ANSI B16.11 Socket Welded High Pressure Tee For Petroleum Industry

Our Product Introduction

Basic Information

- Place of Origin: CHINA
- Brand Name: DEYE
- Certification: ISO9001:2015 PED
- Model Number: PF-BS-F2
- Minimum Order Quantity: 10PCS
- Price: USD2-USD50 each pc as per different material
- Packaging Details: cartons + ply-wooden cases
- Delivery Time: 7 days for stock items
- Payment Terms: L/C, , T/T, D/P
- Supply Ability: 10000pcs each momth

Product Specification

- Standard: ANSI B16.11
- Material: A105, A105N. A350LF2, F22, SS316, SS304, DUPLEX SS, ALLOY STEEL
- Rating: 2000#, 3000#, 6000#, 9000# 2000LBS 3000LBS 6000LBS 9000LBS
- Connection: Socket Welded SW Threaded NPT BSPT BSPP
- Size: 1/4"-4"
- Surface: Black, Pickling, Anti-rust Oil
- Highlight: **ANSI B16.11 high pressure tee**, **Petroleum Industry high pressure tee**, **4in socket weld tee**

Product Description

3000lbs Socket Welded High Pressure straight Tee For Petroleum Industry

Forged high pressure fittings are a type of pipe fittings that are manufactured through the forging process. The forging process involves shaping metal by applying localized compressive forces using dies and hammers or presses. This process results in a strong and dense structure with improved mechanical properties compared to fittings made through other methods such as casting.

Product Information/Product Description/Basis Information/Specification

ASME B16.11	Forged threaded fittings:90-deg elbow,45-deg elbow,tee,cross,coupling,half-coupling,cap,square head plug,hex head plug,round head plug,hex head bushing,flush bushing,street elbows
ASME B16.11	Fogred socket weld fittings:90-deg elbow,45-deg elbow,tee,cross,coupling,half-coupling,cap
MSS SP83	Steel Pipe Unions(socket welding and threaded end)
MSS SP95	swage nipples,bull plug(ends may be threaded,beveled,plain)
MSS SP79	socket welding reducer inserts
MSS SP97	weldolets,threadolets,sockolets,flangolets,elbolet,sweepolets,saddle,nipolets,brazolets,latrolets,insertolets

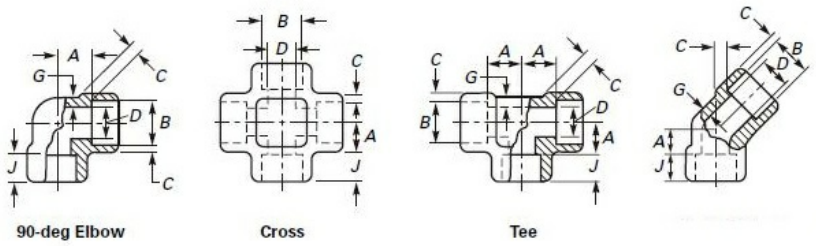
Forged Steel Fitting		
Name	45D/90D Elbow, Street Elbow, Tee, Cross, Cap, Coupling, Half Coupling, Plug, Bushing, Unin, Hexagon Nipple Outlet, Weldolet, Threadolet, Sockolet, Bull plug, Reducer Insert, Pipe Nipple, Swage Nipple	
H.S. Code	7307920000	
Pressure	Threaded Type	2000LBS, 3000LBS, 6000LBS
	Socket-Weld Type	3000LBS, 6000LBS, 9000LBS
Surface Finish	Anti-Rust Oil,Hot Dipped Galvanised,Customized.	
Technology	Forged	
Standard	American Standard	ANSI B16.11, MSS SP 97, MSS SP 95, MSS SP 83, ASTM A733
	British Standard	BS3799
	Japan Standard	JIS B2316
Size	1/8" - 6" (DN6 - DN150)	
Wall Thickness	SCH5S,SCH10S,SCH10,SCH40S,STD,XS,XXS,SCH20,SCH30,SCH40,SCH60,SCH80,SCH160,XXS	
Materials	Mild/Carbon Steel	A234 WPB/WPC,A105,A105N, A350LF2, F11, F22
	Stainless Steel	A403 WP304,304(L),316(L),321,310S,347H,316Ti,317(L),F904L,1.4301,1.4307,1.4401,1.4571,1.4541
	Duplex Stainless Steel	UNS31803,SAF2205,UNS32205,UNS31500,UNS32750,UNS32760,1.4462,1.4410,1.4501
	Alloy Steel	Alloy20,A860 WPHY 42-46-52-60-65-70

Features /Characteristics

Strength and Durability: Forged pipe fittings are known for their superior strength and durability compared to fittings made through other manufacturing methods. The forging process creates a dense and compact structure that can handle high-pressure and high-temperature applications.
Leak-Free Performance: The tight grain structure of forged fittings ensures a leak-free connection. The absence of porosity or voids in the metal reduces the risk of leaks or failures, making them suitable for critical applications where leakage is not acceptable.
Pressure Ratings: Forged pipe fittings generally have higher pressure ratings compared to fittings made by other methods. This makes them ideal for systems that operate under high pressure conditions.
Resistance to Corrosion: Forged fittings are available in various materials such as carbon steel, stainless steel, and alloy steel, which offer excellent resistance to corrosion. The choice of material depends on the specific requirements of the application, ensuring compatibility with the transported fluid or gas.
Wide Range of Shapes and Sizes: Forged pipe fittings are available in a wide range of shapes and sizes to meet different piping system requirements. Common types include elbows, tees, crosses, couplings, unions, caps, and plugs.
Versatility: Forged fittings are suitable for use in various industries such as oil and gas, petrochemicals, power generation, and chemical processing. They can handle different types of fluids, gases, and temperatures, making them versatile for diverse applications.
Quality and Consistency: Due to the controlled forging process, forged pipe fittings exhibit consistent quality and dimensional accuracy. This ensures that the fittings can be easily installed and provide a reliable connection within the piping system.
Longevity: With their robust construction and resistance to wear and tear, forged fittings offer a longer service life compared to other types of fittings. Proper installation, maintenance, and adherence to recommended operating conditions can further enhance their longevity.

Technology/ Technical Data Sheets

Dimension of socket welding Fittings for 90-Deg Elbow, Cross, Tee, 45deg elbow



90-deg Elbow Cross Tee

Nominal Pipe Size	Socket Bore Diameter, B [Note (1)]	Bore Diameter of Fittings, D [Note (1)] Class Designation 3000	6000	9000	Socket Wall Thickness, C [Note (2)] Class Designation 3000 Avg.	3000 Min.	6000 Avg.	6000 Min.	9000 Avg.	9000 Min.	Body Wall, G Class Designation 3000 Min.	6000 Min.	9000 Min.	Min. Depth of Socket, J
⅛	0.440	0.299	0.189	...	0.125	0.125	0.156	0.135	...	...	0.095	0.124	...	0.38
	0.420	0.239	0.126	...										
¼	0.575	0.394	0.280	...	0.149	0.130	0.181	0.158	...	...	0.119	0.145	...	0.38
	0.555	0.334	0.220	...										
⅜	0.710	0.523	0.389	...	0.158	0.138	0.198	0.172	...	...	0.126	0.158	...	0.38
	0.690	0.463	0.329	...										
½	0.875	0.652	0.494	0.282	0.184	0.161	0.235	0.204	0.368	0.322	0.147	0.188	0.294	0.38
	0.855	0.592	0.434	0.222										
¾	1.085	0.854	0.642	0.464	0.193	0.168	0.274	0.238	0.385	0.337	0.154	0.219	0.308	0.50
	1.065	0.794	0.582	0.404										
1	1.350	1.079	0.845	0.629	0.224	0.196	0.312	0.273	0.448	0.392	0.179	0.250	0.358	0.50
	1.330	1.019	0.785	0.569										
1¼	1.695	1.410	1.190	0.926	0.239	0.208	0.312	0.273	0.478	0.418	0.191	0.250	0.382	0.50
	1.675	1.350	1.130	0.866										
1½	1.935	1.640	1.368	1.130	0.250	0.218	0.351	0.307	0.500	0.438	0.200	0.281	0.400	0.50
	1.915	1.580	1.308	1.070										
2	2.426	2.097	1.717	1.533	0.273	0.238	0.430	0.374	0.545	0.477	0.218	0.344	0.436	0.62
	2.406	2.037	1.657	1.473										
2½	2.931	2.529	...	...	0.345	0.302	...	...	...	...	0.276	...	...	0.62
	2.906	2.409	...	...										
3	3.560	3.128	...	...	0.375	0.327	...	...	...	...	0.300	...	...	0.62
	3.535	3.008	...	...										
4	4.570	4.086	...	...	0.421	0.368	...	...	...	...	0.337	...	...	0.75
	4.545	3.966	...	...										

General Note: Dimensions are in millimeters.

Application/Usage

Forged high pressure fittings are commonly used in a variety of industries and applications involving high pressure fluid or gas systems. Some specific applications and uses of forged high pressure fittings include: Oil and Gas Industry, Power Generation, Chemical Processing,Pharmaceutical industry, Water Treatment, Mining and Construction, Aerospace and Defense HVAC and Piping

Material Grades:

Forged high pressure pipefittings here mentioned below are only a few of those covered by B16.11 standard. The physical and chemical values indicated correspond to the latest issued standard, although they are affected by modifications year after year, so we suggest to use them only as a guide.

Chemical Composition

ASTM Designation		Analysis in % C	Mn	Si	Max. P	Max. S	Cr	Ni	Mo
A105 - 05									
		max. 0.35	0.60 - 1.05	0.10 - 0.35	0.035	0.04	max. 0.3 [3 4]	max. 0.4 [3 4]	max. 0.12 [3]
A182 - 07									
Grades	F1 F5	max. 0.25	0.60 - 0.90	0.15 - 0.35	0.045	0.045	4.00 - 6.00	max. 0.50	0.44 - 0.65
	F11 Cl. 1	max. 0.15	0.30 - 0.60	max. 0.50	0.030	0.030	1.00 - 1.50		0.44 - 0.65
		0.05 - 0.15	0.30 - 0.60	0.50 - 1.00	0.030	0.030			0.44 - 0.65
	F11 Cl. 2 / Cl. 3	0.10 - 0.20	0.30 - 0.80	0.50 - 1.00	0.040	0.040	1.00 - 1.50	8.00 - 11.00	0.44 - 0.65
	F22 Cl. 1 / Cl. 3	0.05 - 0.15	0.30 - 0.60	max. 0.5	0.040	0.040	2.00 - 2.50		0.87 - 1.13
	F304 [1]	max. 0.08	max. 2.00	max. 1.00	0.045	0.030	18.00 - 20.00		
	F304 L [1]	max. 0.030	max. 2.00	max. 1.00	0.045	0.030	18.00 - 20.00	8.00 - 13.00	
	F316 [1]	max. 0.08	max. 2.00	max. 1.00	0.045	0.030	16.00 - 18.00	10.00 - 14.00	2.00 - 3.00
	F316L [1]	max. 0.030	max. 2.00	max. 1.00	0.045	0.030	16.00 - 18.00	10.00 - 15.00	2.00 - 3.00
	F321 [2]	max. 0.08	max. 2.00	max. 1.00	0.045	0.030	17.00 - 19.00	9.00 - 12.00	
A350 - 04									
Grades	LF1	max. 0.30	0.60 - 1.35	0.15 - 0.30	0.035	0.040	max. 0.3 [3 4]	max. 0.4 [3]	max. 0.12 [3]
	LF2 Cl. 1	max. 0.30	0.60 - 1.35	0.15 - 0.30	0.035	0.040	max. 0.3 [3 4]	max. 0.4 [3]	max. 0.12 [3]
	LF2 Cl. 2 LF3	max. 0.30	0.60 - 1.35	0.20 - 0.35	0.035	0.040	max. 0.3 [3 4]	max. 0.4 [3]	max. 0.12 [3]
		max. 0.20	max. 0.90	0.20 - 0.35	0.035	0.040	max. 0.3 [3 4]	3.3 - 3.7	max. 0.12 [3]
A694 - 03									
Grades	F42 / F52 / F56 F60 / F65 / F70	max. 0.26	max. 1.4	0.15 - 0.35	0.025	0.025			

PHYSICAL PROPERTIES

ASTM Designatioin		Tensile strength		Fluency limit Elongation in 50 mm.			Stress	Brinell
		Ksi min.	MPa	Ksi min.	MPa	% min.	% min.	Hardness (HB)
A105 - 05								
		70	485	36	250	22	30	187 max.
A182 - 07								
Grades	F1	70	485	40	275	20	30	143 - 192
	F5	70	485	40	275	20	35	143 - 217
	F11 Cl. 1	60	415	30	205	20	45	121 - 174
	F11 Cl. 2	70	485	40	275	20	30	143 - 207
	F11 Cl. 3	75	515	45	310	20	30	156 - 207
	F22 Cl. 1	60	415	30	205	20	35	170 max.
	F22 Cl. 3	75	515	45	310	20	30	
	F304	751	5151	30	205	30	50	156 - 207
	F304L	702	4852	25	170	30	50	
	F316	751	5151	30	205	30	50	
	F316L	702	4852	25	170	30	50	
	F321	751	5151	30	205	30	50	
A350 - 04								
Grades	LF1	60 - 85	415 - 585	30 [3 4]	205	25	38	197 max.
	LF2 Cl. 1	70 - 95	485 - 655	36 [3 4]	250	22	30	197 max.
	LF2 Cl. 2	70 - 95	485 - 655	36 [3 4]	250	22	30	197 max.
	LF3 Cl. 1	70 - 95	485 - 655	37.5 [3 4]	260	22	35	197 max.
	LF3 Cl. 2	70 - 95	485 - 655	37.5 [3 4]	260	22	35	197 max.
A694 - 03								
Grades	F42	60	415	42	290	20		
	F52	66	455	52	360	20		
	F56	68	470	56	385	20		
	F60	75	515	60	415	20		
	F65	77	530	65	450	20		
	F70	82	565	70	485	18		

Products for shipment

Our Service

1. Technical support
2. Raw Material Quality control.
3. Inspection during the production time.
4. Final Test includes Surface, Dimension, PT Test, RT test, ultrasonic Test
5. Test Report each shipment
4. Flexible Delivery terms. EXW FOB CIF CFR DDP DDU
5. Flexible payment Ways: LC. TT. DP
6. Customized Package includes Logo. Cases Dimension.
7. 18 months quality Guarantee time.
9. Free replacement by air if any error founded
10. 24 hours to Feedback your questions

SHIJIAZHUANG DEYE PIPING INDUSTRY CO., LTD Pipefittings Department)

+8613292824811 sales@deyepiping.com piping-industry.com

No. 368 Youyi St. Shijiazhuang, Hebei, China