



## Bonnet/Actuator Specifications

### Manual Bonnet Assembly:

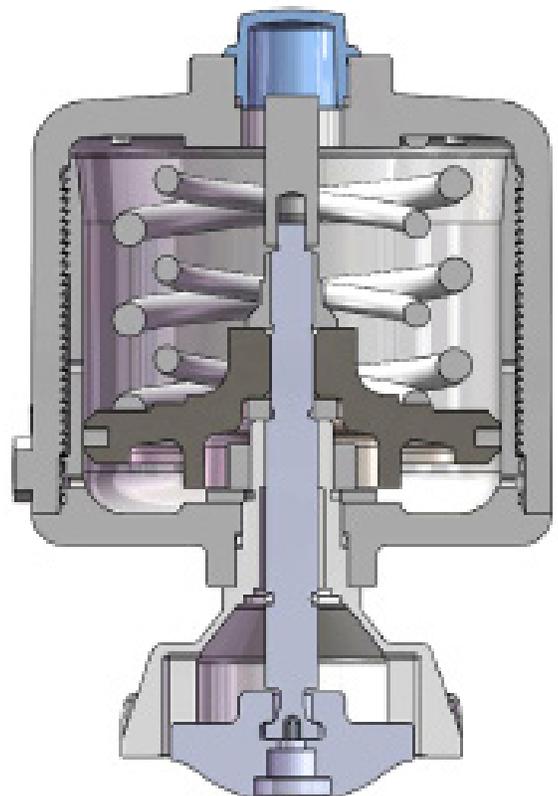
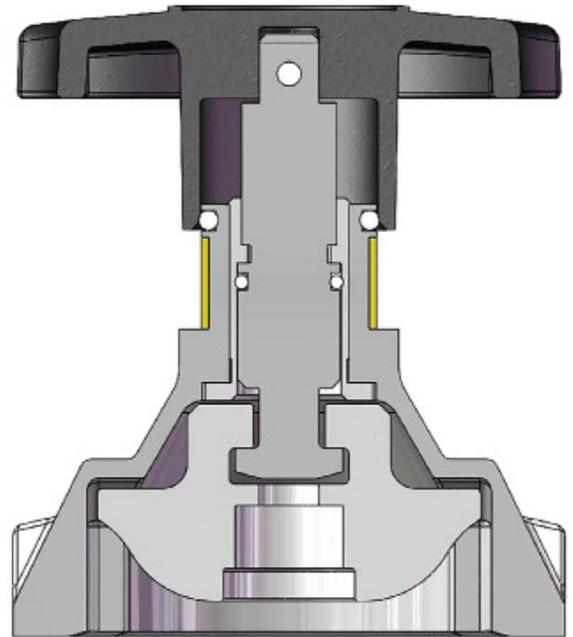
- » Available for sizes: 1-1/2" - 4" (DN40 - DN100)
- » Closing Stop: adjustable
- » Bright visual position indicator
- » Options: contact factory for proximity switches, locking devices and stroke limiter

### Bonnet Materials:

- » Bonnet: electropolished Stainless Steel
- » Compressor: Stainless Steel
- » Insert: brass
- » Thrust Washer: PTFE
- » Compressor Pin: Stainless Steel
- » Indicator: Polyolefin
- » Stem: Stainless Steel
- » Handwheel: PPS (1/4" - 2") (DN8 - DN50); Stainless Steel (2-1/2" - 4") (DN65 - DN100)

### Air Actuated Bonnets:

- » Available for sizes: 1-1/2" - 2" (DN40 - DN50) standard
- » Air Actuator Materials: Polyamide, Stainless Steel, Stainless Steel base standard for all configurations
- » Actuator Seal: Actuator springs and seals can be replaced without exposing process
- » Orientation: Swivel feature allows 360° orientation of air inlet
- » Air Connections: NPT Stainless Steel base standard for all configurations
- » Function: Change from Normally Open or Normally Closed by inverting the actuator housing
- » Control System Interface: Available with optional switch packages for on/off control or with positioners for flow control and modulation



## CAST BODY, 2 WAY DIAPHRAGM VALVES

## ORDERING SCHEMATIC (CAST BODY, 2-WAY DIAPHRAGM VALVE)

MODEL	TYPE	SIZE	CONNECTION	FINISH	ACTUATION	DIAPHRAGM	ACCESSORIES
SFB	1	8	2	3	1	1	

1	TYPE
1	Cast Body 2-way

2	SIZE
7	1-1/2"
8	2"
A	3"
B	4"

3	CONNECTION
1	OD Tube
2	Clamp
3	OD Tube x clamp
Z	Non-standard

4	INTERNAL SURFACE FINISH
3	32Ra µin (0,81 Ra µm)
4	32Ra µin (0,81 Ra µm) EP
Z	Non-standard, consult factory

5	ACTUATION
1	Manual
2	Manual Vented
3	2 1/2" - 4", and Compact Actuator, Spring to Close
4	2 1/2" - 4", and Compact Actuator, Spring to Open
5	Eclipse Actuator, Double Acting (1 1/2" - 2" standard)
6	Eclipse Actuator, Spring to Close (1 1/2" - 2" standard)
7	Eclipse Actuator, Spring to Open (1 1/2" - 2" standard)

6	DIAPHRAGM
1	EPDM
2	TFM/EPDM
Z	Non-standard

7	ACCESSORIES
1	Switch 2 Position
2	Positioner 4-20 mA
Z	Non-standard, consult factory

Please Contact Factory regarding dimensional drawings. All queries are welcome.

# SANITARY DIAPHRAGM VALVES

Manual or Air Actuated Forged 2-way, Ported and Tandem valves. Barstock Zero Static T-Block, Point of Use T-Block, Divert Tank Bottom and Custom Block Body valves



## FEATURES

- » Body & Trim Material: traceable ASME and DIN grade of 316L and Super-Austenitic Stainless Steel and Super Alloys readily available
- » Size Range: 1/4" - 4" (DN8 - DN100)
- » Manual or Air Actuated
- » Surface Finish:
  - Wetted Interior: ASME BBE SF5 20 Ra  $\mu\text{in}$  (0.5 Ra  $\mu\text{m}$ ). Electropolish standard, SF4 and better finish available
  - Exterior: See individual model specifications
- » Diaphragm: All FDA, FDA/USP <88>, <87> Class VI, ADI-TSE Free
  - TFM/EPDM Backer
  - EPDM - Peroxide Cured

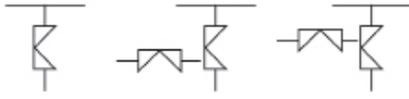
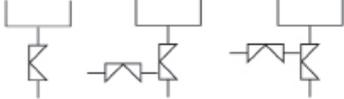
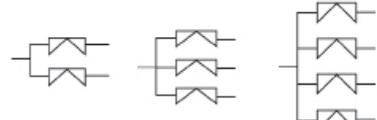
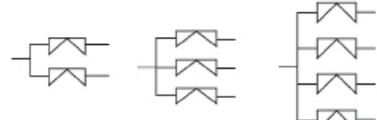
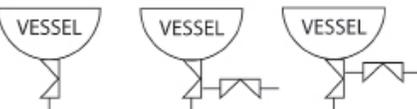
## DOCUMENTATION

A Certificate of Compliance is available at no charge when requested at time of order. The "Unicert" is a chargeable document. If needed, a "Unicert" must be requested at time of order.

## CERTIFICATION

- » CRN No.: 0C22893.5

## VALVE TYPE BY APPLICATION

- » 2 - Ways 
- » Ported 
- » Tandem Access 
- » Zero Static T-Block 
- » Zero Static POU 
- » Divert Block 
- » Custom Blocks 
- » Tank Bottom 

## GENERAL VALVE SPECIFICATIONS\*

**Line Size:** 1/4" - 4" (DN8 - DN100)

**End Connections:** ASME BPE, DIN, ISO, Contact Factory

- » Tri-Clamp
- » Tube Weld End

### Body Materials

- » Forgings: EN 10272:2000 GR 1.4435 316L standard
- » Bar Stock: ASME SA479 316L (UNS 31603) standard; EN 10272:2000 GR 1.4435, AL-6XN®, Hastelloy® C-22 and others readily available options

**Diaphragm Material/Max Temperature:** all diaphragms are FDA, USP <88> Class VI and <87> compliant and ADI-free

- » TFM/EPDM Backer / -14°F to 266°F (-26°C to 130°C) ≤300°F (150°C) at 50 psig (3,45 barg) max during SIP
- » EPDM Peroxide Cured / -14°F to 266°F (-26°C to 130°C) ≤300°F (150°C) at 50 psig (3,45 barg) max during SIP

**Surface Finish:** see individual valve specifications

**Pressure at Maximum Temperature:** 50 psig @ 300°F (3,45 barg @ 150°C)

### Maximum Operating Pressure:

- » 1/4" - 1": 200 psi @ 100°F (13,8 bar @ 38°C)
- » 1-1/2" - 2": 175 psi @ 100°F (12,1 bar @ 38°C)
- » 2-1/2" - 4": 150 psi @ 100°F (10,3 bar @ 38°C)

**Seat Leakage:** ANSI FCI Class VI

## FLOW COEFFICIENT CV (KV)

CONNECTION SIZE	VALVE DESCRIPTION	FLOW COEFFICIENT
1/4" - 1/2"	Compact valve/weir	1.16 (1,0)
1/2"	Any standard forged, barstock or cast body valve with catalog standard weir	5.2 (4,5)
3/4"		8.7 (7,52)
1"		13.9 (12,02)
1-1/2"		34.8 (30,1)
2"		59.7 (51,6)
3"		185 (160)
4"		272 (235)

## BONNET/ACTUATOR SPECIFICATIONS\*

### Manual Bonnet Assembly:

- » Available for valve sizes: 1/2" - 4" (DN15 - DN100)
- » Closing Stop: Adjustable
- » Bright visual position indicator
- » Options: Contact factory for proximity switches, locking devices and stroke limiter

### Bonnet Materials

- » Bonnet: Electropolished Stainless Steel
- » Compressor: Stainless Steel
- » Insert: Brass
- » Thrust Washer: PTFE
- » Compressor Pin: Stainless Steel
- » Indicator: Polyolefin
- » Bushing: Brass
- » Stem: Stainless Steel
- » Handwheel: PPS (1/4" - 2"); Stainless Steel (2-1/2" - 4")

### Air Actuated Bonnets:

- » Available for sizes: 1/2" - 2" (DN15 - DN50) standard; 3" & 4" (DN80 & DN100) optional
- » Air Actuator Materials: Polyamide, Stainless Steel, Stainless Steel base standard for all configurations
- » Actuator Seal: Actuator springs and seals can be replaced without exposing process
- » Orientation: Swivel feature allows 360° orientation of air inlet
- » Air Connections: NPT Stainless Steel base standard for all configurations
- » Function: Change from Normally Open or Normally Closed by inverting the actuator housing
- » Control System Interface: Available with optional switch packages for on/off control or with positioners for flow control and modulation

\* Most valves meet all of these general features and specifications. However, sizes may vary depending upon product selected. See individual product page for specific details about each model.