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# **AFFILIATIONS**

#### **VNE AFFILIATIONS...**

VNE is an active member of numerous industry-related organizations and associations.

#### 3-A<sup>®</sup>

VNE is a member of 3-A®, a voluntary organization committed to safeguarding public health and dairy product quality through a unique industry-regulated program of sanitary standards for equipment used in processing dairy foods.

#### **WCMA**

#### **Wisconsin Cheese Makers Association**

VNE is a member of WCMA, a nonprofit trade association dedicated to improving the business climate for dairy companies, primarily cheese and butter manufacturing and marketing companies. There actions also extend to the companies that supply goods and services to the dairy industry.

#### **FISA**

#### **Food Industry Suppliers Association**

VNE is a member of FISA, a national association of independent distributors and major manufacturers of sanitary supplies used in the food, dairy, beverage, pharmaceutical and personal care industries.

#### **IAFIS**

### The International Association of Food Industry Suppliers

VNE is a member of IAFIS, a nonprofit trade association of manufactures and suppliers serving the global food industry, VNE adheres to the international standards promoted in its activities.

#### **ISPE**

### The International Society for Pharmaceutical Engineering

VNE is a member of ISPE, a not-for-profit volunteer Society of technical professionals, who apply their practical knowledge in the regulated healthcare manufacturing industries. ISPE is committed to advancement of the education and technical efficiency of its members through forums for the exchange of ideas and practical experience.

#### **ASME**

### **American Society of Mechanical Engineers**

VNE is a member of ASME International, a nonprofit educational and technical organization serving world-wide membership of 125,000. Established to promote technical competency through quality programs and activities in the mechanical engineering fields.



**Butterfly Valves** 

# **SPECIFICATIONS**

#### **BUTTERFLY VALVES**

#### "B" SERIES BUTTERFLY VALVES

#### **BUTTERFLY VALVES....**

Butterfly Valves are available in Manual, Air Actuated, or Air Actuated with two Micro switches and a Solenoid Valve. Clamp or Weld ends are standard. Other connections are available upon request.

Available seat materials include Silicone, Viton®, and EPDM. Sizes range from 1" through 4". All product contact surfaces are available in either T304 or T316 stainless steel.



#### **BUTTERFLY VALVES SPECIFICATIONS....**

**Size Range:** 1" through 4" sizes available

Materials: T304

T316

**Info:** All stainless handle with eight positions

is standard. Each position is set in 45°

increments.

Silicone seats are standard - other seats available are EPDM and Viton®.

Surface finish meets 3A, FDA and USDA standards. Seats and Seals are

FDA approved.

#### **ORDERING SPECIFICATIONS....**

**Specify:** • Quantity

· Product description or Part No.

Size

· Material Type

#### **VNE CORPORATION**

TEL: 608-756-4930 • FAX: 608-756-3643 • 1-800-356-1111 • Web site: vnestainless.com

#### PNEUMATICALLY OPERATED

#### PNEUMATICALLY OPERATED BUTTERFLY VALVE INFORMATION

- · Air to open, spring to close is standard.
- Unique design provides higher torque at final closing of disc.
- One actuator fits 1" through 4" valves.
- Air pressure required 73-108 psi to operate actuator.
- · No spare parts required.
- · Maintenance free actuator.

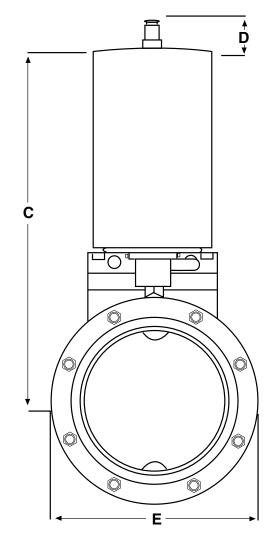
#### **TECHNICAL APPLICATION DATA**

- · Maximum product pressure 10 Bar / 145 PSI
- · Maximum short time sterilization temperature:
  - 130° C / 266°F EPDM
  - 130° C / 266°F Silicon
  - 140° C / 284°F Viton
- Minimum product temperature 14°F

#### PNEUMATICALLY OPERATED BUTTERFLY VALVE

#### **DIMENSIONAL CHART**

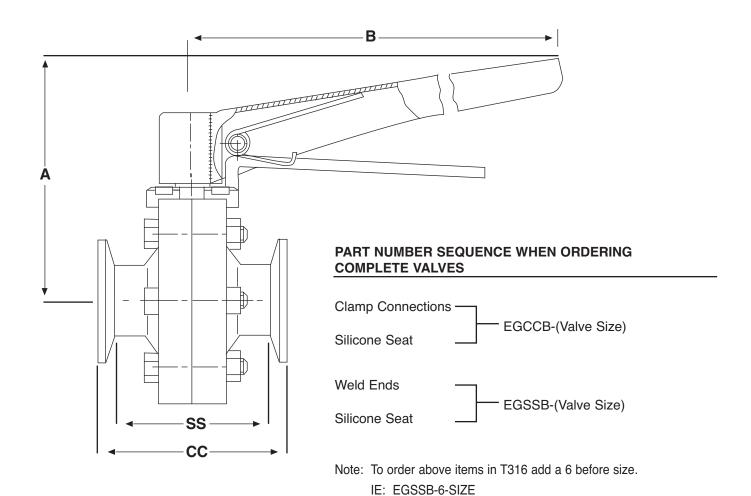
Size	С	С	D	E
	All Steel Internal	Polymer Internals		
1″	7 57/64"	8 23/32	3/4″	2 61/64"
1 1/2″	8 3/64"	8 57/64	3/4″	3 3/16"
2″	8 11/32″	9 11/64	3/4″	3 21/32"
2 1/2"	8 37/64"	9 13/32	3/4″	4 3/32"
3″	8 53/64"	9 21/32	3/4″	4 17/32"
4"	4" 9 7/16"		3/4″	5 43/64"



#### MANUAL BUTTERFLY VALVE

#### MANUAL BUTTERFLY VALVE INFORMATION

Note: If other Elastomer is required add suffix as follows: (E) EPDM (V) Viton®



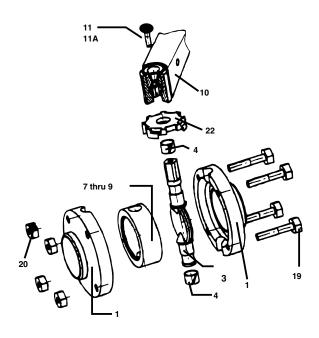
#### MANUAL BUTTERFLY VALVE

#### **DIMENSIONAL CHART**

Size	СС	SS	А	В	Number of Bolts
1″	2 13/16″	1 13/16″	4 19/32"	7″	4
1 1/2″	2 13/16″	1 13/16″	4 23/32"	7″	4
2″	2 13/16″	1 13/16″	4 15/16″	7″	6
2 1/2"	3 3/8″	2 3/8″	5 5/32″	7″	6
3″	3 3/4"	2 3/4"	5 3/8″	7″	6
4"	4″	2 3/4"	5 15/16″	7″	8

#### MANUAL BUTTERFLY VALVE

#### **PARTS DRAWING & INFORMATION**



#### **MANUAL BUTTERFLY VALVE**

#### **PARTS LIST**

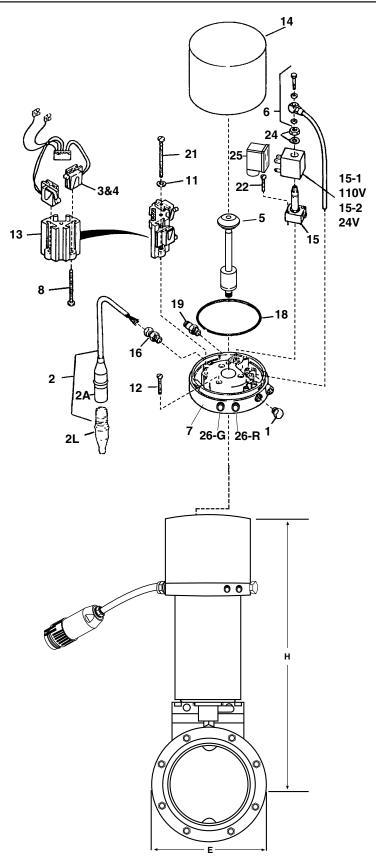
Item	Part Number	Description
1	*BVP-B-96-1-(size)	Body Half - Weld End
1A	*BVP-B-96-1A-(size)	Body Half - Bevel Seat Thread (not shown)
2	*BVP-B-96-2-(size)	Body Half - Clamp (not shown)
3	*BVP-B-96-3-(size)-H	Disc
4	BVP-B-96-4-(size)-H	Teflon Bushing (2 required)
7	BVP-B-96-7-(size)-H	Seat - Silicone (Standard)
8	BVP-B-96-8-(size)-H	Seat - EPDM
9	BVP-B-96-9-(size)-H	Seat - Viton®
10	BVP-B-96-10	All Stainless Handle
11	BVP-B-96-11	Thumbscrew
11A	BVP-B-00-11A	Allen Head Handle Seat Screw
15A	BVP-B-96-15A	Mounting Bracket for Actuator on Clamp Type Valve (not shown)
15B	BVP-B-96-15B	Mounting Bracket for Actuator on Flange Type Valve (not shown)
19	BVP-B-96-19	Bolts for Body Half
19L	BVP-B-96-19L	Long Bolts for Mounting Actuator Bracket (not shown)
20	BVP-B-96-20	Nuts for Body Half
20A	BVP-B-96-20A	Wing Nuts for Body Half (not shown)
20AS	BVP-B-96-20AS	Wing Nuts for 3" Body Half Only (not shown)
22	BVP-B-96-22	Handle Seat

<sup>\*</sup>To order above items in T316 stainless steel add a 6 before size. IE: BVP-B-96-1-6-SIZE

#### **ELECTRONIC BUTTERFLY VALVE**

#### ELECTRONICALLY-CONTROLLED PNEUMATICALLY OPERATED BUTTERFLY VALVE

- Electro-magnetic air solenoid valve provides quick positive response to control signal
- Two limit switches provide confirmation of valve position to central control panel
- · Available in 110V or 24V
- All controls are protected under the splashproof cover on top of the cylinder
- Two Indicating Lights on outside of valve for visual inspection



#### **ELECTRONIC ACTUATOR**

#### **PARTS LIST**

Item	Part Number	Description
1	BVP-ACTUC-1	Stainless Plugs (2)
2	BVP-ACTUC-2	Elec. Adapter (Complete)
2A	BVP-ACTUC-2A	Elec. Adapter (Actuator Side)
2L	BVP-ACTUC-2L	Elec. Adapter (Line Side)
3+4	BVP-ACTUC-3+4	Micro Switches with Harness and Terminal Strip (Complete)
5	BVP-ACTUC-5	Micro Switch Activator
6	BVP-ACTUC-6	Air Vent Tube Assembly
7	BVP-ACTUC-7	Plastic Molded Base
8	BVP-ACTUC-8	Adj. Screws for Micro Switch (2 Required)
11	BVP-ACTUC-11	Washer for Block
12	BVP-ACTUC-12	Base Screws (3 Required)
13	BVP-ACTUC-13	Switch Block
14	BVP-ACTUC-14	Cover
15	BVP-ACTUC-15	Solenoid Valve
15-1	BVP-ACTUC-15-1	110V Coil Only
15-2	BVP-ACTUC-15-2	24V Coil Only
16	BVP-ACTUC-16	Cable Adapter Fitting
18	BVP-ACTUC-18	Cover O-Ring
19	BVP-ACTUC-19	Air Inlet Fitting
21	BVP-ACTUC-21	Screw for Block
22	BVP-ACTUC-22	Screws for Solenoid (2 Required)
24	BVP-ACTUC-24	Nut and Washer for Coil-Solenoid
25	BVP-ACTUC-25	Plug Connection to Solenoid
26-G	BVP-ACTUC-26G	Indicating Light (Green)
26-R	BVP-ACTUC-26R	Indicating Light (Red)
23	BVP-B-96-23	Air Inlet Fitting (not shown)
24	BVP-B-96-24	Coupler for Clamp Type Valve, Visual Stem Indicator (not shown)
25	BVP-B-96-25	Coupler for Flange Type Valve, Visual Stem Indicator (not shown)
25A	BVP-B-96-25A	Rivet for Coupler (not shown)

#### **ELECTRONICALLY-CONTROLLED PNEUMATICALLY OPERATED VALVE**

#### **DIMENSIONAL CHART**

Size	E	Н
1″	2 61/64″	11 57/64″
1 1/2″	3 3/16″	12 3/64″
2″	3 21/32″	12 11/32″
2 1/2″	4 3/32″	12 37/64″
3″	4 17/32″	12 53/64″
4"	5 43/64″	13 7/16″

# PNEUMATICALLY OPERATED AND/OR ELECTRONICALLY-CONTROLLED BUTTERFLY VALVE

## PART NUMBER SEQUENCE WHEN ORDERING COMPLETE VALVES

ASPCCB (Size) -	Clamp End T304 Butterfly Valve with Electronically Controlled all Stainless Air to Spring Actuator & Silicone Seat.
ASPSSB (Size) -	Weld End T304 Butterfly Valve with Electronically Controlled all Stainless Air to Spring Actuator & Silicone Seat
ASPCCB-NE (Size) -	Clamp End T304 Butterfly Valve with all Stainless Air to Spring Actuator & Silicone Seat
ASPSSB-NE (Size) -	Weld End T304 Butterfly Valve with all Stainless Air to Spring Actuator & Silicone Seat
ASPCCB-6 (Size) -	Clamp End T316L Butterfly Valve with Electronically Controlled all Stainless Air to Spring Actuator & Silicone Seat.
ASPSSB-6 (Size) -	Weld End T316L Butterfly Valve with Electronically Controlled all Stainless Air to Spring Actuator & Silicone Seat
ASPCCB-6NE (Size) -	Clamp End T316L Butterfly Valve with all Stainless Air to Spring Actuator & Silicone Seat
ASPSSB-6NE (Size) -	Weld End T316L Butterfly Valve with all Stainless Air to Spring Actuator & Silicone Seat
APPCCB-NE (Size) -	Clamp End T304 Butterfly Valve with Stainless & Polymer Internal Components Air to Spring Actuator & Silicone Seat
APPSSB-NE (Size) -	Weld End T304 Butterfly Valve with Stainless & Polymer Internal Components Air to Spring Actuator & Silicone Seat
APPCCB-6NE (Size) -	Clamp End T316L Butterfly Valve with Stainless & Polymer Internal Components Air to Spring Actuator & Silicone Seat
APPSSB-6NE (Size) -	Weld End T316L Butterfly Valve with Stainless & Polymer Internal Components Air to Spring Actuator & Silicone Seat
	Note: If other Elastomer is required add suffix as follows: (E) EPDM (V) Viton®

ACT-AS-NE-B - All Stainless Air to Spring T304 Actuator

ACT-AP-NE-B - Stainless & Polymer Internal Components Air to Spring T304 Actuator

ACT-AS-(110V/ 24V) - All Stainless Electronically Controlled Air to Spring T304 Actuator. Designate 110V or

24V



**Check Valves** 

## **SPECIFICATIONS**

#### **CHECK VALVES**

#### **BALL, SPRING AND AIR BLOW CHECK VALVES**

#### **CHECK VALVES....**

Check Valves are widely used for both sanitary and industrial applications to prevent backflow of product.

Ball Check Valves are designed to allow full product flow during processing. Once the product flow stops the ball rolls back to the seat at inlet preventing back flow. Ball Check Valves are commonly used with liquid products. Sizes range 11/2" - 3".

Spring Check Valves are designed to assist closure pressure to create a positive shutoff. They are commonly used with liquid products. Sizes range 1/2" - 4".

Both valves are offered with standard clamp ends. Other connections are available upon request. Valves are made of T316L stainless steel.

Air Blow Check Valves are designed to evacuate lines of product or CIP solutions. Air Blow Check Valves are made of T316L Stainless Steel.



#### ORDERING SPECIFICATIONS....

Specify:

- Quantity
- · Product description or Part No.
- Size
- Material Type

Info:

Conform to 3A Sanitary Standards for Vacuum Breakers and Check Valves. Standard number 58-01. Certificate Authorization number 3573. Seats and Seals are FDA approved.

#### **BALL CHECK VALVE**

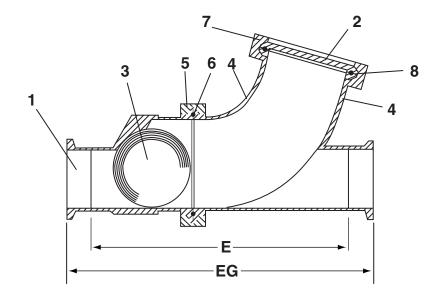
#### **INFORMATION**

- · Precision machined seat to ensure positive shut-off
- Two-piece construction for easier alignment during installation
- · Other connections available upon request
- · Buna-N and Viton® elastomers

- · Polished ID and OD
- All metal contact surfaces of T316L stainless steel
- Sizes range from 1 1/2" through 3"
- · Buna Ball & Gaskets Standard
- Meets 3A requirments

#### **PARTS BREAKDOWN**

- Seat body (Clamp)
- 1W. Seat body (Weld)
- 2. Cap
- 3B. Ball-(Buna-N)
- 3V. Ball-(Viton®)
- 4. Angle body
- 4W. Angle body-(Weld)
- Body clamp
- 6B. Body gasket-(Buna-N)
- 6V. Body gasket-(Viton®)
- 7. Cap clamp
- 8B. Cap gasket-(Buna-N)
- 8V. Cap gasket-(Viton®)



#### PART NUMBER SEQUENCE WHEN ORDERING COMPLETE VALVE:

Clamp connections EG45BY-6 (valve size)
Weld ends E45BYWW-6 (valve size)

Note: If Viton® elastomers are required, add "V" after size

#### PART NUMBER SEQUENCE WHEN ORDERING REPLACEMENT PARTS:

BCV (item number) - (valve size)

Example: BCV3B-1.5 = Buna-N ball for 1.5 valve

	N	ominal Size		Actual Size	Overall	Length		
Valve	1 & 4	2	5 & 7	6 & 8	3	EG	Е	Approx.
Size	Body	Сар	Clamp	Gasket	Ball	Clamp	Weld	Wt. Lbs.
1.5	1.5″	2.5″	2.5″	2.5″	2 1/8"	10	9	4.80
2.0"	2.0″	3.0″	3.0″	3.0″	2 5/8"	11	10	6.30
2.5″	2.5″	4.0″	4.0″	4.0″	3 5/16"	14 1/8	13 1/8	10.20
3.0″	3.0″	4.5″	4.5″	4.5″	4 1/4″	13 5/8	12 5/8	11.50
*3.0"	3.0 <sup></sup>	4.0"	4.0"	4.0"	3 5/16"	13 5/8"	12 5/8"	11.50

<sup>\*</sup> Redesigned February 2003. Valves purchased after 2/03 use \*3.0 dimensions.

#### SPRING CHECK VALVE

#### **INFORMATION**

- One piece stem with O-Ring construction (easy seal replacement and positive shut-off)
- Viton O-Ring standard (other available upon request)
- Clamp connections standard (other connections available upon request)

- · Full Polished ID and OD
- All metal contact surfaces of T316L Stainless Steel
- Sizes range from .5" through 4.0"

#### **PARTS BREAKDOWN**

- 1. Lower body (Body)
- 2. Stem (2.0 thru 4.0 have guide fingers)
- 3. Spring (3-5 psi) (Available upon request)
- 3L Spring Light (1-3 psi) Standard
- 4. O -Ring standard Viton
- 5. Stem guide
- 6. Upper body (Bonnet)
- 7. Body Clamp .5 and .75 = 13MHHM1.5 H

Body Clamp 1.0" and 1.5" = 13MHHM2.5 - H

Body Clamp 2.0" = 13MHHM3.0 - H

Body Clamp 2.5" = 13MHHM4.0 - H

Body Clamp 3.0" = 13MHHM5.0 - H

Body Clamp  $4.0^{\circ} = 13MHP6.0$ 

8. Clamp Gasket .5 and .75 = EG40V 1.5

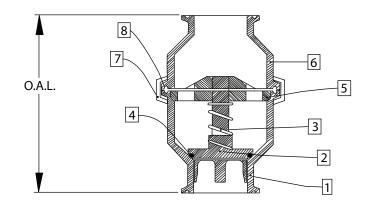
Clamp Gasket 1.0 and 1.5 = EG40V 2.5

Clamp Gasket 2.0 = EG40V 3.0

Clamp Gasket 2.5 = EG40V 4.0

Clamp Gasket 3.0 = EG40V 5.0

Clamp Gasket 4.0 = EG40V 6.0



#### PART NUMBER SEQUENCE WHEN ORDERING COMPLETE VALVE:

45 (spring check) C (clamp) 6 (T316L) 2.0 (size) V (seat material) Example: 45C - 6 2.0 - V

When requesting O-Ring changes add the following to the end of part number

Note: V=Viton E=EDPM S=Silicone B=Buna,

#### PART NUMBER SEQUENCE WHEN ORDERING REPLACEMENT PARTS:

45-SCV (item number) - (valve size)

Example: 45-SCV1C-1.5 = Lower body clamp for 1.5 valve

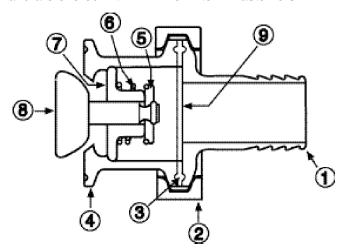
Overall Length									
Valve Size	Standard Clamp	Weld and Other	Approx WT LBS						
.5"	3 1/2	A.O.R	2.2						
.75"	3 1/2	A.O.R.	2.2						
1.0"	4 1/8	A.O.R	3.5						
1.5"	4 9/16	A.O.R.	3.5						
2.0"	5 1/16	A.O.R.	5.4						
2.5"	5 3/8	A.O.R.	6						
3.0"	6 1/8	A.O.R.	6.25						
4.0"	8 1/8	A.O.R.	16						

## **CHECK VALVES**

#### AIR BLOW CHECK VALVE

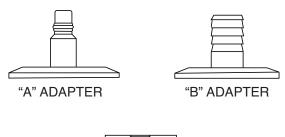
#### **ILLUSTRATION**

Air Blow Check Valves are made of T316L Stainless Steel and are offered with EPDM or Viton® Elastomers.



Note: EDPM Stem Standard

# AIR BLOW CHECK VALVE CONNECTIONS





#### PART NUMBER SEQUENCE WHEN ORDERING COMPLETE VALVE

EG62A-6L SIZE = "A" Connection

EG62B-6L SIZE = "B" Connection (shown)

EG62C-6L SIZE = "C" Connection

For Viton® Add "V" to end of part number

#### **PARTS LIST**

1. ADAPTER

ABV1A = Air Line Quick Coupler ABV1B = Rubber Hose Barb 1" ABV1C = Thermometer Cap 1. EG23B-6L 1.5 x .375 FNPT 2. EG23B-6L 1.0 x .500 FNPT

2. CLAMP

13MHHM 1.5 = 1 1/2" All Sizes

3. PERFORATED DISC

ABV3 1.5 = 1 1/2" EPDM ABV3-V 1.5 = 1 1/2" Viton®

4. VALVE BODY

ABV4 1.5 = 1 1/2" Clamp Body ABV4 2.0 = 2" Clamp Body ABV4 2.5 = 2 1/2" Clamp Body ABV4 3.0 = 3" Clamp Body ABV4 4.0 = 4" Clamp Body 5. SPRING RETAINER

ABV5 = All Sizes

6. SPRING

ABV6 = All Sizes

7. STEM GUIDE

ABV7 = All Sizes

8. STEM

ABV8 = EPDM Stem ABV8-V = Viton® Stem

9. FILTER DISC

ABV9 50 / PKG.

#### AIR BLOW CHECK VALVE

#### AIR BLOW CHECK VALVE ABILITIES

- · VNE Air Blow Check Valves are designed to evacuate lines of product or CIP solutions.
- Fail Safe Operation backflow of product or CIP solution prevented by simple air to open, spring to close operation.
- Easy Assembly / Disassembly Clamp connections permit quick disassembly and assembly for replacing Filter Media, cleaning or inspection.
- · Made of T316L stainless steel offered with EPDM or Viton® Stem and Gasket.
- Meets 3A standards for applications requiring a final filtering of air prior to entering tank or pipelines.
- · Note:

The Air Blow Check Valve must be used with a Filter Disc. These Filter Discs are available in packages of 50.

\* For use on Ball Check Valves: 1 1/2" Ball Check Valve uses 2 1/2" Air Blow Valve

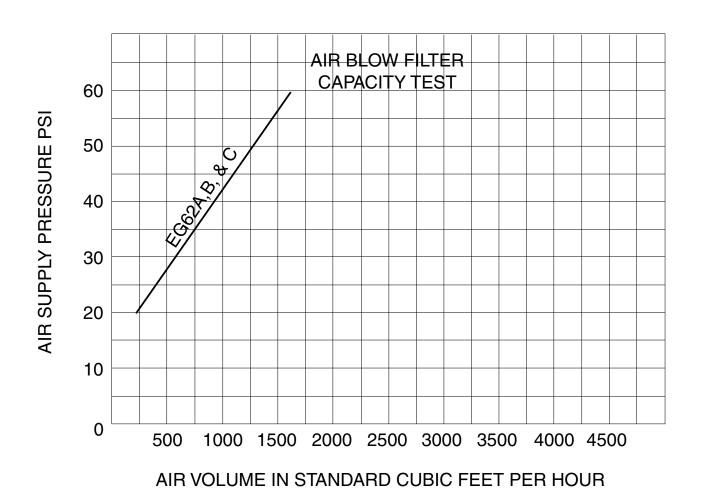
2" Ball Check Valve uses 3" Air Blow Valve 2 1/2" Ball Check Valve uses 4" Air Blow Valve 3" Ball Check Valve uses 4" Air Blow Valve

#### AIR BLOW CHECK VALVE DIMENSION TABLE

Part Number	Description		1 1/2″	2″	2 1/2"	3″	4"
EG62A-6L	"A" Adapter	Length	2.500	2.500	2.500	2.500	2.500
EG62A-6L	"A" Adapter	O.D.	1.984	2.516	3.047	3.579	4.682
EG62B-6L	"B" Adapter	Length	4.875	4.875	4.875	4.875	4.875
EG62B-6L	"B" Adapter	O.D.	1.984	2.516	3.047	3.579	4.682
EG62C-6L	"C" Adapter	Length	2.000	2.000	2.000	2.000	2.000
EG62C-6L	"C" Adapter	O.D.	1.984	2.516	3.047	3.579	4.682

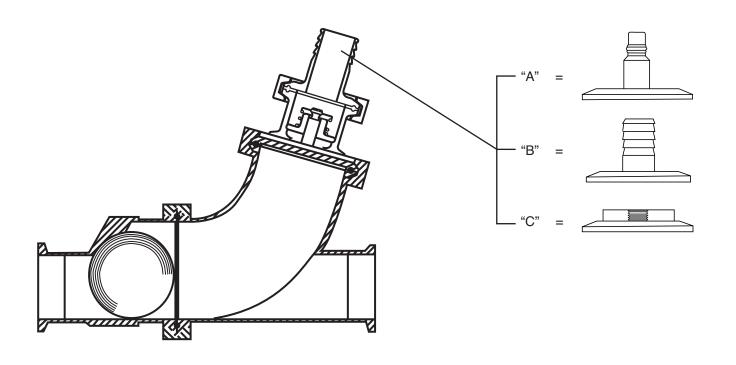
#### AIR BLOW CHECK VALVE

#### DISPOSABLE AIR FILTER MEDIA CAPACITY TEST



#### AIR BLOW CHECK VALVE

#### **BALL CHECK WITH AIR BLOW CHECK VALVE**



<sup>\*</sup> For dimensional information see individual components

#### BALL CHECK WITH AIR BLOW CHECK VALVE

- · Air Blow Check Valves are commonly used on ball check valves to evacuate lines of product or CIP solutions
- · Easy assembly and disassembly of Air Blow Check Valve
- Buna Ball Check Valve offered standard with EPDM Air Blow Check Valve with Viton® options

#### PART NUMBERS FOR BALL CHECK WITH AIR BLOW CHECK VALVE

CLAMP	EG45ABA-6 SIZE = "A" Connection	WELD	E45WWABA-6 SIZE = "A" Connection
	EG45ABB-6 SIZE = "B" Connection		E45WWABB-6 SIZE = "B" Connection
	EG45ABC-6 SIZE = "C" Connection		E45WWABC-6 SIZE = "C" Connection

<sup>\*</sup>For Viton® Ball, Stem, and Elastomers Add "V" to end of part number



**Ball Valves** 

## 2 - WAY BALL VALVE SPECIFICATIONS

#### **BALL VALVES**

#### BALL VALVES....

Ball Valves are used in a wide variety of high pressure applications. Two factors make them popular. First, a full unrestricted flow that allows no product restrictions through the valve. Second, the three piece design and the removal of a minimal number of bolts allows service to be performed without removing the complete valve from the line.

VNE offers two way ball valves made of T316 (CF8M) stainless steel. PTFE seats are easily removed. Clamp and Weld ends are standard. Other connections are available upon request. 1/2" through 4" sizes are available.

VNE offers many options on automated ball valves.

#### **BALL VALVE SPECIFICATIONS....**

**Size:** 1/2", 3/4", 1", 1 1/2", 2",

2 1/2", 3", 4"

Material: Passivated 316 Stainless

Steel (ASTM A351, CF8M)

**Connections:** Clamp, Buttweld and Orbital

weld - other connections available upon request

**Working Pressure:** 1/2" - 1" 1,000 psi

1 1/2" - 2" 1,000 psi 2 1/2" - 4" 600 psi

Temperature Rating: -65 to 320 Degrees F

#### **ORDERING SPECIFICATIONS....**

Specify: • Quantity

· Product description or Part No.

Size

· Material Type



#### IMPORTANT FEATURES...

- 3 Piece design allows valve ends to remain attached while servicing valve body
- 100% Tested
- Valves marked with heat numbers for full identification and traceability
- · English hardware
- Maintenance and servicing is made easy with removal of a minimal number of bolts
- · Reinforced Teflon® Seats
- · PTFE Cavity Filler, fully encapsulated
- · Locking device handle
- Air Actuator mounting kits which include ISO-5211 pads are available
- · Repair kits are available
- Conform to 3A Sanitary Standards for Ball-Type Valves. Standard Number 68-00. Certificate Authorization Number 3511. Seats and Seals are FDA approved.

#### **VNE CORPORATION**

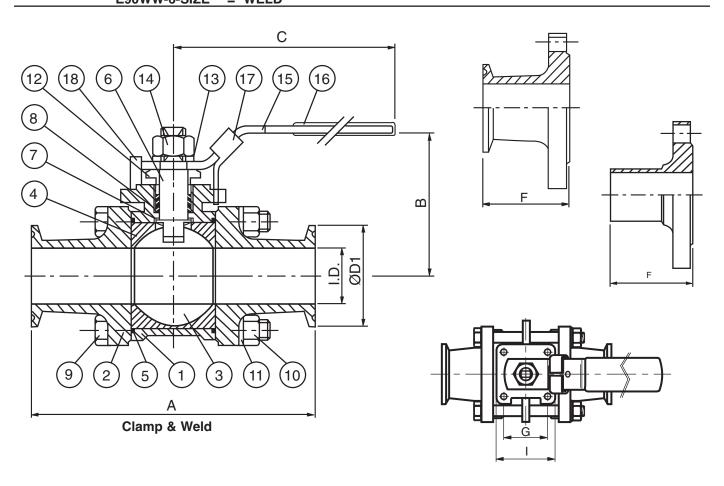
P.O. Box 1698 • 1149 Barberry Drive • Janesville, WI 53547

TEL: 608-756-4930 • FAX: 608-756-3643 • 1-800-356-1111 • Web site: vnestainless.com

# 2 - WAY BALL VALVES

#### **CLAMP AND WELD VALVES**

PART NUMBER EG90CC-6-SIZE = CLAMP E90WW-6-SIZE = WELD



#### **CLAMP & WELD DIMENSIONS**

SIZE	ISO-											
INCH	5211	Α	В	С	I.D.	ØD	ØD1	E	F	G	Н	I
1/2″	F03	3.503	2.165	5.11	0.375	0.50	1.00	0.708	1.289	1.00	0.196	1.456
3/4″	F03	3.976	2.362	5.11	0.625	0.75	1.00	0.728	1.437	1.00	0.196	1.456
1″	F04	4.488	2.716	6.49	0.875	1.00	1.98	0.885	1.574	1.17	0.256	1.653
1 1/2″	F05	5.511	3.307	7.67	1.375	1.50	1.98	1.165	1.712	1.39	0.334	1.968
2″	F05	6.141	3.622	7.67	1.875	2.00	2.51	1.165	1.801	1.39	0.334	1.968
2 1/2"	F07	7.756	5.000	9.92	2.375	2.50	3.05	1.750	2.204	1.95	0.472	2.834
3″	F07	9.015	5.354	9.92	2.875	3.00	3.58	1.750	2.540	1.95	0.472	2.834
4"	F10	9.567	6.260	13.07	3.834	4.00	4.68	1.921	2.385	2.83	0.630	3.740

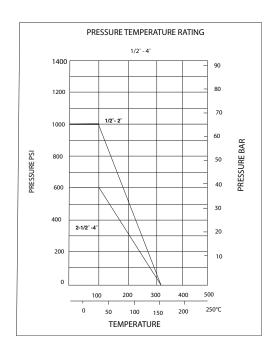
Also available with orbital weld end connections. Contact VNE for dimensions.

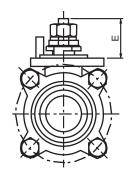
# 2 - WAY BALL VALVES

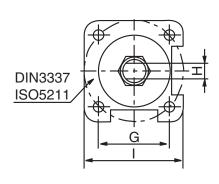
#### **CLAMP AND WELD VALVES**

#### PART LIST FOR CLAMP & WELD VALVES

Part	Description	Matadal	Oh.
Number	Description	Material	Qty.
Ball-1	Body	ASTM-A351-CF8M	1
Ball-2C	Clamp End Connection	ASTM-A351-CF8M	2
Ball-2W	Weld End Connection	ASTM-A351-CF8M	2
Ball-3	Ball	A351-CF8M	1
Ball-4	Seat	PTFE	2
Ball-5	Gasket	PTFE	2
Ball-6	Stem	AISI-316	1
Ball-7	Thrust Washer	PTFE	1
Ball-8	Stem Packing	PTFE	1
Ball-9	Bolt	AISI-304	4
Ball-10	Hex Nut	AISI-304	4
Ball-11	Bolt Washer	AISI-304	4
Ball-12	Gland	AISI-304	1
Ball-13	Washer	AISI-304	1
Ball-14	Nut	AISI-304	1
Ball-15	Handle	AISI-304	1
Ball-16	Plastic Cover	Plastic	1
Ball-17	Lock Device	AISI-304	1
Ball-18	Stop Pin	AISI-304	1







#### **BALL VALVE TORQUE....**

 $3\mbox{-PC}$  Type full port stainless steel 316 sanitary ball valve ferrule-end and weld-end.

1/2"	-	Breakaway Torque	42	In-LBS
3/4"	-	Breakaway Torque	58	In-LBS
1″	-	Breakaway Torque	83	In-LBS
1 1/2"	-	Breakaway Torque	150	In-LBS
2″	-	Breakaway Torque	298	In-LBS
2 1/2"	-	Breakaway Torque	512	In-LBS
3″	-	Breakaway Torque	685	In-LBS
4"	-	Breakaway Torque	996	In-LBS

## 3 - WAY BALL VALVE SPECIFICATIONS

#### **BALL VALVES**

#### **BALL VALVES...**

Ball Valves are used in a wide variety of high pressure applications. A full unrestricted flow allows no product restrictions through the valve. Thus, allowing easy diversion.

VNE offers three way ball valves made of T316 (CF8M) stainless steel. With PTFE seats that are easily removed. Clamp and Weld ends are standard. Other connections are available upon request. 1/2" through 3" sizes are available.



#### **BALL VALVE SPECIFICATIONS...**

**Size:** 1/2", 3/4", 1", 1 1/2",

2", 2 1/2", 3", 4"

Material: Passivated 316 Stainless

Steel (ASTM A351,

CF8M)

Connections: Clamp & weld - other

connections available

upon request

**Working Pressure:** 1/2" - 1" 1,000 psi

1 1/2 "- 2" 1,000 psi 2 1/2" - 4" 800 psi

Temperature Rating: -65 to 350 Degrees F

#### **ORDERING SPECIFICATIONS...**

**Specify:** • Quantity

• Product description or Part No.

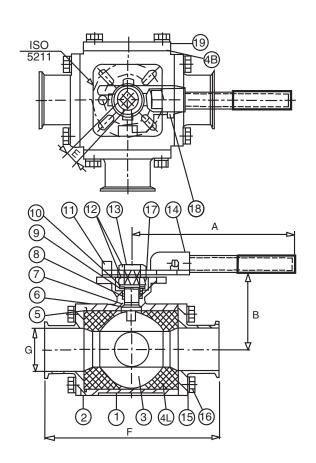
Size

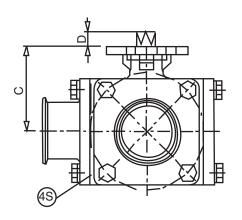
#### **IMPORTANT FEATURES...**

- 100% Tested
- Valves marked with heat numbers for full identification and traceability
- · English hardware
- · Reinforced Teflon® Seats
- · PTFE Cavity Filler, fully encapsulated
- · Locking device handle
- Air Actuator ISO-5211 mounting pad standard on all valves
- · Repair kits are available
- L Port is standard. T Port available upon request
- Conform to 3A Sanitary Standards for Ball-Type Valves. Standard Number 68-00. Certificate Authorization Number 3511. Seats and Seals are FDA approved.

# 3 - WAY BALL VALVES

Clamp and Weld Valves
Part Number EG93CCC - 6 - Size = Clamp
Part Number E93WWW - 6 - Size = Weld



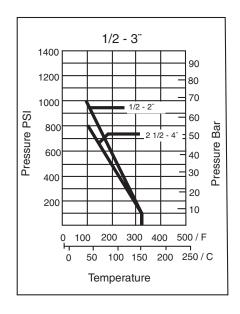


#### **CLAMP AND WELD DIMENSIONS**

Size	ISO-							
Inch	5211	Α	В	С	D	E	F	G
1/2"	F03/F04	4.75	3.0625	1.75	.354	.354	4.625	.375
3/4"	F03/F04	4.75	3.25	1.875	.354	.354	5.000	.625
1"	F04/F05	5.375	3.55	2.323	.433	.433	6.000	.875
1 1/2"	F05/F07	7.125	4.3125	2.8125	.551	.551	6.875	1.375
2"	F05/F07	7.125	4.50	3.25	.551	.551	7.500	1.895
2 1/2"	F07/F10	14.5625	4.25	3.9375	.669	.669	9.000	2.375
3"	F10/F12	15.75	5.25	5.00	.906	.866	10.250	2.875
4"	F10/F12	15.75	6.14	5.335	.906	.866	11.42	3.834

#### Part List for Clamp and Weld Valves

Item Number	Part Number	Description	Material	Qty.
1	Ball - 3 - 1 - Size	Body	A351-CF8M	1
2	Ball - 3 - 2C - Size	Clamp End Connector	A351-CF8M	3
2	Ball - 3 - 2W - Size	Weld End Connector	A351-CF8M	3
3	Ball - 3 - 3 - Size	Ball	A351-CF8M	1
* 4	Ball - 3 - 4L - Size	Seat Large	PTFE	2
* 4	Ball - 3 - 4S - Size	Seat Small	PTFE	1
* 4	Ball - 3 - 4B - Size	Seat Back	PTFE	1
* 5	Ball - 3 - 5 - Size	Gasket	PTFE	1
* 6	Ball - 3 - 6 - Size	Thrust Washer	PTFE	2
* 7	Ball - 3 - 7 - Size	O -Ring	Viton	1
* 8	Ball - 3 - 8 - Size	Stem Packing	PTFE	1
9	Ball - 3 - 9 - Size	Ring	AISI-316	1
10	Ball - 3 - 10 - Size	Bevel Washer	AISI-301	3
11	Ball - 3 - 11 - Size	Stop Pin	AISI-316	1
12	Ball - 3 - 12 - Size	Nut	AISI- 304	2
13	Ball - 3 - 13 - Size	Stem	AISI-316	1
14	Ball - 3 - 14 - Size	Handle	AISI-304	1
15	Ball - 3 - 15 - Size	Washer	AISI-304	16
16	Ball - 3 - 16 - Size	Bolt	AISI-304	16
17	Ball - 3 - 17 - Size	Prevailing Device	AISI-304	1
18	Ball - 3 - 18 - Size	Nut Handle	AISI-304	1
19	Ball - 3 - 19 - Size	Body Cap	A351-CF8M	1
*Kit	Ball - 3 - Kit - Size	Replacement Seal kit	PTFE / Viton	1



#### **BALL VALVE TORQUE...**

3-Way full port stainless steel 316 sanitary ball valve clamp and weld end. To convert In / LBS to Foot LBS X .083.

1/2"	-	Breakaway Torque	79	In-LBS
3/4"	-	Breakaway Torque	85	In-LBS
1"	-	Breakaway Torque	110	In-LBS
1 1/2"	-	Breakaway Torque	290	In-LBS
2"	-	Breakaway Torque	680	In-LBS
2 1/2"	-	Breakaway Torque	1287	In-LBS
3"	-	Breakaway Torque	1770	In-LBS
4"	-	Breakaway Torque	2035	In-LBS

#### **BALL VALVES**

#### **BALL VALVES...**

Ball Valves are used in a wide variety of high pressure applications. A full unrestricted flow allows no product restrictions through the valve. Thus, allowing easy diversion.

VNE offers TWO and THREE way ball valves made of T316 (CF8M) stainless steel. Ball Valves are available in Manual, Pneumatically Actuated, and Electrically Actuated versions. We also offer a full line of control options. Limit switches, Solenoids, and Positioners can be included with your automated valve assembly. VNE Ball Valves feature PTFE seats that are easily removed. Clamp and Weld ends are standard. Other connections are available upon request. 1/2" - 4" sizes are available.



#### **BALL VALVE SPECIFICATIONS...**

**Size:** 1/2", 3/4", 1", 1 1/2",

2", 2 1/2", 3", 4"

Material: Passivated 316 Stainless

Steel (ASTM A351,

CF8M)

**Connections:** Clamp, Buttweld and

Orbital Weld - other connections available

upon request

#### **ORDERING SPECIFICATIONS...**

**Specify:** • Quantity

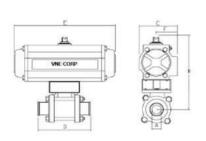
• Product description or Part No.

Size

#### **IMPORTANT FEATURES...**

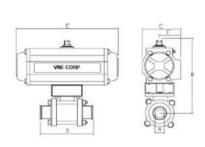
- 100% Tested
- Valves marked with heat numbers for full identification and traceability
- Available with pneumatic and electric actuators
- Conform to 3A Sanitary Standards for Ball-Type Valves. Standard Number 68-00. Certificate Authorization Number 3511. Seats and Seals are FDA approved.

#### **Dimensions 2-way Spring Return Actuated Valve**



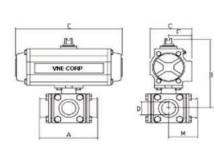
Valve Size	Α	В	С	D	E	F	Weight	Cv Value
1/2	0.38	6.15	2.79	3.50	5.49	1.61	4.16	9
3/4	0.63	6.33	2.79	3.98	5.49	1.61	4.46	26
1	0.88	6.87	3.17	4.49	6.38	1.77	6.75	61
1 1/2	1.38	8.05	3.72	5.51	8.15	2.07	12.70	193
2	1.88	8.89	4.85	6.14	10.69	2.68	22.80	432
2 1/2	2.38	12.15	5.39	7.76	12.91	2.87	41.88	728
3	2.88	12.96	5.83	9.02	14.41	3.15	51.40	1125
4	3.83	15.68	7.350	9.57	16.93	3.94	111.20	1986

#### **Dimensions 2-way Air to Air Actuated Valve**



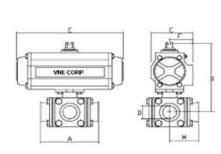
Valve Size	A	В	С	D	E	F	Weight	Cv Value
			_				, , , , , , , , , , , , , , , , , , ,	
1/2	0.38	5.18	1.77	3.50	4.65	0.89	2.62	9
3/4	0.63	5.36	1.77	3.98	4.65	0.89	2.92	26
1	0.88	6.44	2.79	4.49	5.49	1.61	5.03	61
1 1/2	1.38	7.40	3.17	5.51	6.38	1.77	9.02	193
2	1.88	7.94	3.72	6.14	8.15	2.07	11.66	432
2 1/2	2.38	10.85	4.17	7.76	9.35	2.30	25.35	728
3	2.88	11.19	4.17	9.02	9.35	2.30	32.03	1125
4	3.83	13.30	5.39	9.57	12.91	2.87	63.91	1986

#### **Dimensions 3-way Spring Return Actuated Valve**



Valve Size	A	В	С	D	E	F	М	Weight	Cv Value
1/2	4.65	7.17	3.17	0.38	6.38	1.77	2.33	7.97	L-8-T-6
3/4	5.00	7.29	3.17	0.63	6.38	1.77	2.50	8.97	L-17 T-13
1	6.00	6.92	3.72	0.88	8.15	2.07	3.00	13.94	L-25 T-19
1 1/2	6.88	8.38	4.85	1.38	10.69	2.68	3.44	28.40	L-62 T-46
2	7.50	10.08	5.83	1.88	14.41	3.15	3.75	50.76	L-148 T-92
2 1/2	9.00	12.68	7.350	2.38	16.93	3.94	4.50	93.04	L-247 T-156
3	10.25	13.74	7.350	2.88	16.93	3.94	5.13	110.04	L-351 T-230

#### **Dimensions 3-way Air to Air Actuated Valve**

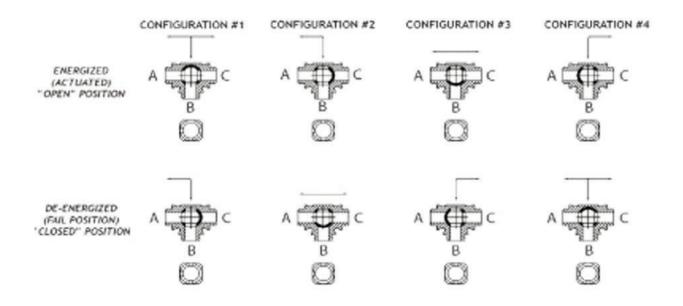


Valve Size	Α	В	С	D	Е	F	М	Weight	Cv Value
1/2	4.65	5.28	2.79	0.38	5.49	1.61	2.33	6.25	L-8 T-6
3/4	5.00	5.40	2.79	0.63	5.49	1.61	2.50	7.25	L-17 T-13
1	6.00	5.85	2.79	0.88	5.49	1.61	3.00	9.25	L-25 T-19
1 1/2	6.88	7.42	3.72	1.38	8.15	2.07	3.44	19.51	L-62 T-46
2	7.50	8.31	4.17	1.88	9.35	2.30	3.75	21.39	L-148 T-92
2 1/2	9.00	10.29	5.39	2.38	12.91	2.87	4.50	45.75	L-247 T-156
3	10.25	11.36	5.39	2.88	12.91	2.87	5.13	62.75	L-351 T 230

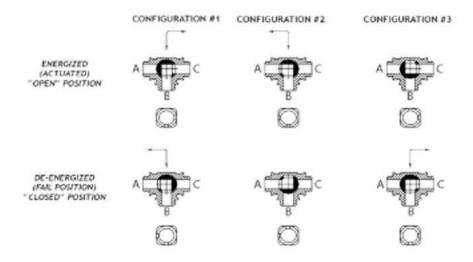
Dimensions shown are for assemblies sized for 80 PSI air supply. 1.2 Safety factor clean liquid products

3-WAY BALL VALVE CONFIGURATION OPTIONS Standard Actuator (CW to Close, CCW to Open)

#### **T-Port Design**

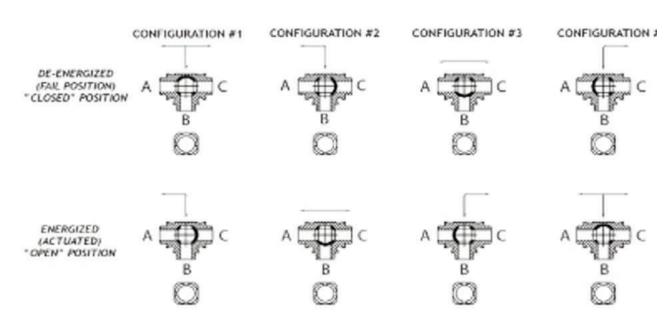


#### L-Port Design

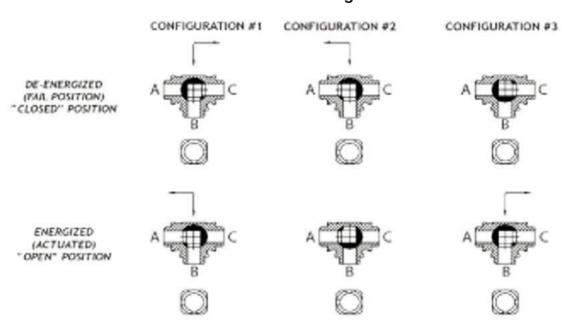


3-WAY BALL VALVE CONFIGURATION OPTIONS
Reverse - Acting Actuator (CCW to Close, CW to Open)

#### **T-Port Design**



#### **L-Port Design**



# **COMPRESSION VALVE**

#### **COMPRESSION VALVE**

#### **INFORMATION**

- One piece stem with O-Ring construction (easy seal replacement and positive shut-off)
- Viton O-Ring standard (others available upon request)
- · Clamp connections are standard

- · Full Polished ID and OD
- All metal contact surfaces of T316L Stainless Steel
- Sizes range from 1.0" through 3.0"
- Surface finish meets 3A, FDA and USDA standards.
   Seats and Seals are FDA approved.

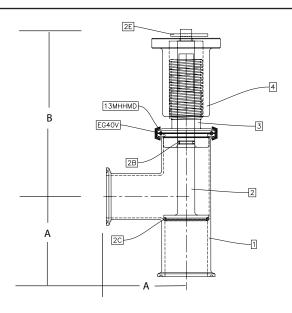
#### **PARTS BREAKDOWN**

- 1. Body
- 2. Stem
- 2B. O-Ring Stem Seal
- 2C O-Ring Stem Seat
- 2E Cotter Pin
- 3. Bonnet
- 4. Handle

EG40V(SIZE)=Viton Clamp Gasket 13MHHMD(SIZE)-H=Clamp

Max. Product Pressure 150 PSI

Max Temperature 200°F



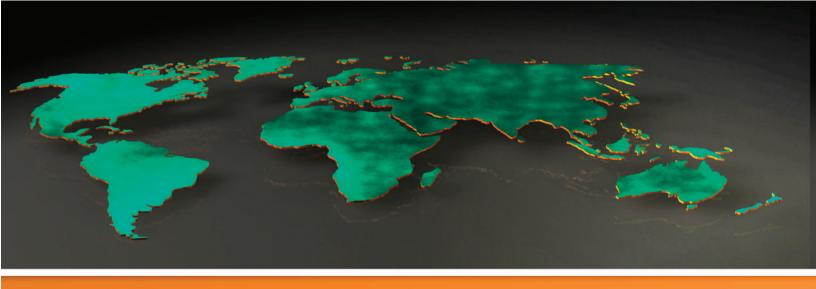
#### PART NUMBER SEQUENCE WHEN ORDERING COMPLETE VALVE:

EG60C (compression valve) 7 (tee style) R (rubber) 2.0 (size) Example: EG60C - 7 - R - 1.5

#### PART NUMBER SEQUENCE WHEN ORDERING REPLACEMENT PARTS:

EG60C (compression valve) 7 (tee style) R (rubber) 2.0 (size) - item Example: EG60C - 7 - R - 1.5 - O-Ring stem seat

Overall Length											
Valve		В									
Size	Α	MIN	MAX	Approx WT LBS							
1.0	2.375	5.750	6.375	2.25							
1.5	2.750	8.000	9.625	6.3							
2.0	3.500	8.750	11.000	9.9							









vnestainless.com



### **VNE** Corporation

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