

## **Built-In Nutrunner**

### **HIGH POWER Compact Nutrunner KCX**

#### **Primary Features**

#### ■ **Small, Lightweight, Powerful**

The new built-in nutrunners from the KCX Series are ultra-compact and extremely lightweight. They were developed especially for applications where nutrunner space requirements and weight play a critical role. This is true for all applications where single or multi-channel nutrunner systems are used in very narrow work areas. Examples for this are robotic applications, e.g. the assembly of sunroofs or airbags.

Our new KCX nutrunners are, however, not only compact and lightweight; they are also very fast. With the use of a newly developed, high-dynamic motor, it is possible to increase nutrunner power, compared to previous generations, by up to 35%. This saves fastening time ... you save money.

#### ■ **Robust Design**

Compact nutrunners in the KCX series from AMT are designed for rugged industrial applications. Both motor and gearbox are configured for long-life operation. This robust design leads to an increase in lifetime and, as a result, a minimum in maintenance costs.

#### ■ **Integrated Data Chip**

Compact nutrunners in the KCX series also feature an integrated data chip that stores all relevant spindle data. This data can be automatically read on any AMT control, as soon as a new tool is connected to the control. Time consuming and tedious parameter definitions become a thing of the past. The data chip also stores the number of executed fastening cycles. This allows for the development of individualized service intervals, in line with preventive maintenance.

#### ■ **Safeguarding the Fastening Process**

All KCX compact nutrunners have reaction torque sensors, in addition to gathering rotation angle data from the resolver. As a result, fastening processes are performed with maximum precision and consistent quality. While recording the rotation angle, the control monitors whether or not the specified torque is actually being applied to the fastened assembly. In addition, the tool's current consumption, equivalent to the torque, is used as a redundant control variable in all AMT controls. By doing this, all requirements for safe, reliable, and high quality fastened assemblies are met.

#### ■ **Technical Data**

**Torque up to 48 Nm**  
**Speed up to 1481 rpm**

##### **General**

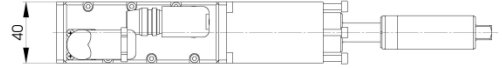
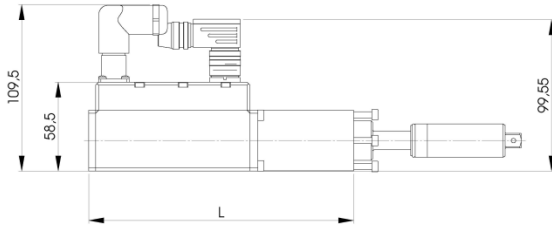
- Brushless drive motor with a linear Hall sensor for rotary positioning.
- Integrated data chip for
  - spindle identification
  - fastening cycle counter
- Reaction torque sensor
- Minimum speed: 0 rpm
- Angle accuracy: 3°, absolute
- Fastening torque tolerance: 7% Cm/Cmk ≥ 1,67



### Compact Nutrunner KCX

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#### Reaction Torque Sensor

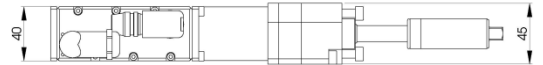
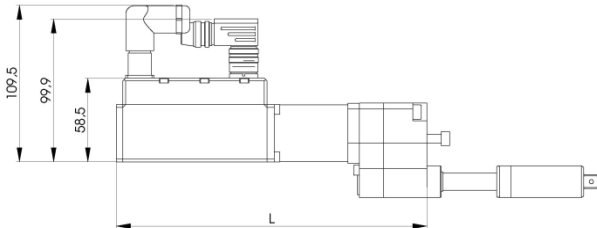


#### Centric Drive with Spring Travel

Max. torque capacity in Nm	Type	Max. idle speed rpm	Length mm	Spring Travel mm	Weight mm	Ident-No.
13	KCX1013ZF25	1481	174	25	1,00	7920723
25	KCX1025ZF25	772	174	25	1,00	7920724
48	KCX1048ZF25	381	194	25	1,10	7920725

#### Centric Drive with Square Drive

Max. torque capacity in Nm	Type	Max. idle speed rpm	Length mm	Drive	Weight mm	Ident-No.
13	KCX1013ZV38	1481	174	3/8"	0,95	7920729



#### Offset Drive with Spring Travel

Max. torque capacity in Nm	Type	Max. idle speed rpm	Length mm	Spring Travel mm	Weight mm	Ident-No.
13	KCX1013OF25	1388	218	25	1,35	7920726
25	KCX1025OF25	723	218	25	1,35	7920727
48	KCX1048OF25	357	257	25	1,60	7920728

#### Offset Drive with Square Drive

Max. torque capacity in Nm	Type	Max. idle speed rpm	Length mm	Drive	Weight mm	Ident-No.
13	KCX1013OV38	1388	218	3/8"	1,30	7920730