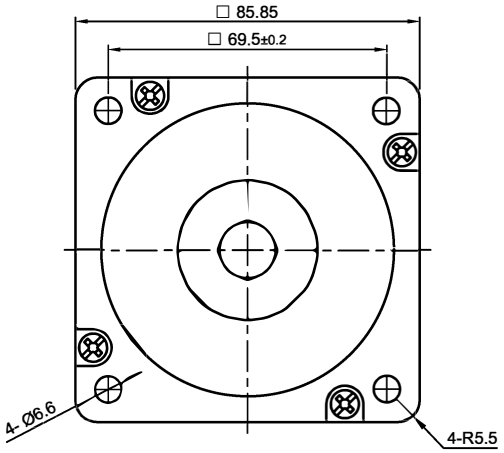
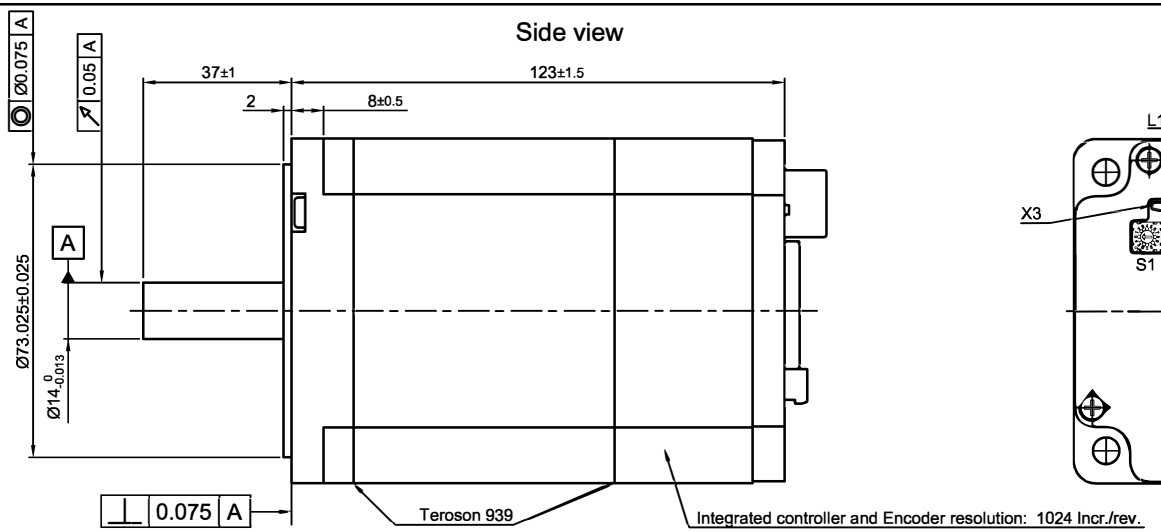
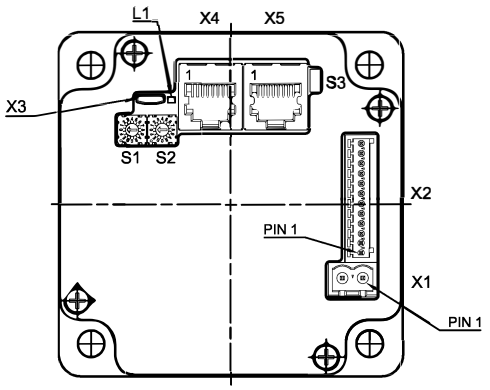
Front view and mounting



Side view



Rear view

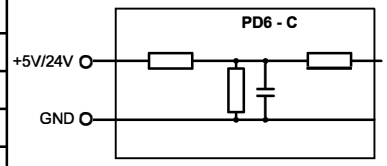


X1 Power Connector	
Pin No.	Function
1	+UB (12–48V)
2	GND

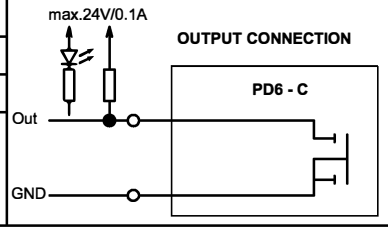
X4/X5 CANopen IN/OUT	
Pin No.	Function
1	CAN_H
2	CAN_L
3	CAN_GND
4	n.c.
5	n.c.
6	CAN_SHLD
7	GND
8	+UB Logic (24V)

CONNECTION / SPECIFICATION	BIPOLAR
VOLTAGE (VDC)	12 to 48
AMPS/PHASE	9.5A
HOLDING TORQUE (Nm) [lb–in]	5.94 [52.57]
DETENT TORQUE (Nm) [lb–in]	0.21 [1.8585]
STEP ANGLE (°) ± ACCURACY	1.8 ±5% to Microstep
ROTOR INERTIA (kg–m²) [ib–in²]	1.9x10⁻⁴ [0.65]
WEIGHT (Kg) [lb]	2.95 [6.50]

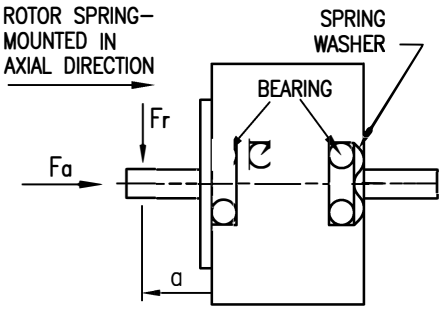
INPUT CONNECTION



OUTPUT CONNECTION



PERMISSIBLE RADIAL+AXIAL FORCE



AXIAL–FORCE Fa (N)	Fa=65			
DISTANCE a (mm)	5	10	15	20
RADIAL–FORCE Fr (N)	535	355	256	200
	AXIAL			
SHAFT PLAY (mm)	☞ 0.2 max.			
AT LOAD MAX: (N)	☞ 250			

X2 IO Connector		
Pin No.	Function	
1	+10V VOLTAGE SUPPLY (max. 200mA)	
2	Input 1/ Enable (5V/24V)	–Input1/ –Enable*
3	Input 2/ Direction (5V/24V)	Input1/ Enable*
4	Input 3/ Clock (5V/24V)	–Input2/ –Direction*
5	Input 4 (5V/24V)	Input2/ Direction*
6	Input 5 (5V/24V)	–Input3/ –Clock*
7	Input 6 (5V/24V)	Input3/ Clock*
8	Analog Input1 (0–10V/0–20mA)	
9	Analog Input2 (0–10V)	
10	Output1 (open drain)	
11	Output2 (open drain)	
12	GND	

*configured as differential input

X3 Micro-USB

OVERTEMPERATURE PROTECTION (ELECTRONICS): 75°C

AMBIENT TEMPERATURE –10°~ 50°C [14°F ~ 122°F]

INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)

INSULATION (MOTOR) 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)

REV	DESCRIPTION	DATE	DRN

Nanotec® PLUG & DRIVE

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

APVD	X.W.	14.06.16	
CHKD			
DRN	A.S.	14.06.16	
SIGNATURE		DATE	

PLUG&DRIVE MOTOR

DWG.NO PD6–C8918M9504–E–09–CYL