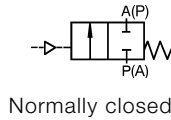


2/2-Way Diaphragm Valve, Pneumatically Operated Casted Stainless Steel Body with Sterile Threaded Ends



2031



DN 25 - 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.

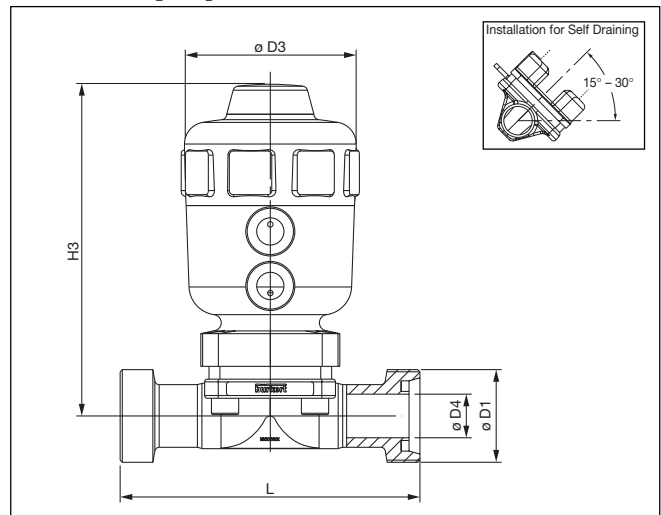
Technical Data

Connections	SMS 1145	
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 on request)	
Flow direction	stainless steel 1.4305	
	Bi-direct	

Specifications

Orifice DN	Kv-Value Water	Max. Op. Pressure (Medium)	Actuator Size ø Diaphragm		Weight
			EPDM [mm]	PTFE [mm]	
[mm]	[m³/h]	[bar]	[mm]	[mm]	[kg]
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]



SMS 1145 Connection

Orifice DN	L	D1	D4	D3	H3
[mm]	[mm]		ø [mm]	ø [mm]	[mm]
25.0	129.0	Rd 40 x 1/6"	22.5	80.0	157.0
25.0	129.0	Rd 40 x 1/6"	22.5	101.0	177.0
40.0	160.0	Rd 60 x 1/6"	35.5	127.0	233.0
40.0	160.0	Rd 60 x 1/6"	35.5	153.0	272.0
50.0	190.0	Rd 70 x 1/6"	48.5	127.0	244.0
50.0	190.0	Rd 70 x 1/6"	48.5	153.0	278.0



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

Specifications - Ordering Chart (Other Versions on Request) for SMS 1145 Connection

Orifice DN [mm]	Connection D1	Surface finish [µm]	Item-No.	
			EPDM Diaphragm	PTFE Diaphragm
25.0	Rd 40 x 1/6"	*1. Internal Ra<6.3 – External Ra<6.3	441 390 F	442 086 P
25.0	Rd 40 x 1/6"	*2. Internal Ra<1.6 – External Ra<6.3	441 391 U	442 087 Q
25.0	Rd 40 x 1/6"	*3. Internal Ra<0.8 – External Ra<6.3	441 392 V	442 088 Z
25.0	Rd 40 x 1/6"	*4. Internal Ra<0.6 – External Ra<3.2	441 393 W	442 089 S
40.0	Rd 60 x 1/6"	*1. Internal Ra<6.3 – External Ra<6.3	441 448 D	442 090 X
40.0	Rd 60 x 1/6"	*2. Internal Ra<1.6 – External Ra<6.3	441 449 E	442 091 L
40.0	Rd 60 x 1/6"	*3. Internal Ra<0.8 – External Ra<6.3	441 450 B	442 092 M
40.0	Rd 60 x 1/6"	*4. Internal Ra<0.6 – External Ra<3.2	441 451 Y	442 093 N
50.0	Rd 70 x 1/6"	*1. Internal Ra<6.3 – External Ra<6.3	441 503 V	442 094 P
50.0	Rd 70 x 1/6"	*2. Internal Ra<1.6 – External Ra<6.3	441 504 W	442 095 Q
50.0	Rd 70 x 1/6"	*3. Internal Ra<0.8 – External Ra<6.3	441 505 X	442 096 R
50.0	Rd 70 x 1/6"	*4. Internal Ra<0.6 – External Ra<3.2	441 506 Y	442 097 J