



ACD Series

Coreless Torque Motor (DDR)

Datasheet

Version 1.0

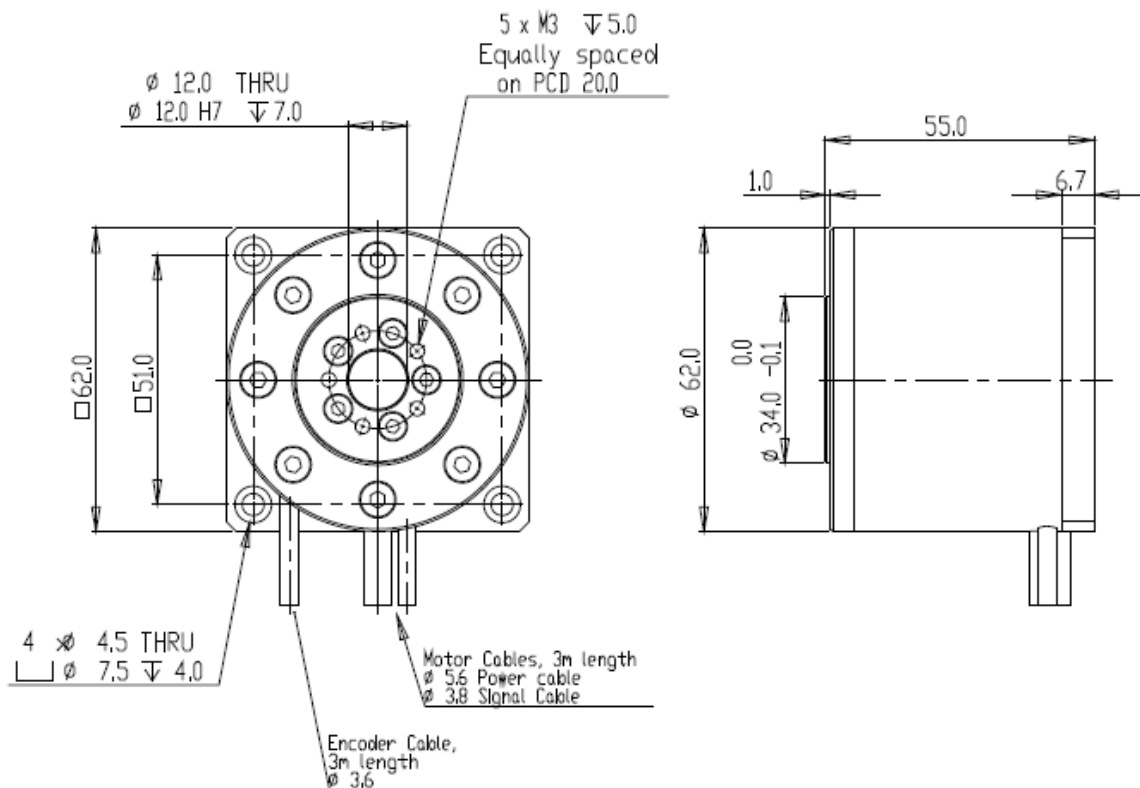


- *Direct drive, zero cogging coreless motor*
- *Encoder options of SINCOS or digital*
- *Precise homing through index pulse*
- *Fast response and settling*
- *Smooth motion even at low speeds (low velocity ripple)*

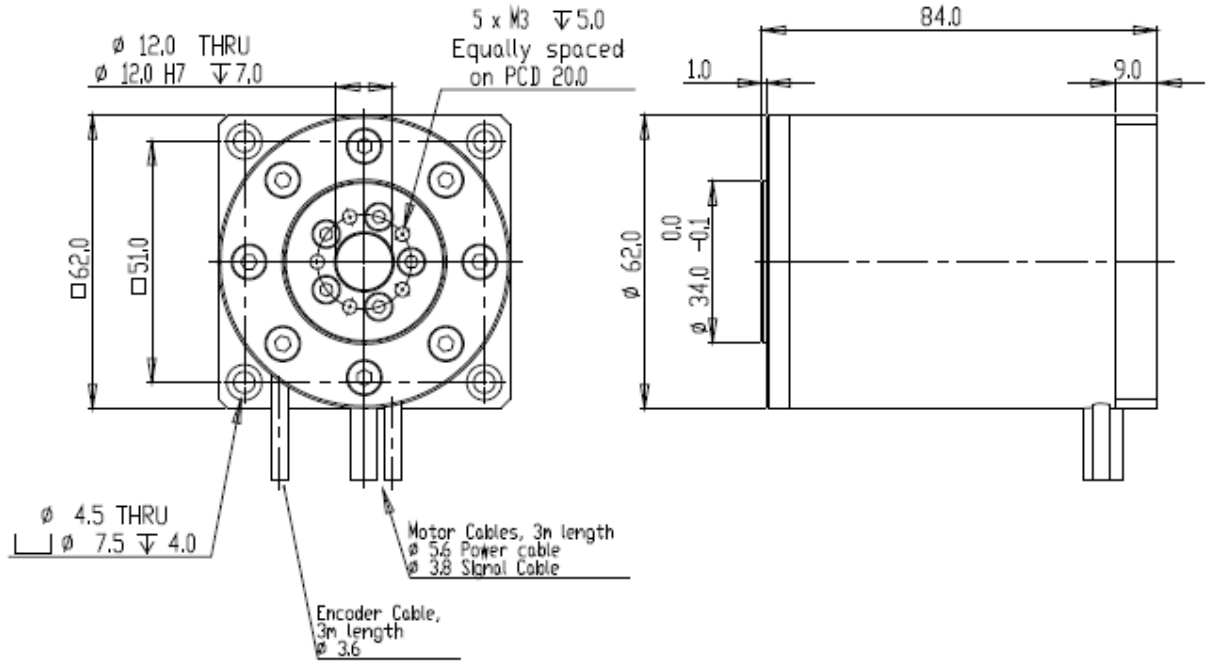
ACD Series

- Diameter of 62 mm, 120 mm and 214 mm
- Maximum continuous torque of 26Nm
- Maximum peak torque of 90Nm

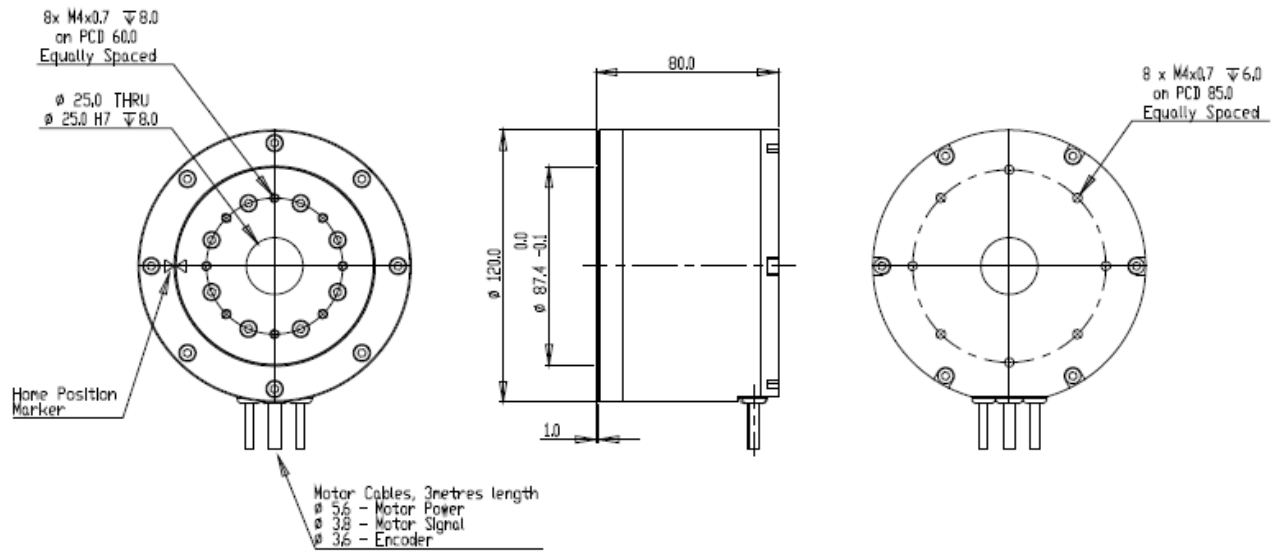
Model	Units	ACD62-55	ACD62-84	ACD120-80	ACD120-175	ACD200-115	ACD200-145
Table diameter	mm	62	62	120	120	200	200
Continuous torque	Nm	0.12	0.34	1.85	9.22	12.90	25.81
Peak torque	Nm	0.40	1.19	6.46	32.25	45.16	90.32
Torque constant	Nm/A	0.024	0.071	0.36	1.81	2.53	5.06
Back EMF constant	V/rpm	0.003	0.007	0.038	0.189	0.265	0.530
Terminal resistance	Ohms	0.80	0.95	1.88	4.05	5.20	8.30
Continuous current	A	4.8	4.8	5.1	5.1	5.1	5.1
Peak current	A	16.8	16.8	17.9	17.9	17.9	17.9
Rotor inertia	Kgm ²	1.701E-05	4.149E-05	0.0010	0.0032	0.0204	0.0310
Number of poles		8	8	12	12	16	16
Mechanical allowable speed	RPM	2500	2500	952	952	517	517
Rec. max speed @ 24 VDC	RPM	2500	1081				
Rec. max speed @ 48 VDC	RPM	2500	2500	381			
Rec. max speed @ 150 VDC	RPM	2500	2500	952	411	216	
Rec. max speed @ 300 VDC	RPM			952	952	816	287
Weight	Kg	0.40	0.65	2.70	6.50	7.00	10.00



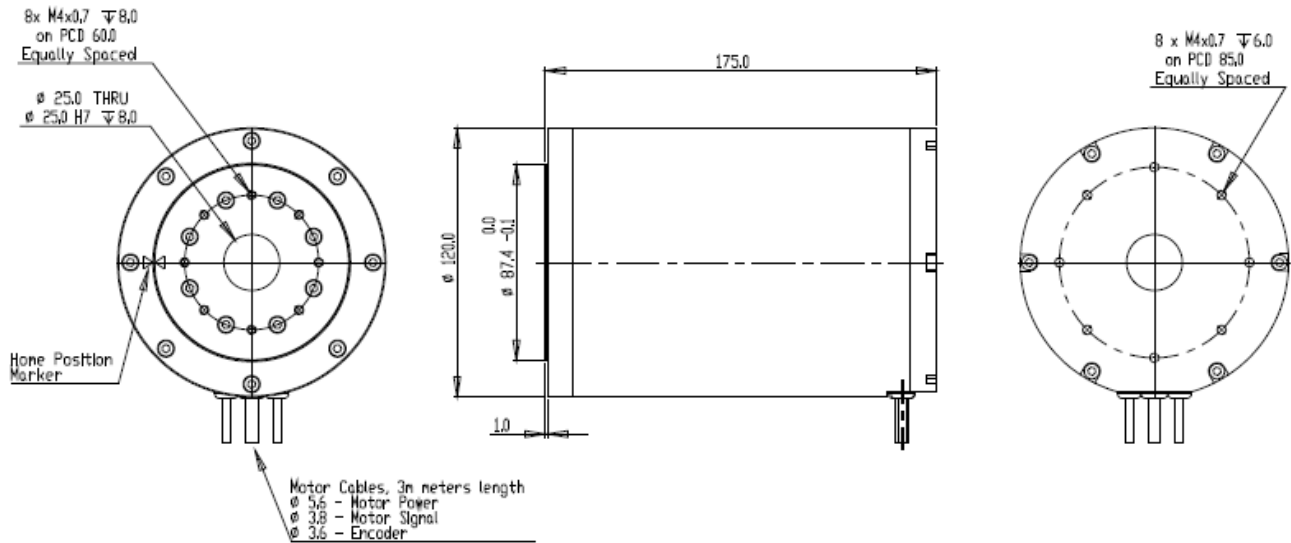
ACD62-55



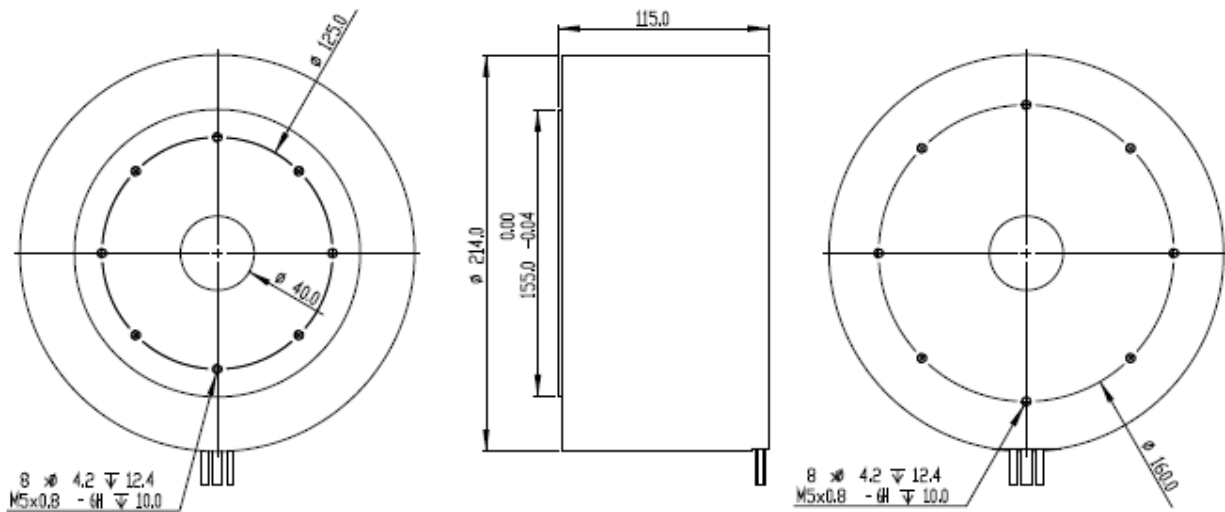
ACD62-84



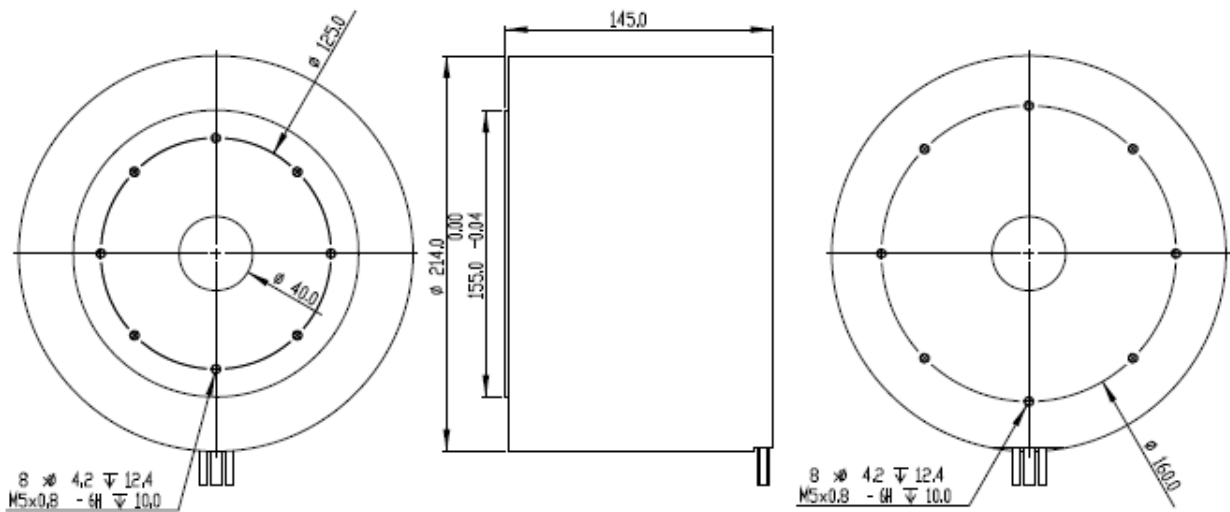
ACD120-80



ACD120-175



ACD200-115



ACD200-145

Part Number Break-down

Model	Height	Encoder options	Encoder Resolution
ACD62	55	NU	81,920 / 819,200 / SINCOS
	84		
ACD120	80	NU	81,920 / 819,200 / SINCOS 245,760
	175	ME	
ACD200	115	NU	144,000 / 1,440,000 / SINCOS 368,640
	145	ME	

Example

ACD120-80-NU-819,200