







Features:

- Linear stepper motor with long lifespan
- Simple structure, with linear movement of the screw shaft through rotor hub.
- Easy control, with same methods of drive and control as other stepper motors.
- High efficiency and thrust performance

Specifications	PFL20-24Q4		
Number of Phase	2 (PM Type) Linearstep		
Excitation Mode	2-2		
Screw Pitch/Step Size	0.05mm/step (1.2mm/revolution)		
Operating Temperature Range	-10°C ~ 50°C		
Dielectric Strength	AC500V (1 min.)		
Insulation Resistance	100MΩ (DC 500V)		
Insulation Class	E		
Max. Operating Temperature	+80°C (at the case)		
Res. Per Winding	$33\Omega\pm7\%$		
Ind. Per Winding	12mH (1 Vrms, 1 KHz)		
Starting Pulse Rate	330 pps (No Load)		
Slewing Pulse Rate	340 pps (No Load)		
Temperature Rise (Res. Method)	70K (0 pps)		
Mass	31g		
Ambient Temperature Range (Operating)	See Max. Operating Temperature		
Operating Humidity	RH85% (Non Dewdrop)		
Ambient Temperature Range (Storage)	-30°C ~ +80°C		

1. Resistance/inductance per winding and starting/slewing pulse rate are tested at the terminal voltage (5V  $\pm$  2%) and the environment is normal temp. (20°C  $\pm$  5°C), humidity range (65%  $\pm$  20%).

2. Dynamic thrust characteristics are value measured by using force gauge.

3. Test D.U. is AD1411 (bipolar constant voltage).

4. Above coil winding is one example from our standard configuration. Please contact an applications engineer if your application requires different drive conditions.

## **Dynamic Thrust Characteristics**





Direction of rotation viewed from shaft end

NO	0	
1	+	+
2	-	+
3		
4	+	-