



Dynamic Marine Systems

Ahead in stabilisation



DMS Anti Rolling Gyro

ARG manufactured by TOHMEI

TECHNICAL SPECIFICATIONS & DIMENSIONS - ARG 175T



Download Video Brochure

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The ARG Gyro Range we represent is markedly different to most other gyros, it is simple to operate, easy to service and exceptionally robust.

A few key points about ARG Gyros are:

- **5 Years Extended Warranty**
- **Air Cooling**
- **Natural Precession Control**
- **Reliable, Robust & Uncomplicated**
- **No Complicated Hydraulics or Electrics**
- **No Vacuum Chamber**
- **No Water Cooling or Hull Openings**
- **Exceptionally Simple Operation**
- **Large 180 Degree Gimbal Angle**
- **Low Maintenance & Ultra-Life Bearings**
- **No Need to Remove for Servicing**
- **Exceptional Big Sea Performance**
- **Extremely Competitive Pricing**

DMS Anti Rolling Gyro

**ARG 175T (220 - 240 VAC)
For Vessels from 10 - 30 Tonnes**



DMS Anti Rolling Gyro

* Note: Selection of correct gyro unit can only be made following performance prediction from DMS/Gyro Manufacturer.

Anti Rolling Gyro
Model:MSM-17500T-A1

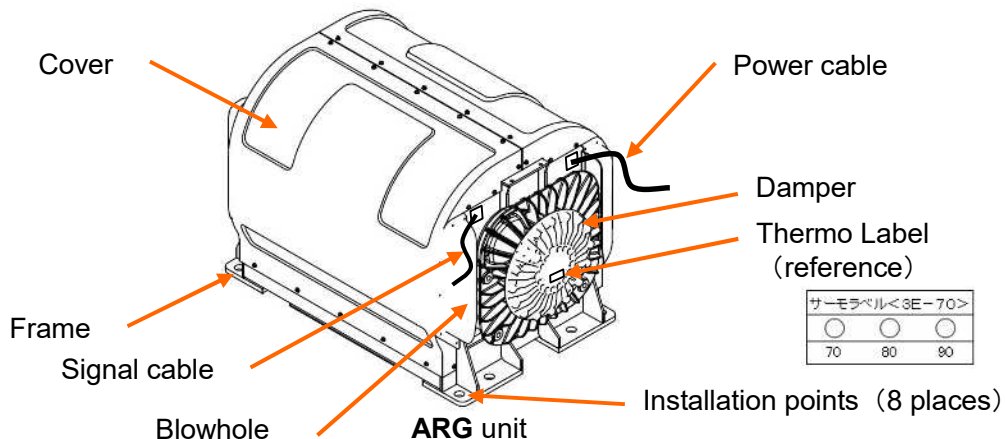
ARG 175T - GENERAL INFORMATION:

| Item | Specifications |
|-----------------------|---|
| Name | ARG175T |
| Model | MSM-17500T-A1 |
| Dimensions | 630 mm (height) x 950 mm (width) x 620 mm (depth) 24.8 inches (height) x 37.4 inches (width) x 24.4 inches (depth) |
| Weight | Approx. 380 kg / 838 lbs |
| Power supply | Supplied exclusive Motor Driver(MAA-2000/4000A-A200) 〔 Single-phase 220 to 240 VAC 50/60Hz Three-phase 200 to 240 VAC 50/60Hz 〕 |
| Ambient temperature | -10 to 40°C |
| Power consumption *1) | Single-phase : Approx. 4.3 kW(Max) 3.5 kW(Max) (Steady-state) Three-phase : Approx. 4.0 kW(Max) 3.0 kW(Max) (Steady-state) |
| Anti-Rolling Torque | Approx. 17,500 Nm (Max) |
| Angular momentum | Approx. 2,900 - 3,500 Nms |
| Rotational speed | Approx. 3,900 - 4,600 rpm |
| Noise *2) | 80 dBA maximum |
| Vibration *2) | 1 m/s ² maximum |
| Performance | <ul style="list-style-type: none"> • The ARG suppresses rolling motion of the ship. • The ARG applies a principle that the Gyro torque (force) is generated by inclination of the flywheel rotating at high speed. • The ARG stops automatically in abnormal conditions (excessive load, abnormal temperature, etc.). |
| Others | Start up duration to the rated speed: Approx. 35 minutes To stop the operation completely from the steady state: Approx. 60 minutes. |

*1) Power consumption varies with the customer generator.

*2) Measurement as per TOHMEI's specification.

The measurements data depend on measurements conditions (installation place, measurements method, etc.).

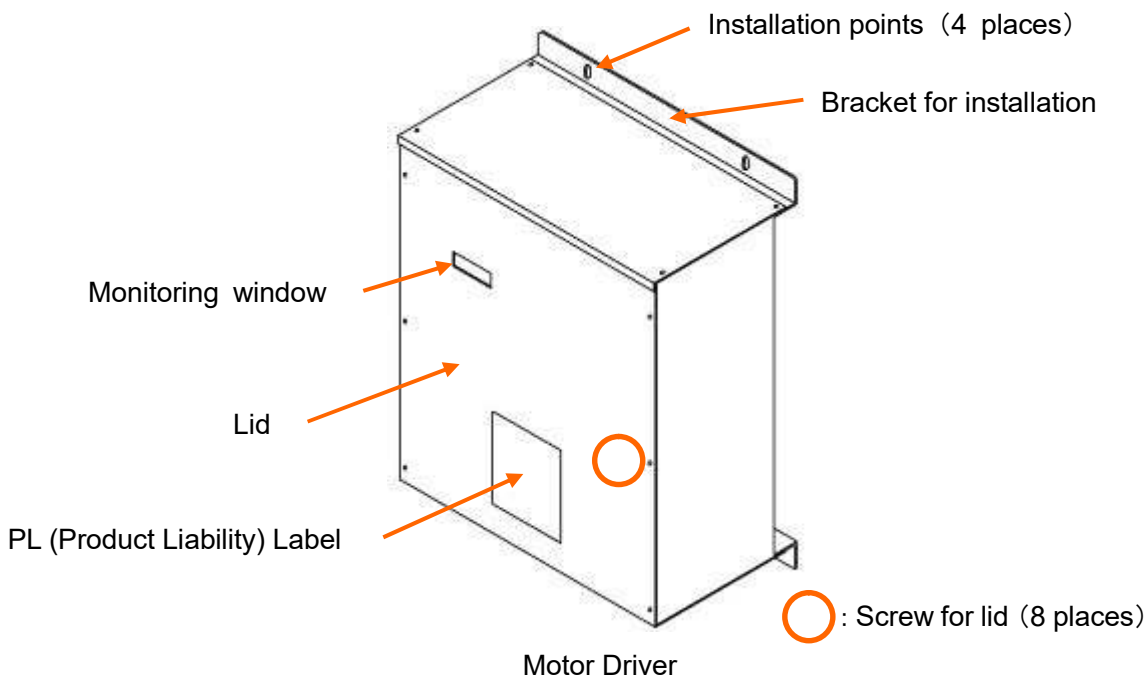


**Anti Rolling Gyro
Model:MSM-17500T-A1**

ARG 175T - MOTOR DRIVER:

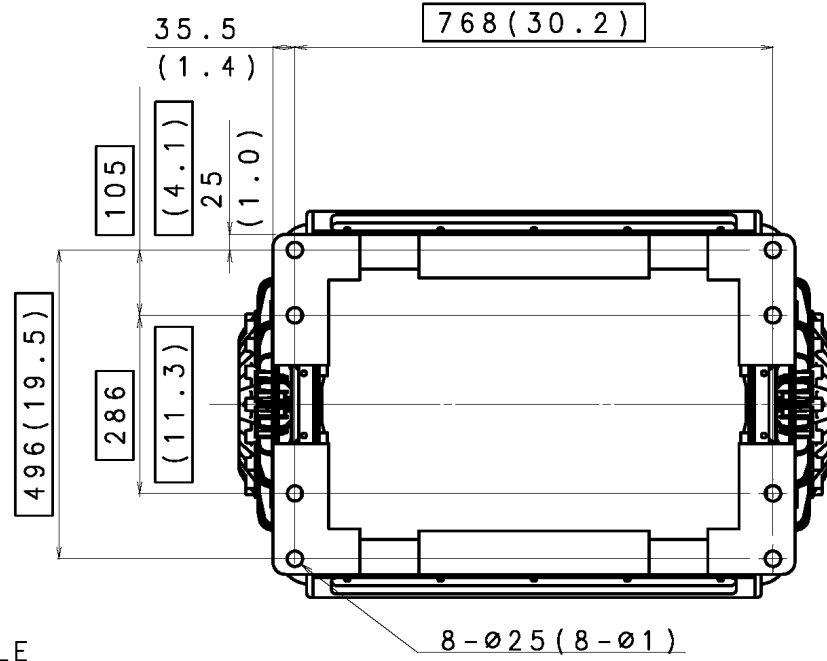
| Item | Specifications |
|--|--|
| Model | MAA-2000/4000A-A200 |
| Dimensions | 400 mm (height) x 350 mm (width) x 189 mm (depth) 15.7 inches (height) x 13.8 inches (width) x 7.4 inches (depth) |
| Weight | Approx. 15 kg / 33.1 lbs |
| Control method | Inverter control |
| Ambient temperature | -10 to 40°C |
| Humidity | 5 to 95% (with no condensation) |
| Pollution Degree | Do not be exposed to dust, direct sunlight, corrosive or flammable gases, oil mist, vapor or water drops. (Pollution Degree 2 (IEC60664-1)) |
| Power supply *3) | Single-phase 220 to 240VAC 50/60Hz Three-phase 200 to 240VAC 50/60Hz |
| Options (outer connecting terminal) (Please prepare by customer) | ① Remote switch: connect to the Motor Driver to remote control the ARG operation (ON/OFF). The ARG can be switched on /off by this remote switch. ② Start check lamp: connect to the Motor Driver to make sure the ARG is in operation or not. ③ Rotation rate check lamp: connect to the Motor Driver to make sure the ARG had reached the rated rotational speed (steady state) or not. |
| Others | The ARG 's operating condition is checked by Monitoring window. |

*3) The Motor Driver is able to use both single-phase and three-phase. Please choose appropriate power input as needed.

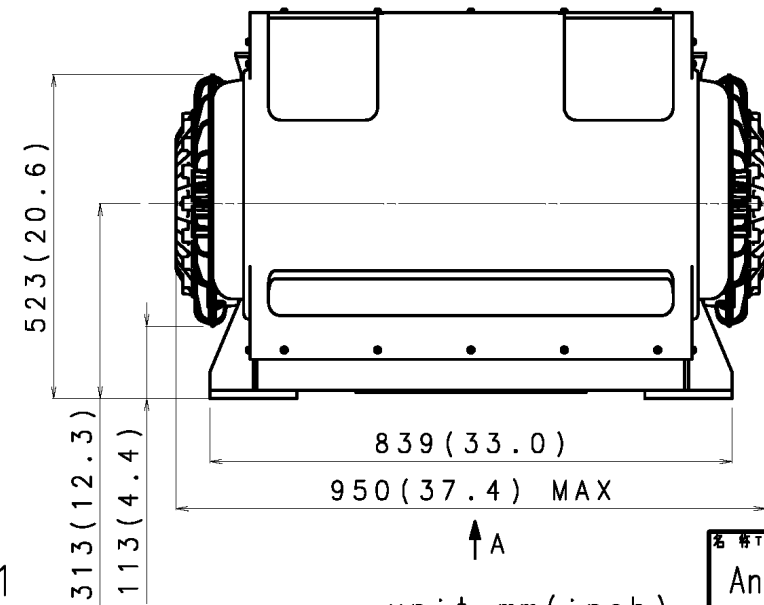
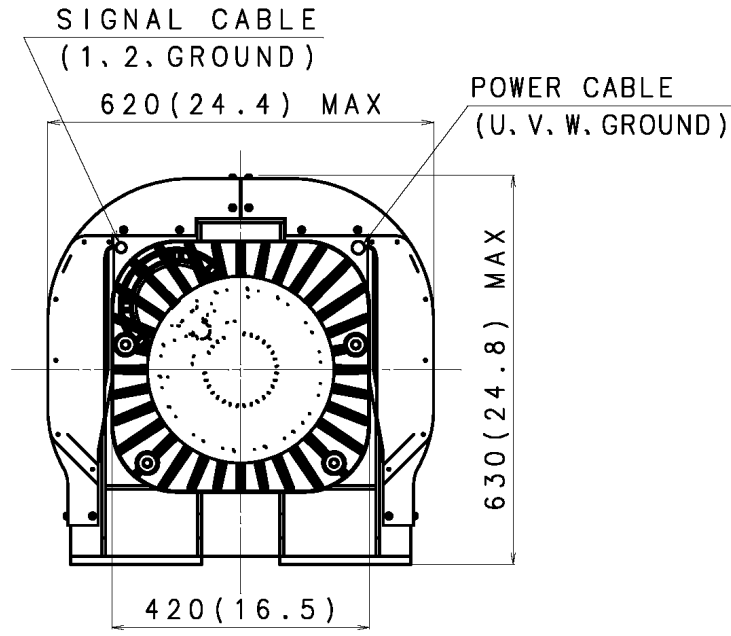


MSM-17500T-A1 specifications

| | |
|----------------------------------|---|
| Name | ARG175T |
| Model | MSM-17500T-A1 |
| Angular momentum | Apporox. 3500Nms |
| Anti-Rolling Torque | Apporox. 17500Nm(MAX) |
| Dimensions | 950mm(width)x620mm(depth)x630mm(height) 37.4inches(width)x24.4inches(depth)x24.8inches(height) |
| Weight | Apporox. 380kg/838lbs |
| Rotational speed | Apporox. 4600rpm |
| Power consumption (Steady-state) | Appox. 3.5kW / For single-phase Power supply220-240VAC Appox. 3.0kW / For three-phase Power supply200-240VAC |
| Power consumption (MAX) | Appox. 4.3kW / For single-phase Power supply220-240VAC Appox. 4.0kW / For three-phase Power supply200-240VAC |



VIEW A



MSM-17500T-A1

unit:mm (inch)

名 号 TITLE
Anti Rolling Gyro
MSM-17500T-A1