

Oil-Free  
Diaphragm Pump

# B85 Series



Max Flow	35 l/min
Max Vacuum	100 mbar
Max Pressure	2.5 bar

**Contamination free pumping**

The B85 range of pumps provide a clean oil free vacuum and pressure source ideal for use in environmental and medical industries where long term reliability is essential. Available as a single or double ended pump the later allowing the user to alternate between greater flow and high vacuum applications by a simple tubing change.

**Proven design and reliability**

Constructed from high quality components the B85 is designed for continuous duty with exceptional service life even in hostile process industries. Proven versatile design allows the pump head and connectors to be orientated in any direction for optimum space saving. Pump performance can be customised to suit individual clients requirements.

**Flexible product options**

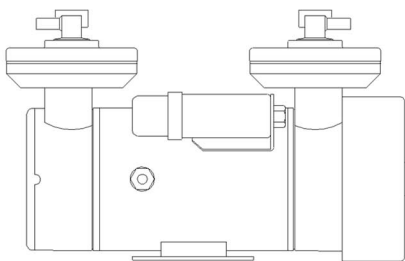
Portable versions of the the B85 can be supplied complete with carry handle or housed in a splash proof metal case both ideal for laboratory benchtop use. Additionally heated head versions are available for dewpoint applications and the extended head option protects the motor and bearings against excessive heat conducted from hot gases. B85 pumps can be supplied with a range of vacuum/pressure gauges and needle valves.

**Fully corrosion resistant**

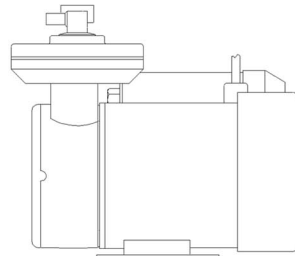
The B85 can be configured to be resistant to virtually all corrosive gases by selecting from a range of optional component specifications.

**Application ideas**

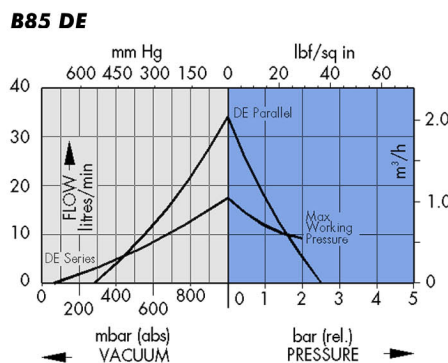
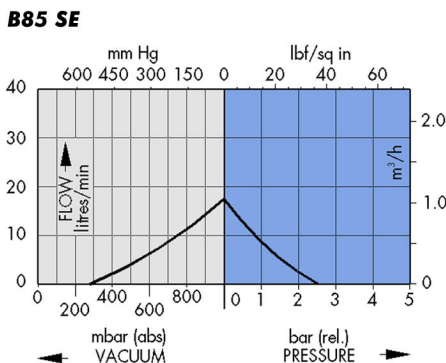
Application ideas include aeration, process sampling, filtration and vacuum forming.



**B85 DE double ended pump**  
The two heads can be connected in:-  
Parallel, as supplied for maximum flow  
Series for maximum vacuum performance  
or as two separate heads



**B85 SE single ended pump**



## B85 Series

### Motor Type:

IP44 Permanent capacitor, totally enclosed fan cooled. 1400 RPM @ 50Hz.  
 Thermal Protection 140°C  
 Maximum permissible ambient temperature 40°C

model no.	110/115V 50/60Hz			230V 50Hz		
	operating current	max. load	fuse rating	operating current	max. load	fuse rating
B85 SE	0.75A	1.0A	2.0A	0.3A	0.4A	1.0A
B85 DE	1.2A	1.4A	2.0A	0.5A	0.7A	2.0A

### Performance:

model no.	max. free flow l/min	max. vacuum mbar (abs)	max. pressure bar
B85 SE	18.0	280	2.5
B85 DE series connected	17.0	100	2.0*
B85 DE parallel connected	35.0	280	2.5

\* recommended maximum working pressure

### Connectors:

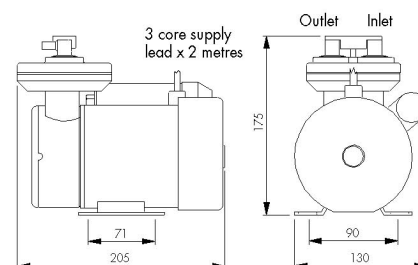
Plain, horizontal, nylon 8.0mm OD  
 Optional: horizontal - polypropylene 6.4, 8.0mm OD plain and nylon 6.0, 6.4mm OD plain.  
 vertical - nylon 6.0, 6.4, 8.0mm OD plain, polypropylene 8.0mm OD, stainless steel, 6.0 6.4, 8.0mm OD plain and PTFE 8.0mm OD.

### Optional filters and silencers:

(Filter: 100 micron, cleanable with renewable element  
 Silencer: Minimises noise and smoothes flow pulsation

**B85 SE** 4.0kg

dimensions: mm

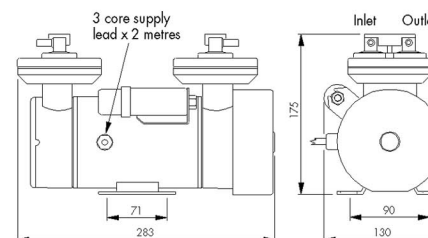


### Pump Materials:

With the choice of the appropriate materials for the head and flexibles, the B85 pump will handle a wide range of corrosive gases.

component	standard	options
Head	aluminium	stainless steel, PTFE
Diaphragm	EPDM	Viton, PTFE
Connectors	nylon	Viton, PTFE
'O' Rings	nitrile	Viton, PTFE
Valves	nitrile	Viton, PTFE

**B85 DE** 6.3kg



distributed by:

Please note that it is important that you ensure the motor specification stated and the range of materials offered in the pump are compatible with the performance, environmental limitations and chemical resistance of the application.

For further information or details of our extensive range of diaphragm pumps, contact our technical sales office who will be pleased to help you select the most suitable pump for your application.

S30-213/2