

General Description

The design of the 2300 Series mechanically actuated diaphragm metering pump is compact, modular, and state-of-the-art. Simplex and duplex models are available. The rugged design makes this pump ideal for most municipal or industrial water treatment chemical applications.

This pump has a metering head designed with a separation chamber behind the diaphragm that protects the body of the pump should the diaphragm rupture or crack due to wear. Any leakage will drain harmlessly back to the tank or an alternate location. Escaping leakage may be detected by a probe, which can be used to shut off the pump or send an alarm.

Performance

Nine different models are available, offering maximum capacities from 17 to 310 gph and a maximum pressure rating of 150 psig.

The drive consists of a single stage reduction worm gear and is lubricated for long life. It includes a 120 VAC single-phase or 230/460 VAC 3-phase TE or XP motor.

The stroke length may be either manually or automatically adjusted from 0-100%. The 2300 Series is designed with low stroking speeds for long term reliability.

Materials of Construction

The 2300 Series can be supplied with 316 Stainless Steel and Polypropylene wetted ends. All diaphragms are PTFE-coated EPDM for severe chemical duty applications. Models 2310-2360 are supplied with double ball type check valves on both the suction and discharge side. In these models, optional spring-loaded single ball checks are available for metering chemicals with higher viscosities. Models 2370-2390 are supplied with check valves of spring-loaded single poppet design. Cemented and NPT pipe connections are standard.

Features

- A micrometer stroke length adjustment allows for in-motion capacity control of 0-100%
- Power Supply - 120 VAC single-phase or 230/460 VAC 3-phase TE or XP motor
- All internal mechanics are oil lubricated



Options

- Electronic Capacity Adjustment (ECA) to control pump stroke length in response to a 4-20 mA signal
- Automatic AC or DC motor speed control by analog input signal
- Double diaphragm system protects environment and pump components in case of diaphragm failure
- Injection nozzles and foot valves
- Wall Bracket
- Splash Guards

Applications

- Municipal water and wastewater treatment
- Industrial chemical applications

Technical Data

Model		2311	2321	2331	2341	2351	2361	2371	2381	2391
Capacity per head @ maximum pressure	gph	17	28	43	51	76	92	139	203	310
Maximum pressure	psig	150						75		60
Stroke frequency	SPM	58	86	124	86	124		58	86	124
Diaphragm diameter	in	3.50			4.70		5.90	7.30		
Suction lift	ft H ₂ O	9						6		
Motor	Hp	1/2			3/4		1	3/4	1	
Max. temperature of process fluid	°F	PP: 120°, 316SS: 175°								
Weight (including motor)	Simplex	lbs.	62		66			84		
Plastic Head	Duplex	lbs.	84		88			110		
Weight (including motor)	Simplex	lbs.	75		95			106		
316SS Head	Duplex	lbs.	106		117			132		

