

# PIFOC® Objective Scanner with High Dynamics

NANOMETER RESOLUTION FOR HEAVY OBJECTIVES



## P-725KHDS

- + Travel range 400  $\mu\text{m}$
- + 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

### Fields of application

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

## Specifications

Preliminary data	P-725KHDS	Unit
Active axes	Z	
<b>Motion and positioning</b>		
Integrated sensor	Capacitive	
Closed- loop travel	400	$\mu\text{m}$
Closed- loop resolution	2.5	nm
Linearity error in X, Y	0.06	%
<b>Mechanical properties</b>		
Stiffness	0.35	N/ $\mu\text{m}$
Unloaded resonant frequency in X	330	Hz
Loaded resonant frequency in X, 100 g	230	Hz
Loaded resonant frequency in X, 400 g	120	Hz
Load capacity	10	N
<b>Drive properties</b>		
Piezo ceramic	PICMA® P-887	
Electrical capacitance in X , Y	6.4	$\mu\text{F}$
<b>Miscellaneous</b>		
Operating temperature range	10 to 50	°C
Material	Aluminum	
Cable length	1.5	m
Connector	Sub- D Special 1 channel	
Recommended controller	E-709.CHG	

