



Kämmer® Series 035000

Standard Valves



Experience In Motion

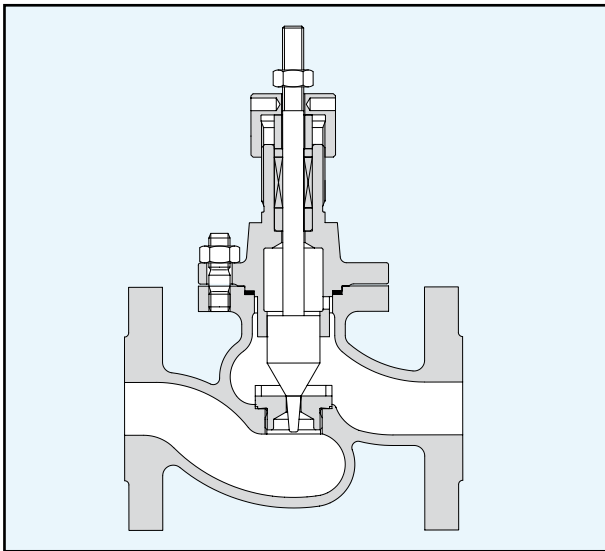
Series 035000

Description

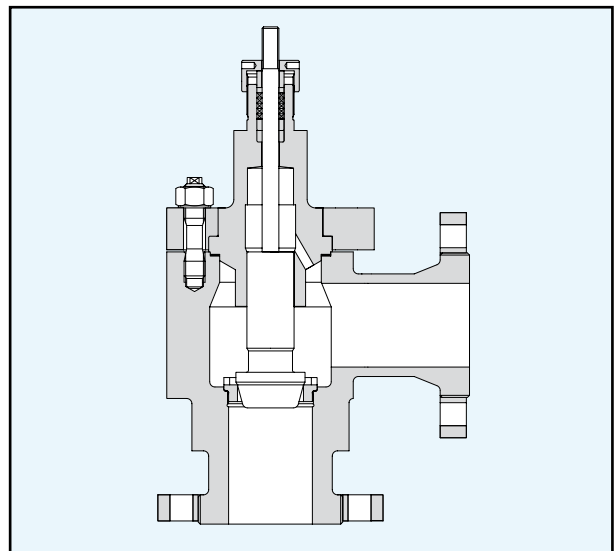
The series 035000 are General Service Valves for special requirements. Ranging from 1" (DN25) to 6" (DN150) this valve series offers many possibilities. Designed mainly in special materials such as Hastelloy, Alloy 20 or other rare materials, the Series 035000 becomes the solution for your application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

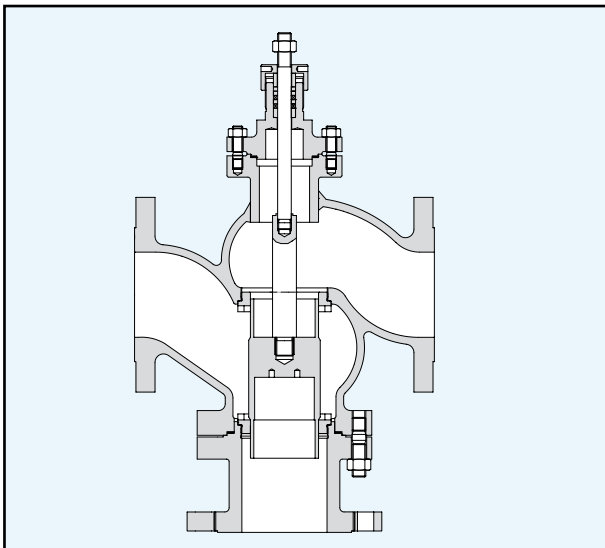
The 035000, with it's further reaching possibilities, is a perfect extension to Flowserve's "FlowTop" General Service valve series.



Series 035000 globe valve



Series 031000 angle valve



Series 033000 3-way valve

Series 035000

Technical Data

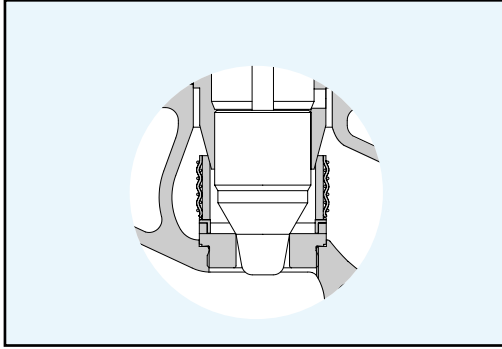
Valve body styles	Globe-, angle-, 3-way valves
Characteristics	Equal %, Linear, On - Off
Seat leakage, standard	< 0.01% of rated k_{vs} value, class IV acc. to DIN IEC 534 - other requirements on request
Material for plug / seat ring	316 stainless steel, with hard faced plug shaft (\geq DN 25). Alloy 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)	Valve plug with PTFE insert for $\geq k_{vs}$ 0.1
Packing	PTFE for temperatures up to 200 °C Grafoil for temperatures over 200 °C PTFE for oxygen service Packing according to German clean air act (TA-Luft)
Body gaskets	PTFE for temperatures up to 200 °C Grafoil for temperatures over 200 °C
Extensions	Standard, normalising fins, bellows seal
Steam jacket connections	Screwed G ½", flanges DN 15 PN 40
k_{vs}-values	See table on page 6

Valve sizes	DIN ANSI	15 ½"	25 1"	40 1½"	50 2"	80 3"	100 4"	150 6"
Stroke	mm	10	20	20	20	40	40	40
DIN flanges	PN 10 - 40 PN 63 - 160	x x	x x	x x	x x	x x	x x	x x
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

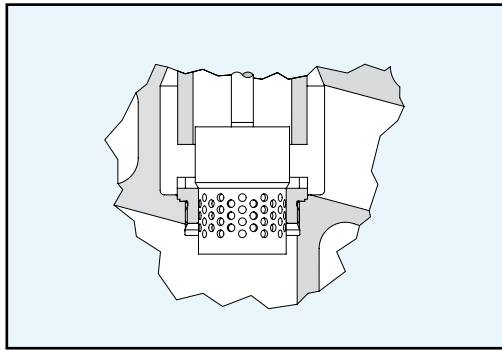
*Material for cryogenic applications down to -270 °C. Bodies also available in Hastelloy C276 (2.4618), Monel 400 (2.4368) and Inconel 600 (2.4816). Other stainless steel and nickel based alloys on request.

Series 035000

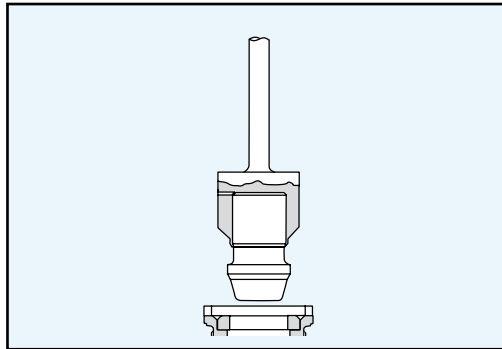
Designs



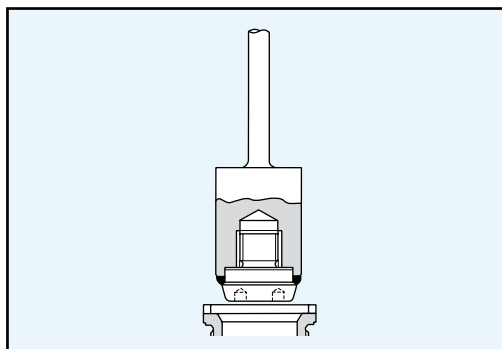
Silencer



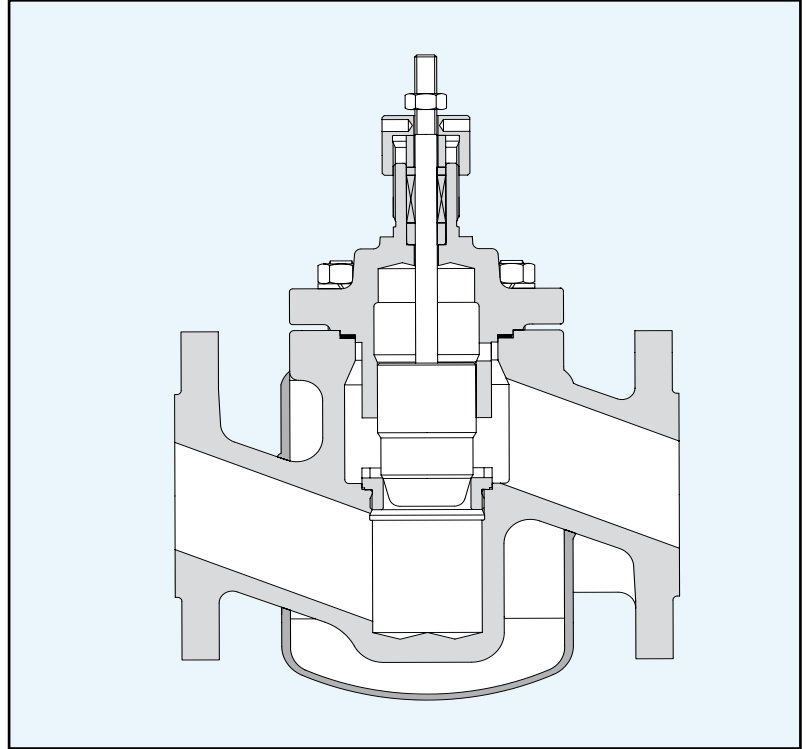
Multi-hole cage plug.



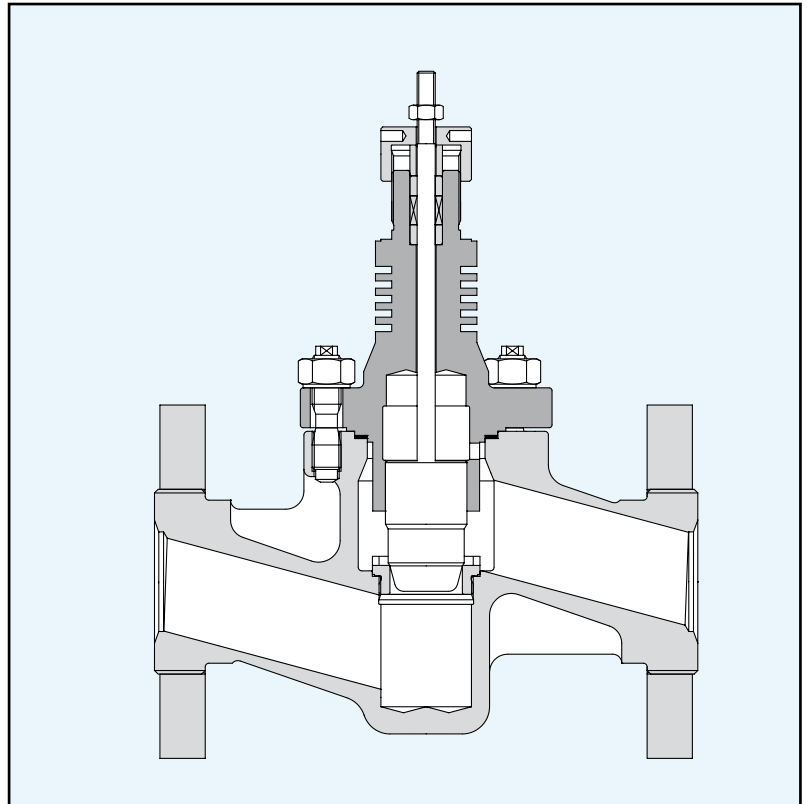
Ceramics or tungsten carbide plug tip and seat.



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



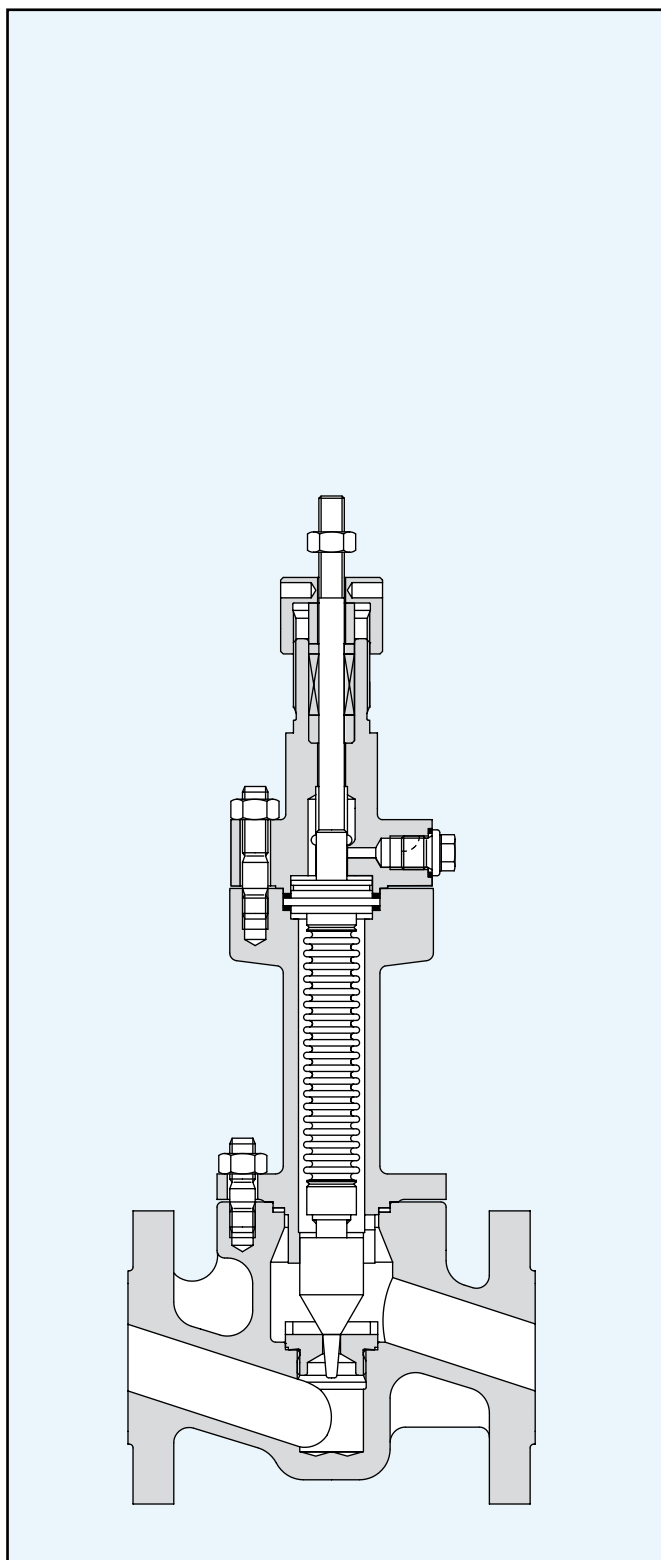
Valve with steam jacket.



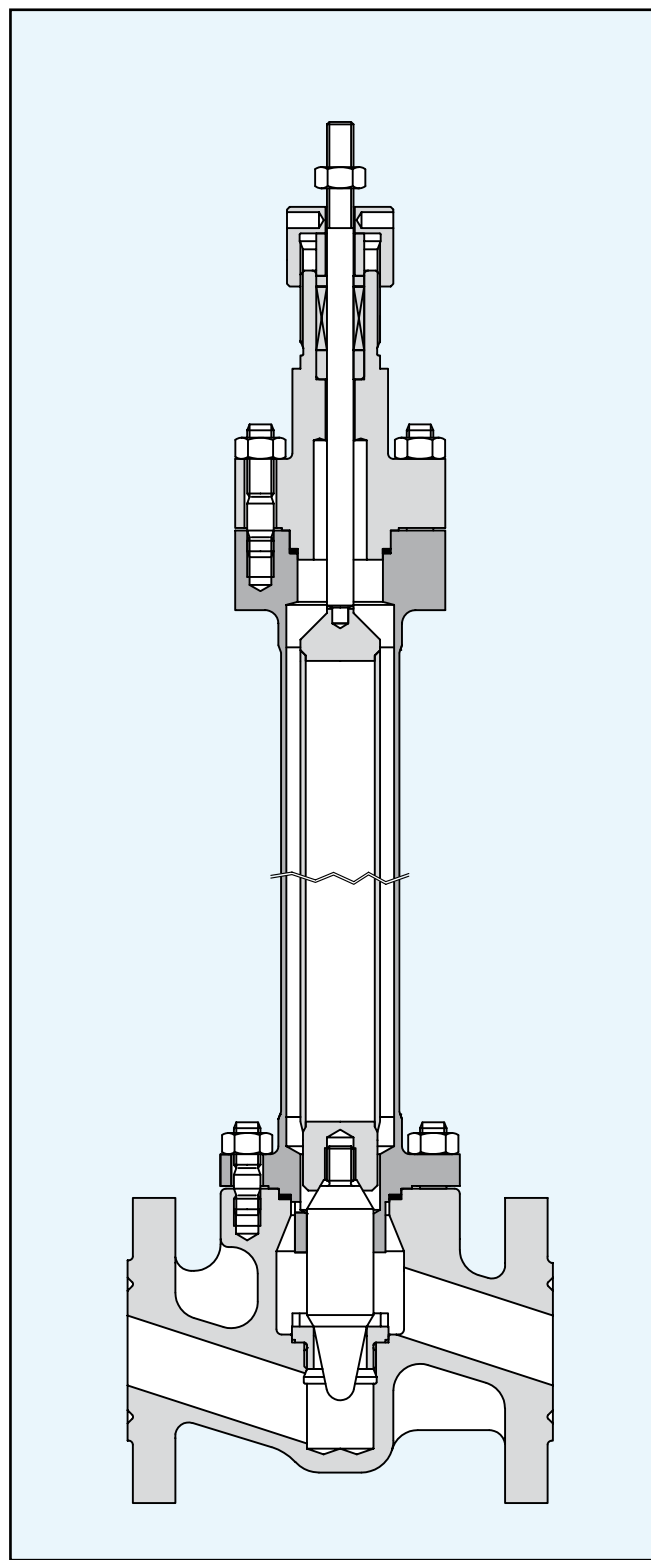
Normalising fins for temp. from -30 to 0 °C and from +200 to 400 °C.

Series 035000

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 $-196\text{ }^{\circ}\text{C}$.

Series 035000

Standard K_{VS} -values

								k_{VS} -value*	Seat diameter (mm)	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					
								0.010	3	50:1	Alloy 6	316Ti
							0.016					
							0.025					
							0.040					
							0.063					
							0.10	4.5				
							0.16					
							0.25					
							0.40					
							0.63	7				
							1.0					
							1.6	10				
							2.5					
							4.0	12				
							6.3	16				
							10	20				
							16	25				
							25	32				
							40	40				
							63	50				
							100	63				
							160	80				
							250	100				
							400	125				

* $K_{VS} \leq 0,25 = K_V \times F_R$ 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

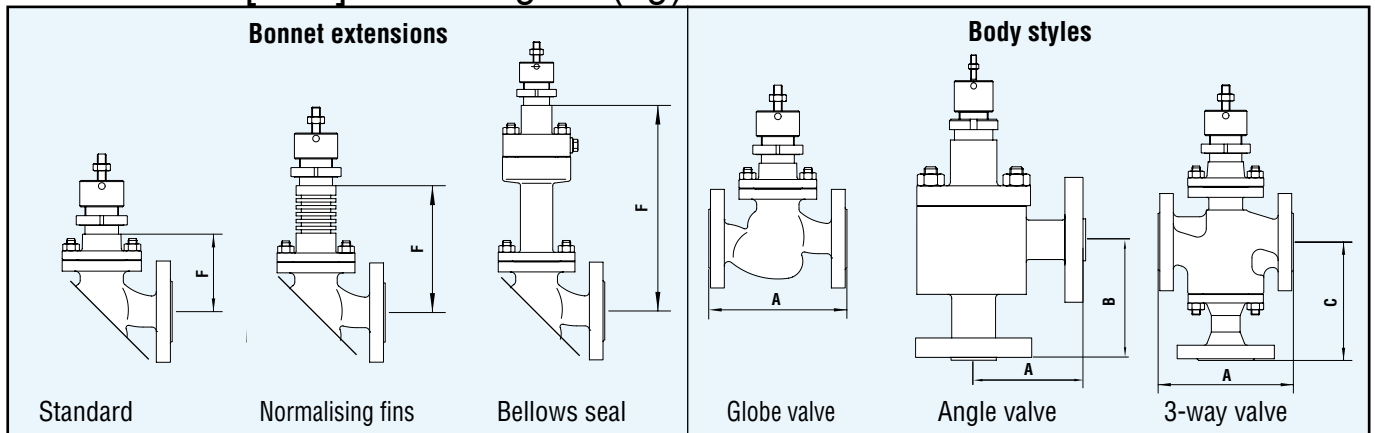
Valve type		
035	Globe valve	Series 035 000
031	Angle valve	031 000
033	3-way valve	033 000

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

Series 035000

Dimensions [mm] and Weights (kg)



Face to face dimensions A / B / C, DIN design (mm)

DN	Globe valve A			Angle valve A / B			3-way valve C
	PN 10 - 40	PN 63 - 160	PN 250 - 320	PN 10 - 40	PN 63 - 160	PN 250 - 320	PN 10 - 40
15	130	210	230	90	105	115	-
25	160	230	260	100	115	130	140
40	200	260	300	115	130	150	170
50	230	300	350	125	150	175	170
80	310	380	450	155	190	225	280
100	350	430	520	175	215	260	280
150	480	550	700	225	275	350	360

Height F (mm) and weight (kg), DIN design

DN	Standard						Normalising fins				Bellows seal			
	PN 10 - 40		PN 63 - 160		PN 250 - 320		PN 10 - 40		PN 63 - 160		PN 10 - 40		PN 63 - 160	
	Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight	Height	Weight
15	90	6	130	19	130	27	130	7	130		195	9	250	
25	90	6.5	150	27	150	43	150	7.5	150		240	9	310	
40	130	13.5	190	47	190	57	190	13.5	190		270	18.5	340	
50	130	16	190		190	61	190	17	190		270	21	340	
80	200	39	260				260	40			430	45		
100	225	48	285				285	49			455	54		
150	330	125	390				390	130			430	135		

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

DN	Globe valve A						Angle valve A / B						3-way valve 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
1/2"	178	190	203	216	216	264	89	95	102	108	108	132	-	-
1"	184	197	210	254	254	308	92	98	105	127	127	154	140	140
1 1/2"	222	235	251	305	305	384	111	117	125	152	152	192	171	171
2"	254	267	286	368	368	451	127	133	143	184	184	225	171	171
3"	298	318	337	381	470	578	149	159	168	190	235	289	279	279
4"	352	368	394	457	546	673	176	184	197	229	273	273	279	279
6"	451	473	508	610	705	914	225	236	254	305	352	457	362	362

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

DN	Standard						Normalising fins				Bellows seal			
	Class 150 - 300		Class 600 - 900		Class 1500 - 2500		Class 150 - 900		Class 1500 - 2500		Class 150 - 300		Class 600 - 900	
	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	
1"	90	8.5	150	46	150	31	150	9	150		240	11	310	
1 1/2"	130	15	190	51	190	61	188	16	190		270	21	340	
2"	135	18	190		190		193	19	190		270	24	340	
3"	200	42	260				260	44			430	48		
4"	225	51	285				285	53			455	57		
6"	330	130	390				390	135			430	139		



Flowserve Essen GmbH
Kämmer Ventile
Manderscheidtstrasse 19
45141 Essen
Germany
Tel.: +49 (0) 201 89 19 5
Fax.: +49 (0) 201 89 19 662

Your contact:



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