

2/2-way Diaphragm Valve, manually operated, forged valve body, weld end and clamp connection, DN 8-100



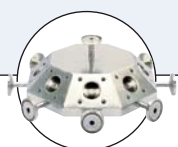
Type 3233 with weld end connection, DN 8/10

Type 3233 with clamp connection

Type 3233 can be combined with...



Type 8034
Flow meter



Multi-Port Block



Type 3233/2031
Tandem valve

- Hermetical separation of fluids from the operating mechanism by diaphragm
- Zero dead volume
- Various surface finishes
- Quality certifications **FDA** / **AS** / **USP**

The manually-operated diaphragm valve in compact form of the Type 3233 consists of a flow-optimised stainless steel body with various surface finishes, a diaphragm and a manual actuator.

The material combinations are selectable. The diaphragm is both a switch element and a sealing element to the outside. It can be easily replaced. The flow can be continually adjusted with the handwheel.

The valves have no dead volume and can be mounted to be self-draining. This enables high flow capacities and a variety of applications to be realized. The valves are autoclavable.

Applications

- Pharma
- Biotechnology
- Food industry

Technical data	
Orifice	DN 8-100
Body materials	Forged stainless steel 316 L/1.4435 / BN2 Fe < 0.5% / C ≤ 0.03%
Actuator materials	Handwheel and bonnet DN 8-50: PPS, stainless steel Handwheel and bonnet DN 65-100: Grey cast iron, white epoxy coated
Seal material	EPDM, PTFE/EPDM (advanced PTFE/EPDM, FKM on request)
Medium	Neutral gases and liquids, high-purity, sterile, aggressive or abrasive fluids
Viscosity	up to viscous
Surface finish	(Average surface finish) internal mechanical polished (external forged surface): Ra ≤ 0.6 µm internal electro polished (external forged surface electro polished) (further on request): Ra ≤ 0.4 µm
Medium temperatures	EPDM, PTFE/EPDM, advanced PTFE/EPDM (on request) ¹⁾ FKM on request -10 to +130 °C (briefly up to +150°C for steam sterilisation) -10 to +130°C
Ambient temperature	up to +130°C Briefly up to +150°C
Port connections	
Weld end acc. to	EN ISO 1127/ISO 4200, DIN 11850, SMS 3008, ASME BPE, BS 4825
Clamp acc. to	ISO 2852, DIN 32676, ASME BPE
Threaded ports	on request
Installation	As required, preferably with actuator in upright position
Options, on request (not for DN 8/10)	Locking function

¹⁾ advanced PTFE/EPDM is recommended for sterilization cycle

Technical data, continued

Port connection		Kv-value water [m ³ /h]	Max. operating pressure [bar]	Weight [kg]	
[mm]	[inch]			Handwheel PPS / bonnet stain- less steel	Handwheel and bonnet PPS
8	1/4"	1.0	10	0.3	0.4
10	3/8"	1.0	10	0.3	0.4
15	1/2"	6.0	10	0.6	0.7
20	3/4"	11.0	10	0.9	1.0
25	1"	16.0	10	1.6	1.8
32	1 1/4"	29.0	10	3.1	3.4
40	1 1/2"	29.0	10	3.1	3.4
50	2"	50.0	7/10 ²⁾	3.7	4.2
65	2 1/2"	160.0 ¹⁾	5/7/10 ²⁾	–	18.5 ³⁾
80	3"	160.0	5	–	18.5 ³⁾
100	4"	235.0	5	–	30.0 ³⁾

1) For ASME BPE and SMS versions 54 m³/h

2) See ordering charts

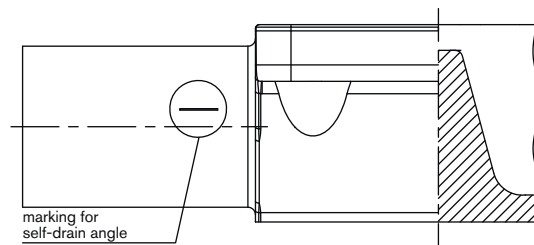
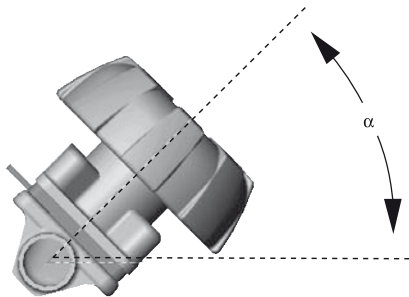
3) Bonnet and handwheel grey cast iron, white epoxy coated

Flow rate: Kv-value water (m³/h)

Measured at +20°C, 1 bar pressure at valve inlet and free outlet.

Pressure values (bar)


Gauge pressures with respect to the prevailing atmospheric pressure.

Installation for self-draining operation

$\alpha = 15$ up to 35° (Marking must face upwards, 12 o'clock position)
plus 3° to 5° inclination to the pipe axis.
Drain marks permanently marked on both sides of the valve body
show the correct mounting position to optimise drain ability.

Ordering chart for valves (other versions on request)

Body with weld end acc. EN ISO 1127/ISO 4200, DN 8-50 (DN 65-100 see next page)




Port connection		External-Ø [mm]	Kv-value water [m ³ /h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
[mm]	[inch]					
Diaphragm material EPDM, handwheel PPS/bonnet PPS						
8	1/4"	13.5	1.0	10	218 575	445 494
10	3/8"	17.2	1.0	10	218 576	445 499
15	1/2"	21.3	6.0	10	218 577	445 504
20	3/4"	26.9	11.0	10	218 579	445 509
25	1"	33.7	16.0	10	218 580	445 514
32	1 1/4"	42.4	29.0	10	218 581	550 291
40	1 1/2"	48.3	29.0	10	218 582	445 519
50	2"	60.3	50.0	7	218 584	445 524
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	13.5	1.0	10	218 585	446 183
10	3/8"	17.2	1.0	10	218 586	446 188
15	1/2"	21.3	6.0	10	218 587	446 193
20	3/4"	26.9	11.0	10	218 588	446 198
25	1"	33.7	16.0	10	218 590	446 203
32	1 1/4"	42.4	29.0	10	218 591	555 031
40	1 1/2"	48.3	29.0	10	218 592	446 208
50	2"	60.3	50.0	10	218 594	446 213
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS						
8	1/4"	13.5	1.0	10	218 595	445 529
10	3/8"	17.2	1.0	10	218 596	445 534
15	1/2"	21.3	6.0	10	218 597	445 539
20	3/4"	26.9	11.0	10	218 598	445 544
25	1"	33.7	16.0	10	218 599	445 549
32	1 1/4"	42.4	29.0	10	218 600	550 288
40	1 1/2"	48.3	29.0	10	218 601	445 554
50	2"	60.3	50.0	7	218 602	445 559
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	13.5	1.0	10	218 603	446 218
10	3/8"	17.2	1.0	10	218 604	446 223
15	1/2"	21.3	6.0	10	218 606	446 228
20	3/4"	26.9	11.0	10	218 607	446 233
25	1"	33.7	16.0	10	218 608	446 238
32	1 1/4"	42.4	29.0	10	218 609	555 036
40	1 1/2"	48.3	29.0	10	218 610	446 243
50	2"	60.3	50.0	10	218 611	446 248

Port connection size equals the orifice diaphragm size except for port connection 32 mm. At port connection 32 mm the orifice diaphragm size equals 40 mm.

 Further versions on request


 **Port connection**
Threaded ports

 **Material**
Seal: advanced PTFE/EPDM, FKM
Handwheel: stainless steel

 **Additional**
Locking function (not for DN 8/10)




Ordering chart for valves (other versions on request)

Body with weld end acc. EN ISO 1127/ISO 4200, DN 65-100

	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
	[mm]	[inch]					
Diaphragm material EPDM, handwheel and bonnet/grey cast iron, white epoxy coated							
	65	2 1/2"	76.1	160.0	5	218 612	551 323
	80	3"	88.9	160.0	5	218 613	551 328
	100	4"	114.3	235.0	5	218 615	551 303
Diaphragm material PTFE/EPDM, handwheel and bonnet/grey cast iron, white epoxy coated							
	65	2 1/2"	76.1	160.0	5	218 616	551 353
	80	3"	88.9	160.0	5	218 618	551 358
	100	4"	114.3	235.0	5	218 619	551 313


Port connection size equals the orifice diaphragm size except for port connection 65 mm. At port connection 65 mm the orifice diaphragm size equals 80 mm.

Further versions on request

-  **Port connection**
Threaded ports
-  **Material**
Seal: advanced PTFE/EPDM, FKM
-  **Additional**
Locking function (not for DN 8/10)

Ordering chart for valves (other versions on request)

Body with weld end acc. DIN 11850 Series 2, DN 10-50 (DN 65-100 see next page)




Port connection	External-Ø [mm]		Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm	
	[mm]	[inch]					
Diaphragm material EPDM, handwheel PPS/bonnet PPS							
	10	3/8"	13.0	1.0	10	218 620	445 634
	15	1/2"	19.0	6.0	10	218 621	445 639
	20	3/4"	23.0	11.0	10	218 622	445 644
	25	1"	29.0	16.0	10	218 623	445 649
	32	1 1/4"	35.0	29.0	10	218 624	554 982
	40	1 1/2"	41.0	29.0	10	218 625	445 654
	50	2"	53.0	50.0	7	218 626	445 659
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
	10	3/8"	13.0	1.0	10	218 627	446 322
	15	1/2"	19.0	6.0	10	218 628	446 327
	20	3/4"	23.0	11.0	10	218 629	446 332
	25	1"	29.0	16.0	10	218 630	446 337
	32	1 1/4"	35.0	29.0	10	218 631	554 987
	40	1 1/2"	41.0	29.0	10	218 632	446 342
	50	2"	53.0	50.0	10	218 633	446 347
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS							
	10	3/8"	13.0	1.0	10	218 634	445 664
	15	1/2"	19.0	6.0	10	218 635	445 669
	20	3/4"	23.0	11.0	10	218 636	445 674
	25	1"	29.0	16.0	10	218 637	445 679
	32	1 1/4"	35.0	29.0	10	218 639	554 992
	40	1 1/2"	41.0	29.0	10	218 640	445 684
	50	2"	53.0	50.0	7	218 641	445 689
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
	10	3/8"	13.0	1.0	10	218 642	446 351
	15	1/2"	19.0	6.0	10	218 643	446 356
	20	3/4"	23.0	11.0	10	218 644	446 361
	25	1"	29.0	16.0	10	218 645	446 366
	32	1 1/4"	35.0	29.0	10	218 647	554 997
	40	1 1/2"	41.0	29.0	10	218 649	446 371
	50	2"	53.0	50.0	10	218 650	446 376

Port connection size equals the orifice diaphragm size except for port connection 32 mm. At port connection 32 mm the orifice diaphragm size equals 40 mm.

i Further versions on request


 **Port connection**
Threaded ports

 **Material**
Seal: advanced PTFE/EPDM, FKM
Handwheel: stainless steel

 **Additional**
Locking function (not for DN 8/10)


Ordering chart for valves (other versions on request)

Body with weld end acc. DIN 11850 Series 2, DN 65-100


	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
	[mm]	[inch]					
Diaphragm material EPDM, handwheel and bonnet/grey cast iron, white epoxy coated							
65	2 1/2"	70.0	160.0	5	218 651	551 338	
80	3"	85.0	160.0	5	218 652	551 343	
100	4"	104.0	235.0	5	218 653	551 309	
Diaphragm material PTFE/EPDM, handwheel and bonnet/grey cast iron, white epoxy coated							
65	2 1/2"	70.0	160.0	5	218 654	551 368	
80	3"	85.0	160.0	5	218 655	551 373	
100	4"	104.0	235.0	5	218 656	551 319	

Port connection size equals the orifice diaphragm size except for port connection 65 mm. At port connection 65 mm the orifice diaphragm size equals 80 mm.

i Further versions on request


 **Port connection**
Threaded ports

 **Material**
Seal: advanced PTFE/EPDM, FKM

 **Additional**
Locking function (not for DN 8/10)

Ordering chart for valves (other versions on request)

Body with weld end acc. SMS 3008




Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
[mm]	[inch]					
Diaphragm material EPDM, handwheel PPS/bonnet PPS						
25	1"	25.0	16.0	10	218 658	445 694
40	1 1/2"	38.0	29.0	10	218 660	445 699
50	2"	51.0	50.0	7	218 661	445 704
65	2 1/2"	63.5	54.0	7	218 662	551 557
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel						
25	1"	25.0	16.0	10	218 663	446 381
40	1 1/2"	38.0	29.0	10	218 664	446 386
50	2"	51.0	50.0	10	218 665	446 391
65	2 1/2"	63.5	54.0	10	218 666	551 567
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS						
25	1"	25.0	16.0	10	218 667	445 709
40	1 1/2"	38.0	29.0	10	218 668	445 714
50	2"	51.0	50.0	7	218 669	445 719
65	2 1/2"	63.5	54.0	7	218 670	551 562
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel						
25	1"	25.0	16.0	10	218 671	446 396
40	1 1/2"	38.0	29.0	10	218 672	446 401
50	2"	51.0	50.0	10	218 673	446 406
65	2 1/2"	63.5	54.0	10	218 674	551 572
Diaphragm material EPDM, handwheel and bonnet/grey cast iron, white epoxy coated						
80	3"	76.1	160.0	5	218 676	551 333
100	4"	101.6	235.0	5	218 677	551 306
Diaphragm material PTFE/EPDM, handwheel and bonnet/grey cast iron, white epoxy coated						
80	3"	76.1	160.0	5	218 678	551 363
100	4"	101.6	235.0	5	218 679	551 316

Port connection size equals the orifice diaphragm size except for port connection 65 mm. At port connection 65 mm the orifice diaphragm size equals 50 mm.

 Further versions on request


 **Port connection**
Threaded ports

 **Material**
Seal: advanced PTFE/EPDM, FKM
Handwheel: stainless steel (for DN 25-65)

 **Additional**
Locking function

Ordering chart for valves (other versions on request)


Body with weld end acc. BS 4825

	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
	[mm]	[inch]					
Diaphragm material EPDM, handwheel PPS/bonnet PPS							
8	1/4"	6.35	1.0	10	218 680	445 564	
10	3/8"	9.53	1.0	10	218 682	445 569	
15	1/2"	12.70	6.0	10	218 683	447 926	
20	3/4"	19.05	12.0	10	218 684	447 931	
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
8	1/4"	6.35	1.0	10	218 685	446 253	
10	3/8"	9.53	1.0	10	218 686	446 258	
15	1/2"	12.70	6.0	10	218 687	447 966	
20	3/4"	19.05	12.0	10	218 688	447 971	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS							
8	1/4"	6.35	1.0	10	218 689	445 599	
10	3/8"	9.53	1.0	10	218 690	445 604	
15	1/2"	12.70	6.0	10	218 691	447 946	
20	3/4"	19.05	12.0	10	218 692	447 951	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
8	1/4"	6.35	1.0	10	218 693	446 288	
10	3/8"	9.53	1.0	10	218 694	446 293	
15	1/2"	12.70	6.0	10	218 695	447 986	
20	3/4"	19.05	12.0	10	218 696	447 991	

i Further versions on request**Port connection**
Threaded ports**Material**
Seal: advanced PTFE/EPDM, FKM
Handwheel: stainless steel**Additional**
Locking function (not for DN 8/10)

Ordering chart for valves (other versions on request)


Body with weld end acc. ASME BPE



Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
[mm]	[inch]					
Diaphragm material EPDM, handwheel PPS/bonnet PPS						
8	1/4"	6.35	1.0	10	218 697	447 936
10	3/8"	9.53	1.0	10	218 698	447 941
15	1/2"	12.70	6.0	10	218 699	445 574
20	3/4"	19.05	12.0	10	218 700	445 579
25	1"	25.40	16.0	10	218 701	445 584
40	1 1/2"	38.10	29.0	10	218 702	445 589
50	2"	50.80	50.0	7	218 703	445 594
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	6.35	1.0	10	218 704	447 976
10	3/8"	9.53	1.0	10	218 705	447 981
15	1/2"	12.70	6.0	10	218 706	446 263
20	3/4"	19.05	12.0	10	218 707	446 268
25	1"	25.40	16.0	10	218 708	446 273
40	1 1/2"	38.10	29.0	10	218 709	446 278
50	2"	50.80	50.0	10	218 710	446 283
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS						
8	1/4"	6.35	1.0	10	218 712	447 956
10	3/8"	9.53	1.0	10	218 713	447 961
15	1/2"	12.70	6.0	10	218 715	445 609
20	3/4"	19.05	12.0	10	218 716	445 614
25	1"	25.40	16.0	10	218 717	445 619
40	1 1/2"	38.10	29.0	10	218 718	445 624
50	2"	50.80	50.0	7	218 719	445 629
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	6.35	1.0	10	218 720	447 996
10	3/8"	9.53	1.0	10	218 721	448 001
15	1/2"	12.70	6.0	10	218 722	446 298
20	3/4"	19.05	12.0	10	218 723	446 303
25	1"	25.40	16.0	10	218 724	446 308
40	1 1/2"	38.10	29.0	10	218 725	446 313
50	2"	50.80	50.0	10	218 726	446 318

i Further versions on request


 **Port connection**
Threaded ports

 **Material**
Seal: advanced PTFE/EPDM, FKM
Handwheel: stainless steel

 **Additional**
Locking function (not for DN 8/10)

Ordering chart for valves (other versions on request)

Body with clamp connection acc. ISO 2852


	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
	[mm]	[inch]					
Diaphragm material EPDM, handwheel PPS/bonnet PPS							
25	1"	22.6	16.0	10	218 857	445 724	
40	1 1/2"	35.6	29.0	10	218 727	445 729	
50	2"	48.6	50.0	7	218 728	445 734	
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
25	1"	22.6	16.0	10	218 729	446 411	
40	1 1/2"	35.6	29.0	10	218 730	446 416	
50	2"	48.6	50.0	10	218 731	446 421	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS							
25	1"	22.6	16.0	10	218 732	445 739	
40	1 1/2"	35.6	29.0	10	218 733	445 744	
50	2"	48.6	50.0	7	218 734	445 749	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
25	1"	22.6	16.0	10	218 735	446 426	
40	1 1/2"	35.6	29.0	10	218 736	446 431	
50	2"	48.6	50.0	10	218 737	446 436	

i Further versions on request**Port connection**DN 65-100 mm acc. to ISO 2852
Threaded ports**Material**Seal: advanced PTFE/EPDM, FKM
Handwheel: stainless steel**Additional**

Locking function

Ordering chart for valves (other versions on request)

Body with clamp connection acc. DIN 32676


	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
	[mm]	[inch]					
Diaphragm material EPDM, handwheel PPS/bonnet PPS							
15		1/2"	16.0	6.0	10	218 738	445 894
20		3/4"	20.0	11.0	10	218 739	445 899
25		1"	26.0	16.0	10	218 740	445 904
40		1 1/2"	38.0	29.0	10	218 741	445 909
50		2"	50.0	50.0	7	218 742	445 914
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
15		1/2"	16.0	6.0	10	218 743	446 581
20		3/4"	20.0	11.0	10	218 744	446 586
25		1"	26.0	16.0	10	218 745	446 591
40		1 1/2"	38.0	29.0	10	218 746	446 596
50		2"	50.0	50.0	10	218 747	446 601
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS							
15		1/2"	16.0	6.0	10	218 748	445 919
20		3/4"	20.0	11.0	10	218 749	445 924
25		1"	26.0	16.0	10	218 750	445 929
40		1 1/2"	38.0	29.0	10	218 751	445 934
50		2"	50.0	50.0	7	218 752	445 939
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
15		1/2"	16.0	6.0	10	218 753	446 606
20		3/4"	20.0	11.0	10	218 754	446 611
25		1"	26.0	16.0	10	218 755	446 616
40		1 1/2"	38.0	29.0	10	218 756	446 621
50		2"	50.0	50.0	10	218 757	446 626

i Further versions on request**Port connection**DN 65-100 mm acc. to DIN 32676
Threaded ports**Material**Seal: advanced PTFE/EPDM, FKM
Handwheel: stainless steel**Additional**

Locking function

Ordering chart for valves (other versions on request)

Body with clamp connection acc. ASME BPE short connection




Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
[mm]	[inch]					
Diaphragm material EPDM, handwheel PPS/bonnet PPS ¹⁾						
8	1/4"	25.0	1.0	10	218 758	445 859
10	3/8"	25.0	1.0	10	218 759	445 864
15	1/2"	25.0	6.0	10	218 760	445 869
20	3/4"	25.0	11.0	10	218 761	445 874
25	1"	50.5	16.0	10	218 762	445 879
40	1 1/2"	50.5	29.0	10	218 763	445 884
50	2"	64.0	50.0	7	218 764	445 889
65	2 1/2"	77.5	54.0	7	218 765	551 455
80	3"	91.0	160.0	5	218 766	551 348
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	25.0	1.0	10	218 767	446 511
10	3/8"	25.0	1.0	10	218 768	446 516
15	1/2"	25.0	6.0	10	218 769	446 521
20	3/4"	25.0	11.0	10	218 770	446 526
25	1"	50.5	16.0	10	218 771	446 531
40	1 1/2"	50.5	29.0	10	218 772	446 536
50	2"	64.0	50.0	10	218 773	446 541
65	2 1/2"	77.5	54.0	10	218 774	551 488
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS ¹⁾						
8	1/4"	25.0	1.0	10	218 775	445 824
10	3/8"	25.0	1.0	10	218 776	445 829
15	1/2"	25.0	6.0	10	218 777	445 834
20	3/4"	25.0	11.0	10	218 778	445 839
25	1"	50.5	16.0	10	218 779	445 844
40	1 1/2"	50.5	29.0	10	218 780	445 849
50	2"	64.0	50.0	7	218 781	445 854
65	2 1/2"	77.5	54.0	7	218 782	551 461
80	3"	91.0	160.0	5	218 783	551 378
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	25.0	1.0	10	218 784	446 546
10	3/8"	25.0	1.0	10	218 785	446 551
15	1/2"	25.0	6.0	10	218 786	446 556
20	3/4"	25.0	11.0	10	218 787	446 561
25	1"	50.5	16.0	10	218 788	446 566
40	1 1/2"	50.5	29.0	10	218 789	446 571
50	2"	64.0	50.0	10	218 790	446 576
65	2 1/2"	77.5	54.0	10	218 791	551 554

1) DN 80 bonnet and handwheel white epoxy coated

Port connection size equals the orifice diaphragm size except for port connection 65 mm.

At port connection 65 mm the orifice diaphragm size equals 50 mm.


 **Further versions on request**
 **Port connection**
Threaded ports

 **Material**
Seal: advanced PTFE/EPDM, FKM
Handwheel: stainless steel
(for DN 8-50)

 **Additional**
Locking function (not for DN 8/10)


Ordering chart for valves (other versions on request)

Body with clamp connection acc. ASME BPE long connection



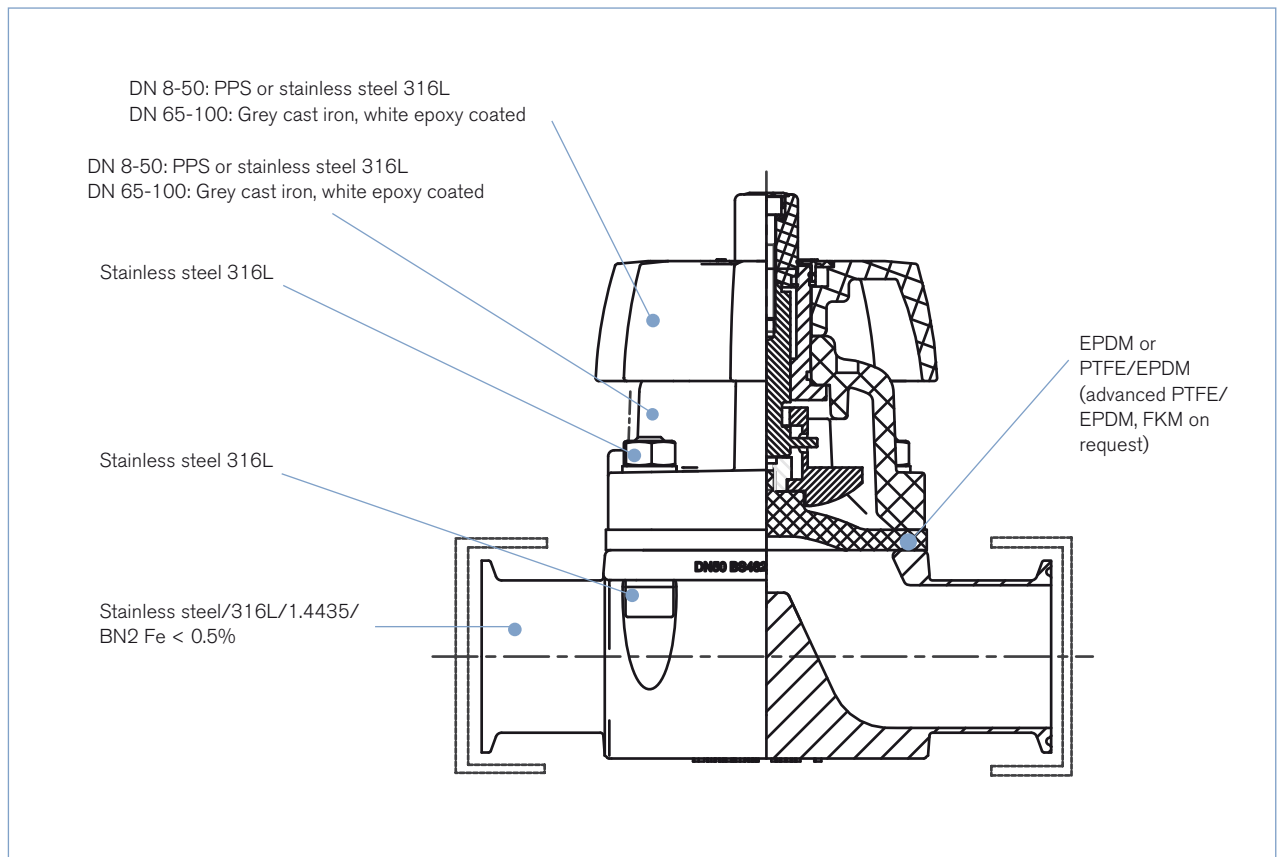
Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
[mm]	[inch]					
Diaphragm material EPDM, handwheel PPS/bonnet PPS						
8	1/4"	25.0	1.0	10	218 792	445 754
10	3/8"	25.0	1.0	10	218 793	445 759
15	1/2"	25.0	6.0	10	218 794	445 764
20	3/4"	25.0	11.0	10	218 795	445 769
25	1"	50.5	16.0	10	218 796	445 774
40	1 1/2"	50.5	29.0	10	218 797	445 779
50	2"	64.0	50.0	7	218 798	445 784
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	25.0	1.0	10	218 799	446 441
10	3/8"	25.0	1.0	10	218 800	446 446
15	1/2"	25.0	6.0	10	218 801	446 451
20	3/4"	25.0	11.0	10	218 802	446 456
25	1"	50.5	16.0	10	218 803	446 461
40	1 1/2"	50.5	29.0	10	218 804	446 466
50	2"	64.0	50.0	10	218 805	446 471
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS						
8	1/4"	25.0	1.0	10	218 806	445 789
10	3/8"	25.0	1.0	10	218 807	445 794
15	1/2"	25.0	6.0	10	218 808	445 799
20	3/4"	25.0	11.0	10	218 809	445 804
25	1"	50.5	16.0	10	218 810	445 809
40	1 1/2"	50.5	29.0	10	218 811	445 814
50	2"	64.0	50.0	7	218 812	445 819
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	25.0	1.0	10	218 813	446 476
10	3/8"	25.0	1.0	10	218 814	446 481
15	1/2"	25.0	6.0	10	218 815	446 486
20	3/4"	25.0	11.0	10	218 816	446 491
25	1"	50.5	16.0	10	218 817	446 496
40	1 1/2"	50.5	29.0	10	218 818	446 501
50	2"	64.0	50.0	10	218 819	446 506

 **Further versions on request**
 **Port connection**
Threaded ports

 **Material**
Seal: advanced PTFE/EPDM, FKM
Handwheel: stainless steel

 **Additional**
Locking function (not for DN 8/10)

Materials



Approvals

Suitable for foodstuffs / sterile applications



- The composition of the EPDM, PTFE/EPDM and advanced PTFE/EPDM diaphragms corresponds to the *Code of Federal Regulations*, published by the *FDA* (Food and Drug Administration, USA).

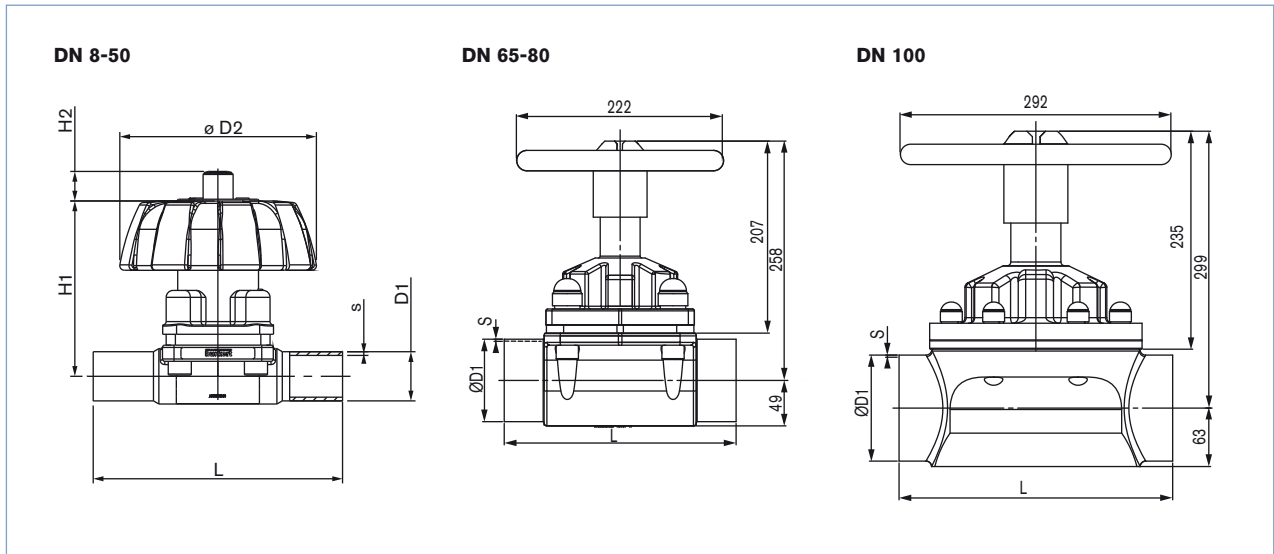


- The diaphragm valves are 3-A approved (3-A Sanitary Standards Symbol Administrative Council)

- The EPDM, PTFE/EPDM and advanced PTFE/EPDM diaphragms are approved acc. USP Class VI

Dimensions [mm]

Body with weld end



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

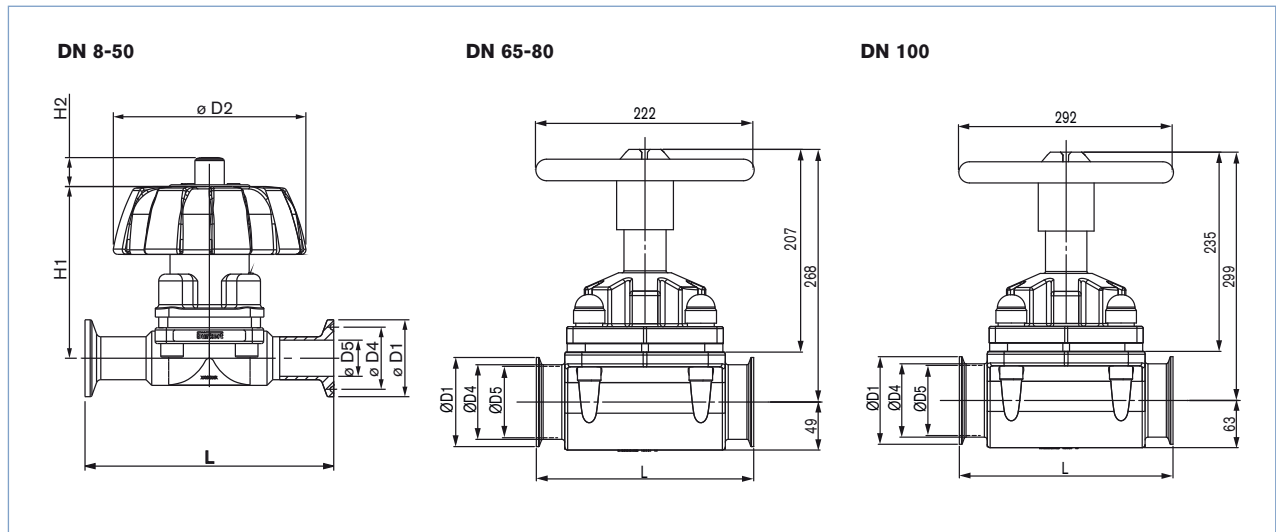
Port connection		ØD2	H1	H2	L	EN ISO 1127/ ISO 4200		DIN 11850 S2		SMS 3008	
[mm]	[inch]					ØD1	s	ØD1	s	ØD1	s
8	1/4"	35	56	-	90	13.5	1.6	-	-	-	-
10	3/8"	35	56	-	90	17.2	1.6	13.0	1.5	-	-
15	1/2"	80	85	7	110	21.3	1.6	19.0	1.5	-	-
20	3/4"	80	93	11	119	26.9	1.6	23.0	1.5	-	-
25	1"	80	94	12	129	33.7	2.0	29.0	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
65	2 1/2"	114	133	25	192	-	-	-	-	63.5	1.65
		-	-	-	250	76.1	2.0	70.0	2.0	-	-
80	3"	-	-	-	250	88.9	2.3	85.0	2.0	76.1	1.65
100	4"	-	-	-	295	114.3	2.3	104.0	2.0	101.6	2.11

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

Dimensions [mm]

Body with clamp connection



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 ¹⁾	-	-	-	-	305	91	83.5	72.1	66
80 ¹⁾	-	-	-	-	305	106	97	84.9	81
100 ¹⁾	-	-	-	-	350	ISO:130 DIN:119	110	110.3	100

1) DN 65-100 on request

Dimensions acc. to ASME BPE long connection and short connection [mm]

Port connection		ØD2	H1	Long conn.	Short conn.	H2	ØD1	ØD4	ØD5
[mm]	[inch]			L	L				
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

Note

You can fill out the fields directly in the PDF file before printing out the form.

Diaphragm valves – request for quotation

▶ Please fill out and send to your nearest Bürkert facility* with your inquiry or order

Company	Contact person
Customer no.	Department
Address	Tel./Fax
Postcode/town	E-Mail

= mandatory fields to fill out

Quantity

Required delivery date

Operating data

<input checked="" type="checkbox"/> Process medium	<input type="text"/>		
<input checked="" type="checkbox"/> Type of media	<input type="checkbox"/> Liquid	<input type="checkbox"/> Steam	<input type="checkbox"/> Gas
<input checked="" type="checkbox"/> Flow rate (Q, Q _N , W) ¹⁾	<input type="text"/> nominal	<input type="text"/> unit	
<input checked="" type="checkbox"/> Temperature at valve inlet	<input type="text"/>	<input type="text"/>	
<input checked="" type="checkbox"/> Absolute pressure at valve inlet	<input type="text"/>	<input type="text"/>	
<input type="checkbox"/> Steam sterilisation	temperature	<input type="text"/>	

¹⁾ standard unit:
Liquid Q = m³/h;
Steam W = kg/h;
Gas Q_N = Nm³/h

Valve features

Specification key

automatically transferred from next page

3233-2-0

Surface finish (if not standard)

internal μm

external μm

Certifications

- Attestation of compliance with the order EN-ISO 10204 2.1 (Item-No. 440 788)
- Test report EN-ISO 10204 2.2 (Item-No. 803 722)
- Certification of Conformity for Raw Material EN-ISO 10204 3.1 (included in delivery)
- Certification of Conformity for the Surface Quality DIN4762-DIN4768-ISO/4287/1
- Certification of Conformity for Pickling and Electropolishing Processes
- FDA and USP compliance
- 3A certificate

Comment / sketch

DTS 1000011008 EN Version: O Status: RL (released | freigegeben | validé) printed: 18.08.2011

* To find your nearest Bürkert facility, click on the orange box →

www.burkert.com

Valve features

Example

15 AB VS SA42 D050 NO17

Specification key

Please make a choice

ORIFICE [mm] (diaphragm)

08
15
20
25
40
50
80
100

SEAL MATERIAL

AB	EPDM in food quality
EA	PTFE/EPDM
FF	FKM
EU	advanced PTFE/EPDM in two pieces
ET	advanced PTFE (bonded on EPDM)

BODY MATERIAL

Standard	VS	Forged 1.4435BN2/ASME BPE
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VARIABLE CODES

Surface finish internal

NO14	Int. mechanical polished Ra=0.5µm
NO17	Int. electro polished Ra=0.4µm
NO23	Int. mechanical polished Ra=0.6µm

Standard

ACTUATOR VERSION

D050	Top and handwheel PPS
D051	Top stainless steel, handwheel PPS
D052	Top and handwheel stainless steel
D085	Grey cast iron, white epoxy painted. Only for DN80 and DN100 orifice!



PORT CONNECTION

Weld end

Orifice [mm]	EN ISO 1127/ISO 4200	DIN 11850				ASME BPE	JIS Sanitary	JIS Utility
		SMS 3008	Series 1	Series 2	BS 4825			
8	SA40=13.5x1.6				SODB=6.35x1.2	SA90=6.35x0.89	SA70=13.8x1.65	
15	SA42=21.3x1.6		SF41=18x1.0	SD42=19x1.5	SODD=12.7x1.2	SA92=12.7x1.65	SA72=21.7x2.1	
20	SA43=26.9x1.6		SF42=22x1.0	SD43=23x1.5	SODE=19.05x1.2	SA93=19.05x1.65	SA76=27.2x2.1	SA80=27.2x2.1
25	SA44=33.7x2.0	SA60=25.0x1.2	SF43=28x1.0	SD44=29x1.5	SODF=25.4x1.65	SODF=25.4x1.65	SA73=25.4x1.2	SA81=34x2.0
32	SA45=42.4x2.0		SF44=34x1.0	SD45=35x1.5				SA83=42.7x2.0
40	SA46=48.3x2.0	SA62=38.0x1.2	SF45=40x1.0	SD46=41x1.5	SODH=38.1x1.65	SODH=38.1x1.65	SA74=38.1x1.2	SA84=60.5x2.0
50	SA47=60.3x2.0	SA63=51.0x1.2	SF46=52x1.0	SD47=53x1.5	SODI=50.8x1.65	SODI=50.8x1.65	SA75=50.8x1.5	
65	SA48=76.1x2.0	SA64=63.5x1.6		SD48=70x2.0	SA64=63.5x1.65	SA64=63.5x1.65		
80	SA49=88.9x2.3	SA65=76.1x1.6		SD49=85x2.0	SA65=76.2x1.65	SA65=76.2x1.65		
100	SA39=114.3x2.3	SA66=101.6x2.0		SD50=104x2.0	SA66=101.6x2.11	SA66=101.6x2.11		

Clamp

Orifice DN [mm]	ISO 2852 SMS 3017	ASME BPE		DIN 32676
		Short version	Long version	
8	TC51=Clamp 34 - for tube ISO 4200	TI40=Clamp 25 - Tube 6.35x0.89	TG40=Clamp 25 - Tube 6.35x0.89	
10	TC41=Clamp 34 - for tube ISO 4200	TI41=Clamp 25 - Tube 9.53x0.89	TG41=Clamp 25 - Tube 9.53x0.89	TD41=Clamp 34 - Tube 13x1.5
15	TC42=Clamp 34 - for tube ISO 4200	TI42=Clamp 25 - Tube 12.7x1.65	TG42=Clamp 25 - Tube 12.7x1.65	TD42=Clamp 34 - Tube 19x1.5
20	TC43=Clamp 50.5 - for tube ISO 4200	TI43=Clamp 25 - Tube 19.05x1.65	TG43=Clamp 25 - Tube 19.05x1.65	TD43=Clamp 34 - Tube 23x1.5
25	TC44=Clamp 50.5 - for tube ISO 4200	TI44=Clamp 50.5 - Tube 25.4x1.65	TG44=Clamp 50.5 - Tube 25.4x1.65	TD44=Clamp 50.5 - Tube 29x1.5
40	TC46=Clamp 64 - for tube ISO 4200	TI46=Clamp 50.5 - Tube 38.1x1.65	TG45=Clamp 50.5 - Tube 38.1x1.65	TD46=Clamp 50.5 - Tube 41x1.5
50	TC47=Clamp 77.5 - for tube ISO 4200	TI47=Clamp 64 - Tube 50.8x1.65	TG46=Clamp 64 - Tube 50.8x1.65	TD47=Clamp 64 - Tube 53x1.5
65			TG47=Clamp 77.5 - Tube 63.5x1.65	
80			TG48=Clamp 91 - Tube 76.1x1.65	
100			TG49=Clamp 119 - Tube 101.6x2.11	

In case of special application conditions, please consult for advice.

Subject to alteration.
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