

Total separator R7

Reliable product separation at high material flow rates. Total separators are required when large quantities of product must be reliably separated from the conveying air. A tangential pre-separator achieves very high separation efficiency; the design, filter media, and size are precisely tailored to the application, pressure, and local conditions. Optionally available with systems for explosion protection, product discharge, final filters, and noise reduction. Specifically adaptable for the filtration of highly explosive substances, hygienic applications, and air recirculation into indoor spaces.

Features:

- Pressure-resistant to -900mbar
- Pressure shock resistant up to +1 bar
- For air volumes from 300 - 10,000 m³/h
- High filter performance due to tangential pre-separator
- Adjustable buffer volumes for high material flow rates
- Quick-release fasteners for opening the chamber
- Special versions Extra and Hygiene for food and pharmaceuticals
- Optionally with swivelling slotted plate and tool-free filter change
- Pneumatic cleaning with full immersion system
- Optionally with integrated final filter

Materials:

- Normal steel
- In contact with product 1.4301 (V2A) or 1.4404 (V4A)
- Complete 1.4301 (V2A) or 1.4404 (V4A)
- Pressure tank made of mild steel, aluminium or stainless steel

Options:

- Dust bucket or product discharge
- Silencer
- Maintenance opening
- Integrated final filter
- Level sensor
- Throttle valve
- Butterfly valve
- Extinguishing system
- Differential pressure measurement
- Pressure relief systems (flameless or bursting disc)
- Non-return flap
- Version for installation in ATEX zone 21 or 22



Layout guidelines

Calculation of required filter area:	for Polyester-needle felt, standard:	AFilter: [m²] = Air volume [m³/h]/90
	for Polyester-needle felt with PTFE:	AFilter: [m²] = Air volume [m³/h]/60

Use of filter media	Clean gas content	Grain size	Amount of dust
Polyester-needle felt. standard	< 10 mg/m³	> 0.5 µm	< 500 g/m³
Polyester-needle felt with PTFE	< 2 mg/m³	> 0.1 µm	< 100 g/m³
with endfilter H13 / H14	< 0.1 mg/m³	> 0.1 µm	< 0.01 g/m³

1 row of filter bags

Diameter	D800	D900	D1000	D1120	D1250	D1400	D1600	D2000
Filter surface (Bag)	3,75	5,75	6,6	8,4	10,8	13,5	17,3	24
Filter surface (Micropore)	8,8	11,6	15,4	19,7	26	29,8	36,4	44,8
Height cylinder	1.100	1.100	1.300	1.300	1.400	1.400	1.500	1500

2 rows of filter bags

Diameter	D800	D900	D1000	D1120	D1250	D1400	D1600	D2000
Filter surface (Bag)	7,5	11,5	13,2	16,8	21,6	27	34,6	48
Filter surface (Micropore)	17,6	23,2	30,8	39,4	52	59,6	72,8	89,6
Height cylinder	1.600	1.600	1.800	1.800	1.900	1.900	2.000	2.000

3 rows of filter bags

Filter surface	3,3	3,4	3,5	3,6	3,7	3,8	3,9	3,12
Diameter	D800	D900	D1000	D1120	D1250	D1400	D1600	D2000
Filter surface (Bag)	11,25	17,25	19,8	25,2	32,4	40,5	51,9	72
Filter surface (Micropore)	26,4	34,8	47,2	59,1	78	89,4	109,2	134,4
Height cylinder	2.100	2.100	2.300	2.300	2.400	2.400	2.500	2.500

Technical Specifications

Compressed air	Connection < 6 bar	Consumption 0,02 – 0,2 m³/h/m²
Control with or without Delta p cleaning	Voltage:	Frequency:
	230 V	AC
	110 V	AC
	24 V	DC/AC