

YAMIT FILTRATION

Hydraulic Pre Pump Self-Cleaning Strainer PPS Series

Service & Maintenance Manual



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1. Introduction

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General

YAMIT Filtration & Water Treatment Ltd. thank you for purchasing the **PPS Hydraulic Pre Pump Self-cleaning Strainer**. This product now joins the wide family of filters and products produced and supplied by **YAMIT Filtration & Water Treatment Ltd.** for agriculture, municipal water, sewage systems, and all types of industrial applications.

All products manufactured by **YAMIT Filtration & Water Treatment Ltd.** are easy to install, use and service and don't require special skills to operate them.

For operation and maintenance of the filter please follow the instructions in this manual.

2. Safety Instructions

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1. Prior to installation or handling of the PPS Strainer, carefully read the installation and operation instructions.
2. Confirm that the pump is shut down prior to service.
3. Take precautions while lifting, transporting or installing the PPS Strainer.
4. Confirm that PPS Strainer weight, when full, meets the support construction requirements.
5. Prior to installation, confirm that the line pressure matches the PPS Strainer operational pressure.
6. During installation, use only standard flanges and connections.
7. Check that all PPS Strainer flanges, bolts and threads are properly secured.
8. Please note, the PPS Strainer starts flushing automatically, without warning, as the pump is running.
9. Use original parts only, when servicing the PPS Strainer.
10. No changes or modifications to the equipment are allowed.
11. Do not perform any maintenance activities other than those given in this manual.

3. Description & Operation

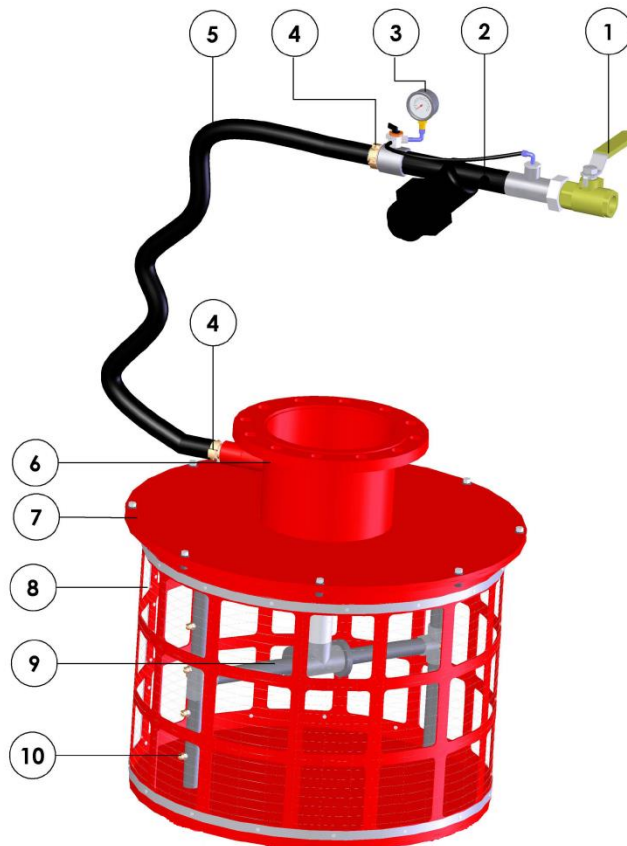
3

General Description

The PPS Hydraulic Pre Pump Self-cleaning Strainer enables high quality pumping from different types of fluid sources such as sewage, reservoirs, rivers, lakes, and wells.

The **PPS Series** contains the following parts

- | | |
|------------------------------------|------------------------------|
| 1. Flushing water inlet ball valve | 6. Suction connection flange |
| 2. Control manual filter | 7. Cover |
| 3. Pressure gauge | 8. Outer strainer |
| 4. Quick coupling | 9. Jet swivel assembly |
| 5. Flushing water inlet pipe | 10. Jet nozzle |



PPS Operation Description

Suction

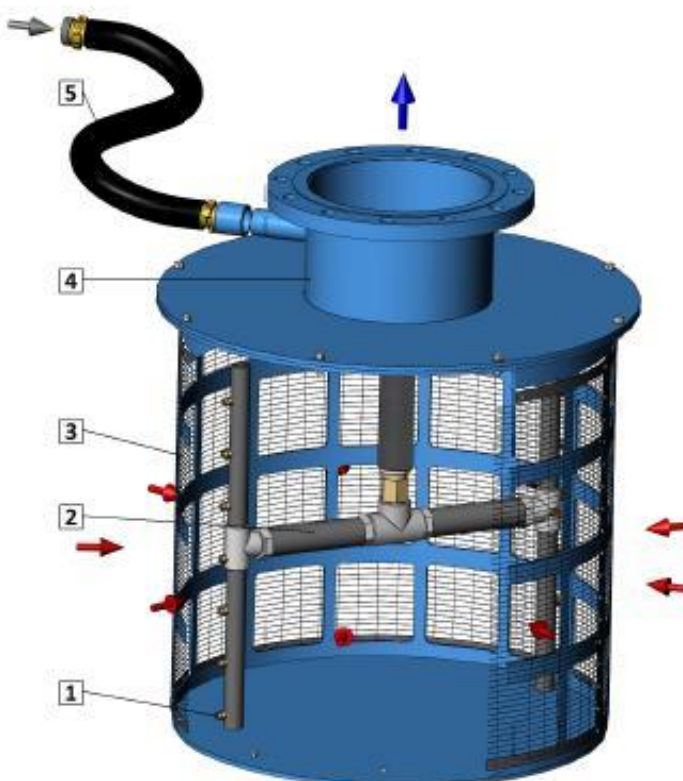
The PPS is connected on the suction side of the pump below the water surface. Water is being sucked by the pump and passes via the outer strainer (8) through the PPS suction connection flange (6) up into the pump and from the pump into the pipe supply system.

Self-cleaning

After the pump, at the pressure side small amount of water is being send back into the PPS via a ball valve (1), a control manual filter (2) and via the flushing water pipe (5) back into the PPS flushing Jets battery swivel (9)

Water is being sprayed with pressure via the Jet nozzle (10) on the outer strainer (8) from the inside to the outside of the strainer.

By this action the water jets are pushing out all the debris that accumulated on the outer surface of the strainer (8) and rotating the PPS jets swivel battery (9), continuously keeping in all time the outer surface clean.



4. Technical Data

Basic Characteristics

Below are the standard specifications for the PPS automatic self-cleaning Pump Filter. Custom or non-standard specifications are also available upon request.

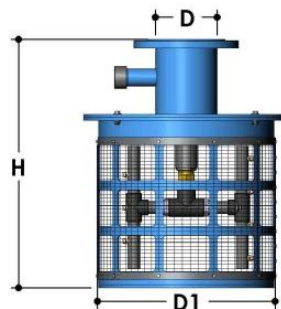
Model	Diameter Inlet/Outlet		Recommended flow rate (up to)			
	inch	mm	1200 micron		2500 micron	
			m ³ /h	GPM	m ³ /h	GPM
PPS1004	4	100	80	350	100	440
PPS1006	6	150	150	660	190	840
PPS1008	8	200	300	1320	380	1670
PPS1010	10	250	500	2200	630	2770
PPS1012	12	300	700	3080	880	3870
PPS1014	14	350	1100	4840	1000	4400
PPS1016	16	400	1400	6160	1380	6080
PPS1018	18	450	1750	7700	2180	9600
PPS1020	20	500	2200	9690	2750	12100

Technical Specifications

Recommended operating pressure: 2-3 bar (29 – 43.5 psi)

Minimal operating pressure: 1.5 bar (22 psi)

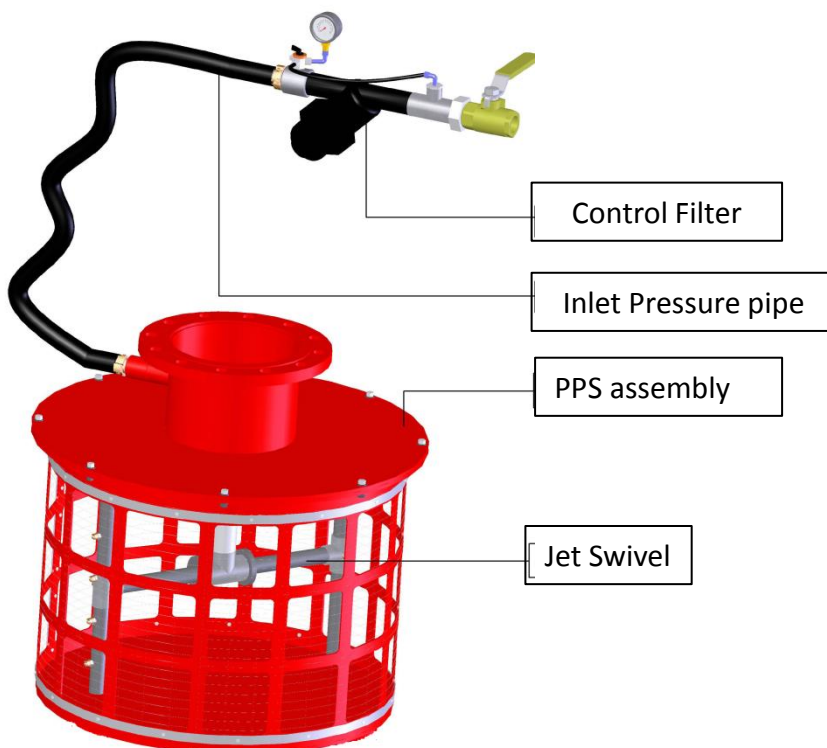
Model	Inlet D		D1		H		Packaging weight		Packaging volume LxWxH	
	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(kg)	(lb)	(m)	(ft)
PPS1004	100	4	478	18.82	520	20.47	60	132	0.85x0.85x0.85	2.80x2.80x2.80
PPS1006	150	6	478	18.82	670	26.38	75	165	0.85x0.85x0.85	2.80x2.80x2.80
PPS1008	200	8	478	18.82	870	34.25	80	176	0.85x0.85*1.05	2.80x2.80x3.50
PPS1010	250	10	748	29.45	790	31.1	128	282	1.00*1.00*0.95	3.30x3.30x3.10
PPS1012	300	12	748	29.45	970	38.19	141	311	1.00*1.00*1.15	3.30x3.30x3.80
PPS1014	350	14	1055	41.54	1025	40.35	**	**	**	**
PPS1016	400	16	1055	41.54	1025	40.35	**	**	**	**
PPS1018	450	18	1270	50	1032	40.63	**	**	**	**
PPS1020	500	20	1270	50	1032	40.63	**	**	**	**



5. Initial Installation & Operation

The PPS assembly is packed on a wood platform with all its parts installed. Please note: the PPS assembly does not include the inlet flushing pressure pipe and its accessories (ball valve, control screen and pressure gauge).

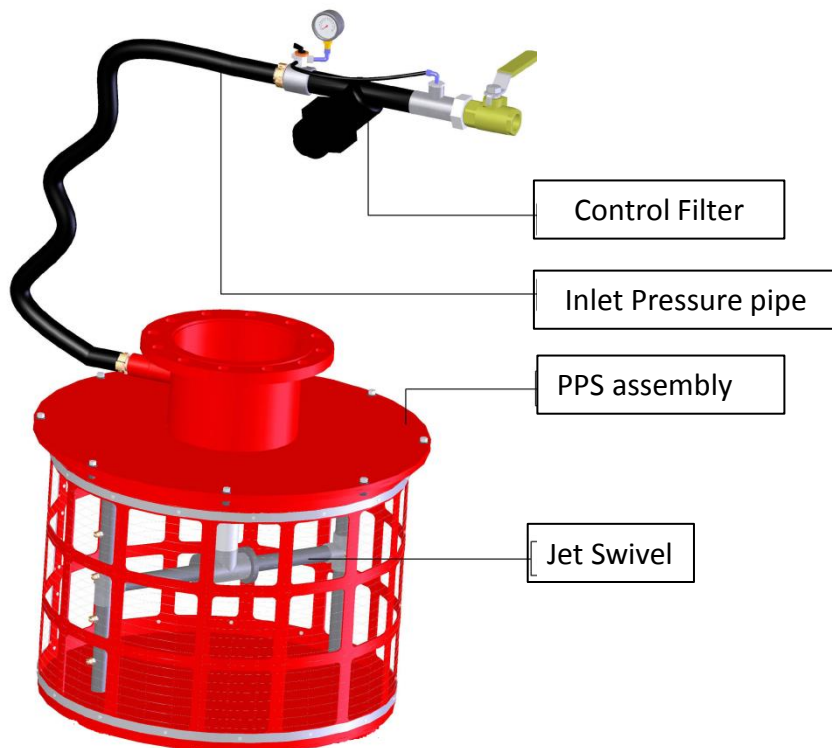
1. Take PPS assembly off of the wood platform.
2. Install the PPS assembly to the suction pipe of the pump; check that the length of the suction pipe with the PPS assembly is feet to the pumping site.
3. Connect 1.5" control filter and a pressure pipe to the pressure side of the pump and to the flushing socket on the PPS assembly.
4. Check that the swivel assembly is rotating.
5. Turn on the pump and make sure that water is running freely via the inlet flushing pipe.
6. Check that all connections are properly secured.
7. Check that all bolts and nuts on filter periphery are properly tightened and secured.



6. Maintenance & Periodical Checking

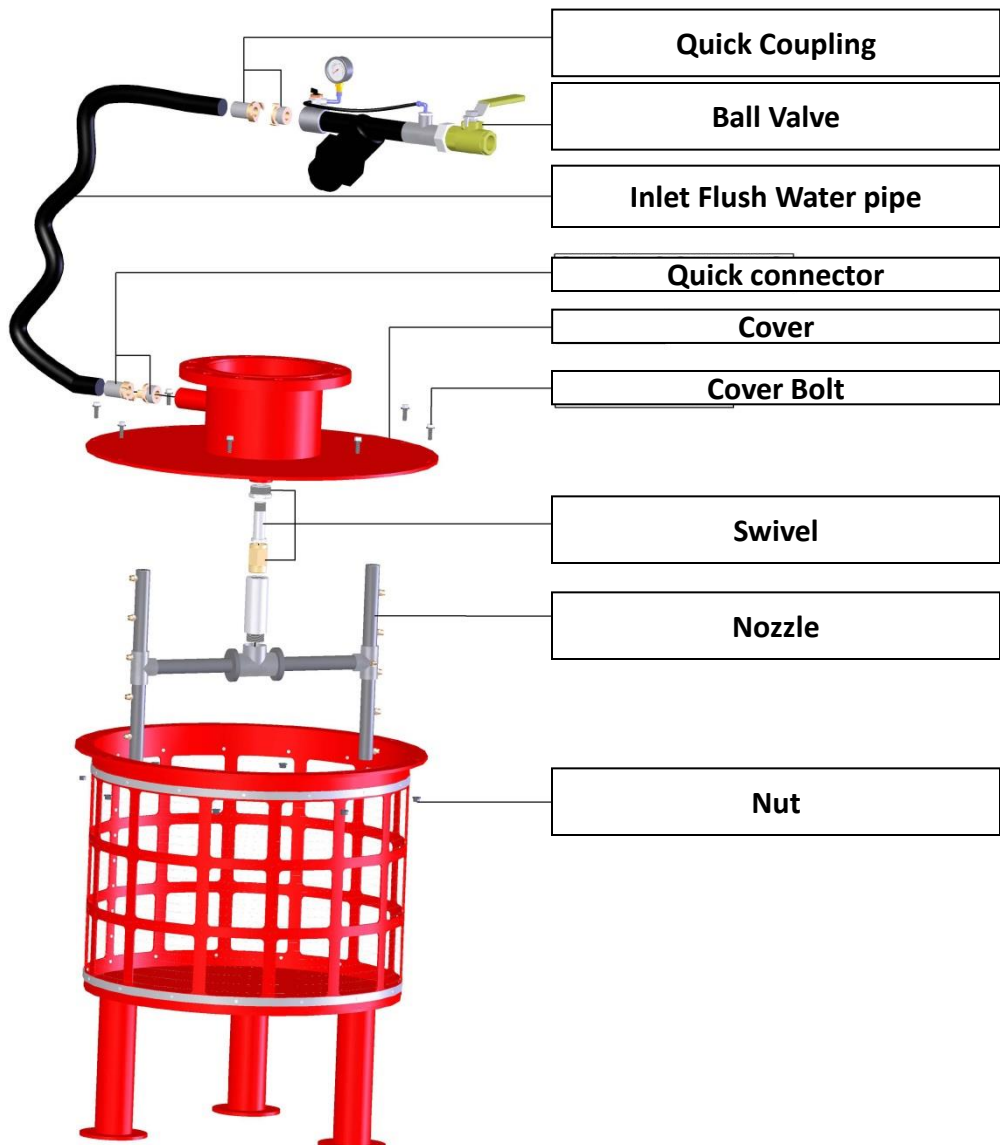
6.1 – Releasing of blocked nozzles

1. Close the inlet ball valve on the flushing pressure pipe.
2. Disconnect the flushing inlet pipe from the ball valve.
3. Connect a vacuum machine to the pipe and turn it on.
4. Verify that water is running from the vacuum machine.
5. Check that the control 1.5" filter is clean, if necessary clean it.
6. Connect the inlet pressure pipe to the control filter.
7. Open the ball valve and make sure that the water is running freely.



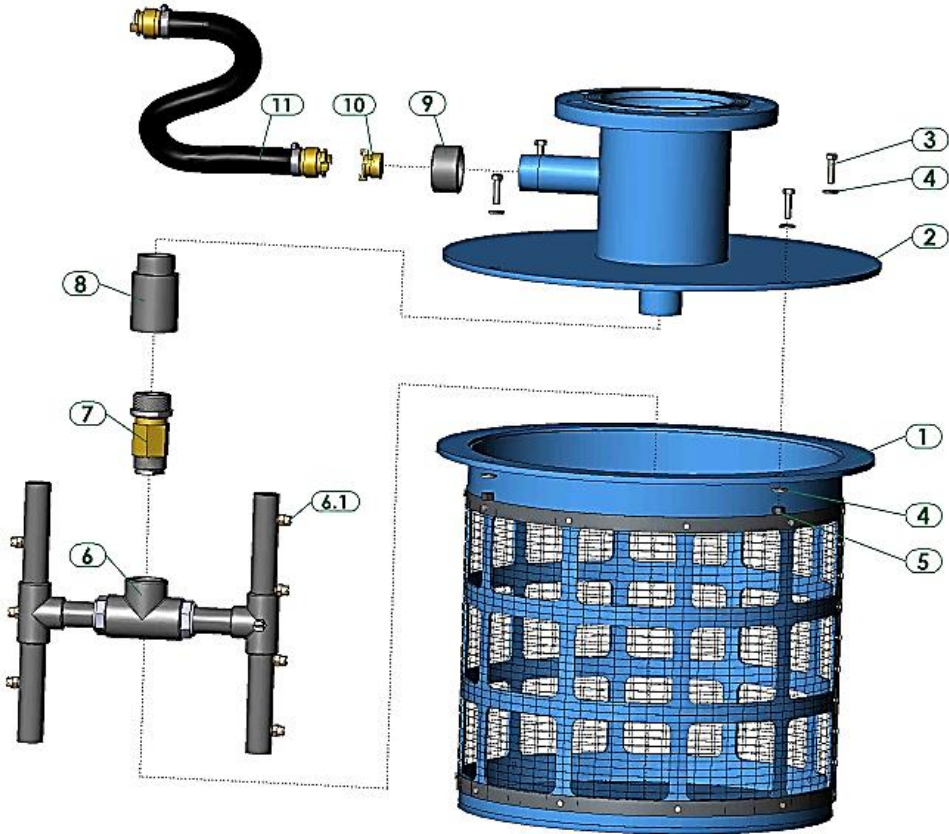
6.2 – Swivel Replacement

1. Shut the pump and remove the PPS from the water in the pumping station.
2. Open the bolts of the PPS cover.
3. Disassemble the damaged swivel from the nozzle assembly and from the cover.
4. Install a new swivel on the nozzle assembly and connect it to the cover assembly.
5. Close the PPS bolts and install the PPS assembly on the pump suction pipe.
6. Check that the swivel assembly is spinning free.
7. Turn on the pump and make sure the water is running freely via the flushing inlet pipe.



7. IPB

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1. Filter Body
2. Filter Cover
3. Bolt
4. Washer
5. Nut
6. Rotating Sprinkler
7. Spray Nozzle
8. Rotating sprinkler bearing
9. Reducing socket
10. Female claw coupling
11. Hose

10. INTERNATIONAL WARRANTY

YAMIT Filtration & Water Treatment Ltd. (hereinafter -"**YAMIT**") guarantees to the customers who purchased **YAMIT's** products directly from **YAMIT** or through its authorized distributors, that such products will be free from defect in material and/or workmanship for the term set forth below, when such products are properly installed, used and maintained in accordance with **YAMIT's** instructions, written or verbal.

Should such products prove defective within one year as of the day it left **YAMIT's** premises, and subject to receipt by **YAMIT** or its authorized representative, of written notice thereof from the purchaser within 30 days of discovery of such defect or failure - **YAMIT** will repair or replace or refund the purchase price, at its sole option, any item proven defective in workmanship or material.

YAMIT will not be responsible, nor does this warranty extend to any consequential or incidental damages or expenses of any kind or nature, regardless of the nature thereof, including without limitation, injury to persons or property, loss of use of the products, loss of goodwill, loss of profits or any other contingent liabilities of any kind or character alleged to be the cause of loss or damage to the purchaser.

This warranty does not cover damage or failure caused by misuse, abuse or negligence, nor shall it apply to such products upon which repairs or alterations have been made by other than an authorized **YAMIT** representative.

This warranty does not extend to components, parts or raw materials used by **YAMIT** but manufactured by others, which shall be only to the extent warranted by the manufacturer's warranty.

No agents or representatives shall have the authority to alter the terms of this warranty nor to add any provisions to it not contained herein or to extend this warranty to anyone other than **YAMIT's** customers.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, EXCEPT THIS WARRANTY WHICH IS GIVEN IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

