

## BA Series

- 1/4" - 24" and (15A-489A) Sizes
- CFOS Cleaned and Bagged
- Integrated Valve Assemblies
- Standard Spool Assemblies & Custom Spool Lengths (Customer Specified In Feet/Meters)
- 100% Helium Leak Tested



# Evans BA Series

Evans Components, Inc. was the first to introduce a High Purity Ball Valve for use in the Semiconductor marketplace. Today we are a market leader in providing innovative fluid handling solutions, serving the Semiconductor, Clean Energy, Life Sciences and Advanced Manufacturing markets. ECI currently offers the widest range materials, sizes, configurations, and integrated assemblies for high purity ball valves while leading the industry as a low cost provider of high quality products and specialty manifolds.

## Evans Manifold Assemblies

### Creating Value

- Pulled Tee Design Eliminates Over 70% of Field Welds
- Helium Leak Tested,  $1 \times 10^{-8}$  scc/sec
- Proven Automated Weld Technology, Minimized Deadleg
- Cleaned, Assembled, & Packaged in Cleanroom Environment
- Optional Lengths (Customer specified in feet/Meters)
- Ideal Solution for Fast Track Projects
- Lowest Installed Cost
- Standard Catalog Item with Part Number Marked on Spool



## Features

### Lower Installed Cost

- Reduced number of welds
- Elimination of fittings in systems (tee's, crosses, etc.)
- No valve disassembly required for welding
- Pre-fabricated, leak tested spools

### Quality Production of Assembly in Controlled Environment

- Reduced tool down time
- Reduced field failure
- Fast track line certification and qualification
- Higher quality, lower installed cost

### Spool Manufacturing

- Standard spool assemblies
- Special overall lengths / configurations (Customer specified)
- Wide variety of end connections

### Full Selection of Ball Valves

- Sizes from 1/4" to 24"
- Integrated valves with heat traceable 316L SS tube extensions

### Locking Handles

- Standard locking lever, 1/4" - 4"
- Tee style bar handle, 6"RP, 6"FP, 8"RP
- Gearbox actuation, 8"FP - 24"

### Testing of Valve Assemblies

- 1/4" - 8" valves leak tested to  $1 \times 10^{-8}$  scc/sec
- 10" - up valves leak tested to  $1 \times 10^{-7}$  scc/sec

### High Purity Cleaning & Packaging

- All Evans High Purity Ball Valves are assembled & tested in a cleanroom
- Visual inspection of all wetted surfaces
- Final DI water rinse and oven dried
- Polyethylene bag packaging with Mylar lined
- polyethylene cap

## Specifications

### Stainless Steel Body Specifications (SS Series)

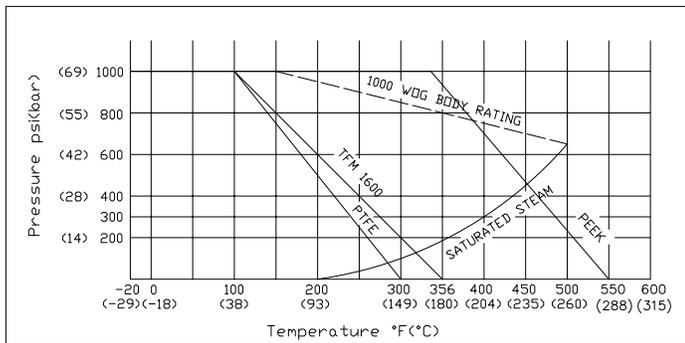
Pressure Rating: Vacuum to 1000 psig (69 bar) size 1/4" - 4"  
 Vacuum to 720 psig (50 bar) size 6" - 8" RP  
 Vacuum to 275 psig (19 bar) size 8" FP - 24"

### General Tube/Pipe Specifications

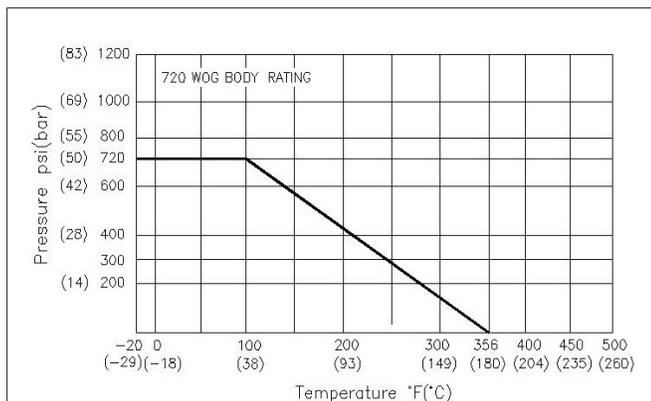
Standard 316L tubing is mechanically polished on the ID to 25 RA  $\mu$ m. Sulfur content is controlled to .005 - .017 percent. Tube ends are square cut, faced and designed for orbital welding.

SCH10S S.S. pipe stubs supplied either mechanically polished or pickled/passivated to 40 RA  $\mu$ m

1/4"-4" SS Valve Sizes



6"-8" RP SS Valve Sizes



\*RP: Reduced Port  
 \*FP: Full Port

Flow Specifications (Cv)		
SIZE	Cv	Kv
1/4"	1.1	1.0
3/8"	2.8	2.4
1/2"	19	16
3/4"	35	30
1"	50	43
1.5"	200	173
2"	350	303
2.5"	650	562
3"	1100	952
4"	2100	1817
6"RP	4550	3936
6"FP	5100	4412
8"RP	6500	5623
8"FP	9500	8218
10"	17,500	15138
12"	25,500	22058
14"	31,500	27248
16"	43,500	37628
18"	57,500	49738
20"	75,000	64875
24"	113,500	98178

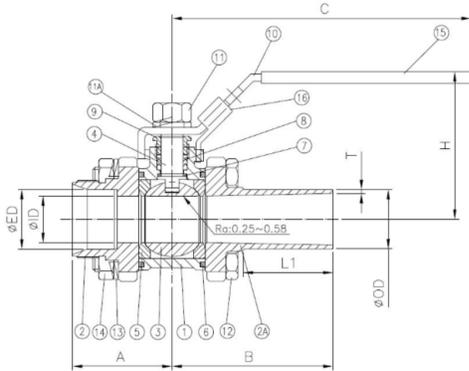
### CE/PED Pressure Equipment Directive 2014/68/EU

Valve Size	Certification Type
1/4" - 1"	SEP (Sound Engineering Practice)
1-1/2" - 3"	Category I, Group 1 & 2 Gas, Module A
4" - 18"	Category II Group 1 & 2 Gas, Module A2

### PED Valve Specifications

PED Working Pressure: 210 psig (14 bar) size 4"  
 300 psig (21 bar) size 6" - 14"  
 160 psig (11 bar) size 16" - 18"

## Tube Sized Valve Information



\* Referenced dimensions are for tube extension and compression ended ball valves only. Consult factory for alternative end connection dimensions

Size	ØID	ØOD	T	A	B	C	H	L1
	IN (mm)	IN (mm)	IN (mm)	IN (mm)	IN (mm)	IN (mm)	IN (mm)	IN (mm)
1/4"	0.18 (4.57)	0.25 (6.35)	0.035 (0.89)	1.38 35.1	1.65 41.9	3.93 99.8	1.93 49.0	0.62 15.7
3/8"	0.305 (7.75)	0.375 (9.53)	0.035 (0.89)	1.33 33.8	1.65 41.9	3.93 99.8	1.93 49.0	0.62 15.7
1/2"	0.402 (10.21)	0.50 (12.70)	0.049 (1.24)	1.38 35.1	2.06 52.3	3.93 99.8	1.93 49.0	1.02 25.9
3/4"	0.62 (15.75)	0.75 (19.05)	0.065 (1.650)	1.63 41.4	2.56 65.0	4.41 112.0	2.33 59.2	1.42 36.1
1"	0.870 (22.10)	1.00 (25.40)	0.065 (1.650)	1.66 42.2	2.92 74.2	4.77 121.2	2.49 63.2	1.70 43.2
1-1/2"	1.370 (34.80)	1.50 (38.10)	0.065 (1.650)	C/F	3.63 92.2	7.13 181.1	3.26 82.8	2.07 52.6
2"	1.870 (47.50)	2.00 (50.80)	0.065 (1.650)	C/F	4.00 101.6	7.50 190.5	4.02 102.1	2.04 51.8
2-1/2"	2.370 (60.33)	2.50 (63.50)	0.065 (1.650)	N/A	5.71 145.0	10.32 262.1	4.59 116.6	3.15 80.0
3"	2.870 (72.90)	3.00 (76.20)	0.065 (1.650)	N/A	5.74 145.8	10.25 260.4	5.34 135.6	2.54 64.5
4"	3.834 (97.38)	4.00 (101.6)	0.083 (2.11)	N/A	6.00 152.4	11.02 279.9	7.37 187.2	2.43 61.7
6" RP	4.921 (125.00)	6.00 (152.4)	0.109 (2.77)	N/A	6.63 168.4	N/A	N/A	2.20 55.9
6" FP	5.782 (146.86)	6.00 (152.4)	0.109 (2.77)	N/A	7.78 197.6	N/A	N/A	2.26 57.4
8" RP	5.782 (146.86)	8.00 (203.2)	0.109 (2.77)	N/A	7.78 197.6	N/A	N/A	2.26 57.4

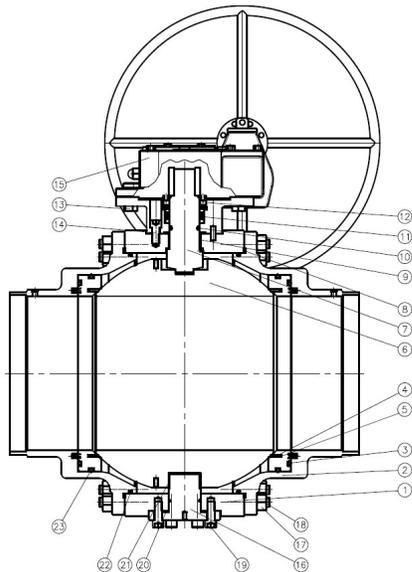
Item	Description	Material	Qty
1	Body	CF8M/CF8	1
2	End Caps	CF3M/CF3	2
3	Ball	CF8M/CF3	1
4	Stem	SS316/SS304	1
5	Ball Seat	RTFE	2
6	Body Seal	RTFE	2
7	Thrust Washer	RTFE	1
8	Stem Packing	RTFE	1
9	Stem Nut	SS304	1
10	Handle	SS304	1
11	Handle Nut	SS304	1
11A	Handle Washer	SS304	1
12	Body Bolt	SS304	4
13	Bolt Washer	SS304	4
14	Bolt Nut	SS304	4
15	Handle Sleeve	VINYL	1
16	Locking Device	SS304	1

\*Dimensions subject to change depending on configuration

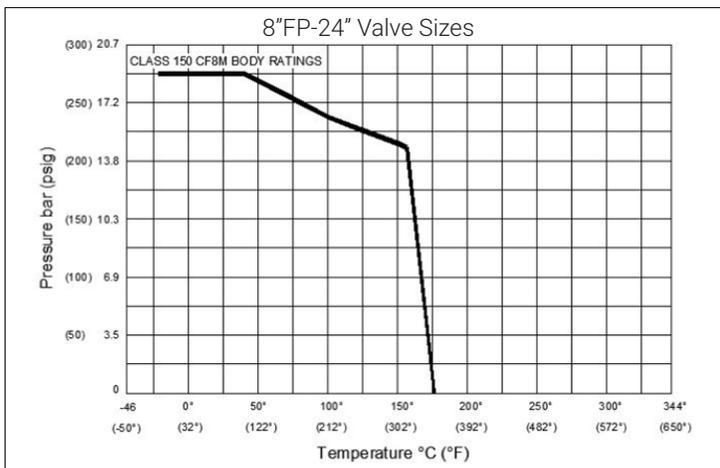
Dimensions are +/- 0.2"

\*C/F - Consult Factory

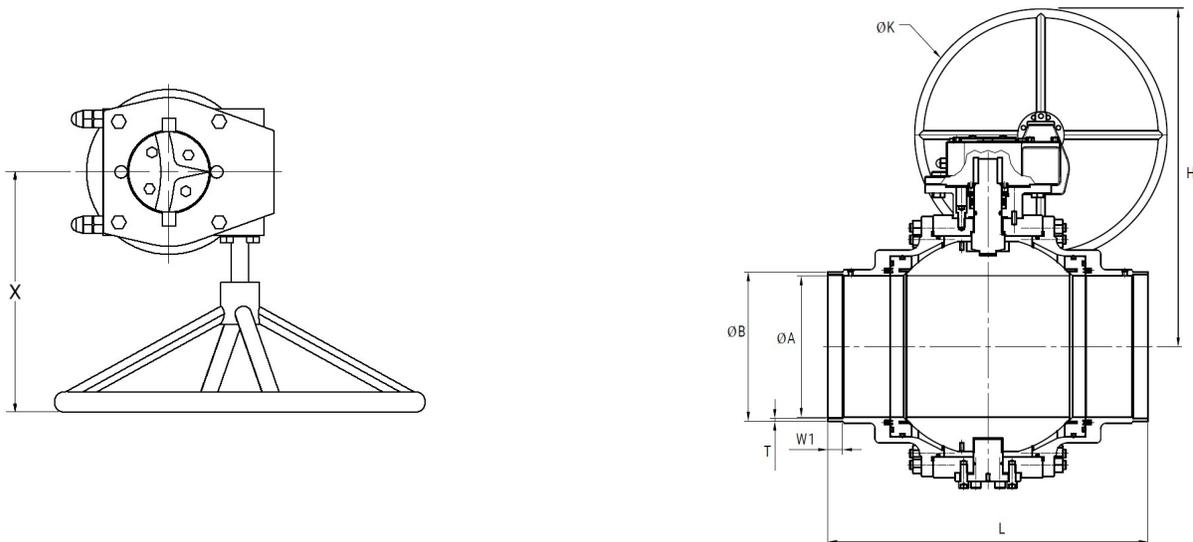
## Large Bore Pipe End Valve With Specifications



NO.	PART NAME	MATERIAL
1	Body	ASTM A351 CF8M
2	End Cap	ASTM A351 CF3M
3	Seat Seals	RTFE.
4	Seat Ring	SS 316
5	Seat	RTFE. (+15%G/F)
6	Ball	ASTM A351 CF8M
7	Stem	ASTM A276 316
8	Body Seals	PTFE.
9	Stem Bushing	PTFE.
10	O-Ring	VITON
11	Packing	PTFE.
12	Gland	SS 304
13	Gear Bolt	SS 304
14	Gland Bolt	SS 304
15	Worm Gear	CAST IRON
16	End Plate	SS 304
17	Nut	ASTM A194 Gr. 8
18	Stud	ASTM A193 Gr. B8
19	Nut	ASTM A194 Gr. 8
20	Gasket	PTFE.
21	Bottom Bearing	PTFE.
22	O-Ring	VITON
23	O-Ring	VITON



## Large Bore Pipe End Valves With Pipe Ends Dimensions



VALVE SIZE	A	ØB	H	ØK	L	W1	X	T	WEIGHT
	(BALL ID)							(SCH10S)	
	IN (mm)	IN (mm)	IN (mm)	IN (mm)	IN (mm)	IN (mm)	IN (mm)	IN (mm)	lb (kg)
6" RP*	4.921 125.00	6.625 168.3	N/A N/A	N/A N/A	13.25 336.6	2.20 55.9	N/A N/A	0.134 3.40	78 35
6" FP*	5.782 146.86	6.625 168.3	N/A N/A	N/A N/A	15.56 395.2	2.24 56.9	N/A N/A	0.134 3.40	199 90
8" RP*	5.782 146.86	8.625 219.1	N/A N/A	N/A N/A	15.56 395.2	2.24 56.9	N/A N/A	0.148 3.76	201 91
8" FP	8.00 203.2	8.625 219.1	19.63 499	15.75 400	20.51 521.0	1.38 35.0	10.21 259.2	0.148 3.76	357 162
10"	10.42 264.7	10.75 273.1	25.00 635.0	23.62 600.0	22.00 558.8	1.38 35.0	14.68 372.8	0.165 4.19	645 293
12"	11.81 300.0	12.75 323.9	26.57 675.0	23.62 600.0	25.00 635.0	1.38 35.0	14.68 372.8	0.180 4.57	911 413
14"	13.26 336.8	14.00 355.6	31.63 803.5	23.62 600.0	30.00 762.0	1.38 35.0	14.68 372.8	0.188 4.78	1390 630
16"	15.16 385.0	16.00 406.4	32.62 828.5	23.62 600.0	30.00 762.0	1.38 35.0	14.68 372.8	0.188 4.78	1980 898
18"	17.17 436.0	18.00 457.2	34.17 868.0	23.62 600.0	35.98 913.9	1.38 35.0	14.68 372.8	0.188 4.78	2425 1100
20"	19.17 487.0	20.00 508.0	39.39 1000.5	29.53 750.0	35.98 913.9	1.38 35.0	21.38 543.0	0.218 5.54	3120 1415
24"	23.23 590.0	24.00 609.6	44.06 1119.0	29.53 750.0	45.00 1143.0	1.38 35.0	21.38 543.0	0.250 6.35	6010 2726

\* - 6"RP, 6"FP, 8"RP Valves come standard with tee bar handles, gear box available upon request

Dimensions are +/- 0.2" \*C/F - Consult Factory

## Configurations

High Purity Straight Valve



Single Horizontal Cross



Single Horizontal Cross 2- Valve



Double Horizontal Tee



Double Vertical Tee



Double Horizontal Cross



Large Bore 6"FP - 24" High Purity Straight Valve\*



Lever Handle 1/4" - 4" Sizes



Tee Handle 6" RP - 8" RP Sizes



Gear Box 8" FP - 24" Sizes



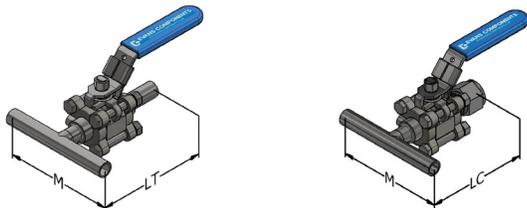
Optional Oval Handle (-OH) 1/4" - 4" Sizes



\* - 6"RP, 6"FP, 8"RP Valves come standard with tee bar handles, gear box available upon request

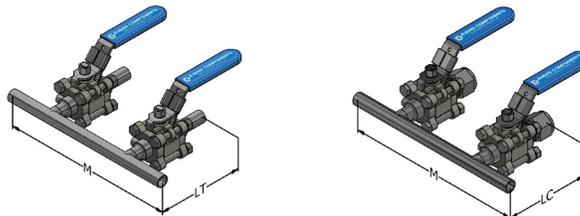
## Integrated Valve Dimensions

Single Horizontal Cross (SHC)



SIZE	M in	M mm	LT in	LT mm	LC in	LC mm
1/2" X 1/4"	3.75	95.3	C/F	C/F	C/F	C/F
1/2" X 1/2"	3.75	95.3	C/F	C/F	C/F	C/F
3/4" X 1/4"	4.00	101.6	C/F	C/F	C/F	C/F
3/4" X 1/2"	4.00	101.6	C/F	C/F	C/F	C/F
3/4" X 3/4"	4.00	101.6	C/F	C/F	C/F	C/F
1" X 1/2"	7.00	177.8	C/F	C/F	C/F	C/F
1" X 3/4"	7.00	177.8	C/F	C/F	C/F	C/F
1" X 1"	7.00	177.8	C/F	C/F	C/F	C/F
1-1/2" X 1/2"	7.00	177.8	C/F	C/F	C/F	C/F
1-1/2" X 3/4"	7.00	177.8	C/F	C/F	C/F	C/F
1-1/2" X 1"	7.00	177.8	C/F	C/F	C/F	C/F
1-1/2" X 1-1/2"	7.00	177.8	C/F	C/F	C/F	C/F
2" X 1/2"	5.75	146.1	C/F	C/F	C/F	C/F
2" X 3/4"	5.75	146.1	C/F	C/F	C/F	C/F
2" X 1"	9.00	228.6	C/F	C/F	C/F	C/F
2" X 1-1/2"	9.00	228.6	C/F	C/F	C/F	C/F
2" X 2"	9.00	228.6	C/F	C/F	C/F	C/F
3" X 1/2"	7.00	177.8	C/F	C/F	C/F	C/F
3" X 3/4"	6.75	171.5	C/F	C/F	C/F	C/F
3" X 1"	9.00	228.6	C/F	C/F	C/F	C/F
3" X 1-1/2"	9.00	228.6	C/F	C/F	C/F	C/F
3" X 2"	9.00	228.6	C/F	C/F	C/F	C/F
4" X 1"	8.25	209.6	C/F	C/F	C/F	C/F
4" X 1-1/2"	8.25	209.6	C/F	C/F	C/F	C/F
4" X 2"	8.25	209.6	C/F	C/F	C/F	C/F
4" X 3"	14.00	355.6	C/F	C/F	C/F	C/F
6" X 1"	11.25	285.8	C/F	C/F	C/F	C/F
6" X 1-1/2"	11.25	285.8	C/F	C/F	C/F	C/F
6" X 2"	11.25	285.8	C/F	C/F	C/F	C/F
6" X 3"	14.00	355.6	C/F	C/F	C/F	C/F
6" X 4"	14.00	355.6	C/F	C/F	C/F	C/F

Single Horizontal Cross 2-Valve (SHC2)



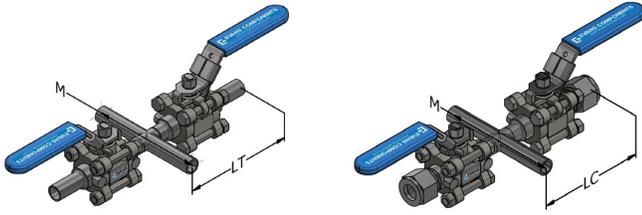
SIZE	M in	M mm	LT in	LT mm	LC in	LC mm
1/2" X 1/4"	19.00	482.6	C/F	C/F	C/F	C/F
1/2" X 1/2"	19.00	482.6	C/F	C/F	C/F	C/F
3/4" X 1/4"	19.00	482.6	C/F	C/F	C/F	C/F
3/4" X 1/2"	19.00	482.6	C/F	C/F	C/F	C/F
3/4" X 3/4"	19.00	482.6	C/F	C/F	C/F	C/F
1" X 1/2"	19.00	482.6	C/F	C/F	C/F	C/F
1" X 3/4"	19.00	482.6	C/F	C/F	C/F	C/F
1" X 1"	19.00	482.6	C/F	C/F	C/F	C/F
1-1/2" X 1/2"	19.00	482.6	C/F	C/F	C/F	C/F
1-1/2" X 3/4"	19.00	482.6	C/F	C/F	C/F	C/F
1-1/2" X 1"	19.00	482.6	C/F	C/F	C/F	C/F
1-1/2" X 1-1/2"	C/F	C/F	C/F	C/F	C/F	C/F
2" X 1/2"	19.00	482.6	C/F	C/F	C/F	C/F
2" X 3/4"	19.00	482.6	C/F	C/F	C/F	C/F
2" X 1"	19.00	482.6	C/F	C/F	C/F	C/F
2" X 1-1/2"	C/F	C/F	C/F	C/F	C/F	C/F
2" X 2"	C/F	C/F	C/F	C/F	C/F	C/F
3" X 1/2"	19.00	482.6	C/F	C/F	C/F	C/F
3" X 3/4"	19.00	482.6	C/F	C/F	C/F	C/F
3" X 1"	19.00	482.6	C/F	C/F	C/F	C/F
3" X 1-1/2"	19.00	482.6	C/F	C/F	C/F	C/F
3" X 2"	C/F	C/F	C/F	C/F	C/F	C/F
4" X 1"	19.00	482.6	C/F	C/F	C/F	C/F
4" X 1-1/2"	C/F	C/F	C/F	C/F	C/F	C/F
4" X 2"	C/F	C/F	C/F	C/F	C/F	C/F
4" X 3"	C/F	C/F	C/F	C/F	C/F	C/F
6" X 1"	19.00	482.6	C/F	C/F	C/F	C/F
6" X 1-1/2"	C/F	C/F	C/F	C/F	C/F	C/F
6" X 2"	C/F	C/F	C/F	C/F	C/F	C/F
6" X 3"	C/F	C/F	C/F	C/F	C/F	C/F
6" X 4"	C/F	C/F	C/F	C/F	C/F	C/F

Dimensions are +/- 0.2"

\*C/F - Consult Factory

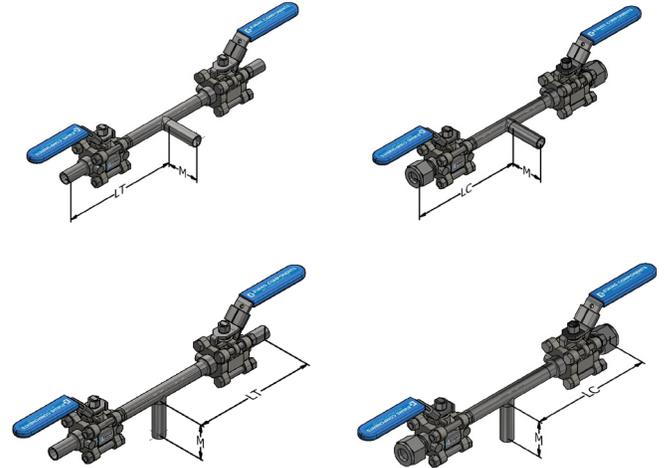
## Integrated Valve Dimensions

Double Horizontal Cross (DHC)



SIZE	M in	M mm	LT in	LT mm	LC in	LC mm
1/2" X 1/4"	3.75	95.3	C/F	C/F	C/F	C/F
1/2" X 1/2"	3.75	95.3	C/F	C/F	C/F	C/F
3/4" X 1/4"	4.00	101.6	C/F	C/F	C/F	C/F
3/4" X 1/2"	4.00	101.6	C/F	C/F	C/F	C/F
3/4" X 3/4"	4.00	101.6	C/F	C/F	C/F	C/F
1" X 1/2"	7.00	177.8	C/F	C/F	C/F	C/F
1" X 3/4"	7.00	177.8	C/F	C/F	C/F	C/F
1" X 1"	7.00	177.8	C/F	C/F	C/F	C/F
1-1/2" X 1/2"	7.00	177.8	C/F	C/F	C/F	C/F
1-1/2" X 3/4"	7.00	177.8	C/F	C/F	C/F	C/F
1-1/2" X 1"	7.00	177.8	C/F	C/F	C/F	C/F
1-1/2" X 1-1/2"	7.00	177.8	C/F	C/F	C/F	C/F
2" X 1/2"	5.75	146.1	C/F	C/F	C/F	C/F
2" X 3/4"	5.75	146.1	C/F	C/F	C/F	C/F
2" X 1"	9.00	228.6	C/F	C/F	C/F	C/F
2" X 1-1/2"	9.00	228.6	C/F	C/F	C/F	C/F
2" X 2"	9.00	228.6	C/F	C/F	C/F	C/F
3" X 1/2"	7.00	177.8	C/F	C/F	C/F	C/F
3" X 3/4"	6.75	171.5	C/F	C/F	C/F	C/F
3" X 1"	9.00	228.6	C/F	C/F	C/F	C/F
3" X 2"	9.00	228.6	C/F	C/F	C/F	C/F
4" X 1"	8.25	209.6	C/F	C/F	C/F	C/F
4" X 1-1/2"	8.25	209.6	C/F	C/F	C/F	C/F
4" X 2"	8.25	209.6	C/F	C/F	C/F	C/F
4" X 3"	14.00	355.6	C/F	C/F	C/F	C/F
6" X 1"	11.25	285.8	C/F	C/F	C/F	C/F
6" X 1-1/2"	11.25	285.8	C/F	C/F	C/F	C/F
6" X 2"	11.25	285.8	C/F	C/F	C/F	C/F
6" X 3"	14.00	355.6	C/F	C/F	C/F	C/F
6" X 4"	14.00	355.6	C/F	C/F	C/F	C/F

Double Horizontal/Vertical Tee (DHT/DVT)



SIZE	M in	M mm	LT in	LT mm	LC in	LC mm
1/2" X 1/2"	C/F	C/F	C/F	C/F	C/F	C/F
3/4" X 1/2"	C/F	C/F	C/F	C/F	C/F	C/F
3/4" X 3/4"	C/F	C/F	C/F	C/F	C/F	C/F
1" X 1/2"	C/F	C/F	C/F	C/F	C/F	C/F
1" X 3/4"	C/F	C/F	C/F	C/F	C/F	C/F
1" X 1"	C/F	C/F	C/F	C/F	C/F	C/F
1-1/2" X 1/2"	C/F	C/F	C/F	C/F	C/F	C/F
1-1/2" X 3/4"	C/F	C/F	C/F	C/F	C/F	C/F
1-1/2" X 1-1/2"	C/F	C/F	C/F	C/F	C/F	C/F
2" X 1/2"	C/F	C/F	C/F	C/F	C/F	C/F
2" X 3/4"	C/F	C/F	C/F	C/F	C/F	C/F
2" X 1"	C/F	C/F	C/F	C/F	C/F	C/F
2" X 2"	C/F	C/F	C/F	C/F	C/F	C/F
3" X 1/2"	C/F	C/F	C/F	C/F	C/F	C/F
3" X 3/4"	C/F	C/F	C/F	C/F	C/F	C/F
3" X 1"	C/F	C/F	C/F	C/F	C/F	C/F
3" X 2"	C/F	C/F	C/F	C/F	C/F	C/F
4" X 2"	C/F	C/F	C/F	C/F	C/F	C/F

Dimensions are +/- 0.2"  
\*C/F - Consult Factory

## Part Number Matrix

### EXAMPLE:

**SS - 08 - 24 DHC M C 08 - XP**  
**1 - 2 - 3 4 5 6 7 - 8 9 10**

1/2" stainless steel, double horizontal cross with a 1-1/2" 316L stainless steel tube main, a 1/2" stainless steel compression branch and a single, downstream compression purge port

#### 1. Series (Body Material) Designator

SS - 316 Stainless Steel (1/4" - 24")

#### 2. Valve Size

04 - 1/4"	32 - 2"	160 - 10"
06 - 3/8"	40 - 2-1/2"	192 - 12"
08 - 1/2"	48 - 3"	224 - 14"
10 - 5/8"	64 - 4"	256 - 16"
12 - 3/4"	80 - 6" RP	288 - 18"
16 - 1"	96 - 6" FP or 8" RP	320 - 20"
24 - 1-1/2"	128 - 8" FP	384 - 24"

#### 3. Main Size Designator

04 - 1/4"	32 - 2"	160 - 10"
06 - 3/8"	40 - 2-1/2"	192 - 12"
08 - 1/2"	48 - 3"	224 - 14"
10 - 5/8"	64 - 4"	256 - 16"
12 - 3/4"	80 - 5"	288 - 18"
16 - 1"	96 - 6"	320 - 20"
24 - 1-1/2"	128 - 8"	384 - 24"

#### 4. Valve Assembly Pattern Designator

STR - Straight 2-way  
 SHC - Single Horizontal Cross  
 SHC2 - Single Horizontal Cross (2-valves)  
 DHC - Double Horizontal Cross  
 DHT - Double Horizontal Tee  
 DVT - Double Vertical Tee

#### Manifold Assemblies\*\*

\*\* - Insert number designator indicating total quantity of valves required for manifold. (Example: DHC6, Double Horizontal Cross pattern, 6 valves)

#### 5. Inlet Connection Designator

#### 6. Outlet Connection Designator

(Skip this designator for STR (straight 2-way valves) if outlet is same as inlet connection)

M - 316L SS Tube Extension  
 C - SS Compression Fitting  
 S - Copper Tube Extension (Type K)  
 B - Copper Tube Extension (Type L)  
 D - Plugged SS Compression Fitting  
 E - Pipe Socket Weld  
 F - Female NPT  
 G - 304L Sch. 10S Pipe Extension  
 L - 316L SS Sch. 10S Pipe Extension  
 L40 - 316L SS Sch. 40S Pipe Extension  
 H - Female Face Seal  
 Q - Plugged Female Face Seal  
 R - Male Face Seal

(continued on next column)

#### 5. (continued)

#### 6. (continued)

T - 316L Tube Extension with Weld Cap  
 TC - Tri-Clamp End  
 U - 150# ANSI Pipe Flange  
 Y - Dockweiler Removable Weld Cap

#### 7. Outlet Connection Size

(Skip this designator for 2-way valves)

04 - 1/4"	16 - 1"	48 - 3"
06 - 3/8"	24 - 1-1/2"	64 - 4"
08 - 1/2"	32 - 2"	
12 - 3/4"	40 - 2-1/2"	

#### 8. Purge Port Designator (Upstream/Downstream)

(1/4" purge port: 1/4" - 2", 1/2" purge port: 2-1/2"-14"  
 3/4" purge port: 16"-20", 1" purge port: 24")

X - No Purge Port  
 V - Purge Valve (capped compression end connection)  
 VZ - Purge Valve (capped VCR end connection)  
 P - Capped Compression  
 Z - Capped Male Face Seal  
 Q - Plugged Female Face Seal

#### 9. Options

E - 15 Ra µin Electropolished Ball & Tube Extension  
 T - Tee style Handle (4" valve option with ISO pad)  
 NO - Normally Open Actuator - Spring Return  
 NC - Normally Closed Actuator - Spring Return  
 DA - Double Acting Actuator  
 OH - Oval Handle with Lockout (1/4"-4" Sizes)  
 GO - Gear Operated Handle (available on sizes 6" - larger)  
 ISO - ISO Mounting Pad  
 PK - PEEK Seats

#### Solenoid Assist for Air Actuator

24V - 24 VDC Solenoid Assist  
 120V - 120 VAC Solenoid Assist  
 240V - 240 VAC Solenoid Assist  
 LS - Nema 4.4 X Limit Switch W/ Beacon  
 EX - Explosion Proof Option

#### 10. Optional Colored Handle Designator

(Leave Blank for Standard Blue Handle)

B - Black  
 W - White  
 G - Green  
 Y - Yellow  
 R - Red  
 I - Pink

\*PED/CE Marking of valves is not standard and must be specified at time of order

## Actuator and Solenoid Specifications

### Direct mounting Namur solenoid valves for process valve actuators Standard features

- Robust, reliable internally pilot acting design provides bubble-tight shut-off for millions of cycles 5/2 function or 3/2 function available
- Direct NAMUR standard mounting
- Long lasting anodized aluminum body
- Low maintenance design requires no lubrication
- High air flow (Cv > 1,4) and fast response
- Operating temperature range: 5°C to 60°C (41°F to 140°F)
- Pressure range 1.5 - 8 Bar (22 - 120 PSI)
- Weather resistant IP65
- Class F standard winding coils
- ATEX coils available



### Air Operated Actuator Performance

Operating Pressure Range - Double Acting: 40 to 120PSIG.

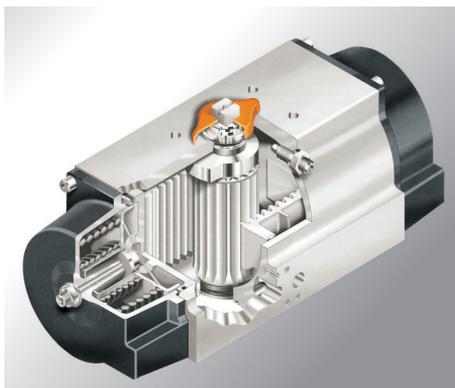
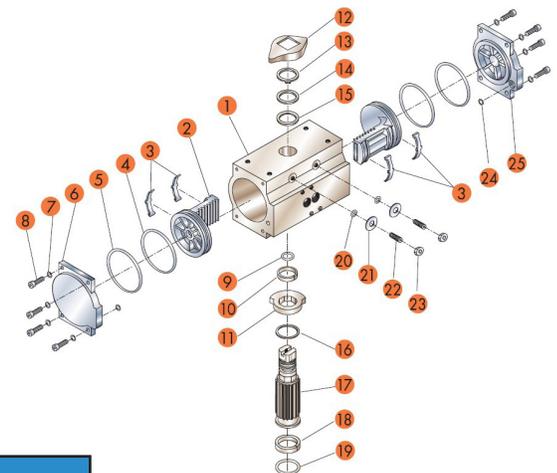
Operating Pressure Range - Spring Return: 60 to 120PSIG.

Maximum Allowable Working Pressure: 150PSIG.

Maximum Operating Pressure: 120PSIG

Operating Temperature Standard: -40°F to +200°F

\*Air Inlet/Outlet connections: 1/4 BSP



NO.	MATERIAL
1	BODY: Extruded aluminum alloy ( Hard anodized )
2	PISTONS: Die cast aluminum alloy
3	BEARING: Nylon
4	O-RING: Buna-N
5	O-RING: Buna-N
6	END CAP(L): Die cast aluminum alloy
7	WASHER: Stainless steel
8	CAP SCREW: Stainless steel
9	O-RING: Buna-N
10	BEARING: Nylon
11	STOP CAM: Sinteral steel
12	PISTON INDICATOR: Polyethylene
13	RETAINING RING: Stainless steel

NO.	MATERIAL
14	WASHER: Stainless steel
15	BEARING: Nylon
16	RETAINING RING: Stainless steel
17	PINION: Carbon steel (Electro-less nickel plated)
18	BEARING: Nylon
19	O-RING: Buna-N
20	O-RING: Buna-N
21	WASHER: Stainless steel
22	NUT: Stainless steel
23	NUT: Stainless steel
24	O-RING: Buna-N
25	END CAP(R): Die cast aluminum alloy

## Learn more about related Evans Products

**EVANS COMPONENTS** | Evans SS-G & GXL Series  
Integrated Stainless Gas Sicks



**G & GXL Series Features**

- 316SS CF8M Body Construction
- CFOS Cleaned and packaged in cleanroom
- 2-PC Design G-series allows for isolation and removal of regulator



**EVANS COMPONENTS** | Evans PLT Series Presslok<sup>®</sup> Stainless Tube Fittings/Valves  
Tube Size Range: 1/2" thru 4"



**PRESSLOK<sup>®</sup> GO/NO-GO GAUGES**

If Presslok<sup>®</sup> Go/No-Go Gauge slips over-pressed section of fitting, press is acceptable.  
If gauge does not slip over pressed section, press is unacceptable.



**EVANS COMPONENTS** | Evans E-Series  
"Low Cost" CFOS Grade Gas Sicks



**Options**

- Available Size Range: 1/4" (6.4mm) thru 1" (25.4mm)
- Optional 5 Micron Sintered Filter



[www.evanscomponents.com](http://www.evanscomponents.com)

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