



- Borosilicate filter element 99.995% efficiency
- Lightweight, corrosion-protected aluminium body
- Differential pressure gauge indicator for filter element replacement
- Sterilisable drain flask to capture biological fluids
- Vacuum flow rates from 850-7504 litres/min (30-265 scfm)
- Available in 1" to 3" pipe connections



**Medical Vacuum Filters**  
**High Performance Series**

## Trident Cleansweep Medical Vacuum Filters - High Performance Series

Trident Cleansweep Medical Vacuum Filters - High Performance Series are designed to remove the liquid, solid and bacterial contamination from the suction side of the vacuum pump and the potential biological infection of the surrounding environment with low pressure drop. The filter elements and housings are designed for medical use and can be utilized in hospitals, pharmaceutical laboratories, dentist's surgery and other critical areas.

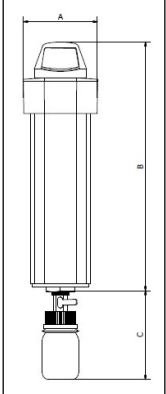
Installed on suction side of vacuum pump to remove bacteria and prevent contamination to the pump and atmosphere.

Biological liquids are collected in a transparent drain flask, which can be easily removed for sterilization. The flask should be visually checked daily and removed for cleaning and sterilization. The filter element must be replaced at least every 6 months or when the pressure drop reaches 100 mbar, towards the end of the red zone of the differential pressure indicator.

The efficiency of the installed filter elements exceeds the 0.005% penetration specified in HTM 2022 for infectious disease units, when tested in accordance with BS 3928.

### Technical Specifications

Model	Item Code		Pipe connections	Flow rate at atmospheric pressure		Housing Dimensions (mm)			Spares Item Code	
	NPT	BSP		scfm	n-l/min	A	B	C	Filter element kit	Drain flask
T250VP	PFV13	PFV15	1"	30	850	114	399		AS946	
T600VP	PFV19	PFV21	1½"	40	1133	114	474		AS943	
T851VP	PFV20	PFV22	2"	115	3256	148	666	170	AS945	AC249
T1210VP	PFV17	PFV23	2"	140	3964	148	736		AS949	
T1810VP	PFV18	PFV24	3"	265	7504	211	761		AS950	



### Correction factor

Absolute Vacuum	mm Hg (abs)	750	369	242	178	140
	in Hg (abs)	29.5	14.5	9.5	7.0	5.5
	mbar (abs)	1000	492	322	238	187
	psi (abs)	14.5	7.1	4.7	3.4	2.7
Correction factor	-	1	2	3	4	5

Example :

- Flow & vacuum at user end : 1500 n-lpm, 369 mm Hg (abs)
- Since the catalogue specifies flow rates at atmospheric pressure, the suitable correction factor must be selected from the table - this is 2 in this case.  
Therefore, filter capacity required : 1500 n-lpm x 2 = 3000 n-lpm
- From the table of models, choose the model that has the closest higher flow rate to the above value. In this case, it is 3256 n-lpm, so model T851VP must be used.

### Specification

Penetration to	BS 3928 <0.005%	Filter element	Borosilicate
Particle removal	0.3 micron (99.995%)	Construction material	Extruded Aluminium Alloy
Maximum temperature	80°C (176°F)	Coating – External	Epoxy Powder coating
Pressure loss-clean element	30 mbar	Coating – Internal	Anodised
Pressure loss-change element	100 mbar	Drain type	Hand shut-off valve with
Maximum working vacuum	Full vacuum		Sterilisable drain flask (capacity 100 ml)

### Trident Pneumatics Private Limited

Door No.3/69G, 120, 2nd Cross, Codissia Industrial Park, Kallapalayam - 641 201, India. Ph : +91 73977 42565

e-mail : [sales@tridentpneumatics.com](mailto:sales@tridentpneumatics.com) / [marketing@tridentpneumatics.com](mailto:marketing@tridentpneumatics.com) Website : [www.tridentpneumatics.com](http://www.tridentpneumatics.com)