

# Measuring protocol airflow resistance according to DIN EN 29053 (ISO 9053)

## Measurement of specific airflow resistance $R_s$

### Measuring sample:

Name: VELOS 1  
Description: acoustic fabric  
Manufacturer: création baumann Weberei und Färberei AG  
CH-4901 Langenthal  
Client of measurement: manufacturer



### Measuring conditions:

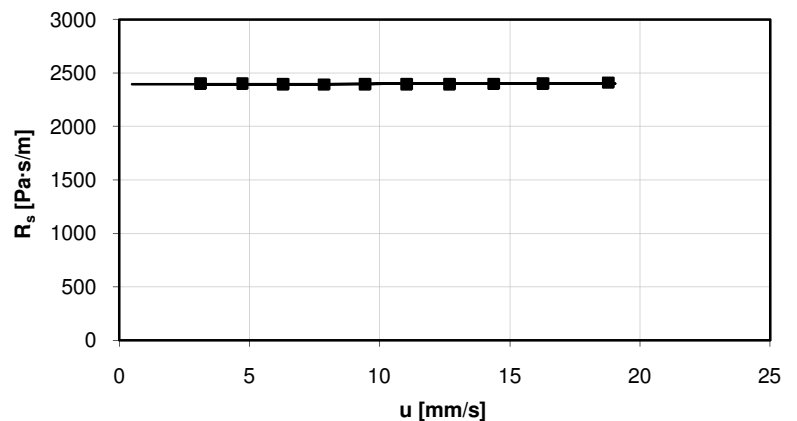
Standard: DIN EN 29053: Materials for acoustical applications; Determination of airflow resistance (ISO 9053)  
Method: direct-airflow method, measurement at 10 different airflow velocities and extrapolation to an airflow velocity of 0,5 mm/s  
Specimen holder: round, 100 mm diameter  
Temperature: 19°C  
Relative humidity: 58%  
Measurement date: 2008-01-18

### Specimen:

Total number: 1  
Shape: specimen (ca. 200 mm x 180 mm) fit in specimen holder  
Effective cross section: 78,54 cm<sup>2</sup>

### Single results:

Specimen	Nr.1		
	u	$\Delta p$	$R_s$
Measuring values	18,8	45,3	2410
	16,3	39,1	2401
	14,4	34,5	2398
	12,7	30,4	2396
	11,0	26,4	2396
	9,4	22,6	2395
	7,9	18,8	2394
	6,3	15,1	2395
	4,7	11,3	2401
	3,1	7,5	2403
Extrapolation	0,5		2395



Airflow velocity  $u$  in mm/s, pressure difference  $\Delta p$  over specimen in Pa, specific airflow resistance  $R_s$  in Pa·s/m

### Measuring result:

Specific airflow resistance  $R_s = 2395 \text{ Pa·s/m}$