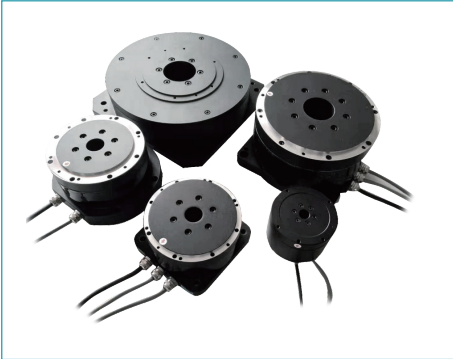


Motor Products

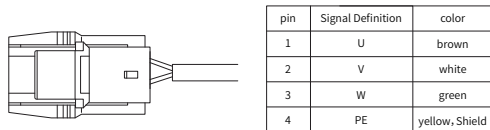
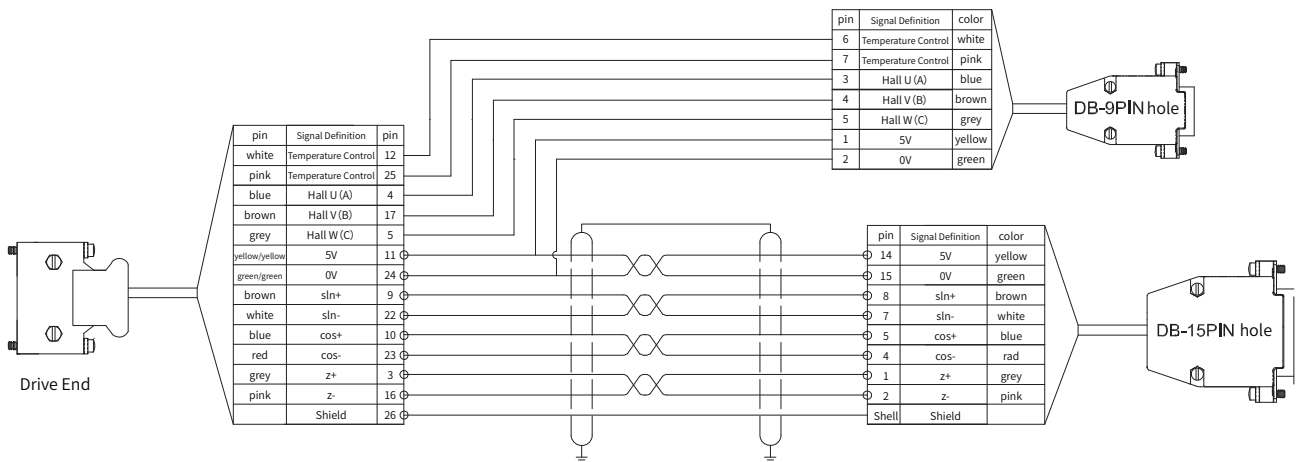
MDDR Series



Model Selection

MDDR	A003	40	S	N	R1
MDDR DR series motor	Peak motor torque	The length of the wiring	wiring method	Cooling form	Drive Specification
MDRH RH series motor	A003 -Peak Torque 3N•M	03=300mm	S=Side Cable Outlet	N=Natural Cooling	R1=I/O(NPN)
MDDRi DR Series Internal Rotor	A009 -Peak Torque 9N•M	20=2000mm	B=Bottom Cable Outlet	A=Air Cooling	R2=Ether CAT
MDRHi RH Series Internal Rotor	A014 -Peak Torque 14N•M	40=4000mm		W=Water Cooling (Default N)	R3=Can Open
	A071 -Peak Torque 71N•M	60=6000mm			R4=Compatible (I/O+Ether CAT)
	A105 -Peak Torque 105N•M	100=10000mm			
	A190 -Peak Torque 109N•M				
	A300 -Peak Torque 300N•M				
	A500 -Peak Torque 500N•M				
	A1406 -Peak Torque 1406N•M				
	A1501 -Peak Torque 1501N•M				

Wiring Definitions

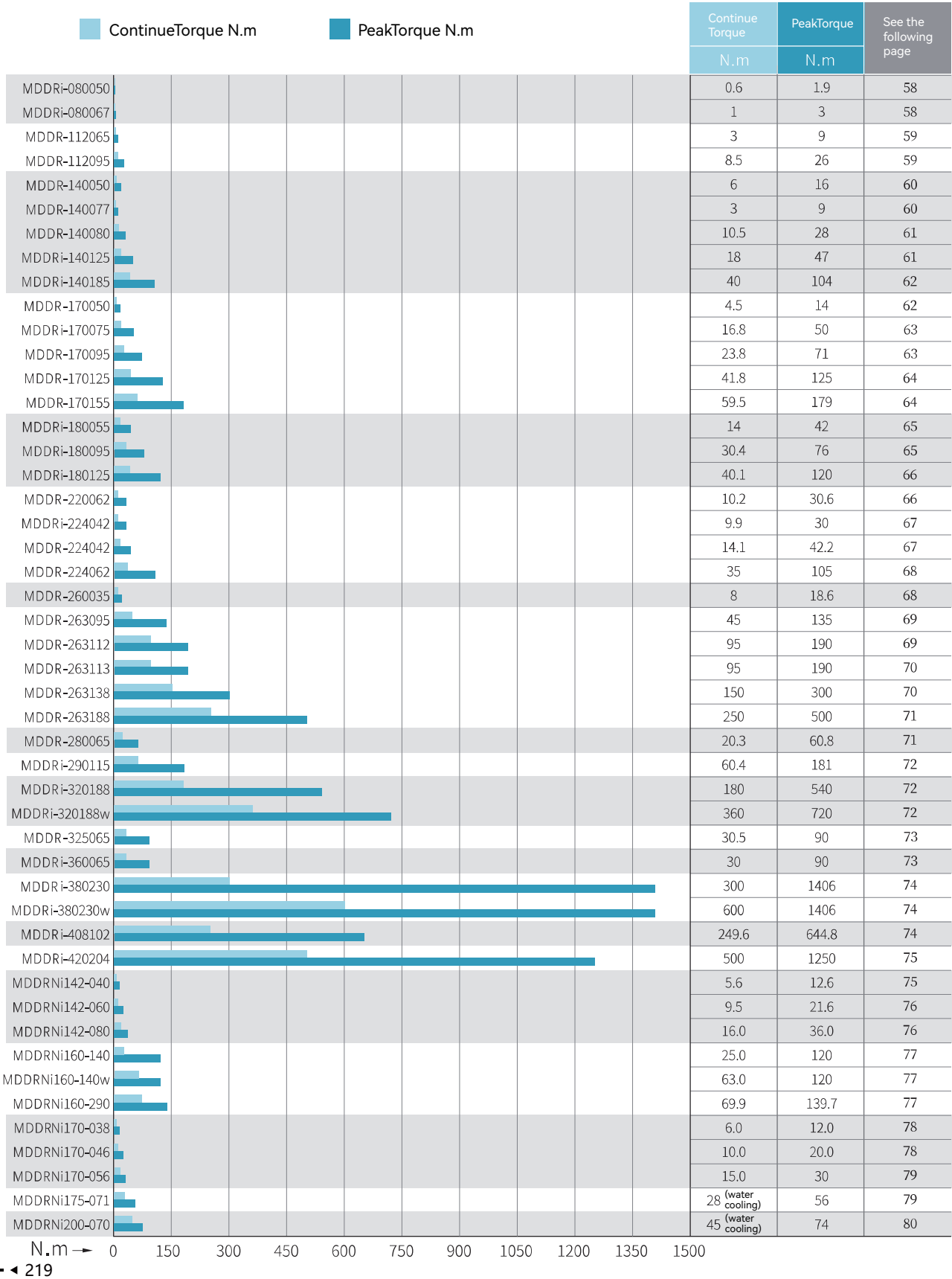


Motor power line wiring definition		
Serial number	definition	colour
1	U	brown
2	V	white
3	W	green
4	PE	yellow
5	Shield	Shield

Motor Products

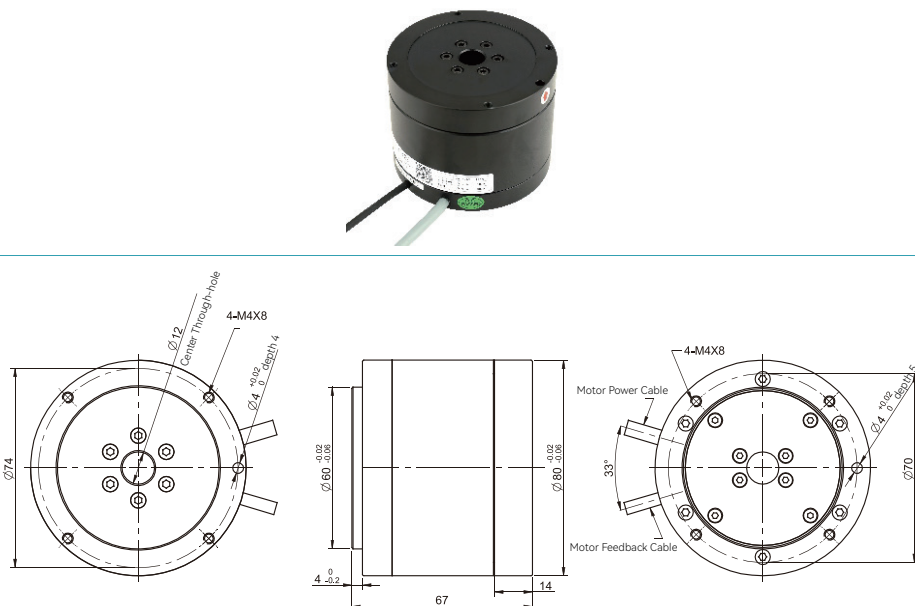
MDDR Series

MDDR Product Thrust Table and Page Numbers

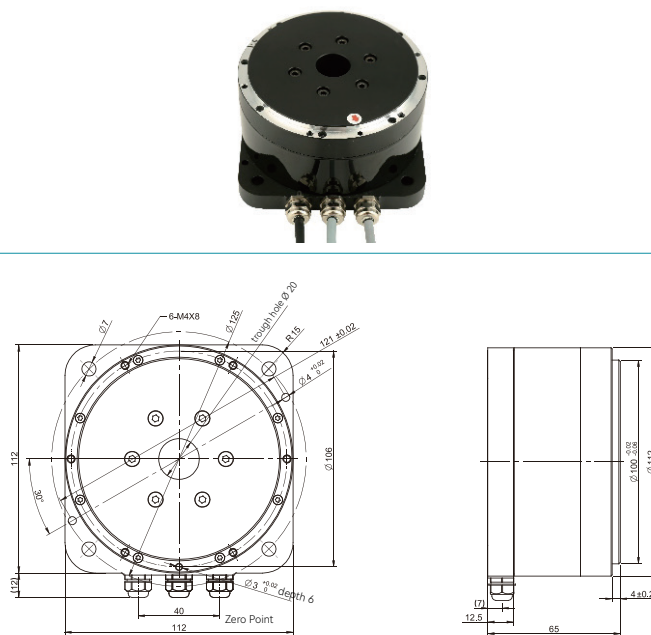


MDDR Series

Performance Parameters	Unit	MDDR-A003
Continuous Torque	N.m	1
Continuous Current	Arms	3.2
Maximum Torque	N.m	3
Peak Current	Arms	9.6
Torque Constant	N.m/Arms	0.31
Resistance (ptp)	Ω (25°C)	1.5
Inductance (ptp)	mH (25°C)	1.8
Number of Poles	-	10
Back EMF Constant (ptp)	Vrms/rad/s	0.26
Maximum Rated Power Loss	W (25°C)	29.3
Motor Constant	Nm/ $\sqrt{W}$	0.21
Moment of Inertia	Kg.m ²	$3.7 \cdot 10^{-4}$
Motor Weight	Kg	1.6
Maximum Speed	rpm	450
Positioning Accuracy	Arc sec	± 50
Repeatability	Arc sec	± 2.5
Resolution	sin/cos	5000
Maximum Axial Load	N	50
Maximum Radial Load	N.m	10
Axial Runout	mm	0.03
Radial Runout	mm	0.03



Performance Parameters	Unit	MDDR-A009
Continuous Torque	N.m	3.0
Continuous Current	Arms	2.5
Maximum Torque	N.m	9.0
Peak Current	Arms	7.5
Torque Constant	N.m/Arms	1.2
Resistance (ptp)	Ω (25°C)	2.2
Inductance (ptp)	mH (25°C)	1.8
Number of Poles	-	28
Back EMF Constant (ptp)	Vrms/rad/s	1.0
Maximum Rated Power Loss	W (25°C)	26.3
Motor Constant	Nm/ $\sqrt{W}$	0.6
Moment of Inertia	Kg.m ²	0.025
Motor Weight	Kg	2.7
Maximum Speed	rpm	350
Positioning Accuracy	Arc sec	± 30
Repeatability	Arc sec	± 1.5
Resolution	sin/cos	8192
Maximum Axial Load	N	2500
Maximum Radial Load	N.m	20
Axial Runout	mm	0.005
Radial Runout	mm	0.005

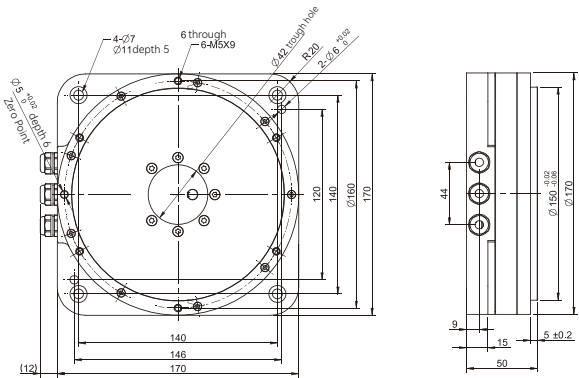


Motor Products

MDDR Series

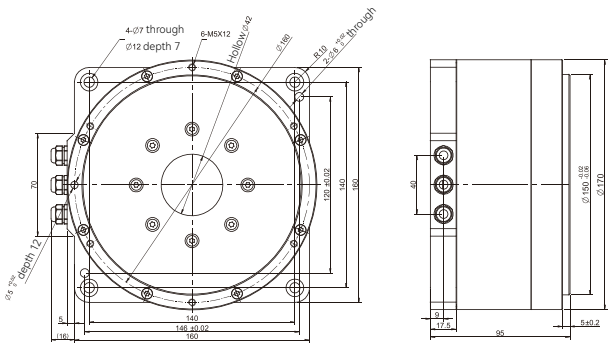
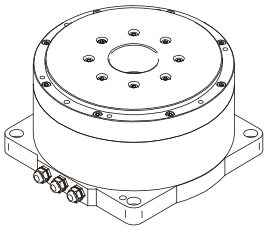
Motor Mode MDDR-A014

Performance Parameters	Unit	MDDR-A014
Continuous Torque	N.m	4.5
Continuous Current	Arms	1.4
Maximum Torque	N.m	14.0
Peak Current	Arms	4.2
Torque Constant	N.m/Arms	3.4
Resistance (ptp)	Ω (25°C)	6.0
Inductance (ptp)	mH (25°C)	7.6
Number of Poles	-	30
Back EMF Constant (ptp)	Vrms/rad/s	2.8
Maximum Rated Power Loss	W (25°C)	22.5
Motor Constant	Nm/ $\sqrt{W}$	0.9
Moment ofInertia	Kg.m ²	0.0068
Motor Weight	Kg	3.9
Maximum Speed	rpm	450
Positioning Accuracy	Arc sec	± 30
Repeatability	Arc sec	± 1.5
Resolution	sin/cos	11740
Maximum Axial Load	N	2500
Maximum Radial Load	N.m	20
Axial Runout	mm	0.05
Radial Runout	mm	0.05



Motor Mode MDDR-A071

Performance Parameters	Unit	MDDR-A071
Continuous Torque	N.m	23.8
Continuous Current	Arms	2.5
Maximum Torque	N.m	71
Peak Current	Arms	7.5
Torque Constant	N.m/Arms	9.5
Resistance (ptp)	Ω (25°C)	2.52
Inductance (ptp)	mH (25°C)	5.4
Number of Poles	-	30
Back EMF Constant (ptp)	Vrms/rad/s	7.8
Maximum Rated Power Loss	W (25°C)	30.1
Motor Constant	Nm/ $\sqrt{W}$	4.3
Moment ofInertia	Kg.m ²	0.018
Motor Weight	Kg	9.5
Maximum Speed	rpm	190
Positioning Accuracy	Arc sec	± 30
Repeatability	Arc sec	± 1.5
Resolution	sin/cos	11740
Maximum Axial Load	N	15000
Maximum Radial Load	N.m	150
Axial Runout	mm	0.005
Radial Runout	mm	0.005

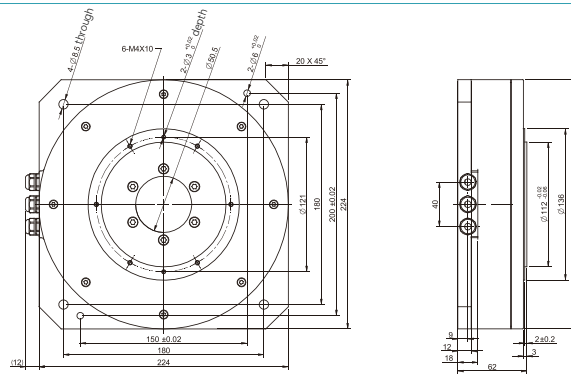
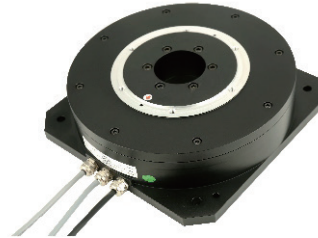


Motor Products

MDDR Series

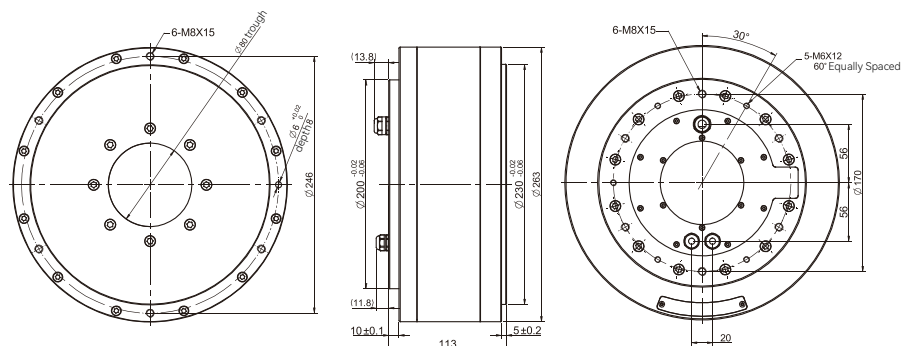
Motor Mode MDDR-A105

Performance Parameters	Unit	MDDR-A105
Continuous Torque	N.m	35.0
Continuous Current	Arms	2.2
Maximum Torque	N.m	105.0
Peak Current	Arms	6.6
Torque Constant	N.m/Arms	15.71
Resistance (ptp)	Ω (25°C)	13.2
Inductance (ptp)	mH (25°C)	36.5
Number of Poles	-	40
Back EMF Constant (ptp)	Vrms/rad/s	12.8
Maximum Rated Power Loss	W (25°C)	122.0
Motor Constant	Nm/ $\sqrt{W}$	5.6
Moment of Inertia	Kg.m ²	0.02
Motor Weight	Kg	9.6
Maximum Speed	rpm	200
Positioning Accuracy	Arc sec	± 50
Repeatability	Arc sec	± 1.5
Resolution	sin/cos	16384
Maximum Axial Load	N	10000
Maximum Radial Load	N.m	100
Axial Runout	mm	0.05
Radial Runout	mm	0.05



Motor Mode MDDR-A190

Performance Parameters	Unit	MDDR-A190
Continuous Torque	N.m	95.0
Continuous Current	Arms	7.1
Maximum Torque	N.m	190
Peak Current	Arms	14.2
Torque Constant	N.m/Arms	13.4
Resistance (ptp)	Ω (25°C)	3.4
Inductance (ptp)	mH (25°C)	10.8
Number of Poles	-	40
Back EMF Constant (ptp)	Vrms/rad/s	10.9
Maximum Rated Power Loss	W (25°C)	327.3
Motor Constant	Nm/ $\sqrt{W}$	3.0
Moment of Inertia	Kg.m ²	0.13
Motor Weight	Kg	23.7
Maximum Speed	rpm	150
Positioning Accuracy	Arc sec	± 30
Repeatability	Arc sec	± 1.5
Resolution	sin/cos	16384
Maximum Axial Load	N	40000
Maximum Radial Load	N.m	400
Axial Runout	mm	0.005
Radial Runout	mm	0.005

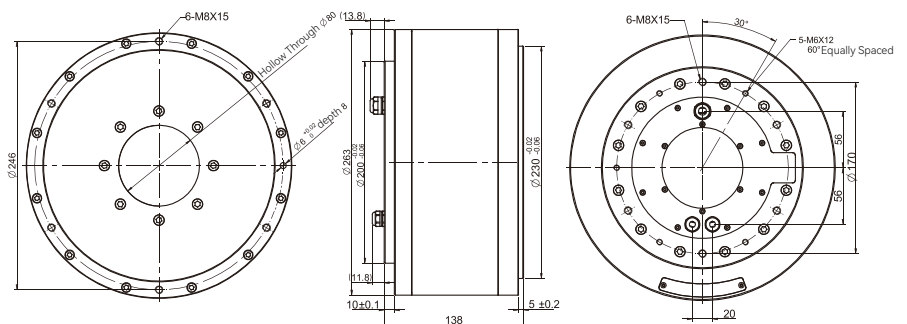
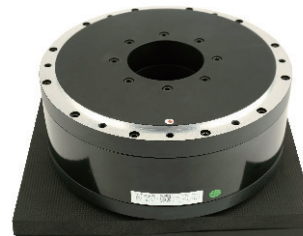


Motor Products

MDDR Series

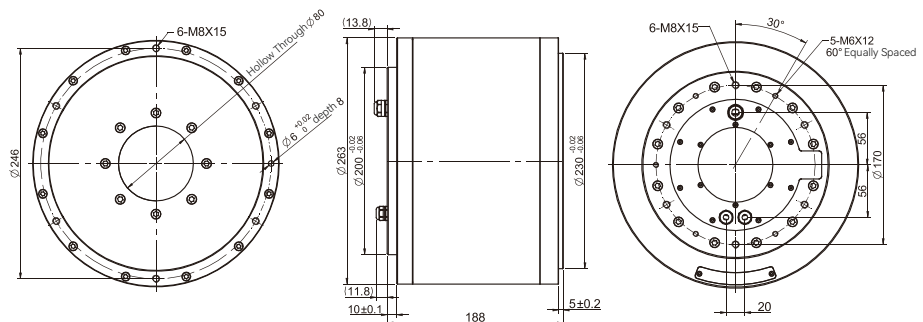
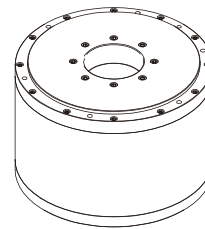
Motor Mode MDDR-A300

Performance Parameters	Unit	MDDR-A300
Continuous Torque	N.m	150.0
Continuous Current	Arms	7.1
Maximum Torque	N.m	300.0
Peak Current	Arms	14.2
Torque Constant	N.m/Arms	21.9
Resistance (ptp)	Ω (25°C)	4.2
Inductance (ptp)	mH (25°C)	13.9
Number of Poles	-	40
Back EMF Constant (ptp)	Vrms/rad/s	17.9
Maximum Rated Power Loss	W (25°C)	404.3
Motor Constant	Nm/ $\sqrt{W}$	7.9
Moment of Inertia	Kg.m ²	0.15
Motor Weight	Kg	35
Maximum Speed	rpm	120
Positioning Accuracy	Arc sec	± 30
Repeatability	Arc sec	± 1.5
Resolution	sin/cos	16384
Maximum Axial Load	N	40000
Maximum Radial Load	N.m	400
Axial Runout	mm	0.005
Radial Runout	mm	0.005



Motor Mode MDDR-A500

Performance Parameters	Unit	MDDR-A500
Continuous Torque	N.m	250.0
Continuous Current	Arms	7.1
Maximum Torque	N.m	500
Peak Current	Arms	14.2
Torque Constant	N.m/Arms	35.2
Resistance (ptp)	Ω (25°C)	6.7
Inductance (ptp)	mH (25°C)	22.8
Number of Poles	-	40
Back EMF Constant (ptp)	Vrms/rad/s	28.7
Maximum Rated Power Loss	W (25°C)	644.9
Motor Constant	Nm/ $\sqrt{W}$	7.9
Moment of Inertia	Kg.m ²	0.21
Motor Weight	Kg	48
Maximum Speed	rpm	100
Positioning Accuracy	Arc sec	± 30
Repeatability	Arc sec	± 1.5
Resolution	sin/cos	16384
Maximum Axial Load	N	40000
Maximum Radial Load	N.m	400
Axial Runout	mm	0.005
Radial Runout	mm	0.005



Motor Products

MDDR Series

Motor Mode MDDR-A1406

Performance Parameters	Unit	MDDR-A1406	
		自然冷却	水冷却
Continuous Torque	N.m	300.0	600.0
Continuous Current	Arms	16	32
Maximum Torque	N.m	1406	1406
Peak Current	Arms	75	75
Torque Constant	N.m/Arms	18.75	
Resistance (ptp)	Ω (25°C)	1.1	
Inductance (ptp)	mH (25°C)	3.5	
Number of Poles	-	60	
Back EMF Constant (ptp)	Vrms/rad/s	15.3	
Maximum Rated Power Loss	W (25°C)	537.7	2150.9
Motor Constant	Nm/ $\sqrt{W}$	12.9	12.9
Moment of Inertia	Kg.m ²	1.2	
Motor Weight	Kg	81	
Maximum Speed	rpm	150	
Positioning Accuracy	Arc sec	± 20	
Repeatability	Arc sec	± 1.5	
Resolution	sin/cos	18000	
Maximum Axial Load	N	15000	
Maximum Radial Load	N.m	300	
Axial Runout	mm	0.05	
Radial Runout	mm	0.05	

