

**STANDARD FEATURES:**

- Rigid construction
- Sleeve bearing
- Lead positioning
- Motor and input variable
- Step angle accuracy range between  $\pm 5^\circ$  and  $\pm 1.0^\circ$
- Available with 50Hz windings
- 130° C insulation

**OPTIONAL FEATURES:**

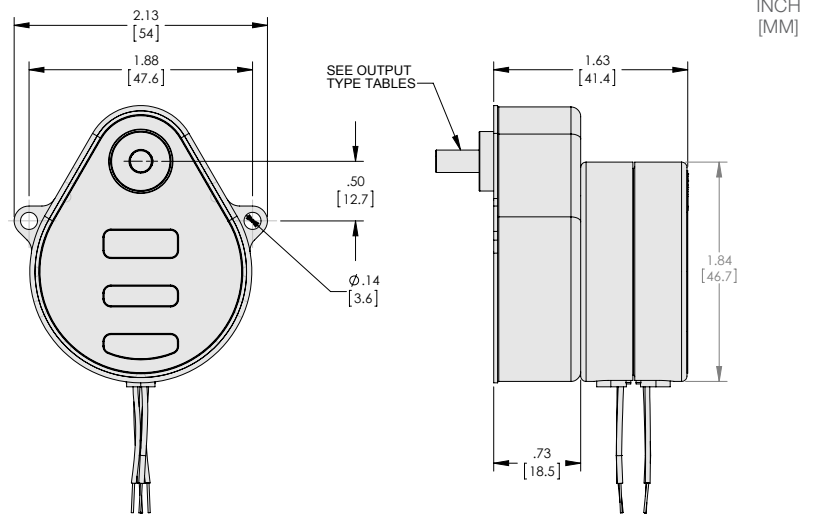
- Voltages up to 240V
- Custom leads and terminations
- Custom stepper motor outputs
- Nearly 3000 unique gear ratios are available from 5.3:1 to 72000:1.
- Higher insulation class
- Custom shafting
- Rear shaft extensions
- Available with shallow gearbox or deep gearbox

**TYPICAL APPLICATIONS:**

- Medical Devices
- Instrument Control
- HVAC Control
- ATM Machine
- Robotic Controls
- Lighting Controls
- Voting Machine
- Sun Tracker
- Beverage Dispensing
- Video Games/Gaming Machine
- POP Displays



**Series 119-3 Deep**



**Series 119 Part Numbering Example**

119-----

**Gear Ratio: (If Motor Type 1 - Leave Blank)**  
Motor Type 2, 3, (5, 30, 100, 150, . . . )  
Motor Type 4, (12,48, 192, e.g. 012=12:1, 192=192:1)

**Wattage/Driver Type**  
DC: 1=Bipolar | 4=Unipolar | 7=Centertap  
AC: 2=2W | 3=3W | 5=5W

**Motor Speed/Step Angle**  
AC 3 = 300 RPM | 6 = 600 RPM  
DC 5 = 15 Degrees | 7 = 7.5 Degrees

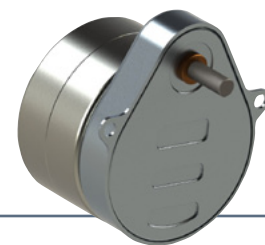
**Rated Voltage** (5,12, 24, 120, or 240)  
0=5VDC | 1=12VDC | 2=24VDC | 3=24 VAC/50Hz, 4=24 VAC/60Hz  
5=120 VAC/50Hz | 6=120 VAC/60Hz | 7=240 VAC/50Hz | 8=240 VAC/60Hz

**Motor Type**  
1 = Motor Only  
2 = Motor + C Mount Gearbox - Shallow  
3 = Motor + P Mount Gearbox - Deep  
4 = Motor + 2" Gearbox

# Series 119-2, 3

## Size 19 Step Gear Motor

(pear shaped gearbox) Continued



### SERIES 119 - 1.9 IN. AC GEAR MOTOR (SYNCHRON PEAR GEARBOX)

PART NUMBER	VOLTAGE VAC	VOLTAGE TYPE AC/DC	FREQUENCY HZ	STEP ANGLE (°)	INPUT POWER W	SPEED RPM	GEAR RATIO	CONTINUOUS TORQUE IN-OZ	INTERMITTENT TORQUE IN-OZ	CAPACITOR MF
119-3462150	24	AC	60	15	2	4	150	200	400	5
119-3463150	24	AC	60	15	3.5	4	150	200	400	8
119-3465150	24	AC	60	15	5	4	150	200	400	12
119-3432150	24	AC	60	7.5	2	2	150	200	400	5
119-3433150	24	AC	60	7.5	3.5	2	150	200	400	8
119-3435150	24	AC	60	7.5	5	2	150	200	400	12
119-3662150	120	AC	60	15	2	4	150	200	400	0.22
119-3663150	120	AC	60	15	3.5	4	150	200	400	0.33
119-3665150	120	AC	60	15	5	4	150	200	400	0.47
119-3632150	120	AC	60	7.5	2	2	150	200	400	0.22
119-3633150	120	AC	60	7.5	3.5	2	150	200	400	0.33
119-3635150	120	AC	60	7.5	5	2	150	200	400	0.47
119-3862150	240	AC	60	15	2	4	150	200	400	0.068
119-3863150	240	AC	60	15	3.5	4	150	200	400	0.082
119-3865150	240	AC	60	15	5	4	150	200	400	0.15
119-3832150	240	AC	60	7.5	2	2	150	200	400	0.068
119-3833150	240	AC	60	7.5	3.5	2	150	200	400	0.082
119-3835150	240	AC	60	7.5	5	2	150	200	400	0.15

### SERIES 119 - 1.9 IN. DC STEPPER GEAR MOTOR (SYNCHRON PEAR GEARBOX)

PART NUMBER	VOLTAGE VDC	VOLTAGE TYPE AC/DC	DRIVE TYPE	STEP ANGLE (°)	SPEED RPM @ 100PPS	GEAR RATIO	CONTINUOUS TORQUE IN-OZ	INTERMITTENT TORQUE IN-OZ
119-3154150	12	DC	Unipolar	15.0	1.67	150	200	400
119-3151150	12	DC	Bipolar	15.0	1.67	150	200	400
119-3174150	12	DC	Unipolar	7.5	0.83	150	200	400
119-3171150	12	DC	Bipolar	7.5	0.83	150	200	400
119-3254150	24	DC	Unipolar	15.0	1.67	150	200	400
119-3251150	24	DC	Bipolar	15.0	1.67	150	200	400
119-3271150	24	DC	Bipolar	7.5	0.83	150	200	400
119-3274150	24	DC	Unipolar	7.5	0.83	150	200	400