

# Compact-XY-Stages

## KDT 105



### Technical Data



			KDT 105	
			-50-PM	-50-LM
Travel	[mm]		50 x 50	50 x 50
Repeatability*	[counts]		± 2	± 2
Relative deviation from straightness / flatness - over total length	[µm]		± 1	± 1
Max. speed*	[mm/s]		5	200*
Max. acceleration*	[m/s <sup>2</sup> ]		10	10*
Permissible loads	Fx	[N]	5	10
	Fy	[N]	5	10
	Fz	[N]	50	50
Clear aperture	[mm]		40	40
Weight	[kg]		1.6	1.6

Parameters refer to single axis measurement. \* depending on duty cycle and load  
For more information please see definitions on pages 102, 103.

### Specifications

■ **Linear motor -PM**  
Holding Force

■ **Piezo linear motor -LM**  
Holding force

■ **Incremental linear encoder**  
Resolution

■ **Piezo LEGS®**  
5 N

■ **HR-4**  
15 N; no magnetic fields

up to 5 nm (-PM)  
up to 50 nm (-LM)

■ **Travel limitation** fixed stops (-LM)

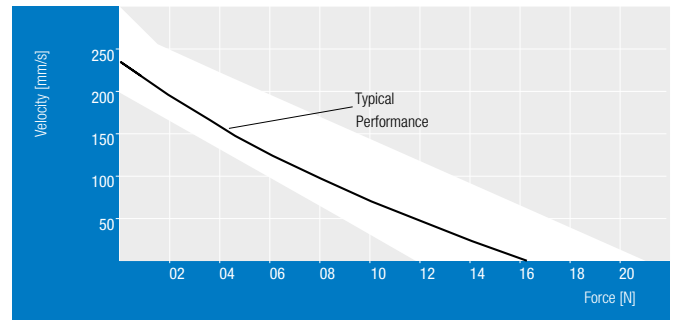
■ **Bearing** backlash-free preloaded cross roller bearings

■ **Material** low distortion aluminum alloy, black anodized

## Options

- Mechanical and electrical modifications on customers' request (e.g. travel, hole pattern)
- High vacuum preparation on request (other technical data)
- Cleanroom preparation on request
- Non-magnetic preparation on request (other technical data)

## Characteristics



■ For KDT 105-50-LM

## Dimensions

**KDT 105**; slide in middle position

