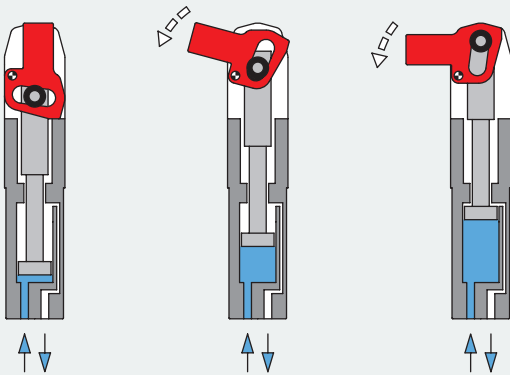
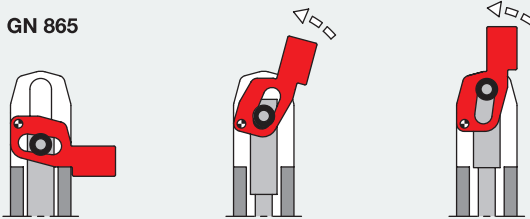


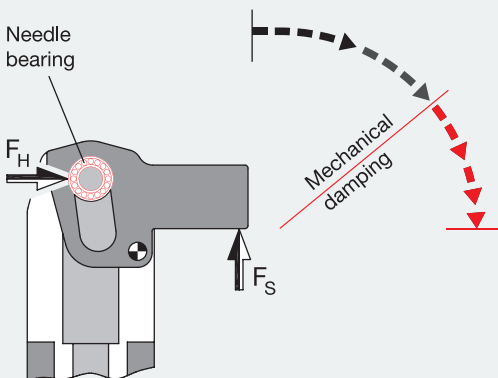
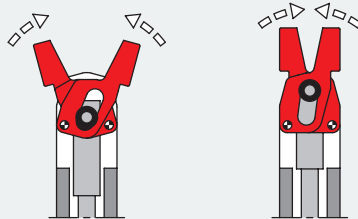
GN 864




GN 865



GN 866



These pneumatically operated Power clamps (patent ) are used for clamping, holding, gripping and positioning of work pieces in jigs and handling systems.

The salient points of these Power clamps are:

- the high clamping force
- the small dimensions
- the reduced air consumption
- the light weight

The working principle of these three types of clamps can be seen from the sketches on the left.

Pistons with diameters of 20, 32 and 40 mm yield a clamping force of 60 Nm up to 300 Nm, which leads to clamping forces being much above those of competitors' clamps.

The Power clamps have been designed and configured to achieve an extended life. Functional tests have proved that even after 20 million cycles they were still serviceable.

Further salient design points are:

- The movement path is designed in such a manner that at the end of the clamping stroke (Clamping force F_S), irreversible self locking (Holding force F_H) is achieved.
- The forward stroke sequence of the clamping arm is rapid but the ultimate clamping action is slow and as a result pneumatic damping is normally not required. Upon request, however, it can be supplied when big masses are moved.
- The clamping mechanism is fitted with needle bearings which give optimum clamping forces and reduced wear.
- The steel cylinder with the integrated clamping mechanism are in one unit. This leads to high stability for these small units with an extended range of applications. The placement of the air connection at the bottom end leads also to many other advantages.
- The clamping mechanism of GN 864 is also shrouded to avoid the ingress of dirt and other objects which could interfere with the proper functioning of the clamps (such as welding operations!).