

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 Ib | Bit Drive | | |
|-------------------|---------------------------------|------------|---------------|------------------|-----------|-------------------|--|
| 165150 | KDS-NT70CA | 0.04 - 0.6 | 20 - 700 | 20 - 700 8.9 x 1 | | Hex 1/4" | |
| 165150/HM | KDS-NT70CA/HM | 0.04 - 0.6 | 20 - 700 | 8.9 x 1 | 0.7 | Half moon 0.16 in | |
| 165151 | KDS-NT120CA | 1.7 - 10.6 | 20 - 430 | 8.9 x 1 | 0.7 | Hex 1/4" | |
| 165151/HM | KDS-NT120CA/HM | 1.7 - 10.6 | 20 - 430 | 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 | | RPM min-max | Dimensions in | Weight lb | Bit Drive |
|---------------|---------------------------------|------------|-------------|---------------|-----------|-----------|
| 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" |
| 135110/FN-1/4 | KDS-PL10CA/FN-1/4 | 7.1 - 88.5 | 50 - 600 | 13.8 x 1.6 | 2.4 | Hex 1/4" |
| 135115/FN | KDS-PL15CA/FN | 4.42 - 133 | 50 - 320 | 13.8 x 1.6 | 2.4 | Sq 3/8" |
| 135115/FN-1/4 | KDS-PL15CA/FN-1/4 | 4.42 - 133 | 50 - 320 | 13.8 x 1.6 | 2.4 | Hex 1/4" |
| 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 Ibf-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" |

2D and 3D drawings available on 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.

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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.

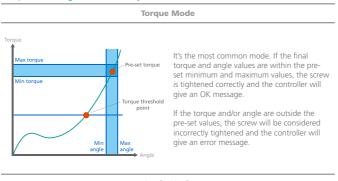
Industry 4.0

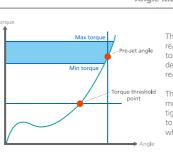
Interconnection, automatic control and continuous monitoring are fundamental aspects of Industry 4.0.

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





This mode gives priority to the angle to be reached. Starting from the pre-set threshold torque, the system will start counting the degrees and when the pre-set angle is reached the screwdriver will stop.

The control unit will give an OK or NOK message depending on whether the screw is tightened correctly or not. It is also possible to set minimum and maximum values within which the set angle must be reached.





Fixture Mount Screwdrivers / PLUTO, MITO and NATO Series

Aluminium housing Screwdrivers

| Code | Model | Torque Ibf-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 | 7.5 - 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 Ibf-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 | 7.5 - 53.1 | 200 - 850 | 10.6 x 1.6 | 1.5 | Sq 3/8" |
| 133206/FN2/1-4 | PLUTO6CA/FN2/1-4 | 7.5 - 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" |
| 133211/FN2/1-4 | PLUTO10CA/FN2/1-4 | 13.3 - 88.5 | 110 - 600 | 9.7 x 1.6 | 1.5 | Hex 1/4" |
| 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 | 7.5 - 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 Di | | 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 | 7.5 - 53.1 200 - 850 1 | 10.6 x 1.6 | 1.5 | Sq 3/8" | |
| 133206/FN2/TA/1-4 | PLUTO6CA/FN2/TA/1-4 | 7.5 - 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" |
| 133211/FN2/TA/1-4 | PLUTO10CA/FN2/TA/1-4 | 13.3 - 88.5 | 110 - 600 | 9.7 x 1.6 | 1.5 | Hex 1/4" |
| 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 | | | ٠ | | ٠ | ٠ | 5.5 | 7.5 x 8.1 x 4.7 |
| 034000/HPRO/TA | EDU2AE/HPRO/TA | • | • | | ٠ | | | 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 | • | | • | | ٠ | ٠ | 5.5 | 7.5 x 8.1 x 4.7 |

22 • • • • • 5.5 7.5 x 8.1 x 4.7 23







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 EDU 1BL/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 maintenancefree solution. The absence of maintenance operations guarantees high productive continuity.

For clean-room environments

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

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



SCAN TO WATCH



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 | | Screw Count | | 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

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

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