

TAF-filters

Amiad (Discontinued)



TAF filters are self-cleaning plastic filters from Amiad. TAF filters are based on the operating principle of the SAF family, but are tailored to smaller capacities. Only a small amount of flushing water is released during flushing. TAF filters are compact in design so that they can be easily installed. The filters are supplied complete with electronic differential pressure measuring, control (for pressure difference and/or time), with 230 V electric motor (or hydraulic motor) and drainage tap.

The contaminated water comes directly into the fine filter screen of the TAF. The contamination is collected on the inside of this screen, causing the resistance at the filter to increase. The flushing cycle starts as soon as the resistance at the TAF filter 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 motor ensures that the scanner cleans the whole screen spirally.

APPLICATION

TAF filters are used as main filter in smaller installations, such as drip irrigation or (roof) spinkler irrigation, or prefilter in the event of contamination of the day tank. TAF filters require no extra controller. If necessary, the flushing signal from the TAF filter can be interrupted by the (substrate) computer until, for example, the dripping cycle has been completed. The 2" version is also available in a Super (S) version with an extra-large filter screen (150% larger).

CHARACTERISTICS

- ✓ Capacity up to 50 m³/h
- ✓ Filtration from 25 to 500 micron (stainless steel screen)
- ✓ Less flushing water (25 litres per flushing cycle)
- ✓ Complete filter with flushing controller and drainage tap
- ✓ Operates with 230 V
- ✓ Back-flushing during filtration is possible
- ✓ Low resistance and low working pressure (1.5 bar)
- ✓ Compact design, no subsequent filter required
- ✓ Connection with 2" or 3" thread or 3" flange (90 mm)
- ✓ Adjustable flushing duration and cycle time
- ✓ CE approved

TECHNICAL DATA

Filter		2" TAF	2" TAF-S	3" TAF
General information				
Theoretical capacity	m ³ /h	25	25	50
Effective filter area	cm ²	500	750	750
Standard filtration levels	micron	25, 50, 80, 100, 130, 200, 300, 500, 800		
Screen types		Polyester-stainless steel Cylinder		
Diameter of connection		2" thread	2" thread	3" thread or flange
Minimum pressure	bar	1,5 - 2,0 (behind the filter, during flushing)		
Maximum working pressure	bar	8		
Maximum (working) temperature	°C	60		
Weight	kg	11,6	12,4	13,0

Filter		2" TAF	2" TAF-S	3" TAF
Flushing				
Flushing time	sec		16	
Flushing water per cycle	litres	18	25	25
Minimum flushing capacity	m ³ /h	4	5,7	5,7
Drainage tap		1 ½" Dorot-NC (24 VAC)		
Flushing criteria		Pressure difference of 0.5 bar		
Control and electricity				
Operating voltage	VAC		230	
Electric motor	W		15 (48 / 58 R.P.M.)	
Current consumption	Amp		0,18	
Control voltage	VAC		24 (Electrical TAF)	
Materials				
Filter housing		Glassfibre-reinforced polyamide		
Cleaning mechanism		PVC, Delrin®		
Drainage tap		Plastic, rubber		
Seals		Nitrile rubber		

Practical advice

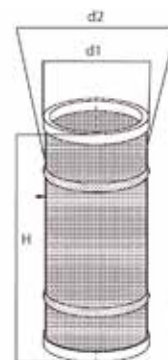
The following table contains practical advice drawn up for the standard applications of the TAF filter. Consult Netafim for advice on deviating operating conditions.

Capacity (m ³ /h) with:	Micron	Type of water								
		2" TAF			2" TAF-S			3" TAF		
		Rain	Ditch	Drain	Rain	Ditch	Drain	Rain	Ditch	Drain
Filling the day storage tank	50	10	8	6,5	15	12	10	15	12	10
Drip irrigation	80	13	10	8	20	15	12	20	15	12
Uniram	100	16	13	10	25	20	15	25	20	15
Greenhouse irrigation	130	20	16	13	25	25	20	30	25	20
Sprinkler > 150 l/h	200	23	20	16	25	25	25	35	30	25
Outdoor irrigation	300	25	23	20	25	25	25	40	35	30
Flushing water per cycle (l)	500	25	25	23	25	25	25	45	40	35

Dimensions of filtration elements

Type	Filter screen		
	ø (mm)		H (mm)
	d1	d2	
2" TAF *	109	109	248
2" TAF-S *	109	109	373
3" TAF *	109	109	373

* Polyester-stainless steel cylinder

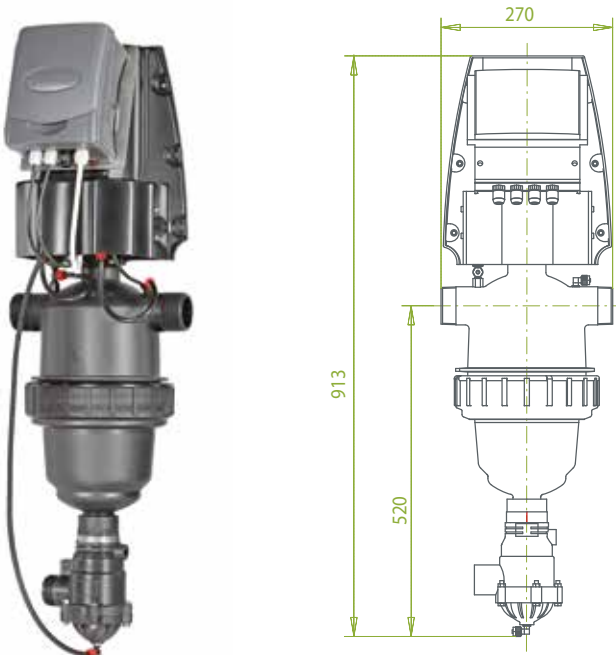


INSTALLATION & MAINTENANCE

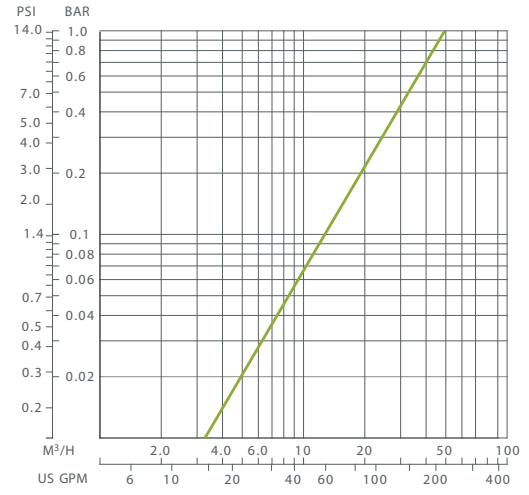
- ✔ Read the operating manual before installation. Install a non-return valve on the outgoing side to prevent damage due to implosion of the screen where there is a risk of water hammer.
- ✔ The TAF filter can be installed vertically or horizontally. If the water contains hard contaminants (such as sand), horizontal installation of the filter (housing) is to be preferred.
- ✔ We recommend that the function of the TAF filter and screen is checked at regular intervals, depending on use, but at least once a year.
- ✔ In case of leakage at the shaft of the filter, it is recommended to replace the following 3 parts: u-cup seal (74480-005747), o-ring 30x3 (74480-018023) and o-ring seal (74480-018027).

TECHNICAL DRAWINGS

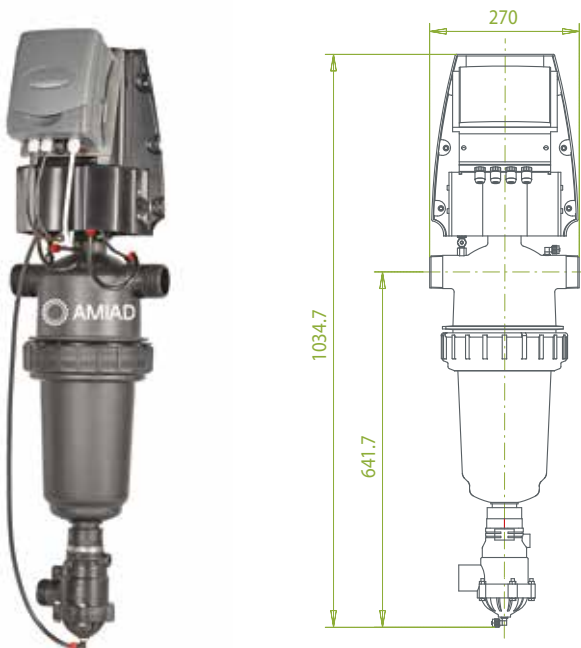
2" TAF



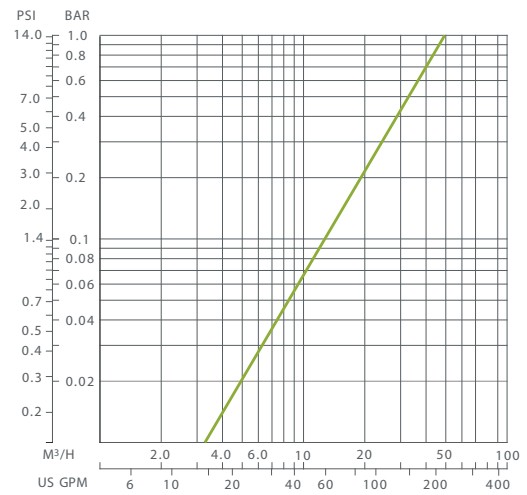
Pressure loss (in clean water)



2" TAF-S



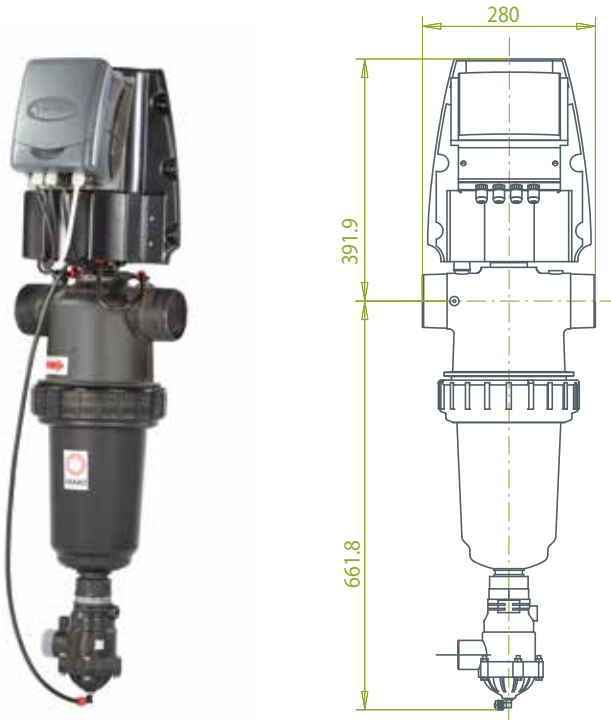
Pressure loss (in clean water)



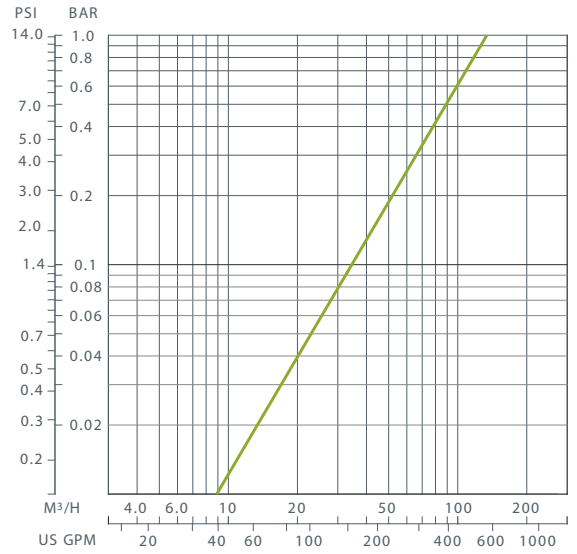
* Required length for the installation (approximately)

TECHNICAL DRAWINGS

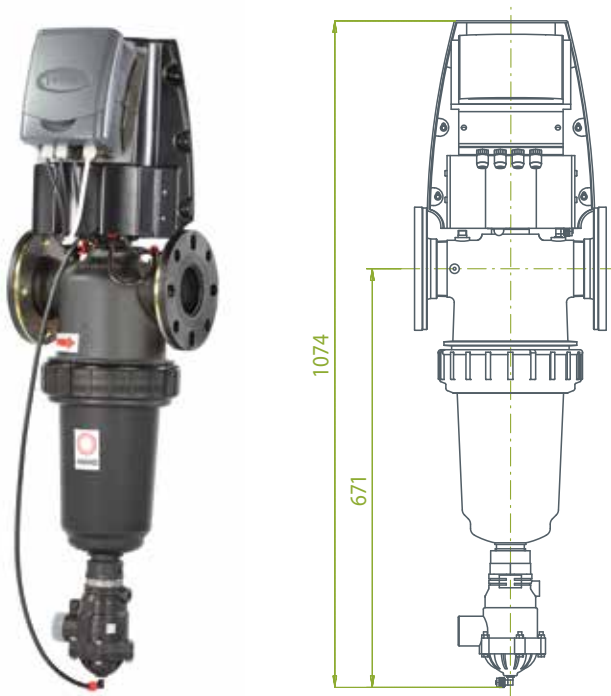
3" TAF



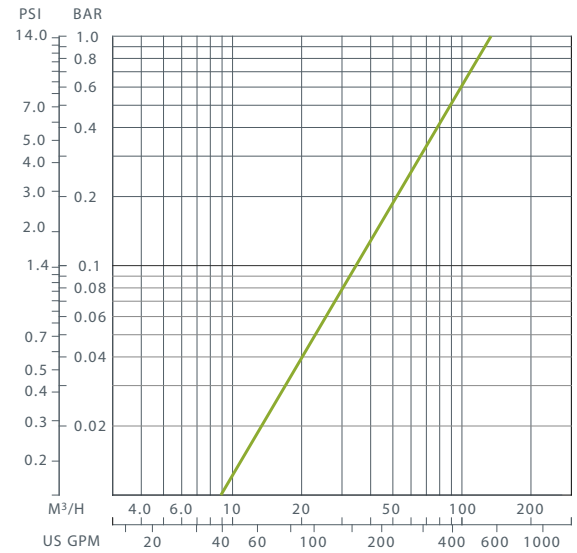
Pressure loss (in clean water)



3" TAF-S



Pressure loss (in clean water)

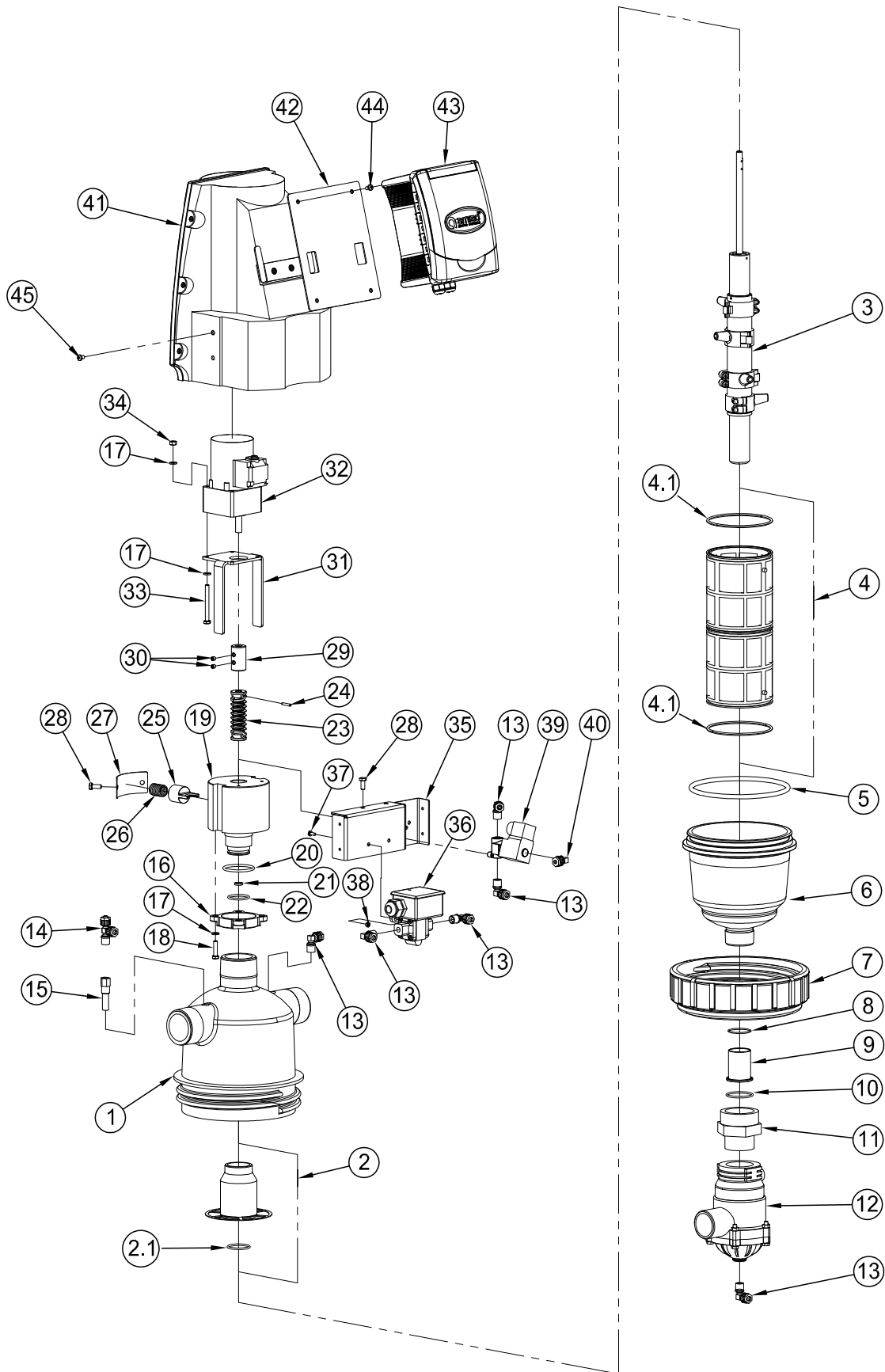


* Required length for the installation (approximately)

PARTS LIST TAF 2"

Item	Amiad TAF-500 2" parts schedule	Netafim art.no.		
1	Housing 2" TAF-500/750 NPT 1 NYLON	A710103-001202	38	Hex Nut M4 S/ST304 DIN934 2 SST304 A760102-000083
1	2"TAF-500/750 Housing BSPT Electric 1 NYLON	A710103-001200	39	3/2 Nc Solenoid Valve (Type B) 24VAC 50Hz 1 Various 74480-013140
2	Pressure Balancing Assembly 2" TAF Electric 1 Various	A700190-001831	39	3/2 Nc Solenoid Valve 24VAC 60Hz 1 Various A720103-000189
2.1	O-Ring Seal P2-125 Scanner Bearing NBR"S" 1 NBR	74480-014145	40	L-Connector 1/8"MX6MM Black-Red 1 PP A720501-000209
3	Suction Scanner 2" TAF-750 1 Various	A700190-001925	41	Drive Unit Cover TAF 1 Various A710103-001204
4	en TAF-750 1 Various	see filter screens	42	Control System Sling Electric 74480-017231
4.1	O-Ring Seal P2-242 (2"/3 Screen) NBR"S" 2 NBR	74480-004100	43	Electronic Control 230VAC 6-OUT 1INVarious 74480-050010
5	O-Ring Seal P2-437 1 NBR	74480-004150	44	Phillips Pan Machine Screw M5X8 S/ST316 4 SST316L A760101-000713
6	2"T-S,3"T Lid PA BSPT 1 NYLON	A710103-000562	45	Phillips Pan Machine Screw M5X8 304 4 SST304 A760101-000530
7	Tightening nut (T filters) 1 NYLON	74480-006170		
8	O-Ring Rubber Seal P2-028 1 NBR	A770102-000069		
9	Long Bearing For Suction Scanner 2"T 1 Delrin	A710103-000704		
10	O-Ring Seal P2-129 NBR 1 NBR	A770102-000096		
11	Connector 11/2"FX11/2"M 1 ST.37-2	A780101-000955		
12	1-1/2" Dorot 60 ANC Valve	71600-006445		
13	L-Connector 1/4"X8MM Red/Black 6 NYLON	A720501-000198		
14	Finger Filter 1 Various	A730110-000034		
15	T-Connector 8MMX8MMX1/4"M Black-Red 1 PP	A720501-000232		
16	Motor Connecting Flange 2" TAF NPT 1 NYLON	A710101-000765		
16	Motor Connecting Flange 2" TAF BSPT 1 NYLON	A710101-000760		
17	Flat Washer M6 DIN125S/ST316 12 SST316	76540-005280		
18	Hex Bolt Full Thread M6X25 S/ST316 DIN933 4 SST316L	A760101-000445		
19	Endless Worm Shaft Housing TAF 1 Delrin	74480-066200		
20	O-Ring Seal 3.5X45 TAF Motor Housing NBR 1 NBR	74480-018027		
21	Seal U-Cup (Scanner Shaft) Hydro-TAF 1 NBR	74480-005747		
22	O-Ring Seal 30X3 NBR "S" 1 NBR	74480-018023		
23	Reversible Worm Shaft 1 Acetal	74480-017227		
24	Slotted Pin 3x20 DIN1481 S/ST 304 1 S/ST 304	74480-018067		
25	Endless Worm Shft Tooth 1 S/ST 303	74480-017290		
26	Spring Tooth S/St302 1 Hastelloy C-276	74480-010857		
27	Tooth Cover TAF 1 S/ST 316L	A710103-001210		
28	Hex Bolt Full Thread M6X15 S/ST304 DIN933 4 SST304	A760101-000443		
29	Motor Shaft Coupler 1 S/ST 316L	74480-066050		
30	Socket Set Screw M6X6 SST304 DIN916 2 SST304	A760101-000544		
31	Drive Unit Basis TAF 1 S/ST 316L	A710103-001217		
32	Drive Unit TAF-750 220V AC 1/25 1 Various	74480-066000		
32	Drive Unit TAF-750 110V AC 1/25 1 Various	A720201-000032		
33	Hex Bolt Full Thread M6X60 S/ST316 DIN933 4 SST316L	A760101-000607		
34	Hex Nut M6 S/ST316 DIN934 4 SST316L	A760102-000085		
35	Instrumentation Bracket 1 S/ST 316L	A710103-001212		
36	PD Switch UE 24-011 1 Various	74480-011540		
37	Phillips Pan Machine Screw M4X10 316 2 SST316L	A760101-000529		

PARTS DRAWING TAF 2"



PARTS LIST FOR TAF 3" THREADED AND FLANGED VERSION

Item	Amiad TAF-500 2" parts schedule	Netafim art.no.		
	Housing 3" TAF-750 BSPT Machined 1 NYLON	A710103-001269	39	3/2 Nc Solenoid Valve (Type B) 24VAC 50Hz 1 Various 74480-013140
1	Housing 3" TAF-750 NPT Machined 1 NYLON	A710103-001271	39	3/2 NC Solenoid Valve 60HZ NC 24VAC 1 Various A720103-000189
2	Pressure Balancing Assembly 3" TAF-750 1 Various	A700190-001924	40	L-Connector 1/8"MX6MM Black-Red 1 PP A720501-000209
2.1	O-Ring Seal P2-125 Scanner Bearing NBR"S" 1 NBR	74480-014145	41	Drive Unit Cover TAF 1 Various A710103-001204
3	Suction Scanner 3" TAF-750 1 Various	74480-066100	42	Control System Sling Electric 74480-017231
4	en TAF-750 1 Various	see filter screens	43	Electronic Control 230VAC 6-OUT 1INVarious 74480-050010
4.1	O-Ring Seal P2-242 (2"/3 Screen) NBR"S" 2 NBR	74480-004100	44	Phillips Pan Machine Screw M5X8 S/ST316 4 SST316L A760101-000713
5	O-Ring Seal P2-437 1 NBR	74480-004150	45	Phillips Pan Machine Screw M5X8 304 4 SST304 A760101-000530
6	2"T-S,3"T Lid PA BSPT 1 NYLON	A710103-000562	46	Cap Seal 3/4" NBR 1 NBR A770103-000025
7	Tightening nut (T filters) 1 NYLON	74480-006170	47	3/4" Cap Black 1 PP A710101-000674
8	O-Ring Rubber Seal P2-028 1 NBR	A770102-000069	48	Plastic Flange 3" NPT 2 PP A710103-000568
9	Long Bearing For Suction Scanner 2"T 1 Delrin	A710103-000704	49	Flange Support 3" ASA150 2 SAE 1020 A710105-000041
10	O-Ring Seal P2-129 NBR 1 NBR	A770102-000096	50	O-Ring Seal P2-339 (3" Flange)NBR "S" 2 NBR A770102-000150
11	Connector 11/2"FX11/2"M 1 ST.37-2	A780101-000955	51	Plug 1/4"M Black 1 PVC A720501-000221
12	1-1/2" Dorot 60 ANC Valve	71600-006445		
13	L-Connector 1/4"X8MM Red/Black 7 NYLON	A720501-000198		
14	Finger Filter 1 Various	A730110-000034		
15	T-Connector 8MMX8MMX8MM Black-Red 1 PVC	A720501-000228		
16	Motor Connecting Flange 2" TAF NPT 1 NYLON	A710101-000765		
16	Flange Adaptor (HYDROTAF) 1 NYLON	A710101-000760		
17	Flat Washer M6 DIN125S/ST316 12 SST316	76540-005280		
18	Hex Bolt Full Thread M6X25 S/ST316 DIN933 4 SST316L	A760101-000445		
19	Endless Worm Shaft Housing TAF 1 Delrin	74480-066200		
20	O-Ring Seal 3.5X45 TAF Motor Housing NBR 1 NBR	74480-018027		
21	Seal U-Cup (Scanner Shaft) Hydro-TAF 1 NBR	74480-005747		
22	O-Ring Seal 30X3 NBR "S" 1 NBR	74480-018023		
23	Reversible Worm Shaft 1 Acetal	74480-017227		
24	Slotted Pin 3x20 DIN1481 S/ST 304 1 S/ST 304	74480-018067		
25	Endless Worm Shft Tooth 1 S/ST 303	74480-017290		
26	Spring Tooth S/St302 1 Hastelloy C-276	74480-010857		
27	Tooth Cover TAF 1 S/ST 316L	A710103-001210		
28	Hex Bolt Full Thread M6X15 S/ST304 DIN933 4 SST304	A760101-000443		
29	Motor Shaft Coupler 1 S/ST 316L	74480-066050		
30	Socket Set Screw M6X6 SST304 DIN916 2 SST304	A760101-000544		
31	Drive Unit Basis TAF 1 S/ST 316L	A710103-001217		
32	Drive Unit TAF-750 220V AC 1/25 1 Various	74480-066000		
32	Drive Unit TAF-750 110V AC 60HZ 0.015KW 1/25 1 Various	A720201-000032		
33	Hex Bolt Full Thread M6X60 S/ST316 DIN933 4 SST316L	A760101-000607		
34	Hex Nut M6 S/ST316 DIN934 4 SST316L	A760102-000085		
35	Instrumentation Bracket 1 S/ST 316L	A710103-001212		
36	PD Switch UE 24-011 1 Various	74480-011540		
37	Phillips Pan Machine Screw M4X10 316 2 SST316L	A760101-000529		
38	Hex Nut M4 S/ST304 DIN934 2 SST304	A760102-000083		

PARTS DRAWING TAF 3" -FLANGE VERSION

