



## Tubes/tube bends

### Seamless EO steel tubes | Material E235+N / St.37.4 (1.0308)

Acc. to DIN EN 10305-4

1. DIN 2413 I: Tubes with a diameter of OD/ID>2 are calculated for static stress in accordance with DIN 2413 III but with K=yield strength.
2. Evaluated in Parker Lab and Test Field. ( ) = Burst pressure (B.P.) acc. to Faupel-von-Mises

Material E235+N / St.37.4 (1.0308)		d <sub>a</sub> Outer-Ø (mm)	Outer-Ø Tolerance (mm)	s Wall- thickness (mm)	d <sub>i</sub> Inner-Ø (mm)	Design pressure		2 Burst pressure bar	Weight kg/m
Surface Phosphated and oiled	Cr(VI)- free					1 DIN 2413 I static PN bar	DIN 2413 III dynamic PN bar		
Order code									
R04X0.5	R04X0.5CF	04		0.50	3.0	313	273	1160	0.047
	R04X0.75CF	04	±0.08	0.75	2.5	470	391	1820	0.063
R04X1	R04X1CF	04		1.00	2.0	627	500	2700	0.074
	R05X1CF	05	±0.08	1.00	3.0	501	414	2120	0.099
R06X0.75CF	R06X0.75CF	06		0.75	4.5	333	288	1150	0.103
	R06X1CF	06		1.00	4.0	444	372	1650	0.123
R06X1	R06X1.5CF	06	±0.08	1.50	3.0	666	526	2550	0.166
	R06X2CF	06		2.00	2.0	692	662	>3500	0.197
R06X2.25	R06X2.25CF	06		2.25	1.5	757	725	>3500	0.208
R08X1	R08X1CF	08		1.00	6.0	333	288	1175	0.173
R08X1.5	R08X1.5CF	08	±0.08	1.50	5.0	499	412	1925	0.240
R08X2	R08X2CF	08		2.00	4.0	666	526	2500	0.296
	R08X2.5CF	08		2.50	3.0	658	630	2650	0.339
R10X1	R10X1CF	10		1.00	8.0	282	248	900	0.222
R10X1.5	R10X1.5CF	10	±0.08	1.50	7.0	423	357	1450	0.314
R10X2	R10X2CF	10		2.00	6.0	564	458	2025	0.395
R10X2.5	R10X2.5CF	10		2.50	5.0	705	551	2675	0.462
	R10X3CF	10		3.00	4.0	666	638	>3500	0.518
R12X1	R12X1CF	12		1.00	10.0	235	209	750	0.271
R12X1.5	R12X1.5CF	12	±0.08	1.50	9.0	353	303	1150	0.388
R12X2	R12X2CF	12		2.00	8.0	470	391	1600	0.493
	R12X2.5CF	12		2.50	7.0	588	474	2025	0.586
	R12X3CF	12		3.00	6.0	705	551	2600	0.666
	R12X3.5CF	12		3.50	5.0	651	624	(3109)	0.734
R14X2	R14X1.5CF	14	±0.08	1.50	11.0	302	264	975	0.462
	R14X2CF	14		2.00	10.0	403	342	1325	0.592
	R14X2.5CF	14		2.50	9.0	504	415	1650	0.709
	R14X3CF	14		3.00	8.0	604	485	2200	0.814
R15X1	R15X1CF	15		1.00	13.0	188	170	575	0.345
R15X1.5	R15X1.5CF	15	±0.08	1.50	12.0	282	248	950	0.499
R15X2	R15X2CF	15		2.00	11.0	376	321	1275	0.641
R16X1.5	R16X1.5CF	16	±0.08	1.50	13.0	264	233	850	0.536
R16X2	R16X2CF	16		2.00	12.0	353	303	1175	0.691
R16X2.5	R16X2.5CF	16		2.50	11.0	441	370	1500	0.832
R16X3	R16X3CF	16		3.00	10.0	529	433	1850	0.962
R18X1	R18X1CF	18		1.00	16.0	157	143	450	0.419
R18X1.5	R18X1.5CF	18	±0.08	1.50	15.0	235	209	700	0.610
R18X2	R18X2CF	18		2.00	14.0	313	273	975	0.789
R18X2.5	R18X2.5CF	18		2.50	13.0	392	333	1300	0.956
	R18X3CF	18		3.00	12.0	470	391	1575	1.111

Surface finish:

- Tubes with I.D. 1.5-5 mm: outside and inside oiled.
- Tubes from 6 mm I.D.: outside and inside phosphated and oiled.

• Cr(VI)-free:

These dimensions are externally thick coat passivated (thickness of coat 8-12µm), inside oiled.




**Tubes/tube bends**
**Seamless EO steel tubes (continued) | Material E235+N / St.37.4 (1.0308)**

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2. Evaluated in Parker Lab and Test Field.

Material E235+N / St.37.4 (1.0308)		d <sub>a</sub> Outer-Ø (mm)	Outer-Ø Tolerance (mm)	s Wall- thickness (mm)	d <sub>i</sub> Inner-Ø (mm)	Design pressure		2 Burst pressure bar	Weight kg/m
Surface						1 DIN 2413 I static PN bar	DIN 2413 III dynamic PN bar		
Phosphated and oiled	Cr(VI)- free	Order code							
R20X2 R20X2.5 R20X3	R20X1.5CF	20	±0.08	1.50	17.0	212	190	675	0.684
	R20X2CF	20		2.00	16.0	282	248	900	0.888
	R20X2.5CF	20		2.50	15.0	353	303	1100	1.079
	R20X3CF	20		3.00	14.0	423	357	1400	1.258
R22X1.5 R22X2 R22X2.5	R20X3.5CF	20	±0.08	3.50	13.0	494	408	1650	1.424
	R20X4CF	20		4.00	12.0	564	458	2000	1.578
	R22X1.5CF	22		1.50	19.0	192	173	550	0.758
	R22X2CF	22		2.00	18.0	256	227	775	0.986
R25X2 R25X2.5 R25X3 R25X4	R22X2.5CF	22	±0.08	2.50	17.0	320	278	1025	1.202
	R22X3CF	22		3.00	16.0	385	328	1175	1.406
	R25X2CF	25		2.00	21.0	226	201	725	1.134
	R25X2.5CF	25		2.50	20.0	282	248	850	1.387
R28X1.5 R28X2 R28X2.5 R28X3	R25X3CF	25	±0.08	3.00	19.0	338	292	1025	1.628
	R25X4CF	25		4.00	17.0	451	378	1500	2.072
	R25X4.5CF	25		4.50	16.0	508	418	1625	2.275
	R28X1.5CF	28		1.50	25.0	151	138	425	0.980
R30X2.5 R30X3 R30X4 R30X5	R28X2CF	28	±0.08	2.00	24.0	201	181	600	1.282
	R28X2.5CF	28		2.50	23.0	252	223	750	1.572
	R28X3CF	28		3.00	22.0	302	264	900	1.850
	R30X2CF	30		2.00	26.0	188	170	575	1.381
R35X2 R35X2.5 R35X3	R30X2.5CF	30	±0.08	2.50	25.0	235	209	725	1.695
	R30X3CF	30		3.00	24.0	282	248	850	1.998
	R30X4CF	30		4.00	22.0	376	321	1175	2.565
	R30X5CF	30		5.00	20.0	470	391	1600	3.083
R38X2 R38X3 R38X4 R38X5	R35X2CF	35	±0.15	2.00	31.0	161	147	450	1.628
	R35X2.5CF	35		2.50	30.0	201	181	600	2.004
	R35X3CF	35		3.00	29.0	242	215	700	2.367
	R35X4CF	35		4.00	27.0	322	280	960	3.058
R42X2 R42X3 R42X4	R38X2.5CF	38	±0.15	2.50	33.0	186	168	550	2.189
	R38X3CF	38		3.00	32.0	223	199	675	2.589
	R38X4CF	38		4.00	30.0	297	260	900	3.354
	R38X5CF	38		5.00	28.0	371	318	1150	4.069
R42X2 R42X3 R42X4	R38X6CF	38	±0.20	6.00	26.0	445	373	1425	4.735
	R38X7CF	38		7.00	24.0	519	427	1700	5.352
	R42X2CF	42		2.00	38.0	134	123	375	1.973
	R42X3CF	42		3.00	36.0	201	181	575	2.885
R42X4CF	42	4.00	34.0	269	237	850	3.749		



Other sizes on request!

