

MIL 34000 - Eccentric Rotary Plug Valve



Applications

- Refinery / Oil & Gas
- Chemical & Fertilizer Industries
- Water & Steam utility applications
- Clean / dirty corrosive liquids & gases, erosive and abrasive slurries

More information: www.ksb-mil.com



Eccentric Rotary Plug Valve with Rack & Pinion Actuator



Electrical actuated Eccentric Rotary Plug Valve with Low Noise Pak



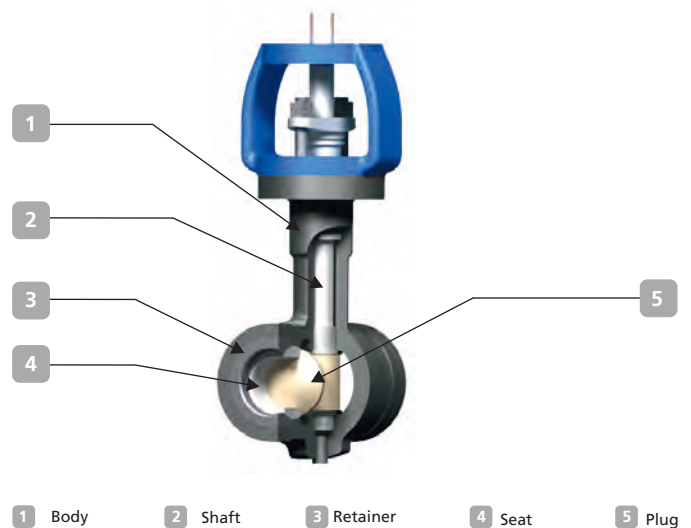
Diaphragm Actuated Eccentric Rotary Plug Valve with linkage assembly

Your contact:

Form area for contact information, consisting of a large empty rectangular box with corner brackets.

MIL 34000 - Eccentric Rotary Plug Valve

- 1 Compact design with high rangeability and Cv
- 2 Self aligning eccentric rotating plug
- 3 Requires less actuator torque
- 4 Reduced trim options available



Model Decodification

1 st	2 nd	3 rd	4 th	5 th	6 th	7 th
Actuator Type		Body Series		Bore Type	End Connections	Seat Type
-	-	3	4	-	-	-
20. Hand operated 37. Spring diaphragm for fail close and open 67. Direct piston cylinder 68. Reverse piston cylinder 77. Rack and Pinion Double Acting 78. Rack and Pinion Spring Return 87. Scotch Yoke Double Acting 88. Scotch Yoke Spring Return 90. Electrical actuator		34. Eccentric Rotary Plug Valve		0. Undefined 1. Full bore 2. Reduced Bore	0. Undefined 1. Wafer 2. Flanged	0. Undefined 1. PTFE Seated 2. Metal Seated

General Data

Materials

Body	WCB carbon steel / 316 stainless steel (SS)
Plug	Stainless Steel, Nickel-plated & Specials on request
Shaft	Hardened 17-4 PH stainless steel
Seat	Stainless Steel / PTFE
Gland / Gland Flange	Stainless Steel

Actuator Options

Diaphragm Actuators
Single / Double acting Rack & Pinion Actuators
Electrical Actuators
Hydraulic Actuators
Single / Double Acting Scotch Yoke Actuators

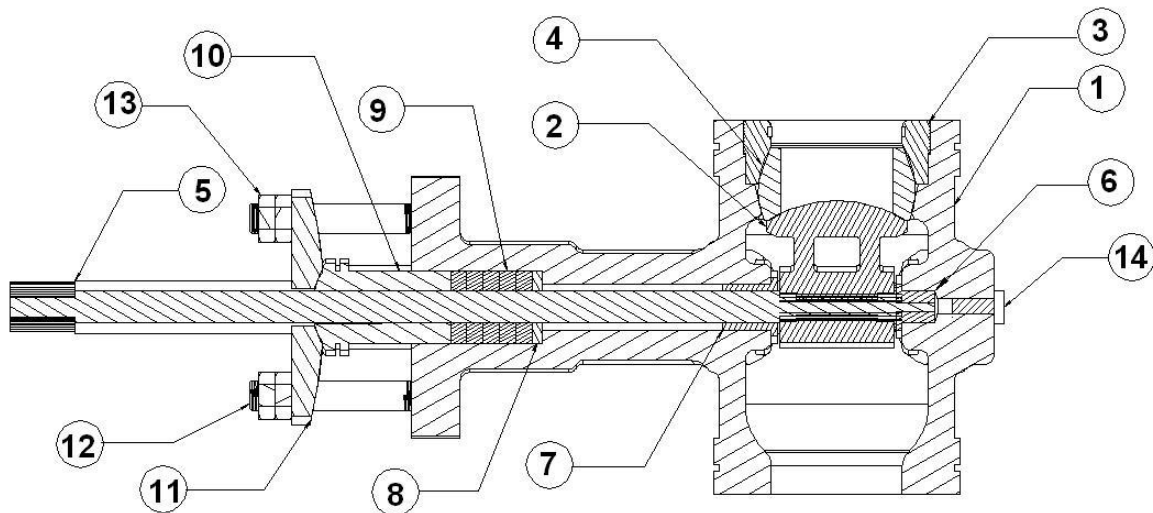
Technical Data

Size	DN 50 to 500
Trim Size	100%, 60%, 40%, 20% Capacity Trims
Pressure class	150# to 600#
Leakage class	Class IV (Metal to Metal seat) Class VI (PTFE seat)
Flow Direction	Flow to open (inlet from convex side of the plug): for clean liquids, gases, and steam. Flow to close (inlet from backside of the plug): for erosive and slurry service
Body Connection Type	Wafer & Flanged
Inherent Characteristics	Linear & Equal %
Angle of Rotation	60 Degrees
Inherent Rangeability	100:1
Disc Orientation	Counter Clockwise to Open & Clockwise to Close
Design Standard	ASME B16.34

Note

Additional accessories or Instruments like Solenoid Valve, Limit Switches, Air Filter Regulator & Positioner (Pneumatic / Electro-Pneumatic / Smart) can be supplied along with valve depending upon the requirement.

Double Eccentric Plug Rotary valve Cross Sectional View



MATERIAL OF CONSTRUCTION		
Sr. No.	Part Detail	Qty.
1	VALVE BODY	1 No.
2	ECCENTRIC PLUG	1 No.
3	SEAT RETAINER	1 No.
4	SEAT RING	1 No.
5	SHAFT	1 No.
6	BEARING BUSH 1	1 No.
7	BEARING BUSH 2	1 No.
8	PACKING SPACER	1 No.
9	PACKING SET	1 No.
10	GLAND	1 No.
11	GLAND FLANGE	1 No.
12	GLAND STUD	2 No.
13	GLAND NUT	4 No.
14	PIPE PLUG	1 Nos.

Cv / Kv Values (MIL 34000)

Table 1.a: - (FLOW TO OPEN – FTO)

FLOW TO OPEN Valve Size (Inch)	Trim Size			
	100 % Trim Cv (Kv)	60% Trim Cv (Kv)	40% Trim Cv (Kv)	20% Trim Cv (Kv)
1	14 (12.1)	8.4 (7.2)	5.6 (4.8)	2.8 (2.4)
1.5	32 (27.6)	20 (17.30)	13 (11.2)	6.5 (5.6)
2	51 (44.1)	30 (25.9)	20 (17.30)	10 (8.6)
3	150 (129.7)	90 (77.8)	60 (51.90)	30 (25.9)
4	247 (213.6)	147 (127.1)	98 (84.8)	49 (42.4)
6	520 (449.8)	312(269.9)	208 (179.9)	104 (89.9)
8	870 (752.6)	522 (451.5)	348 (301)	174 (150.5)
10	2250 (1946)	1420 (1228)	980 (848)	470 (407))
12	3120 (2699)	1730 (1496)	1030 (891)	592 (512)
14	4250 (3676)	2355 (2037)	1402 (1213)	795 (688)
16	5430 (4697)	3120 (2699)	1840 (1592)	1018 (880)
18	6330 (5476)	3950 (3417)	2330 (2016)	1188 (1028)
20	7740 (6695)	4390 (3798)	2650 (2292)	1340 (1169)

Table 1.b: - (FLOW TO CLOSE – FTC)

FLOW TO CLOSE Valve Size (Inch)	Trim Size			
	100 % Trim Cv (Kv)	60% Trim Cv (Kv)	40% Trim Cv (Kv)	20% Trim Cv (Kv)
1	15 (12.9)	9.0 (7.7)	6.0 (5.2)	3.0 (2.6)
1.5	34 (29.4)	21 (18.2)	14 (12.1)	7.0 (6)
2	55 (47.5)	33 (28.5)	22 (19)	11 (9.5)
3	155 (134)	93 (80.4)	62 (53.6)	31 (26.8)
4	266 (230.1)	159 (137.5)	106 (91.7)	53 (45.8)
6	480 (415.2)	288 (249.1)	192 (166.1)	96 (83)
8	800 (692)	480 (415.2)	320 (276.8)	160 (138.4)
10	1500 (1298)	950 (822)	620 (536)	296 (256)
12	2430 (2102)	1030 (891)	660 (571)	470 (407)
14	3308 (2862)	1402 (1213)	898 (777)	640 (558)
16	3930 (3400)	2080 (1799)	1290 (1116)	792 (685)
18	4620 (3997)	2633 (2289)	1646 (1424)	1002 (867)
20	5550 (4801)	3120 (2699)	1840 (1592)	1360 (1176)



Technology that **makes its mark**

Your local KSB representative:

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