

TR4200

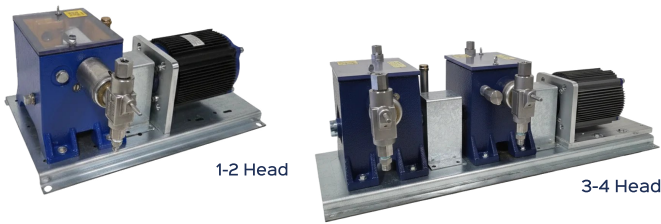
Chemical Injection Pump

Installation Formats

- Standalone: Floor mount with drip tray
- Solar Skid: Pump and controller mounted on a skid with solar array
- EcoPak: Integrated skid including pump, solar panel, battery bank, chemical tank, and disconnect switch in a Class I Div 2 compliant package

Hazardous Area Classifications

- Electric Motor: Class I, Division 1, Group D (T5)
- Controller: Class I, Division 2, Groups A, B, C, and D (T6)
- Solar Skids/EcoPaks: Rated Class I, Division 2, Group D (T3C)



1-2 Head

3-4 Head

PRODUCT OVERVIEW

The TR4200 Chemical Injection Pump, is engineered for reliable, precise chemical delivery in demanding field environments. Designed for versatility and efficiency, this pump system supports a wide range of injection applications while maintaining low power consumption for remote or solar-powered installations.

GENERAL SPECIFICATION

Feature	Specification
Pump Type	Electric Driven Positive Displacement Plunger Pump
Drive System	Integral Worm Gear Drive (Rotary Electric)
Gear Ratios	12.5:1
Configurations	Single, Double, or Multiplex (Up to 4 Heads per Motor)
Stroke Length	Variable 0 – 100% (0 – 1" Maximum)
Stroke Adjustment	Micrometer-type adjustment (adjustable while running)
Suction/Discharge	1/4" FNPT Connections
Control Interface	Keypad with LCD Display (Trido TSC1000 Controller)

ELECTRICAL & CONTROL

Parameter	Value
Motor Type	PMAC 24V 3 Phase, C1D1
Voltage Range	14 to 32 VDC
Max Current	15 Amps
Controller Type	TSC-1000, VFD 24V
Communication Interface	SCADA, MODBUS

MINIMUM PUMP HEAD VOLUMES (100 RPM, 8 Strokes/min)

Head Size	1" Stroke	3/4" Stroke	1/2" Stroke	1/4" Stroke
3/16"	5.21 L/Day	3.91 L/Day	2.61 L/Day	1.30 L/Day
3/8"	9.27 L/Day	6.95 L/Day	4.63 L/Day	2.32 L/Day
1/4"	20.85 L/Day	15.64 L/Day	10.44 L/Day	5.21 L/Day
1/2"	37.07 L/Day	27.80 L/Day	18.52 L/Day	9.27 L/Day

MATERIALS OF CONSTRUCTION

Component	Available Materials
Fluid Head	Ductile Iron or Stainless Steel
Internal Wetted Components	Stainless Steel
Plungers	Stainless Steel or Ceramic
Seals	Buna, Metal-to-Metal, Viton, Teflon, Fluorosilicone, Brueze
Packing Options	V-Style Buna, Buna Hard Viton, Teflon, Fluorosilicone, Buna/Teflon, Viton/Teflon, Brueze, Brueze FFKM

1 HEAD PUMP

MAXIMUM OPERATING PRESSURES FOR 1 HEAD PUMP AT 32 STROKES PER MINUTE

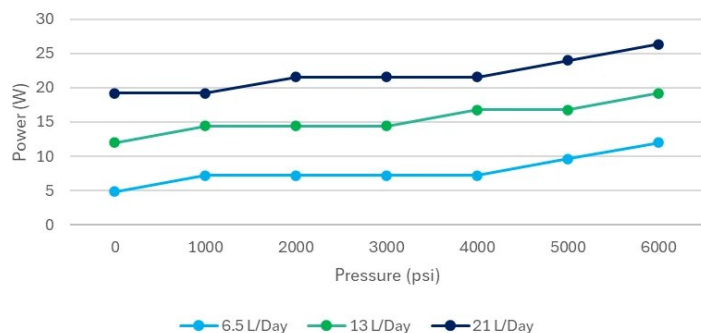
Piston size 5100 Series Fluid End	Maximum Pressure
3/16" Piston	6000 PSI
1/4" Piston	3000 PSI
3/8" Piston	2500 PSI
1/2" Piston	1200 PSI

* All pump heads operating above 3000 psi must include Hard Packing

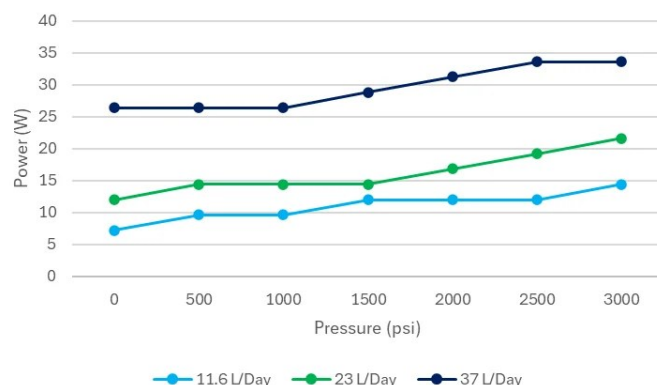
MECHANICAL SPECIFICATIONS

Dimensions (HxWxL)	Weight
9.5" x 16.4" x 19.5"	69.2 lbs

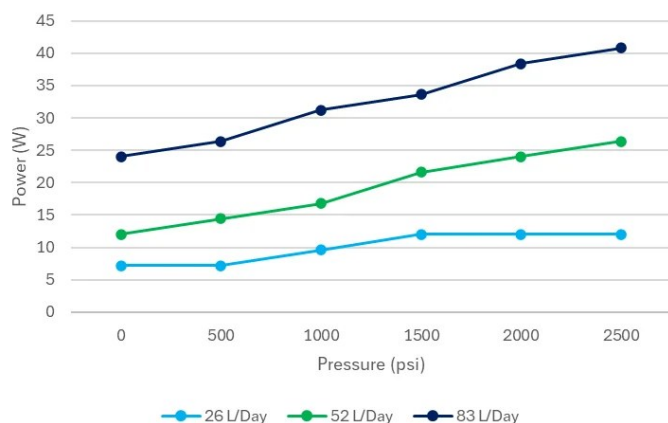
Average Power Draw of 3/16"- TR4200
1 Head Pump



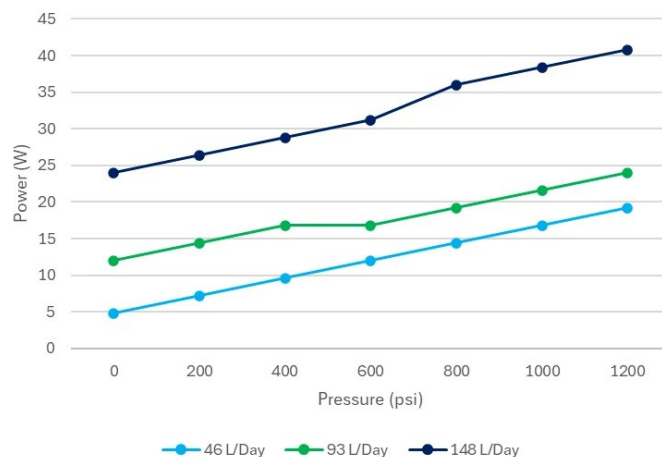
Average Power Draw of 1/4"- TR4200
1 Head Pump



Average Power Draw of 3/8"- TR4200
1 Head Pump



Average Power Draw of 1/2"- TR4200
1 Head Pump



2 HEAD PUMP

MAXIMUM OPERATING PRESSURES FOR 2 HEAD PUMP AT 32 STROKES PER MINUTE

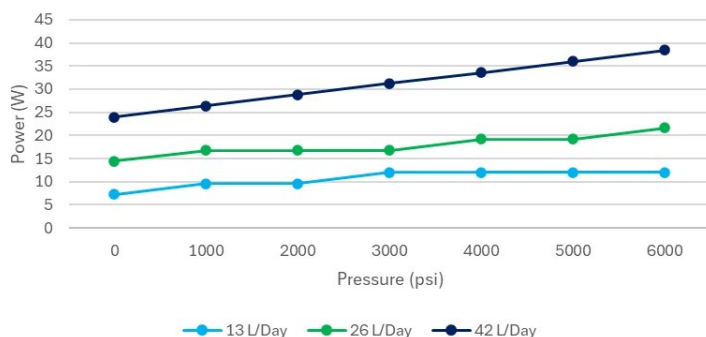
Power Maximum Capacity for Dual Head Adapter	Maximum Operating Pressure
3/16" Piston	6000 PSI
1/4" Piston	3000 PSI
3/8" Piston	2500 PSI
1/2" Piston	1200 PSI

* All pump heads operating above 3000 psi must include Hard Packing

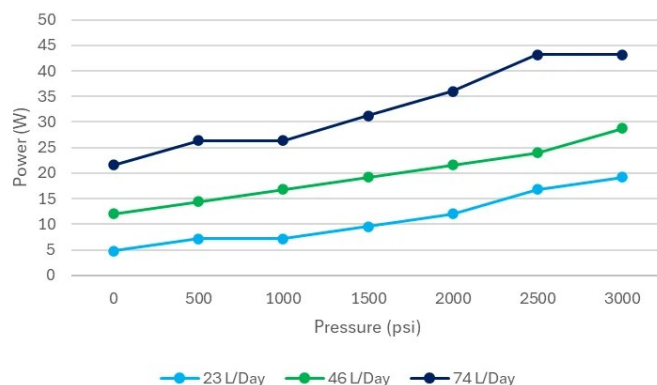
MECHANICAL SPECIFICATIONS

Dimensions (HxWxL)	Weight
9.5" x 20.5" x 19.5"	71.7 lbs

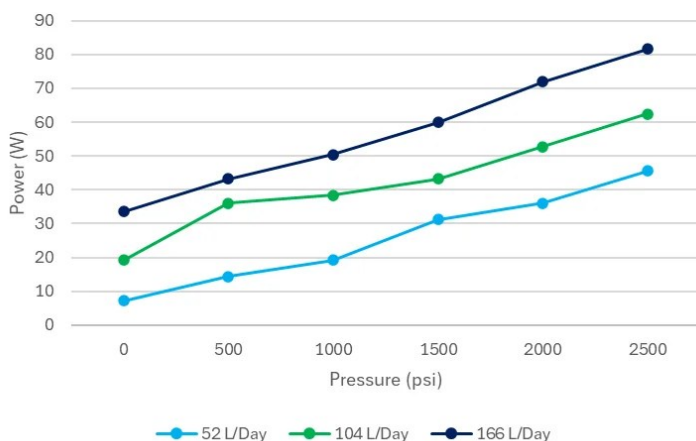
Average Power Draw of 3/16"- TR4200
2 Head Pump



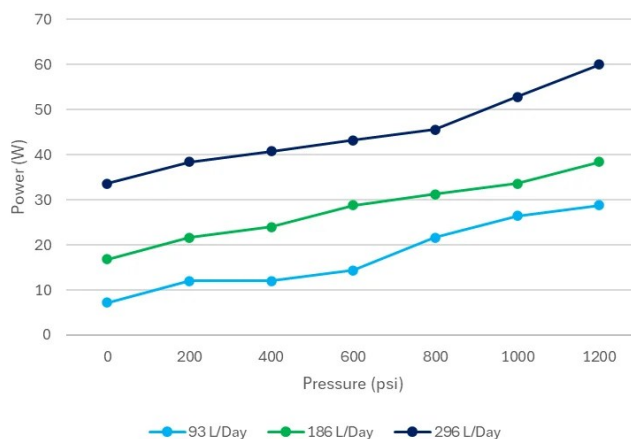
Average Power Draw of 1/4"- TR4200
2 Head Pump



Average Power Draw of 3/8"- TR4200
2 Head Pump



Average Power Draw of 1/2"- TR4200
2 Head Pump



4 HEAD PUMP

MAXIMUM OPERATING PRESSURES FOR 4 HEAD PUMP AT 32 STROKES PER MINUTE

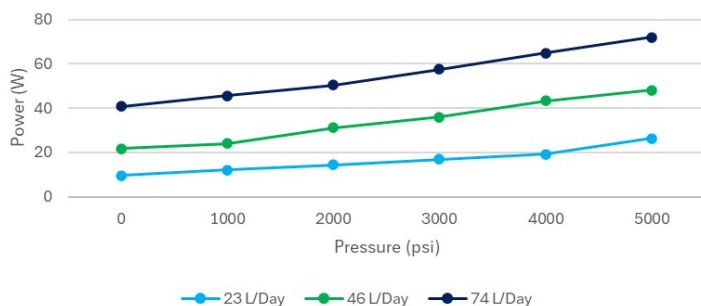
Piston size 5100 Series Fluid End	Maximum Pressure
3/16" Piston	5000 PSI
1/4" Piston	3000 PSI
3/8" Piston	2000 PSI
1/2" Piston	600 PSI

* All pump heads operating above 3000 psi must include Hard Packing

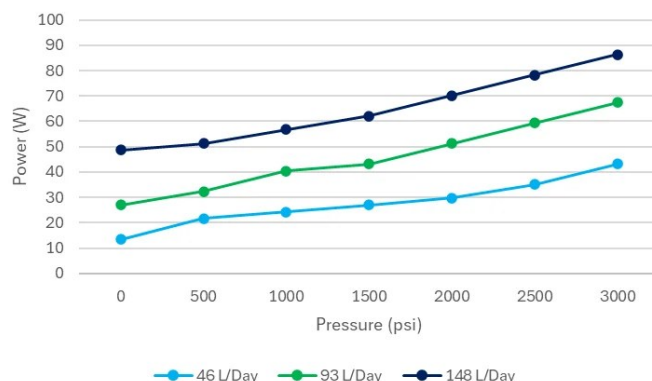
MECHANICAL SPECIFICATIONS

Dimensions (HxWxL)	Weight
9.5" x 20.5" x 30"	122.8 lbs

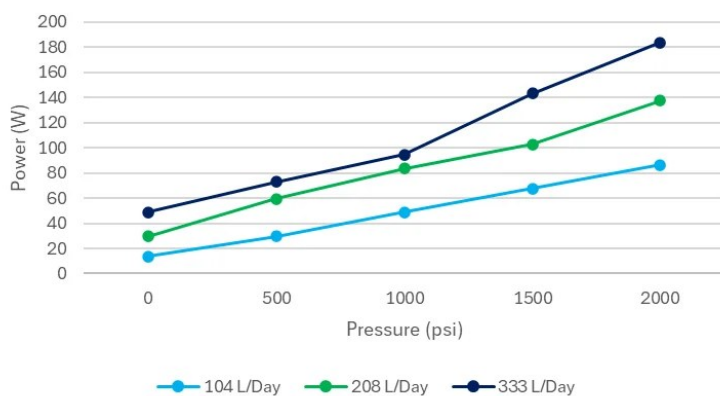
Average Power Draw of 3/16"- TR4200
4 Head Pump



Average Power Draw of 1/4"- TR4200
4 Head Pump



Average Power Draw of 3/8"- TR4200
4 Head Pump



Average Power Draw of 1/2"- TR4200
4 Head Pump

