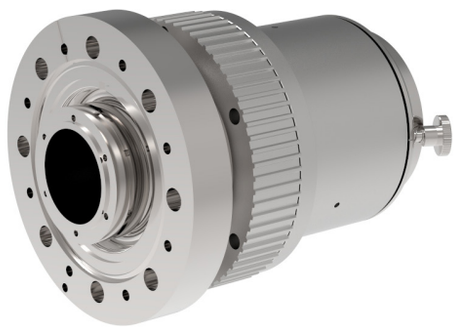
Solid MagiDrive Series



MD63 Series

(CF64, 4.5" OD Flange)

The MD63 MagiDrive provides high torque rotation through a high stiffness coupling. This drive would be ideally suited to robot type or platen rotation applications. The MD63 is also available in a hollow configuration. For higher torque applications (up to 40Nm) see MD64LBM & MD100H technical datasheets.

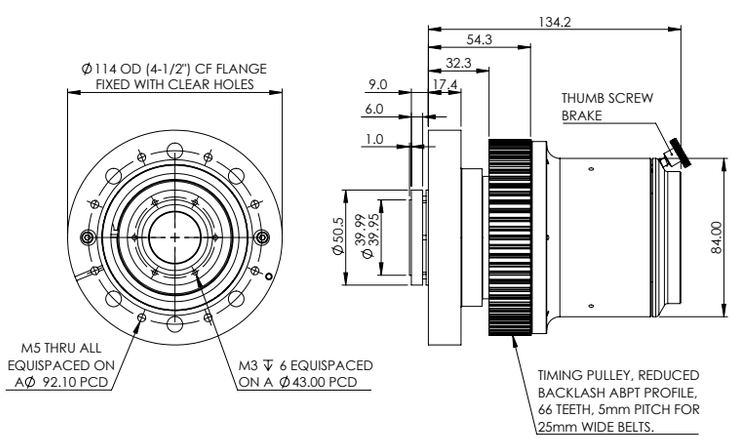
MD63 KEY ADVANTAGES

- » Magnetically-coupled fail-safe design
- » High torque 25Nm
- » 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.

Example Dimensions (mm)

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



MD63 Technical Data

SPECIFICATION	VALUE
System mounting flange size	FC64 (4 1/2") with clear holes
Magnetic breakaway torque	25Nm
Magnetic coupling stiffness	2.9 Nm/degree
Bakeout temperature	250°C with motor/pneumatic cylinder removed
Shaft options	spigot flange
Shaft radial runout at shaft attachment	0.1mm
Maximum radial load	900N
Maximum axial load	250N
Calibrated thimble option - resolution	1 degree
Pulley option - type and PCD	AT profile 66 teeth 5mm pitch and 105.04 PCD
Pneumatic option - cylinder sweep	adjustable 30 to 170 degrees
Pneumatic option - cylinder bore	32 mm
Pneumatic option - cylinder fitting	6mm tube push fit
Pneumatic option - cylinder switch	100mA micro switch
Pneumatic option - max rotation speed	0.2 seconds per 90 degrees (dependant on load)
Stepper motor option	23 frame 8 wires 3.9A / phase
Standard stepper option - motor wiring	M12 5 PIN
Upgrade stepper motor option - switches	Panasonic slotted opto 5-24V PNP, pre-wired
In-line Stepper motor max speed option 1, output torque & resolution per 1/2 step	300 rpm, 1.6Nm and 0.18 degrees
In-line Stepper motor max speed option 2, output torque & resolution per 1/2 step	150 rpm, 3.2Nm and 0.09 degrees
In-line Stepper motor max speed option 3, output torque & resolution per 1/2 step	60 rpm, 7.4Nm and 0.036 degrees
In-line Stepper motor max speed option 4, output torque & resolution per 1/2 step	30 rpm, 14.8Nm and 0.018 degrees
Side-mounted Stepper motor max speed option 1, output torque & resolution per 1/2 step	150 rpm, 3.2Nm and 0.096 degrees
Side-mounted Stepper motor max speed option 2, output torque & resolution per 1/2 step	75 rpm, 6.5Nm and 0.048 degrees
Side-mounted Stepper motor max speed option 3, output torque & resolution per 1/2 step	30 rpm, 14.8Nm and 0.0192 degrees
Side-mounted Stepper motor max speed option 4, output torque & resolution per 1/2 step	15 rpm, 25Nm and 0.0096 degrees
DC motor option	24V dc brushed geared motor
DC motor option - motor wiring	2 pin generic plug to diagram WD-010
In line and side mounted DC motor speed option 1	440 rpm, 0.9Nm and 230 rpm, 1.8Nm
In line and side mounted DC motor speed option 2	220 rpm, 1.8Nm and 92 rpm, 4.6Nm
In line and side mounted DC motor speed option 3	88 rpm, 4.2Nm and 46 rpm, 8.4Nm
In line and side mounted DC motor speed option 4	44 rpm, 8.4Nm and 23 rpm, 16.8Nm

For more information:

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