

### Features:

- Design Capacities of 1.25 to 59.2 GPH
- Discharge Pressures to 150 PSIG
- Metering Accuracy of  $\pm 1\%$
- 10:1 Turndown via Stroke Length
- Internal Hydraulic Relief Valve
- Modular Design With Multiple Options
- Specifically Matched Accessories
- Auto-degassing with Closed Vent
- Suction Lift Capable for Low NPSHa



Capacities Available				
Capacity (GPH)	Plunger Diameter	Stroke Speed	Connections (NPT)	
1.25	9/16"	29	3/4" suction	
2.50		58		
4.20		97		
5.10		117		
6.10		140		
7.40		170		
2.25		3/4"		29
4.50	58			
7.50	97			
9.05	117			
10.9	140			
13.2	170			
3.05	7/8"	29		1/2" discharge
6.10		58		
10.2		97		
12.3		117		
14.8		140		
17.9		170		
5.05	1-1/8"	29		
10.1		58		
16.9		97		
20.4		117		
24.4		140		
29.6		170		

Simplex capacities shown.  
Double capacity for duplex.

The NIKKISO Hydroflo® Series 1000 with auto degassing liquid end is a rugged, compact, hydraulically actuated diaphragm metering pump specifically designed to precisely meter process fluids which tend to off-gas easily.

With its unique self-venting head, the pump continually removes undissolved gases from difficult to handle fluids such as sodium hypochlorite, hydrogen peroxide, hydrazine, ammonia, etc. -- resulting in accurate, pure liquid metering. The high suction lift feature enables the pump to operate in applications with low NPSHa.

It is available in either simplex or duplex configuration, with independent capacity adjustment for each pumphead.

All drive parts are fully enclosed and operate in an oil bath which minimizes friction and wear while providing protection from harsh environments. A self-compensating hydraulic system assures diaphragm position and eliminates the need for troublesome vacuum breakers and refill valve.

The easy to read micrometer knob enables convenient capacity adjustment between 0-100% while the pump is operating or stopped. In addition to manual control, the pump can be supplied with optional automatic capacity control, making it possible for the pump to control the flow rate in proportion to various process signals. A simple, externally adjustable, internal hydraulic relief valve protects the pump and the process from pump induced overpressure situations.

# NIKKISO HYDROFLO®

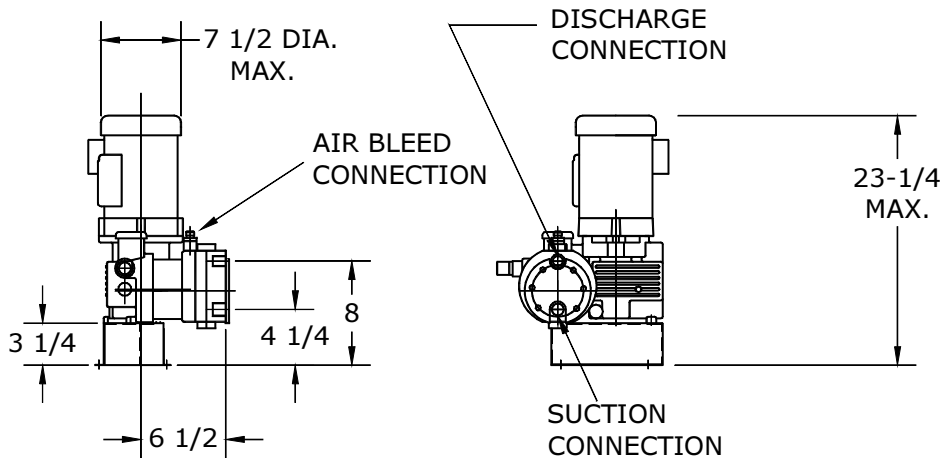
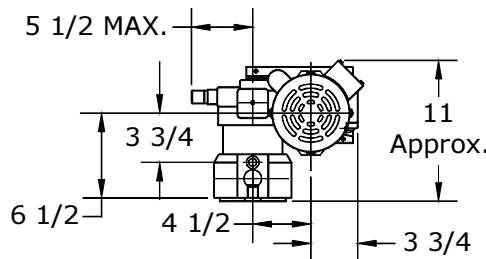
## Series 1000 With Auto-Degassing Liquid End

Custom Features	Accessories
Alternate Diaphragm Materials	NIKKISO HydroChek™ Calibration Columns
Automatic Capacity Control	NIKKISO HydroDamp® Pulsation Dampeners
Double Diaphragm Liquid Ends	NIKKISO HydroDrive™ VSD's and Motor Controls
Diaphragm Status Indication	NIKKISO HydroGarD™ Back Pressure Valves
Liquid End Jacketing	NIKKISO HydroGarD™ Safety Relief Valves
Offshore/Marine Services	NIKKISO HydroInjex™ Injection Assemblies
Sanitary Services	NIKKISO HydroMix™ Agitators
Tubular Diaphragm Liquid Ends	NIKKISO HydroTank® Liquid Handling Package

Component	Materials of Construction		
Diaphragm Head	PVC	Acrylic <sup>1</sup>	PVDF
Diaphragm	PTFE	PTFE	PTFE
Check Valve Body <sup>2</sup>	PVC	Acrylic	PVDF
Check Valve Seat	PVC	PVC	PVDF
Check Valve Ball	Ceramic	Ceramic	Ceramic
Degass Valve Ball	Ceramic	Ceramic	Ceramic
Check Valve O-Ring	FKM	FKM	FKM

**Notes:** 1. Acrylic head is clear. 2. Check valve body is an integral part of pump head.

### Dimensions: (inches)



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