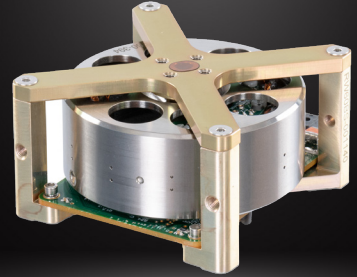


# REACTION WHEEL

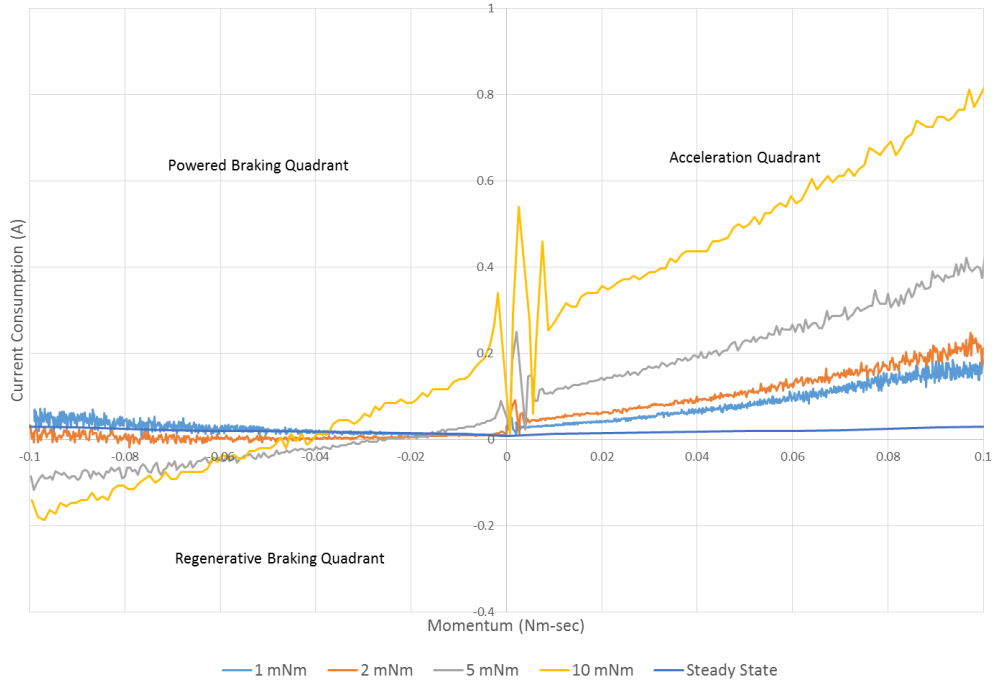
## 60 mNms RW-0.06 Data Sheet

Version 2, 7 April 2022



<b>MOMENTUM</b>	Nominal: 0.06 Nms Peak: 0.18 Nms (at 28 V supply)
<b>TORQUE</b>	±20 mNm at 0.12 Nms (at 28 V supply)
<b>CONTROL MODE</b>	Speed or torque, with built-in control CPU
<b>COMMAND/TELEMETRY</b>	RS-485, CAN, ±36 V fault tolerant
<b>MECHANICAL</b>	Dimensions: 77 mm x 65 mm x 38 mm Mass: 226 g
<b>SUPPLY VOLTAGE</b>	Nominal: 7.5 V to 34 V, Maximum: 50 V Redundant pins, reverse polarity protected, shorted bus protected
<b>SUPPLY POWER (28 V IN VACCUM)</b>	23.4 W @ 0.12 Nms, +10 mNm 0.9 W @ 0.12 Nms, steady state 0.5 W @ 0.06 Nms, steady state -4.6W @ 0.10 Nms, -10 mNm regenerative braking
<b>ENVIRONMENT</b>	Thermal: -40°C to +70°C (operating) Vibration: >23 gRMS Radiation: >20 krad dose
<b>RELIABILITY</b>	Advanced hybrid ball bearings Redundant motor windings Radiation lot-screened parts on all flight models
<b>HERITAGE</b>	41 Units total on-orbit on 12 satellites, first launched June 2014 Common design to RW-0.03, with >11 year on-orbit
<b>PRICE</b>	US \$35,000 each

Input Current at 28 V in Vacuum for Various Torques



Torque Box at 28 V in Vacuum

