

User Point Diaphragm Valve

Forged stainless steel body,
pneumatically operated



Description

Series 35 pneumatically operated diaphragm valve has a flow-optimized stainless steel body, a diaphragm, and actuator. The stainless steel body is available with various surface finish. The diaphragm is both a switch as well as a sealing element for the media. It is easily replaceable. An actuator is provided for the protection of diaphragm and for opening and closing actuation of upright connection of valve. This valve is designed for zero dead leg and can be mounted to be self-draining. This allows high flow capacity and variety of applications.

Main Features

- Very useful at sampling / injection points on high purity systems
- Compact construction
- Hermetical separation of fluids from the operating mechanism by diaphragm
- Fully machined from SS 316L bar-stock – no welded components
- Zero dead leg
- Self-draining operation
- Fully Autoclavable
- Various internal surface finish available each with less than 0.40 Ra

Dimensions

User point diaphragm valve, forged stainless steel body, pneumatically operated

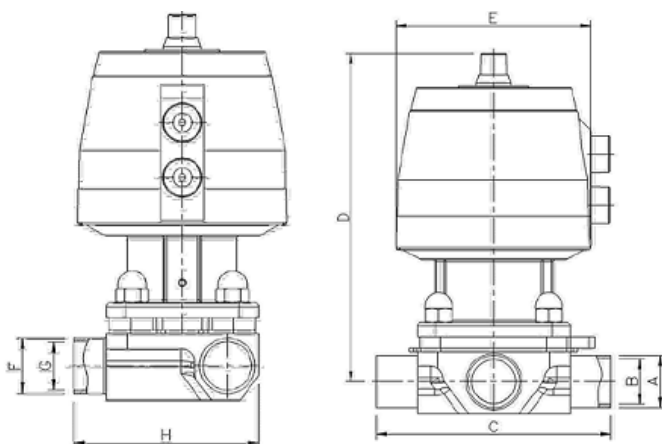


Figure 35-1 Body with Butt-weld End

Figure 30-1 Bonnet & handle- Stainless Steel

Main Conn. Size	Main Pipe OD	Main Pipe ID	Face to face length	Max. Valve Height From Pipe Center	Outside Diameter of Handle	Upright Conn. Size	Upright Pipe OD	Upright Pipe ID	Valve Width
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		F [mm]	G [mm]	H [mm]
1/2"	12.70	9.40	88.0	115.1	68.0	1/2"	12.70	9.40	65.0
3/4"	19.05	15.75	88.0	117.7	68.0	1/2"	12.70	9.40	65.0
3/4"	19.05	15.75	88.0	117.7	68.0	3/4"	19.05	15.75	65.0
1"	25.40	22.10	88.0	124.1	68.0	1/2"	12.70	9.40	70.6
1"	25.40	22.10	88.0	124.1	68.0	3/4"	19.05	15.75	70.6
1"	25.40	22.10	113.0	161.4	96.0	1"	25.40	22.10	89.0
1 1/2"	38.10	34.80	88.0	130.8	68.0	1/2"	12.70	9.40	76.5
1 1/2"	38.10	34.80	88.0	130.8	68.0	3/4"	19.05	15.75	83.3
1 1/2"	38.10	34.80	113.0	170.7	96.0	1"	25.40	22.10	99.2
1 1/2"	38.10	34.80	134.9	237.5	151.0	1 1/2"	38.10	34.80	111.9
2"	50.80	47.50	88.0	136.2	68.0	1/2"	12.70	9.40	94.4
2"	50.80	47.50	88.0	136.2	68.0	3/4"	19.05	15.75	96.6
2"	50.80	47.50	113.0	178.8	96.0	1"	25.40	22.10	108.0
2"	50.80	47.50	134.9	245.1	151.0	1 1/2"	38.10	34.80	121.0
2"	50.80	47.50	134.9	242.4	151.0	2"	50.80	47.50	121.0
2 1/2"	63.50	60.20	88.0	138.6	68.0	1/2"	12.70	9.40	105.3
2 1/2"	63.50	60.20	88.0	142.1	68.0	3/4"	19.05	15.75	105.3
2 1/2"	63.50	60.20	113.0	182.5	96.0	1"	25.40	22.10	122.0
2 1/2"	63.50	60.20	134.9	248.8	151.0	1 1/2"	38.10	34.80	134.5
2 1/2"	63.50	60.20	134.9	248.8	151.0	2"	50.80	47.50	134.5
2 1/2"	63.50	60.20	159.1	268.3	180.0	2 1/2"	63.50	60.20	146.2
3"	76.20	72.90	88.0	148.9	68.0	1/2"	12.70	9.40	100.8
3"	76.20	72.90	88.0	148.9	68.0	3/4"	19.05	15.75	105.3
3"	76.20	72.90	113.0	188.8	96.0	1"	25.40	22.10	134.9
3"	76.20	72.90	134.9	255.1	151.0	1 1/2"	38.10	34.80	147.3
3"	76.20	72.90	134.9	255.1	151.0	2"	50.80	47.50	147.3
3"	76.20	72.90	159.1	274.6	180.0	2 1/2"	63.50	60.20	158.9

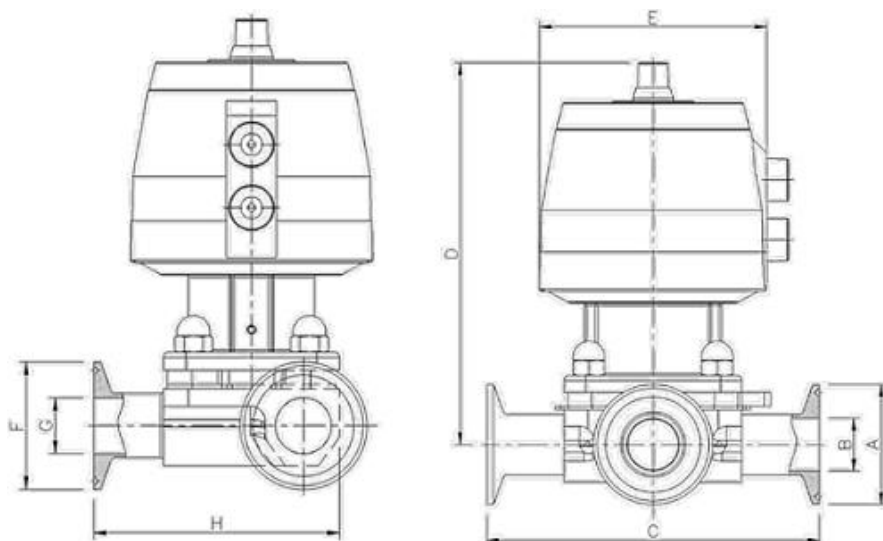


Figure 35-2 Body with V-band (Hygienic) Clamp Connector

Figure 35-2 Body with V-band (Hygienic) Clamp Connector

Main Conn. Size	Main Pipe OD	Main Pipe ID	Face to face length	Max. Valve Height From Pipe Center	Outside Diameter of Handle	Upright Conn. Size	Upright Pipe OD	Upright Pipe ID	Valve Width
	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]		F [mm]	G [mm]	H [mm]
1/2"	25.00	9.40	113.4	115.1	68.0	1/2"	25.00	9.40	77.7
3/4"	25.00	15.75	113.4	117.7	68.0	1/2"	25.00	9.40	77.7
3/4"	25.00	15.75	113.4	117.7	68.0	3/4"	25.00	15.75	77.7
1"	50.40	22.10	113.4	124.1	68.0	1/2"	25.00	9.40	83.3
1"	50.40	22.10	113.4	124.1	68.0	3/4"	25.00	15.75	83.3
1"	50.40	22.10	138.4	161.4	96.0	1"	50.40	22.10	101.7
1 1/2"	50.40	34.80	113.4	130.8	68.0	1/2"	25.00	9.40	89.2
1 1/2"	50.40	34.80	113.4	130.8	68.0	3/4"	25.00	15.75	96.0
1 1/2"	50.40	34.80	138.4	170.7	96.0	1"	50.40	22.10	111.9
1 1/2"	50.40	34.80	160.3	237.5	151.0	1 1/2"	50.40	34.80	124.6
2"	63.90	47.50	113.4	136.2	68.0	1/2"	25.00	9.40	107.1
2"	63.90	47.50	113.4	136.2	68.0	3/4"	25.00	15.75	109.3
2"	63.90	47.50	138.4	178.8	96.0	1"	50.40	22.10	120.7
2"	63.90	47.50	160.3	245.1	151.0	1 1/2"	50.40	34.80	133.7
2"	63.90	47.50	160.3	242.4	151.0	2"	63.90	47.50	133.7
2 1/2"	77.40	60.20	113.4	138.6	68.0	1/2"	25.00	9.40	118.0
2 1/2"	77.40	60.20	113.4	142.1	68.0	3/4"	25.00	15.75	118.0
2 1/2"	77.40	60.20	138.4	182.5	96.0	1"	50.40	22.10	134.7
2 1/2"	77.40	60.20	160.3	248.8	151.0	1 1/2"	50.40	34.80	147.2
2 1/2"	77.40	60.20	160.3	248.8	151.0	2"	63.90	47.50	147.2
2 1/2"	77.40	60.20	184.5	268.3	180.0	2 1/2"	77.40	60.20	158.9
3"	90.90	72.90	113.4	148.9	68.0	1/2"	25.00	9.40	113.5
3"	90.90	72.90	113.4	148.9	68.0	3/4"	25.00	15.75	118.0
3"	90.90	72.90	138.4	188.8	96.0	1"	50.40	22.10	147.6
3"	90.90	72.90	160.3	255.1	151.0	1 1/2"	50.40	34.80	160.0
3"	90.90	72.90	160.3	255.1	151.0	2"	63.90	47.50	160.0
3"	90.90	72.90	184.5	274.6	180.0	2 1/2"	77.40	60.20	171.6

Notes:

1. For V-band (Hygienic) clamp connections, clamp connector will be welded to the valve body with butt-weld end. Internal finish will be provided as per customer request.
2. Dimensions and tolerances for end connection and face-to-face length are as per ASME BPE.
3. All other dimensions are approximate and subject to change without prior notice.

Technical Data

Processing medium

Neutral gases and liquids, high purity, sterile, aggressive or abrasive fluids

Temperature

Media temperature		Sterilization temperature		Ambient Temperature
EPDM	-10°C to 75°C	EPDM	Briefly up to 130°C	Up to 90°C
PTFE	-10°C to 90°C	PTFE	Briefly up to 150°C	

Valve body material

MOC – Wetted (Contact)	MOC – Non-wetted (Non- contact)
Stainless Steel 316L	Polyamide or ASTM A351 CF8 (SS 304)

End connection

V-band (Hygienic) Clamp	ASME BPE (EN ISO 1127/ISO 4200 and BS 4825 are available on request)
Butt-Weld	

Installation

Installation for self draining mounting	Tilted 10°C to 35°C to the horizontal and inclined 3°C to 5°C to the direction of flow
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Data Order

M5	1/2" Mini
R5	1/2" Regular
07	3/4"
10	1"
15	1 1/2"
20	2"
25	2 1/2"
30	3"

Type of Diaphragm	
EPDM	E
PTFE	P

Certificate	
ISO 9001	9
ISO 9001 + 'CE' (PED 97/23/EC)	p ¹

Connection Type	
ASME BPE	A
BS 4825	B
EN ISO 1127 / ISO 4200	E ²

Upright conn. size	
05	1/2"
07	3/4"
10	1"
15	1 1/2"
20	2"
25	2 1/2"

Type of End Connection	
Butt Weld	B
V- Band (hygienic) Clamp	T

Surface Finish	
Mechanical Polish	M
Electro Polish	E

Bonnet & handle Material of Construction	
ASTM A351 GR CF8	C
Polyamide	P

Actuator Type	
Normally Open (NO)	O
Normally Closed (NC)	C
Doubled Actuating	A

Order Example	LE	35	A	10	10	E	O	E	B	9
Leistung										
Series #										
Conn. Type										
Conn. Size										
Upright Conn. size										
Type of diaphragm										
Actuator type										
Surface finish										
Type of end conn.										
Certificate										

Notes:

1. 'CE'-marking is applicable for valves with connection sizes 1½", 2", 2½" and 3" only.
2. EN ISO 1127/ISO 4200 offers standards for butt-weld end connections only.
3. Valves with end connection sizes according to EN ISO 1127/ISO 4200 and BS 4825 are available on request

Contact: sales@titanresearch.ca
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