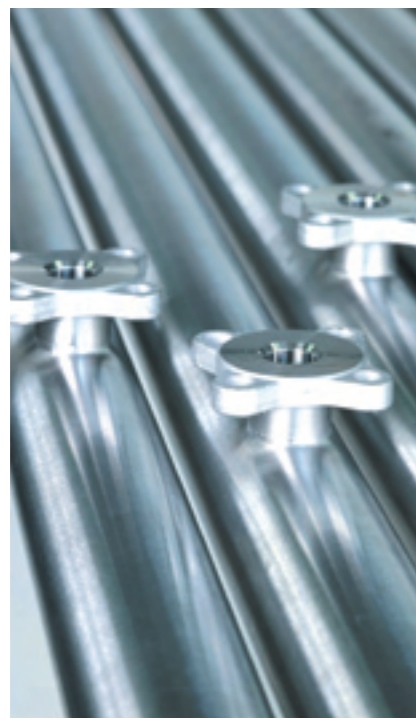


EVANS PART NUMBERING / ORDER INFORMATION

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

Above part number describes a 1/2" stainless steel, double Tee with a 1 1/2" stainless steel tube main, a 1/2" compression and a single, downstream compression purge port.



High Purity Ball Valves for the Semiconductor Industry

1. Material

SS- 316L Stainless Steel

2. Ball Valve size

04 - 1/4"	20 - 1-1/4"
06 - 3/8"	24 - 1-1/2"
08 - 1/2"	32 - 2"
10 - 5/8"	40 - 2-1/2"
12 - 3/4"	48 - 3"
16 - 1"	64 - 4"
	96 - 6"

3. Main Tube diameter

04 - 1/4"	14 - 7/8"	40 - 2-1/2"
06 - 3/8"	16 - 1"	48 - 3"
08 - 1/2"	20 - 1-1/4"	64 - 4"
10 - 5/8"	24 - 1-1/2"	96 - 6"
12 - 3/4"	32 - 2"	128 - 8"

4. Valve Assembly Pattern Designator

STR	-	Straight 2-way
SHC	-	Single Horizontal Cross
SHT	-	Single Horizontal Tee
DHC	-	Double Horizontal Cross
DHT	-	Double Horizontal Tee
DVT	-	Double Vertical Tee
DHA	-	Double Horizontal Angle (90°)

5. Main Tube Connection

C	-	Stainless Steel Compression Fitting
D	-	Plugged Stainless Steel Compression Fitting
F	-	Female NPT
M	-	316L Stainless Steel Tube Extension
N	-	NW/KF Vacuum Fitting
R	-	Male Face Seal
T	-	Ferrule
Y	-	Dockweiler Weld Cap

6. Outlet Connection Designator

Same options as listed under 5.

7. Outlet Connection Size

(skip this designator for 2-way Valves)

04 - 1/4"	14 - 7/8"	40 - 2-1/2"
06 - 3/8"	16 - 1"	48 - 3"
08 - 1/2"	20 - 1-1/4"	64 - 4"
10 - 5/8"	24 - 1-1/2"	
12 - 3/4"	32 - 2"	

8. Purge Port Designator (Upstream/Downstream)

1/4" Purge port: 1/4" – 2 1/2"
1/2" Purge port: 3"-6"
X – No purge port:
V – Purge Valve
P – Compression
Z – Capped Male Face Seal

9. Options

E – Ra 0.25 µm electropolished ball and tube extension
Q – No lube
Z – Not high purity (cleanroom cleaning is standard)
NO – Normally open actuator – spring return
NC – Normally closed actuator – spring return
DA – Double acting actuator

10. Optional Colored Handle Designator

(leave blank for standard blue handle)
B - Black G - Green P - Purple R - Red
S - Silver Y - Yellow W - White I - Pink

The manufacturing processes in the semiconductor industry demand ball valves of the highest standard possible – for bulk gas or for process cooling water systems. Leak integrity, cleanliness, high flow rates, provided at low installation cost, make Evans High Purity Ball Valves the number one specified ball valve in the semiconductor industry worldwide.

Advantages

- Lower system cost
 - Reduced number of welds and fittings
 - No disassembly of ball valves necessary
 - Flexibility with system layout
- Full tube diameter allows unrestricted gas flow
- Speciality manufacture
 - Manifold assemblies, also special lengths
 - Wide variety of end connections
- End control of assembly in controlled environment
- Full selection of Ball Valves
 - (from 1/4" to 6")
- Tube weld ends with Dockweiler Tubing (full traceability of melts)
- Locking handle as standard
- 100% leak test for all configurations (1 x 10⁻⁷ mbarL/sec)
- Cleanroom treatment and packaging (HP)
 - Visual inspection of all media contact surfaces
 - Capped, double bagged in PE foil
 - All Evans (HP) Ball Valves are assembled and tested in a cleanroom
 - Final DI-water rinsed and oven-dried

Applications

- Inert bulk gas distribution
- Nitrogen for pneumatic applications
- Process vacuum exhaust
- Dry, oil free compressed air systems
- Solvents, e.g. isopropylalcohol
- Breathable air



Specification of Stainless Steel Body

Temperature range	-40 to 232 °C
Maximum working pressure acc. to CE marking requirements	in bar
1/4"	55*
3/8"	55*
1/2"	55*
3/4"	55*
1"	55*
1-1/2"	55
2"	55
3"	34
4"	34

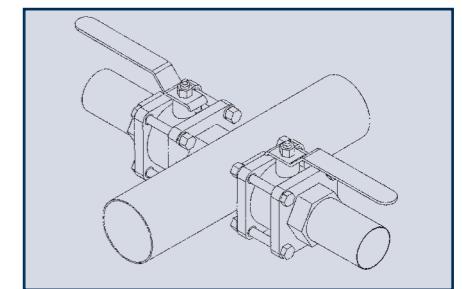
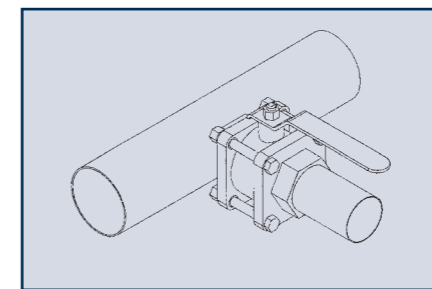
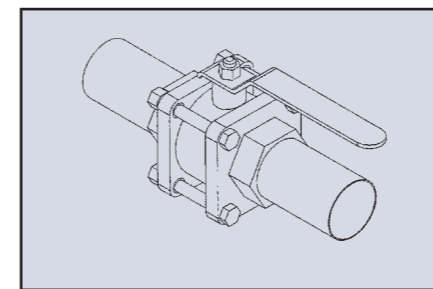
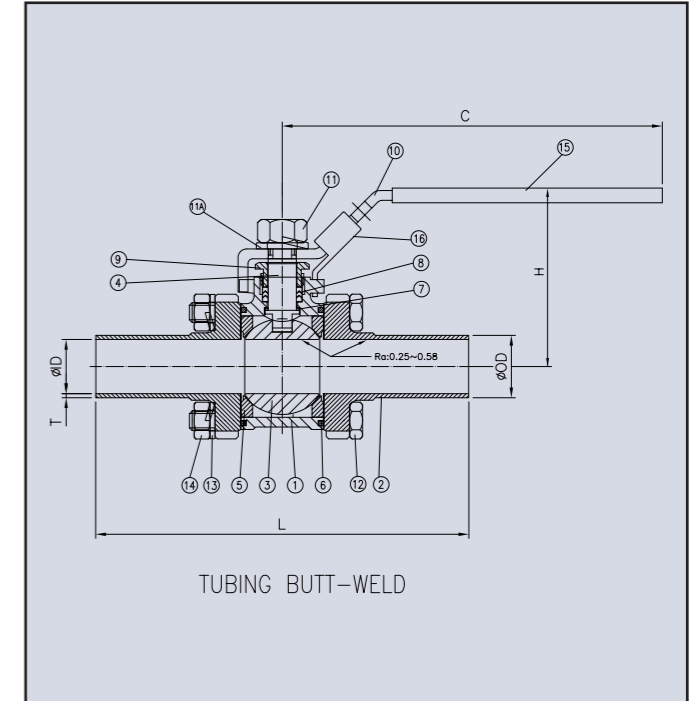
* ball valves of these sizes do not require CE marking tags

Available body configurations

- Straight
- Simple Tee
- Double Tee

MATERIALS OF CONSTRUCTION

Item	Description	Material	Quantity
1	Body	CF8M	1
2	End Cap	CF3M/CF8M	2
3	Ball	CF8M	1
4	Stem	SS316	1
5	Ball Seat	PTFE, Teflon	2
6	Body Seal	PTFE, Teflon	2
7	Thrust Washer	PTFE, Teflon	1
8	Stem Packing	PTFE, Teflon	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	SS304	1
16	Locking Device	SS304	1



Dimensional Data – Stainless Steel Body (SS Series Ball Valve)															
Size	1/4"	3/8"	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"	6"RP	8"	8"RP	
Ø ID mm	4,60	7,50	10,21	15,81	22,11	34,81	47,52	60,22	72,93	97,42	150,17	125,02	197,18	150,17	
Ø OD mm	6,35	9,53	12,70	19,05	25,40	38,10	50,80	63,50	76,20	110,60	152,40	152,40	203,20	203,20	
T mm	0,89	0,99	1,25	1,65	1,65	1,65	1,65	1,65	1,65	2,11	2,77	2,77	3,05	3,05	
Overall Length	L mm	66,43	65,43	135,05	138,05	152,05	190,07	204,07	254,10	280,02	306,19	376,58	320,17	521,16	376,58
Handel Swing	C mm	103,04	103,04	103,04	128,04	155,05	194,08	194,08	295,26	395,13	495,24	n/a	n/a	n/a	n/a
Center Tube Diameter/															
Handle Ht.	H mm	53,03	53,03	58,01	63,02	73,03	90,03	98,03	139,04	149,06	178,07	231,23	197,94	n/a	231,23