

SG Series

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



Evans SG Series

The 304L SG Series valves offer a lower cost option vs. BA Series 316L stainless models. ASTM A269 tube stubs can be orbitally welded or used in Presslok installations.

Evans Manifold Assemblies

Creating Value

- Pulled Tee Design Eliminates Over 70% of Field Welds
- Helium Leak Tested, 1×10^{-8} scc/sec
- Proven Automated Weld Technology, Minimized Deadleg
- Cleaned, Assembled, & Packaged in Cleanroom Environment
- 304L SS material of construction
- Ideal Solution for Fast Track Projects
- Lowest Installed Cost



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 4"
- Integrated valves with heat traceable 304L SS tube extensions

Locking Handles

- Standard locking lever, 1/4" - 4"

Testing of Valve Assemblies

- 1/4" - 4" valves leak tested to 1×10^{-8} 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)

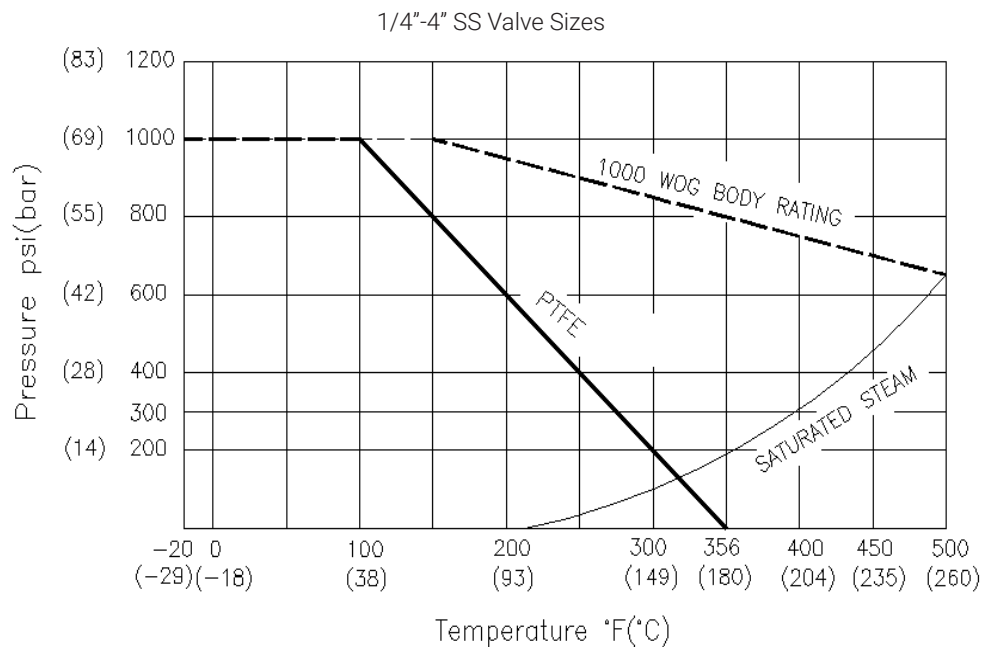
Pressure Rating: Vacuum to 1000 psig (69 bar) size 1/4" - 4"

General Tube/Pipe Specifications

Standard 304L/316L tubing is mechanically polished on the ID to 25 RA μ in. Sulfur content is controlled to .005 - .017 percent. Tube ends are square cut, faced and designed for orbital welding.

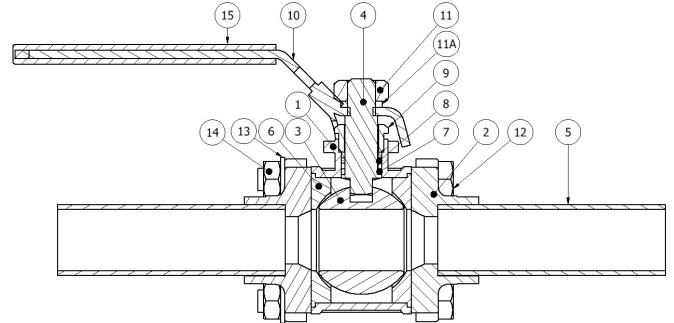
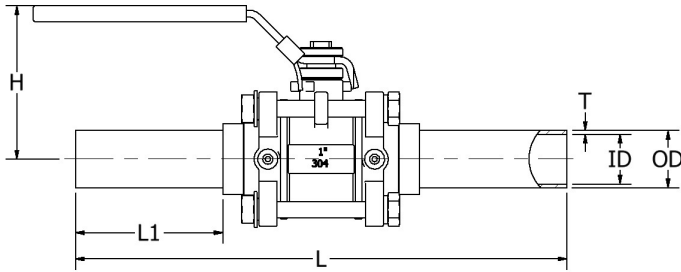
SCH10S S.S. pipe stubs supplied either mechanically polished or pickled/passivated to 40 RA μ in

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
1.25"	110	95
1.5"	200	173
2"	350	303
2.5"	650	562
3"	1100	952
4"	2100	1817



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"	Category II, Group 1 & 2 Gas, Module H

Tube Sized Valve Information



Size	ØID	ØOD	T	L	L1	H
	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)	C/F	0.62 15.7	1.93 49.0
3/8"	0.305 (7.75)	0.375 (9.53)	0.035 (0.89)	C/F	0.62 15.7	1.93 49.0
1/2"	0.402 (10.21)	0.50 (12.70)	0.049 (1.24)	C/F	C/F	C/F
3/4"	0.62 (15.75)	0.75 (19.05)	0.065 (1.650)	C/F	C/F	C/F
1"	0.870 (22.10)	1.00 (25.40)	0.065 (1.650)	C/F	C/F	C/F
1-1/2"	1.370 (34.80)	1.50 (38.10)	0.065 (1.650)	C/F	C/F	C/F
2"	1.870 (47.50)	2.00 (50.80)	0.065 (1.650)	C/F	C/F	C/F
2-1/2"	2.370 (60.33)	2.50 (63.50)	0.065 (1.650)	N/A	C/F	C/F
3"	2.870 (72.90)	3.00 (76.20)	0.065 (1.650)	N/A	C/F	C/F
4"	3.834 (97.38)	4.00 (101.6)	0.083 (2.11)	N/A	C/F	C/F

Item	Description	Material	Qty.
1	Body	SS304	1
2	End Cap	CF8/CF3	2
3	Ball	SS304	1
4	Stem	SS304	1
5	Tube Extension	ASTM A269 304L	2
6	Ball Seat	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

Part Number Matrix

EXAMPLE:

SG - 08 - 24 DHC W C 08 - XP
1 - 2 - 3 4 5 6 7 - 8 9

1/2" stainless steel, double horizontal cross with a 1-1/2" 304L stainless steel tube main, a 1/2" stainless steel compression branch and a single, downstream compression purge port

1. Series (Body Material) Designator

SG - 304 Stainless Steel (1/4"-4")

2. Valve Size

04 - 1/4"	32 - 2"
06 - 3/8"	40 - 2-1/2"
08 - 1/2"	48 - 3"
10 - 5/8"	64 - 4"
12 - 3/4"	
16 - 1"	(For valves larger than 4", consult Evans BA Series catalog)
24 - 1-1/2"	

3. Main Size Designator

04 - 1/4"	32 - 2"
06 - 3/8"	40 - 2-1/2"
08 - 1/2"	48 - 3"
10 - 5/8"	64 - 4"
12 - 3/4"	80 - 5"
16 - 1"	96 - 6"
24 - 1-1/2"	128 - 8"

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

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

5. Inlet Connection Designator

6. Outlet Connection Designator
 (Skip this designator for STR (straight 2-way valves) if outlet is same as inlet connection)

C - SS Compression Fitting
 D - Plugged SS Compression Fitting
 E - Pipe Socket Weld (Up to 2")
 F - Female NPT (Up to 2")
 G - 304L Sch. 10S Pipe Extension
 W - 304L SS Tube Extension
 U - 150# ANSI Pipe Flange

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

9. Optional Colored Handle Designator

(Leave Blank for Standard Blue Handle)

W - White
 G - Green
 Y - Yellow

Configurations

Straight 2-Way



Single Horizontal Cross



Single Horizontal Cross 2- Valve



Double Horizontal Tee



Double Vertical Tee

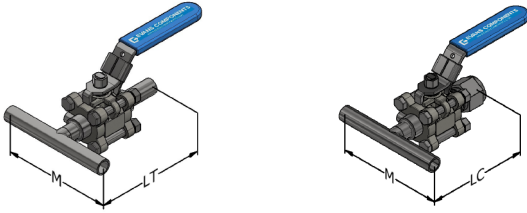


Double Horizontal Cross



Integrated Valve Dimensions

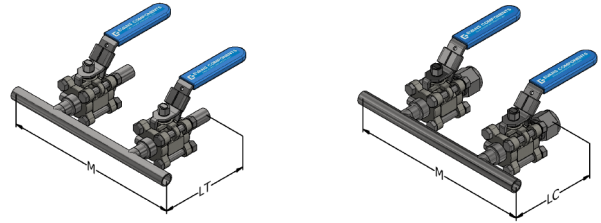
Single Horizontal Cross (SHC)



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"	6.75	171.5	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	N/A	N/A
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	N/A	N/A
6" X 4"	14.00	355.6	C/F	C/F	N/A	N/A

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

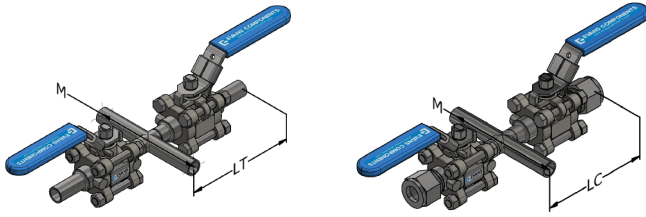
Single Horizontal Cross 2-Valve (SHC2)



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 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	N/A	N/A
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	N/A	N/A
6" X 4"	C/F	C/F	C/F	C/F	N/A	N/A

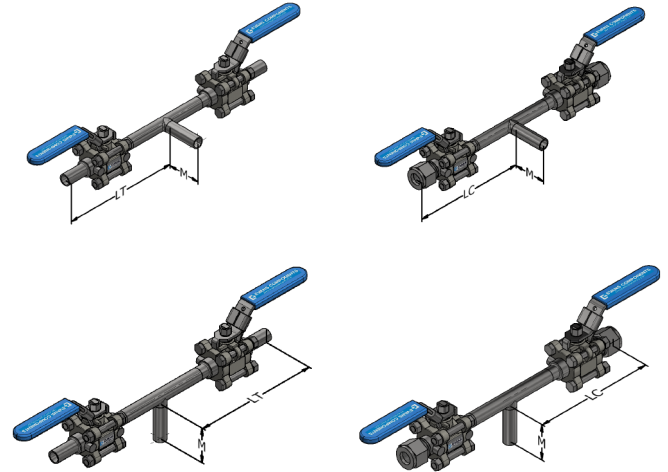
Integrated Valve Dimensions

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"	6.75	171.5	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

Learn more about related Evans Products

EVANS COMPONENTS | Evans Ball Valves
High Purity 304/316 Stainless



BA-SG 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)
- 100% Helium Leak Tested



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



PRESSLOK® GO/NO-GO GAUGES

If Presslok® 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 SS-G & GXL Series
Integrated Stainless Gas Sticks



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



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