

SoundPro - Exhaust

Reduction of aeroacoustics in fuel cell air paths



- ✓ Broadband damping
- ✓ High efficiency
- ✓ System competence

MANN+HUMMEL SoundPro – Exhaust Reduction of aeroacoustics in fuel cell air paths

Technical specification

Performance class	MEDIUM	HIGH	HIGH+	MAX
Fuel cell stack power [kW]	~ 30 - 60	~ 80 - 130	~ 150 - 200	Up to 400
Air volume flow* [m ³ /min]	1.0 - 2.5	2.0 - 6.5	3,5 - 10,0	> 10,0
Air mass flow* [g/s]	20 - 50	30 - 130	70 - 200	> 200
Design layout	4 eccentric Chamber		6 eccentric Chamber	
Frequency range [Hz]	800 - 3500		800 - 2500	
Acoustic damping (TL) [dB]	> 20		> 15	
Pressure drop [mbar]	2.5 - 3.5		4.0 - 4.5	

* $T = 20\text{ }^{\circ}\text{C}$ / $p = 1013\text{ hPa}$ / $\varphi = 50\%$ rel. humidity

Product features

- Reduces exhaust tail pipe noise
- Design suitable for fuel cell exhaust path
- Outlet pipe installation at lowest position

PA rapid prototyping parts

- $T = 85\text{ }^{\circ}\text{C}$ (long term, operating)
- Burst pressure $> 2\text{ [bar]}$ @ $20\text{ }^{\circ}\text{C}$

MANN+HUMMEL memberships and partnerships in e-mobility and fuel cells:

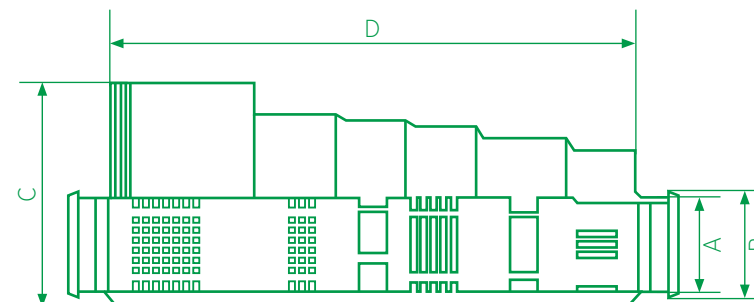


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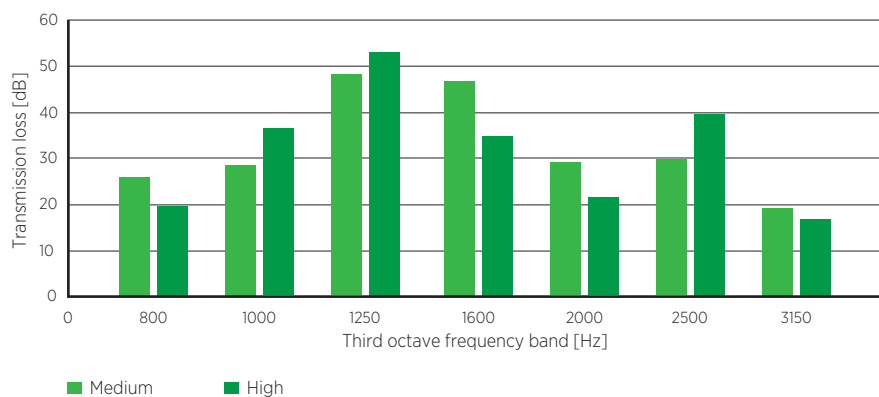
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Dimensions [mm]

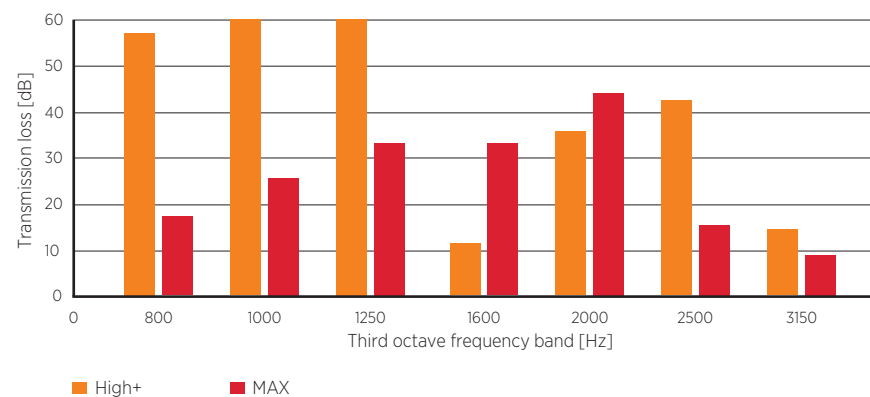
Performance class	MEDIUM	HIGH	HIGH+	MAX
Chambers	4		6	
A	35	54	64	90
B	44	66	76	102
C	100	134	164	164
D	307,5	307,5	401,5	401,5



Transmission loss curve example 4-Chamber design



Transmission loss curve example 6-Chamber design





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Open the website for more information about products for electrified powertrains from MANN+HUMMEL.



Watch the video of the broad band silencer for fuel cell systems.



Visit our E-Mobility Onlineshop to check our offerings and buy directly.