



① fitted to outside diameter item 2 at the choice of manufacturer

Integral leak rate $< 1 \times 10^{-10}$ mbar l/s

Outgassing rate $< 5 \times 10^{-10}$ mbar l/s cm^2

pay attention to F-TG-QUA-de-Schweisstechnik-V007

UHV-suitable cleaning, an example can be found in the guideline F-TG-V6.1e and F-TG-V-6.3e

Details, also to the alternative materials can be found in F-DS-HEB-en-VC_0096_Detailed_Specification_Straight_Tubes

Welding classification	Quality level
DIN EN ISO 5817	
Vacuum weldings	-B-

Edges ISO 13715 $\begin{matrix} +0.3 \\ -0.1 \end{matrix}$ $\sqrt{Rz25}$

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GSF Helmholtzzentrum für Schwerionenforschung GmbH Planckstrasse 1, 64291 Darmstadt		Surfaces DIN EN ISO 1302:2002	---Approved---
Dimensions without tolerance indication DIN ISO 2768-1-1 DIN ISO 2768-2-1:1991 DIN EN ISO 13920-BF		Weight 51,8 kg	Scale 1:1
Drawn 07.08.2025 EHEGER	Date 07.08.2025 ZURKAN	Description Beamtube	
Checked 07.08.2025 ZURKAN	Date 22.09.2025 TEBERL	Drawing No. VC-1450932-A-V04	Rev. - Sheet 1 of 1
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