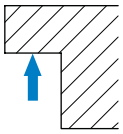
Mechanical Clamping Nut
MKD

Application area

- For all types of presses
- For various die sizes and clamping dimensions
- For clamping upper and lower dies
- For dies with U-recess
- For applications in the construction of jigs and fixtures

Mode of operation



- The clamping nut is pushed manually into the U-recess of the die and the T-slot on the machine.
- The clamping nut is then adjusted manually to the required clamping dimension.
- The required clamping force is created by turning the operating hexagon clockwise with a wrench. A planetary gear provides a multiple torque increase.
- Unclamping occurs by turning the operating hexagon counter-clockwise.

Description

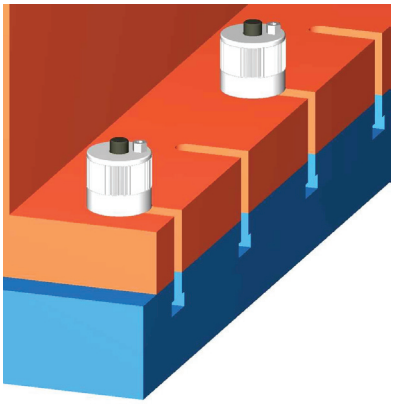
The transmission ratio provides multiple torque amplification which is then transmitted to the nut via the planetary wheels. The rotation of the nut causes the clamping stroke for the screwed-in T-bolt. The clamping force is safely applied, depending on the operating torque and the spring stiffness of the entire system.
The clamping and operating forces are supported by axial bearings and a pressure plate directly to the machine bed or slide or the fixture. This clamping mechanism guarantees self-locking in all clamping positions. The line MKD is designed with a threaded through bore and a lateral operating hexagon.

Advantages

- Infinitely variable adaptation to various die sizes
- Large clamping dimension tolerance
- Corrosion protected
- Highest level of clamping force with manual operation
- Mechanically self-locking
- Suitable for retrofitting
- Maintenance free
- Easy installation
- Versatile
- Max. operating temperature 200°C

Accessories

- T-bolts



Note

We recommend the use of a torque wrench in order to reliably guarantee the required clamping force and to protect the clamping mechanism from damage by excessively high torque. Under certain conditions, the use of a standard socket wrench, ring spanner of racketing end wrench may be acceptable for clamping. It must be ensured that the screwed-in T-bolts are tight, i.e. cannot turn with the clamp unit.

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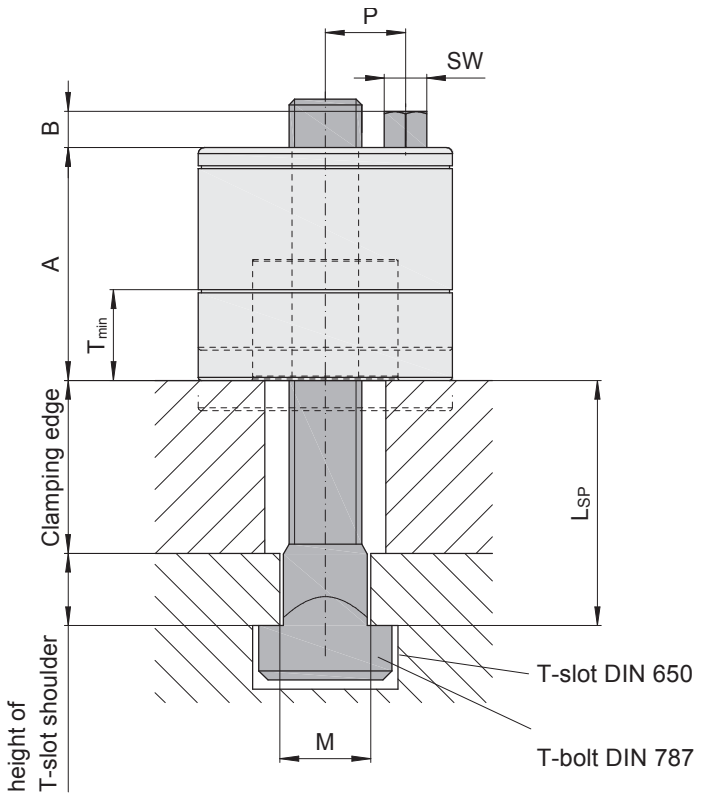

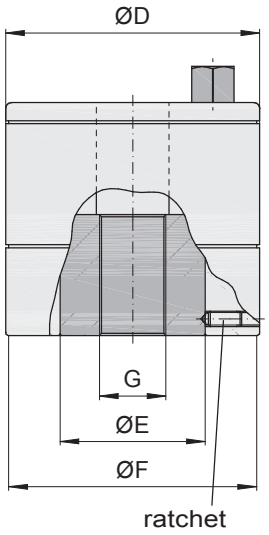

L_{SP} = Nominal clamping dimension [mm]
(Custom designs available on request)

Example order

without T-bolt	**MKD 120 - M 24**
incl. T-bolt	**MKD 120 - 28 - 100**
Type	
T-slot size according to DIN 650	
L_{SP}	

Type	Clamping force (kN)	nominal actuation torque (Nm)	max. loading force [1] (kN)	Weight approx. (kg)	M T-slot	L_{SP} min.	A	B	Ø D	Ø E	Ø F	G *	P	T min.	SW
MKD 60	60	30 35 40	70 120 120	1,6 1,6 1,6	14 18 22	14 18 22	58	11	74	40	72	M12 M16 M20	21,5	23	14
MKD 120	120	65 70 75 80	130 200 240 240	2,6 2,6 2,5 2,4	18 22 28 36	18 22 28 36	73,5	11	84	50	82	M16 M20 M24 M30	26,5	32	14
MKD 180	180	90 100 110 115 125	300 300 400 450 450	4,0 3,9 3,8 3,7 3,7	28 36 42 48 54	28 36 42 48 54	78	11	105	64	103	M24 M30 M36 M42 M48	35	37	14

* T-bolt strength classes up to M24 minimum Q 10.9, from M30 Q 8.8

1) Mechanical damage may occur at higher loads.