

PTSCS836 Series (Sand filter + Carbon filter + Softener) Pretreatment for R.O.

have been engineered for capacities ranging

from 0.3m³/h to 10m³/h

Applications:

- Pretreatment of Reverse Osmosis system
- Water filtration



Benefits

- Fully Equipped and Customizable
- Flexible application
- Components Easily Accessible
- Pre-Plumbed Wired and Assembled
- Individually Tested and preserved
- Low Operation and Maintenance Costs
- Easy Maintenance and Servicing
- 1-Year Limited Warranty

PTSCS836 Series Pretreatment for R.O.

Standard Features

FRP Tank

- Working Pressure --- Max. 100psi
- Working Temperature: 1-49°C
- Max. Vacuum: 127mm Hg

Feed Water Pump

- Type --- Horizontal Multi-stage Centrifugal
- Pump Material --- SS304
- Connection --- Thread (horizontal pump)
Flange (vertical pump)
- Pump Brand --- CNP

Connection Port

- Feed Inlet Port
- Outlet Port
- Drain Port

Instrumentation

- Pressure gauge --- Inlet, Outlet
- Micro switch--- Multi-port Auto valves for Sand filter and Carbon filter

Control system

- Relay control
- Tank level control
- Aux on/off backup
- Pretreatment lockout signal

Multiport Valve

- Type --- Mechanical Timer
- Connection --- Thread

Material of Construction

- Piping and Valves--- UPVC
- Frame --- SS304
- Control box --- IP54 (painted carbon steel)

Documentation Included

- Operation and maintenance manual
- Drawings: P&ID, Electrical diagram

Options and Upgrades

- Flow meter
- Pressure tank
- Grundfos Pump
- SS316L Pump
- Volume Meter for the Multiport Valve
- Flux switch
- Pressure switch (for controlling the Pump)
- Vertical Pump
- Digital Multiport Valve
- Duplex softener (one duty, one standby)



PTSCS836 Series Pretreatment for R.O.

Ordering Guide

Order Example	PTSCS836	30	FD/TB	220S50
Type				
Tank Size (Diameter by inch)				
Connection port Flange/Thread/Socket(code)				
Power supply (code)				

Connection Port (Flange)	Code
Flange, ANSI	FA
Flange, DIN	FD

Connection Port (Thread)	Code
Thread, NPT	TN
Thread, BSPT	TB

Connection Port (Socket)	Code
Socket, ANSI	SA
Socket, DIN	SD

Power Supply	Code
220VAC / 50hz / single phase	220S50
230VAC / 50hz / single phase	230S50
240VAC / 50hz / single phase	240S50
100VAC / 60hz / single phase	100S50
110VAC / 60hz / single phase	110S50
120VAC / 60hz / single phase	120S60
127VAC / 60hz / single phase	127S60
200VAC / 60hz / single phase	200S60
220VAC / 60hz / single phase	220S60
240VAC / 60hz / single phase	240S60
380VAC / 50hz / three phase	380T50
400VAC / 50hz / three phase	400T50
415VAC / 50hz / three phase	415T50
440VAC / 50hz / three phase	440T50
200VAC / 60hz / three phase	200T60
208VAC / 60hz / three phase	208T60
220VAC / 60hz / three phase	220T60
240VAC / 60hz / three phase	240T60
380VAC / 60hz / three phase	380T60
440VAC / 60hz / three phase	440T60
460VAC / 60hz / three phase	460T60
480VAC / 60hz / three phase	480T60

PTSCS836 Series Pretreatment for R.O.

Specifications

MODEL	PTSCS836-08	PTSCS836-10	PTSCS836-12	PTSCS836-14	PTSCS836-16
Service Flow rate	0.4~0.7m ³ /hr	0.7~1.0m ³ /hr	1.0~1.5m ³ /hr	1.5~2.0m ³ /hr	2.0~2.5m ³ /hr
Approx. Backwash Flow Rate	1.2m ³ /hr (sand filter)	2.3m ³ /hr (sand filter)	2.8m ³ /hr (sand filter)	3.5m ³ /hr (sand filter)	4.0m ³ /hr (sand filter)
	0.9m ³ /hr (carbon filter)	1.4m ³ /hr (carbon filter)	1.6m ³ /hr (carbon filter)	2.4m ³ /hr (carbon filter)	2.8m ³ /hr (carbon filter)
	0.4m ³ /hr (softener)	0.55m ³ /hr (softener)	0.9m ³ /hr (softener)	1.15m ³ /hr (softener)	1.6m ³ /hr (softener)
Pump and Motor					
Manufacturer	CNP	CNP	CNP	CNP	CNP
Model	CHLF2-40 (50hz)	CHLF2-40 (50hz)	CHLF2-40 (50hz)	CHLF2-40 (50hz)	CHLF4-40 (50hz)
Motor HP	0.55kw	0.55kw	0.55kw	0.55kw	0.75kw
Wet contact Material	SS304	SS304	SS304	SS304	SS304
Flowrate (service) ¹	0.6m ³ /hr @ 3.5bar	0.9m ³ /hr @ 3.5bar	1.3m ³ /hr @ 3.3bar	1.8m ³ /hr @ 3.0bar	2.3m ³ /hr @ 3.4bar
Flowrate (backwash for sand)	1.2m ³ /hr @ 3.3bar	2.3m ³ /hr @ 2.7bar	2.8m ³ /hr @ 2.5bar	3.5m ³ /hr @ 2.2bar	4.0m ³ /hr @ 3.0bar
FRP Tank					
Approx. Dimension	Ø8"×H44"	Ø10"×H54"	Ø12"×H52"	Ø14"×H65"	Ø16"×H65"
Open	2.5" Top	2.5" Top	2.5" Top	2.5" Top	4" Top
Max. Working Pre.	10bar	10bar	10bar	10bar	10bar
Brine Tank					
Capacity	60L	100L	100L or 130L	160L or 200L	200L
Multi-port Valve (Filter valve / Softener valve)					
Auto Valve Model (brand: Fobrite)	F11-FTC / F11-STC	F11-FTC / F11-STC	D-FTC / D-STC	D-FTC / D-STC	F15-FTC / F15-STC
Optional: Auto valve (brand: Pentair)	5600FT / 5600ST	5600FT / 5600ST	5000SE-F / 5000SE-S	5000SE-F / 5000SE-S	2510FT / 2510ST
Optional: Manual valve (brand: Runxin)	F56E / F64B	F56E / F64B	F56A / F64B	F56F / F64A	F56F / F64F
Inlet/Outlet	1" Thread	1" Thread	1" Thread	1" Thread	1" Thread
Drain	1/2" Thread	1/2" Thread	1/2" Thread	1/2" Thread	3/4" Thread
Max. Working Pre.	7bar	7bar	7bar	7bar	7bar
Installation					
Inlet	1" Thread	1" Thread	1" Thread	1" Thread	1-1/4" Thread
Outlet	1" Thread	1" Thread	1" Thread	1" Thread	1" Thread
Drain	1/2"	1/2"	1/2"	1/2"	3/4"
Package Dimension					
Approx. Height	1650mm	1650mm	1650mm	1650mm	1650mm
Approx. Width	700mm	700mm	700mm	700mm	700mm
Approx. Depth	650mm	650mm	650mm	800mm	800mm
Approx. Shipping Weight	105kg	115kg	128kg	145kg	180kg

¹Recirculation pipeline with adjustable valve or pressure relief valve is required from feed pump outlet to feed water tank.

PTSCS836 Series Pretreatment for R.O.

Specifications

MODEL	PTSCS836-18	PTSCS836-21	PTSCS836-24	PTSCS836-30	PTSCS836-36
Service Flow rate	2.5~3.0m ³ /hr	3.0~4.5m ³ /hr	4.5~5.3m ³ /hr	5.3~7.0m ³ /hr	7.0~11m ³ /hr
Approx. Backwash Flow Rate	6.0m ³ /hr (sand filter)	8.0m ³ /hr (sand filter)	12m ³ /hr (sand filter)	16m ³ /hr (sand filter)	22m ³ /hr (sand filter)
	3.6m ³ /hr (carbon filter)	6.0m ³ /hr (carbon filter)	3.5m ³ /hr (carbon filter)	12m ³ /hr (carbon filter)	16m ³ /hr (carbon filter)
	1.8m ³ /hr (softener)	2.7m ³ /hr (softener)	7.5m ³ /hr (softener)	5.7m ³ /hr (softener)	8m ³ /hr (softener)
Pump and Motor					
Manufacturer	CNP	CNP	CNP	CNP	CNP
Model	CDLF4-4 (50hz)	CDLF4-5 (50hz)	CDLF8-4 (50hz)	CDLF12-3 (50hz)	CDLF16-3 (50hz)
Motor HP	0.75kw	1.1kw	1.5kw	2.2kw	3kw
Wet contact Material	SS304	SS304	SS304	SS304	SS304
Flowrate (service) ¹	3.0m ³ /hr @ 3.4bar	4.5m ³ /hr @ 3.6bar	5.3m ³ /hr @ 4.0bar	7m ³ /hr @ 3.5bar	11m ³ /hr @ 3.8bar
Flowrate (backwash for sand)	6.0m ³ /hr @ 2.4bar	8.0m ³ /hr @ 2.0bar	12m ³ /hr @ 2.6bar	16m ³ /hr @ 2.1bar	22m ³ /hr @ 2.5bar
FRP Tank					
Approx. Dimension	Ø18"×H65"	Ø21"×H62"	Ø24"×H72"	Ø30"×H72"	Ø36"×H72"
Open	4" Top	4" Top	4" Top	4" Top	4" Top
Max. Working Pre.	10bar	10bar	10bar	10bar	10bar
Brine Tank					
Capacity	200L or 300L	200L or 300L	300L	350L or 500L	500L
Multi-port Valve					
Auto Valve Model (brand: Fobrite)	F21-FTC / F21-STC	F21-FTC / F21-STC	F21-FTC / F21-STC	F41-FTC / F41-STC	F41-FTC / F41-STC
Optional: Auto valve (brand: Pentair)	2850FT / 2850ST	2850FT / 2850ST	2850FT / 2850ST	3150FT / 3150ST	3150FT / 3150ST
Optional: Manual valve (brand: Runxin)	F56D / F64F	F56D / F64F	F56D / F64D	N/A	N/A
Inlet/Outlet	1.5" Thread	1.5" Thread	1.5" Thread	2" Thread	2" Thread
Drain	1" Thread	1" Thread	1" Thread	2" Thread	2" Thread
Max. Working Pre.	7bar	7bar	7bar	7bar	7bar
Installation					
Inlet	1-1/4" Flange	1-1/4" Flange	2" Flange	2" Flange	2" Flange
Outlet	1.5" Flange	1.5" Flange	1.5" Flange	2" Flange	2" Flange
Drain	1/2"	1/2"	1/2"	1/2"	3/4"
Package Dimension					
Approx. Height	1650mm	1650mm	1650mm	1650mm	1650mm
Approx. Width	700mm	700mm	700mm	700mm	700mm
Approx. Depth	650mm	650mm	650mm	800mm	800mm
Approx. Shipping Weight	220kg	265kg	335kg	450kg	610kg

¹Recirculation pipeline with adjustable valve or pressure relief valve is required from feed pump outlet to feed water tank.

Operating Limits

Maximum Feed Temperature	℃ (°F)	43 (110)	Maximum Feed Pressure	bar (psi)	7 (100)
Minimum Feed Temperature	℃ (°F)	1 (34)	Minimum Feed Pressure	bar (psi)	2.8 (40)