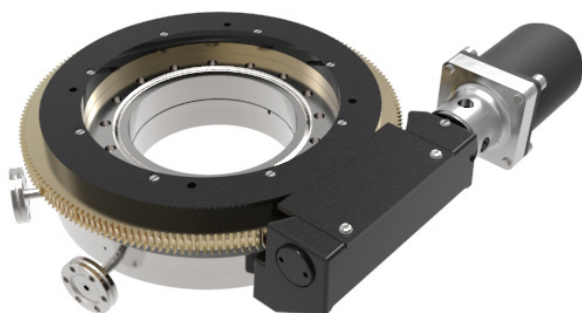




RP 100mm Bore Rotating Platforms

The VACGEN rotating platform provides the means of translating rotation through a vessel wall without losing vacuum integrity, enabling probes or assemblies to be inserted without effect on the chamber pressure.

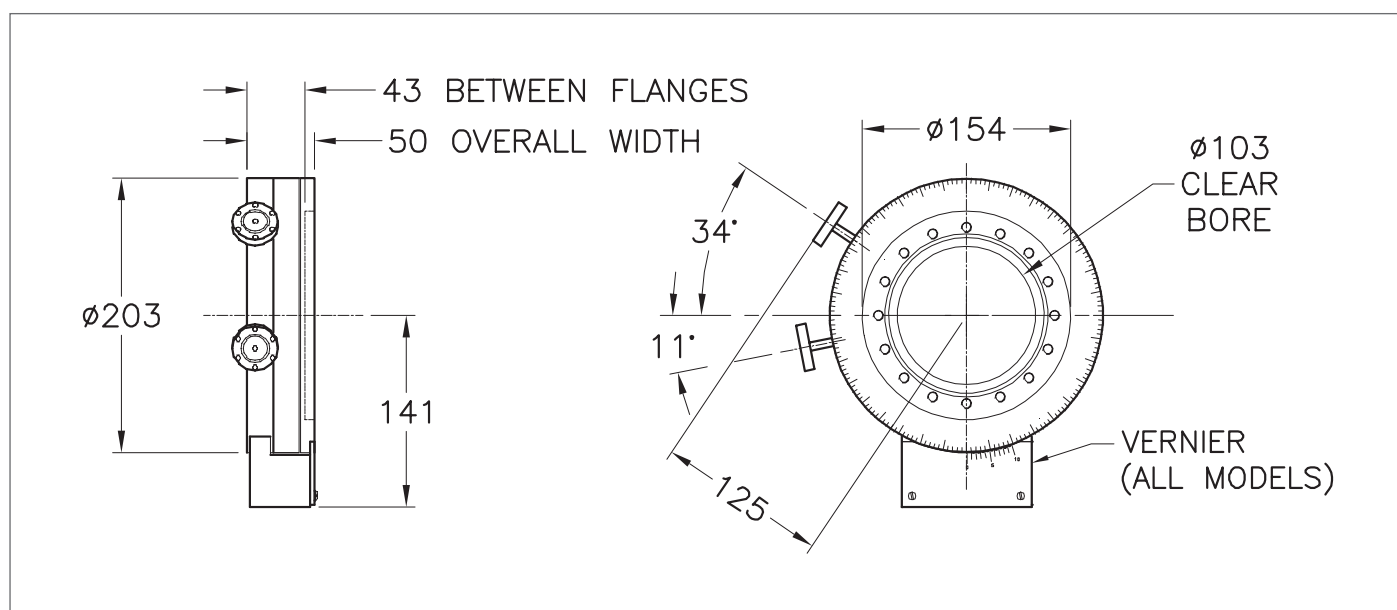


To maintain the rotary seals, a vacuum port is mounted to the side of the assembly allowing connection to an appropriate pump.

100mm clear bore with both course and fine control available in addition to motorised options.

Product Overview

- Continuous rotation
- 100 mm clear bore versions on 152 mm OD Conflat flanges
- M8 Tapped base flange
- Air side M8 clear bolt hole flange
- Interspace pumping to 10^{-2} mbar via two 34 mm OD Conflat flange
- Coarse or High Precision versions
- Replaceable PTFE seals
- Fully bakeable
- Manual and motorisation options with encoder
- Optional double differentially - pumped version
- Payload Limits Vertical - 80kg at 20mm polar offset or 120kg with centralised load
- Horizontal - 20kg at 100 mm flange offset and 20mm polar offset
- Inverted - 60 kg at 20 mm polar offset or 90 kg with centralised load





RP 100mm Bore Rotating Platforms

RP100 Rotary Platform									
DN Type	Flange OD mm	Fixed and Rotating Flange Holes	Actuation	Gearing	Resolution Degrees	Max Rotation Speed	Torque to Rotate	Bakeout Temp	Order Code
DN100	152	Tapped M8	Manual coarse two stage pumping		Coarse	-	8 Nm	150°C	ZRP100C
DN100	152	Tapped M8	High Precision two stage pumping	1 turn = 2 degrees rotation	0.05	1.0 rpm	0.3 Nm	150°C	ZRP100H
DN100	152	Tapped M8	Stepper Motor two stage pumping	1 turn = 2 degrees rotation	0.005 per half step	2.0 rpm	-	150°C*	ZRP100W
DN100	152	Tapped M8	Stepper Motor with encoder two stage pumping	1 turn = 2 degrees rotation	0.005 per half step	2.0 rpm	-	150°C*	ZRP100E
DN100	152	Tapped M8	DC Motor with two stage pumping	1 turn = 2 degrees rotation	Coarse	2.0 rpm	-	150°C*	ZRP100DC

* with motor and encoder remove

RP Series Rotating Platforms	
Description	Order Code
Coarse Version 100 mm bore Rotating Platform	ZRP100C
High Precision 100 mm bore Rotating Platform	ZRP100H
Motorised 100 mm bore Rotating Platform with Stepper motor fitted1	ZRP100M
Motorised 100 mm bore Rotating Platform with encoded stepper motor fitted1	ZRP100E
Motorised RP100 with DC motor fitted	ZRP100DC
Straight adaptor flange 90 mm long with clearance holes (for mounting an Omniax manipulator)	ZBS1090

RP Series Rotating Platforms	
Bore	102.5 mm (4.03")
Flanges	DN100 bore (152mm flange OD), both with tapped holes
Distance Between Flanges	42.6 mm (all models)
Drive Options	Coarse - pin spanner (provided)
Differential Pumping	High Precision - worm and wormwheel
Interspace Pressure	Motorised - stepper motor
Payload Limits	Vertical - 80kg at 20mm polar offset or 120kg with centralised load
	Horizontal - 20kg at 100mm flange offset and 20mm polar offset
	Inverted - 60kg at 20mm polar offset or 90kg with centralised load
Seals	Spring energised with long-life PTFE compound

RP Series Rotating Platforms	
Bearing type	Twin integral races
Rotation Resolution	0.05° divisions with Vernier (0 to 360°)
Worm and Wormwheel Gearing	1 turn = 2°
Approx Torque to Rotate	0.005° per half step
Operating Pressure Range	Atmosphere to 10-11 mbar
Bakeout Temperature	150 °C