HydroBlock®

HSK63F HYDRO CHUCK

ADVANTAGES

- Reduced set up times
- Easy and quick tool change
- More clamping force compared to collet chucks
- Higher cutting precision and better finishing
- Less vibration
- Up to 3.000 tool changes without losing accuracy
- Longer tool lifetime up to 40% more
- Cost saving without the use of external equipment

FUNCTIONAL DESCRIPTION

The hydraulic expansion chucks perform tool clamping hydraulically by manually driving the internal piston through the clamping screw. To achieve maximum clamping force on the tool, the screw must be tightened all the way. **Tightening the screw activates the internal hydraulic mechanism, pushing the volume of oil inside and pressing it in measured amounts against the internal thin walls of the sealed chamber, which will expand causing the tool to clamp optimally and uniformly**. The benefits are therefore considerable, greatly reducing vibration and improving machining quality. Unscrewing the screw, on the other hand, causes a reduction in oil pressure on the thin walls of the sealed expansion chamber and thus the release of the tool.

SISTEMI has chosen to produce and place on the market two versions of the HSK63F hydraulic chuck: a more compact one (A=80 mm) and an extended one (A=100 mm), with nominal diameters in both millimeters and inches so as to satisfy every request of our customers. Such a wide range enables us to offer a guaranteed and extremely precise product.

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With a few simple action, the tool can be changed quickly and easily. Insert the tool into the hydraulic toolholder, with an Allen key (included) tighten the clamping screw to the end - chuck is now ready to be used! Your advantage: time savings, reduced set-up time, no extra investment in additional devices and machines.

TECHNICAL FEATURES

1. Clamping screw
The clamping screw is used to move the clamping piston.
Tighten the clamping screw to the end using an Allen key (included).

2. Clamping piston
The clamping piston compresses the hydraulic fluid into the oil system.

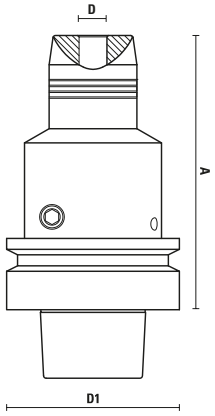
3. Expansion sleeve and oil system
The expansion sleeve expands itself against the tool shank. The tool shank is centered first and then clamped powerfully and evenly across the entire surface. Cutting edge wear is thus dramatically reduced and tool life is increased by up to 40%.

4. Taper part
The hollow taper shank is produced according to DIN 69893.

5. Threaded through hole (M5)

6. Cutter shank
The tool is centrically clamped to the center axis ensuring highest run-out and concentricy of ≤ 0,005 mm.
Cutting tool must have h6 tolerance.

7. Dirt grooves
Specially created to collect dirt (oil and grease residues) while keeping the rest of the surface dry.



Item	A	D1	D	Rotation
T518.095.N100	100	63	3/8"	Rh-Lh
T518.120.N100	100	63	12	Rh-Lh
T518.127.N100	100	63	1/2"	Rh-Lh
T518.160.N100	100	63	16	Rh-Lh
T518.195.N100	100	63	3/4"	Rh-Lh
T518.200.N100	100	63	20	Rh-Lh
T518.120.N	80	63	12	Rh-Lh
T518.160.N	80	63	16	Rh-Lh
T518.200.N	80	63	20	Rh-Lh
T518.250.N	85	63	25	Rh-Lh

REDUCTION SLEEVES FOR HYDRO CHUCKS - ITEM T521

These sleeves allow clamping of different diameters with just one hydro chuck.
Suitable for all common cutting tools with cylindrical shank.

Item	D	d
T521.120.030	12	3
T521.120.040	12	4
T521.120.050	12	5
T521.120.060	12	6
T521.120.080	12	8
T521.120.100	12	10

Item	D	d
T521.200.060	20	6
T521.200.080	20	8
T521.200.100	20	10
T521.200.120	20	12
T521.200.140	20	14
T521.200.160	20	16
T521.200.180	20	18

Item	D	d
T521.250.060	25	6
T521.250.080	25	8
T521.250.100	25	10
T521.250.120	25	12
T521.250.140	25	14
T521.250.160	25	16
T521.250.180	25	18
T521.250.200	25	20

View ONLINE

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