

CERTIFICATE

Nr. 30589902E/MM/07.10.2025

AMTEC Advanced Measurement Messtechnischer Service GmbH Hoher Stea 13 DE-74348 Lauffen Telefon: +49 7133 9502-0

Telefax: +49 7133 9502-22 E-mail: temes@amtec.de Internet: www.amtec.eu

customer:

NEUMO GmbH + Co.KG DE - 75438 Knittlingen

The sealing system mentioned below with the designation Clamp Connection BioConnect was tested according to the requirements of TA Luft:2021 and the specifications of VCI Bauteilprüfung (2022) with regard to the proof of tightness class L0.01 according to TA Luft:

clamp socket:

gasket:

nominal size:

bracing elements:

Clamp Connection NEUMO BioConnect Freudenberg Process Seals O-Ring

DN40 / PN16

M10, A2-70 screws nuts & spring washer

In the laboratory of amtec a test with test number 25-747 was carried out under the following conditions and produced the following results:

Assembly:

20 Nm

Exposure temperature / duration:

°C 150

48 h

Helium

Re-tightening required:

no

Remaining gasket stress (Dissassembly):

MPa

Test pressure (absolute) / medium:

16 bar

Measuring times:

24/24 h

The leak rates measured with a helium leak detector at the end of the measurement period were:

 $1.0 \cdot 10^{-5} \,\text{mg/(s·m)}$

after Assembly

 $8.0 \cdot 10^{-6} \, \text{mg/(s·m)}$

after temperature exposure

The leakage criterion of the TA Luft of 1.0 · 10-2 mg/(s·m) was not exceeded in the relevant measurement L2 / L4. The Clamp connection BioConnect is considered a tight clamp connection in accordance to TA Luft: 2021.

This certificate is valid only in connection with the test report 3058992/- and the boundary conditions listed therein.

amtec Advanced Measurement Messtechnischer Service GmbH Lauffen, September 25th, 2025

B. Eng. M. Metzger Project Engineer

Dipl.-Ing. F. Herkert

Head of Laboratory