



Operating-/Assembly Instruction

KBK feedback attachment units

1. APPLICATIONS and USE

KBK feedback attachment units for various signal generators and encoders or for absolute measurements by means of resolvers and absolute signal generators for applications on numerical control systems, robot axes, handling devices, automation systems, machine-tools and wherever rotational movements have to be acquired for numerical control systems. The design concept of these feedback units is valid for applications in enclosed spaces.

2. DESIGN

KBK feedback attachment units function on the principle of precision spur gear feedback units. The pairs of gear wheels are permanently lubricated and are aligned so as to be backlash-free, as are also the integrated ball-bearings. As a rule the **KBK** feedback attachment units are housed inside an aluminium enclosure and can be used without restriction up to a rotational speed of 4000 revs.

3. TECHNICAL SPECIFICATIONS

The feedback unit brochure comprises technical specifications and descriptions for diverse types of feedback units, including specifications for the shaft loads. For versions with a free cable output terminal or plug connection, reference is made to the connexion layout in the form of a pinout on a separate data sheet which is enclosed with the consignment.

4. MOUNTING

As a rule **KBK** feedback attachment units are secured by means of claw clamps. The claw clamps engage with the synchro groove at the front end of the feedback unit. In exceptional cases fixture can also be effected by means of threaded borings on the front face. In the process it must be observed that a subsequent zero point setting of the feedback unit can no longer be effected or must be specifically taken into consideration. Connexion of the feedback unit's shafts with the spindle or pivot must be effected via torsionally stiff couplings. The torsional stiffness of the coupling must be afforded special attention in the case of highly sensitive, dynamic systems.

In the case of systems which are sensitive to vibrations, e.g. on presses, special attention must be paid to the mounting of the feedback units. Under certain circumstances the claw clamps have to be replaced by all-round groove-rings.

5. DEMOUNTING

When demounting feedback units take care that the shaft bearing is not damaged. If replacement of resolvers or shaft encoders is carried out by customers, absolute backlash-free mounting of the encoders must be ensured. As a rule it is recommended that replacement of encoders be carried out exclusively by **KBK**.

6. MAINTENANCE

KBK feedback attachment units are maintenance-free. In the case of applications at higher rotational speeds than 4000 revs the lubrication must be given special consideration. The minimum serviceable life of the ball-bearings used is approx. 30.000 hours.

Further details on the operation and use of feedback units are obtainable from **KBK**.

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Right reserved to make changes with respect to mounting and further developments.