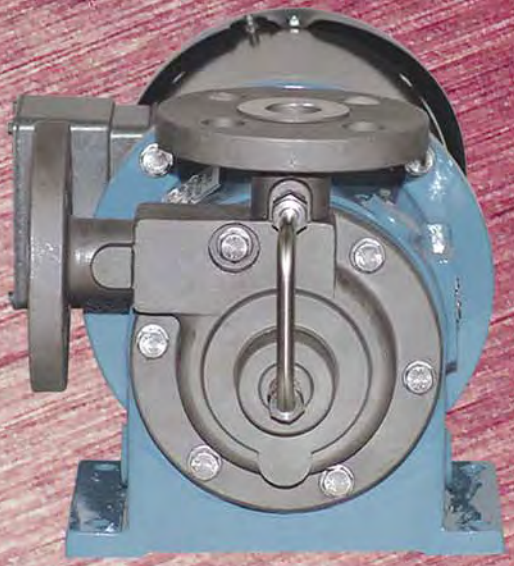
WMDAT Series
Seal-less Mag-Drive Pumps

WARRENDER



Seal-less Mag-Drive Pump Specialists

WMDAT

Alloy
MAG-DRIVE

TURBINE PUMPS

WARRENDER Series WMDAT
Regenerative Turbine Mag-Drive Pumps

The WARRENDER WMDAT Series Alloy Regenerative Turbine Seal-less Mag-drive Pumps are ideally suited for low flow / high head applications. All WMDAT pumps are equipped with zero leakage magnetic couplings to meet the latest toxic emissions regulations. The absence of mechanical seals or packing glands eliminates costly pump maintenance, lost production time and process contamination.

The WMDAT pumps are able to pump liquids containing up to 20% entrained gas. The WMDAT pumps are suitable for thin non-lubricating liquids and/or high differential pressures.

Technical Design Features

- High head / low flow capability minimizes by-pass requirements and prevents overheating of centrifugals and highhead cavitation
- Heavy duty casings and impellers
- Heavy duty alloy containment shell
- No galling or metal to metal contact
- Impeller design handles up to 20% entrained gas - ideal for pumping liquefied gases
- Self balancing impeller - Zero axial thrust loading
- Replaceable impeller, reduces maintenance costs
- High torque magnets, suitable for direct starting motors
- Pedestal mounted or close coupled design

Commercial Benefits

- Eliminates catastrophic seal leakage
- Exempt from EPA seal monitoring
- Avoids by-pass lines associated with oversized centrifugals
- Avoids relief valves required for P.D. pumps
- Balanced thrust loads prevents thrust bearing maintenance in clear service

Materials of Construction

Alloy Components
- AISI SS-316 Stainless Steel
- Alloy-20
- Incoloy-825
- Hastelloy-C276

Internal Sleeve Bearings
- Alpha Grade Silicon Carbide

Casing Gasket
- PTFE, Garlock, Gylon or Graphoil

Specifications

- Flow Capacities: to 40 GPM
- Power Capabilities: to 10 HP
- Differential Heads: to 400 Feet (122 m)
- Working Pressures: 350 PSI (25 BAR) to 3000 PSI (200 BAR)
- Operating Temperatures: -150°F (-100°C) to 600°F (315°C)

Options

- 150 & 300 lb. flanges
- Welded steam jackets: pump casing
- Silicon carbide journal bearings
- High temperature design
- Long coupled or NEMA close-coupled drive assemblies

Standard version

High temperature version

WARRENDER, LTD.

This chart shows the proper components required for ordering
WARRENDER "WMDAT" series standard alloy TURBINE Mag Drive pumps.

CATEGORY SELECTION:

ORDERING EXAMPLE

WMDAT 1 2 5 L 07 CF M

SERIES:

WMDAT Standard Alloy TURBINE MAG DRIVE

SIZE:

1 - T1
2 - T2
3 - T3
4 - T4
5 - T5
6 - T6

PUMP HEAD:

1 = Gas Threaded
2 = NPT Threaded
3 = PN 40 (PN16, PN 25)
4 = ANSI Flanged (150 lbs.)
5 = ANSI Flanged (300 lbs.)
6 = ANSI Flanged (600 lbs.)-(Machined Head)
7 = ANSI Flanged (900 lbs.)-(Machined Head)
8 = ANSI Flanged (1500 lbs.)-(Machined Head)

SLEEVE BEARING MATERIAL:

4 - Silicon Carbon (SiC) / Carbon
5 - Silicon Carbon (SiC)
6 - Tungsten carbide
7 - Alloy Impregnated Carbon

MAGNETIC COUPLING:

L - Standard Mag-Coupling (up to 248°F - 120°C)
H - High Temp Mag-Coupling (up to 662°F - 350°C)

FRAME SIZE:

01 - Metric 71
02 - Metric 80
03 - Metric 90
04 - Metric 100
05 - Metric 112
06 - Metric 132
07 - NEMA 56C
08 - NEMA 145TC
09 - NEMA 184TC
10 - NEMA 215TC

BRACKET OPTIONS:

B - Bearing Frame
C - Closed Bracket (up to 391°F - 200°C)
CF - Closed Bracket with Feet (up to 391°F - 200°C)
O - Open Bracket (up to 662°F - 350°C)

MOTOR:

M - With Motor