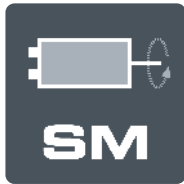


# Compact-XY-Stages

## KT 180



### Technical Data



		KT 180	
		-50-DC	-50-SM
Travel	[mm]	50 x 50	50 x 50
Accuracy	[ $\mu$ m]	5	5
Repeatability	[ $\mu$ m]	$\pm 2$ (optional 1)	$\pm 1$ (optional 2)
Relative deviation from straightness / flatness			
- over 10 mm	[ $\mu$ m]	$\pm 0.5$	$\pm 0.5$
- over total length	[ $\mu$ m]	$\pm 4$	$\pm 4$
Max. speed	[mm/s]	5	4
Max. acceleration	[mm/s <sup>2</sup> ]	100	40
Permissible loads	Fx [N]	30	30
	Fy [N]	30	30
	Fz [N]	50	50
Weight	[kg]	3.0	3.0

Parameters refer to single axis measurement. For more information please see definitions on p. 98,99.

### Specifications

#### ■ DC motor

Nominal voltage 24 V  
Gear 11.8 : 1

#### ■ Stepper motor

Resolution 1.894  $\mu$ m / full step  
Gear 22 : 1

#### ■ Recirculating precision ball screw

Screw diameter 5 mm  
Screw pitch 1 mm

#### ■ Rotary encoder (for DC motor)

Pulses per rotation 512

#### ■ Travel limitation

2 limit switches (Hall switches /5 ... 24 V)

#### ■ Cabling

15-pin SUB-D connector; one plug for both axis

#### ■ Bearing

backlash-free preloaded cross roller bearings

#### ■ Material

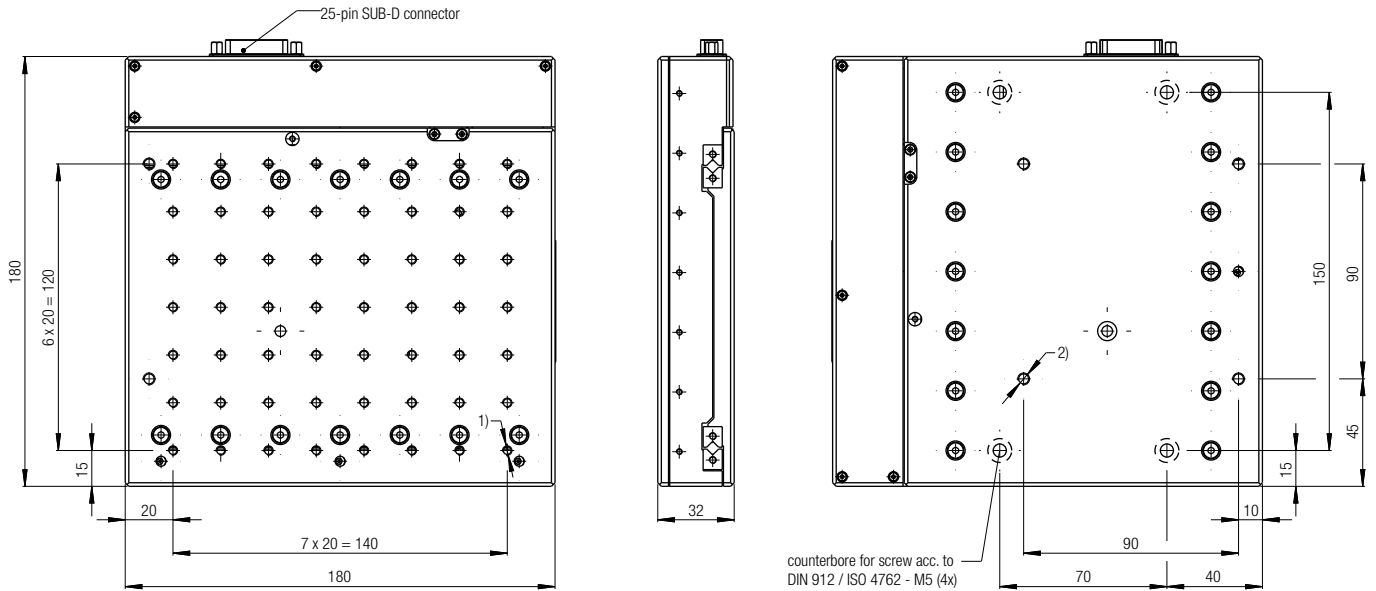
low distortion aluminum alloy, black anodized

## Options

- Different hole patterns

## Dimensions

**KT 180**; slide in middle position



- 1) M 4 ; depth 8 (40x) and depth 4 (16x)  
 2) M 5 ; depth 8 (2x) and depth 4 (2x)