

Manually Operated 2/2-way Forged Diaphragm Valve

3233

DN8-80 mm

- Hermetic separation of fluids from actuator
- For high purity and aseptic mediums
- Certifications for hygienic processing applications
- CIP/SIP
- Zero dead volume

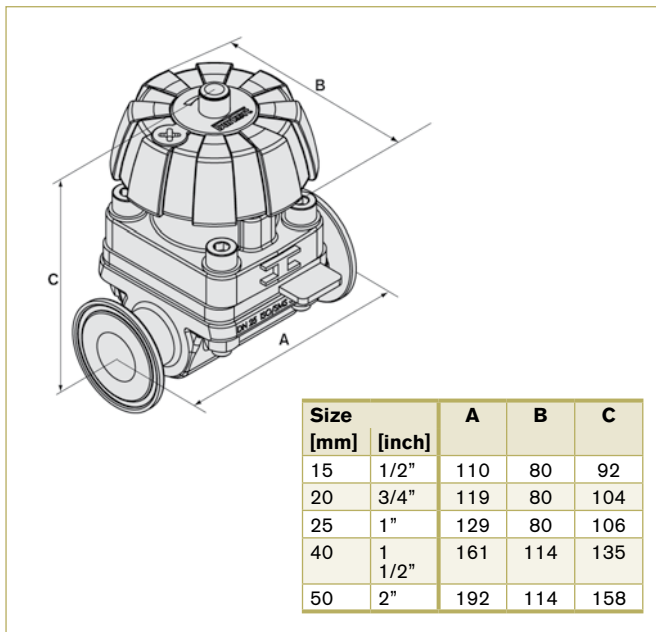


Hand operated diaphragm valve designed specifically for 3A/FDA compliant bioprocessing tasks. The forged 316L stainless steel body can be delivered with your specific surface finish with a range of diaphragm materials to suit positive control of ultra-pure, abrasive and aggressive fluids. The flow is continuously adjustable with the hand wheel. The valves are zero dead volume and can be mounted to self-draining. The valves are autoclavable.

Technical Data

Pressure range	see ordering chart
Temperature media	-10 °C to +130 °C (for steam sterilization short time up to +150 °C)
Ambient temperature	Up to +130 °C, short time up to 150 °C
Body material	Forged stainless steel 316L/1.4435/BN2 Fe < 0.5% / C ≤ 0.03%
Seal material	EPDM (FDA and KTW approval) or PTFE/EPDM (FDA approval)
Viscosity	to viscous
Surface	mechanically polished Ra ≤ 0.6 µm (Average roughness) (outside forged surface) electropolished inside (outside Ra ≤ 0.4 µm (Average roughness) Forged surface electropolished) (others on request)
Actuator materials	
Handwheel and attachment DN8-50	PPS, stainless steel
Handwheel and attachment DN65-100	Stainless steel

Envelope Dimensions [mm]

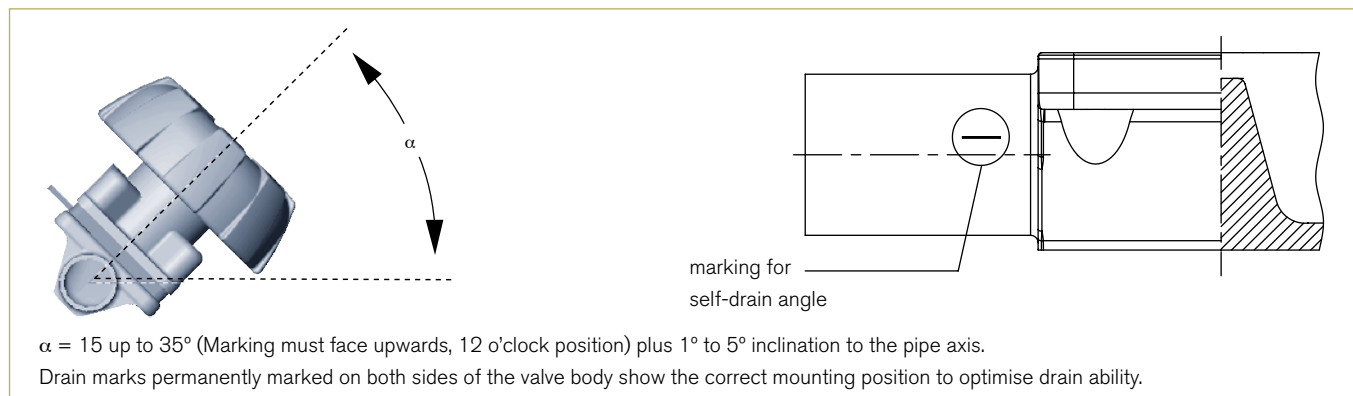


Size	A	B	C
15	110	80	92
20	119	80	104
25	129	80	106
40	161	114	135
50	192	114	158

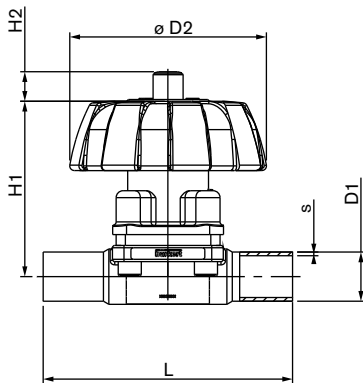
Options

- All mechanical and electropolished finishes a standard
- Locking function

Installation for self-draining operation



**Body with weld end
DN8-50**



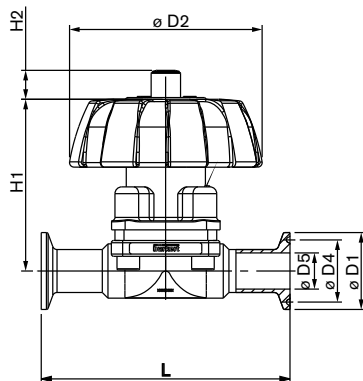
Dimensions acc. to EN ISO 1127/ISO 4200, DIN 11850 S2 and SMS 3008 [mm]

Port connection		ØD2	H1	H2	L	EN ISO 1127/ ISO 4200		DIN 11850 R2		SMS 3008	
[mm]	[inch]					ØD1	S	ØD1	S	ØD1	S
8	1/4"	35	56	-	90	13.5	1.6	-	-	-	-
10	3/8"	35	56	-	90	17.2	1.6	13.0	1.5	-	-
15	1/2"	80	85	7	110	21.3	1.6	19.0	1.5	-	-
20	3/4"	80	93	11	119	26.9	1.6	23.0	1.5	-	-
25	1"	80	94	12	129	33.7	2.0	29.0	1.5	25.0	1.2
32	1 1/4"	114	116	19	161	42.4	2.0	35.0	1.5	-	-
40	1 1/2"	114	116	19	161	48.3	2.0	41.0	1.5	38.0	1.2
50	2"	114	133	25	192	60.3	2.0	53.0	1.5	51.0	1.2

Dimensions acc. to BS 4825 and ASME BPE [mm]

Port connection		ØD2	H1	H2	L	BS 4825		ASME BPE	
[mm]	[inch]					ØD1	S	ØD1	S
8	1/4"	35	56	-	78.0	6.35	1.2	6.35	0.89
10	3/8"	35	56	-	89.0	9.53	1.2	9.53	0.89
15	1/2"	80	85	7.0	108.0	12.70	1.2	12.70	1.65
20	3/4"	80	93	11.0	117.0	19.05	1.2	19.05	1.65
25	1"	80	94	12.0	127.0	25.40	1.65	25.40	1.65
40	1 1/2"	114	116	19.0	159.0	38.10	1.65	38.10	1.65
50	2"	114	133	25.0	190.0	50.80	1.65	50.80	1.65

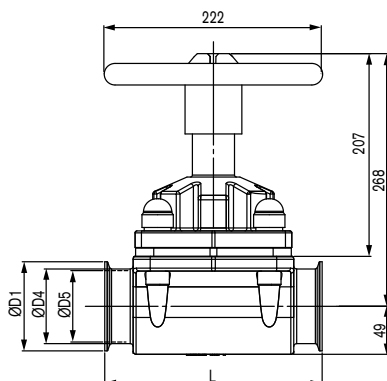
**Body with clamp connection
DN8-50**



Dimensions acc. to ISO 2852 and DIN 32676 [mm]

Port connection		ØD2	H1	H2	L	ØD1	ØD4	ISO 2852 ØD5	DIN 32676 ØD5
[mm]	[inch]								
15	1/2"	80.0	85.0	7.0	110.0	34.0	27.5	-	16.0
20	3/4"	80.0	93.0	11.0	119.0	34.0	27.5	-	20.0
25	1"	80.0	94.0	12.0	129.0	50.5	43.5	22.6	26.0
40	1 1/2"	114.0	116.0	19.0	161.0	50.5	43.5	35.6	38.0
50	2"	114.0	133.0	25.0	192.0	64.0	56.5	48.6	50.0
65	-	-	-	-	305	91	83.5	72.1	66
80	-	-	-	-	305	106	97	84.9	81

**Body with clamp connection
DN65-80**



Dimensions acc. to ASME BPE

long connection and short connection [mm]

Port connection		ØD2	H1	Long conn. L	Short conn. L	H2	ØD1	ØD4	ØD5
[mm]	[inch]								
8	1/4"	35	56	78.0	64.5	-	25.0	20.22	4.57
10	3/8"	35	56	89.0	89.0	-	25.0	20.22	7.75
15	1/2"	80	85	108.0	89.0	7.0	25.0	20.22	9.40
20	3/4"	80	93	117.0	102.0	11.0	25.0	20.22	15.75
25	1"	80	94	127.0	114.0	12.0	50.5	43.5	22.20
40	1 1/2"	114	116	159.0	140.0	19.0	50.5	43.5	34.90
50	2"	114	133	190.0	159.0	25.0	64.0	56.5	47.60
65	2 1/2"	114	133	-	190.0	25.0	77.5	70.5	60.2
80	3"	-	-	-	222.0	-	91	83.5	72.9

Ordering Chart

3233

Port connection		External-Ø [mm]	Kv value water [m³/h]	Max. operat- ing pressure [bar]	Item no. Diaphragm EPDM		Item no. Diaphragm PTFE/ EPDM	
[mm]	[inch]				mech. polished, Ra ≤ 0.6 µm	electro polished, Ra ≤ 0.4 µm	mech. polished, Ra ≤ 0.6 µm	electro polished, Ra ≤ 0.4 µm
Body with clamp connection acc. ISO 2852								
25	1	22.60	16.0	10	218 857	445 724	218 732	445 739
40	1 1/2	35.60	29.0	10	218 727	445 729	218 733	445 744
50	2	48.60	50.0	7	218 728	445 734	218 734	445 749
Body with clamp connection acc. DIN 32676								
15	1/2	16.00	6.0	10	218 738	445 894	218 748	445 919
20	3/4	20.00	11.0	10	218 739	445 899	218 749	445 924
25	1	26.00	16.0	10	218 740	445 904	218 750	445 929
40	1 1/2	38.00	29.0	10	218 741	445 909	218 751	445 934
50	2	50.00	50.0	7	218 742	445 914	218 752	445 939
Body with clamp connection acc. ASME BPE short connection								
8	1/4	25.00	1.0	10	218 758	445 859	218 775	445 824
10	3/8	25.00	1.0	10	218 759	445 864	218 776	445 829
15	1/2	25.00	6.0	10	218 760	445 869	218 777	445 834
20	3/4	25.00	11.0	10	218 761	445 874	218 778	445 839
25	1	50.50	16.0	10	218 762	445 879	218 779	445 844
40	1 1/2	50.50	29.0	10	218 763	445 884	218 780	445 849
50	2	64.00	50.0	7	218 764	445 889	218 781	445 854
65	2 1/2	77.50	54.0	7	218 765	551 455	218 782	551 461
80	3	91.00	160.0	5	253 099	252 571	263 163	257 108
Body with clamp connection acc. ASME BPE long connection								
8	1/4	25.00	1.0	10	218 792	445 754	218 806	445 789
10	3/8	25.00	1.0	10	218 793	445 759	218 807	445 794
15	1/2	25.00	6.0	10	218 794	445 764	218 808	445 799
20	3/4	25.00	11.0	10	218 795	445 769	218 809	445 804
25	1	50.50	16.0	10	218 796	445 774	218 810	445 809
40	1 1/2	50.50	29.0	10	218 797	445 779	218 811	445 814
50	2	64.00	50.0	7	218 798	445 784	218 812	445 819

Ordering Chart

Port connection		External-Ø [mm]	Kv value water [m ³ /h]	Max. operat- ing pressure [bar]	Item no. Diaphragm EPDM		Item no. Diaphragm PTFE/ EPDM	
[mm]	[inch]				mech. polished, Ra ≤ 0.6 µm	electro polished, Ra ≤ 0.4 µm	mech. polished, Ra ≤ 0.6 µm	electro polished, Ra ≤ 0.4 µm
Body with weld end acc. EN ISO 1127/ISO 4200, DN 8-50								
8	1/4	13.50	1.0	10	218 575	445 494	218 595	445 529
10	3/8	17.20	1.0	10	218 576	445 499	218 596	445 534
15	1/2	21.30	6.0	10	218 577	445 504	218 597	445 539
20	3/4	26.90	11.0	10	218 579	445 509	218 598	445 544
25	1	33.70	16.0	10	218 580	445 514	218 599	445 549
40	1 1/4	42.40	29.0	10	218 581	550 291	218 600	550 288
40	1 1/2	48.30	29.0	10	218 582	445 519	218 601	445 554
50	2	60.30	50.0	7	218 584	445 524	218 602	445 559
Body with weld end acc. DIN 11850 Series 2, DN 10-50								
10	3/8	13.00	1.0	10	218 620	445 634	218 634	445 664
15	1/2	19.00	6.0	10	218 621	445 639	218 635	445 669
20	3/4	23.00	11.0	10	218 622	445 644	218 636	445 674
25	1	29.00	16.0	10	218 623	445 649	218 637	445 679
40	1 1/2	41.00	29.0	10	218 625	445 654	218 640	445 684
50	2	53.00	50.0	7	218 626	445 659	218 641	445 689
Body with weld end acc. SMS 3008								
25	1	25.00	16.0	10	218 658	445 694	218 667	445 709
40	1 1/2	38.00	29.0	10	218 660	445 699	218 668	445 714
50	2	51.00	50.0	7	218 661	445 704	218 669	445 719
65	2 1/2	63.50	54.0	7	218 662	551 557	218 670	551 562
Body with weld end acc. BS 4825								
8	1/4	6.35	1.0	10	218 680	445 564	218 689	445 599
10	3/8	9.53	1.0	10	218 682	445 569	218 690	445 604
15	1/2	12.70	6.0	10	218 683	447 926	218 691	447 946
20	3/4	19.05	12.0	10	218 684	447 931	218 692	447 951
Body with weld end acc. ASME BPE								
8	1/4	6.35	1.0	10	218 697	447 936	218 712	447 956
10	3/8	9.53	1.0	10	218 698	447 941	218 713	447 961
15	1/2	12.70	6.0	10	218 699	445 574	218 715	445 609
20	3/4	19.05	12.0	10	218 700	445 579	218 716	445 614
25	1	25.40	16.0	10	218 701	445 584	218 717	445 619
40	1 1/2	38.10	29.0	10	218 702	445 589	218 718	445 624
50	2	50.80	50.0	7	218 703	445 594	218 719	445 629