

# VT - Activated carbon towers + vessels

## Features & Benefits

- ▶ Guaranteed air purity with residual oil content below 0,003 mg/m<sup>3</sup>
  - Superb 2-layer activated carbon material
  - Designed with sufficient safety margin
  - Performance certified by external body
- ▶ Significant energy savings & limited system operating costs
  - Optimal internal flow path
  - Average pressure drop of 125 mbar only
- ▶ Certified class 1 performance, according to ISO 8573-1:2010
  - If combined with Pneumatech oil coalescing filters (G & C)
- ▶ Compact and reliable product design
  - Wall-mounting kit, optional for VT1 - 7
  - Easy to lift, install and service
- ▶ The VT is capable of removing hydrocarbons, odors and oil vapors from compressed air



VT 1-9



VT 11-15

## General Specifications

- ▶ Compressed air inlet pressure:
  - VT 1-9: 1-16 barg / 15-232 psig (extruded Versions)
  - VT with optional oil indicator: 1-8,8 barg / 15-127 psig
  - VT 11-15: 1-14,5 barg / 15- 210 psig (Welded Versions)
  - VT11-15: life time 12000 hours
- ▶ Ambient air temperature: (Extruded Versions)
  - -10 - 50°C / 14 - 122°F
- ▶ Ambient air temperature: (Welded Versions)
  - -10 - 80°C / 14 - 176°F
- ▶ Compressed air inlet temperature:
  - 1 - 66°C / 34 - 151°F

## Options



Wall mounting kit



Oil Indicator



Oil indicator welded version



Dust filter



ISO 8573-1:2010 Class 1 validation certificate

Pneumatech's VT activated carbon towers and vessels are high-efficiency filtration products designed to meet the most demanding industry applications. Examples are pharmaceutical, medical, food & beverage, electronics and chemical industries.

The VT is capable of removing hydrocarbons, odors and oil vapors from compressed air. The activated carbon layers will, by the use Activated carbon vessels for higher flows available on request. Please consult Pneumatech for further support.

1. Flow is measured at reference conditions: 1 bara and 20°C at operating pressure of 7 barg, inlet temperature 20°C & inlet PDP of 3°C at the outlet. of adsorption, reduce the residual oil content to less than 0,003 mg/m3. In combination with Pneumatech G and C filters, the VT meets the requirements of air purity class 1 for total oil, according to ISO 8573-1:2010 in a typical compressed air installation, as was certified by an external body.

### Technical specifications for VT 1-9

Pneumatech Variant → Specifications ↓	Units	VT 1	VT 2	VT 3	VT 4	VT 5	VT 6	VT 7	VT 8	VT 9
Capacity <sup>(1)</sup>	l/s	20	45	60	95	125	150	185	245	310
	m <sup>3</sup> /hr	72	162	216	342	450	540	666	882	1116
	cfm	42	95	127	201	265	318	392	519	657
Initial pressure drop over filter when dry	BARG	0,015	0,065	0,11	0,085	0,135	0,1	0,145	0,185	0,27
Connection	G/NPT	½"	1"	1"	1"	1½"	1½"	1½"	1½"	1½"
Dimensions (A)	mm	490	715	840	715	840	715	840	840	840
	inch	19.29	28.15	33.07	28.15	33.07	28.15	33.07	33.07	33.07
Dimensions (B)	mm	223	223	223	387	387	551	551	715	879
	inch	8.78	8.78	8.78	15.24	15.24	21.69	21.69	28.15	34.61
Dimensions (C)	mm	190	190	190	190	190	190	190	190	190
	inch	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48
Weight	Kg	10	15	18	29	34	42	50	67	84
	Lbs	22.0	33.1	39.7	63.9	75.0	92.6	110.2	147.7	185.2

1. Flow is measured at reference conditions: 1 bara and 20°C at operating pressure of 7 barg, inlet temperature 20°C & inlet PDP of 3°C at the outlet.

### Technical specifications vessel version VT 11-15

Pneumatech Variant → Specifications ↓	Units	VT 11	VT 12	VT 13	VT 14	VT 15
Capacity	l/s	425	550	850	1100	1800
	m <sup>3</sup> /hr	1530	1980	3060	3960	6480
	cfm	901	1165	1801	2331	3814
Initial pressure drop over filter when dry	bar	0.070	0.080	0.095	0.095	0,120
Connection	DIN	80	80	100	100	150
Length	mm	1048	1048	1175	1175	1810
	inch	41.3	41.3	46.3	46.3	71.3
Width	mm	1125	1125	1118	1118	1213
	inch	44.3	44.3	44.0	44.0	47.8
Height	mm	2435	2435	2449	2449	2535
	inch	95.9	95.9	96.4	96.4	99.8
Weight	Kg	264	302	391	602	882
	Lbs	582	666	862	1327	1944



### Correction factors

For other compressed air inlet temperatures, please multiply the filter capacity by the following correction factor (Kt):

Inlet temperature	°C	20	25	30	35	40	45	50	55	60
	°F	68	77	86	95	104	113	122	131	140
Correction factor	Kt	1.67	1.43	1.25	1	0.71	0.56	0.37	0.25	0.19

For other compressed air inlet pressures, please multiply the filter capacity by the following correction factor (Kp):

Inlet pressure	barg	3	4	5	6	7	8	9	10	11	12	13
	psig	44	58	73	87	102	116	131	145	160	174	189
Correction factor	Kp	0.57	0.77	0.83	1	1	1	1	1.05	1.05	1.11	1.18

Correction factors for VT 11-15 (for other compressed air inlet temperatures)

Inlet pressure	°C	20	25	30	35	40	45	50	55	60	65
Correction factor	Kt	1	1	1	1	0,83	0,67	0,59	0,48	0,42	0,33

\* for oil free compressors correction factor is always 1