

# RW20

## Reaction Wheels 20 for Nanosatellites



The latest Reaction Wheel generation, plug-&-play, radiation proof, with a long life time, safeguarded electronics, and a very compact design.



**Detumbling**



**Attitude control**

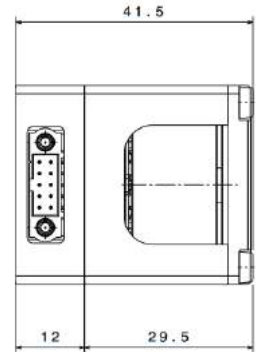
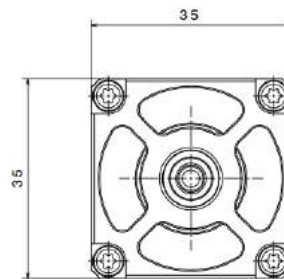


**Torque or angular rate control**



### Main benefits

- ✓ Plug & play concept
- ✓ Embedded electronic
- ✓ Robust technology (stainless steel bearings)
- ✓ High torque design (brushless motor)
- ✓ High performance control loop



### Key features

Torque 2 mNm mean	Mechanical interface Size: 35 x 35 x 42 mm Mass: 1 RW = 150 g (electronic and radiation protection included)	Mechanical environment QSL: 25 g Random: 20 grms Shock: 1,000 g/1,000 Hz
Kinetic moment 20 mN.ms	Life time More than 32,000 zero crossing tests 3 years of operation	Radiation <10 Krad
Accuracy Down to 1 rpm		Protocol NSP communication Protocol
Supply Voltage 14 V [12 V; 16 V]	Thermal environment -25 °C / +45 °C	Acceptance Test µvib   Vibration   Thermal cycling   Performance
Data Interface RS 485		



Satellite control

# REACTION WHEELS

