1000 SERIES





Lubrication & Transfer Pumps



>>> ENGINEERED TO IMPRESS

Our manufacturing expertise and knowledge of applications enable us to not only provide you with an engineered solution, but we ensure your satisfaction with post-sales service. We pride ourselves on properly servicing you with specification, installation, operation, and troubleshooting. The pump was originally designed to meet and exceed the exacting requirements of the refrigeration compressor market. The design has so many inherent features and benefits that our traditional customers are also seeing the advantages. The excellent performance of the 1000 series pumps are solving problems in many industries and varying applications.

PERFORMANCE RANGE

- Flow Range 2.3 to 190 GPM (8.7 to 720 LPM)
- Differential Pressure to 261PSI (18 BAR) for Higher Pressure Consult Factory
- ·Viscosity to 9400 ssu (2000 cst)
- •Temperature to 392 °F (200 °C)
- Max Speed
 - Model 1010 up to 3600 RPM
 - Model 1012-1024 up to 1750 RPM
- Max Inlet Pressure 870 PSI (60 BAR)

Dependent on type of mechanical seal fitted

>>> 1000 SERIES PUMPS

1000 Series pumps are based on the proven internal gear principal, and have been enhanced in response to demands from our OEM customers for a pump that offers advanced features which make installation easier. These side-ported pumps have the option to bolt SAE/DIN flanges onto them ensuring maximum flexibility on the porting arrangements. Our goal was to design a pump that meets your technical requirements and is easily fitted into your system. The 1000 Series pumps are mechanical seal fitted and have a Carbon Bushing Idler as standard. Options are available for lip seals on direct mounted pumps and a choice of ball bearing or carbon bearings in the body.

FEATURES

- Preset integral adjustable bolt-on relief valve
- Sintered metal or steel idler gear
- Can be vertically mounted
- Carbon steel rotor
- Self priming
- Non-pulsating flow
- •EN1561 EN GIS-250 body
- Modular design for ports
- · Flange has an o-ring seal
- Modular design for bushings

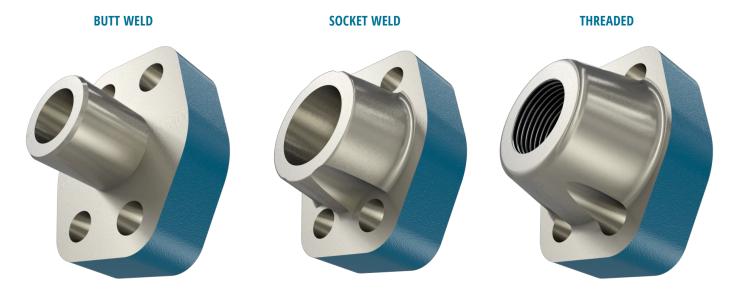
EASE OF MAINTENANCE

- No labour to line up motor
- Unique seal flush system for prolonged life
- Pumps can be removed from the system without having to unthread any pipework, ensuring quick and leak free installation



>>> PORTING

The 1000 Series pumps are fitted with SAE/DIN flanged ports, which enable Tuthill to offer various port options. We have the ability to build your pump with threaded, butt weld, socket weld ports, or a blank flange. The blank flange can be tapped to your specific requirement.



>>> MOUNTING

The 1000 series is designed to be close coupled directly to IEC or NEMA motors. This compact mounting process enables a smaller foot print, but also automatic shaft alignment when changing pumpheads.

Vertical mounting optimizes the fit of the pump into smaller footprints. This is a highly requested configuration whenever floor space is limited. It is recommended that if the pumps are to be mounted in this manner, it is indicated at the inquiry stage of the buying process.

All the adapters can be supplied with a tapped port to facilitate fitting of a clear bottle. The bottle is used as a sight glass to determine seal status.

The 1000 series symmetrical design provides added flexibility. The pumphead can be rotated in 90° increments, creating the ability to change port alignment from horizontal to vertical or reversing suction and discharge ports.



>>> 1000 SERIES SPECIFICATION DATA

FLOW RATE AT 50HZISO 32 at 104 °F (40 °C) 50 PSI (3.45 BAR)

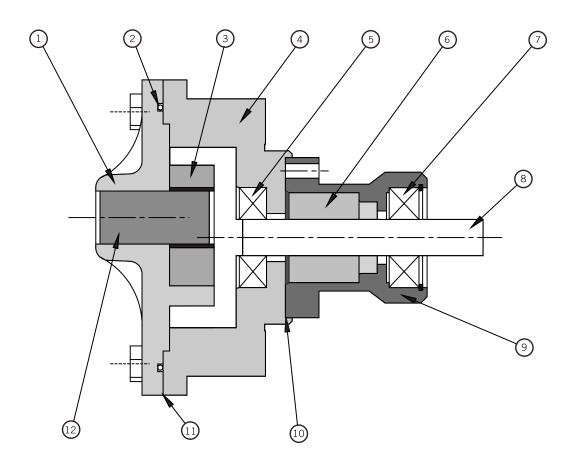
FLOW RATE AT 60HZ							
ISO 32 at 104 °F (40 °C) 50 PSI (3.45 BAR)							

	720 RPM		960 RPM		1425 RPM	
MODEL	GPM	LPM	GPM	LPM	GPM	LPM
1010	2.31	8.73	3.12	11.82	4.71	17.82
1012	3.84	14.55	5.04	19.09	7.21	27.28
1014	6.25	23.64	8.29	31.37	12.43	47.05
1015	7.00	26.50	9.31	35.23	13.85	52.42
1017	14.39	54.46	19.25	72.87	28.52	107.97
1020	22.42	84.87	31.02	117.42	47.53	179.93
1022	30.83	116.70	43.54	164.80	67.05	253.80
1024	79.26	300.04	106.58	403.46	*147.60	*558.71

860 RPM		1150 RPM		1750 RPM	
GPM	LPM	GPM	LPM	GРM	LPM
2.76	10.45	3.74	14.16	5.64	21.35
4.61	17.45	6.05	22.90	8.64	32.71
7.49	28.35	9.94	37.63	14.90	56.40
8.40	31.80	11.16	42.25	16.61	62.88
17.26	65.34	23.09	87.41	34.20	129.50
26.88	101.75	37.20	140.82	57.00	215.77
39.96	151.27	52.20	197.60	80.40	304.35
95.04	359.77	127.80	483.78	*190.2	*719.99

*4" Ports

>>> ASSEMBLY 1012 TO 1017



- **1** Cover
- 2 O-Ring
- **3** Idler Gear
- 4 Body
- **5** Bearing
- **6** Mechanical Seal
- **7** Bearing
- 8 Rotor
- 9 Seal Housing
- **10** Gasket
- **11** Gasket
- 12 Idler Pin



Tuthill's 1000 Series pump is a time-honoured pump for lubrication and circulation in cooling and refrigeration applications.

>>> INDUSTRIES AND APPLICATIONS

HEATING, COOLING, & REFRIGERATION

- AIR & GAS COMPRESSORS BEARING LUBRICATION
 - FORCED LUBRICATION
- PRE-LUBRICATION
- BOILER FEED
- TRANSFER FEED

CHEMICAL TRANSFER

- ADDITIVES
- GLYCOL
- POLYMERS
- RESIN DOSING FOR **FOUNDRIES**
- SPECIALTY CHEMICALS

OIL & GAS

- ADDITIVES
- DIESEL
- FUEL OIL
- KEROSENE
- OIL TANK CIRCULATION
- SAMPLING

PAINTS, COATINGS, & PRINTING INKS

- BLENDING
- LUBRICATION
- TRANSFER

HEAVY MACHINERY & EQUIPMENT

- BARRIER FLUID FOR SEALS
- CRANE/HOISTS
- LIGHT HYDRAULICS
- LUBRICATION
- ENGINE LUBRICATION
- FARM MACHINERY
- FUEL SUPPLY
- GEARBOX LUBRICATION
- LARGE DIESEL ENGINE
- LIGHT HYDRAULICS
- LUBRICATION
- MACHINE TOOLS
 - FILTRATION
 - INJECTION
- TRANSFER
- MACHINERY AND SPINDLE
- PRE-LUBRICATION
- PULP & PAPER
 - FORCED LUBRICATION
- RAILROAD EQUIPMENT
- TRANSMISSIONS

ENERGY & POWER

- BIODIESEL
 - FUELS
 - RAW MATERIAL FATS & OIL
- CIRCULATION OF COOLANT
- FORCED LUBRICATION
- GLYCERIN
- HEAVY AUTOMOTIVE
- MARINE
- PRE-LUBRICATION
- TURBINE

>>> DOWNLOAD OUR IPAD APP

TAP YOUR WAY INTO BROCHURES, VIDEOS, PHOTOS, PERFORMANCE CURVES, AND MORE WITH EASE

Conveniently access Tuthill's knowledge and experience while learning more about who we are.

FEATURES

- Instant-on access to 120 years of manufacturing and engineering expertise
- Offline content storage available
- Easily gather what you want through favorites, search, and knowledge packs
- Notifications to download updated information
- Easily share content and customizable knowledge packs
- Keep personal notes and share valuable feedback to further support Tuthill's continuous improvement
- •The story about Tuthill, our culture, and our products will be available at any time

AVAILABLE AT APPLE APP STORE

Simply visit the Apple App store on your iPad and search for "Tuthill" to download the app for any iPad running iOS 6.0 or greater.

>>> VISIT US AT WWW.TUTHILLPUMP.COM

OUR LIBRARY INCLUDES

- Experience & Reputation
- Product Information
- Service Manuals
- Technical Information



>>> LOCATIONS

TUTHILL PUMP GROUP

12500 South Pulaski Road Alsip, Illinois 60803 USA phone: 1.708.389.2500

TUTHILL UNITED KINGDOM

Birkdale Close

Manners Industrial Estate Ilkeston, Derbyshire DE7 8YA UK phone: 44.0.115.932.5226

TUTHILL CHINA

88 Jia Xiu Road

Nan Xiang Town Jia Ding District Shanghai, P.R.C. 201802 China phone: 86.21.6917.1999



THE HEART IS THE ORIGINAL PUMP

All of us are born with a pump inside – our hearts. At Tuthill, we don't just make pumps, blowers, and vacuum systems & blowers, we make an invitation for the original pump – the heart – to come alive.

We've always been a company with heart. From our beginnings as a brick maker, we made the bricks that made Chicago. As the horses hauled clay from the quarry, it was too much for their hearts to bear. So Tuthill created an oil pump to power a truck, an innovation that saved horses and led to our first manufactured pump – made from the heart.

Today, we pump our hearts into everything we do: every cut, drill, and cycle, and everything we bring to you. We invite you to join us and find what makes your heart beat a little faster. Because when we all come alive, the world comes along.

