

□28.2mm(□1.11in.)

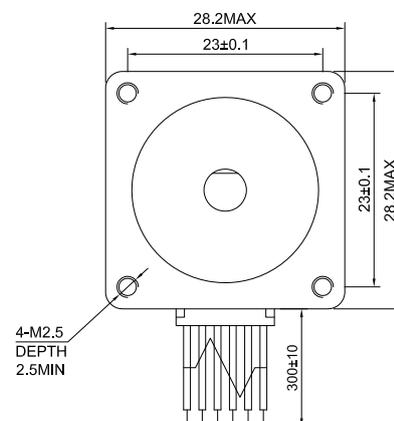
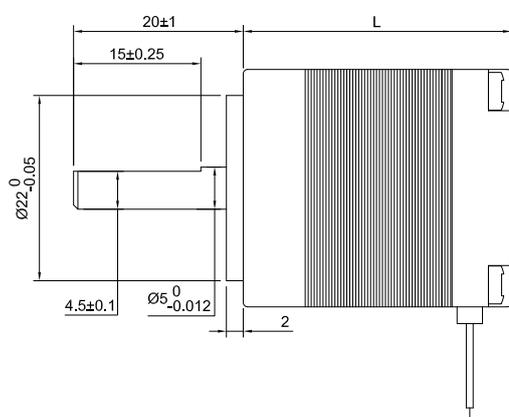
Step Angle 1.8° 11HS High-Torque Type

Common Rating

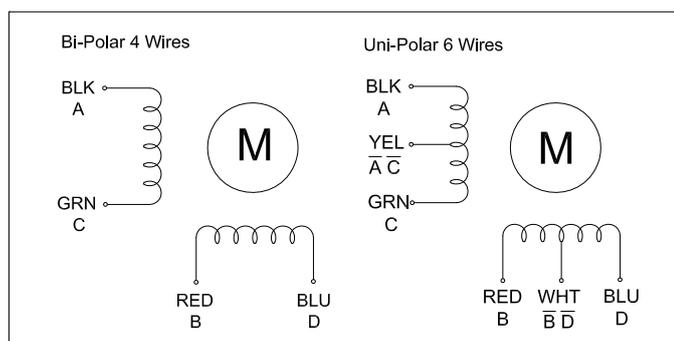
Item	Specification
Step Angle Accuracy	±5% (full step, no load)
Resistance Accuracy	±10%
Inductance Accuracy	±20%
Temperature Rise	80°C Max. (rated current, 2 phase on)
Ambient Temperature	-10°C~+50°C
Insulation Resistance	100MΩMin. 500VDC
Dielectric Strength	500VAC for one minute
Shaft Radial Play	0.02Max. (450 g-load)
Shaft Axial Play	0.08Max. (450 g-load)



Dimension Unit = mm(in.)



Wiring Diagram



Excitation Sequence

Excitation: 2-2					Excitation: 2-1-2				
STEP	A	B	C	D	STEP	A	B	C	D
1	+	+			1	+			
2		+	+		2	+	+		
3			+	+	3		+		
4	+			+	4		+	+	
					5			+	
					6			+	+
					7				+
					8	+			+

Specifications

Model	Torque		Voltage	Current	Resistance	Inductance	Inertia	Bi/Unipolar	Weight	Length "L"	
	Ncm	oz.in	V/Phase	A/Phase	Ohm/Phase	mH/Phase	g.cm2	# of Leads	Kg	mm	in
11HS12-0956S	4.3	6.1	2.66	0.95	2.8	1	9	Uni (6)	0.11	31.5	1.24
11HS12-0674S	6	8.5	3.8	0.67	5.6	4.2	9	Bi (4)	0.11	31.5	1.24
11HS18-0956S	7.5	10.6	3.2	0.95	3.4	1.2	12	Uni (6)	0.14	44.5	1.75
11HS18-0674S	9.5	13.5	4.6	0.67	6.8	4.9	12	Bi (4)	0.14	44.5	1.75
11HS20-0956S	9	12.7	4.4	0.95	4.6	1.4	18	Uni (6)	0.2	50.5	1.99
11HS20-0674S	12	17.0	6.2	0.67	9.2	5.7	18	Bi (4)	0.2	50.5	1.99

* Specify -S for Single Shaft; -D for Double Shaft * All motor's specifications are based on full-step constant current operation