



Kammer Series 185000

Laboratory Valves



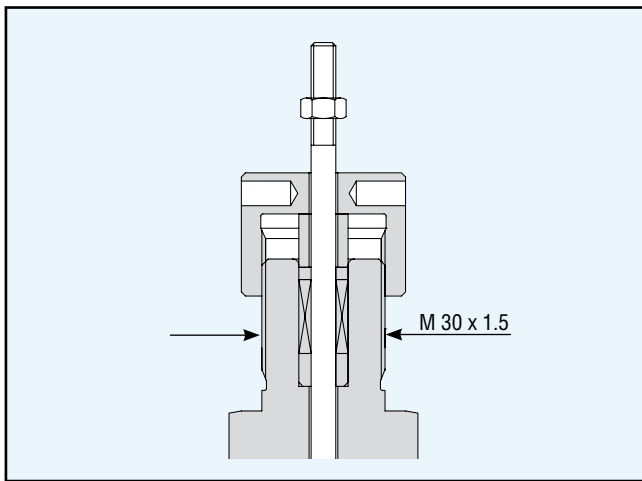
Experience In Motion

Kammer Series 185000

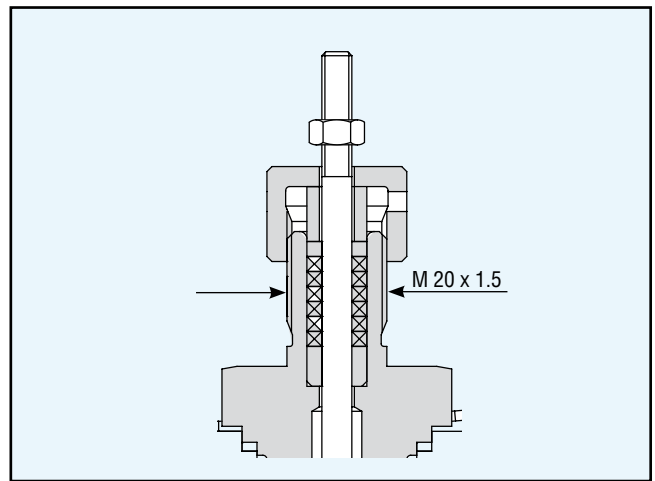
Description

Kammer microflow series 185000 / 285000 and 187000 / 287000 are ½" laboratory valves designed for precision controlling. The bodies in stainless steel and C-steel are manufactured from forged material, the bodies for all other special materials are manufactured from bar stock. The bodies are, therefore, easy to adapt for application requirements. Together with the series 1 or 2 actuators they form a compact control valve.

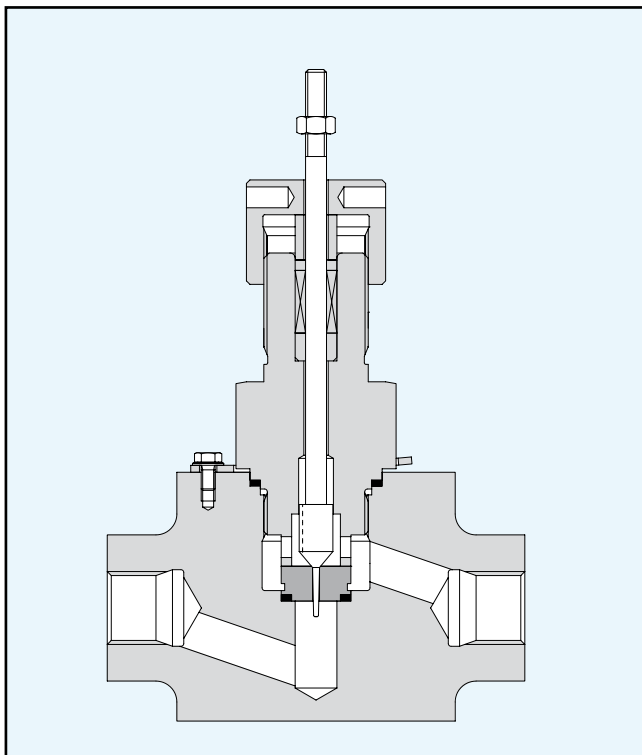
Upon request a special calculating program is available to define the C_{vs} values and the actual rangeability.



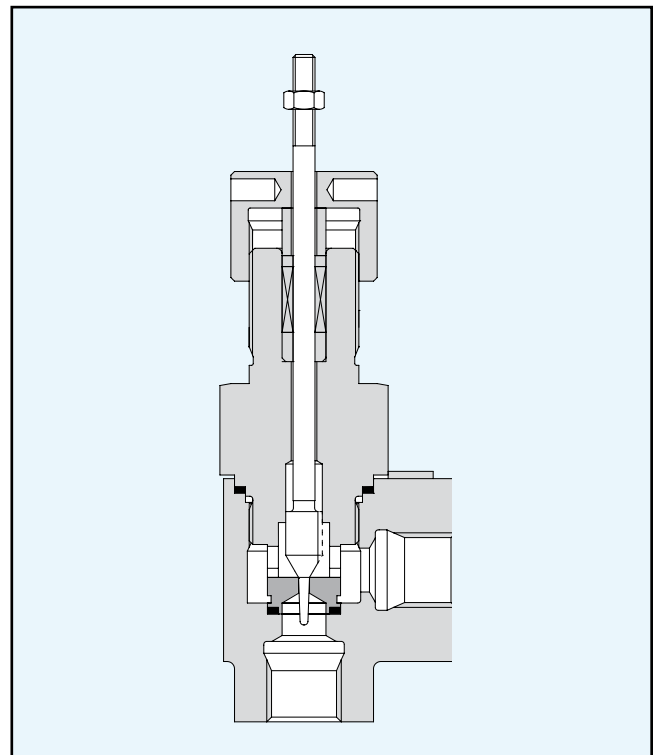
Series 185000 with connection M30 for actuator series 2 and 4



Series 285000 with connection M20 for actuator series 1 and 4



Series 185000 / 285000 globe valve



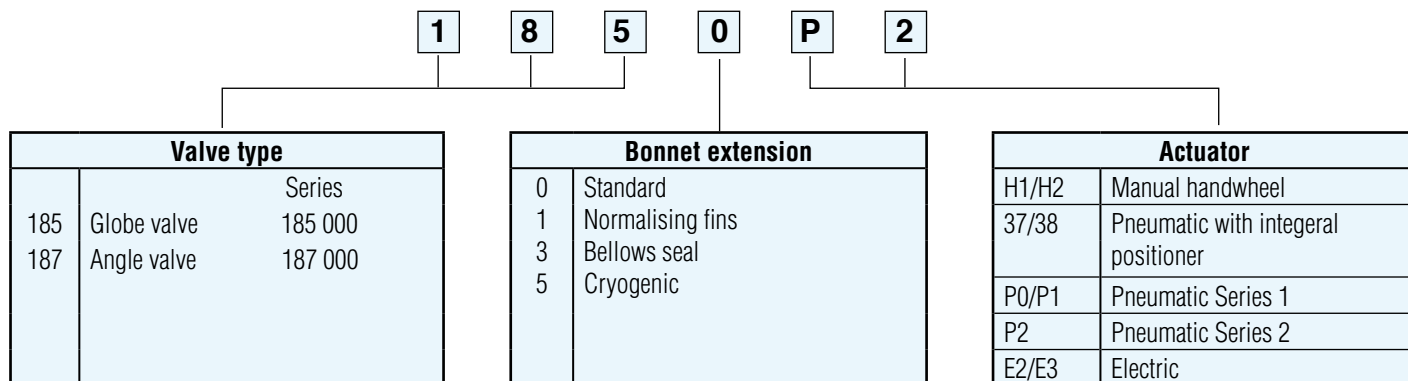
Series 187000 / 287000 angle valve

Kammer Series 185000

Technical Data

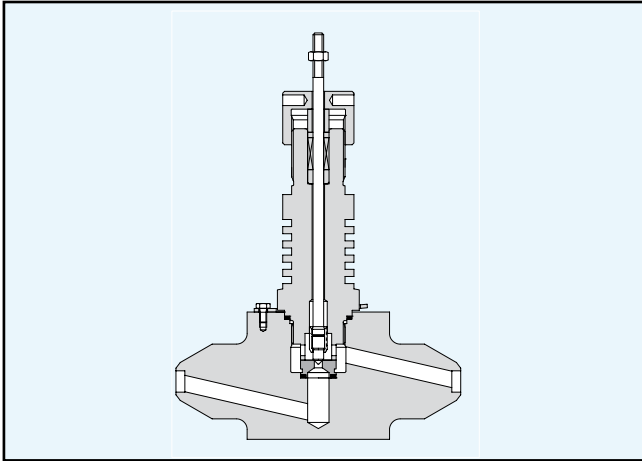
Valve body style	Globe valve and angle valve (angle valve with female thread only)			
Characteristics	Equal%, Linear, On-Off			
Seat leakage	< 0.01% of rated C _{vs} (ANSI Class IV)			
Material for valve plug / seat ring	See table page 5			
Packing	PTFE for temperatures up to 200 °C (392 °F) Grafoil for temperatures over 200 °C (392 °F) PTFE packing for oxygen service Packing according to German clean air act			
PTFE soft seat T = max. 150 °C (300 °F)	In seat ring C _{vs} ≥ 0.12			
Body gasket	PTFE for temperatures up to 200 °C (392 °F) Grafoil for temperatures over 200 °C (392 °F)			
Extensions	Standard, normalizing fins, bellows seal, cryogenic			
Optional steam jacket	G ¼" or NPT ¼", other connections on request			
C_{vs} values	See table on page 5			
Sizes DIN	10	15	20	25
DIN-flange PN 10 - 160	X	X	X	X
DIN-flange PN 250 - 400	X	X	X	-
Sizes ANSI	-	½"	¾"	1"
Class 150 - 2500	-	X	X	X
Connections	G ½", NPT ½" or flange connections			
Body material	A 105, 1.4405/316L Optional: Hastelloy B/C, Nickel, Monel, Titanium, Zirconium, Inconel			
Canadian Registration Number	CRN 0C09104.2 for the series 185000, max. Class 1500 [#]			

Valve Code

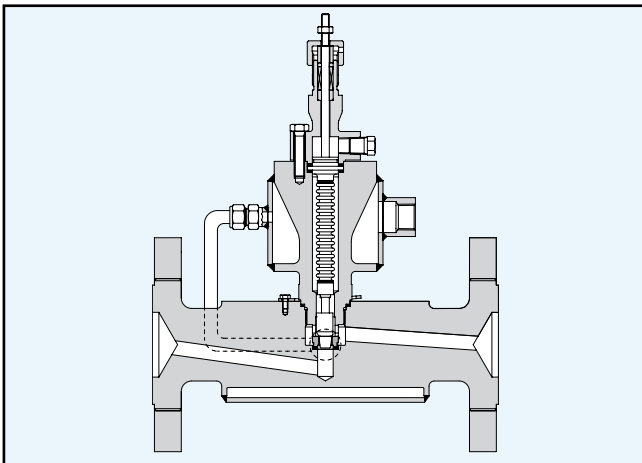


Kammer Series 185000

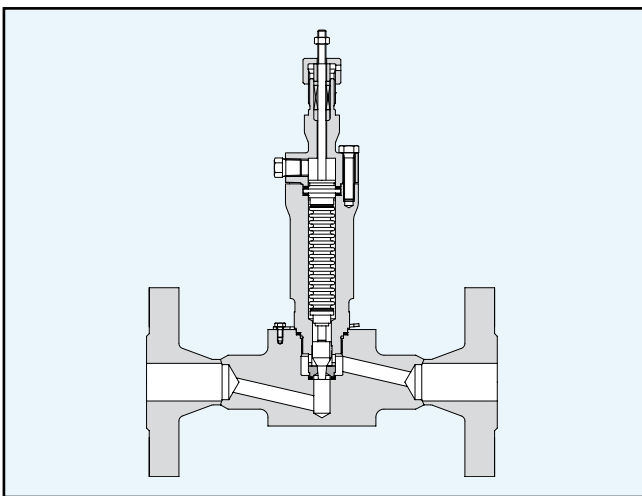
Designs



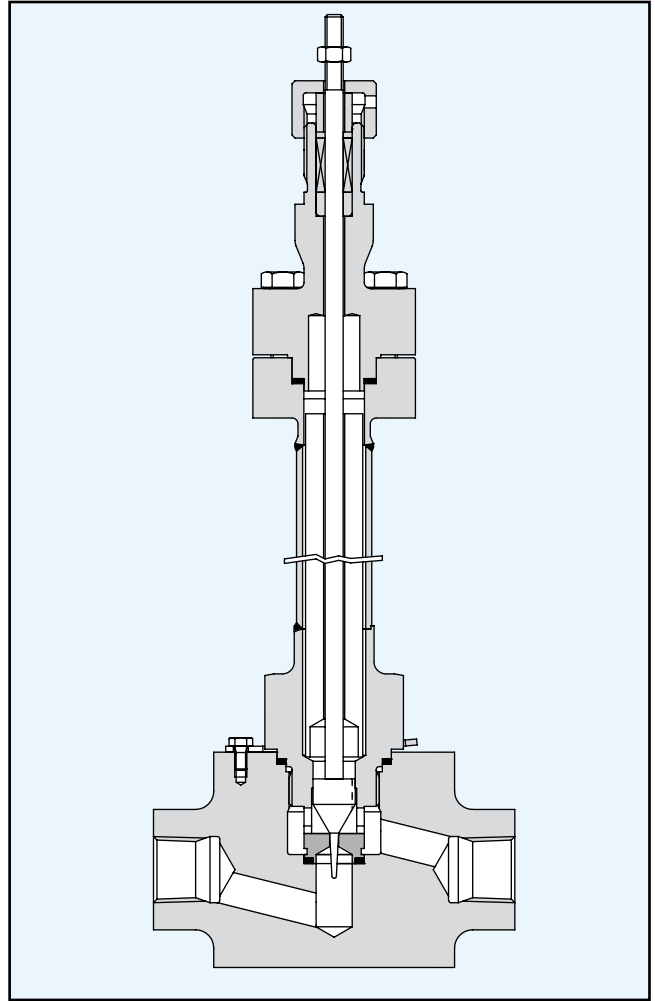
Valve with normalising fins



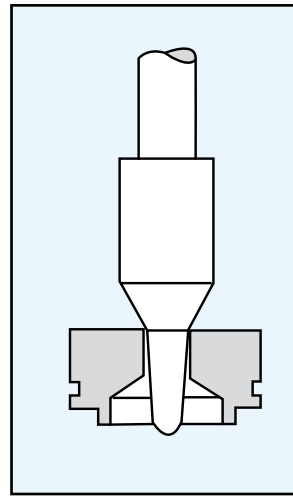
Valve with steam jacket



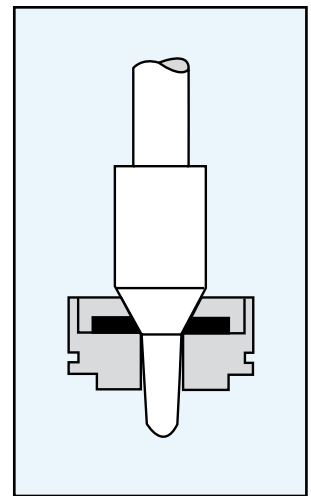
Valve with bellows seal



Valve with cryogenic extension



Standard trim



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

Kammer Series 185000

Standard C_{vs}/K_{vs} values

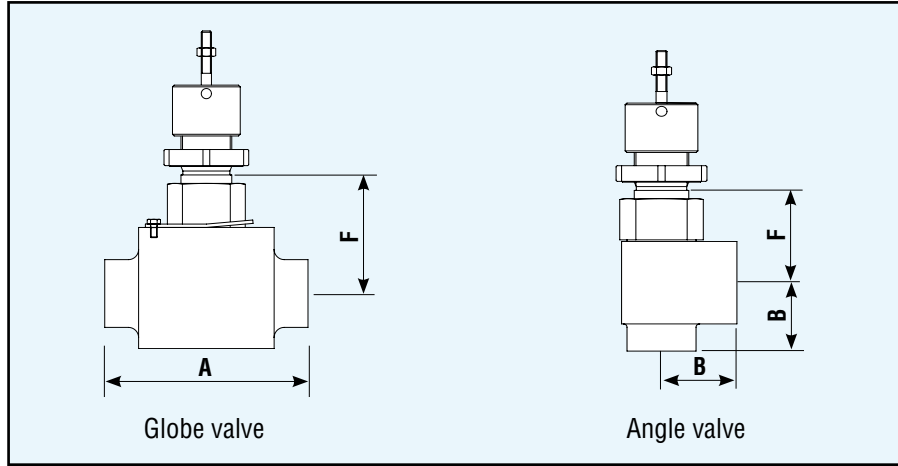
C_{vs} values *	K_{vs} values *	Reynolds Factor Kämmer	Stroke mm (in.)	Stem diameter mm (in.)	Seat diameter mm (in.)	Rangeability**	Plug material, Standard	Seat material, Standard	Characteristics Iin	Characteristics equal%	Alternative materials for seat/plug	
											Tungsten carbide; Hastelloy C	Nickel; Monel; Titanium; Alloy 6
0.0000012	0.000001	0.019	10 (0.39)	6 (0.24)	2	25:1	Alloy 6	1.4122 440C		X		
0.0000019	0.0000016	0.024								X		
0.0000029	0.0000025	0.030								X		
0.0000047	0.000004	0.038								X		
0.0000074	0.0000063	0.049								X		
0.000012	0.00001	0.062	10 (0.39)	6 (0.24)	2	25:1	Alloy 6	1.4122 440C		X		
0.000019	0.000016	0.079								X		
0.000029	0.000025	0.100								X		
0.000047	0.00004	0.128								X		
0.000074	0.000063	0.162								X		
0.00012	0.0001	0.206	10 (0.39)	6 (0.24)	2	25:1	Alloy 6	1.4122 440C		X	X	
0.00019	0.00016	0.249								X	X	
0.00029	0.00025	0.298								X	X	
0.00047	0.0004	0.360								X	X	
0.00074	0.00063	0.432								X	X	
0.0012	0.001	0.520	10 (0.39)	6 (0.24)	2	25:1	Alloy 6	1.4122 440C		X	X	
0.0019	0.0016	0.628								X	X	
0.0029	0.0025	0.751								X	X	
0.0047	0.004	0.871								X	X	
0.0074	0.0063	0.931								X	X	
0.012	0.01	0.940	10 (0.39)	6 (0.24)	3	50:1	Alloy 6	1.4571 316		X	X	X
0.019	0.016	0.968								X	X	X
0.029	0.025	0.983								X	X	X
0.047	0.04	0.990								X	X	X
0.074	0.063	1.000								X	X	X
0.12	0.1	1.000	10 (0.39)	6 (0.24)	3	50:1	1.4571 316	1.4571 316		X	X	X
0.19	0.16	1.000								X	X	X
0.29	0.25	1.000								X	X	X
0.47	0.4	1.000								X	X	X
0.74	0.63	1.000								X	X	X
1.2	1.0	1.000	10 (0.39)	6 (0.24)	7	50:1	1.4571 316	1.4571 316		X	X	X
1.9	1.6	1.000								X	X	X
2.9	2.5	1.000								X	X	X

* $C_{vs}/K_{vs} \leq 0.25 = C_v/K_v \times F_R$ acc. to ICE 534

** For calibrating conditions

Kammer Series 185000

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



Dimension A / B

Size		Female thread		DIN-Flange			ANSI-Flange				
DIN	ANSI	Globe	Angle	PN 10-40	PN 63-160	PN250-400	Class 150	Class 300	Class 600	Class 1500	Class 2500
10	-	-	-	130 (5.1)	210 (8.3)	-	-	-	-	-	-
15	½"	120 (4.7)	43/43(1.7)/(1.7)	130 (5.1)	210 (8.3)	230 (9.0)	178 (7.0)	190 (7.5)	203 (8.0)	216 (8.5)	264 (10.4)
20	¾"	-	-	150 (5.9)	230 (9.0)	230 (9.0)	181 (7.1)	194 (7.6)	206 (8.1)	230 (9.0)	273 (10.7)
25	1"	-	-	160 (6.3)	230 (9.0)	260 (10.2)	184 (7.2)	197 (7.7)	210 (8.3)	254 (10.0)	308 (12.1)

Dimension F

Size	Standard	Fins	Bellows		Cryogenic
			PN 10-100	PN160-250	
all	65 (2.3)	105 (4.1)	200 (7.9)	250 (9.8)	S*

*S = Special design to customer specifications.

Weights

Size		Female thread		DIN-Flange			ANSI-Flange				
DIN	ANSI	Globe	Angle	PN 10-40	PN 63-160	PN250-400	Class 150	Class 300	Class 600	Class 1500	Class 2500
10	-	-	-	4.5 (9.9)	4.9 (10.8)	5.4 (11.9)	4.5 (9.9)	4.8 (10.6)	5.0 (11.0)	5.4 (11.9)	5.6 (12.3)
15	½"	3.8 (8.4)	3.8 (8.4)	4.6 (10.1)	5.1 (11.2)	5.8 (12.8)	4.6 (10.1)	5.0 (11.0)	5.3 (11.7)	5.8 (12.8)	6.1 (13.4)
20	¾"	-	-	4.9 (10.8)	7.5 (16.5)	8.5 (18.7)	4.9 (10.8)	5.5 (12.1)	7.7 (16.9)	8.5 (18.7)	8.8 (19.4)
25	1"	-	-	5.7 (12.5)	7.7 (16.9)	9.0 (19.8)	5.7 (12.5)	6.1 (13.4)	7.3 (17.0)	9.0 (19.8)	9.5 (21.0)

Other Kämmer micro-flow valves



Kämmer micro-flow series 030000

Kämmer series 030000 1/2" low flow valves are designed for precision controlling up to ANSI 300# / PN40. The body is a precision casting for high finishing accuracy. Together with the series 1 actuator it forms a compact control valve.

Upon request a special calculating programme is available to define the C_{vs} -values and the actual rangeability.



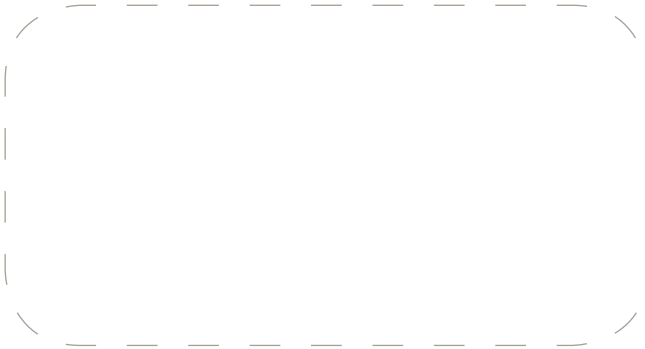
Kämmer micro-flow series 080000/081000

Kämmer series 080000 / 081000 1/4" low flow laboratory valves are designed for precision controlling up to ANSI 2500# / PN400. The body is manufactured from bar stock stainless steel and is easily adapted to meet application requirements. Together with the series 1 actuator it forms an extremely compact control valve.

Upon request a special calculating programme is available to define the C_{vs} values and the actual rangeability.



Your Contact:



FCD KMENBR8521-00 06/08

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