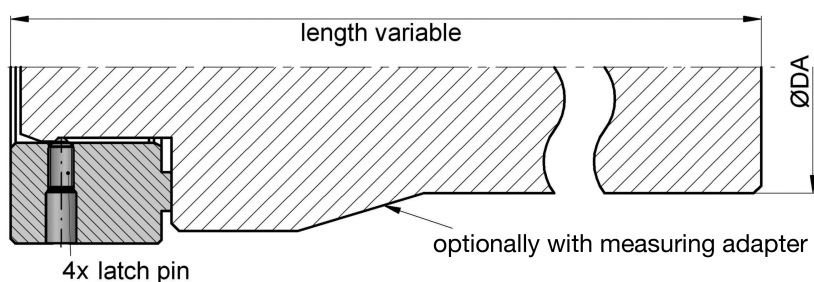
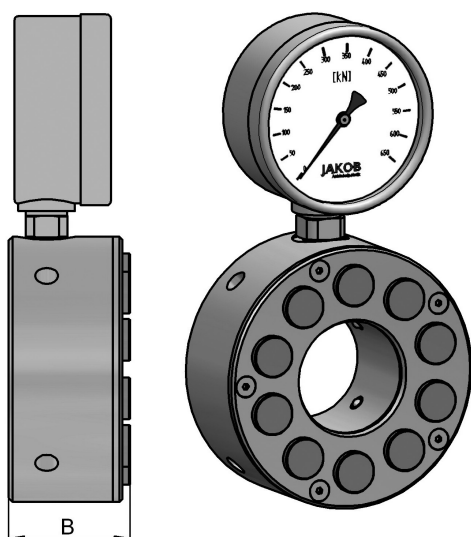
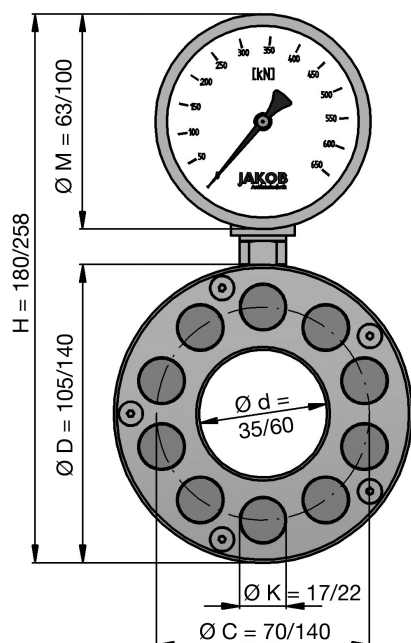


HMD - Hydraulic Force Measuring System

type-size	HMD 300-R	HMD 600-R
measuring range	0 - 300 kN	0 - 600 kN
scale graduation	10 kN	10 kN
accuracy [T=20°C]	1,6%	1,0%
mass	3,5 kg	6,2 kg
temperature range	-10°C - +60°C	
protection class	IP 65	
maximum piston stroke	1mm	



General:

Hydraulic load cells of the series HMD are robust indicators that calculate axial compressive forces with median accuracy. The force is transferred analogously over pressure pistons and the hydraulic fluid to a manometer with a kN-indicator scale. The measuring system is autarkic, so there is no need of external or additional energy. Therefore static and dynamic forces can be detected at numerous applications of the entirety of mechanical engineering in an easy and economically priced way.

System design - function:

The load cells are designed on the basis of the multi-piston-system. The compressive forces are transferred over several small pistons to the hydraulic fluid. In the series HMD-R which is in ring forms the pistons are arranged concentrically. The innovative principle allows the realization of load cells in every geometric configuration. The floating piston-overlay compensates construction and angle mistakes in a considerable dimension. High shearing forces should be avoided. Special piston seals guarantee an enduring and hermetic sealing of the fluid medium.

Notice:

During the measuring, ensure that all pistons are pending the measuring surface with the complete pressure load area.

To ensure a flawless measuring function, the manometer-connection and the lock or fill screw should not be removed. Load cells are useless for measuring strong pulsating forces or high accelerations.

The inner diameter of the ring load cells is primed for the insertion of measuring adapter pieces using four ball latch pins. Customized adapter types are available on request (see example of use).