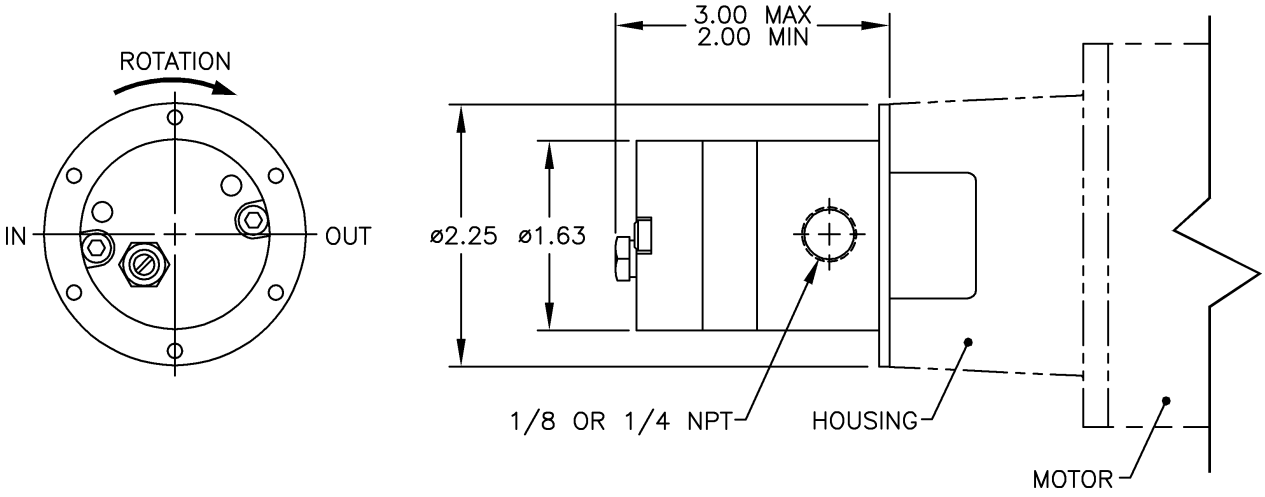
Specification Sheet
D Series Pump

Pump Details

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

Applications

Tuthill Pump Group specializes in OEM applications. All pumps have a wide range of options. Consult factory for other options and performance requirements. Laboratory Equipment, Water Purification, Heat Transfer, Lubrication, Water Treatment, Lubrication, Fluid Transfer, Recirculation, Cooling, Chemical Metering, Fluid Sampling, Temperature Control, Additive Delivery, Proportioning, Chemical Handling, Refrigerant, Liquid Chromatography, Laser, Oil Filtration, Oil Filtration, Acids, Heat Transfer, X-Ray Equipment, etc.



General Specifications

Flow Rates	< 1 to 121 GPH (< 4 to 458 LPH)	**Metal Wetted Parts**	316 Stainless Steel, Titanium, or Hastelloy C276
Temperatures	-50 to 350°F (-46 to 176°C)	**Ports**	1/8 - 27 NPT or 1/4 - 18 NPT
Differential Pressures	250 PSI (17.2 bar)	**Speed**	5,000 RPM maximum
System Pressures	500 PSI (34.5 bar)	**Service Life**	Up to 20,000 hours + based on water
Viscosity	0.3 to 2000 cps +	**Suction Vacuum**	28.5 " Hg (724 mm Hg)
Magnet Torque	15 to 240 in-oz	**Self Priming**	Yes, wetted
Magnet Materials	Ceramic or Samarium Cobalt	**Size**	1.6" diameter pumphead

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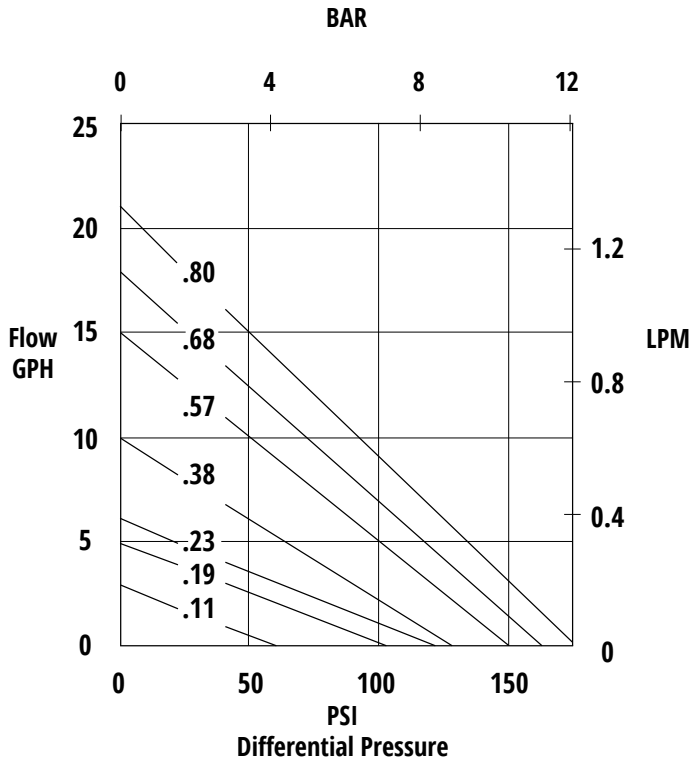
Flow @ 3500 RPM

Model ml/rev	GPH @ 0 PSI	LPH @ 0 bar	GPH @ PSI Differential Pressure	LPH @ bar Differential Pressure	Continuous Duty Limit		Intermittent Duty Limit	
					PSI	bar	PSI	bar
.11	6	22	.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	46	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 @ 250	64 @ 13.8	200	13.8	250	17.2
.80	42	160	21 @ 200	79 @ 13.8	200	13.8	250	17.2
.99	52	198	36 @ 140	136 @ 9.7	140	9.7	200	13.8
1.2	63	239	45 @140	170 @ 9.7	140	9.7	200	13.8
1.3	69	259	51 @125	193 @ 8.6	125	8.6	175	12.1
1.6	84	319	68 @ 100	257 @ 6.9	100	6.9	150	10.3
2.0	105	399	86 @ 100	325 @ 6.9	100	6.9	150	10.3
2.3	121	459	96 @ 100	363 @ 6.9	100	6.9	150	10.3
Performance Estimate Based on 68°F (20°C) Clean Deionized Water @ 1.0 centipoise fluid viscosity								

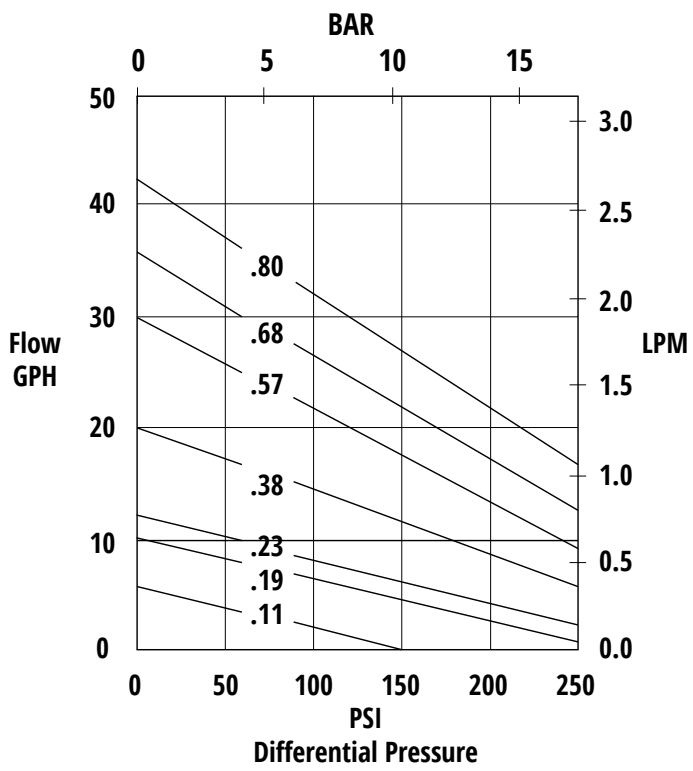
Materials of Construction

Metal Wetted Parts	316 Stainless Steel, Hastelloy C276, or Titanium
Gears & Bearings	PPS (Polyphenylene Sulfide), PEEK (Polyetheretherketone), or PTFE
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.

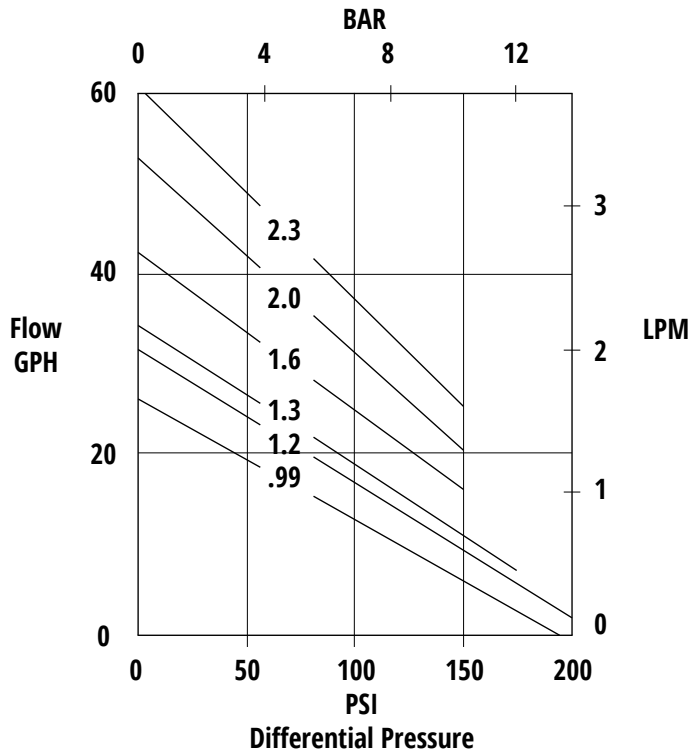
1750 RPM



3500 RPM



1750 RPM



3500 RPM