# 5-axis module clamping system 138



## **Technical information for** 5-axis module clamping system 138

Features	Description
Functionality	Functional slides are closed by the manual rotary movement of a threaded spindle with RH/LH threads and lock the clamping pin with frictional force.
Self-locking	After closing, the clamping pin remains in the tensioned clamping module, even if the external tensile force exceeds the retraction force.
Actuation torque	30 Nm
Repeat accuracy: with clamping pin Form A	< 0,005 mm
Short cone centring	Precise centring with radii to ease insertion
Milling application	The clamping modules are generally not approved for turning applications.
Temperature range	+5°C to +60°C

### **Retraction force in axial direction**

Retraction force by 30 Nm actuation torque = 30,000 N

#### **Axial load and retraction path**

Axial load F  $_{Axial}$  = 45,000 N (4.5 t)

Retraction travel = 0.7 mm

Tilt/torque single module

M tilt module	= 1,000 Nm (empirically determined)

 $M_{rotation module} = 200 Nm$ 

 $\mathsf{F}_{_{lateral\,force}}$ = 3,000 N [lateral force without relative movement]\*

# $M_{\rm Kipp}$ ${\bf M}_{\rm rotation\ module}$ F lateral force

\* The correct function of the clamping modules, in particular the repeat accuracy, is guaranteed up to a lateral force of 3,000 N. The failsafe and personal safety of the clamping modules is assured up to a critical lateral force of 20,000 N.





