

PTMC Series Reverse Osmosis system



PTMC series pretreatment (Multi-media filter + Carbon filter) for reverse osmosis systems have been engineered for **capacities ranging from 10T/H-50T/H.**

Applications

- Pretreatment of reverse osmosis system
- Water filtration

Standard Features

■ FRP Tank

- Working pressure---Max. 100PSI
- Working temperature---1-49℃
- Max. vacuum: 127mm Hg
- Accessory: Top/Bottom distributor

Vacuum breaker

■ Auto Valve Controller

- Siemens PLC control
- Parameter setting panel
- Backwash timer control
- Communication connection with RO backup
- Flow meter with switch or pulse signal

Differential pressure and external signal control backup

■ Feed Water Pump

- Type---Vertical multistage centrifugal
- Pump material---SS304
- Connection---Flange
- Brand---CNP

- Qty: 1 pc

■ Backwash Pump

- Type---Vertical multistage centrifugal
- Pump material---SS304
- Connection---Flange
- Brand---CNP
- Qty: 1 pc

■ 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

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

Options and Upgrades

- Flow meter with output switch signal
- Differential pressure switch
- Grundfos pump
- SS316L pump
- Standby pump
- Flocculant dosing unit
- Flow meter with pulse signal
- ABB VFD
- Carbon steel tank with rubber liner
- Air flush or multi-media filter
- Communication: Modbus RTU

Ordering Guide

Order Example	PTMC	120	FD/TB	440T60
Type				
Tank Size (Diameter by CM)				
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

Specifications

MODEL	PTMC-100	PTMC-120	PTMC-135	PTMC-150	PTMC-180
Service Flowrate ¹	10~16m ³ /hr 32m ³ /hr	14~22m ³ /hr 44m ³ /hr	18~30m ³ /hr 60m ³ /hr	22~35m ³ /hr 70m ³ /hr	32~50m ³ /hr 100m ³ /hr
Approx. Backwash Flow Rate	(multi-media filter) 21m ³ /hr (carbon filter)	(multi-media filter) 30m ³ /hr (carbon filter)	(multi-media filter) 38m ³ /hr (carbon filter)	(multi-media filter) 48m ³ /hr (carbon filter)	(multi-media filter) 68m ³ /hr (carbon filter)
Feed Pump and Motor					
Manufacturer	CNP	CNP	CNP	CNP	CNP
Model	CDLF16-2 (60hz)	CDLF20-2 (60hz)	CDLF32-20-2 (60hz)	CDLF32-20-2 (60hz)	CDLF42-10 (60hz)
Motor HP	4kw	4kw	5.5kw	5.5kw	7.5kw
Wet contact Material	SS304	SS304	SS304	SS304	SS304
Flowrate (service)	16m ³ /hr @ 3.5bar	22m ³ /hr @ 3.3bar	30m ³ /hr @ 3.6bar	35m ³ /hr @ 3.2bar	50m ³ /hr @ 2.9bar
Flowrate ² (backwash with 2 Feed pumps)	32m ³ /hr @ 3.5bar	44m ³ /hr @ 3.3bar	60m ³ /hr @ 3.6bar	70m ³ /hr @ 3.2bar	100m ³ /hr @ 2.9bar
Backwash pump					
Manufacturer	CNP	CNP	CNP	CNP	CNP
Model	CDLF32-10 (60hz)	CDLF42-10-1 (60hz)	CDLF65-10-1 (60hz)	CDLF65-10-1 (60hz)	CHLF85-10-1 (60hz)
Motor HP	4kw	5.5kw	7.5kw	7.5kw	11kw
Wet contact Material	SS304	SS304	SS304	SS304	SS304
Flowrate (backwash)	32m ³ /hr @ 2.3bar	44m ³ /hr @ 2.5bar	60m ³ /hr @ 2.3bar	70m ³ /hr @ 2.1bar	100m ³ /hr @ 2.1bar
FRP Tank					
Approx. Dimension Open	Ø1000×H2145mm 6"Flange Top/Bottom	Ø1200×H2110mm 6"Flange Top/Bottom	Ø1350×H2400mm 6"Flange Top/Bottom	Ø1500×H2450mm 6"Flange Top/Bottom	Ø1800×H2450mm 6"Flange Top/Bottom
Max. Working Pre.	7bar	7bar	7bar	7bar	7bar
Carbon steel tank with rubber liner (Optional)					
Approx. Dimension Open	Ø1000×H2700mm 6"Flange Top/Bottom	Ø1200×H2700mm 6"Flange Top/Bottom	Ø1350×H3000mm 6"Flange Top/Bottom	Ø1500×H3200mm 6"Flange Top/Bottom	Ø1800×H3200mm 6"Flange Top/Bottom
Max. Working Pre.	7bar	7bar	7bar	7bar	7bar
Pneumatic valves for Multimedia filter					
Feed valve	2" butterfly valve	3" butterfly valve	3" butterfly valve	3" butterfly valve	4" butterfly valve
Product valve	2" butterfly valve	3" butterfly valve	3" butterfly valve	3" butterfly valve	4" butterfly valve
Backwash valve	2.5" butterfly valve	3" butterfly valve	4" butterfly valve	4" butterfly valve	5" butterfly valve
Top drain valve	2.5" butterfly valve	3" butterfly valve	4" butterfly valve	4" butterfly valve	5" butterfly valve
Bottom drain valve	2" butterfly valve	3" butterfly valve	3" butterfly valve	3" butterfly valve	4" butterfly valve
Air inlet valve (optional)	1" double union ball valve	1" double union ball valve	1.5" double union ball valve	1.5" double union ball valve	2" butterfly valve
Air vent valve (optional)	1/2" double union ball valve	1/2" double union ball valve	3/4" double union ball valve	3/4" double union ball valve	1" double union ball valve
Pneumatic valves for Carbon filter					
Feed valve	2" butterfly valve	3" butterfly valve	3" butterfly valve	3" butterfly valve	4" butterfly valve
Product valve	2" butterfly valve	3" butterfly valve	3" butterfly valve	3" butterfly valve	4" butterfly valve
Backwash valve	2" butterfly valve	3" butterfly valve	3" butterfly valve	3" butterfly valve	4" butterfly valve
Top drain valve	2" butterfly valve	3" butterfly valve	3" butterfly valve	3" butterfly valve	4" butterfly valve
Bottom drain valve	2" butterfly valve	3" butterfly valve	3" butterfly valve	3" butterfly valve	4" butterfly valve
Installation					
Inlet	2" Flange	3" Flange	3" Flange	3" Flange	4" Flange
Outlet	2" Flange	3" Flange	3" Flange	3" Flange	4" Flange
Drain	3" Flange	3" Flange	4" Flange	4" Flange	5" Flange
Air inlet inlet (optional)	1/2" socket DIN or ANSI	1/2" socket DIN or ANSI	1.5" socket DIN or ANSI	1.5" socket DIN or ANSI	2" socket DIN or ANSI
Air vent inlet (optional)	1/2" socket DIN or ANSI	1/2" socket DIN or ANSI	3/4" socket DIN or ANSI	3/4" socket DIN or ANSI	1" socket DIN or ANSI
Options					
Flocculant dosing unit	Metering pump: 3L/h Chemical tank: 200-300L	Metering pump: 3L/h Chemical tank: 200-300L	Metering pump: 3L/h Chemical tank: 200-300L	Metering pump: 3L/h Chemical tank: 300-500L	Metering pump: 7L/h Chemical tank: 300-500L

Operating Limits

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