



MAHLE
Industriefilter

Automatic Metal Edge Filter

With radial cleaning device

AF 71 H

High-pressure version up to 400 bar

for liquids, pastes, etc.
Connection size: G 1 1/4

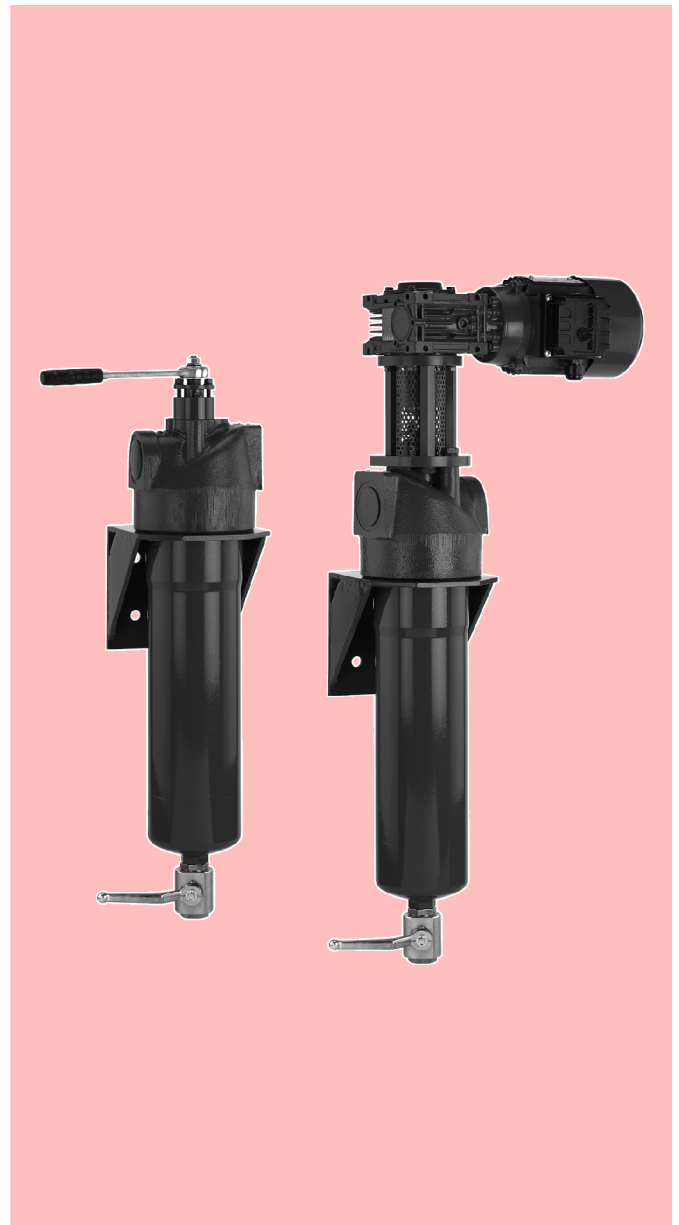
1. Principle of operation

The **MAHLE metal edge filter system** is used for filtering and homogenising a wide range of liquids, pastes and such like. This compact in-line pressure filter requires no waste disposal such as used filter material. It can be cleaned manually or automatically without having to interrupt process operations.

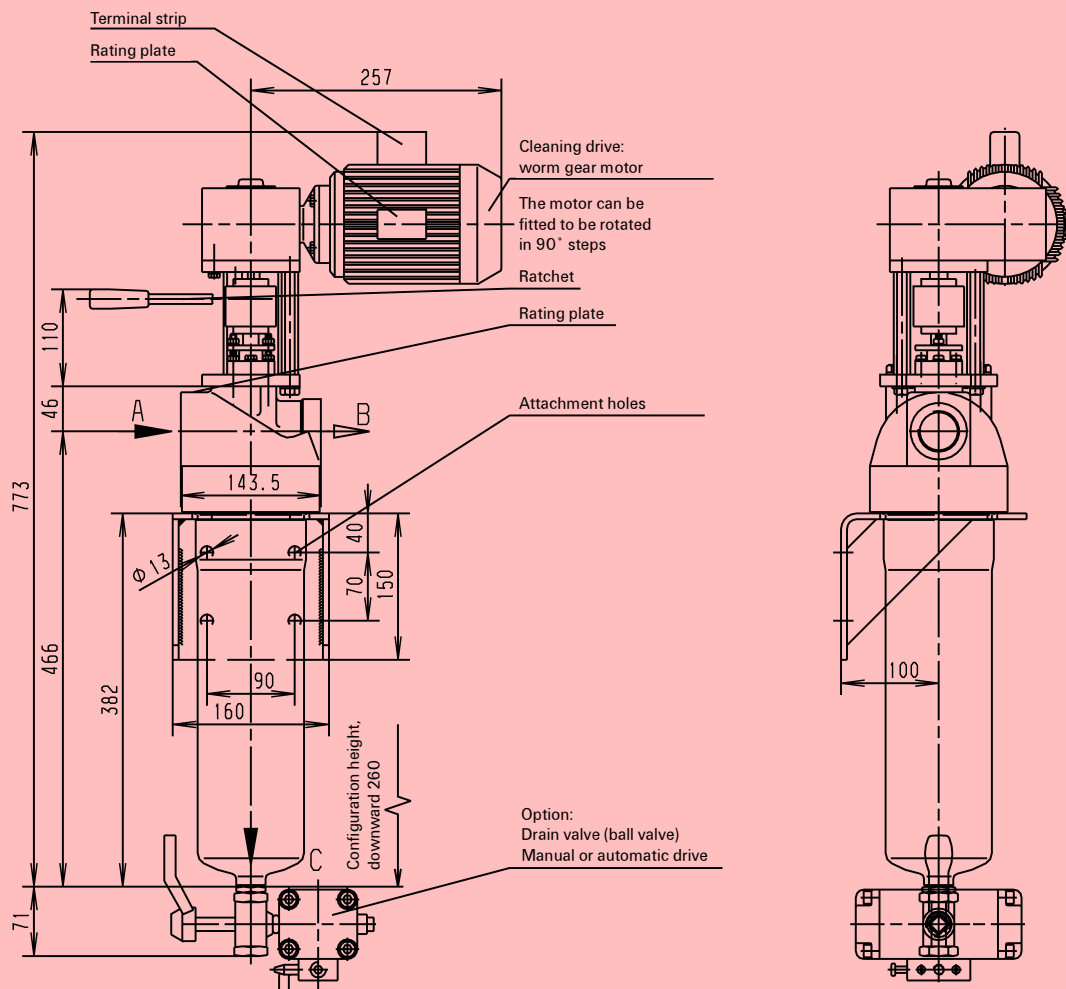
The liquid flows from the outside inwards through the **MAHLE filter cartridge**. The filtrate is discharged at the top, opposite the inlet connection. Solid matter, etc. is separated on the triangular-profiled wire winding on the filter cartridge.

The MAHLE filter cartridge is cleaned by rotating it against a fixed scraper blade. The special profile of the wire winding ensures a very effective cleaning process. The **patented AKF system** prevents high axial forces, ensuring that the cleaning process is trouble free.

The residue deposited in the collection cone can then be emptied through the drain valve while the system is switched off or while it is in operation.



2. Dimensions and data



Motor data

Worm gear motor
MB winding

V	Hz	kW	rpm	A
△ 230 ± 10 %	50	0,18	17	0,7
△ 400 ± 10 %	50	0,18	17	0,4
△ 266 ± 10 %	60	0,22	21	0,7
△ 460 ± 10 %	60	0,22	21	0,4

Degree of protection: IP 55 insulation class F; output torque: 52 Nm

Worm gear motor with explosion protection
EExe II T4; output torque: 52 Nm

V	Hz	kW	rpm	A
△ 230 ± 10 %	50	0,18	17	0,7
△ 400 ± 10 %	50	0,18	17	0,4

Dimensions	Contents	Weight	Cleaning drive
Type	(l)	(kg)	
AF7132-91.-	2,5	10	Ratchet
AF7133-91.-	2,5	14	Gear motor
AF7134-91.-	2,5	14	Gear motor expl.-prot.

Filter data

Perm. operating pressure: 400 bar
Perm. operating temperature: + 180 °C
- 10 °C

Sealing material at operating temperature up to max. 180 °C FPM (Viton)
alternatively PTFE

Permissible differential pressure: cartridge 40 bar
motor can 20 bar

A-B / Inlet / Outlet connection: G1 1/4
C / Drain connection: G1/2

Standard materials:
Filter head NCI 40
Filter bowl Ck 15
Installed parts ch. steel / high-grade steel
Bearing bushes PTFE-based
FPM (Viton) seals

Drive shaft seal: Collar packing and O-ring

Outer paintwork: Artificial resin primer,
blue conforming to RAL 5007

Other finishes available on request

Subject to technical modifications!

3. Type designation

Type designation for empty filter housings

Specimen selection:

AF 713		3	-	16		9	1	-	7	0	2	0	1	/ H 1				
Size, quantity, Ø and length of filter elements in mm		Cleaning drive		Inlet / outlet connections		Permissible operating pressure [bar] Head and bowl	Standard material with FPM seal + PTFE bearing		delta-p display / switch with adapter in the in-feed / drain		Drain valve		Bypass valve	End no. for	Design variants	Type	Serial number	
1 x Ø 42 x 190	2	Ratchet	16	G1 1/4	9	PN 400	1 Head / bowl NCI / Ck internal parts ch. steel or similar	6	PIS-3192/ 2.2 bar/ stat. 450 bar	B l a n k	1	Manual ball valve	1	20 bar	none	Standard filter	Cast iron finish c	Serial number
	3	Standard gear motor 230/400 V/50 Hz 266/460 V/60 Hz 10 rpm		Others available on request		Others available on request			7		PIS-3192/ 5 bar stat. 450 bar	2	Automatic ball valve el.-pneum. 24 V double-action		3700	PTFE seals Others available on request		
	4	Standard gear motor 230/400 V/50 Hz EEx II T4 Others available on request					3	Head / bowl NCI / Ck internal parts high-grade steel 1.4301				3	Automatic ball valve el.-pneum. 230 V double-action					
						5	Head / bowl NCI / Ck nickel-plated internal parts high-grade steel 1.4301 Others available on request				4	Automatic ball valve el. 24 V						
									5		Automatic ball valve el. 230 V Others available on request							
	0	Different design, see end no.	0	Different design, see end no.	0	Different design, see end no.	0	Different design, see end no.	0	Without or different design, see end no.	0	Without or different design, see end no.	0	Without or different design, see end no.			s	Welded finish available on request

Unless otherwise specified, accessories are made from the same or similar materials and are subject to at least the permissible filter operating pressure.

If the cleaning motor is used in explosion-protected design, the drain valve is also designed to be explosion-protected.

Type designation for filter elements

Specimen selection:

AF 70		1		3			-		005	
Series			Profile support material	Triangular profiled winding material	Supporting ring material	Triangular profile width in mm	Ø x length in mm		Gap width in µm	
AF 70	Cartridges	1	Al	1.4571	1.4571	0,5	3	Ø 42 x 190	003	30
		3	1.4581	1.4571	-	0,5			004	40
									005	50
									006	60
									008	80
									010	100
									013	130
									016	160
	Elements	7	-	1.4571	1.4571	1,0	020	200		
		8	-	1.4571	1.4571	0,75	025	250		
							036	360		
							050	500		
							100	1000		
							150	1500		
							200	2000		
		Others available on request								



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