



*Clear solutions to your water problems*

# RESIDENTIAL AND COMMERCIAL REVERSE OSMOSIS SYSTEMS

Horizontal Series

Offering consumers the opportunity to have safe, treated water within the comfort of their own home or business



Proudly manufactured in  
Humboldt, Saskatchewan



(306) 986-4499



myROsystem@sapphire-water.ca



Saskatoon | Calgary | Winnipeg | Humboldt

# DRO4040-10

Membrane Quantity	Permeate Flow Range	Maximum Operating Pressure	Array	Dimensions Height   Width   Depth	Estimated Shipping Weight
10	6 - 8 USGPM	250 psi	2:2:1	Inches: 63   34   104 Mm: 1594   865   2640	175 lbs (79 kgs)

## STANDARD OFFERINGS

### On-Skid Mechanical Equipment:

- o Frame: Carbon steel
- o Stainless Steel High Pressure Recirculation & Concentrate Piping
- o Stainless Steel Pre-Filter Housing and Cartridges
- o Low Energy, High Recovery RO Membranes
- o Fiberglass Membrane Vessels
- o On-Skid Booster Pump (5 HP)
- o Raw and Permeate Pressure Switches
- o Pre-Filter, Post-Filter, Inter-Stage, Permeate and Concentrate Pressure Gauges
- o Inlet, Concentrate, CIP Cleaning, and Permeate Divert Solenoid Valves

### On-Skid Electrical Equipment:

- o Microprocessor Controller
  - o 208V, Three Phase Power
- \* Electrical connections provided by others*

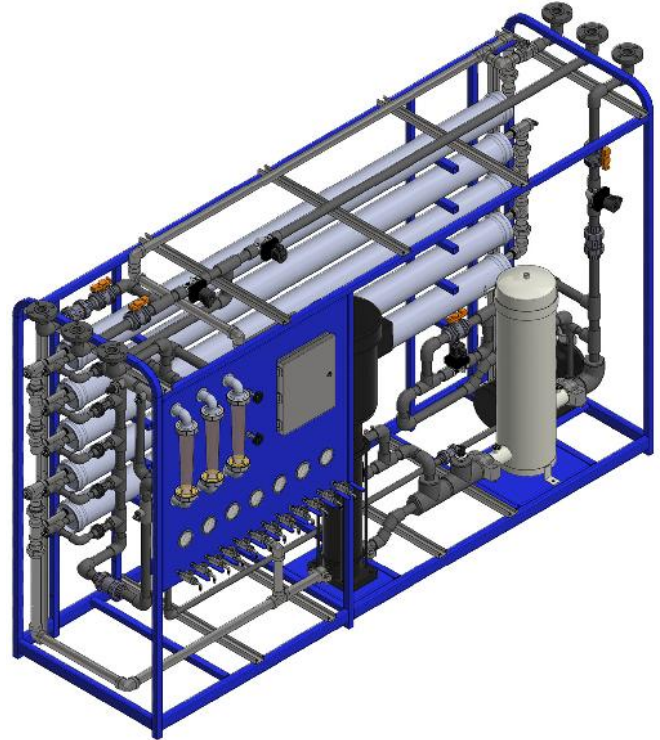
### Chemical Equipment:

- o Anti-Scalant Dosing Pump and Day Tank
- \* Shipped loose*

### Installation Requirements:

- o **Feed Pressure Supply Range:** 20-40 psi
- o **Inlet Connection:** 1" NPT
- o **Permeate Connection:** 1" NPT
- o **Concentrate Connection:** 1" NPT
- o **Proper Electrical Connections**

*\* Expected operating pressures and flow set points can be shared if lab water quality is provided. Predicted system flow rate is based on membrane manufacturer specifications and nominal conditions. Membrane production varies with water quality, operating pressure, temperature, pH, and recovery. Anti-scalant chemical injection required.*



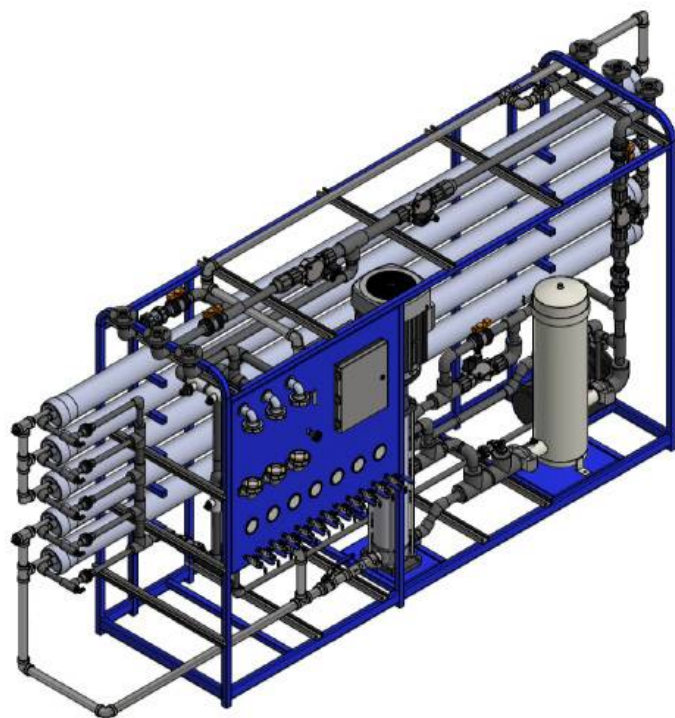
## ADDITIONAL ENHANCEMENTS

- Clean-in-Place System
- Clean-in-Place Heater (kW)
- Granular Activated Carbon (GAC)
- Re-pressurization System
- TDS and Feed Conductivity
- Alternative Voltage: 575V, 3P
- Stenner Dosing Pumps
- Custom Membranes
- Calcite Contactor
- Spare Set of Membranes
- Spare Cartridges
- On-Site Commissioning and Training
- CSA Certification



# DRO4040-15

Membrane Quantity	Permeate Flow Range	Maximum Operating Pressure	Array	Dimensions Height   Width   Depth	Estimated Shipping Weight
15	9 - 12 USGPM	250 psi	2:2:1	Inches: 63   32   137 Mm: 1600   825   3485	175 lbs (79 kgs)



## STANDARD OFFERINGS

### On-Skid Mechanical Equipment:

- o Frame: Carbon steel
- o Stainless Steel High Pressure Recirculation & Concentrate Piping
- o Stainless Steel Pre-Filter Housing and Cartridges
- o Low Energy, High Recovery RO Membranes
- o Fiberglass Membrane Vessels
- o On-Skid Booster Pump (7.5 HP)
- o Raw and Permeate Pressure Switches
- o Pre-Filter, Post-Filter, Inter-Stage, Permeate and Concentrate Pressure Gauges
- o Inlet, Concentrate, CIP Cleaning, and Permeate Divert Solenoid Valves

### On-Skid Electrical Equipment:

- o Microprocessor Controller
  - o 208V, Three Phase Power
- \* Electrical connections provided by others*

### Chemical Equipment:

- o Anti-Scalant Dosing Pump and Day Tank
- \* Shipped loose*

### Installation Requirements:

- o **Feed Pressure Supply Range:** 20-40 psi
- o **Inlet Connection:** 1" NPT
- o **Permeate Connection:** 1" NPT
- o **Concentrate Connection:** 1" NPT
- o **Proper Electrical Connections**

*\* Expected operating pressures and flow set points can be shared if lab water quality is provided. Predicted system flow rate is based on membrane manufacturer specifications and nominal conditions. Membrane production varies with water quality, operating pressure, temperature, pH, and recovery. Anti-scalant chemical injection required.*

## ADDITIONAL ENHANCEMENTS

- Clean-in-Place System
- Clean-in-Place Heater (kW)
- Granular Activated Carbon (GAC)
- Re-pressurization System
- TDS and Feed Conductivity
- Alternative Voltage: 575V, 3P
- Stenner Dosing Pumps
- Custom Membranes
- Calcite Contactor
- Spare Set of Membranes
- Spare Cartridges
- On-Site Commissioning and Training
- CSA Certification



# DRO4040-21

Membrane Quantity	Permeate Flow Range	Maximum Operating Pressure	Array	Dimensions Height   Width   Depth	Estimated Shipping Weight
21	12 - 17 USGPM	250 psi	3:2:2	Inches: 64   34   140 Mm: 1625   865   3538	175 lbs (79 kgs)

## STANDARD OFFERINGS

### On-Skid Mechanical Equipment:

- o Frame: Carbon steel
- o Stainless Steel High Pressure Recirculation & Concentrate Piping
- o Stainless Steel Pre-Filter Housing and Cartridges
- o Low Energy, High Recovery RO Membranes
- o Fiberglass Membrane Vessels
- o On-Skid Booster Pump (7.5 HP)
- o Raw and Permeate Pressure Switches
- o Pre-Filter, Post-Filter, Inter-Stage, Permeate and Concentrate Pressure Gauges
- o Inlet, Concentrate, CIP Cleaning, and Permeate Divert Solenoid Valves

### On-Skid Electrical Equipment:

- o Microprocessor Controller
  - o 208V, Three Phase Power
- \*Electrical connections provided by others*

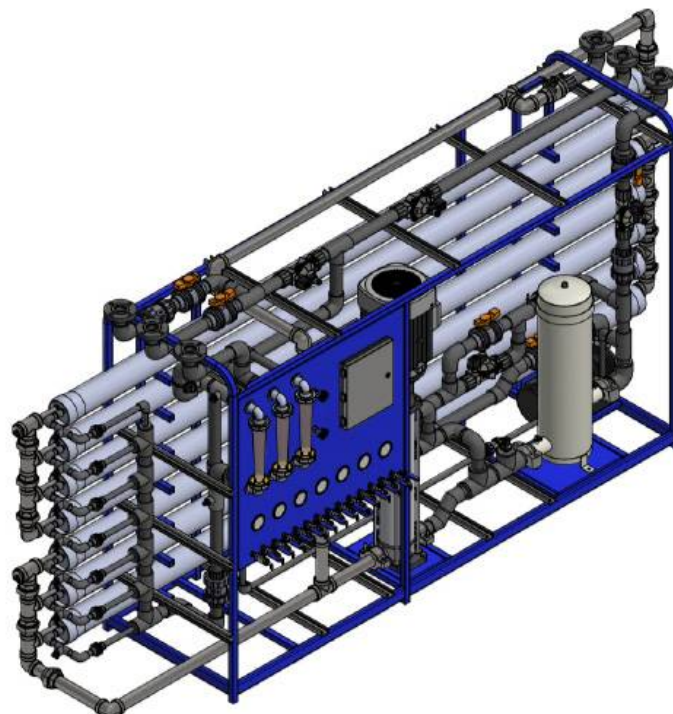
### Chemical Equipment:

- o Anti-Scalant Dosing Pump and Day Tank
- \*Shipped loose*

### Installation Requirements:

- o **Feed Pressure Supply Range:** 20-40 psi
- o **Inlet Connection:** 1½" NPT
- o **Permeate Connection:** 1½" NPT
- o **Concentrate Connection:** 1½" NPT
- o **Proper Electrical Connections**

*\* Expected operating pressures and flow set points can be shared if lab water quality is provided. Predicted system flow rate is based on membrane manufacturer specifications and nominal conditions. Membrane production varies with water quality, operating pressure, temperature, pH, and recovery. Anti-scalant chemical injection required.*



## ADDITIONAL ENHANCEMENTS

- Clean-in-Place System
- Clean-in-Place Heater (kW)
- Granular Activated Carbon (GAC)
- Re-pressurization System
- TDS and Feed Conductivity
- Alternative Voltage: 575V, 3P
- Stenner Dosing Pumps
- Custom Membranes
- Calcite Contactor
- Spare Set of Membranes
- Spare Cartridges
- On-Site Commissioning and Training
- CSA Certification



# DRO8040-6

Membrane Quantity	Permeate Flow Range	Maximum Operating Pressure	Array	Dimensions Height   Width   Depth	Estimated Shipping Weight
6	17 - 25 USGPM	250 psi	1:1	Inches: 68   44   151 Mm: 1733   1118   3835	175 lbs (79 kgs)

## STANDARD OFFERINGS

### On-Skid Mechanical Equipment:

- o Frame: Carbon steel
- o Stainless Steel High Pressure Recirculation & Concentrate Piping
- o Stainless Steel Pre-Filter Housing and Cartridges
- o Low Energy, High Recovery RO Membranes
- o Fiberglass Membrane Vessels
- o On-Skid Booster Pump (15 HP)
- o Raw and Permeate Pressure Switches
- o Pre-Filter, Post-Filter, Inter-Stage, Permeate and Concentrate Pressure Gauges
- o Inlet, Concentrate, CIP Cleaning, and Permeate Divert Solenoid Valves

### On-Skid Electrical Equipment:

- o Microprocessor Controller
  - o 208V, Three Phase Power
- \* Electrical connections provided by others*

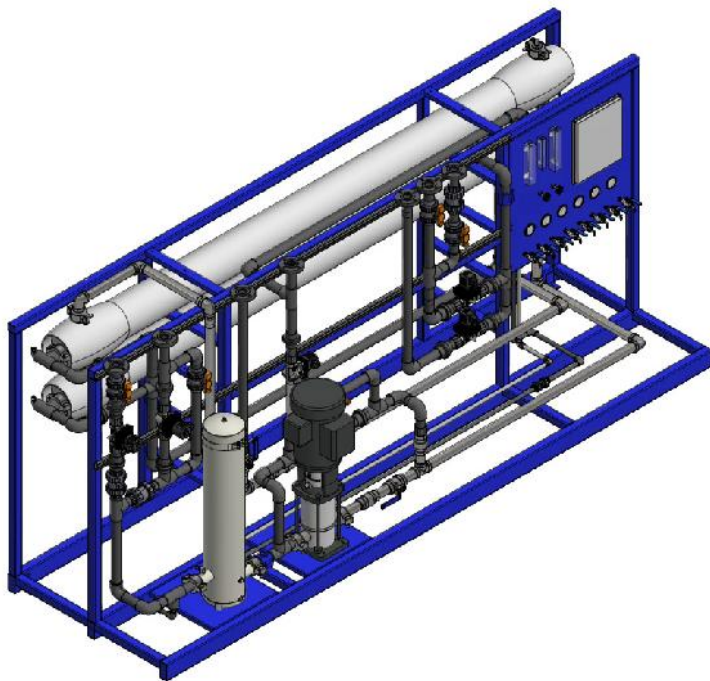
### Chemical Equipment:

- o Anti-Scalant Dosing Pump and Day Tank
- \* Shipped loose*

### Installation Requirements:

- o **Feed Pressure Supply Range:** 20-40 psi
- o **Inlet Connection:** 1½" NPT
- o **Permeate Connection:** 1½" NPT
- o **Concentrate Connection:** 1½" NPT
- o **Proper Electrical Connections**

*\* Expected operating pressures and flow set points can be shared if lab water quality is provided. Predicted system flow rate is based on membrane manufacturer specifications and nominal conditions. Membrane production varies with water quality, operating pressure, temperature, pH, and recovery. Anti-scalant chemical injection required.*



## ADDITIONAL ENHANCEMENTS

- Clean-in-Place System
- Clean-in-Place Heater (kW)
- Granular Activated Carbon (GAC)
- Re-pressurization System
- TDS and Feed Conductivity
- Alternative Voltage: 575V, 3P
- Stenner Dosing Pumps
- Custom Membranes
- Calcite Contactor
- Spare Set of Membranes
- Spare Cartridges
- On-Site Commissioning and Training
- CSA Certification



# DRO8040-9

Membrane Quantity	Permeate Flow Range	Maximum Operating Pressure	Array	Dimensions Height   Width   Depth	Estimated Shipping Weight
9	25 - 35 USGPM	250 psi	1:1:1	Inches: 68   44   151 Mm: 1733   1118   3835	175 lbs (79 kgs)

## STANDARD OFFERINGS

### On-Skid Mechanical Equipment:

- o Frame: Carbon steel
- o Stainless Steel High Pressure Recirculation & Concentrate Piping
- o Stainless Steel Pre-Filter Housing and Cartridges
- o Low Energy, High Recovery RO Membranes
- o Fiberglass Membrane Vessels
- o On-Skid Booster Pump (15 HP)
- o Raw and Permeate Pressure Switches
- o Pre-Filter, Post-Filter, Inter-Stage, Permeate and Concentrate Pressure Gauges
- o Inlet, Concentrate, CIP Cleaning, and Permeate Divert Solenoid Valves

### On-Skid Electrical Equipment:

- o Microprocessor Controller
  - o 208V, Three Phase Power
- \* Electrical connections provided by others*

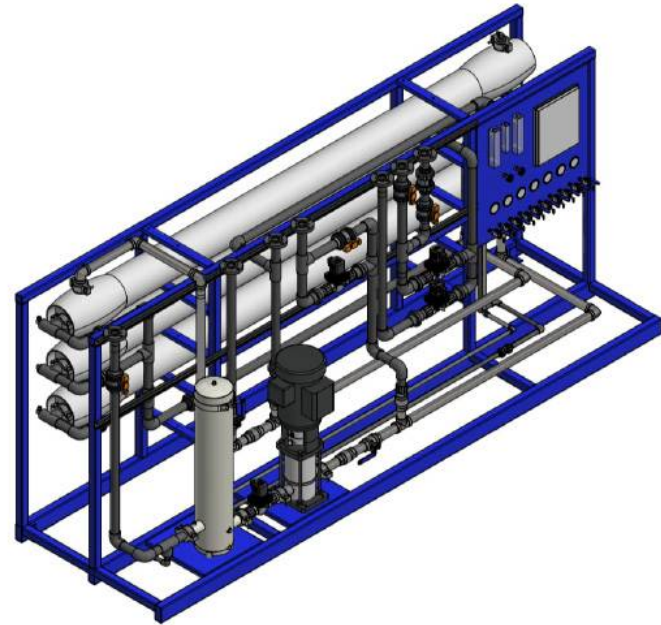
### Chemical Equipment:

- o Anti-Scalant Dosing Pump and Day Tank
- \* Shipped loose*

### Installation Requirements:

- o **Feed Pressure Supply Range:** 20-40 psi
- o **Inlet Connection:** 1½" NPT
- o **Permeate Connection:** 1½" NPT
- o **Concentrate Connection:** 1½" NPT
- o **Proper Electrical Connections**

*\* Expected operating pressures and flow set points can be shared if lab water quality is provided. Predicted system flow rate is based on membrane manufacturer specifications and nominal conditions. Membrane production varies with water quality, operating pressure, temperature, pH, and recovery. Anti-scalant chemical injection required.*



## ADDITIONAL ENHANCEMENTS

- Clean-in-Place System
- Clean-in-Place Heater (kW)
- Granular Activated Carbon (GAC)
- Re-pressurization System
- TDS and Feed Conductivity
- Alternative Voltage: 575V, 3P
- Stenner Dosing Pumps
- Custom Membranes
- Calcite Contactor
- Spare Set of Membranes
- Spare Cartridges
- On-Site Commissioning and Training
- CSA Certification



# DRO8040-12

Membrane Quantity	Permeate Flow Range	Maximum Operating Pressure	Array	Dimensions Height   Width   Depth	Estimated Shipping Weight
12	35 - 50 USGPM	250 psi	1:1:1	Inches: 68   44   191 Mm: 1733   1118   4851	175 lbs (79 kgs)

PICTURE  
COMING  
SOON

## ADDITIONAL ENHANCEMENTS

- Clean-in-Place System
- Clean-in-Place Heater (kW)
- Granular Activated Carbon (GAC)
- Re-pressurization System
- TDS and Feed Conductivity
- Alternative Voltage: 575V, 3P
- Stenner Dosing Pumps
- Custom Membranes
- Calcite Contactor
- Spare Set of Membranes
- Spare Cartridges
- On-Site Commissioning and Training
- CSA Certification

## STANDARD OFFERINGS

### On-Skid Mechanical Equipment:

- Frame: Carbon steel
- Stainless Steel High Pressure Recirculation & Concentrate Piping
- Stainless Steel Pre-Filter Housing and Cartridges
- Low Energy, High Recovery RO Membranes
- Fiberglass Membrane Vessels
- On-Skid Booster Pump (15 HP)
- Raw and Permeate Pressure Switches
- Pre-Filter, Post-Filter, Inter-Stage, Permeate and Concentrate Pressure Gauges
- Inlet, Concentrate, CIP Cleaning, and Permeate Divert Solenoid Valves

### On-Skid Electrical Equipment:

- Microprocessor Controller
  - 208V, Three Phase Power
- \* Electrical connections provided by others*

### Chemical Equipment:

- Anti-Scalant Dosing Pump and Day Tank
- \* Shipped loose*

### Installation Requirements:

- **Feed Pressure Supply Range:** 20-40 psi
- **Inlet Connection:** 2" NPT
- **Permeate Connection:** 1½" NPT
- **Concentrate Connection:** 1½" NPT
- **Proper Electrical Connections**

*\* Expected operating pressures and flow set points can be shared if lab water quality is provided. Predicted system flow rate is based on membrane manufacturer specifications and nominal conditions. Membrane production varies with water quality, operating pressure, temperature, pH, and recovery. Anti-scalant chemical injection required.*

