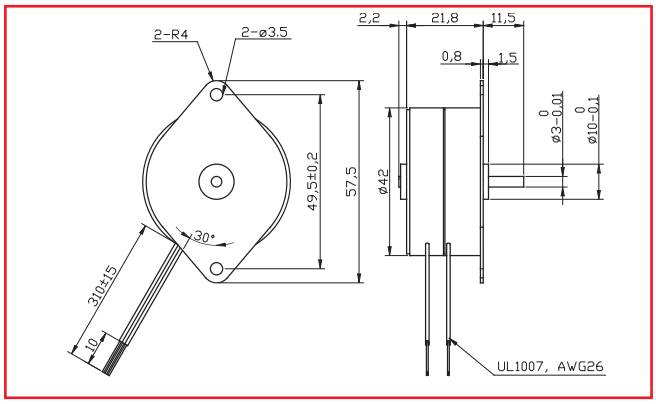
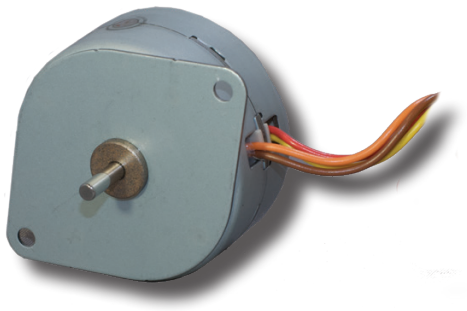
NPM Nippon Pulse
Your Partner in Motion Control

Tin-Can Steppers
PF42



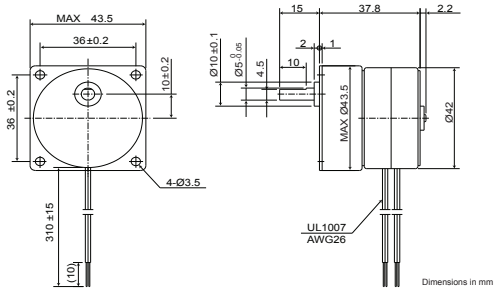


Specifications

Specification	Unit	PF42-24				PF42-48			
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	70	12	76	14	70	12	76	14
Inductance	mH	35	5.9	74	14	41	6.1	87	16
Holding Torque	mN·m	28	28	41	41	45	45	54	54
Rotor Inertia	kg·m^2	16.8 x 10^{-7}				12.8 x 10^{-7}			
Starting Pulse Rate*	pps	180				310			
Slewing Pulse Rate*	pps	250				320			
Operating Temp. Range	˚C	-10 to +50							
Temperature Rise*	K	55							
Weight	g	160							

Dimensions of Geared Model

PF42 w/H Gear Head



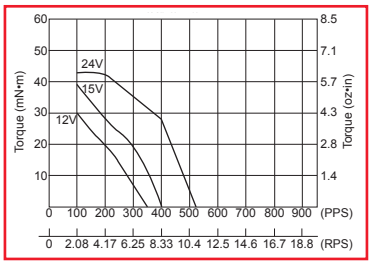
Gear Ratio	6/25	1/5	3/25	1/10	2/25	1/15	3/50	1/20	1/25
Ordinary Torque	200mN·m				250mN·m				
Destruction Torque	600mN·m				750mN·m				

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

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

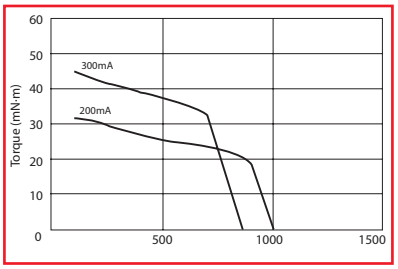
Torque Curve (pull-out torque)*

Bipolar Constant Voltage (48P1)



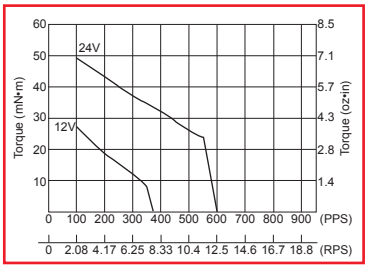
Coil Resistance: 76Ω

Bipolar Constant Current (48Y1)



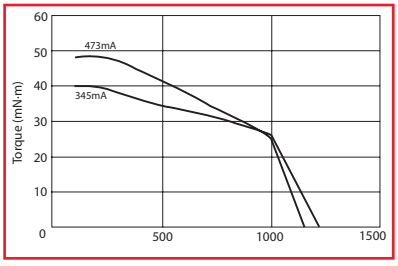
Coil Resistance: 20Ω Supply Voltage: 24V

Unipolar Constant Voltage (48C1)



Coil Resistance: 70Ω

Unipolar Constant Current (48I1)



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