

Certificate



968/TA 1676.00/26

Product tested	Pop-A-Plug® Tube Plugs	Certificate holder	EST Group B.V. Hoorn 312 D 2404 HL Alphen aan den Rijn The Netherlands
Type designation	P2 & CPI/Perma		
Codes and standards	TA Luft:2021 DIN EN ISO 15848-2:2015-11	VDI 2440:2021	
Intended application	Plugging of tubes in for example: heat exchangers, pre-heaters, reactors, air cooler, condensers		
Specific requirements	Temperature range: according to manufacturer's specifications Pressure range: CPI: 69 bar, P2: 414 / 310 / 138 bar (dependent on nominal width) Nominal diameter range: CPI: 11,99 - 52,50 mm, P2: 10,19 - 39,64 mm Materials: according to manufacturer's specifications		

Summary of test results see back side of this certificate.

Valid until 2031-03-25

The issue of this certificate is based upon an examination, whose results are documented in Report No. 968/TA 1676.00/26 dated 2026-03-25.

This certificate is valid only for products which are identical with the product tested.

TÜV Rheinland Industrie Service GmbH
Bereich Automation
Funktionale Sicherheit
Am Grauen Stein, 51105 Köln

Köln, 2026-03-25

TÜV Rheinland Industrie Service GmbH

Dipl.-Ing. (FH) Wolf Rückwart

Certificate Holder: EST Group B.V.
Horn 312 D
2404 HL
Alphen aan den Rijn
The Netherlands

Tested Product: Pop-A-Plug® Tube Plug

Types: P2 & CPI/Perma™

Evaluation results:

Die Pop-A-Plug® Tube Plugs can be used in accordance with TA Luft (German Clean Air Act) in conjunction with the standards on page 1 within the following specifications and restrictions::

Temperature range: according to manufacturer's specification (test range +5°C to +40°C)

Pressure range: CPI: 69 bar, P2: 414 / 310 / 138 bar (dependent on nominal width)

Nominal diameter range: CPI: 11,99 - 52,50 mm, P2: 10,19 - 39,64 mm

Materials: according to manufacturer's specifications

Pop-A-Plug® Model	Test pressure (helium) [bar]	Leakage rate relative to seal circumference [mbar [*] /s*m]
P2 Model		
P2-400-C	621	3,3*10 ⁻⁷
P2-680-C		2,0*10 ⁻⁸
P2-700-C	465	3,6*10 ⁻⁷
P2-960-C		2,6*10 ⁻⁷
P2-980-C	207	1,6*10 ⁻⁷
P2-1540-C		2,5*10 ⁻⁷
Pop-A-Plug® Modell		
Pop-A-Plug® Modell	Test pressure (helium) [bar]	Leakage rate relative to seal circumference [mbar [*] /s*m]
CPI Model		
V-471-C	103,5	2,0*10 ⁻⁸
V-774-C		4,7*10 ⁻⁷
V-1024-C		2,4*10 ⁻⁷
V-1994-C		2,5*10 ⁻⁷

Source of the data presented:

The data provided is the result of leak tests previously carried out using the vacuum method (integral) in accordance with DIN EN 13185 (EN 1779) at room temperature, as described in the corresponding report. The data provided does not release the end user from observing the manufacturer's instructions / conditions of use / installation specifications.

Maintenance:

The specified values require periodic maintenance as described in the installation, operating, and maintenance instructions.

The operator is responsible for taking specific external conditions into account (e.g., ensuring the required media quality, max. temperature, max. pressure) and for installation / testing in accordance with the manufacturer's instructions.