

Technical specifications

Models DC 12 to 1545

Model	Flow rate ¹⁾ m ³ /min	Operating pressure bar	Pressure drop ¹⁾ bar	Compressed air connection	Ambient temperature °C	Max. temp. at compressed air inlet °C	Dimensions W x D x H mm	Mass kg
DC 12	1.17	5 ... 16	≤ 0.2	G ¾	2 ... 45	2 ... 50	750 x 750 x 1950	181
DC 18	1.83	5 ... 16	≤ 0.2	G ¾	2 ... 45	2 ... 50	750 x 750 x 1950	220
DC 27	2.67	5 ... 16	≤ 0.2	G ¾	2 ... 45	2 ... 50	750 x 750 x 1970	308
DC 33	3.33	5 ... 16	≤ 0.2	G 1 ¼	2 ... 45	2 ... 50	1150 x 750 x 1980	398
DC 50	5.00	5 ... 16	≤ 0.2	G 1 ¼	2 ... 45	2 ... 50	750 x 1150 x 1980	421
DC 75	7.50	5 ... 16	≤ 0.2	G 1 ¼	2 ... 45	2 ... 50	750 x 1150 x 1990	531
DC 108	10.83	5 ... 16	≤ 0.2	G 2	2 ... 45	2 ... 50	750 x 1150 x 1990	650
DC 133	13.33	5 ... 16	≤ 0.2	G 2	2 ... 45	2 ... 50	750 x 1150 x 2000	815
DC 169	16.88	5 ... 10	≤ 0.2	DN 80	2 ... 45	2 ... 50	1500 x 1320 x 1910	965
DC 215	21.47	5 ... 10	≤ 0.2	DN 80	2 ... 45	2 ... 50	1500 x 1420 x 1921	1275
DC 266	26.62	5 ... 10	≤ 0.2	DN 80	2 ... 45	2 ... 50	1500 x 1470 x 2090	1525
DC 323	32.33	5 ... 10	≤ 0.2	DN 80	2 ... 45	2 ... 50	1500 x 1520 x 2116	1710
DC 386	38.63	5 ... 10	≤ 0.2	DN 100	2 ... 45	2 ... 50	1500 x 1720 x 2136	2080
DC 444	44.35	5 ... 10	≤ 0.2	DN 100	2 ... 45	2 ... 50	1700 x 1770 x 2225	2305
DC 601	60.01	5 ... 10	≤ 0.2	DN 100	2 ... 45	2 ... 50	1950 x 1920 x 2258	2755
DC 859	85.85	5 ... 10	≤ 0.2	DN 150	2 ... 45	2 ... 50	2400 x 2140 x 2456	4105
DC 1173	117.33	5 ... 10	≤ 0.2	DN 200	2 ... 45	2 ... 50	2690 x 23350x 2701	6200
DC 1545	154.53	5 ... 10	≤ 0.2	DN 200	2 ... 45	2 ... 50	2820 x 2504 x 2536	6800

¹⁾ As per ISO 7183, option A1: Point of reference: 1 bar(abs), 20 °C, 0 % relative humidity; operating point: pressure dew point -40 °C, working pressure 7 bar(g), inlet temperature 35 °C, ambient temperature 20 °C, 100 % relative humidity Electrical supply: 95-240 V ±10% / 1 Ph / 50 - 60 Hz

Options

Mechanical components	DC 12 to 133	DC 169 to 1545
16 bar operating pressure	Standard	Optional
System enclosure	Optional	-
Indoor installation to -20 °C, consisting of system enclosure with resistance heating	Optional	-
Sound insulation ≤ 85 dB(A): DC 12 - 133: Enclosure lined with acoustic foam and mesh base DC 169 - 1545: Silencer in sound enclosure; please note: larger footprint	Optional	Optional
Paint option: yellow components in RAL colour	Optional	Optional
Painted in corrosion class C3 – medium (160 µm, DIN EN ISO 12944); includes painting of exterior surfaces of system housing and desiccant tank	Optional	Optional
Silicone-free as per VW test standard PV 3.10.7	Optional	Optional
Equipped with one safety valve per desiccant tank	Optional	Optional
Special pressure vessel inspections (e.g. ASME) upon request	Optional	Optional

Calculating flow rate

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

Deviating working pressure p at dryer inlet												
p bar _(g)	5	6	7	8	9	10	11	12	13	14	15	16
k _p	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 _i						
Temperature (°C)	25	30	35	40	45	50
k _t	1.00	1.00	1.00	0.96	0.90	0.83

Example:				
Working pressure	8 bar	->	Factor	1.06
Compressed air inlet temperature	40 °C	->	Factor	0.96

KAESER FILTER F 880 with flow rate of 88.50 m ³ /min	
Max. possible flow rate under following operating conditions	
$V_{\max \text{ Operation}} = V_{\text{Reference}} \times k_p \times k_t$	
$V_{\max \text{ Operation}} = 88.50 \text{ m}^3/\text{min} \times 1.06 \times 0.96 = 90.06 \text{ m}^3/\text{min}$	