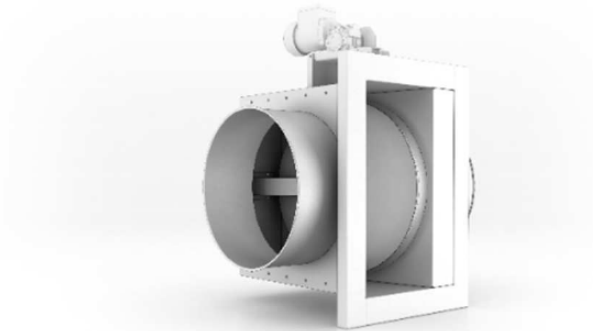
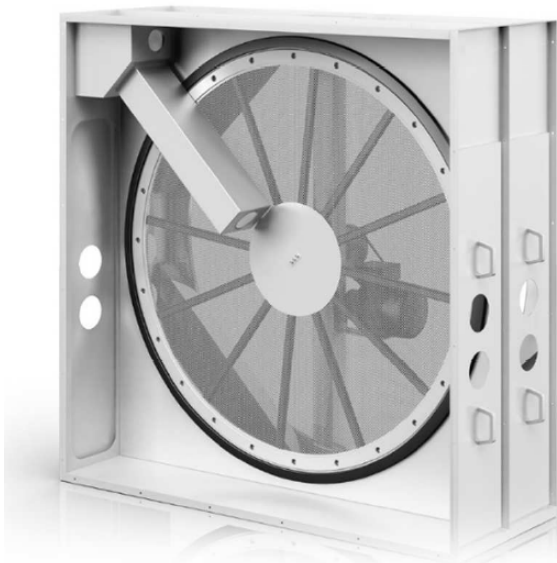


Prefilter Type TVM/TVN

For air streams with a high content of fiber and particles



Functional Description

The prefilter type TVM/TVN consists of a housing which is separated by a dividing wall in which the rotating filter disc is mounted. The raw gas side is sealed off from the clean gas side by a special felt strip around the filter disc. The filter disc is cleaned continuously by negative pressure through a stationary slot nozzle (type TVM) or by a traversing round nozzle (type TVN).

The nozzle does not touch the filter screen during cleaning. A gear motor drives the filter screen and nozzle with belt drive mounted to the filter disc on the clean gas side. The prefilter type TVM/TVN can be integrated directly into the duct. The drive of the filter disc occurs about a gear engine with strap or optionally chain, which is mounted on the pure gas side, optionally beyond the airflow.

Prefilter Type TVM/TVN

The prefilter type TVM/TVN is suited particularly for big exhaust air streams with high fiber or particle shares of the most different materials, dimensions and forms. The wide variety screen meshes are adapted to the application.

Application in various industrial sectors

- Textile industry
- Non-woven industry
- Wood working industry
- Paper and cellulose industry
- Tobacco industry
- Fiberglass industry

Advantages

- Regenerative filter unit
- No pressure fluctuations in the extraction system due to continuous cleaning
- Space saving installation due to disc shape and compact design
- Optimum flow velocity achieved by exact adaptation to the total air quantity
- No fiber contamination of drive elements and easy access due to installation behind the prefilter screen
- Easy filter media change
- Minimized pressure loss due to optimal airflow design
- Energy efficient

Prefilter Type TVM/TVN

For air streams with a high content of fiber and particles

Type TVM

Volumetric Airflow [m³/h]	Cover plate *) diam. [mm]	Airflow velocity ***) net filter area [m/s]	Prefilter extraction, Fiber volume max.			Δp _{stat} **) [Pa]
			Recycling waste [kg/h]	Fibers, e. g. comber waste [kg/h]	Air-volume [m³/h]	
Type TVM 1120						
10,000 ... 12,000	500	5.6 ... 6.8	20	10	800	2,200
over 12,000 ... 15,000	400	5.6 ... 7.1	30	15	1,000	
over 15,000 ... 20,000	–	5.8 ... 8.3	40	20	1,500	
Type TVM 15						
15,000 ... 20,000	1,000	5.7 ... 7.5	30	15	1,100	2,200
over 20,000 ... 25,000	750	5.3 ... 6.7	50	22	1,750	
over 25,000 ... 40,000	400	5.6 ... 9.0	70	30	2,350	
Type TVM 20						
20,000 ... 30,000	1,480	5.0 ... 7.5	35	15	1,200	2,200
over 30,000 ... 40,000	1,250	5.3 ... 7.3	65	28	1,750	
over 40,000 ... 45,000	1,000	5.6 ... 6.4	70	30	2,300	
over 45,000 ... 55,000	750	5.5 ... 6.7	85	35	2,700	
over 55,000 ... 70,000	600	6.3 ... 8.1	95	40	3,000	
Type TVM 25						
to 65,000	1,480	... 6.2	80	35	2,400	2,200
over 65,000 ... 75,000	1,250	5.4 ... 6.2	90	40	2,800	
over 75,000 ... 85,000	1,000	5.5 ... 6.3	110	50	3,300	
over 85,000 ... 90,000	750	5.8 ... 6.2	120	53	3,750	
over 90,000 ... 130,000	600	6.0 ... 8.6	130	58	4,100	

Type TVN

Volumetric Airflow [m³/h]	Cover plate *) diam. [mm]	Airflow velocity ***) net filter area [m/s]	Prefilter extraction		Δp _{stat} **) [Pa]
			Fiber volume max. [kg/h]	Air volume [m³/h]	
Type TVN 15					
15,000 ... 20,000	1,000	5.7 ... 7.5	ca. 100	1,000	2,200
over 20,000 ... 25,000	750	5.3 ... 6.7			
over 25,000 ... 40,000	400	5.6 ... 9.0			
Type TVN 20					
20,000 ... 30,000	1,480	5.0 ... 7.5	ca. 100	1,000	2,200
over 30,000 ... 40,000	1,250	5.3 ... 7.3			
over 40,000 ... 45,000	1,000	5.6 ... 6.4			
over 45,000 ... 55,000	750	5.5 ... 6.7			
over 50,000 ... 70,000	600	6.3 ... 8.1			
Type TVN 25					
to 65,000	1,480	... 6.2	ca. 100	1,000	2,200
over 65,000 ... 75,000	1,250	5.4 ... 6.2			
over 75,000 ... 85,000	1,000	5.5 ... 6.3			
over 85,000 ... 90,000	750	5.8 ... 6.2			
over 90,000 ... 130,000	600	6.0 ... 8.6			

*) The diameter of the selected cover plate must be specified on the order form.

**) With a Δp of 150 Pa in front of the filter disc. If necessary, the partial vacuum must be increased in accordance with the pressure level of the plant.

***) To ensure reliable fiber extraction, it is essential for all the fibrous matter to be drawn onto the filter disc. This requires a minimum airflow velocity of 5 m/s in the case of lightweight material or 6 m/s in the case of heavy material, e.g. recycled material.

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