

Catálogo



**ACEROS
ALTAVISTA**

Conexiones

CODO 90° Radio largo y radio corto



ESPECIFICACIONES

Conexión de acero al carbón

Soldable a tope

WPB-A234

Cédula estándar, extra fuerte y 160

Medidas:

R/L de 1/2" a 36" · R/C de 1" a 8"

ASME B16.9

CODO 45°



ESPECIFICACIONES

Conexión de acero al carbón

Soldable a tope

WPB-A234

Cédula estándar, extra fuerte y 160

Medidas de 1/2" a 36"

ASME B16.9

CODO 180°

Codo retorno



ESPECIFICACIONES

Conexión de acero al carbón

Soldable a tope

WPB-A234

Cédula estándar, extra fuerte y 160

Medidas de 1/2" a 8"

ASME B16.9

CODO REDUCIDO



ESPECIFICACIONES

Conexión de acero al carbón

Soldable a tope

WPB-A234

Cédula estándar, extra fuerte y 160

Medidas de 1/2" a 8"

ASME B16.9

TEE RECTA



ESPECIFICACIONES

Conexión de acero al carbón

Soldable a tope

WPB-A234

Cédula estándar, extra fuerte y 160

Medidas de 1/2" a 36"

ASME B16.9

TEE REDUCIDA



ESPECIFICACIONES

Conexión de acero al carbón

Soldable a tope

WPB-A234

Cédula estándar, extra fuerte y 160

Medidas de 1/2" a 14"

ASME B16.9

Reducción CONCÉNTRICA Y EXCÉNTRICA



ESPECIFICACIONES

Conexión de acero al carbón

Soldable a tope

WPB-A234

Cédula estándar, extra fuerte y 160

Medidas de 1/2" a 14"

ASME B16.9

TAPÓN CAPA



ESPECIFICACIONES

Conexión de acero al carbón

Soldable a tope

WPB-A234

Cédula estándar, extra fuerte y 160

Medidas de 1/2" a 36"

ASME B16.9

CODO 90°



ESPECIFICACIONES

Conexión de acero inoxidable
Soldable a tope
Tipo 304L y 316L
Cédula 10S y 40S
Medidas de 1/2" a 12"

CODO 45°



ESPECIFICACIONES

Conexión de acero inoxidable
Soldable a tope
Tipo 304L y 316L
Cédula 10S y 40S
Medidas de 1/2" a 12"

TEE RECTA



ESPECIFICACIONES

Conexión de acero inoxidable
Soldable a tope
Tipo 304L y 316L
Cédula 10S y 40S
Medidas de 1/2" a 12"

Reducción CONCÉNTRICA



ESPECIFICACIONES

Conexión de acero inoxidable
Soldable a tope
Tipo 304L y 316L
Cédula 10S y 40S
Medidas de 1/2" a 12"

TAPÓN CAPA



ESPECIFICACIONES

Conexión de acero inoxidable
Soldable a tope
Tipo 304L y 316L
Cédula 10S y 40S
Medidas de 1/2" a 12"

Conexiones

CODO 90° ASME B16.9

Diámetro nominal del tubo	Diámetro exterior (mm)	A (mm)		R/L Peso aproximado (Kg)			R/C Peso aprox. (Kg)	
		L/R	S/R	STD	XS	S40	STD	XS
1/2	21.3	38	-	0.07	0.10	0.07	-	-
3/4	26.7	29	-	0.10	0.12	0.10	-	-
1	33.4	38	25	0.15	0.18	0.15	0.10	0.12
1-1/4	42.2	48	32	0.25	0.33	0.25	0.16	0.21
1-1/2	48.3	57	38	0.35	0.48	0.35	0.23	0.31
2	60.3	76	51	0.65	0.88	0.65	0.42	0.58
2-1/2	73.0	95	64	1.30	1.70	1.30	0.86	1.13
3	88.9	114	76	2.02	2.72	2.02	1.35	1.81
3-1/2	101.6	133	-	2.81	3.90	2.81	1.87	2.60
4	114.3	152	102	3.82	5.35	3.82	2.55	3.56
5	141.3	190	127	6.55	9.22	6.55	4.36	6.15
6	168.3	229	152	10.12	15.30	10.12	6.75	10.20
8	219.1	305	203	20.40	30.91	20.40	13.60	20.60
10	273.0	381	254	36.16	48.75	36.16	24.11	32.5
12	323.8	457	305	52.82	69.90	57.20	35.21	46.6
14	355.6	533	-	67.86	89.74	79.20	-	-
16	406.4	610	-	88.95	117.93	118.20	-	-
18	457.0	686	-	112.99	149.67	167.57	-	-
20	508.0	762	-	139.82	185.33	219.15	-	-
24	610.0	914	-	202.02	268.08	366.03	-	-

CODO 45° ASME B16.9

Diámetro nominal del tubo	Diámetro exterior (mm)	B	Peso aproximado (Kg)		
			STD	XS	S40
1	33.4	22	0.07	0.10	0.07
1-1/4	42.2	25	0.12	0.16	0.12
1-1/2	48.3	29	0.17	0.23	0.17
2	60.3	35	0.31	0.43	0.31
2-1/2	73.0	44	0.65	0.85	0.65
3	88.9	51	1.00	1.36	1.00
3-1/2	101.6	57	1.40	1.95	1.40
4	114.3	64	1.92	2.67	1.92
5	141.3	79	3.27	4.61	3.27
6	168.3	95	5.05	7.65	5.05
8	219.1	127	10.20	15.46	10.20
10	273.0	159	18.08	24.37	18.08
12	323.8	190	26.40	34.95	28.60
14	355.6	222	33.92	44.87	39.60
16	406.4	254	44.47	58.96	59.10
18	457.0	286	56.50	74.83	83.79
20	508.0	343	69.91	92.67	109.57
24	610.0	381	101.01	134.04	183.01

CODO 180° ASME B16.9

Diámetro nominal del tubo	Diámetro exterior (mm)	O (mm)	K (mm)	R/C Peso aprox. (Kg)	
		R/L	R/L	STD	XS
3/4	26.7	57	43	0.18	0.20
1	33.4	76	56	0.30	0.37
1-1/4	42.2	95	70	0.50	0.66
1-1/2	48.3	114	83	0.72	0.96
2	60.3	152	106	1.30	1.77
2-1/2	73.0	190	132	2.60	3.40
3	88.9	229	159	4.05	5.46
3-1/2	101.6	267	184	5.63	7.81
4	114.3	305	210	7.65	10.71
5	141.3	381	262	13.10	18.45
6	168.3	457	313	20.25	30.60

CODO REDUCIDO ASME B16.9

Diámetro nominal del tubo	O (mm)	K (mm)	R/C Peso aprox. (Kg)	
	R/L	R/L	STD	XS
2x1-1/2	60.3	48.3	0.67	0.90
2-1/2x1-1/2	73.0	48.3	1.35	1.81
2-1/2x2	73.0	60.3	1.35	1.81
3x2	88.9	60.3	2.05	2.72
3x2-1/2	88.9	73.0	2.05	2.72
4x2-1/2	114.3	73.0	4.08	5.45
4x3	114.3	88.9	4.08	5.45
5x4	141.3	114.3	6.81	9.08
6x4	168.3	114.3	10.9	14.55
6x5	168.3	141.3	10.9	14.55

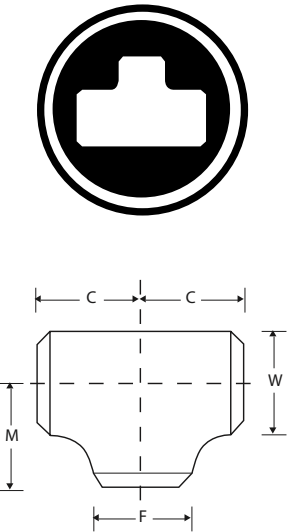
TEE RECTA ASME B16.9

Diámetro nominal del tubo	W (mm)	F (mm)	M (mm)	C (mm)	Peso Aprox. (Kg)	
					STD	XS
1/2	21.3	21.3	25.0	25.0	0.10	0.13
3/4	26.7	26.7	29.0	29.0	0.16	0.19
1	33.4	33.4	38.0	38.0	0.32	0.40
1-1/4	42.2	42.2	48.0	48.0	0.52	0.70
1-1/2	48.3	48.3	57.0	57.0	0.75	1.03
2	60.3	60.3	64.0	64.0	1.09	1.49
2-1/2	73.0	73.0	76.0	76.0	2.00	2.54
3	88.9	88.9	86.0	86.0	2.83	3.81
3-1/2	101.6	101.6	95.0	95.0	3.85	5.00
4	114.3	114.3	105.0	105.0	4.81	6.80
5	141.3	141.3	124.0	124.0	7.27	10.19
6	168.3	168.3	143.0	143.0	10.20	16.20
8	219.1	219.1	178.0	178.0	19.63	28.79
10	273.0	273.0	216.0	216.0	33.63	-
12	323.8	323.8	254.0	254.0	47.72	-

Conexiones

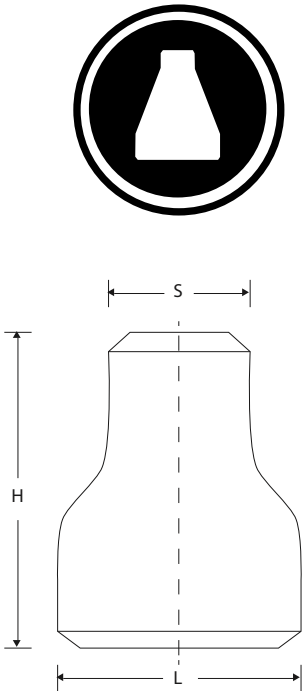
TEE REDUCIDA ASME B16.9

Diámetro nominal del tubo	W (mm)	F (mm)	M (mm)	C (mm)	Peso Aprox. (Kg)	
					STD	XS
3/4x1/2	26.7	21.3	29	29	0.15	0.19
1x1/2	33.4	21.3	38	38	0.32	0.38
1x3/4	33.4	26.7	38	38	0.32	0.38
1-1/4x1/2	42.2	21.3	48	48	0.52	0.70
1-1/4x3/4	42.2	26.7	48	48	0.52	0.70
1-1/4x1	42.2	33.4	48	48	0.52	0.70
1-1/2x1/2	48.3	21.3	57	57	0.68	0.99
1-1/2x3/4	48.3	26.7	57	57	0.68	0.99
1-1/2x1	48.3	33.4	57	57	0.71	0.99
1-1/2x1-1/4	48.3	42.2	57	57	0.71	1.02
2x1/2	60.3	21.3	44	64	0.82	1.30
2x3/4	60.3	26.7	44	64	0.85	1.30
2x1	60.3	33.4	51	64	0.92	1.30
2x1-1/4	60.3	42.2	57	64	0.97	1.49
2x1-1/2	60.3	48.3	60	64	1.06	1.49
2-1/2x1/2	73.0	21.3	57	76	1.67	2.18
2-1/2x3/4	73.0	26.7	57	76	1.67	2.18
2-1/2x1	73.0	33.4	57	76	1.71	2.18
2-1/2x1-1/4	73.0	42.2	64	76	1.73	2.18
2-1/2x1-1/2	73.0	48.3	67	76	1.78	2.18
2-1/2x2	73.0	60.3	70	76	1.86	2.40
3x1	88.9	33.4	67	86	2.42	3.27
3x1-1/4	88.9	42.2	70	86	2.42	3.27
3x1-1/2	88.9	48.3	73	86	2.42	3.38
3x2	88.9	60.3	76	86	2.52	3.60
3x2-1/2	88.9	73.0	83	86	2.80	3.81
4x1-1/4	114.3	42.2	86	105	4.06	6.00
4x1-1/2	114.3	48.3	86	105	4.10	6.00
4x2	114.3	60.3	89	105	4.20	6.00
4x2-1/2	114.3	73.0	95	105	4.20	6.00
4x3	114.3	88.9	98	105	4.55	6.45
5x2	141.3	60.3	105	124	6.27	9.36
5x2-1/2	141.3	73.0	108	124	6.66	9.72
5x3	141.3	88.9	111	124	6.73	9.72
5x4	141.3	114.3	117	125	7.12	10.00
6x2	168.3	60.3	118	143	9.51	15.36
6x2-1/2	168.3	73.0	121	143	9.60	15.36
6x3	168.3	88.9	124	143	10.01	15.51
6x4	168.3	114.3	130	143	10.10	15.51
6x5	168.3	141.3	137	143	10.20	15.90
8x3	219.1	88.9	152	178	17.66	-
8x4	219.1	114.3	156	178	17.95	27.81
8x5	219.1	141.3	162	178	19.46	28.18
8x6	219.1	168.3	168	178	19.46	28.79
10x4	273.0	114.3	184	216	30.30	-
10x5	273.0	141.3	191	216	30.86	-
10x6	273.0	168.0	194	216	30.86	-
10x8	273.0	219.1	203	216	33.40	-
12x6	323.8	168.3	219	254	46.35	-
12x8	323.8	219.1	229	254	46.35	-
12x10	323.8	273.0	241	254	47.38	-

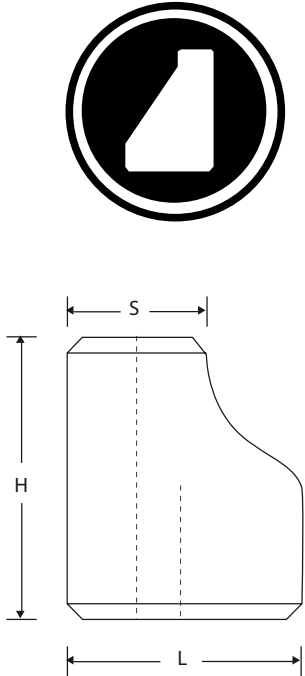


REDUCCIÓN CONCÉNTRICA ASME B16.9

Diámetro nominal del tubo	L (mm)	S (mm)	H (mm)	Peso Aprox. (Kg)	
				STD	XS
3/4x1/2	26.7	21.3	38	0.05	0.07
1x1/2	33.4	21.3	51	0.12	0.15
1x3/4	33.4	26.7	51	0.12	0.15
1-1/4x1/2	42.2	21.3	51	0.16	0.22
1-1/4x3/4	42.2	26.7	51	0.16	0.22
1-1/4x1	42.2	33.4	51	0.16	0.22
1-1/2x1/2	48.3	21.3	64	0.25	0.33
1-1/2x3/4	48.3	26.7	64	0.25	0.33
1-1/2x1	48.3	33.4	64	0.25	0.33
1-1/2x1-1/4	48.3	42.2	64	0.25	0.33
2x1/2	60.3	21.3	76	0.40	0.55
2x3/4	60.3	26.7	76	0.40	0.55
2x1	60.3	33.4	76	0.40	0.55
2x1-1/4	60.3	42.2	76	0.40	0.55
2x1-1/2	60.3	48.3	76	0.40	0.55
2-1/2x1	73.0	33.4	89	0.76	1.00
2-1/2x1-1/4	73.0	42.2	89	0.76	1.00
2-1/2x1-1/2	73.0	48.3	89	0.76	1.00
2-1/2x2	73.0	60.3	89	0.76	1.00
3x1	88.9	33.4	89	1.00	1.35
3x1-1/4	88.9	42.2	89	1.00	1.35
3x1-1/2	88.9	48.3	89	1.00	1.35
3x2	88.9	60.3	89	1.00	1.35
3x2-1/2	88.9	73.0	89	1.00	1.35
3-1/2x3	101.6	88.9	102	1.26	1.85
4x1	114.3	33.4	102	1.60	2.25
4x1-1/4	114.3	42.2	102	1.60	2.25
4x1-1/2	114.3	48.3	102	1.60	2.25
4x2	114.3	60.3	102	1.60	2.25
4x2-1/2	114.3	73.0	102	1.60	2.25
4x3	114.3	88.9	102	1.60	2.25
4x3-1/2	114.3	101.6	102	1.60	2.25
5x2	141.3	60.3	127	2.72	3.85
5x2-1/2	141.3	73.0	127	2.72	3.85
5x3	141.3	88.9	127	2.72	3.85
5x4	141.3	114.3	127	2.72	3.85
6x2	168.3	60.3	140	3.95	5.85
6x2-1/2	168.3	73.0	140	3.95	5.85
6x3	168.3	88.9	140	3.95	5.85
6x4	168.3	114.3	140	3.95	5.85

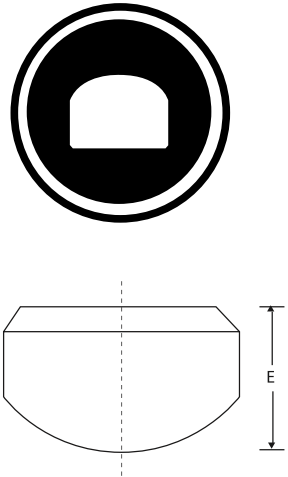


REDUCCIÓN EXCÉNTRICA ASME B16.9



Diámetro nominal del tubo	L (mm)	S (mm)	H (mm)	Peso Aprox. (Kg)	
				STD	XS
3/4x1/2	26,7	21,3	38	0,05	0,07
1x1/2	33,4	21,3	51	0,12	0,15
1x3/4	33,4	26,7	51	0,12	0,15
1-1/4x1	42,2	33,4	51	0,17	0,23
1-1/2x1	48,3	33,4	64	0,25	0,34
1-1/2x1-1/4	48,3	42,2	64	0,25	0,34
2x1	60,3	33,4	76	0,42	0,56
2x1-1/4	60,3	42,2	76	0,42	0,56
2x1-1/2	60,3	48,3	76	0,42	0,56
2-1/2x1-1/2	73,0	48,3	89	0,78	1,00
2-1/2x2	73,0	60,3	89	0,78	1,00
3x1-1/2	88,9	48,3	89	1,00	1,35
3x2	88,9	60,3	89	1,00	1,35
3x2-1/2	88,9	73,0	89	1,00	1,35
4x1-1/2	114,3	48,3	102	1,65	2,26
4x2	114,3	60,3	102	1,65	2,26
4x2-1/2	114,3	73,0	102	1,65	2,26
4x3	114,3	88,9	102	1,65	2,26
5x3	141,3	88,9	127	2,80	3,90
5x4	141,3	114,3	127	2,80	3,90
6x3	168,3	88,9	140	3,86	5,85
6x4	168,3	114,3	140	3,86	5,85
6x5	168,3	141,3	140	3,86	5,85
8x4	219,1	114,3	152	6,50	9,85
8x5	219,1	141,3	152	6,50	9,85
8x6	219,1	168,3	152	6,50	9,85
10x8	273,0	219,1	178	11,25	14,50
12x8	323,8	219,1	203	14,83	19,62
12x10	323,8	273,0	203	14,83	19,62
14x10	355,6	273,0	330	26,83	35,55
14x12	355,6	323,8	330	26,83	35,55
16x10	406,4	273,0	356	32,11	42,58
16x12	406,4	323,8	356	32,11	42,58
16x14	406,4	355,6	356	32,11	42,58

TAPÓN CAPA ASME B16.9



Diámetro nominal del tubo	Diámetro exterior	E (mm)	CAP. Peso aproximado (Kg)	
			STD	XS
1-1/4	42.2	38	0.14	0.17
1-1/2	48.3	38	0.16	0.21
2	60.3	38	0.23	0.30
2-1/2	73.0	38	0.36	0.46
3	88.9	51	0.64	0.83
4	114.3	64	1.15	1.55
5	141.3	76	1.90	2.60
6	168.3	89	2.90	4.20
8	219.1	102	5.13	7.40
10	273.0	127	9.09	11.95
12	323.8	152	13.40	17.26
14	355.6	165	16.58	21.35
16	406.4	178	19.76	26.26

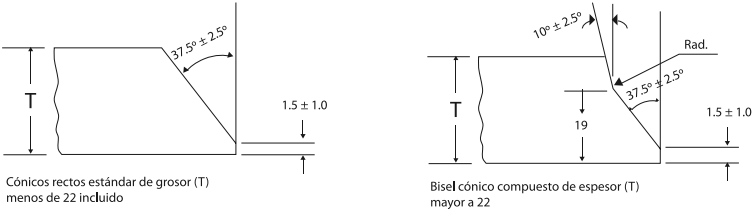
TABLA DE GROSOR NOMINAL

Diámetro nominal del tubo	STD	SCH40	XS.XH	SCH80	SCH160	XXS
1/2	2.8	2.8	3.7	3.7	4.7	7.5
3/4	2.9	2.9	3.9	3.9	5.5	7.8
1	3.4	3.4	4.5	4.5	6.4	9.1
1-1/4	3.6	3.6	4.9	4.9	6.4	9.7
1-1/2	3.7	3.7	5.1	5.1	7.1	10.2
2	3.9	3.9	5.5	5.5	8.7	11.1
2-1/2	5.2	5.2	7.0	7.0	9.5	14.0
3	5.5	5.5	7.6	7.6	11.1	15.2
3-1/2	5.7	5.7	8.1	8.1	-	-
4	6.0	6.0	8.6	8.6	13.5	17.1
5	6.6	6.6	9.5	9.5	15.9	19.1
6	7.1	7.1	11.0	11.0	18.2	21.9
8	8.2	8.2	12.7	12.7	23.0	22.2
10	9.3	9.3	12.7	15.1	28.6	-
12	9.5	10.3	12.7	17.4	33.3	-
14	9.5	11.1	12.7	19.1	35.7	-
16	9.5	12.7	12.7	21.4	40.5	-
18	9.5	14.3	12.7	23.8	45.2	-
20	9.5	15.1	12.7	26.2	50.0	-
24	9.5	17.5	12.7	31.0	59.5	-

SCH: CÉDULA

TOLERANCIA DIMENSIONAL (MM)

Medidas	Medidas	1/2"-2-1/2"	3"-4"	5"-8"	10"-18"
	Artículos				
Todas las medidas	Diámetro exterior en bisel	+1.6 -0.8	±1.6	+2.4 -1.6	+4.0 -3.2
	Diámetro del extremo interior	±0.8	±1.6	±1.6	±3.2
	espesor de la pared	No menos del 87.5% del espesor nominal			
45° & 90° L / Tees	Del Centro al f nal [A,B,C,M]	±2	±2	±2	±2
Reductores	Longitud total [H]	±2	±2	±2	±2
Tapas	Longitud total [E]	±3	±3	±6	±6
Codos 180°	De centro a centro [O]	±6	±6	±6	±10
	Trasera a cara [K]	±6	±6	±6	±6





ACERO FORJADO

3000lb

ROSCADA (NPT) - ANSI A105

Acero al carbón forjado



CODO 90°

Roscada (NPT)
Medidas de 1/4" a 4"



CODO 45°

Roscada (NPT)
Medidas de 1/4" a 4"



CODO NIPLE 90°

Roscada (NPT)
Medidas de 1/4" a 2"



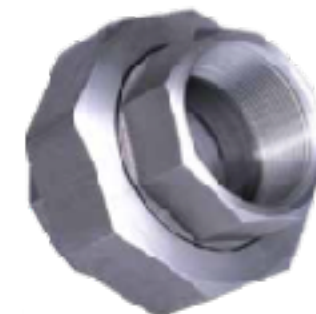
TEE RECTA

Roscada (NPT)
Medidas de 1/4" a 4"



CRUZ

Roscada (NPT)
Medidas de 1/4" a 2"



TUERCA UNIÓN

Roscada (NPT)
Medidas de 1/4" a 4"

Conexiones



COPLE

Roscada (NPT)
Medidas de 1/4" a 4"



TAPÓN CACHUCHA

Roscada (NPT)
Medidas de 1/4" a 4"



MEDIO COPLE

Roscada (NPT)
Medidas de 1/2" a 2"



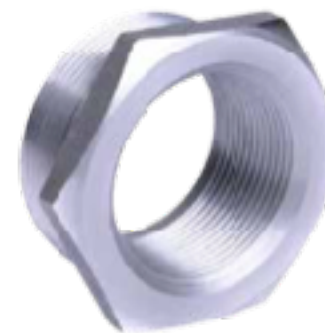
TAPÓN MACHO

Roscada (NPT)
Medidas de 1/4" a 4"



COPLE REDUCIDO

Roscada (NPT)
Medidas de 1/4" a 4"



REDUCCIÓN BUSHING

Roscada (NPT)
Medidas de 1/4" a 4"

3000lb

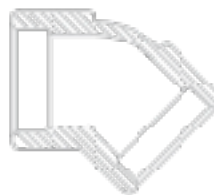
SOLDABLE (SW) - ANSI A105

Acero al carbón forjado



CODO 90°

Soldable (SW)
Medidas de 1/2" a 4"



CODO 45°

Soldable (SW)
Medidas de 1/2" a 4"



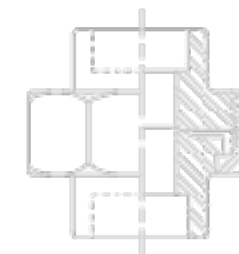
TEE RECTA

Soldable (SW)
Medidas de 1/2" a 4"



TEE REDUCIDA

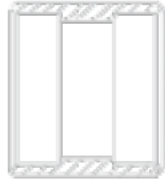
Soldable (SW)
Medidas de 1/2" a 4"



TUERCA UNIÓN

Soldable (SW)
Medidas de 1/2" a 4"

Conexiones



COPLE

Soldable (SW)
Medidas de 1/2" a 4"



MEDIO COPLE

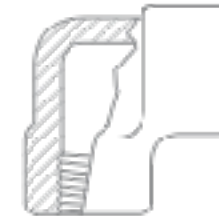
Soldable (SW)
Medidas de 1/2" a 2"



TAPÓN CACHUCHA

Soldable (SW)
Medidas de 1/2" a 4"

6000lb
ROSCADA (NPT) - ANSI A105
Acero al carbón forjado



CODO 90°

Roscada (NPT)
Medidas de 1/2" a 2"



TEE RECTA

Roscada (NPT)
Medidas de 1/2" a 2"

6000lb
SOLDABLE (SW) - ANSI A105
Acero al carbón forjado



TUERCA UNIÓN

Roscada (NPT)
Medidas de 1/2" a 2"



COPLE

Roscada (NPT)
Medidas de 1/2" a 2"



CODO 90°

Soldable (SW)
Medidas de 1/2" a 2"



TEE RECTA

Soldable (SW)
Medidas de 1/2" a 2"



TUERCA UNIÓN

Soldable (SW)
Medidas de 1/2" a 2"



COPLE

Soldable (SW)
Medidas de 1/2" a 2"

3000lb
ROSCADA (NPT)
Acero inoxidable forjado tipo 304L y 316L



CODO 90°

Roscada (NPT)
Medidas de 1/2" a 2"



TEE RECTA

Roscada (NPT)
Medidas de 1/2" a 2"

***ALTA PRESIÓN,
ALTA ESPECIALIDAD***

Conexiones



TUERCA UNIÓN

Roscada (NPT)
Medidas de 1/2" a 2"



TAPÓN CACHUCHA

Roscada (NPT)
Medidas de 1/2" a 2"



TAPÓN MACHO

Roscada (NPT)
Medidas de 1/2" a 2"



COPLE

Roscada (NPT)
Medidas de 1/2" a 2"



REDUCCIÓN BUSHING

Roscada (NPT)
Medidas de 1/2" a 2"

3000lb

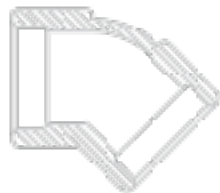
SOLDABLE (SW)

Acero inoxidable forjado 304L y 316L



CODO 90°

Soldable (SW)
Medidas de 1/2" a 2"



CODO 45°

Soldable (SW)
Medidas de 1/2" a 2"



TEE RECTA

Soldable (SW)
Medidas de 1/2" a 2"



TUERCA UNIÓN

Soldable (SW)
Medidas de 1/2" a 2"



COPLE

Soldable (SW)
Medidas de 1/2" a 2"

The image contains four technical drawings of a mechanical part, labeled a, b, c, and d. Each drawing shows a different view of the part with various dimensions and features.

- Drawing a:** A top view of the part. It shows a central rectangular area with rounded corners. Dimensions include B (total width), D (inner width), E (radius of the inner corner), G (radius of the outer corner), and F (total height). A diagonal line is drawn across the part.
- Drawing b:** A side view of the part. It shows a profile with a central rectangular area and rounded corners. Dimensions include A (total height), B (total width), D (inner width), E (radius of the inner corner), G (radius of the outer corner), and F (total height). A diagonal line is drawn across the part.
- Drawing c:** A side view of the part, similar to drawing b. It shows a profile with a central rectangular area and rounded corners. Dimensions include A (total height), B (total width), D (inner width), E (radius of the inner corner), G (radius of the outer corner), and F (total height). A diagonal line is drawn across the part.
- Drawing d:** A side view of the part, similar to drawing b. It shows a profile with a central rectangular area and rounded corners. Dimensions include A (total height), B (total width), D (inner width), E (radius of the inner corner), G (radius of the outer corner), and F (total height). A diagonal line is drawn across the part.

Cruz SW

Too Slow

Code: 9005W

Diámetro Nominal	Diámetro Interior	Diámetro Interior del Tubo	Espesor de Caja y Solilar								Cuerpo de la Pared			Profundidad de Caja	Centro a Base del Interior						
DN	NPS	B	D			C						Grn			Jmin	A					
			3000	6000	9000	3000		6000		9000		3000	6000	9000		3000	6000	9000	3000	6000	9000
6	1/8	10.9	6.1	3.2	-	3.18	3.18	3.96	3.43	-	-	2.41	3.15	-	9.5	11.3	11.0	-	8.0	8.0	-
8	1/4	14.3	8.5	5.6	-	3.78	3.30	4.60	4.01	-	-	3.02	3.68	-	9.5	11.3	13.5	-	8.0	8.0	-
10	3/8	17.7	11.0	0.4	-	4.01	3.50	5.03	4.37	-	-	3.20	4.61	-	9.5	13.5	15.5	-	8.0	11.0	-
15	1/2	21.9	15.0	11.0	5.6	4.67	4.09	5.97	5.18	9.53	8.18	3.73	4.78	7.47	9.5	15.5	19.0	25.5	11.0	12.5	15.5
20	3/4	27.3	20.2	14.8	10.3	4.90	4.27	6.96	6.04	9.78	8.56	3.91	5.56	7.82	12.5	19.3	22.5	28.5	13.0	14.0	19.0
25	1	34.0	25.0	19.9	14.4	5.69	4.98	7.92	6.93	11.38	9.96	4.55	6.35	9.09	12.5	22.5	27.0	32.0	14.0	17.5	20.5
32	1-1/4	42.8	34.3	28.7	21.0	6.07	5.28	7.92	6.93	12.14	10.52	4.85	6.35	9.70	12.5	27.3	32.0	35.0	17.5	20.5	22.5
40	1-1/2	48.9	40.1	33.2	21.2	6.35	5.54	8.92	7.80	12.70	11.12	5.08	7.14	10.15	12.5	32.3	38.0	38.0	20.5	25.5	25.5
50	2	61.2	51.7	42.1	31.4	6.93	6.04	10.92	9.50	13.04	12.12	5.54	8.74	11.07	16.0	38.3	44.0	54.0	25.5	28.5	28.5
65	2-1/2	73.9	61.2	-	-	8.76	7.62	-	-	-	-	7.01	-	-	16.0	41.3	-	-	28.5	-	-
80	3	89.9	76.4	-	-	9.52	8.30	-	-	-	-	7.62	-	-	16.0	5.73	-	-	32.0	-	-
100	4	115.5	100.7	-	-	10.69	9.35	-	-	-	-	8.56	-	-	19.0	66.5	-	-	41.0	-	-

Yes at 45° SW

Diámetro Nominal	Diámetro Interior	Diámetro Interior del Tubo	Espesor de Caja p/Soldar						Cuerpo de la Pared			Prot. de Caja	Longitud del Tubo	Longitud del tubo	Grosor del Final	Centro a Fondo de Caja									
			D		C				Gemin							Jmin	Kmin			A	H				
DNIH	NPS	B	3000	6000	9000	ave	min	ave	min	ave	min	3000	6000	9000	E		F	3000	5000	9000	3000	5000	3000	5000	3000
6	1/8	13.9	6.1	3.2	-	3.18	3.18	3.96	3.43	-	-	2.41	3.15	-	6.5	16.0	4.8	6.4	-	-	-	-	-	-	-
8	1/4	14.3	8.5	5.6	-	3.78	3.30	4.66	4.01	-	-	3.02	3.68	-	6.5	16.0	4.8	6.4	-	-	-	-	-	-	-
10	3/8	17.7	11.3	8.4	-	4.01	3.50	5.03	4.37	-	-	3.20	4.01	-	6.5	17.5	4.8	6.4	-	17	-	9.5	-	-	-
15	1/2	21.9	15.0	11.0	5.6	4.67	4.09	5.91	5.18	9.53	8.18	3.73	4.78	7.47	9.5	22.5	6.4	7.9	11.2	41	51	9.5	11	9.5	11
20	3/4	27.3	20.2	14.8	10.3	4.90	4.27	6.96	6.04	9.78	8.56	3.91	5.56	7.82	12.5	24.0	6.4	7.9	12.7	51	60	11	13	11	13
25	1	34.0	25.3	19.9	14.4	5.69	4.98	7.92	6.93	11.38	9.56	4.55	6.35	9.70	12.5	28.5	9.6	11.2	14.2	60	71	13	16	13	16
32	1-1/4	42.8	34.5	25.7	22.0	6.87	5.28	7.92	6.93	12.14	10.82	4.85	6.35	9.70	12.5	30.0	9.6	11.2	14.2	71	81	16	17	16	17
40	1-1/2	49.9	40.1	33.2	27.2	6.35	5.54	8.92	7.80	12.70	11.12	5.08	7.14	10.15	12.5	32.0	11.2	12.7	15.7	81	98	17	21	17	21
50	2	61.2	51.7	42.1	37.4	6.93	5.04	10.92	9.50	13.84	12.12	5.54	8.74	11.07	16.0	41.0	12.7	15.7	19	98	151	21	30	21	30
65	2-1/2	73.9	61.3	-	-	8.76	7.62	-	-	-	-	7.01	-	-	16.0	43.0	15.7	19.0	-	151	-	30	-	-	-
80	3	83.9	76.4	-	-	9.52	8.30	-	-	-	-	7.62	-	-	16.0	44.5	19.0	22.4	-	184	-	57	-	-	-
100	4	115.5	100.7	-	-	10.69	9.35	-	-	-	-	8.56	-	-	19.0	48.0	21.4	28.4	-	201	-	66	-	-	-

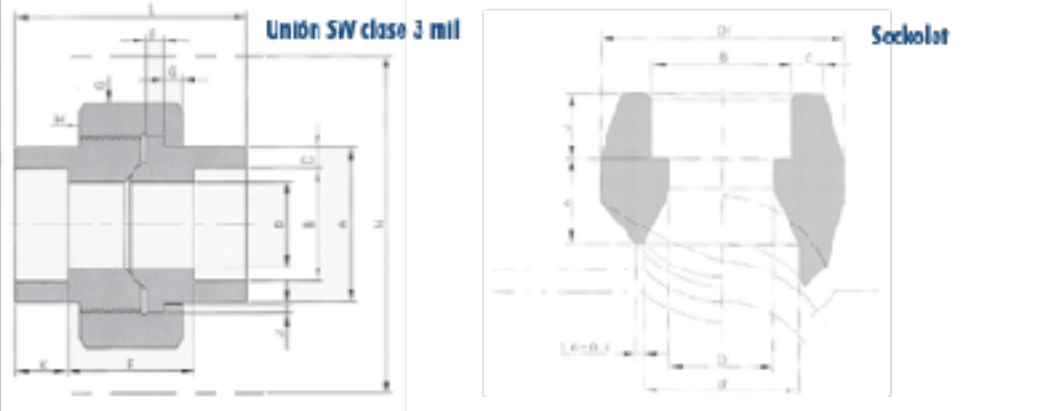
Conexiones

Cople
Reducido SW

MSS SP-79

		Tipo 1		Tipo 2									
Diámetro Nominal		Tipo		Diámetro Interior		Profundidad de Caja		Diámetro de Rosca		Longitud del Tubo		Diámetro Interior del Tubo	
DN	NPS	3000	6000	B	Emin	SE	A		D	Gmin		3000	6000
							3000	6000		3000	6000		
12x8	3/8 x 1/4	1	1	143	9.5	17.1	19.1	21.3	9.2	6.4	3.8	4.6	
14x10 x8	1/2 x 3/8 x1/4	1	1	177	9.5	21.3	20.6	23.1	12.5	9.1	4.0	5.0	
		1	1	143	9.5		20.6	20.6	9.2	6.4	3.8	4.6	
20x15 x10 x8	3/4 x 1/2 x3/8 x1/4	1	1	219	9.5	26.7	22.4	25.4	15.8	11.8	4.7	6.0	
		2	1	177	9.5		15.7	22.4	12.5	9.1	4.0	5.0	
		2	2	143	9.5		17.5	22.4	9.2	6.4	3.8	4.6	
25x20 x15 x10 x8	1 x 3/4 x1/2 x3/8 x1/4	1	1	273	12.5	33.4	23.9	28.5	20.9	15.5	4.9	7.0	
		2	1	219	9.5		15.7	28.5	15.8	11.8	4.7	6.0	
		2	2	177	9.5		17.5	22.4	12.5	9.1	4.0	5.0	
		2	2	143	9.5		19.1	23.9	9.2	6.4	3.8	4.6	
35x25 x20 x15 x10 x8	1-1/4 x 1 x3/4 x1/2 x3/8 x1/4	1	1	340	12.5	42.2	25.4	30.2	26.6	20.7	5.7	7.9	
		2	2	273	12.5		17.5	30.6	20.9	15.5	4.9	7.0	
		2	2	219	9.5		19.1	22.4	15.8	11.8	4.7	6.0	
		2	2	177	9.5		20.6	23.9	12.5	9.1	4.0	5.0	
40x32 x25 x20 x15 x10	1 1/2 x 1 1/4 x1 x3/4 x1/2 x3/8	1	1	428	12.5	48.3	28.5	35.1	35.1	29.5	6.1	7.9	
		2	1	340	12.5		17.5	29.2	26.6	20.7	5.7	7.9	
		2	2	273	12.5		19.1	25.4	20.9	15.5	4.9	7.0	
		2	2	220	9.5		20.6	26.9	15.8	11.8	4.7	6.0	
50x40 x32 x25 x20 x15	2 x 1-1/2 x1-1/4 x1 x3/4 x1/2	1	1	489	12.5	60.3	31.8	38.9	40.9	34.0	6.4	8.9	
		2	2	428	12.5		20.6	33.9	35.1	29.5	6.1	7.9	
		2	2	340	12.5		22.4	25.4	26.6	20.7	5.7	7.9	
		2	2	273	12.5		23.9	26.9	20.9	15.5	4.9	7.0	
65x50 x40 x32 x25 x20	2-1/2 x 2 x1-1/2 x1-1/4 x1 x3/4	1	1	514	16.0	73.0	45.0	42.7	52.5	42.9	6.9	10.9	
		2	2	489	12.5		35.1	35.1	40.9	34.0	6.4	8.9	
		2	2	428	12.5		36.6	36.6	35.1	29.5	6.1	7.9	
		2	2	340	12.5		38.1	38.1	26.6	20.7	5.7	7.9	
80x65 x50 x40 x32 x25	3 x 2-1/2 x2 x1-1/2 x1-1/4 x1	1	1	741	16.0	88.9	38.1	57.2	63.7	54.0	8.8	11.9	
		2	2	514	16.0		25.4	31.8	52.5	42.9	6.9	10.9	
		2	2	489	12.5		28.5	31.8	40.9	34.0	6.4	8.9	
		2	2	428	12.5		30.2	31.8	35.1	29.5	6.1	7.9	
100x80 x65 x50 x40 x32	4 x 3 x2-1/2 x2 x1-1/2 x1-1/4	1	1	900	16.0	114.3	33.3	54.0	77.9	66.6	9.5	13.8	
		2	2	741	16.0		38.1	54.0	62.7	54.0	8.8	12.5	
		2	2	514	16.0		38.1	54.0	52.5	42.9	6.9	11.9	
		2	2	489	12.5		41.2	57.0	40.9	34.0	6.4	8.9	
		2	2	428	12.5		42.9	57.0	35.1	29.5	6.1	7.9	

DE: DIÁMETRO EXTERIOR



A-MSS SP-83

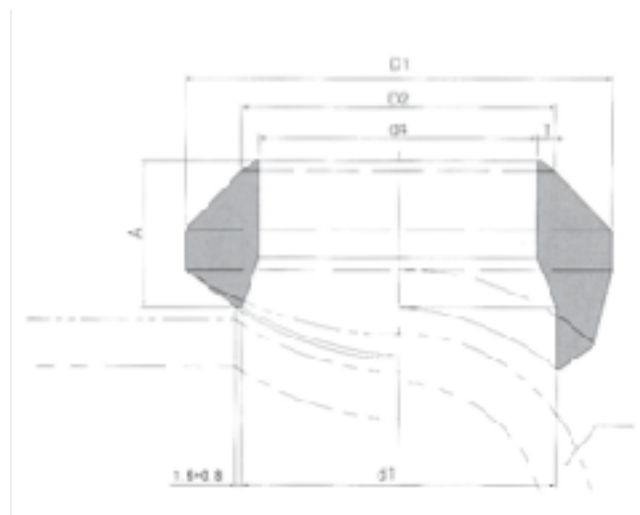
Diámetro Nominal		Final del tubo	Diámetro Interior	Pared de Caja	Pasa	longitud del tubo	Bride Macho	Tuerca	Asiento	Profundidad de Caja	Largo	Claro de tuerca
DN	NPS	Amin	Bmin	Cmin	D	E	Fmin	Gmin	Jmin	Kmin	Lmin	M
6	1/8	21.8	10.9	3.2	6.1	20.7	3.2	3.2	1.2	9.7	41.4	51
8	1/4	21.8	14.3	3.3	8.5	20.7	3.2	3.2	1.2	9.7	41.4	51
10	3/8	25.9	17.7	3.5	11.8	23.3	3.4	3.4	1.4	9.7	46	56
15	1/2	31.2	21.9	4.1	15	23.3	3.7	3.7	1.5	9.7	49	59
20	3/4	37.1	27.3	4.3	20.4	28.9	4.1	4.1	1.7	12.7	56.9	66
25	1	45.5	34	5	25.9	30.2	4.6	4.4	1.9	12.7	62	79
32	1-1/8	54.9	42.8	5.3	30.5	36.4	5.3	5.1	2.1	12.7	71.1	94
40	1-1/2	61.5	48.9	5.5	40.1	38.1	5.8	5.6	2.3	12.7	76.3	112
50	2	75.2	61.2	6	51.7	41.4	6.6	6.4	2.7	15.7	86.1	132
55	2-1/2	91.7	73.9	7.7	61.2	56.9	7.5	7.1	3.1	15.7	102.4	150
80	3	109.2	89.9	8.3	75.4	58.7	8.3	8	3.5	15.7	109	176

B MSS SP-83

Diámetro Nominal		Diámetro Nominal de la Salida		Prof. de Caja	Caja o Rosca		DE de Conexión		Espesor de Caja p/ Soldar		Diámetro del Corte	
DN	NPS	DN	NPS	J _{min}	A _{area}		D _{int}		C _{ext}		D _{ext}	
					3000	6000	3000	6000	3000	6000	3000	6000
8-900	1/4-36	5	1/8	9.5	10	-	27	-	3.18	-	16	-
13-900	3/8-36	8	1/4	9.5	10	-	27	-	3.78	-	16	-
15-900	1/2-36	10	3/8	9.5	13	-	30	-	4.01	-	19	-
23-900	3/4-36	15	1/2	9.5	16	24	38	47	4.67	5.97	24	19
25-900	1-36	20	3/4	12.5	16	25	47	53	4.90	6.96	30	25
32-900	1-1/8-36	25	1	12.5	22	29	56	63	5.69	7.92	36	33
43-900	1-1/2-36	32	1-1/4	12.5	22	30	66	74	6.07	7.92	45	38
53-900	2-36	40	1-1/2	12.5	24	32	75	83	6.35	8.92	51	49
65-900	2-1/2-36	50	2	16.0	24	37	90	104	6.98	10.37	65	59
83-900	3-36	65	2-1/2	16.0	25	-	105	-	8.76	-	76	-
100-900	4-36	80	3	16.0	30	-	124	-	9.52	-	94	-
125-900	5-36	100	4	19.0	30	-	154	-	10.69	-	121	-

DE: DIÁMETRO EXTERIOR

Conexiones

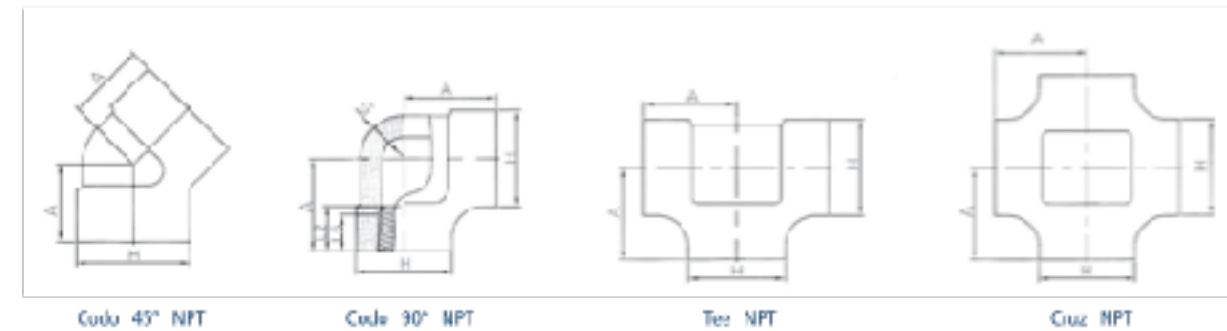


Weldolet

MSS SP-97

Diámetro Nominal		Diámetro Nominal de la Salida		Largo			DE de Conexión			Diámetro del Corte		
DN	NPS	DN	NPS	A			D2mini			D1mini		
				STD	XS	SC4150	STD	XS	SCW160	STD	XS	SCW160
3-900	1/4-36	6	1/8	15	16	—	24	24	—	16	16	—
10-900	3/8-36	8	1/4	15	16	—	26	25	—	16	16	—
15-900	1/2-36	10	3/8	19	19	—	30	30	—	19	19	—
20-900	3/4-36	15	1/2	19	19	28	36	35	36	24	24	14
25-900	1-36	20	3/4	22	22	32	43	43	46	30	30	19
32-900	1-1/4-36	25	1	27	27	38	55	55	51	36	36	25
40-900	1-1/2-36	32	1-1/4	32	32	44	66	65	63	45	45	33
50-900	2-36	40	1-1/2	33	33	51	74	74	71	51	51	38
65-900	2-1/2-36	50	2	33	38	55	90	90	82	60	60	43
80-900	3-36	65	2-1/2	41	41	52	104	104	98	76	76	54
90-900	3-1/2-36	80	3	44	44	73	124	124	122	93	93	73
100-900	4-36	90	3-1/2	43	48	—	138	138	—	113	133	—
125-900	5-36	100	4	51	51	34	151	151	151	120	120	98
150-900	6-36	125	5	57	57	34	187	187	188	141	141	122
200-900	8-36	150	6	60	79	100	213	227	222	170	170	146
250-900	10-36	200	8	70	90	—	265	262	—	220	220	—
300-900	12-36	250	10	73	94	—	323	325	—	275	265	—
350-900	14-36	300	12	85	103	—	379	381	—	325	317	—
400-900	16-36	350	14	89	100	—	411	416	—	357	351	—
450-900	18-36	400	16	94	106	—	485	488	—	408	403	—
500-900	20-36	450	18	97	111	—	522	525	—	453	455	—
550-900	22-36	500	20	102	119	—	573	584	—	508	509	—
650-900	26-36	500	24	116	140	—	690	708	—	614	612	—

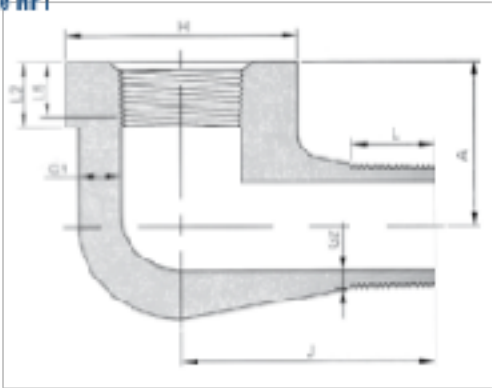
DE DIÁMETRO EXTERIOR

**ASME B16.11**

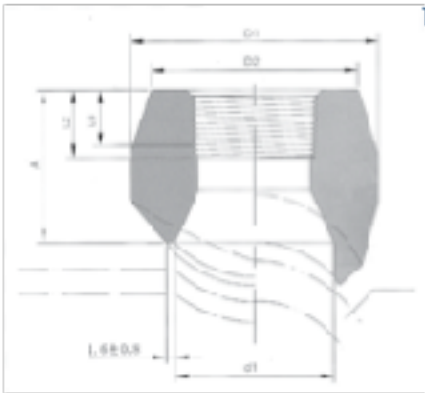
Diámetro Nominal de la Tubería		Centro a Final						Diámetro Exterior de la Banda			Espesor Pared			Largo de la Rosca	
DN	NPS	A						B			C=			L=	L=
		90° Codos, T, Cruz			45° Codos						E=				
		2000	3000	6000	2400	3300	6000	2000	3000	6000	2000	3000	6000		
6	1/8	21	21	25	17	17	19	22	22	25	3.18	3.18	6.35	6.4	6.7
8	1/4	21	25	28	17	19	22	22	25	33	3.18	3.30	6.60	8.1	10.2
10	3/8	25	28	33	19	22	25	25	33	38	3.18	3.51	6.98	9.1	10.4
15	1/2	28	33	38	22	25	28	33	38	46	3.18	4.05	8.15	10.9	13.6
20	3/4	33	38	44	25	28	33	38	46	56	3.18	4.32	8.53	12.7	13.9
25	1	38	44	51	28	33	35	46	56	62	3.68	4.98	8.93	14.7	17.3
32	1 1/4	44	51	60	33	35	43	56	62	75	3.89	5.28	10.99	17.0	18.0
40	1 1/2	51	60	64	35	43	44	62	75	84	4.01	5.56	11.07	17.8	18.4
50	2	60	64	83	43	44	52	75	84	102	4.27	7.14	12.09	19.0	19.2
65	2 1/2	76	88	95	52	52	64	92	102	121	5.61	7.65	15.29	23.6	28.9
80	3	86	95	106	64	54	79	109	121	146	5.99	8.84	16.64	25.9	30.5
100	4	106	114	114	79	79	79	145	152	152	6.55	11.13	18.67	27.7	33.0

Conexiones

Codo niple NPT



Threadolet



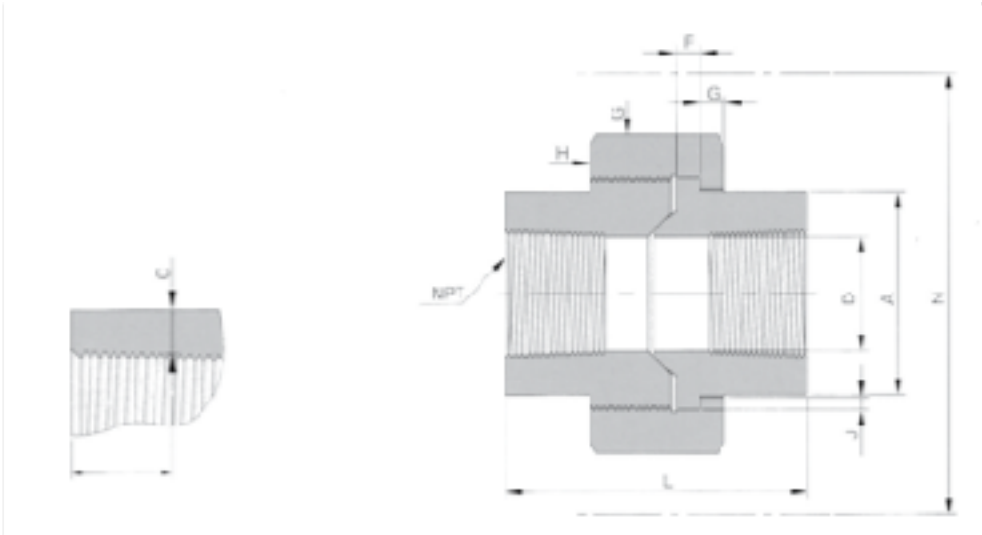
A- ASME B16.11

Diámetro Nominal	Punta a Punta	Centro a Bosca Macho		Diámetro Exterior de Salida Hembra		Grosor de la Pared		Espesor de la Pared		Largo del Tubo		Largo Rosca Macho	
		A		I		C		G		L		L	
DN	NPS	3000	6000	3000	6000	3000	6000	3000	6000	3000	6000	3000	6000
6	1/8	19	22	25	32	19	25	3.18	5.08	2.72	4.22	6.4	6.7
8	1/4	22	25	32	38	25	32	3.30	5.66	3.22	5.28	8.1	10.2
10	3/8	25	28	38	41	32	38	3.51	6.98	3.50	5.50	9.1	10.4
15	1/2	28	35	41	48	38	44	4.09	8.15	4.16	6.52	10.9	13.6
20	3/4	35	44	48	57	44	51	4.32	8.53	4.88	6.86	12.7	13.9
25	1	44	51	57	66	51	62	4.98	9.93	5.56	7.96	14.7	17.3
32	1-1/4	51	54	66	71	62	70	5.28	10.59	5.56	8.48	17.0	18.0
40	1-1/2	54	64	71	84	70	84	5.56	11.07	6.25	8.86	17.8	18.4
50	2	54	83	84	105	84	102	7.14	12.09	7.64	9.70	19.0	19.2

B- MSS SP-97

Diámetro Nominal		Diámetro Nominal de la Salida		Largo		DE de Conexión		DE de Salida		Largo del Tubo		Diámetro del Codo	
DN	NPS	DN	NPS	A		D _{min}		D _{min}		L _{min}	L _{max}	D _{nom}	
				3000	6000	3000	6000	3000	6000			3000	6000
8-30	1/4-3/8	6	1/8	19	—	27	—	22	—	6.7	16	—	—
10-90	3/8-3/8	8	1/4	19	—	27	—	22	—	10.2	16	—	—
15-90	1/2-3/8	10	3/8	21	—	30	—	25	—	10.4	19	—	—
20-90	3/4-3/8	15	1/2	25	32	38	45	32	42	13.6	24	19	—
25-90	1-3/8	20	3/4	27	37	47	54	35	48	13.9	30	25	—
32-90	1-1/4-3/8	25	1	33	40	56	63	48	58	17.3	36	33	—
40-90	1-1/2-3/8	32	1-1/4	33	41	66	72	58	67	18.0	45	38	—
50-90	2-3/8	40	1-1/2	35	43	73	83	64	77	18.4	51	49	—
65-90	2-1/2-3/8	50	2	38	52	90	104	71	92	19.2	55	59	—
80-90	3-3/8	65	2-1/2	46	—	105	—	97	—	28.9	76	—	—
100-90	4-3/8	80	3	51	—	124	—	114	—	30.5	94	—	—
125-90	5-3/8	100	4	57	—	154	—	143	—	32.5	121	—	—

DE: DIÁMETRO EXTERIOR



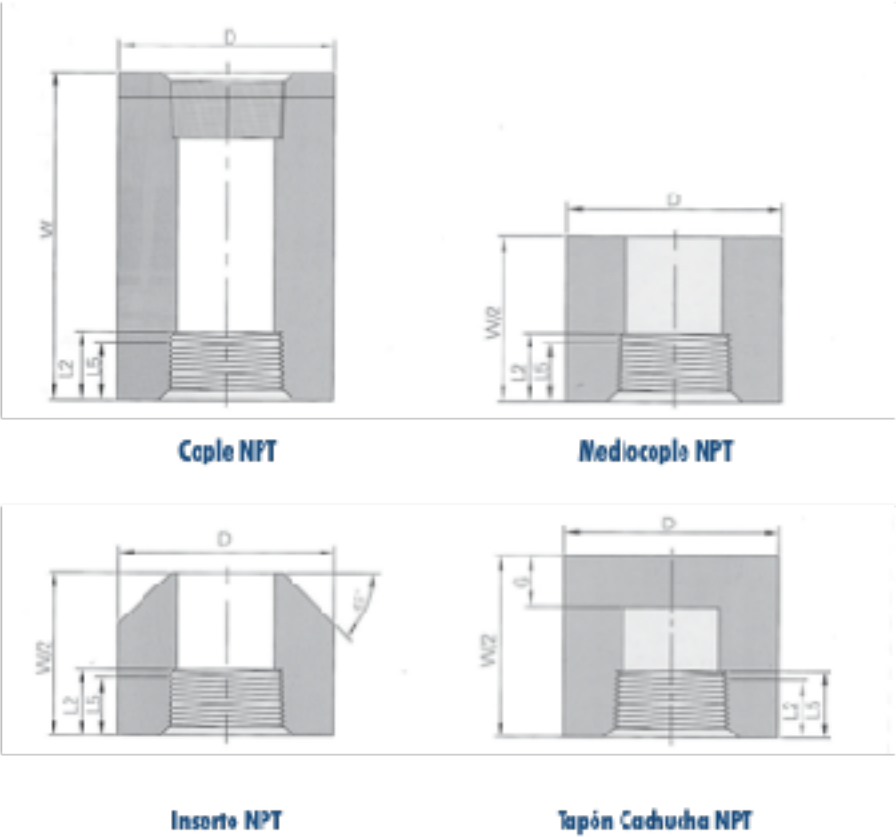
Apriete de llave

Unión NPT clase 3 mil

MSS SP-83

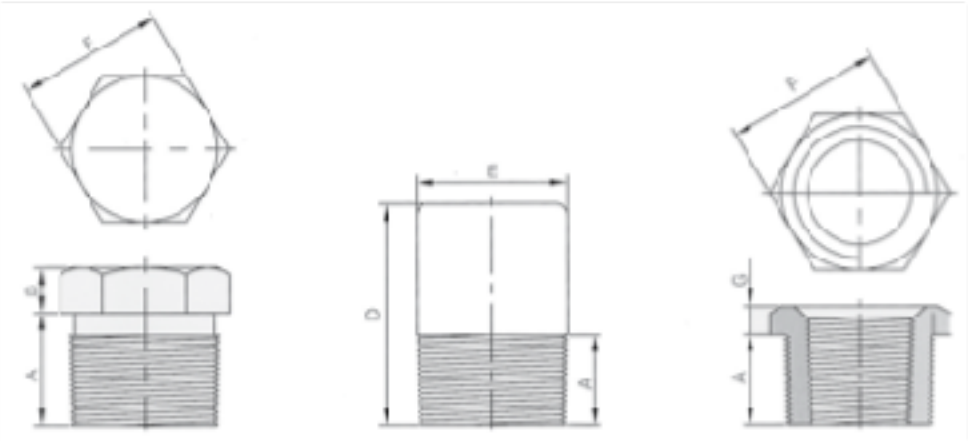
Diámetro Nominal		Final del Tubo		Pared		Husco		Brida Macho		Torcer		Rosca por Pulgada		Asiento		Largo		Claro de Torcer	
DN	NPS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
6	1/8	14.7	—	2.4	8.4 6.4	—	3.2	3.2	16	1.2	41.4	51	—	—	—	—	—	—	—
8	1/4	19.1	—	3.0	11.1 9.4	—	3.2	3.2	16	1.2	41.4	51	—	—	—	—	—	—	—
10	3/8	22.9	—	3.2	14.3 11.5	—	3.4	3.4	14	1.4	46.0	55	—	—	—	—	—	—	—
15	1/2	27.7	—	3.7	17.9 17.1	—	3.7	3.7	14	1.5	45.0	59	—	—	—	—	—	—	—
20	3/4	33.5	—	3.9	23.0 21.4	—	4.1	4.1	11	1.7	56.9	65	—	—	—	—	—	—	—
25	1	41.4	—	4.5	29.0 27.7	—	4.6	4.4	11	1.9	62.0	73	—	—	—	—	—	—	—
32	1-1/4	53.5	—	4.9	37.7 35.4	—	5.3	5.2	10	2.1	71.1	94	—	—	—	—	—	—	—
40	1-1/2	57.2	—	5.1	43.5 41.2	—	5.8	5.6	10	2.3	76.5	112	—	—	—	—	—	—	—
50	2	70.1	—	5.5	55.6 52.1	—	6.6	6.4	10	2.7	86.1	132	—	—	—	—	—	—	—
65	2-1/2	85.3	—	7.0	66.3 64.3	—	7.5	7.1	8	3.1	102.4	150	—	—	—	—	—	—	—
80	3	102.4	—	7.6	82.6 77.3	—	8.3	8.0	8	3.5	109.0	176	—	—	—	—	—	—	—

Conexiones

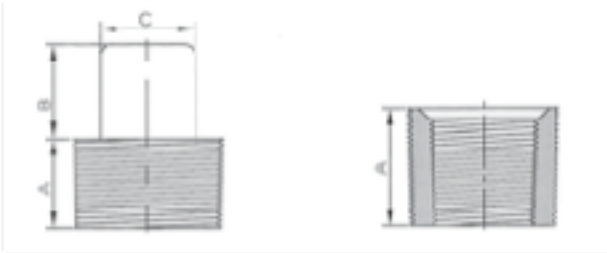


ASME B16.11

Diámetro Nominal		Punta a Punta	Punta a Punta		Diámetro Exterior		Esp. Pared		Largo Rosca Macho	
DN	NPS	W	F		D		Gmin		Lmin	L2min
		3000/6000	3000	6000	3000	6000	3000	6000		
6	1/8	32	19	—	16	22	4.0	—	6.4	6.7
8	1/4	35	25	27	19	25	4.8	6.4	8.1	10.2
10	3/8	38	25	27	22	32	4.8	6.4	9.1	10.4
15	1/2	48	32	33	28	38	6.4	7.9	10.9	13.6
20	3/4	51	37	38	35	44	6.4	7.9	12.7	13.9
25	1	60	41	43	44	57	9.7	11.2	14.7	17.3
32	1-1/4	67	44	46	57	64	9.7	11.2	17.0	18.0
40	1-1/2	79	44	48	64	76	11.2	12.7	17.8	18.4
50	2	86	48	51	76	92	12.7	15.7	19.0	19.2
65	2-1/2	92	60	64	92	108	15.7	19.0	23.6	28.9
80	3	108	65	68	108	127	19.0	22.4	25.9	30.5
100	4	121	68	75	140	159	22.4	28.4	27.7	33.0



Tapón Macho Cab. Hex. Tapón Macho Cab. Redonda Reducción Bushing Hex.



Tapón Macho Cab. Cuadrada Bushing Lisa

ASME B16.11

Diámetro Nominal		Largo	Alto del Cuadro	Ancho de Cab. Cuad.	Diámetro de la Cabeza	Largo	Altura Cab. Hexagonal	Altura Cab. Hexagonal	Ancho de Cab. Hex.
DN	NPS	Amin	Bmin	Cmin	Emin	Dmin	Hmin	Gmin	Fmin
		3000	6000	3000	6000	3000	6000	3000	6000
6	1/8	10	6	7	10	35	6	—	11
8	1/4	11	6	10	14	41	6	3	16
10	3/8	13	8	11	18	41	8	4	17.5
15	1/2	14	10	14	21	44	8	5	22
20	3/4	16	11	16	23	44	10	6	27
25	1	19	13	21	33	51	10	6	35
32	1-1/4	21	14	24	43	51	14	7	44.5
40	1-1/2	21	16	28	48	51	15	8	51
50	2	22	18	32	60	54	18	9	63.5
65	2-1/2	27	19	36	73	70	19	10	76
80	3	28	21	41	85	70	21	10	89
100	4	32	25	65	111	76	25	13	117.5

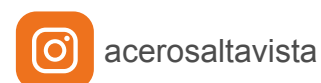
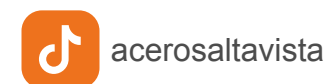


Datos de contacto

Dirección: Matias Romero No. 102 Col. Del Valle
Alc. Benito Juárez C.P. 03100 Ciudad de México

Correo electrónico: ventas@acerosaltavista.com

Teléfono: (01 55) 8852 2800 / (01 55) 8852 2801



www.acerosaltavista.com