

Barcol-Air Netherlands casing leakage test sheet

According to standard NEN-EN 1751-2014

| Test setup | | |
|----------------------|------------|--------------------------|
| Date | 22-10-2020 | Reference nr. LM-18-0019 |
| Exp. Date | 22-10-2023 | Tested by TK |
| Place | Barcol-Air | Witness by MBs |
| Air temperature | 20 [°C] | |
| Atmospheric pressure | 1013 [hPa] | |

| Contact information | |
|---------------------|------------------------|
| Tel | +31 (0)299 689 300 |
| Email | barcol-air@hcgroep.com |
| Website | www.barcol-air.nl |



Model (Name/Type):

[Air valve rectangular single skin type: ADFOMOO 500x300](#)

Result:

Class D

| Product specifications | | |
|------------------------|--|-------------------|
| Productcode | ADFOMOO | |
| Model | 500x300 | |
| Case Width | 0,300 | [m] |
| Case Height | 0,500 | [m] |
| Case Diameter | | [m] |
| Case Length | 0,110 | [m] |
| Real Duct surface | 0,176 | [m ²] |
| Virtual Duct surface | 1,600 | [m ²] |
| Note: | When Case Length <1m; 1m is used in calculations as specified by LUKA. | |

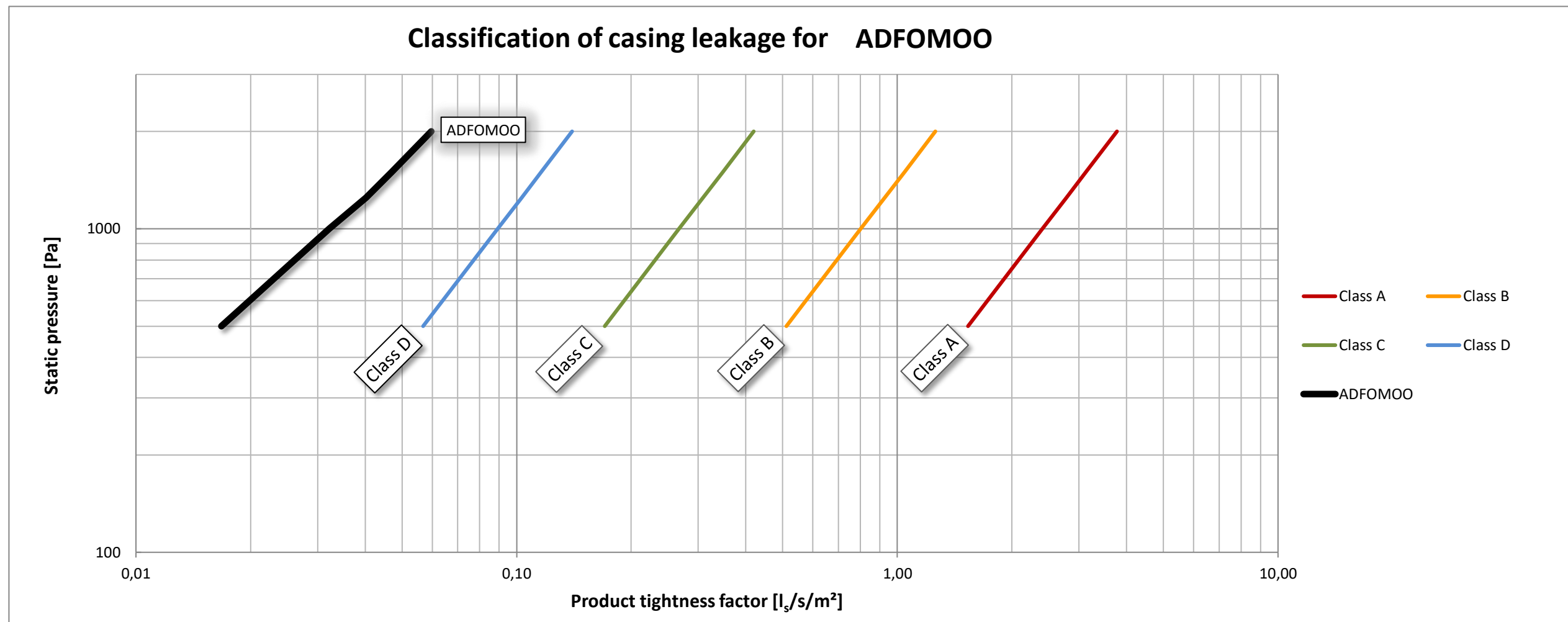
| Measurement specifications | | |
|----------------------------|------------------------|----------------------|
| Pressure time | 60 seconds | |
| Pressure controller | PR-41X/20mbar/81955.50 | |
| Airflow meter(s) | Low Flow | F-111B-20K-RAD-00-V |
| | High Flow | F-112AC-M20-RAD-55-V |
| Rated Accuracy | Pressure Ctrl | ± 0,05%Rd + 0,093%FS |
| | Low Flow | ± 0,5%Rd + 0,1%FS |
| | High Flow | ± 0,5%Rd + 0,1%FS |
| | Pressure Ctrl | 21-2-2020 |
| Date calibrated | Low Flow | 18-2-2020 |
| | High Flow | 17-2-2020 |

Leakage is measured in normal liters (= 1 liter at 0°C and 101325 pa)

| NEN-EN 1751-2014 | |
|--|-------|
| Max. Leakagefactor [l _v /s/m ²] | |
| Class A | 0,027 |
| Class B | 0,009 |
| Class C | 0,003 |
| Class D | 0,001 |
| $\Phi L = f \times P_s^{0,65}$ | |
| ΦL Leakage [l _v /s/m ²] | |
| f = Leakagefactor | |
| P _s = Static Pressure | |

| Measurements and calculations | | | | | |
|-------------------------------|--------------------|----------------------|---|---|--|
| Reading | Measure instrument | Static pressure [Pa] | Measured air leakage rate [l _v /s] | Corrected air leakage rate 20°C [l _v /s] | Product tightness factor [l _v /s/m ²] |
| 1 | Low Flow | 500 | 0,025 | 0,027 | 0,017 |
| 2 | Low Flow | 1000 | 0,048 | 0,052 | 0,032 |
| 3 | Low Flow | 1250 | 0,060 | 0,064 | 0,040 |
| 4 | Low Flow | 1500 | 0,070 | 0,075 | 0,047 |
| 5 | Low Flow | 2000 | 0,089 | 0,095 | 0,060 |

| LUKA standards | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-----------------|
| Class A | Class B | Class C | Class D | Estimated class |
| [l _v /s/m ²] | [l _v /s/m ²] | [l _v /s/m ²] | [l _v /s/m ²] | |
| 1,53 | 0,51 | 0,17 | 0,06 | Class D |
| 2,41 | 0,80 | 0,27 | 0,09 | Class D |
| 2,78 | 0,93 | 0,31 | 0,10 | Class D |
| 3,13 | 1,04 | 0,35 | 0,12 | Class D |
| 3,78 | 1,26 | 0,42 | 0,14 | Class D |



| Other results | |
|--------------------|----------|
| Visual deformation | Negative |
| Pressure [Pa] | 2000 |

*As the tested model is the smallest model of this product range, the same classification result (or better) is valid for all larger models.

Approved and certified by
TÜVRheinland[®]
 Precisely Right.
 Certificate nr. P-97/52-45

Calibration certifications nr.
 Low Flow BHTG19/5369552
 High Flow BHTG22/5368561
 Pressure ctrl not specified