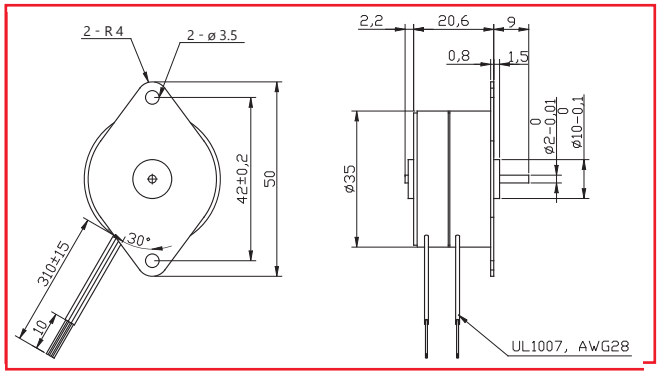
NPM Nippon Pulse
Your Partner in Motion Control

Tin-Can Steppers
PF35

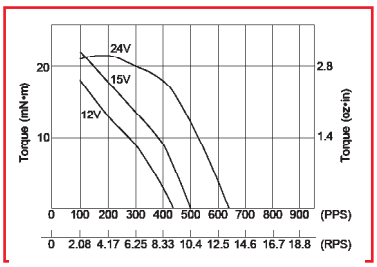


Specifications

Specification	Unit	PF35-24				PF35-48			
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			
Winding		C	D	P	Q	C	D	P	Q
Rated Voltage	V	12	5	12	5	12	5	12	5
Resistance	Ω	90	16	100	17	90	16	100	17
Inductance	mH	37	8.7	95	14	48	8.9	124	19
Holding Torque	mN·m	15	15	19	19	20	20	25	25
Rotor Inertia	kg·m^2	4.5 x 10^{-7}				4.5 x 10^{-7}			
Starting Pulse Rate*	pps	310				500			
Slewing Pulse Rate*	pps	410				530			
Operating Temp. Range	˚C	-10 to +50							
Temperature Rise*	K	55							
Weight	g	80							

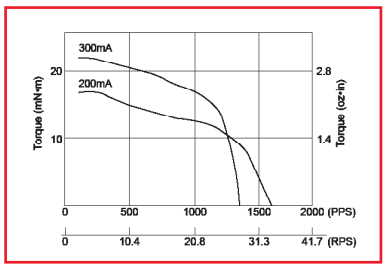
Torque Curve (pull-out torque)*

Bipolar Constant Voltage (48P1)



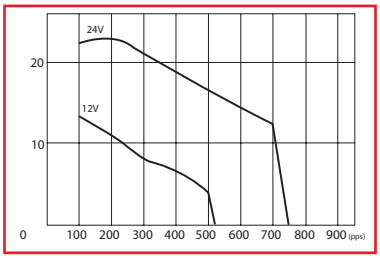
Coil Resistance: 100Ω

Bipolar Constant Current (48181)



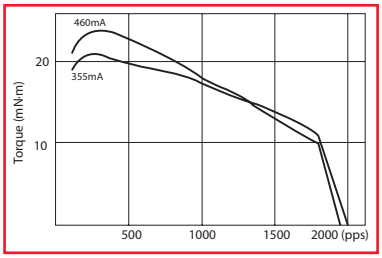
Coil Resistance: 18Ω Supply Voltage: 24V

Unipolar Constant Voltage (48C1)



Coil Resistance: 90Ω

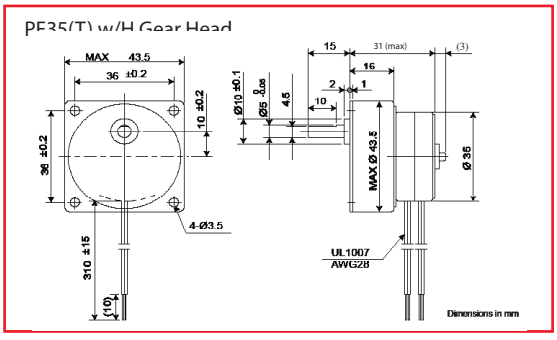
Unipolar Constant Current (48071)



Coil Resistance: 20Ω Supply Voltage: 24V

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

Dimensions of Geared Model



Gear Ratio	6/25	1/5	3/25	1/10
Ordinary Gear Strength	200mN·m			
Destruction Gear Strength	600mN·m			

Gear Ratio	2/25	1/15	3/50	1/20	1/25
Ordinary Gear Strength	250mN·m				
Destruction Gear Strength	750mN·m				

Gear Ratio	1/30	1/50	1/60	2/125	1/75
Ordinary Gear Strength	300mN·m				
Destruction Gear Strength	900mN·m				

Gear Ratio	1/100	1/120	1/125	1/150	1/200	1/250	1/300
Ordinary Gear Strength	400mN·m						
Destruction Gear Strength	1200mN·m						