

Equipment



ACRYLATE GEL PUMP

For Acrylic Gel Injection

Product Identifier

Product Name

ACRYLATE GEL PUMP

The Alchatek Acrylate Gel Pump is a reciprocating positive displacement piston pump. The material is delivered at a mixing ratio of 1:1. The large and exact operating valves provide a high flow rate and high mixing accuracy. This pump is durable and easy to maintain. All material transferring parts are made of stainless steel.

Supplier Details

Alchatek
4508 Bibb Blvd
Tucker, GA 30084
T: (404) 618-0438

Emergency Phone Numbers

Call CHEMTREC
Day or Night

1-800-424-9300
+1 703-527-3887

Description

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Uses

- Acrylic gels.
- Low-viscosity, 1:1 chemical resins.
- Combination grouting with microfine cements and polyacrylate gels.

Advantages

- Reliable 1:1 mix ratio, with third flush pump.
- High volume output.
- Easy maintenance and repair.

Operation

Be sure to note all operating warnings and familiarize yourself with the Acrylate Gel Pump prior to connecting air source, be sure to turn both air regulators down to zero. Mix the injection resin components per manufacturer recommendations, and clearly label the containers A and B. Take special care to note which sides (marked A-red and B-blue) are used for A and B components. Cross contamination can destroy the pump by having cured material throughout the suction and supply lines. If pumping acrylic gel, the flush pump is used for water supply to the manifold / gun assembly. It is always recommended to perform batch tests with cups and clearly notate gel times to avoid material setting up in the pump lines. Once material is

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mixed, and manifold / gun assembly is ready for connection to the delivery port, packer, or pipe, the regulator to the supply pumps can be activated. To initiate the supply of chemical grout, the air valve to the regulators must be opened, and manifold / gun assembly must be placed in the open position to allow flow of material. Pump material per manufacturer and engineer directives.

Seal and pressure tests can be run on the machine when operated in a closed system with air on and manifold / gun assembly valves in closed position. This is recommended to conduct with water or flushing agent as time taken for pressure and seal test could allow for material to cure in the manifold / gun assembly.

If pumping is stopped for any reason, special care must be taken to immediately flush the manifold / gun assembly with water or flushing agent. This will prevent material curing in the short flexible hose and manifold / gun assembly. To activate the flush pump, the regulator to the flush pump must be activated and the flow of flush controlled by the valve handles on the underside of the manifold / gun assembly. Flush A, then quickly flush B. Once the manifold / gun assembly is flushed, the pump is ready for breaks. If breaking for extended periods of time, it is recommended to keep material in sealed containers, and purge all lines.

Technical Data

PROPERTIES

Working pressure - infinitely variable	150-1500 psi (10–100 bar)
Delivery rate	max. 0.26 gal/min (max. 8 liter/min)
Air consumption	35 ft ³ /min (1 m ³ /min)
Air pressure	max 116 psi (max. 8 bar)
Transmission ratio	1:13
Air consumption and delivery rate at 1500 psi (100 bar) back pressure (injection pressure)	
Air consumption	Delivery rate
21.9 gal/min (83 liter/min)	0.13 gal/min (0.5 liter/min)
43.8 gal/min (166 liter/min)	0.26 gal/min (1 liter/min)
90.3 gal/min (342 liter/min)	0.52 gal/min (2 liter/min)
114.3 gal/min (433 liter/min)	0.79 gal/min (3 liter/min)
Mixing ratio	1:1
Weight	64.5 lb (29.3 kg)
LxWxH	30.7x15.3x31.4 in (78x 39x80 cm)

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Rinsing pump	
Working pressure - infinitely variable	105-3300 psi (7-220 bar)
Delivery rate	1.34 gal/min (5.1 liter/min)
Transmission ratio	1:28
Accessories	No.
Spare and wear part set DESOI AirPower S25-3C	17602-EVS
Setof tools DESOI AirPower S25-3C	17602-WS

Packaging

The Acrylate Gel Pump is shipped with the 32.8 foot (10 meter) hose and carted on a heat treated pallet. Packaging will include a box with the necessary oils, in separate bottles, which must be filled into the pump on a daily basis before carrying out any injection work.

Storage

To ensure proper use and a long working life, the pump must be stored after being cleaned correctly and after the water is completely drained out. No other special storage conditions apply.

Accessories

Alchatek Mechanical Packers, Couplers, Pipes, and other fittings supplied separately.