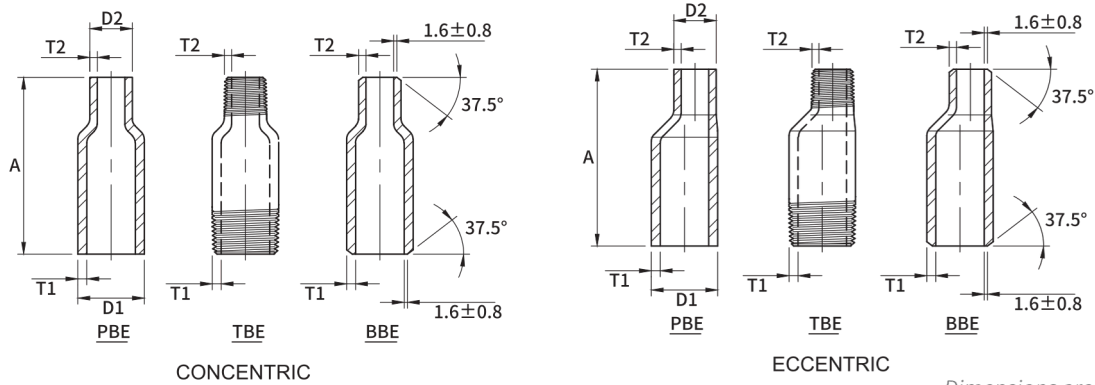


# SWAGE NIPPLE MSS SP-95-2018

DIMENSIONS- PBE, TBE, BBE, CONCENTRIC  
AND ECCENTRIC



Dimensions are in millimeters.

Nom. Pipe Size	Outside Diameter		End to End "A"	Wall Thickness							
	Large End D1	Small End D2		T1				T2			
				Sch40 (STD)	Sch80 (XS)	Sch160	XXS	Sch40 (STD)	Sch80 (XS)	Sch160	XXS

1/4×1/8	13.7	10.3	57	2.2	3.0	3.7	6.1	1.7	2.4	—	—
3/8×1/8	17.1	10.3	64	2.3	3.2	4.0	6.4	1.7	2.4	—	—
3/8×1/4	17.1	13.7	64	2.3	3.2	4.0	6.4	2.2	3.0	—	—
1/2×1/8	21.3	10.3	70	2.8	3.7	4.8	7.5	1.7	2.4	—	—
1/2×1/4	21.3	13.7	70	2.8	3.7	4.8	7.5	2.2	3.0	—	—
1/2×3/8	21.3	17.1	70	2.8	3.7	4.8	7.5	2.3	3.2	—	—
3/4×1/8	26.7	10.3	76	2.9	3.9	5.6	7.8	1.7	2.4	—	—
3/4×1/4	26.7	13.7	76	2.9	3.9	5.6	7.8	2.2	3.0	—	—
3/4×3/8	26.7	17.1	76	2.9	3.9	5.6	7.8	2.3	3.2	—	—
3/4×1/2	26.7	21.3	76	2.9	3.9	5.6	7.8	2.8	3.7	4.8	7.5
1×1/8	33.4	10.3	89	3.4	4.5	6.4	9.1	1.7	2.4	—	—
1×1/4	33.4	13.7	89	3.4	4.5	6.4	9.1	2.2	3.0	—	—
1×3/8	33.4	17.1	89	3.4	4.5	6.4	9.1	2.3	3.2	—	—
1×1/2	33.4	21.3	89	3.4	4.5	6.4	9.1	2.8	3.7	4.8	7.5
1×3/4	33.4	26.7	89	3.4	4.5	6.4	9.1	2.9	3.9	5.6	7.8
1-1/4×1/8	42.2	10.3	102	3.6	4.9	6.4	9.7	1.7	2.4	—	—
1-1/4×1/4	42.2	13.7	102	3.6	4.9	6.4	9.7	2.2	3.0	—	—
1-1/4×3/8	42.2	17.1	102	3.6	4.9	6.4	9.7	2.3	3.2	—	—
1-1/4×1/2	42.2	21.3	102	3.6	4.9	6.4	9.7	2.8	3.7	4.8	7.5
1-1/4×3/4	42.2	26.7	102	3.6	4.9	6.4	9.7	2.9	3.9	5.6	7.8
1-1/4×1	42.2	33.4	102	3.6	4.9	6.4	9.7	3.4	4.5	6.4	9.1
1-1/2×1/8	48.3	10.3	114	3.7	5.1	7.1	10.2	1.7	2.4	—	—
1-1/2×1/4	48.3	13.7	114	3.7	5.1	7.1	10.2	2.2	3.0	—	—
1-1/2×3/8	48.3	17.1	114	3.7	5.1	7.1	10.2	2.3	3.2	—	—
1-1/2×1/2	48.3	21.3	114	3.7	5.1	7.1	10.2	2.8	3.7	4.8	7.5
1-1/2×3/4	48.3	26.7	114	3.7	5.1	7.1	10.2	2.9	3.9	5.6	7.8
1-1/2×1	48.3	33.4	114	3.7	5.1	7.1	10.2	3.4	4.5	6.4	9.1
1-1/2×1-1/4	48.3	42.2	114	3.7	5.1	7.1	10.2	3.6	4.9	6.4	9.7
2×1/8	60.3	10.3	165	3.9	5.5	8.7	11.1	1.7	2.4	—	—
2×1/4	60.3	13.7	165	3.9	5.5	8.7	11.1	2.2	3.0	—	—
2×3/8	60.3	17.1	165	3.9	5.5	8.7	11.1	2.3	3.2	—	—
2×1/2	60.3	21.3	165	3.9	5.5	8.7	11.1	2.8	3.7	4.8	7.5
2×3/4	60.3	26.7	165	3.9	5.5	8.7	11.1	2.9	3.9	5.6	7.8
2×1	60.3	33.4	165	3.9	5.5	8.7	11.1	3.4	4.5	6.4	9.1
2×1-1/4	60.3	42.2	165	3.9	5.5	8.7	11.1	3.6	4.9	6.4	9.7
2×1-1/2	60.3	48.3	165	3.9	5.5	8.7	11.1	3.7	5.1	7.1	10.2
2-1/2×1/8	73.0	10.3	178	5.2	7.0	9.5	14.0	1.7	2.4	—	—
2-1/2×1/4	73.0	13.7	178	5.2	7.0	9.5	14.0	2.2	3.0	—	—
2-1/2×3/8	73.0	17.1	178	5.2	7.0	9.5	14.0	2.3	3.2	—	—
2-1/2×1/2	73.0	21.3	178	5.2	7.0	9.5	14.0	2.8	3.7	4.8	7.5
2-1/2×3/4	73.0	26.7	178	5.2	7.0	9.5	14.0	2.9	3.9	5.6	7.8
2-1/2×1	73.0	33.4	178	5.2	7.0	9.5	14.0	3.4	4.5	6.4	9.1

# SWAGE NIPPLE MSS SP-95-2018



## DIMENSIONS- PBE, TBE, BBE, CONCENTRIC AND ECCENTRIC

(Continued)

Dimensions are in millimeters.

Nom. Pipe Size	Outside Diameter		End to End "A"	Wall Thickness							
	Large End D1	Small End D2		T1				T2			
				Sch40 (STD)	Sch80 (XS)	Sch160	XXS	Sch40 (STD)	Sch80 (XS)	Sch160	XXS
2-1/2×1-1/4	73.0	42.2	178	5.2	7.0	9.5	14.0	3.6	4.9	6.4	9.7
2-1/2×1-1/2	73.0	48.3	178	5.2	7.0	9.5	14.0	3.7	5.1	7.1	10.2
2-1/2×2	73.0	60.3	178	5.2	7.0	9.5	14.0	3.9	5.5	8.7	11.1
3×1/8	88.9	10.3	203	5.5	7.6	11.1	15.2	1.7	2.4	—	—
3×1/4	88.9	13.7	203	5.5	7.6	11.1	15.2	2.2	3.0	—	—
3×3/8	88.9	17.1	203	5.5	7.6	11.1	15.2	2.3	3.2	—	—
3×1/2	88.9	21.3	203	5.5	7.6	11.1	15.2	2.8	3.7	4.8	7.5
3×3/4	88.9	26.7	203	5.5	7.6	11.1	15.2	2.9	3.9	5.6	7.8
3×1	88.9	33.4	203	5.5	7.6	11.1	15.2	3.4	4.5	6.4	9.1
3×1-1/4	88.9	42.2	203	5.5	7.6	11.1	15.2	3.6	4.9	6.4	9.7
3×1-1/2	88.9	48.3	203	5.5	7.6	11.1	15.2	3.7	5.1	7.1	10.2
3×2	88.9	60.3	203	5.5	7.6	11.1	15.2	3.9	5.5	8.7	11.1
3×2-1/2	88.9	73.0	203	5.5	7.6	11.1	15.2	5.2	7.0	9.5	14.0
3-1/2×1/8	101.6	10.3	203	5.7	8.1	—	—	1.7	2.4	—	—
3-1/2×1/4	101.6	13.7	203	5.7	8.1	—	—	2.2	3.0	—	—
3-1/2×3/8	101.6	17.1	203	5.7	8.1	—	—	2.3	3.2	—	—
3-1/2×1/2	101.6	21.3	203	5.7	8.1	—	—	2.8	3.7	4.8	7.5
3-1/3×3/4	101.6	26.7	203	5.7	8.1	—	—	2.9	3.9	5.6	7.8
3-1/2×1	101.6	33.4	203	5.7	8.1	—	—	3.4	4.5	6.4	9.1
3-1/2×1-1/4	101.6	42.2	203	5.7	8.1	—	—	3.6	4.9	6.4	9.7
3-1/2×1-1/2	101.6	48.3	203	5.7	8.1	—	—	3.7	5.1	7.1	10.2
3-1/2×2	101.6	60.3	203	5.7	8.1	—	—	3.9	5.5	8.7	11.1
3-1/2×2-1/2	101.6	73.0	203	5.7	8.1	—	—	5.2	7.0	9.5	14.0
3-1/2×3	101.6	88.9	203	5.7	8.1	—	—	5.5	7.6	11.1	15.2
4×1/4	114.3	13.7	229	6.0	8.6	13.5	17.1	2.2	3.0	—	—
4×3/8	114.3	17.1	229	6.0	8.6	13.5	17.1	2.3	3.2	—	—
4×1/2	114.3	21.3	229	6.0	8.6	13.5	17.1	2.8	3.7	4.8	7.5
4×3/4	114.3	26.7	229	6.0	8.6	13.5	17.1	2.9	3.9	5.6	7.8
4×1	114.3	33.4	229	6.0	8.6	13.5	17.1	3.4	4.5	6.4	9.1
4×1-1/4	114.3	42.2	229	6.0	8.6	13.5	17.1	3.6	4.9	6.4	9.7
4×1-1/2	114.3	48.3	229	6.0	8.6	13.5	17.1	3.7	5.1	7.1	10.2
4×2	114.3	60.3	229	6.0	8.6	13.5	17.1	3.9	5.5	8.7	11.1
4×2-1/2	114.3	73.0	229	6.0	8.6	13.5	17.1	5.2	7.0	9.5	14.0
4×3	114.3	88.9	229	6.0	8.6	13.5	17.1	5.5	7.6	11.1	15.2
4×3-1/2	114.3	101.6	229	6.0	8.6	13.5	17.1	5.7	8.1	—	—

- (1) Wall Thickness (T1, T2) in Accordance with ASME B36.10M.  
PBE:PLAIN BOTH ENDS      BBE:BEVEL BOTH ENDS      TBE:THREAD BOTH ENDS  
PSE:PLAIN SMALL END      BSE:BEVEL SMALL END      TSE:THREAD SMALL END  
PLE:PLAIN LARGE END      BLE:BEVEL LARGE END      TLE:THREAD LARGE END

### DIMENSIONAL TOLERANCES OF SWAGED NIPPLES

MSS SP-95-2018

Unit : mm

Nominal Pipe Size (Inch)	Overall Length	Outside Diameter at End		Fitting Wall Thickness (see Note 1)
		Square Cut Ends	Other End Connections	
1/8~3/8	±1.5	+0.4 -0.8	±0.8	Not less than 87.5% of Nominal Wall Thickness
1/2~1-1/2	±1.5	+0.4 -0.8	+1.5 -0.8	
2~2-1/2	±3.0	±0.8	+1.5 -0.8	
3~4	±3.0	±0.8	±1.5	