



## KDS Screwdrivers for Automation | Torque range 0.44 – 443 in-lb

The KDS CA screwdrivers are part of the K-DUCER series for automated applications. They are the ideal solution for assembly lines with robots or any other machine requiring Industry 4.0 standards. The torque range covers 0.44 - 443 in-lb.

### Excellent precision and accuracy

KDS transducerized screwdrivers are designed to ensure a high-quality torque and angle-controlled tightening experience. The built-in transducer and torque-angle feature guarantee maximum precision and accuracy.

### Perfect for automatic machines

KDS CA transducerized screwdrivers are very easy to install on robots, automatic machines and autofeeding systems.

KDS CA/FN models are supplied with flange and telescopic spindle specifically designed for demanding applications. Models with 90° angle heads for hard-to-reach screws are also available.

### Designed for Industry 4.0

The K-Ducer series screwdrivers guarantee total traceability, according to Industry 4.0 standards. Their built-in LED signals provide immediate feedback on each tightening process.

KDS screwdrivers work in combination with KDU control units to collect and analyse detailed assembly information. Integrating the K-Ducer in your smart factory will be effortless, thanks to the built-in Modbus TCP and Open Protocol connectivity.

The built-in transducer continuously reads torque and screw position and sends the collected data to the KDU control unit for analysis (more information on KDU features on page 12).

### Available housings



ALUMINIUM BODY (KDS-PL CA) – Specifically designed for automation. Easy to install on any machine or robot.



ALUMINIUM BODY WITH FLANGE MOUNT (KDS-PL CA/FN) – Ideal for automated high volume/high duty applications. Flange and telescopic spindle available together or separately.



ANGLE MODELS (KDS-PL CA/ANG) Models for automation, with angle head attached for hard-to-reach screws.



### Aluminium housing KDS Screwdrivers

Code	Model	Torque lbf-in	RPM min-max	Dimensions in	Weight lb	Bit Drive
165150	KDS-NT70CA	0.4 - 6.2	20 - 700	8.9 x 1	0.7	Hex 1/4"
165150/HM	KDS-NT70CA/HM	0.4 - 6.2	20 - 700	8.9 x 1	0.7	Half moon 0.16 in
165151	KDS-NT120CA	1.7 - 10.6	20 - 400	8.9 x 1	0.7	Hex 1/4"
165151/HM	KDS-NT120CA/HM	1.7 - 10.6	20 - 400	8.9 x 1	0.7	Half moon 0.16 in
175115	KDS-MT1.5CA	0.9 - 13.3	50 - 850	10 x 1.6	1.9	Hex 1/4"
135103	KDS-PL3CA	3.5 - 26.6	50 - 1800	9.8 x 1.6	1.9	Hex 1/4"
135106	KDS-PL6CA	4.42 - 53	50 - 850	9.8 x 1.6	1.9	Hex 1/4"
135110	KDS-PL10CA	7.1 - 88.5	50 - 600	9.8 x 1.6	1.9	Hex 1/4"
135115	KDS-PL15CA	4.42 - 133	50 - 320	9.8 x 1.6	1.9	Hex 1/4"
135120	KDS-PL20CA	17.7 - 177	10 - 210	11.7 x 1.9	2.9	Sq 3/8"
135135	KDS-PL35CA	26.6 - 310	10 - 140	12.5 x 2.2	3.9	Sq 3/8"
135150	KDS-PL50CA	44.3 - 443	10 - 90	12.7 x 2.2	3.9	Sq 1/2"

### Aluminium housing KDS Screwdrivers with flange mount

Code	Model	Torque lbf-in	RPM min-max	Dimensions in	Weight lb	Bit Drive
165150/FN	KDS-NT70CA/FN	0.4 - 6.2	20 - 700	12.4 x 1.6	2.4	Hex 1/4"
165151/FN	KDS-NT120CA/FN	1.7 - 10.6	20 - 430	12.4 x 1.6	2.4	Hex 1/4"
175115/FN	KDS-MT1.5CA/FN	0.9 - 13.3	50 - 850	12.4 x 1.6	2.4	Hex 1/4"
135103/FN-1/4	KDS-PL3CA/FN-1/4	3.5 - 26.6	50 - 1800	13.8 x 1.6	2.4	Hex 1/4"
135106/FN	KDS-PL6CA/FN	4.42 - 53	50 - 850	13.8 x 1.6	2.4	Sq 3/8"
135106/FN-1/4	KDS-PL6CA/FN-1/4	4.42 - 53	50 - 850	13.8 x 1.6	2.4	Hex 1/4"
135110/FN	KDS-PL10CA/FN	7.1 - 88.5	50 - 600	13.8 x 1.6	2.4	Sq 3/8"
135115/FN	KDS-PL15CA/FN	4.42 - 133	50 - 320	13.8 x 1.6	2.4	Sq 3/8"
135120/FN	KDS-PL20CA/FN	17.7 - 177	10 - 210	15.1 x 1.9	3.5	Sq 3/8"
135135/FN	KDS-PL35CA/FN	26.6 - 310	10 - 140	16.1 x 2.2	4.6	Sq 3/8"
135150/FN	KDS-PL50CA/FN	44.3 - 443	10 - 90	16.5 x 1.7	5.1	Sq 1/2"

### Aluminium housing KDS Screwdrivers with angle head

Code	Model	Torque lbf-in	RPM min-max	Dimensions in	Weight lb	Bit Drive
135103/A	KDS-PL3CA/ANG	3.5 - 26.6	50 - 1800	11 x 1.6	1.5	Hex 1/4"
135106/A	KDS-PL6CA/ANG	4.42 - 48.7	50 - 850	11 x 1.6	1.5	Hex 1/4"
135110/A	KDS-PL10CA/ANG	7.1 - 80	50 - 600	11 x 1.6	1.5	Hex 1/4"
135115/A	KDS-PL15CA/ANG	4.42 - 106	50 - 320	11 x 1.6	1.9	Hex 1/4"
135120/A	KDS-PL20CA/ANG	2 - 20	20 - 210	12.3 x 1.9	2.9	Sq 3/8"

2D and 3D drawings available on [kolver.com](http://kolver.com) // **IMPORTANT: Continuous use over 80% of torque range is not recommended.**

**KDS Screwdrivers work in combination with KDU series controllers. See page 12 for further information.**



## Fixture Mount Screwdrivers / Automation



### Current-controlled Screwdrivers for Automation | Torque range 0.18 – 443 lbf-in

Kolver's CA screwdrivers are designed for automated and fixtured applications. Whether you're working with a robot or adapting your assembly line to Industry 4.0 standards, we have the right solution for automation in all its forms.

#### Perfect for automatic machines

Our CA screwdrivers are supplied in an aluminium body for a quick and easy integration with automatic machines and screwfeeding systems. PLUTO and MITO tools in CA/FN version are equipped with a flange mount and reciprocating spindle for high volume/high duty applications.

#### Robotic applications

Our CA screwdrivers can be easily interfaced with robots. The controller connects to robots to determine screw speed, torque and time out, and sends a signal to the robot when the screw reaches the specified torque.

#### The Torque/Angle Models

Automation requires accurate torque controlling techniques. TA automated systems feature advanced monitoring strategies such as torque and rotation angle of the screw, for precise torque and angle control on all automated operations.

#### Plenty of options

PLUTO, MITO and NATO automated torque & angle screwdrivers cover a wide torque range of 0.18-443 lbf-in; choose the tool that best suits your application! You can set 8 independent programs either directly on control unit or remotely.

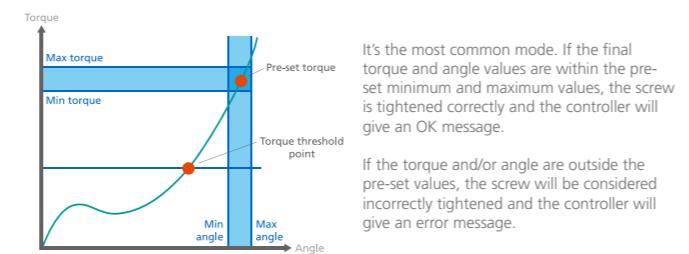
#### Industry 4.0

Interconnection, automatic control and continuous monitoring are fundamental aspects of Industry 4.0. Simply connect the screwdriver controller to your PLC, robot or machine through the proper connectors to manage input/output signals such as start, stop, error and more.

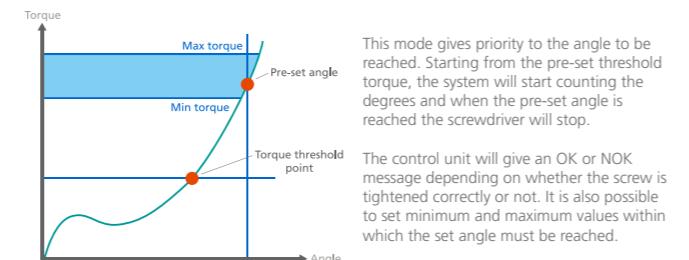
You can also get data reports of the full tightening procedure on advanced control units like EDU2AE/TOP/E, EDU2AE/TOP/TA and EDU2AE/TOP/NT/TA.

#### Torque and Angle Functionality

##### Torque Mode



##### Angle Mode



## Fixture Mount Screwdrivers / PLUTO, MITO & NATO Series

#### Aluminium housing Screwdrivers

Code	Model	Torque lbf-in	RPM min-max	Dimensions in	Weight lb	Bit Drive
130303	PLUTO3CA	4.4 - 22.1	370 - 1300	6.6 x 1.6	1.1	Hex 1/4"
133206	PLUTO6CA	8.8 - 53.1	200 - 850	6.6 x 1.6	1.1	Hex 1/4"
133211/N	PLUTO10CA/N	13.3 - 88.5	110 - 600	6.6 x 1.6	1.1	Hex 1/4"
133216/N	PLUTO15CA/N	17.7 - 133	60 - 320	6.6 x 1.6	1.1	Hex 1/4"
133221	PLUTO20CA	26.6 - 177	50 - 200	9.1 x 1.9	2.4	Sq 3/8"
133236	PLUTO35CA	26.6 - 310	40 - 140	9.7 x 2.2	3.3	Sq 3/8"
133250	PLUTO50CA	44.3 - 443	20 - 90	9.9 x 2.2	3.3	Sq 1/2"

#### Aluminium housing Screwdrivers with flange mount

Code	Model	Torque lbf-in	RPM min-max	Dimensions in	Weight lb	Bit Drive
130303/FN2	PLUTO3CA/FN2	4.4 - 22.1	370 - 1300	10.6 x 1.6	1.5	Sq 3/8"
130303/FN2/1-4	PLUTO3CA/FN2/1-4	4.4 - 22.1	370 - 1300	9.7 x 1.6	1.5	Hex 1/4"
133206/FN2	PLUTO6CA/FN2	8.8 - 53.1	200 - 850	10.6 x 1.6	1.5	Sq 3/8"
133206/FN2/1-4	PLUTO6CA/FN2/1-4	8.8 - 53.1	200 - 850	9.7 x 1.6	1.5	Hex 1/4"
133211/FN2	PLUTO10CA/FN2	13.3 - 88.5	110 - 600	10.6 x 1.6	1.5	Sq 3/8"
133216/FN2	PLUTO15CA/FN2	17.7 - 133	60 - 320	10.6 x 1.6	1.5	Sq 3/8"
133221/FN	PLUTO20CA/FN	26.6 - 177	50 - 200	12.7 x 1.9	2.9	Sq 3/8"
133236/FN	PLUTO35CA/FN	26.6 - 310	40 - 140	13.3 x 2.2	4.3	Sq 3/8"
133250/FN	PLUTO50CA/FN	44.3 - 443	20 - 90	13.8 x 2.2	4.3	Sq 1/2"

#### Aluminium housing TA Screwdrivers

Code	Model	Torque lbf-in	RPM min-max	Dimensions in	Weight lb	Bit Drive
163015/TA	NATO15CA/TA	0.18 - 2.4	100 - 700	5.9 x 2.2	0.4	Half moon 0.16 in
163050/TA	NATO50CA/TA	0.4 - 6.2	50 - 700	5.9 x 2.2	0.4	Hex 1/4"
170016/TA	MITO15CA/TA	3.5 - 13.3	450 - 850	7.6 x 2.9	0.8	Hex 1/4"
130303/TA	PLUTO3CA/TA	4.4 - 22.1	370 - 1300	6.6 x 1.6	1.1	Hex 1/4"
133206/TA	PLUTO6CA/TA	8.8 - 53.1	200 - 850	6.6 x 1.6	1.1	Hex 1/4"
133211/TA	PLUTO10CA/TA	13.3 - 88.5	110 - 600	6.6 x 1.6	1.1	Hex 1/4"
133216/TA	PLUTO15CA/TA	17.7 - 133	60 - 320	6.6 x 1.6	1.1	Hex 1/4"
133221/TA	PLUTO20CA/TA	26.6 - 177	50 - 200	9.1 x 1.9	1.5	Sq 3/8"
133236/TA	PLUTO35CA/TA	26.6 - 310	40 - 140	9.7 x 2.2	1.5	Sq 3/8"
133250/TA	PLUTO50CA/TA	44.3 - 443	20 - 90	9.9 x 2.2	1.5	Sq 1/2"

#### Aluminium housing TA Screwdrivers with flange mount

Code	Model	Torque lbf-in	RPM min-max	Dimensions in	Weight lb	Bit Drive
170016/FN/TA	MITO15CA/FN/TA	3.5 - 13.3	450 - 850	10.7 x 2.9	0.8	Hex 1/4"
130303/FN2/TA	PLUTO3CA/FN2/TA	4.4 - 22.1	370 - 1300	10.6 x 1.6	1.5	Sq 3/8"
130303/FN2/TA/1-4	PLUTO3CA/FN2/TA/1-4	4.4 - 22.1	370 - 1300	9.7 x 1.6	1.5	Hex 1/4"
133206/FN2/TA	PLUTO6CA/FN2/TA	8.8 - 53.1	200 - 850	10.6 x 1.6	1.5	Sq 3/8"
133206/FN2/TA/1-4	PLUTO6CA/FN2/TA/1-4	8.8 - 53.1	200 - 850	9.7 x 1.6	1.5	Hex 1/4"
133211/FN2/TA	PLUTO10CA/FN2/TA	13.3 - 88.5	110 - 600	10.6 x 1.6	1.5	Sq 3/8"
133216/FN2/TA	PLUTO15CA/FN2/TA	17.7 - 133	60 - 320	10.6 x 1.6	1.5	Sq 3/8"
133221/FN/TA	PLUTO20CA/FN/TA	26.6 - 177	50 - 200	12.7 x 1.9	2.3	Sq 3/8"
133236/FN/TA	PLUTO35CA/FN/TA	26.6 - 310	40 - 140	13.3 x 2.2	4.3	Sq 3/8"
133250/FN/TA	PLUTO50CA/FN/TA	44.3 - 443	20 - 90	13.8 x 2.2	4.3	Sq 1/2"

#### Control units

Code	Model	Torque & Angle	Single Program	Multitorque	Serial Port	USB Port	PC Software	Weight lb	Dimensions in
032000/HPRO	EDU2AE/HPRO	•	•	•	•	•	•	5.3	7.7 x 6.7 x 4.3
032000/TOP/E	EDU2AE/TOP/E	•	•	•	•	•	•	5.5	7.5 x 8.1 x 4.7
034000/HPRO/TA	EDU2AE/HPRO/TA	•	•	•	•	•	•	5.28	7.7 x 6.7 x 4.3
031000/TOP/NT/TA	EDU2AE/TOP/NT/TA	•	•	•	•	•	•	4.4	7.5 x 8.1 x 4.7
034000/TOP/TA	EDU2AE/TOP/TA	•	•	•	•	•	•	5.5	7.5 x 8.1 x 4.7



## Fixture Mount Clutch Screwdrivers / KBL Series



### KBL Screwdrivers for Automation | Torque range 0.4 – 26.7 in-lb

KBL CA Screwdrivers combine state-of-the-art brushless motors with an aluminium housing for quick and easy installation on robots and automatic machines.

#### Designed for automation

KBL CA tools are supplied in an aluminium body for a quick and easy integration with automatic machines and screw feeding systems. KBL tools in CA/FN version are equipped with a flange mount and reciprocating spindle for high-intensity applications.

#### Easy to install and operate

Each KBL CA screwdriver works in combination with an EDU1BL/SG control unit. Its electronic control circuit cuts the power supply to the screwdriver motor in response to the clutch action, as soon as the pre-set torque has been reached.

KBL's torque clutch only needs to be set once and guarantees accurate repeatability on any kind of joint.

#### Industry 4.0 with KBL

Transitioning to Industry 4.0 is easy with KBL CA screwdrivers. They can be easily connected to robots or automatic machines through their EDU1BL/SG controller's proper connectors to manage input/output signals such as start, stop, error and more.

#### No maintenance required

Automation requires tools capable of keeping high quality standards, even on heavy-duty applications. KBL Screwdrivers combine Swiss brushless motors with magnetic clutch switches for a real maintenance-free solution. The absence of maintenance operations guarantees high productive continuity.

#### For clean-room environments

KBL screwdrivers are perfect for automated applications requiring clean-room standards. No brushes means zero emissions of carbon dust or other pollutants into the working environment, which guarantees high-quality assembly on any joint.



## Fixture Mount Clutch Screwdrivers / KBL Series

### Aluminium housing KBL Screwdrivers

Code	Model	Torque in-lb	RPM min-max	Dimensions in	Weight lb	Bit Drive
190004/CA	KBL04FR/CA	0.4 - 3.5	700 - 1150	10.1 x 1.6	1.3	Hex 1/4"
190015/CA	KBL15FR/CA	3.5 - 13.3	700 - 1150	10.1 x 1.6	1.3	Hex 1/4"
190030/CA	KBL30FR/CA	6.2 - 26.5	700 - 1150	10.4 x 1.6	1.5	Hex 1/4"
190040/CA	KBL40FR/CA	8 - 35	400 - 700	10.4 x 1.6	1.5	Hex 1/4"

### Aluminium housing KBL Screwdrivers with flange mount

Code	Model	Torque in-lb	RPM min-max	Dimensions in	Weight lb	Bit Drive
190004/CA/FN	KBL04FR/CA/FN	0.4 - 3.5	700 - 1150	13 x 1.6	1.4	Hex 1/4"
190015/CA/FN	KBL15FR/CA/FN	3.5 - 13.3	700 - 1150	13 x 1.6	1.4	Hex 1/4"
190030/CA/FN	KBL30FR/CA/FN	6.2 - 26.5	700 - 1150	13.3 x 1.6	1.8	Hex 1/4"
190040/CA/FN	KBL40FR/CA/FN	8 - 35	400 - 700	13.3 x 1.6	1.8	Hex 1/4"

### Control unit for KBL CA Screwdrivers

Code	Model	Settable Speed	Ramp Option	I/O Signals	Serial Print	Screw Count	Min-Max Run Time	Weight lb	Dimensions in
003000/SG	EDU1BL/SG	•	•	•	with ACE	with ACE	with ACE	1.3	5.4 x 4.6 x 2.6

2D and 3D drawings available on [kolver.com](http://kolver.com)

**IMPORTANT:** Continuous use over 80% of torque range is not recommended.

#### Available Housings



ALUMINIUM BODY (KBL CA) – Specifically designed for automation. Easy to install on any machine or robot. Also available with autoreverse feature (KBL FR/AR), best used with RIV HD riveting heads.



ALUMINIUM BODY WITH FLANGE MOUNT (KBL CA/FN) – Ideal for automated high volume/high duty applications. Flange and telescopic spindle available together or separately.



Robotic application  
**SCAN TO WATCH**



ESD-safe housing