


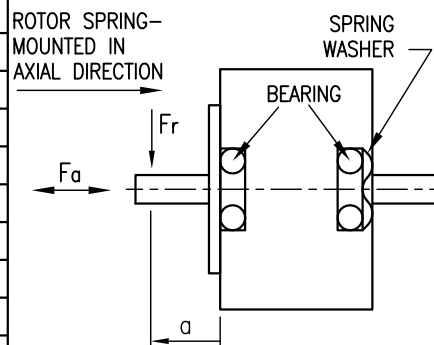





























Technical drawing of the connector assembly showing dimensions and specifications:

- Dimensions:**
  - Total length:  $51\text{Max.}$
  - Distance from mounting surface to center of contact:  $20.6 \pm 0.5$
  - Contact pitch:  $1.6$
  - Contact width:  $5$
  - Mounting hole diameter:  $\varnothing 6.35_{-0.013}^0$
  - Overall height:  $\varnothing 38.1 \pm 0.025$
- Surface Finishes:**
  - Top surface:  $0.08 \mu\text{m A}$
  - Bottom surface:  $0.05 \mu\text{m}$
- Material and Plating:**
  - UL1430 AWG 22
  - L=300+10
- Connector Type:** JST XHP-8
- Contact:** SXH-001T-P0.6

SPECIFICATION	CONNECTION	UNIPOLAR OR	BIPOLAR	
		BIPOLAR-1 WINDING	SERIAL	PARALLEL
VOLTAGE (VDC)		3.0		
AMPS/PHASE		2.0	1.41	2.82
RESISTANCE/PHASE (Ohms)@25°C		1.5±10%	3.0±10%	0.75±10%
INDUCTANCE/PHASE (mH) @1KHz		2.6±20%	10.4±20%	2.6±20%
HOLDING TORQUE (Nm) [lb-in]		0.7 [6.25] 	 0.99 [8.76]	 0.99 [8.76]
DETENT TORQUE (Nm) [lb-in]		0.03 [0.266]		
STEP ANGLE (°)		1.8		
ACCURACY(NON-ACCUM)		±5%		
ROTOR INERTIA (Kg-m <sup>2</sup> ) [lb-in <sup>2</sup> ]		2.75x10 <sup>-5</sup> [0.094]		
WEIGHT (Kg) [lb]		0.65 [1.43]		



TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)	AXIAL-FORCE $F_a$ (N)	$F_a=15$			
AMBIENT TEMPERATURE $-10^{\circ}\sim 50^{\circ}\text{C}$ [ $14^{\circ}\text{F} \sim 122^{\circ}\text{F}$ ]	DISTANCE $a$ (mm)	5	10	15	20
INSULATION RESISTANCE 100 MΩ (UNDER NORMAL TEMPERATURE AND HUMIDITY)	RADIAL-FORCE $F_r$ (N)	130	90	70	52
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	

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

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

STEP	A	B	A\	B\
1	+	+	-	-
2	-	+	+	-
3	-	-	+	+
4	+	-	-	+

3	HOLD.TOR.+DELE. BACK-EMF	18.11.13	J.D.
2	NEW UL NO.	28.07.09	J.W.
1	PIN-ASSIGNMENT	08.01.08	J.W.
REV	DESCRIPTION	DATE	APVD



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SCALE	FREE	APVD	<i>S.Ha.</i>	19.03.07
X	±0.5	CHKD		
1PL	±0.2	DRN	<i>J.W.</i>	21.11.06
2PL	±0.1	SIGNATURE		DATE
ANGLE	±30'			

## STEPPING MOTOR

DWG.NO
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ST5918S2008-A