

# ECO GEARCHEM<sup>®</sup> Series 12

## EXTERNAL SPUR GEAR PUMP

The Gearchem pumps are designed for continuous on duty use. They are constructed out of the strongest material available to provide superior chemical resistance and assure long life.

Designed to handle a variety of process liquids including liquefied gasses, the GA12 can handle highly viscous fluids to very thin, clear, non-abrasive fluids. Typically employed to transfer fluids they are equally advantageous in metering fluids because of their consistency.



### Applications

- pH control
- odor control
- acids
- caustics



### Flow

up to 28 gpm (106 lpm)



### Pressure

up to 200 psi (13.8 bar)



### Temperature

up to 450°F (232°C)



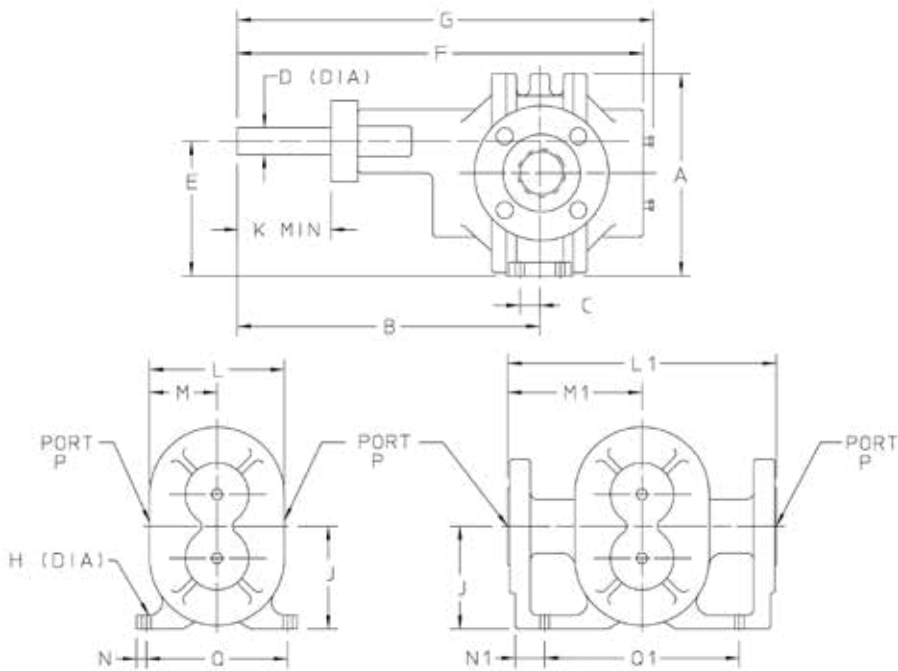
- Gearchem pumps offer laminar flows for consistent, continuous and measurable transfer of liquids.
- Self-priming and bi-directional.
- Closed running and operating clearance evacuate air from the suction piping.
- Can handle clear lubricating and non-lubricating fluids including hydrocarbons and polymers.
- Variety of gears available and easily convertible to satisfy different service conditions.
- All gear materials are non-sparking for use with hazardous fluids.
- Internal sleeve type bearings are lubricated by process fluid eliminating the need for periodic lubrication maintenance and prevents contamination of external lubrication materials.
- Offered with heavy duty wedge-type single mechanical seal.
- Dual purposed: can be used as either a transfer pump or a metering pump.
- Handles a variety of fluids and viscosities.
- Has superior chemical resistance.

ECO GEARCHEM® 12

SPECIFICATIONS

Port Size and Type	NPT, BSPT or 150 LB RF Flange
Direction of Rotation	Bi-directional
Theoretical Displacement	2.792 gal/100 rev (105.7 cc/rev)
Drive Shaft Diameter	1.0"
Maximum Differential Pressure	100 psi (6.9 bar)
Minimum System Pressure	0.1mm Hg (abs)
Maximum Speed	1150 rpm
Maximum Viscosity	Up to 100,000 cPS
Maximum Fluid Temperature	450°F (232°C)
Minimum Fluid Temperature	-100°F (-73°C)
Fluid pH range	0-14
Approximate Weight	39 lbs. (17.6 kg) pump only

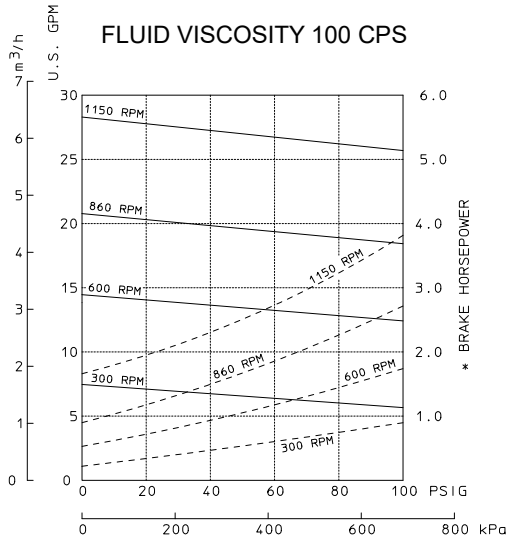
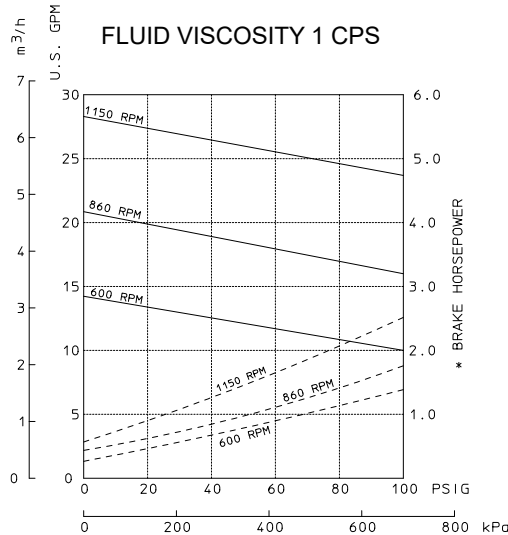
DIMENSIONS



NPT OR BSPT CONNECTIONS

FLANGED CONNECTIONS

FLOW & PRESSURE



PORT SIZES		NPT OR BSPT CONN				FLANGED CONN			
NPT OR BSPT	150 LB RF FLG	L	M	N	Q	L1	M1	N1	Q1
P	P	A	B	C	D	E	F	G	H
1.5"	1.5"	7.5"	11.25"	0.75"	1"	5"	15.12"	15.5"	0.34"

MATERIALS OF CONSTRUCTION

Casing/Housings	316SS
Drive/Idler Gears	316SS
Shafts	316SS
Bearings	Carbon 72, Carbon 92, Glass-filled PTFE, Silicon Carbide
Bearing Type	Internal Sleeve
Wearplate	Carbon 72, Carbon 92, Glass-filled PTFE, Silicon Carbide
Bearing Lubrication	By pumped fluid
Mechanical Seals	Single internal mechanical seal

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