

**Kämmer® SmallFlow™ - 385000**

Low and Micro Flow Valves

FCD KMENTB0050-00 11/08



# C<sub>v</sub> VALUES

					Plug	1.4571	Alloy 6	Alloy 6	Alloy 6	1.4571	Multihole	Hast C	IN/NI/MO
					Seat	1.4571	1.4571	1.4122	Alloy 6	PTFE	Alloy 6	Hast C	IN/NI/MO
Kvs / Cv values					seat dia.								
Kvs	Trim#	Cv	Trim#	seat dia.									
0,000054	2T	0,000063	.08T	2 / 0.08			x						
0,000068	2S	0,000079	.08S	2 / 0.08			x						
0,000084	2R	0,000098	.08R	2 / 0.08			x						
0,0001	2Q	0,00012	.08Q	2 / 0.08			x						
0,00013	2P	0,00015	.08P	2 / 0.08			x						
0,00016	2O	0,00019	.08O	2 / 0.08			x						
0,0002	2N	0,00023	.08N	2 / 0.08			x						
0,00025	2M	0,00029	.08M	2 / 0.08			x						
0,00031	2L	0,00036	.08L	2 / 0.08			x						
0,00039	2K	0,00045	.08K	2 / 0.08			x						
0,00048	2J	0,00056	.08J	2 / 0.08			x						
0,00064	2I	0,00075	.08I	2 / 0.08			x						
0,00084	2H	0,00098	.08H	2 / 0.08			x						
0,0011	2G	0,0013	.08G	2 / 0.08			x						
0,0015	2F	0,0017	.08F	2 / 0.08			x						
0,0019	2E	0,0022	.08E	2 / 0.08			x					x	
0,0025	2D	0,0029	.08D	2 / 0.08			x					x	
0,0033	2C	0,0038	.08C	2 / 0.08			x					x	
0,0046	2B	0,0054	.08B	2 / 0.08			x					x	
0,0068	2A	0,0079	.08A	2 / 0.08			x					x	
0,011	3H	0,013	.12H	3 / 0.12		x		x				x	x
0,017	3G	0,02	.12G	3 / 0.12		x		x				x	x
0,025	3F	0,029	.12F	3 / 0.12		x		x				x	x
0,04	3E	0,047	.12E	3 / 0.12		x		x				x	x
0,063	3D	0,074	.12D	3 / 0.12		x		x				x	x
0,1	3C	0,12	.12C	3 / 0.12	x	x		x	x			x	x
0,16	3B	0,19	.12B	3 / 0.12	x	x		x	x			x	x
0,25	3A	0,29	.12A	3 / 0.12	x	x		x	x			x	x
0,4	4,5B	0,47	.18B	4,5 / 0.18	x	x		x	x			x	x
0,63	4,5A	0,74	.18A	4,5 / 0.18	x	x		x	x			x	x
1	7B	1,2	.28B	7 / 0.28	x	x		x	x			x	x
1,6	7A	1,9	.28A	7 / 0.28	x	x		x	x	x		x	x
2,5	10	2,9	.40	10 / 0.40	x	x		x	x	x		x	x
4	12	4,7	.48	12 / 0.48	x	x		x				x	x
<b>Stroke</b>													
mm / in					10 / 0.394								
<b>Plug Characteristic</b>													
Equal percentage					x								
Linear					x								
On-Off					x								

## BODY DATA

	15	20	25	15	20	25	15	20	25
	1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
	Cast			Forged			Barstock		
<b>Body Style</b>									
Globe		x			x			x	
Angle									x
<b>Pressure Classes</b>									
PN 10 - 40		x							x
PN 63 - 160		x							x
PN 250					x				x
PN 400					x				x
CL 150		x							x
CL 300		x							x
CL 600		x							x
CL 900 - 1500					x				x
CL 2500					x				x
<b>End Connection Type</b>									
Screwed ends G 1/2" / 1/2" NPT	x			x			x		
Flanged EN 1092-1					x				
Flanged ANSI B16.5					x				
Weld ends	x			x			x		
APV flanges			x						
Screwed ends DIN 11851			x						
Others on request						x			
<b>Bonnet Type</b>									
Standard					x				
Bellows					x				
Normalizing fins					x				
Low temperature extension (300mm / 600mm)					x				
<b>Approvals</b>									
PED 97/23					x				
ATEX 94/9					x				

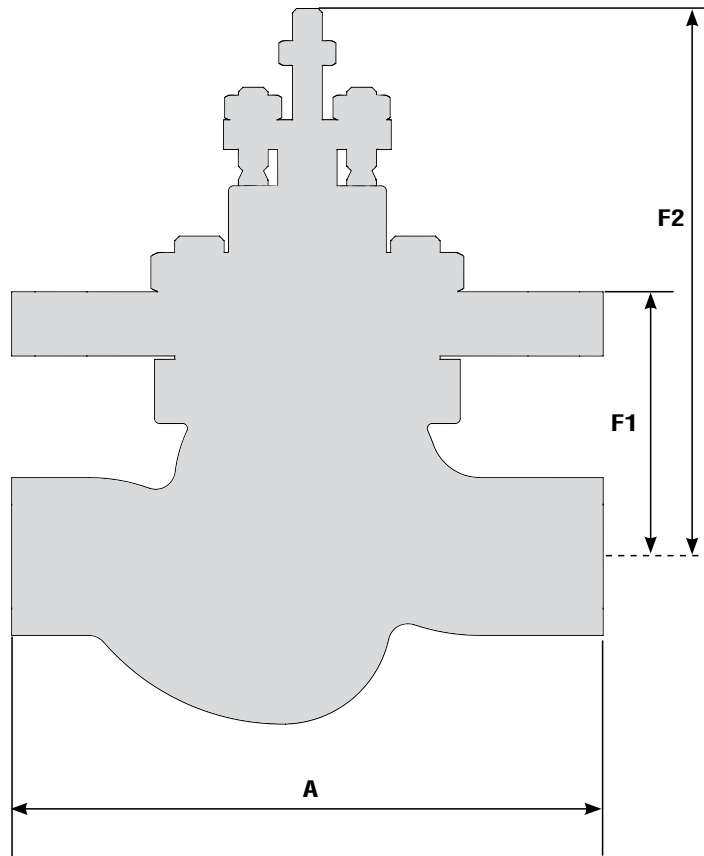
## MATERIALS

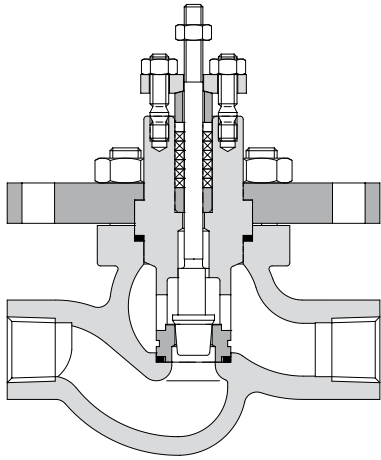
		15	20	25	15	20	25	15	20	25
		1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
		Cast			Forged			Barstock		
<b>Body Material</b>										
1.4408 / CF3M	Stainless Steel		x							
1.4404 / 316L	Stainless Steel					x				x
1.0619 / WCB	Carbon Steel		x							
1.0460 / A105	Carbon Steel				x					x
Hastelloy 276										x
Inconel 600										x
Nickel										x
Monel 400										x
Other materials on request										x
<b>Bellows Material</b>										
1.4571 PN 10-63			x							x
1.4571 PN 100			x							x
1.4571 PN 160			x							x
1.4571 PN 250						x				x
HC 276 PN 10-63			x							x
<b>Packing</b>										
PTFE						x				
Graphite SAS						x				
PTFE V-Ring spring loaded						x				
SureGuard HP	ISO 15848-1 Class B (max PN100)		x							x
ISO-C	ISO 15848-1 Class C (max PN 160)		x							x
<b>Body Gaskets</b>										
PTFE						x				

## DIMENSIONS & WEIGHTS

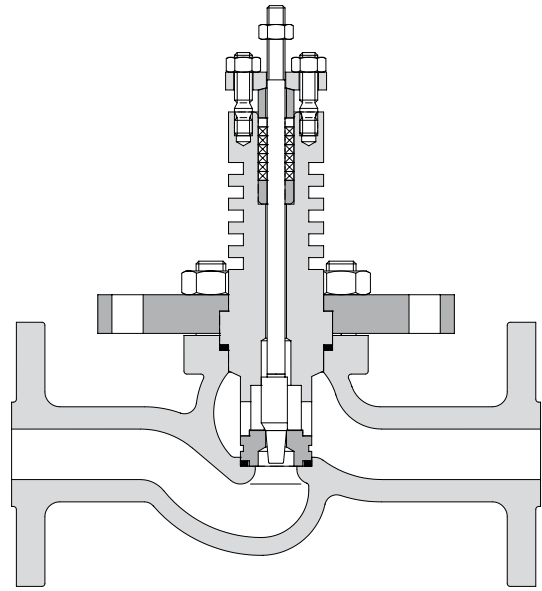
	15	20	25	15	20	25	15	20	25
	1/2"	3/4"	1"	1/2"	3/4"	1"	1/2"	3/4"	1"
	Cast			Forged			Bar stock		
<b>A [mm/in]</b>									
Screwed ends G 1/2" / 1/2" NPT	120 / 4.724								
Flanged EN 1092-1 (PN 10-40)	130 / 5.118	150 / 5.906	160 / 6.299	130 / 5.118	150 / 5.906	160 / 6.299	130 / 5.118	150 / 5.906	160 / 6.299
Flanged EN 1092-1 (PN 63-160)	210 / 8.268	230 / 9.055	230 / 9.055	210 / 8.268	230 / 9.055	230 / 9.055	210 / 8.268	230 / 9.055	230 / 9.055
Flanged EN 1092-1 (PN 250)	230 / 9.055	230 / 9.055	260 / 10.236	230 / 9.055	230 / 9.055	260 / 10.236	230 / 9.055	230 / 9.055	260 / 10.236
Flanged EN 1092-1 (PN 400)	230 / 9.055	230 / 9.055	260 / 10.236	230 / 9.055	230 / 9.055	260 / 10.236	230 / 9.055	230 / 9.055	260 / 10.236
Flanged ANSI B16.5 (Class 150)	178 / 7.008	181 / 7.126	184 / 7.244	178 / 7.008	181 / 7.126	184 / 7.244	178 / 7.008	181 / 7.126	184 / 7.244
Flanged ANSI B16.5 (Class 300)	190 / 7.48	194 / 7.638	197 / 7.756	190 / 7.48	194 / 7.638	197 / 7.756	190 / 7.48	194 / 7.638	197 / 7.756
Flanged ANSI B16.5 (Class 600)	203 / 7.992	206 / 8.11	210 / 8.268	203 / 7.992	206 / 8.11	210 / 8.268	203 / 7.992	206 / 8.11	210 / 8.268
Flanged ANSI B16.5 (CL 900-1500)	216 / 8.504	119 / 4.685	154 / 6.063	216 / 8.504	119 / 4.685	154 / 6.063	216 / 8.504	119 / 4.685	154 / 6.063
Flanged ANSI B16.5 (Class 2500)	264 / 10.394	273 / 10.748	308 / 12.126	264 / 10.394	273 / 10.748	308 / 12.126	264 / 10.394	273 / 10.748	308 / 12.126
Weld ends	120 / 4.724								
APV Flansche	128 / 5.039								
Screwed ends DIN 11851									
<b>F1 [mm/in]</b>									
Standard	54 / 2.126								
Bellows seal	198 / 7.795								
Normalizing fins	54 / 2.126								
Low temperature extension (300mm)	368 / 14.488								
Low temperature extension (600mm)	668 / 26.299								
<b>F2 [mm/in]</b>									
Standard	111 / 4.37								
Bellows seal	257 / 10.118								
Normalizing fins	151 / 5.945								
Low temperature extension (300mm)	427 / 16.811								
Low temperature extension (600mm)	727 / 28.622								
<b>Weight kg/lbs</b>									
CL150 Standard	3,3 / 7.3		4,2 / 9.2	3,3 / 7.3		4,2 / 9.2	3,3 / 7.3		4,2 / 9.2
CL150 Normalizing fins	3,5 / 7.7		4,4 / 9.7	3,5 / 7.7		4,4 / 9.7	3,5 / 7.7		4,4 / 9.7
CL150 Bellows PN100	4,9 / 10.8		5,5 / 12.1	4,9 / 10.8		5,5 / 12.1	4,9 / 10.8		5,5 / 12.1
CL150 Low temp.-300	7,2 / 15.8		8,1 / 17.8	7,2 / 15.8		8,1 / 17.8	7,2 / 15.8		8,1 / 17.8
CL300-600 Standard	4,1 / 9.0		5,9 / 13.0	4,1 / 9.0		5,9 / 13.0	4,1 / 9.0		5,9 / 13.0
CL300-600 Normalizing fins	4,3 / 9.5		6,1 / 13.4	4,3 / 9.5		6,1 / 13.4	4,3 / 9.5		6,1 / 13.4
CL300-600 Bellows PN100	5,7 / 12.5		7,5 / 16.5	5,7 / 12.5		7,5 / 16.5	5,7 / 12.5		7,5 / 16.5
CL300-600 Low temp.-300	8,0 / 17.6		9,8 / 21.6	8,0 / 17.6		9,8 / 21.6	8,0 / 17.6		9,8 / 21.6
NPT Standard	2,2 / 4.8			2,2 / 4.8			2,2 / 4.8		
NPT Rippen	2,4 / 5.3			2,4 / 5.3			2,4 / 5.3		
NPT Bellows PN100	3,8 / 8.4			3,8 / 8.4			3,8 / 8.4		
NPT TT-300	6,1 / 13.4			6,1 / 13.4			6,1 / 13.4		
DN10-40 Standard	3,5 / 7.7		4,9 / 10.8	3,5 / 7.7		4,9 / 10.8	3,5 / 7.7		4,9 / 10.8
DN10-40 Normalizing fins	3,7 / 8.1		5,1 / 11.2	3,7 / 8.1		5,1 / 11.2	3,7 / 8.1		5,1 / 11.2
DN10-40 Bellows PN100	5,1 / 11.2		6,5 / 14.3	5,1 / 11.2		6,5 / 14.3	5,1 / 11.2		6,5 / 14.3
DN10-40 Low temp.-300	7,4 / 16.3		8,8 / 19.4	7,4 / 16.3		8,8 / 19.4	7,4 / 16.3		8,8 / 19.4
DN63-160 Standard	4,8 / 10.6		7,9 / 17.4	4,8 / 10.6		7,9 / 17.4	4,8 / 10.6		7,9 / 17.4
DN63-160 Normalizing fins	5,0 / 11.0		8,1 / 17.8	5,0 / 11.0		8,1 / 17.8	5,0 / 11.0		8,1 / 17.8
DN63-160 Bellows PN100	6,4 / 14.1		9,5 / 20.9	6,4 / 14.1		9,5 / 20.9	6,4 / 14.1		9,5 / 20.9
DN63-160 Low temp.-300	8,7 / 19.1		11,8 / 26.0	8,7 / 19.1		11,8 / 26.0	8,7 / 19.1		11,8 / 26.0

**DIMENSIONS**

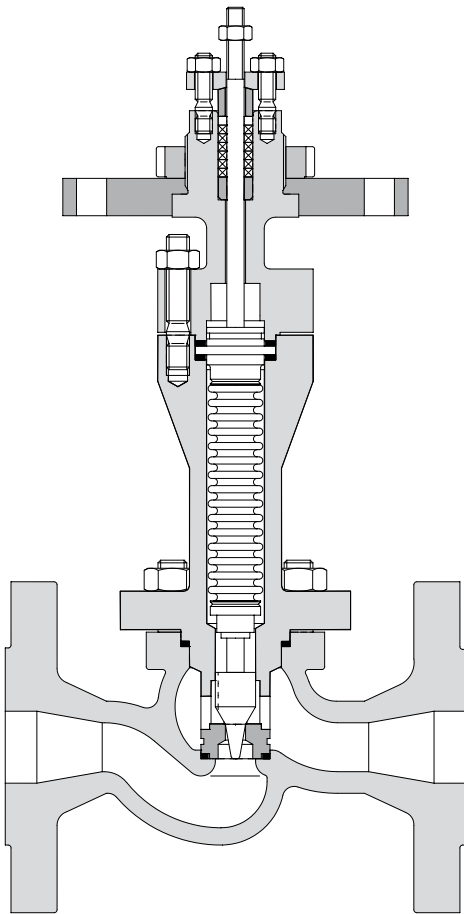




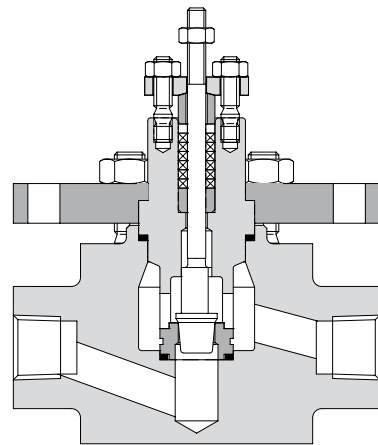
**Standard Design**



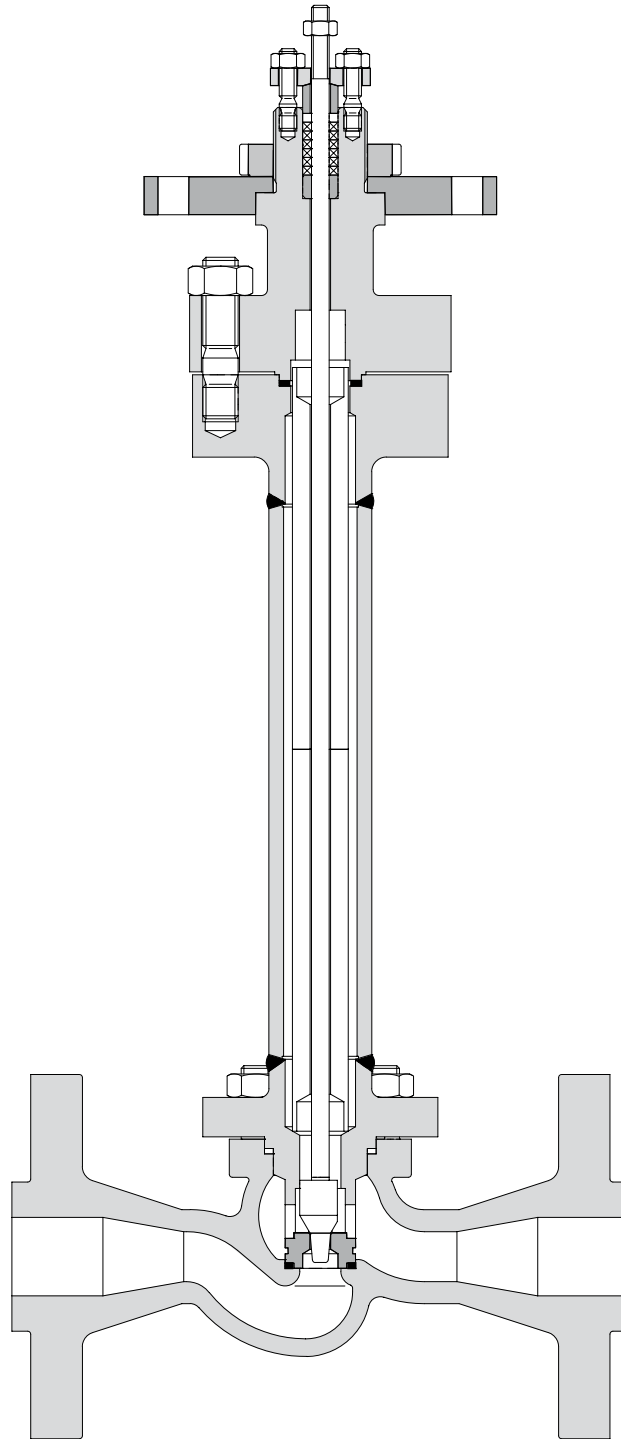
**Normalizing Fins**



**Bellows Seal**



**Special Materials**



**Cryogenic Extension**



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