

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

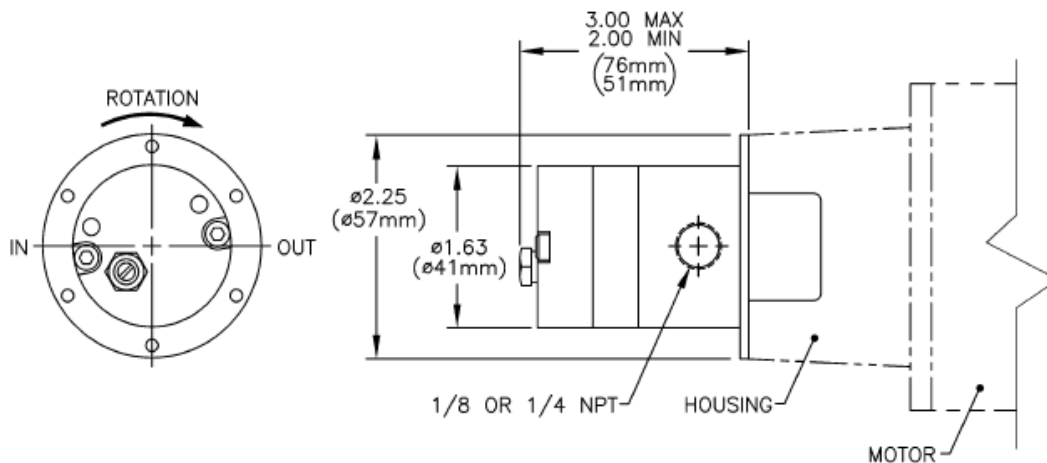
Speed: 5,000 RPM maximum
Service Life: Up to 20,000 hours +
Suction Vacuum: 28.5 " Hg
 724 mm Hg
Self Priming: Yes, wetted
Bypass: Optional
Size: 1.6" diameter pump head

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.



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 PTFE

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.

