFE or Graphite) or PTFE V rings	
	Temperature range	≤ 180° C for PTFE, > 180° C for Graphite	
Trim	Type	Single stage / Multi-stage (Anti-cav / Lo-dB)	
	Plug type	Balanced or Unbalanced ▪ Pressure balanced with spring-energised, Metallic, Polymeric or Graphite seal rings ▪ Pressure balanced with auxiliary shut-off pilot plug ▪ Unbalanced without seal rings	
	Seat type	Clamped (Quick Change)	
	Guiding	Cage guiding	
	Rangeability	100 : 1 for standard trims, 50 : 1 for Lo-dB/ Anti-cav trims	
	Characteristic	Standard - Linear/ Equal % / On-off, Anti-cav / Lo-dB - Linear/Mod. Equal% (on request)	

* Meets the stringent Class A emission requirement as per ISO 15848

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