

ASTM TUBE PART NUMBER MATRIX

TXXX		-	XX		-	XXXXXX (XXX)		X4	-	XXX	XX	
PROCESS CODE			ALLOY CODE (SEE NOTE 1)			SIZE CODE (SEE NOTE 3)		USED ONLY FOR 4-METER LENGTH TUBES		WALL CODE	SURFACE FINISH & VISUALS	
T1A	= PER SP-9204 (101)		0S	= 316L SEAMLESS		00125	.13		= .125" DIA	028	= .028" THICK	USED ONLY FOR 401 PROCESS CODE
T2A	= PER SP-9206 (201)		0W	= 316L WELDED		00250	.25		= .25" DIA	035	= .035" THICK	A5 = 5µIn Ra Max, Superior Visuals
T2I	= PER CUSTOM SPEC		1S	= 304L SEAMLESS		00375	.38		= .375" DIA	039	= .039" THICK	A7 = 7µIn Ra Max, Superior Visuals
T3A	= PER SP-9223 (301)		1W	= 304L WELDED		00500	.50		= .5" DIA	049	= .049" THICK	B0 = 10µIn Ra Max, Standard Visuals
T3B	= PER SP-9223 BULK PK (301)		2S	= 304L SEAMLESS		00750	.75		= .75" DIA	058	= .058" THICK	C0 = 10µIn Ra, Relaxed Visuals
T3O	= PER SP-9223 OEM (301)		2W	= 304L WELDED		01000	1.0		= 1" DIA	065	= .065" THICK	
T3OB	= PER SP-9223 OEM BULK PK (301)		3S	= 304L SEAMLESS		01500	1.5		= 1.5" DIA	083	= .083" THICK	USED ONLY FOR 444 PROCESS CODE
T4A	= PER SP-9220 (401)		3W	= 304L WELDED		02000	2.0		= 2" DIA	095	= .095" THICK	-A = 5µIn Ra Max
T4B	= PER SP-9220 BULK PK (401)		AS	= 304 SEAMLESS		02500	2.5		= 2.5" DIA	109	= .109" THICK	-B = 10µIn Ra Max
T4I	= PER CUSTOM SPEC		AW	= 304 WELDED		03000	3.0		= 3" DIA			
T4O	= PER SP-9220 OEM (401)		BS	= 316L SEAMLESS, VOD/VAR		04000	4.0		= 4" DIA			
T4R	= PER SP-9220 & I.D./O.D. POLISH (401)		HS	= UNS N06022 ALLOY		06000	6.0		= 6" DIA			
TMC	= PER SP-9207 (222)		KS	= 316L SEAMLESS VIM/VAR		USED FOR 20-FOOT AND 6-METER LENGTH TUBES		USED ONLY FOR 4-METER LENGTH TUBES				
TNE	= PER SP-9241 (444)		NS	= 316L SEAMLESS (ASTM STD)								
			NW	= 316L WELDED (ASTM STD)								
			QS	= 316L SEAMLESS								
			QW	= 316L WELDED								
			RS	= 316L SEAMLESS								
			RW	= 316L WELDED								
			VS	= 316L SEAMLESS VIM/VAR								
NOTES:												
1. PROCESS CODES ARE NOT AVAILABLE FOR ALL TYPE CODES (MATERIAL) AND SIZES. PLEASE CONTACT VALEX												

NOTES:
1. SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.

- NOTES:
- 1. PROCESS CODES ARE NOT AVAILABLE FOR ALL TYPE CODES (MATERIAL) AND SIZES. PLEASE CONTACT VALEX SALES FOR ITEM NUMBER AVAILABILITY.
 - 2. ZEROS MAY BE OMITTED AND REPLACED WITH DECIMAL IN SOME PROCESSES (I.E. T30B).
 - 3. SHADED COLUMNS USED ONLY FOR 4-METER LENGTH TUBES.
 - 4. VISUAL CRITERIA IS TO BE USED IN CONJUNCTION WITH SURFACE ROUGHNESS AS INDICATED.



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TITLE TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME		
SPECIFICATION SP-9200	SHEET 1/9	REV CB

ASTM COAXIAL TUBE PART NUMBER MATRIX

CTXX		XX		- XX		- XXXXX (XXXX)		X4		- XX		
INNER PROCESS CODE		OUTER ALLOY (SEE NOTE 1)		INNER ALLOY (SEE NOTE 1)		SIZE CODE - INNER (SEE NOTE 3)		USED ONLY FOR 4-METER LENGTH TUBES		SURFACE FINISH & VISUALS		
CT1A	= PER SP-9204 (101)	0S	= 316L 0S SEAMLESS	0S (or BLANK)	= 316L SEAMLESS	.25	.25			= .25" DIA	USED ONLY FOR 401 PROCESS CODE	
CT2A	= PER SP-9206 (201)	0W	= 316L 0W WELDED	0W	= 316L WELDED	.25M	.25M			= .25" DIA (1MM WALL)	A5 = 5µIn Ra Max, Superior Visuals	
CT3A	= PER SP-9223 (301)	1S	= 304L SEAMLESS	2S	= 304L SEAMLESS	.375	.38			= .375" DIA	A7 = 7µIn Ra Max, Superior Visuals	
CT4A	= PER SP-9220 (401)	1W	= 304L WELDED	2W	= 304L WELDED	.375M	.38M			= .375" DIA (1MM WALL)	B0 = 10µIn Ra Max, Standard Visuals	
CTMC	= PER SP-9207 (222)	2S	= 304L SEAMLESS	3S	= 304L SEAMLESS	.5	.5			= .5" DIA	C0 = 10µIn Ra, Relaxed Visuals	
CTNE	= PER SP-9241 (444)	2W	= 304L WELDED	3W	= 304L WELDED	.75	.75			= .75" DIA	USED ONLY FOR 444 PROCESS CODE	
		AW	= 304 WELDED	BS	= 316L SEAMLESS, VOD/VAR	.75M	.75M			= .75" DIA (.049" WALL)		
		NS	= 316L SEAMLESS (ASTM STD)	HS	= UNS N06022 ALLOY	1	1	= 1" DIA				
		NW	= 316L WELDED (ASTM STD)	KS	= 316L SEAMLESS VIM/VAR	1.5	1.5	= 1.5" DIA				
		RS	= 316L SEAMLESS	NS	= 316L SEAMLESS (ASTM STD)	2	2	= 2" DIA	-A = 5µIn Ra Max			
		RW	= 316L WELDED	NW	= 316L WELDED (ASTM STD)	USED FOR 20-FOOT AND 6-METER LENGTH TUBES		USED ONLY FOR 4-METER LENGTH TUBES		-B = 10µIn Ra Max		
		VS	= 316L SEAMLESS VIM/VAR	QS	= 316L SEAMLESS							
				QW	= 316L WELDED							
				RS	= 316L SEAMLESS							
				RW	= 316L WELDED							
				VS	= 316L SEAMLESS VIM/VAR							

NOTES:

1. SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.
2. DECIMALS MAY BE OMITTED AND REPLACED WITH ZEROS IN SOME PROCESSES (I.E. CT4A-S-VS-XXXX-XX).
3. SHADED COLUMNS USED ONLY FOR 4-METER LENGTH TUBES.
4. PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES. PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.



TITLE

TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME

SPECIFICATION

SP-9200

SHEET
2/9

REV
CB

SINGLE WALL FITTING PART NUMBER MATRIX - ASTM

XX

PROCESS / ALLOY (SEE NOTE 1)
B = SP-9206 (201) 0S/0W/A4 (316L)
D = SP-9206 (201) 2S/2W (304L)
E = SP-9220 (401) 0S/0W/A4 (316L)
H = SP-9207 (222) HS (N06022)
Q = SP-9220 (401) VS (316L)
RB = SP-9206 (201) RS/RW (316L)
RE = SP-9220 (401) RS/RW (316L)
Y = SP-9220 (401) KS (316L)
YB = SP-9206 (201) KS (316L)

XXXX

CONFIGURATION CODE
2 = 90° ELBOW
2W = 90° ELBOW, WLD
2K = 45° ELBOW
2KW = 45° ELBOW, WLD
7 = EQUAL TEE
7W = EQUAL TEE, WLD
7ST = EQUAL TEE, SHORT TANGENT
7STW = EQUAL TEE, SHORT TANGENT, WLD
7R = REDUCING TEE
7RW = REDUCING TEE, WLD
7RWW = REDUCING TEE, WLD X WLD
9 = EQUAL CROSS
9R = REDUCING CROSS
16 = END CAP
16W = END CAP, WLD
31 = CONCENTRIC REDUCER
31(S) = CONCENTRIC REDUCER, SHORT TYPE
31W = CONCENTRIC REDUCER, WLD X SMLS
31WW = CONCENTRIC REDUCER, WLD X WLD
32 = ECCENTRIC REDUCER
32W = ECCENTRIC REDUCER, WLD X SMLS
32WW = ECCENTRIC REDUCER, WLD X WLD
38 = WELD NECK FLANGE W/ SMLS TUBE
38W = WELD NECK FLANGE W/ WLD TUBE
38SE = TUBE STUB END, SHORT
38LE = TUBE STUB END, LONG
38PF = TUBE PLATE FLANGE

-

XXXXX

SIZE CODE (SEE NOTE 2)
.25 = 1/4" O.D. X .035" WALL
.25M = 1/4" O.D. X .039" (1MM) WALL
.375 = 3/8" O.D. X .035" WALL
.375M = 3/8" O.D. X .039" (1MM) WALL
.5 = 1/2" O.D. X .049" WALL
.75 = 3/4" O.D. X .065" WALL
.75M = 3/4" O.D. X .049" WALL
1 = 1" O.D. X .065" WALL
1.5 = 1-1/2" O.D. X .065" WALL
2 = 2" O.D. X .065" WALL
2.5 = 2-1/2" O.D. X .065" WALL

3 = 3" O.D. X .065" WALL
4 = 4" O.D. X .083" WALL
6 = 6" O.D. X .109" WALL

x(XXXXXX)

USED ONLY FOR
REDUCING FITTINGS

REFER TO "SIZE"
CODE IF APPLICABLE

- XX

SURFACE FINISH & VISUALS
USED ONLY FOR 401 PROCESS CODE
A5 = 5µIn Ra Max, Superior Visuals
A7 = 7µIn Ra Max, Superior Visuals
B0 = 10µIn Ra Max, Standard Visuals
C0 = 10µIn Ra, Relaxed Visuals

Single Wall Fitting Example 1:
E2-5-B0
VALEX 401 SPEC, 90° ELBOW, 1/2" O.D. X .049" WALL,
STANDARD VISUALS, 10 Ra MAX, 0S CHEMISTRY

Single Wall Fitting Example 2:
Y7R-1X.5-A5
VALEX 401 SPEC, REDUCING TEE, 1"(.065" WALL) X 1/2" (.049" WALL),
SUPERIOR VISUALS, 5Ra MAX, KS CHEMISTRY

COAXIAL FITTING PART NUMBER MATRIX - ASTM

XX

INNER PROCESS / ALLOY (SEE NOTE 1)
C = SP-9220 (401) 0S/0W (316L)
CB = SP-9206 (201) 0S/0W (316L)
HC = SP-9207 (222) HS (N06022)
R = SP-9220 (401) VS (316L)
RC = SP-9220 (401) RS/RW (316L)
W = SP-9220 (401) KS (316L)
WB = SP-9206 (201) KS (316L)

X

OUTER ALLOY (SEE NOTE 1)
BLANK = 0S/0W (316L)
2 = 2S/2W (304L)
A = AW (304)
N = NS (316L)
R = RS/RW (316L)
V = VS (316L)

XXXX

CONFIGURATION CODE
2 = 90° ELBOW
2K = 45° ELBOW
7 = EQUAL TEE
7R = REDUCING TEE
7P = COAX PURGE TEE, MALE
7PF = COAX PURGE TEE, FEMALE
7PFS = COAX PURGE TEE W/ FS, MALE
12 = COAX SLEEVE
12E = COAX SLEEVE (4=4", 5=5", 6=6")
14FS = COAX FS WELD GLAND, FEMALE
15FS = COAX FS WELD GLAND, MALE
16 = COAX TERMINATOR
17BH = COAX BULKHEAD FITTING
31 = CONCENTRIC REDUCER

-

XXXXX

SIZE CODE (SEE NOTE 2)
.25 = 1/4" O.D. X .035" WALL INNER TUBE
1/2" O.D. X .049" WALL OUTER TUBE
.25M = 1/4" O.D. X .039" (1MM) WALL INNER TUBE
1/2" O.D. X .049" WALL OUTER TUBE
.375 = 3/8" O.D. X .035" WALL INNER TUBE
5/8" O.D. X .049" WALL OUTER TUBE
.375M = 3/8" O.D. X .039" (1MM) WALL INNER TUBE
5/8" O.D. X .049" WALL OUTER TUBE
.5 = 1/2" O.D. X .049" WALL INNER TUBE
3/4" O.D. X .065" WALL OUTER TUBE
.75 = 3/4" O.D. X .065" WALL INNER TUBE
1" O.D. X .065" WALL OUTER TUBE
.75M = 3/4" O.D. X .049" WALL INNER TUBE
1" O.D. X .065" WALL OUTER TUBE
1 = 1" O.D. X .065" WALL INNER TUBE
1-1/4" O.D. X .065" WALL OUTER TUBE
1.5 = 1.5" O.D. X .065" WALL INNER TUBE
2" O.D. X .065" WALL OUTER TUBE
2 = 2" O.D. X .065" WALL INNER TUBE
2-1/2" O.D. X .065" WALL OUTER TUBE

x(XXXXXX)

USED ONLY FOR
REDUCING FITTINGS

REFER TO "SIZE"
CODE IF APPLICABLE

- XX

SURFACE FINISH & VISUALS
USED ONLY FOR 401 PROCESS CODE
A5 = 5µIn Ra Max, Superior Visuals
A7 = 7µIn Ra Max, Superior Visuals
B0 = 10µIn Ra Max, Standard Visuals
C0 = 10µIn Ra, Relaxed Visuals

Coax Fitting Example:
C2-.25M-A5
VALEX 401 SPEC, COAXIAL 90° ELBOW, 1/4" (1MM WALL) INNER,
1/2" (.049" WALL) OUTER, SUPERIOR VISUALS, 5 Ra MAX, 0S INNER
CHEMISTRY, 0S OUTER CHEMISTRY

NOTES:
1. SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.
2. SHADED COLUMNS USED ONLY FOR REDUCING FITTINGS.
3. PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES.
PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.



TITLE
TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME

SPECIFICATION	SHEET	REV
SP-9200	3/9	CB

JIS COAXIAL PIPE PART NUMBER MATRIX

CPXX	- XX	- XX	- XXX	(XX)	X	X4	- XX
<u>INNER PROCESS CODE</u>	<u>OUTER ALLOY (SEE NOTE 1)</u>	<u>INNER ALLOY (SEE NOTE 1)</u>	<u>SIZE CODE - INNER (SEE NOTE 2)</u>		<u>END TYPE CODE</u>	USED ONLY FOR 4-METER LENGTH PIPES	<u>SURFACE FINISH & VISUALS</u>
CP1A = PER SP-9204 (101)	AS = 304 SEAMLESS	1S = 304L SEAMLESS (JIS STD)	008	08	A = SQUARE		USED ONLY FOR 401 PROCESS CODE
CP2A = PER SP-9206 (201)	AW = 304 WELDED	1W = 304L WELDED (JIS STD)	010	10	B = 32.5° BEVELED		A5 = 5µIn Ra Max, Superior Visuals
CP4A = PER SP-9220 (401)	NS = 316L SEAMLESS (JIS STD)	NS = 316L SEAMLESS (JIS STD)	015	15	C = SQUARE,		A7 = 7µIn Ra Max, Superior Visuals
	NW = 316L WELDED (JIS STD)	NW = 316L WELDED (JIS STD)	020	20	+10% / -15% WALL		B0 = 10µIn Ra Max, Standard Visuals
	RS = 316L SEAMLESS	RS = 316L SEAMLESS	025	25	D = 32.5° BEVELED,		C0 = 10µIn Ra, Relaxed Visuals
	RW = 316L WELDED	RW = 316L WELDED	032	32	+10% / -15% WALL		
			USED FOR 20-FOOT AND 6-METER LENGTH PIPES	USED ONLY FOR 4-METER LENGTH PIPES	J = SQUARE,		
					+UNSPECIFIED / -20% WALL		
					K = 32.5° BEVELED,		
					+UNSPECIFIED / -20% WALL		

- NOTES:
- 1. SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.
 - 2. SHADED COLUMNS USED ONLY FOR 4-METER LENGTH PIPES.
 - 3. PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES. PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.



TITLE

TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME

SPECIFICATION	SHEET	REV
SP-9200	5/9	CB

SINGLE WALL FITTING PART NUMBER MATRIX - JIS

XX

PROCESS / ALLOY (SEE NOTE 1)
JA = SP-9204 (101) AS/AW (304)
JB = SP-9206 (201) RS/RW (316L)
JD = SP-9206 (201) AS/AW (304)
JE = SP-9220 (401) RS/RW (316L)
JF = SP-9206 (201) NS/NW (316L)
JG = SP-9206 (201) QS/QW (316L)
JH = SP-9220 (401) NS/NW (316L)
JJ = SP-9220 (401) QS/QW (316L)
JK = SP-9204 (101) 1S/1W (304L)
JL = SP-9206 (201) 1S/1W (304L)

XXXXXX

CONFIGURATION CODE
2(S) = 90° ELBOW, SHORT RADIUS
2(L) = 90° ELBOW, LONG RADIUS
2W(S) = 90° ELBOW, SHORT RADIUS, WLD
2W(L) = 90° ELBOW, LONG RADIUS, WLD
2K = 45° ELBOW
2KW = 45° ELBOW, WLD
2(SS) = 90° ELBOW, SHORT, JIS B2312
2(LS) = 90° ELBOW, LONG, JIS B2312
2W(SS) = 90° ELBOW, SHORT, JIS B2313, WLD
2W(LS) = 90° ELBOW, LONG, JIS B2313, WLD
2K(LS) = 45° ELBOW, LONG, JIS B2312
2KW(LS) = 45° ELBOW, LONG, JIS B2313, WLD
7 = EQUAL TEE
7W = EQUAL TEE, WLD
7R = REDUCING TEE
7RW = REDUCING TEE, WLD
7RWW = REDUCING TEE, WLD X WLD
7RN = REDUCING TEE, NO RISER
7S = EQUAL TEE, JIS B2312 / B2313
7RS = REDUCING TEE, JIS B2312 / B2313
7RSN = REDUCING TEE, JIS B2312 / B2313, NO RISER
16 = END CAP
16W = END CAP, WLD
31 = CONC REDUCER
31W = CONC REDUCER, WLD X SMLS
31WW = CONC REDUCER, WLD X WLD
31FF = CONC REDUCER, FORMED, NO TANGENT
31FS = CONC REDUCER, NO TANGENT LARGE, SMALL TANGENT SMLS
31SF = CONC REDUCER, LARGE TANGENT SMLS, NO TANGENT SMALL
31FW = CONC REDUCER, NO TANGENT LARGE, SMALL TANGENT WLD
31WF = CONC REDUCER, LARGE TANGENT WLD, NO TANGENT SMALL
33 = CONC REDUCER, CAP TYPE
33FF = CAP REDUCER, FORMED, NO TANGENT
33FS = CAP REDUCER, NO TANGENT LARGE, SMALL TANGENT SMLS
33SF = CAP REDUCER, LARGE TANGENT SMLS, NO TANGENT SMALL
33FW = CAP REDUCER, NO TANGENT LARGE, SMALL TANGENT WLD
33WF = CAP REDUCER, LARGE TANGENT WLD, NO TANGENT SMALL
38BF = BLANK FLANGE
38L = LAP JOINT STUB END, JIS
38LJ = LAP JOINT FLANGE
38WN = WELD NECK FLANGE

- XXXX

SIZE CODE (SEE NOTE 2)
8 = 8A PIPE
10 = 10A PIPE
15 = 15A PIPE
20 = 20A PIPE
25 = 25A PIPE
32 = 32A PIPE
40 = 40A PIPE
50 = 50A PIPE
65 = 65A PIPE
80 = 80A PIPE
90 = 90A PIPE
100 = 100A PIPE
125 = 125A PIPE
150 = 150A PIPE
200 = 200A PIPE
250 = 250A PIPE
300 = 300A PIPE
350 = 350A PIPE
400 = 400A PIPE
450 = 450A PIPE
500 = 500A PIPE
550 = 550A PIPE
600 = 600A PIPE
650 = 650A PIPE
700 = 700A PIPE
750 = 750A PIPE
800 = 800A PIPE
.25 = 1/4" O.D. X .035" WALL
.25M = 1/4" O.D. X .039" (1MM) WALL
.38 = 3/8" O.D. X .035" WALL
.38M = 3/8" O.D. X .039" (1MM) WALL
.5 = 1/2" O.D. X .049" WALL
.75 = 3/4" O.D. X .065" WALL
.75M = 3/4" O.D. X .049" WALL
1 = 1" O.D. X .065" WALL
1.5 = 1-1/2" O.D. X .065" WALL
2 = 2" O.D. X .065" WALL
2.5 = 2-1/2" O.D. X .065" WALL
3 = 3" O.D. X .065" WALL
4 = 4" O.D. X .083" WALL
6 = 6" O.D. X .109" WALL

X

END TYPE CODE
A = SQUARE
B = 32.5° BEVELED
C = SQUARE,
+10% / -15% WALL
D = 32.5° BEVELED,
+10% / -15% WALL
E = SQUARE, LOW Ti
F = 32.5° BEVELED, LOW Ti
G = SQUARE, LOW Ti,
+10% / -15% WALL
H = 32.5° BEVELED, LOW Ti,
+10% / -15% WALL
J = SQUARE,
+UNSPECIFIED / -20% WALL
K = 32.5° BEVELED,
+UNSPECIFIED / -20% WALL

FLANGE TYPE CODE
S = JIS 5K
T = JIS 10K

X

SCHEDULE
BLANK = 5S
T = 10S

FACE-TYPE
(FLANGE ONLY)
1 = FULL FACE
2 = RAISED FACE
3 = GROOVED FACE

FLANGE TYPE / SCHEDULE
(LAP JOINT STUB END ONLY)
BLANK = JIS 5K / 5S
V= JIS 10K / 5S

x(XXXX)

USED ONLY FOR
REDUCING FITTINGS

REFER TO "SIZE", "END
TYPE" & "SCHEDULE"
CODES IF APPLICABLE

- XX

SURFACE FINISH & VISUALS
USED ONLY FOR 401 PROCESS CODE
A5 = 5µIn Ra Max, Superior Visuals
A7 = 7µIn Ra Max, Superior Visuals
B0 = 10µIn Ra Max, Standard Visuals
C0 = 10µIn Ra, Relaxed Visuals

Single Wall Fitting Example 1:
JE2S-150AT-B0
VALEX 401 SPEC, 90° ELBOW (SHORT TYPE), 150A PIPE,
SCHEDULE 10, SQUARED ENDS, STANDARD VISUALS, 10 Ra MAX

Single Wall Fitting Example 2:
JB7R-80AX20A
VALEX 201 SPEC, REDUCING TEE, 80A PIPE X 20A PIPE,
SCHEDULE 5, SQUARED ENDS, NO EP.

COAXIAL FITTING PART NUMBER MATRIX - JIS

XX

INNER PROCESS / ALLOY (SEE NOTE 1)
JC = SP-9220 (401) RS/RW (316L)
JK = SP-9206 (201) NS/NW (316L)
JL = SP-9206 (201) QS/QW (316L)
JM = SP-9220 (401) NS/NW (316L)
JN = SP-9220 (401) QS/QW (316L)

X

OUTER ALLOY (SEE NOTE 1)
1 = 1S/1W (304L)
A = AW (304)
N = NS (316L)
R = RS/RW (316L)

XXXXXX

CONFIGURATION CODE
2 = 90° ELBOW
2K = 45° ELBOW
7 = EQUAL TEE
7R = REDUCING TEE
7P = COAX PURGE TEE, MALE
7PF = COAX PURGE TEE, FEMALE
7PFS = COAX PURGE TEE W/ FS, MALE
12 = COAX SLEEVE
14FS = COAX FS WELD GLAND, FEMALE
15FS = COAX FS WELD GLAND, MALE
16 = COAX TERMINATOR
17BH = COAX BULKHEAD FITTING
31 = CONCENTRIC REDUCER

- XXXX

SIZE CODE (SEE NOTE 2)
10 = 10A X SCHEDULE 5 INNER PIPE
20A X SCHEDULE 5 OUTER PIPE
15 = 15A X SCHEDULE 5 INNER PIPE
25A X SCHEDULE 5 OUTER PIPE
20 = 20A X SCHEDULE 5 INNER PIPE
32A X SCHEDULE 5 OUTER PIPE
25 = 25A X SCHEDULE 5 INNER PIPE
40A X SCHEDULE 5 OUTER PIPE
32 = 32A X SCHEDULE 5 INNER PIPE
40A X SCHEDULE 5 OUTER PIPE

X

END TYPE CODE
A = SQUARE
B = 32.5° BEVELED
C = SQUARE,
+10% / -15% WALL
D = 32.5° BEVELED,
+10% / -15% WALL
J = SQUARE,
+UNSPECIFIED / -20% WALL
K = 32.5° BEVELED,
+UNSPECIFIED / -20% WALL

x(XXX)

USED ONLY FOR
REDUCING FITTINGS

REFER TO "SIZE", "END
TYPE" CODES IF
APPLICABLE

- XX

SURFACE FINISH & VISUALS
USED ONLY FOR 401 PROCESS CODE
A5 = 5µIn Ra Max, Superior Visuals
A7 = 7µIn Ra Max, Superior Visuals
B0 = 10µIn Ra Max, Standard Visuals
C0 = 10µIn Ra, Relaxed Visuals

Coax Fitting Example:
JC2-25A-A5
VALEX 401 SPEC, COAXIAL 90° ELBOW, 25A (SCH 5) INNER,
40A (SCH 5) OUTER, SQUARED ENDS, SUPERIOR VISUALS, 5 Ra MAX,
RS INNER CHEMISTRY, OW OUTER CHEMISTRY

- NOTES:
- SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.
 - SHADED COLUMNS USED ONLY FOR REDUCING FITTINGS.
 - PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES.
PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.



TITLE
TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME

SPECIFICATION
SP-9200

SHEET
6/9

REV
CB

TUBE & PIPE PART NUMBER MATRIX - CFOS AND LDEP PRODUCT LINES

XX	- XXXXX	X	X	XXXX	- XXXX	
PROCESS / ALLOY (SEE NOTE 1)	SIZE CODE:		END TYPE CODE:	WALL CODE	FINISH CODE	
CS = 316L SEAMLESS	<u>ASTM TUBE</u> 1/4 = .25" DIA 3/8 = .375" DIA 1/2 = .5" DIA 3/4 = .75" DIA 1 = 1" DIA 1-1/2 = 1.5" DIA 2 = 2" DIA 2-1/2 = 2.5" DIA 3 = 3" DIA 4 = 4" DIA 6 = 6" DIA 8 = 8" DIA 10 = 10" DIA	<u>JIS & NPS PIPE</u> 25 = DN 25 (JIS 25A) 32 = DN 32 (JIS 32A) 40 = DN 40 (JIS 40A) 50 = DN 50 (NPS 2 / JIS 50A) 65 = DN 65 (NPS 2-1/2 / JIS 65A) 80 = DN 80 (NPS 3 / JIS 80A) 90 = DN 90 (NPS 3-1/2 / JIS 90A) 100 = DN 100 (NPS 4 / JIS 100A) 125 = DN 125 (NPS 5 / JIS 125A) 150 = DN 150 (NPS 6 / JIS 150A) 200 = DN 200 (NPS 8 / JIS 200A) 250 = DN 250 (NPS 10 / JIS 250A) 300 = DN 300 (NPS 12 / JIS 300A) 350 = DN 350 (NPS 14 / JIS 350A) 400 = DN 400 (NPS 16 / JIS 400A) 450 = DN 450 (NPS 18 / JIS 450A) 500 = DN 500 (NPS 20 / JIS 500A) 550 = DN 550 (NPS 22 / JIS 550A) 600 = DN 600 (NPS 24 / JIS 600A) 650 = DN 650 (JIS 650A) 700 = DN 700 (JIS 700A) 750 = DN 750 (NPS 30 / JIS 750A) 800 = DN 800 (JIS 800A)	<u>ASTM TUBE</u> BLANK = SQUARE	<u>TUBE WALL</u> .035 = .035" THICK .039 = .039" THICK .049 = .049" THICK .065 = .065" THICK .083 = .083" THICK .109 = .109" THICK .120 = .120" THICK	<u>PIPE SCHEDULE</u> 5S = SCH. 5 10S = SCH. 10 40S = SCH. 40 80S = SCH. 80	
CW = 316L WELDED						
DS = 304L SEAMLESS						
DW = 304L WELDED						
AS = 304 SEAMLESS					<u>JIS PIPE:</u> A = SQUARE B = BEVELED J = SQUARE, -20% WALL K = BEVELED, -20% WALL	
AW = 304 WELDED						
					<u>NPS PIPE:</u> L = SQUARE M = BEVELED N = SQUARE, -20% WALL P = BEVELED, -20% WALL	
						<u>NPS Pipe Example:</u> DW-250LX20S-BA40 VALEX CFOS SPEC PIPE, 304L WELDED, NPS 10 (DN 250) X SCH 20, BA FINISH OPTION WITH 40 Ra, SQUARED ENDS
						<u>ASTM Tube Example:</u> CS-1/2X.049-BA VALEX CFOS SPEC TUBE, 316L SEAMLESS, 1/2" O.D. X .049" WALL, BA FINISH OPTION, SQUARED ENDS
						<u>JIS Pipe Example:</u> AW-250BX10S-AP VALEX CFOS SPEC PIPE, 304 WELDED, JIS SIZE 250A X SCH 10, AP FINISH OPTION, BEVELED ENDS

NPS Pipe Example:
DW-250LX20S-BA40
VALEX CFOS SPEC PIPE, 304L WELDED, NPS 10 (DN 250) X SCH 20,
BA FINISH OPTION WITH 40 Ra, SQUARED ENDS

ASTM Tube Example:
CS-1/2X.049-BA
VALEX CFOS SPEC TUBE, 316L SEAMLESS, 1/2" O.D. X .049" WALL,
BA FINISH OPTION, SQUARED ENDS

JIS Pipe Example:
AW-250BX10S-AP
VALEX CFOS SPEC PIPE, 304 WELDED, JIS SIZE 250A X SCH 10,
AP FINISH OPTION, BEVELED ENDS

- NOTES:
- 1. PER VALEX SPECIFICATION SP-9234 (CFOS) AND SP-9235 (LDEP).
 - 2. PROCESS CODES ARE NOT AVAILABLE FOR ALL SIZE AND FINISH CODES. PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.

www.valex.com

TITLE

TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME

SPECIFICATION

SP-9200

SHEET

7/9

REV.

CB

FITTING PART NUMBER MATRIX - CFOS AND LDEP PRODUCT LINES

XX

ALLOY
(SEE NOTE 1)
AF = 304
CF = 316L
DF = 304L

XXXXX

CONFIGURATION CODE
2S = 90° ELBOW, SHORT RADIUS
2L = 90° ELBOW, LONG RADIUS
2WS = 90° ELBOW, SHORT RADIUS, WLD
2WL = 90° ELBOW, LONG RADIUS, WLD
2K = 45° ELBOW
2KW = 45° ELBOW, WLD
2SS = 90° ELBOW, SHORT, ASME B16.9 / JIS B2312
2LS = 90° ELBOW, LONG, ASME B16.9 / JIS B2312
2WSS = 90° ELBOW, SHORT, ASME B16.9 / B2313, WLD
2WLS = 90° ELBOW, LONG, ASME B16.9 / B2313, WLD
2KLS = 45° ELBOW, LONG, ASME B16.9 / JIS B2312
2KWLS = 45° ELBOW, LONG, ASME B16.9 / B2313, WLD
7 = EQUAL TEE
7W = EQUAL TEE, WLD
7ST = EQUAL TEE, SHORT TANGENT
7STW = EQUAL TEE, SHORT TANGENT, WLD
7R = REDUCING TEE
7RW = REDUCING TEE, WLD
7RWW = REDUCING TEE, WLD X WLD
7S = EQUAL TEE, JIS B2312 / B2313
7RS = REDUCING TEE, JIS B2312 / B2313
9 = EQUAL CROSS
9R = REDUCING CROSS
16 = END CAP
16W = END CAP, WLD
31 = CONC REDUCER
31T = CONC REDUCER, TRANSITIONAL
31W = CONC REDUCER, WLD X SMLS
31WW = CONC REDUCER, WLD X WLD
31FF = CONC REDUCER, FORMED
32 = ECCENTRIC REDUCER
33 = CONC REDUCER, CAP TYPE
38BF = BLIND / BLANK FLANGE
38L = LAP JOINT STUB END, JIS
38LA = LAP JOINT STUB END, LONG PATTERN, TYPE "A", ASME B16.9
38SA = LAP JOINT STUB END, SHORT PATTERN, TYPE "A", ASME B16.9
38LJ = LAP JOINT FLANGE
38WN = WELD NECK FLANGE

- NOTES:
- PER VALEX SPECIFICATION SP-9234 (CFOS) AND SP-9235 (LDEP).
 - SHADED COLUMNS USED ONLY FOR REDUCING FITTINGS.
 - PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES. PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.

- XX

SIZE CODE (SEE NOTE 2)	
ASTM TUBE	JIS & NPS PIPE
04 = .25" DIA	70 = DN 15 (NPS 1/2 / JIS 15A)
06 = .375" DIA	71 = DN 20 (NPS 3/4 / JIS 20A)
08 = .5" DIA	72 = DN 25 (NPS 1 / JIS 25A)
12 = .75" DIA	73 = DN 32 (NPS 1-1/4 / JIS 32A)
16 = 1" DIA	74 = DN 40 (NPS 1-1/2 / JIS 40A)
24 = 1.5" DIA	75 = DN 50 (NPS 2 / JIS 50A)
32 = 2" DIA	76 = DN 65 (NPS 2-1/2 / JIS 65A)
40 = 2.5" DIA	77 = DN 80 (NPS 3 / JIS 80A)
48 = 3" DIA	78 = DN 90 (NPS 3-1/2 / JIS 90A)
64 = 4" DIA	79 = DN 100 (NPS 4 / JIS 100A)
96 = 6" DIA	80 = DN 125 (NPS 5 / JIS 125A)
	81 = DN 150 (NPS 6 / JIS 150A)
	82 = DN 200 (NPS 8 / JIS 200A)
	83 = DN 250 (NPS 10 / JIS 250A)
	84 = DN 300 (NPS 12 / JIS 300A)
	85 = DN 350 (NPS 14 / JIS 350A)
	86 = DN 400 (NPS 16 / JIS 400A)
	87 = DN 450 (NPS 18 / JIS 450A)
	88 = DN 500 (NPS 20 / JIS 500A)
	89 = DN 550 (NPS 22 / JIS 550A)
	90 = DN 600 (NPS 24 / JIS 600A)
	91 = DN 650 (JIS 650A)
	92 = DN 700 (JIS 700A)
	93 = DN 750 (JIS 750A)
	94 = DN 800 (JIS 800A)

Fitting Example 1:

AF7RWW-82MT75MT-2

VALEX CFOS SPEC, REDUCING TEE, NPS 8" X NPS 2" PIPE, SCHEDULE 10, BEVELED ENDS, BA GRADE

Fitting Example 2:

CF2KW-79M-3

VALEX CFOS SPEC, 45° ELBOW, NPS 4" PIPE, SCHEDULE 5, BA GRADE, 40 Ra

X

TYPE CODE
ASTM TUBE:
BLANK = SQUARE

JIS PIPE:
A = SQUARE
B = BEVELED
J = SQUARE, -20% WALL
K = BEVELED, -20% WALL

NPS PIPE:
L = SQUARE
M = BEVELED
N = SQUARE, -20% WALL
P = BEVELED, -20% WALL

FLANGE TYPE:
Q = B16.5, CLASS 150
R = B16.5, CLASS 300
S = JIS B2220, 5K
T = JIS B2220, 10K

X

WALL CODE
ASTM TUBE:
B = .035" WALL
C = .039" WALL
D = .049" WALL
F = .065" WALL
G = .083" WALL
J = .109" WALL

JIS & NPS PIPE:
BLANK = 5S
T = 10S
V = 40S
W = 80S

FACE-TYPE
(FLANGE ONLY):
1 = FLAT / FULL FACE
2 = RAISED FACE
3 = GROOVED FACE

(XXXX)

USED ONLY FOR REDUCING FITTINGS
REFER TO "SIZE", "TYPE" & "WALL" CODES IF APPLICABLE

- X

FINISH CODE
BLANK = NO FINISH REQUIREMENT
1 = O.D.=AP, I.D.=AP
2 = O.D.=BA, I.D.=BA 200 Ra MAX
3 = O.D.=BA, I.D.=40 Ra BA
4 = O.D.=BA, I.D.=EP 20 Ra Ave / 25 Ra MAX
5 = O.D.=AP, I.D.=40 Ra BA
6 = O.D.=AP, I.D.=BA 200 Ra MAX
7 = O.D.=MP, I.D.=AP
8 = O.D.=BA, I.D.=EP 10 Ra Ave / 15 Ra MAX



TITLE
TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME

SPECIFICATION	SHEET	REV
SP-9200	8/9	CB

CHEMISTRY CODE MATRIX

Unit : wt%																					
Alloy Identifier	Fitting Identifier	Coax Fitting Identifier (Inner)	Seamless / Welded	Melt Type	Standard	Grade	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	Al	Fe	W	Co	V	N
REFERENCE					ASTM A269	TP 304	0.080 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 11.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					ASTM A269	TP 304L	0.035 max ²	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 12.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					ASTM A269	TP 316L	0.035 max ²	1.00 max	2.00 max	0.045 max	0.030 max	10.0 - 15.0	16.0 - 18.0	2.00 - 3.00	-	-	-	-	-	-	-
					ASTM A312	TP 304	0.080 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 11.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					ASTM A312	TP 304L	0.035 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 13.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					ASTM A312	TP 316L	0.035 max	1.00 max	2.00 max	0.045 max	0.030 max	10.0 - 14.0	16.0 - 18.0	2.00 - 3.00	-	-	-	-	-	-	-
					ASTM A276 / A479	S31603 (316L)	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	10.0 - 14.0	16.0 - 18.0	2.00 - 3.00	-	-	-	-	-	-	-
					ASTM A632	TP 304	0.080 max	0.75 max	2.00 max	0.045 max	0.030 max	8.0 - 11.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					ASTM A632	TP 304L	0.030 max	0.75 max	2.00 max	0.045 max	0.030 max	8.0 - 13.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					ASTM A632	TP 316L	0.030 max	1.00 max ³	2.00 max	0.045 max	0.030 max	10.0 - 15.0	16.0 - 18.0	2.00 - 3.00	-	-	-	-	-	-	-
					ASTM A774	TP 304L	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 12.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					ASTM A774	TP 316L	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	10.0 - 14.0	16.0 - 18.0	2.00 - 3.00	-	-	-	-	-	-	-
					ASTM A778	TP304L	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 13.0	18.0 - 20.0	-	-	-	-	-	-	-	0.10 max
					ASTM B622	UNS N06022	0.015 max	0.08 max	0.50 max	0.02 max	0.020 max	remainder	20.0 - 22.5	12.5 - 14.5	-	-	2.0-6.0	2.5-3.5	2.5 max	0.35 max	-
					JIS G3459	SUS304TP	0.080 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 11.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					JIS G3459	SUS304LTP	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	9.0 - 13.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					JIS G3459	SUS316LTP	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	12.0 - 16.0	16.0 - 18.0	2.00 - 3.00	-	-	-	-	-	-	-
					JIS G3468	SUS304	0.080 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 10.5	18.0 - 20.0	-	-	-	-	-	-	-	-
					JIS G3468	SUS304L	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	9.0 - 13.0	18.0 - 20.0	-	-	-	-	-	-	-	-
					JIS G3468	SUS316L	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	12.0 - 15.0	16.0 - 18.0	2.00 - 3.00	-	-	-	-	-	-	-

Exceptions to Standard Chemistry

0S	E, B	C, CB	Seamless	AOD or VOD	A269 ¹	316L	-	-	-	-	0.005 - 0.012	-	-	-	-	-	-	-	-	-	-
0W	E, B	C, CB	Welded	AOD or VOD	A269 ¹	316L	-	-	-	-	0.005 - 0.017	-	-	-	-	-	-	-	-	-	-
1S	DF ⁴	-	Seamless	AOD or VOD	G3459 / G3468 / A312 / A269	304L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1W	DF ⁴	-	Welded	AOD or VOD	G3459 / G3468 / A312 / A269 / A778	304L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2S	D	-	Seamless	AOD or VOD	A269 ¹	304L	-	-	-	-	0.005 - 0.012	-	-	-	-	-	-	-	-	-	-
2W	D	-	Welded	AOD or VOD	A269 ¹	304L	-	-	-	-	0.005 - 0.017	-	-	-	-	-	-	-	-	-	-
3S	-	-	Seamless	AOD or VOD	A269 ¹ / A312	304L	-	-	-	-	0.010 max	-	-	-	-	-	-	-	-	-	-
3W	-	-	Welded	AOD or VOD	A269 ¹ / A312	304L	-	-	-	-	0.010 max	-	-	-	-	-	-	-	-	-	-
A4	E, B	C	N/A	AOD	A276 / A479	316L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AS	AF, JD, JA	-	Seamless	AOD or VOD	G3459 / G3468 / A269 ¹ / A312	304	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AW	AF, JD, JA	-	Welded	AOD or VOD	G3459 / G3468 / A269 ¹ / A312	304	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BS	-	-	Seamless	VOD/VAR	G3459	316L	0.02 max	0.30 max	0.40 max	0.040 max	0.003 max	12.0 - 15.0	-	-	-	-	-	-	-	-	-
HS	H	HC	Seamless	AOD	B622	UNS N06022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KS	Y, YB	W, WB	Seamless	VIM/VAR	G3459 / A269 ¹	316L	0.02 max	0.20 max	0.05 max	0.040 max	0.002 max	14.5 - 16.0	-	2.20 - 3.00	0.15 max	0.010 max	-	-	-	-	-
NS	CF ⁴ ,JF,JH	JK,JM	Seamless	AOD or VOD	G3459 / A269 ¹ / A312	316L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NW	CF ⁴ ,JF,JH	JK,JM	Welded	AOD or VOD	G3459 / A269 ¹ / A312	316L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QS	JG,JJ	JL,JN	Seamless	AOD or VOD	A269 ¹ / A312	316L	-	-	-	-	0.010 max	-	-	-	-	-	-	-	-	-	-
QW	JG,JJ	JL,JN	Welded	AOD or VOD	A269 ¹ / A312	316L	-	-	-	-	0.010 max	-	-	-	-	-	-	-	-	-	-
RS	RE, RB, JE, JB	JC, RC	Seamless	AOD or VOD	G3459 / G3468 / A269 ¹	316L	0.025 max	0.60 max	0.80 max	0.040 max	0.005 max	12.0 - 15.0	-	-	-	-	-	-	-	-	-
RW	RE, RB, JE, JB	JC, RC	Welded	AOD or VOD	G3459 / G3468	316L	-	-	-	-	0.010 max	-	-	-	-	-	-	-	-	-	-
VS	Q	R	Seamless	VIM/VAR	A269 ¹	316L	0.02 max	0.20 max	0.05 max	0.040 max	0.002 max	14.5 - 16.0	-	2.20 - 3.00	0.15 max	0.010 max	-	-	-	-	-

NOTES:

- 1) For tube sizes 1/2" and greater, the ASTM reference is A269. For tube sizes less than 1/2", the ASTM reference is A632.
- 2) For tube sizes less than 1/2", a carbon maximum of 0.040% is allowed in ASTM A269 grades 304L and 316L.
- 3) For ASTM A632 welded 316L grade tubes, the maximum silicon allowed is 0.75%.
- 4) Special Pipe X Tube Fittings may have chemistry per A774 pipe connections.



TITLE:
TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME

SPECIFICATION
SP-9200

SHEET
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