

MMBF filters

The MMBF filters (Multi Modular Bag Filter) are under- and over-pressure filters designed to run in constant operation. They are modular and can therefore be added to in line with growing capacity requirements and can be adapted to any task. More modules can subsequently be added, or they can be rebuilt to a different height or other material transport system to meet changed extraction needs. The MMBF filter is made of high tensile steel to ensure strength combined with low weight. The filter is self-supporting with adjustable legs, and can be erected outdoors or in.

More efficient operation

The number of filter bags per module is 30. This means large filter area and low riser speed in the filter for a given air volume. The perforated sheet is shaped to avoid chafing the filter bags. The bags are antistatic with a large diameter (220) and fitted with a snap ring fastener, reducing dust particle retention, enabling more efficient bag cleaning. The result is lower pressure loss and reduced risk of blockage. The partition wall between the modules makes continuous cleaning easy during operation.

Fast assembly

MMBF filters are factory-assembled as standard. A top and bottom part are delivered which can quickly be erected and assembled. The filters can also be supplied unassembled. The filter is multi-modular, and can be assembled using bolts in high tension steel with integrated washers, significantly reducing assembly time and the risk of over-tightening bolt assemblies.

Surface

Galvanised sheet, class Z 275 - zinc plating min. 275 g/m² double-sided.

Inlet

The MMBF filter is supplied with the supply air chamber in the conical bottom. Side inlet 300×400 mm is standard, but it can also be supplied with one and two end inlets 400×500 mm. The standard inlet is supplied with contra-flaps, which are open during normal filter operation, but close when the fan is switched off. The flaps prevent the air flow created by the regenerating fan returning into the pipe system.

Outlet

The MMBF filter has a built-in return air conduit. The outlet from the return air conduit is available with an ATEX-approved fire damper. Filter type H outlet is 450×950 mm and filter type E is 600×950 mm.

Cleaning system

The regenerating fan ensures easy, effective filter bag cleaning. One module at a time is regenerated, as there are partition walls between the modules.

Discharge system

Screw, rotary valve or bucket discharge systems are available.

The MMBF screw is available in 2 to 12 modules. The screw is $\varnothing 180$ mm and made of AISI 304 and supplied as standard with 22 min⁻¹ or 43 min⁻¹.

The MMBF rotor filter is available with 1 to 4 modules and with JK-50S, JK-100S, JK-150S or JK-200S.



The MMBF bag emptying filter is available with 1 to 4 modules with a dust bucket under each. Buckets are supplied fully assembled direct from JKF, fitted with inspection glass to give a good indication of fill status. Easily mounted, using a clamp with uniform key code.

The filter is fitted with a pressure-equalisation hose to prevent the bag being sucked up during startup at underpressure. Hose can be easily disconnected using a compressed air coupling.

ATEX

The MMBF filter is ATEX-approved and has approved explosion membranes. Choose between side venting in the cone (ERH) 600x600 KER or JKF's specially developed VFV® explosion venting (ERR) 920x920 KER, which vents vertically through the filter top.

Operating range

Pressure:	+/- 5000 Pa
Filter area:	41,7-612 m ²
Max. operating temperature:	70°C
Min. operating temperature:	-20°C (available for: -40°C)

Connection

Motor

Regenerating fan

H filter ø450: 1.5 kW, 2900 min⁻¹, 3x400 V, 50 Hz, 3.2 A

E filter ø600: 1.5 kW, 1450 min⁻¹, 3x400 V, 50 Hz, 3.2 A

Screw

0.55 kW, 22 min⁻¹, 3x400V, 50 Hz, 2.5 A

0.75 kW, 43 min⁻¹, 3x400V, 50 Hz, 3.2 A

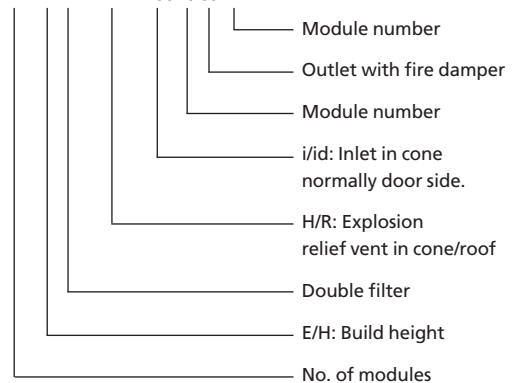
Filter bags

30 filter bags per module

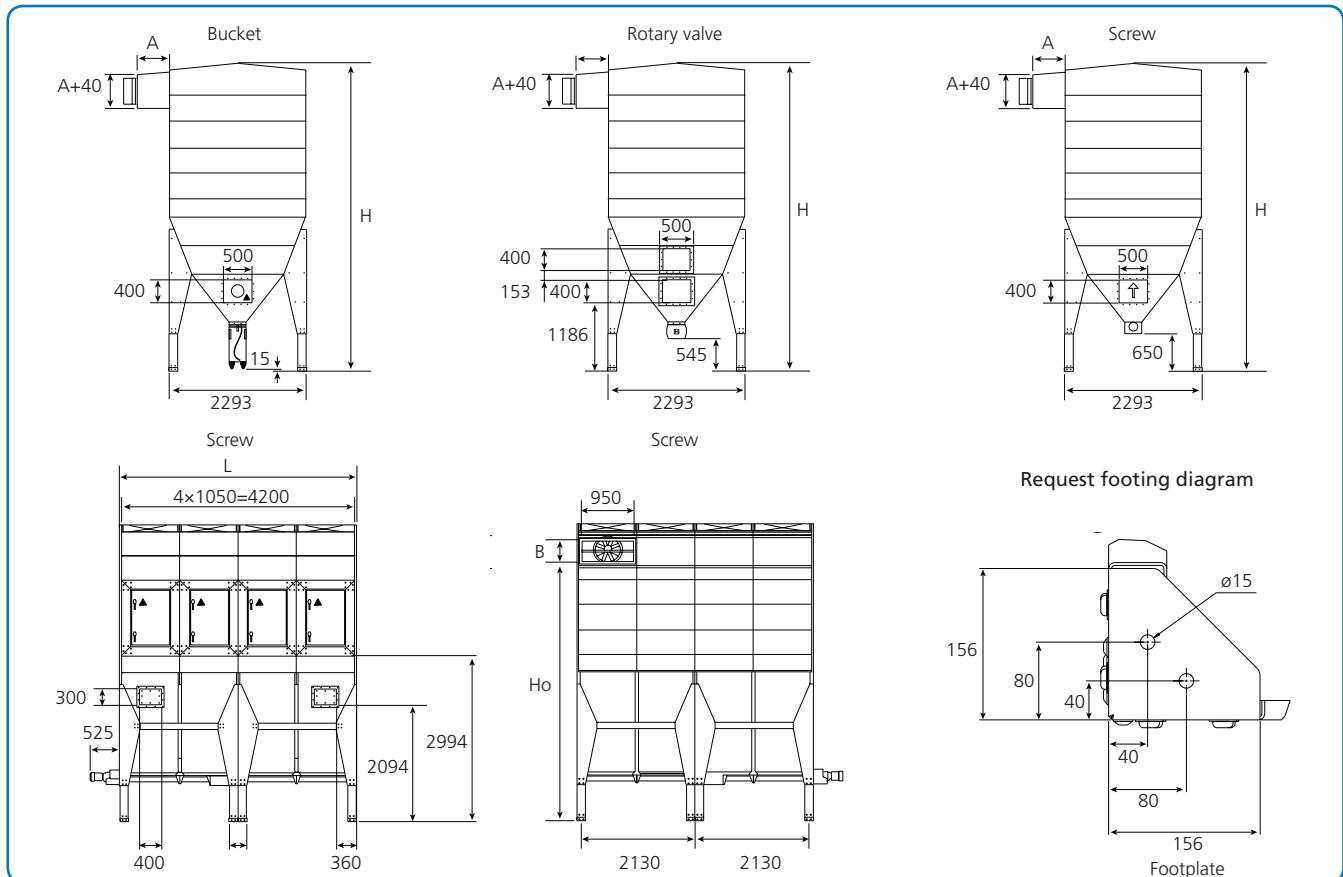
Type designations

Filters are type-designated using a combination of letters and numbers separated by hyphens and spaces. Designation MMBF-4M E D-ERH-id/4/o/1 thus describes a MMBF filter with 4 modules, height, double filter, explosion relief venting in the cone, inlet in module 4, outlet with fire damper in module 1.

MMBF-4M E D-ERH-id/4/o/1



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Discharge			Type				Filter area	H	Ho	L	A	No. of	Bucket	Rotary	Screw	B	
							m ²	mm	mm	mm	mm	legs	kg	valve	kg	kg	
Bucket	Rotary valve	-	MMBF	1	M	HD	ERH/ERR	41.7	5350	4660	1130	550	4	1137	1205	-	400
Bucket	Rotary valve	-	MMBF	1	M	ED	ERH/ERR	51.0	5800	4910	1130	750	4	1220	1289	-	600
Bucket	Rotary valve	Screw	MMBF	2	M	HD	ERH/ERR	83.4	5350	4660	2130	550	4	1656	1655	1770	400
Bucket	Rotary valve	Screw	MMBF	2	M	ED	ERH/ERR	102.0	5800	4910	2130	750	4	1823	1822	1937	600
Bucket	Rotary valve	Screw	MMBF	3	M	HD	ERH/ERR	125.1	5350	4660	3180	550	4	2335	2324	2418	400
Bucket	Rotary valve	Screw	MMBF	3	M	ED	ERH/ERR	153.0	5800	4910	3180	750	4	2588	2557	2681	600
Bucket	Rotary valve	Screw	MMBF	4	M	HD	ERH/ERR	166.8	5350	4660	4280	550	8	3215	3183	3190	400
Bucket	Rotary valve	Screw	MMBF	4	M	ED	ERH/ERR	204.0	5800	4910	4280	750	8	3468	3446	3489	600
-	-	Screw	MMBF	5	M	HD	ERH/ERR	208.5	5350	4660	5330	550	8	-	-	3890	400
-	-	Screw	MMBF	5	M	ED	ERH/ERR	255.0	5800	4910	5330	750	8	-	-	4255	600
-	-	Screw	MMBF	6	M	HD	ERH/ERR	250.2	5350	4660	6380	550	12	-	-	4590	400
-	-	Screw	MMBF	6	M	ED	ERH/ERR	306.0	5800	4910	6380	750	12	-	-	5021	600
-	-	Screw	MMBF	7	M	HD	ERH/ERR	291.9	5350	4660	7430	550	12	-	-	5290	400
-	-	Screw	MMBF	7	M	ED	ERH/ERR	357.0	5800	4910	7430	750	12	-	-	5787	600
-	-	Screw	MMBF	8	M	HD	ERH/ERR	333.6	5350	4660	8480	550	16	-	-	5990	400
-	-	Screw	MMBF	8	M	ED	ERH/ERR	408.0	5800	4910	8480	750	16	-	-	6553	600
-	-	Screw	MMBF	9	M	HD	ERH/ERR	375.3	5350	4660	9530	550	16	-	-	6690	400
-	-	Screw	MMBF	9	M	ED	ERH/ERR	459.0	5800	4910	9530	750	16	-	-	7319	600
-	-	Screw	MMBF	10	M	HD	ERH/ERR	417.0	5350	4660	10580	550	20	-	-	7390	400
-	-	Screw	MMBF	10	M	ED	ERH/ERR	510.0	5800	4910	10580	750	20	-	-	8085	600
-	-	Screw	MMBF	11	M	HD	ERH/ERR	458.7	5350	4660	11630	550	20	-	-	8090	400
-	-	Screw	MMBF	11	M	ED	ERH/ERR	561.0	5800	4910	11630	750	20	-	-	8851	600
-	-	Screw	MMBF	12	M	HD	ERH/ERR	500.4	5350	4660	12680	550	24	-	-	8790	400
-	-	Screw	MMBF	12	M	ED	ERH/ERR	612.0	5800	4910	12680	750	24	-	-	9617	600