

# **PIFOC Objective Scanner with High Dynamics**

Nanometer Resolution for Heavy Objectives



## **P-725KHDS**

- Travel range 400 μm
- Resonant frequency 120 Hz, with 400 g load
- Step-and-settle 20 ms, with 400 g load
- QuickLock thread adapters up to M32

#### **PIFOC objective scanner**

1 axis. Frictionless flexure-guided design. Capacitive position sensor for maximum stability and linearity. QuickLock adapter for easy attachment.

#### PICMA® high-performance piezo drive

Piezo ceramic actuators with all-ceramic insulation. Longer lifetime, humidity resistance and operating temperatures to 80 °C.

#### **Application fields**

Microscopy, confocal microscopy, 3D imaging, screening, autofocus systems, surface analysis. Ideal for multiphoton microscopy due to high dynamics at heavy loads.

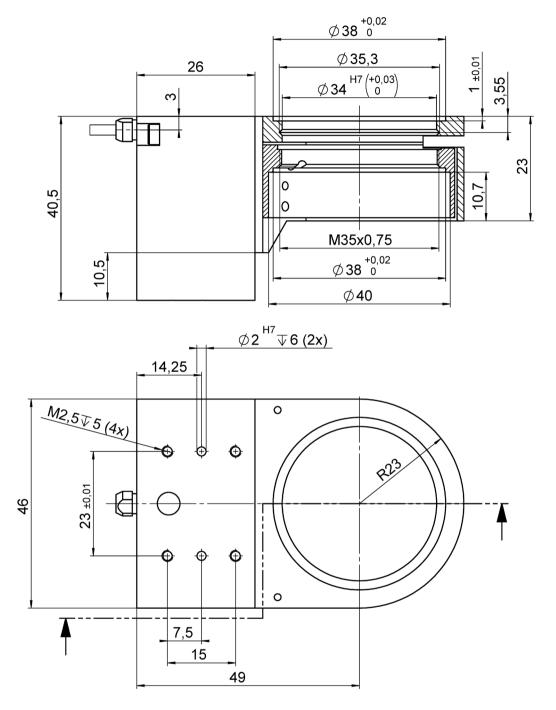


## Specifications

	P-725KHDS	Unit
Active axes	Z	
Motion and positioning		
Integrated sensor	Capacitive	
Closed-loop travel	400	μm
Closed-loop resolution	2.5	nm
Linearity error	0.06	%
Mechanical properties		
Stiffness	0.35	N/µm
Unloaded resonant frequency	340	Hz
Loaded resonant frequency, 100 g	230	Hz
Loaded resonant frequency, 400 g	120	Hz
Load capacity	10	Ν
Drive properties		
Piezo ceramic	PICMA <sup>®</sup> P-887	
Electrical capacitance	12.8	μF
Miscellaneous		
Operating temperature range	10 to 50	°C
Material	Aluminum	
Cable length	1.5	m
Connector	D-sub 7W2	
Recommended electronics	E-709.CHG	

Ask about customized versions.

## Drawings / Images



P-725KHDS, dimensions in mm. Note that the decimal places are separated by a comma in the drawings.

### **Ordering Information**

#### P-725KHDS

PIFOC piezo nanofocusing system with high stiffness, 400 µm, capacitive sensors, D-sub connector, for QuickLock adapter