

# SAF filters

Amiad



SAF filters are industrial, self-cleaning metal filters from Amiad. SAF filters can handle large quantities of contaminant that - if required - can be automatically discharged during filtration. Only a small amount of flushing water is released during flushing. Furthermore, the filters have a compact design so that they can be installed in a unit.

The large effective screen surface area and the high quality of the screen make Amiad SAF filters unique. The screen has no blind spots, can be fully used for filtration and can also be completely cleaned. With the SAF filters the water enters the filter through a coarse screen and leaves the filter via the multi-layer fine filter screen.

The contamination is collected on the inside of this fine filter screen, causing the resistance through the filter to increase. The SAF filter starts the flushing cycle as soon as this resistance increases to above 0.5 bar or when the set time has expired. During the flushing cycle, the drainage tap opens and allows the pressure in the suction scanner and in the nozzles in front of the screen to drop. The electric motor ensures that the scanner cleans the whole screen spirally by means of several suction nozzles on the shaft.

## APPLICATION

SAF filters are used where a high capacity, fine filtration or continuous filtration is required. Application for pre-filtration, drip irrigation, spinkler irrigation (roof, greenhouse and outdoor irrigation), fog installations, filtration for UV installations and underground water storage.

## CHARACTERISTICS

- ✓ Filtration from 10 to 800 micron
- ✓ Large effective screen surface area
- ✓ Coarse inlet filter and fine filter screen
- ✓ Automatic flushing cycle with various setting possibilities
- ✓ Small amount of flushing water (max. 1%)
- ✓ Available with Amiad control panel (PLC or relay)
- ✓ Also available with spring-loaded nozzles (for extra suction force)
- ✓ CE approved
- ✓ Blue colour, RAL 5010



## TECHNICAL DATA

Filter		SAF-1500	SAF-3000	SAF-4500	SAF-6000
<b>General information</b>					
Theoretical capacity of body*	m <sup>3</sup> /h	80	150	250	400
Effective filtration area	cm <sup>2</sup>	1500	3000	4500	6000
Standard filtration levels	micron	10, 25, 50, 80, 100, 130, 200, 300, 500, 800			
Material of filter screen		4 layers of woven stainless steel 316L			
Diameter of connection flange	inch	2"-3"-4"	3"-4"-6"	4"-6"-8"	6"-8"
Minimum working pressure	bar	2 (lower pressure on request)			
Maximum working pressure	bar	10			
Maximum (working)temperature	°C	50	50	60	60
Weight	kg	2": 84	3": 105	4": 150	6": 240
		3": 86	4": 110	6": 156	8": 245
		4": 88	6": 115	8": 165	
<b>Flushing</b>					
Flushing time **	sec	15	20	20	40
Flushing water per cycle***	litres	25	64	83	280
Minimum flushing capacity ***	m <sup>3</sup> /h	6	11	15	25
Water content	litres	42,5	56,3	77,2	127
Drainage Dorot-75 S 3-way (basic)		2"	2"	2"	2"
Flushing criteria		Pressure difference of 0.5 bar (standard)			
No. of nozzles		2	3	4	4
<b>Control and electricity</b>					
Operating voltage		3-phase, 230/400 VAC 50/60 Hz			
Electric motor output	kW	0,18	0,18	0,18	0,258
Force	pk	¼	¼	¼	½
Nominal power consumption (at 400V)	A	0,71	0,71	0,71	0,78
Inrush current (at 400V)	A	2,6	2,6	2,6	3,3
Co sinus Phi		0,67	0,67	0,67	0,73
Control voltage		24 VAC 50/60 Hz (from 2020 the SAF filter is provided with a sticker '5,5W 50/60Hz')			
<b>Construction material</b>					
Filter housing		epoxy-coated steel (blue: RAL 5010)			
Filter cover		SMC Polyester / Epoxy-coated steel			
Cleaning mechanism		Stainless steel 316L, Acetal			
Drainage valve		Reinforced polyamide and EDPM			
Seals		synthetic rubber, Teflon			

\* see application recommendation table \*\* adjustable \*\*\* with 2 bar pressure difference

## CONNECTION CAPACITY

Dimensions	Recommended capacity
	m <sup>3</sup> /h
2"	20
3"	40
4"	80
6"	150
8"	250

## BRACKET MOUNT

Type	Diameter (mm)	Diameter (")	Article number VDL Pipe clamp
SAF-1500	255	10	77300-104098
SAF-3000	255	10	77300-104098
SAF-4500	276	11	77300-104096
Saf-6000	355,6	14	77300-104101

## FILTER SELECTION

The choice of filter depends on the desired capacity, filtration level and contamination level of the water. The selection table below can be used to make the right choice. The recommendations have been compiled with the greatest care on the basis of practical experience and based on an average water contamination. Deviations can occur, for example, due to dirtier water or pre-filtration; in some cases rainwater can be more contaminated than surface water. It is then possible that the values for surface water have to be used for rainwater. If in doubt, ask Netafim for advice.

### Application recommendations for SAF filters (capacity in m<sup>3</sup>/h)

Micron	300	200	130	100	80	50	25	10
<b>Rain water</b>								
SAF-1500	60	58	50	45	35	25	15	6
SAF-3000	120	116	100	90	70	50	30	12
SAF-4500	180	174	150	135	105	75	45	18
SAF-6000	240	232	200	180	140	100	60	24
<b>Surface water</b>								
SAF-1500	50	45	35	30	25	15	10	5
SAF-3000	100	90	70	60	50	30	20	10
SAF-4500	150	135	105	90	75	45	30	15
SAF-6000	200	180	140	120	100	60	40	20
<b>Drain water</b>								
SAF-1500	45	40	30	25	20	12	8	4
SAF-3000	90	80	60	50	40	24	16	8
SAF-4500	135	120	90	75	60	36	24	12
SAF-6000	180	160	120	100	80	48	32	16

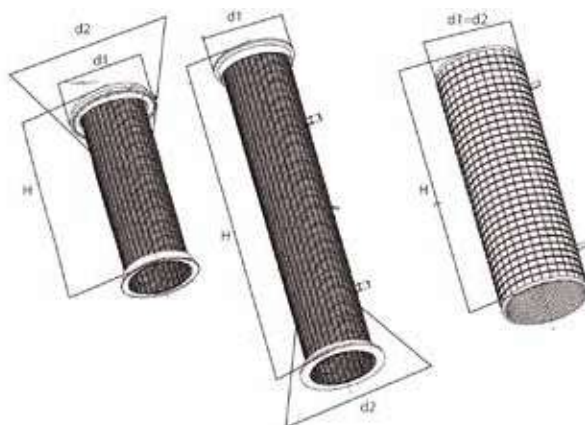
### Dimensions of stainless steel screen elements

Type	Screen cylinder		
	ø (mm)		H (mm)
	d1	d2	
SAF-1500	240	180	370
SAF-3000	240	180	665
SAF-4500	210	180	910
SAF-6000	265	265	815

SAF-1500/3000

SAF-4500

SAF-6000



### Screen codes

Filtration level	Code
Micron	on screen
10	DTW 18
25	SPW 34
50	SPW 63
80	SPW 75
100	SPW 101
130	SPW 125
200	SPW 201
300	Square Mesh
500	Square Mesh
800	Square Mesh

## SPRING LOADED NOZZLES

The SAF Supernozzles increase the suction force when cleaning SAF filters. The contamination is drawn out of the screen with more force. The SAF Supernozzle is pressed against the protective layer of the filter screen by a spring mechanism. During cleaning, all water is forced through the screen so that maximum suction force is created through the screen. This greatly improves the cleaning effect, particularly with finer screens (10 - 50 micron) and/or with cloying contaminants.

Tests with 10 micron screens showed over 50% less flushing cycles and significantly less flushing water per flushing cycle.

The Supernozzles have sliding elements (caps) made from a special, wear-resistant plastic that move along the screen during cleaning. Depending on the use, these sliding elements have to be replaced periodically. If the nozzles are not replaced, the screen can be damaged in extreme cases. Replacement can easily be carried out when the shaft is removed from the filter.

The flushing pressure is the difference in pressure between the outgoing stream and the flushing line. Ensure that the maximum flushing pressure does not exceed 4.5 bar, measured between the outlet and flushing inlet of the filter, during flushing.

The SAF Supernozzles can be installed in any SAF filter by replacing the suction scanner (shaft with nozzles) with a shaft with Supernozzles.

## ABBREVIATIONS DESIGNATIONS

The abbreviations T1, T2, T4, T6 or combinations thereof are used in the parts of the various SAF filters.

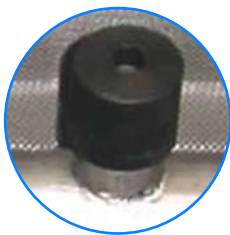
These abbreviations stand for:

T1	: SAF-1500
T3	: SAF-3000
T4	: SAF-4500
T6	: SAF-6000
T1346	: Part can be used in all types of SAF filter



## TYPES OF NOZZLES

A model SAF Nozzles



B model SAF Nozzles



SAF Supernozzles



## SAF SUPER SEAL

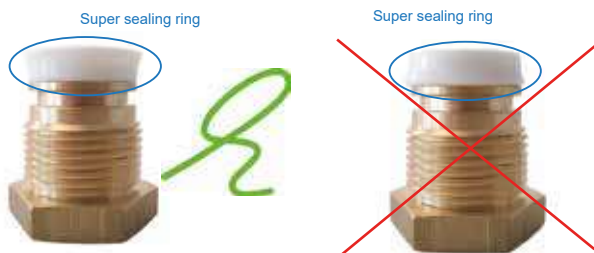
Netafim, in partnership with Amiad, has developed a new shaft seal kit for the SAF filter. This sealing kit assures a long-lasting leak-free shaft seal, especially for SAF filters that are frequently flushed. The kit fits the SAF 1500, 3000 and 4500. The kit contains the parts needed to replace the current seal with a SAF Super Seal. Individual parts are available separately. Since late 2020, all SAF filters have been fitted with the SAF Super Seal as standard.

## SOLUTION FOR HEAVY CONTAMINATION

Leakage along the shaft is often caused by heavy contamination, which means the SAF filter has to be frequently flushed. Flushing very frequently wears out the internal O-ring excessively. The new SAF Super Seal is more resistant to this. But it does not reduce the frequency of flushing, and heavy contamination still causes extra wear on parts such as the super nozzles. We recommend taking measures to reduce the amount of contamination, such as cleaning the water storage.

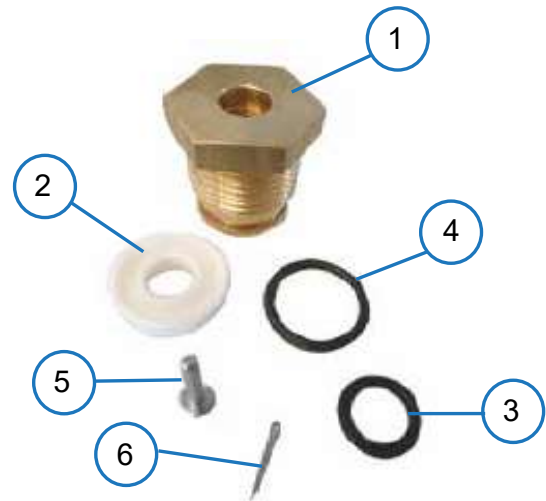
## SAF SUPER SEAL: INSTALLATION & MAINTENANCE

- ✓ In addition to the usual work involved in replacing the shaft seal, it is important that attention is paid to installing the Super Seal ring in the correct place. After all, it must seal the pressure difference between the filter and the atmosphere. Make sure the flat side is on the side of the sealing nut (see photos). Use enough Vaseline during installation, as this makes it easier to insert the ring.
- ✓ During maintenance, the Super Seal ring and the internal and external O-rings must be replaced.



## Parts list Super seal set T134 (02227-303180)

No.	Article no.	Article
1	74480-000094	Am-SAF-part Super Sealing nut T134
2	74480-016190	Am-SAF-part Super Sealing ring T134
3	74480-018000	Am-SAF-part Sealing nut int O-ring T134
4	74480-060870	Am-SAF-part Sealing nut ext O-ring T134
5	74480-018060	Am-SAF-part Connect.pin driveshaft T134
6	74480-018065	Am-SAF-part Split pin 1.6x12 T134



## SAF UL-CSA MOTOR

The SAF filters are fitted with 400-V SIT1 rotary motors as standard. Given the growing demand for motors that function according to the American standard, Netafim has introduced two new models with UL-CSA certification. This American certification prioritises fire safety and safety in general. Special conversion kits are available to adapt the SAF filter in our factory, so that the filter can be immediately exported.

The standard motor is a 230/400-V 50-Hz or 276/480-V 60-Hz model. As an option, the motor is available in the same voltage with UL-CSA. Other voltage on request.



## CONTROL BOARD TYPE E

Compared to its predecessor type C, the flush controller type E has been completely renewed. The beating heart of this controller is a new Siemens Logo! PLC, which provides clear information about flushing cycles and settings to its user. This PLC is also very easy to operate and settings such as flushing interval or time starts can be easily set. The adjustment options and reliability of the coil controller have also been greatly improved. The Type-E controller is used to flush SAF filters. The pressure difference switch of the SAF filter can serve as an input to flush when the pressure difference is too high. However, it is also possible to flush at fixed time settings or time intervals. The filter can also be started externally, for example by a start contact of a horticultural or irrigation computer. The controller can be paused when the motor thermal protection is active and can trigger an external alarm.

## APPLICATION

The type-E coil controller for SAF filters is mainly used when the SAF filter is used completely autonomously and/or outside an irrigation unit. But also where the flush control is not already integrated in the existing control panel on the unit.

## CHARACTERISTICS

- ✓ Suitable for all SAF filters
- ✓ All-in-one control
- ✓ Compact housing
- ✓ Flushing on: time, differential pressure, manual or continuous setting
- ✓ Flushing counter
- ✓ Alarm output + indicator
- ✓ 8 Digital Inputs
  - Differential pressure switch
  - Upper limit switch
  - Lower limit switch
  - Start
  - Reset
  - Select SAF mod
  - External start
  - Thermal motor protection
- ✓ 4 Digital Outputs
  - Turn engine left
  - Turn engine right
  - Flush valve open/close (24VAC solenoid)
  - External alarm

## TECHNICAL DATA

Voltage	: 230/400VAC, 3-phase, 50/60Hz
Control voltage	: 24VAC
Protection	: IP65
Weight	: 7kg
Sizing	: 40x30x20 cm
Standard	: CE norm

## INSTALLATION & MAINTENANCE

### Installation

- ✓ Installation of Type-E controllers should only be performed by qualified personnel.
- ✓ Please note that sufficient space is maintained around the panel for maintenance and to perform future work in a safe and secure way.
- ✓ Electrical installation must be performed in accordance with the installation and safety regulations applicable in the country of installation.
- ✓ Mount the controller panel within sight of the filter so any manual operation of the filter connected to the panel can be done safely and checked visually.

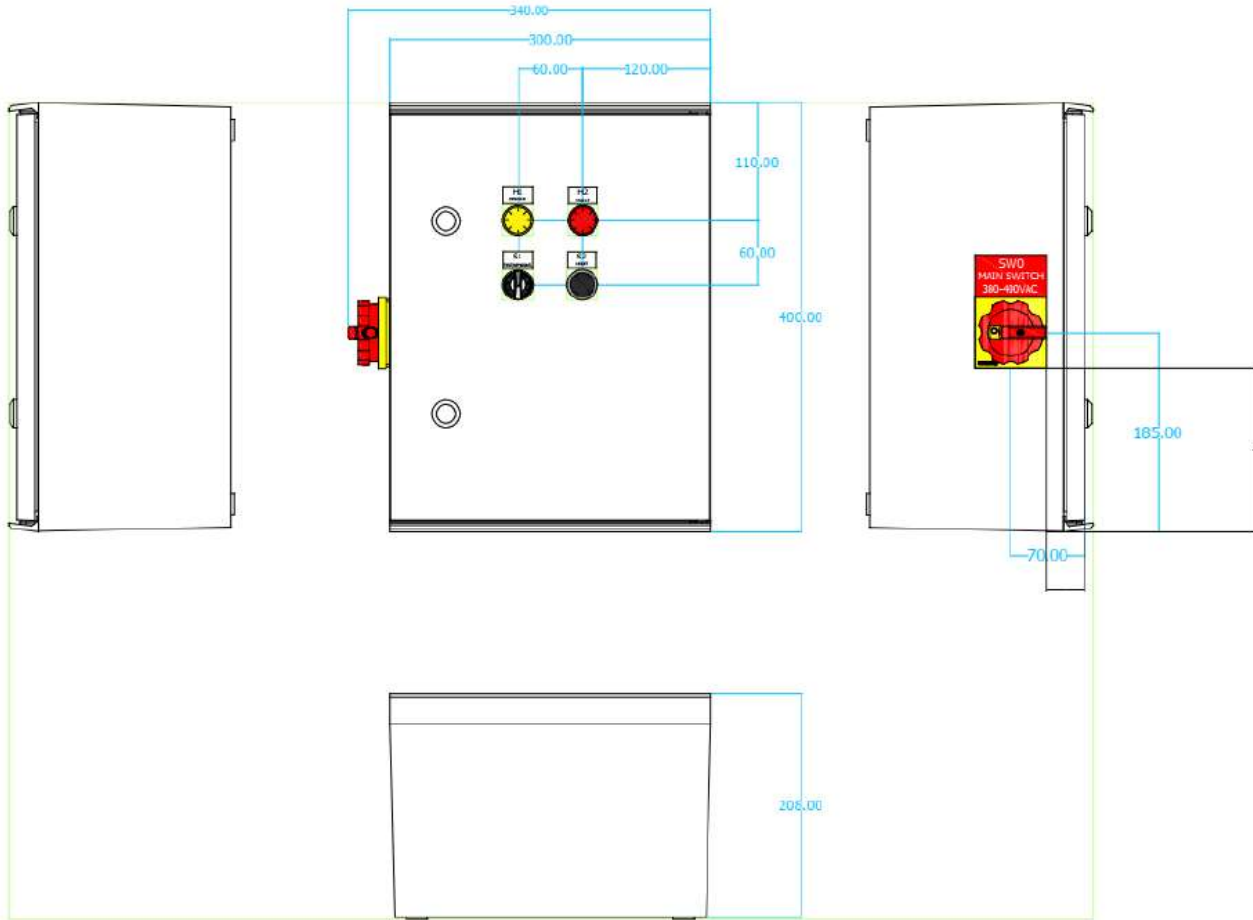
### Maintenance

- ✓ Maintenance of the SAF filter and Type-E controller should only be performed by qualified personnel.
- ✓ Always disconnect the power before performing work on the controller or filter.



## TECHNICAL DRAWING

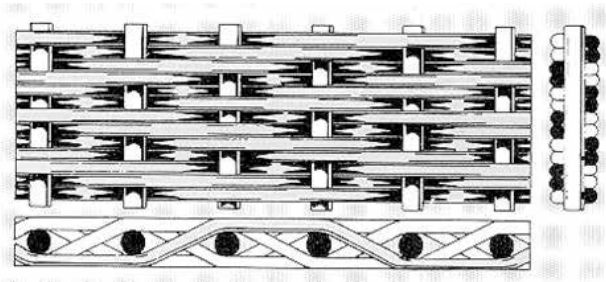
### Amiad flush controller type E



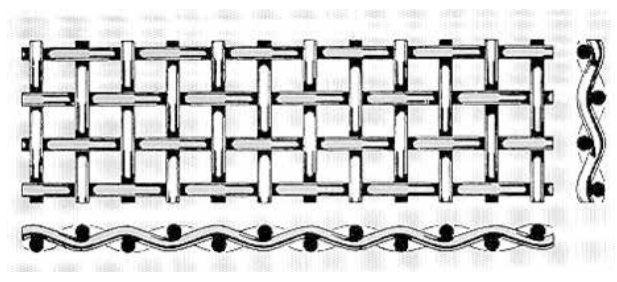
## APPEARANCE



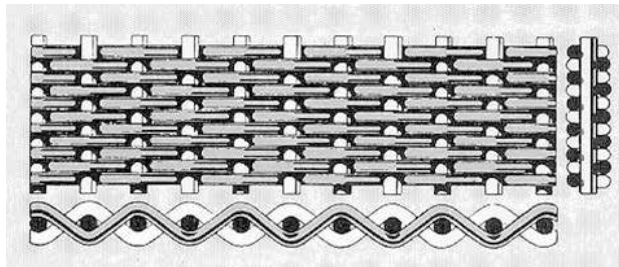
## STRUCTURE OF FILTER SCREENS



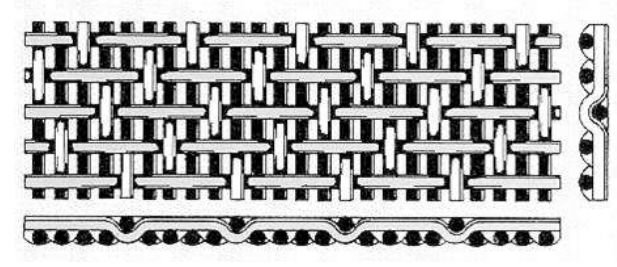
100-200 micron



> 200 micron



50-80 micron



10 micron

## INSTALLATION & MAINTENANCE

### Installation

- ✓ Pre-filtration with 250 micron is recommended when filtering surface water and drain water (10-50 micron, ebb and flood systems also 80 micron).
- ✓ For the installation of an 8" SAF filter with 16 bar bore, a special adapted flange 225 mm is available (77300-000350), this fits on a VDL flange adapter DN200-225 mm (77300-103552) in combination with a rubber ring for flange adapter 225 mm (77300-104735). The regular VDL PVC flange and flange adapter fit on the 8" SAF filter with 10 bar bore.
- ✓ Before installation, read the manual where you will find drawings and installation instructions.
- ✓ Install a non-return valve on the outgoing side to prevent damage due to water hammer, etc.
- ✓ Ensure that the correct screen is installed, that the installation sequence is correct and that the seals are fitted (see manual for SAF filters)
- ✓ Ensure good earthing of the filter housing to avoid the risk of stress corrosion cracking.

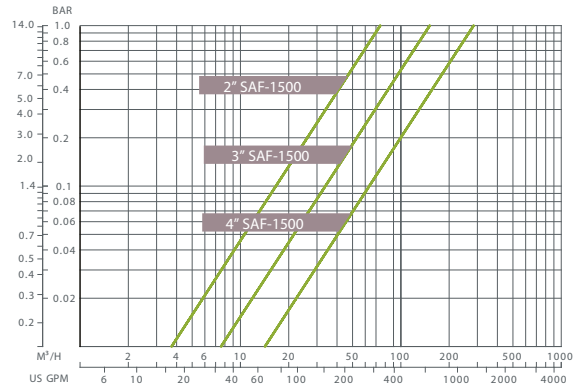
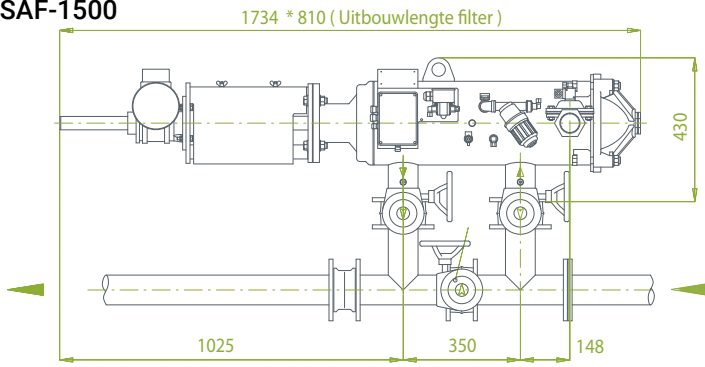
### Maintenance

- ✓ We recommend that the function of the SAF filter and screen is checked at regular intervals, depending on the application, but at least once a year. For maintenance: See the manual and SAF maintenance checklist.
- ✓ The maintenance frequency of SAF filters is linked to the flushing frequency of the filter, which in turn is proportional to the amount of pollution in combination with applied filtration degree and capacity. With regular applications such as drip irrigation or overhead irrigation, once a year is usually sufficient. With UV disinfectants, maintenance usually also takes place once a year, or depending on the pollution load and capacity, 2 or even 3 times a year.
- ✓ Standard parts kits are available for regular maintenance, which are sufficient in most cases. Of course, these do not take specific local situations into account.
- ✓ Cleaning of the SAF filter screen in case of organic contamination takes place by exposing the screen to 0.1% hydrogen peroxide for a maximum of 30 minutes. For inorganic contamination we recommend 1% hydrochloric acid for max. 10-20 min. Note the removal of rubbers. After cleaning, the screen filter should be rinsed well (see also the SAF maintenance advice).
- ✓ A repair kit for SAF filters for treatment against corrosion is also available. This kit includes i.a. epoxy coating, thinner and a brush.

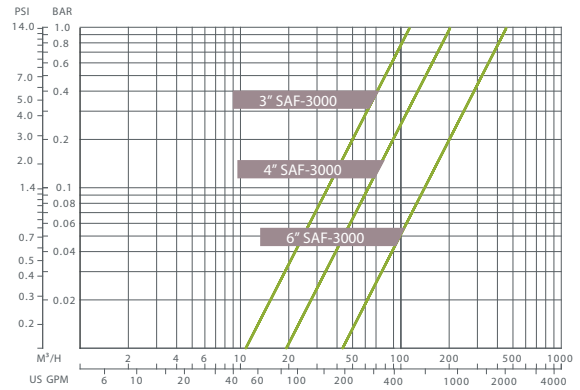
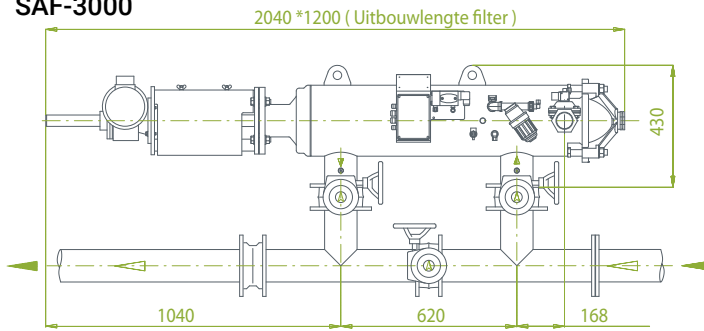


**TECHNICAL DRAWINGS AND DIAGRAMS**

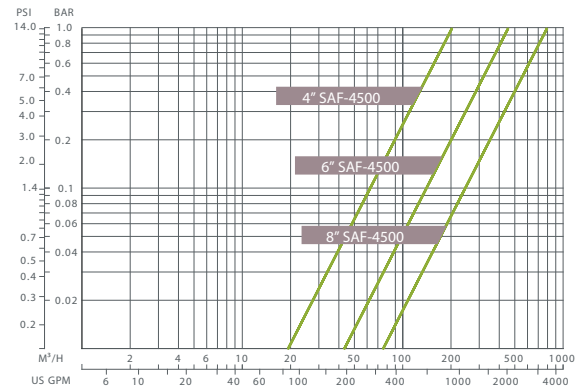
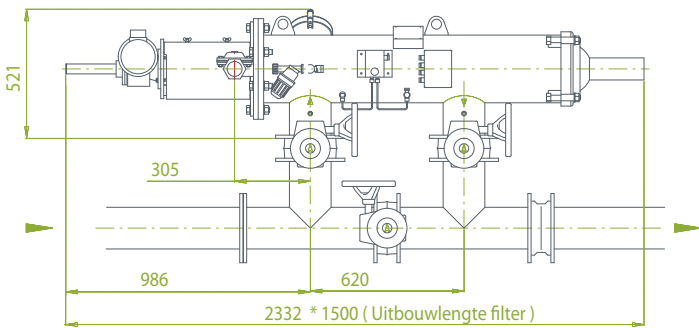
**SAF-1500**



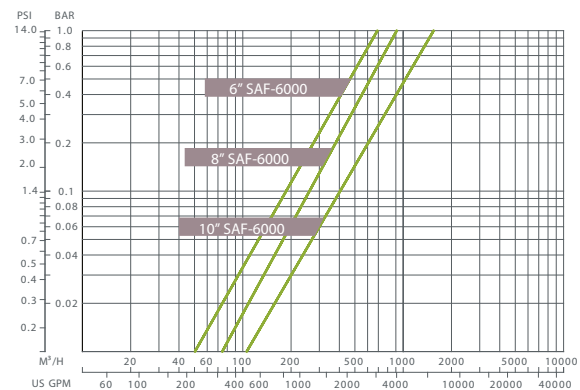
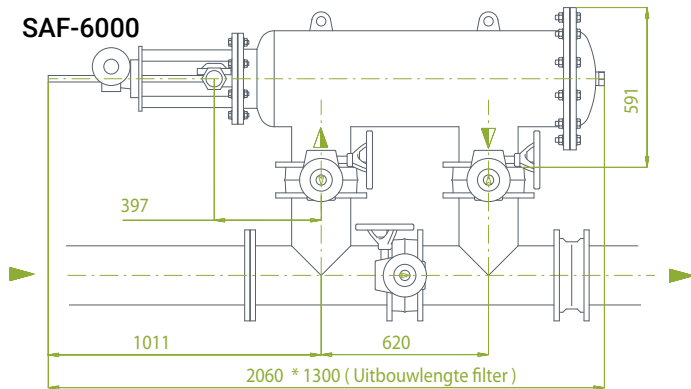
**SAF-3000**



**SAF-4500**



**SAF-6000**



## PARTS LIST SAF-1500

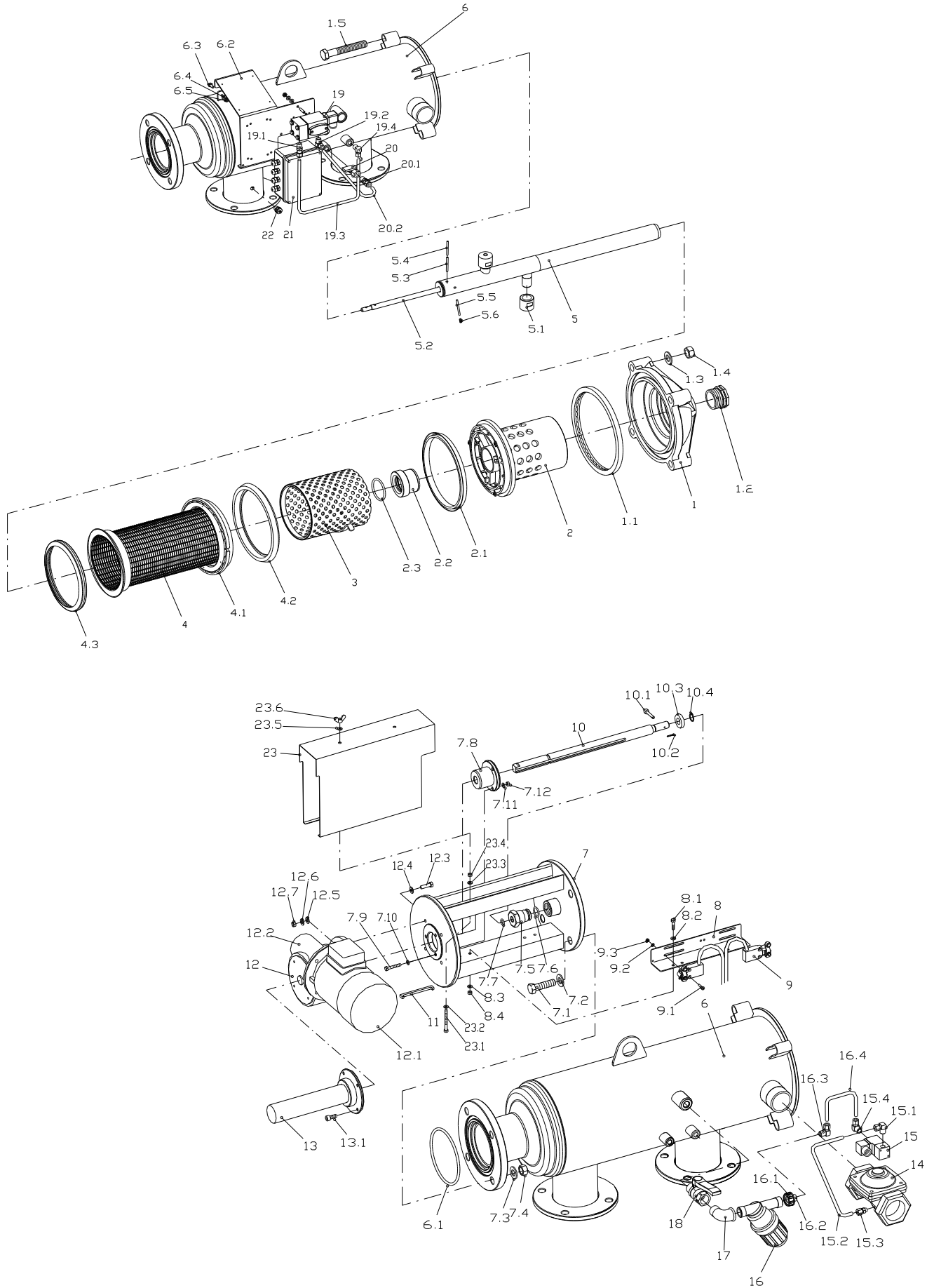
Item	Amiad SAF-1500 filter parts schedule	Netafim art.nr.
1	Housing lid	A.710103-002116
1.1	Lid seal	74480-006270
1.2	2" Plastic plug	76200-008500
1.5	Bolt M20 x 130 (x4)	A.760101-000361
2	Flushing chamber-SAF 1500	A.700190-002281
2.1	Flushing chamber seal	74480-012330
2.2	Scanner bearing-SAF 1500	74480-061070
2.3	bearing O-ring (P2-328)	74480-061150
3	Coarse screen	A.700101-000932
4	Fine screen	Consult portfolio overview
4.1	Cylinder centering ring	74480-001160
4.2	Upper screen Seal	74480-012350
4.3	Lower screen Seal	74480-006260
5	Suction scanner Assembly	A.700190-003477
	Suction scanner Super-nozzles	74480-064000
	Super-nozzle set	02227-303175
	Super-nozzle cap	74480-060930
	O-ring super-nozzle cap	74480-060940
5.1	Suction nozzle	74480-060968
5.2	Suction scanner Shaft	74480-064100
5.3	Slotted spring pin 5 X 50 (< 2015)	74480-060980
5.4	Slotted spring pin 3 X 30 (< 2015)	74480-018069
5.5	Pin for Shaft (SAF-1500) 35 x 5 S/ST (> 2015)	A.710103-002091
5.6	Plug Threaded M8 (> 2015)	A.710103-002501
6	Filter housing 2"	74420-030000
6	Filter housing 3"	74420-030010
6	Filter housing 4"	74420-030020
6.1	Housing O-ring (p 2-433)	74480-004710
6.2	Instrumentation bracket	A.710103-002074
6.3	Bolt M6 X 20 (X2)	A.760101-000444
7	Drive shaft housing	A.710105-001021
7.1	Bolt M16 X 60 (X4)	A.760101-000328
7.5	Sealing nut	74480-060880
7.6	Sealing nut external O-Ring	74480-060870
7.7	Sealing nut internal O-ring	74480-018000
7.8	Drive bushing	74480-017292
7.9	St.St. Bolt M6 X 35 (X3)	A.760101-000447
8	Limit Switch Sling	A.710103-002309
8.1	St.St. Bolt M6 X 15 (X2)	A.760101-000443
8.4	St.St. Bolt M6 X 20 (X2)	A.760101-000444
9	Mechanic Limit Switch (X2)	74480-040000
9.1	St.St. Bolt M4 X 20 (X 4)	A.760101-000439
10	Drive Shaft	A.710103-002164
10.1	Connecting Pin	74480-018060
10.2	Split pin 1.6 X12	74480-018065
10.3	Limit Switch Disc Mechanic	74480-060953
10.4	Disc locking ring	74480-060950
11	Drive Shaft Key	74480-017289
12	Drive unit (complete)	A.720201-000030
12.1	1/4 Hp Electric Motor	74480-018360
12.2	Worm Gear RMI 50, 23:1	A.720202-000019
12.3	Bolt M8 X 40 (X4)	A.760101-000308
12.4	M8 Washer (X4)	A.760103-000075
12.5	M8 Washer (X4)	A.760103-000075
12.6	M8 Spring Washer (X4)	A.760103-000142
12.6	M8 Nut (X4)	A.760102-000063
13	Drive Shaft Cover	74480-017294
13.1	Socket Set Screw M8X20 (X4)	A.760101-000522
14	2" Exhaust Valve (Dorot)	71600-002300
15	Solenoid Valve (GEM-SOL)	02244-600515

Item	Amiad SAF-1500 filter parts schedule	Netafim art.nr.
15.1	L-Connector 8 x 1/4" (PE)	76400-003500
15.2	LDPE 8 x 1,5 mm	02058-250048
15.3	Connector 8 x 1/4" (PE)	76400-002300
15.3	Connector 8 x 1/4" (PE)	76400-002300
15.4	L-Connector 8 x 1/8" (PE)	76400-003400
16	3/4" Control Filter	74400-001090
	Screen control filter 0.2 mm	74480-001040
16.1	Raccord Connector Nut	74480-060800
16.2	Raccord Connector Nipple	74480-060700
16.3	L-Connector 8 x 1/4" (PE)	76400-003500
16.4	LDPE 8 x 1,5 mm	02058-250048
17	3/4" Angle	A.780101-000789
18	3/4" Ball Valve	A.730104-000220
19	Pressure Differential Switch (Midwest)	74480-011560
19.1	Connector 8 x 1/8" (PE)	76400-002100
19.2	Connector 8 x 1/8" (PE)	76400-002100
19.3	LDPE 8 x 1,5 mm	02058-250048
19.4	L-Connector 8 x 1/4" (PE)	76400-003500
20	Manometer valve 1/4"	74480-061120
20.1	L-Connector 8 x 1/4" (PE)	76400-003500
20.2	LDPE 8 x 1,5 mm	02058-250048
21	Electronic board type"C" 3-phs	74480-020000
22	Pressure Check Point - cap	74480-006350
22	Pressure Check Point - rubber	74480-006370
23	Drive Shaft Housing Cover	A.710105-001189
23.1	Bolt M6 x 60 (x 2)	A.760101-000450
23.4	Nut M6 (x 2)	A.760102-000085
23.5	St.St. Washer M6 (X2)	A.760103-000094
23.6	St.St. Winged nut M6 (X2)	A.760102-000107

Am-SAF-ond O-ring set SAF-1500

74480-061200

PARTS DRAWING SAF-1500

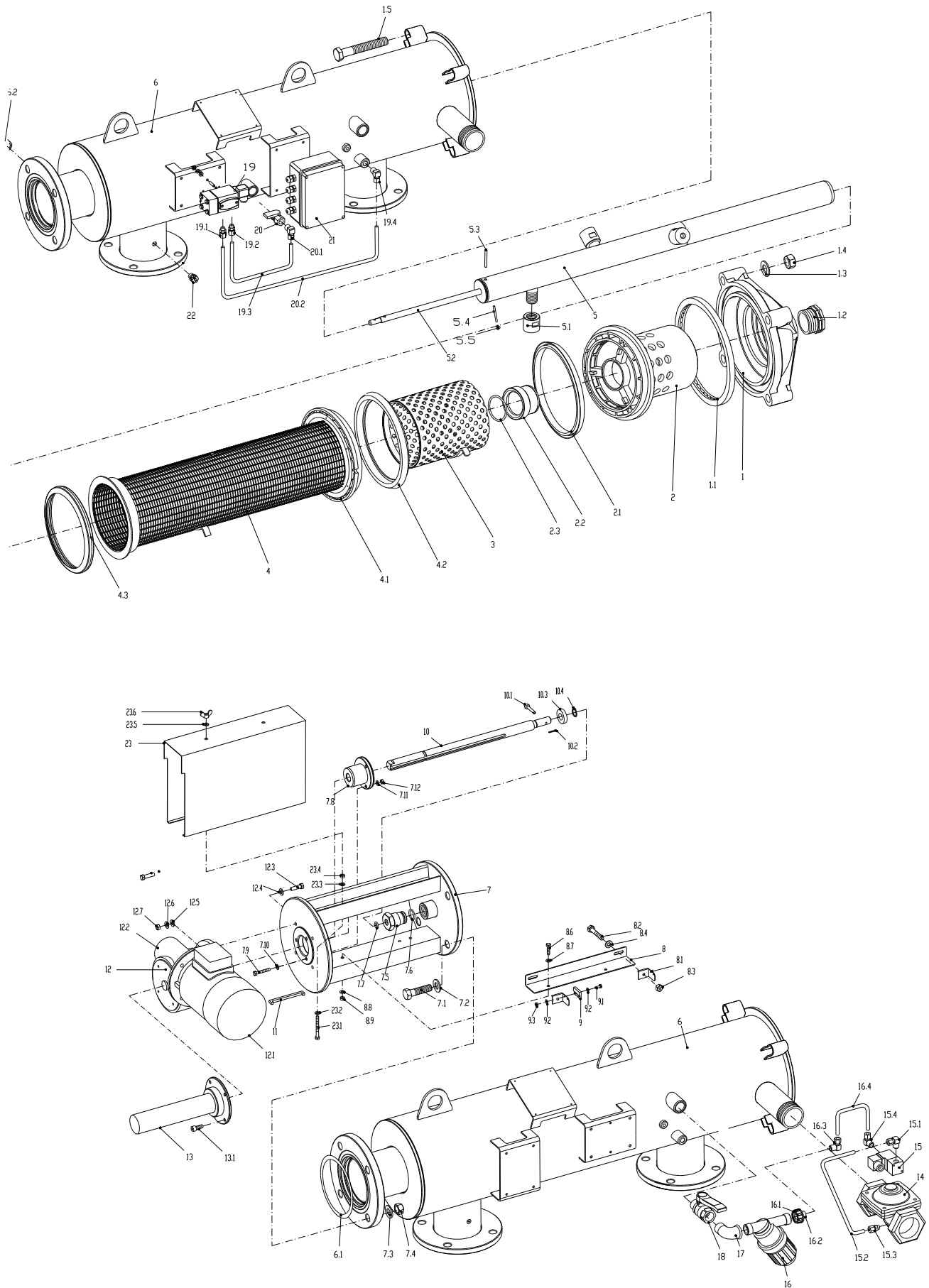


## PARTS LIST SAF-3000

Item	Amiad SAF-3000 filter parts schedule	Netafim art.nr.
1	Housing lid	A.710103-000679
1.1	Lid seal	74480-006270
1.2	2" Plastic plug	76200-008500
1.3	Washer M20 (x4)	A.760103-000070
2	Flushing chamber	74480-012340
2.1	Flushing chamber seal	74480-012330
2.2	Suction scanner bearing	74480-017407
2.3	Bearing O-ring	74480-018020
3	Coarse screen	A.700101-000932
4	Fine screen	Consult portfolio overview
4.1	Cylinder centering ring	74480-017647
4.2	Upper screen seal	74480-012350
4.3	Lower screen seal	74480-006260
5	Suction Scanner Assembly	74480-064020
	Suction Scanner Assembly Super-nozzle	74480-060882
	Suction-nozzle complete	74480-018110
	Super-nozzle cap	74480-060930
	O-ring Super-nozzle cap	74480-060940
	Am-SAF-ond Super-nozzle set T3	02227-303176
5.1	Suction nozzle	74480-060970
5.2	Suction scanner Shaft	74480-064120
5.3	Slotted spring pin 5 X 50 (< 2015)	74480-060980
5.4	Pin for Shaft (SAF-3000) 45 x 5 S/ST (> 2015)	A.710103-002520
5.5	Plug Threaded M8 (> 2015)	A.710103-002501
6	Filter housing 3"	74420-030100
6	Filter housing 4"	74420-030110
6	Filter housing 6"	74420-030120
6.1	Housing O-ring (p 2-433)	74480-004710
6.2	3/4" Galvanized plug	A.780101-000773
7	Drive shaft housing	A.700190-002275
7.1	Bolt M16 X 60 (X4)	A.760101-000328
7.5	Sealing nut	74480-060880
7.6	Sealing nut external O-Ring	74480-060870
7.7	Sealing nut internal O-ring	74480-018000
7.8	Drive bushing	74480-017292
7.9	St.St. Bolt M6 X 35 (X3)	A.760101-000447
8	Limit Switch Sling	A.710103-002168
8.1	Limit Switch Seat (X2)	A.710103-002190
8.2	St.St. Bolt M6 X 15 (X 2)	A.760101-000443
9	Magnetic Limit Switch (X2)	74480-060952
9	Mechanic Limit Switch (X2)	74480-040000
9.1	St.St. Bolt M3 X 10 (X 4)	A.760101-000437
10	Drive Shaft	A.710103-002164
10.1	Connecting Pin	74480-018060
10.2	Split pin 1.6 X12	74480-018065
10.3	Magnetic disc	74480-060951
	Mechanic disc	74480-060953
10.4	Magnetic disc Locking Ring	74480-060950
11	Drive Shaft Key	74480-017289
12	Drive unit (complete)	A.720201-000030
12.1	1/4 Hp Electric Motor	74480-018360
12.2	Worm Gear RMI 50, 23:1	A.720202-000019
12.3	Bolt M8 X 40 (X4)	A.760101-000308
13	Drive Shaft Cover	74480-017294
13.1	Socket Set Screw M8X20 (X4)	A.760101-000522
14	2" Exhaust Valve Nylon	71600-002300
15	Bacc. Solenoid NO/AC + base	02244-600515
15.1	L-Connector 8 x 1/4" (PE)	76400-003500
15.2	LDPE 8 x 1,5 mm	02058-250048
15.3	Connector 8 x 1/4" (PE)	76400-002100

Item	Amiad SAF-3000 filter parts schedule	Netafim art.nr.
15.4	L-Connector 8 x 1/8" (PE)	76400-003400
16	3/4" Control Filter	74400-001090
16	3/4" Filter cylinder 200 micron	74480-001040
16.1	Raccord Connector Nut	74480-060800
16.2	Raccord Connector Nipple	74480-060700
16.3	L-Connector 8 x 1/4" (PE)	76400-003500
16.4	LDPE 8 x 1,5 mm	02058-250048
17	3/4" Angle	A.780101-000789
18	3/4" Ball Valve	A.730104-000223
19	Pressure Differential Switch (MidWest)	74480-011560
19.1	Connector 8 x 1/4" (PE)	76400-002100
19.2	Connector 8 x 1/4" (PE)	76400-002100
19.3	LDPE 8 x 1,5 mm	02058-250048
19.4	L-Connector 8 x 1/4" (PE)	76400-003500
20	Manometer valve 1/4"	74480-061120
20.1	L-Connector 8 x 1/4" (PE)	76400-003500
20.2	LDPE 8 x 1,5 mm	02058-250048
21	Electronic board type"C" 3-phs	74480-020000
22	Pressure Check Point - cap	74480-006350
22	Pressure Check Point - rubber	74480-006370
23	Drive Shaft Housing Cover	A.710105-001189
23.1	Bolt M6 x 60 (x 2)	A.760101-000450
23.6	St.St. Winged nut M6 (X2)	A.760102-000107
	Am-SAF-ond O-ring set SAF-3000	74480-061210

PARTS DRAWING SAF-3000



## PARTS LIST SAF-4500

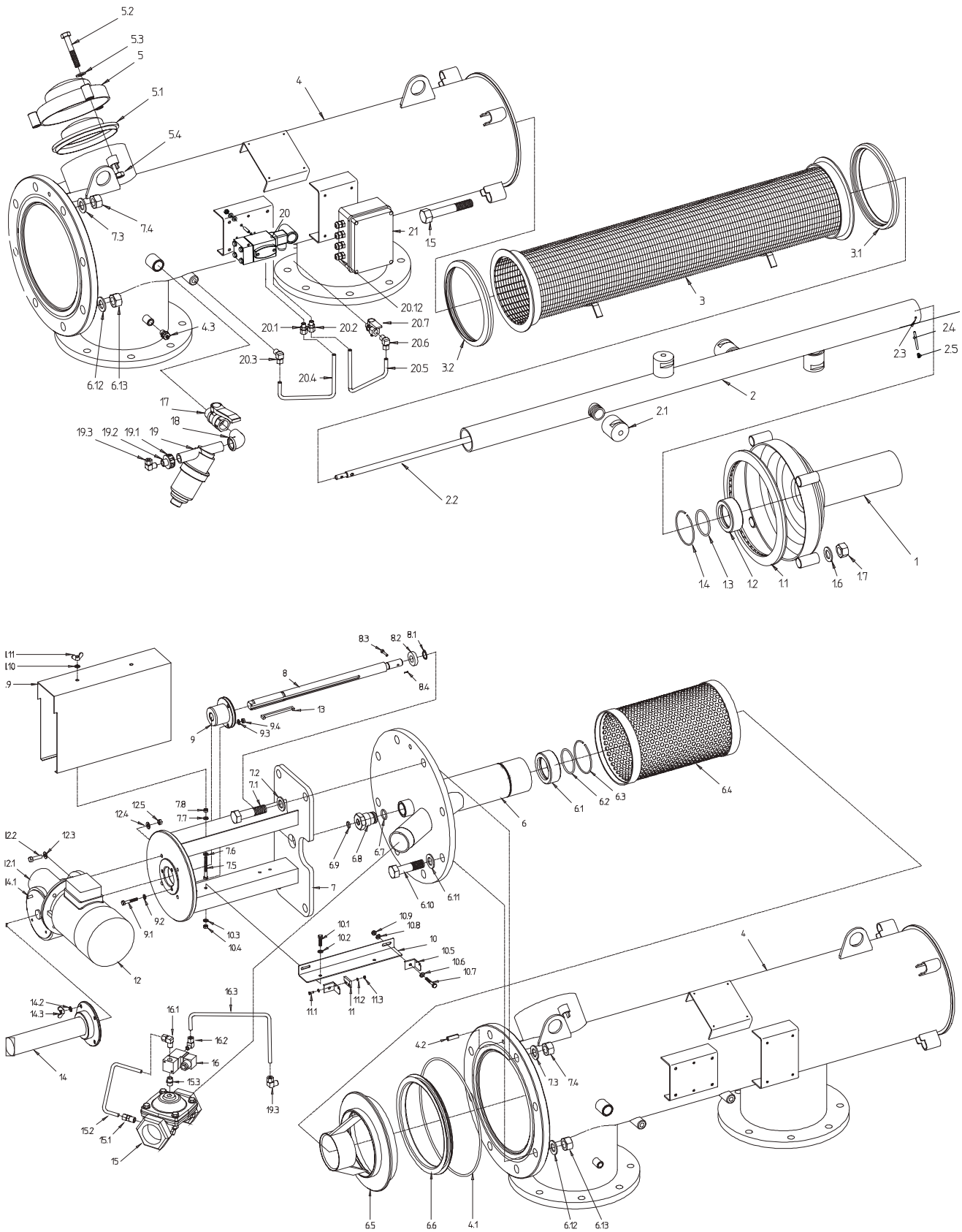
Item	Amiad SAF-4500 filter parts schedule	Netafim art.nr.
1	Housing lid	74480-017403
1.1	Lid Seal	74480-060960
1.2	Suction Scanner Bearing	74480-061100
1.3	Bearing O-Ring	74480-018020
1.4	Locking Spring Ring	74480-061236
1.5	Bolt M20 x 120 (x4)	A.760101-000360
2	Suction Scanner Assembly	A.700190-003478
	Suction Scanner Super-nozzle	74480-060885
	Super-nozzle set	02227-303177
	Super-nozzle cap	74480-060930
	O-ring Super-nozzle cap	74480-060940
2.1	Suction Nozzle	74480-060920
2.2	Suction Scanner Shaft	A.710102-000833
2.3	Slotted Spring pin 5 X 50 (< 2015)	74480-060980
2.4	Pin for Shaft (SAF-4500) 45 x 5 S/ST (> 2015)	74480-066285
2.5	Plug Threaded M8 (> 2015)	74480-066286
3	Fine Screen	Consult portfolio overview
3.1	Screen Seal	74480-006260
3.2	Screen Seal	74480-006260
4	Filter Housing 4"	74420-030200
	Filter Housing 6"	74420-030210
4.1	Housing O-Ring	74480-061235
4.2	Centering Pin	A.760105-000026
22	Pressure Check Point - cap	74480-006350
22	Pressure Check Point - rubber	74480-006370
5	Service Port Lid	A.710105-003777
5.1	Service Port Lid Seal	74480-008360
5.2	Bolt M12 X 80 (X3)	A.74480-011895
6	Flushing Chamber	A.710105-001115
6.1	Suction Scanner Bearing	74480-061100
6.2	Bearing O-Ring	74480-018020
6.3	Locking Spring Ring	74480-061236
6.4	Coarse Screen	A.700101-000958
6.5	Screens Adaptor	A.710105-001106
6.6	Screens Adapter Seal	74480-062750
6.7	Sealing Nut External O-Ring	74480-060870
6.8	Sealing Nut	74480-060880
6.9	Sealing Nut Internal O-Ring	74480-018000
6.10	Bolt M20 X 80 (X4)	76540-019320
7	Drive Shaft Housing	A.710105-001116
7.1	Bolt M20 X 80	76540-019320
7.5	St.St. Bolt M6 X 60	A.760101-000450
7.6	St.St. Washer M6	A.760103-000094
7.7	St.St. Washer M6	A.760103-000094
7.8	St.St. Nut M6	A.760102-000085
7.9	Drive Shaft Housing Cover	A.710105-003779
7.11	St.St. Winged Nut M6 (X2)	A.760102-000107
8	Drive Shaft	A.710103-002164
8.1	Magnetic disc Locking Ring	74480-060950
8.2	Magnetic Limit Switch disc	74480-060951
	Mechanic Limit Switch disc	74480-060953
8.3	Connecting Pin	74480-018060
8.4	Split pin 1.6 X12	74480-018065
9	Drive Bushing	74480-017292
9.1	St.St. Bolt M6 X 35 (X3)	A.760101-000447
10	Limit Switch Sling	A.710103-002168
10.1	St.St. Bolt M6 X 20 (X 2)	A.760101-000444
10.6	Limit Switch Seat (X2)	A.710103-002190
11	Magnetic Limit Switch (X2)	74480-060952
	Mechanic Limit Switch (X2)	74480-040000

Item	Amiad SAF-4500 filter parts schedule	Netafim art.nr.
11.1	St.St. Bolt M3 X 10 (X 4)	A.760101-000437
12	1/3 Hp Electric Motor**	74480-018370
	1/4 Hp Electric Motor	74480-018360
12.1	Worm Gear RMI 50, 28 :1**	74480-017296
	Worm Gear RMI 50, 23:1	A.720202-000019
12.2	Bolt M8 X 40 (X4)	A.760101-000308
13	Drive Shaft Key	74480-017289
14	Drive Shaft Cover	74480-017294
14.1	Socket Set Screw M6X45 (X4)	A.760101-000522
14.2	St.St. Washer M6 (X4)	A.760103-000094
14.3	St.St. Winged Nut M6 (X4)	A.760102-000107
15	2" Exhaust Valve (Dor-75-bas)	71600-002300
15.1	Nipple 8 x 1/4" (PE)	76400-002300
15.2	LDPE 8 x 1,5	02080-250038
15.3	Connector 1/4" x 1/4" (PE)	76400-006300
16	Solenoid Valve	02244-600515
16.1	Elbow 8 x 1/4" (PE)	76400-003500
16.2	Elbow 8 x 1/8" (PE)	76400-003400
17	3/4" Ball Valve	A.730104-000220
18	3/4" Angle	A.780101-000789
19	3/4" Control Filter 0.2 mm	74400-001090
	Screen 3/4" Filter 200 micron	74480-001040
19.1	Raccord Connector Nut	74480-060800
19.2	Raccord Connector Nipple	74480-060700
19.3	Elbow 8 x 1/4" (PE)	76400-003500
20	Pressure Differential Switch (Midwest)	74480-011560
20.1/2	Nipple 8 x 1/8" (PE)	76400-002100
20.3	Elbow 8 x 1/4" (PE)	76400-003500
20.6	Elbow 8 x 1/4" (PE)	76400-003500
20.7	Manometer valve 1/4"	74480-061120
20.12	Cable Connector - PG-7	A.720204-000035
21	Electronic board type"C" 3-phs	74480-020000

Am-SAF-ond O-ring set SAF-4500

74480-061220

## PARTS DRAWING SAF-4500



## PARTS LIST SAF-6000

Item	Amiad SAF-6000 filter parts schedule	Netafim art.nr.
1	Tightening plug - leading shaft	74480-064210
2	Tightening plug - seal	74480-064300
3	leading shaft	74480-012345
4	Upper bearing insert	74480-064400
5	Housing lid	A.710105-001239
7	Bolt M20 x 80 (x12)	A.760101-000355
8	Centering sleeve (x 2)	74480-061170
9	Suction scanner	A.700190-002473
	Suction scanner Super-noz T6	74480-060890
	Super-nozzle set T6	02227-303174
	Super-nozzle cap T6	74480-060900
	O-ring Super-nozzle cap T1346	74480-060940
9.1	Suction	74480-020705
9.2	Scanner nozzle (x 4)	74480-060910
9.3	Suction scanner shaft	74480-064140
9.4	Slotted Spring pin 5 X 50 (< 2015)	74480-060980
9.5	Slotted Spring pin 3 X 30 (< 2015)	74480-018069
9.6	Pin for Shaft (SAF-6000) 45 x 5 S/ST (> 2015)	A.710103-002520
9.7	Plug Threaded M8 (> 2015)	A.710103-002501
10	Screen seal (x 2)	74480-012310
11	Fine screen	Consult portfolio overview
12	Lid seal	74480-060945
13	Three-Way Valve	A.730104-000202
13.1	L-Connector 5/16" x 1/4"	A.720501-000202
13.2	1/4" Brass Bushing	A.720501-000220
13.3	L-Connector 5/16" x 1/4"	A.720501-000202
13.4	Pressure Gauge	A.720301-000043
13.5	L-Connector 1/4" M X 1/4" F	74480-064500
13.6	Copper Tube 5/16"	A.720502-000025
13.7	L-Connector 5/16" x 1/4"	A.720501-000202
14	Filter housing 6"	74420-030300
	Filter housing 8"	74420-030310
15	Electronic board type C" 3-phs	74480-020000
15.1	Bolt M5 x 16 (x 4)	A.760101-000531
15.2	Nut M5 (x 4)	A.760102-000084
15.3	Washer M5	A.760103-000093
16	Pressure Differential Switch (Midwest)	74480-011560
16.1	Connector 5/16" x 1/8"	A.720501-000213
16.2	Connector 5/16" x 1/8"	A.720501-000213
16.3	L-Connector 5/16" x 1/4"	A.720501-000202
16.4	Copper Tube 5/16" (H.P.)	A.720502-000025
16.5	Copper Tube 5/16" (L.P.)	A.720502-000025
16.6	L-Connector 5/16" x 1/4"	A.720501-000202
16.7	Manometer valve 1/4"	74480-061120
16.9	Bolt M5 x 16 (x 2)	A.760101-000531
16.12	Cable Connector - PG-7	A.720204-000035
17	Drive shaft housing seal	74480-060965
18	Coarse screen	A.700190-000982
19	Flushing chamber	A.700190-002424
20	Bolt M10 x 30 (x2)	A.760101-000459
20.1	St. St. washer M10 (x 2)	A.760103-000097
22	Sealing flange O-ring	74480-018020
23	Sealing flange	74480-061135
24	Drive shaft housing	A.710105-001270
25	Bolt M16 x 70 (x 8)	A.760101-000330
26	Bolt M8 x 40 (x4)	A.760101-000308
26.3	Spring washer M8 (x4)	A.760103-000142
27	Magnetic disc Locking Ring	74480-060950
28	Magnetic disc	74480-060951
29	St.St. Bolt M6 X 35 (X3)	A.760101-000447

Item	Amiad SAF-6000 filter parts schedule	Netafim art.nr.
29.3	St.St. Lock nut M6 (X3)	A.760102-000101
30	Drive bushing	74480-017292
31	Sealing rope set-scanner shaft	74480-061130
32	Sealing rope tightening nut	74480-061145
32.1	Sealing Nut Internal O-Ring	74480-061140
33	connecting pin	74480-061000
34	Split pin	74480-061050
35	Drive shaft	74480-017291
36	Drive shaft key	74480-017289
37	Drive unit (motor and gear)	74480-017295
38	3/4" Angle	A.780101-000789
39	3/4" Ball valve	A.730104-000220
40	3/4" Control filter 0.2 mm	74400-001090
40.1	Raccord connector nut 3/4"x1/4"	74480-060800
40.2	Raccord nipple 3/4" x 1/4"	74480-060700
40.3	Elbow 8 1/4" (PE)	76400-003500
41	Solenoid valve *	02244-600515
41.1	Elbow 8 1/8" (PE)	76400-003400
41.2	Elbow 8 1/4" (PE)	76400-003500
41.3	connector 1/4" x 1/4"	76400-006300
42	2" Exhaust valve *	71600-002300
42.1	connector 5/16" x 1/4"	A.720501-000206
42.2	Copper tube 5/16" (drain)	A.720502-000025
45	Drive shaft housing cover	A.710105-001229
47	6" Blind flange	A.740103-000141
47.1	6" Seal	74480-061160
48	Bolt M16 x 60 (x 8)	A.760101-000328
49	Magnetic limit switch (x 2)*	74480-060952
49.1	Mechanic limit switch (x 2) *	74480-040000
50	Limit switch sling	A.710103-002256
51	St.St. Bolt M6 X 15 (X 2)	A.760101-000443
51.3	St.St. Lock nut M6 (X2)	A.760102-000101
52	St.St. Bolt M3 X 10 (X 4)	A.760101-000437
52.2	St.St. Lock nut M3 (X4)	A.760102-000098
52.3	Limit Switch Seat (X2)	A.710103-002190
52.4	St.St. Bolt M6 X 15 (X 2)	A.760101-000443
52.6	St.St. Lock nut M6 (X2)	A.760102-000101
53	Bolt M6 x 60 (x 2)	A.760101-000450
53.3	Nut M6 (x 2)	A.760102-000085
53.5	Wing nut (x 2 )	A.760102-000107
54	Drive Shaft Cover	74480-017294
54.1	Socket Set Screw M6X45(X4)	A.760101-000522

Am-SAF-ond O-ring set SAF-6000

74480-061230



PARTS DRAWING SAF-6000

