

Hollow MagiDrive Serie

MD35LB Series

(CF35, 2.75" OD Flange)



MD35LB is a medium/high torque, medium stiffness rotary drive. The MD35LB is provided with calibrated thimble, brake and timing pulley as standard. An adjustable rear flange enables rotation of position prior to fixing. The large 27mm clear bore allows a component to pass through the centre, such as a heater module, a feedthrough or a cold lance.

MD35LB KEY ADVANTAGES

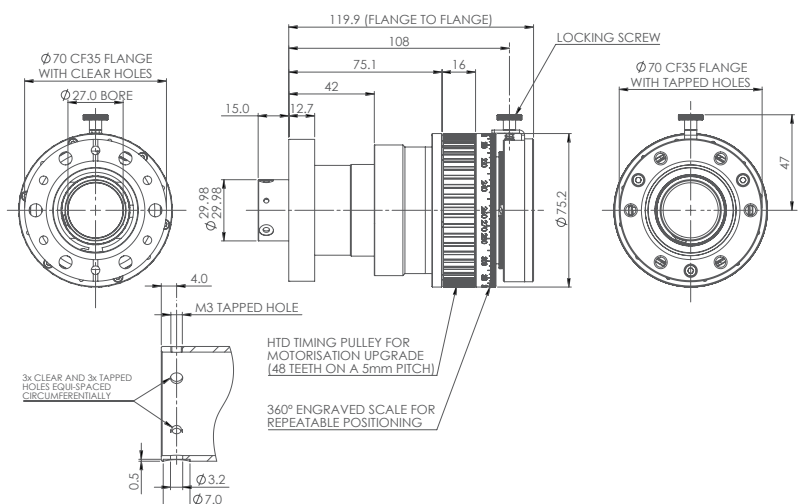
- » 27mm clear bore
- » Magnetically-coupled fail-safe design
- » Medium/high torque
- » No bellows or dynamic seals
- » Bakeable to 250°C
- » Zero backlash under low load
- » True UHV performance

The production-proven MagiDrive range of rotary feedthroughs enable rotation to be transferred into a vacuum system using a stiff high flux magnetic coupling. With no bellows, fluids or dynamic seals, the MagiDrive range offers reliable and totally leak-tight UHV operation.

The four largest MagiDrives are available in a hollow configuration, terminating with a non-rotating CF flange at the rear. This allows services to be passed through the drive or alternatively, an additional MagiDrive to be mounted to the rear, providing a secondary axes of rotation. Up to four independent axes of rotation can be provided by combining the MD16, MD35H, MD64H and MD100H MagiDrives. This stacking capability is typically used to provide simple solutions to sophisticated manipulation requirements.

Example Dimensions (mm)

For comprehensive 2D drawings & 3D models please contact us.



MD35LB Technical Data

SPECIFICATION	VALUE
System mounting flange size	FC38 (2 3/4") with clear holes
Rear Flange	FC38 (2 3/4") with tapped holes
Drive clear bore	27mm (rear flange option)
Magnetic breakaway torque	6Nm
Magnetic coupling stiffness	0.85 Nm/degree
Bakeout temperature	250°C with motor removed
Shaft options	30mm od Tube
Shaft radial runout at shaft attachment	0.01mm
Maximum radial load	2900N
Maximum axial load	145N
Calibrated thimble with brake - resolution	1 degree
Pulley - type and PCD	HTD profile 48 teeth 5mm pitch and 76.39 PCD
Stepper motor option	23 frame 8 wires 3A / phase
Standard stepper option	UTO motor 23HT18C
Stepper motor max speed option 1, output torque & resolution per 1/2 step	500 rpm, 0.8Nm and 0.45 degrees
Stepper motor max speed option 2, output torque & resolution per 1/2 step	150 rpm, 3.7Nm and 0.09 degrees
Stepper motor max speed option 3, output torque & resolution per 1/2 step	75 rpm, 6Nm and 0.045 degrees
Stepper motor max speed option 4, output torque & resolution per 1/2 step	30 rpm, 6Nm and 0.018 degrees
DC motor option	24V dc brushed geared motor
DC motor option - motor wiring	2 pin generic plug to diagram WD-010
DC motor speed option 1 and output torque	538 rpm and 0.4Nm
DC motor speed option 2 and output torque	104 rpm and 1.7Nm
DC motor speed option 3 and output torque	28 rpm and 6Nm
DC motor speed option 4 and output torque	17 rpm and 6Nm

For more information:

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