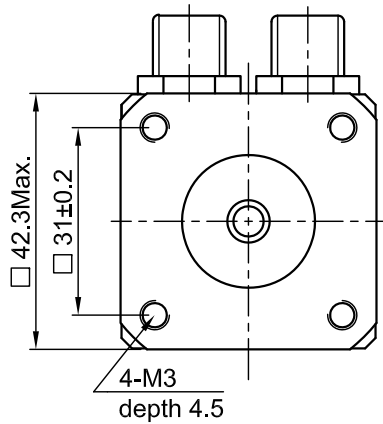
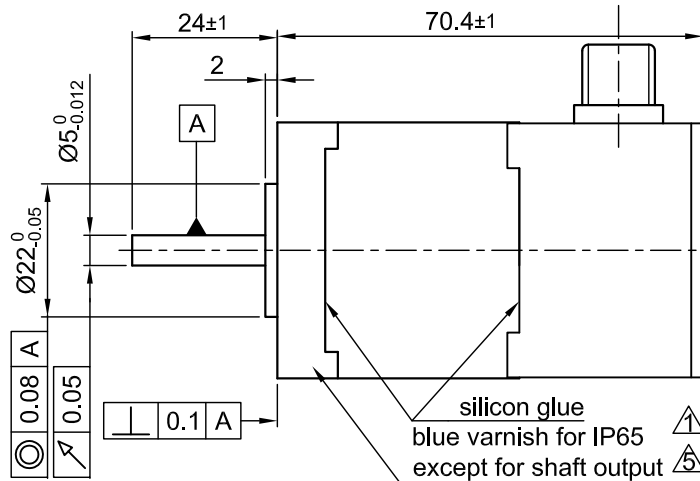


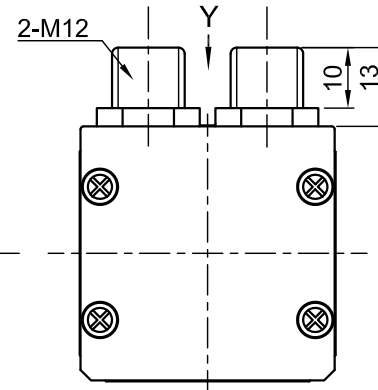
Front view and mounting



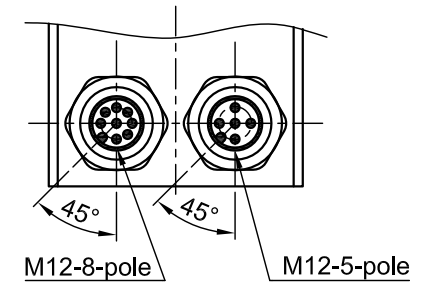
Side view



Rear view



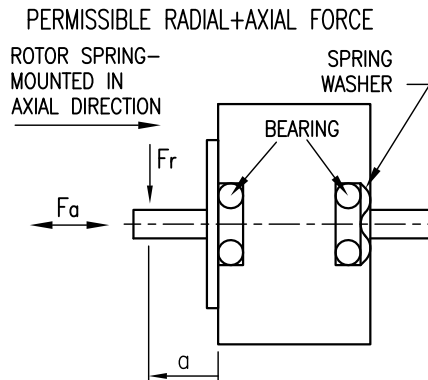
Y view



SPECIFICATION	CONNECTION	BIPOLAR PARALLEL
VOLTAGE (VDC)		3.15
AMPS/PHASE		1.8
RESISTANCE/PHASE (Ohms)@25°C		1.75±10%
INDUCTANCE/PHASE (mH) @1KHz		3.3±20%
HOLDING TORQUE (Nm) [lb-in]		0.5 [4.425]
DETENT TORQUE (Nm) [lb-in]		0.022 [0.1946]
STEP ANGLE (°) ± ACCURACY		1.8±5% (NON-ACCUM)
BACK-EMF (V) (300 U/min)		6.9
ROTOR INERTIA (Kg-m ²) [lb-in ²]		8.2x10 ⁻⁶ [0.028]
WEIGHT (Kg) [lb]		0.34 [0.75]

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

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



M12-5 pole Motor	
PIN. NO.	ASSIGNMENT
1	A\
2	A
3	B
4	B\
5	HOUSING

M12-8 pole Encoder	
PIN NO.	ASSIGNMENT
1	A
2	A\
3	B
4	B\
5	GND
6	I
7	I\
8	Vcc (5V)
HOUSING	GND/SHIELDING

TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)	AXIAL-FORCE Fa (N)	Fa=15			
AMBIENT TEMPERATURE -10~ 50°C [14°F ~ 122°F]	DISTANCE a (mm)	5	10	15	20
INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)	RADIAL-FORCE Fr (N)	58	36	26	20
INSULATION CLASS B 130° [266°F]			AXIAL	RADIAL	
DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASE)	SHAFT PLAY (mm)	0.08	0.02		
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)	AT LOAD MAX: (N)	4.5	4.5		

CABLE MOTOR: Δ
ZK-M12-5-2m(5m)
STRAIGHT OR 90°
ANGELED

CABLE ENCODER: Δ
ZK-M12-8-2m(5m)
STRAIGHT OR 90°
ANGELED

6	VALUES OF RADIAL-FORCE	11.11.10	J.W.
5	RESTRICTION SUPPLEMENTED	17.02.10	J.W.
4	WIRE COLOUR DELETE	17.09.09	J.W.
REV	DESCRIPTION	DATE	APVD



AS4118L1804-E

SCALE FREE	APVD	S.H.	12.08.08
X ±0.5	CHKD		
1PL ±0.2	DRN	J.W.	12.08.08
2PL ±0.1	SIGNATURE	DATE	
ANGLE ±30'			

STEPPER MOTOR IN PROTECTION

DWG.NO

AS4118L1804-E