



BR6000



Pneumatically Driven Chemical Injection Pump



Product Details

The Bruin BR6000 Chemical Injector Pump is a single acting, positive displacement plunger type barrel pump. Powered by pneumatic pressure acting against a piston, equipped with a spring return and standalone timer. The BR6000 can produce output volumes up to 204.2 Litres per day with a 1/2" plunger and discharge pressures up to 3000 psig with a 1/4" plunger. Volume is controlled based on plunger size, stroke length selection, and the speed of the pump via a timer. Maximum discharge pressure capability is governed by the seal selection and discharge pressure can be controlled with the supply pressure via a regulator.

Highlights

- Adjustable speed (0 - 45 spm) and plunger sizes (1/4" & 1/2") provide an adjustable volume output up to 204.2 Litres per day maximum.
- Standalone stainless steel timer.
- Threaded exhaust ports.
- Double sealing arrangement with lubrication chamber.
- Bleeder equipped with barbed fitting for tubing.
- Discharge and suction check valves incorporate TFE seals.
- Stainless steel construction.
- Hardened 17-4 PH stainless steel seats.
- Designed for ease of operation and maintenance under varied pumping applications.

SPECIFICATIONS

BR6000 Series

Type	Pneumatically Operated
Volume	0 – 204.2 Litres / Day 0 – 44.8 Imp. Gal. / Day 0 – 53.9 US. Gal. / Day
Pressure	Max. 3000 psig Max. 20684 kPa
Operating Supply Pressure	30 psig (Minimum) 100 psig (Maximum)
Plunger Sizes	1/4" or 1/2"
Stroke Length	Variable – Up to 1" Maximum
Switching System	Bruin Controller
Fluid Suction Connection	1/4" MNPT (1/4" Plunger) 1/2" MNPT (1/2" Plunger)
Fluid Discharge Connection	1/4" FNPT
Supply Connection	1/4" FNPT
Exhaust Valve Connection	1/4" FNPT
Weight	8 lbs 3.628 kg

MATERIALS OF CONSTRUCTION

Fluid Head	Stainless Steel
Internal Wetted Components	Stainless Steel
Plunger	Stainless Steel (Std.) Ceramic (Optional)
Diaphragm	Buna w/ Nylon Reinforcement
Plunger Seal	Graphite Fiber Reinforced PTFE pressure energized seal or optional O-Ring Seal Arrangement available in Buna, Viton, Teflon, Fluorosilicone, Breez or other material arrangements available
O-Ring	Teflon standard, other material arrangements available

APPLICATIONS

Methanol Injection, Chemical Injection, Soap Injection, Corrosion Inhibitors

ACCESSORIES

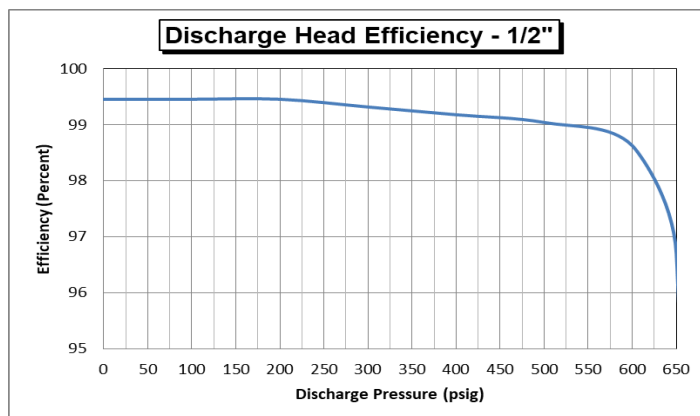
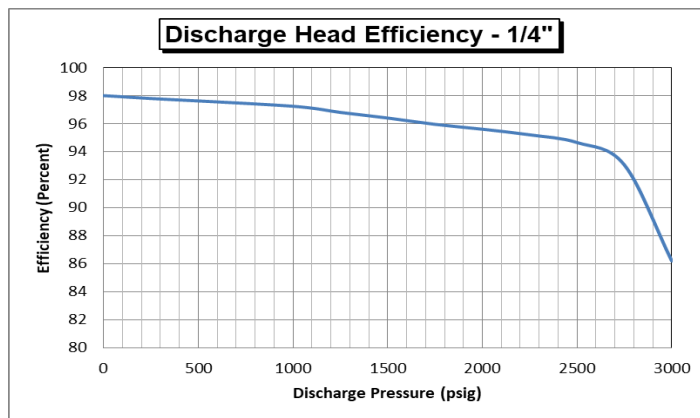
Bases, Tanks, Regulators, Gauges
Stainless Steel Fittings, Skid Package

	PLUNGER SIZE	
	1/4"	1/2"
Standard Model		
Model Number	BR6011	BR6015
Maximum Discharge Pressure (psig)	3000	650
Maximum Discharge Pressure (kPa)	20684	4481
Maximum Discharge Pressure (bar)	206	44
Max. Recommended Speed (Strokes/Min) @ Maximum Discharge Pressure	45	45
Maximum Volume		
Daily @ 0 psig Discharge Pressure		
Maximum Volume (litres/day)	51.0	204.2
Maximum Volume (imp gal/day)	11.1	44.8
Maximum Volume (US gal/day)	13.4	53.9

* Volumes shown are at 0 psig Discharge Pressure.

Altering either the stroke rate or stroke length will have the same proportional effect on volume output.

EXAMPLE: Reducing the stroke length by 25% will reduce volume output by 25% or reducing the stroke rate by 25% will also reduce the volume output by 25%.



These Settings Produce the Same Flow Rate	
Stroke Rate	Stroke Length
10	1" (100%)
20	1/2" (50%)
40	1/4" (25%)

NOTE: With an increase in discharge pressure, the volumetric pumping efficiency of the pump decreases as shown in the graph.

EXAMPLE: A 1/4" plunger will provide approximately 11.1 imperial gallons per day (~98% efficiency) maximum at 0 psig discharge pressure running at 45 spm. If the discharge pressure increases to 2500 psig, the pump runs at approximately 94.5% efficiency, so the maximum volume is reduced to 10.9 imperial gallons per day running at 45 spm.

NOTE: Discharge pump efficiency is theoretically determined based on testing and may vary between applications and assemblies.