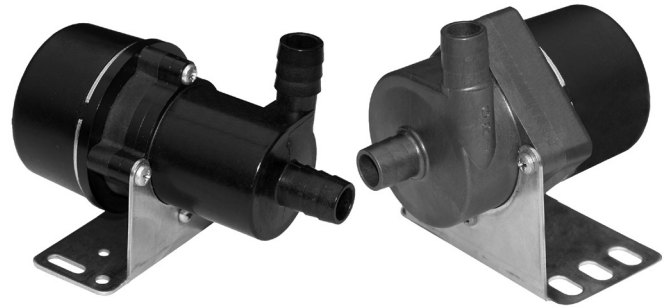




The Pump People

Magnetic Drive Pumps



Operation is similar to standard centrifugal pumps, except the impeller is driven with a magnetic coupling, eliminating the need for a shaft seal. Magnetic drive pumps must be used where flooded suction exists.

Typical applications include film processors; laser and x-ray cooling systems; medical, scientific and laboratory equipment and silver recovery equipment.

Features:

- Corrosion resistant
- Hydraulically efficient
- Quiet operation
- No shaft seals
- Flexible mounting and body discharge positions
- Low current draw and heat rise
- NSF certified models available

Contents

- Magnetic Drive Pump Overview 2
- OEM Options..... 3
- Series Comparison Chart 3
- 14110 Series..... 4-5
- 14520 Series..... 6-7
- 15651 Series..... 8-10
- 17650 Series..... 11-12
- Replacement Kits 14-15

Gorman-Rupp Industries designs and manufactures pumps and pumping solutions for the Original Equipment Manufacturer (OEM). All series/models shown can be configured to meet specific OEM application requirements. Contact GRI for design points that fall outside of shown parameters.

| SERIES | MAX FLOW | MAX HEAD | MAX SYSTEM PRESSURE | MAX FLUID TEMPERATURE | MOTOR SPECS / VOLTAGES |
|--------|----------|----------|---------------------|-----------------------|---|
| 14110 | 11 GPM | 16 FT | 25 PSI | 180°F (82°C) | • 115, 50/60 Hz |
| 14520 | 26 GPM | 35 FT | 75 PSI | 203°F (95°C) | • 115, 230, 50/60 Hz |
| 15651 | 3.75 GPM | 13 FT | 75 PSI | 203°F (95°C) | • 115, 230, 50/60 Hz • 12, 24 DC Brushless |
| 17650 | 9 GPM | 50 FT | 75 PSI | 160°F (71°C) | • 115, 230, 50/60 Hz • 12, 24 DC Brushless |



180 Hines Ave. • Bellville, OH 44813 • PH: 419-886-3001 • FAX: 419-886-2338 • www.GRIpumps.com

Magnetic Drive Pumps Overview

Magnetic drive centrifugal pump operation is similar to a standard centrifugal pump except the motor shaft seal is eliminated. Magnetic drive pumps are designed to isolate the pump body from the motor by driving an impeller and magnet assembly with a drive magnet attached to the motor shaft. Motor torque is transmitted by a drive magnet through a plastic housing to the impeller assembly. The plastic housing separates the motor drive magnet from the fluid being pumped. Leaks caused by shaft seal failure are eliminated. The end result is a more efficient seal-less centrifugal pump that will not leak and is capable of achieving up to 50 thousand hours of continuous duty operation.

To handle the most aggressive chemicals, GRI's material of construction consists of special combinations of chemically inert plastic. The impeller shaft and bearing system handle the inherent friction and motor heat with built-in cooling passages that are designed to use the pumped liquid as a lubricating coolant. GRI uses ceramic shafts with either Teflon® or ceramic thrust bearings as standard materials for each magnetic drive pump line. These robust features add tremendously to the chemical compatibility and overall life of the pump to make it virtually maintenance free.

Impellers and pump bodies are designed to produce efficient flow and head characteristics required in today's applications. The hydraulic designs, coupled with motors specifically designed for the pump end, means less power consumption for the work performed.

Typical OEM applications include film processors, laser and x-ray cooling systems, medical, scientific, laboratory and silver recovery equipment. Magnetic drive centrifugal pumps must be used where flooded suction conditions exist.

Pump Specifications:

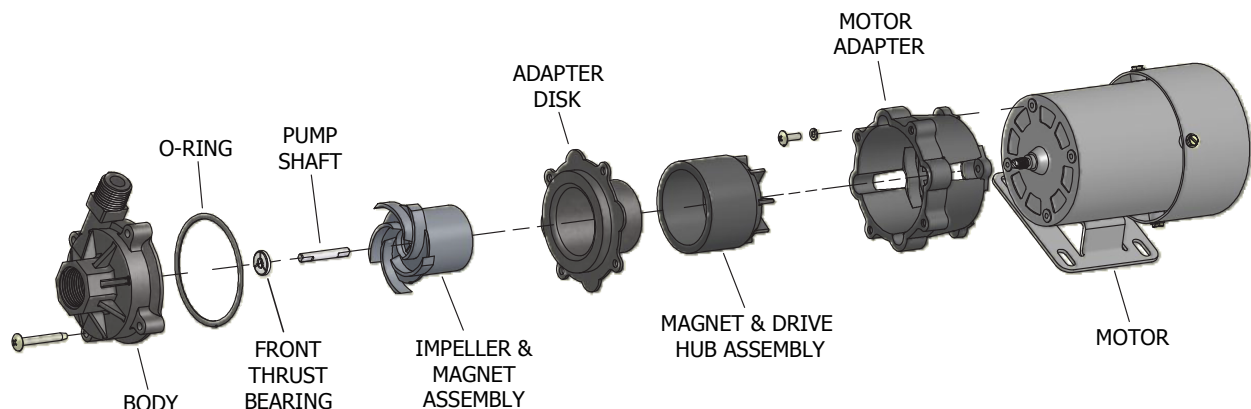
Flow Rates: Range to 35 gpm (132 lpm)

Max. Discharge Head: Range to 53 feet (16 m)

Max. Fluid Temperature: Up to 250°F (121°C)

Motors: All motors, except the 15651 series and 18650 series motors which use sleeve bearings, have sealed electric motor grade ball bearings, are thermally protected, class B insulated, and continuous duty rated. Most pumps available with AC or DC motors.

Please contact GRI for questions regarding chemical compatibility.



OEM Options:

GRI specializes in the custom design and manufacturing of fluid pumps for the OEM market. Please contact us to discuss your project's needs and specifications.

Body

- NSF certified models available
- Multiple suctions and discharge port configurations available.

O-Rings (Elastomers)

- Fluorosilicone (14110 & 14518/20 Series only)
- Kel-F®
- Nitrile
- Neoprene
- Silicone
- Viton®/Fluoroelastomer

Motors

- 115V, 50/60 Hz
- 115V/230V, 50/60 Hz Capacitor start, drip-proof, ball bearing, thermally protected
- 115V, 50/60Hz; 230, 50/60 Hz Explosion-proof (14520 Series only)
- 115V, 50/60 Hz; 230V, 50/60 Hz Open, shaded pole
- 115V, 50/60Hz; 230V, 50/60 Hz Open, shaded pole, impedance protected, ball bearing
- 230V, 50/60 Hz
- 12, 24 Brushless DC (BLDC)
- Drip-proof, shaded pole, thermally protected
- TEFC/PSC, thermally protected

Compliances

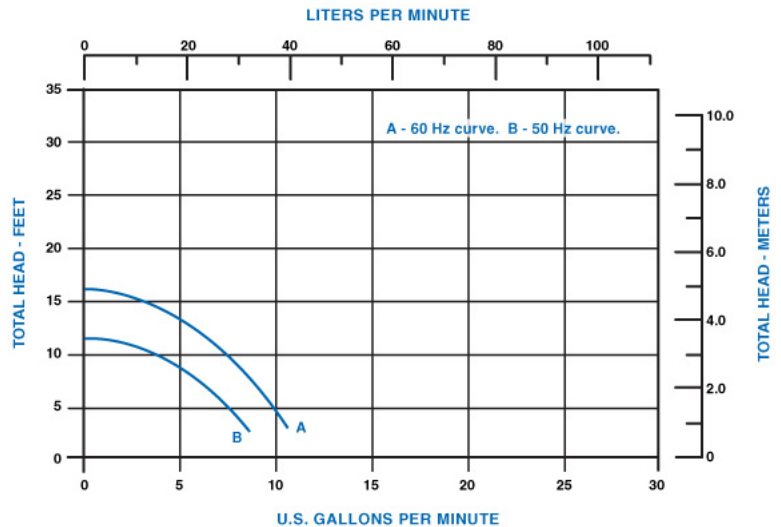
- RoHS 2 (2011/65/EC)
- REACH (SVHC)

Agency Approvals (contact GRI)

| Specifications | |
|--|---|
| Max Flow: | 11 gpm |
| Max Head: | 16 ft |
| Max System Pressure: | 25 psi |
| Max Fluid Temp. | 180°F (82°C) |
| Materials in contact with solution / OEM options | |
| Body | Ryton® |
| Impeller | Ryton® with Epoxy adhesive |
| Adaptor | Ryton® |
| Pump Shaft | Ceramic |
| Impeller Bearings | Resin Impregnated Carbon |
| Front Thrust Bearings | Glass-Filled Teflon® |
| Rear Thrust Bearings | Ceramic |
| O-Rings (Elastomers) | <ul style="list-style-type: none"> • EPT/EPDM • Viton®/Fluoroelastomer • Nitrile • Neoprene • Silicone • Kel-F® |

| Motor specifications / OEM options | |
|------------------------------------|--|
| Motor Specs | <ul style="list-style-type: none"> • 115V, 50/60 hz • Vented • Shaded pole • Thermally protected • Tefc/psa |

| Features | |
|--------------------------------|--|
| Corrosion Resistant | Quiet operation |
| Hydraulically efficient | Flexible mounting and body discharge positions |
| No shaft seals | NSF certified models available |
| Low current draw and heat rise | |



Do Not Run Pumps Dry. Pumps must be in a continuous flooded suction environment.

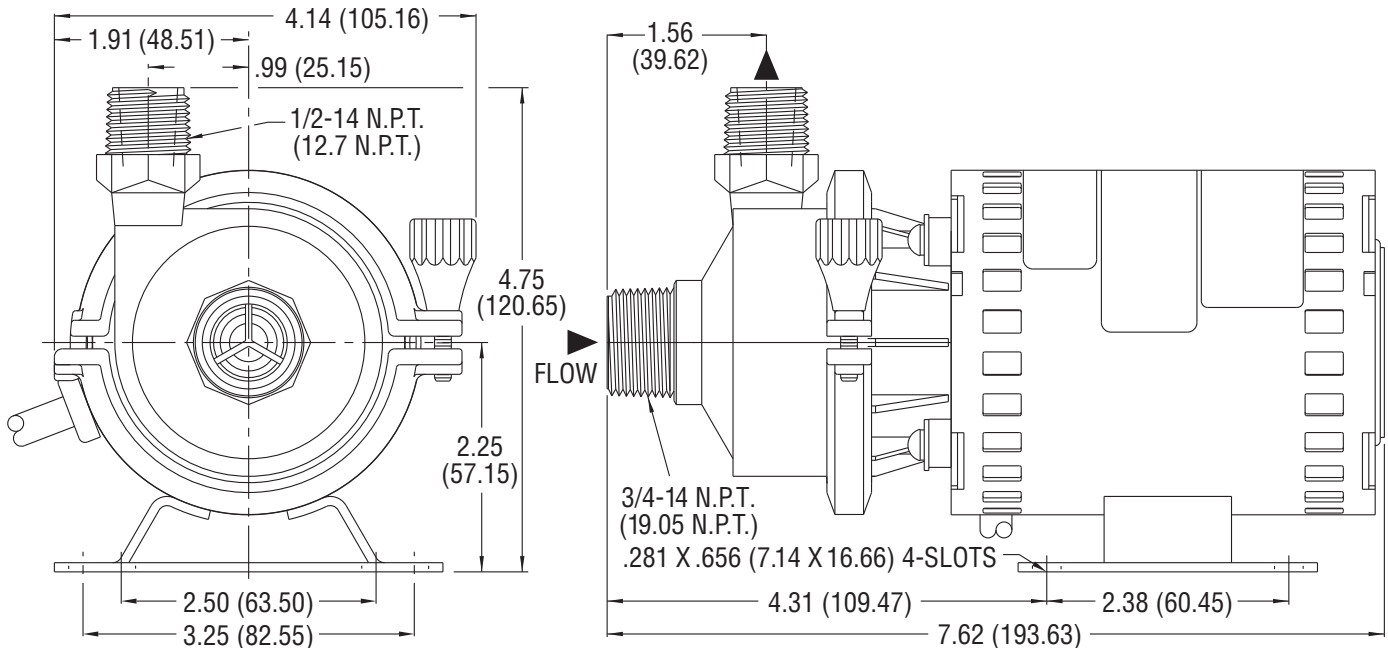
GRI designs and manufactures pumps and pumping solutions for the Original Equipment Market (OEM). All models shown can be configured to meet specific OEM application requirements. Contact GRI for design points that fall outside of shown parameters.

| Model Number | Voltage (Type) | Amps | Body Material | O-Ring Material | Connections Inlet/Outlet (inches) | Curve (50Hz/60Hz) |
|--------------|----------------|-----------|---------------|-----------------|-----------------------------------|-------------------|
| 14110-050 | 115 | 2.0 / 1.6 | Ryton® | EPT/EPDM | 3/4 MPT / 1/2 MPT | B / A |
| 14110-051 | 115 | 2.0 / 1.6 | Ryton® | Viton®/FKM | 3/4 MPT / 1/2 MPT | B / A |

Performance at 50 Hz will be approximately 83% of the performance at 60 Hz.

FKM = Fluoroelastomer, FPT = Female Pipe Thread, MPT = Male Pipe Thread, MHB = Male Hose Barb.

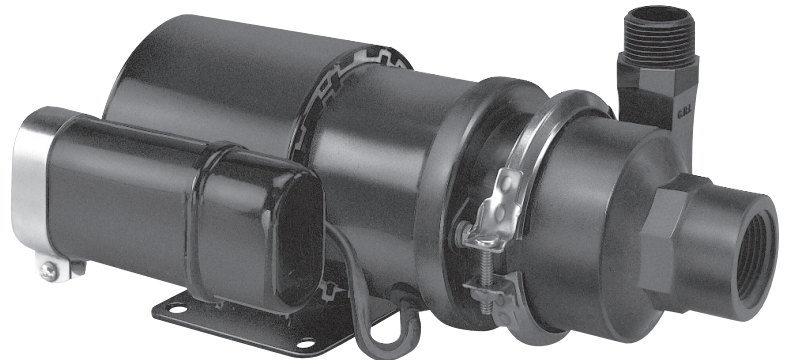
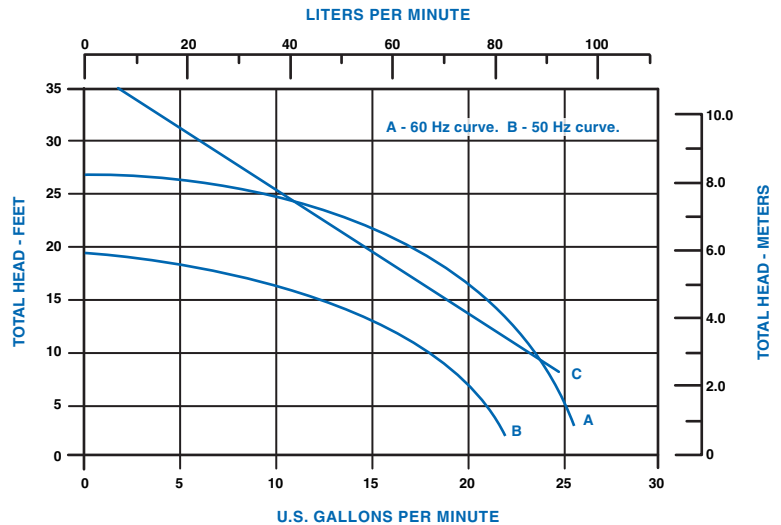
Typical Dimensions



Dimensions in Inches
(Dimensions in Millimeters)

14520 Series Magnetic Drive Pumps

| Specifications | |
|--|--|
| Max Flow | 26 gpm |
| Max Head | 35 ft |
| Max System Pressure | 75 psi |
| Max Fluid Temp. | 203°F (95°C) |
| Materials in contact with solution / OEM options | |
| Body | Ryton® |
| Impeller | Ryton® with Epoxy adhesive |
| Adaptor | Ryton® |
| Pump Shaft | Ceramic |
| Impeller Bearings | Resin Impregnated Carbon |
| Front Thrust Bearings | Glass-Filled Teflon® |
| Rear Thrust Bearings | Ceramic |
| O-Rings (Elastomers) | <ul style="list-style-type: none"> • EPT/EPDM • Viton®/Fluoroelastomer • Nitrile • Neoprene • Silicone • Kel-F® |
| Motor specifications / OEM options | |
| Motor Specs | <ul style="list-style-type: none"> • 115V, 50/60 hz • 230V, 50/60 hz • Vented • Shaded pole • Thermally protected • Tefc/psa |
| Features | |
| Corrosion Resistant | Quiet operation |
| Hydraulically efficient | Flexible mounting and body discharge positions |
| No shaft seals | NSF certified models available |
| Low current draw and heat rise | |



Do Not Run Pumps Dry. Pumps must be in a continuous flooded suction environment.

GRI designs and manufactures pumps and pumping solutions for the Original Equipment Market (OEM). All models shown can be configured to meet specific OEM application requirements. Contact GRI for design points that fall outside of shown parameters.

| Model Number | Voltage (Type) | Amps | Body Material | O-Ring Material | Connections Inlet/Outlet (inches) | Curve (50Hz/60Hz) |
|--------------|-----------------|-----------|---------------|-----------------|-----------------------------------|-------------------|
| 14520-050 | 115V AC (TEFC) | 2.4 / 2.0 | Ryton® | EPT/EPDM | 1 FPT x 3/4 MPT | B / A |
| 14520-051 | 115V AC (TEFC) | 2.4 / 2.0 | Ryton® | Viton®/FKM | 1 FPT x 3/4 MPT | B / A |
| 14520-052 | 230V AC (TEFC) | 1.06 | Ryton® | EPT/EPDM | 1 FPT x 3/4 MPT | B / A |
| 14520-053 | 230V AC (TEFC) | 1.06 | Ryton® | Viton®/FKM | 1 FPT x 3/4 MPT | B / A |
| 14520-054 | 24V BLDC (TENV) | 8.3 | Ryton® | EPT/EPDM | 1 FPT x 3/4 MPT | C |
| 14520-055 | 24V BLDC (TENV) | 8.3 | Ryton® | Viton®/FKM | 1 FPT x 3/4 MPT | C |

Vectra® is chemically resistant to most acids, oxidants and bleaches, and organic solvents. (Do not use with chemicals which are bases.)

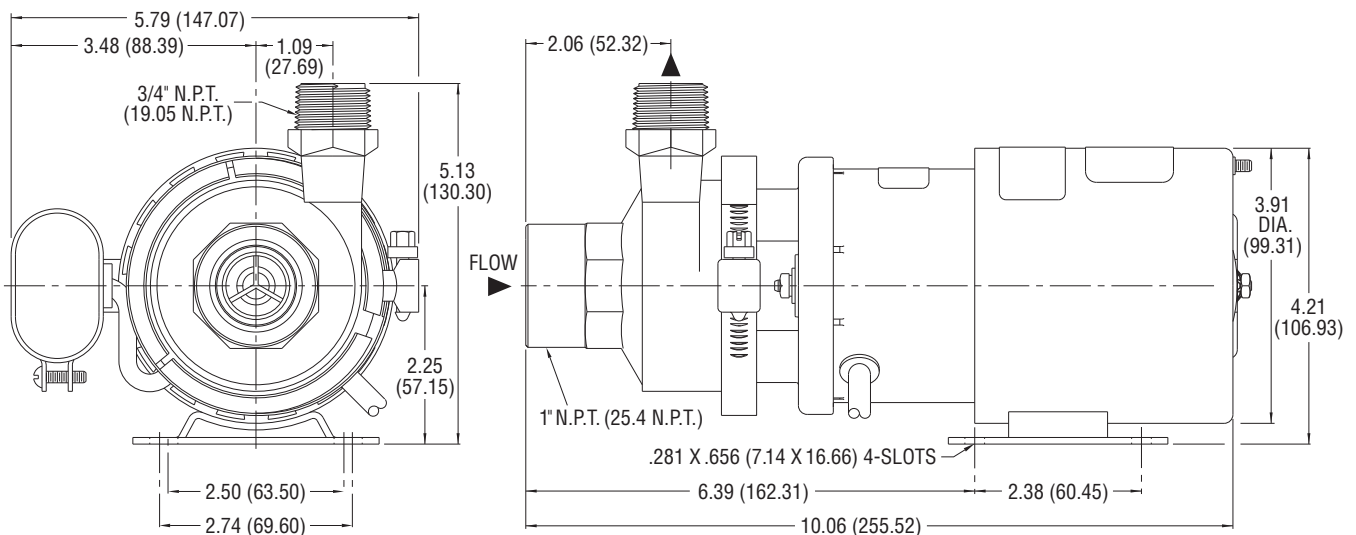
BLDC = Brushless DC.

HS = High Speed.

Performance at 50 Hz will be approximately 83% of the performance at 60 Hz.

FKM = Fluoroelastomer, FPT = Female Pipe Thread, MPT = Male Pipe Thread, MHB = Male Hose Barb.

Typical Dimensions



Dimensions in Inches
(Dimensions in Millimeters)



Specifications

| | |
|---------------------|--------------|
| Max Flow | 3.75 gpm |
| Max Head | 13 ft |
| Max System Pressure | 75 psi |
| Max Fluid Temp. | 203°F (95°C) |

Materials in contact with solution / OEM options

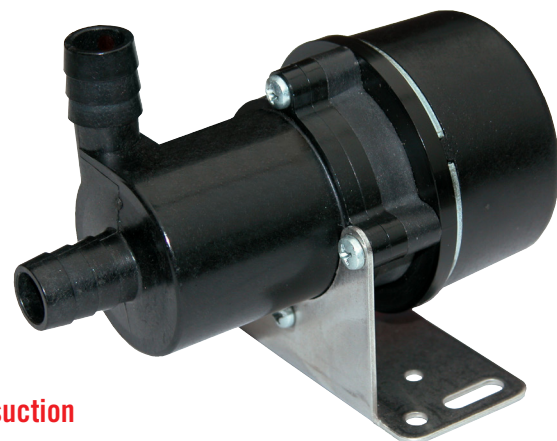
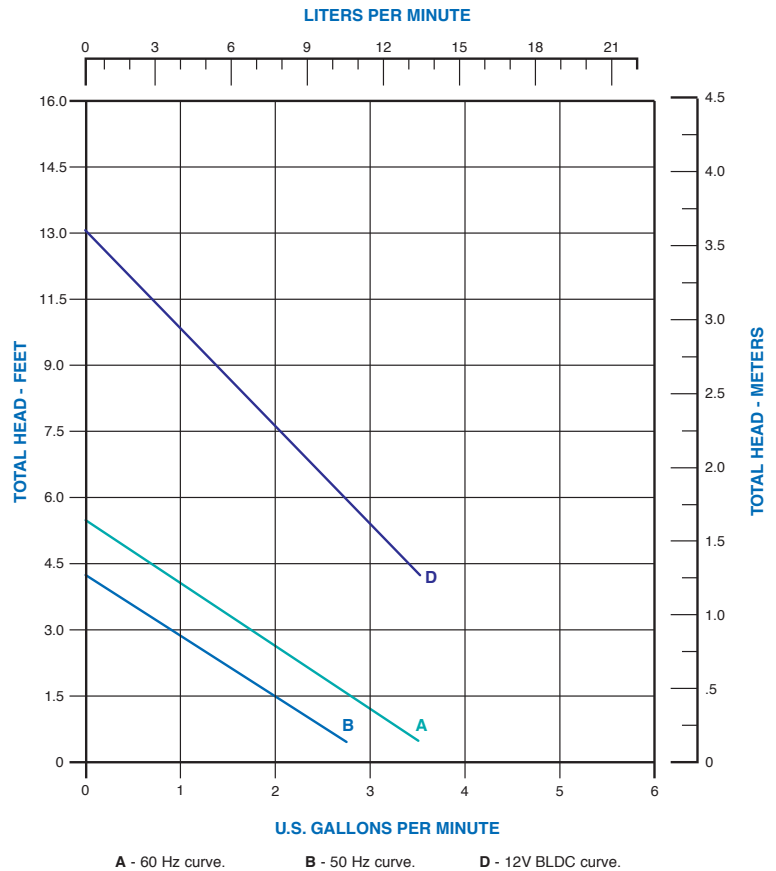
| | |
|----------------------|---|
| Body | Vectra®, Noryl® |
| Impeller | Vectra® |
| Bearings | Vectra® |
| Pump Shaft | Ceramic |
| Thrust Bearings | Glass-Filled Teflon® |
| O-Rings (Elastomers) | <ul style="list-style-type: none"> • EPT/EPDM • Viton®/Fluoroelastomer • Nitrile • Neoprene • Silicone • Kel-F® |

Motor specifications / OEM options

| | |
|-------------|---|
| Motor Specs | <ul style="list-style-type: none"> • 115V, 50/60 Hz • 230V, 50/60 Hz • 12 & 24V BLDC • Open • Shaded Pole • Impedance Protected • Sleeve Bearing |
|-------------|---|

Features

| | |
|--------------------------------|--|
| Corrosion Resistant | Quiet operation |
| Hydraulically efficient | Flexible mounting and body discharge positions |
| No shaft seals | NSF certified models available |
| Low current draw and heat rise | |



Do Not Run Pumps Dry. Pumps must be in a continuous flooded suction environment.

15651 Series

Magnetic Drive Pumps

GRI designs and manufactures pumps and pumping solutions for the Original Equipment Market (OEM). All models shown can be configured to meet specific OEM application requirements. Contact GRI for design points that fall outside of shown parameters.

| Model Number | Voltage (Type) | Amps | Body Material | O-Ring Material | Connections Inlet/Outlet (inches) | Curve (50Hz/60Hz) |
|--------------|----------------|------|---------------|-----------------|-----------------------------------|-------------------|
| 15651-050 | 115 VAC | .45 | Noryl® | EPT/EPDM | 1/2 MHB | B / A |
| 15651-051 | 115 VAC | .45 | Noryl® | Viton®/FKM | 1/2 MHB | B / A |
| 15651-052 | 230 VAC | .22 | Noryl® | EPT/EPDM | 1/2 MHB | B / A |
| 15651-053 | 230 VAC | .22 | Noryl® | Viton®/FKM | 1/2 MHB | B / A |
| 15651-054 | 115 VAC | .45 | Vectra® | EPT/EPDM | 1/2 MHB | B / A |
| 15651-055 | 115 VAC | .45 | Vectra® | Viton®/FKM | 1/2 MHB | B / A |
| 15651-056 | 230 VAC | .22 | Vectra® | EPT/EPDM | 1/2 MHB | B / A |
| 15651-057 | 230 VAC | .22 | Vectra® | Viton®/FKM | 1/2 MHB | B / A |
| 15651-072 | 12V BLDC | 1.24 | Vectra® | EPT/EPDM | 1/2 MHB | D |
| 15651-073 | 12V BLDC | 1.24 | Vectra® | Viton®/FKM | 1/2 MHB | D |
| 15651-075 | 24V BLDC | .71 | Vectra® | Viton®/FKM | 1/2 MHB | D |

BLDC = Brushless DC.

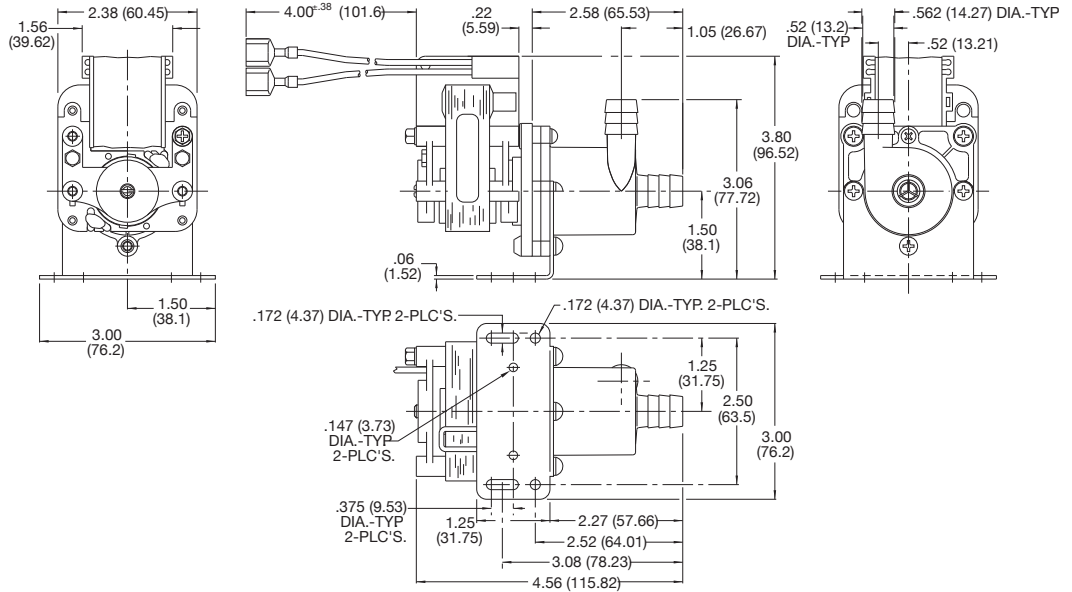
Performance at 50 Hz will be approximately 83% of the performance at 60 Hz.

FKM = Fluoroelastomer, FPT = Female Pipe Thread, MPT = Male Pipe Thread, MHB = Male Hose Barb.

Typical Dimensions

15651 Series AC Models:

- 15651-050
- 15651-051
- 15651-052
- 15651-053
- 15651-054
- 15651-055
- 15651-056
- 15651-057



Dimensions in Inches
 (Dimensions in Millimeters)

Specifications

| | |
|---------------------|--------------|
| Max Flow | 9 gpm |
| Max Head | 50 ft |
| Max System Pressure | 75 psi |
| Max Fluid Temp. | 160°F (71°C) |

Materials in contact with solution / OEM options

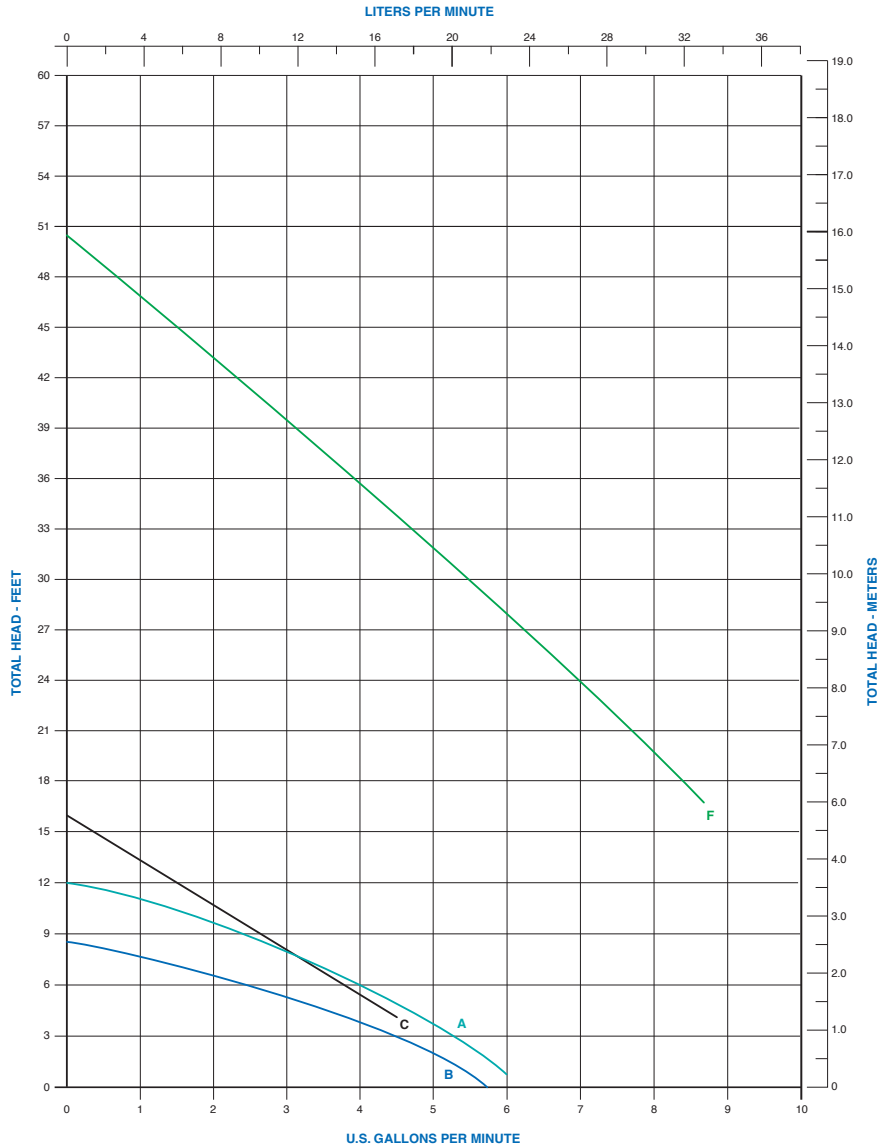
| | |
|----------------------|---|
| Body and Housing | <ul style="list-style-type: none"> • Vectra®* • Noryl® • NSF certified models available • 3/8" MNPT |
| Impeller | Vectra® |
| Bearings | Vectra® |
| Pump Shaft | Ceramic |
| Thrust Bearings | <ul style="list-style-type: none"> • Glass-Filled Teflon® • Reinforced Thermoplastic Resin • Vectra® |
| O-Rings (Elastomers) | <ul style="list-style-type: none"> • EPT/EPDM • Viton®/Fluoroelastomer • Nitrile • Neoprene • Silicone • Kel-F® |

Motor specifications / OEM options

| | |
|-------------|---|
| Motor Specs | <ul style="list-style-type: none"> • 115V, 230V 50/60 Hz • Drip-Proof • Shaded Pole • 12 & 24Vdc Brushed-Type & brushless |
|-------------|---|

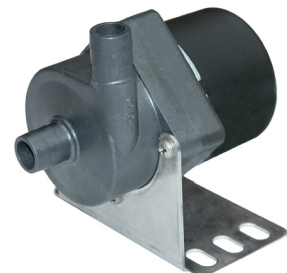
Features

| | |
|--------------------------------|--|
| Corrosion Resistant | Quiet operation |
| Hydraulically efficient | Flexible mounting and body discharge positions |
| No shaft seals | NSF certified models available |
| Low current draw and heat rise | |



A - 60 Hz B - 50 Hz C - 12VDC F - 12 & 24V BLDC curve

Testing performed in a controlled laboratory environment.
Actual performance may vary (+) or (-) 10%.



Do Not Run Pumps Dry. Pumps must be in a continuous flooded suction environment.



The Pump People.

GRI designs and manufactures pumps and pumping solutions for the Original Equipment Market (OEM). All models shown can be configured to meet specific OEM application requirements. Contact GRI for design points that fall outside of shown parameters.

| Model Number | Voltage (Type) | Amps | Body Material | O-Ring Material | Connections Inlet/Outlet (inches) | Curve (50Hz/60Hz) |
|--------------|----------------|------|---------------|-----------------|-----------------------------------|-------------------|
| 17651-050 | 115 VAC | .8 | Noryl® | EPT/EPDM | 1/2 MHB | B / A |
| 17651-051 | 115 VAC | .8 | Noryl® | Viton®/FKM | 1/2 MHB | B / A |
| 17651-052 | 230 VAC | .4 | Noryl® | EPT/EPDM | 1/2 MHB | B / A |
| 17651-053 | 230 VAC | .4 | Noryl® | Viton®/FKM | 1/2 MHB | B / A |
| 17651-054 | 115 VAC | .8 | Vectra® | EPT/EPDM | 1/2 MHB | B / A |
| 17651-055 | 115 VAC | .8 | Vectra® | Viton®/FKM | 1/2 MHB | B / A |
| 17651-056 | 230 VAC | .4 | Vectra® | EPT/EPDM | 1/2 MHB | B / A |
| 17651-057 | 230 VAC | .4 | Vectra® | Viton®/FKM | 1/2 MHB | B / A |
| 17651-081 | 24V BLDC | .75 | Vectra® | Viton®/FKM | 1/2 MHB | C |
| 17651-094 | 12V HS BLDC | — | Noryl® | EPT/EPDM | 1/2 MHB | F |
| 17651-095 | 12V HS BLDC | — | Noryl® | Viton®/FKM | 1/2 MHB | F |
| 17651-552 | 230 VAC | .35 | Noryl® | EPT/EPDM | 1/2 MHB | B / A |
| 17651-553 | 230 VAC | .35 | Noryl® | Viton®/FKM | 1/2 MHB | B / A |
| 17651-556 | 230 VAC | .35 | Vectra®* | EPT/EPDM | 1/2 MHB | B / A |
| 17651-557 | 230 VAC | .35 | Vectra®* | Viton®/FKM | 1/2 MHB | B / A |

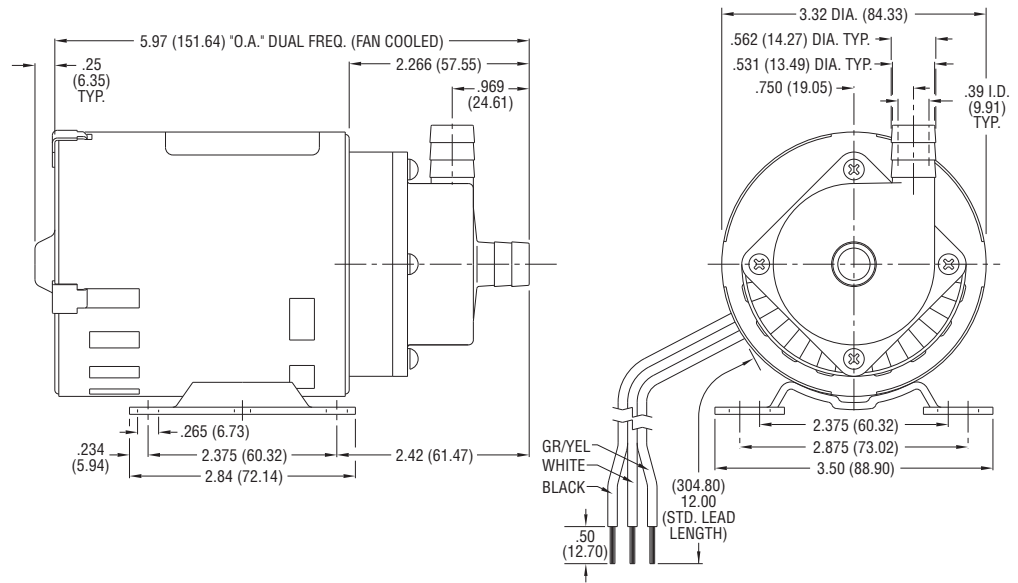
Vectra® is chemically resistant to most acids, oxidants and bleaches, and organic solvents. (Do not use with chemicals which are bases.)
BLDC = Brushless DC. HS = High Speed. FKM = Fluoroelastomer, FPT = Female Pipe Thread, MPT = Male Pipe Thread, MHB = Male Hose Barb.
Performance at 50 Hz will be approximately 83% of the performance at 60 Hz.



Typical Dimensions

17650 Series AC Models:

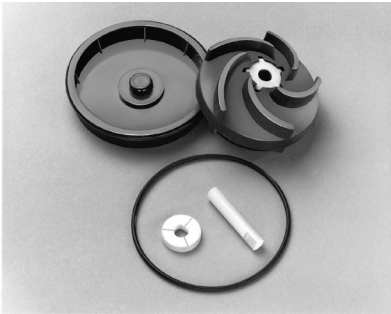
- 17651-050
- 17651-051
- 17651-052
- 17651-053
- 17651-054
- 17651-055
- 17651-056
- 17651-057



Replacement Kits

Magnetic Drive Pumps

Impeller & Bearing Kits



Impeller and bearing kits include front and rear thrust bearings, pump shaft, impeller bearing, adapter disc, impeller and magnet assembly and O-ring.

Body Kits



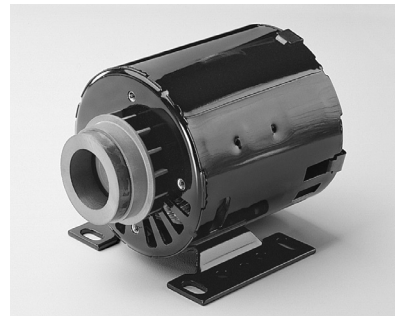
Body kit includes O-ring, body and V-band clamp assembly.

Motor Adapter Kits



Motor adapter kits include motor adapter, screws and washers.

Motor/Hub & Magnet Kit



Motor/hub and magnet kit includes motor, drive hub, magnet and set screw.

Please see Replacement Kit Chart on following page.

Replacement Kits

Magnetic Drive Pumps

| Model Number | Impeller & Bearing Kit | Motor/Hub & Magnet Kit | Body Kit | Motor Adapter Kit |
|--------------|------------------------|------------------------|-----------|-------------------|
| 15651-050 | — | 02501-569 | 02501-572 | — |
| 15651-051 | — | 02501-569 | 02501-573 | — |
| 15651-052 | — | 02501-570 | 02501-572 | — |
| 15651-053 | — | 02501-570 | 02501-573 | — |
| 15651-054 | — | 02501-569 | 02501-574 | — |
| 15651-055 | — | 02501-569 | 02501-575 | — |
| 15651-056 | — | 02501-570 | 02501-574 | — |
| 15651-057 | — | 02501-570 | 02501-575 | — |
| 17651-050 | — | 02501-580 | 02501-576 | — |
| 17651-051 | — | 02501-580 | 02501-577 | — |
| 17651-052 | — | 02501-581 | 02501-576 | — |
| 17651-053 | — | 02501-581 | 02501-577 | — |
| 17651-054 | — | 02501-580 | 02501-578 | — |
| 17651-055 | — | 02501-580 | 02501-579 | — |
| 17651-056 | — | 02501-581 | 02501-578 | — |
| 17651-057 | — | 02501-581 | 02501-579 | — |
| 17651-058 | — | 02501-584 | 02501-582 | — |
| 17651-059 | — | 02501-584 | 02501-583 | — |
| 14110-050 | 02501-551 | 02500-573 | 02501-553 | 02501-072 |
| 14110-051 | 02501-552 | 02500-573 | 02501-554 | 02501-072 |
| 14110-052 | 02501-551 | 02500-574 | 02501-553 | 02501-072 |
| 14110-053 | 02501-552 | 02500-574 | 02501-554 | 02501-072 |
| 14518-050 | 02501-555 | 02500-567 | 02501-557 | 02501-074 |
| 14518-051 | 02501-556 | 02500-567 | 02501-558 | 02501-074 |
| 14518-052 | 02501-555 | 02500-568 | 02501-557 | 02501-074 |
| 14518-053 | 02501-556 | 02500-568 | 02501-558 | 02501-074 |
| 14520-050 | 02501-559 | 02500-561 | 02501-561 | 02501-074 |
| 14520-051 | 02501-560 | 02500-561 | 02501-562 | 02501-074 |
| 14520-052 | 02501-559 | 02500-562 | 02501-561 | 02501-074 |
| 14520-053 | 02501-560 | 02500-562 | 02501-562 | 02501-074 |
| 15700-050 | 02501-567 | — | 02501-565 | 02501-242 |
| 15700-051 | 02501-568 | — | 02501-566 | 02501-242 |

Blank Page

