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EFV001/08



EDM Industries Group

Instrument Valves & Fittings

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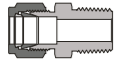
Fittings

Tube Fittings



- Ⓞ Sizes range from 1/16" to 2" and 2mm to 50mm
- Ⓞ Diverse materials and configurations are available
- Ⓞ Precision machined components ensure perfect deformation of the ferrules and tubing
- Ⓞ Hardened threads and smoothed surface finishes extend fitting life and prevent sticking of the matching threads
- Ⓞ Female nut threads are silver-plated to minimize the friction with body threads
- Ⓞ Radius junction design within elbows provides smooth flow path
- Ⓞ Every fitting is stamped with size, material, and heat code
- Ⓞ Fittings are easy to disconnect and retighten

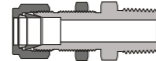
Male Connector



Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F1B1-1004-S□□□□
	3/8	E3F1B1-1006-S□□□□
	1/2	E3F1B1-1008-S□□□□
	3/4	E3F1B1-1012-S□□□□
12	1/4	E3F1B1-1204-S□□□□
	3/8	E3F1B1-1206-S□□□□
	1/2	E3F1B1-1208-S□□□□
	3/4	E3F1B1-1212-S□□□□
14	1/4	E3F1B1-1404-S□□□□
	3/8	E3F1B1-1406-S□□□□
	1/2	E3F1B1-1408-S□□□□
16	3/8	E3F1B1-1606-S□□□□
	1/2	E3F1B1-1608-S□□□□
	3/4	E3F1B1-1612-S□□□□
18	1/2	E3F1B1-1808-S□□□□
	3/4	E3F1B1-1812-S□□□□
20	1/2	E3F1B1-2008-S□□□□
	3/4	E3F1B1-2012-S□□□□
22	3/4	E3F1B1-2212-S□□□□
	1	E3F1B1-2216-S□□□□
25	1/2	E3F1B1-2508-S□□□□
	3/4	E3F1B1-2512-S□□□□
	1	E3F1B1-2516-S□□□□

* For other connections and sizes, contact factory or local distributor.

Bulkhead Male Connector



Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F1B2-1004-S□□□□
	3/8	E3F1B2-1006-S□□□□
	1/2	E3F1B2-1008-S□□□□
	3/4	E3F1B2-1012-S□□□□
12	1/4	E3F1B2-1204-S□□□□
	3/8	E3F1B2-1206-S□□□□
	1/2	E3F1B2-1208-S□□□□
	3/4	E3F1B2-1212-S□□□□
14	1/4	E3F1B2-1404-S□□□□
	3/8	E3F1B2-1406-S□□□□
	1/2	E3F1B2-1408-S□□□□
16	3/8	E3F1B2-1606-S□□□□
	1/2	E3F1B2-1608-S□□□□
	3/4	E3F1B2-1612-S□□□□
18	1/2	E3F1B2-1808-S□□□□
	3/4	E3F1B2-1812-S□□□□
20	1/2	E3F1B2-2008-S□□□□
	3/4	E3F1B2-2012-S□□□□
22	3/4	E3F1B2-2212-S□□□□
	1	E3F1B2-2216-S□□□□
25	1/2	E3F1B2-2508-S□□□□
	3/4	E3F1B2-2512-S□□□□
	1	E3F1B2-2516-S□□□□

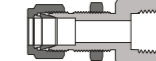
Female Connector



Tube OD mm	NPT Female Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F1C1-1004-S□□□□
	3/8	E3F1C1-1006-S□□□□
	1/2	E3F1C1-1008-S□□□□
	3/4	E3F1C1-1012-S□□□□
12	1/4	E3F1C1-1204-S□□□□
	3/8	E3F1C1-1206-S□□□□
	1/2	E3F1C1-1208-S□□□□
	3/4	E3F1C1-1212-S□□□□
14	1/4	E3F1C1-1404-S□□□□
	3/8	E3F1C1-1406-S□□□□
	1/2	E3F1C1-1408-S□□□□
16	3/8	E3F1C1-1606-S□□□□
	1/2	E3F1C1-1608-S□□□□
	3/4	E3F1C1-1612-S□□□□
18	1/2	E3F1C1-1808-S□□□□
	3/4	E3F1C1-1812-S□□□□
20	1/2	E3F1C1-2008-S□□□□
	3/4	E3F1C1-2012-S□□□□
22	3/4	E3F1C1-2212-S□□□□
	1	E3F1C1-2216-S□□□□
25	1/2	E3F1C1-2508-S□□□□
	3/4	E3F1C1-2512-S□□□□
	1	E3F1C1-2516-S□□□□

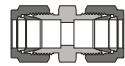
* For other connections and sizes, contact factory or local distributor.

Bulkhead Female Connector



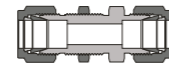
Tube OD mm	NPT Female Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F1C2-1004-S□□□□
	3/8	E3F1C2-1006-S□□□□
	1/2	E3F1C2-1008-S□□□□
	3/4	E3F1C2-1012-S□□□□
12	1/4	E3F1C2-1204-S□□□□
	3/8	E3F1C2-1206-S□□□□
	1/2	E3F1C2-1208-S□□□□
	3/4	E3F1C2-1212-S□□□□
14	1/4	E3F1C2-1404-S□□□□
	3/8	E3F1C2-1406-S□□□□
	1/2	E3F1C2-1408-S□□□□
16	3/8	E3F1C2-1606-S□□□□
	1/2	E3F1C2-1608-S□□□□
	3/4	E3F1C2-1612-S□□□□
18	1/2	E3F1C2-1808-S□□□□
	3/4	E3F1C2-1812-S□□□□
20	1/2	E3F1C2-2008-S□□□□
	3/4	E3F1C2-2012-S□□□□
22	3/4	E3F1C2-2212-S□□□□
	1	E3F1C2-2216-S□□□□
25	1/2	E3F1C2-2508-S□□□□
	3/4	E3F1C2-2512-S□□□□
	1	E3F1C2-2516-S□□□□

Union



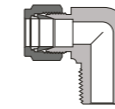
Tube OD mm	Tube OD mm	Basic Ordering Number (316 SS)
10	8	E3F1A1-1008-S□□□□
	10	E3F1A1-1000-S□□□□
12	8	E3F1A1-1208-S□□□□
	10	E3F1A1-1210-S□□□□
	12	E3F1A1-1200-S□□□□
14	8	E3F1A1-1408-S□□□□
	10	E3F1A1-1410-S□□□□
	12	E3F1A1-1412-S□□□□
14	14	E3F1A1-1400-S□□□□
	16	E3F1A1-1610-S□□□□
	12	E3F1A1-1612-S□□□□
16	14	E3F1A1-1614-S□□□□
	16	E3F1A1-1600-S□□□□
	18	E3F1A1-1812-S□□□□
18	14	E3F1A1-1814-S□□□□
	16	E3F1A1-1816-S□□□□
	18	E3F1A1-1800-S□□□□
20	14	E3F1A1-2014-S□□□□
	16	E3F1A1-2016-S□□□□
	18	E3F1A1-2018-S□□□□
	20	E3F1A1-2000-S□□□□
22	14	E3F1A1-2214-S□□□□
	16	E3F1A1-2216-S□□□□
	18	E3F1A1-2218-S□□□□
	20	E3F1A1-2220-S□□□□
	22	E3F1A1-2200-S□□□□
25	14	E3F1A1-2514-S□□□□
	16	E3F1A1-2516-S□□□□
	18	E3F1A1-2518-S□□□□
	20	E3F1A1-2520-S□□□□
	22	E3F1A1-2522-S□□□□
	25	E3F1A1-2500-S□□□□

Bulkhead Union



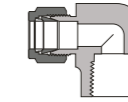
Tube OD mm	Tube OD mm	Basic Ordering Number (316 SS)
10	8	E3F1A2-1008-S□□□□
	10	E3F1A2-1000-S□□□□
12	8	E3F1A2-1208-S□□□□
	10	E3F1A2-1210-S□□□□
	12	E3F1A2-1200-S□□□□
14	8	E3F1A2-1408-S□□□□
	10	E3F1A2-1410-S□□□□
	12	E3F1A2-1412-S□□□□
14	14	E3F1A2-1400-S□□□□
	16	E3F1A2-1610-S□□□□
	12	E3F1A2-1612-S□□□□
16	14	E3F1A2-1614-S□□□□
	16	E3F1A2-1600-S□□□□
	18	E3F1A2-1812-S□□□□
18	14	E3F1A2-1814-S□□□□
	16	E3F1A2-1816-S□□□□
	18	E3F1A2-1800-S□□□□
20	14	E3F1A2-2014-S□□□□
	16	E3F1A2-2016-S□□□□
	18	E3F1A2-2018-S□□□□
	20	E3F1A2-2000-S□□□□
22	14	E3F1A2-2214-S□□□□
	16	E3F1A2-2216-S□□□□
	18	E3F1A2-2218-S□□□□
	20	E3F1A2-2220-S□□□□
	22	E3F1A2-2200-S□□□□
25	14	E3F1A2-2514-S□□□□
	16	E3F1A2-2516-S□□□□
	18	E3F1A2-2518-S□□□□
	20	E3F1A2-2520-S□□□□
	22	E3F1A2-2522-S□□□□
	25	E3F1A2-2500-S□□□□

Male Elbow



Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F2B1-1004-S□□□□
	3/8	E3F2B1-1006-S□□□□
	1/2	E3F2B1-1008-S□□□□
	3/4	E3F2B1-1012-S□□□□
12	1/4	E3F2B1-1204-S□□□□
	3/8	E3F2B1-1206-S□□□□
	1/2	E3F2B1-1208-S□□□□
	3/4	E3F2B1-1212-S□□□□
14	1/4	E3F2B1-1404-S□□□□
	3/8	E3F2B1-1406-S□□□□
	1/2	E3F2B1-1408-S□□□□
16	3/8	E3F2B1-1606-S□□□□
	1/2	E3F2B1-1608-S□□□□
	3/4	E3F2B1-1612-S□□□□
18	1/2	E3F2B1-1808-S□□□□
	3/4	E3F2B1-1812-S□□□□
20	1/2	E3F2B1-2008-S□□□□
	3/4	E3F2B1-2012-S□□□□
22	3/4	E3F2B1-2212-S□□□□
	1	E3F2B1-2216-S□□□□
25	1/2	E3F2B1-2508-S□□□□
	3/4	E3F2B1-2512-S□□□□
	1	E3F2B1-2516-S□□□□

Female Elbow

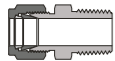


Tube OD mm	NPT Female Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F2C1-1004-S□□□□
	3/8	E3F2C1-1006-S□□□□
	1/2	E3F2C1-1008-S□□□□
	3/4	E3F2C1-1012-S□□□□
12	1/4	E3F2C1-1204-S□□□□
	3/8	E3F2C1-1206-S□□□□
	1/2	E3F2C1-1208-S□□□□
	3/4	E3F2C1-1212-S□□□□
14	1/4	E3F2C1-1404-S□□□□
	3/8	E3F2C1-1406-S□□□□
	1/2	E3F2C1-1408-S□□□□
16	3/8	E3F2C1-1606-S□□□□
	1/2	E3F2C1-1608-S□□□□
	3/4	E3F2C1-1612-S□□□□
18	1/2	E3F2C1-1808-S□□□□
	3/4	E3F2C1-1812-S□□□□
20	1/2	E3F2C1-2008-S□□□□
	3/4	E3F2C1-2012-S□□□□
22	3/4	E3F2C1-2212-S□□□□
	1	E3F2C1-2216-S□□□□
25	1/2	E3F2C1-2508-S□□□□
	3/4	E3F2C1-2512-S□□□□
	1	E3F2C1-2516-S□□□□

* For other connections and sizes, contact factory or local distributor.

* For other connections and sizes, contact factory or local distributor.

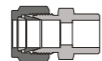
Thermocouple Connector



Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F1B3-1004-S□□□□
	3/8	E3F1B3-1006-S□□□□
	1/2	E3F1B3-1008-S□□□□
	3/4	E3F1B3-1012-S□□□□
12	1/4	E3F1B3-1204-S□□□□
	3/8	E3F1B3-1206-S□□□□
	1/2	E3F1B3-1208-S□□□□
	3/4	E3F1B3-1212-S□□□□
14	1/4	E3F1B3-1404-S□□□□
	3/8	E3F1B3-1406-S□□□□
	1/2	E3F1B3-1408-S□□□□
16	3/8	E3F1B3-1606-S□□□□
	1/2	E3F1B3-1608-S□□□□
	3/4	E3F1B3-1612-S□□□□
18	1/2	E3F1B3-1808-S□□□□
	3/4	E3F1B3-1812-S□□□□
20	1/2	E3F1B3-2008-S□□□□
	3/4	E3F1B3-2012-S□□□□
22	3/4	E3F1B3-2212-S□□□□
	1	E3F1B3-2216-S□□□□
25	1/2	E3F1B3-2508-S□□□□
	3/4	E3F1B3-2512-S□□□□
	1	E3F1B3-2516-S□□□□

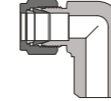
* For other connections and sizes, contact factory or local distributor.

Weld Connector



Tube OD mm	Male Pipe Weld Size, in	Basic Ordering Number (316 SS)
10	1/4	E3F1D1-1004-S□□□□
	3/8	E3F1D1-1006-S□□□□
	1/2	E3F1D1-1008-S□□□□
	3/4	E3F1D1-1012-S□□□□
12	1/4	E3F1D1-1204-S□□□□
	3/8	E3F1D1-1206-S□□□□
	1/2	E3F1D1-1208-S□□□□
	3/4	E3F1D1-1212-S□□□□
14	1/4	E3F1D1-1404-S□□□□
	3/8	E3F1D1-1406-S□□□□
	1/2	E3F1D1-1408-S□□□□
16	3/8	E3F1D1-1606-S□□□□
	1/2	E3F1D1-1608-S□□□□
	3/4	E3F1D1-1612-S□□□□
18	1/2	E3F1D1-1808-S□□□□
	3/4	E3F1D1-1812-S□□□□
20	1/2	E3F1D1-2008-S□□□□
	3/4	E3F1D1-2012-S□□□□
22	3/4	E3F1D1-2212-S□□□□
	1	E3F1D1-2216-S□□□□
25	1/2	E3F1D1-2508-S□□□□
	3/4	E3F1D1-2512-S□□□□
	1	E3F1D1-2516-S□□□□

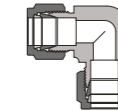
Weld Elbow



Tube OD mm	Male Pipe Weld Size, in	Basic Ordering Number (316 SS)
10	1/4	E3F2D1-1004-S□□□□
	3/8	E3F2D1-1006-S□□□□
	1/2	E3F2D1-1008-S□□□□
	3/4	E3F2D1-1012-S□□□□
12	1/4	E3F2D1-1204-S□□□□
	3/8	E3F2D1-1206-S□□□□
	1/2	E3F2D1-1208-S□□□□
	3/4	E3F2D1-1212-S□□□□
14	1/4	E3F2D1-1404-S□□□□
	3/8	E3F2D1-1406-S□□□□
	1/2	E3F2D1-1408-S□□□□
16	3/8	E3F2D1-1606-S□□□□
	1/2	E3F2D1-1608-S□□□□
	3/4	E3F2D1-1612-S□□□□
18	1/2	E3F2D1-1808-S□□□□
	3/4	E3F2D1-1812-S□□□□
20	1/2	E3F2D1-2008-S□□□□
	3/4	E3F2D1-2012-S□□□□
	-	-
22	3/4	E3F2D1-2212-S□□□□
	1	E3F2D1-2216-S□□□□
	-	-
25	1/2	E3F2D1-2508-S□□□□
	3/4	E3F2D1-2512-S□□□□
	1	E3F2D1-2516-S□□□□

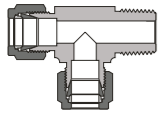
* For other connections and sizes, contact factory or local distributor.

Union Elbow



Tube OD mm	Tube OD mm	Basic Ordering Number (316 SS)
10	8	E3F2A1-1008-S□□□□
	10	E3F2A1-1000-S□□□□
	-	-
	-	-
12	8	E3F2A1-1208-S□□□□
	10	E3F2A1-1210-S□□□□
	12	E3F2A1-1200-S□□□□
	-	-
14	10	E3F2A1-1410-S□□□□
	12	E3F2A1-1412-S□□□□
	14	E3F2A1-1400-S□□□□
16	12	E3F2A1-1612-S□□□□
	14	E3F2A1-1614-S□□□□
	16	E3F2A1-1600-S□□□□
18	14	E3F2A1-1814-S□□□□
	16	E3F2A1-1816-S□□□□
	18	E3F2A1-1800-S□□□□
20	14	E3F2A1-2014-S□□□□
	16	E3F2A1-2016-S□□□□
	20	E3F2A1-2000-S□□□□
22	14	E3F2A1-2214-S□□□□
	16	E3F2A1-2216-S□□□□
	22	E3F2A1-2200-S□□□□
25	14	E3F2A1-2514-S□□□□
	16	E3F2A1-2516-S□□□□
	25	E3F2A1-2500-S□□□□

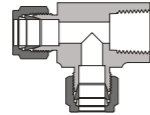
Male Run Tee



Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F3BA-1004-S□□□□
	3/8	E3F3BA-1006-S□□□□
	1/2	E3F3BA-1008-S□□□□
	3/4	E3F3BA-1012-S□□□□
12	1/4	E3F3BA-1204-S□□□□
	3/8	E3F3BA-1206-S□□□□
	1/2	E3F3BA-1208-S□□□□
	3/4	E3F3BA-1212-S□□□□
14	1/4	E3F3BA-1404-S□□□□
	3/8	E3F3BA-1406-S□□□□
	1/2	E3F3BA-1408-S□□□□
16	3/8	E3F3BA-1606-S□□□□
	1/2	E3F3BA-1608-S□□□□
	3/4	E3F3BA-1612-S□□□□
18	1/2	E3F3BA-1808-S□□□□
	3/4	E3F3BA-1812-S□□□□
20	1/2	E3F3BA-2008-S□□□□
	3/4	E3F3BA-2012-S□□□□
22	3/4	E3F3BA-2212-S□□□□
	1	E3F3BA-2216-S□□□□
25	1/2	E3F3BA-2508-S□□□□
	3/4	E3F3BA-2512-S□□□□
	1	E3F3BA-2516-S□□□□

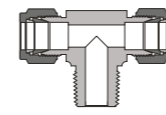
* For other connections and sizes, contact factory or local distributor.

Female Run Tee



Tube OD mm	NPT Female Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F3CA-1004-S□□□□
	3/8	E3F3CA-1006-S□□□□
	1/2	E3F3CA-1008-S□□□□
	3/4	E3F3CA-1012-S□□□□
12	1/4	E3F3CA-1204-S□□□□
	3/8	E3F3CA-1206-S□□□□
	1/2	E3F3CA-1208-S□□□□
	3/4	E3F3CA-1212-S□□□□
14	1/4	E3F3CA-1404-S□□□□
	3/8	E3F3CA-1406-S□□□□
	1/2	E3F3CA-1408-S□□□□
16	3/8	E3F3CA-1606-S□□□□
	1/2	E3F3CA-1608-S□□□□
	3/4	E3F3CA-1612-S□□□□
18	1/2	E3F3CA-1808-S□□□□
	3/4	E3F3CA-1812-S□□□□
20	1/2	E3F3CA-2008-S□□□□
	3/4	E3F3CA-2012-S□□□□
22	3/4	E3F3CA-2212-S□□□□
	1	E3F3CA-2216-S□□□□
25	1/2	E3F3CA-2508-S□□□□
	3/4	E3F3CA-2512-S□□□□
	1	E3F3CA-2516-S□□□□

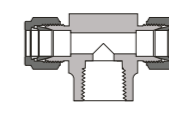
Male Branch Tee



Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F3AB-1004-S□□□□
	3/8	E3F3AB-1006-S□□□□
	1/2	E3F3AB-1008-S□□□□
	3/4	E3F3AB-1012-S□□□□
12	1/4	E3F3AB-1204-S□□□□
	3/8	E3F3AB-1206-S□□□□
	1/2	E3F3AB-1208-S□□□□
	3/4	E3F3AB-1212-S□□□□
14	1/4	E3F3AB-1404-S□□□□
	3/8	E3F3AB-1406-S□□□□
	1/2	E3F3AB-1408-S□□□□
16	3/8	E3F3AB-1606-S□□□□
	1/2	E3F3AB-1608-S□□□□
	3/4	E3F3AB-1612-S□□□□
18	1/2	E3F3AB-1808-S□□□□
	3/4	E3F3AB-1812-S□□□□
20	1/2	E3F3AB-2008-S□□□□
	3/4	E3F3AB-2012-S□□□□
22	3/4	E3F3AB-2212-S□□□□
	1	E3F3AB-2216-S□□□□
25	1/2	E3F3AB-2508-S□□□□
	3/4	E3F3AB-2512-S□□□□
	1	E3F3AB-2516-S□□□□

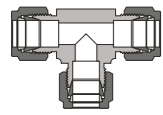
* For other connections and sizes, contact factory or local distributor.

Female Branch Tee



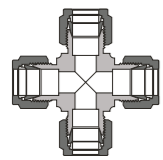
Tube OD mm	NPT Female Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3F3AC-1004-S□□□□
	3/8	E3F3AC-1006-S□□□□
	1/2	E3F3AC-1008-S□□□□
	3/4	E3F3AC-1012-S□□□□
12	1/4	E3F3AC-1204-S□□□□
	3/8	E3F3AC-1206-S□□□□
	1/2	E3F3AC-1208-S□□□□
	3/4	E3F3AC-1212-S□□□□
14	1/4	E3F3AC-1404-S□□□□
	3/8	E3F3AC-1406-S□□□□
	1/2	E3F3AC-1408-S□□□□
16	3/8	E3F3AC-1606-S□□□□
	1/2	E3F3AC-1608-S□□□□
	3/4	E3F3AC-1612-S□□□□
18	1/2	E3F3AC-1808-S□□□□
	3/4	E3F3AC-1812-S□□□□
20	1/2	E3F3AC-2008-S□□□□
	3/4	E3F3AC-2012-S□□□□
22	3/4	E3F3AC-2212-S□□□□
	1	E3F3AC-2216-S□□□□
25	1/2	E3F3AC-2508-S□□□□
	3/4	E3F3AC-2512-S□□□□
	1	E3F3AC-2516-S□□□□

Union Tee



Tube OD mm	Basic Ordering Number (316 SS)
10	E3F3AA-1000-S□□□□
12	E3F3AA-1200-S□□□□
14	E3F3AA-1400-S□□□□
16	E3F3AA-1600-S□□□□
18	E3F3AA-1800-S□□□□
20	E3F3AA-2000-S□□□□
22	E3F3AA-2200-S□□□□
25	E3F3AA-2500-S□□□□

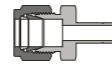
Union Cross



Tube OD mm	Basic Ordering Number (316 SS)
10	E3F4AA-1000-S□□□□
12	E3F4AA-1200-S□□□□
14	E3F4AA-1400-S□□□□
16	E3F4AA-1600-S□□□□
18	E3F4AA-1800-S□□□□
20	E3F4AA-2000-S□□□□
22	E3F4AA-2200-S□□□□
25	E3F4AA-2500-S□□□□

* For other connections and sizes, contact factory or local distributor.

Reducer



Tube OD mm	Tube OD mm	Basic Ordering Number (316 SS)
10	8	E3F1T1-1008-S□□□□
12	8	E3F1T1-1208-S□□□□
	10	E3F1T1-1210-S□□□□
14	8	E3F1T1-1408-S□□□□
	10	E3F1T1-1410-S□□□□
	12	E3F1T1-1412-S□□□□
	16	E3F1T1-1416-S□□□□
	20	E3F1T1-1420-S□□□□
	22	E3F1T1-1422-S□□□□
	25	E3F1T1-1425-S□□□□
16	10	E3F1T1-1610-S□□□□
	12	E3F1T1-1612-S□□□□
	14	E3F1T1-1614-S□□□□
	18	E3F1T1-1618-S□□□□
	20	E3F1T1-1620-S□□□□
	22	E3F1T1-1622-S□□□□
18	25	E3F1T1-1625-S□□□□
	12	E3F1T1-1812-S□□□□
	14	E3F1T1-1814-S□□□□
	16	E3F1T1-1816-S□□□□
20	14	E3F1T1-2014-S□□□□
	16	E3F1T1-2016-S□□□□
22	18	E3F1T1-2018-S□□□□
	14	E3F1T1-2214-S□□□□
	16	E3F1T1-2216-S□□□□
25	18	E3F1T1-2218-S□□□□
	20	E3F1T1-2220-S□□□□
	14	E3F1T1-2514-S□□□□
	16	E3F1T1-2516-S□□□□
	18	E3F1T1-2518-S□□□□
20	20	E3F1T1-2520-S□□□□
	22	E3F1T1-2522-S□□□□

Nut+Ferrules



Tube OD mm	Basic Ordering Number (316 SS)
10	E3F1NF-1000-S□□□□
12	E3F1NF-1200-S□□□□
14	E3F1NF-1400-S□□□□
16	E3F1NF-1600-S□□□□
18	E3F1NF-1800-S□□□□
20	E3F1NF-2000-S□□□□
22	E3F1NF-2200-S□□□□
25	E3F1NF-2500-S□□□□

Cap



Tube OD mm	Basic Ordering Number (316 SS)
10	E3F1TC-1000-S□□□□
12	E3F1TC-1200-S□□□□
14	E3F1TC-1400-S□□□□
16	E3F1TC-1600-S□□□□
18	E3F1TC-1800-S□□□□
20	E3F1TC-2000-S□□□□
22	E3F1TC-2200-S□□□□
25	E3F1TC-2500-S□□□□

* For other connections and sizes, contact factory or local distributor.

Ferrules



Tube OD mm	Basic Ordering Number (316 SS)
10	E3F1FF-1000-S□□□□
12	E3F1FF-1200-S□□□□
14	E3F1FF-1400-S□□□□
16	E3F1FF-1600-S□□□□
18	E3F1FF-1800-S□□□□
20	E3F1FF-2000-S□□□□
22	E3F1FF-2200-S□□□□
25	E3F1FF-2500-S□□□□

Plug



Tube OD mm	Basic Ordering Number (316 SS)
10	E3F1TP-1000-S□□□□
12	E3F1TP-1200-S□□□□
14	E3F1TP-1400-S□□□□
16	E3F1TP-1600-S□□□□
18	E3F1TP-1800-S□□□□
20	E3F1TP-2000-S□□□□
22	E3F1TP-2200-S□□□□
25	E3F1TP-2500-S□□□□

Pipe Fittings



- ⓐ Sizes range from 1/16" to 2" and 6mm to 30mm
- ⓐ Materials include stainless steel, alloy 400R-405, alloy 600, brass and carbon steel
- ⓐ End connections with NPT, ISO/BSP, SAE, and metric threads are available
- ⓐ Hardened threads and smoothed surface finishes extend fitting life and prevent sticking of the matching threads
- ⓐ Radius junction design within elbows provides smooth flow path
- ⓐ Every fitting is stamped with size, material, and heat code

Reducing Bushing



NPT Male Pipe, in.	NPT Female Pipe, in.	Basic Ordering Number (316 SS)
3/8	1/4	E3PBC-0604-S□□□□
	-	-
1/2	1/4	E3PBC-0804-S□□□□
	3/8	E3PBC-0806-S□□□□
	-	-
3/4	1/4	E3PBC-1204-S□□□□
	3/8	E3PBC-1206-S□□□□
	1/2	E3PBC-1208-S□□□□
	-	-
1	1/4	E3PBC-1604-S□□□□
	3/8	E3PBC-1606-S□□□□
	1/2	E3PBC-1608-S□□□□
	3/4	E3PBC-1612-S□□□□
	-	-

Adapter



NPT Female Pipe, in.	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
3/8	1/4	E3PCB-0604-S□□□□
	3/8	E3PCB-0600-S□□□□
1/2	1/4	E3PCB-0804-S□□□□
	3/8	E3PCB-0804-S□□□□
	1/2	E3PCB-0800-S□□□□
3/4	1/4	E3PCB-1204-S□□□□
	3/8	E3PCB-1206-S□□□□
	1/2	E3PCB-1208-S□□□□
	3/4	E3PCB-1200-S□□□□
1	1/4	E3PCB-1604-S□□□□
	3/8	E3PCB-1606-S□□□□
	1/2	E3PCB-1608-S□□□□
	3/4	E3PCB-1612-S□□□□
	1	E3PCB-1600-S□□□□

* For other connections and sizes, contact factory or local distributor.

Pipe Plug



NPT Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3PP1-0004-S□□□□
3/8	E3PP1-0006-S□□□□
1/2	E3PP1-0008-S□□□□
3/4	E3PP1-0012-S□□□□
1	E3PP1-0016-S□□□□

Hollow Hex Plug



NPT Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3PH1-0004-S□□□□
3/8	E3PH1-0006-S□□□□
1/2	E3PH1-0008-S□□□□
3/4	E3PH1-0012-S□□□□
1	E3PH1-0016-S□□□□

Pipe Cap



NPT Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3PC1-0004-S□□□□
3/8	E3PC1-0006-S□□□□
1/2	E3PC1-0008-S□□□□
3/4	E3PC1-0012-S□□□□
1	E3PC1-0016-S□□□□

* For other connections and sizes, contact factory or local distributor.

Close Nipple



NPT Male Pipe, in.	Basic Ordering Number (316 SS)	Length (mm)
1/4 - 1/4	E3PCN-0404-S□□□□	28.4
3/8 - 1/4	E3PCN-0604-S□□□□	28.4
3/8 - 3/8	E3PCN-0606-S□□□□	28.4
1/2 - 1/4	E3PCN-0804-S□□□□	38.1
1/2 - 3/8	E3PCN-0806-S□□□□	38.1
1/2 - 1/2	E3PCN-0808-S□□□□	38.1
3/4 - 1/4	E3PCN-1204-S□□□□	38.1
3/4 - 3/8	E3PCN-1206-S□□□□	38.1
3/4 - 3/4	E3PCN-1212-S□□□□	38.1
1 - 1/4	E3PCN-1604-S□□□□	47.8
1 - 3/8	E3PCN-1606-S□□□□	47.8
1 - 1/2	E3PCN-1608-S□□□□	47.8
1 - 3/4	E3PCN-1612-S□□□□	47.8
1 - 1	E3PCN-1616-S□□□□	47.8

Special Pipe Nipple



NPT Male Pipe, in.	Basic Ordering Number (316 SS)	Length (mm)
1/4 - 1/4	E3PSN-0404-SL□□□□	A=38.1, B=50.8, C=63.5, D=76.2, E=101.6
3/8 - 1/4	E3PSN-0604-SL□□□□	A=38.1, B=50.8, C=63.5, D=76.2, E=101.6
3/8 - 3/8	E3PSN-0606-SL□□□□	A=38.1, B=50.8, C=63.5, D=76.2, E=101.6
1/2 - 1/4	E3PSN-0804-SL□□□□	A=50.8, B=76.2, C=101.6, D=152.4
1/2 - 3/8	E3PSN-0806-SL□□□□	A=50.8, B=76.2, C=101.6, D=152.4
1/2 - 1/2	E3PSN-0808-SL□□□□	A=50.8, B=76.2, C=101.6, D=152.4
3/4 - 1/4	E3PSN-1204-SL□□□□	A=50.8, B=76.2, C=101.6
3/4 - 3/8	E3PSN-1206-SL□□□□	A=50.8, B=76.2, C=101.6
3/4 - 3/4	E3PSN-1212-SL□□□□	A=50.8, B=76.2, C=101.6
1 - 1/4	E3PSN-1604-SL□□□□	A=76.2, B=101.6
1 - 3/8	E3PSN-1606-SL□□□□	A=76.2, B=101.6
1 - 1/2	E3PSN-1608-SL□□□□	A=76.2, B=101.6
1 - 3/4	E3PSN-1612-SL□□□□	A=76.2, B=101.6
1 - 1	E3PSN-1616-SL□□□□	A=76.2, B=101.6

* For other connections and sizes, contact factory or local distributor.

Hex Nipple



NPT Male Pipe, in.	Basic Ordering Number (316 SS)	Length (mm)
1/4 - 1/4	E3PHN-0404-S□□□□	35.6
3/8 - 1/4	E3PHN-0604-S□□□□	36.3
3/8 - 3/8	E3PHN-0606-S□□□□	36.3
1/2 - 1/4	E3PHN-0804-S□□□□	41.9
1/2 - 3/8	E3PHN-0806-S□□□□	41.9
1/2 - 1/2	E3PHN-0808-S□□□□	46.7
3/4 - 1/4	E3PHN-1204-S□□□□	41.9
3/4 - 3/8	E3PHN-1206-S□□□□	41.9
3/4 - 3/4	E3PHN-1212-S□□□□	46.7
1 - 1/4	E3PHN-1604-S□□□□	49.3
1 - 3/8	E3PHN-1606-S□□□□	49.3
1 - 1/2	E3PHN-1608-S□□□□	54.1
1 - 3/4	E3PHN-1612-S□□□□	54.1
1 - 1	E3PHN-1616-S□□□□	58.9

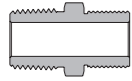
Hex Long Nipple



NPT Male Pipe, in.	Basic Ordering Number (316 SS)	Length (mm)
1/4 - 1/4	E3PLN-0404-SL□□□□	A=38.1, B=50.8, C=63.5, D=76.2, E=101.6
3/8 - 1/4	E3PLN-0604-SL□□□□	A=38.1, B=50.8, C=63.5, D=76.2, E=101.6
3/8 - 3/8	E3PLN-0606-SL□□□□	A=38.1, B=50.8, C=63.5, D=76.2, E=101.6
1/2 - 1/4	E3PLN-0804-SL□□□□	A=50.8, B=76.2, C=101.6, D=152.4
1/2 - 3/8	E3PLN-0806-SL□□□□	A=50.8, B=76.2, C=101.6, D=152.4
1/2 - 1/2	E3PLN-0808-SL□□□□	A=50.8, B=76.2, C=101.6, D=152.4
3/4 - 1/4	E3PLN-1204-SL□□□□	A=50.8, B=76.2, C=101.6
3/4 - 3/8	E3PLN-1206-SL□□□□	A=50.8, B=76.2, C=101.6
3/4 - 3/4	E3PLN-1212-SL□□□□	A=50.8, B=76.2, C=101.6
1 - 1/4	E3PLN-1604-SL□□□□	A=76.2, B=101.6
1 - 3/8	E3PLN-1606-SL□□□□	A=76.2, B=101.6
1 - 1/2	E3PLN-1608-SL□□□□	A=76.2, B=101.6
1 - 3/4	E3PLN-1612-SL□□□□	A=76.2, B=101.6
1 - 1	E3PLN-1616-SL□□□□	A=76.2, B=101.6

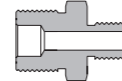
* For other connections and sizes, contact factory or local distributor.

Hex Nipple



NPT Male Pipe, in.	Metric Size mm	Basic Ordering Number (316 SS)
1/4	M14×1.5	E3PBK-0414-S□□□□
3/8	M14×1.5	E3PBK-0614-S□□□□
1/2	M14×1.5	E3PBK-0814-S□□□□
1/4	M20×1.5	E3PBK-0420-S□□□□
3/8	M20×1.5	E3PBK-0620-S□□□□
1/2	M20×1.5	E3PBK-0820-S□□□□
3/4	M20×1.5	E3PBK-1220-S□□□□

Hex Nipple



Metric Size mm	Metric Size mm	Basic Ordering Number (316 SS)
M20×1.5	M10×1	E3PKK-2010-S□□□□
M20×1.5	M12×1.5	E3PKK-2012-S□□□□
M20×1.5	M14×1.5	E3PKK-2014-S□□□□
M20×1.5	M16×1.5	E3PKK-2016-S□□□□
M20×1.5	M20×1.5	E3PKK-2000-S□□□□
M27×2	M27×2	E3PKK-2700-S□□□□

* For other connections and sizes, contact factory or local distributor.

Hex Coupling



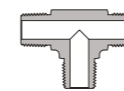
NPT Female Pipe, in.	Basic Ordering Number (316 SS)
3/8 - 1/4	E3PHC-0604-S□□□□
3/8 - 3/8	E3PHC-0600-S□□□□
1/2 - 1/4	E3PHC-0804-S□□□□
1/2 - 3/8	E3PHC-0806-S□□□□
1/2 - 1/2	E3PHC-0800-S□□□□
3/4 - 1/4	E3PHC-1204-S□□□□
3/4 - 1/2	E3PHC-1206-S□□□□
3/4 - 3/4	E3PHC-1200-S□□□□
1 - 1/2	E3PHC-1608-S□□□□
1 - 3/4	E3PHC-1612-S□□□□
1 - 1	E3PHC-1600-S□□□□

Male Elbow



NPT Male Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P2B-0004-S□□□□
3/8	E3P2B-0006-S□□□□
1/2	E3P2B-0008-S□□□□
3/4	E3P2B-1200-S□□□□
1	E3P2B-1600-S□□□□

Male Tee



NPT Male Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P3B-0004-S□□□□
3/8	E3P3B-0006-S□□□□
1/2	E3P3B-0008-S□□□□
3/4	E3P3B-1200-S□□□□
1	E3P3B-1600-S□□□□

* For other connections and sizes, contact factory or local distributor.

Union Ball Joint



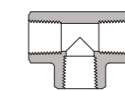
NPT Female Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3PJC-0400-S□□□□
3/8	E3PJC-0600-S□□□□
1/2	E3PJC-0800-S□□□□
3/4	E3PJC-1200-S□□□□
1	E3PJC-1600-S□□□□

Female Elbow



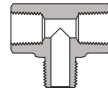
NPT Female Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P2C-0400-S□□□□
3/8	E3P2C-0600-S□□□□
1/2	E3P2C-0800-S□□□□
3/4	E3P2C-1200-S□□□□
1	E3P2C-1600-S□□□□

Female Tee



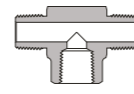
NPT Female Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P3C-0400-S□□□□
3/8	E3P3C-0600-S□□□□
1/2	E3P3C-0800-S□□□□
3/4	E3P3C-1200-S□□□□
1	E3P3C-1600-S□□□□

Male Branch Tee



NPT Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P3CB-0004-S□□□□
3/8	E3P3CB-0006-S□□□□
1/2	E3P3CB-0008-S□□□□
3/4	E3P3CB-1200-S□□□□
1	E3P3CB-1600-S□□□□

Female Branch Tee



NPT Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P3BC-0400-S□□□□
3/8	E3P3BC-0600-S□□□□
1/2	E3P3BC-0800-S□□□□
3/4	E3P3BC-1200-S□□□□
1	E3P3BC-1600-S□□□□

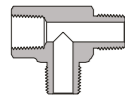
Weld Fittings



- Ⓢ Sizes range from 1/16" to 1" and 6mm to 38mm
- Ⓢ 316 stainless steel material is standard, other materials are available on request

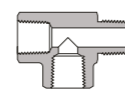
- Ⓢ Radius junction design within elbows provides smooth flow path
- Ⓢ Maximum working temperature is 1000°F(538°C)
- Ⓢ Every fitting is stamped with size, material, and heat code

Female Run Tee



NPT Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P3RB-0004-S□□□□
3/8	E3P3RB-0006-S□□□□
1/2	E3P3RB-0008-S□□□□
3/4	E3P3RB-1200-S□□□□
1	E3P3RB-1600-S□□□□

Male Street Tee



NPT Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P3SC-0400-S□□□□
3/8	E3P3SC-0600-S□□□□
1/2	E3P3SC-0800-S□□□□
3/4	E3P3SC-1200-S□□□□
1	E3P3SC-1600-S□□□□

Tube Butt Weld Male Connector



Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
10	1/8	E3W1QB-1002-S□□□□
	1/4	E3W1QB-1004-S□□□□
14	1/4	E3W1QB-1404-S□□□□
	3/8	E3W1QB-1406-S□□□□
	1/2	E3W1QB-1408-S□□□□
16	3/8	E3W1QB-1606-S□□□□
	1/2	E3W1QB-1608-S□□□□
20	3/8	E3W1QB-2006-S□□□□
	1/2	E3W1QB-2008-S□□□□

Tube Butt Weld Female Connector



Tube OD mm	NPT Female Pipe, in.	Basic Ordering Number (316 SS)
10	1/8	E3W1QC-1002-S□□□□
12	1/8	E3W1QC-1202-S□□□□
14	1/8	E3W1QC-1402-S□□□□
	1/4	E3W1QC-1404-S□□□□
16	1/8	E3W1QC-1602-S□□□□
	1/4	E3W1QC-1604-S□□□□
18	1/8	E3W1QC-1802-S□□□□
	1/4	E3W1QC-1804-S□□□□
20	1/8	E3W1QC-2002-S□□□□
	1/4	E3W1QC-2004-S□□□□
	3/8	E3W1QC-2006-S□□□□

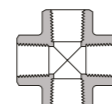
* For other connections and sizes, contact factory or local distributor.

Street Elbow



NPT Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P2CB-0004-S□□□□
3/8	E3P2CB-0006-S□□□□
1/2	E3P2CB-0008-S□□□□
3/4	E3P2CB-1200-S□□□□
1	E3P2CB-1600-S□□□□

Female Cross



NPT Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3P4CC-0400-S□□□□
3/8	E3P4CC-0600-S□□□□
1/2	E3P4CC-0800-S□□□□
3/4	E3P4CC-1200-S□□□□
1	E3P4CC-1600-S□□□□

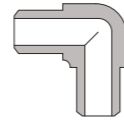
* For other connections and sizes, contact factory or local distributor.

Tube Butt Weld Reducing Union



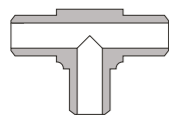
Tube OD mm	Basic Ordering Number (316 SS)
10 - 8	E3W1QQ-1008-S□□□□
12 - 8	E3W1QQ-1208-S□□□□
12 - 10	E3W1QQ-1210-S□□□□
16 - 14	E3W1QQ-1614-S□□□□
18 - 14	E3W1QQ-1814-S□□□□
18 - 16	E3W1QQ-1816-S□□□□
20 - 14	E3W1QQ-2014-S□□□□
20 - 16	E3W1QQ-2016-S□□□□

Tube Butt Weld Union Elbow



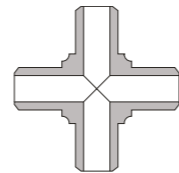
Tube OD mm	Basic Ordering Number (316 SS)
10 - 10	E3W2QQ-1000-S□□□□
12 - 12	E3W2QQ-1200-S□□□□
14 - 14	E3W2QQ-1400-S□□□□
16 - 16	E3W2QQ-1600-S□□□□
18 - 18	E3W2QQ-1800-S□□□□
20 - 20	E3W2QQ-2000-S□□□□

Tube Butt Weld Union Tee



Tube OD mm	Basic Ordering Number (316 SS)
10	E3W3QQ-1000-S□□□□
12	E3W3QQ-1200-S□□□□
14	E3W3QQ-1400-S□□□□
16	E3W3QQ-1600-S□□□□
18	E3W3QQ-1800-S□□□□
20	E3W3QQ-2000-S□□□□

Tube Butt Weld Union Cross



Tube OD mm	Basic Ordering Number (316 SS)
10	E3W4QQ-1000-S□□□□
12	E3W4QQ-1200-S□□□□
14	E3W4QQ-1400-S□□□□
16	E3W4QQ-1600-S□□□□
18	E3W4QQ-1800-S□□□□
20	E3W4QQ-2000-S□□□□

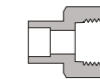
* For other connections and sizes, contact factory or local distributor.

Tube Socket Weld Male Connector



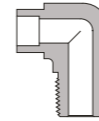
Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
12	1/4	E3W1HB-1204-S□□□□
	3/8	E3W1HB-1206-S□□□□
	1/2	E3W1HB-1208-S□□□□
14	3/8	E3W1HB-1406-S□□□□
	1/2	E3W1HB-1408-S□□□□
16	1/2	E3W1HB-1608-S□□□□
20	1/2	E3W1HB-2008-S□□□□

Tube Socket Weld Female Connector



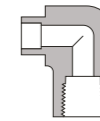
Tube OD mm	NPT Female Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3W1HC-1004-S□□□□
14	3/8	E3W1HC-1406-S□□□□
	1/2	E3W1HC-1408-S□□□□
16	1/2	E3W1HC-1608-S□□□□
20	1/2	E3W1HC-2008-S□□□□
25	1/2	E3W1HC-2508-S□□□□

Tube Socket Weld Male Elbow



Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
12	1/4	E3W2HB-1204-S□□□□
	3/8	E3W2HB-1206-S□□□□
	1/2	E3W2HB-1208-S□□□□
14	3/8	E3W2HB-1406-S□□□□
	1/2	E3W2HB-1408-S□□□□
16	1/2	E3W2HB-1608-S□□□□
20	1/2	E3W2HB-2008-S□□□□

Tube Socket Weld Female Elbow



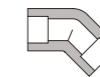
Tube OD mm	NPT Male Pipe, in.	Basic Ordering Number (316 SS)
10	1/4	E3W2HC-1004-S□□□□
14	3/8	E3W2HC-1406-S□□□□
	1/2	E3W2HC-1408-S□□□□
16	1/2	E3W2HC-1608-S□□□□
20	1/2	E3W2HC-2008-S□□□□
25	1/2	E3W2HC-2508-S□□□□

Tube Socket Weld Union Elbow



Tube OD mm	Basic Ordering Number (316 SS)
10	E3W2H1-1000-S□□□□
12	E3W2H1-1200-S□□□□
14	E3W2H1-1400-S□□□□
16	E3W2H1-1600-S□□□□
18	E3W2H1-1800-S□□□□
20	E3W2H1-2000-S□□□□
22	E3W2H1-2200-S□□□□
25	E3W2H1-2500-S□□□□

Tube Socket Weld Union 45° Elbow



Tube OD mm	Basic Ordering Number (316 SS)
10	E3W2H2-1000-S□□□□
12	E3W2H2-1200-S□□□□
14	E3W2H2-1400-S□□□□
16	E3W2H2-1600-S□□□□
18	E3W2H2-1800-S□□□□
20	E3W2H2-2000-S□□□□
22	E3W2H2-2200-S□□□□
25	E3W2H2-2500-S□□□□

* For other connections and sizes, contact factory or local distributor.

Tube Socket Weld Union



Tube OD mm	Basic Ordering Number (316 SS)
10	E3W1H1-1000-S□□□□
12	E3W1H1-1200-S□□□□
14	E3W1H1-1400-S□□□□
16	E3W1H1-1600-S□□□□
18	E3W1H1-1800-S□□□□
20	E3W1H1-2000-S□□□□
22	E3W1H1-2200-S□□□□
25	E3W1H1-2500-S□□□□

Tube Socket Weld Reducing Union



Tube OD mm	Basic Ordering Number (316 SS)
10 - 8	E3W1H2-1008-S□□□□
12 - 8	E3W1H2-1208-S□□□□
12 - 10	E3W1H2-1210-S□□□□
14 - 10	E3W1H2-1410-S□□□□
14 - 12	E3W1H2-1412-S□□□□
16 - 10	E3W1H2-1610-S□□□□
16 - 12	E3W1H2-1612-S□□□□
16 - 14	E3W1H2-1614-S□□□□
18 - 14	E3W1H2-1814-S□□□□
18 - 16	E3W1H2-1816-S□□□□
20 - 14	E3W1H2-2014-S□□□□
20 - 16	E3W1H2-2016-S□□□□
20 - 18	E3W1H2-2018-S□□□□

Pipe to Weld End Union



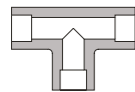
Metric Threads Size	Tube OD mm	Basic Ordering Number (316 SS)
M16×1.5	8	E3W1JQ-1608-S□□□□
	10	E3W1JQ-1610-S□□□□
M18×1.5	10	E3W1JQ-1810-S□□□□
	14	E3W1JQ-1814-S□□□□
M20×1.5	8	E3W1JQ-2008-S□□□□
	10	E3W1JQ-2010-S□□□□
	12	E3W1JQ-2012-S□□□□
	14	E3W1JQ-2014-S□□□□
M22×1.5	16	E3W1JQ-2016-S□□□□
	14	E3W1JQ-2214-S□□□□
M24×1.5	16	E3W1JQ-2216-S□□□□
	18	E3W1JQ-2418-S□□□□
	14	E3W1JQ-2414-S□□□□
M27×2	16	E3W1JQ-2416-S□□□□
	20	E3W1JQ-2716-S□□□□
	22	E3W1JQ-2720-S□□□□
M30×2	25	E3W1JQ-2722-S□□□□
		E3W1JQ-3025-S□□□□

Male Pipe to Weld End Union



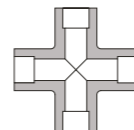
NPT Male Pipe, in.	Tube OD mm	Basic Ordering Number (316 SS)
1/4	12	E3W1BQ-0412-S□□□□
	14	E3W1BQ-0414-S□□□□
1/2	16	E3W1BQ-0416-S□□□□
	14	E3W1BQ-0814-S□□□□
	16	E3W1BQ-0816-S□□□□
1	20	E3W1BQ-0820-S□□□□
	22	E3W1BQ-0822-S□□□□
	34	E3W1BQ-1634-S□□□□

Tube Socket Weld Union tee



Tube OD mm	Basic Ordering Number (316 SS)
10	E3W3HH-1000-S□□□□
12	E3W3HH-1200-S□□□□
14	E3W3HH-1400-S□□□□
16	E3W3HH-1600-S□□□□
18	E3W3HH-1800-S□□□□
20	E3W3HH-2000-S□□□□
22	E3W3HH-2200-S□□□□
25	E3W3HH-2500-S□□□□

Tube Socket Weld Union Cross



Tube OD mm	Basic Ordering Number (316 SS)
10	E3W4HH-1000-S□□□□
12	E3W4HH-1200-S□□□□
14	E3W4HH-1400-S□□□□
16	E3W4HH-1600-S□□□□
18	E3W4HH-1800-S□□□□
20	E3W4HH-2000-S□□□□
22	E3W4HH-2200-S□□□□
25	E3W4HH-2500-S□□□□

Copper Gasket



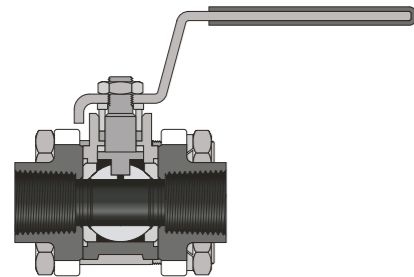
Metric Threads Size	Basic Ordering Number (Copper)
M16×1.5	E3W1CG-1600-S□□□□
M18×1.5	E3W1CG-1800-S□□□□
M20×1.5	E3W1CG-2000-S□□□□
M22×1.5	E3W1CG-2200-S□□□□
M24×1.5	E3W1CG-2400-S□□□□
M27×2	E3W1CG-2700-S□□□□

* For other connections and sizes, contact factory or local distributor.

* For other connections and sizes, contact factory or local distributor.

Valves

Ball Valves

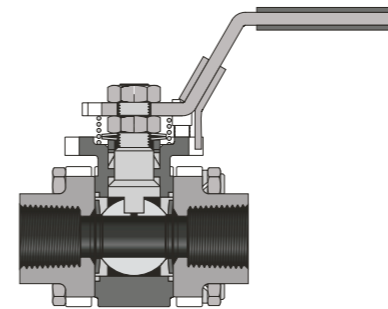


- @ 3-piece precision cast body construction
- @ Body materials: CF8M (316), CF3M (316L), CF8 (304), and CF3 (304L)
- @ Seat material: PTFE
- @ Packing material: PTFE, Graphite
- @ End connections: 1/8" to 3" thread
 - 1/8" to 3" pipe butt (socket) weld
 - 1/8" to 2" and 12mm to 50mm tube butt (socket) weld
 - 1/8" to 2" and 12mm to 38mm tube fitting
 - 1/8" to 4" flange
- @ Orifice sizes: 6.4mm to 76mm
- @ Maximum working pressure: 1000 psig(68.9 bar)
- @ Working temperature: -50°F to 450°F(-46°C to 232°C)

Basic Ordering Number (316 SS, PTFE Packing)	Connection		Orifice (mm)	Cv
	Inlet	Outlet		
E3BV1H1-1200-S□□□□	Φ12mm Socket Weld	Φ12mm Socket Weld	9.5	7.5
E3BV1H1-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	9.5	7.5
E3BV1H1-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	13.1	13.6
E3BV1H1-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	13.1	13.6
E3BV1H1-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	22.2	40
E3BV1H1-2514-S□□□□	Φ25mm Socket Weld	Φ14mm Socket Weld	22.2	40
E3BV1H1-2516-S□□□□	Φ25mm Socket Weld	Φ16mm Socket Weld	22.2	40
E3BV1A1-0800-S□□□□	Φ8mm Tube Fitting	Φ8mm Tube Fitting	6.4	2.5
E3BV1A1-1000-S□□□□	Φ10mm Tube Fitting	Φ10mm Tube Fitting	7.1	3.8
E3BV1A1-1200-S□□□□	Φ12mm Tube Fitting	Φ12mm Tube Fitting	9.5	7.5
E3BV1A1-1400-S□□□□	Φ14mm Tube Fitting	Φ14mm Tube Fitting	9.5	7.5
E3BV1A1-1600-S□□□□	Φ16mm Tube Fitting	Φ16mm Tube Fitting	9.5	7.5
E3BV1A1-1614-S□□□□	Φ16mm Tube Fitting	Φ14mm Tube Fitting	9.5	7.5
E3BV1A1-2000-S□□□□	Φ20mm Tube Fitting	Φ20mm Tube Fitting	13.1	13.6
E3BV1A1-2500-S□□□□	Φ25mm Tube Fitting	Φ25mm Tube Fitting	22.2	40
E3BV1C1-0800-S□□□□	1/2" Female NPT	1/2" Female NPT	10.3	7.5
E3BV1C1-1200-S□□□□	3/4" Female NPT	3/4" Female NPT	13.1	13.6
E3BV1C1-1600-S□□□□	1" Female NPT	1" Female NPT	22.2	40

* For other connections and sizes, contact factory or local distributor.

Ball Valves

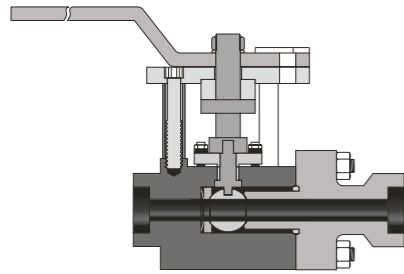


- @ 3-piece precision cast body construction
- @ Body materials: CF8M (316), CF3M (316L), CF8 (304), and CF3 (304L)
- @ Seat material: PTFE, RPTFE, PEEK, and UHMWPE
- @ Packing material: PTFE, RPTFE, PEEK, UHMWPE and Graphite
- @ End connections: 1/8" to 2" thread
 - 1/8" to 2" pipe butt (socket) weld
 - 1/2" to 2" and 12mm to 50mm tube butt (socket) weld
 - 1/2" to 2" and 12mm to 38mm tube fitting
 - 1/2" to 2" flange
- @ Orifice sizes: 6.4mm to 76mm
- @ Maximum working pressure: 3000 psig(207 bar)
- @ Working temperature: -50°F to 550°F(-46°C to 287°C)

Basic Ordering Number (316 SS, PTFE Packing)	Connection		Orifice (mm)	Cv
	Inlet	Outlet		
E3BV2H1-1200-S□□□□	Φ12mm Socket Weld	Φ12mm Socket Weld	9.5	7.5
E3BV2H1-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	9.5	7.5
E3BV2H1-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	13.1	13.6
E3BV2H1-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	13.1	13.6
E3BV2H1-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	22.2	40
E3BV2H1-2514-S□□□□	Φ25mm Socket Weld	Φ14mm Socket Weld	22.2	40
E3BV2H1-2516-S□□□□	Φ25mm Socket Weld	Φ16mm Socket Weld	22.2	40
E3BV2A1-0800-S□□□□	Φ8mm Tube Fitting	Φ8mm Tube Fitting	6.4	2.5
E3BV2A1-1000-S□□□□	Φ10mm Tube Fitting	Φ10mm Tube Fitting	7.1	3.8
E3BV2A1-1200-S□□□□	Φ12mm Tube Fitting	Φ12mm Tube Fitting	9.5	7.5
E3BV2A1-1400-S□□□□	Φ14mm Tube Fitting	Φ14mm Tube Fitting	9.5	7.5
E3BV2A1-1600-S□□□□	Φ16mm Tube Fitting	Φ16mm Tube Fitting	9.5	7.5
E3BV2A1-1614-S□□□□	Φ16mm Tube Fitting	Φ14mm Tube Fitting	9.5	7.5
E3BV2A1-2000-S□□□□	Φ20mm Tube Fitting	Φ20mm Tube Fitting	13.1	13.6
E3BV2A1-2500-S□□□□	Φ25mm Tube Fitting	Φ25mm Tube Fitting	22.2	40
E3BV2C1-0800-S□□□□	1/2" Female NPT	1/2" Female NPT	10.3	7.5
E3BV2C1-1200-S□□□□	3/4" Female NPT	3/4" Female NPT	13.1	13.6
E3BV2C1-1600-S□□□□	1" Female NPT	1" Female NPT	22.2	40

* For other connections and sizes, contact factory or local distributor.

Ball Valves



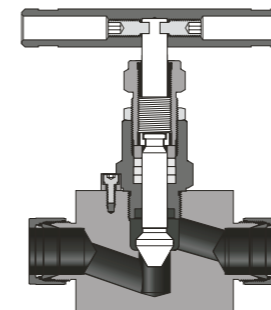
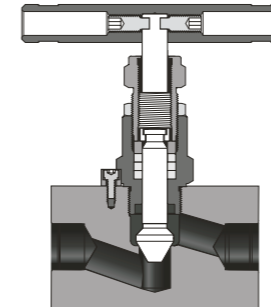
- @ Metal seat 2-piece body construction
- @ Body materials: 316 SS, 304 SS, 321 SS, F22, F91, Duplex 2205, alloy 400, Inconel 600, and carbon steel
- @ Seat surface materials: tungsten carbide, chrome carbide, chrome oxide, and stellite
- @ Ball surface materials: tungsten carbide, chrome carbide, chrome oxide, and stellite
- @ Packing material: PTFE, RPTFE, PEEK, UHMWPE and Graphite
- @ End connections: 1/8" to 2" thread
 - 1/8" to 2" pipe butt (socket) weld
 - 1/2" to 2" and 12mm to 50mm tube butt (socket) weld
 - 1/2" to 2" and 12mm to 38mm tube fitting
 - 1/2" to 2" flange
- @ Orifice sizes: 6.4mm to 38.1mm
- @ Maximum working pressure: 10800 psig(745 bar)
- @ Working temperature: -20°F to 1500°F(-29°C to 815°C)

Basic Ordering Number (316 SS, PTFE Packing)	Connection		Orifice (mm)	Cv
	Inlet	Outlet		
E3BV3H1-1200-S□□□□	Φ12mm Socket Weld	Φ12mm Socket Weld	9.5	7.5
E3BV3H1-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	9.5	7.5
E3BV3H1-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	13.1	13.6
E3BV3H1-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	13.1	13.6
E3BV3H1-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	22.2	40
E3BV3H1-2514-S□□□□	Φ25mm Socket Weld	Φ14mm Socket Weld	22.2	40
E3BV3H1-2516-S□□□□	Φ25mm Socket Weld	Φ16mm Socket Weld	22.2	40
E3BV3A1-0800-S□□□□	Φ8mm Tube Fitting	Φ8mm Tube Fitting	6.4	2.5
E3BV3A1-1000-S□□□□	Φ10mm Tube Fitting	Φ10mm Tube Fitting	7.1	3.8
E3BV3A1-1200-S□□□□	Φ12mm Tube Fitting	Φ12mm Tube Fitting	9.5	7.5
E3BV3A1-1400-S□□□□	Φ14mm Tube Fitting	Φ14mm Tube Fitting	9.5	7.5
E3BV3A1-1600-S□□□□	Φ16mm Tube Fitting	Φ16mm Tube Fitting	9.5	7.5
E3BV3A1-1614-S□□□□	Φ16mm Tube Fitting	Φ14mm Tube Fitting	9.5	7.5
E3BV3A1-2000-S□□□□	Φ20mm Tube Fitting	Φ20mm Tube Fitting	13.1	13.6
E3BV3A1-2500-S□□□□	Φ25mm Tube Fitting	Φ25mm Tube Fitting	22.2	40
E3BV3C1-0800-S□□□□	1/2" Female NPT	1/2" Female NPT	10.3	7.5
E3BV3C1-1200-S□□□□	3/4" Female NPT	3/4" Female NPT	13.1	13.6
E3BV3C1-1600-S□□□□	1" Female NPT	1" Female NPT	22.2	40

* For other connections and sizes, contact factory or local distributor.

Bar Stock Needle Valves

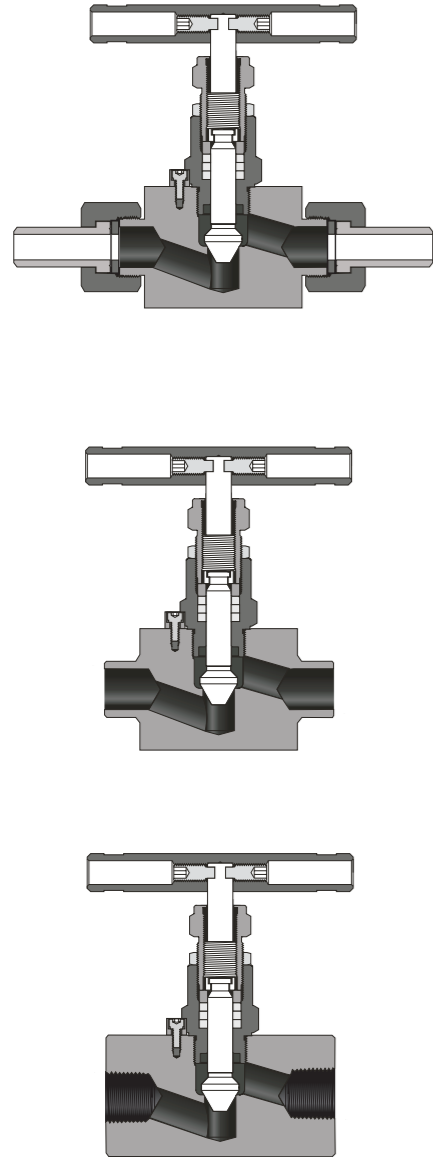
- @ Body construction: cold drawn bar or forged body
- @ Body materials: 316 SS, 316L SS, 304 SS, 321 SS,F91, Duplex 2205, Titanium, alloy 400, alloy C-276, and brass
- @ Sealing face materials: same as body materials; optional stellite available
- @ Stem tips: blunt, ball, regulating, and soft tips
- @ End connections: 1/8" to 1" and M14 to M27 thread
 - 1/4" to 1" and 6mm to 25mm tube fitting
 - 3/8" to 1" and 10mm to 28mm weld
- @ Orifice sizes: 4mm, 6mm, 11mm, 15mm, and 20mm
- @ Maximum working pressure: 6000 psig(414 bar)
- @ Working temperature: -65°F to 1200°F(-54°C to 649°C)



Basic Ordering Number (316 SS, Graphite packing)	Connection		Orifice (mm)	Cv
	Inlet	Outlet		
E3BNV1H2-1200-S□□□□	Φ12mm Socket Weld	Φ12mm Socket Weld	6.0	0.85
E3BNV1H2-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3BNV1H2-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	6.0	0.85
E3BNV1H2-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3BNV1H3-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3BNV1H3-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	11.10	2.18
E3BNV1H3-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3BNV1H4-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	15.0	3.27
E3BNV1H4-2516-S□□□□	Φ25mm Socket Weld	Φ16mm Socket Weld	15.0	3.27
E3BNV1H5-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	20.0	6.65
E3BNV1H5-2800-S□□□□	Φ28mm Socket Weld	Φ28mm Socket Weld	20.0	6.65
E3BNV2A1-0800-S□□□□	Φ8mm Tube Fitting	Φ8mm Tube Fitting	4.0	0.35
E3BNV2A1-1000-S□□□□	Φ10mm Tube Fitting	Φ10mm Tube Fitting	4.0	0.35
E3BNV2A2-1000-S□□□□	Φ10mm Tube Fitting	Φ10mm Tube Fitting	6.0	0.85
E3BNV2A2-1200-S□□□□	Φ12mm Tube Fitting	Φ12mm Tube Fitting	6.0	0.85
E3BNV2A2-1400-S□□□□	Φ14mm Tube Fitting	Φ14mm Tube Fitting	6.0	0.85
E3BNV2A2-1600-S□□□□	Φ16mm Tube Fitting	Φ16mm Tube Fitting	6.0	0.85
E3BNV2A3-1400-S□□□□	Φ14mm Tube Fitting	Φ14mm Tube Fitting	11.0	2.18
E3BNV2A3-1600-S□□□□	Φ16mm Tube Fitting	Φ16mm Tube Fitting	11.0	2.18
E3BNV2A3-2000-S□□□□	Φ20mm Tube Fitting	Φ20mm Tube Fitting	11.0	2.18
E3BNV2A3-2200-S□□□□	Φ22mm Tube Fitting	Φ22mm Tube Fitting	11.0	2.18
E3BNV2A4-2500-S□□□□	Φ25mm Tube Fitting	Φ25mm Tube Fitting	15.0	3.27
E3BNV2A5-2200-S□□□□	Φ22mm Tube Fitting	Φ22mm Tube Fitting	20.0	6.65
E3BNV2A5-2500-S□□□□	Φ25mm Tube Fitting	Φ25mm Tube Fitting	20.0	6.65

* For other connections and sizes, contact factory or local distributor.

Bar Stock Needle Valves

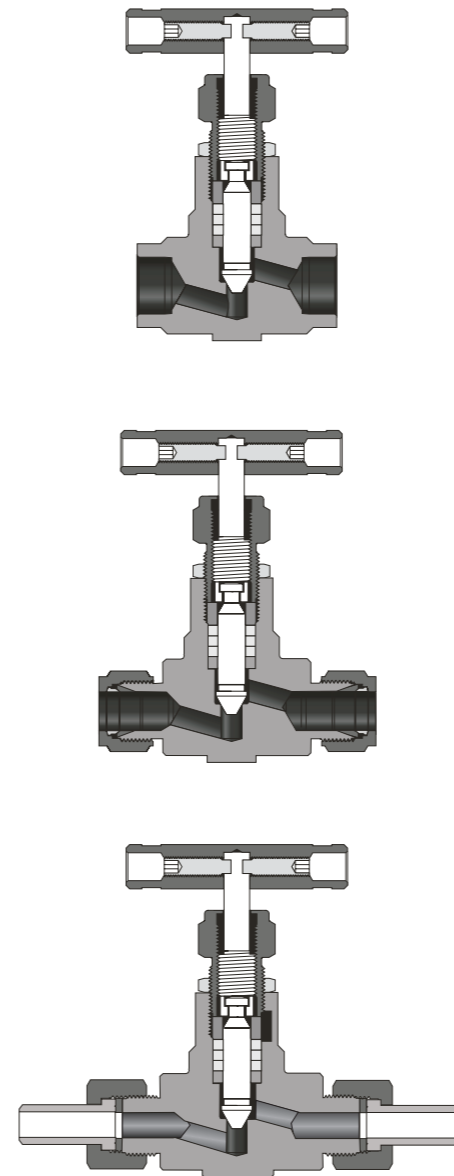


Basic Ordering Number (316 SS, Graphite packing)	Connection		Orifice (mm)	Cv
	Inlet	Outlet		
E3BNV3Q2-1400-S□□□□	Φ14mm Union TBW	Φ14mm Union TBW	6.0	0.85
E3BNV3Q2-1600-S□□□□	Φ16mm Union TBW	Φ16mm Union TBW	6.0	0.85
E3BNV3Q3-1400-S□□□□	Φ14mm Union TBW	Φ14mm Union TBW	11.0	2.18
E3BNV3Q3-1600-S□□□□	Φ16mm Union TBW	Φ16mm Union TBW	11.0	2.18
E3BNV4D2-0600-S□□□□	3/8" Pipe Butt Weld	3/8" Pipe Butt Weld	6.0	0.85
E3BNV4D3-0800-S□□□□	1/2" Pipe Butt Weld	1/2" Pipe Butt Weld	11.0	2.18
E3BNV4D3-1200-S□□□□	3/4" Pipe Butt Weld	3/4" Pipe Butt Weld	11.0	2.18
E3BNV4T2-1400-S□□□□	Φ14mm Tube Butt Weld	Φ14mm Tube Butt Weld	6.0	0.85
E3BNV4T2-1600-S□□□□	Φ16mm Tube Butt Weld	Φ16mm Tube Butt Weld	6.0	0.85
E3BNV4T3-1400-S□□□□	Φ14mm Tube Butt Weld	Φ14mm Tube Butt Weld	11.0	2.18
E3BNV4T3-1600-S□□□□	Φ16mm Tube Butt Weld	Φ16mm Tube Butt Weld	11.0	2.18
E3BNV4T3-1800-S□□□□	Φ18mm Tube Butt Weld	Φ18mm Tube Butt Weld	11.0	2.18
E3BNV4T3-2000-S□□□□	Φ20mm Tube Butt Weld	Φ20mm Tube Butt Weld	11.0	2.18
E3BNV4T3-2200-S□□□□	Φ22mm Tube Butt Weld	Φ22mm Tube Butt Weld	11.0	2.18
E3BNV4T4-2500-S□□□□	Φ25mm Tube Butt Weld	Φ25mm Tube Butt Weld	15.0	3.27
E3BNV4T5-2500-S□□□□	Φ25mm Tube Butt Weld	Φ25mm Tube Butt Weld	20.0	6.65
E3BNV5C1-0400-S□□□□	1/4" Female NPT	1/4" Female NPT	4.0	0.35
E3BNV5C2-0400-S□□□□	1/4" Female NPT	1/4" Female NPT	6.0	0.85
E3BNV5C2-0600-S□□□□	3/8" Female NPT	3/8" Female NPT	6.0	0.85
E3BNV5C3-0800-S□□□□	1/2" Female NPT	1/2" Female NPT	11.0	2.18
E3BNV5C3-1200-S□□□□	3/4" Female NPT	3/4" Female NPT	11.0	2.18
E3BNV5C3-1600-S□□□□	1" Female NPT	1" Female NPT	11.0	2.18

* For other connections and sizes, contact factory or local distributor.

Forged-Body Needle Valves

- @ Body construction: one-piece forged body
- @ Body materials: 316 SS, 316L SS, 304 SS, 321 SS, F91, Duplex 2205, Titanium, alloy 400, alloy C-276, and brass
- @ Sealing face materials: same as body materials; optional stellite available
- @ Stem tips: blunt, ball, regulating, and soft tips
- @ End connections: 1/8" to 1" and M14 to M27 thread
1/4" to 1" and 6mm to 28mm tube fitting
3/8" to 1" and 10mm to 28mm weld
- @ Orifice sizes: 4mm, 6mm, 11mm, 15mm, and 20mm
- @ Maximum working pressure: 6000 psig(414 bar)
- @ Working temperature: -65°F to 1200°F(-54°C to 649°C)

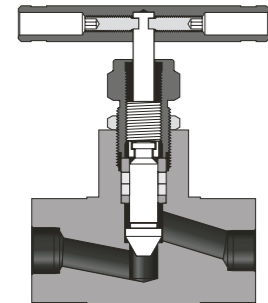


Basic Ordering Number (316 SS, Graphite packing)	Connection		Orifice (mm)	Cv
	Inlet	Outlet		
E3FNV1H2-1200-S□□□□	Φ12mm Socket Weld	Φ12mm Socket Weld	6.0	0.85
E3FNV1H2-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3FNV1H2-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	6.0	0.85
E3FNV1H2-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3FNV1H3-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3FNV1H3-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	11.10	2.18
E3FNV1H3-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3FNV1H4-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	15.0	3.27
E3FNV1H4-2516-S□□□□	Φ25mm Socket Weld	Φ16mm Socket Weld	15.0	3.27
E3FNV1H5-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	20.0	6.65
E3FNV2A1-0800-S□□□□	Φ8mm Tube Fitting	Φ8mm Tube Fitting	4.0	0.35
E3FNV2A1-1000-S□□□□	Φ10mm Tube Fitting	Φ10mm Tube Fitting	4.0	0.35
E3FNV2A2-1000-S□□□□	Φ10mm Tube Fitting	Φ10mm Tube Fitting	6.0	0.85
E3FNV2A2-1200-S□□□□	Φ12mm Tube Fitting	Φ12mm Tube Fitting	6.0	0.85
E3FNV2A2-1400-S□□□□	Φ14mm Tube Fitting	Φ14mm Tube Fitting	6.0	0.85
E3FNV2A2-1600-S□□□□	Φ16mm Tube Fitting	Φ16mm Tube Fitting	6.0	0.85
E3FNV2A3-1400-S□□□□	Φ14mm Tube Fitting	Φ14mm Tube Fitting	11.0	2.18
E3FNV2A3-1600-S□□□□	Φ16mm Tube Fitting	Φ16mm Tube Fitting	11.0	2.18
E3FNV2A3-2000-S□□□□	Φ20mm Tube Fitting	Φ20mm Tube Fitting	11.0	2.18
E3FNV2A4-2500-S□□□□	Φ25mm Tube Fitting	Φ25mm Tube Fitting	15.0	3.27
E3FNV3Q2-1400-S□□□□	Φ14mm Union TBW	Φ14mm Union TBW	6.0	0.85
E3FNV3Q2-1600-S□□□□	Φ16mm Union TBW	Φ16mm Union TBW	6.0	0.85
E3FNV3Q3-1400-S□□□□	Φ14mm Union TBW	Φ14mm Union TBW	11.0	2.18
E3FNV3Q3-1600-S□□□□	Φ16mm Union TBW	Φ16mm Union TBW	11.0	2.18

* For other connections and sizes, contact factory or local distributor.

High-Pressure Needle Valves

- @ Body construction: heavy-wall forged body
- @ Body materials: 316 SS, 316L SS, 304 SS, 321 SS, F91, Duplex 2205, Titanium, alloy 400, and alloy C-276
- @ Sealing face materials: same as body materials; optional stellite available
- @ Stem tips: blunt, ball, regulating, and soft tips
- @ End connections: 1/8" to 3/4" and M14 to M27 thread
1/4" to 1" and 6mm to 25mm tube fitting
3/8" to 3/4" and 10mm to 28mm weld
- @ Orifice sizes: 6mm, 11mm and 20mm
- @ Maximum working pressure: 10000 psig(689 bar)
- @ Working temperature: -65°F to 1200°F(-54°C to 649°C)

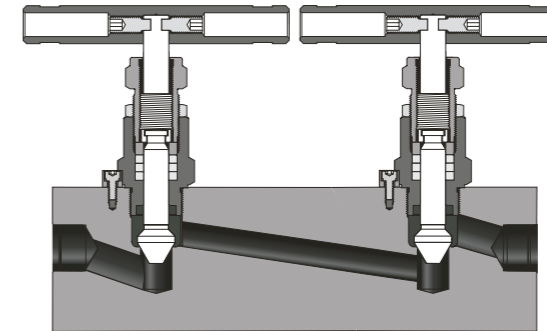


Basic Ordering Number (316 SS, Graphite packing)	Connection		Orifice (mm)	Cv
	Inlet	Outlet		
E3HNV1H2-1200-S□□□□	Φ12mm Socket Weld	Φ12mm Socket Weld	6.0	0.85
E3HNV1H2-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3HNV1H2-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	6.0	0.85
E3HNV1H2-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3HNV1H3-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3HNV1H3-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	11.10	2.18
E3HNV1H3-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3HNV1H4-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	15.0	3.27
E3HNV1H4-2516-S□□□□	Φ25mm Socket Weld	Φ16mm Socket Weld	15.0	3.27
E3HNV1H5-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	20.0	6.65
E3HNV1H5-2800-S□□□□	Φ28mm Socket Weld	Φ28mm Socket Weld	20.0	6.65

* For other connections and sizes, contact factory or local distributor.

Bar Stock Double Needle Valves

- @ Body construction: cold drawn bar
- @ Body materials: 316 SS, 316L SS, 304 SS, 321 SS and F91
- @ Sealing face materials: same as body materials; optional stellite available
- @ Stem tips: blunt, ball, regulating, and soft tips
- @ End connections: 3/8" to 1" and 10mm to 28mm weld
- @ Orifice sizes: 6mm and 11mm
- @ Maximum working pressure: 6000 psig(414 bar)
- @ Working temperature: -65°F to 1200°F(-54°C to 649°C)

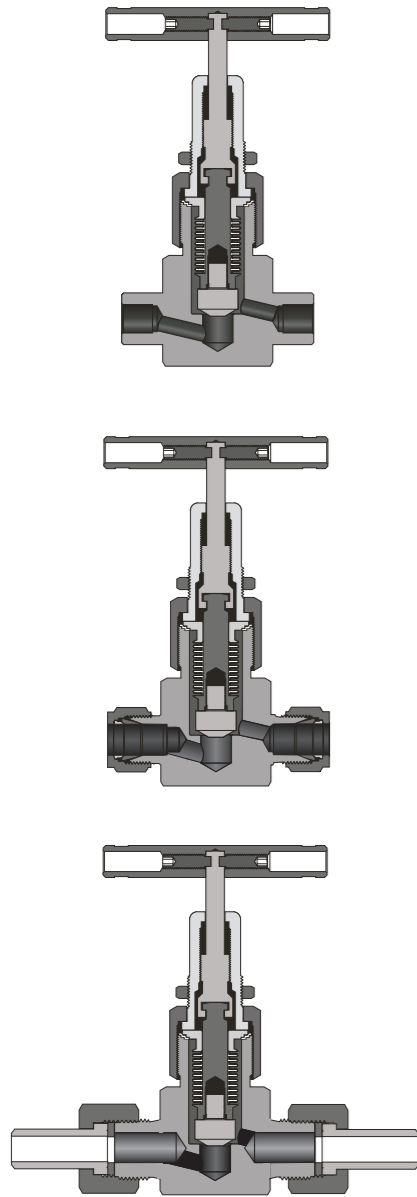


Basic Ordering Number (316 SS, Graphite packing)	Connection		Orifice (mm)	Cv
	Inlet	Outlet		
E3DNV1H2-1000-S□□□□	Φ10mm Socket Weld	Φ10mm Socket Weld	6.0	0.85
E3DNV1H2-1200-S□□□□	Φ12mm Socket Weld	Φ12mm Socket Weld	6.0	0.85
E3DNV1H2-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3DNV1H2-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	6.0	0.85
E3DNV1H2-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3DNV1H3-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3DNV1H3-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	11.10	2.18
E3DNV1H3-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3DNV1H3-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	11.10	2.18
E3DNV1H3-2514-S□□□□	Φ25mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3DNV1H3-2516-S□□□□	Φ25mm Socket Weld	Φ16mm Socket Weld	11.10	2.18

* For other connections and sizes, contact factory or local distributor.

Bellows-Sealed Valves

- Ⓞ Compact design for convenient installation
- Ⓞ Working pressures up to 1000 psig(68.9 bar)
- Ⓞ Working temperature from -20°F to 900°F(-28°C to 482°C)
- Ⓞ Hydraulically-formed multilayer bellows for enhanced cycle life
- Ⓞ Nonrotating stem tip to eliminate galling within the seat area
- Ⓞ Externally pressurized bellows design for maximum strength
- Ⓞ Strictly controlled bellows stroke to improve safety and cycle life
- Ⓞ Replaceable bellows and stem tip assembly
- Ⓞ Regulating, conical, and spherical stem tips available
- Ⓞ Panel and bottom mounting
- Ⓞ Stainless steel, brass, and alloy 400 body materials



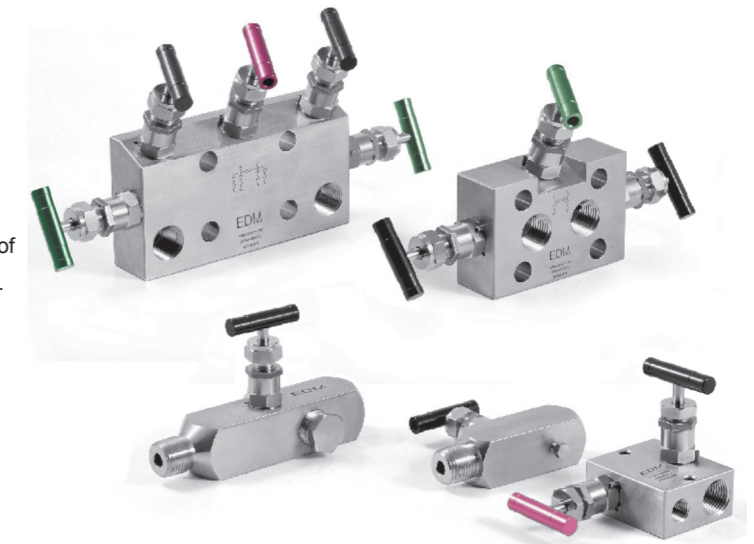
Basic Ordering Number (316 SS, Graphite packing)	Connection		Orifice (mm)	Cv
	Inlet	Outlet		
E3BSV1H2-1200-S□□□□	Φ12mm Socket Weld	Φ12mm Socket Weld	6.0	0.85
E3BSV1H2-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3BSV1H2-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	6.0	0.85
E3BSV1H2-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	6.0	0.85
E3BSV1H3-1400-S□□□□	Φ14mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3BSV1H3-1600-S□□□□	Φ16mm Socket Weld	Φ16mm Socket Weld	11.10	2.18
E3BSV1H3-1614-S□□□□	Φ16mm Socket Weld	Φ14mm Socket Weld	11.10	2.18
E3BSV1H4-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	15.0	3.27
E3BSV1H4-2516-S□□□□	Φ25mm Socket Weld	Φ16mm Socket Weld	15.0	3.27
E3BSV1H5-2500-S□□□□	Φ25mm Socket Weld	Φ25mm Socket Weld	20.0	6.65
E3BSV2A1-0800-S□□□□	Φ8mm Tube Fitting	Φ8mm Tube Fitting	4.0	0.35
E3BSV2A1-1000-S□□□□	Φ10mm Tube Fitting	Φ10mm Tube Fitting	4.0	0.35
E3BSV2A2-1000-S□□□□	Φ10mm Tube Fitting	Φ10mm Tube Fitting	6.0	0.85
E3BSV2A2-1200-S□□□□	Φ12mm Tube Fitting	Φ12mm Tube Fitting	6.0	0.85
E3BSV2A2-1400-S□□□□	Φ14mm Tube Fitting	Φ14mm Tube Fitting	6.0	0.85
E3BSV2A2-1600-S□□□□	Φ16mm Tube Fitting	Φ16mm Tube Fitting	6.0	0.85
E3BSV2A3-1400-S□□□□	Φ14mm Tube Fitting	Φ14mm Tube Fitting	11.0	2.18
E3BSV2A3-1600-S□□□□	Φ16mm Tube Fitting	Φ16mm Tube Fitting	11.0	2.18
E3BSV2A3-2000-S□□□□	Φ20mm Tube Fitting	Φ20mm Tube Fitting	11.0	2.18
E3BSV2A4-2500-S□□□□	Φ25mm Tube Fitting	Φ25mm Tube Fitting	15.0	3.27
E3BSV3Q2-1400-S□□□□	Φ14mm Union TBW	Φ14mm Union TBW	6.0	0.85
E3BSV3Q2-1600-S□□□□	Φ16mm Union TBW	Φ16mm Union TBW	6.0	0.85
E3BSV3Q3-1400-S□□□□	Φ14mm Union TBW	Φ14mm Union TBW	11.0	2.18
E3BSV3Q3-1600-S□□□□	Φ16mm Union TBW	Φ16mm Union TBW	11.0	2.18

* For other connections and sizes, contact factory or local distributor.

Gauge Valves and Instrument Manifolds

- Ⓞ Working pressure, Stainless steel: 6000 psig(414 bar)
- Ⓞ Working temperature:
PTFE: -65°F to 450°F(-54°C to 232°C)
Graphite: -65°F to 1200°F(-54°C to 649°C)

- Ⓞ Orifice sizes: 0.25" (6.0mm); Cv: 0.85
- Ⓞ Two stems design. The upper stem has hardened threads, the lower stem has hardened smooth surface.
- Ⓞ Upper stem thread lubricant is isolated from system media.
- Ⓞ The lower stem performs vertical linear movement instead of screwing movement, significantly reducing the friction area.
- Ⓞ The nonrotating lower stem eliminates galling between the seat and tip.
- Ⓞ Stem back seating seals in the fully open position.
- Ⓞ Double lock-pink enable steady and durable fastening of the handle.
- Ⓞ All designs are tested for strength with pure water at 1.5 times the working pressure. Every valve is tested with nitrogen for leak-tight performance at 6000 psig or its maximum working pressure if less than 6000 psig.



Handle colors indicate functions:

Black = Isolate/Block **Red** = Test/Vent **Green** = Equalize

Gauge Valves (316 SS, PTFE packing)

E3GVBC1-0800-S□□□□	E3GVBC2-0800-S□□□□	E3GVBC3-0800-S□□□□

2-Valve Manifolds (316 SS, Graphite packing)

E3V2CP1-0800-S□□□□	E3V2CP2-0800-S□□□□	E3V2CP3-0800-S□□□□

* For other connections and sizes, contact factory or local distributor.

E3V2CP4-0800-S□□□□	E3V2CP5-0800-S□□□□	E3V2CP6-0800-S□□□□
E3V2CB7-0800-S□□□□	E3V2CP8-0800-S□□□□	Flow Diagram
		<p>Instrument</p>

3-Valve Manifolds (316 SS, Graphite packing)

E3V3CP1-0800-S□□□□	E3V3CP2-0800-S□□□□
E3V3CC3-0800-S□□□□	Flow Diagram
	<p>Instrument</p>

5-Valve Manifolds (316 SS, Graphite packing)

E3V5CP1-0800-S□□□□	E3V5CP2-0800-S□□□□	Flow Diagram A
		<p>Instrument</p>
E3V5CP3-0800-S□□□□	E3V5CP4-0800-S□□□□	Flow Diagram B
		<p>Instrument</p>

* For other connections and sizes, contact factory or local distributor.

3051 Transmitter Manifolds (316 SS, Graphite packing)

E3V2CP9-0800-S□□□□	E3V3CP4-0800-S□□□□	E3V5CP5-0800-S□□□□
Instrument	Instrument	Instrument

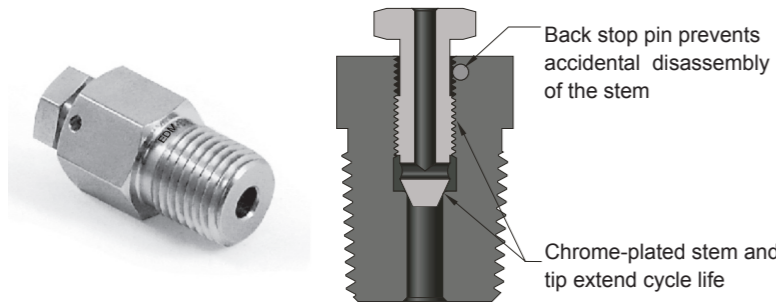
Manifold Mounting Brackets (316 SS)

	<p>E3MMB1-S□□□□</p>
	<p>E3MMB2-S□□□□</p>
	<p>E3MMB3-S□□□□</p>

* For other connections and sizes, contact factory or local distributor.

Bleed Valves

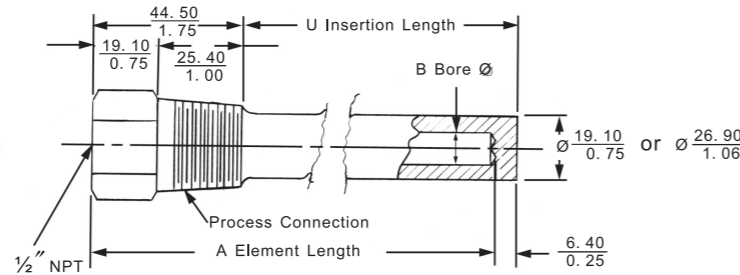
- @ Compact design for convenient installation
- @ Working Pressures up to 10000 Psig(690 bar)
- @ Working temperature from -65°F to 850°F(-53°C to 454°C)
- @ Stainless steel, carbon steel, and alloy R-405 body materials



NPT Male Pipe, in.	Basic Ordering Number (316 SS)
1/4	E3BVB1-0004-S□□□□
3/8	E3BVB1-0006-S□□□□
1/2	E3BVB1-0008-S□□□□
Metric Threads Size	Basic Ordering Number (316 SS)
M14×1.5	E3BVK1-1400-S□□□□
M20×1.5	E3BVK1-2000-S□□□□

Thermowells

- @ Maximum Working pressure 6200 psig (428 bar)
- @ Maximum working temperature 1000 °F (538 °C)
- @ Standard material: 316 SS, 304 SS and 321 SS

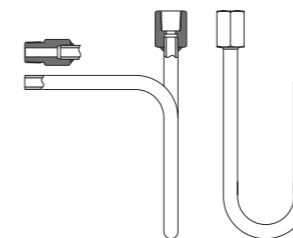
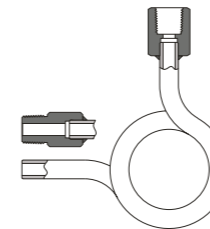


Ordering Number (316 SS)	U Insertion Length		A Element Length		B Bore Diameter		Ø Outer Diameter		Process Connection in. NPT(M)	Max. Process Pressure	
	mm	in	mm	in	mm	in	mm	in			
E3TWB1-1200-S□□□□	114.3	4.5	152.6	6	10.4	.41	19.10	.75	3/4"	6200PSI@500 °F	
E3TWB1-1600-S□□□□									1"		
E3TWB2-1200-S□□□□	190.5	7.5	228.6	9					3/4"		
E3TWB2-1600-S□□□□									1"		
E3TWB3-1600-S□□□□	190.5	7.5	228.6	9	16.8	.66	26.90	1.06	1"		4700PSI@1000 °F

* For other connections and sizes, contact factory or local distributor.

Syphons

- @ Working pressure up to 6000psig (414 bar)
- @ Working temperature up to 800°F(427°C)
- @ 316 SS, 304 SS and 321 SS materials

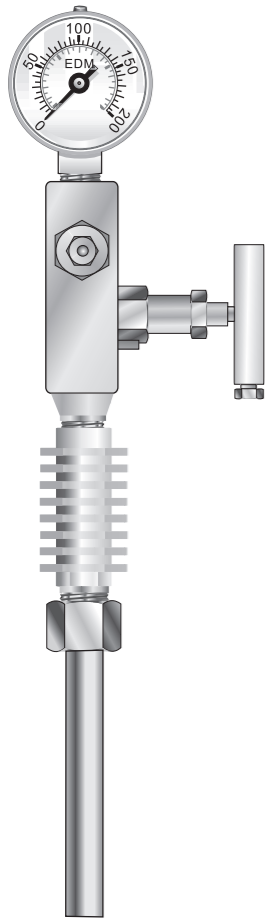
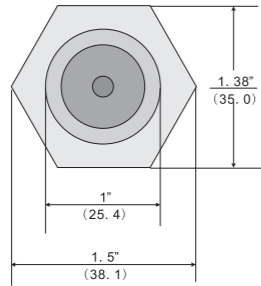
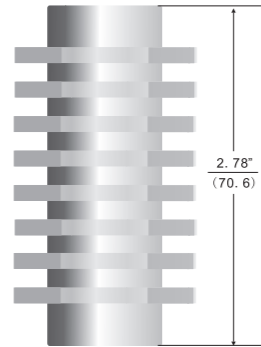


Top side	Bottom side	Ordering Number(316 SS)
1/2" NPT(F)	1/2" NPT(F)	E3SYC1-0800-S□□□□
1/2" NPT(F)	M20×1.5(F)	E3SVCJ-0820-S□□□□
1/2" NPT(F)	Φ14 TSW	E3SVCH-0814-S□□□□
M20×1.5(F)	M20×1.5(F)	E3SVJ1-2000-S□□□□
M20×1.5(F)	M20×1.5(M)	E3SVJK-2000-S□□□□
Φ14×2.5	Φ14×2.5	E3SV11-1400-S□□□□
1/2" NPT(M)	1/2" NPT(M)	E3SVB1-0800-S□□□□
1/2" NPT(M)	M20×1.5(M)	E3SVBK-0820-S□□□□
1/2" NPT(M)	M20×1.5(F)	E3SVBJ-0820-S□□□□
M20×1.5(M)	M20×1.5(M)	E3SVK1-2000-S□□□□
M20×1.5(M)	M20×1.5(F)	E3SVKJ-2000-S□□□□
1/2" NPT(F)	1/2" NPT(F)	E3SHC1-0800-S□□□□
1/2" NPT(F)	M20×1.5(F)	E3SHCJ-0820-S□□□□
1/2" NPT(F)	Φ14 TSW	E3SHCH-0814-S□□□□
M20×1.5(F)	M20×1.5(F)	E3SHJ1-2000-S□□□□
M20×1.5(F)	M20×1.5(M)	E3SHJK-2000-S□□□□
Φ14×2.5	Φ14×2.5	E3SH11-1400-S□□□□
1/2" NPT(M)	1/2" NPT(M)	E3SHB1-0800-S□□□□
1/2" NPT(M)	M20×1.5(M)	E3SHBK-0820-S□□□□
1/2" NPT(M)	M20×1.5(F)	E3SHBJ-0820-S□□□□
M20×1.5(M)	M20×1.5(M)	E3SHK1-2000-S□□□□
M20×1.5(M)	M20×1.5(F)	E3SHKJ-2000-S□□□□
1/2" NPT(F)	1/2" NPT(F)	E3SUC1-0800-S□□□□
1/2" NPT(F)	M20×1.5(F)	E3SUCJ-0820-S□□□□
1/2" NPT(F)	Φ14 TSW	E3SUCH-0814-S□□□□
M20×1.5(F)	M20×1.5(F)	E3SUJ1-2000-S□□□□
M20×1.5(F)	M20×1.5(M)	E3SUJK-2000-S□□□□
Φ14×2.5	Φ14×2.5	E3SU11-1400-S□□□□
1/2" NPT(M)	1/2" NPT(M)	E3SUB1-0800-S□□□□
1/2" NPT(M)	M20×1.5(M)	E3SUBK-0820-S□□□□
1/2" NPT(M)	M20×1.5(F)	E3SUBJ-0820-S□□□□
M20×1.5(M)	M20×1.5(M)	E3SUK1-2000-S□□□□
M20×1.5(M)	M20×1.5(F)	E3SUKJ-2000-S□□□□

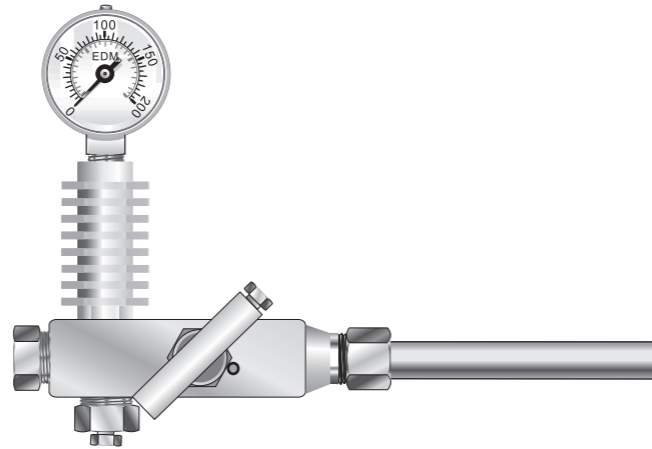
* For other connections and sizes, contact factory or local distributor.

Gauge Syphon

- @ Maximum working pressure 6000 psig (414 bar)
- @ Maximum working temperature 1000 °F (538 °C)
- @ Standard material: 316 SS, 304 SS and 321 SS



Ordering Number (316 SS)	Bottom Side	Top Side
E3GSH1-1400-S□□□□	Φ14mm TSW	Φ14mm TSW
E3GSH1-1600-S□□□□	Φ16mm TSW	Φ16mm TSW
E3GSH1-1614-S□□□□	Φ16mm TSW	Φ14mm TSW
E3GSH1-0800-S□□□□	1/2" TSW	1/2" TSW
E3GSHJ-1420-S□□□□	Φ14mm TSW	M20×1.5(F)
E3GSHJ-1620-S□□□□	Φ16mm TSW	M20×1.5(F)
E3GSC1-0800-S□□□□	1/2" NPT(F)	1/2" NPT(F)
E3GSCB-0800-S□□□□	1/2" NPT(F)	1/2" NPT(M)
E3GSB1-0800-S□□□□	1/2" NPT(M)	1/2" NPT(M)
E3GSJ1-2000-S□□□□	M20×1.5(F)	M20×1.5(F)
E3GSKJ-2000-S□□□□	M20×1.5(M)	M20×1.5(F)
E3GSK1-2000-S□□□□	M20×1.5(M)	M20×1.5(M)
E3GSBK-0820-S□□□□	1/2" NPT(M)	M20×1.5(M)
E3GSBJ-0820-S□□□□	1/2" NPT(M)	M20×1.5(F)
E3GSCJ-0820-S□□□□	1/2" NPT(F)	M20×1.5(F)
E3GSCK-0820-S□□□□	1/2" NPT(F)	M20×1.5(M)




* For other connections and sizes, contact factory or local distributor.

Tools and Accessories

Hand Tube Benders

- @ For bending stainless steel and copper tubing
- @ For bending 1/4" to 1/2" and 6mm to 16mm outside diameter tubing
- @ 1° to 180° bending range

Configuration	Type	Ordering Number
	For 1/4" Tube	ESB-04
	For 3/8" Tube	ESB-06
	For 1/2" Tube	ESB-08
	For 6mm Tube	ESB-6M
	For 8mm Tube	ESB-8M
	For 10mm Tube	ESB-10M
	For 12mm Tube	ESB-12M
	For 14mm Tube	ESB-14M
	For 16mm Tube	ESB-16M

Tube Cutter

Ordering Number: ESTC-03

- @ For cutting stainless steel, copper, and aluminum tubing
- @ For cutting 1/8" to 2" and 3mm to 50mm outside diameter tubing



Tube Deburring Tool

Ordering Number: ESDT-03

- @ For deburring tubing made from stainless steel, steel, and copper materials
- @ For deburring 3/16" to 1 1/2" and 4mm to 38mm outside diameter tubing



Universal Adapters Cases

- @ Carefully selected adapters, hoses, and gaskets in one case for convenience
- @ Customer specified adapters available

Ordering Numbers:

- ESA-065P: 65 standard pieces inside
- ESA-065PC: 65 customer specified pieces inside
- ESA-030P: 30 standard pieces inside
- ESA-030PC: 30 customer specified pieces inside



* For other connections and sizes, contact factory or local distributor.