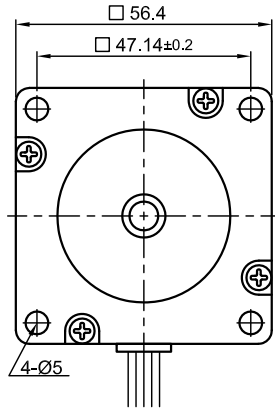
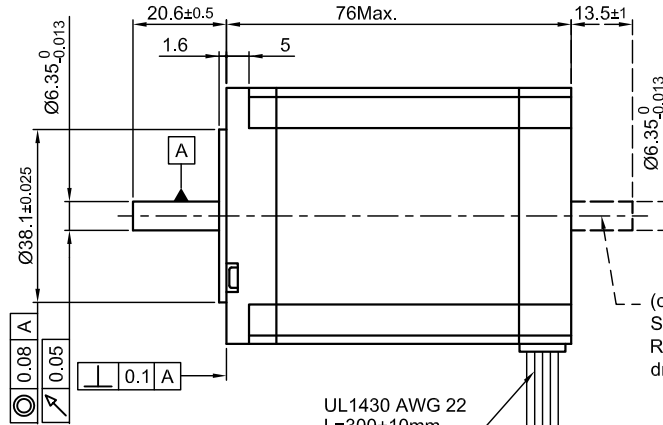


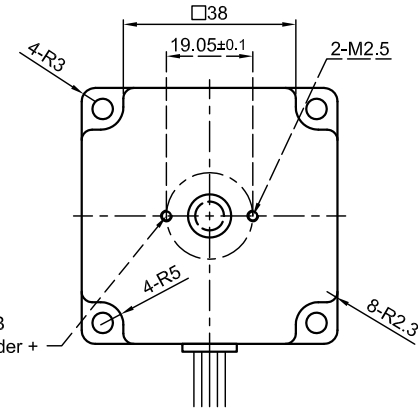
Front view and mounting



Side view



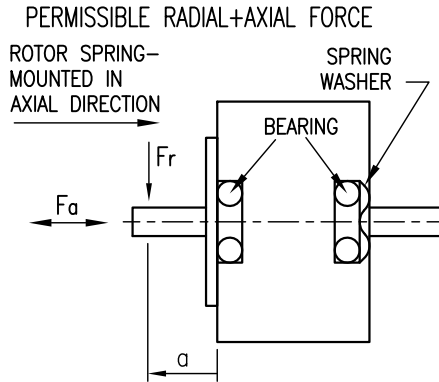
Rear view



(only for type ST5909L2008-B Ready for encoder + driver mount)

UL1430 AWG 22 L=300+10mm  
Connector Type: JST XHP-8  
Contact: SXH-001T-P0.6

SPECIFICATION	CONNECTION	UNIPOLAR OR BIPOLAR-1 WINDING	BIPOLAR	
			SERIAL	PARALLEL
VOLTAGE (VDC)		4.8		
AMPS/PHASE		2.0	1.41	2.82
RESISTANCE/PHASE (Ohms)@25°C		2.4±10%	4.8±10%	1.2±10%
INDUCTANCE/PHASE (mH) @1KHz		6.7±20%	26.8±20%	6.7±20%
HOLDING TORQUE (Nm) [lb-in]		1.4 [12.39]	1.98 [17.52]	1.98 [17.52]
DETENT TORQUE (Nm) [lb-in]		0.068 [0.602]		
STEP ANGLE (°) ± ACCURACY		0.9±5% (NON-ACCUM)		
BACK-EMF (V) (300 U/min)			29.6	
ROTOR INERTIA (Kg-m <sup>2</sup> ) [lb-in <sup>2</sup> ]		4.8x10 <sup>-5</sup> [0.164]		
WEIGHT (Kg) [lb]		1.0 [2.2]		
TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)				
AMBIENT TEMPERATURE -10~ 50°C [14°F ~ 122°F]				
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)				

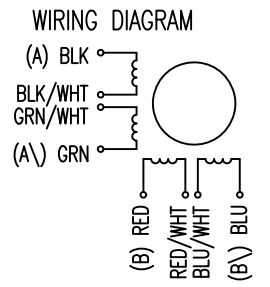


	AXIAL-FORCE Fa (N)	Fa=15			
DISTANCE a (mm)		5	10	15	20
RADIAL-FORCE Fr (N)		130	90	70	52
		AXIAL	RADIAL		
SHAFT PLAY (mm)		0.08	0.02		
AT LOAD MAX: (N)		4.5	4.5		

UNIPOLAR	TYPE OF CONNECTION (EXTERN)			MOTOR		
	1WINDING	BIPOLAR SERIAL	BIPOLAR PARALLEL	CONNECTOR PIN NO.	LEADS	WINDING
A	A	A	A	1	BLK	A
COM	A			3	BLK/WHT	
A\	B	A\	A\	2	GRN/WHT	A\
B	B	B	B	4	GRN	B
COM	B			5	RED	
B\	B	B\	B\	7	RED/WHT	B\
				6	BLU/WHT	
				8	BLU	

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

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



REV	DESCRIPTION	DATE	APVD
1	NEW VALUE OF INDUCRANCE	15.05.09	J.W.

**Nanotec**  
PLUG & DRIVE  
ST5909L2008

SCALE	APVD	S.Ha.	DATE
FREE			09.12.08
X ±0.5	CHKD		
1PL ±0.2	DRN	J.W.	09.12.08
2PL ±0.1	SIGNATURE		DATE
ANGLE ±30'			

**STEPPING MOTOR**  
DWG.NO ST5909L2008