



Application

HSS gripper are intended for the clamping of hollow shank tooling according to DIN 69893 with central cooling lubricant supply. The HSSL version is used for dry machining.

Design Features

HSS and HSSL gripper are primarily designed of four sturdy clamping claws and wedge drives, one centrally arranged draw-bolt as well as one sliding bush, actuated by means of a generously dimensioned coil spring.

Before the clamping force builds up, the draw-bolt brings the clamping claws into a stretched position. As such, for clamping, they are only able to move axially, not radially. Therefore, the clamping claws, as well as the tools and internal spindle contour are not subject to friction wear as in other designs which have a negative effect on the service life of tool and spindle.

Once the axial gap between tool and spindle has been bridged, the clamping force F_S which amounts to several times the actuation force F_B , builds up.

The main force flow between tool and spindle closes by means of the clamping claws and the wedge drive, the elements of which are not supported by an angled but rather by the easy to manufacture, square internal spindle contour.

The defined axial play between tool and clamping claws bridges the length tolerances of tool and spindle without reducing surface overlapping required to build up the clamping force.

In release direction, the wedge tapers of the spring loaded sliding bush compress the clamping claws for tool removal. The generously dimensioned face of the draw-bolt has been provided for tool ejection.

HSS gripper have an internal thread for check valve mounting.

Both collet designs may be assembled to form a complete unit by means of a standard socket wrench. The assembly tool MW being part of the delivery scope is used to push back the spring loaded slide bush during assembly and disassembly of the gripper. Subsequently, time consuming assembly and setting work is not required.

Note: The connection parts must be designed such, that when in release position, the back stop is reached either in the hydraulic cylinder or by means of spring force in the spindle. When clamped without a tool, the collet is supported in depth 'g' by the spindle shoulder.

Item

Order Number



Item	Order Number
BERG Gripper HSS 38 for HSK-A 50	963.13419.000.4
BERG Gripper HSS 75 for HSK-A 100 w/ Assembly Tool	963.15142.000.1
BERG Gripper HSS 48 for HSK-A 63	963.15306.000.1

The BERG Spanntechnik HSS gripper has been replaced by the HK and HKR. Replacement grippers are available for existing machines.