

# Calibrated leak



## Verification of tightness test devices

The calibration leaks lend themselves to the verification of tightness test devices, based either upon the deformation or the pressure difference principle. This way, the proper functioning of the device may be checked quickly and conveniently.

The capillaries, tailored to the desired leak rate, offer a precise airflow resistance. The air leaks into or out of the box through the capillaries.

The calibration leaks are robust and characterized by an easy usage and a long life expectancy. The calibration leaks should be stored in a dry and dust-free place. It is best for them to be kept in the included box.

Inappropriate storage or dirty compressed air may affect the leak rate of the calibration leaks. We recommend a yearly calibration.

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## Technical data

- **Dimensions**  
Ø 46mm, height 12.6mm, weight 37g
- **Box**  
red anodized aluminium
- **Deformation**  
standard 10µm/bar
- **Test medium**  
compressed air, without oil, filtered
- **Operating range**  
-0.8 bis +10bar
- **Calibrated leak rate**  
at 2 bar

The fabrication of the calibration leaks ensures a tolerance of  $\pm 10\%$  of the standard leak rate.

The precision of a calibrated leak rate is  $\pm 5\%$ , resp.  $+ 5\mu\text{g} / \text{min}$ .

The calibration takes place under controlled environmental conditions. Variations of these conditions affect the leak rate.



## Standard and theoretical values

The standard leak rates are guiding values, occurring under the following environmental conditions:

- Air pressure 960 mbar
- Temperature 20° C
- Air humidity 40 %

Typ no.	Leak rate at 2 bar test pressure			Ref. vol.
	µg / min	mm3/min	% / min	mm3
42.40.000	tight	tight	tight	2100
42.40.030	30	26.4	-0.6	2100
42.40.100	100	88.0	-2.0	2100
42.40.200	200	175.9	-4.0	2100