



MRD93 Magnetically Coupled Rotary Drive

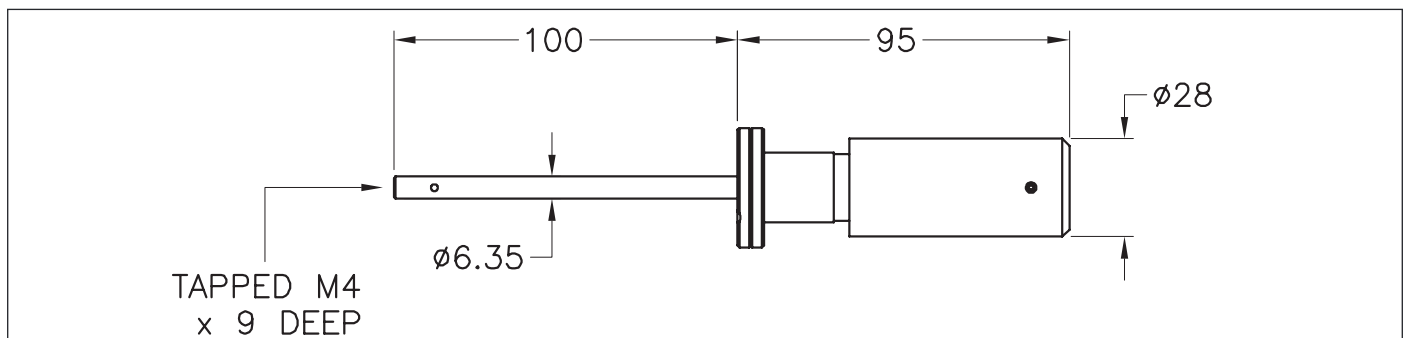
The MRD series magnetic rotary drive uses a high strength magnetic coupling to transfer rotational forces into the vacuum envelope. This is achieved without any dynamic seals or bellows making these devices exceptionally robust.



Product Overview

- Vacuum enclosure machined from single piece of 316 stainless steel
- No vacuum seals or bellows - no leaks to atmosphere
- Exceptional torsional rigidity
- Zero angular backlash under low load/acceleration
- Cannot be damaged by application of excessive torque
- Long service life
- Bakeable to 250 °C (standard UHV drive)
- Motor can be fitted/removed in minutes
- Manual drive has V-groove in drive knob for alternative motorisation

MRD93 Manual Magnetically Coupled Rotary Drive



MRD93 Magnetically-Coupled Rotary Drive

DN Type	Flange OD mm	Type of Operation	Breakaway Torque Nm	Thrust N	Max Rotation RPM	Life	Shipping weight kg	Order Code
DN19	34	Manual	0.5	10	1000	Standard	0.3	ZMRD93
DN19	34	Manual	0.5	10	1000	Extended	0.3	ZMRD93L



MRD93 Magnetically Coupled Rotary Drive

Technical Data: ZMRD93

Leak Rate	<1x10 ⁻¹⁰ mbar l.s ⁻¹
Pressure Range	1x10 ⁻¹⁰ mbar – 2 bar absolute
Temperature Range	250 °C standard UHV drives
	200 °C Extended UHV drives
Materials	Body – 316 stainless steel
	Mechanical parts – aluminium alloy – grade 6082
	Bearings – stainless steel
	Magnets – sintered rare-earth
Lubrication	Dry film molybdenum disulphide (standard UHV drives)
	UHV compatible lubricant (extended life drives)
Actuation	Manual
Options	Ceramic bearing options, special shaft length/diameters, available on request.