Magnetic Linear Traslator (ML)

Magnetic Coupling Screw Drive
Bake out 300 °C
Mounting in any position

VACUO magnetic linear drives are designed to use in ultra high vacuum (UHV).These magnetic-drive feedthroughs have solved the problems of vulnerable bellows or dynamic seals, providing an intrinsecally save solution for the life of rotation in UHV.
The unique design of magnetic coupling circuit has evolved the range of linear feedthroughs over the last decade.With the application of the new magnetic materials the torque level has been increased togheter the bake out temperature : so the high torque to designed size ratios are the result of a unique magnetic coupling ,which focuses the multiple magnetic fields.In this way any stray magnetic flowlines are reduced below the earth's field ,allowing the use with sensible applications as XPS and UPS.

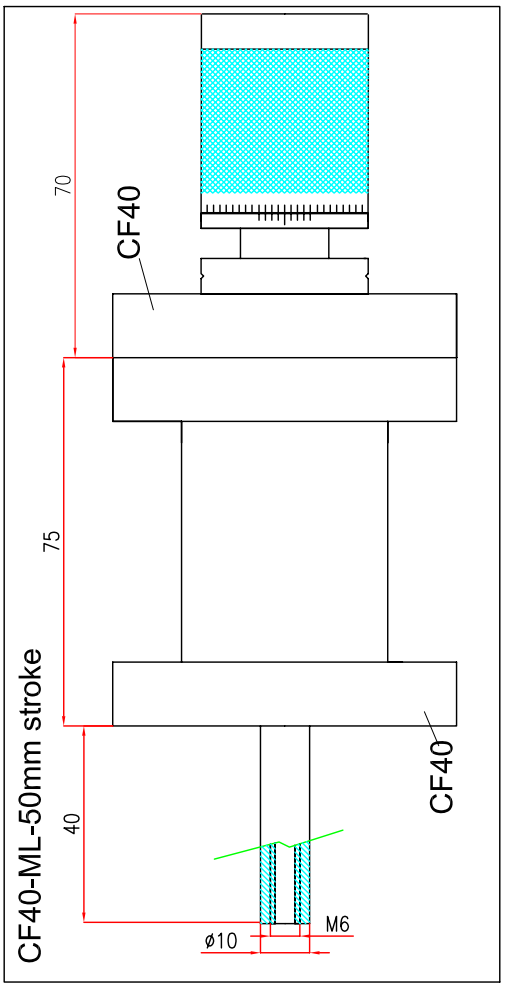
ML are made by two components : a magnetic rotary drive CF16 ROT-MAG and a sliding feedthrough; in this way the requested stroke can be manufactured easily low cost.
Additional options include ceramic ball bearings and dry lubricants for ultra clean application such as space , medical and semiconductor production.
Coupling flanges are CF40 and DN40.

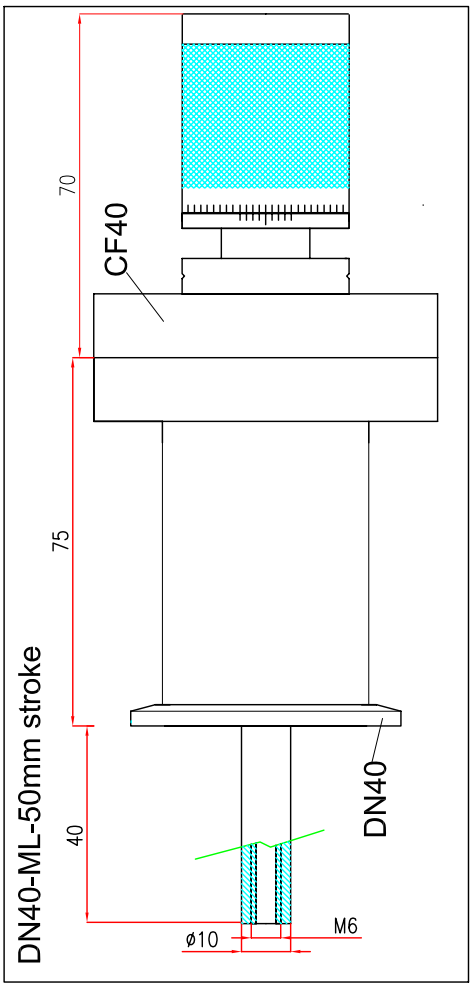
Bake out temperature	300°C
Break away torque	80Nm
Axial thrust	100 N
Maximum speed	200rpm
Stroke on request from 50 to 250mm	
Precision : manually	0.01mm
step motor	0.001mm

CODE:TM 340 xxx (xxx=stroke in mm)

ML on CF40 flange

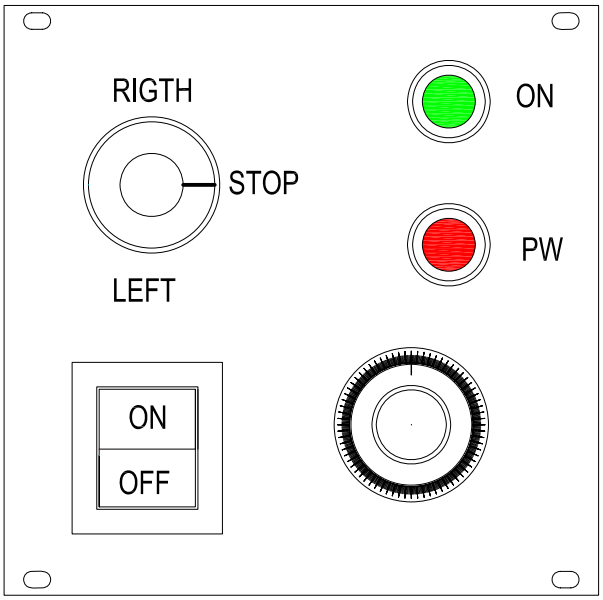
ML with MCP support



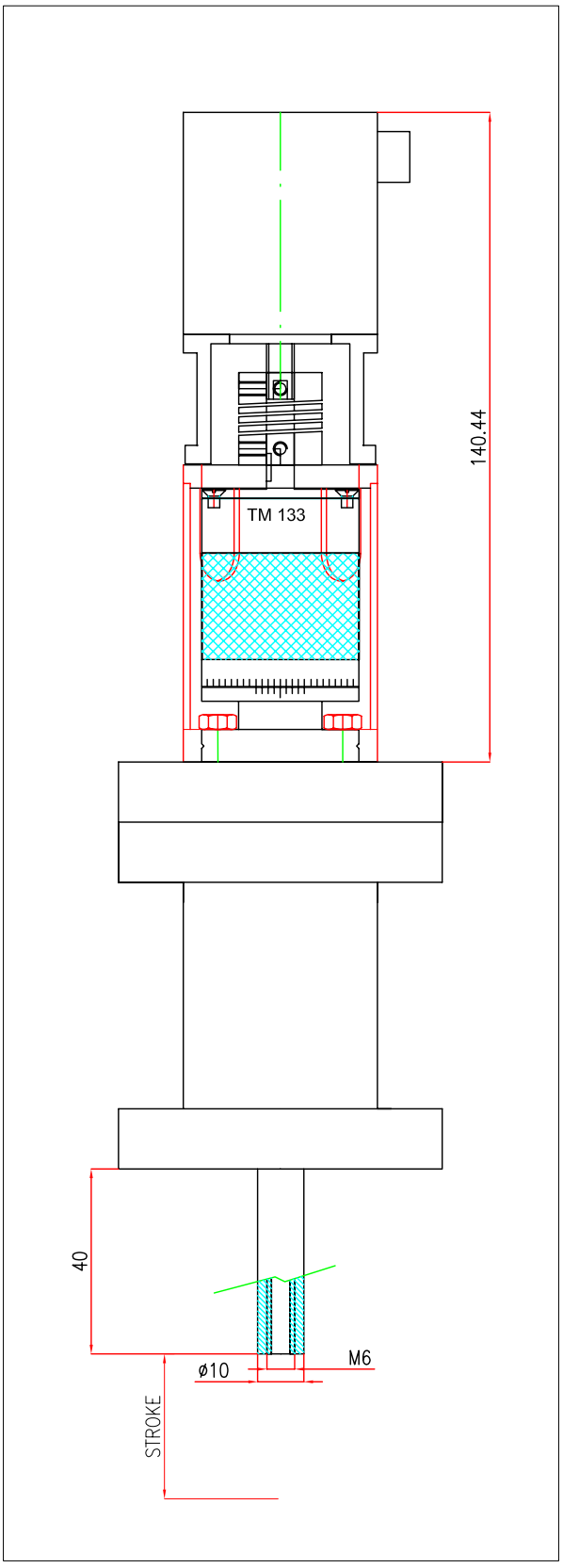


Motorisation

To improve movement quality the Magnetic rotary drive M34 are motorized with a DC-Motor.
A simple solution with DC GearMotor is proposed:the module is a small, front panel mounted, lowprice motor driver.
VACUO DC-Controller is designed to drive 24V DC Gearmotor (Imax 4A). Housed in a rack metal case the device is very easy to use.
Universally rated to ensure voltage compatibility,the controller is fully compliant with EMC regulations.
The controller provides a bi-directional output to drive a single axis motorized in either direction. Spin direction is triggered by an electronic shunter. Speed motor is selected by a 10-turns potentiometer.



DC Motor Controller



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