

Kämmer® Series 035000 Standard Valves



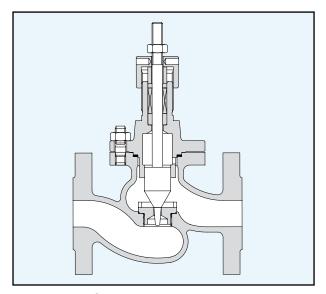


Description

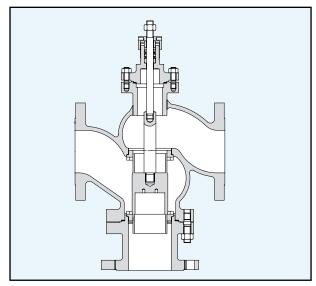
The series 035000 are General Service Valves for special requirements. Ranging from 1" (DN25) to 6" (DN150) this valve series offers many possibilities. Designed mainly in special materials such as Hastelloy, Alloy 20 or other rare materials, the Series 035000 becomes the solution for your application in any pressure class up to CL2500 or PN400. For pressure classes up to CL600 (PN63) it is also available in stainless steel or carbon steel. The series is available as ANSI or DIN and in globe, angle or 3-way valve design.

The series 035000 can also be used as an engineered product to fulfill special applications or customer requests. Low noise trims, anti-cavitation inserts, high pressure bellows seals, steam jackets or low emission packing system "SureGuard HP" in accordance with the German TA-Luft are available.

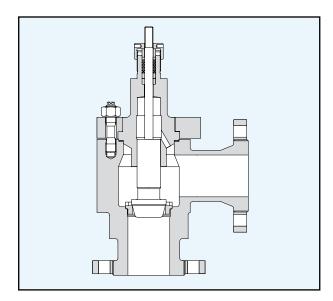
The 035000, with it's further reaching possibilities, is a perfect extension to Flowserve's "FlowTop" General Service valve series.



Series 035000 globe valve



Series 033000 3-way valve



Series 031000 angle valve

Technical Data

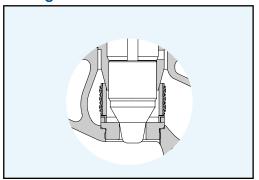
Valve body styles	Globe-, angle-, 3-way valves
Characteristics	Equal %, Linear, On - Off
Seat leakage, standard	< 0.01% of rated C_{vs} value, class IV acc. to DIN IEC 534 - other requirements on request
Material for	316 stainless steel, with hard faced plug shaft (≥ DN 25).
plug / seat ring	Alloy 6 facing, Hastelloy B/C, Nickel, Monel, Titanium, Ceramics, Tungsten carbide optional.
	Noise reduction by multi-hole cage plug and additional silencer inside the valve body
PTFE soft seat T = max. 150 °C (300 °F)	Valve plug with PTFE insert for $\ge C_{vs}$ 0.1
Packing	PTFE for temperatures up to 200 °C (392 °F)
	Grafoil for temperatures over 200 °C (392 °F)
	PTFE for oxygen service
	Packing according to German clean air act (TA-Luft)
Body gaskets	PTFE for temperatures up to 200 °C (392 °F)
	Grafoil for temperatures over 200 °C (392 °F)
Extensions	Standard, normalising fins, bellows seal
Steam jacket connections	Screwed G ½", flanges DN 15 PN 40
C _{vs} -values	See table on page 6

Valve sizes	ANSI	1/2"	1"	11/2"	2"	3"	4"	6"
Stroke	mm (in.)	10 (0.39)	20 (0.79)	20 (0.79)	20 (0.79)	40 (1.57)	40 (1.57)	40 (1.57)
ANSI flanges	Class 150/300	Х	Х	Х	х	х	х	Х
	Class 600/900	Х	Х	х	х	x	x	x
Body materials:								
Forged steel	C22.8 (1.0460)	X						
	A105 (1.0432)	Х	Х	Х	х			
	1.4571* (316Ti)	Х	Х	х	х			
Cast carbon steel	GS-C25N (1.0619)		Х	Х	Х	Х	Х	Х
	WCB (1.1136)		Х	х	х	x	x	
Cast stainless steel	1.4581	Х	Х	Х	х	х	х	х
	CF3M*	Х	Х	х	X	X	x	X

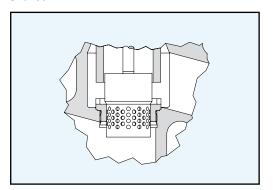
^{*}Material for cryogenic applications down to -270 °C (-450 °F)). Bodies also available in Hastelloy C276 (2.4618), Monel 400 (2.4368) and Inconel 600 (2.4816). Other stainless steel and nickel based alloys on request.



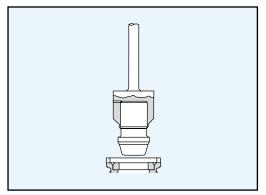
Designs



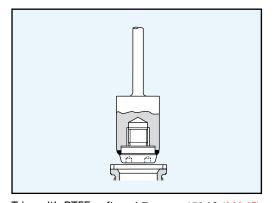
Silencer



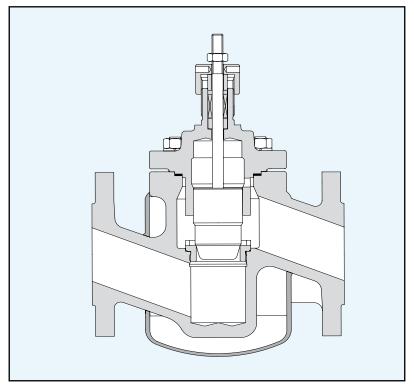
Multi-hole cage plug.



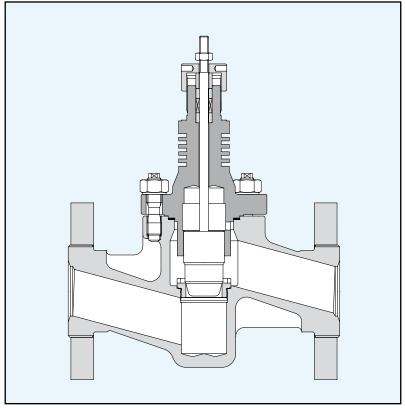
Ceramics or tungsten carbide plug tip and seat.



Trim with PTFE soft seat T = max. 150 °C (300 °F).

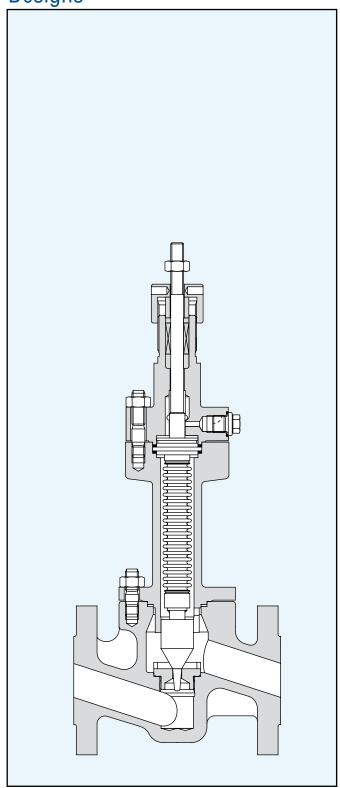


Valve with steam jacket.

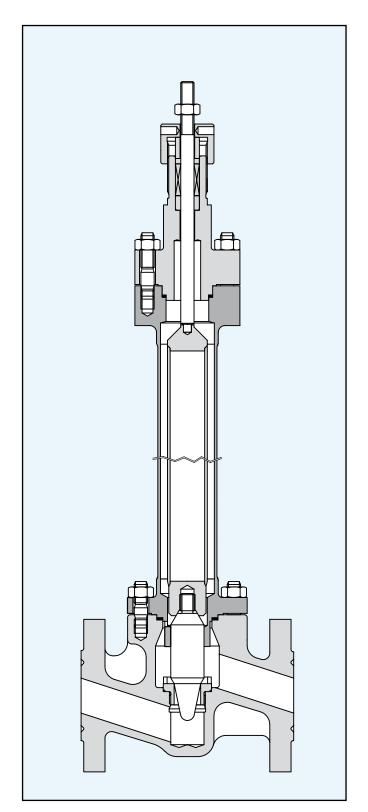


Normalising fins from -30 to 0 °C (-22 to 32 °F) and +200 to 400 °C (-390 to 750 °F).

Designs



Bellows seals are available up to 270 bar service pressure. Standard bellows material is 321 stainless steel. Special materials for extraordinary service on request.



Control valve with extension for cryogenic service. Body and extension material 321 stainless steel for service temperatures down to -196 °C (-321 °F).



Standard C_{VS}-values

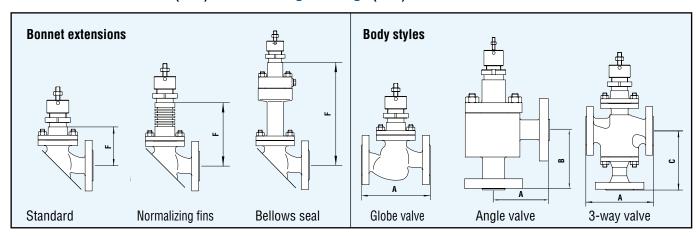
								C _{vs} -value*	Seat diameter mm (in.)	Rangeability**	Seat material (standard)	Plug material (standard)
Size DIN	15	25	40	50	80	100	150					
Size ANSI	1/2"	1"	1½"	2"	3"	4"	6"	ļ				
Stroke (mm)	10	20	20	20	40	40	40					
Stem diameter (mm)	6	10	10	10	16	16	16					
								0.012 0.019 0.029 0.046 0.074	3 (0.19)		Alloy 6	
								0.12 0.19 0.29 0.46 0.74	4.5 (0.78)			
								1.2 1.6 2.9	7 (0.28) 10 (0.39)	50:1	316Ti	316Ti
								4.6	12 (<mark>0.47</mark>)			
								7.4	16 (0.63)			
								12	20 (0.79)			
								19 29	25 (0.98) 32 (1.26)			
								46	40 (1.57)			
								74 120	50 (1.97) 63 (2.48)			
								190 290	80 (3.15) 100 (3.94)			
								460	125 (4.92)			

^{*} $C_{VS} \le 0.25 = K_V \times F_R$ in acc. with IEC 534 (more Information on request) Further special K_{VS} trims on request.

 $[\]hbox{**For calibrating conditions}\\$

Val	ve code	0	3	5	0	P	3		
	Body	type		Boni	net exter	sion			Actuator
005	Olahassahaa	Series	0	Standard				H3, H4, H5	Manual handwheel
035 031 033	Globe valve Angle valve 3-way valve	035 000 031 000 033 000	3 5		on		P2, P3 P4, P5	Pneumatic, series 2	
								37, 38 39, 3D	Pneumatic, series 4
6								E2, E3 E4, E5	Electric

Dimensions mm (in.) and Weights kg (lb.)



Face to face dimensions A / B / C, ANSI design RF mm (in.)

Ci-a		GI	obe Valve	Dimensior	n A		Angle Valve Dimension A / B							3-way valve Dim. C	
Size	Class 150	Class 300	Class 600	Class 900	Class 1500	Class 2500	Class 150	Class 300	Class 600	Class 900	Class 1500	Class 2500	Class 150	Class 300	
1/2"	178	190	203	216	216	264	89	95 (2.75)	102	108	108	132	-	-	
1"	(7.00) 184 (7.25)	(7.50) 197 (7.75)	(8.00) 210 (8.27)	(8.50) 254 (10.00)	(8.50) 254 (10.00)	(10.39) 308 (12.13)	(3.50) 92 (3.62)	(3.75) 98 (3.86)	(4.00) 105 (4.13)	(4.25) 127 (5.00)	(4.25) 127 (5.00)	(5.20) 154 (6.06)	140 (5.50)	140	
11/2"	222 (8.75)	235 (9.25)	251 (9.87)	305 (12.00)	305 (12.00)	384 (15.12)	111 (4.37)	117 (4.60)	125 (4.92)	152 (6.00)	152 (6.00)	192 (7.56)	171 (6.73)	171 (6.73)	
2"	254 (10.00)	267 (10.50)	286 (11.25)	368 (14.50)	368 (14.50)	451 (17.75)	127 (5.00)	133 (5.25)	143 (5.63)	184 (7.25)	184 (7.25)	225 (8.86)	171 (6.73)	171 (6.73)	
3"	298 (11.75)	318 (12.50)	337 (13.27)	381 (15.00)	470 (18.50)	578 (22.75)	149 (5.87)	159 (6.26)	168 (6.61)	190 (7.48)	235 (9.25)	289 (11.38)	279 (11.00)	279 (11.00)	
4"	352 (13.87)	368 (14.50)	394 (15.50)	457 (18.00)	546 (21.50)	673 (14.50)	176 (6.93)	184 (7.24)	197 (7.76)	229 (9.00)	273 (10.75)	273 (10.75)	279 (11.00)	279 (11.00)	
6"	451 (17.75)	473 (18.62)	508 (20.00)	610 (24.00)	705 (27.75)	914 (36.00)	225 (<mark>8.86</mark>)	236 (9.29)	254 (10.00)	305 (12.00)	352 (13.85)	457 (18.00)	362 (14.25)	362 (14.25)	

Height F mm (in.) and weight kg (lb.), ANSI design RF

			Stan	dard				Normali	sing fins		Bellows seal				
	Class 150 - 300 Clas		Class 6	600 - 900 Class 1500 - 25		00 - 2500	Class 150 - 900		Class 1500 - 2500		Class 150 - 300		Class 600 - 900		
DN	Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight	
1/2"	90	7	130	21	130	31	130	7.5	130		195	9	250		
	(3.55)	(15.4)	(5.12)	(46.3)	(5.12)	(68.3)	(5.12)	(16.5)	(5.12)		(7.70)	(19.8)	(9.25)		
1"	90	8.5	150	46	150	31	150	9	150		240	11	310		
	(3.55)	(18.7)	(5.90)	(101.4)	(5.90)	(68.3)	(5.90)	(19.8)	(5.90)		(9.50)	(24.3)	(12.00)		
11/2"	130	15	190	51	190	61	188	16	190		270	21	340		
	(5.12)	(33.0)	(7.50)	(112.5)	(7.50)	(134.5)	(7.40)	(35.3)	(7.50)		(10.65)	(46.3)	(13.38)		
2"	135	18	190		190		193	19	190		270	24	340		
	(3.31)	(40.0)	(7.50)		(7.50)		(7.60)	(42.0)	(7.50)		(10.65)	(53.0)	(13.38)		
3"	200	42	260				260	44			430	48			
	(7.87)	(92.6)	(10.25)				(10.25)	(97.0)			(17.00)	(106.0)			
4"	225	51	285				285	53			455	57			
	(8.86)	(112.5)	(11.22)				(11.22)	(117.0)			(18.00)	(126.0)			
6"	330	130	390				390	135			430	139			
	(13.00)	(286.5)	(15.35)				(15.35)	(298.0)			(16.93)	(307.0)			









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