

Series HDA

Electric Pump



PUMP CATEGORY

Type: Electric Metallic Diaphragm
Control: HSV or Motor Speed

FLOW RATE

0.11 - 2.88 USG/H (0.42 - 10.90 L/H)

PRESSURE

0 - 6,000 PSIG (0 - 414 BARG)

SUPERIOR DESIGN

- Metallic Sandwich Diaphragm
- Diaphragm Rupture Detection
- No External Leaks
- Maximum Flow Rate at Zero Discharge Pressure
- Durable, High-Quality Materials
- Accurate and Repeatable Injection
- Quick Maintenance and Low Downtime
- High Return on Investment

CHEMICAL RESISTANCE

High-quality diaphragm and proprietary seal materials enable CheckPoint pumps to provide unparalleled chemical resistance. Chemical applications include, but are not limited to:

- Scavengers (H₂S, O₂, CO₂)
- Hydrate Inhibitors (MeOH, MEG, LDHI)
- Foamers and Defoamers
- Corrosion, Scale, and Paraffin Inhibitors
- Clarifiers, Biocides

WARRANTY

CheckPoint guarantees 12 months of material and workmanship.

MODEL	FLOW RATE (MINIMUM) USG/H (L/H)	FLOW RATE (MAXIMUM) USG/H (L/H)	WORKING PRESSURE (MAXIMUM) PSIG (BARG)	PISTON DIAMETER IN (MM)	DIAPHRAGM DIAMETER IN (MM)	DIMENSIONS L X W X H IN (MM)	WEIGHT LB (KG)	SUCTION CONNECTION	DISCHARGE CONNECTION
HDA	0.11 (0.42)	2.88 (10.90)	6,000 (414)	.394 (10)	3.94 (100)	17 (432) X 14.25 (362) X 11.25 (286)	51 (23)	1/4" MNPT	1/4" MNPT

Tabular data should be used for quick reference only. See performance curves for accurate pump selection. Series HDA pumps are available in single and dual head configurations. This performance data represents the standard Series HDA with 1800 RPM motor and 13:1 reducer. Contact CheckPoint for additional data.



The **Series HDA** is a chemical pump that uses reciprocating motion to pressurize hydraulic fluid on one side of a diaphragm set, causing the diaphragms to flex outward into a chemical head. The other side of the diaphragm set is in contact with the chemical, which is pumped out at the same pressure as the hydraulic fluid. The hydraulic fluid is stored in a reservoir connected to the pressure chamber by a self-bleeding burp valve. The burp valve allows air in the system to automatically return to the reservoir and separate from the hydraulic fluid. The diaphragm set consists of three stainless steel disks that are constrained between the chemical head and hydraulic body. There are no elastomer seals on the chemical side, as the diaphragms are deformed by a radial groove clamping system.

The pump head has several safety and indication features. The first safety feature is an internal relief valve on the hydraulic supply side, which limits the pressure the pump can supply. When this safety system has been activated, a tattletale indicator is activated and remains so until reset. This indication allows the user to see if an event has occurred in the past, even if it is not currently happening. The diaphragm set consists of three stainless steel disks which, due to their thickness, can flex quite easily. If any one of the diaphragms fails, the pump will continue to pump without cross-contamination between the hydraulic oil and the chemical. Failure of the diaphragm will activate a leak detection indicator. This leak detection system can be a simple popup tattletale, a gauge, or an electrical indicating signal.

The Series HDA is driven by an electrical drive unit. The hydraulic plunger and bushing are constructed of strong ceramic materials for long life and low wear. This material selection allows for repeatable and consistent pumping of chemical.

