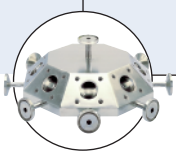




Type 3233 with weld end connection, DN 8/10

Type 3233 with clamp connection

Type 3233 can be combined with




**Multi-Port Block**



**Type 3233/2031**

Tandem valve

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

- Hermetical separation of fluids from the operating mechanism by diaphragm
- Zero dead volume
- Various surface finishes
- Quality certifications 

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	
<b>Port connection</b>	DN 8-100
<b>Body materials</b>	Forged stainless steel 316 L/1.4435 / BN2 Fe < 0.5% / C ≤ 0.03%
<b>Actuator materials</b>	Handwheel and bonnet DN 8-50 PPS, stainless steel Handwheel and bonnet DN 65-100 Stainless steel
<b>Seal material</b>	EPDM, PTFE/EPDM (advanced PTFE/EPDM, FKM on request)
<b>Medium</b>	Neutral gases and liquids, high-purity, sterile, aggressive or abrasive fluids
<b>Viscosity</b>	up to viscous
<b>Surface finish</b>	(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
<b>Medium temperatures</b>	EPDM, PTFE/EPDM, advanced PTFE/EPDM (on request) <sup>1)</sup> FKM on request -10 to +130 °C (briefly up to +150°C for steam sterilisation) -10 to +130°C
<b>Ambient temperature</b>	up to +130°C Briefly up to +150°C
<b>Port connections</b>	
<b>Weld end</b> acc. to	EN ISO 1127/ISO 4200, DIN 11850, SMS 3008, ASME BPE, BS 4825
<b>Clamp</b> acc. to	ISO 2852, DIN 32676, ASME BPE
<b>Threaded ports</b>	on request
<b>Installation</b>	As required, preferably with actuator in upright position
<b>Options, on request</b> (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 <sup>3</sup> /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 <sup>2)</sup>	3.7	4.2
65	2 1/2"	160.0 <sup>1)</sup>	5/7/10 <sup>2)</sup>	–	18.5 <sup>3)</sup>
80	3"	160.0	10	–	18.5 <sup>3)</sup>
100	4"	235.0	5	–	30.0 <sup>3)</sup>

1) For ASME BPE and SMS versions 54 m<sup>3</sup>/h

2) See ordering charts

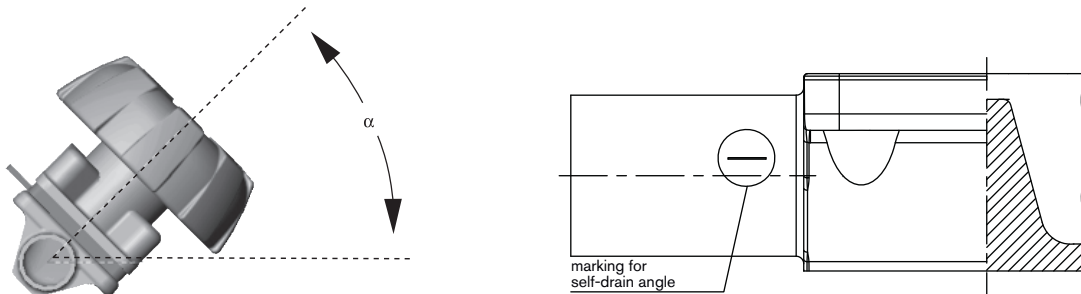
3) Bonnet and handwheel stainless steel

**Flow rate: Kv-value water (m<sup>3</sup>/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  $35^\circ$  (Marking must face upwards, 12 o'clock position)  
plus  $1^\circ$  to  $5^\circ$  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 DN		Orifice (Diaphragm size) [mm]	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]						
<b>Diaphragm material EPDM, handwheel PPS/bonnet PPS</b>								
8		1/4"	8	13.5	1.0	10	218 575	445 494
10		3/8"	8	17.2	1.0	10	218 576	445 499
15		1/2"	15	21.3	6.0	10	218 577	445 504
20		3/4"	20	26.9	11.0	10	218 579	445 509
25		1"	25	33.7	16.0	10	218 580	445 514
32		1 1/4"	40	42.4	29.0	10	218 581	550 291
40		1 1/2"	40	48.3	29.0	10	218 582	445 519
50		2"	50	60.3	50.0	7	218 584	445 524
<b>Diaphragm material EPDM, handwheel PPS/bonnet stainless steel</b>								
8		1/4"	8	13.5	1.0	10	218 585	446 183
10		3/8"	8	17.2	1.0	10	218 586	446 188
15		1/2"	15	21.3	6.0	10	218 587	446 193
20		3/4"	20	26.9	11.0	10	218 588	446 198
25		1"	25	33.7	16.0	10	218 590	446 203
32		1 1/4"	40	42.4	29.0	10	218 591	555 031
40		1 1/2"	40	48.3	29.0	10	218 592	446 208
50		2"	50	60.3	50.0	10	218 594	446 213
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS</b>								
8		1/4"	8	13.5	1.0	10	218 595	445 529
10		3/8"	8	17.2	1.0	10	218 596	445 534
15		1/2"	15	21.3	6.0	10	218 597	445 539
20		3/4"	20	26.9	11.0	10	218 598	445 544
25		1"	25	33.7	16.0	10	218 599	445 549
32		1 1/4"	40	42.4	29.0	10	218 600	550 288
40		1 1/2"	40	48.3	29.0	10	218 601	445 554
50		2"	50	60.3	50.0	7	218 602	445 559
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel</b>								
8		1/4"	8	13.5	1.0	10	218 603	446 218
10		3/8"	8	17.2	1.0	10	218 604	446 223
15		1/2"	15	21.3	6.0	10	218 606	446 228
20		3/4"	20	26.9	11.0	10	218 607	446 233
25		1"	25	33.7	16.0	10	218 608	446 238
32		1 1/4"	40	42.4	29.0	10	218 609	555 036
40		1 1/2"	40	48.3	29.0	10	218 610	446 243
50		2"	50	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.

### **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. EN ISO 1127/ISO 4200, DN 65-100

	Port connection DN		Orifice (Diaphragm size) [mm]	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]						
<b>Diaphragm material EPDM, handwheel and bonnet/stainless steel</b>								
	65	2 1/2"	80	76.1	160.0	10	261 951	273 309
	80	3"	80	88.9	160.0	10	269 238	273 310
	100	4"	100	114.3	235.0	5	273 308	273 311
<b>Diaphragm material PTFE/EPDM, handwheel and bonnet/stainless steel</b>								
	65	2 1/2"	80	76.1	160.0	10	261 871	273 312
	80	3"	80	88.9	160.0	10	261 872	270 877
	100	4"	100	114.3	235.0	5	257 104	273 313

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.

**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. DIN 11850 Series 2, DN 10-50 (DN 65-100 see next page)




Port connection DN		Orifice (Diaphragm size) [mm]	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]						
<b>Diaphragm material EPDM, handwheel PPS/bonnet PPS</b>							
10	3/8"	8	13.0	1.0	10	218 620	445 634
15	1/2"	15	19.0	6.0	10	218 621	445 639
20	3/4"	20	23.0	11.0	10	218 622	445 644
25	1"	25	29.0	16.0	10	218 623	445 649
32	1 1/4"	40	35.0	29.0	10	218 624	554 982
40	1 1/2"	40	41.0	29.0	10	218 625	445 654
50	2"	50	53.0	50.0	7	218 626	445 659
<b>Diaphragm material EPDM, handwheel PPS/bonnet stainless steel</b>							
10	3/8"	8	13.0	1.0	10	218 627	446 322
15	1/2"	15	19.0	6.0	10	218 628	446 327
20	3/4"	20	23.0	11.0	10	218 629	446 332
25	1"	25	29.0	16.0	10	218 630	446 337
32	1 1/4"	40	35.0	29.0	10	218 631	554 987
40	1 1/2"	40	41.0	29.0	10	218 632	446 342
50	2"	50	53.0	50.0	10	218 633	446 347
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS</b>							
10	3/8"	8	13.0	1.0	10	218 634	445 664
15	1/2"	15	19.0	6.0	10	218 635	445 669
20	3/4"	20	23.0	11.0	10	218 636	445 674
25	1"	25	29.0	16.0	10	218 637	445 679
32	1 1/4"	40	35.0	29.0	10	218 639	554 992
40	1 1/2"	40	41.0	29.0	10	218 640	445 684
50	2"	50	53.0	50.0	7	218 641	445 689
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel</b>							
10	3/8"	8	13.0	1.0	10	218 642	446 351
15	1/2"	15	19.0	6.0	10	218 643	446 356
20	3/4"	20	23.0	11.0	10	218 644	446 361
25	1"	25	29.0	16.0	10	218 645	446 366
32	1 1/4"	40	35.0	29.0	10	218 647	554 997
40	1 1/2"	40	41.0	29.0	10	218 649	446 371
50	2"	50	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.

### 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 DN		Orifice (Diaphragm size) [mm]	External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra <math>\leq 0.6 \mu\text{m}</math>	Item no. electro polished, Ra <math>\leq 0.4 \mu\text{m}</math>
	[mm]	[inch]						
<b>Diaphragm material EPDM, handwheel and bonnet/stainless steel</b>								
65	2 1/2"	80	70.0	160.0	10	257 379	273 315	
80	3"	80	85.0	160.0	10	253 098	273 316	
100	4"	100	104.0	235.0	5	273 314	273 317	
<b>Diaphragm material PTFE/EPDM, handwheel and bonnet/stainless steel</b>								
65	2 1/2"	80	70.0	160.0	10	273 318	273 321	
80	3"	80	85.0	160.0	10	273 319	273 322	
100	4"	100	104.0	235.0	5	273 320	273 322	


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 DN		Orifice (Diaphragm size) [mm]	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]						
<b>Diaphragm material EPDM, handwheel PPS/bonnet PPS</b>							
25	1"	25	25.0	16.0	10	218 658	445 694
40	1 1/2"	40	38.0	29.0	10	218 660	445 699
50	2"	50	51.0	50.0	7	218 661	445 704
65	2 1/2"	50	63.5	54.0	7	218 662	551 557
<b>Diaphragm material EPDM, handwheel PPS/bonnet stainless steel</b>							
25	1"	25	25.0	16.0	10	218 663	446 381
40	1 1/2"	40	38.0	29.0	10	218 664	446 386
50	2"	50	51.0	50.0	10	218 665	446 391
65	2 1/2"	50	63.5	54.0	10	218 666	551 567
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS</b>							
25	1"	25	25.0	16.0	10	218 667	445 709
40	1 1/2"	40	38.0	29.0	10	218 668	445 714
50	2"	50	51.0	50.0	7	218 669	445 719
65	2 1/2"	50	63.5	54.0	7	218 670	551 562
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel</b>							
25	1"	25	25.0	16.0	10	218 671	446 396
40	1 1/2"	40	38.0	29.0	10	218 672	446 401
50	2"	50	51.0	50.0	10	218 673	446 406
65	2 1/2"	50	63.5	54.0	10	218 674	551 572
<b>Diaphragm material EPDM, handwheel and bonnet/stainless steel</b>							
80	3"	80	76.1	160.0	10	273 324	273 326
100	4"	100	101.6	235.0	5	273 325	273 327
<b>Diaphragm material PTFE/EPDM, handwheel and bonnet/stainless steel</b>							
80	3"	80	76.1	160.0	10	248 292	273 328
100	4"	100	101.6	235.0	5	257 213	273 329

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.

### **i** 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 DN		Orifice (Diaphragm size) [mm]	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]						
<b>Diaphragm material EPDM, handwheel PPS/bonnet PPS</b>							
8	1/4"	8	6.35	1.0	10	218 680	445 564
10	3/8"	8	9.53	1.0	10	218 682	445 569
15	1/2"	15	12.70	6.0	10	218 683	447 926
20	3/4"	20	19.05	12.0	10	218 684	447 931
<b>Diaphragm material EPDM, handwheel PPS/bonnet stainless steel</b>							
8	1/4"	8	6.35	1.0	10	218 685	446 253
10	3/8"	8	9.53	1.0	10	218 686	446 258
15	1/2"	15	12.70	6.0	10	218 687	447 966
20	3/4"	20	19.05	12.0	10	218 688	447 971
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS</b>							
8	1/4"	8	6.35	1.0	10	218 689	445 599
10	3/8"	8	9.53	1.0	10	218 690	445 604
15	1/2"	15	12.70	6.0	10	218 691	447 946
20	3/4"	20	19.05	12.0	10	218 692	447 951
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel</b>							
8	1/4"	8	6.35	1.0	10	218 693	446 288
10	3/8"	8	9.53	1.0	10	218 694	446 293
15	1/2"	15	12.70	6.0	10	218 695	447 986
20	3/4"	20	19.05	12.0	10	218 696	447 991

 **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 DN		Orifice (Diaphragm size) [mm]	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]						
<b>Diaphragm material EPDM, handwheel PPS/bonnet PPS</b>							
8	1/4"	8	6.35	1.0	10	218 697	447 936
10	3/8"	8	9.53	1.0	10	218 698	447 941
15	1/2"	15	12.70	6.0	10	218 699	445 574
20	3/4"	20	19.05	12.0	10	218 700	445 579
25	1"	25	25.40	16.0	10	218 701	445 584
40	1 1/2"	40	38.10	29.0	10	218 702	445 589
50	2"	50	50.80	50.0	7	218 703	445 594
<b>Diaphragm material EPDM, handwheel PPS/bonnet stainless steel</b>							
8	1/4"	8	6.35	1.0	10	218 704	447 976
10	3/8"	8	9.53	1.0	10	218 705	447 981
15	1/2"	15	12.70	6.0	10	218 706	446 263
20	3/4"	20	19.05	12.0	10	218 707	446 268
25	1"	25	25.40	16.0	10	218 708	446 273
40	1 1/2"	40	38.10	29.0	10	218 709	446 278
50	2"	50	50.80	50.0	10	218 710	446 283
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS</b>							
8	1/4"	8	6.35	1.0	10	218 712	447 956
10	3/8"	8	9.53	1.0	10	218 713	447 961
15	1/2"	15	12.70	6.0	10	218 715	445 609
20	3/4"	20	19.05	12.0	10	218 716	445 614
25	1"	25	25.40	16.0	10	218 717	445 619
40	1 1/2"	40	38.10	29.0	10	218 718	445 624
50	2"	50	50.80	50.0	7	218 719	445 629
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel</b>							
8	1/4"	8	6.35	1.0	10	218 720	447 996
10	3/8"	8	9.53	1.0	10	218 721	448 001
15	1/2"	15	12.70	6.0	10	218 722	446 298
20	3/4"	20	19.05	12.0	10	218 723	446 303
25	1"	25	25.40	16.0	10	218 724	446 308
40	1 1/2"	40	38.10	29.0	10	218 725	446 313
50	2"	50	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 DN		Orifice (Diaphragm size) [mm]	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]						
<b>Diaphragm material EPDM, handwheel PPS/bonnet PPS</b>								
	25	1"	25	22.6	16.0	10	218 857	445 724
	40	1 1/2"	40	35.6	29.0	10	218 727	445 729
	50	2"	50	48.6	50.0	7	218 728	445 734
<b>Diaphragm material EPDM, handwheel PPS/bonnet stainless steel</b>								
	25	1"	25	22.6	16.0	10	218 729	446 411
	40	1 1/2"	40	35.6	29.0	10	218 730	446 416
	50	2"	50	48.6	50.0	10	218 731	446 421
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS</b>								
	25	1"	25	22.6	16.0	10	218 732	445 739
	40	1 1/2"	40	35.6	29.0	10	218 733	445 744
	50	2"	50	48.6	50.0	7	218 734	445 749
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel</b>								
	25	1"	25	22.6	16.0	10	218 735	446 426
	40	1 1/2"	40	35.6	29.0	10	218 736	446 431
	50	2"	50	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 DN		Orifice (Diaphragm size) [mm]	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]						
<b>Diaphragm material EPDM, handwheel PPS/bonnet PPS</b>								
	15	1/2"	15	16.0	6.0	10	218 738	445 894
	20	3/4"	20	20.0	11.0	10	218 739	445 899
	25	1"	25	26.0	16.0	10	218 740	445 904
	40	1 1/2"	40	38.0	29.0	10	218 741	445 909
	50	2"	50	50.0	50.0	7	218 742	445 914
<b>Diaphragm material EPDM, handwheel PPS/bonnet stainless steel</b>								
	15	1/2"	15	16.0	6.0	10	218 743	446 581
	20	3/4"	20	20.0	11.0	10	218 744	446 586
	25	1"	25	26.0	16.0	10	218 745	446 591
	40	1 1/2"	40	38.0	29.0	10	218 746	446 596
	50	2"	50	50.0	50.0	10	218 747	446 601
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS</b>								
	15	1/2"	15	16.0	6.0	10	218 748	445 919
	20	3/4"	20	20.0	11.0	10	218 749	445 924
	25	1"	25	26.0	16.0	10	218 750	445 929
	40	1 1/2"	40	38.0	29.0	10	218 751	445 934
	50	2"	50	50.0	50.0	7	218 752	445 939
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel</b>								
	15	1/2"	15	16.0	6.0	10	218 753	446 606
	20	3/4"	20	20.0	11.0	10	218 754	446 611
	25	1"	25	26.0	16.0	10	218 755	446 616
	40	1 1/2"	40	38.0	29.0	10	218 756	446 621
	50	2"	50	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 DN		Orifice (Diaphragm size) [mm]	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]						
<b>Diaphragm material EPDM, handwheel PPS/bonnet PPS <sup>1)</sup></b>							
8	1/4"	8	25.0	1.0	10	218 758	445 859
10	3/8"	8	25.0	1.0	10	218 759	445 864
15	1/2"	15	25.0	6.0	10	218 760	445 869
20	3/4"	20	25.0	11.0	10	218 761	445 874
25	1"	25	50.5	16.0	10	218 762	445 879
40	1 1/2"	40	50.5	29.0	10	218 763	445 884
50	2"	50	64.0	50.0	7	218 764	445 889
65	2 1/2"	50	77.5	54.0	7	218 765	551 455
80	3"	80	91.0	160.0	10	253 099	252 571
<b>Diaphragm material EPDM, handwheel PPS/bonnet stainless steel</b>							
8	1/4"	8	25.0	1.0	10	218 767	446 511
10	3/8"	8	25.0	1.0	10	218 768	446 516
15	1/2"	15	25.0	6.0	10	218 769	446 521
20	3/4"	20	25.0	11.0	10	218 770	446 526
25	1"	25	50.5	16.0	10	218 771	446 531
40	1 1/2"	40	50.5	29.0	10	218 772	446 536
50	2"	50	64.0	50.0	10	218 773	446 541
65	2 1/2"	50	77.5	54.0	10	218 774	551 488
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS <sup>1)</sup></b>							
8	1/4"	8	25.0	1.0	10	218 775	445 824
10	3/8"	8	25.0	1.0	10	218 776	445 829
15	1/2"	15	25.0	6.0	10	218 777	445 834
20	3/4"	20	25.0	11.0	10	218 778	445 839
25	1"	25	50.5	16.0	10	218 779	445 844
40	1 1/2"	40	50.5	29.0	10	218 780	445 849
50	2"	50	64.0	50.0	7	218 781	445 854
65	2 1/2"	50	77.5	54.0	7	218 782	551 461
80	3"	80	91.0	160.0	10	263 163	257 108
<b>Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel</b>							
8	1/4"	8	25.0	1.0	10	218 784	446 546
10	3/8"	8	25.0	1.0	10	218 785	446 551
15	1/2"	15	25.0	6.0	10	218 786	446 556
20	3/4"	20	25.0	11.0	10	218 787	446 561
25	1"	25	50.5	16.0	10	218 788	446 566
40	1 1/2"	40	50.5	29.0	10	218 789	446 571
50	2"	50	64.0	50.0	10	218 790	446 576
65	2 1/2"	50	77.5	54.0	10	218 791	551 554


1) DN 80 bonnet and handwheel stainless steel

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



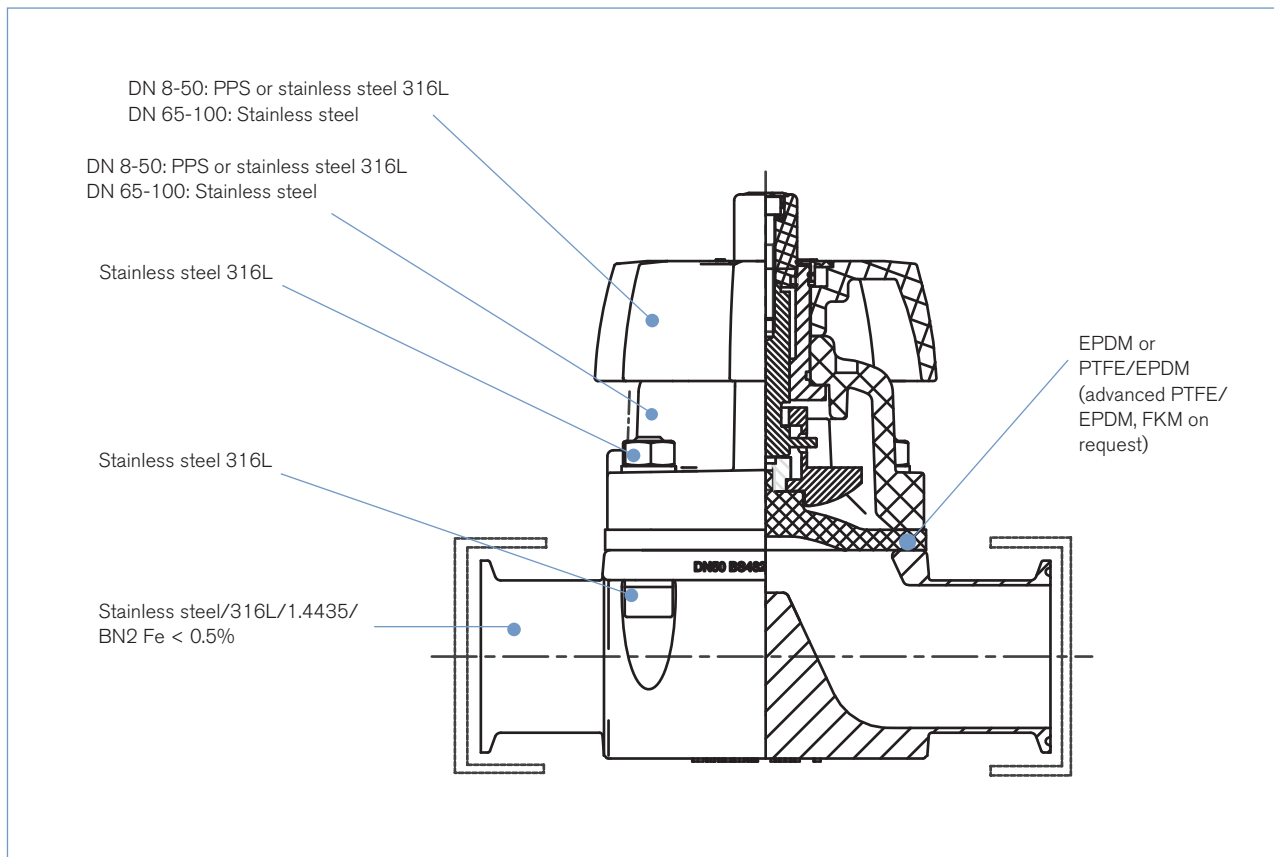
Port connection DN		Orifice (Diaphragm size) [mm]	External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm	Item no. electro polished, Ra ≤ 0.4 µm
[mm]	[inch]						
<b>Diaphragm material EPDM, handwheel PPS/bonnet PPS</b>							
8	1/4"	8	25.0	1.0	10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

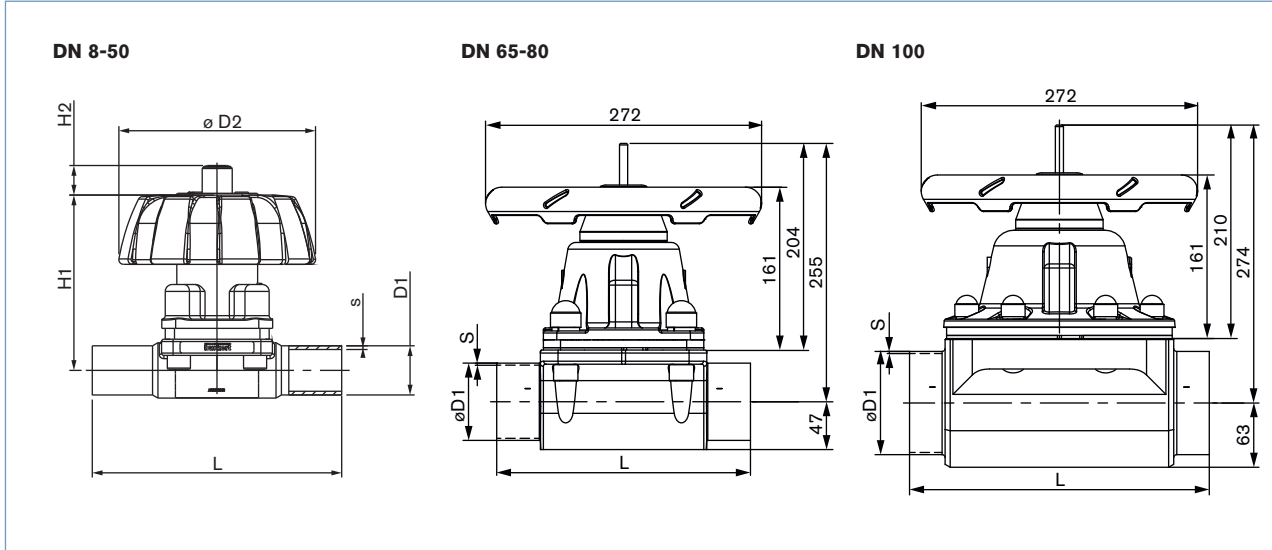


- 3-A approved diaphragm valves on request  
(3-A Sanitary Standards Symbol Administrative Council)

- The EPDM, PTFE/EPDM and advanced PTFE/EPDM diaphragms are approved acc. USP Class VI
- Approval according TA-air (Port connection DN 8-50)

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

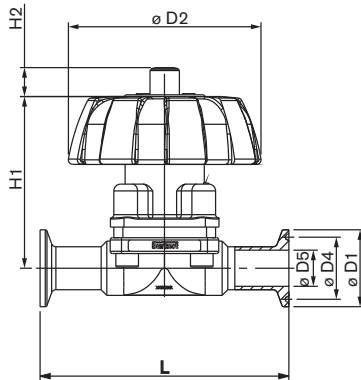
Dimensions acc. to BS 4825 and ASME BPE [mm]

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

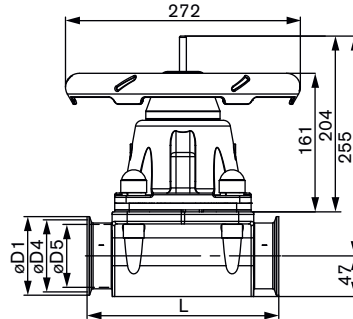
Dimensions [mm]

Body with clamp connection

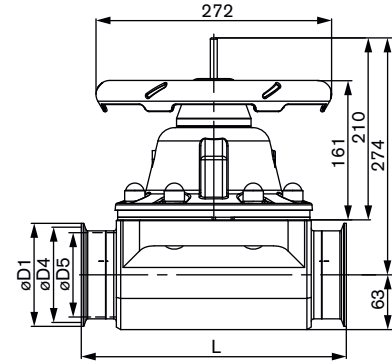
DN 8-50



DN 65-80



DN 100



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

Port connection		ØD2	H1	H2	L	ØD1	ØD4	ISO 2852	DIN 32676
[mm]	[inch]							ØD5	ØD5
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 <sup>1)</sup>	-	-	-	-	305	91	83.5	72.1	66
80 <sup>1)</sup>	-	-	-	-	305	106	97	84.9	81
100 <sup>1)</sup>	-	-	-	-	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



Body label

