Media release

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More to configure – Motor, gearhead and encoder tailored to your needs.
The maxon X drives family of configurable products is growing.

Like all motors in the DCX series, these brushed DC motors feature high power density and low vibration. In addition to the technical highlights, the program's appeal lies in the configuration options. Motors, gearheads and encoders may be selected and ordered online. After only 11 working days, even complex drive systems are ready to be shipped. Detailed product data can be viewed online immediately, and 3D data for the configuration is available for downloading. Discover more at dcx.maxonmotor.com.

The center of the maxon motor is the unique ironless winding, system maxon. This motor concept has unique advantages, including low electromagnetic interference and a complete lack of magnetic cogging torque. The efficiency is unrivaled by other motor systems.

The maxon X drives family is being expanded to include two additional motor sizes: 16 mm and 32 mm. The new 16 mm DCX 16 S is available with precious metal and graphite brushes and can be combined with the new GPX 16 planetary gearhead in the customary modular system. Combinations with ENX encoders round off the modular system for demanding control tasks. The new DCX 32 L is also available with graphite brushes and can be combined with the GPX 32. This 32 mm diameter DC motor is a powerhouse with excellent parameters that can easily hold up to the competition. The high thermal resistance helps it achieve higher continuous power.

Three more versions are also being added to the GPX gearhead family. The GPX 16 and GPX 32 gearheads are available with diameters matching those of the motors, in 1-stage and 2-stage versions. The planetary gearheads have scaled gear stages. That means the geometry has been optimized for the load in each stage. With the compact design and the welded connections at the motors, the length may be kept to an absolute minimum.

The GP 16 A planetary gearhead, manufactured by maxon, has been part of the company's product program for many years, with great success. On the GPX 16, it was possible to install larger ball bearings. This increases the maximum permissible radial load by several factors. The maximum permitted input speed was also significantly increased to 14,000 rpm.

The GPX 32 planetary gearhead features higher input speeds of up to 7,000 rpm and higher continuous torques of up to 2.9 Nm. The previous values were 6,000 rpm and 2.25 Nm.

The 22 mm planetary gearhead is now also available as a low-backlash version, the GPX 22 LZ. In total, there are now four different gearhead versions available: standard, ceramic, reduced noise level and reduced backlash.
Figure 1: The maxon X drives family consists of motors and planetary gearheads with a diameter of 10 to 35 mm, as well as encoders. Configure online at: dcx.maxonmotor.com.