



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

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

Outgassing rate  $< 5 \times 10^{-12}$  mbar l/s cm<sup>2</sup>

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\_0092\_Detailed\_Specification\_Bellow-V004

<b>Welding classification</b> DIN EN ISO 5817	Quality level
Vacuum weldings	-B-

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

Bakeout temperature: max. 300°C  
 Operating temperature: 20°C  
 Installation position: horizontal  
 Axial movement per convolution +/- 3.1mm  
 Inside Diameter: 144.1mm  
 Outside Diameter: 189.9mm  
 Vacuum: inside

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<b>GSF</b> <small>Helmholtzzentrum für Schwerionenforschung GmbH        Planckstrasse 1, 64291 Darmstadt</small>		<b>Surfaces</b> <small>DIN EN ISO 1302:2002</small>	<b>Weight</b> 8,3 kg
<b>Dimensions without tolerance indication</b> <small>DIN ISO 2768-1-1        DIN ISO 2768-2-1:1991        DIN EN ISO 13020-0F</small>		<b>Material</b>	<b>Scale</b> 1:1
<b>Drawn</b> 06.08.2025 EHEGER	<b>Date</b> 12.08.2025	<b>Name</b> ZURKAN	<b>Description</b> Beamtube with bellow bakeable
<b>Checked</b> 22.09.2025 TEBERL	<b>Date</b> 22.09.2025	<b>Name</b> TEBERL	<b>Size</b> A1
<b>Approved</b> 22.09.2025 TEBERL		<b>Drawing No.</b> VC-1452723-A-V01	<b>Rev.</b> -
<b>FR</b>		<b>Sheet</b> 1 of 1	