



DustStorm® filter

Technical catalogue: Filters
Section: 01
Revised: 01.01.2011

The DustStorm® filter is an under- and over-pressure filter, designed for continuous operation.

Constructed as a self-supporting sheet metal construction. The round design ensures great strength combined with low weight.

Surface

Powder coated to corrosion class C3 cf. ISO 12944.

Inlet

Contaminated air passes into the filter through the pressure loss optimised inlet, ensuring optimised separation of the dust particles.

DS-12, 20, 28, 36 and 44 are supplied with side inlet according to the "partial downflow" principle. A diffuser effect which ensures minimum pressure loss with maximum effect. Alternatively, the filters can be fitted with a total separator. DS-7 and 12 are supplied with total separators.

Cleaning system

DS-12, 20, 28, 36, 44 has the PowerPulse® cleaning system with filter control system ECOTROL® or DS total cleaning system. DS-7 EC and DS-12 EC have EC cleaning.

Discharge system

DustStorm® filter is available with conical or scraper bottom. The DS filter is also available as a silo filter. DS-7 is only available with conical bottom.

ATEX

DustStorm® filter is fitted with approved explosion membranes with side relief venting. The filters fulfil pressure shock-resistance according to VDI 2263. Venting according to VDI 3673. The DS filter with external compressed air source is supplied ATEX-approved.

Operating range

Pressure: +/- 5000 Pa (available up to +20 kPa to -10 kPa)
Filter area: 38-534 m²
Max. operating temperature: 70°C
Min. operating temperature: -20°C (available down to -40°C)

Connection DS-12 - DS-44

Gear motor PowerPulse® cleaning system:

0.12 kW, 15.6 min⁻¹, 3 x 230 V, 50 Hz, 0.7 A

Gear motor scraper bottom:

DS-12-S: 0.37 kW, 15.7 min⁻¹, 3 x 400 V, 50 Hz, 1.1 A

DS-20-S and DS-28-S: 0.55 kW, 15.7 min⁻¹, 3 x 400 V, 50 Hz, 1.6 A

DS-36-S and DS-44-S: 0.75 kW, 11.0 min⁻¹, 3 x 400 V, 50 Hz, 2.2 A

Inductive sensor scraper bottom:

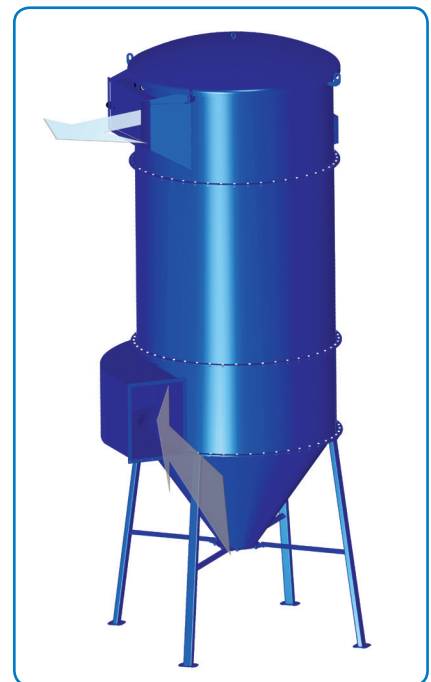
24 VDC.



DustStorm® filter with conical bottom and bucket. With ladder and platform mounted.



DustStorm® filter with scraper bottom.



DustStorm® filter with total separator.



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PowerPulse® ECOTROL® filter control system:

0.6 kW, 1 x 230 V, 50 Hz, 1.9 A

PowerPulse® DS total filter control system:

0.7 kW, 1 x 230 V, 50 Hz, 2.1 A

External compressed air - PowerPulse®:

DS-36 and DS-44 (for cleaning system and roof opening):
75 bar, min. 350 NI/min.

DS-12 and DS-28 (for cleaning system):
5.0 bar, min. 350 NI/min.

Air quality according to ISO 8573-1: Quality class (5. 4. 4)
External connection: 1/4" internal thread.

Internal compressor - PowerPulse®:

2.2 kW, 3 x 400 V, 50 Hz, 5.9 A
Capacity: 350 NI/min.

Connection DS-7 EC and DS-12 EC

EC filter control system:

0.2 kW, 1 x 230 V, 50 Hz, 0.8 A

External compressed air - EC cleaning system:

7 bar, min. 400 NI/min.

Air quality according to ISO 8573-1: Quality class (5. 4. 4)

External connection: 1/4" internal thread.

Integrated fan:

DS-7 E EC: 4.0 kW, 3 x 400 V, 50 Hz, 11.0 A (JK-30MTD)

DS-12 E EC: 11.0 kW, 3 x 400 V, 50 Hz, 19.0 A (JK-40MTD)

Accessories

Ladder/gangway:

Ladder/gangway designed according to ISO/EN/DIN 14122.3/4 and available in several configurations.

Monitoring apparatus for explosion membrane.

Door contacts:

2.3 (close-before-switch-contact) in accordance with EN50047, IP67 NC contact.

Noise

Noise level during cleaning measured at 5 m above ground.

DS-7 EC and DS-12 EC: 70.0 dBA

DS-7 EC E: 71.0 dBA

DS-12 EC E: 75.4 dBA

DS-12 ET EX - DS-44 ET EX: 70.0 dBA

DS-12 ET - DS-44 ET: 72.4 dBA



DS-EC-K E R



DS-EC-K R

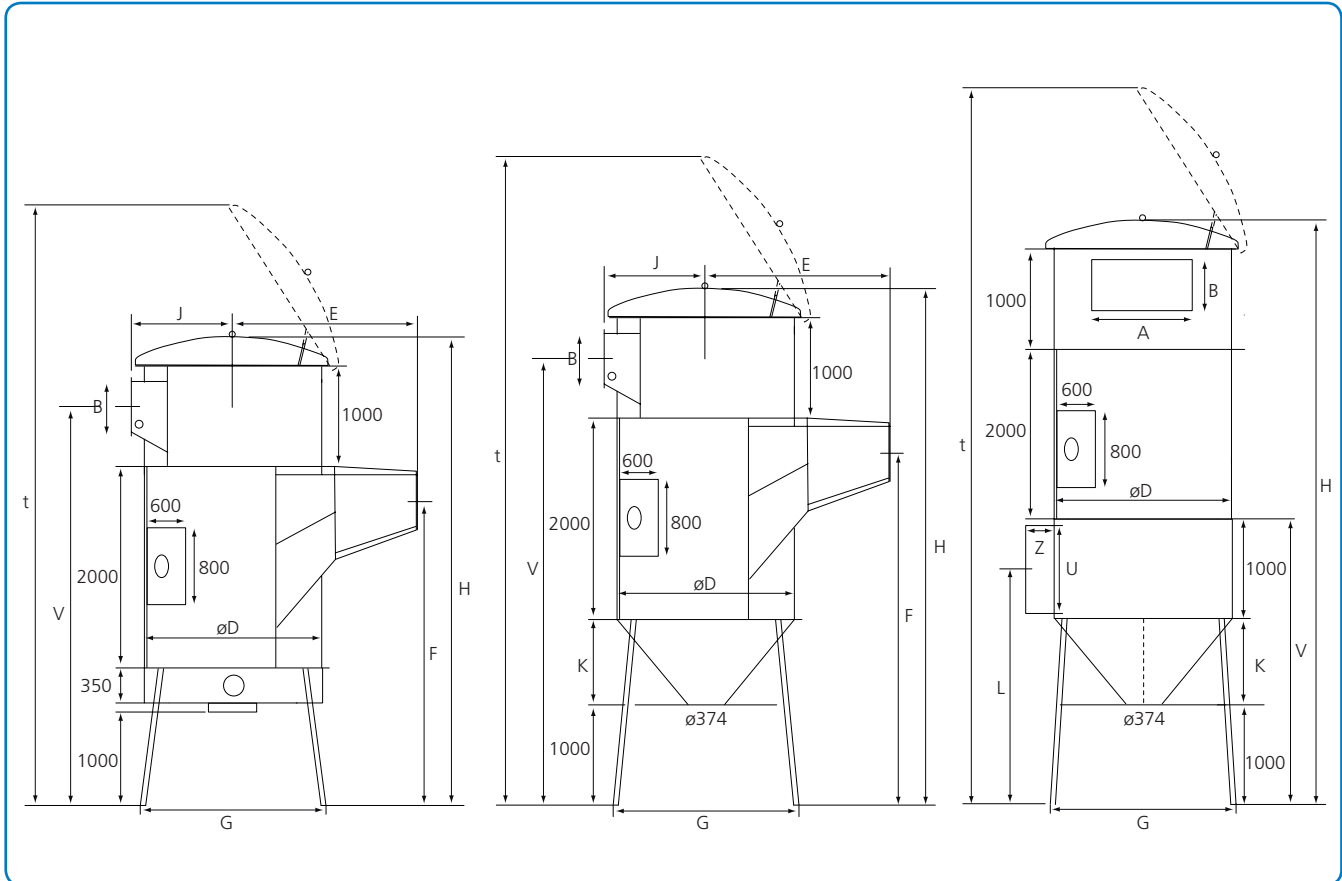


DS-EC-S E R



DustStorm® filter with PowerPulse® cleaning system

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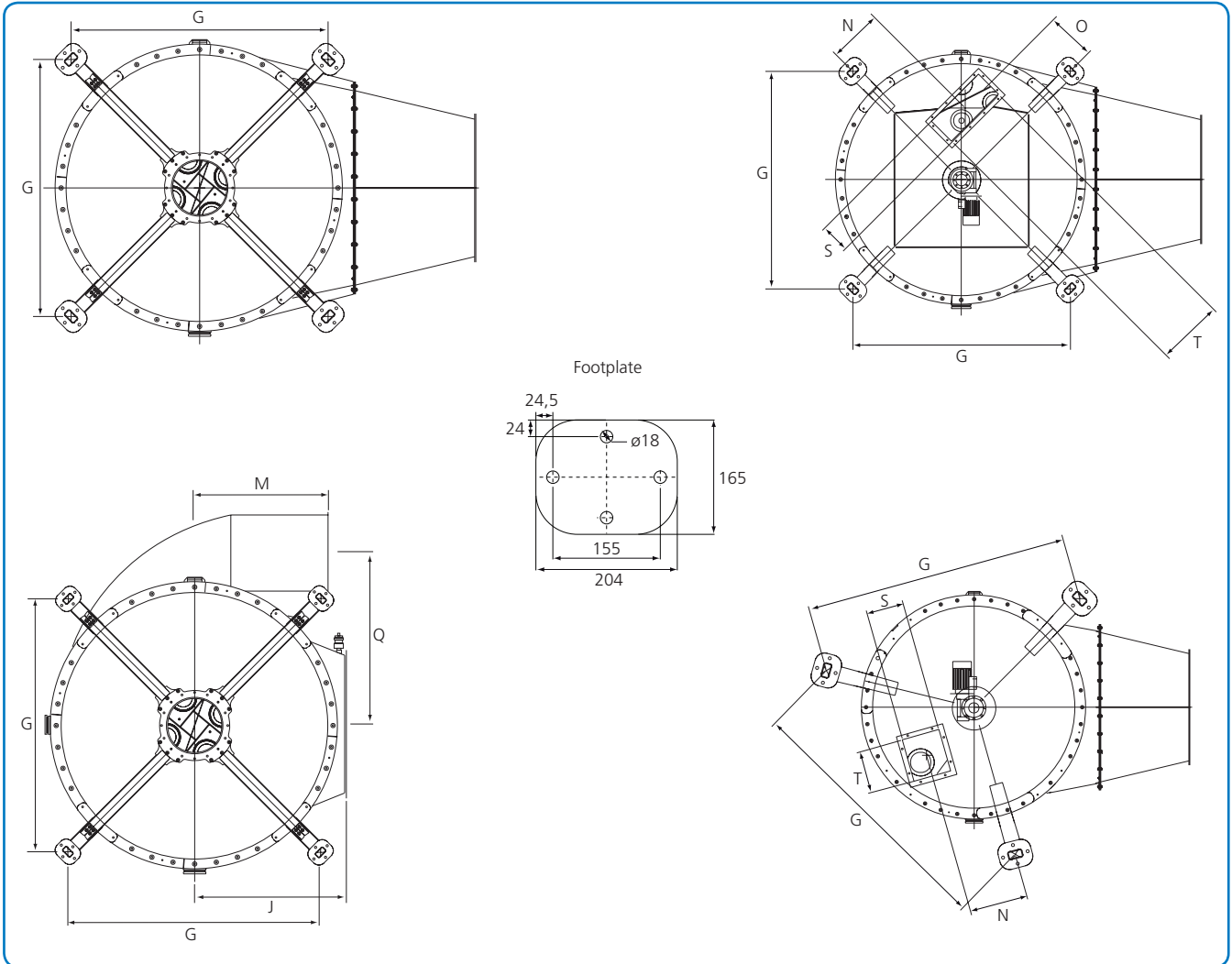
Type	AxB mm	UxZ mm	øD mm	t mm	J mm	E mm	F mm	V mm	H mm	K mm	L mm	G mm	Weight kg
DS-12-K	605x305	-	1200	5695	700	1320	3354	4252	4802	600	-	1486	684
DS-20-K	805x405	-	1570	6293	925	1739	3531	4362	5071	823	-	1868	872
DS-28-K	905x505	-	1770	6651	1024	1831	3662	4594	5280	1007	-	1704	1056
DS-36-K	1105x505	-	2140	7126	1226	2191	3928	4830	5614	1271	-	2019	1376
DS-44-K	1205x605	-	2330	7319	1302	2341	4017	4999	5775	1407	-	2180	1543
DS-12-S	605x305	-	1200	5473	700	1320	3138	4031	4580	-	-	1558	722
DS-20-S	805x405	-	1570	5849	925	1739	3086	3918	4627	-	-	1877	924
DS-28-S	905x505	-	1770	6019	1024	1831	3036	3967	4648	-	-	1648	1126
DS-36-S	1105x505	-	2140	6234	1226	2191	3037	3994	4722	-	-	1911	1431
DS-44-S	1205x605	-	2330	6292	1302	2341	2989	3972	4748	-	-	2045	1628
DS-12-K T	605x305	605x305	1200	6695	700	-	-	5252	5802	600	2100	1486	827
DS-20-K T	805x405	805x405	1570	7293	925	-	-	5362	6071	823	2323	1868	1057
DS-28-K T	905x505	805x605	1770	7651	1024	-	-	5549	6280	1007	2507	1704	1282
DS-36-K T	1105x505	805x605	2140	8126	1226	-	-	5830	6614	1271	2771	2019	1664
DS-44-K T	1205x605	805x605	2330	8319	1302	-	-	5999	6775	1407	2907	2180	1868

Weight excluding filter elements



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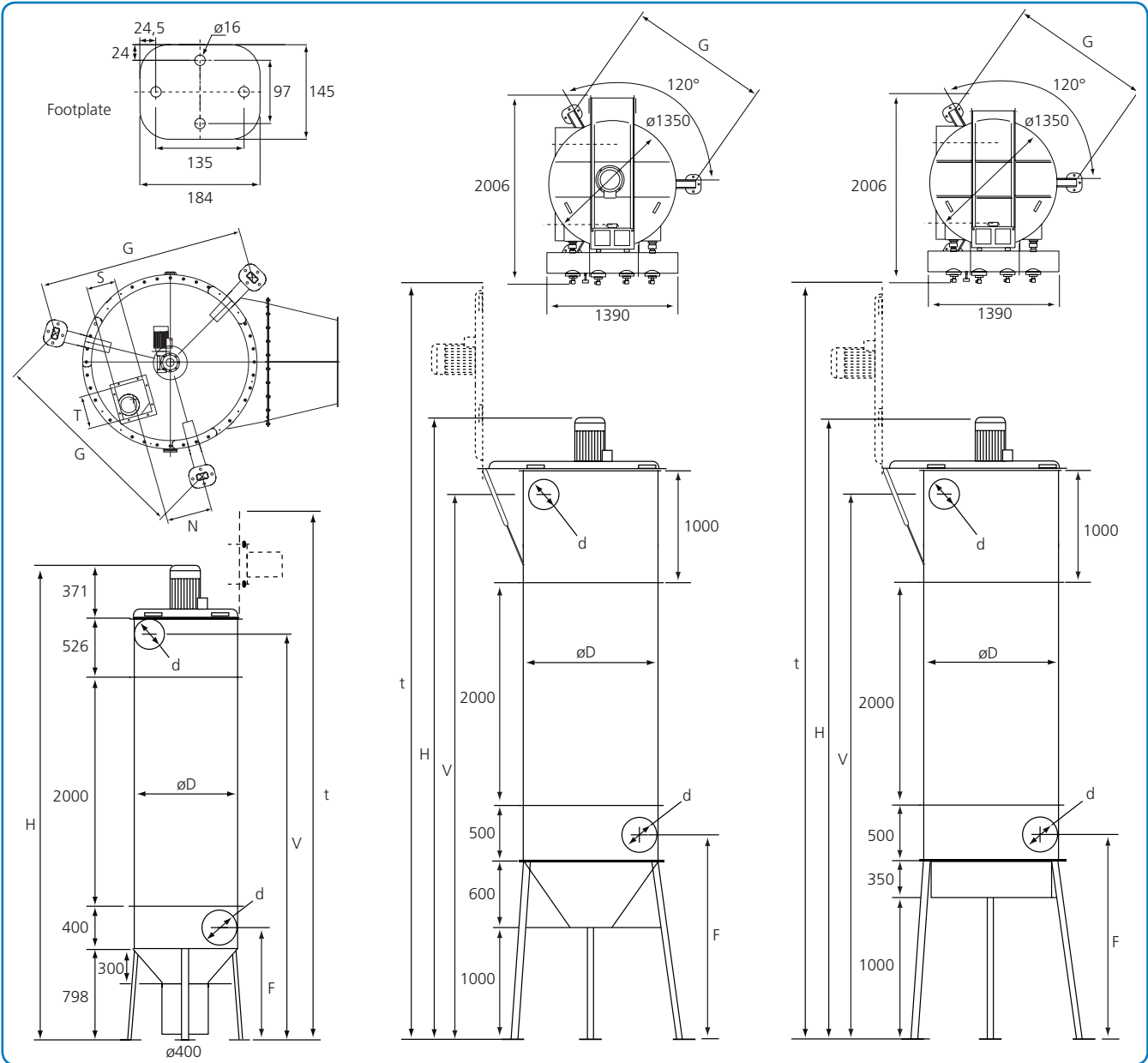
Type	J mm	M mm	Q mm	O mm	N mm	S×T mm	G mm	Weight kg
DS-12-K	700	-	-	-	-	-	1486	684
DS-20-K	925	-	-	-	-	-	1868	872
DS-28-K	1024	-	-	-	-	-	1704	1056
DS-36-K	1226	-	-	-	-	-	2019	1376
DS-44-K	1302	-	-	-	-	-	2180	1543
DS-12-S	700	-	-	346	341	220×250	1558	722
DS-20-S	925	-	-	503	290	220×250	1877	924
DS-28-S	1024	-	-	367	406	220×500	1648	1126
DS-36-S	1226	-	-	367	613	220×500	1911	1431
DS-44-S	1302	-	-	367	728	220×500	2045	1628
DS-12-K T	700	606	664.0	-	-	-	1486	827
DS-20-K T	925	791	982.5	-	-	-	1868	1057
DS-28-K T	1024	893	1041.0	-	-	-	1704	1282
DS-36-K T	1226	1078	1368.0	-	-	-	2019	1664
DS-44-K T	1302	1173	1465.0	-	-	-	2180	1868

Weight excluding filter elements



DustStorm® filter with EC cleaning system

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DS-7

DS-12-K

DS-12-S

Type	øD mm	t mm	F mm	V mm	H mm	d mm	N mm	SxT mm	G mm	Weight kg
DS-7 EC-K	900	4693	988	3563	3801	300	-	-	951	277
DS-7 EC-K E	900	6105	988	3563	4095	300	-	-	951	340
DS-12 EC-K	1200	6387	1850	4905	5193	350	-	-	1486	534
DS-12 EC-K E	1200	6817	1850	4905	5551	350	-	-	1486	656
DS-12 EC-S	1200	6160	1628	4684	4972	350	341	220x250	1558	656
DS-12 EC-S E	1200	6400	1628	4684	5330	350	290	220x250	1558	778

Weight excluding filter elements



DustStorm® filter

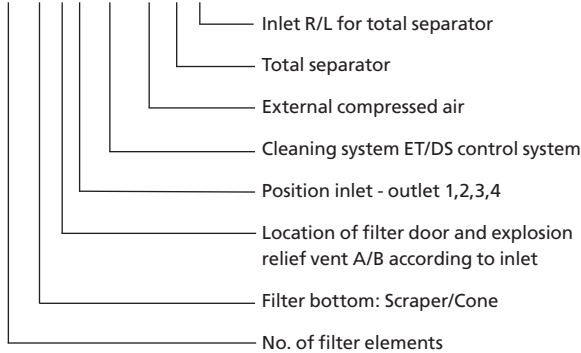
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Type designations

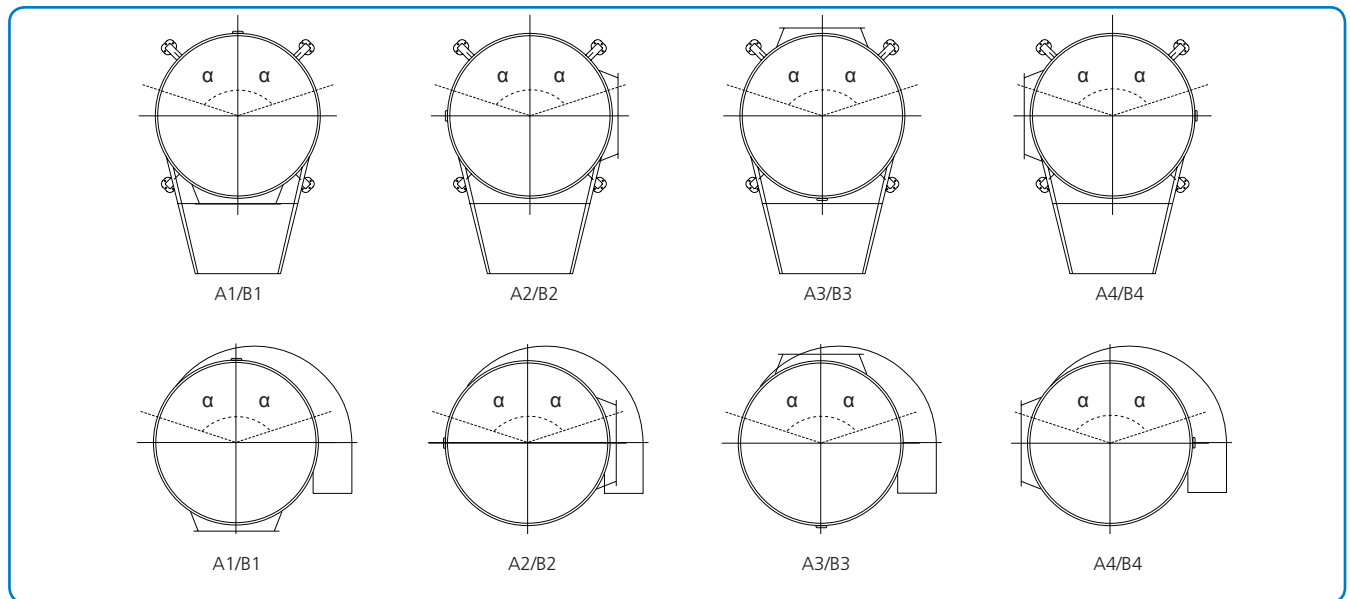
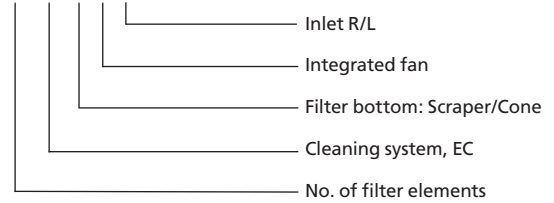
Filters are type-designated using a combination of letters and numbers separated by hyphens and spaces. Designation DS-44-K A2-ET EX T-R

thus describes a DustStorm® filter with 44 filter elements, conical bottom, filter door on the left side, outlet to the right, cleaning system ET, external compressed air, right inlet for total separator.

DS-44-K A2-ET EX T-R



DS-12 EC-K E-R



Please state location of inlet and discharge when ordering according to illustrations. Angle α indicates the distance from centre line to door and explosion relief venting respectively.

A: Filter door located on left side and explosion relief venting on right in relation to inlet.

B: Explosion relief venting located on left side and filter door on right in relation to inlet.

Roof hinging:

DS-36 and DS-44: Hinged opposite outlet.

DS-12 and DS-28: Hinge on right/left 90SDgr in relation to outlet.

Type	Angle: α
DS-12	57.5
DS-20	72.5
DS-28	39.0
DS-36	32.2
DS-44	29.6

Type	Angle: α
DS-20 T	42.5
DS-28 T	39.0
DS-36 T	32.2
DS-44 T	37.0