

## Specifications

Specification	Unit	PF(C)25-24				PF(C)25-48			
		Unipolar		Bipolar		Unipolar		Bipolar	
Type of Winding		Unipolar		Bipolar		Unipolar		Bipolar	
Excitation Mode*		Full step (2-2)				Full step (2-2)			
Step Angle	°	15 ±5%				7.5 ±5%			
Steps Per Revolution*		24				48			
Rated Voltage	V	12	5	12	5	12	5	12	5
Resistance	Ω	120	16	122	15	120	16	122	15
Inductance	mH	34	4.5	66	8	39	5.5	81	10
Holding Torque*	mN·m	8	8	10	10	10	10	12	12
Rotor Inertia	kg·m <sup>2</sup>	1.0 × 10 <sup>-7</sup>				1.0 × 10 <sup>-7</sup>			
Starting Pulse Rate*	pps	490				790			
Slewing Pulse Rate*	pps					900			
Operating Temp. Range	°C					-10 to +50			
Temperature Rise*	°C					70			
Weight	g					35			



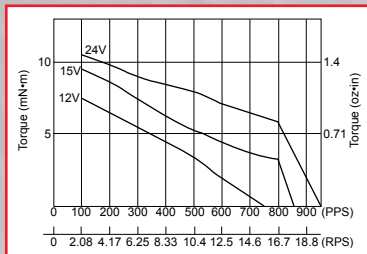
PF25



PFC25

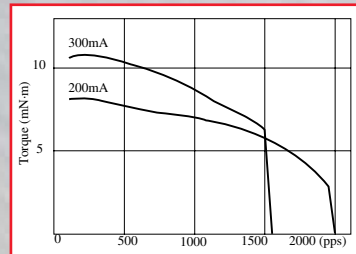
## Torque Curve (pull-out torque)\*

### Bipolar Constant Voltage (48P1)



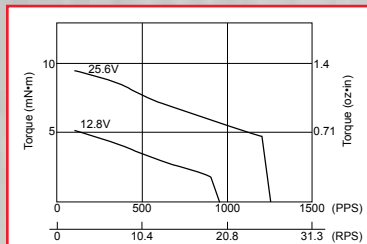
Coil Resistance: 122Ω

### Bipolar Constant Current (48R1)



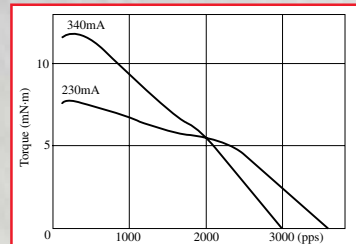
Coil Resistance: 35Ω Supply Voltage: 24V

### Unipolar Constant Voltage (48C1)



Coil Resistance: 120Ω

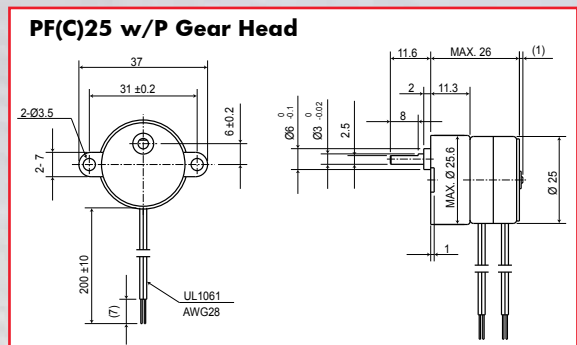
### Unipolar Constant Current (48H1)



Coil Resistance: 34Ω Supply Voltage: 24V

All tin-can motor specifications are based on full-step constant voltage operation  
Magnet type: Anisotropic  
Note: Torque curves are for reference only and are not guaranteed

## Dimensions of Geared Model



Gear Ratio	6/25	1/5	3/25	1/10	2/25	1/15	3/50	1/20
Ordinary Torque	20mN·m				50mN·m			
Destruction Torque	60mN·m				150mN·m			

Gear Ratio	1/25	1/30	1/50	1/60	1/75
Ordinary Torque	70mN·m				
Destruction Torque	210mN·m				

Gear Ratio	1/100	1/120	1/125	1/150	1/200	1/250	1/300
Ordinary Torque	100mN·m						
Destruction Torque	300mN·m						