



ENCODER VERBINDUNG:1000PPR(4000CPR)

LEAD COLOR	RED	BLK	BRN	ORG	BLU	GRN	YEL	WHT
DESCRIPTION	+5V	EGND	EA+	EA-	EB+	EB-	EZ+	EZ-

FULL STEP 2 PHASE-EX. WHEN FACING MOUNTING END (X)		MOTOR CONNECTION								
STEP	A+	B+	A-	B-	CCW	CW	UNIT mm	PIN NO	BIPOLAR	LEADS
1	+	+	-	-	←	→	GB/T 1804-M EQV/ISO 2768-1 CLASS M: ±0.1	1	A+	BLK
2	-	+	+	-	←	→	<=6 ±0.1	2	A-	GRN
3	-	-	+	+	←	→	>6-30 ±0.2	3	B+	RED
4	+	-	-	+	←	→	>30-120 ±0.3	4	B-	BLU
							>120-400 ±0.5			



SPECIFICATION	VALUE
AMPS/PHASE	1.68
RESISTANCE/PHASE(Ohms)@25°C	1.60±10%
INDUCTANCE/PHASE(mH)@1KHz	3.20±20%
HOLDING TORQUE w/o GEARBOX(Nm)[lb-in]	0.39[3.45]
GEAR RATIO	50
EFFICIENCY	75%
STEP ANGLE w/o GEARBOX(°)	1.80
BACKLASH@NO-LOAD(°)	1.6
MAX. PERMISSIBLE TORQUE(Nm)	10
MOMENT PERMISSIBLE TORQUE(Nm)	15
SHAFT MAXIMUM AXIAL LOAD(N)	50
SHAFT MAXIMUM RADIAL LOAD(N)	100
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

17HS15-1684D-HG50-AR4