

BARE COTTON GAUZE AIR FILTER FLOW RATE DATA

The following table contains flow rate data (in Cubic Feet/min) for bare cotton gauze air filters supplied by Reverie. Page 3 contains a graph which plots pressure drop against flow rate (the lines in the graph correlate to the number in the Graph column of the table).

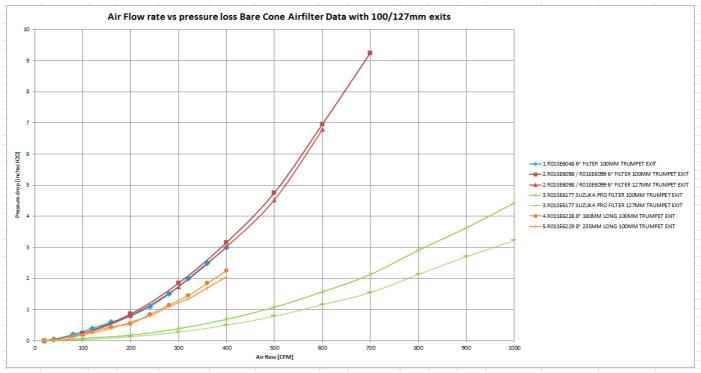
CFM Flow Quoted is taken at 1.5" of water (equates to approximately 3.73 mbar. 1" H2O = 2.49 mbar); this is considered an acceptable pressure drop across a filter

	Description	Size (mm)	CFM	Graph
R01SE0342	152mm (6") Cotton gauze cone air filter with spun alloy 75mm outlet	152mm Dia x 200mm	200	1
R01SE0343	152mm (6") Cotton gauze cone air filter with spun alloy 100mm outlet	152mm Dia x 200mm	280	1
R01SE0420	152mm (6") Cotton gauze cone air filter with spun alloy 85mm outlet	152mm Dia x 200mm	240	1
R01SE6048	152mm (6") Cotton gauze air filter (bare)	152mm Dia x 200mm	300	1
R01SE0421	Panel air filter for use in lid of Interlagos 425X and 425Y	380 x 110mm	342	1
R01SE6009	Panel air filter for use in Ultima GTR air box (requires two filters)	380 x 110mm	457	1

R01SE6017	Round Can-Am air filter	355mm Dia x 80mm	692	1
R01SE6088	435 x 152 x 42mm performance element	435 x 152 x 42mm	458	1
R01SE6089	435 x 152 x 54.5mm performance air flter element	435 x 152 x 54.5mm	595	1
R01SE6090	435 x 152 x 66mm performance air filter element	435 x 152 x 66mm	720	1
R01SE6091	445 x 152 x 96.5mm performance air filter element	445 x 152 x 96.5mm	1071	1
R01SE6098	Cotton Gauze cone air filter with 152mm dia rubber neck outlet moulding (short version for use with filter adaptors)	152mm Dia x 160mm	285	2
R01SE6099	Cotton Gauze cone air filter with 152mm dia rubber neck exit moulding (short version for 152mm ducted/non ducted)	152mm Dia x 145mm	285	2
R01SE6228	Cotton Gauze cone air filter with 206mm dia rubber neck exit moulding (for Daytona 500)	206mm Dia x 180mm	324	4



R01SE6229	Cotton Gauze cone air filter with 206mm dia rubber neck exit moulding (for Daytona 500)	206mm Dia x 235mm	340	5
R01SE6177	High-flow performance air filter element for Reverie Suzuka Pro air filter canisters	195mm Dia x 275mm	746	3



INLET SIZING

An inlet that is too small will cause a pressure drop inside the air box restricting performance. The inlet sizing guide (below) shows the minimum recommended inlet/ducting size for a power output category. The larger the power output of an engine the more air it will require to run at peak efficiency, therefore a larger intake is needed as power increases. Multiple smaller inlets can be used to achieve the same open inlet area as a larger intake, for example, if a larger inlet pipe won't fit on the air box, multiple smaller inlet or <u>oval inlet pipes</u> could be used to create a comparable open area.

BHP Category	Open Area (cm²)	Inlet Diameter (mm)
1 - 150	44.18	75.0
150 - 205	56.75	85.0
205 - 265	78.54	100.0
265 - 325	127.68	127.5
325 +	181.46	152.0

On typical engines, 150CFM is required for each 100BHP

On high performance engines 130CFM is required for each 100 BHP

The formula below shows the formula for required airflow to the engine in cubic feet per minute:

CFM = Engine Capacity (Cubic Inches) / 3464 x Max RPM

1L = 61.0237in³

For example a 5.7 litre engine requires 703CFM of air at 7000rpm:

703 CFM = 347.84CJ / 3464 * 7000RPM

Or if supercharged...CFM = (Cl x RPM / 3456) x (boost [psi] / 14.7 + 1)

Email: sales@reverie.ltd.uk Tel: 0044 (0)1206 866663 Issue Date: 25/04/2020 Page: 3