

Wedge Screw Grips Series KSP up to 250 kN

These manual operated wedge screw grips are well suited for tensile tests on metals, hard and reinforced plastics, (geo)-textiles, wood and other similar materials. The KSP series of manual operated mechanic grips combines the advantages of screw grip and wedge grip functions. They are operated via hand-wheel(s) and available with or without synchronization. The opening & closing (parallel) and holding force to the specimen is applied via hand-wheel(s) whereas the main gripping force is generated by the wedge action proportionally increasing to the applied tensile force.

The models with synchronisation are symmetrically closing through one hand operation.

The synchronization can be switched on/off allowing to test both symmetrical and asymmetrical specimens or for example bonded shear specimens.

In the non-synchronized versions, which are also suitable for clamping asymmetric specimens such as bonded shear specimens, the left and right are closed and opened separately.

The models without synchronisation allows also to grip asymmetrically specimens such as bonded specimens.



Features

- Available for tensile forces up to 250 kN
- Available with or without synchronization
- Available with side or front hand wheels
- Proportional increase of the clamping force (self-clamping) to the applied tensile force.
- Easy insertion of the specimens thanks to the open front design
- The design allows short specimens to be gripped
- Long clamping length that minimizes the surface pressure
- Quick and easy change between the different jaws without tools
- Low overall height and low mass
- Flat jaws with sample stops for quick and precise specimen loading
- A hexagonal adapter enables the specimens to be preloaded using a torque wrench
- Offers various coupling elements for compression or bending fixtures or smaller grips.
- Suitable for strain rate control tests according to ISO 6892-1 and ASTM E8

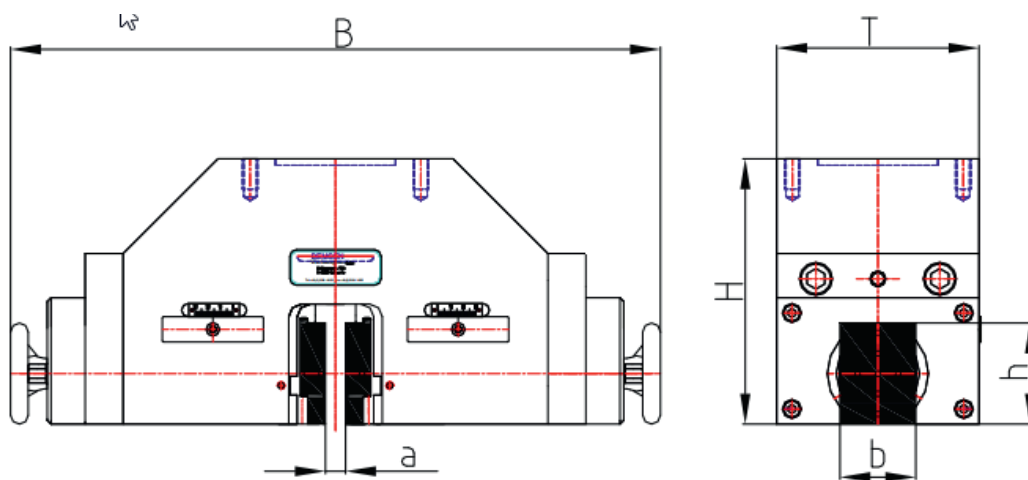
Use at low and high temperatures

These grips are also available for testing at low and high temperatures in combination with an environmental chamber.

Due to their design, these grips are easy to operate also inside the temperature chamber and thanks to their low mass quickly reach the test temperature.

Technical Data

Model	Test Force (kN)	Clamping Range a (mm)	Jaw h x b (mm)	Hand-Wheel	Synchronisation (on/off switchable)	Width A (mm)	Depth B (mm)	Height H (mm)	Weight kg
KSP-10-SCH	10	0-30	45x30	side	no	345	90	125	22
KSP-10-SY	10	0-30	45x30	side	yes	345	90	125	22
KSP-10-SY-HV	10	0-30	45x30	front	yes	335	175	90	22
KSP-20-SCH	20	0-30	45x30	side	no	350	100	135	26
KSP-20-SY	20	0-30	45x30	side	yes	350	100	135	26
KSP-20-SY-HV	20	0-30	45x30	front	yes	350	150	135	26
KSP-50-SCH	50	0-30	53x40	side	no	360	100	140	36
KSP-50-SY	50	0-30	53x40	side	yes	360	100	140	36
KSP-50-SY-HV	20	0-30	53x40	front	yes	360	190	100	28
KSP-100-SCH	100	0-30	63x50	side	no	415	120	190	60
KSP-100-SY	100	0-30	63x50	side	yes	415	120	190	60
KSP-100-SY-HV	100	0-30	63x50	front	yes	418	170	190	60
KSP-250-SCH	250	0-60	80x60	side	no	485	160	210	98
KSP-250-SY	250	0-60	80x60	side	yes	485	160	210	98
KSP-250-SY-HV	250	0-60	80x60	front	yes	500	250	210	98

Models with side hand-wheel**Models with front hand-wheels**