



Kämmer® TotalFlow™ - 035000

Standard Valves



Experience In Motion

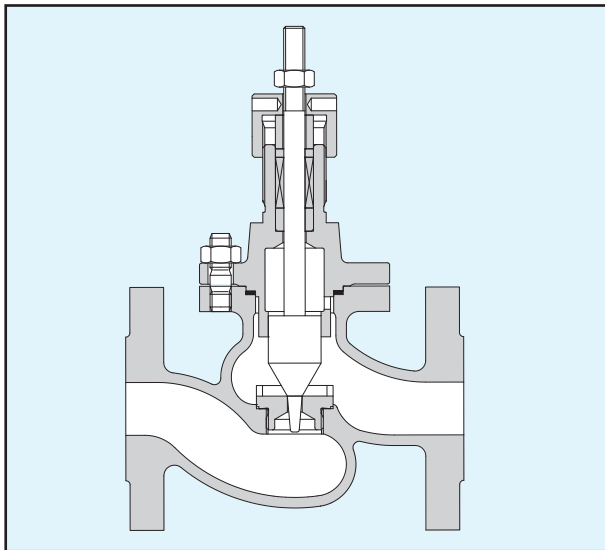
TotalFlow™ - 035000

Description

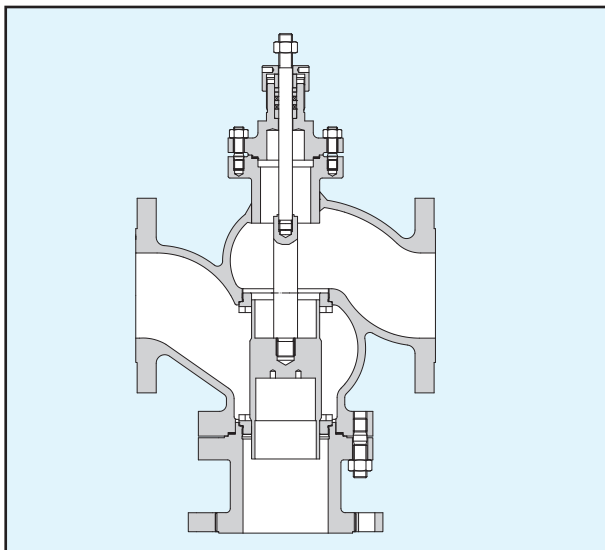
The series 035000 are General Service Valves for special requirements. Ranging from 1" (DN25) to 6" (DN150) this valve series offers many possibilities. Designed mainly in special materials such as Hastelloy, Alloy 20 or other rare materials, the Series 035000 becomes the solution for your application 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.

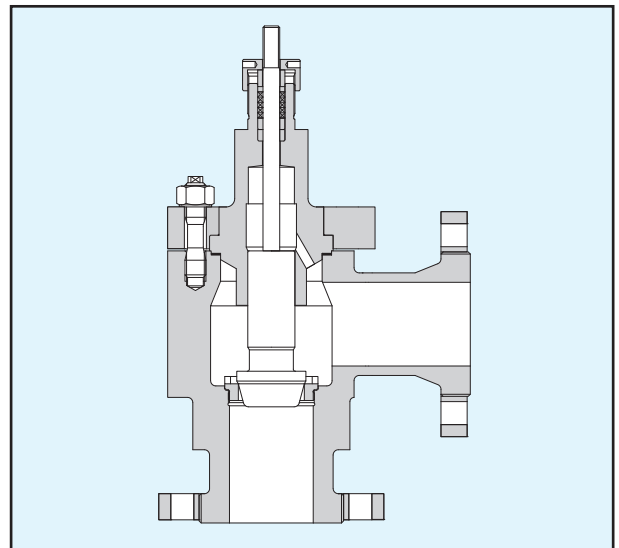
The 035000, with it's further reaching possibilities, is a perfect extension to Flowserve's "FlowTop" General Service valve series.



Series 035000 globe valve



Series 033000 3-way valve



Series 031000 angle valve

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Technical Data

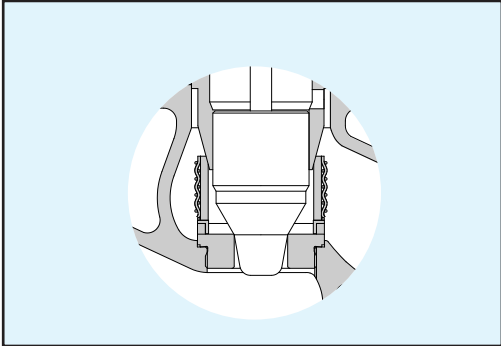
Valve body styles	Globe-, angle-, 3-way valves
Characteristics	Equal %, Linear, On - Off
Seat leakage, standard	< 0.01% of rated C _{vs} value, class IV acc. to DIN IEC 534 - other requirements on request
Material for plug / seat ring	316 stainless steel, with hard faced plug shaft (≥ DN 25). Alloy 6 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 ≥ 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	½"	1"	1½"	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 Class 600/900	x x	x x	x x	x x	x x	x x	x x
Body materials:								
Forged steel	C22.8 (1.0460) A105 (1.0432) 1.4571* (316Ti)	x x x	x x	x x	x x			
Cast carbon steel	GS-C25N (1.0619) WCB (1.1136)		x x	x x	x x	x x	x x	x
Cast stainless steel	1.4581 CF3M*	x x	x x	x x	x x	x x	x x	x x

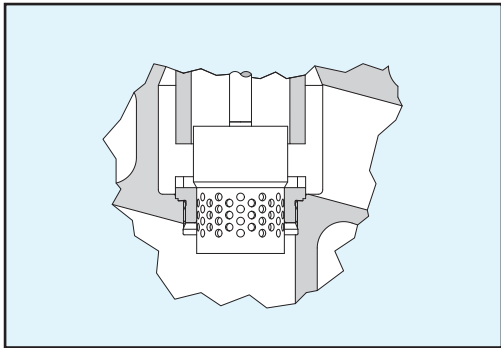
*Material for cryogenic applications down to -270 °C (-450 °F)). Bodies also available in Hastelloy C276 (2.4618), Monel 400 (2.4368) and Inconel 600 (2.4816). Other stainless steel and nickel based alloys on request.

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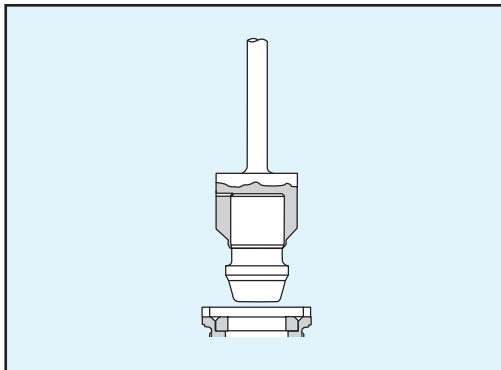
Designs



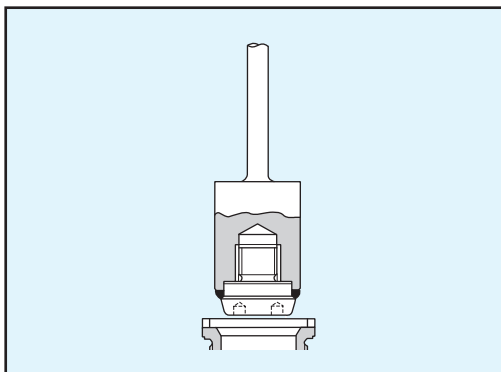
Silencer



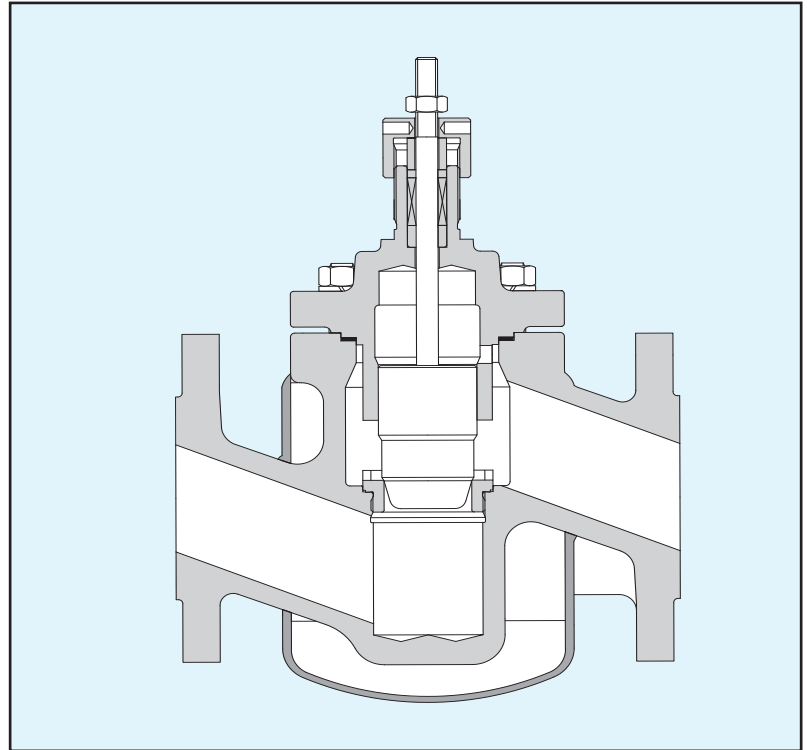
Multi-hole cage plug.



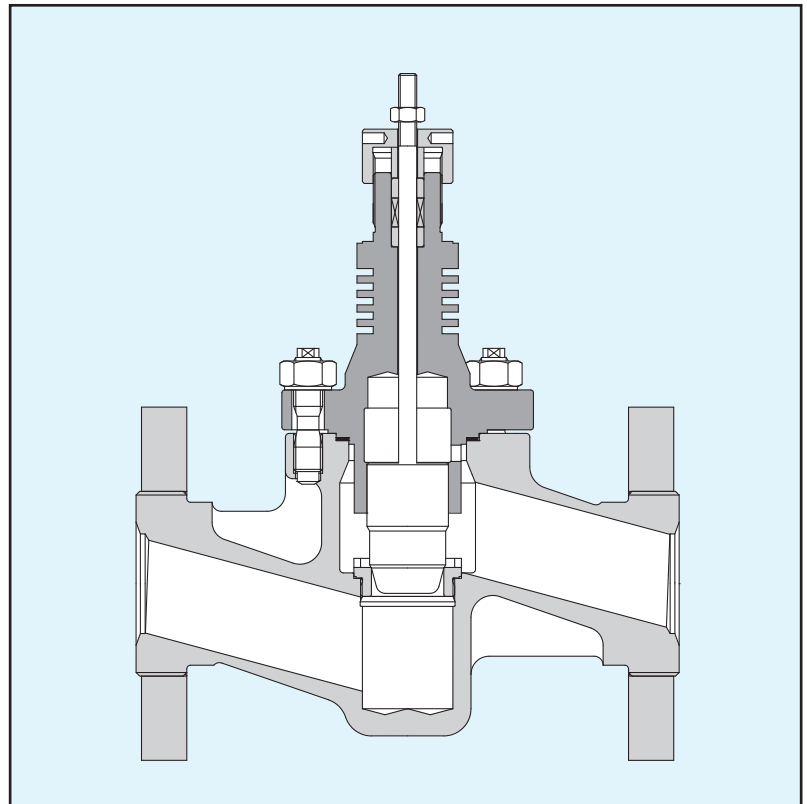
Ceramics or tungsten carbide plug tip and seat.



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



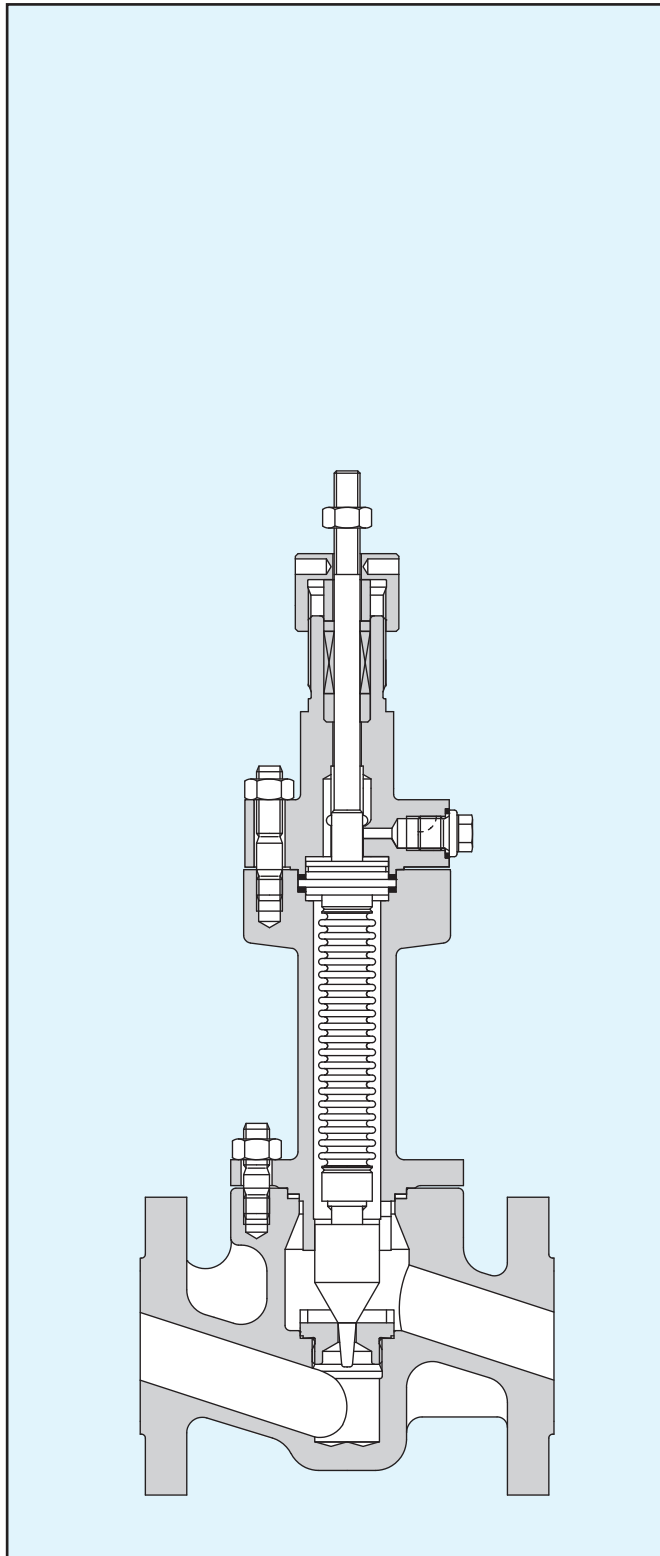
Valve with steam jacket.



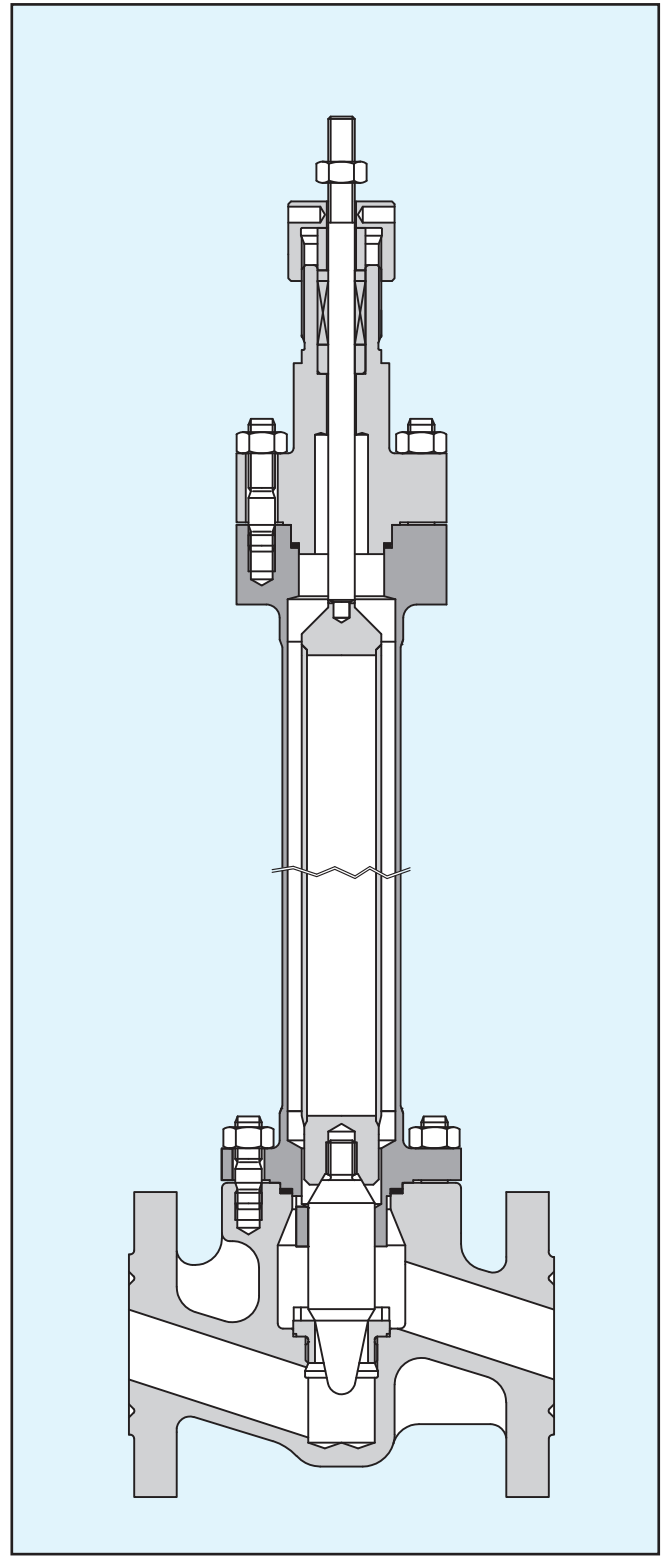
Normalising fins from -30 to 0 °C (-22 to 32 °F) and +200 to 400 °C (-390 to 750 °F).

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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 $-196\text{ }^{\circ}\text{C}$ ($-321\text{ }^{\circ}\text{F}$).

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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	½"	1"	1½"	2"	3"	4"	6"					
Stroke (mm)	10	20	20	20	40	40	40					
Stem diameter (mm)	6	10	10	10	16	16	16					
								0.012	3 (0.19)	50:1	Alloy 6	316Ti
							0.019					
							0.029					
							0.046					
							0.074					
							0.12	4.5 (0.78)				
							0.19					
							0.29					
							0.46					
							0.74					
							1.2	7 (0.28)				
							1.6					
							2.9	10 (0.39)				
							4.6	12 (0.47)				
							7.4	16 (0.63)				
							12	20 (0.79)				
							19	25 (0.98)				
							29	32 (1.26)				
							46	40 (1.57)				
							74	50 (1.97)				
							120	63 (2.48)				
							190	80 (3.15)				
							290	100 (3.94)				
							460	125 (4.92)				

* C_{VS} ≤ 0,25 = K_V x F_R in acc. with IEC 534 (more information on request)
Further special K_{VS} trims on request.

**For calibrating conditions

Valve code

0 3 5 0 P 3

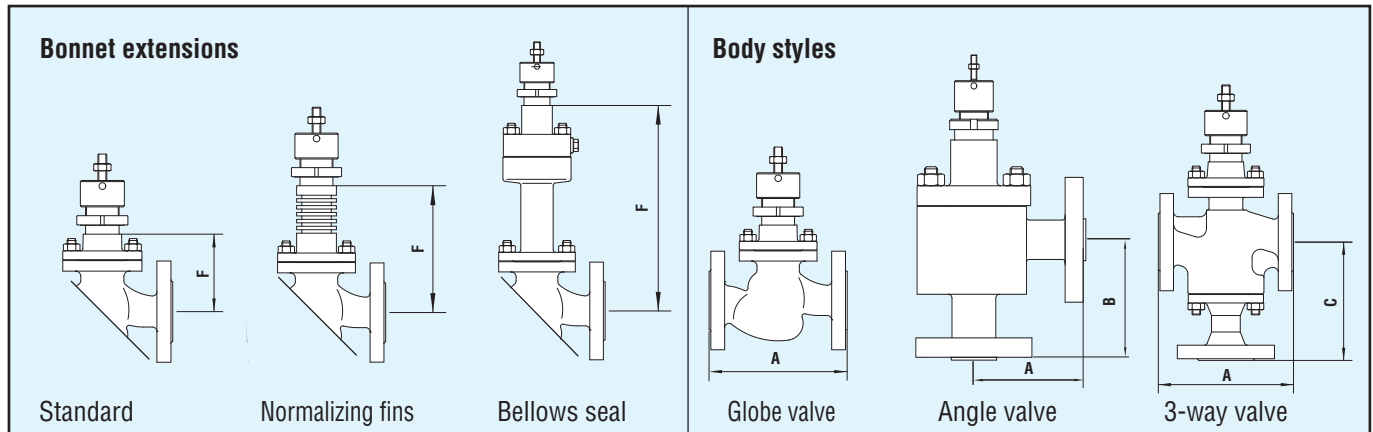
Body type		
035	Globe valve	Series 035 000
031	Angle valve	031 000
033	3-way valve	033 000

Bonnet extension	
0	Standard
1	Normalising fins
3	Bellows seal
5	Cryogenic extension

Actuator	
H3, H4, H5	Manual handwheel
P2, P3 P4, P5	Pneumatic, series 2
37, 38 39, 3D	Pneumatic, series 4
E2, E3 E4, E5	Electric

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



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

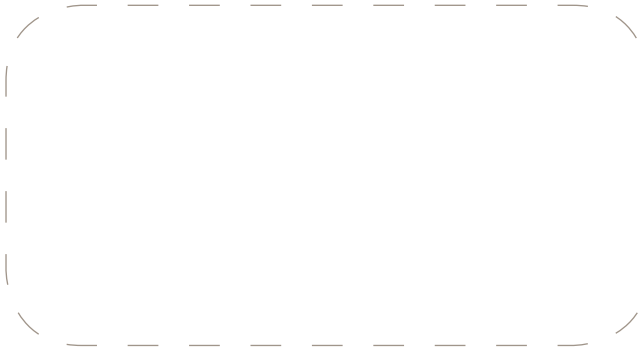
Size	Globe Valve Dimension A						Angle Valve Dimension A / B						3-way valve Dim. C	
	Class 150	Class 300	Class 600	Class 900	Class 1500	Class 2500	Class 150	Class 300	Class 600	Class 900	Class 1500	Class 2500	Class 150	Class 300
½"	178 (7.00)	190 (7.50)	203 (8.00)	216 (8.50)	216 (8.50)	264 (10.39)	89 (3.50)	95 (3.75)	102 (4.00)	108 (4.25)	108 (4.25)	132 (5.20)	-	-
1"	184 (7.25)	197 (7.75)	210 (8.27)	254 (10.00)	254 (10.00)	308 (12.13)	92 (3.62)	98 (3.86)	105 (4.13)	127 (5.00)	127 (5.00)	154 (6.06)	140 (5.50)	140
1½"	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 (26.50)	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 (8.86)	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

DN	Standard		Class 600 - 900		Class 1500 - 2500		Normalising fins		Class 1500 - 2500		Bellows seal		Class 600 - 900	
	Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight
½"	90 (3.55)	7 (15.4)	130 (5.12)	21 (46.3)	130 (5.12)	31 (68.3)	130 (5.12)	7.5 (16.5)	130 (5.12)		195 (7.70)	9 (19.8)	250 (9.25)	
1"	90 (3.55)	8.5 (18.7)	150 (5.90)	46 (101.4)	150 (5.90)	31 (68.3)	150 (5.90)	9 (19.8)	150 (5.90)		240 (9.50)	11 (24.3)	310 (12.00)	
1½"	130 (5.12)	15 (33.0)	190 (7.50)	51 (112.5)	190 (7.50)	61 (134.5)	188 (7.40)	16 (35.3)	190 (7.50)		270 (10.65)	21 (46.3)	340 (13.38)	
2"	135 (3.31)	18 (40.0)	190 (7.50)		190 (7.50)		193 (7.60)	19 (42.0)	190 (7.50)		270 (10.65)	24 (53.0)	340 (13.38)	
3"	200 (7.87)	42 (92.6)	260 (10.25)				260 (10.25)	44 (97.0)			430 (17.00)	48 (106.0)		
4"	225 (8.86)	51 (112.5)	285 (11.22)				285 (11.22)	53 (117.0)			455 (18.00)	57 (126.0)		
6"	330 (13.00)	130 (286.5)	390 (15.35)				390 (15.35)	135 (298.0)			430 (16.93)	139 (307.0)		



Your contact:



KMENBR3520-01 02/10

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