

# Equipment

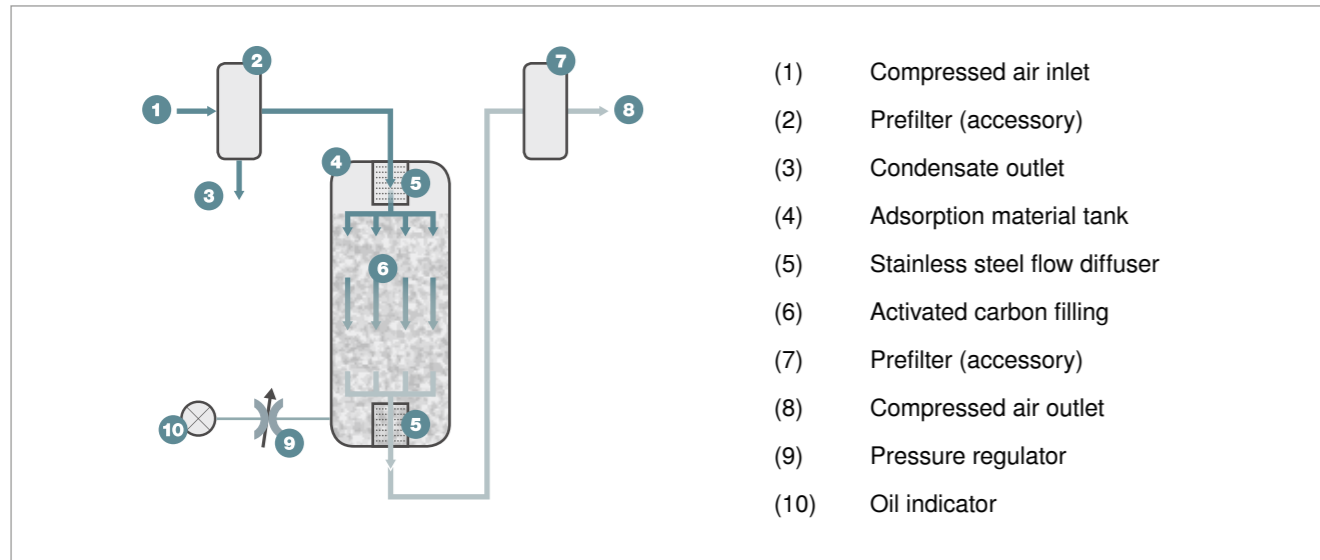
## Standard equipment

Adsorption material tank including activated carbon filling, upper/lower stainless steel flow diffusers and separate upper/lower filling and emptying connections; equipped with tank pressure gauge and pressure regulator with oil indicator; pre-installed compressed air inlet and discharge line (flexible positioning); stable base frame, 2-component wet paint coating.

## Options

- Silicone-free version as per VW test standard PV 3.10.7
- Working pressure 16 bar for models ACT 169 – 1545
- Working pressure 48 bar for models ACT 12 – 1545 HP

## How it works



# Technical specifications

Model	Flow rate * m³/min	Working pressure bar	Pressure loss bar	Compressed air connection	Ambient temperature °C	Max. temp. compressed air inlet °C	Dimensions W x D x H mm	Mass kg
ACT 12	1.17	4 ... 16	< 0.1	R ¾	2...45	2...55	350 x 750 x 1950	90
ACT 18	1.83	4 ... 16	< 0.1	R ¾	2...45	2...55	350 x 750 x 1950	110
ACT 27	2.67	4 ... 16	< 0.1	R ¾	2...45	2...55	350 x 750 x 1950	130
ACT 33	3.33	4 ... 16	< 0.1	R 1¼	2...45	2...55	350 x 750 x 1980	160
ACT 50	5.00	4 ... 16	< 0.1	R 1¼	2...45	2...55	550 x 750 x 1980	170
ACT 75	7.50	4 ... 16	< 0.1	R 1½	2...45	2...55	550 x 750 x 1990	215
ACT 108	10.83	4 ... 16	< 0.1	R 2	2...45	2...55	550 x 750 x 1990	260
ACT 133	13.33	4 ... 16	< 0.1	R 2	2...45	2...55	550 x 750 x 2000	330
ACT 169	16.88	4 ... 10	< 0.1	DN 80	2...45	2...55	800 x 1160 x 2215	275
ACT 215	21.47	4 ... 10	< 0.1	DN 80	2...45	2...55	800 x 1160 x 2505	310
ACT 266	26.62	4 ... 10	< 0.1	DN 80	2...45	2...55	960 x 1230 x 2385	360
ACT 323	32.33	4 ... 10	< 0.1	DN 80	2...45	2...55	1010 x 1230 x 2385	420
ACT 386	38.63	4 ... 10	< 0.1	DN 100	2...45	2...55	1010 x 1250 x 2595	430
ACT 444	44.35	4 ... 10	< 0.1	DN 100	2...45	2...55	1110 x 1454 x 2835	575
ACT 601	60.01	4 ... 10	< 0.1	DN 150	2...45	2...55	1110 x 1728 x 2868	625
ACT 859	85.85	4 ... 10	< 0.1	DN 150	2...45	2...55	1540 x 1965 x 2873	925
ACT 1173	117.73	4 ... 10	< 0.1	DN 200	2...45	2...55	1540 x 2169 x 2984	1200
ACT 1545	154.53	4 ... 10	< 0.1	DN 200	2...45	2...55	1580 x 2187 x 3297	1510

\* Performance data at reference conditions: Working pressure 7 bar, ambient temperature + 25° C, compressed air inlet temperature + 35° C, PDP ≤ +3 °C; based on 1 bar ambient pressure absolute and 20 °C. The flow rate changes for deviating operating conditions.

## Calculating flow rate

Correction factors for deviating operating conditions (flow rates in m³/min x k...)

Deviating working pressure p at filter inlet													
p bar <sub>(g)</sub>	4	5	6	7	8	9	10	11	12	13	14	15	16
k <sub>p</sub>	0.63	0.75	0.88	1.00	1.06	1.12	1.17	1.22	1.27	1.32	1.37	1.41	1.46

Compressed air inlet temperature T <sub>i</sub>							
T <sub>i</sub> (°C)	25	30	35	40	45	50	55
k <sub>Ti</sub>	3.10	1.70	1.00	0.57	0.33	0.19	0.11

Example:				
Working pressure	8 bar	->	Factor	1.06
Compressed air inlet temperature	40 °C	->	Factor	0.57

ACT 133 activated carbon adsorber with 8.05 m³/min flow rate	
Max. possible flow rate under following operating conditions	
$V_{\text{max Operation}} = V_{\text{Reference}} \times k_p \times k_{Ti}$	
$V_{\text{max Operation}} = 13.33 \text{ m}^3/\text{min} \times 1.06 \times 0.57 = 8.05 \text{ m}^3/\text{min}$	

## Dimensions

