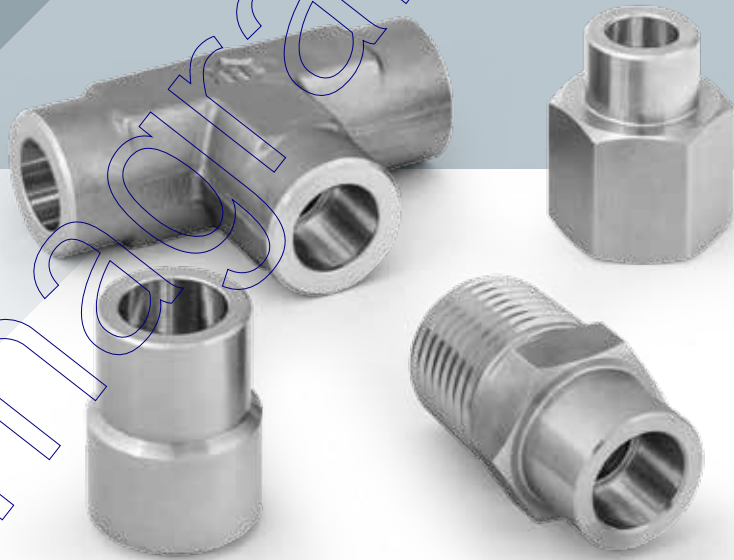


HAM-LET PRECISION  
INSTRUMENT WELD FITTINGS

**WELDLINE**



## HAM-LET WELDLINE FITTINGS

### MATERIAL

Standard material is 316L stainless steel and is in accordance with ASTM A479 and ASTM A276. 316 / 316L Stainless steel SHAPED items are manufactured from material in accordance with ASTM A182. Cleaning requirements: Per HAM-LET STD Cleaning SOP 8184.

### HOW TO ORDER:

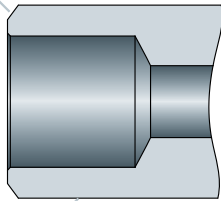
EXAMPLE:

I		P		94 TS		04H04	
INCH / MM		Material		Fittings Designator		Size Designator	
I - Inch		P -	Stainless Steel 316	TS	Tube Socket weld	inch	mm
M - mm				TBW	Tube Butt Weld	04 = 1/4	06 = 6mm
			All orders should include material description and ordering information (see product table).	PT	Pipe Butt weld to Tube Socket Weld	06 = 3/8	08 = 8mm
				PS	Pipe Socket weld	08 = 1/2	10 = 10mm
				PBW	Pipe Butt weld	12 = 3/4	12 = 12mm
						16 = 1"	

### PBW - PIPE BUTT WELD

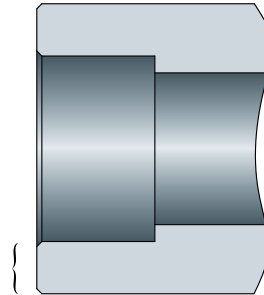
37.5° chamfer for proper weld Fillet

Outside diameter matches pipe size.



### PS - PIPE SOCKET WELD

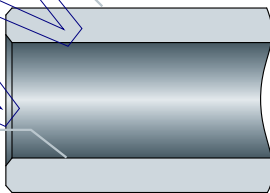
Heavy wall plus strength of material assures long life in severe service application



### TBW - TUBE BUTT WELD

Male tube weld

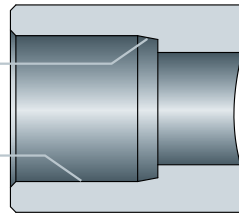
Quality machining of all surfaces assures consistent welding to tube



### TS - TUBE SOCKET WELD

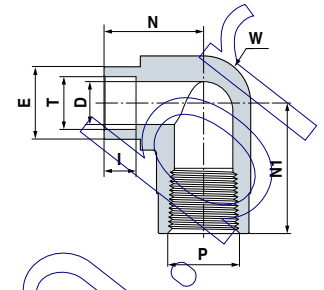
Tapered socket speeds layout, assembly & alignment

Precise machining of socket assures proper tube fit



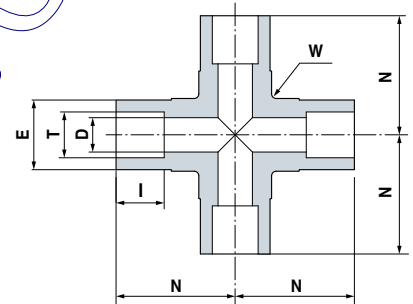
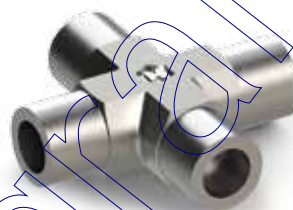
Accurate socket depth assures proper tube support & consistent assembly

**IP90TS  
TUBE SOCKET WELD  
FEMALE ELBOW**



Ordering Information	T Tube O.D.	P NPT	N		N1		I		D Min. Opening		E		W Wrench Flat		Working Pressure [Psi]
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
IP90TS04H04	1/4	1/4	0.9	22.9	1.17	29.7	0.28	7.1	0.19	4.8	0.48	12.2	13/16	20.6	6600
IP90TS06H04	3/8	1/4	0.99	25.1	1.17	29.7	0.31	7.9	0.28	7.1	0.60	15.2	13/16	20.6	5300
IP90TS06H08	3/8	1/2	1.13	28.7	1.56	39.6	0.31	7.9	0.28	7.1	0.60	15.2	1 1/8	28.6	4900
IP90TS08H08	1/2	1/2	1.19	30.2	1.56	39.6	0.38	9.7	0.41	10.4	0.73	18.5	1 1/8	28.6	4900

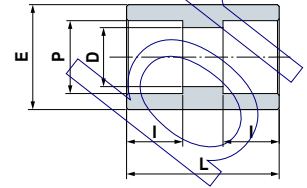
**IP91TS  
TUBE SOCKET WELD  
UNION CROSS**



Ordering Information	T Tube O.D.	N		I		D Min. Opening		E		W Wrench Flat		Working Pressure [Psi]
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
IP91TS04H00	1/4	0.86	21.8	0.28	7.1	0.19	4.8	0.53	13.5	5/8	15.8	10300
IP91TS06H00	3/8	1.04	26.4	0.31	7.9	0.28	7.1	0.64	16.3	13/16	20.6	8100
IP91TS08H00	1/2	1.13	28.7	0.38	9.7	0.41	10.4	0.81	20.6	13/16	20.6	6600
IP91TS12H00	3/4	1.49	37.9	0.44	11.2	0.62	15.7	1.20	30.5	1 3/8	34.9	5900
IP91TS16H00	1	1.92	48.8	0.62	15.7	0.88	22.4	1.45	36.8	1 11/16	42.9	5600

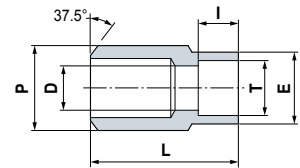
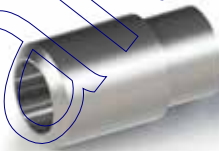
www.ham-let.com

## IP92PS PIPE SOCKET WELD UNION



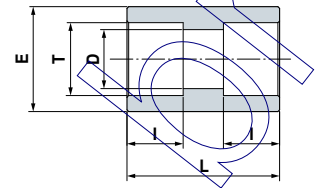
Ordering Information	P Pipe Size.	L		I		D Min. Opening		E		Working Pressure [Psi]
		inch	mm	inch	mm	inch	mm	inch	mm	
IP92PS04H00	1/4	1.06	26.9	0.39	9.9	0.36	9.1	0.88	22.4	8100
IP92PS06H00	3/8	1.12	28.4	0.39	9.9	0.49	12.4	1.03	26.2	7100
IP92PS08H00	1/2	1.12	28.4	0.39	9.9	0.62	15.7	1.25	31.8	6800
IP92PS12H00	3/4	1.75	44.5	0.51	13.0	0.82	20.8	1.47	37.3	5800
IP92PS16H00	1	1.75	44.5	0.51	13.0	1.05	26.7	1.86	47.2	6100

## IP92PT PIPE BUTT WELD TO TUBE SOCKET WELD



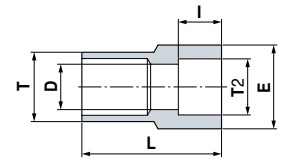
Ordering Information	P Pipe Size	T Tube O.D.	L		I		D Min. Opening		E		Working Pressure [Psi]
			inch	mm	inch	mm	inch	mm	inch	mm	
IP92PT04H04	1/4	1/4	0.88	22.4	0.28	7.1	0.19	4.8	0.48	12.2	10300
IP92PT06H06	3/8	3/8	1.03	26.2	0.31	7.9	0.28	7.1	0.60	15.2	8100
IP92PT06H08	3/8	1/2	1.00	25.4	0.38	7.9	0.41	10.4	0.73	18.5	6600
IP92PT08H04	1/2	1/4	1.12	28.4	0.28	7.1	0.19	4.8	0.48	12.2	7800
IP92PT08H06	1/2	3/8	1.12	28.4	0.31	7.9	0.28	7.1	0.60	15.2	7800
IP92PT08H08	1/2	1/2	1.19	30.2	0.38	9.7	0.41	10.4	0.73	18.5	6600
IP92PT12H06	3/4	3/8	1.50	38.1	0.31	7.9	0.28	7.1	0.60	15.2	6600
IP92PT12H08	3/4	1/2	1.50	38.1	0.38	9.7	0.41	10.4	0.73	18.5	6600
IP92PT12H12	3/4	3/4	1.50	38.1	0.44	11.2	0.62	15.7	1.05	26.7	5900
IP92PT16H06	1	3/8	1.38	35.1	0.31	7.9	0.28	7.1	0.60	15.2	6000
IP92PT16H08	1	1/2	1.56	39.6	0.38	9.7	0.41	10.4	0.73	18.5	6000

**IP92TS  
TUBE SOCKET  
WELD UNION**



Ordering Information	T Tube O.D.	L		I		D Min. Opening		E		Working Pressure [Psi]
		inch	mm	inch	mm	inch	mm	inch	mm	
IP92TS04H00	1/4	0.75	19.1	0.28	7.1	0.19	4.8	0.48	12.2	10300
IP92TS06H00	3/8	0.88	22.4	0.31	7.9	0.28	7.1	0.60	15.2	8100
IP92TS08H00	1/2	1.06	26.9	0.38	9.7	0.41	10.4	0.73	18.5	6600
IP92TS12H00	3/4	1.31	33.3	0.44	11.2	0.62	15.7	1.04	26.4	5900
IP92TS16H00	1	1.44	36.6	0.62	15.7	0.88	22.4	1.36	34.6	5600

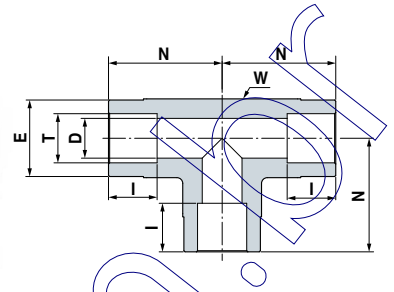
**IP93TBW  
TUBE BUTT WELD TO  
TUBE SOCKET WELD**



Ordering Information	T Tube O.D.	T2 Tube O.D.	L		I		D Min. Opening		E		Working Pressure [Psi]
			inch	mm	inch	mm	inch	mm	inch	mm	
IP93TBW04H02	1/4	1/8	0.56	14.9	0.10	2.5	0.09	2.3	0.29	7.4	12600
IP93TBW06H04	3/8	1/4	0.75	19.1	0.28	7.1	0.19	4.8	0.48	12.2	8200
IP93TBW08H04	1/2	1/4	0.88	22.4	0.28	7.1	0.19	4.8	0.50	12.7	7500
IP93TBW08H06	1/2	3/8	0.88	22.4	0.31	7.9	0.33	8.4	0.60	15.2	7500
IP93TBW12H08	3/4	1/2	1.12	28.4	0.38	9.7	0.41	10.4	0.75	19.1	6300
IP93TBW16H08	1	1/2	1.38	35.1	0.38	9.7	0.41	10.4	0.73	18.5	5300

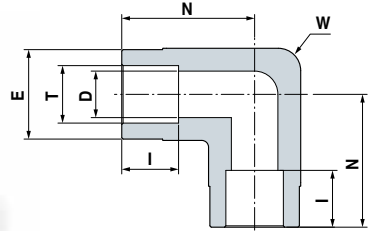
www.ham-let.com

IP94TS  
**TUBE SOCKET WELD  
 UNION TEE**



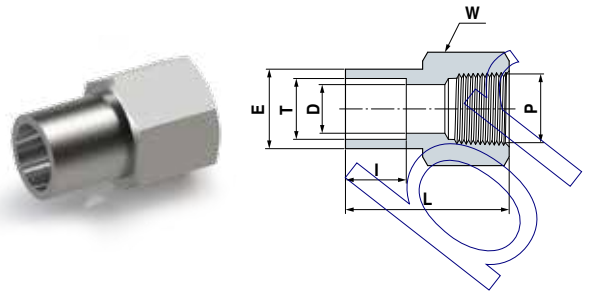
Ordering Information	T Tube O.D.	N		I		D Min. Opening		E		W Wrench Flat		Working Pressure [Psi]
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
IP94TS02H00	1/8	0.59	15.0	0.10	2.5	0.09	2.3	0.35	9.0	7/16	11.1	12600
IP94TS04H00	1/4	0.86	21.8	0.28	7.1	0.19	4.8	0.53	13.5	5/8	15.9	10300
IP94TS06H00	3/8	1.04	26.4	0.31	7.9	0.28	7.1	0.69	17.5	11/16	17.5	8100
IP94TS08H00	1/2	1.17	29.7	0.38	9.7	0.41	10.4	0.81	20.6	13/16	20.6	6600
IP94TS12H00	3/4	1.56	39.6	0.44	11.2	0.62	15.7	1.13	28.6	1 1/8	28.6	5900
IP94TS16H00	1	1.92	48.8	0.62	15.7	0.88	22.4	1.45	36.8	1 11/16	42.9	5600

IP95TS  
**TUBE SOCKET WELD  
 UNION ELBOW**



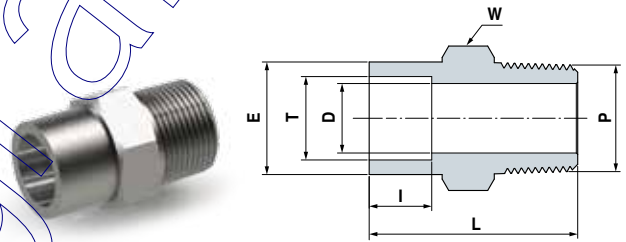
Ordering Information	T Tube O.D.	N		I		D Min. Opening		E		W Wrench Flat		Working Pressure [Psi]
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
IP95TS04H00	1/4	0.86	21.8	0.28	7.1	0.19	4.8	0.53	13.5	5/8	15.8	10300
IP95TS06H00	3/8	1.04	26.4	0.31	7.9	0.28	7.1	0.69	17.5	11/16	17.5	8100
IP95TS08H00	1/2	1.17	29.7	0.38	9.7	0.41	10.4	0.81	20.6	13/16	20.6	6600
IP95TS12H00	3/4	1.56	39.6	0.44	11.2	0.62	15.7	1.13	28.6	1 1/8	28.6	5900
IP95TS16H00	1	1.92	48.8	0.62	15.7	0.88	22.4	1.45	36.8	1 11/16	42.9	5600

**IP96TS**  
**TUBE SOCKET WELD**  
**FEMALE CONNECTOR**



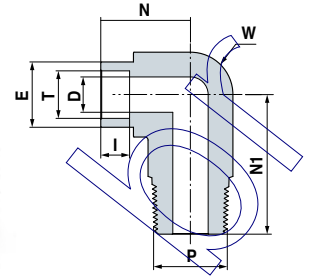
Ordering Information	T TUBE O.D.	P NPT	L		I		D Min. Opening		E		W Hex Flat	Working Pressure [Psi]
			inch	mm	inch	mm	inch	mm	inch	mm		
IP96TS02H02	1/8	1/8	0.83	21.1	0.10	2.5	0.09	2.3	0.29	7.4	9/16	6500
IP96TS04H02	1/4	1/8	1.05	26.7	0.28	7.1	0.19	4.8	0.48	12.2	9/16	6500
IP96TS04H04	1/4	1/4	1.18	30.0	0.28	7.1	0.19	4.8	0.48	12.2	3/4	6600
IP96TS06H04	3/8	1/4	1.24	31.5	0.31	7.9	0.28	7.1	0.60	15.2	3/4	6600
IP96TS08H06	1/2	3/8	1.36	34.5	0.38	9.7	0.41	10.4	0.73	18.5	7/8	5300
IP96TS08H08	1/2	1/2	1.59	40.4	0.38	9.7	0.41	10.4	0.73	18.5	1 1/16	4900
IP96TS12H12	3/4	3/4	1.73	43.9	0.44	11.2	0.62	15.7	1.04	26.4	1 5/16	4600

**IP98TS**  
**TUBE SOCKET WELD**  
**MALE CONNECTOR**



Ordering Information	T TUBE O.D.	P NPT	L		I		D Min. Opening		E		W Hex Flat	Working Pressure [Psi]
			inch	mm	inch	mm	inch	mm	inch	mm		
IP98TS04H04	1/4	1/4	1.15	29.2	0.28	7.1	0.19	4.8	0.48	12.2	9/16	8000
IP98TS06H04	3/8	1/4	1.25	31.8	0.31	7.9	0.28	7.1	0.62	15.8	5/8	8000
IP98TS06H06	3/8	3/8	1.25	31.8	0.31	7.9	0.28	7.1	0.62	15.8	11/16	7800
IP98TS06H08	3/8	1/2	1.47	37.3	0.31	7.9	0.28	7.1	0.62	15.8	7/8	7700
IP98TS08H04	1/2	1/4	1.31	33.3	0.38	9.7	0.28	7.1	0.73	18.5	3/4	6600
IP98TS08H06	1/2	3/8	1.31	33.3	0.38	9.7	0.38	9.7	0.73	18.5	3/4	6600
IP98TS08H08	1/2	1/2	1.53	38.9	0.38	9.7	0.41	10.4	0.73	18.5	7/8	6600

IP99TS  
**TUBE SOCKET WELD  
 MALE ELBOW**



Ordering Information	T Tube O.D.	P NPT	N		N1		I		D Min. Opening		E		W Wrench Flat		Working Pressure [Psi]
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm			
IP99TS04H04	1/4	1/4	0.79	20.1	0.94	24.0	0.28	7.1	0.19	4.8	0.48	12.2	1/2	12.7	8000
IP99TS06H04	3/8	1/4	1.04	26.4	1.05	26.7	0.31	7.9	0.28	7.1	0.64	16.3	11/16	17.5	8000
IP99TS06H06	3/8	3/8	0.97	24.6	1.03	26.2	0.31	7.9	0.28	7.1	0.60	15.2	11/16	17.5	7800
IP99TS06H08	3/8	1/2	1.02	25.9	1.45	36.9	0.31	7.9	0.28	7.1	0.60	15.2	13/16	20.6	7700
IP99TS08H08	1/2	1/2	1.08	27.4	1.45	36.9	0.38	9.7	0.41	10.4	0.73	18.5	13/16	20.6	6600