

# Reaction Wheel Type L-A



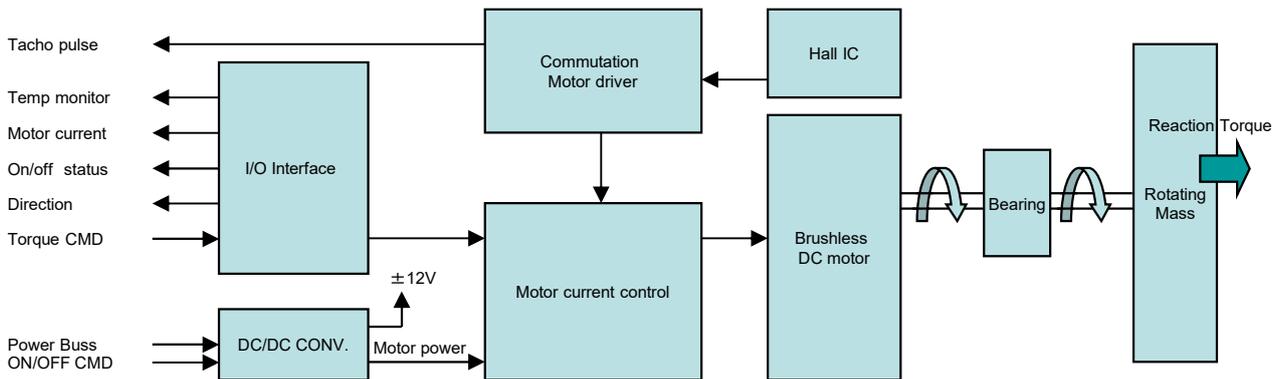
## Features

- Angular momentum 30 to 80Nms selectable rotor momentum muss.
- Output torque 0.2Nm to 0.4Nm
- Low disturbance by well-balanced tuning technology.
- Up to severe environmental condition
- Duplex angular contact bearings
- Lubricant: synthetic oil MAC
- Built-in drive electronics
- Over current protection

## Heritage

ASTRO-H

## Block Diagram



## Performance

Item	Capability	Remarks
Maximum momentum	30 ~ 80Nms	@ 6000rpm
Maximum output Torque	> 0.2Nm @ 6000rpm > 0.3Nm @ 3500rpm > 0.4Nm @ 2000rpm	
Speed range	± 6000rpm	
Power consumption		
Peak Torque @ 6000rpm , 0.2Nm	208W TYP	
Steady state @ 6000rpm	23W TYP	
Disturbance @ 6000rpm	Torque < 0.4Nm Force < 2N	100 to 200Hz
Static Imbalance	< 0.25 g·cm	
Dynamic Imbalance	< 5.0 g·cm <sup>2</sup>	
Power Bus Voltage	30~ 52VDC, 100VDC available	
Dimension ( Diameter X Height )	Φ 365mm X 145mm TYP	
Mass	11.0kg TYP @ 80Nms	
Integrated Electronics	Yes	
Tachometer	96Pulses/rev	
Signal Interface	Analog	
Operation Temperature Range	-15 ~ +60°C	
Turn on Temperature Range	-30 ~ +60°C	
Random Vibration	> 196.0m/s <sup>2</sup> rms ( Z ) > 159.4m/s <sup>2</sup> rms ( X , Y )	
Radiation Hard	> 100krad ( Si )	
Design Life	> 10years	

Subject to change without prior notice.