PRECISE TRANSMISSION OF ROTARY MOVEMENTS

Measuring gearboxes are used wherever rotational movements have to be transmitted or reduced highly accurate. Measuring gears by KBK Antriebstechnik are equipped with particularly precise gear wheels that allow an extremely high transmission accuracy.

Originally, the measuring gears were designed for NC-tooling machines, equipment or robots. However, they are also suitable for rotating towers, antennas or cranes. Here the gearboxes engage with the sprockets and exactly record the current position of the process.

The measuring gearboxes were developed by Merz Antriebstechnik, which was acquired by KBK at the beginning of 2019. With an outer diameter from 65 mm to 180 mm, these gearboxes are predestinated for applications with small installation place. KBK offers the model ranges VGA and VGB. Whereas the measuring gearboxes of series VGA enable the direct attachment of a rotary encoder by a sprocket, the rotary encoder of VGB is flexibly connected with the gearbox by a mounting bell and a coupling. The main field of application for these measuring gearboxes are applications where rotation angles have to be recorded and measured precisely, e.g. in sprockets. In this case, the measuring gearboxes convert any angle into exact one rotation in a purely mechanical way. On version VGA, the rotary encoder cannot be separated from the gearbox anymore upon attachment because it is inseparably combined with the gearbox.

KBK designs both versions according to the transmission or reduction required by the customer, either transmission to the fast mode or reduction to the slow mode. The gearboxes and connection components are integrated into existing housings, to allow a standardized and cost-effective construction as far as possible. The backlash-free and sealed gearboxes (IP44) are also available in stainless steel.