

Barcol-Air Netherlands casing leakage test sheet

According to standard NEN-EN 1751-2014

Test setup		
Date	18-5-2018	Reference nr. LM-18-0015B
Exp. Date	18-5-2021	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):

[Measuring and control terminal circular single skin type: AFQDOOB 100](#)

Result:

Class C

Product specifications		
Productcode	AHQD	
Model	100	
Case Width	[m]	
Case Height	[m]	
Case Diameter	0,100	[m]
Case Length	0,500	[m]
Real Duct surface	0,157	[m ²]
Virtual Duct surface	0,314	[m ²]
Note:	When Case Length <1m; 1m is used in calculations as specified by LUKA.	

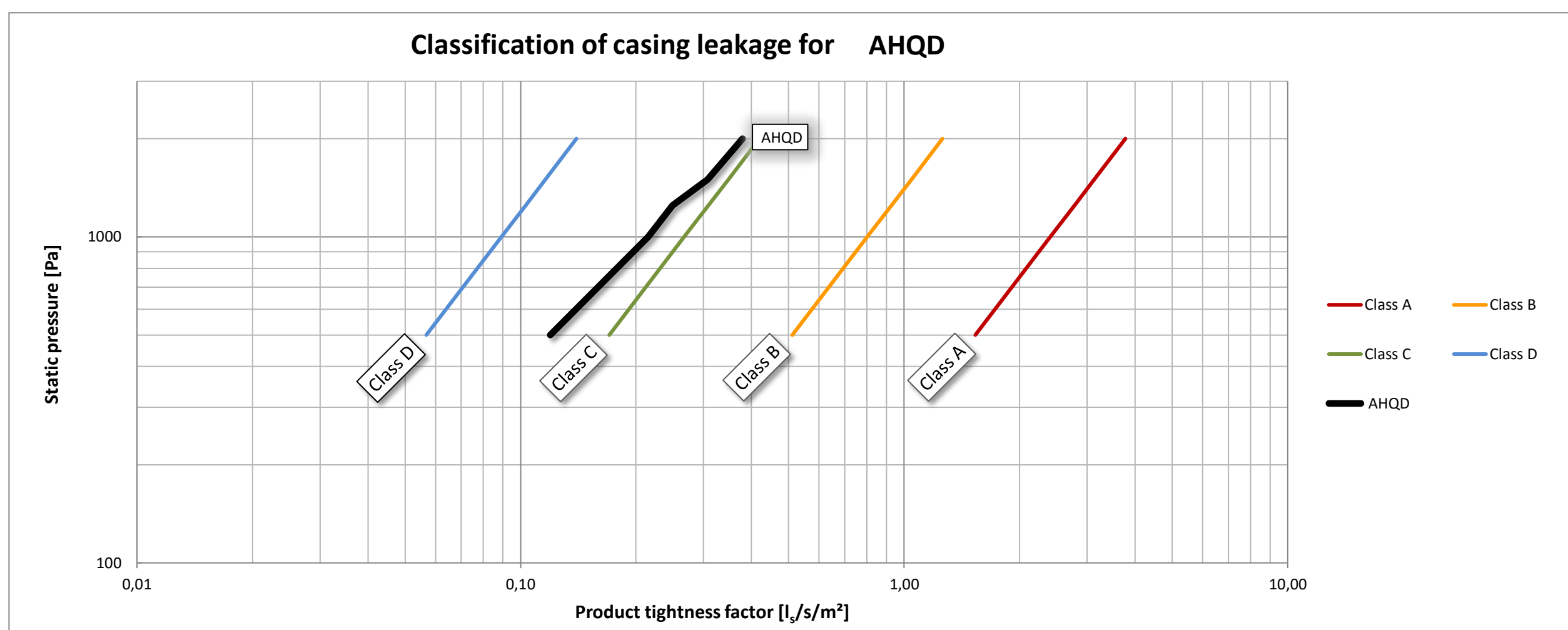
Measurement specifications		
Pressure time	60 seconds	
Pressure controller	PR-41X/20mbar/81955.50	
Airflow meter(s)	Low Flow	F-111B-20K-RAD-00-V
	High Flow	F-112AC-M20-RAD-55-V
Rated Accuracy	Pressure Ctrl	± 0,05%Rd + 0,093%FS
	Low Flow	± 0,5%Rd + 0,1%FS
	High Flow	± 0,5%Rd + 0,1%FS
	Pressure Ctrl	21-2-2020
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	0,035	0,038	0,120
2	Low Flow	1000	0,063	0,068	0,215
3	Low Flow	1250	0,073	0,078	0,249
4	Low Flow	1500	0,090	0,097	0,307
5	Low Flow	2000	0,111	0,119	0,379

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 C
2,41	0,80	0,27	0,09	Class C
2,78	0,93	0,31	0,10	Class C
3,13	1,04	0,35	0,12	Class C
3,78	1,26	0,42	0,14	Class C



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.

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