



DYNOPTIC

BK-40B

Purge Air Blower Kit for DSL Opacity / Dust / Particulate Monitors



Designed specifically for use with the DynOptic range of opacity, dust and particulate monitors, the Purge Air Blower Kit includes:

- Air blower, inlet filter, hose tails and splitter plus connection fittings
- In-line air pre-treatment filter with replaceable filter cartridges
- 110 Vac / 230 Vac Single and 415 Vac three phase supply options
- Wall mount assembly (with mounting plate)
- Optional stainless steel weather cover suitable for outdoor installations
- Optional air hose (up to 100m length)

The DSL range of stack monitors use optical techniques to make opacity and/or dust measurements. Therefore, each measurement head has an optical surface, which is exposed to the dirty and potentially harmful environment inside the stack. To protect the optical surfaces from contamination by particle depositions and the damaging effects of heat and/or corrosive stack gas, it is necessary to use an air-purge system to prevent the stack gas from coming into contact with the measurement heads.

An air-purge system produces a flow of clean and dry air, which flows away from the measurement head, repelling the stack gas, and then flows into the stack. This continuous flow of air provides a clean air barrier between the optics and the stack gas.

The DSL BK-40B Blower Kit offers a low cost standalone air purge blower system that is capable of providing an air flow rate of 100 to 400 litres/min, which is sufficient to be able to supply air purge to the both instrument heads of a DSL Opacity/Dust/Particulate Monitor. The pressure provided by the blower at this flow rate is sufficient to overcome the losses in the tubing, splitters and connectors in applications where the stack or flue is not under positive pressure.

The purge air produced by the blower must be clean, dry and free from dust and aerosols, in order to prevent it contributing to the measured stack dust or contaminating the optics. Therefore, the DSL-BK40B blower kit includes a high performance particulate filter to $\leq 5\mu\text{m}$.

The complete DSL BK-40B Blower Kit consists of a rotating fan; an air inlet filter; a "T" or "Y" piece splitter; tubing connection fittings for the blower and for the heads plus jubilee clips for securing the tubing in place on the connection fittings.

(Please note that the blower kit does not include any tubing; this is available, in varying lengths, as a separate accessory. A weatherproof cover for the blower is also available and is recommended for outdoor installations; see Spares and Options for more details).



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Specification:

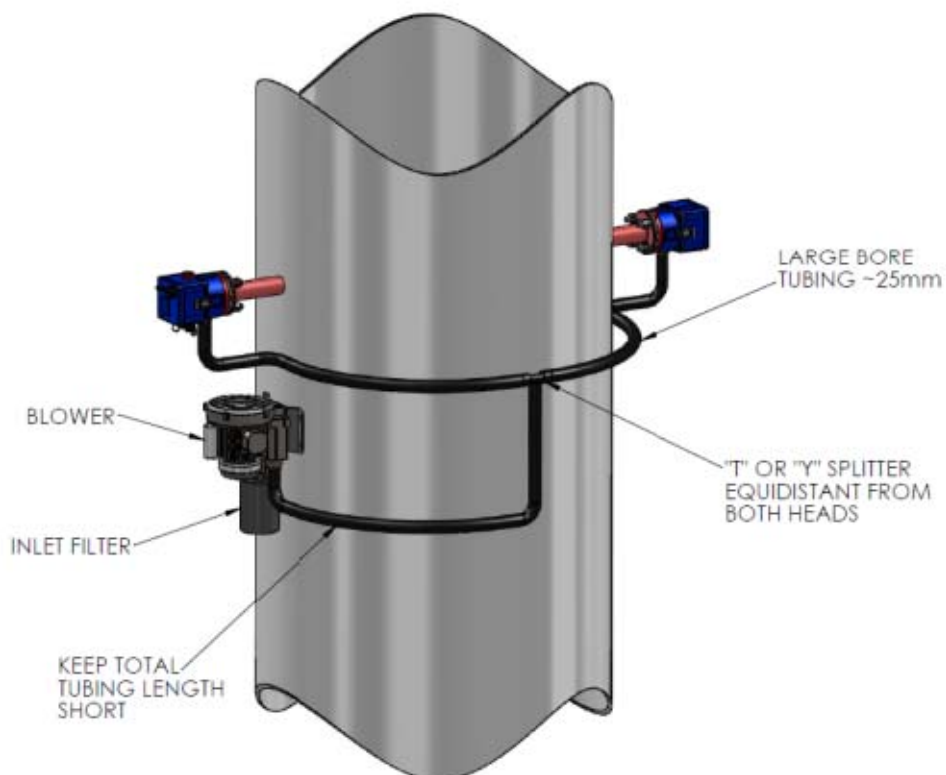
Performance

No.	Parameter	Units	Min	Max	Comment
1	Maximum available pressure	mbar psi		90 1.3	With no flow
2	Maximum available flow	L/min cfm		650 23	With no pressure losses
3	Power Supply (options)		110 Vac or 230 Vac		415 Vac three phase available on request
4	Power Consumption	kW		0.2	
5	Air inlet filter	µm		5	

Physical

4	Ingress Protection		IP55		Optional weather cover available
5	Operating Temperature	°C	0	+40	Air temperature at blower inlet
6	Operating Humidity	%		90	Humidity at blower inlet
7	Dimensions	mm	200 x 220 x 220		Blower only
8	Weight	kg		8.0	Blower only
9	Warranty	months	24		Return to base warranty

Installation Example:



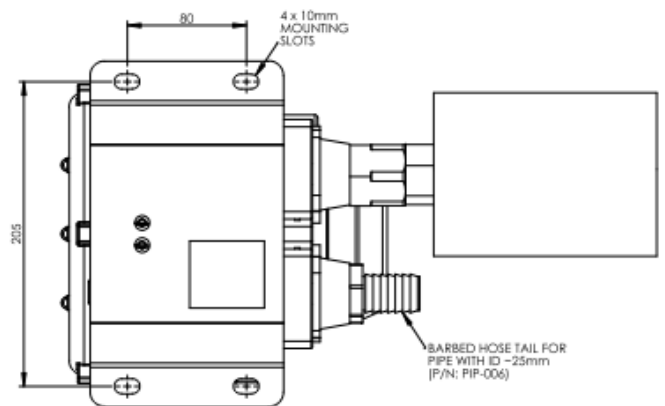
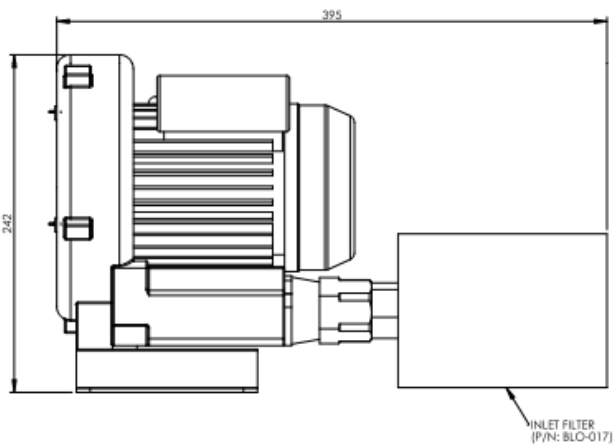
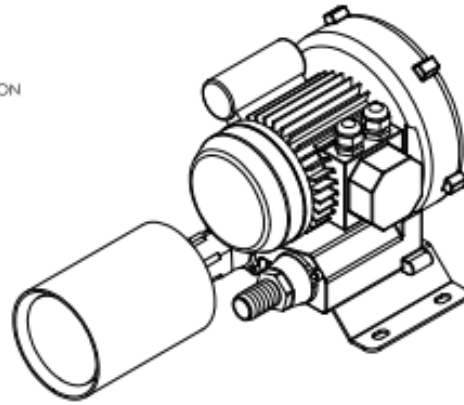
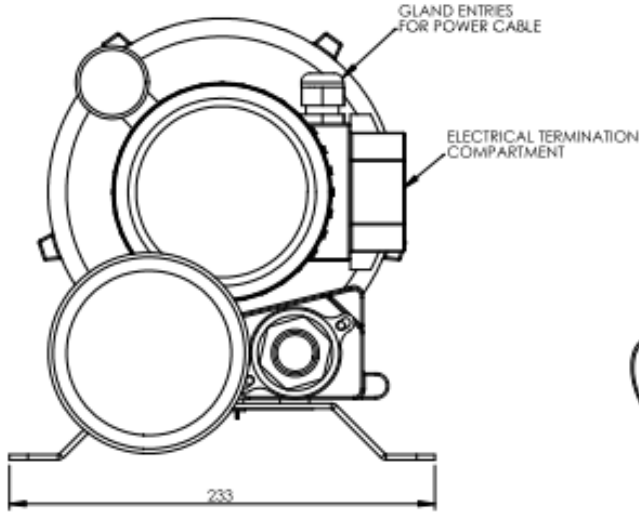


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Dimensions (mm):



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Options & Accessories:

Description	Order Code	Notes
<p>Blower Kit</p> 	<p>BK-40B-110 BK-40B-230 BK-40B-415</p>	<p>The blower kit comprises of the following: Blower (110 Vac, 230 Vac or 415 Vac supply) BLO-017: Air Inlet Filter PIP-006: Hose Tail (3 off) PIP-016: T-Piece HDW-223: Jubilee Clips (6 off)</p>
<p>Weather Cover</p> 	<p>MTL-271</p>	
<p>Tubing</p>	<p>PIP-017</p>	<p>25mm ID flexible tubing (available in 10m lengths up to 100m).</p>

Note that the actual part may differ from the above representative pictures.