



Integrity Series™

Integrated Magnetic Drive Recirculation Pumps

Gorman-Rupp Industries designs and manufactures pumps and pumping solutions for the Original Equipment Manufacturer (OEM). **The information shared is based on catalog versions of our Integrity Series pumps. All models shown can be configured to meet specific OEM application requirements.**

Designed for the circulation and transfer of fluids, GRI’s Integrity Series Magnetic Drive Circulator Pumps offer a flexible and robust pumping solution to OEM fluid circulation applications. By manufacturing the motors and the majority of the pump’s components in-house, GRI has the flexibility to precisely configure an Integrity Series pump to meet an OEM’s specific flow and pressure requirements.

Equipped with an integrated 9 to 24 volt brushless DC variable speed motor, the magnetically coupled centrifugal pumps incorporate the components into a compact, lightweight design, eliminating motor bearings and leaving the impeller assembly as the only moving part. Fewer parts promote long life, quiet operation, and low power consumption.

Features

- Brushless DC Integrated Motor
- Only one moving part: No motor bearings
- Magnetically coupled/driven
- Compact, lightweight design
- Low power consumption
- Long Life
- Quiet Operation
- Limited dry run capability
- Adjustable base
- UL778: Motor-operated Water Pumps (INTG 1 & 3 series)
- NSF 61: Potable Water (INTG 1 & 3 series)
- NSF 372: Lead Content (INTG 1 & 3 series)

Options

- 9-24 volt power supply
- Built-in speed control
- Flow and pressure adjustment
- Remote third wire 0-5 volt control
- Submersible
- Multiple inlet/outlet configurations
- Extreme Temperature Fluids
- Multiple OEM options

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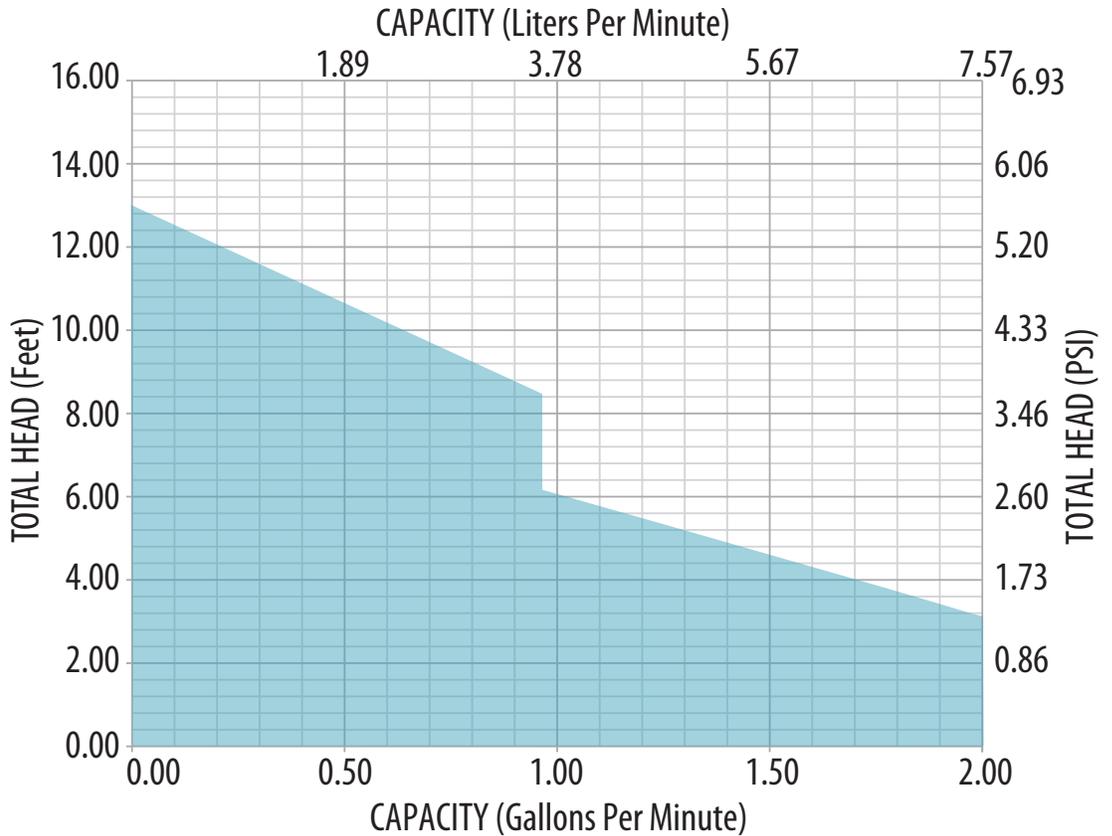
| Specifications |
|--------------------------------------|
| Max. Fluid Temp: 203°F (95°C) |
| Max Sys. Pressure: 75 psi |
| Weight: 10 oz (283.5 grams) |
| Ports: 1/2" MHB, 3/8" MPT |

| FLOW RATES: H2O |
|--|
| Max Flow: 1.96 GPM, 7.15 LPM |
| Max Head: 13.00 FT, 5.63 PSI |
| Flow and pressure dependent on input voltage |

| Materials in contact with solution |
|---|
| Body: PPS (Ryton®) |
| Impeller: PPS (Ryton®) |
| Pump Shaft: Ceramic |
| Bearing Plate: PPS (Ryton®) |
| Housing: PPS (Ryton®) |
| Rotor Shell: PPS (Ryton®) |
| Static O-Ring: EPDM, FKM (Viton) |

| Motor specifications |
|--|
| Motor: Integrated, Brushless DC |
| Supply Voltage: 24v BLDC w/ 0-5v third wire speed control (optional) |
| Inrush Current: None. Ramps up to running current. |
| It is recommended that the customer provide circuit over current protection to the pump. 1.5 amp fast acting fuse is recommended. |
| Electronics Max Power: 18 watts. |
| Remote Speed Control (Optional - Consult Factory) |
| <ul style="list-style-type: none"> • Third Wire • 0-5 volts (Reference DC NEG). Speed is controlled by a nominal 0-5 volt DC signal. |

| Agency Approvals | Compliances |
|---|-------------|
| UL778: Motor-operated Water Pumps NSF 61: Potable Water NSF 372: Lead Content | RoHS, REACH |



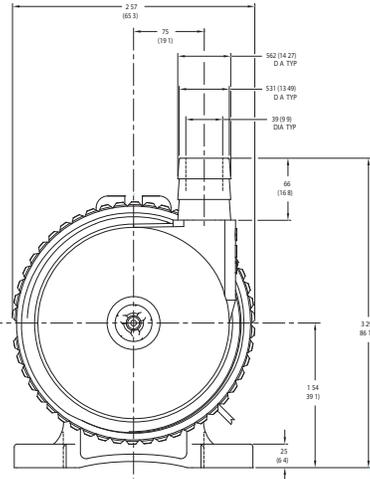
The above curve is an all inclusive overview of the INTG1 Series catalog models represented on this tech sheet. Gorman-Rupp Industries designs and manufactures pumps and pumping solutions for the Original Equipment Manufacturer (OEM). All models shown can be configured to meet specific OEM application requirements. Contact GRI for design points that fall outside of shown parameters.



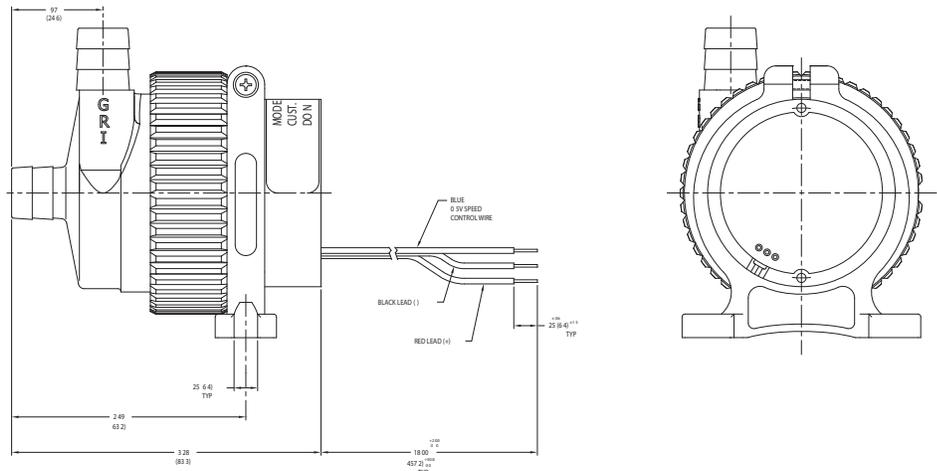
| Mounting Base Options |
|---|
| 360° Mounting Bracket: PPS material |
| Rubberized shock absorbing: Elastomer material (Neoprene) |

Note: Testing performed in a controlled laboratory environment. Actual performance may vary (+) or (-) 10% from the information shown.





Drawing represents model INTG1-040 with 1/2" MHB connectors and 3 wire driver.



| Model | Voltage | Max Amps @ Max Flow | Max Flow GPM (LPM) | Max Head Feet (PSI) | Connections Inlet/Outlet (Inches) | O-Ring Material |
|------------------------|-------------------------|---------------------|--------------------|---------------------|-----------------------------------|-----------------|
| INTG1-040 | 24 VDC, 0-5v controller | 0.51 | 1.96 (7.41) | 13.00 (5.63) | 1/2 MHB | EPDM |
| INTG1-041 | 24 VDC, 0-5v controller | 0.51 | 1.96 (7.41) | 13.00 (5.63) | 1/2 MHB | FKM |
| INTG1-042 | 24 VDC, 0-5v controller | 0.51 | 1.96 (7.41) | 13.00 (5.63) | 3/8 MPT | EPDM |
| INTG1-043 | 24 VDC, 0-5v controller | 0.51 | 1.96 (7.41) | 13.00 (5.63) | 3/8 MPT | FKM |
| ▼ SUBMERSIBLE ▼ | | | | | | |
| INTG1-S40 | 24 VDC, 0-5v controller | 0.51 | 1.96 (7.41) | 13.00 (5.63) | 1/2 MHB | EPDM |
| INTG1-S41 | 24 VDC, 0-5v controller | 0.51 | 1.96 (7.41) | 13.00 (5.63) | 1/2 MHB | FKM |
| INTG1-S42 | 24 VDC, 0-5v controller | 0.51 | 1.96 (7.41) | 13.00 (5.63) | 3/8 MPT | EPDM |
| INTG1-S43 | 24 VDC, 0-5v controller | 0.51 | 1.96 (7.41) | 13.00 (5.63) | 3/8 MPT | FKM |

• Electronics Maximum power = 18 Watts. • 0-5v Controller requires third wire on driver. • Testing performed in a controlled laboratory environment. Actual performance may vary (+) or (-) 10% from the information shown.

Specifications

| |
|--|
| Max. Fluid Temp: 203°F (95°C) |
| Max Sys. Pressure: 75 psi |
| Weight: 12.8 oz (362.9 grams) |
| Ports: 1/2", 3/4" MHB, 3/8" MPT |

FLOW RATES: H2O

| |
|--|
| Max Flow: 7.79 GPM, 29.47 LPM |
| Max Head: 54.38 FT, 23.58 PSI |
| Flow and pressure dependent on input voltage |

Materials in contact with solution

| |
|---|
| Body: PPS (Ryton®) |
| Impeller: PPS (Ryton®) |
| Pump Shaft: Ceramic |
| Bearing Plate: PPS (Ryton®) |
| Housing: PPS (Ryton®) |
| Rotor Shell: PPS (Ryton®) |
| Static O-Ring: EPDM, FKM (Viton) |

Motor specifications

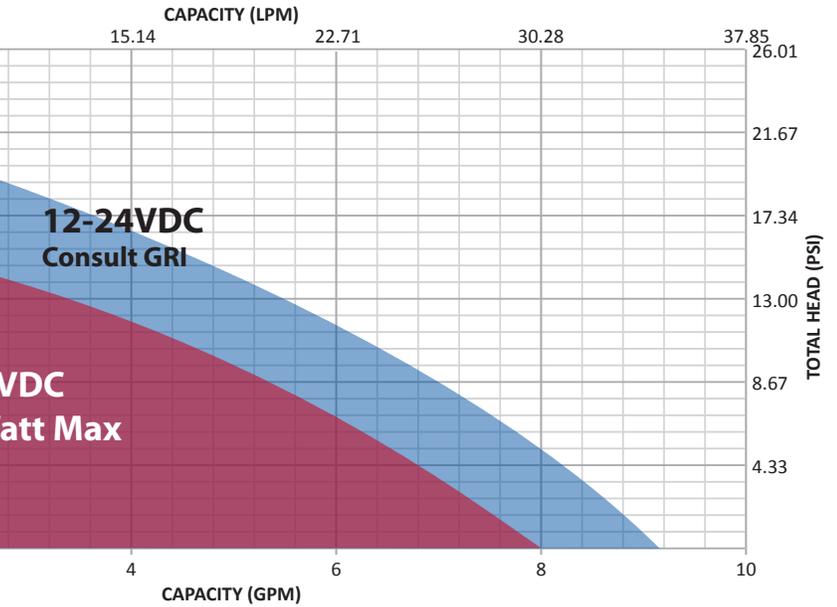
| |
|--|
| Motor: Integrated, Brushless DC |
| Supply Voltage: 9-24 VDC 60 Watts |
| Inrush Current: None. Ramps up to running current. |
| It is recommended that the customer provide circuit over current protection to the pump. 60 watt pump: 5 amp fast acting fuse is recommended. |
| Electronics Max Power: 60 watts |
| Remote Speed Control (Optional - Consult Factory) |
| <ul style="list-style-type: none"> • Third Wire • 0-5 volts (Reference DC NEG). Speed is controlled by a nominal 0-5 volt DC signal. |

Agency Approvals

| |
|-----------------------------------|
| UL778: Motor-operated Water Pumps |
| NSF 61: Potable Water |
| NSF 372: Lead Content |

Compliances

| |
|-------------|
| RoHS, REACH |
|-------------|



The above curve is an all inclusive overview of the INTG3 Series catalog models represented on this tech sheet. Gorman-Rupp Industries designs and manufactures pumps and pumping solutions for the Original Equipment Manufacturer (OEM). All models shown can be configured to meet specific OEM application requirements. Contact GRI for design points that fall outside of shown parameters.

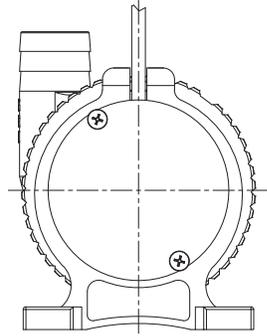
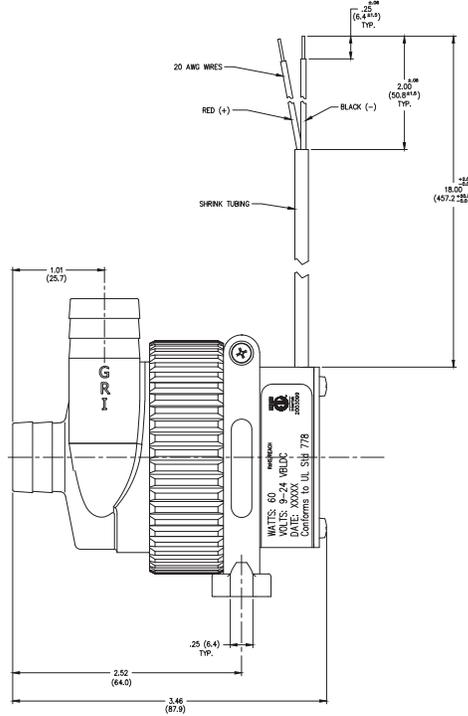
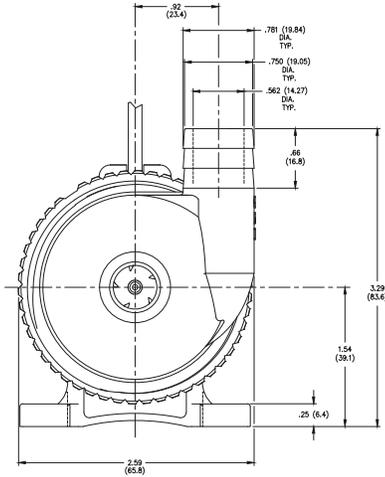


Mounting Base Options

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|---|
| 360° Mounting Bracket: PPS material |
| Rubberized shock absorbing: Elastomer material (Neoprene) |

Note: Testing performed in a controlled laboratory environment. Actual performance may vary (+) or (-) 10% from the information shown.





| Model | Voltage | Max Watts | Max Amps @ Max Flow | Max Flow GPM (LPM) | Max Head Feet (PSI) | Connections Inlet/Outlet (Inches) | O-Ring Material |
|-----------|-------------------------|-----------|---------------------|--------------------|---------------------|-----------------------------------|-----------------|
| INTG3-550 | 9-24 VDC | 60 | 2.15 | 7.79 (29.47) | 30.22 (13.10) | 3/4 MHB | EPDM |
| INTG3-551 | 9-24 VDC | 60 | 2.15 | 7.79 (29.47) | 30.22 (13.10) | 3/4 MHB | FKM |
| INTG3-552 | 24 VDC, 0-5v controller | 60 | 1.99 | 7.89 (29.88) | 29.11 (12.62) | 3/4 MHB | EPDM |
| INTG3-553 | 24 VDC, 0-5v controller | 60 | 1.99 | 7.89 (29.88) | 29.11 (12.62) | 3/4 MHB | FKM |
| INTG3-560 | 9-24 VDC | 60 | 2.19 | 6.73 (25.46) | 39.42 (17.09) | 1/2 MHB | EPDM |
| INTG3-561 | 9-24 VDC | 60 | 2.19 | 6.73 (25.46) | 39.42 (17.09) | 1/2 MHB | FKM |
| INTG3-562 | 24 VDC, 0-5v controller | 60 | 2.07 | 6.73 (25.46) | 39.83 (17.27) | 1/2 MHB | EPDM |
| INTG3-563 | 24 VDC, 0-5v controller | 60 | 2.07 | 6.73 (25.46) | 39.83 (17.27) | 1/2 MHB | FKM |
| INTG3-564 | 9-24 VDC | 60 | 2.19 | 6.73 (25.46) | 39.42 (17.09) | 3/8 MPT | EPDM |
| INTG3-565 | 9-24 VDC | 60 | 2.19 | 6.73 (25.46) | 39.42 (17.09) | 3/8 MPT | FKM |
| INTG3-566 | 24 VDC, 0-5v controller | 60 | 2.07 | 6.73 (25.46) | 39.83 (17.27) | 3/8 MPT | EPDM |
| INTG3-567 | 24 VDC, 0-5v controller | 60 | 2.07 | 6.73 (25.46) | 39.83 (17.27) | 3/8 MPT | FKM |
| INTG3-570 | 9-24 VDC | 60 | 2.88 | 6.41 (24.27) | 53.54 (23.21) | 1/2 MHB | EPDM |
| INTG3-571 | 9-24 VDC | 60 | 2.88 | 6.41 (24.27) | 53.54 (23.21) | 1/2 MHB | FKM |
| INTG3-572 | 24 VDC, 0-5v controller | 60 | 3.18 | 7.49 (28.34) | 54.38 (23.58) | 1/2 MHB | EPDM |
| INTG3-573 | 24 VDC, 0-5v controller | 60 | 3.18 | 7.49 (28.34) | 54.38 (23.58) | 1/2 MHB | FKM |
| INTG3-574 | 9-24 VDC | 60 | 2.88 | 6.41 (24.27) | 53.54 (23.21) | 3/8 MPT | EPDM |
| INTG3-575 | 9-24 VDC | 60 | 2.88 | 6.41 (24.27) | 53.54 (23.21) | 3/8 MPT | FKM |
| INTG3-576 | 24 VDC, 0-5v controller | 60 | 3.18 | 7.49 (28.34) | 54.38 (23.58) | 3/8 MPT | EPDM |
| INTG3-577 | 24 VDC, 0-5v controller | 60 | 3.18 | 7.49 (28.34) | 54.38 (23.58) | 3/8 MPT | FKM |

• 0-5v Controller requires third wire on driver. • Testing performed in a controlled laboratory environment. Actual performance may vary (+) or (-) 10% from the information shown.



Specifications

Max. Fluid Temp: 203°F (95°C)

Max Sys. Pressure: 75 psi

Weight: 3.52 lbs (1596.645 grams)

Ports: 1" MHB

FLOW RATES: H2O, 12-30 VDC, 0-5v controller

Max Flow: 18.87 GPM, 71.42 LPM

Max Head: 66.22 Feet, 28.71 PSI

Flow and pressure dependent on input voltage

Materials in contact with solution

Body: PPS (Ryton®)

Impeller: PPS (Ryton®)

Pump Shaft: Ceramic

Bearing Plate: PPS (Ryton®)

Housing: PPS (Ryton®)

Rotor Shell: PPS (Ryton®)

Static O-Ring: EPDM, FKM (Viton)

Motor specifications

Motor: Integrated, Brushless DC

Supply Voltage: 12-30 VDC, 0-5v Controller

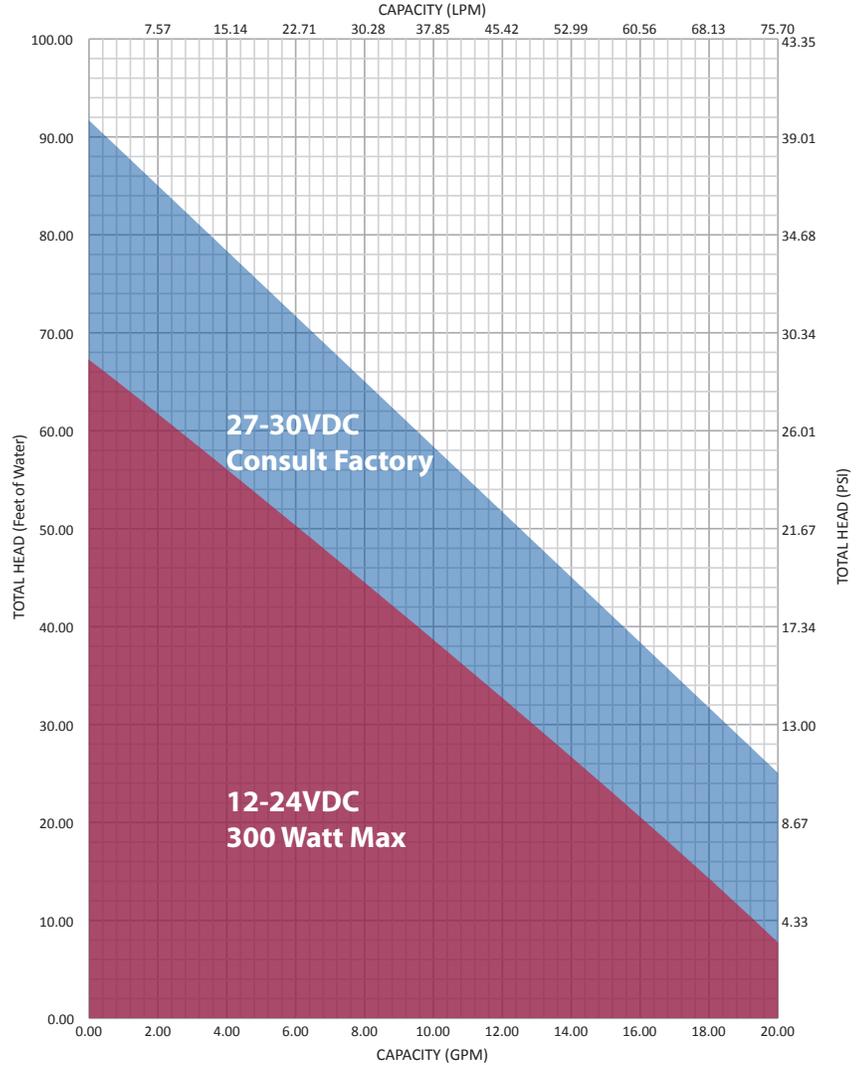
It is recommended that the customer provide circuit over current protection to the pump.

300 watt pump: 10 amp fast acting fuse is recommended.

Consult factory for wiring diagram and more specific instructions.

Mounting Base

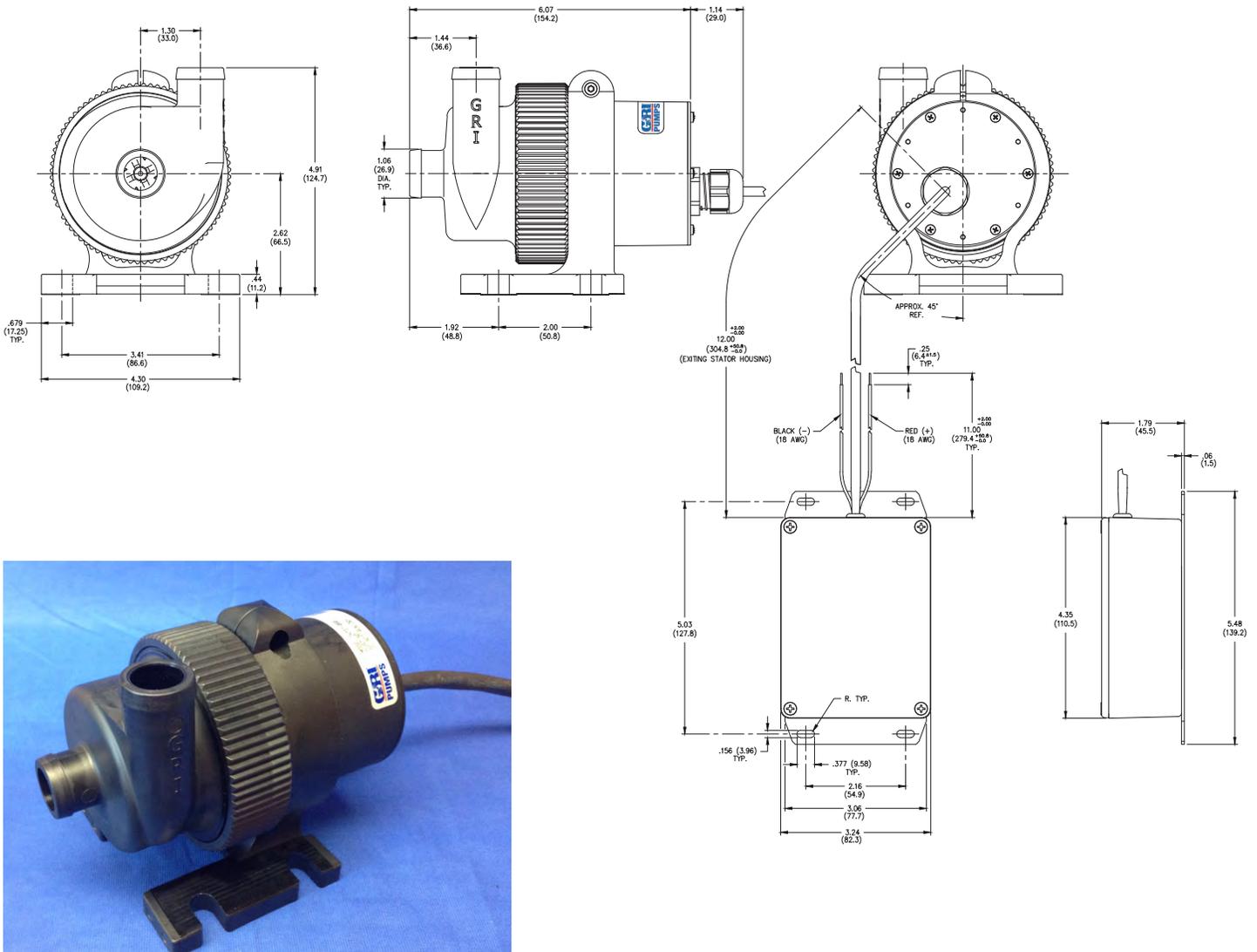
Variable 360° rotation



The above curve is an all inclusive overview of the INTG7 Series catalog models represented on this tech sheet. Gorman-Rupp Industries designs and manufactures pumps and pumping solutions for the Original Equipment Manufacturer (OEM). All models shown can be configured to meet specific OEM application requirements. Contact GRI for design points that fall outside of shown parameters.

Note: Testing performed in a controlled laboratory environment. Actual performance may vary (+) or (-) 10% from the information shown.





| Model | Voltage | Max Amps @ Max Flow | Max Power Rating Watts | Max Flow GPM (LPM) | Max Head Feet (PSI) | Connections Inlet/Outlet (Inches) | O-Ring Material |
|-----------|-------------------------|---------------------|------------------------|--------------------|---------------------|-----------------------------------|-----------------|
| INTG7-060 | 12-30 VDC | 7.92 | 300 | 16.02 (60.64) | 93.93 (40.72) | 1 MHB | EPDM |
| INTG7-061 | 12-30 VDC | 7.92 | 300 | 16.02 (60.64) | 93.93 (40.72) | 1 MHB | FKM |
| INTG7-062 | 24 VDC, 0-5V controller | 8.20 | 300 | 18.87 (71.42) | 66.22 (28.71) | 1 MHB | EPDM |
| INTG7-063 | 24 VDC, 0-5V controller | 8.20 | 300 | 18.87 (71.42) | 66.22 (28.71) | 1 MHB | FKM |

• Electronics Maximum power = 600 Watts. • 0-5v Controller requires third wire on driver. • Testing performed in a controlled laboratory environment. Actual performance may vary (+) or (-) 10% from the information shown.