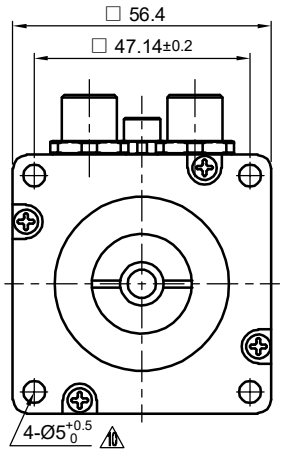
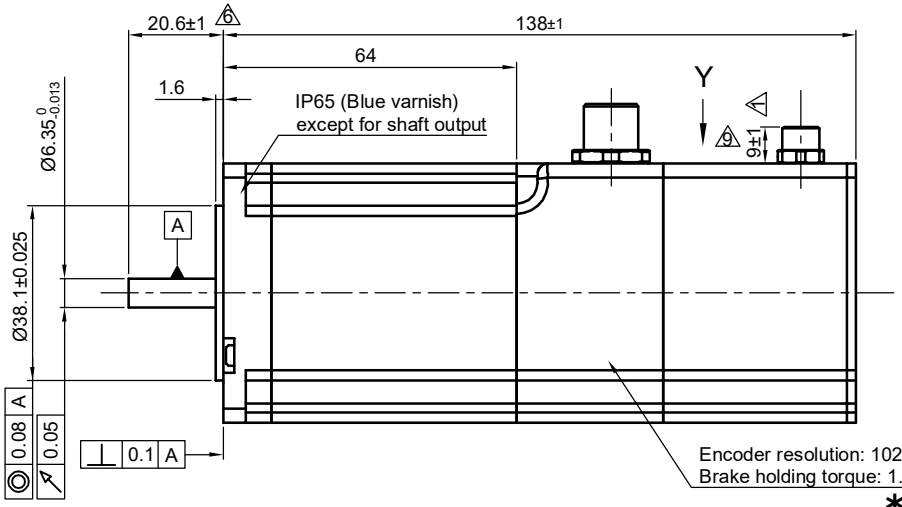
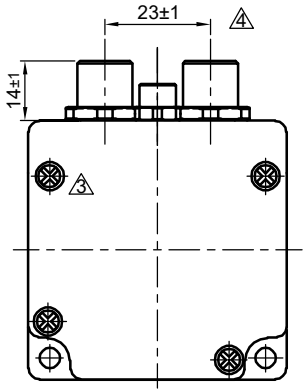
Front view and mounting



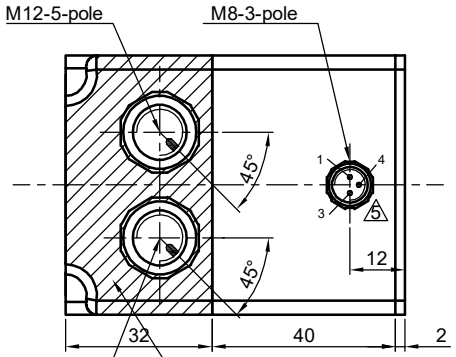
Side view



Rear view



Top view Y



Attention: An axial pulling of the motor shaft is not permitted and may damage the motor. 2

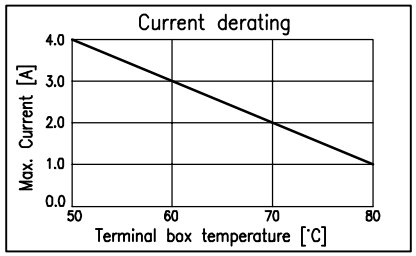
✱Temperature on marked area must not exceed 80°C.
From 50°C to 80°C follow derating curve 7

SPECIFICATION \ CONNECTION	BIPOLAR PARALLEL
VOLTAGE (VDC)	2.4 10
AMPS/PHASE	4.2 ✱ 7
RESISTANCE/PHASE (Ohms)@25°C	0.58±15% 10
INDUCTANCE/PHASE (mH) @1KHz	1.9±20%
HOLDING TORQUE (Nm) [lb-in]	1.87 [16.52] 8
STEP ANGLE (°)	1.8 7
ACCURACY(NON-ACCUM)	±5%
ROTOR INERTIA (Kg-m²) [lb-in²]	50.4x10⁻⁶ [0.172] 11
WEIGHT (Kg) [lb]	1.37 [3.02] 11

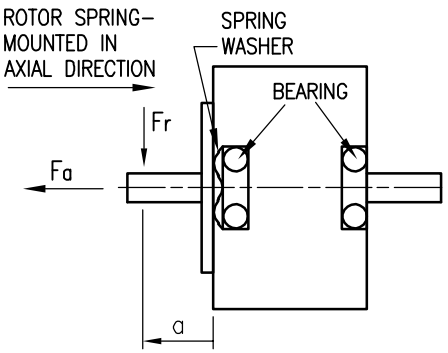
FULL STEP 2 PHASE-Ex.,
WHEN FACING MOUNTING END (X)

STEP	A	B	A\	B\	
1	+	+	−	−	CCW
2	−	+	+	−	
3	−	−	+	+	
4	+	−	−	+	CW

✱ 7



PERMISSIBLE RADIAL+AXIAL FORCE



MOTOR M12-5	
Pin	Assignment
1	A\
2	A
3	B
4	B\
5	HOUSING

ENCODER M12-8	
Pin	Assignment
1	A
2	A\
3	B
4	B\
5	GND
6	I\
7	I
8	Vcc (24V±10%)

11

BRAKE M8-3	
Pin	Assignment
1	24-48V(±5%)
3	GND
4	NC

11
11

TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED) ✱ 7	
AMBIENT TEMPERATURE -10°~ 50°C [14°F ~ 122°F] ✱ 7	
INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)	
INSULATION CLASS B 130° [266°F]	
DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASE)	
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)	

AXIAL-FORCE Fa (N)	Fa=15			
DISTANCE a (mm)	5	10	15	20
RADIAL-FORCE Fr (N)	130	90	70	52

	AXIAL 2	RADIAL
SHAFT PLAY MAX (mm)	-0.03	0.02
AT LOAD: (N)	200	4.5

REV	DESCRIPTION	DATE	DRN
11	UPDATE VALUES AND TOLERANCE	13.11.20	L W
10	NEW RESISTNACE	18.07.17	GYQ
9	M8 HEIGHT TOLERANCE	28.10.16	GYQ

Nanotec® PLUG & DRIVE

Surface specification DIN ISO 1302 | General tolerances DIN ISO 2768-cH | Work piece edge DIN ISO 13715

APVD	G.S.	10.12.15
CHKD	L B	09.10.11
DRN	GYQ	09.10.11
SIGNATURE		DATE

STEPPER MOTOR IN PROTECTION

DWG.NO

AS5918L4204-ENM24B