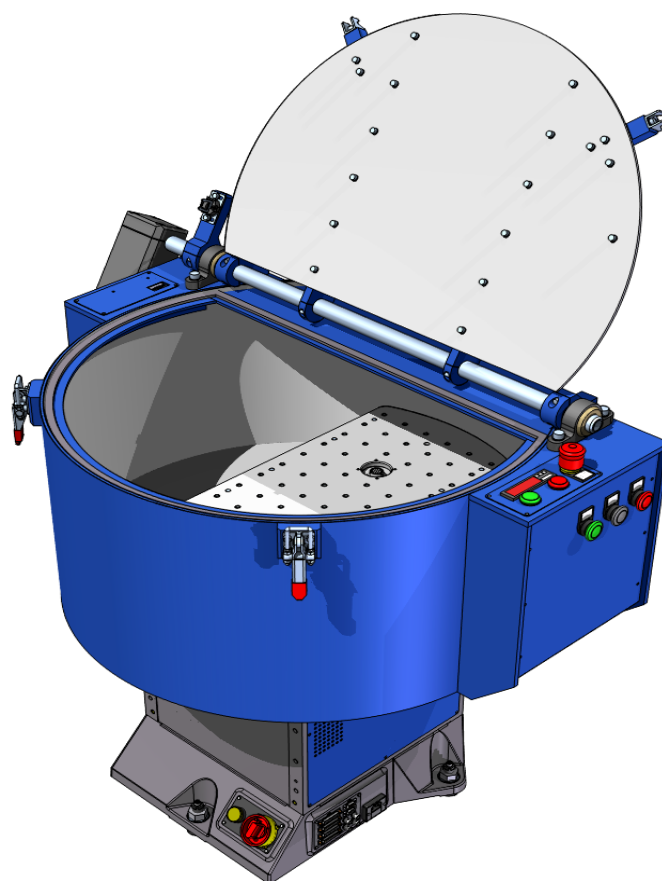


## Centrifuge Series GLC-4\_100G-kg

### Modes of Operation

- Direct drive brushless torquer for long wear and precise rate.
- Rate: no drift, good instantaneous rate stability with high resolution of 0.001deg/sec
- Analog command with 12 bit resolution
- Shroud for operator safety and controlled aero dynamic conditions
- Optional pneumatic, hydraulic, optical or RF rotary joints



### Description

Centrifuges Series GLC-4 are based on the modular drive assemblies used for the series of proven test instruments. The axis is driven by direct drive brushless torquers and supported by precision angular contact bearings. The high resolution optical encoder provides the rate feedback. Slip rings are incorporated meeting the customer's requirement

The centrifuge is designed for the testing and calibration of integrated packages and subassemblies under high G-loading. The Payload is mounted on the hard anodized aluminum platen. A pattern of threaded holes accept a variety of test loads. Electrical access to the payload is dimensioned for different power ratings and signals. The lines terminate on the boom and the base casting by D-Sub connectors. The access to the payload can be configured meeting the test requirements. Hydraulic, pneumatic, RF and/or optical joints can be optional provided.

All operations are commanded by a PC. The control software delivered with the instrument is based on C#.

The centrifuge requires an enclosure for the protection of the operating crew and to reduce the aero dynamic drag. Large clam shell doors provide convenient access to the instrument and the payload. The closing the door is monitored. The centrifuge can only be operated with door properly closed.

## Centrifuge Series GLC-4\_100G-kg

- General Configuration**
- Payload nominal: 200mm cube, 2kg; (4kg max.)
  - Mounting platen: aluminum hard anodized with grid of threaded mounting holes M8 with insert on 50mm spacing,
  - Radius: 300mm nominal ranging between 250 to 350 mm
  - Platen flatness: +/- 0.1mm
  - Sliprings to UUT: 4 lines rated for 5A shielded  
28 lines rated for 2A shielded
- Performance**
- Capacity: 100 G-kg
  - G-Rating: 1 to 50 G
  - Speed Range: 1 to 3000 deg/s (53.3rad/s)
  - Speed Resolution: 0.001 deg/s
  - Speed Performance: Stability better than +/- 0.002%
  - Fail safe Brake: pneumatic failsafe emergency brake optional available
- Command**
- Through High-Speed Ethernet, via a compatible input device or host computer. Safety features are hard wired.

G-Level for 0.30m radius as result of Rate  
Rate in deg/sec

G-Level	Rate at boom radius (deg/s)		
	0.20 m	0.30 m	0.40 m
1 G	401.48	327.81	283.89
5 G	897.73	733.00	634.79
10 G	1269.59	1036.61	897.73
15 G	1554.92	1269.59	1099.49
20 G	1795.47	1465.99	1269.59
25 G	2007.39	1639.03	1419.44
30 G	2198.99	1795.47	1554.92
40 G	2539.17	2073.23	1795.47
50 G	2838.88	2317.94	2007.39

