

Positioning Accuracy

To better meet the requirements of customers using trapezoidal screws as positioning system we produce screws with lead accuracy according to the following table

Screw type	Lead Accuracy	Pitch error
KTS	100 (200 *)	+/- 0.100 mm every 300 mm of thread
KUE	100 (200 *)	+/- 0.100 mm every 300 mm of thread
KKA	50	+/- 0.050 mm every 300 mm of thread
KSR	500	+/- 0.500 mm every 300 mm of thread
KQX	200	+/- 0.200 mm every 300 mm of thread
KEQ	200	+/- 0.200 mm every 300 mm of thread
KRP	200	+/- 0.200 mm every 300 mm of thread
KRE	200	+/- 0.200 mm every 300 mm of thread
KAM	200	+/- 0.200 mm every 300 mm of thread
KAF	200	+/- 0.200 mm every 300 mm of thread

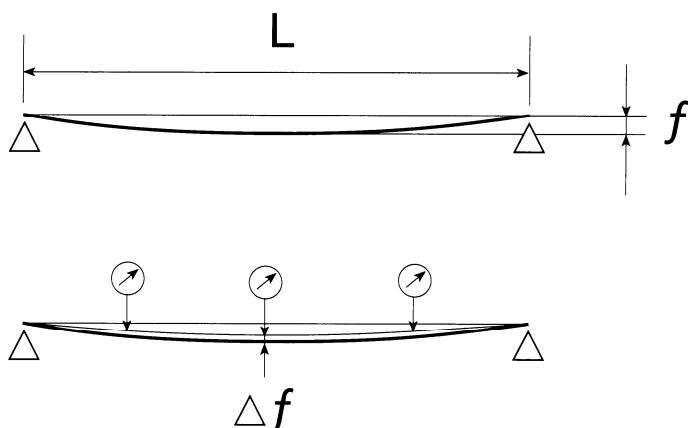
* Class 200 for diameters bigger than 80x10.

Straightness

CONTI screws are produced with controlled straightness.

Screw straightness is appraised by measuring the variation of the deflection “ f ” when the screw is supported at the ends on two constraints and slightly rotated.

For example, the screw KKA Tr 30 A (threading Tr 30 x 6 with 1 start) has straightness of 0.3 on 3000 mm. This means that a screw Tr 30x6 3000 mm long resting on two constraints at the ends and rotated slightly displays a camber variation “ Δf ” less than 0.3 mm at all points of the screw.



f = screw weight camber

for screws Tr 30x6 with $L = 3000$ mm

Δf maximum: 0.3 mm

Good screw straightness gives operation with load always centred on the axis, hence uniform distribution of surface contact pressure between screw and nut with resulting smooth running, and regular rotation and translation.