



SPECIFICATION	VALUE
AMPS/PHASE	2.80
RESISTANCE/PHASE(Ohms)@25°C	0.90±10%
INDUCTANCE/PHASE(mH)@1KHz	2.80±20%
HOLDING TORQUE w/o GEARBOX(Nm)[lb-in]	1.02[9.03]
GEAR RATIO	50
EFFICIENCY	85%
STEP ANGLE w/o GEARBOX(°)	1.80
BACKLASH@NO-LOAD	<=50arcmin
MAX.PERMISSIBLE TORQUE(Nm)	20.00
MOMENT PERMISSIBLE TORQUE(Nm)	40.00
SHAFT MAXIMUM AXIAL LOAD(N)	100
SHAFT MAXIMUM RADIAL LOAD(N)	250
AMBIENT TEMPERATURE	-10°C~50°C[14°F~122°F]
INSULATION CLASS	B 130°C[266°F]
TEMPERATURE RISE	MAX.80°C

FULL STEP 2 PHASE-Ex.,WHEN FACING MOUNTING END (X)

STEP	A+	B+	A-	B-	CW	CCW
1	+	+	-	-	↓	↑
2	-	+	+	-	↓	↑
3	-	-	+	+	↓	↑
4	+	-	-	+	↓	↑

UNIT mm  
 GB/T 1804-M EQV.ISO  
 2768-1 CLASS M:  
 <=6 ±0.1  
 >6~30 ±0.2  
 >30~120 ±0.3  
 >120~400 ±0.5

MOTOR CONNECTION

PIN NO	BIPOLAR	LEADS	A+	A-	B+	B-
1	A+	BLK	⊕	⊖	⊕	⊖
2	A-	GRN	⊕	⊖	⊕	⊖
3	B+	RED	⊕	⊖	⊕	⊖
4	B-	BLU	⊕	⊖	⊕	⊖

**OSMTEC**<sup>®</sup>  
 Stepper Motor Specialists

mm			
UNITS	DRN	ZPJ	1.9.2026
2:3	APVD	YSX	1.9.2026
SCALE	SIGNATURE	DATE	

**GEARBOX MOTOR**  
 23HS22-2804D-HG50-AR3