



ENCODER RESOLUTION:1000PPR(4000CPR)

LEAD COLOR	RED	BLK	WHT	YEL	ORG	GRA	GRN	BLU
DESCRIPTION	VCC	GND	EA+	EA-	EB+	EB-	EZ+	EZ-

FULL STEP 2 PHASE-EX. WHEN FACING MOUNTING END (X)								
STEP	A+	B+	A-	B-	CCW	CW	UNIT mm	
1	+	+	-	-	←	→	GR1 180/4M	
2	-	+	+	-			EQVISO 2/8-1	
3	-	-	+	+			CLASS W:	
4	+	-	-	+			<=6	±0.1
							>6-30	±0.2
							>30-120	±0.3
							>120-400	±0.5

MOTOR CONNECTION			
STEP	A+	B+	B-
1	A+	BLK	
2	A-	GRN	
3	B+	RED	
4	B-	BLU	



SPECIFICATION	VALUE
AMPS/PHASE	1.00
RESISTANCE/PHASE(Ohms)@25°C	3.50±10%
INDUCTANCE/PHASE(mH)@1KHz	3.20±20%
HOLDING TORQUE w/o GEARBOX(Nm)[lb-in]	0.14[1.24]
GEAR RATIO	51.43/3
EFFICIENCY	73%
STEP ANGLE w/o GEARBOX(°)	1.80
BACKLASH@NO-LOAD(°)	<=3
MAX.PERMISIBLE TORQUE(Nm)	4
MOMENT PERMISSIBLE TORQUE(Nm)	6
SHAFT MAXIMUM AXIAL LOAD(N)	-
SHAFT MAXIMUM RADIAL LOAD(N)	-
AMBIENT TEMPERATURE	-10°C-50°C[14°F~122°F]
INSULATION CLASS	B 130°C[266°F]
TEMPERATURE RISE	MAX.80°C

OSMTEC®

Stepper Motor Specialists

mm	DRN	LDJ	1.9.2026
UNITS	APVD	ZPJ	1.19.2026
SCALE	SIGNATURE		DATE

PLANETARY GEARBOX MOTOR

11HS20-1004D-E1000-PG51