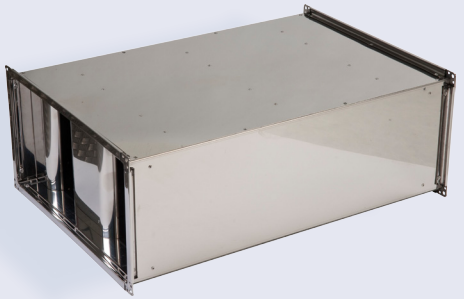
ACOUSTICA MANUFACTURING LTD

T 01794 528 350 E info@aco-on.com W aco-on.com

R02 6



R02 6 RECTANGULAR SILENCER

Available in **eight** standard lengths R02 6 Rectangular Duct Mounted Silencers have excellent attenuation properties, achieved with sound absorbing infill splitters, retained in the attenuator casing by a perforated liner.

The resistance to airflow is a function of the face velocity and length. It is not recommended to select the R02 6 silencers with a face velocity above 6 metres per second without asking advice regarding re-generated self noise. We can advise on the selections and can perform system analysis to ensure the correct unit is specified.

- High performance rectangular duct silencer
- Eight standard lengths
- Many connection options
- Cross section dimensions in 1mm increments
- System pressure within ducted systems to 1500 Pa
- Special lengths on request

INSERTION LOSS (db) - CENTRE BAND FREQUENCY

PRODUCT CODE	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
R02 6-600	2	3	6	7	12	14	11	10
R02 6-900	3	6	11	19	24	24	15	11
R02 6-1200	4	7	15	26	29	32	20	14
R02 6-1500	5	8	19	33	39	39	25	17
R02 6-1800	6	10	21	36	45	45	28	19
R02 6-2100	7	13	25	43	50	50	33	21
R02 6-2400	7	15	28	49	50	50	38	25

Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

RESISTANCE TO AIRFLOW (Pa)

FACE VELOCITY M/S	2.5	3.0	4.0	5.0	6.0
R02 6-600	12	16	23	43	63
R02 6-900	12	16	24	44	64
R02 6-1200	13	17	25	45	67
R02 6-1500	13	17	25	46	68
R02 6-1800	13	18	26	47	72
R02 6-2100	14	19	27	51	74
R02 6-2400	15	19	28	54	78

LIMPET™

R02 6

ACOUSTICA™

MATERIAL & FINISH

All components are manufactured from mill finish hot dip galvanised mild steel conforming to EN10327 (BS2989). To prevent erosion of absorbing materials, the R Series silencers are fitted with perforated splitters manufactured from galvanised mild steel conforming to EN10327 (BS2989)

R Series silencers utilise acoustic grade mineral fibre absorbing infill and are manufactured to the HVCA specification DW142 class B and M&E 100 for sheet steel thickness and stiffening.

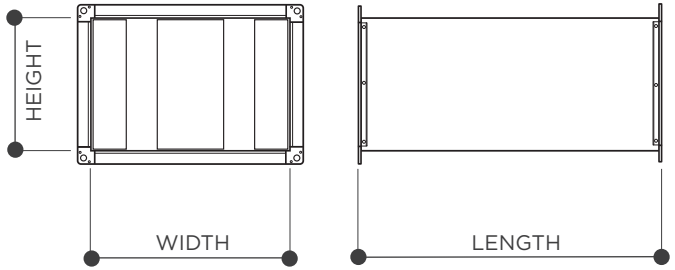
Pressure: Up to 1500 Pascal's positive and negative.
Temperature: - 12° to + 100° C.
Location: Internally & externally mountable.

MELINEX LINING (OPTIONAL)

Where moist conditions exist (e.g. process systems) or for critically clean applications (e.g. hospitals) the sound absorbing material may be required to be fully sealed by Melinex lining to prevent fibre migration. This will however, effect the acoustic performance of the silencer. Please contact us to discuss your requirements.

ALTERNATE SPECIFICATION

The above specification refers to our standard, stock range. We can also supply custom materials such as 304 and 316 grade stainless steels, cold reduced (CR4) mild steel and aluminium.



DIMENSIONAL DATA

DIMENSION	MINIMUM	MAXIMUM
DUCT WIDTH	100mm	1200mm
DUCT HEIGHT	100mm	1200mm
LENGTH	400mm	2400mm

Units smaller than the minimum and larger than the maximum with the same areo-acoustic performances are available but may have different manufacturing methods and are therefore coded accordingly.

CONNECTION OPTIONS	
MEZ FLANGES	20, 30 & 40mm
DUCTMATE FLANGES	25 & 35mm
CIRCULAR SPIGOT	"SPIRAL FIT" circular spigots, can be offset.
RECTAGULAR SPIGOT	Rectangular spigots, can be offset
RAW	plain end for slip jointing etc.

INSTALLATION

For recommendations for the support of the fan the principles of Part six (pages 43-46) of the HVCA DW144 standard should be followed. Always use the correct size bolts as specified in the dimensional data table above. The arcuate holes are sized to allow the metric thread sizes to be utilised, for an M10 fixing for example the slot is made 19mm long by 13mm wide. Please contact us to confirm the suitability of any fan manufacturers product.

Centrifugal Fans	Position at least one duct width from inlet or outlet.
Axial Fans	Position at least one duct width from inlet or outlet.
Mixed-Flow Fans	Position at least one duct width from inlet or outlet.
Ductwork Bends	Position at least three duct widths from inlet or outlet. One duct width will increase resistance by 90%, two by 20%. Ensure splitters are in parallel plane to bend.
Ductwork Reducers	Direct couple only with reducers of maximum 15° cheek slope.
Finned Coils & Filters	Leave 500mm plenum between silencer and coil or filter, and suitable reducer as specified in HVCA DW/144 1998.

MAINTENANCE

Silencers are of a passive nature and as such require no routine maintenance or lubrication.

CLEANING

Should the product require routine cleaning we recommend low-pressure air blasting, vacuuming or wiping the exposed surfaces with damp cloth. It is not unusual for "White zinc oxide" to develop on galvanised silencers when the zinc in the galvanising reacts electrolytically with moisture.

T 01794 528 350 E info@aco-on.com W aco-on.com