

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)

Controller Features

- Modes: Local (Keypad) or Remote (SCADA).
- Display: Real-time Pump Rate, Duty Cycle, Input Voltage, and Stroke Count
- Protection: Over-current, Over-voltage, and Low-voltage protection
- Data Logging: Capable of logging runtime, duty cycles, and error reports
- Temp Control: Integrated temperature monitoring features

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

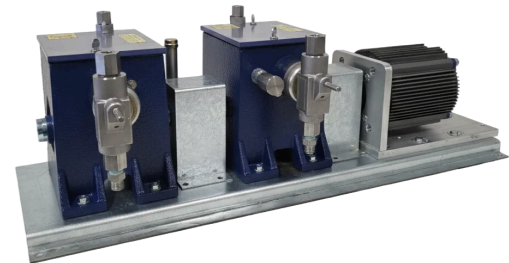
Feature	Specification
Pump Type	Electric Driven Positive Displacement Plunger Pump
Drive System	Integral Worm Gear Drive (Rotary Electric)
Gear Ratios	12.5:1
Configurations	Single, Double, or Multiplex (Up to 4 Heads per Motor)
Stroke Length	Variable 0 – 100% (0 – 1" Maximum)
Stroke Adjustment	Micrometer-type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

MECHANICAL SPECIFICATIONS

Pump	Dimensions (H x W x L)	Weight
1-2 Head	9.5" x 20.3" x 30"	71.7 Lbs
3-4 Head	9.5" x 30" x 20.3"	122.8 Lbs



2-Head

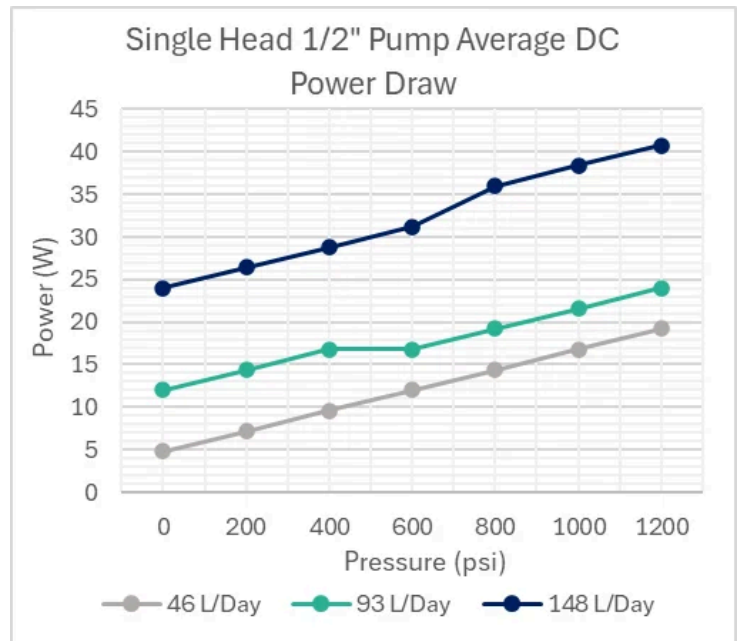
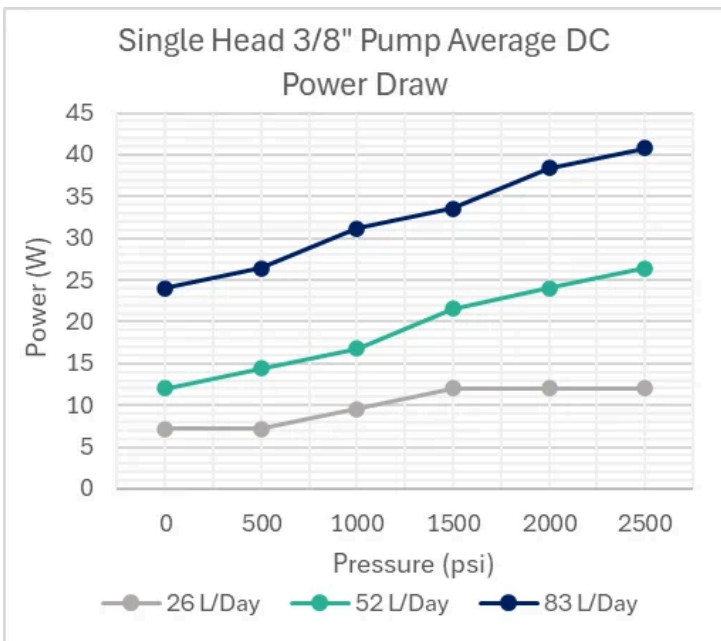
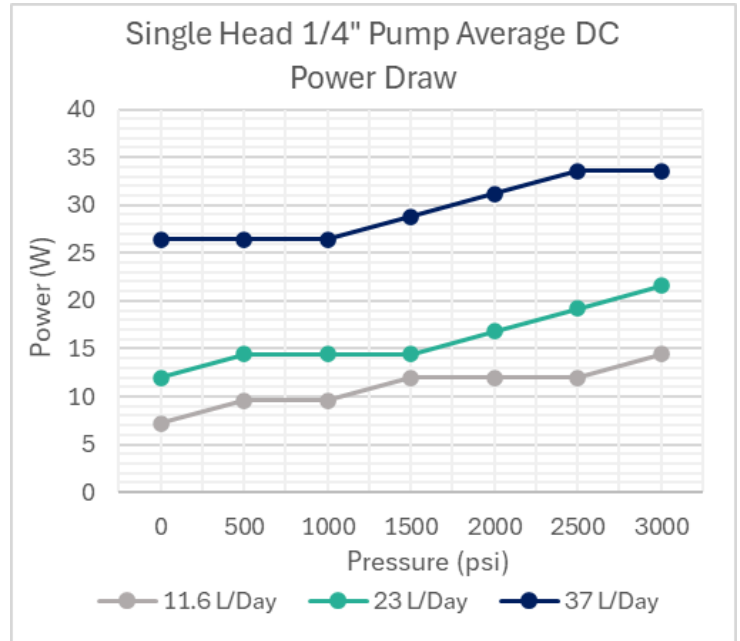
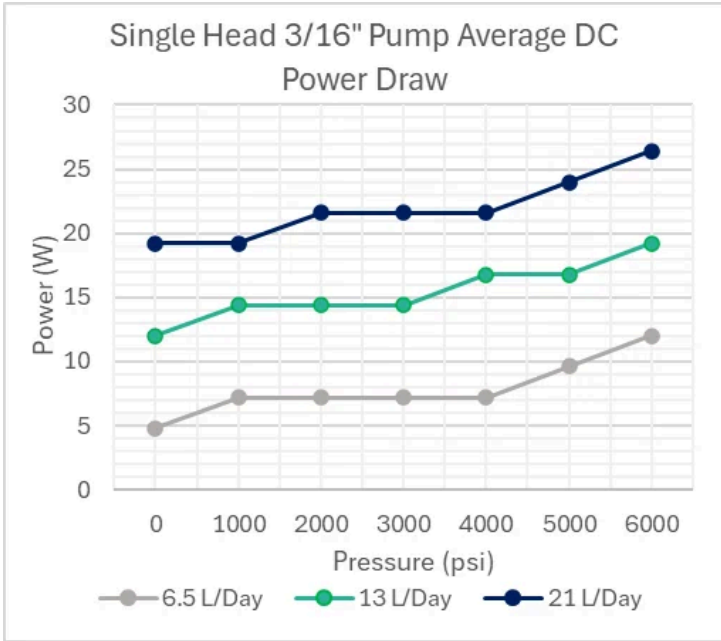


4-Head

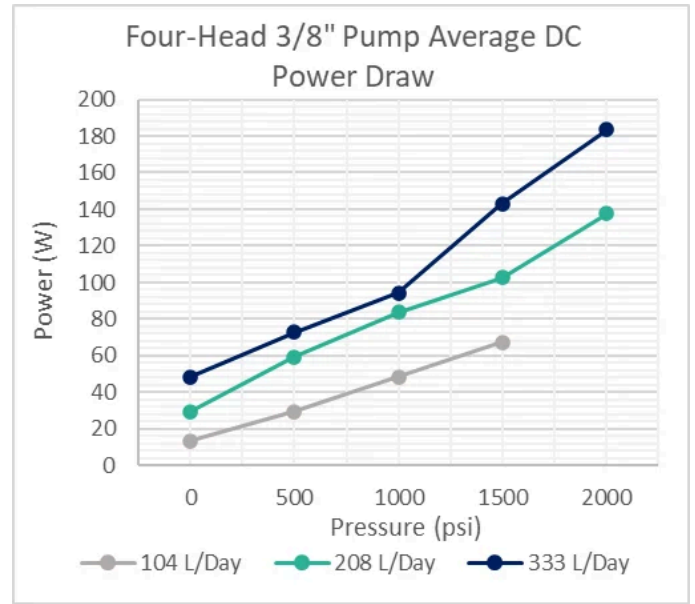
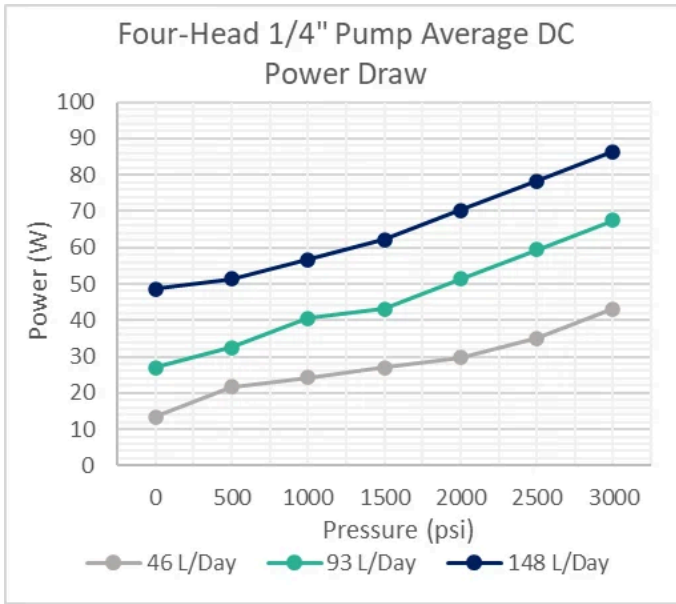
MINIMUM PUMP HEAD VOLUMES (100 RPM, 8 Strokes/min)

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

POWER PUMP DATA SINGLE HEAD POWER CURVES



FOUR HEAD POWER CURVES



PUMP HYDRAULIC PERFORMANCE

Piston size 5100 Series Fluid End	Maximum Pressure
3/16" Plunger	6000 PSI
1/4" Plunger	3000 PSI
3/8" Plunger	2400 PSI
1/2" Plunger	1200 PSI

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

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, Buez
Packing Options	V-Style Buna, Buna Hard Viton, Teflon, Fluorosilicone, Buna/Teflon, Viton/Teflon, Buez, Buez FFKM