

D-SERIES

**Magnetic Coupled External Gear Pump
Non-Pulsing Flow, Positive Displacement,
Accurate, Leak Free, Chemical Resistant, Long Life**



Flow Rates: < 1 GPH to 121 GPH
< 4 L/Hr to 458 L/Hr
Temperatures: -50°F to 350°F
-46°C to 176°C
Differential Pressures: 250 PSI
17.2 bar
System Pressures: 500 PSI
34.5 bar

Viscosity: 0.3 to 2000 cps +
Magnet Torque: 15 to 240 in/oz
Magnet Materials: Ceramic or
Samarium Cobalt
Metal Wetted Parts: 316 Stainless Steel,
Hastelloy or Titanium
Ports: 1/8-27 NPT or 1/4 -18 NPT

Speed: 5,000 RPM maximum
Service Life: Up to 20,000 hours +
Suction Vacuum: 28.5 " Hg
724 mm Hg
Self Priming: Yes, wetted
Bypass: Optional
Size: 1.6" diameter pump head

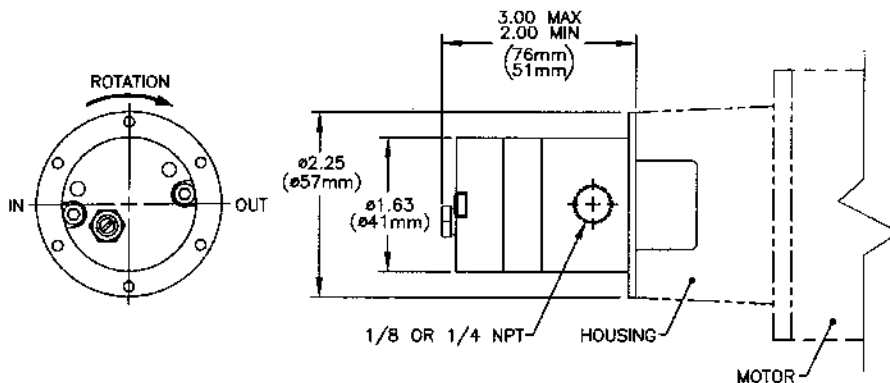
Flow @ 3500 RPM

MODEL ml/rev	GPH @ 0 PSI	L/Hr @ 0 bar	GPH @ PSI Differential Pressure	L/Hr @ bar Differential Pressure	Continuous Duty Limit		Intermittent Duty Limit	
					PSI	bar	PSI	bar
.11	6	23	.2 @ 150	.75 @ 10.3	250	17.2	250	17.2
.19	10	38	.7 @ 250	2.6 @ 17.2	250	17.2	250	17.2
.23	12	45	2 @ 250	7 @ 17.2	250	17.2	250	17.2
.38	20	76	5 @ 250	19 @ 17.2	250	17.2	250	17.2
.57	30	114	9 @ 250	34 @ 17.2	250	17.2	250	17.2
.68	36	136	17 @ 200	64 @ 13.8	200	13.8	250	17.2
.80	42	159	21 @ 200	79 @ 13.8	200	13.8	250	17.2
.99	52	197	36 @ 140	136 @ 9.7	140	9.7	200	13.8
1.2	63	238	45 @ 140	170 @ 9.7	140	9.7	200	13.8
1.3	68	257	51 @ 125	193 @ 8.6	125	8.6	175	12.1
1.6	84	318	68 @ 100	257 @ 6.9	100	6.9	150	10.3
2.0	105	397	86 @ 100	325 @ 6.9	100	6.9	150	10.3
2.3	121	458	96 @ 100	363 @ 6.9	100	6.9	150	10.3

Performance Estimate Based on Pumping Ambient Temperature Clean Water

Tuthill Pump Group specializes in OEM applications. All pumps have a wide range of options. Consult factory for other options and performance requirements.

Applications: Laboratory, Water Purification, Heat Transfer, Lubrication, Fluid Transfer, Recirculation, Cooling, Chemical Metering, Sampling, Temperature Control, Additive Delivery, Proportioning, Chemical Handling, Refrigerant, Liquid Chromatography, Lasers, Oil Filtration, Metering, General Use.



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Materials of Construction

Metal Wetted Parts: 316 Stainless Steel, Hastelloy C276, or Titanium

Gears & Bearings: PPS (Polyphenylene Sulfide) or PEEK (Polyetheretherketone)

O-Rings: Viton or Teflon

Ports: 1/8 NPT or 1/4 NPT

Magnet Shrouds: Ceramic Magnets (stronium ferrite) may be O-Ring seal shrouded; Samarium Cobalt Magnets are Metal Laser Welded

Magnet Torque: 15 in/oz, 30 in/oz, 50 in/oz or 240 in/oz

Bypass: Full flow externally adjustable bypass option available

Suction Vacuum: Pumps self prime when wetted with operating fluid to 28.5 Hg" (724mm Hg). Dry lift not recommended. Fluid viscosity, temperature and pressure may affect the performance.

Motors: AC, DC, BLDC, Air, Variable Speed or Motor Mate Adapter Kits

Operating Temperatures above 140 °F (60 °C)

In the D Series Product line we offer special sizing option for operating at temperatures above 140 °F (60 °C).

Consult factory for details.

Gear & Bearing Material Temperature Limit

PPS limit is approximately 250 °F (121 °C)

PEEK, Carbon and Metal limits are approximately 350 °F (176 °C)

If possible, for temperatures above 250 °F (121 °C) Carbon bearings should be selected.

