



STEP MOTORS

USAutomation step motors solve almost any application calling for precise open loop positioning. Our wide range of sizes are among the most competitive offered anywhere. Most sizes are available in prototype quantities off the shelf. OEM custom configurations are encouraged.

| Model Number | Bipolar Torque (oz in) | Series Current (A) | Series Inductance (mH) | Rotor Inertia (oz in sec ²) | Shaft Diameter (in) | Number of Leads | Weight (lbs) | Length (in) |
|---------------|------------------------|--------------------|------------------------|---|---------------------|-----------------|--------------|-------------|
| USS08T2102-4S | 2.5 | 0.85 | 1.7 | .000028 | 0.1575 | 4 | 0.13 | 1.180 |
| USS08T2302-4S | 4.2 | 1.13 | 1.5 | .000051 | 0.1575 | 4 | 0.18 | 1.650 |
| USS11T2102-4S | 8.3 | 0.67 | 4.0 | .00013 | 0.197 | 4 | 0.24 | 1.250 |
| USS11T2202-4S | 13.2 | 0.67 | 5.0 | .00017 | 0.197 | 4 | 0.31 | 1.750 |
| USS11T2302-4S | 16.7 | 0.67 | 7.0 | .00025 | 0.197 | 4 | 0.44 | 2.000 |
| USS17T2001-4S | 24 | 0.40 | 36.0 | .00028 | 0.197 | 4 | 0.33 | 1.024 |
| USS17T2101-4S | 31 | 0.28 | 48.7 | .00050 | 0.197 | 4 | 0.50 | 1.338 |
| USS17T2102-4S | 31 | 0.67 | 16.8 | .00050 | 0.197 | 4 | 0.50 | 1.338 |
| USS17T2201-4S | 50 | 0.28 | 120.0 | .00076 | 0.197 | 4 | 0.60 | 1.575 |
| USS17T2202-4S | 50 | 0.85 | 10.0 | .00076 | 0.197 | 4 | 0.60 | 1.575 |
| USS17T2301-4S | 62 | 0.28 | 100.0 | .00096 | 0.197 | 4 | 0.80 | 1.890 |
| USS17T2302-4S | 62 | 0.85 | 11.0 | .00096 | 0.197 | 4 | 0.80 | 1.890 |
| USS17T2402-4S | 100 | 0.85 | 29.0 | .00143 | 0.197 | 4 | 1.10 | 2.360 |
| USS23T2002-8S | 76 | 0.70 | 21.6 | .0017 | 0.250 | 8 | 1.00 | 1.614 |
| USS23T2004-8S | 76 | 1.40 | 5.6 | .0017 | 0.250 | 8 | 1.00 | 1.620 |
| USS23T2006-8S | 76 | 2.10 | 2.4 | .0017 | 0.250 | 8 | 1.00 | 1.620 |
| USS23T2104-8S | 175 | 1.40 | 10.0 | .0042 | 0.250 | 8 | 1.55 | 2.210 |
| USS23T2106-8S | 175 | 2.10 | 4.4 | .0042 | 0.250 | 8 | 1.55 | 2.210 |
| USS23T2206-8S | 262 | 2.10 | 6.4 | .0068 | 0.250 | 8 | 2.21 | 3.000 |
| USS23T2210-8S | 262 | 3.50 | 1.6 | .0068 | 0.250 | 8 | 2.21 | 3.000 |
| USS23T2306-8S | 425 | 2.10 | 20.0 | .0103 | 0.250 | 8 | 3.31 | 4.520 |
| USS34T2004-8S | 467 | 1.40 | 45.2 | .014 | 0.500 | 8 | 3.70 | 2.560 |
| USS34T2006-8S | 467 | 3.00 | 15.6 | .014 | 0.500 | 8 | 3.70 | 2.560 |
| USS34T2008-8S | 467 | 2.80 | 8.5 | .014 | 0.500 | 8 | 3.70 | 2.560 |
| USS34T2010-8S | 467 | 3.50 | 6.0 | .014 | 0.500 | 8 | 3.70 | 2.560 |
| USS34T2104-8S | 637 | 1.40 | 56.8 | .020 | 0.500 | 8 | 5.10 | 3.150 |
| USS34T2108-8S | 637 | 2.80 | 15.2 | .020 | 0.500 | 8 | 5.10 | 3.150 |
| USS34T2112-8S | 637 | 4.30 | 6.8 | .020 | 0.500 | 8 | 5.10 | 3.150 |
| USS34T2207-8S | 1200 | 2.50 | 33.2 | .038 | 0.500 | 8 | 8.40 | 4.650 |
| USS34T2214-8S | 1200 | 5.00 | 8.0 | .038 | 0.500 | 8 | 8.40 | 4.650 |
| USS34T2307-8S | 1700 | 2.50 | 50.0 | .057 | 0.625 | 8 | 12.00 | 6.140 |
| USS34T2314-8S | 1700 | 5.00 | 14.0 | .057 | 0.625 | 8 | 12.00 | 6.140 |

USS
Step motor

XX
Frame size:
8, 11, 17, 23, 34

X
T = 1.8 degree

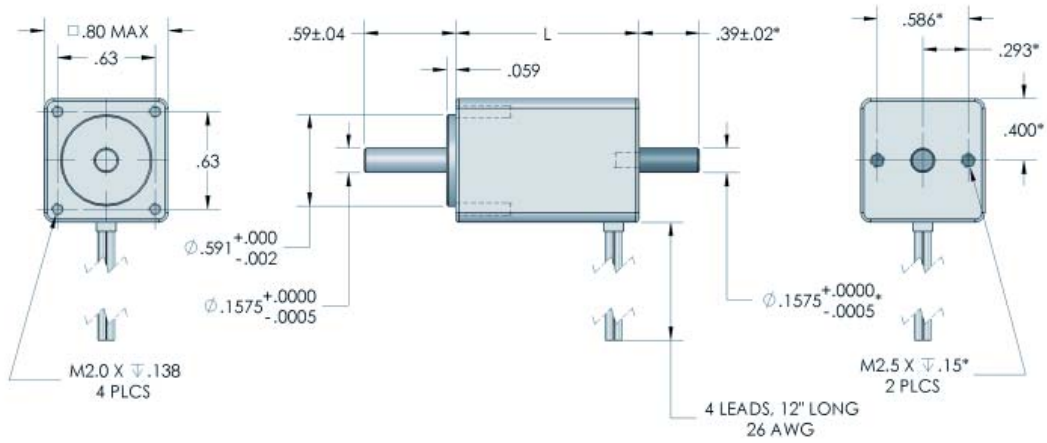
XXX
Stack length & winding

X
of lead wires

X
Shaft:
S = Single
D = Double
E = Encoder



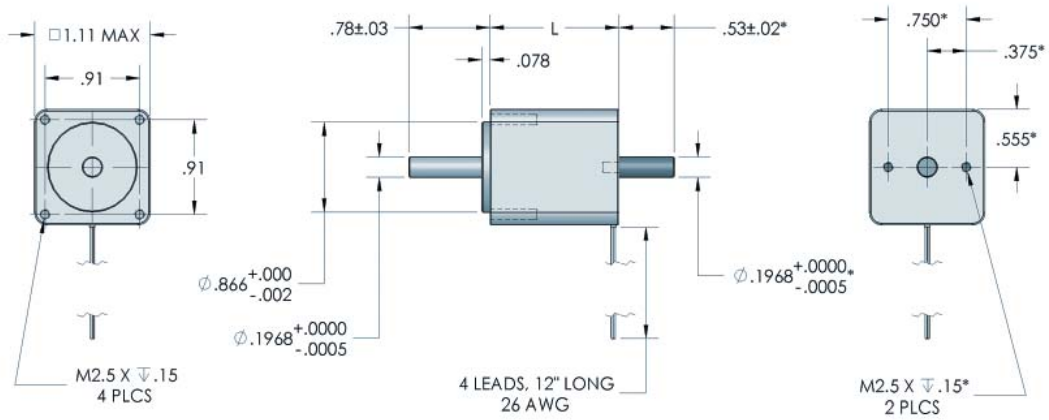
USS08T SERIES



* THESE DIMENSIONS REFER TO DOUBLE SHAFT VERSION ONLY

| MOTOR P/N | DIM "L" |
|---------------|-------------|
| | in (mm) |
| USS08T2102-4S | 1.18 (30.0) |
| USS08T2302-4S | 1.65 (41.9) |

USS11T SERIES

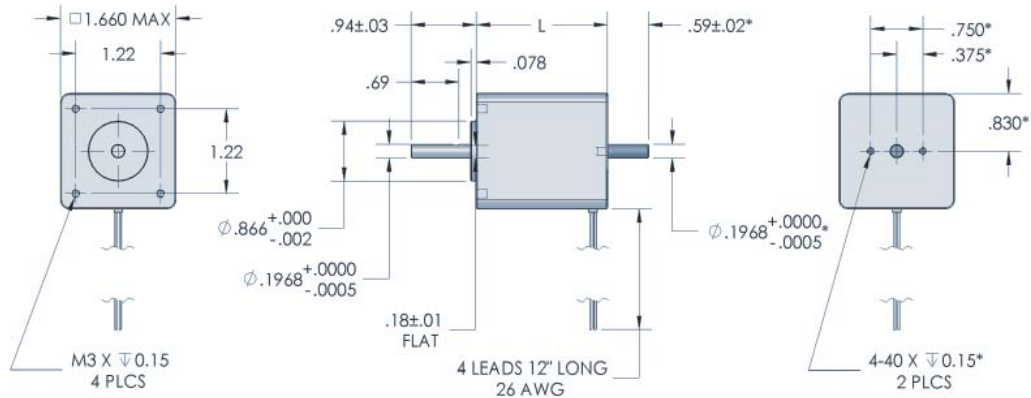


* THESE DIMENSIONS REFER TO DOUBLE SHAFT VERSION ONLY

| MOTOR P/N | DIM "L" |
|---------------|-------------|
| | in (mm) |
| USS11T2102-4S | 1.25 (31.8) |
| USS11T2202-4S | 1.75 (44.5) |
| USS11T2302-4S | 2.00 (50.8) |



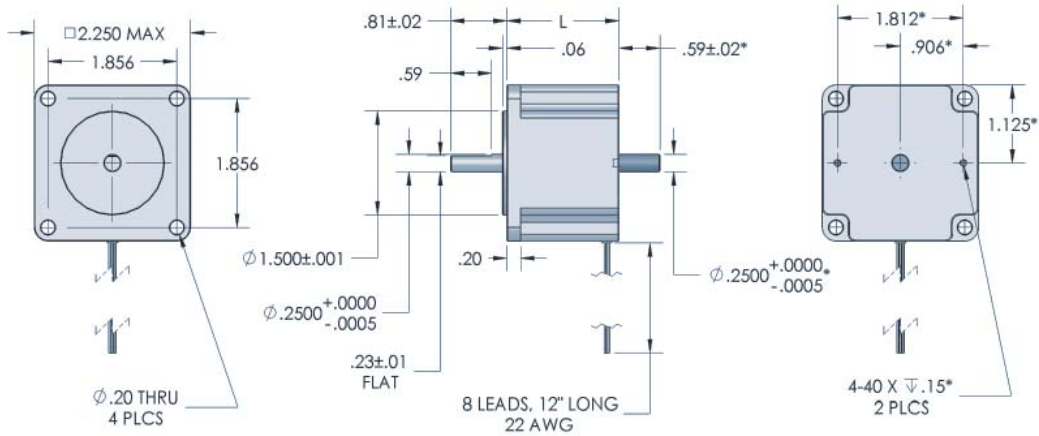
USS17T SERIES



* THESE DIMENSIONS REFER TO DOUBLE SHAFT VERSION ONLY

| MOTOR P/N | DIM "L" in (mm) |
|---------------|--------------------|
| USS17T2001-4S | 1.02 (25.9) |
| USS17T2101-4S | 1.34 (34.0) |
| USS17T2102-4S | 1.34 (34.0) |
| USS17T2201-4S | 1.58 (40.1) |
| USS17T2202-4S | 1.58 (40.1) |
| USS17T2301-4S | 1.89 (48.0) |
| USS17T2302-4S | 1.89 (48.0) |
| USS17T2402-4S | 2.36 (59.9) |

USS23T SERIES

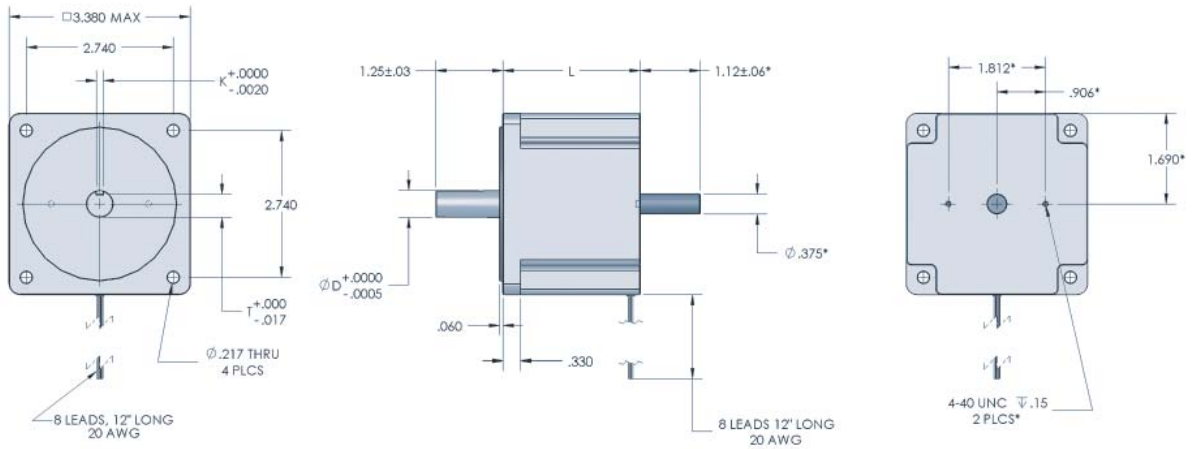


* THESE DIMENSIONS REFER TO DOUBLE SHAFT VERSIONS ONLY

| MOTOR P/N | DIM "L" in (mm) |
|---------------|--------------------|
| USS23T2002-8S | 1.62 (41.2) |
| USS23T2004-8S | 1.62 (41.2) |
| USS23T2006-8S | 1.62 (41.2) |
| USS23T2104-8S | 2.21 (56.1) |
| USS23T2106-8S | 2.21 (56.1) |
| USS23T2206-8S | 3.00 (76.2) |
| USS23T2210-8S | 3.00 (76.2) |
| USS23T306-4S8 | 4.52 (114.8) |



USS34T SERIES



* THESE DIMENSIONS REFER TO DOUBLE SHAFT VERSION ONLY

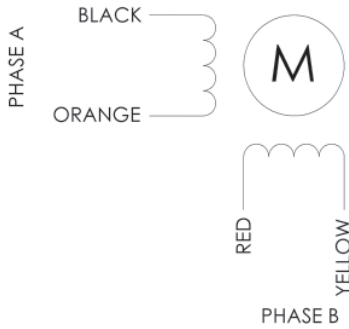
| MOTOR P/N | DIM "L" | | DIM "K" | | DIM "I" | | DIM "L" | |
|---------------|---------|--------|---------|-------|---------|--------|---------|---------|
| | in (mm) | | in (mm) | | in (mm) | | in (mm) | |
| USS34T2004-8S | .500 | (12.7) | .125 | (3.2) | .430 | (10.9) | 2.56 | (65.0) |
| USS34T2006-8S | .500 | (12.7) | .125 | (3.2) | .430 | (10.9) | 2.56 | (65.0) |
| USS34T2006-8S | .500 | (12.7) | .125 | (3.2) | .430 | (10.9) | 2.56 | (65.0) |
| USS34T2010-8S | .500 | (12.7) | .125 | (3.2) | .430 | (10.9) | 2.56 | (65.0) |
| USS34T2104-8S | .500 | (12.7) | .125 | (3.2) | .430 | (10.9) | 3.15 | (80.0) |
| USS34T2108-8S | .500 | (12.7) | .125 | (3.2) | .430 | (10.9) | 3.15 | (80.0) |
| USS34T2112-8S | .500 | (12.7) | .125 | (3.2) | .430 | (10.9) | 3.15 | (80.0) |
| USS34T2207-8S | .500 | (12.7) | .125 | (3.2) | .430 | (10.9) | 4.65 | (118.1) |
| USS34T2214-8S | .500 | (12.7) | .125 | (3.2) | .430 | (10.9) | 4.65 | (118.1) |
| USS34T2307-8S | .625 | (15.9) | .188 | (4.8) | .518 | (13.2) | 6.14 | (156.0) |
| USS34T2314-8S | .625 | (15.9) | .188 | (4.8) | .518 | (13.2) | 6.14 | (156.0) |



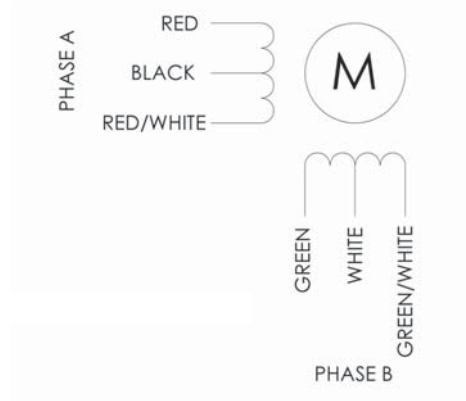


STEP MOTOR WIRING DIAGRAMS

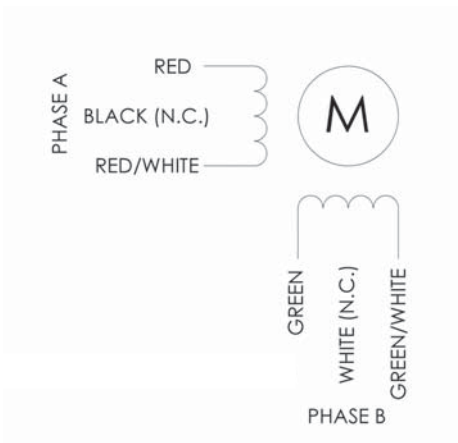
4 lead



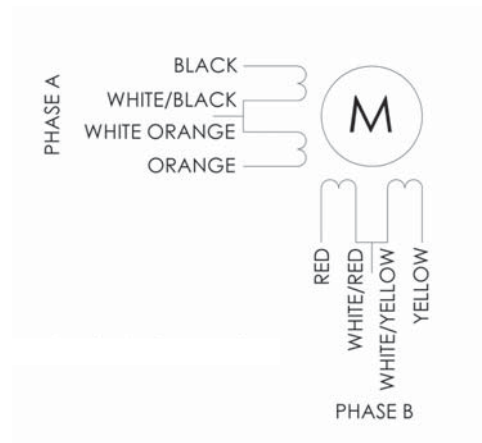
6 lead unipolar



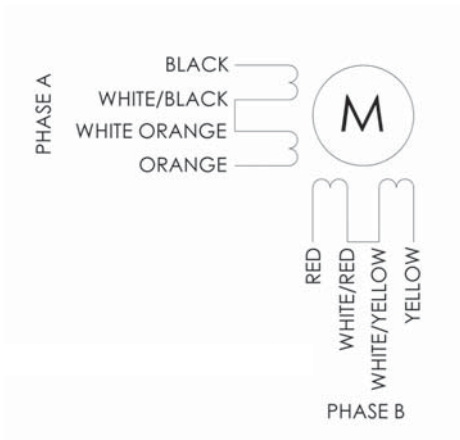
6 lead series



8 lead unipolar



8 lead series



8 lead parallel

