

Achieving Optimum Balance for Maximum Value

1000 SERIES



■ LubeTech Family of
Lubrication Pumps



TUTHILL
Pump Group

Engineered Solutions

1000 SERIES

1000 Series pumps are based on the proven internal gear principal, but 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.

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. Contact us to review your application and determine if the 1000 series pump is your engineered solution.



Features

- Materials of construction
Body: EN/GJL/250
Rotor: Carbon Steel
Idler Gear: Sintered metal or steel
- Self Priming
- Non-pulsating flow
- Mechanical seal fitted as standard (lipseal option only on direct mounted pumps)
- Choice of ball bearing or carbon bearings in body. Carbon Bush Idler is standard
- Max speed
1008-1010 3600rpm
1012-1024 1750rpm
- Max differential pressure 18 bar* (265psi)
- Max inlet pressure 45 bar** (380psi)
- Max temperature 200°C (390°F)

* For higher pressure consult the factory

** Dependent on type of mechanical seal fitted

FLOW RATE AT 50HZ.

Imperial Gallons per minute/Litres per minute
3.45 bar (50psi)

	720 RPM		960 RPM		1425 RPM	
	GPM	LPM	GPM	LPM	GPM	LPM
1008	0.88	4.02	1.30	5.91	2.00	9.09
1010	1.92	8.71	2.60	11.82	3.92	17.81
1012	3.20	14.55	4.20	19.09	6.00	27.28
1014	5.20	23.50	6.90	31.50	10.35	47.00
1015	5.83	26.52	7.75	35.23	11.53	52.43
1017	11.98	54.48	16.03	72.89	23.75	107.97
1020	18.67	84.86	25.83	117.44	39.58	179.95
1022	25.67	116.68	36.25	164.79	55.83	253.82
1024	66.00	300.00	88.75	403.00	122.90*	595.00*

*4" Ports

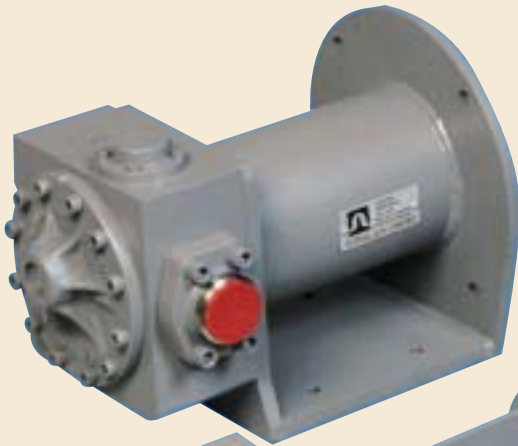
1000 Series Mounting

1000 series pumps can be coupled to either IEC or NEMA standard motors via an aluminium adaptor.

Models 1008-1022 are usually supplied fitted to C face motors, however the 1024 pump is too heavy to fit on a C face motor so we supply this model on an adaptor which utilises a D flange motor. The 1020 & 1022 will also fit on this D flange adaptor.

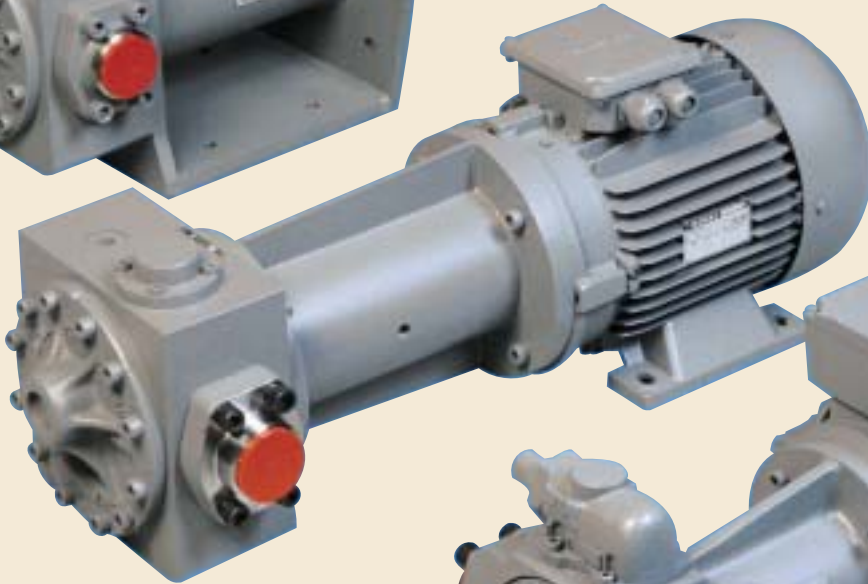
All pumps are designed to be suitable for vertical mounting with the pump facing down. This is usually a requirement in the refrigeration industry. It is recommended that if the pumps are to be mounted in this manner, it is indicated at the enquiry stage of the buying process.

All the adaptors 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.



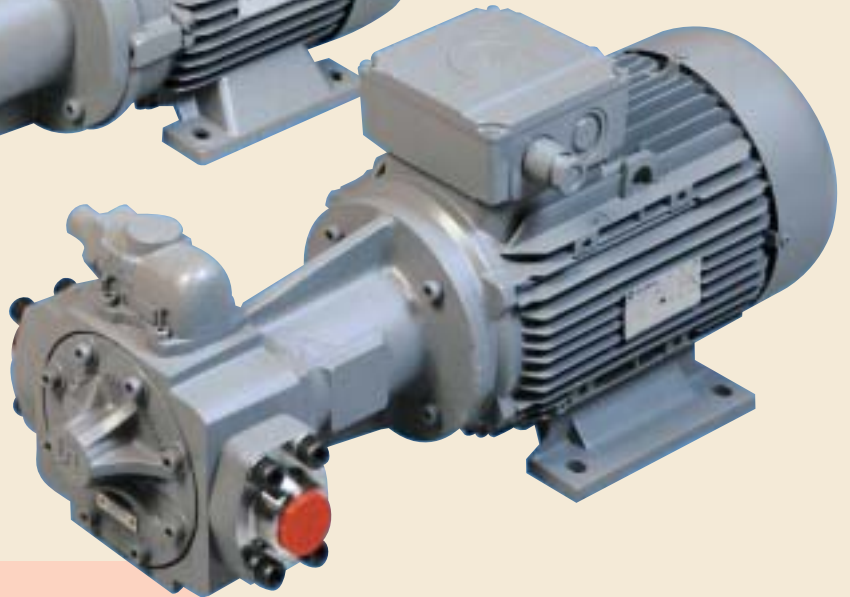
1022/D Flange

Preset integral relief valve



1020/C Face

Preset integral relief valve



1017/C Face

Adjustable bolt on relief valve

FLOW RATE AT 60HZ.

US Gallons per minute/Litres per minute
3.45 bar (50psi)

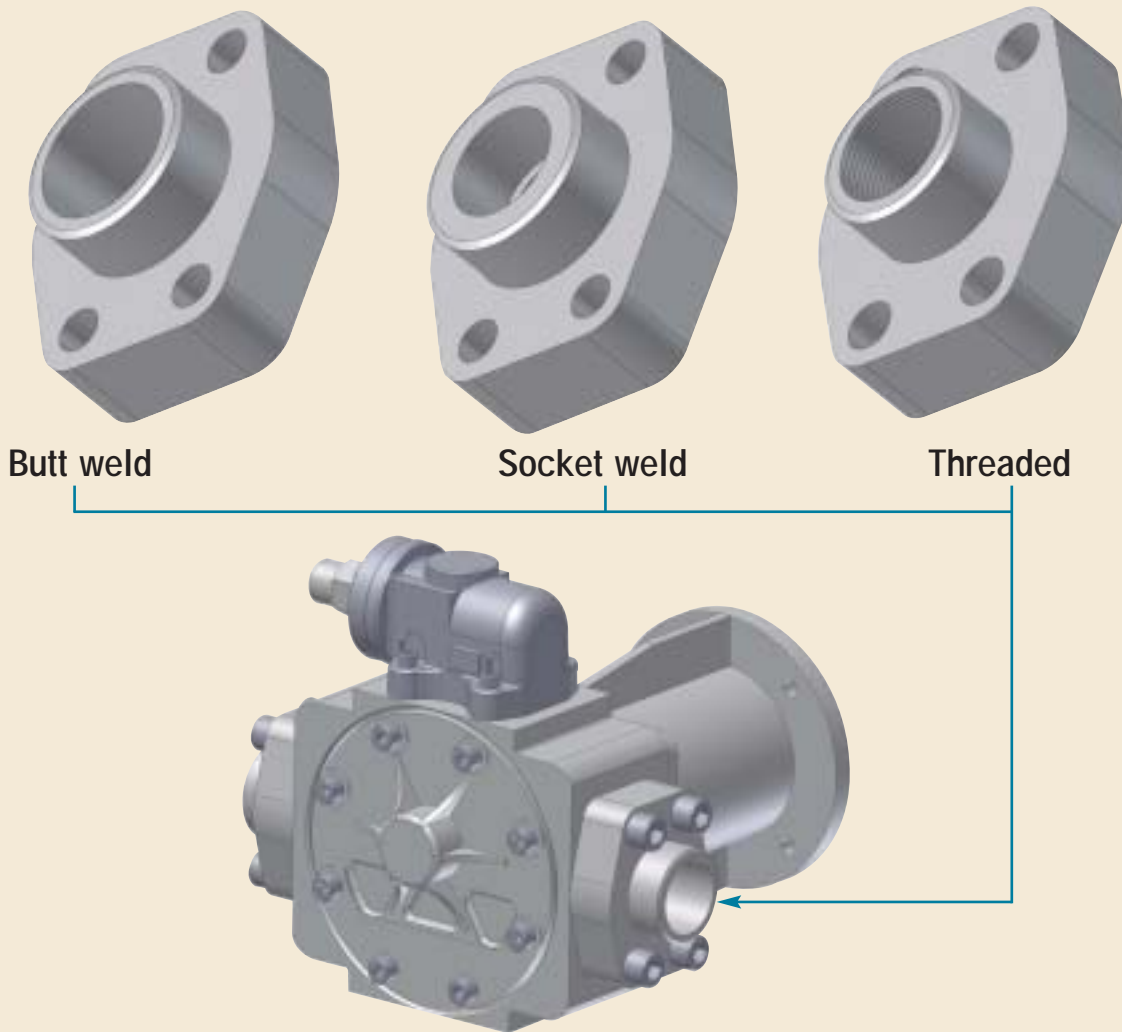
	860 RPM		1150 RPM		1750 RPM	
	USGPM	LPM	USGPM	LPM	USGPM	LPM
1008	1.26	4.80	1.87	7.09	2.88	10.88
1010	2.76	10.46	3.74	14.18	5.64	21.37
1012	4.61	17.46	6.05	22.91	8.64	32.73
1014	7.49	28.20	9.94	37.80	14.90	56.40
1015	8.40	31.82	11.16	42.28	16.61	62.92
1017	17.26	65.37	23.09	87.47	34.20	129.56
1020	26.88	101.83	37.20	140.93	57.00	215.94
1022	39.96	140.02	52.20	197.75	80.40	304.58
1024	95.04	360.00	127.80	483.60	190.20*	730.70*

*4" Ports

1000 Series Porting

The 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 or socket weld ports or a blank flange. The blank flange can be tapped to your specific requirement.



1000 Series Relief Valves

All pumps can be fitted with safety relief valves which can be configured for either a 'return to tank' or 'return to suction' feature. The valve caps have either an O ring seal (integrated relief valve), or PTFE or fibre gaskets (bolt-on relief valve type).

Models 1008-1022 can be supplied with a preset tamper-proof relief valve that is gas tight. These valves are usually a 'return to suction' type, but can be vented to tank if required.

1 Poppet

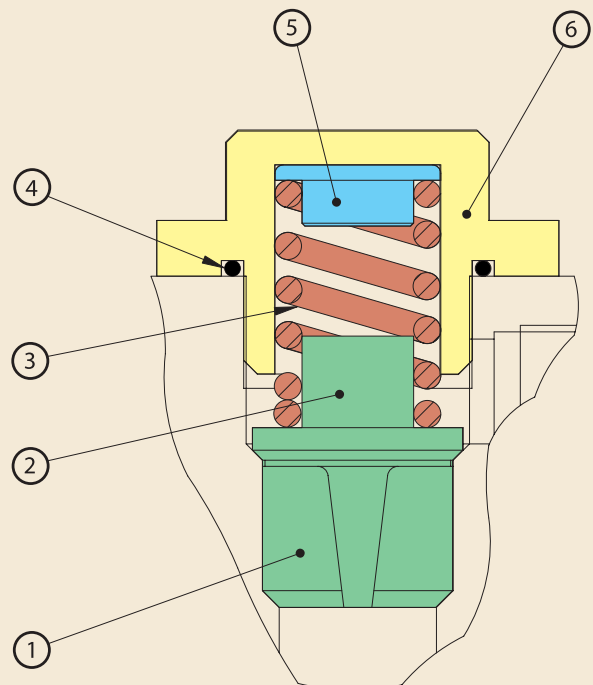
2 Spring Retainer

3 Spring

4 O-Ring

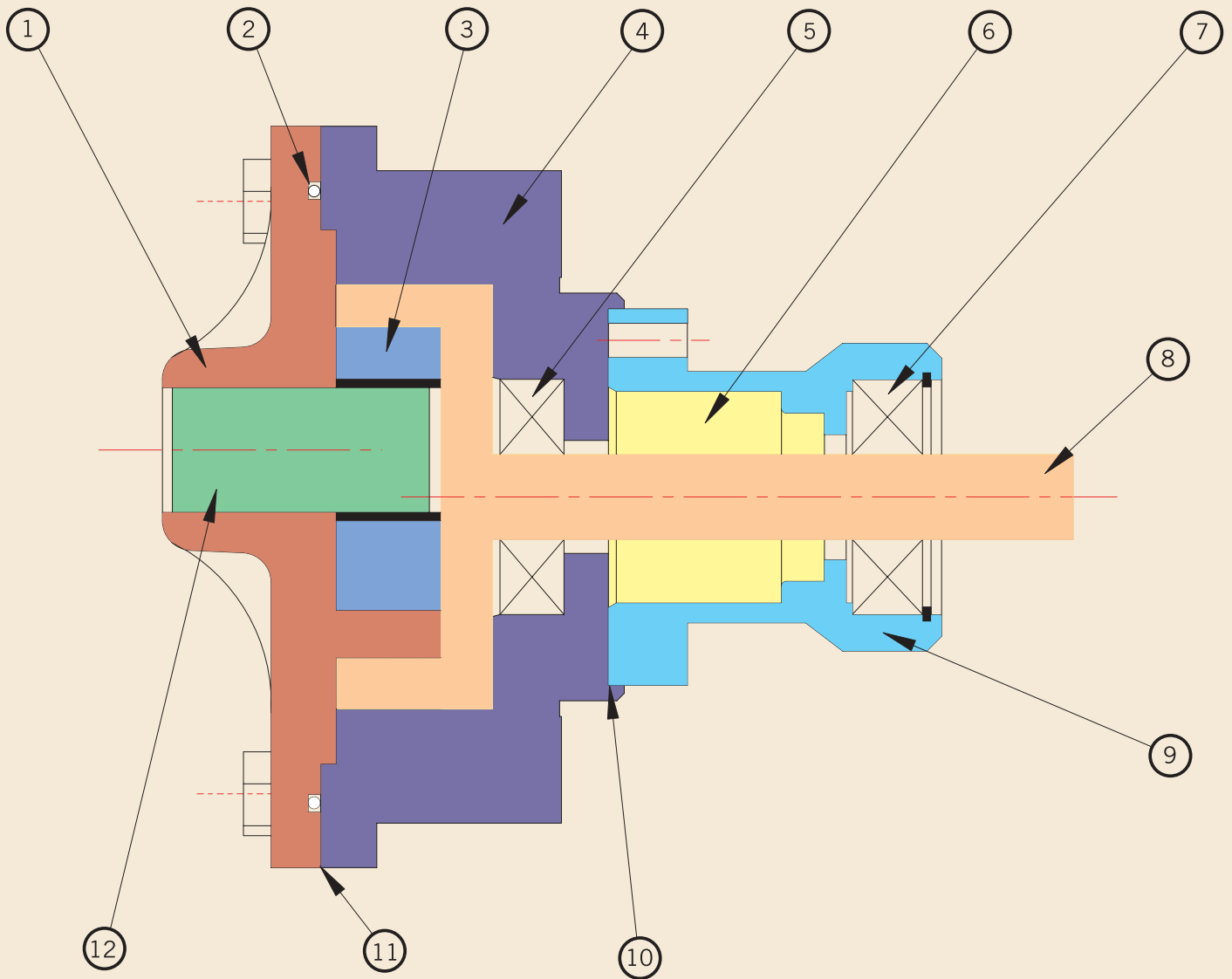
5 Spring Cap

6 Relief Valve Cap



Preset Relief Valve Assembly

Assembly 1012-1017



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



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