

# Hollow MagiDrive Series

## MD64H Series

(CF64, 4.5" OD Flange)



The MD64H MagiDrive provides high torque rotation through a high stiffness coupling. This drive is ideally suited to platen rotation or robot type applications. The MD64H has an adjustable rear flange enabling rotation of position prior to fixing. The hollow bore allows a component to pass through the centre such as a heater module, or a second MagiDrive rotary feedthrough shaft.

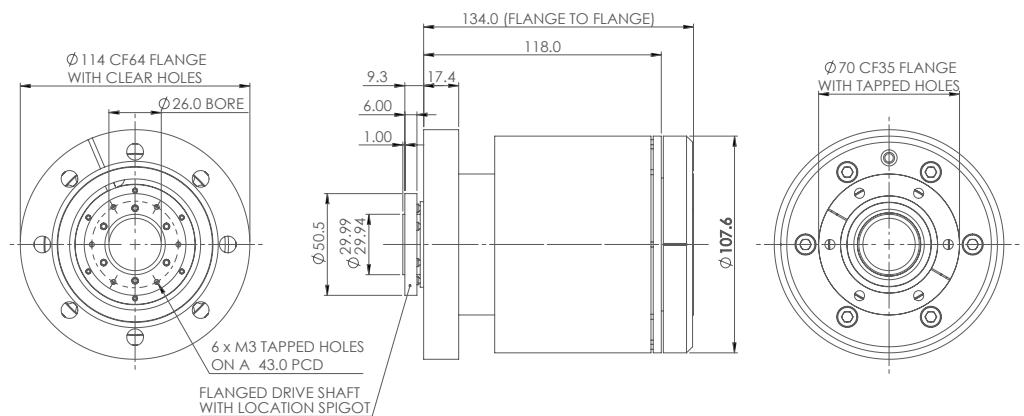
### MD64H KEY ADVANTAGES

- » 26mm clear bore
- » Magnetically-coupled fail-safe design
- » Medium 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.

### Example Dimensions (mm)

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



## MD64H Technical Data

SPECIFICATION	VALUE
System mounting flange size	FC64 (4 1/2") with clear holes
Rear Flange option	FC38 (2 3/4") with tapped holes
Drive clear bore	26mm (rear flange option)
Magnetic breakaway torque	10Nm
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	0.01mm
Maximum radial load	8300N
Maximum axial load	415N
Calibrated thimble option - resolution	1 degree
Pulley option - type and PCD	AT profile 75 teeth 5mm pitch and 119.39 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	1A 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	UTO Socket wired to WD-M-009
Upgrade stepper motor option - switches	Omron slotted opto 24V PNP type with flying leads
In-line Stepper motor max speed option 1, output torque & resolution per 1/2 step	300 rpm, 4.6Nm and 0.18 degrees
In-line Stepper motor max speed option 2, output torque & resolution per 1/2 step	150 rpm, 3.7Nm and 0.09 degrees
In-line Stepper motor max speed option 3, output torque & resolution per 1/2 step	60 rpm, 8.4Nm and 0.036 degrees
In-line Stepper motor max speed option 4, output torque & resolution per 1/2 step	30 rpm, 10Nm and 0.018 degrees
Side-mounted Stepper motor max speed option 1, output torque & resolution per 1/2 step	150 rpm, 3.5Nm and 0.096 degrees
Side-mounted Stepper motor max speed option 2, output torque & resolution per 1/2 step	75 rpm, 6.9Nm and 0.048 degrees
Side-mounted Stepper motor max speed option 3, output torque & resolution per 1/2 step	30 rpm, 10Nm and 0.0192 degrees
Side-mounted Stepper motor max speed option 4, output torque & resolution per 1/2 step	15 rpm, 10Nm 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 245 rpm, 1.7Nm
In line and side mounted DC motor speed option 2	220 rpm, 1.8Nm and 98 rpm, 4.3Nm
In line and side mounted DC motor speed option 3	88 rpm, 4.2Nm and 49 rpm, 7.9Nm
In line and side mounted DC motor speed option 4	44 rpm, 8.4Nm and 25 rpm, 10Nm

### For more information:

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