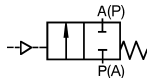


2/2-Way Diaphragm Valve, Pneumatically Operated Casted Stainless Steel Body with Weld Ends



2031



Normally closed

DN 4 - 50

- ✓ Fully integrated in Burkert's Easy Process Control Systems
- ✓ Hermetical separation of fluids from the operating mechanism by diaphragm
- ✓ Zero dead volume
- ✓ Various surface finishes
- ✓ Quality certifications

The valve combination of hermetically sealed actuators, casted stainless steel bodies and chemically neutral diaphragms provides positive control of critical or ultra-pure fluids. The zero dead volume body, combined with various surface finishes allows a wide range of applications. The valve can be actuated by pneumatic pilot valves. (single pilot valves, valve islands and control heads) Control function A, normally closed by spring return.

Technical Data

Connections	ISO 4200 and SMS 3008
Pilot pressure (depending on actuator)	5.5 ... 10 bar (PA ≤ 100) 5.5 ... 7 bar (PA > 100) 5.5 ... 7 bar (PPS)
Temperatures	
Medium	-10°C ... +130°C (short +150°C)
Ambient (depending on actuator)	-10°C ... +60°C (PA) +5°C ... +140°C (PPS < 100) +5°C ... +90°C (PPS ≥ 100) (short +140°C)

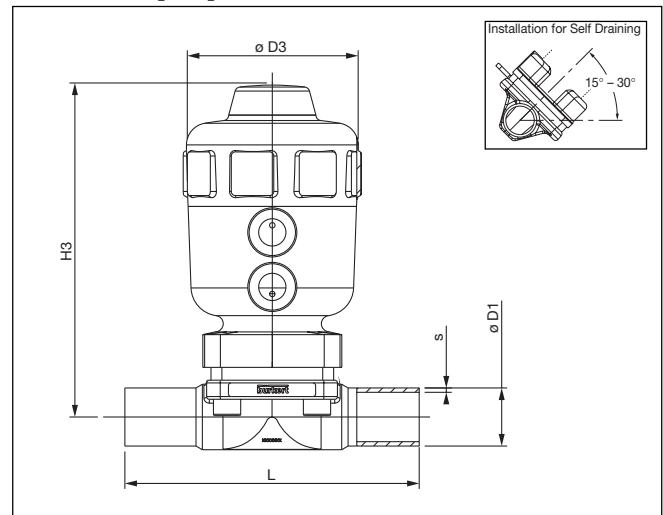
Materials

Valve body	stainless steel 316L
Diaphragm	investment cast
Actuator	EPDM, PTFE
Threads for pilot valves	PPS, PA
Flow direction	stainless steel 1.4305
	Bi-direct

Specifications

Orifice DN	Kv-Value Water	Max. Op. Pressure (Medium)	Actuator Size ø Diaphragm		Weight
			EPDM	PTFE	
[mm]	[m³/h]	[bar]	[mm]	[mm]	[kg]
4.0	0.8	10.0	C-40	-	0.4
4.0	0.8	7.0	-	C-40	0.4
6.0	0.8	10.0	C-40	-	0.4
6.0	0.8	7.0	-	C-40	0.4
8.0	1.0	10.0	C-40	-	0.4
8.0	1.0	7.0	-	C-40	0.4
10.0	1.0	10.0	C-40	-	0.4
10.0	1.0	7.0	-	C-40	0.4
15.0	4.0	9.0	D-50	-	0.7
15.0	4.5	10.0	-	E-63	0.9
20.0	7.0	8.0	E-63	-	1.3
20.0	7.5	10.0	-	F-80	2.0
25.0	12.0	10.0	F-80	-	2.2
25.0	12.0	8.0	-	F-80	2.2
40.0	30.0	6.5	G-100	-	4.2
40.0	30.5	10.0	-	H-125	5.7
50.0	51.5	8.5	H-125	-	7.6
50.0	51.5	7.0	-	H-125	7.6

Dimensions [mm]



ISO 4200 Connection (DN 4 and 6 - DIN 11850 Series 0)

Orifice DN	L	D1	s	D3	H3
[mm]	[mm]	ø [mm]	[mm]	ø [mm]	[mm]
4.0	90.0	6.0	1.0	53.0	85.0
6.0	90.0	8.0	1.0	53.0	85.0
8.0	90.0	13.5	1.6	53.0	85.0
10.0	90.0	17.2	1.6	53.0	85.0
15.0	110.0	21.3	1.6	64.0	121.0
15.0	110.0	21.3	1.6	80.0	138.0
20.0	119.0	26.9	1.6	80.0	148.0
20.0	119.0	26.9	1.6	101.0	174.0
25.0	129.0	33.7	2.0	80.0	157.0
25.0	129.0	33.7	2.0	101.0	177.0
40.0	161.0	48.3	2.0	127.0	233.0
40.0	161.0	48.3	2.0	153.0	272.0
50.0	192.0	60.3	2.0	127.0	244.0
50.0	192.0	60.3	2.0	153.0	278.0

SMS 3008 Connection

25.0	129.0	25.0	1.2	80.0	157.0
25.0	129.0	25.0	1.2	101.0	177.0
40.0	161.0	38.0	1.2	127.0	233.0
40.0	161.0	38.0	1.2	153.0	272.0
50.0	192.0	51.0	1.2	127.0	244.0
50.0	192.0	51.0	1.2	153.0	278.0



2/2-Way Diaphragm Valve, Pneumatically Operated Casted Stainless Steel Body with Weld Ends

Specifications - Ordering Chart (Other Versions on Request) for ISO 4200 Connection

Orifice DN [mm]	Connection D1 x S [mm]	Surface finish *1. Glass beaded *2. Mech. polished *3. Satin finished *4. Electro polished [µm]	Item-No.			
			Pneumatic Actuator EPDM Diaphragm		Pneumatic Actuator PTFE Diaphragm	
			PPS Actuator	PA Actuator	PPS Actuator	PA Actuator
4.0	6.0 x 1.0	*1. Internal Ra<6.3 – External Ra<6.3	443 767 E	on request	443 775 E	on request
4.0	6.0 x 1.0	*2. Internal Ra<1.6 – External Ra<6.3	443 768 P	on request	443 776 F	on request
4.0	6.0 x 1.0	*3. Internal Ra<0.8 – External Ra<6.3	443 769 Q	on request	443 777 G	on request
4.0	6.0 x 1.0	*4. Internal Ra<0.6 – External Ra<3.2	443 770 M	on request	443 778 R	on request
6.0	6.0 x 1.0	*1. Internal Ra<6.3 – External Ra<6.3	443 771 A	on request	443 779 J	on request
6.0	6.0 x 1.0	*2. Internal Ra<1.6 – External Ra<6.3	443 772 B	on request	443 780 G	on request
6.0	6.0 x 1.0	*3. Internal Ra<0.8 – External Ra<6.3	443 773 C	on request	443 781 V	on request
6.0	6.0 x 1.0	*4. Internal Ra<0.6 – External Ra<3.2	443 774 D	on request	443 782 W	on request
8.0	13.5 x 1.6	*1. Internal Ra<6.3 – External Ra<6.3	441 214 S	on request	441 950 G	on request
8.0	13.5 x 1.6	*2. Internal Ra<1.6 – External Ra<6.3	439 538 V	on request	441 951 V	on request
8.0	13.5 x 1.6	*3. Internal Ra<0.8 – External Ra<6.3	441 215 T	on request	441 952 W	on request
8.0	13.5 x 1.6	*4. Internal Ra<0.6 – External Ra<3.2	441 216 U	on request	441 953 X	on request
10.0	17.2 x 1.6	*1. Internal Ra<6.3 – External Ra<6.3	441 237 Z	on request	441 961 X	on request
10.0	17.2 x 1.6	*2. Internal Ra<1.6 – External Ra<6.3	441 238 A	on request	441 962 Y	on request
10.0	17.2 x 1.6	*3. Internal Ra<0.8 – External Ra<6.3	441 239 B	on request	441 963 Z	on request
10.0	17.2 x 1.6	*4. Internal Ra<0.6 – External Ra<3.2	441 240 Q	on request	441 964 S	on request
15.0	21.3 x 1.6	*1. Internal Ra<6.3 – External Ra<6.3	441 280 H	443 815 P	441 965 T	443 835 K
15.0	21.3 x 1.6	*2. Internal Ra<1.6 – External Ra<6.3	441 281 W	443 816 Q	441 966 U	443 836 L
15.0	21.3 x 1.6	*3. Internal Ra<0.8 – External Ra<6.3	441 282 X	443 817 R	441 967 V	443 837 M
15.0	21.3 x 1.6	*4. Internal Ra<0.6 – External Ra<3.2	441 283 Y	443 818 S	441 968 E	443 838 W
20.0	26.9 x 1.6	*1. Internal Ra<6.3 – External Ra<6.3	441 319 B	443 819 T	441 969 F	443 839 X
20.0	26.9 x 1.6	*2. Internal Ra<1.6 – External Ra<6.3	441 320 G	443 820 Y	441 970 C	443 840 C
20.0	26.9 x 1.6	*3. Internal Ra<0.8 – External Ra<6.3	441 321 V	443 821 M	441 971 Z	443 841 Z
20.0	26.9 x 1.6	*4. Internal Ra<0.6 – External Ra<3.2	441 322 W	443 822 N	441 972 S	443 842 S
25.0	33.7 x 2.0	*1. Internal Ra<6.3 – External Ra<6.3	441 362 E	443 823 P	441 973 T	443 843 T
25.0	33.7 x 2.0	*2. Internal Ra<1.6 – External Ra<6.3	441 363 F	443 824 Q	441 974 U	443 844 U
25.0	33.7 x 2.0	*3. Internal Ra<0.8 – External Ra<6.3	441 364 G	443 825 R	441 975 V	443 845 V
25.0	33.7 x 2.0	*4. Internal Ra<0.6 – External Ra<3.2	441 365 H	443 826 J	441 976 W	443 846 W
40.0	48.3 x 2.0	*1. Internal Ra<6.3 – External Ra<6.3	441 420 V	443 827 K	441 977 X	443 847 X
40.0	48.3 x 2.0	*2. Internal Ra<1.6 – External Ra<6.3	441 421 J	443 828 U	441 978 G	443 848 G
40.0	48.3 x 2.0	*3. Internal Ra<0.8 – External Ra<6.3	441 422 K	443 829 V	441 979 H	443 849 H
40.0	48.3 x 2.0	*4. Internal Ra<0.6 – External Ra<3.2	441 423 L	443 830 S	441 980 X	443 850 E
50.0	60.3 x 2.0	*1. Internal Ra<6.3 – External Ra<6.3	441 475 Y	443 831 P	441 981 L	443 851 T
50.0	60.3 x 2.0	*2. Internal Ra<1.6 – External Ra<6.3	441 476 Z	443 832 Q	441 982 M	443 852 U
50.0	60.3 x 2.0	*3. Internal Ra<0.8 – External Ra<6.3	441 477 S	443 833 R	441 983 N	443 853 V
50.0	60.3 x 2.0	*4. Internal Ra<0.6 – External Ra<3.2	441 478 B	443 834 J	441 984 P	443 854 W

Specifications - Ordering Chart (Other Versions on Request) for SMS 3008 Connection

Orifice DN [mm]	Connection D1 x S [mm]	Surface finish *1. Glass beaded *2. Mech. polished *3. Satin finished *4. Electro polished [µm]	Item-No.			
			Pneumatic Actuator EPDM Diaphragm		Pneumatic Actuator PTFE Diaphragm	
			PPS Actuator	PA Actuator	PPS Actuator	PA Actuator
25.0	25.0 x 1.2	*1. Internal Ra<6.3 – External Ra<6.3	441 366 A	443 855 X	442 059 B	443 867 T
25.0	25.0 x 1.2	*2. Internal Ra<1.6 – External Ra<6.3	441 367 B	443 856 Y	442 060 G	443 868 C
25.0	25.0 x 1.2	*3. Internal Ra<0.8 – External Ra<6.3	441 368 L	443 857 Z	442 061 V	443 869 D
25.0	25.0 x 1.2	*4. Internal Ra<0.6 – External Ra<3.2	441 369 M	443 858 A	442 062 W	443 870 A
40.0	38.0 x 1.2	*1. Internal Ra<6.3 – External Ra<6.3	441 424 M	443 859 B	442 063 X	443 871 X
40.0	38.0 x 1.2	*2. Internal Ra<1.6 – External Ra<6.3	441 425 N	443 860 G	442 064 Y	443 872 Y
40.0	38.0 x 1.2	*3. Internal Ra<0.8 – External Ra<6.3	441 426 P	443 861 V	442 065 Z	443 873 Z
40.0	38.0 x 1.2	*4. Internal Ra<0.6 – External Ra<3.2	441 427 Q	443 862 W	442 066 S	443 874 S
50.0	51.0 x 1.2	*1. Internal Ra<6.3 – External Ra<6.3	441 479 C	443 863 X	442 067 T	443 875 T
50.0	51.0 x 1.2	*2. Internal Ra<1.6 – External Ra<6.3	441 480 S	443 864 Y	442 068 C	443 876 U
50.0	51.0 x 1.2	*3. Internal Ra<0.8 – External Ra<6.3	441 481 P	443 865 Z	442 069 D	443 877 V
50.0	51.0 x 1.2	*4. Internal Ra<0.6 – External Ra<3.2	441 482 Q	443 866 S	442 070 A	443 878 E

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

We reserve the right to make technical changes without notice.
009-GB/ 2-0220