

Radial expansion | H01.80

Piezo Fiber Stretchers



Characteristics >>

- Radial stroke is 80μm
- Resolution of the 4nm
- 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

Fax: +86-451-86267847

Web: 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		H01.80	Units
Motion		Radial expansion	
Travel range (0~120V)	Radial	64	$\mu\text{m}\pm 20\%$
	Fiber/circle	336	
Travel range (0~150V)	Radial	80	$\mu\text{m}\pm 20\%$, Cal.
	Fiber/circle	420	
Resolution	Radial	4	nm $\pm 20\%$, Cal.
	Fiber/circle	20	
Radial max. blocking force		160	N
Unloaded resonant frequency		740	Hz $\pm 20\%$
Stiffness		3	N/ $\mu\text{m}\pm 20\%$
El. capacitance		5.4	$\mu\text{F}\pm 20\%$
Operating temperature ^[1]		-20~80	°C
Material		Steel	
Mass		220	g $\pm 5\%$
Size		Ø80×14	mm
Cable length ^[2]		1.5	m $\pm 10\text{mm}$

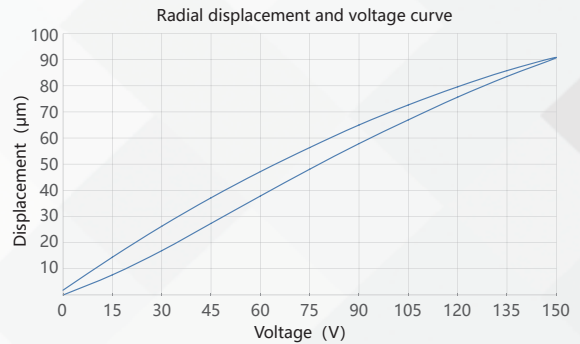
Note: Max driving voltage -20~150V, recommended voltage 0~120V for long-term and high-reliable operation. Technical data is measured by CoreMorrow E00/E01 series piezo controller.

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

[2] Custom cable length and connector is available.

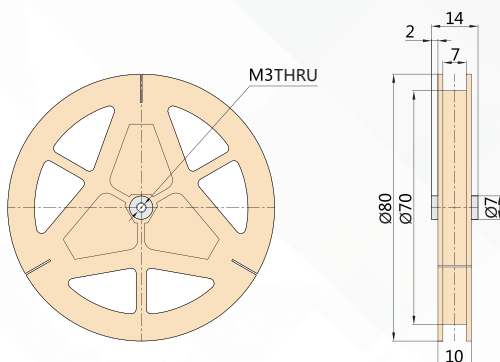
Note: The parallelism of the moving platform is about 20 μm , and the roughness is about 1.6 to 3.2. Please contact the sales engineer for confirmation before purchase.

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
 Fax: +86-451-86267847 Web: www.coremorrow.com

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