



Dynamic Marine Systems

Ahead in stabilisation



DMS Anti Rolling Gyro

ARG manufactured by TOHMEI

TECHNICAL SPECIFICATIONS & DIMENSIONS - ARG 50T & 65T



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 50T (12 VDC)
For Vessels Under 10 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-5000T-A1

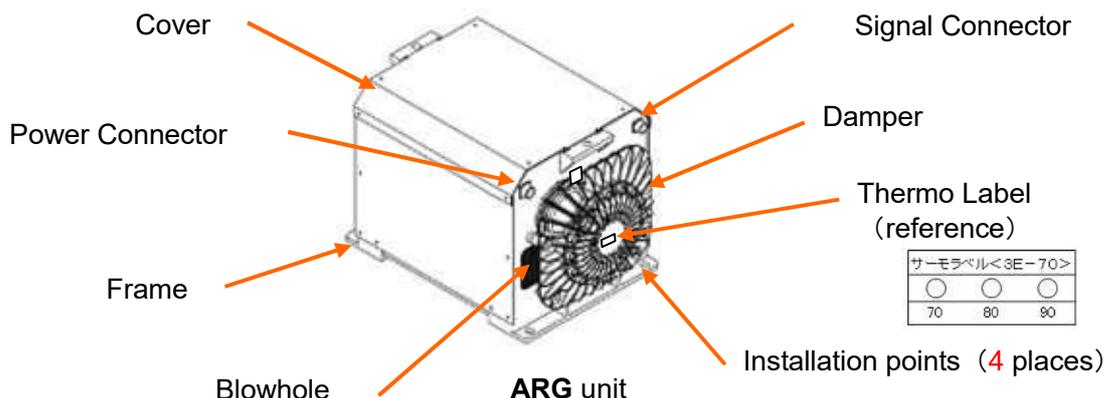
ARG 50T 12V - GENERAL INFORMATION:

Item	Specifications
Name	ARG50T
Model	MSM-5000T-A1
Dimensions	525 mm (height) x 741 mm (width) x 536 mm (depth) 20.7 inches (height) x 29.2 inches (width) x 21.1 inches (depth)
Weight	Approx. 234 kg / 515 lbs
Power supply	DC 12V(10.5~16V) { SP-1500-212,MAA-2000/4000A-A200 }
Ambient temperature	-10 to 40°C
Power consumption *1)	Approx. 1 kW(Max) 0.7 kW(Max) (Steady-state)
Anti-Rolling Torque	Approx. 5,000 Nm (Max)
Angular momentum	Approx. 1,000 Nms
Rotational speed	Approx. 3,200 rpm
Noise *2)	70 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. 30 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.

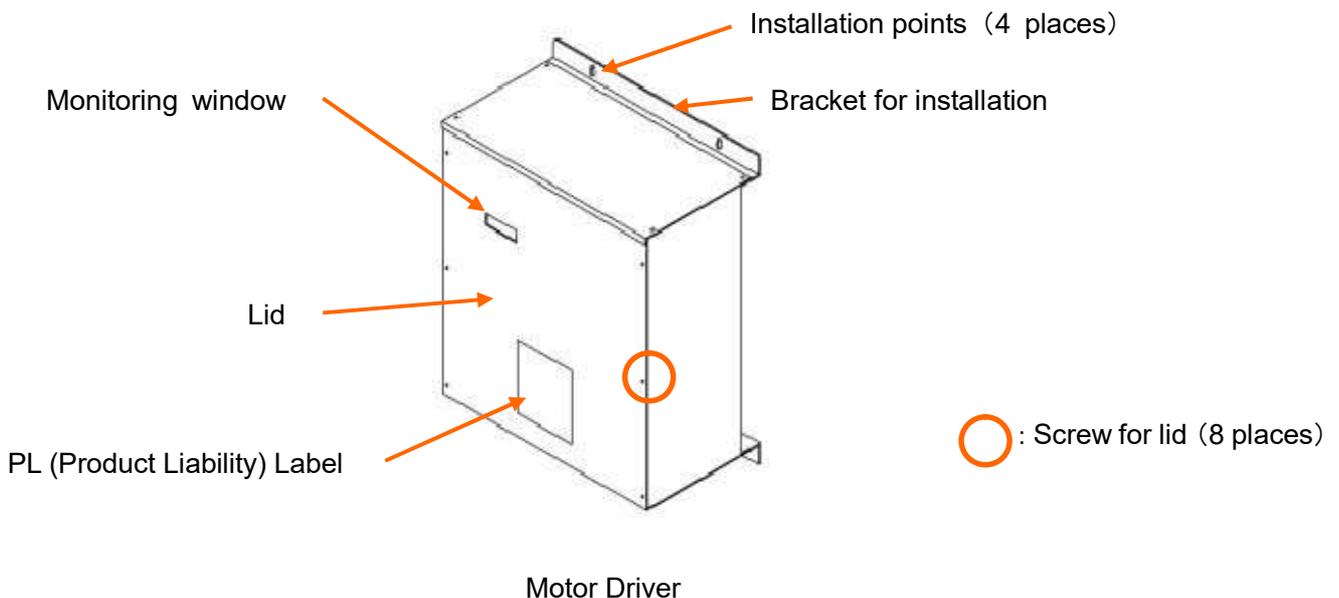
The measurements data depend on measurements conditions (installation place, measurements method, etc.).



Anti Rolling Gyro
Model:MSM-5000T-A1

ARG 50T 12V - GENERAL INFORMATION:

Item	Specifications
Model	MAA-25000B-A200
Dimensions	180 mm (height) x 400 mm (width) x 350 mm (depth) 7.09 inches (height) x 15.7 inches (width) x 13.7 inches (depth)
Weight	Approx. 15 kg / 33.6 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	Single-phase 210 to 240VAC 50/60Hz Convert the power from the 12V DC battery into AC by the Power Inverter (SP - 1500 - 212).
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.



**Anti Rolling Gyro
Model:MSM-5000T-A1**

ARG 50T 12V - POWER INVERTER:

Item	Specifications
Model	Sinusoidal Power Inverter
Type	SP-1500-212
Dimensions	83 mm(height) × 248 mm(width) × 421 mm(depth) 3.3 in(height) x 9.8in(width) x 16.6in(depth)
Weight	4.1 kg
Ambient temperature	-20 ~ 40°C
Humidity	10 ~ 95% (with no condensation)
Power supply	12VDC(rated)、 10.5~16.5VDC(operating area)
Output Voltage	Single-phase 200~240V、 50/60Hz
Output Power	1500VA(rated)
Safety Circuit	Over voltage、 low voltage、 reverse connection (internal fuse)、 short circuit, overload, over temperature, low temperature

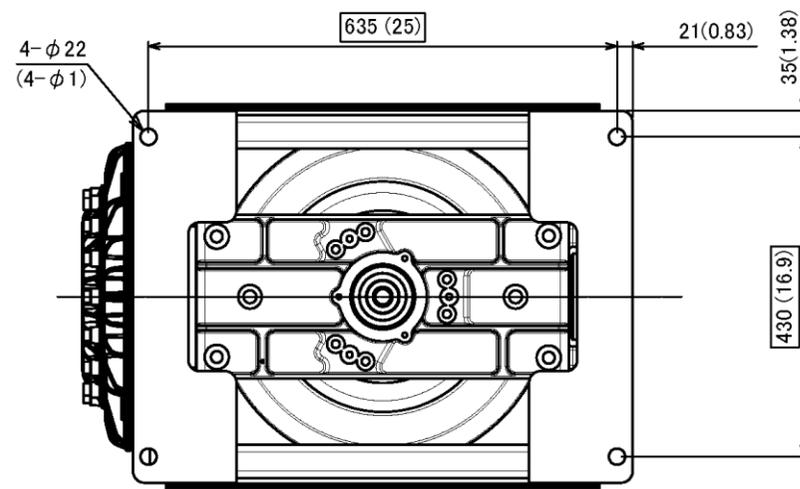


Power Inverter

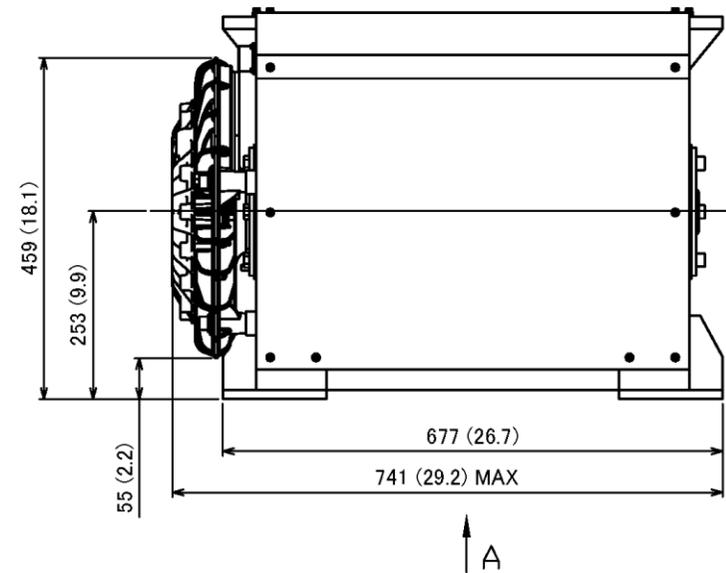
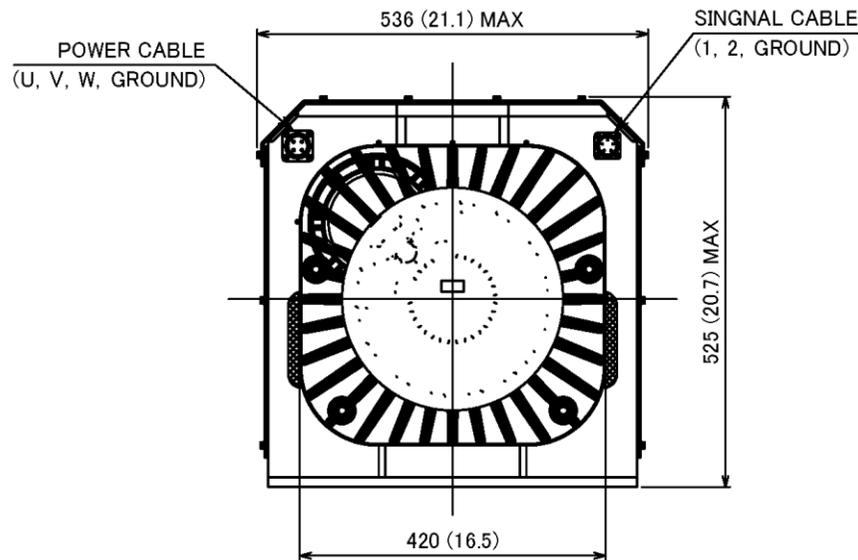
Note: The power inverter is the above-mentioned commercially available or equivalent product of "Denryou" Ltd., handling and others depend on the individual specification of the product.

MSM-5000T/6500T-A1 specifications

Name	ARG50T	ARG65T
Model	MSM-5000T-A1	MSM-6500T-A1
Angular momentum	Approx. 1000Nms	Approx. 1300Nms
Anti-Rolling Torque	Approx. 5000Nm (MAX)	Approx. 6500Nm (MAX)
Dimensions	525mm(height) × 741mm(width) × 536mm(depth)	
Weight	Approx. 234kg/515lbs	
Rotational speed	Approx. 3200rpm	Approx. 4200rpm
Power consumption (Steady-state)	Approx. 0.7kVA / For @12VDC	Approx. 1.4kVA / For single-phase Power supply @210~240VAC
Power consumption (MAX)	Approx. 1.0kVA / For @12VDC	Approx. 1.8kVA / For single-phase Power supply @210~240VAC



VIEW A



unit : mm (inch)

MSM-5000T/6500T-A1

名称 TITLE
Anti Rolling Gyro
MSM-5000T/6500T-A1

**ARG 65T (210 - 240 VAC)
For Vessels Under 10 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-6500T-A1

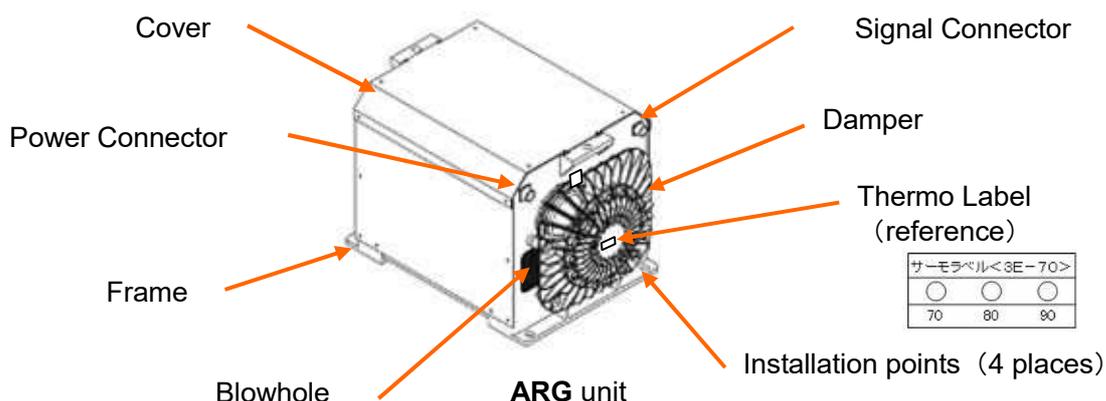
ARG 65T - GENERAL INFORMATION:

Item	Specifications
Name	ARG65T
Model	MSM-6500T-A1
Dimensions	525 mm (height) x 741 mm (width) x 536 mm (depth) 20.7 inches (height) x 29.2 inches (width) x 21.1 inches (depth)
Weight	Approx. 234 kg / 515 lbs
Power supply	AC Single-phase 210 - 240V { MAA-6500A-A200 }
Ambient temperature	-10 to 40°C
Power consumption *1)	Approx. 1.8kW(Max) 1.4 kW(Max) (Steady-state)
Anti-Rolling Torque	Approx. 6,500 Nm (Max)
Angular momentum	Approx. 1,300 Nms
Rotational speed	Approx. 4,200 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. 30 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.

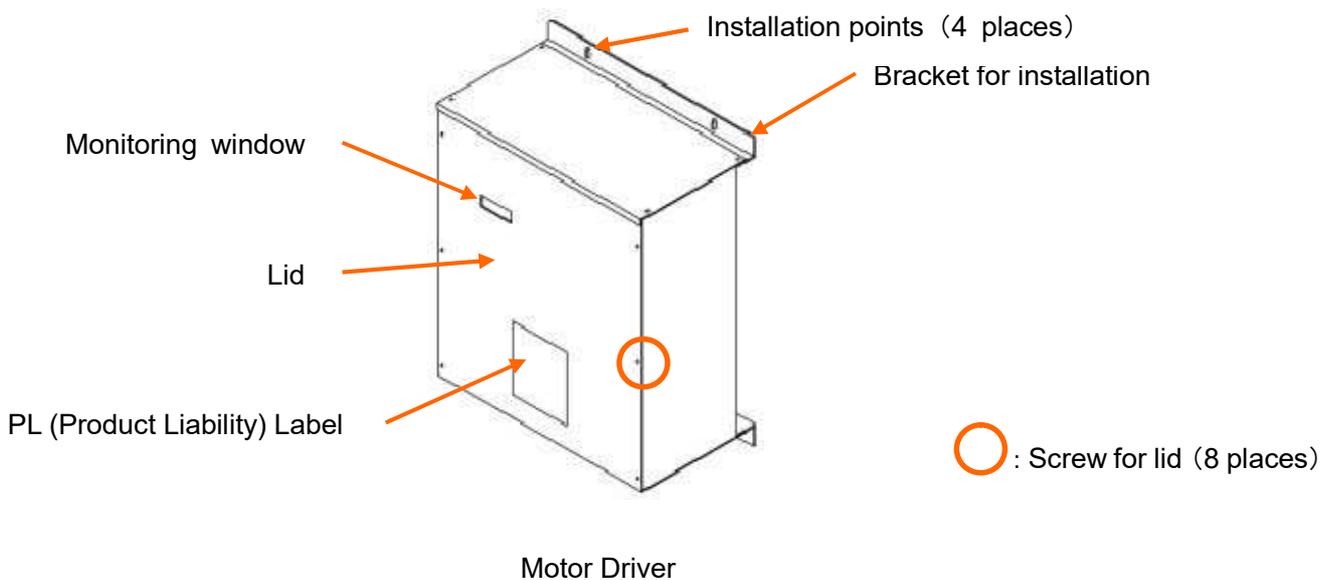
The measurements data depend on measurements conditions (installation place, measurements method, etc.).



**Anti Rolling Gyro
Model:MSM-6500T-A1**

ARG 65T - MOTOR DRIVER:

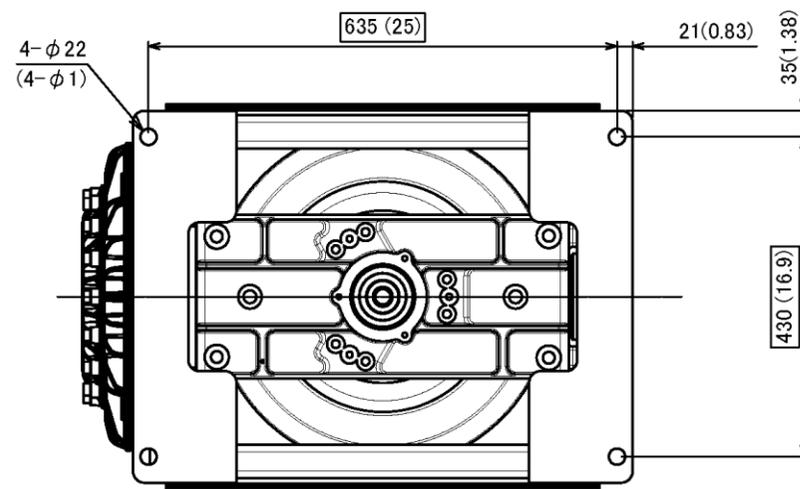
Item	Specifications
Model	MAA-25000B-A200
Dimensions	180 mm (height) x 400 mm (width) x 350 mm (depth) 7.09 inches (height) x 15.7 inches (width) x 13.7 inches (depth)
Weight	Approx. 15 kg / 33.6 lbs
Control method	Inverter control
Ambient temperature	-10 to 40°C
Humidity	5 to 95% (with no condensation)
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	Single-phase 210 to 240VAC 50/60Hz
Options (outer connecting terminal) (Please prepare by customer)	<ul style="list-style-type: none"> 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.



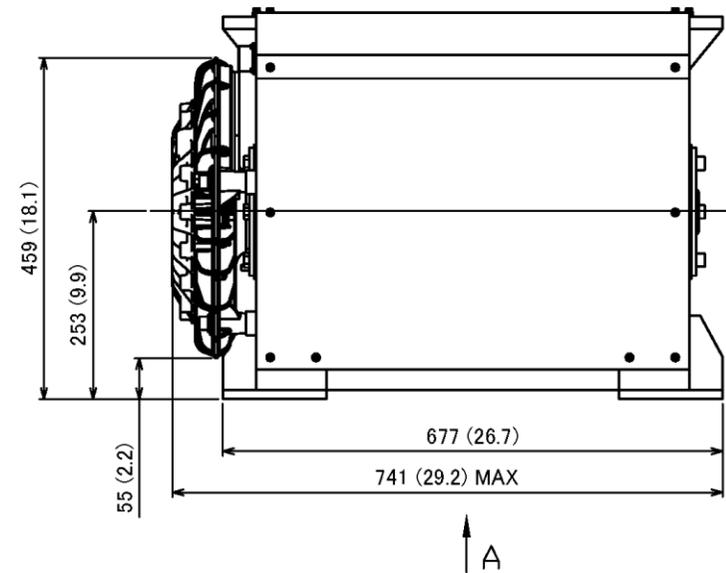
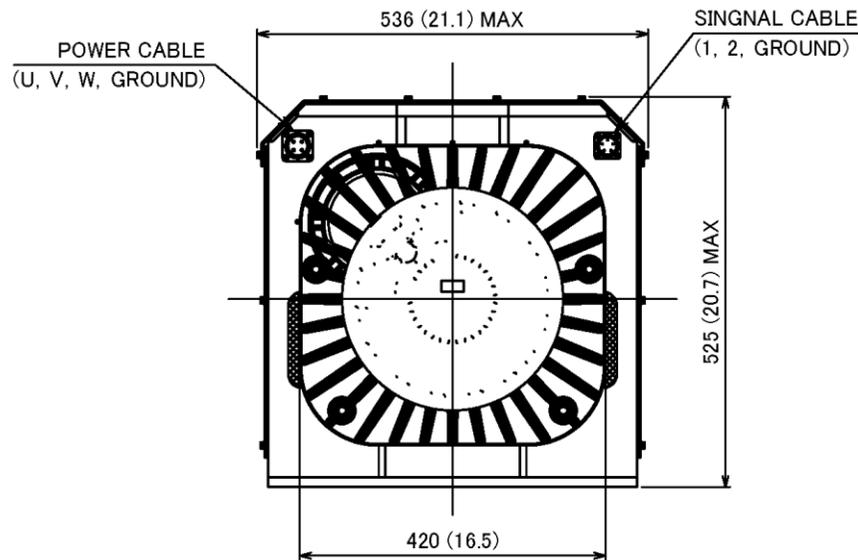
Motor Driver

MSM-5000T/6500T-A1 specifications

Name	ARG50T	ARG65T
Model	MSM-5000T-A1	MSM-6500T-A1
Angular momentum	Approx. 1000Nms	Approx. 1300Nms
Anti-Rolling Torque	Approx. 5000Nm (MAX)	Approx. 6500Nm (MAX)
Dimensions	525mm(height) × 741mm(width) × 536mm(depth)	
Weight	Approx. 234kg/515lbs	
Rotational speed	Approx. 3200rpm	Approx. 4200rpm
Power consumption (Steady-state)	Approx. 0.7kVA / For @12VDC	Approx. 1.4kVA / For single-phase Power supply @210~240VAC
Power consumption (MAX)	Approx. 1.0kVA / For @12VDC	Approx. 1.8kVA / For single-phase Power supply @210~240VAC



VIEW A



unit : mm (inch)

MSM-5000T/6500T-A1

名称 TITLE
Anti Rolling Gyro
MSM-5000T/6500T-A1