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Pipes & Tubes

<p>Steel Pipes</p>  <p>P. 71-1~5</p>	<p>Stainless Steel Pipes</p>  <p>P. 71-5~6</p>
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Carbon Steel Pipes for Ordinary Piping

Galvanized

Tuberías de Acero Carbono 配管用炭素鋼管(白管) 普通镀锌钢管

Standard length: 5.5 mtrs.

Ref. JIS-G-3452 (SGP) standard industrial quality. SGP denotes Steel Gas Piping.

Equal to ASTM A53, BS1387, and DIN1615, and ISO65 quality. For general purpose use such as in steam lines, water and gas piping, etc.

How to order: CODE

Pipe, carbon steel, galvanized, NOMINAL SIZE, LENGTH mtr

Unit Per Lgh.

Galvanized Standard Length 5.5 mtrs					
CODE	Nominal Size		Size mm		Kg Per Mtr
	A	B	O.D.	Wall T	
71 01 01	6A	1/8	10.5	2.0	0.419
02	8A	1/4	13.8	2.3	0.652
03	10A	3/8	17.3	2.3	0.851
04	15A	1/2	21.7	2.8	1.310
05	20A	3/4	27.2	2.8	1.680
71 01 06	25A	1	34.0	3.2	2.430
07	32A	1-1/4	42.7	3.5	3.380
08	40A	1-1/2	48.6	3.5	3.890
09	50A	2	60.5	3.8	5.310
10	65A	2-1/2	76.3	4.2	7.470
71 01 11	80A	3	89.1	4.2	8.790
12	90A	3-1/2	101.6	4.2	10.1
13	100A	4	114.3	4.5	12.2
14	125A	5	139.8	4.5	15.0
15	150A	6	165.2	5.0	19.8
71 01 16	175A	7	190.7	5.3	24.2
17	200A	8	216.3	5.8	30.1
18	225A	9	241.8	6.2	36.0
19	250A	10	267.4	6.6	42.4
20	300A	12	318.5	6.9	53.0
71 01 21	350A	14	355.6	7.9	67.7
22	400A	16	406.4	7.9	77.6
23	450A	18	457.2	7.9	87.5
24	500A	20	508.0	7.9	97.4

Carbon Steel Pipes for Ordinary Piping

Ungalvanized

Tuberías de Acero Carbono para Servicio Ordinario (Sin Galcanizar)

配管用炭素鋼管(黑管) 普通碳钢管

Standard length: 5.5 mtrs.

Exactly the same specifications as described above but ungalvanized.

How to order: CODE

Pipe, carbon steel, ungalvanized, NOMINAL SIZE, LENGTH mtr

Unit Per Lgh.

Black or Ungalvanized Standard Length 5.5 mtrs					
CODE	Nominal Size		Size mm		Kg Per Mtr
	A	B	O.D.	Wall T	
71 01 51	6A	1/8	10.5	2.0	0.419
52	8A	1/4	13.8	2.3	0.652
53	10A	3/8	17.3	2.3	0.851
54	15A	1/2	21.7	2.8	1.310
55	20A	3/4	27.2	2.8	1.680

(to be continued)



71 01 56	25A	1	34.0	3.2	2.430
57	32A	1-1/4	42.7	3.5	3.380
58	40A	1-1/2	48.6	3.5	3.890
59	50A	2	60.5	3.8	5.310
60	65A	2-1/2	76.3	4.2	7.470
71 01 61	80A	3	89.1	4.2	8.790
62	90A	3-1/2	101.6	4.2	10.1
63	100A	4	114.3	4.5	12.2
64	125A	5	139.8	4.5	15.0
65	150A	6	165.2	5.0	19.8
71 01 66	175A	7	190.7	5.3	24.2
67	200A	8	216.3	5.8	30.1
68	225A	9	241.8	6.2	36.0
69	250A	10	267.4	6.6	42.4
70	300A	12	318.5	6.9	53.0
71 01 71	350A	14	355.6	7.9	67.7
72	400A	16	406.4	7.9	77.6
73	450A	18	457.2	7.9	87.5
74	500A	20	508.0	7.9	97.4

Carbon Steel Pipes for Pressure Services

Tuberías de Acero Carbono para Servicio de Presión

压力配管用炭素鋼管 碳钢管

Standard length: 5.5 mtrs.

Ref. JIS-G-3454 (STPG-370) standard industrial quality. STPG denotes Steel Tube Piping General.

Equal quality to ASTM A135/A53 or DIN1626/1629 and ISO2604. Both ends are plain ends. Available in black only. Two types of electric resistant welding (ERW) and seamless pipes are available. Most common schedule (Wall Thickness) Number 40 and 80 are listed below.



ERW (Electric Resistant Welding) Pipes

How to order: CODE

Pipe, carbon steel for pressure service, ERW, SCHEDULE NO., NOMINAL SIZE, Length mtr

Unit Per Lgh.

ERW Schedule-40 Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 02 01	6A	1/8	10.5	1.7	6.0	0.369
02	8A	1/4	13.8	2.2	"	0.629
03	10A	3/8	17.3	2.3	"	0.851
04	15A	1/2	21.7	2.8	"	1.31
05	20A	3/4	27.2	2.9	"	1.74
71 02 06	25A	1	34.0	3.4	6.0	2.57
07	32A	1-1/4	42.7	3.6	"	3.47
08	40A	1-1/2	48.6	3.7	"	4.10
09	50A	2	60.5	3.9	"	5.44
10	65A	2-1/2	76.3	5.2	"	9.12
71 02 11	80A	3	89.1	5.5	6.0	11.3
12	90A	3-1/2	101.6	5.7	"	13.5
13	100A	4	114.3	6.0	"	16.0
14	125A	5	139.8	6.6	"	21.7
15	150A	6	165.2	7.1	"	27.7
71 02 16	200A	8	216.3	8.2	6.0	42.1
17	250A	10	267.4	9.3	"	59.2
18	300A	12	318.5	10.3	"	78.3
19	350A	14	355.6	11.1	"	94.3
20	400A	16	406.4	12.7	"	123
71 02 21	450A	18	457.2	14.3	6.0	156
22	500A	20	508.0	15.1	"	184

(to be continued)

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Pipes & Tubes

Unit Per Lgh.

ERW Schedule-80 Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 02 26	6A	1/8	10.5	2.4	12.0	0.479
27	8A	1/4	13.8	3.0	"	0.799
28	10A	3/8	17.3	3.2	"	1.11
29	15A	1/2	21.7	3.7	"	1.64
30	20A	3/4	27.2	3.9	"	2.24
71 02 31	25A	1	34.0	4.5	12.0	3.27
32	32A	1-1/4	42.7	4.9	"	4.57
33	40A	1-1/2	48.6	5.1	"	5.47
34	50A	2	60.5	5.5	"	7.46
35	65A	2-1/2	76.3	7.0	"	12.0
71 02 36	80A	3	89.1	7.6	12.0	15.3
37	90A	3-1/2	101.6	8.1	"	18.7
38	100A	4	114.3	8.6	"	22.4
39	125A	5	139.8	9.5	"	30.5
40	150A	6	165.2	11.0	"	41.8
71 02 41	200A	8	216.3	12.7	12.0	63.8
42	250A	10	267.4	15.1	"	93.9
43	300A	12	318.5	17.4	"	129
44	350A	14	355.6	19.0	"	158
45	400A	16	406.4	21.4	"	203
71 02 46	450A	18	457.2	23.8	12.0	254
47	500A	20	508.0	26.2	"	311

Seamless Pipes

How to order: CODE
Pipe, carbon steel for pressure service, seamless, SCHEDULE NO., NOMINAL SIZE, LENGTH mtr

Unit Per Lgh.

Seamless Schedule-40 Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 02 51	6A	1/8	10.5	1.7	6.0	0.369
52	8A	1/4	13.8	2.2	"	0.629
53	10A	3/8	17.3	2.3	"	0.851
54	15A	1/2	21.7	2.8	"	1.31
55	20A	3/4	27.2	2.9	"	1.74
71 02 56	25A	1	34.0	3.4	6.0	2.57
57	32A	1-1/4	42.7	3.6	"	3.47
58	40A	1-1/2	48.6	3.7	"	4.10
59	50A	2	60.5	3.9	"	5.44
60	65A	2-1/2	76.3	5.2	"	9.12
71 02 61	80A	3	89.1	5.5	6.0	11.3
62	90A	3-1/2	101.6	5.7	"	13.5
63	100A	4	114.3	6.0	"	16.0
64	125A	5	139.8	6.6	"	21.7
65	150A	6	165.2	7.1	"	27.7
71 02 66	200A	8	216.3	8.2	6.0	42.1
67	250A	10	267.4	9.3	"	59.2
68	300A	12	318.5	10.3	"	78.3
69	350A	14	355.6	11.1	"	94.3
70	400A	16	406.4	12.7	"	123
71 02 71	450A	18	457.2	14.3	6.0	156
72	500A	20	508.0	15.1	"	184

Seamless Schedule-80 Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 02 76	6A	1/8	10.5	2.4	12.0	0.479
77	8A	1/4	13.8	3.0	"	0.799
78	10A	3/8	17.3	3.2	"	1.11
79	15A	1/2	21.7	3.7	"	1.64
80	20A	3/4	27.2	3.9	"	2.24
71 02 81	25A	1	34.0	4.5	12.0	3.27
82	32A	1-1/4	42.7	4.9	"	4.57
83	40A	1-1/2	48.6	5.1	"	5.47
84	50A	2	60.5	5.5	"	7.46
85	65A	2-1/2	76.3	7.0	"	12.0

(to be continued)

71 02 86	80A	3	89.1	7.6	12.0	15.3
87	90A	3-1/2	101.6	8.1	"	18.7
88	100A	4	114.3	8.6	"	22.4
89	125A	5	139.8	9.5	"	30.5
90	150A	6	165.2	11.0	"	41.8
71 02 91	200A	8	216.3	12.7	12.0	63.8
92	250A	10	267.4	15.1	"	93.9
93	300A	12	318.5	17.4	"	129
94	350A	14	355.6	19.0	"	158
95	400A	16	406.4	21.4	"	203
71 02 96	450A	18	457.2	23.8	12.0	254
97	500A	20	508.0	26.2	"	311

Carbon Steel Pipes
for High Pressure Service

Tuberías de Acero Carbono para Servicio de Alta Presión
高压配管用炭素鋼鋼管 碳鋼管

Standard length: 5.5 mtrs.

Ref. JIS-G-3455 (STS-370) quality. STS denotes Steel Tube Special.

Equal quality to BS778, DIN1630, ISO2604. Plain both ends. Available in black only. Most common schedule (Wall Thickness) number 40, 80 and 160 are listed below. They are used for temperatures less than 350°C.



How to order: CODE
Pipe, carbon steel for high pressure, NOMINAL SIZE, LENGTH mtr

Unit Per Lgh.

Schedule-40 Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 04 01	6A	1/8	10.5	1.7	6.0	0.369
02	8A	1/4	13.8	2.2	"	0.629
03	10A	3/8	17.3	2.3	"	0.851
04	15A	1/2	21.7	2.8	"	1.31
05	20A	3/4	27.2	2.9	"	1.74
71 04 06	25A	1	34.0	3.4	6.0	2.57
07	32A	1-1/4	42.7	3.6	"	3.47
08	40A	1-1/2	48.6	3.7	"	4.10
09	50A	2	60.5	3.9	"	5.44
10	65A	2-1/2	76.3	5.2	"	9.12
71 04 11	80A	3	89.1	5.5	6.0	11.3
12	90A	3-1/2	101.6	5.7	"	13.5
13	100A	4	114.3	6.0	"	16.0
14	125A	5	139.8	6.6	"	21.7
15	150A	6	165.2	7.1	"	27.7
71 04 16	200A	8	216.3	8.2	6.0	42.1
17	250A	10	267.4	9.3	"	59.2
18	300A	12	318.5	10.3	"	78.3
19	350A	14	355.6	11.1	"	94.3
20	400A	16	406.4	12.7	"	123
71 04 21	450A	18	457.2	14.3	6.0	156
22	500A	20	508.0	15.1	"	184

Schedule-80 Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 04 26	6A	1/8	10.5	2.4	12.0	0.479
27	8A	1/4	13.8	3.0	"	0.799
28	10A	3/8	17.3	3.2	"	1.11
29	15A	1/2	21.7	3.7	"	1.64
30	20A	3/4	27.2	3.9	"	2.24
71 04 31	25A	1	34.0	4.5	12.0	3.27
32	32A	1-1/4	42.7	4.9	"	4.57
33	40A	1-1/2	48.6	5.1	"	5.47
34	50A	2	60.5	5.5	"	7.46
35	65A	2-1/2	76.3	7.0	"	12.0

(to be continued)

Unit Per Lgh.

Schedule-80						
Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 04 36	80A	3	89.1	7.6	12.0	15.3
37	90A	3-1/2	101.6	8.1	"	18.7
38	100A	4	114.3	8.6	"	22.4
39	125A	5	139.8	9.5	"	30.5
40	150A	6	165.2	11.0	"	41.8
71 04 41	200A	8	216.3	12.7	12.0	63.8
42	250A	10	267.4	15.1	"	93.9
43	300A	12	318.5	17.4	"	129
44	350A	14	355.6	19.0	"	158
45	400A	16	406.4	21.4	"	203
71 04 46	450A	18	457.2	23.8	12.0	254
47	500A	20	508.0	26.2	"	311

Schedule-160						
Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 04 51	15A	1/2	21.7	4.7	20.0	1.97
52	20A	3/4	27.2	5.5	"	2.94
53	25A	1	34.0	6.4	"	4.36
54	32A	1-1/4	42.7	6.4	"	5.73
55	40A	1-1/2	48.6	7.1	"	7.27
71 04 56	50A	2	60.5	8.7	20.0	11.1
57	65A	2-1/2	76.3	9.5	"	15.6
58	80A	3	89.1	11.1	"	21.4
59	90A	3-1/2	101.6	12.7	"	27.8
60	100A	4	114.3	13.5	"	33.6
71 04 61	125A	5	139.8	15.9	20.0	48.6
62	150A	6	165.2	18.2	"	66.6
63	200A	8	216.3	23.0	"	110
64	250A	10	267.4	28.6	"	168
65	300A	12	318.5	33.3	"	234
71 04 66	350A	14	355.6	35.7	20.0	282
67	400A	16	406.4	40.5	"	365

Carbon Steel Pipes for High Temperature Service

Tuberías de Acero Carbono para Servicio de Alta Temperatura
高温配管用炭素鋼管 碳钢管

Standard length: 5.5 mtrs.

Ref. JIS-G-3456 (STPT-370) standard industrial quality. STPT denotes Steel Tube Piping Temperature. Equal quality to ASTM A106, DIN17175, BS3602 and ISO2604. Available in black only. Most common schedule (Wall Thickness) number 40, 80 and 160 are listed below. They are used for temperatures over 350°C.



STPT

How to order: CODE

Pipe, carbon steel for high temperature service, SCHEDULE NO., NOMINAL SIZE, LENGTH mtr

Unit Per Lgh.

Schedule-40						
Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 05 01	6A	1/8	10.5	1.7	0.369	
02	8A	1/4	13.8	2.2	0.629	
03	10A	3/8	17.3	2.3	0.851	
04	15A	1/2	21.7	2.8	1.31	
05	20A	3/4	27.2	2.9	1.74	
71 05 06	25A	1	34.0	3.4	2.57	
07	32A	1-1/4	42.7	3.6	3.47	
08	40A	1-1/2	48.6	3.7	4.10	
09	50A	2	60.5	3.9	5.44	
10	65A	2-1/2	76.3	5.2	9.12	

(to be continued)

71 05 11	80A	3	89.1	5.5	11.3
12	90A	3-1/2	101.6	5.7	13.5
13	100A	4	114.3	6.0	16.0
14	125A	5	139.8	6.6	21.7
15	150A	6	165.2	7.1	27.7
71 05 16	200A	8	216.3	8.2	42.1
17	250A	10	267.4	9.3	59.2
18	300A	12	318.5	10.3	78.3
19	350A	14	355.6	11.1	94.3
20	400A	16	406.4	12.7	123
71 05 21	450A	18	457.2	14.3	156
22	500A	20	508.0	15.1	184

Schedule-80						
Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 05 26	6A	1/8	10.5	2.4	0.479	
27	8A	1/4	13.8	3.0	0.799	
28	10A	3/8	17.3	3.2	1.11	
29	15A	1/2	21.7	3.7	1.64	
30	20A	3/4	27.2	3.9	2.24	
71 05 31	25A	1	34.0	4.5	3.27	
32	32A	1-1/4	42.7	4.9	4.57	
33	40A	1-1/2	48.6	5.1	5.47	
34	50A	2	60.5	5.5	7.46	
35	65A	2-1/2	76.3	7.0	12.0	
71 05 36	80A	3	89.1	7.6	15.3	
37	90A	3-1/2	101.6	8.1	18.7	
38	100A	4	114.3	8.6	22.4	
39	125A	5	139.8	9.5	30.5	
40	150A	6	165.2	11.0	41.8	
71 05 41	200A	8	216.3	12.7	63.8	
42	250A	10	267.4	15.1	93.9	
43	300A	12	318.5	17.4	129	
44	350A	14	355.6	19.0	158	
45	400A	16	406.4	21.4	203	
71 05 46	450A	18	457.2	23.8	254	
47	500A	20	508.0	26.2	311	

Schedule-160						
Standard Length 5.5 mtrs						
CODE	Nominal Size		Size mm		Test Pressure MPa	Kg Per Mtr
	A	B	O.D.	Wall T		
71 05 51	15A	1/2	21.7	4.7	1.97	
52	20A	3/4	27.2	5.5	2.94	
53	25A	1	34.0	6.4	4.36	
54	32A	1-1/4	42.7	6.4	5.73	
55	40A	1-1/2	48.6	7.1	7.27	
71 05 56	50A	2	60.5	8.7	11.1	
57	65A	2-1/2	76.3	9.5	15.6	
58	80A	3	89.1	11.1	21.4	
59	90A	3-1/2	101.6	12.7	27.8	
60	100A	4	114.3	13.5	33.6	
71 05 61	125A	5	139.8	15.9	48.6	
62	150A	6	165.2	18.2	66.6	
63	200A	8	216.3	23.0	110	
64	250A	10	267.4	28.6	168	
65	300A	12	318.5	33.3	234	
71 05 66	350A	14	355.6	35.7	282	
67	400A	16	406.4	40.5	365	

Steel Pipes for Low Temperature Service

Tuberías de Acero para Servicio de Baja Temperatura
低温配管用鋼管 鋼管

Standard length: 5.5 mtrs

Ref. JIS-G-3460 (STPL-380) quality. STPL denotes Steel Tube Piping Low. Equal quality of ASTM A333, BS3603, and ISO2604. Available in black only. Most common schedule (Wall Thickness) Number 40 and 80 are listed below. They are used for Temperatures below 0°C.



STPL

How to order: CODE

Pipe, steel for low temperature service, SCHEDULE NO., NOMINAL SIZE, LENGTH mtr

Unit Per Lgh.

Schedule-40
Standard Length 5.5 mtrs

CODE	Nominal Size		Size mm		Kg Per Mtr
	A	B	O.D.	Wall T	
71 06 01	6A	1/8	10.5	1.7	0.369
02	8A	1/4	13.8	2.2	0.629
03	10A	3/8	17.3	2.3	0.851
04	15A	1/2	21.7	2.8	1.31
05	20A	3/4	27.2	2.9	1.74
71 06 06	25A	1	34.0	3.4	2.57
07	32A	1-1/4	42.7	3.6	3.47
08	40A	1-1/2	48.6	3.7	4.10
09	50A	2	60.5	3.9	5.44
10	65A	2-1/2	76.3	5.2	9.12
71 06 11	80A	3	89.1	5.5	11.3
12	90A	3-1/2	101.6	5.7	13.5
13	100A	4	114.3	6.0	16.0
14	125A	5	139.8	6.6	21.7
15	150A	6	165.2	7.1	27.7
71 06 16	200A	8	216.3	8.2	42.1
17	250A	10	267.4	9.3	59.2
18	300A	12	318.5	10.3	78.3
19	350A	14	355.6	11.1	94.3
20	400A	16	406.4	12.7	123
71 06 21	450A	18	457.2	14.3	156
22	500A	20	508.0	15.1	184

Schedule-80
Standard Length 5.5 mtrs

71 06 26	6A	1/8	10.5	2.4	0.479
27	8A	1/4	13.8	3.0	0.799
28	10A	3/8	17.3	3.2	1.11
29	15A	1/2	21.7	3.7	1.64
30	20A	3/4	27.2	3.9	2.24
71 06 31	25A	1	34.0	4.5	3.27
32	32A	1-1/4	42.7	4.9	4.57
33	40A	1-1/2	48.6	5.1	5.47
34	50A	2	60.5	5.5	7.46
35	65A	2-1/2	76.3	7.0	12.0
71 06 36	80A	3	89.1	7.6	15.3
37	90A	3-1/2	101.6	8.1	18.7
38	100A	4	114.3	8.6	22.4
39	125A	5	139.8	9.5	30.5
40	150A	6	165.2	11.0	41.8
71 06 41	200A	8	216.3	12.7	63.8
42	250A	10	267.4	15.1	93.9
43	300A	12	318.5	17.4	129
44	350A	14	355.6	19.0	158
45	400A	16	406.4	21.4	203
71 06 46	450A	18	457.2	23.8	254
47	500A	20	508.0	26.2	311

Carbon Steel Precision Tubes for Hydraulic Line Service

Tuberías de Presión de Acero para Servicio de Línea Hidráulica

油压配管用精密炭素鋼鋼管 液壓碳鋼管

The carbon steel precision tubes for hydraulic line service are classed according to the working pressure, appropriate standard and manufacturing process. The most common classes of line service items are abstracted and listed below.



Name	Class of Working Pressure	Symbol of Standard	Manufacturing Process
Precision carbon steel tubes for hydraulic line service	Under 210 kgf/cm ²	OST 2	SC
	Under 100 kgf/cm ²	OST 1	S-C E-C

Standard length of pipe is 4 mtrs. and sold by weight.

When ordering, please specify the following points.

1. Working pressure 2. Outside diameter 3. Thickness

How to order: CODE

Pipe, carbon steel, OST - 2, OUTSIDE DIAM mm, THICKNESS mm, LENGTH mtr

OST-2 Standard Length 4 mtrs

Unit Per Lgh.

CODE	Outside Dia. mm	Thickness mm	CODE	Outside Dia. mm	Thickness mm
71 07 01	4	1.0	71 07 19	16	1.5
02	6	1.0	20	16	2.0
03	6	1.5	21	18	1.5
04	8	1.0	22	18	2.0
05	8	1.5	23	18	2.5
71 07 06	8	2.0	71 07 24	20	2.0
07	10	1.0	25	20	2.5
08	10	1.2	26	20	3.0
09	10	1.5	27	22	2.0
10	10	2.0	28	22	3.0
71 07 11	12	1.0	71 07 29	25	2.0
12	12	1.2	30	25	2.5
13	12	1.5	31	25	3.0
14	12	2.0	32	28	2.5
15	15	1.2	33	30	2.5
71 07 16	15	1.5	71 07 34	35	2.5
17	15	2.0	35	35	4.0
18	15	2.5	36	42	4.0

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Available size range normally produced are as follows.

Wall thickness (mm)	Standard dimension	0.5	1.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	7.0
	Tolerance	±15%					±10%								
Outside diameter (mm)															
Standard dimension	Tolerance														
4.0	±0.10	o Δ	o ◇												
6.0		Δ	o ◇		o ◇										
8.0		Δ	o ◇		o ◇										
10.0		Δ	o ◇		o ◇	o ◇									
12.0			o ◇		o ◇		o ◇								
13.8															
15.0					o		o								
16.0					◇	◇		◇							
17.3															
18.0					o		o	o							
20.0	±0.15				◇	◇	◇		◇						
21.7															
22.0						o		o		o					
25.0						o		o			o				
27.2															
28.0						o	o		o			o			
30.0						◇	◇		◇				◇		
34.0															
35.0						o	o	o			o				
38.0									◇						◇

- Notes: 1) Boxed columns  indicates range of dimensions of tubes normally manufactured.
 2) Mark o standard dimensions specified in Japan Oil Hydraulic Association Standards (OST).
 3) Mark ◇ standard dimensions specified in Japanese Industrial Standards (JIS B STPS).
 4) Mark Δ standard dimensions of soft iron tubes.

Stainless Steel Pipes

Tuberías de Acero - inoxidable 配管用ステンレス鋼管 不锈钢管

Standard length: 4 mtrs.

Ref. JIS-G-3459 (SUS 304 TP) standard industrial quality. SUS TP denotes Steel Use Stainless Tube Piping. Equal quality of ASTM A312, BS3605.

Used for corrosion proof, heat-resistance and high temperature service.



SUS-TP-8P

Hydraulic Test Pressure

Schedule No.	5	10	20	40	80	160
MPa	1.5	2.0	3.5	6.0	12	20
kgf/cm ²	15	20	35	60	120	200
Bar	15	20	34	59	118	196

How to order: CODE

Stainless steel pipe, SCHEDULE NO., NOMINAL SIZE, LENGTH mtr

Unit Per Lgh.

Schedule-5 Standard Length 4 mtrs					
CODE	Nominal Size		Size mm		Kg Per Mtr
	A	B	O.D.	Wall T	
71 10 01	6A	1/8	10.5	1.0	0.237
02	8A	1/4	13.8	1.2	0.377
03	10A	3/8	17.3	1.2	0.481
04	15A	1/2	21.7	1.65	0.824
05	20A	3/4	27.2	1.65	1.05
71 10 06	25A	1	34.0	1.65	1.33
07	32A	1-1/4	42.7	1.65	1.69
08	40A	1-1/2	48.6	1.65	1.93
09	50A	2	60.5	1.65	2.42
10	65A	2-1/2	76.3	2.1	3.88
71 10 11	80A	3	89.1	2.1	4.55
12	90A	3-1/2	101.6	2.1	5.20
13	100A	4	114.3	2.1	5.87
14	125A	5	139.8	2.8	9.56
15	150A	6	165.2	2.8	11.3
71 10 16	200A	8	216.3	2.8	14.9
17	250A	10	267.4	3.4	22.4
18	300A	12	318.5	4.0	31.3

(to be continued)

Unit Per Lgh.

Schedule-5 Standard Length 4 mtrs					Kg Per Mtr
CODE	Nominal Size		Size mm		
	A	B	O.D.	Wall T	

Schedule-10 Standard Length 4 mtrs					
71 10 26	6A	1/8	10.5	1.2	0.278
27	8A	1/4	13.8	1.65	0.499
28	10A	3/8	17.3	1.65	0.643
29	15A	1/2	21.7	2.1	1.03
30	20A	3/4	27.2	2.1	1.31
71 10 31	25A	1	34.0	2.8	2.18
32	32A	1-1/4	42.7	2.8	2.78
33	40A	1-1/2	48.6	2.8	3.19
34	50A	2	60.5	2.8	4.02
35	65A	2-1/2	76.3	3.0	5.48
71 10 36	80A	3	89.1	3.0	6.43
37	90A	3-1/2	101.6	3.0	7.37
38	100A	4	114.3	3.0	8.32
39	125A	5	139.8	3.4	11.6
40	150A	6	165.2	3.4	13.7
71 10 41	200A	8	216.3	4.0	21.2
42	250A	10	267.4	4.0	26.2
43	300A	12	318.5	4.5	35.2

Schedule-20 Standard Length 4 mtrs					
71 10 51	6A	1/8	10.5	1.5	0.336
52	8A	1/4	13.8	2.0	0.588
53	10A	3/8	17.3	2.0	0.762
54	15A	1/2	21.7	2.5	1.20
55	20A	3/4	27.2	2.5	1.54
71 10 56	25A	1	34.0	3.0	2.32
57	32A	1-1/4	42.7	3.0	2.97
58	40A	1-1/2	48.6	3.0	3.41
59	50A	2	60.5	3.5	4.97
60	65A	2-1/2	76.3	3.5	6.35
71 10 61	80A	3	89.1	4.0	8.48
62	90A	3-1/2	101.6	4.0	9.72
63	100A	4	114.3	4.0	11.0
64	125A	5	139.8	5.0	16.8
65	150A	6	165.2	5.0	20.0
71 10 66	200A	8	216.3	6.5	34.0
67	250A	10	267.4	6.5	42.2
68	300A	12	318.5	6.5	50.5

Schedule-40 Standard Length 4 mtrs					
71 10 76	6A	1/8	10.5	1.7	0.373
77	8A	1/4	13.8	2.2	0.636
78	10A	3/8	17.3	2.3	0.859
79	15A	1/2	21.7	2.8	1.32
80	20A	3/4	27.2	2.9	1.76
71 10 81	25A	1	34.0	3.4	2.59
82	32A	1-1/4	42.7	3.6	3.51
83	40A	1-1/2	48.6	3.7	4.14
84	50A	2	60.5	3.9	5.50
85	65A	2-1/2	76.3	5.2	9.21
71 10 86	80A	3	89.1	5.5	11.5
87	90A	3-1/2	101.6	5.7	13.6
88	100A	4	114.3	6.0	16.2
89	125A	5	139.8	6.6	21.9
90	150A	6	165.2	7.1	28.0
71 10 91	200A	8	216.3	8.2	42.5
92	250A	10	267.4	9.3	59.8
93	300A	12	318.5	10.3	79.1

Schedule-80 Standard Length 4 mtrs					
71 11 01	6A	1/8	10.5	2.4	0.484
02	8A	1/4	13.8	3.0	0.807
03	10A	3/8	17.3	3.2	1.12
04	15A	1/2	21.7	3.7	1.66
05	20A	3/4	27.2	3.9	2.26
71 11 06	25A	1	34.0	4.5	3.31
07	32A	1-1/4	42.7	4.9	4.61
08	40A	1-1/2	48.6	5.1	5.53
09	50A	2	60.5	5.5	7.54
10	65A	2-1/2	76.3	7.0	12.1

(to be continued)

71 11 11	80A	3	89.1	7.6	15.4
12	90A	3-1/2	101.6	8.1	18.9
13	100A	4	114.3	8.6	22.6
14	125A	5	139.8	9.5	30.8
15	150A	6	165.2	11.0	42.3
71 11 16	200A	8	216.3	12.7	64.4
17	250A	10	267.4	15.1	94.9
18	300A	12	318.5	17.4	131

Schedule-120 Standard Length 4 mtrs					
71 11 26	100A	4	114.3	11.1	28.5
27	125A	5	139.8	12.7	40.2
28	150A	6	165.2	14.3	53.8
29	200A	8	216.3	18.2	89.8
30	250A	10	267.4	21.4	131
71 11 31	300A	12	318.5	25.4	185

Schedule-160 Standard Length 4 mtrs					
71 11 51	15A	1/2	21.7	4.7	1.99
52	20A	3/4	27.2	5.5	2.97
53	25A	1	34.0	6.4	4.40
54	32A	1-1/4	42.7	6.4	5.79
55	40A	1-1/2	48.6	7.1	7.34
71 11 56	50A	2	60.5	8.7	11.2
57	75A	2-1/2	76.3	9.5	15.8
58	80A	3	89.1	11.1	21.6
59	90A	3-1/2	101.6	12.7	28.1
60	100A	4	114.3	13.5	33.9
71 11 61	125A	5	139.8	15.9	49.1
62	150A	6	165.2	18.2	66.6
63	200A	8	216.3	23.0	111
64	250A	10	267.4	28.6	170
65	300A	12	318.5	33.3	237

Stainless Steel Seamless Tubes

Tubos sin Costura de Acero Inoxidable

ステンレス継目無チューブ 不锈钢无缝钢管

Seamless stainless steel tube of SUS 304 TPS-C. For use in general services and tube fittings. Sold by weight at random lengths.



How to order: CODE

Stainless steel tube, seamless, OUTER DIAM mm, THICKNESS mm, LENGTH mtr

CODE		Unit Per Kgs.		
Unit in Kg	Unit in mtr	O.D. mm	Thickness mm	Wt. Kg Per Meter
71 12 01	71 12 21	6	1	0.125
02	22		1.5	0.168
03	23		1	0.174
04	24	8	1.5	0.243
05	25		1	0.224
71 12 06	71 12 26	10	1.5	0.318
07	27		1	0.274
08	28		1.5	0.392
09	29	15	1	0.349
10	30		1.5	0.504
71 12 11	71 12 31		1	0.374
12	32	16	1.5	0.542
13	33		1	0.423
14	34		1.5	0.617
71 12 15	71 12 35	20	1	0.473
16	36		1.5	0.691
17	37		1	0.523
18	38	22	1.5	0.766
19	39		1	0.598
20	40		1.5	0.878

Copper Tubes, Seamless

Tubo de Cobre, Sin Costura 継目無銅管 无缝铜管

Standard length: 5 mtrs.

Ref. JIS-H-3300 (C 1220) standard industrial quality. Drawn from solid copper and used for general plumbing, steam piping, etc. Furnished in straight 5 mtr length.



How to order: CODE

Copper tube, seamless, OUTER DIAM mm, THICKNESS mm, LENGTH mtr

				Unit Per Lgh.			
CODE	Size mm		Kg Per Mtr	CODE	Size mm		Kg Per Mtr
	O.D.	T			O.D.	T	
71 14 01	5	0.6	0.0737	71 14 40		0.8	0.384
71 14 02		0.6	0.0905	41	18	1	0.475
03	6	0.8	0.116	42		1.2	0.563
04		1	0.140	71 14 43		0.8	0.407
71 14 05		0.6	0.0972	44		1	0.503
06	6.4	0.8	0.125	45	19	1.2	0.597
07		1	0.151	46		1.5	0.733
71 14 08		0.6	0.124	47		2	0.950
09		0.8	0.161	71 14 48		1	0.531
10	8	1	0.196	49	20	1.2	0.630
11		1.2	0.228	71 14 50		1	0.587
71 14 12		0.8	0.194	51	22	1.2	0.697
13	9.5	1	0.237	52		1.5	0.859
14		1.2	0.278	71 14 53		1	0.592
71 14 15		0.8	0.206	54	22.2	1.2	0.704
16	10	1	0.251	55		1.5	0.867
17		1.2	0.295	71 14 56		1	0.670
71 14 18		0.8	0.250	57	25	1.2	0.798
19		1	0.307	58		2	1.28
20	12	1.2	0.362	71 14 59		1	0.681
21		1.5	0.440	60	25.4	1.2	0.811
71 14 22		0.8	0.266	61		1.5	1.00
23	12.7	1	0.327	62		2	1.31
24		1.2	0.385	71 14 63		1	0.754
25		1.5	0.469	64	28	1.2	0.898
71 14 26		0.8	0.295	71 14 65		1	0.860
27	14	1	0.363	66	31.8	1.2	1.03
28		1.2	0.429	67		1.5	1.27
71 14 29		0.8	0.317	71 14 68		1	0.866
30	15	1	0.391	69	32	1.2	1.03
31		1.2	0.463	71 14 70	35	1	0.950
32		1.5	0.566	71 14 71		1	1.04
71 14 33		0.8	0.317	72	38.1	1.2	1.24
34	15.9	1	0.391	71 14 73	45	2	2.40
35		1.2	0.463	74	50	2	2.68
36		1.5	0.566	75	50.8	2	2.73
71 14 37		0.8	0.340				
38	16	1	0.419				
39		1.2	0.496				

Copper Tubes, Annealed Seamless (for Piping Refrigerating Systems)

Tubos de Cobre, Sin Costura Recocido ナマシ銅管 无缝紫铜盘管

Standard length: 10 or 20 mtrs.

Seamless and flexible tubes. Can be bent, coiled or shaped as required for installation. Tube ends can be flanged and fitted easily for any requirement.



How to order: CODE

Copper tube, annealed, OUTER DIAM mm, THICKNESS mm, LENGTH mtr

				Unit Per Mtr	
CODE	Out Diameter		Wall Thickness	Kg Per Mtr	
	mm	in	mm		
71 15 01	5		1.0	0.12	
02	6		1.0	0.14	
03	6.35	1/4	1.0	0.15	
04	8		1.0	0.2	
05	9.52	3/8	1.0	0.24	
71 15 06	10		1.0	0.26	
07	12		1.0	0.31	
08	12.7	1/2	1.0	0.33	
09	15.87	5/8	1.0	0.42	
10	19.05	3/4	1.0	0.51	

Aluminium Tubes, Welded

Tubos de Aluminio, Soldados アルミ溶接管 铝焊接管

Standard length: 5 mtrs.

Ref. JIS-H-4090 (1050) standard industrial quality. There are for the same tube diameter several different wall thicknesses available.



How to order: CODE

Aluminium tube, welded, OUTER DIAM mm, THICKNESS mm, LENGTH mtr

				Unit Per Lgh.			
CODE	Out Diam mm	Thick-ness mm	Kg Per Mtr	CODE	Out Diam mm	Thick-ness mm	Kg Per Mtr
71 16 01	6	1.0	0.043	71 16 20		1.0	0.145
71 16 02		1.0	0.060	21	18	1.6	0.223
03	8	1.6	0.088	22		2.0	0.272
71 16 04		1.0	0.077	23		2.5	0.330
05	10	1.6	0.114	71 16 24		1.0	0.162
06		2.0	0.136	25	20	1.6	0.251
71 15 07		1.0	0.094	26		2.0	0.307
08	12	1.6	0.142	27		2.5	0.372
09		2.0	0.171	71 16 28		1.0	0.179
71 16 10		1.0	0.111	29	22	1.6	0.278
11	14	1.6	0.170	30		2.0	0.340
12		2.0	0.205	31		2.5	0.415
71 16 13		1.0	0.120	71 16 32		1.0	0.204
14	15	1.6	0.183	33	25	1.6	0.319
15		2.0	0.221	34		2.0	0.392
71 16 16		1.0	0.128	35		2.5	0.478
17	16	1.6	0.196	71 16 36		1.0	0.247
18		2.0	0.238	37		1.6	0.387
19		2.5	0.287	38	30	2.0	0.476
				39		2.5	0.586
				40		3.0	0.690

71 Aluminium Brass Tubes

for Condensers and Heat Exchangers
(Ref. JIS H 3300 C6872T)

Tubos de Aluminio y de Latón para Condensadores e Intercambiadores Térmicos

アルブラ管 鋁銅合金 (公制)

Newly developed high corrosion resistant aluminium brass material for use in condenser and heat exchanger tubes.

"ALUMIBRASS" added Ni to the ordinary contents of the so-called standard alumi brass. These tubes are used most often for various equipment in marine service including not only condensers, various heat exchangers and the heating coils, but also seawater conduits. In the case of ships, as seawater is used for cooling water, most tubes are made of alumi brass because of the very good results.

The standard sizes of the tubes are shown below. Specify size when ordering. These tubes are sold by weight.



Maximum Length & Weight

Class	Outside Diameter			
	< 20Φ	20 - 60Φ	60.1 - 90Φ	> 90Φ
Length	40 m Max	25 m Max	10 m Max	6 m Max
Weight	60 Kg "	60 Kg "	50 Kg "	80 Kg "

How to order: CODE

Alumi brass tube, NOMINAL SIZE, OUT DIAM mm, THICKNESS mm, LENGTH mtr

Metric Size

CODE		Nominal Size A	O.D. mm	Thickness mm	Unit Per Kg.
Unit in Kg	Unit in mtr				Kg Per Mtr
71 17 01	71 17 21	15	20	1.0	0.50
02	22	20	25	1.5	0.98
03	23	25	30	1.5	1.12
04	24	32	38	1.5	1.43
05	25	40	44.5	1.5	1.69
71 17 06	71 17 26	50	57	1.5	2.18

Inch Converted Metric Size

CODE		Nominal Size A	O.D. mm	Thickness mm	Unit Per Kg.
Unit in Kg	Unit in mtr				Kg Per Mtr
71 17 11	71 17 31	15	15.13	1.21	0.45
12	32	20	21.48	1.21	0.65
13	33	25	28.24	1.42	1.00
14	34	32	34.59	1.42	1.24
15	35	40	40.94	1.42	1.48
71 17 16	71 17 36	50	54.05	1.62	2.24

Remark: 1. For delivery, please allow extra time.

2. Besides above, other sizes are also available.

PVC Plastic Tubes

Tubos de Plástico PVC 硬質塩化ビニールパイプ PVC塑料管

Standard length: 4 mtrs.

Used for interior plumbing and also for soil, waste and vent lines and drainage systems. Applicable also for chemical liquids. Ref. JIS K-6741 (VP) standard industrial quality.

How to order: CODE

Tube, PVC plastic, OUTER DIAM mm, INSIDE DIAM mm, LENGTH mtr

CODE	Size mm	Diameter mm		Thickness mm	Kg Per 4 Mtrs
		O.D.	I.D.		
71 18 01	13	18	13	2.2	0.70
02	16	22	16	2.7	1.02
03	20	26	20	2.7	1.24
04	25	32	25	3.1	1.79
05	30	38	31	3.1	2.17
71 18 06	40	48	40	3.6	3.16
07	50	60	51	4.1	4.49
08	75	89	77.4	5.5	8.81
09	100	114	100	6.6	13.64

Symbol	Abbreviation			
SGP	S: Steel	G: Gas	P: Piping	
SGPW	S: Steel	G: Gas	P: Piping	W: Water
STB	S: Steel	T: Tube	B: Boiler	
STBA	S: Steel	T: Tube	B: Boiler	A: Alloy
STBL	S: Steel	T: Tube	B: Boiler	L: Low Temperature
STH	S: Steel	T: Tube	H: High Pressure	
STK	S: Steel	T: Tube	K:	
STKM	S: Steel	T: Tube	K:	M: Machine
STKS	S: Steel	T: Tube	K:	S: Special
STKR	S: Steel	T: Tube	K:	R: Rectangular
STL	S: Steel	T: Tube	L: Locomotive	
STM	S: Steel	T: Tube	M: Mining	
	C: Core or Casing		R: Boring Rod	
STO	S: Steel	T: Tube	O: Oil	
STPA	S: Steel	T: Tube	P: Piping	A: Alloy
STPG	S: Steel	T: Tube	P: Piping	G: General
STPL	S: Steel	T: Tube	P: Piping	L: Low
STPT	S: Steel	T: Tube	P: Piping	T: Temperature
STPY	S: Steel	T: Tube	P: Piping	Y:
STS	S: Steel	T: Tube	S: Special	
SUS-TP	S: Steel	U: Use	S: Stainless T: Tube	P: Piping
SUS-TB	S: Steel	U: Use	S: Stainless T: Tube	B: Boiler

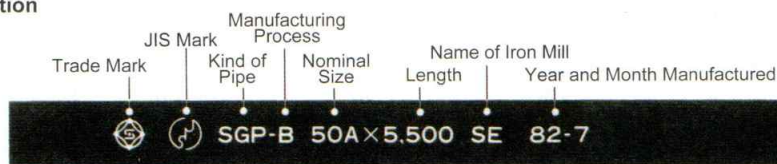
Dimensions of Welded and Seamless Steel Pipe (ANSI/ASME B36.10M)

Nominal Pipe Size	Outside Diameter inch	Schedule 40		Schedule 80		Schedule 120		Schedule 160	
		inch	mm	inch	mm	inch	mm	inch	mm
1/8	0.405	0.068	1.7	0.095	2.4	...	...	...	...
1/4	0.540	0.088	2.2	0.119	3.0	...	...	...	...
3/8	0.675	0.091	2.3	0.126	3.2	...	...	...	...
1/2	0.840	0.109	2.8	0.147	3.7	...	...	0.188	4.8
3/4	1.050	0.113	2.9	0.154	3.9	...	...	0.219	5.6
1	1.315	0.133	3.4	0.179	4.5	...	...	0.250	6.4
1-1/4	1.660	0.140	3.6	0.191	4.9	...	...	0.250	6.4
1-1/2	1.900	0.145	3.7	0.200	5.1	...	...	0.281	7.1
2	2.375	0.154	3.9	0.218	5.5	...	...	0.344	8.7
2-1/2	2.875	0.203	5.2	0.276	7.0	...	...	0.375	9.5
3	3.500	0.216	5.5	0.300	7.6	...	...	0.438	11.1
3-1/2	4.000	0.226	5.7	0.318	8.1	...	...	...	...
4	4.500	0.237	6.0	0.337	8.6	0.438	11.1	0.531	13.5
5	5.563	0.258	6.6	0.375	9.5	0.500	12.7	0.625	15.9
6	6.625	0.280	7.1	0.432	11.0	0.562	14.3	0.719	18.3
8	8.625	0.322	8.2	0.500	12.7	0.719	18.3	0.906	23.0
10	10.750	0.365	9.3	0.594	15.1	0.844	21.4	1.125	28.6
12	12.750	0.406	10.3	0.688	17.5	1.000	25.4	1.312	33.3
14	14.000	0.438	11.1	0.750	19.1	1.094	27.8	1.406	35.7
16	16.000	0.500	12.7	0.844	21.4	1.219	31.0	1.594	40.5
18	18.000	0.562	14.3	0.938	...	1.375	...	1.781	...

JIS ASTM Carbon Steel Pipe Outside Diameter Comparison and Actual Wall Thickness by Schedule Number

Nom. Size		Actual OD mm		Actual Wall Thickness by Schedule Numbers mm.									
A	B	JIS	ASTM	10	20	30	40	60	80	100	120	140	160
6	1/8	10.5	10.3				1.7	2.2	2.4				
8	1/4	13.8	13.7				2.2	2.4	3.0				
10	3/8	17.3	17.1				2.3	2.8	3.2				
15	1/2	21.7	21.3				2.8	3.2	3.7				4.7
20	3/4	27.2	26.7				2.9	3.4	3.9				5.5
25	1	34.0	33.4				3.4	3.9	4.5				6.4
32	1-1/4	42.7	42.2				3.6	4.5	4.9				6.4
40	1-1/2	48.6	48.3				3.7	4.5	5.1				7.1
50	2	60.5	60.3		3.2		3.9	4.9	5.5				8.7
65	2-1/2	76.3	73.0		4.5		5.2	6.0	7.0				9.5
80	3	89.1	88.9		4.5		5.5	6.6	7.6				11.1
90	3-1/2	101.6	101.6		4.5		5.7	7.0	8.1				12.7
100	4	114.3	114.3		4.9		6.0	7.1	8.6		11.1		13.5
125	5	139.8	141.3		5.1		6.6	8.1	9.5		12.7		15.9
150	6	165.2	168.3		5.5		7.1	9.3	11.0		14.3		18.2
200	8	216.3	219.1		6.4	7.0	8.2	10.3	12.7	15.1	18.2	20.6	23.0
250	10	267.4	273.1		6.4	7.8	9.3	12.7	15.1	18.2	21.4	25.4	28.6
300	12	318.5	323.9		6.4	8.4	10.3	14.3	17.4	21.4	25.4	28.6	33.3
350	14	355.6	355.6	6.4	7.9	9.5	11.1	15.1	19.0	23.8	27.8	31.8	35.7
400	16	406.4	406.4	6.4	7.9	9.5	12.7	16.7	21.4	26.2	30.9	36.5	40.5
450	18	457.2	457.2	6.4	7.9	11.1	14.3	19.0	23.8	29.4	34.9	39.7	45.2
500	20	508.0		6.4	9.5	12.7	15.1	20.6	26.2	32.5	38.1	44.4	50.0

Steel Pipe Indication



Metric Carbon Steel Tubing for Hydraulic and Pneumatic Applications

DIN 2391

O.D. mm	Wall Thick mm	Working Pressure Bar*	Proof Pressure Bar*	Burst Pressure Bar*	Kg per Meter
6	1	377	558	1,320	0.12
	1.5	564	792	1,584	0.17
	2	644	966	1,932	0.19
8	1	282	430	953	0.17
	1.5	424	619	1,514	0.24
	2	565	792	2,145	0.30
10	1	239	370	746	0.22
	1.5	359	538	1,170	0.31
	2	479	694	1,634	0.39
12	1	199	308	612	0.27
	1.5	299	455	953	0.39
	2	399	591	1,320	0.49
14	1.5	256	394	804	0.46
	2	342	514	1,107	0.58
	2.5	403	604	1,209	0.71
15	1	129	194	388	0.35
	1.5	239	370	746	0.50
	2	319	483	1,024	0.64
	2.5	376	564	1,128	0.78
16	1	121	182	363	0.36
	1.5	224	347	695	0.54
	2	299	455	953	0.69
	2.5	374	558	1,225	0.83
	3	449	656	1,514	0.96
18	1	107	161	321	0.41
	1.5	199	308	612	0.61
	2	266	408	837	0.79
	2.5	313	469	939	0.96
	3	399	591	1,320	1.11
20	1.5	179	277	547	0.68
	2	239	370	746	0.89
	2.5	299	455	953	1.08
	3	359	538	1,170	1.26
	4	479	694	1,634	1.58
22	1.5	163	252	495	0.76
	2	217	336	673	0.99
	2.5	272	417	858	1.20
	3	326	493	1,050	1.41
25	2	191	296	586	1.13
	2.5	239	370	746	1.39
	3	287	438	911	1.63
	4	399	595	1,259	2.07
28	1.5	128	198	384	0.98
	2	171	264	520	1.28
	2.5	201	301	603	1.57
	3	256	394	804	1.85
	4	302	453	906	2.37
30	2	159	246	483	1.38
	2.5	199	308	612	1.70
	3	239	370	746	2.00
	4	333	504	1,024	2.57
	5	416	617	1,320	3.08
35	2	142	220	411	1.63
	2.5	178	275	520	2.00
	3	214	331	631	2.37
	4	322	463	966	3.06
	5	403	604	1,209	3.70
38	2.5	164	254	476	2.19
	3	197	305	578	2.59
	4	263	405	789	3.35
	5	328	498	1,009	4.07
42	2	119	183	339	1.97
	3	171	264	520	2.89
	4	238	367	707	3.75
	5	297	454	903	4.56
50	5	249	386	746	5.55
	6	299	457	911	6.51
60	6	249	386	746	7.99
	8	333	504	1,024	10.26

Note : *Admissible working pressure according to DIN 2413

Type : Seamless cold drawn high pressure steel tubes

Material : Steel ST 35.4 DIN 2391

Metric Stainless Steel Tubing**ASTM A269**

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Pipes & Tubes

O.D. mm	Wall Thick mm	Working Pressure Bar*	Kg per 100 Meter	Kg per Meter
6	1	470	12.30	0.12
	1.5	705	16.70	0.16
8	1	352	17.30	0.17
	1.5	529	24.00	0.24
	2	705	29.60	0.29
10	1	282	22.20	0.22
	1.5	423	31.40	0.31
	2	564	39.50	0.40
12	1	235	27.10	0.27
	1.5	352	38.90	0.39
	2	470	49.30	0.49
14	1.5	294	46.20	0.46
	2	388	59.20	0.59
15	1.5	282	49.90	0.50
	2	376	64.10	0.64
16	1.5	264	53.60	0.54
	2	352	69.10	0.69
	2.5	440	84.50	0.85
18	1.5	235	61.00	0.61
	2	313	78.90	0.79
	2.5	333	96.70	0.97
20	2	282	88.80	0.89
	2.5	352	107.90	1.08
22	1.5	192	75.80	0.76
	2	256	98.60	0.98
25	2	235	115.20	1.15
	2.5	282	138.70	1.39
	3	338	163.00	1.63
28	2	201	128.20	1.28
	2.5	263	159.40	1.59
	3	302	185.00	1.85
30	2	194	152.00	1.52
	3	282	200.00	2.00
35	2	161	163.00	1.63
	3	241	237.00	2.37
38	2	144	204.00	2.04
	3	222	259.00	2.59
	4	297	335.00	3.35
	5	318	594.00	5.94
42	2	134	197.00	1.97
	3	201	289.00	2.89
	4	280	380.00	3.80

Note : *Admissible working pressure according to DIN 2413

Type : Seamless stainless steel high pressure steel tubes

Material : Stainless steel Type 316L Material No. 1.4404

Conversion Table

[Length]	m	km	in	ft	yd	mile
m	1	1×10^{-3}	39.37	3.28	1.093	6.214×10^{-4}
km	1×10^3	1	3.937×10^4	3,280	1,093	0.621
in	0.0254	2.54×10^{-5}	1	1/12	1/36	1.58×10^{-5}
ft	0.305	3.048×10^{-4}	12	1	1/3	1.894×10^{-4}
yd	0.914	9.144×10^{-4}	36	3	1	5.682×10^{-4}
mile	1,609	1.609	63,360	5,280	1,760	1

[Mass (Weight)]	g	kg	t	lb	oz
g	1	1×10^{-3}	1×10^{-6}	2.204×10^{-3}	0.0352
kg	1×10^3	1	1×10^{-3}	2.204	35.27
t	1×10^6	1×10^3	1	2,204	35,270
lb	453.6	0.4536	4.536×10^{-4}	1	16
oz	28.35	0.02835	2.835×10^{-5}	1/16	1

[Volume]	cm ³ (cc or ml)	m ³	l	in ³	qt	pt	fl-oz	ft ³	gal
cm ³ (cc or ml)	1	0.000001	0.001	0.061	0.00088	0.0018	0.035	-	0.00022
m ³	1,000,000	1	1,000	61,024	880	1,760	35,195	35.314	220
l	1,000	0.001	1	61.024	0.880	1.760	35.195	0.035	0.220
in ³	16.387	0.000016	0.016	1	0.014	0.029	0.577	0.00058	0.0036
qt	1,136.52	0.0011	1.137	69.355	1	2	40	0.033	0.25
pt	568	0.00057	0.568	34.677	0.5	1	20	0.017	0.125
fl-oz	28.413	0.000028	0.028	1.734	0.025	0.05	1	0.0008	0.00625
Ft ³	28,316	0.0283	28.316	1,728	29.922	59.844	958	1	7,481
gal	4,546	0.0045	4.546	277	4	8	160	0.134	1

[Pressure]	bar	kgf/cm ²	lbf/cm ²	mmHg (0°C)	Pa (SI)
bar	1	1.020	14.50	750.1	100,000
kgf/cm ²	0.9807	1	14.22	753.6	98,066
lbf/cm ²	0.0689	0.0703	1	51.72	6,895
mmHg (0°C)	0.00133	0.0013	0.0193	1	133.3
Pa (SI)	1×10^{-5}	1.02×10^{-5}	1.45×10^{-4}	10.2×10^{-4}	1

[Stress]	Pa (SI)	MPa	kgf/mm ²	kgf/cm ²
Pa (SI)	1	1×10^{-6}	1.01972×10^{-7}	1.01972×10^{-5}
MPa	1×10^6	1	1.01972×10^{-1}	1.01972×10
kgf/mm ²	9.80665×10^6	9.80665	1	1×10^2
kgf/cm ²	9.80665×10^4	9.80665×10^{-2}	1×10^{-2}	1

[Force]	kW	kgf · m/sec	HP
kW	1	102.0	1.341
kgf · m/sec	0.009807	1	0.01315
HP	0.7457	76.04	1