



TUBES :-

Tubes is Customarily Specified by it's Outside Diameter (O.D.) and Wall Thickness (W.T) expressed either in Birmingham Wire Gauge (BWG) or in thousandths of an inch.

DIM. STD :- ASME B36.19 - B36.10. **GAUGE :-** 12 / 14 / 16 / 18 / 20 / 22

GRADE :- ASTM/ASME A213 & A269 Gr.TP304, 304L, 310, 316, 316L, 317, 317L,321 & 347
DUPLEX, SUPER DUPLEX,CU-NI,MONEL HEASTOLOY



TYPE :- ERW / SEAMLESS

PIPES :-

Pipes is Customarily Identified by "Nominal Pipe Size" (NPS), with Wall Thickness (W.T) defined by Schedule Number (SCH).

DIM. STD :- ASME B36.19 - B36.10.

SCH :- 5,5S,10,10S,20,30,40,40S,60,80,80S,100,120,140,160,STD,XS AND XXS

GRADE :- ASTM/ASME A53, A106, API 5L Gr.B & A335 Gr.P5, P9, P11, P22, P91, P92
ASTM/ASME A312 & A358 Gr.TP304, 304L, 310, 316, 316L, 317, 317L,321 & 347
DUPLEX, SUPER DUPLEX,CU-NI,MONEL HEASTOLOY,BRASS,NICKEL.

PHOTO :-



TYPE :- ERW / SEAMLESS



FITTINGS :- BUTTWELD FITTINGS

Buttweld Pipe Fittings is defined as a part used in a Piping System, for Changing Direction, Branching or for change of Pipe Diameter, and which is Mechanically joined to the system. There are many different type of Fittings and they are the same in all Sizes and Schedules as the Pipe.

TYPE :- ELBOW, 45°/90°LR
ELBOW, 45°/90°SR
ELBOW, 180° LR/SR
END CAPS
REDUCER CONCENTRIC - ECCENTRIC
TEE - EQUAL & REDUCING
STUB END (MSS SP-43/B16.9)
SWAGE NIPPLE - CONC. & ECC.



DIM. STD :- ASME B16.9 - B36.10.

GRADE :- ASTM/ASME A234 GR.WPB, WP5, WP11, WP22, WP91, A420 WPL6 & A403
Gr.WP304, 304L, 316, 316L, 310, 317, 317L, 321 & 347
DUPLEX, SUPER DUPLEX, CU-NI, MONEL HEASTOLOY, BRASS, NICKEL

SCH :- 5, 5S, 10, 10S, 20, 30, 40, 40S, 60, 80, 80S, 100, 120, 140, 160, STD, XS AND XXS

RANGES :- 1/2"NB TO 48"NB





FITTINGS :- THREADED FITTINGS

Threaded joints probably represent the oldest method of joining piping systems. Threaded fittings are mainly used for small pipe diameters (Small Bore Piping); generally for piping whose nominal diameter is NPS 2 or smaller. Threaded piping is commonly used in low-cost, noncritical application such as domestic water, fire protection and industrial cooling water systems.

TYPE :- ELBOW, 45°/90°

TEE

CROSS

END CAPS

FULL COUPLING

HALF COUPLING

SQUARE HEAD PLUG/HEX HEAD PLUG/ROUND HEAD PLUG

HEX HEAD BUSHING

UNION (MSS SP-83)

PIPE NIPPLE/HEX NIPPLE



DIM. STD :- ASME B16.11.

GRADE :- ASTM/ASME A105, A350 LF2 & A182 Gr.F5,F11,F22,F51,F52,F91,F92,F304, F304H,F304L,F310,F316, F316L,F317, F317L,F321 & F347,CU-NI,MONEL HEASTOLOY,BRASS,NICKEL

CLASS :- 3000#, 6000# & 9000#

THREADED TYPE :- NPT, BSP & BSPT

RANGES :- 1/2"NB TO 6"NB





FITTINGS :- SOCKETWELD FITTINGS

A Socket Weld is a pipe attachment detail in which a pipe is inserted into a recessed area of a Valve, fitting or flange. In contrast to butt weld fittings, Socket Weld fittings are mainly used for small pipe diameter (small bore piping); generally for piping whose nominal diameter is NPS2 or smaller.

TYPE :- ELBOW, 45°/90°
TEE
CROSS
END CAPS
FULL COUPLING
HALF COUPLING
REDUCING COUPLING
REDUCER INSERT
UNION

DIM. STD :- ASME B16.11.

GRADE :- ASTM/ASME A105, A350 LF2 & A182 Gr.F5,F11,F22,F51,F52,F91,F92,F304, F304H,F304L,F310,F316, F316L,F317, F317L,F321 & F347,CU-NI,MONEL HEASTOLOY,BRASS,NICKEL

CLASS :- 3000#, 6000# & 9000#

RANGES :- 1/2"NB TO 6"NB





BRANCH CONNECTION FITTINGS :-

Branch Connection Fittings (also known as O`lets) are fittings which provide an outlet from a larger pipe to a smaller one (or one of the same size.). The main pipe onto which the branch connection is welded is usually called the Run or Header Size.

TYPE :- WELDOLET
SOCKOLET
THREDOLET
LATROLET
ELBOLET
NIPPOLET
SWEEPOLET



NIPOLET



SWEEPOLET

DIM. STD :- ASME B16.11/MSS SP95/MSS SP97.

GRADE :- ASTM/ASME A105, A350 LF2 & A182 Gr.F5,F11,F22,F51,F52,F91,F92,F304, F304H,F304L,F310,F316, F316L,F317, F317L,F321 & F347,CU-NI,MONEL HEASTOLOY,BRASS,NICKEL

CLASS :- 3000#, 6000# & 9000# & SCH.10 TO SCH.XXS

RANGES :- 1/2"NB TC

B¹



WELDOLET



SOCKOLET



THREDOLET



LATROLET



NIPPOLET



ELBOLET



FLANGES :-

A Flange is a method of connecting pipes, valves, pumps and other equipments to form a piping system. It also provides easy access for cleaning, inspection or modification. Flanges are usually Welded or Screwed. Flanges joints are made by bolting together two flanges with a Gasket between them to provide a seal.

TYPE :- WELD NECK FLANGES
SLIPON FLANGES
SOCKET WELD FLANGES
LAP JOINT FLANGES
THREADED FLANGES
BLIND FLANGES
SERIES A & B FLANGES



DIM. STD :- ASME B16.5/B16.47.

GRADE :- ASTM/ASME A105, A350 LF2 & A182 Gr.F5,F11,F22,F51,F52,F91,F92,F304, F304H,F304L,F310,F316, F316L,F317, F317L,F321 & F347,CU-NI,MONEL HEASTOLOY,BRASS,NICKEL

CLASS :- 150#, 300#, 600#, 900#, 1500# & 2500#

RANGES :- 1/2"NB TO 24"NB





SPECIAL FLANGES :-

TYPE :- ORIFICE FLANGES
LONG WELDNECK FLANGES
SPECTACLE BLIND FLANGES FIG.8
WELDO FLANGES
NIPPO FLANGES
EXPANDER FLANGES
REDUCING FLANGES
AWWA FLANGES



DIN STANDARD FLANGES :-

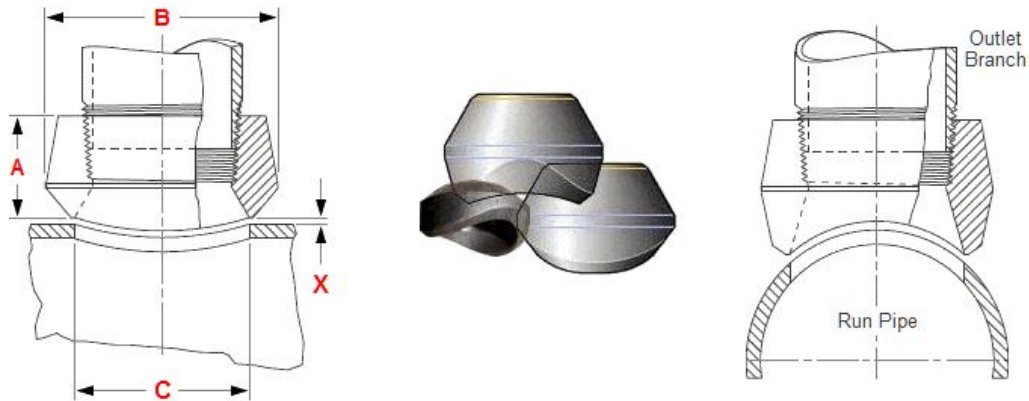
TYPE :- DIN ALL TYPE
EN1092-1 FLANGES

FASTNERS :- BOLT, NUT & WASHERS





Dimensions Reducing Thredolets® MSS SP97



Class 3000

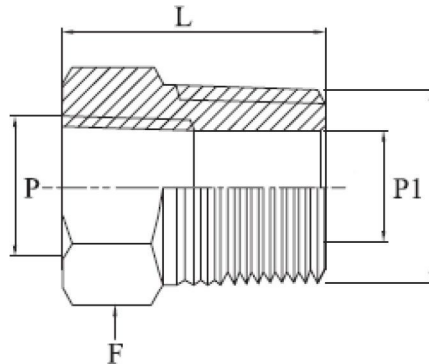
NPS	A	B	C
1/2" (21.3MM)	1 25.4	1.13/32 35.71	15/16 23.81
1" (33.4MM)	1.5/16 33.33	2 50.80	1.7/16 36.51

General notes:

- Dimensions: Top Row in Inches / Bottom Row in millimeters.
- Root Gap - **X** - "Space" for welding the O'let is raised off the run pipe to establish proper weld gap by placing spacers, e.g. welding rods, under the fitting. This provides a uniform welding gap between the curvature of the run and base of fitting.
- Threaded Ends are in accordance with ASME B1.20.1. Design per MSS SP-97.



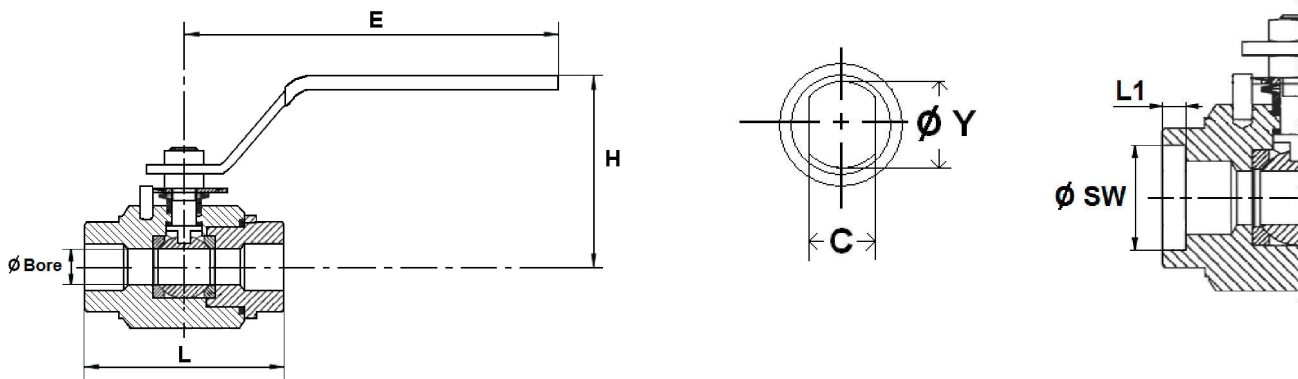
Male X Female NPT Reducer ASME B16.11



NPS	L MINIMUM LENGTH	F MIN.HEX HEIGHT	P1 NOMINAL	P
2"MALE X 1/2"FEMALE	32	9	60.3	21.3

General notes:

- Dimensions are in millimeters unless otherwise indicated.



Carbon steel ball valve – 2 piece body - with female NPT thread – 800lbs / 138ba

Dimensions:

- Size : DN 1/2"
- Ends : NPT female thread

Specifications:

- Carbon steel ball valve : Min Temperature : -10°C
- Carbon steel ball valve : Max Temperature : + 180°C
- Max Pressure : 138 Bars
- Bore : Full bore
- Fire safe according to BS 6755 part.2
- Antistatic device
- Blow-out proof shaft
- Handle steel black flat

Materials :

- Body of the valve: Carbon steel body – ASTM A105
- Sphere: Stainless Sphere – ASTM A182 F316
- Stem seal with PTFE ring and O-ring FKM
- Seal: Seals Carbone-graphite-loaded PTFE seats Carbone-graphite
- Coating: zinc coated carbon steel ball valve

Ref.	DN	15
	Ø Bore	15
	L	75
	E	148
	H	75
716 / 717	C	5.5
	Ø Y	10
	Ø SW	21.8
	L1	9.5
	Weight (Kg)	0.8

Code	Diameter (DN)	Connecting	Passage diameter (mm)	Nominal pressure (bar)	Mini. temp (°C)	max. temp (°C)	Face to Face (mm)
717004	1/2"	NPT	15	138	-10	180	75