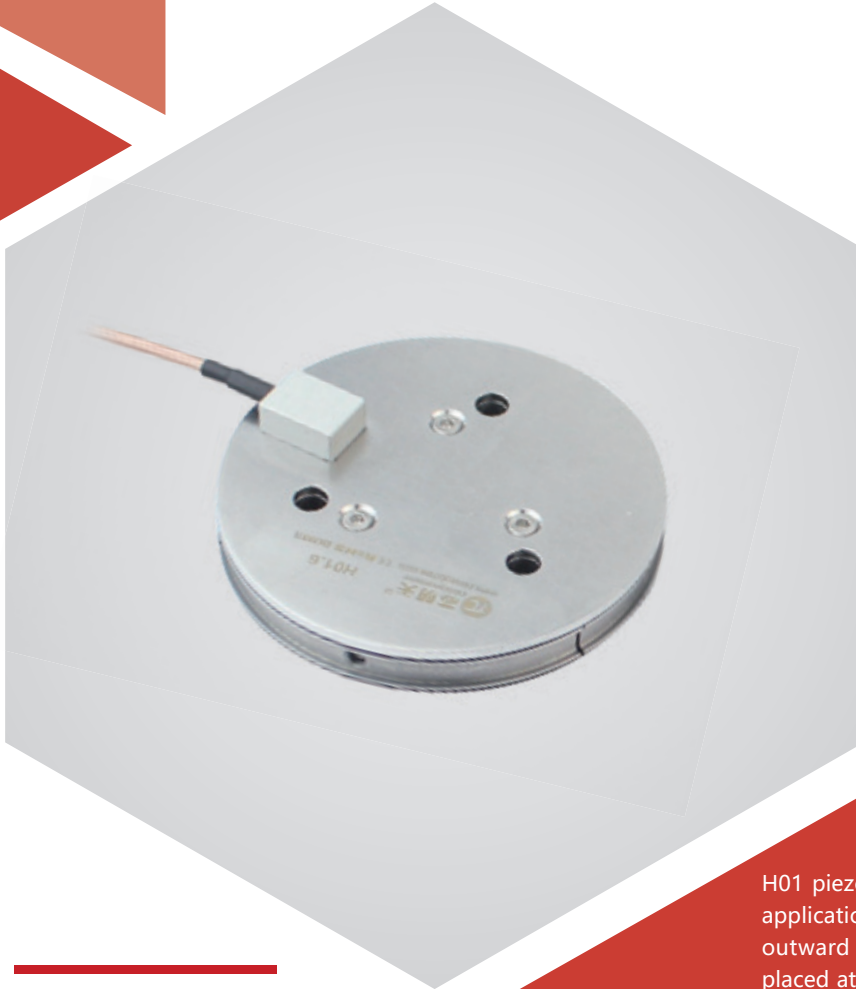


# Radial expansion | H01.6K

## Piezo Fiber Stretchers



### Characteristics >>

- Radial stroke is 7 $\mu$ m
- Resolution of the 0.5 nm
- Radial expansion
- Large displacement

### Applications >>

- Fiber stretching
- Fiber optic sensor
- Optical fiber intensity, optical wavelength adjustment

## Introduction

H01 piezo fiber stretcher is designed for fiber stretching applications. Its principle is to cause the hinge structure outward expansion by the action of three piezo stacks placed at 120 degrees thereby stretching the optical fiber wound in the outer diameter groove.



**Harbin Core Tomorrow Science & Technology Co., Ltd.**

Tel: +86-451-86268790 Email: [info@coremorrow.com](mailto:info@coremorrow.com)  
Fax: +86-451-86267847 Web: [www.coremorrow.com](http://www.coremorrow.com)

Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin  
Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai

## Technical Data >>

Type		H01.6K	Units
Motion		Radial expansion	
Travel range (0~120V)	Radial	5.6	$\mu\text{m}\pm 20\%$
	Fiber/circle	28	
Travel range (0~150V)	Radial	7	$\mu\text{m}\pm 20\%$ , Cal.
	Fiber/circle	35	
Resolution	Radial	0.5	nm $\pm 20\%$ , Cal.
	Fiber/circle	2.5	
Radial max. blocking force		250	N
Unloaded resonant frequency		9500	Hz $\pm 20\%$
Stiffness		30	N/ $\mu\text{m}\pm 20\%$
El. capacitance		1.2	$\mu\text{F}\pm 20\%$
Operating temperature <sup>[1]</sup>		-20~80	°C
Material		Titanium, al	
Mass		60	g $\pm 5\%$
Size		Ø55×8	mm
Cable length <sup>[2]</sup>		1.5	m $\pm 10\text{mm}$
Sensor/voltage connector <sup>[2]</sup>		-	

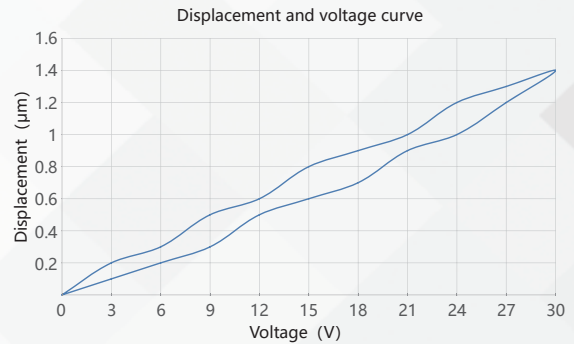
Note: Max driving voltage -20~150V, recommended voltage 0~120V for long-term and high-reliable operation. Technical data is measured by CoreMorrow E00/E01 series piezo controller.

[1] Custom ultralow temperature and ultrahigh vacuum versions are available.

[2] Custom cable length and connector is available.

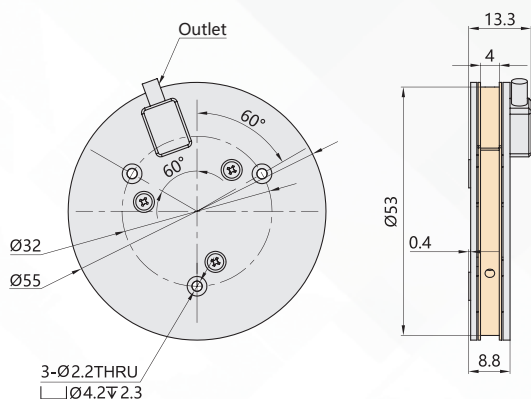
Note: The parallelism of the moving platform is about 20 $\mu\text{m}$ , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

## Curves >>



Disclaimer: The data here are typical, only for reference. Some variations will occur for different batch.

## Drawing >>



## Recommended Controllers >>



**E01.C1**  
 LCD, membrane button, up to 625mA  
 RS-232/RS-422/USB interface  
 Software secondary development



**E53.C**  
 Small size, 60mA  
 RS-232/RS-422/USB interface  
 Software secondary development



**Harbin Core Tomorrow Science & Technology Co., Ltd.**

Tel: +86-451-86268790

Email: info@coremorrow.com

Headquarters: Building I2, No.191 Xuefu Road, Nangang District, Harbin

Fax: +86-451-86267847

Web: www.coremorrow.com

Shanghai Office: Building 2, No.608 Shengxia Road, Pudong District, Shanghai