

TECHNICAL BULLETIN

Kämmer® SmallFlow™ - 080000 Low and Micro Flow Valves

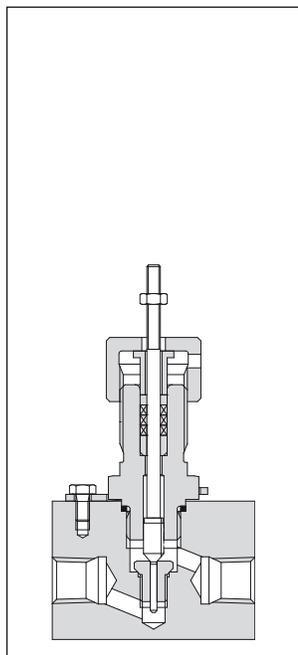
FCD KMENTB8020-01 01/12



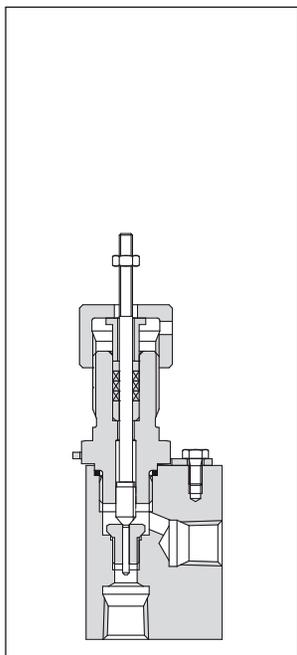
Description

Kammer series 080000/081000 low flow laboratory valves are designed for precision controlling. 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.

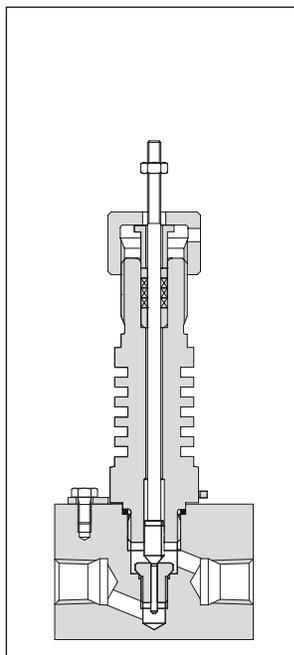
On request a special calculating programme is available to define the C_{vs} -values and the actual rangeability.



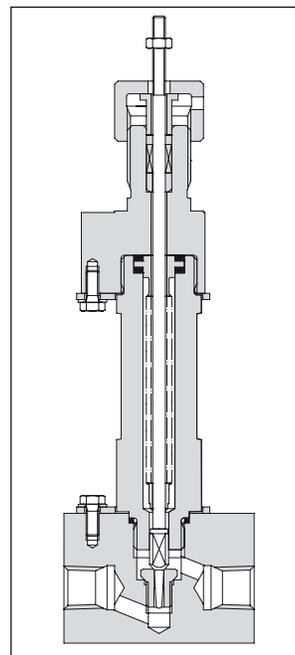
Globe valve



Angle valve



Valve with normalising fins

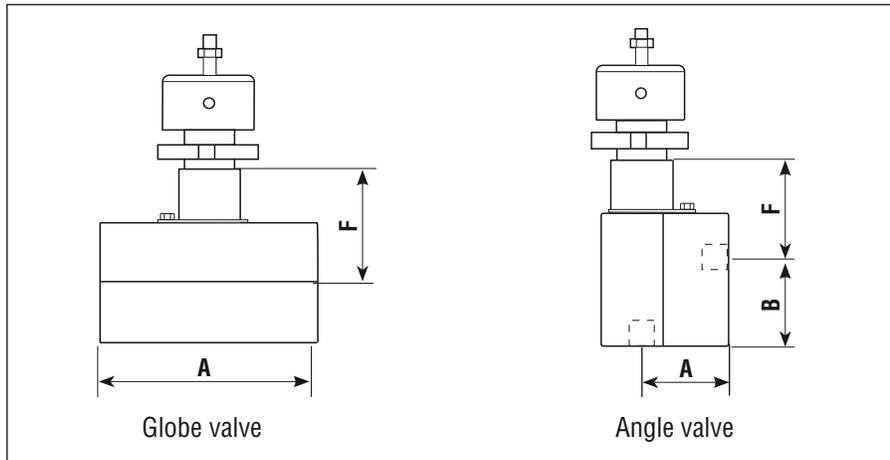


Valve with bellows seal

Technical Data

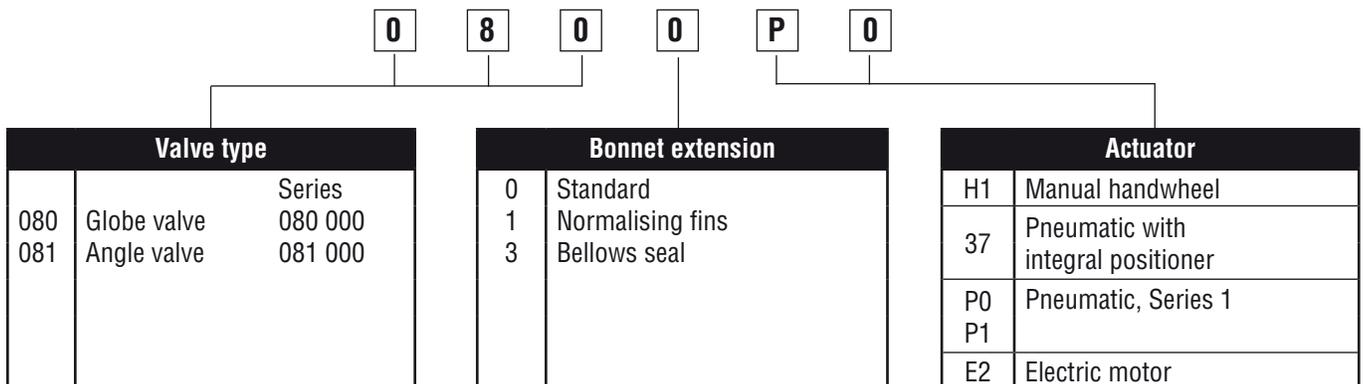
Valve body style	Globe valve, angle valve
Characteristics	Equal%, Linear, On-Off
Seat leakage	$\leq 0.01\%$ of rated C_{vs} (ANSI Class IV).
Valve plug and Seat ring	See table page 4
Packing	PTFE for temperatures up to 200 °C (392 °F) Grafoil for temperatures above 200 °C (392 °F) PTFE packing for oxygen service Packing according to German clean air act
Body gasket	316 stainless steel or as body material
Extensions	Standard, normalizing fins, bellows seal
C_{vs}-values	See table page 4
Connections	G 1/4" or NPT 1/4" internal thread. Other connections on request.
Valve body	316 stainless steel, Hastelloy B/C, Nickel, Monel, Titanium optional.

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



Globe valve Length Internal thread	Angle valve Length Internal thread		Dimension F			Weight		
			Standard	Fins	Bellows	Standard	Fins	Bellows
A	A	B						
60 (2.4)	29 (1.1)	29 (1.1)	30 (1.2)	70 (2.6)	120 (4.7)	0.7 (1.5)	0.8 (1.8)	1.0 (2.2)

Valve Code





Standard C_{vs} Values

Kvs / Cv values				Plug	1.4571	Alloy 6	Alloy 6	Alloy 6	1.4571	Multihole	Hast C	IN/NI/MO
Kvs	Trim#	Cv	Trim#	Seat	1.4571	1.4571	1.4122	Alloy 6	PTFE	Alloy 6	Hast C	IN/NI/MO
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					
0,0025	2D	0,0029	.08D	2 / 0.08			x					
0,0033	2C	0,0038	.08C	2 / 0.08			x					
0,0046	2B	0,0054	.08B	2 / 0.08			x					
0,0068	2A	0,0079	.08A	2 / 0.08			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

Your contact:

Germany
Flowserve Essen GmbH
 Schederhofstr. 71
 45145 Essen
 Deutschland
 Tel.: +49 (0)201 8919 5
 Fax: +49 (0)201 8919 662

USA
Flowserve Corporation
 1300 Parkway View Drive
 Pittsburgh, PA 15205
 USA
 Tel.: +1 412 787 8803
 Fax: +1 412 787 1944

Singapore
Flowserve Pte Ltd
 12 Tuas Avenue 20
 Singapore, 638824
 Singapore
 Tel.: +65 6879 8989
 Fax: +65 6862 4940

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can (and often does) provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation Operation Maintenance (IOM) instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes only and should not be considered certified or as a guarantee of satisfactory results by reliance thereon. Nothing contained herein is to be construed as a warranty or guarantee, express or implied, regarding any matter with respect to this product. Because Flowserve is continually improving and upgrading its product design, the specifications, dimensions and information contained herein are subject to change without notice. Should any question arise concerning these provisions, the purchaser/user should contact Flowserve Corporation at any one of its worldwide operations or offices.

© 2000 Flowserve Corporation. Irving, Texas, USA. Flowserve is a registered trademark of Flowserve Corporation.