ROTARY MOTION

Primary Features :

- UHV compatibility
- Mounting flange : 16CF to 63CF
- Manual or motorized motions
- Mechanical or magnetic motion
- Robustness and reliability
- Large range of components
- High precision

The manipulation instruments for rotary motions have been designed to ensure the movements of components and samples under vacuum and UHV (10^{-12} mbar) with great precision.
They are developed by Vinci Technologies - Meca 2000 to ensure very high robustness and reliability.
The materials used to manufacture these devices have been chosen to minimize the rates of degassing and withstand bakeout temperatures up of 250 ℃.
Moreover, their manufacture is subject to strict controls for full compatibility with UHV environments.

Meca 2000 range includes:

Mechanical rotary drives : TMR series

Magnetic rotary drive : TMG

Hollow motion rotary drives : TMRC series

TMR series:
The TMR model was specially designed for intensive and continuous operation. The strengthened mechanical parts ensure an exceptional strength.
Optional : mechanical or electrical limit switch, graduation, electro pneumatic actuators.

TMRP series:
The TMRP model is a high precision rotation feedthrough. The rotation is marked by a graduated handle and reads to the tenth of a degree. The reliability and repeatability of this feedthrough allows for multiple applications.

TMG :
The TMG model is a very economical feedthrough with a magnetic coupling. It is specially designed for motion that requires very low torque, such as shutters. It can also be used on the substrate manipulator.

TMRC :
The feedthrough mechanism functions by an eccentric shaft driven by a control rod. Sealing is ensured by two edge welded bellows. It does not present the disadvantages of other devices that require differential pumping or complex mechanical assemblies.
The core reinforced shaft withstands heavy loads and provides a 9 mm diameter central passage.
This feedthrough model is generally used for the development of manipulators requiring several degrees of movement.

TMR 16 II	TMR 40	TMRP 40	TMG	TMRC
16CF	40CF	40CF	16CF	63CF
1 N.m	2 N.m	2 N.m	0.7 N.m	2 N.m
250 °C			60°C	250°C
5.10^{-10} mbar.L/s				
1.10^{-10} mbar				
302 040	**300 434**	**300 435**	**420 001**	**302 198**

VINCI TECHNOLOGIES
DIVISION MECA 2000
27 B Rue du Port – 92022 NANTERRE
FRANCE
Tel : +33 1.41.37.92.20
Fax : +33 1.41.37.04.76
meca2000@vinci-technologies.com
www.vinci-technologies.com
www.meca2000.fr