

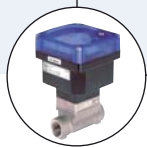
2/2-way Diaphragm Valve, manually operated, forged valve body, weld end and clamp connection, DN 8-100



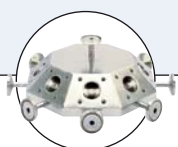
Type 3233
with weld end
connection, DN 8/10

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  /  / 

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 (TFM/EPDM, FKM on request)
Media	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 ≤ 0.5 µm internal electro polished (external forged surface electro polished) (further on request) Ra ≤ 0.4 µm
Medium temperatures	EPDM, PTFE/EPDM, TFM/EPDM ¹⁾ -10 to +130 °C (briefly up to +150°C for steam sterilisation) FKM on request -10 to +130°C
Ambient temperature	up to +130°C Briefly up to +150°C
Port connections	
Weld end acc. to	<ul style="list-style-type: none"> ▪ EN ISO 1127/ISO 4200 ▪ DIN 11850 Series 0 to 3 ▪ SMS 3008 ▪ ASME BPE ▪ BS 4825
Clamp acc. to	<ul style="list-style-type: none"> ▪ 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⁾ TFM/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 stainless 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

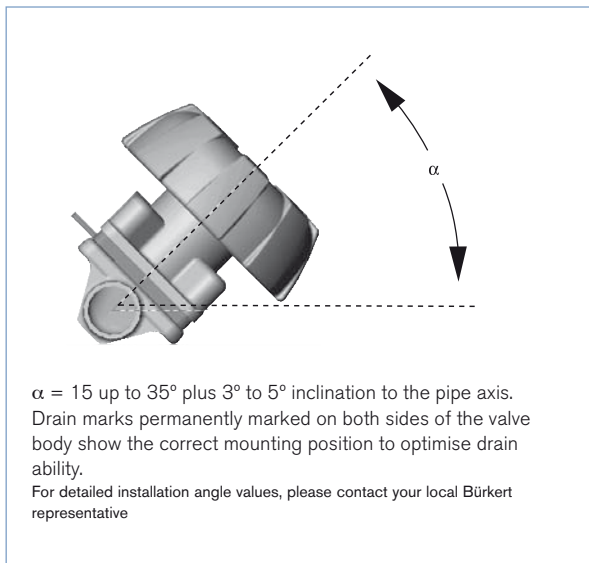
3) Bonnet and handwheel grey cast iron, white epoxy coated

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

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 [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.5 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	445 493	445 494
10	3/8"	17.2	1.0	10	445 498	445 499
15	1/2"	21.3	6.0	10	445 503	445 504
20	3/4"	26.9	11.0	10	445 508	445 509
25	1"	33.7	16.0	10	445 513	445 514
32	1 1/4"	42.4	29.0	10	552 110	550 291
40	1 1/2"	48.3	29.0	10	445 518	445 519
50	2"	60.3	50.0	7	445 523	445 524
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	13.5	1.0	10	446 182	446 183
10	3/8"	17.2	1.0	10	446 187	446 188
15	1/2"	21.3	6.0	10	446 192	446 193
20	3/4"	26.9	11.0	10	446 197	446 198
25	1"	33.7	16.0	10	446 202	446 203
32	1 1/4"	42.4	29.0	10	555 030	555 031
40	1 1/2"	48.3	29.0	10	446 207	446 208
50	2"	60.3	50.0	10	446 212	446 213
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS						
8	1/4"	13.5	1.0	10	445 528	445 529
10	3/8"	17.2	1.0	10	445 533	445 534
15	1/2"	21.3	6.0	10	445 538	445 539
20	3/4"	26.9	11.0	10	445 543	445 544
25	1"	33.7	16.0	10	445 548	445 549
32	1 1/4"	42.4	29.0	10	555 027	550 288
40	1 1/2"	48.3	29.0	10	445 553	445 554
50	2"	60.3	50.0	10	445 558	445 559
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	13.5	1.0	10	446 217	446 218
10	3/8"	17.2	1.0	10	446 222	446 223
15	1/2"	21.3	6.0	10	446 227	446 228
20	3/4"	26.9	11.0	10	446 232	446 233
25	1"	33.7	16.0	10	446 237	446 238
32	1 1/4"	42.4	29.0	10	555 035	555 036
40	1 1/2"	48.3	29.0	10	446 242	446 243
50	2"	60.3	50.0	10	446 247	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: TFM/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 ≤ 0.5 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	551 322	551 323
	80	3"	88.9	160.0	5	551 327	551 328
	100	4"	114.3	235.0	5	551 302	551 303
Diaphragm material PTFE/EPDM, handwheel and bonnet/grey cast iron, white epoxy coated							
	65	2 1/2"	76.1	160.0	5	551 352	551 353
	80	3"	88.9	160.0	5	551 357	551 358
	100	4"	114.3	235.0	5	551 312	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.

i Further versions on request


Port connection
Threaded ports




Material
Seal: TFM/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 ≤ 0.5 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	445 633	445 634
	15	1/2"	19.0	6.0	10	445 638	445 639
	20	3/4"	23.0	11.0	10	445 643	445 644
	25	1"	29.0	16.0	10	445 648	445 649
	32	1 1/4"	35.0	29.0	10	554 981	554 982
	40	1 1/2"	41.0	29.0	10	445 653	445 654
	50	2"	53.0	50.0	7	445 658	445 659
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
	10	3/8"	13.0	1.0	10	445 462	446 322
	15	1/2"	19.0	6.0	10	446 326	446 327
	20	3/4"	23.0	11.0	10	446 331	446 332
	25	1"	29.0	16.0	10	446 336	446 337
	32	1 1/4"	35.0	29.0	10	554 986	554 987
	40	1 1/2"	41.0	29.0	10	446 341	446 342
	50	2"	53.0	50.0	10	446 346	446 347
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS							
	10	3/8"	13.0	1.0	10	445 663	445 664
	15	1/2"	19.0	6.0	10	445 668	445 669
	20	3/4"	23.0	11.0	10	445 673	445 674
	25	1"	29.0	16.0	10	445 678	445 679
	32	1 1/4"	35.0	29.0	10	554 991	554 992
	40	1 1/2"	41.0	29.0	10	445 683	445 684
	50	2"	53.0	50.0	7	445 688	445 689
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
	10	3/8"	13.0	1.0	10	447 340	446 351
	15	1/2"	19.0	6.0	10	446 355	446 356
	20	3/4"	23.0	11.0	10	446 360	446 361
	25	1"	29.0	16.0	10	446 365	446 366
	32	1 1/4"	35.0	29.0	10	554 996	554 997
	40	1 1/2"	41.0	29.0	10	446 370	446 371
	50	2"	53.0	50.0	10	446 375	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: TFM/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 ≤ 0.5 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	551 337	551 338	
80	3"	85.0	160.0	5	551 342	551 343	
100	4"	104.0	235.0	5	551 308	551 309	
Diaphragm material PTFE/EPDM, handwheel and bonnet/grey cast iron, white epoxy coated							
65	2 1/2"	70.0	160.0	5	551 367	551 368	
80	3"	85.0	160.0	5	551 372	551 373	

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: TFM/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 ≤ 0.5 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	445 693	445 694
40	1 1/2"	38.0	29.0	10	445 698	445 699
50	2"	51.0	50.0	7	445 703	445 704
65	2 1/2"	63.5	54.0	7	449 820	551 557
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel						
25	1"	25.0	16.0	10	446 380	446 381
40	1 1/2"	38.0	29.0	10	446 385	446 386
50	2"	51.0	50.0	10	446 390	446 391
65	2 1/2"	63.5	54.0	10	551 566	551 567
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS						
25	1"	25.0	16.0	10	445 708	445 709
40	1 1/2"	38.0	29.0	10	445 713	445 714
50	2"	51.0	50.0	7	445 718	445 719
65	2 1/2"	63.5	54.0	7	551 561	551 562
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel						
25	1"	25.0	16.0	10	446 395	446 396
40	1 1/2"	38.0	29.0	10	446 400	446 401
50	2"	51.0	50.0	10	446 405	446 406
65	2 1/2"	63.5	54.0	10	551 571	551 572
Diaphragm material EPDM, handwheel and bonnet/grey cast iron, white epoxy coated						
80	3"	76.1	160.0	5	449 821	551 333
100	4"	101.6	235.0	5	449 822	551 306
Diaphragm material PTFE/EPDM, handwheel and bonnet/grey cast iron, white epoxy coated						
80	3"	76.1	160.0	5	550 633	551 363
100	4"	101.6	235.0	5	550 634	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: TFM/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 ≤ 0.5 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	445 563	445 564	
10	3/8"	9.53	1.0	10	445 568	445 569	
15	1/2"	12.70	6.0	10	447 925	447 926	
20	3/4"	19.05	12.0	10	447 930	447 931	
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
8	1/4"	6.35	1.0	10	446 252	446 253	
10	3/8"	9.53	1.0	10	446 257	446 258	
15	1/2"	12.70	6.0	10	447 965	447 966	
20	3/4"	19.05	12.0	10	447 970	447 971	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS							
8	1/4"	6.35	1.0	10	445 598	445 599	
10	3/8"	9.53	1.0	10	445 603	445 604	
15	1/2"	12.70	6.0	10	447 945	447 946	
20	3/4"	19.05	12.0	10	447 950	447 951	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
8	1/4"	6.35	1.0	10	446 287	446 288	
10	3/8"	9.53	1.0	10	446 292	446 293	
15	1/2"	12.70	6.0	10	447 985	447 986	
20	3/4"	19.05	12.0	10	447 990	447 991	

i Further versions on request


 **Port connection**
Threaded ports

 **Material**
Seal: TFM/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 ≤ 0.5 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	447 935	447 936	
10	3/8"	9.53	1.0	10	447 940	447 941	
15	1/2"	12.70	6.0	10	445 573	445 574	
20	3/4"	19.05	12.0	10	445 578	445 579	
25	1"	25.40	16.0	10	445 583	445 584	
40	1 1/2"	38.10	29.0	10	445 588	445 589	
50	2"	50.80	50.0	7	445 593	445 594	
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
8	1/4"	6.35	1.0	10	447 975	447 976	
10	3/8"	9.53	1.0	10	447 980	447 981	
15	1/2"	12.70	6.0	10	446 262	446 263	
20	3/4"	19.05	12.0	10	446 267	446 268	
25	1"	25.40	16.0	10	446 272	446 273	
40	1 1/2"	38.10	29.0	10	446 277	446 278	
50	2"	50.80	50.0	10	446 282	446 283	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS							
8	1/4"	6.35	1.0	10	447 955	447 956	
10	3/8"	9.53	1.0	10	447 960	447 961	
15	1/2"	12.70	6.0	10	445 608	445 609	
20	3/4"	19.05	12.0	10	445 613	445 614	
25	1"	25.40	16.0	10	445 618	445 619	
40	1 1/2"	38.10	29.0	10	445 623	445 624	
50	2"	50.80	50.0	7	445 628	445 629	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
8	1/4"	6.35	1.0	10	447 995	447 996	
10	3/8"	9.53	1.0	10	448 000	448 001	
15	1/2"	12.70	6.0	10	446 297	446 298	
20	3/4"	19.05	12.0	10	446 302	446 303	
25	1"	25.40	16.0	10	446 307	446 308	
40	1 1/2"	38.10	29.0	10	446 312	446 313	
50	2"	50.80	50.0	10	446 317	446 318	

i Further versions on request


 **Port connection**
Threaded ports

 **Material**
Seal: TFM/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 ≤ 0.5 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	445 723	445 724
	40	1 1/2"	35.6	29.0	10	445 728	445 729
	50	2"	48.6	50.0	7	445 733	445 734
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
	25	1"	22.6	16.0	10	446 410	446 411
	40	1 1/2"	35.6	29.0	10	446 415	446 416
	50	2"	48.6	50.0	10	446 420	446 421
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS							
	25	1"	22.6	16.0	10	445 738	445 739
	40	1 1/2"	35.6	29.0	10	445 743	445 744
	50	2"	48.6	50.0	7	445 748	445 749
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
	25	1"	22.6	16.0	10	446 425	446 426
	40	1 1/2"	35.6	29.0	10	446 430	446 431
	50	2"	48.6	50.0	10	446 435	446 436

i Further versions on request


 **Port connection**
DN 65-100 mm acc. to ISO 2852
Threaded ports

 **Material**
Seal: TFM/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 ≤ 0.5 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	445 893	445 894
	20	3/4"	20.0	11.0	10	445 898	445 899
	25	1"	26.0	16.0	10	445 903	445 904
	40	1 1/2"	38.0	29.0	10	445 908	445 909
	50	2"	50.0	50.0	7	445 913	445 914
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
	15	1/2"	16.0	6.0	10	446 580	446 581
	20	3/4"	20.0	11.0	10	446 585	446 586
	25	1"	26.0	16.0	10	446 590	446 591
	40	1 1/2"	38.0	29.0	10	446 595	446 596
	50	2"	50.0	50.0	10	446 600	446 601
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS							
	15	1/2"	16.0	6.0	10	445 918	445 919
	20	3/4"	20.0	11.0	10	445 923	445 924
	25	1"	26.0	16.0	10	445 928	445 929
	40	1 1/2"	38.0	29.0	10	445 933	445 934
	50	2"	50.0	50.0	7	445 938	445 939
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
	15	1/2"	16.0	6.0	10	446 605	446 606
	20	3/4"	20.0	11.0	10	446 610	446 611
	25	1"	26.0	16.0	10	446 615	446 616
	40	1 1/2"	38.0	29.0	10	446 620	446 621
	50	2"	50.0	50.0	10	446 625	446 626

i Further versions on request**Port connection**DN 65-100 mm acc. to DIN 32676
Threaded ports**Material**Seal: TFM/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	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.5 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	445 858	445 859	
10	3/8"	25.0	1.0	10	445 863	445 864	
15	1/2"	25.0	6.0	10	445 868	445 869	
20	3/4"	25.0	11.0	10	445 873	445 874	
25	1"	50.5	16.0	10	445 878	445 879	
40	1 1/2"	50.5	29.0	10	445 883	445 884	
50	2"	64.0	50.0	7	445 888	445 889	
65	2 1/2"	77.5	54.0	7	551 454	551 455	
80	3"	91.0	160.0	5	551 347	551 348	
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel							
8	1/4"	25.0	1.0	10	446 510	446 511	
10	3/8"	25.0	1.0	10	446 515	446 516	
15	1/2"	25.0	6.0	10	446 520	446 521	
20	3/4"	25.0	11.0	10	446 525	446 526	
25	1"	50.5	16.0	10	446 530	446 531	
40	1 1/2"	50.5	29.0	10	446 535	446 536	
50	2"	64.0	50.0	10	446 540	446 541	
65	2 1/2"	77.5	54.0	10	551 487	551 488	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS ¹⁾							
8	1/4"	25.0	1.0	10	445 823	445 824	
10	3/8"	25.0	1.0	10	445 828	445 829	
15	1/2"	25.0	6.0	10	445 833	445 834	
20	3/4"	25.0	11.0	10	445 838	445 839	
25	1"	50.5	16.0	10	445 843	445 844	
40	1 1/2"	50.5	29.0	10	445 848	445 849	
50	2"	64.0	50.0	7	445 853	445 854	
65	2 1/2"	77.5	54.0	7	551 460	551 461	
80	3"	91.0	160.0	5	551 377	551 378	
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel							
8	1/4"	25.0	1.0	10	446 545	446 546	
10	3/8"	25.0	1.0	10	446 550	446 551	
15	1/2"	25.0	6.0	10	446 555	446 556	
20	3/4"	25.0	11.0	10	446 560	446 561	
25	1"	50.5	16.0	10	446 565	446 566	
40	1 1/2"	50.5	29.0	10	446 570	446 571	
50	2"	64.0	50.0	10	446 575	446 576	
65	2 1/2"	77.5	54.0	10	551 553	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.

i Further versions on request**Port connection**
Threaded ports**Material**
Seal: TFM/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 ≤ 0.5 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	445 753	445 754
10	3/8"	25.0	1.0	10	445 758	445 759
15	1/2"	25.0	6.0	10	445 763	445 764
20	3/4"	25.0	11.0	10	445 768	445 769
25	1"	50.5	16.0	10	445 773	445 774
40	1 1/2"	50.5	29.0	10	445 778	445 779
50	2"	64.0	50.0	7	445 783	445 784
Diaphragm material EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	25.0	1.0	10	446 440	446 441
10	3/8"	25.0	1.0	10	446 445	446 446
15	1/2"	25.0	6.0	10	446 450	446 451
20	3/4"	25.0	11.0	10	446 455	446 456
25	1"	50.5	16.0	10	446 460	446 461
40	1 1/2"	50.5	29.0	10	446 465	446 466
50	2"	64.0	50.0	10	446 470	446 471
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet PPS						
8	1/4"	25.0	1.0	10	445 788	445 789
10	3/8"	25.0	1.0	10	445 793	445 794
15	1/2"	25.0	6.0	10	445 798	445 799
20	3/4"	25.0	11.0	10	445 803	445 804
25	1"	50.5	16.0	10	445 808	445 809
40	1 1/2"	50.5	29.0	10	445 813	445 814
50	2"	64.0	50.0	7	445 818	445 819
Diaphragm material PTFE/EPDM, handwheel PPS/bonnet stainless steel						
8	1/4"	25.0	1.0	10	446 475	446 476
10	3/8"	25.0	1.0	10	446 480	446 481
15	1/2"	25.0	6.0	10	446 485	446 486
20	3/4"	25.0	11.0	10	446 490	446 491
25	1"	50.5	16.0	10	446 495	446 496
40	1 1/2"	50.5	29.0	10	446 500	446 501
50	2"	64.0	50.0	10	446 505	446 506

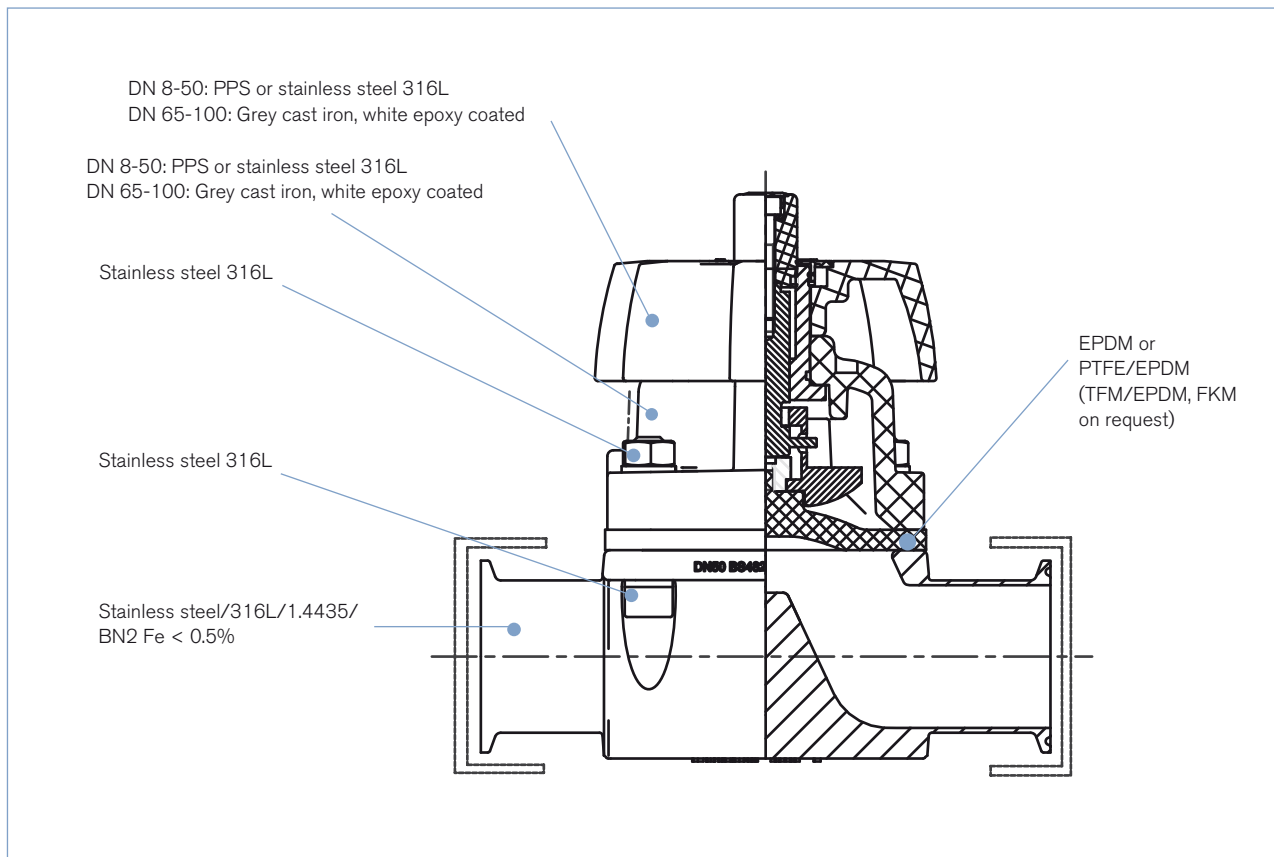
 Further versions on request

 **Port connection**
Threaded ports

 **Material**
Seal: TFM/EPDM, FKM
Handwheel: stainless steel

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

Materials



Approvals

Suitable for foodstuffs / sterile applications



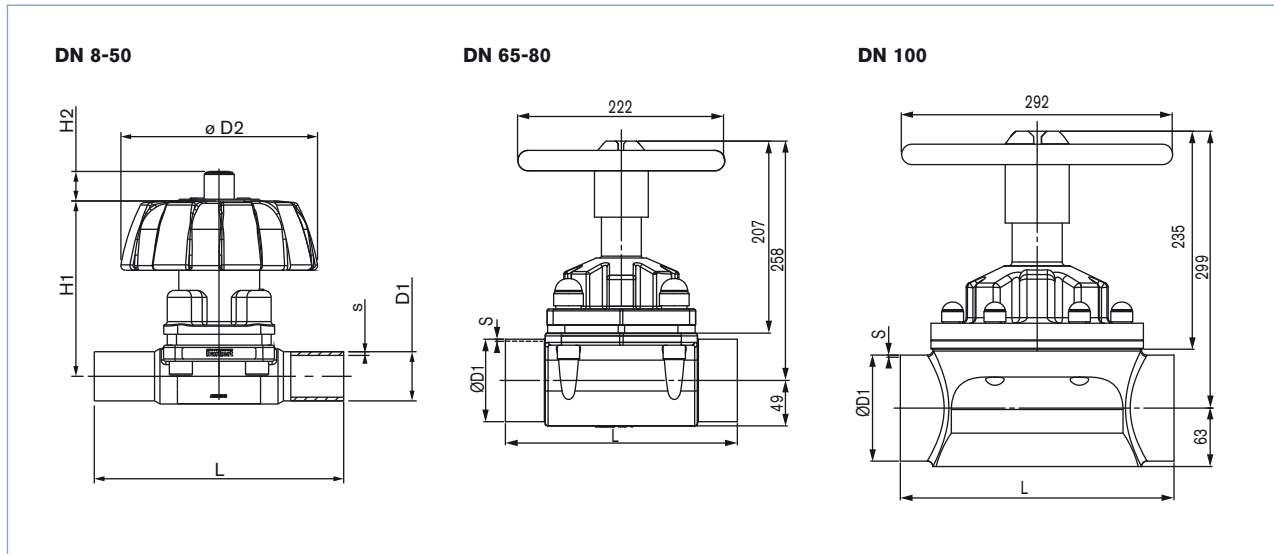
- The composition of the EPDM, PTFE/EPDM and TFM/EPDM diaphragms corresponds to the *Code of Federal Regulations*, published by the *FDA* (Food and Drug Administration, USA).
- The EPDM diaphragms correspond to the *KTW-Recommendation* (Plastics in the Drinking Water Sector). A Manufacturer's Declaration will be supplied on request.



- The diaphragm valves are 3-A approved (3-A Sanitary Standards Symbol Administrative Council)
- The EPDM, PTFE/EPDM and TFM/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]

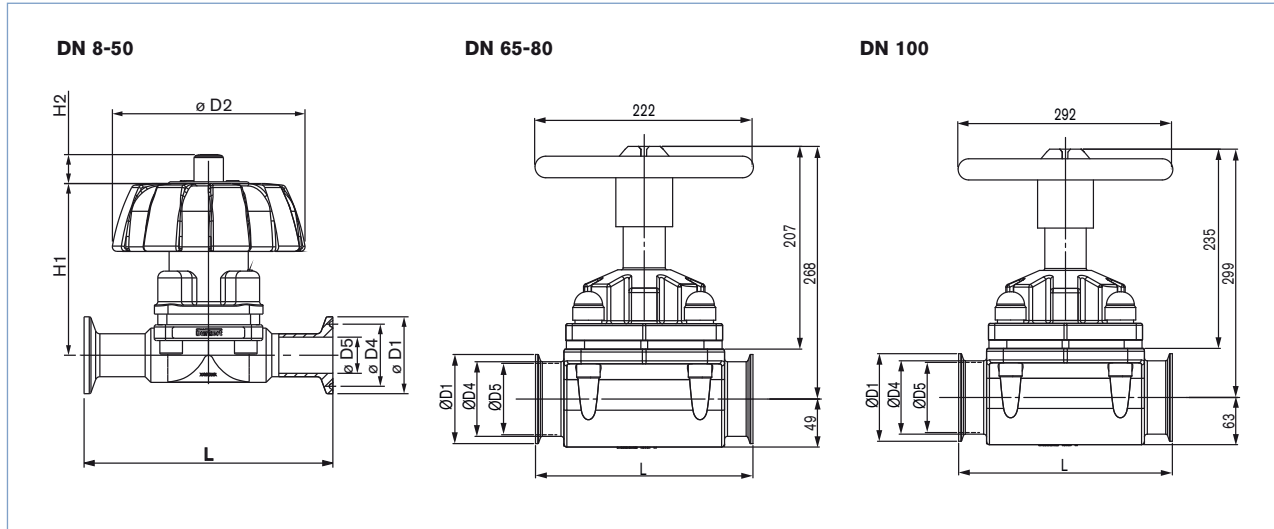
Port connection		ØD2	H1	H2	L	EN ISO 1127/ ISO 4200		DIN 11850 S2		SMS 3008	
[mm]	[inch]					ØD1	s	ØD1	s	ØD1	s
8	1/4"	35	56	–	90	13.5	1.6	–	–	–	–
10	3/8"	35	56	–	90	17.2	1.6	13.0	1.5	–	–
15	1/2"	80	85	7	110	21.3	1.6	19.0	1.5	–	–
20	3/4"	80	93	11	119	26.9	1.6	23.0	1.5	–	–
25	1"	80	94	12	129	33.7	2.0	29.0	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 type="checkbox"/> Process medium	<input type="text"/>		
<input type="checkbox"/> Type of media	<input type="checkbox"/> Liquid	<input type="checkbox"/> Steam	<input type="checkbox"/> Gas
<input type="checkbox"/> Flow rate (Q, Q _N , W) ¹⁾	<input type="text"/> nominal	<input type="text"/> unit	
<input type="checkbox"/> Temperature at valve inlet	<input type="text"/>	<input type="text"/>	
<input 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

- | | |
|---|--|
| <input type="checkbox"/> Attestation of compliance with the order EN-ISO 10204 2.1 | <input type="checkbox"/> Certification of Conformity for Pickling and Electropolishing Processes |
| <input type="checkbox"/> Test report EN-ISO 10204 2.2 | <input type="checkbox"/> FDA and USP compliance |
| <input type="checkbox"/> Certification of Conformity for Raw Material EN-ISO 10204 3.1 | <input type="checkbox"/> 3A certificate |
| <input type="checkbox"/> Certification of Conformity for the Surface Quality DIN4762-DIN4768-ISO/4287/1 | |

Comment / sketch

* 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	TFM/EPDM in two pieces
ET	TFM (bonded on EPDM)

BODY MATERIAL

Standard VS	Forged 1.4435BN2/ASME BPE
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VARIABLE CODES

Surface finish internal	
NO14	Int. Satin finished Ra=0.5µm
NO17	Int. Electro finished Ra=0.4µm

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	SMS 3008	DIN 11850				BS 4825	ASME BPE	JIS Sanitary	JIS Utility
			Series 0	Series 1	Series 2	Series 3				
8	SA40=13.5x1.6		SC42=10x1.0				SODB=6.35x1.2	SA90=6.35x0.89	SA70=13.8x1.65	
15	SA42=21.3x1.6		SC43=18x1.5	SF41=18x1.0	SD42=19x1.5	SE42=20x2.0	SODD=12.7x1.2	SA92=12.7x1.65	SA72=21.7x2.1	
20	SA43=26.9x1.6		SC44=22x1.5	SF42=22x1.0	SD43=23x1.5	SE43=24x2.0	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	SC45=28x1.5	SF43=28x1.0	SD44=29x1.5	SE44=30x2.0	SODF=25.4x1.65	SODF=25.4x1.65	SA73=25.4x1.2	SA81=34x2.0
32	SA45=42.4x2.0		SC46=34x1.5	SF44=34x1.0	SD45=35x1.5	SE45=36x2.0				SA83=42.7x2.0
40	SA46=48.3x2.0	SA62=38.0x1.2	SC47=40x1.5	SF45=40x1.0	SD46=41x1.5	SE46=42x2.0	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	SC48=52x1.5	SF46=52x1.0	SD47=53x1.5	SE47=54x2.0	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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