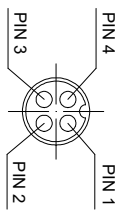
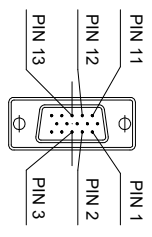


B VIEW



A VIEW



ENCODER RESOLUTION:1000PPR(4000CPR)

15-PIN DB MALE PLUG	1	2	3	11	12	13
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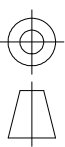
DESCRIPTION EA+ VCC GND EB+ EB- EA-

STEP	A+	B+	A-	B-	CCW	CW
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

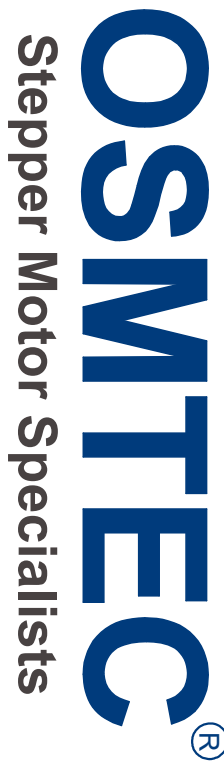
MOTOR CONNECTION

PIN NO	BIPOLAR LEADS	A+	A-	B+	B-
1	A+	+	-	+	-
2	A-	-	+	-	+
3	B+	+	-	+	-
4	B-	-	+	-	+



SPECIFICATION VALUE

AMPS/PHASE	4.0
RESISTANCE/PHASE(Ohms)@25°C	0.45±10%
INDUCTANCE/PHASE(mH)@1KHz	1.30±20%
HOLDING TORQUE w/o GEARBOX(Nm)[lb-in]	1.20[10.62]
GEAR RATIO	15
EFFICIENCY	85%
STEP ANGLE w/o GEARBOX(°)	1.80
BACKLASH@NO-LOAD(arcmin)	≤±50
MAX.PERMISIBLE TORQUE(Nm)	20
MOMENT PERMISSIBLE TORQUE(Nm)	40
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



mm	DRN	LDJ	1.7.2026
UNITS	APVD	ZPJ	1.19.2026
2:3	SIGNATURE	DATE	
SCALE			

PLANETARY GEARBOX MOTOR  
23HS22-HG15-E1000