

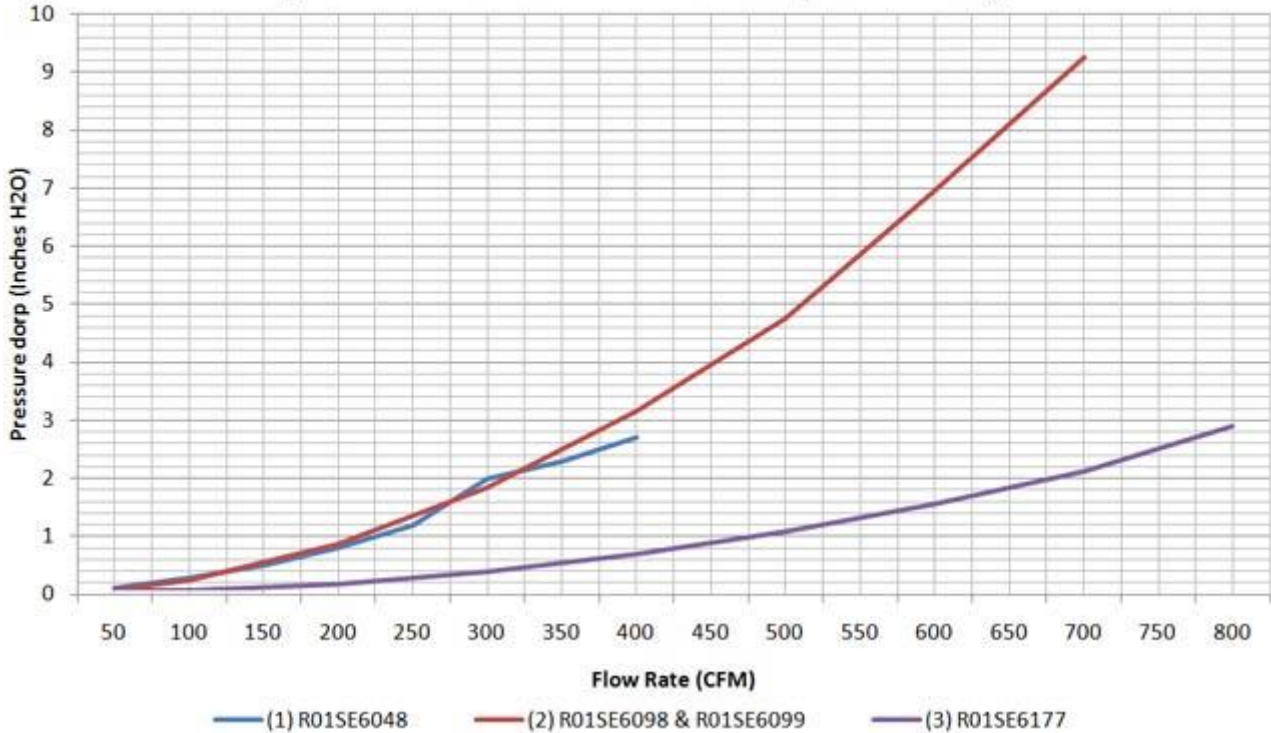
## BARE COTTON GAUZE AIR FILTER FLOW RATE DATA

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*).

	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 filter 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 115mm	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 115mm	285	2
 R01SE6177	High-flow performance air filter element for Reverie Suzuka Pro air filter canisters	195mm Dia x 275mm	746	3

## Graph showing flow rate vs pressure loss for bare filters (152mm to 100mm filter adaptor fitted)



### 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 [oval inlet pipes](#) could be used to create a comparable open area.

BHP Category	Open Area (cm <sup>2</sup> )	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:

$$\text{CFM} = \text{Engine Capacity (Cubic Inches)} / 3464 \times \text{Max RPM}$$

$$1\text{L} = 61.0237\text{in}^3$$

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

$$703 \text{ CFM} = 347.84\text{CI} / 3464 * 7000\text{RPM}$$

$$\text{Or if supercharged...CFM} = (\text{CI} \times \text{RPM} / 3456) \times (\text{boost [psi]} / 14.7 + 1)$$