

ARC Series

□ Features

- Coreless linear motor operating on a circular track
- High resolution, high precision, and stability of control by use of direct drive design
- Suitable for precision alignment and indexing of large size LCD panels (Gen8, Gen11)
- High torque, high degree of stiffness, and thin structure



<Pic> ARC series

□ Standard Specifications

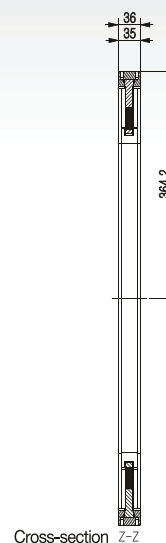
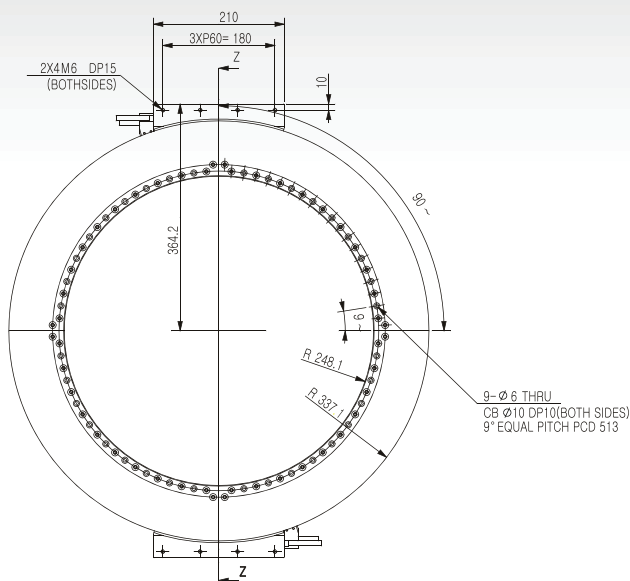
Insulation Resistance	10M Ω (DC500V)
Insulation Dielectric Voltage	AC 1500V, 15mA, 1min
Ambient Humidity	20 to 80%RH (non-condensing)
Ambient Temperature	0 to 40°C

Model			JTKA3012A	JTKA3025A	JTKA4235	JTKA4270	JTKA6597
Performance Parameters	Symbol	Units					
Continuous Tangential Force	Fc	N	99	198	208	416	375
Peak Tangential Force	Fp	N	395	791	832	1664	1500
Continuous Torque	Tc	Nm	30	60	89	178	244
Peak Torque	Tp	Nm	121	242	356	712	975
Continuous Current	IcTmax	A _{rms}	1,5	3	6,0	12	6,0
Peak Current	Ip	A _{rms}	6,0	12	24,0	48	24,0
Force Constant	Kf	N/A _{rms}	65,9	65,9	34,7	34,7	62,5
Torque Constant	Kt	Nm/A _{rms}	20,1	20,1	14,8	14,8	40,6
Electrical Time Constant	te	ms	1,3	1,3	1,4	1,4	2,1
Back EMF Constant (phase to phase)	Ke	V _{rms} /m/s	38,1	38,1	20,0	20,0	36,1
Resistance (phase to phase at 25°C)	Rs	Ω	11,0	5,5	1,5	0,7	2,1
Inductance (phase to phase)	Ls	mH	14,5	7,2	2,0	1,0	4,5
Motor Constant	KM	N/ \sqrt{W}	14,3	20,2	20,7	29,3	31,0
Coil Mass	Mc	kg	1,4	2,7	3,1	6,1	4,1
Working Radius		mm	305,6	305,6	427,8	427,8	650
Maximum Rotational Speed *1	Vmax	rpm	54,1	54,1	77,1	38,6	32,0

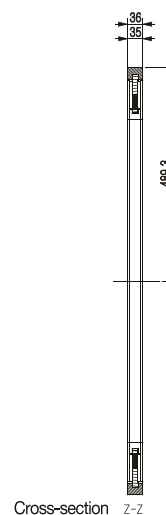
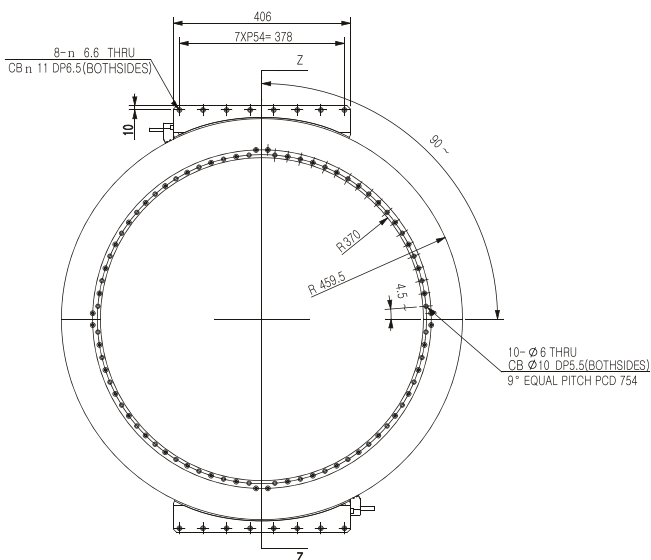
*Note1 : Dependent upon encoder resolution and amount of installation space utilized by encoder head

□ Dimensions

**JTKA3012A
3025A**



**JTKA4235
4270**



JTKA6597

