



HANLEY CONTROLS

CLONMEL

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CQ CLEAN TUBES

Stainless steel tube system for High Purity Gas Systems

Calamo stainless steel tube system CQ is manufactured for transporting high purity gases for laboratories, calibration gases or transport of oxygen. The manufacturing process is very controlled to guarantee a stable quality from gas source to point of use.



Products

Stainless steel tubes

- Outside diameter: 6,00 – 152,40 mm

Standard

Steel grade: EN 1.4404/1.4435/1.4432, ASTM 316L

Seamless: EN 10216-5 TC1, ASTM A269/A270, ASME SA213

Welded: EN 10217-7 TC1, ASTM A270/A269, ASME SA 249

Tolerances: ISO 1127 D4/T3, D3/T3, D2/T3, D2/T2, ASTM A269/A270

Specification

- Manufactured in accordance with SP3-007
- Option: Surface roughness
- In accordance with ASTM G93



Certificate

CALAMO is certified in accordance with following systems (quality) ISO 9001, (environment) ISO 14001 och (Occupational healthy and safety) OHSAS 18001.

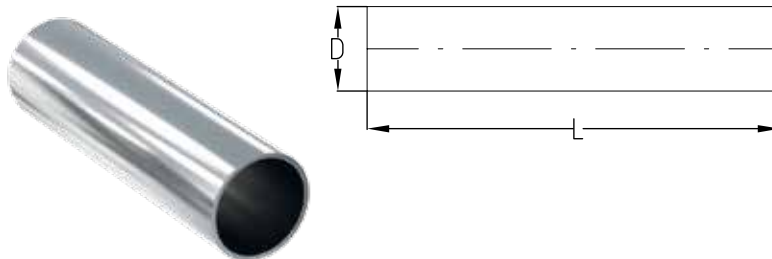
Manufacturing

- Cleanliness achieved through advanced surface treatment and packing technique.
- Final rinsing always using deionized water.
- Tubes are dried with nitrogen from cryo tank.
- Individual surface control of cleanliness and surfaces.
- CQ-products are sealed with polyethylene caps and packed in sealed polyethylene sleeve.

Advantages

- Tubes are cleaned to transport high purity gases without interference with the process.
- High purity tubes are protected from contamination.
- Products have full traceability from steel melt to customer. Material certificate according to EN 10204 3.1.
- Each sleeve is marked with a unique label that can be traced back to the certificate.
- The products fulfill the requirements according to PED 2014/68/EU and AFS 1999:4. Tees are optional.
- A large stock of finished tubes safeguard short lead times and quick installations.
- CQ is prepared for orbital welding.
- CQ tubes with OD below 6-18 mm can be bent on-site with same cleanliness and durability.
- A large stock of finished tubes and fittings guarantee high service and short lead times.

CALAMO - CQ - TUBE

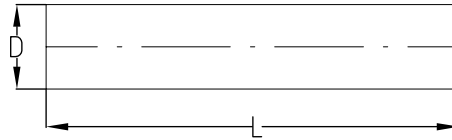


(L) Nominell length 6000 mm

DN	(D) x wall (mm)	Weight (Kg/m)	Pressure ¹ (Bar)	Article number	Product name	Execution ² S/W	Stock ³ ○ / ●
8	6,35 x 0,89 mm 1/4 x 0.035"	0,123	331	0400120	CQ	S	●
10	9,53 x 0,89 mm 3/8 x 0.035"	0,195	210	0400240	CQ	S	○
15	12,70 x 1,24 mm 1/2 x 0.049"	0,353	221	0400560	CQ	S	●
20	19,05 x 1,65mm 3/4 x 0.065"	0,719	194	0400880	CQ	S	●
25	25,40 x 1,65mm 1 x 0.065"	0,974	182	0401160	CQ	S	●
25	25,40 x 1,65mm 1 x 0.065"	-	-	0441170	CQ	W	●
40	38,1 x 1,65mm 1 1/2 x 0.065"	1,500	93	0441480	CQ	W	●
50	50,8 x 1,65mm 2 x 0.065"	2,030	69	0441680	CQ	W	○
65	63,5 x 1,65mm 2 1/2 x 0.065"	2,500	38	0441778	CQ	W	○
80	76,2 x 1,65mm 3 x 0.065"	3,056	46	0441820	CQ	W	○
100	101,60 x 2,11mm 4 x 0.083"	5,210	31	0442000	CQ	W	○
150	152,4 x 2,77mm 6 x 0.109"	10,287	27	0462050	CQ	W	○

¹⁾ Maximum operating pressure at maximum 20 C° according to EN 13480-3 ²⁾ Execution: S = seamless tubes W = manufactured from welded tubes
³⁾ ○ = Made to order, ● = Stock standard product

CALAMO - CQ - TUBE



(L) Nominell length 6000 mm

(D) x wall (mm)	Weight (Kg/m)	Pressure ¹ (Bar)	Article number	Product name	Execution ² S/W	Stock ³ ○ / ●
4,00 x 1,00 mm	0,074	-	0900425	CQ	S	●
6,00 x 1,00 mm	0,124	462	0400040	CQ	S	●
8,00 x 1,00 mm	0,174	333	0400200	CQ	S	●
10,00 x 1,00 mm	0,223	261	0400360	CQ	S	●
12,00 x 1,00 mm	0,273	214	0400440	CQ	S	●
15,00 x 1,00 mm	0,350	125	0400700	CQ	S	●
18,00 x 1,50 mm	0,615	234	0400810	CQ	S	●
22,00 x 1,50 mm	0,769	157	0400990	CQ	S/W	○
28,00 x 1,50 mm	0,987	146	0401321	CQ	S/W	●

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³) ○ = Made to order, ● = Stock standard product