

## Features:

- Proven and robust silicon MEMS vibrating ring gyro
- Analog voltage output
- High shock and vibration rejection
- Class-leading bias and noise over temperature
- Low noise – high resolution



## Applications:

- Automotive in-car navigation
- GPS vehicle and personal navigation aiding
- Vehicle yaw, pitch and roll rate sensing
- Antenna stabilization
- Motion control

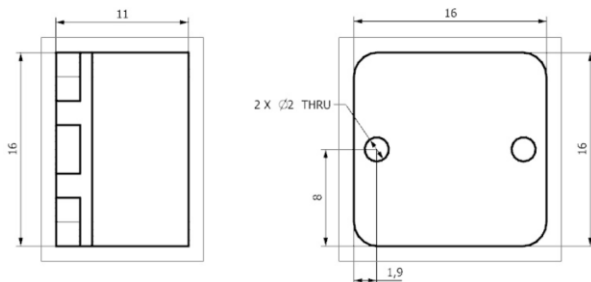
Dynalabs MEMS based gyroscopes are designed by micro-mechanical silicon structures. Thus, gyroscopes are insensitive to external impacts and vibrations. For harsh environmental conditions Dynalabs gyroscopes are preferred.

6000 Series Uniaxial and 7000 Series Triaxial Gyroscopes feature a lightweight, reliable aluminum housing and they have an integrated cable with configurable length and connectors.

## Uniaxial Gyroscopes

		DYN-G-6075	DYN-G-6150	DYN-G-6300	DYN-G-6900
Full-scale angular velocity	(°/s)	± 75	± 150	± 300	± 900
Frequency range	(Hz)	0-150	0-150	0-150	0-150
Non-linearity (full scale)	(%)	0.06	0.06	0.06	0.06
Noise (in band)	(°/s/√Hz)	0.0075	0.0075	0.0075	0.0075
Scale factor (nominal)	(V/°/s)	0.012	0.006	0.003	0.001
Scale factor var. over temp.	(%)	0.5	0.5	0.5	0.5
Bias variation with temp.	(°/s)	± 1	± 2	± 3	± 4
Shock survivability	(g)	10,000	10,000	10,000	10,000
Protection level		IP 68			
Operating Voltage	(VDC)	5V – 20V			
Operating Temperature	(°C)	-40 to +100			
Weight (without cable)		7 g (aluminum) 17 g (steel)			
Housing Material		Aluminum or Steel			

## Technical Drawing:



## Options:

- Custom Cable Length (5m standard cable)
- Custom Housing Material
- Custom Connector

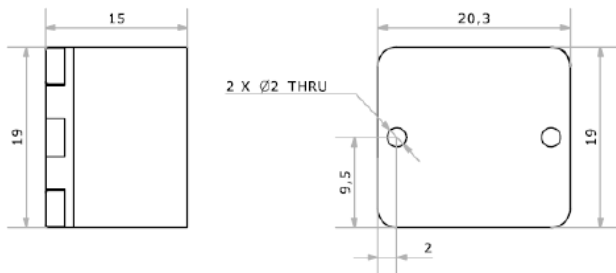
Standard length of the integrated cable is 5 meters. But, based on request customized cable lengths are possible.

Standard version has no connector at the cable end. However, it is possible to assemble connector during production.

## Triaxial Gyroscopes

		DYN-G-7075	DYN-G-7150	DYN-G-7300	DYN-G-7900
Full-scale angular velocity	(°/s)	± 75	± 150	± 300	± 900
Frequency range	(Hz)	0-150	0-150	0-150	0-150
Non-linearity (full scale)	(%)	0.06	0.06	0.06	0.06
Noise (in band)	(°/s/√Hz)	0.0075	0.0075	0.0075	0.0075
Scale factor (nominal)	(V/°/s)	0.012	0.006	0.003	0.001
Scale factor var. over temp.	(%)	0.5	0.5	0.5	0.5
Bias variation with temp.	(°/s)	± 1	± 2	± 3	± 4
Shock survivability	(g)	10,000	10,000	10,000	10,000
Protection level		IP 68			
Operating Voltage	(VDC)	5V – 20V			
Operating Temperature	(°C)	-40 to +100			
Weight (without cable)		12 g (aluminum) 29 g (steel)			
Housing Material		Aluminum or Steel			

### Technical Drawing:



### Options:

- Custom Cable Length (5m standard cable)
- Custom Housing Material
- Custom Connector

### Cable Code/Pin Configuration:

**Cable for 6000 Series :** 4x #28 AWG Conductors PFA Insulated, Braided Shield, TPE Jacket

**Cable for 7000 Series:** 5x #28 AWG Conductors PFA Insulated, Braided Shield, TPE Jacket

#### DYN-G-6000 Series

- Red: V +                      Supply voltage 5V to 20V.
- Black: Ground              Power GND
- RX : Yellow : Gyro Signal      Single-ended analog output voltage signal.

#### DYN-G-7000 Series

- Red: V+                      Supply voltage 5V to 20V.
- Black: Ground              Power GND
- RX : Yellow : Gyro Signal      X-Axis: Analog output voltage signal for single-ended mode.
- RY : Blue : Gyro Signal      Y-Axis: Analog output voltage signal for single-ended mode.
- RZ : White : Gyro Signal      Z-Axis: Analog output voltage signal for single-ended mode.