

## IDX Drive

maxon IDX drives stand out for their high torque density. The compact EC-i motor technology (BLDC) combined with an EPOS4 positioning controller yields extremely high continuous torques and high power density. Its compact size makes the IDX more efficient than current solutions on the market. The unit's high-quality design is complemented with an IP65-protected housing.

The integrated temperature sensors on the winding and in the positioning controller are evaluated directly in the drive and enable optimal utilization of the operating range. The IDX drives are designed to be commanded and controlled as a slave node in a CANopen network. The fully integrate into the maxon EPOS4 environment and possess outstanding position control and speed control capabilities. Latest technology, such as field-oriented control (FOC), acceleration/velocity feed forward in combination with highest control cycle rates and a broad range of other functionalities allow sophisticated, ease-of-use motion or speed control. The IDX drives are available in two sizes, different lengths and various winding versions. They deliver up to 3 Nm of continuous torque that allow full adaption to suit specific needs.

The IDX drives come with an optionally available holding break which blocks the rotor while the drive is in switched off state.

### Product features

- Maximum power density
- IP 65 protected housing
- Configuration and Communication via CANopen (CiA 301, 402, 305) or USB
- CANopen profile position- (PPM), profile velocity- (PVM) and homing mode
- Position and velocity control with feed forward
- Field-oriented Control (FOC)
- Velocity observer
- Touch Probe and Position Compare
- Control of holding brake
- Windows-based graphical user interface "EPOS Studio" for configuration, firmware download, auto-tuning, I/O configuration and data recording free of charge
- Libraries and programming examples for Windows DLL (32-/64-bit), Linux shared object library (X86 32-/64-bit, ARMv7 for Raspberry Pi and BeagleBone)
- Inputs: 4 digital; 2 analog (differential)
- Outputs: 2 digital
- Easy to use

### Applications

- Robotics
- Handling devices
- Equipment engineering
- Automation
- Special-purpose machinery engineering
- Or similar product

### Product family

- IDX56 S: 180/212 Watt, 450 mNm
- IDX56 M: 230/256 Watt, 516 mNm
- IDX56 L: 280/316 Watt, 795 mNm
- IDX70 S: 550/641 Watt, 1530 mNm
- IDX70 M: 650/773 Watt, 2441 mNm
- IDX70 L: 750/831 Watt, 3167 mNm

Nominal values at operating point and  $T_a = 25\text{ °C}$

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## Features

No features listed.