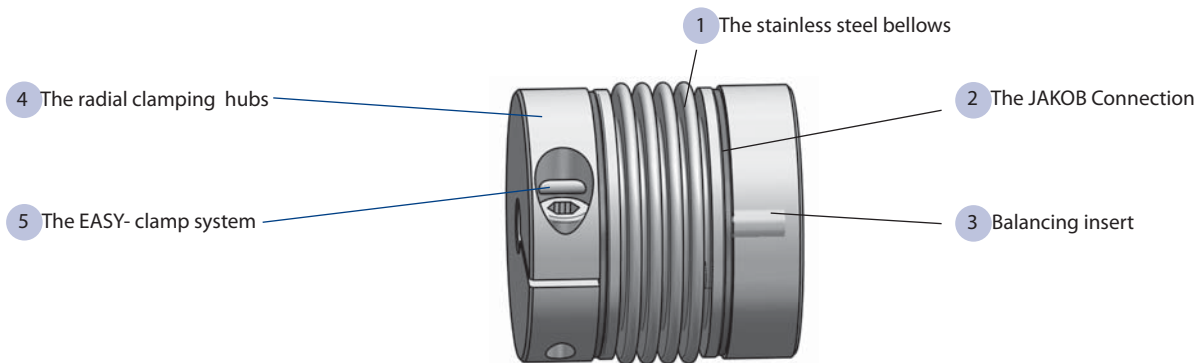


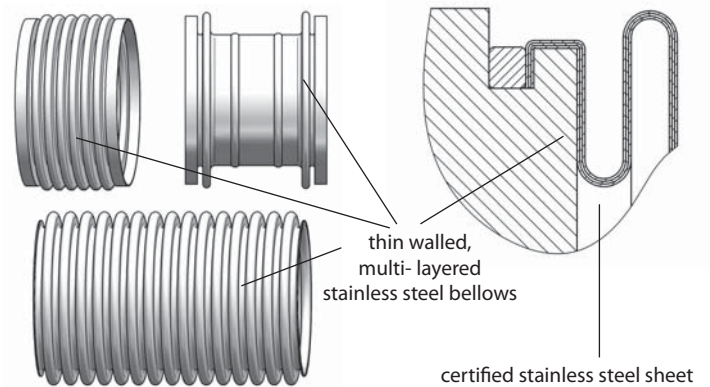
# Metal bellows- Servo couplings I Technical



## 1. The Stainless Steel Bellow

### Advantages:

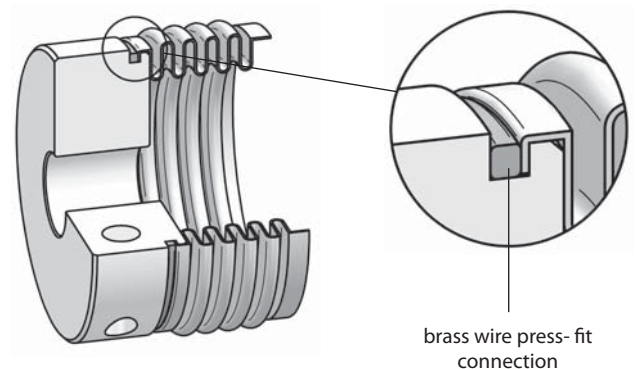
- ✓ absolute backlash free, conformal torque transmission
- ✓ extreme high torsional stiffness
- ✓ high flexibility for compensation of shaft displacement
- ✓ minimized moment of inertia
- ✓ Maintenance and wear-free up to 300°C
- ✓ High quality precision manufacture
- ✓ system modules with a multiplicity different bellow variants
- ✓ maximized JAKOB-KNOW-HOW at the specific bellow dimensioning
- ✓ 100 % final inspection



## 2. The Patented Connection Method

### Advantages:

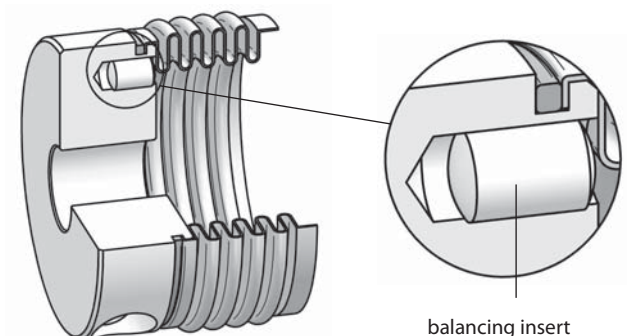
- ✓ the from JAKOB developed and 1974 patented beading press in method is the optimal, backlash free connection from aluminium hubs with multi layered stainless steel bellows, alternative for this the steel or stainless steel hubs are connected via plasma welding procedure for connection with metal bellows
- ✓ in contrast to glued connections are both connections methods at critical operating conditions (-50°C to 300°C chemicals) absolute boundless not fatigue critical and transmitted torque is sure induce in the hub



## 3. Balancing of the Hub

### Advantages:

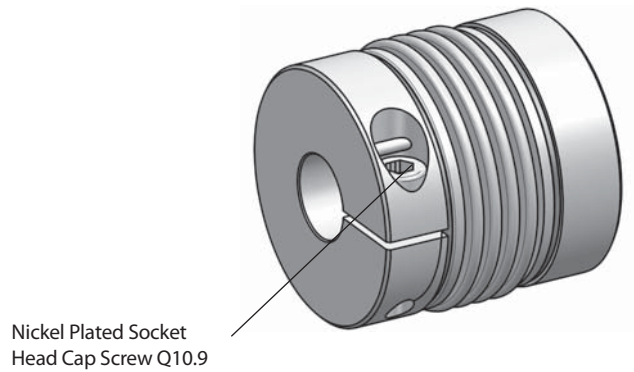
- ✓ the balancing bolt ensures a standard balancing quality of Q 16
- ✓ high speeds up to 20.000 rpm
- ✓ smooth running to prevent oscillations
- ✓ Can be specially balanced for balancing quality Q1 - Q2,5



# Metal bellows- Servo couplings I Technical

## 4. The Radial Clamping Hub

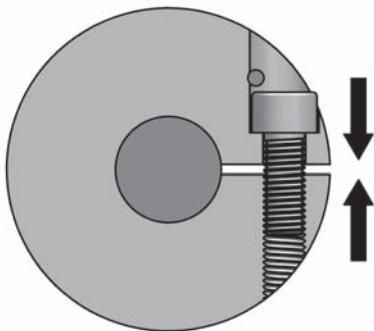
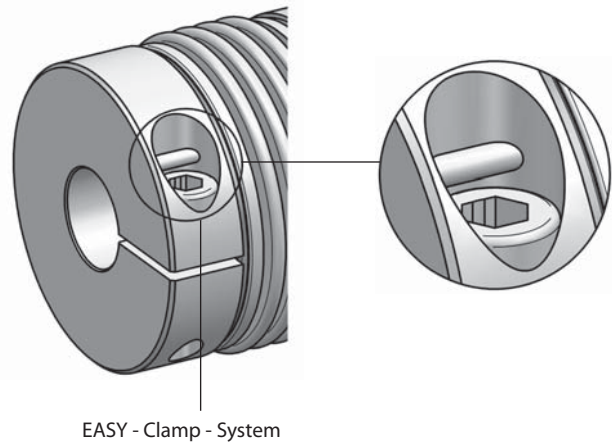
- /// existing clamping hub made of hightensil aluminium
- /// simple radial fitting of shaft-hub-connection
- /// secure guarantee of a backlash free, force-locked transfer of the declared value nominal torque (no keyway necessary)
- /// minimized moment of inertia, low mass, stainless design
- /// short delivery time by system modules principle
- /// hub bores (D1/D2 standard tolerance G6) customised possible
- /// at customer request completion with keyway



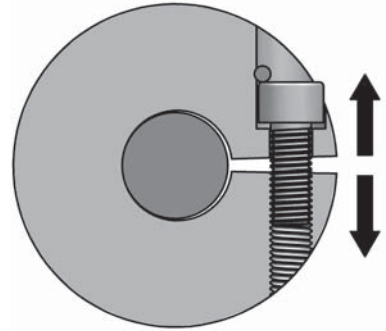
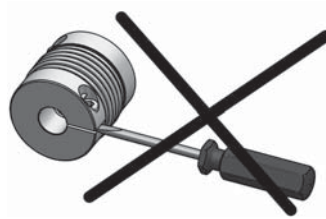
## 5. The EASY - Clamp System

### Advantages:

- /// revolution of coupling fitting
- /// no shortening or extension of bellows
- /// grave time saving, no reoperation
- /// blind assembly possible, hole in bell housing is enough
- /// widely compensation of tolerance demerit of shaft-hub-fit
- /// no additional tool necessary
- /// no damage of hub bores and bellows at demounting of motor



The clamping hub is backlash free and positively with shaft tied.

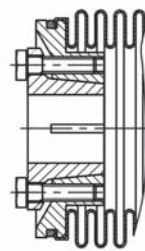


The clamping hub will be elastic expandet for assembly or disassembly.

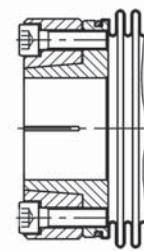
## 6. The conical connection

### Advantages:

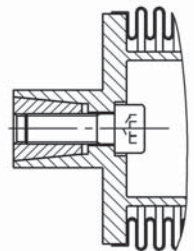
- /// Through force amplifying (wedge principal) a safe transmission of the torque although for smaller bore sizes (hub additionally sliced) is guaranteed
- /// Backlash- and maintenance- free, actuated by no keyway necessary
- /// Rotary symetric, good balancing for high speed able
- /// Expanding cone hub for axial mountening in a hollow shaft



conical clamping hub



conical ring hub



expanding cone hub