Sound attenuators, types YAA and YAH
Installation and maintenance instructions

Fig. 2

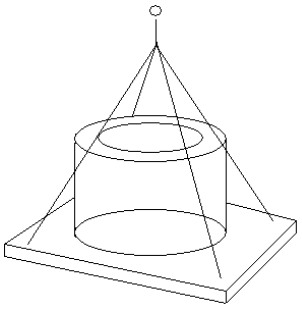

Fig. 3

1. APPLICATIONS
Type YAA and YAH sound attenuators are used to muffle ventilation plant.
Type YAH sound attenuators are available in hot-dip galvanised or acid-resistant finish.
Type YAA sound attenuators are designed for use in maritime environments.
The sound attenuators are available with or without core.
Attenuators with core have the greatest muffling effect, especially for high-frequency sounds. (see Figs. 5 and 6).
As standard, sound attenuators are available in 11 sizes, ranging in diameter from 250 to 1120 mm (diameters of 1250, 1400 and 1600 mm are available to order).

2. HANDLING
2.1 Transportation
Sound attenuators are delivered on pallets, thus allowing them to be transported by fork-lift truck (see Fig. 2).
When hoisting, lift by the pallet (see Fig. 3).

2.2 Weight
The total weights (in kg) of type YAA and YAH sound attenuators
are given in Fig. 4.

3. STORAGE
Type YAA and YAH sound attenuators should be stored beneath a rainproof shelter.
Alternatively, sound attenuators may be stored uncovered outdoors. If stored outdoors, sound attenuators should be positioned to allow water to run off them freely and to allow the free ventilation of all surfaces.

4. INSTALLATION
Type YAA and YAH sound attenuators must be installed on a firm, level surface. They must be fixed firmly in position using bolts appropriate to the following flange standards: DIN 24154 for type YAA and EUROVENT 1/2 for type YAH.
Note that sound attenuators must be installed as concentrically as possible in order to prevent joint displacements that may disrupt the air flow.
Avoid deforming the sound attenuators during installation.

5. START-UP
Before start-up, check that the sound attenuator and duct connections are free of tools and other foreign objects.
Also check that the net on the suction and discharge sides of the ventilation plant are correctly installed.

6. MAINTENANCE
Inspect the inside of the sound attenuator for coatings of dirt and dust, and clean as required. Be careful to protect the underlying glass fabric and avoid using sharp tools that may damage it.

	Sizes of YAA and YAH													
	250	315	400	500	560	630	710	800	900	1000	1120	1250	1400	1600
Type:	**Max. total weight [kg]**													
YAA - 10 mm with core	43	63	89	125	150	182	222	276	337	408	509			
YAA - 10 mm without core	41	60	85	120	143	172	210	255	310	375	465			
YAA - 6 mm with core	32	47	65	91	109	131	160	198	240	290	364			
YAA - 6 mm without core	30	45	62	86	101	121	146	175	214	255	330			
YAH with core	8	12	17	27	33	41	53	70	89	110	137			
YAH without core	7	10	14	21	25	28	37	45	63	76	93			

Fig. 4

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If the sound attenuator is lacquered, check the lacquer surface and repair as required.

7. SOUND ABSORPTION

Type YAA and YAH sound attenuators are mounted direct on the suction and pressure sides of all sizes of axial fan types ACA, ACN, ACD and ACW, and on the pressure side of fan types ACP and ACG.
The sound absorption values given in Figs. 5 and 6 apply to all installation types with the exception of fitting immediately behind ACP in which case the sound absorption for the 250 and 500 Hz bands is approx. 3-5 dB lower.
For more details, please refer to our catalogue material or computer programs designed to calculate the specific noise emission.
Sound absorption values for eight octave bands are shown in Figs. 5 and 6.

YAA and YAH without core

YAA/YAH Size	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
	Sound absorption values [dB] for YAA and YAH without core							
250	–	1	10	14	13	12	9	9
315	–	1	10	14	13	12	9	9
400	–	1	10	14	13	11	9	9
500	–	1	10	14	13	10	8	8
560	–	1	10	14	12	10	8	8
630	–	1	10	14	12	9	8	8
710	–	1	10	13	11	8	7	7
800	–	1	10	12	10	8	6	6
900	–	1	10	12	9	7	6	5
1000	–	1	10	11	8	6	5	4
1120	–	1	10	10	7	5	4	3
1250	–	1	10	9	6	4	3	2
1400	–	1	10	8	5	3	2	1
1600	–	1	10	6	4	2	1	0

Fig. 5

YAA and YAH with core

YAA/YAH Size	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
	Sound absorption values [dB] for YAA and YAH with core							
250	–	–	8	14	14	15	13	12
315	–	–	8	14	14	15	13	12
400	–	–	8	14	14	15	13	12
500	–	–	8	14	14	15	12	11
560	–	–	8	14	14	15	12	11
630	–	–	8	14	14	15	12	11
710	–	–	9	15	15	15	12	11
800	–	1	10	16	16	15	12	10
900	–	1	11	17	17	15	12	10
1000	1	1	11	18	18	15	11	9
1120	1	2	12	19	18	15	10	8
1250	1	2	12	19	18	15	9	7
1400	1	2	12	19	18	15	8	6
1600	1	2	11	18	16	11	7	6

Fig. 6