

# Test certificate Z-211203001-4

Flange connection with clamping socket, Tri-Clamp clamp and Garlock BIO-PRO® PLUS PTFE gasket

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Certificate

The above-mentioned connection was tested according to the requirements of TA Luft:2021 and the specifications of the VCI component testing (2019-09) with regard to compliance with the tightness class L0.01 according to TA Luft. The test was carried out under the following material specifications and boundary conditions:

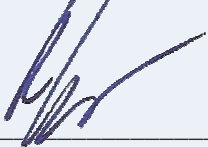
Clamping joint:	Clamping joint DIN 32676-KK-A-53x1.5-1.4404-H2
Gasket:	DIN 32676-A-53x1.5-PTFE, Garlock GYLON BIO-PRO® PLUS, made of GYLON® Style 3522/3527
Nominal size:	DN 50
Clamping elements:	DIN 32676 (Tri-Clamp) clamp DN 50 with hexagon nut
Installation torque:	8 Nm
Retightening required:	yes
Ageing:	$T_{\text{test } 1,2} = 120 \text{ °C}$ for 48h
Test medium and pressure:	Helium at 25 bar (absolute)

At room temperature, the following final leakages occurred after 24 hours of measurement:

after assembly/re-tightening	after ageing
$L_1: 7.4 \cdot 10^{-5} \text{ mg/(s}\cdot\text{m)}$	$L_2: 1.3 \cdot 10^{-3} \text{ mg/(s}\cdot\text{m)}$
$L_3: 7.3 \cdot 10^{-5} \text{ mg/(s}\cdot\text{m)}$	$L_4: 2.4 \cdot 10^{-4} \text{ mg/(s}\cdot\text{m)}$

The leakage criterion of TA Luft of  $1.0 \cdot 10^{-2} \text{ mg/(s}\cdot\text{m)}$  was not exceeded in the relevant test  $L_4$ , the above-mentioned compound is thus considered to be of **high quality in the sense of TA Luft**.

The issue of this certificate is based on a test, the results and boundary conditions of which are documented in test report 211203001-3 dated 28.09.2022.

  
M.Reppien (Managing director)  
Steinfurt, 2022-09-28