

Seamless EO Stainless Steel Tubes

Material-No.: 1.4571

Part No.	End Size (mm)	Tolerance	Wall Thickness (mm)	Tube I.D. (mm)	Design Pressure (bar)		1.4571 Burst Pressure (bar)	Weight (kg/m)	STANDARD FROM STOCK
					DIN 2413-1 Static	DIN 2413-1 Dynamic			Stainless Steel (71)
					R6x171	6			±0.1
R8x171	8	±0.1	1	6	368	256	1660	0.175	•
R8x1.571	8		1.5	5	472	366	2800	0.244	•
R10x171	10		1	8	294	209	1290	0.225	•
R10x1.571	10	±0.1	1.5	7	389	301	1930	0.319	•
R10x271	10		2	6	498	386	3100	0.401	•
R12x171	12		1	10	245	177	1220	0.275	•
R12x1.571	12	±0.08	1.5	9	368	256	1580	0.394	•
R12x271	12		2	8	426	330	2380	0.501	•
R14x1.571	14		1.5	11	315	223	1550	0.469	•
R14x271	14	±0.08	2	10	420	289	2180	0.601	•
R14x2.571	14		2.5	9	452	351	2800	0.720	•
R15x171	15		1*	13	196	143	860	0.351	•
R15x1.571	15	±0.08	1.5	12	294	209	1140	0.507	•
R15x271	15		2	11	392	271	1750	0.651	•
R16x271	16		2	12	368	256	1800	0.701	•
R16x2.571	16	±0.08	2.5	11	403	312	2120	0.845	•
R16x371	16		3	10	472	366	2800	0.977	•
R18x1.571	18	±0.08	1.5	15	245	177	1050	0.620	•
R18x271	18		2	14	327	230	1520	0.801	•
R20x271	20		2	16	294	209	1250	0.901	•
R20x2.571	20	±0.08	2.5	15	368	256	1550	1.095	•
R20x371	20		3	14	389	301	1960	1.277	•
R22x1.571	22	±0.08	1.5	19	200	146	720	0.770	•
R22x271	22		2	18	267	192	1020	1.002	•
R25x2.571	25	±0.08	2.5	20	294	209	1190	1.408	•
R25x371	25		3	19	353	247	1520	1.653	•
R28x1.571	28	±0.08	1.5	25	158	117	620	0.995	•
R28x271	28		2	24	210	153	880	1.302	•
R30x371	30	±0.08	3	24	294	209	1140	2.028	•
R30x471	30		4	22	392	271	1650	2.605	•
R35x271	35	±0.15	2	31	168	124	670	1.653	•
R38x471	38	±0.15	4	30	309	219	1240	3.405	•
R38x571	38		5	28	387	268	1680	4.131	•
R42x271	42	±0.2	2*	38	140	104	520	2.003	•
R42x371	42		3	36	210	153	860	2.930	•

Pressure Calculation:

Pressure calculation given are according to DIN 2413 part I for **static stress**

$$P = \frac{20 \cdot K \cdot s \cdot c \text{ (bar)}}{S \cdot d_a}$$

Material characteristic value K=235 N/mm² (1.4571), K=235 N/mm² (1.4571) (1% proof stress)

Safety factor S = 1.5

Factor "c" for consideration of wall thickness divergence: 0.9

d_a = Tube O.D. in mm

s = Wall thickness in mm

Remarks:

Corrosion — Additional allowances are not considered for the calculation of pressures.

Tubes with a diameter ratio da/di ≥ 1.35 are calculated according to DIN 2413 part III (formula see page R4) with above characteristic K value.

Conversion Factors:

- Bar x 14.5 = psig
- kg/m x 0.672 = lbs/ft
- N/mm² x 145 = lb/in²

* Tubes which need a support sleeve (VH) for assembly in EO and EO-2 fittings.

Table R4 — Seamless EO stainless steel tubes

Dimensions and pressures for reference only, subject to change.