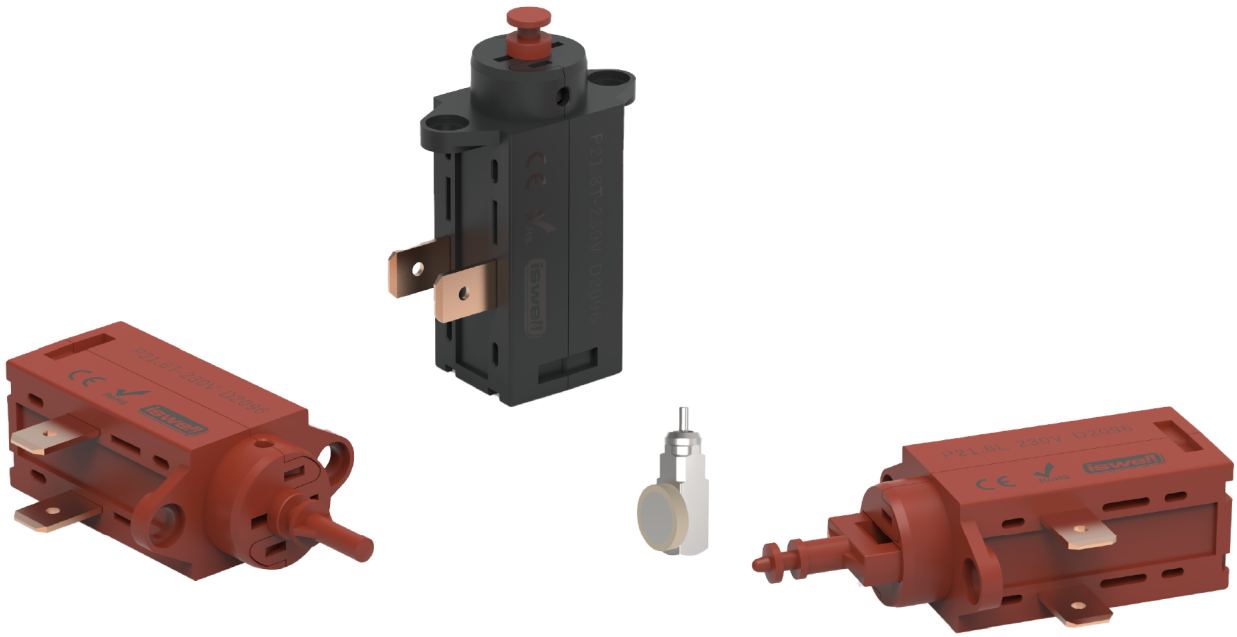


Thermo-actuator

Overview

A thermo-actuator is a small device that delivers a silent and smooth linear movement. It consists of a wax motor, flame-retardant housing, plastic ejector, return spring, and conductive plugs.
The PTC element on the wax motor starts heating up after energizing and drives the temperature-sensitive wax inside the wax motor to transform from solid to liquid phase. The volumetric expansion of the wax pushes the plastic ejector outwards to deliver a linear movement.
On the contrary, when the PTC element stops heating up, the temperature-sensitive wax cools down and transforms from liquid to solid phase. The volume of the wax gradually shrinks. With the assistance of the return spring, the plastic ejector returns to its initial position.
iSwell manufactures and provides OEM/ODM services for PUSH and PULL versions of thermos-actuators with strokes of 6mm and 8mm.

Features

- **Powerful and Reliable Output Force**
- **Compact Size and Easy Installation**
- **Low Power Consumption**
- **Completely Silent and Smooth Operation**
- **No Electromagnetic Interference**
- **Long Product Life Cycle**

Applications

Dishwasher Detergent Dispenser, Washing/Drying Machine Door Lock, Dishwasher Vent Fan Motor, Exhaust Fan with Louver, Steam Oven Exhaust Control ...

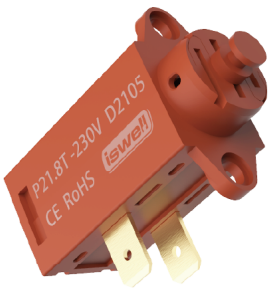
OEM/ODM Service

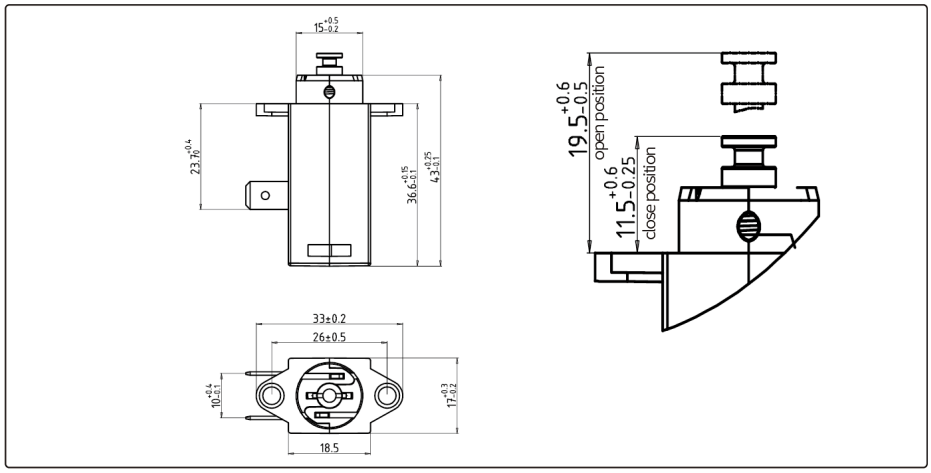
With deep engineering knowledge, strong R&D capability, and practical field experience, iSwell strives to be your reliable OEM/ODM partner. You can customize nearly everything about thermos-actuators, including external dimensions, working voltage, working curve, and pushing/pulling force.

iSwell Controls Technology (Yueqing) Co., Ltd.
Address: No. 261, Wei 17 Road, Economic Development Zone, 325600 Yueqing, Zhejiang Province, China
www.waxmotor.com
info@waxmotor.com

P21.8T Thermo-actuator

Dimensions





Specifications

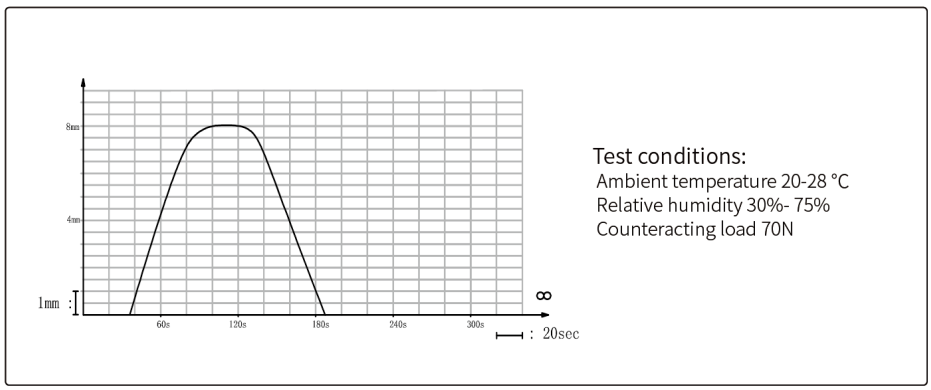
Working temperature	-10°C ～ +90°C
Working humidity	RH30% ～RH95%
Rated workload	Push load:70N/Pull load:0N
Output stroke	P21.8T：8mm
Plug size	6.3*0.8mm
Steady-state power	3w
Electrical Parameters	240/110V 50/60Hz 0.12A
Service life	>50000 cycles ** Service life test standard: ambient temperature 25 °C, load 10N, power on for 2 minutes, power off for 5 minutes, working stroke attenuation <10%

> The service life is mainly affected by :

1.Working load on the plastic ejector

2.Cumulative power-on time

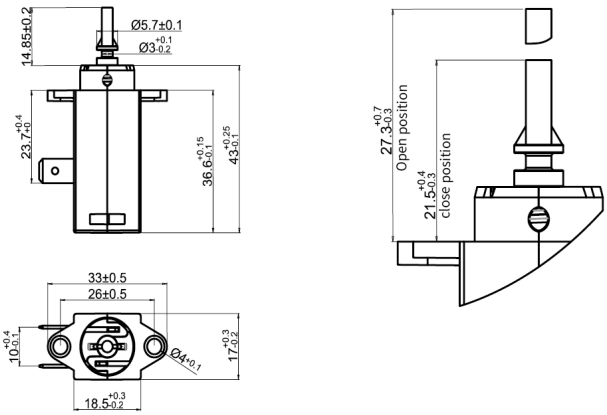
Working Curve



Test conditions:
Ambient temperature 20-28 °C
Relative humidity 30%- 75%
Counteracting load 70N

P21.6T Thermo-actuator

Dimensions



Specifications

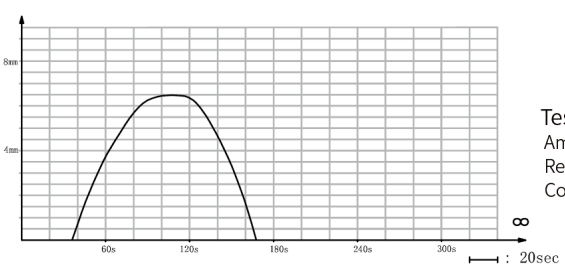
Working temperature	-10°C ～ +90°C
Working humidity	RH30%～RH95%
Rated workload	Push load:70N/Pull load:0N
Output stroke	P21.6T：6mm
Plug size	6.3*0.8mm
Steady-state power	3w
Electrical Parameters	240/110V 50/60Hz 0.12A
Service life	>50000 cycles ** Service life test standard: ambient temperature 25 °C, load 10N, power on for 2 minutes, power off for 5 minutes, working stroke attenuation <10%

> The service life is mainly affected by :

1.Working load on the plastic ejector

2.Cumulative power-on time

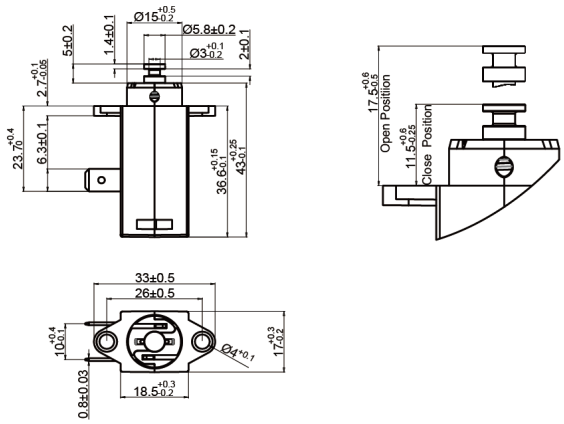
Working Curve



Test conditions:
Ambient temperature 20-28 °C
Relative humidity 30%- 75%
Counteracting load 70N

P21.6T-A Thermo-actuator

Dimensions



Specifications

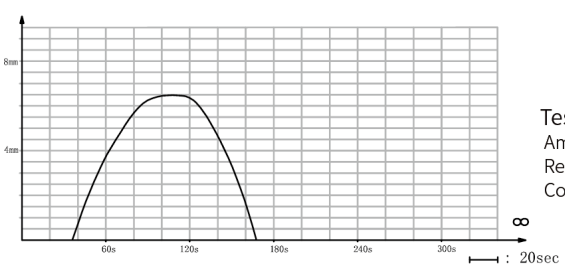
Working temperature	-10°C ～ +90°C
Working humidity	RH30% ～RH95%
Rated workload	Push load: 50N/Pull load :10N
Output stroke	P21.6T-A：6mm
Plug size	6.3*0.8mm
Steady-state power	3w
Electrical Parameters	240/110V 50/60Hz 0.12A
Service life	>50000 cycles ** Service life test standard: ambient temperature 25 °C, load 10N, power on for 2 minutes, power off for 5 minutes, working stroke attenuation <10%

> The service life is mainly affected by :

1.Working load on the plastic ejector

2.Cumulative power-on time

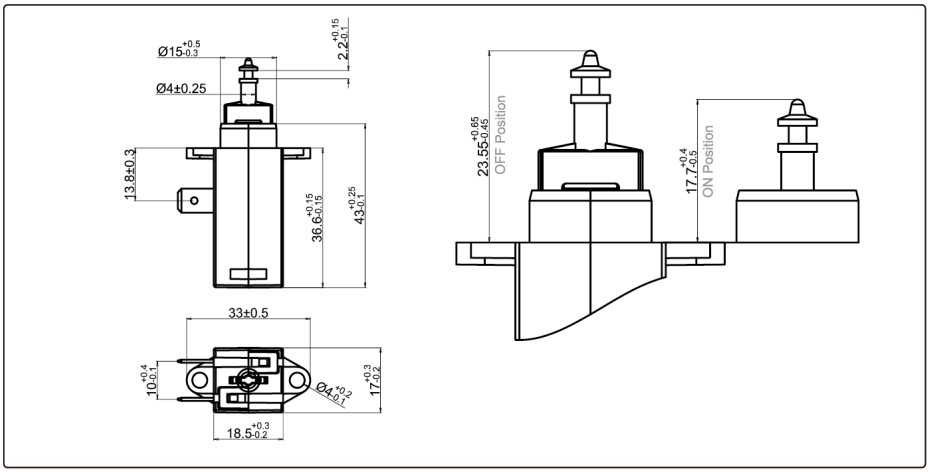
Working Curve



Test conditions:
Ambient temperature 20-28 °C
Relative humidity 30%- 75%
Counteracting load 70N

P21.6L Thermo-actuator

Dimensions



Specifications

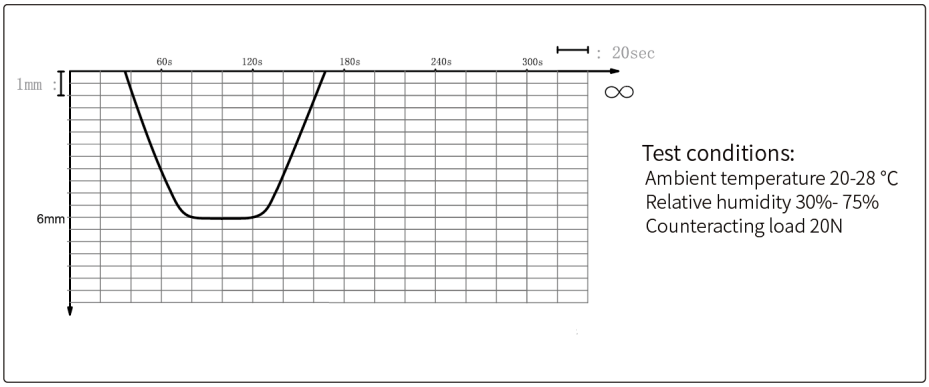
Working temperature	-10°C ～ +90°C
Working humidity	RH30% ～RH95%
Rated workload	Push load: 2N/Pull load :10N
Output stroke	P21.6L: 6mm
Plug size	6.3*0.8mm
Steady-state power	3w
Electrical Parameters	240/110V 50/60Hz 0.12A
Service life	>50000 cycles ** Service life test standard: ambient temperature 25 °C, load 10N, power on for 2 minutes, power off for 5 minutes, working stroke attenuation <10%

> The service life is mainly affected by :

1.Working load on the plastic ejector

2.Cumulative power-on time

Working Curve



Test conditions:
Ambient temperature 20-28 °C
Relative humidity 30%- 75%
Counteracting load 20N