

KDS Hand-held Screwdrivers | Torque range 0.05 – 70 Nm

K-Ducer is the new A-class intelligent transducerized assembly system from Kolver, the electric tool pioneer since 1989. The system consists of an advanced state-of-the-art controller and a range of handheld and fixtured electric screwdrivers with torque up to 70 Nm.

Finest accuracy and precision

KDS transducerized electric tools cover all assembly line requirements for an accurate, high-quality torque and angle-controlled tightening experience.

A built-in compact transducer provides torque control with excellent repeatability.

Excellent ergonomics

KDS screwdrivers feature unsurpassed ergonomics, soft touch design, status LED, temperature protection combined with full traceability and error-proofing capabilities.

Available in straight, pistol and fixture configuration (see page 10 for further information).

Connectivity and Industry 4.0

KDS tools are the ideal solution for your Industry 4.0 production line. Integrating the K-Ducer in your smart factory will be effortless, thanks to the built-in Modbus TCP and Open Protocol connectivity.

Built-in LED lights provide immediate feedback on each tightening process, i.e. you'll be able to check at a glance whether the part is correctly tightened or not.

KDS screwdrivers work in combination with KDU control units to gather, analyse and process detailed assembly information.

Their built-in transducer continuously reads torque and position of the screw and sends the gathered data to the KDU controller for analysis.

Available Housings



INLINE (KDS-PL/ESD) – Inline versions available in lever start. ESD-safe. KDS inline screwdrivers can also be supplied with built-in LED lights (KDS-PL/LED/ESD), which light up the area underneath while in use.



PISTOL GRIP – Trigger start, pistol grip available with top connector (KDS-PL P/U/ESD) or bottom connector (KDS-PL P/ESD). ESD-safe.



ALUMINIUM HOUSING (KDS-PL) For torques over 20 Nm, with start and reverse buttons.



ANGLE MODELS (KDS-PL ANG/ESD) Inline models with angle head attached. ESD-safe.



Inline KDS Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
165050	KDS-NT70	0.05 - 0.5	20 - 700	223 x 27	0.3	Hex 1/4"
165050/HM	KDS-NT70/HM	0.05 - 0.5	20 - 700	223 x 27	0.3	Half moon 4 mm
175015/ESD	KDS-MT1.5/ESD	0.1 - 1.5	50 - 850	254 x 40	0.7	Hex 1/4"
135006/ESD	KDS-PL6/ESD	0.5 - 6	50 - 850	251 x 40	0.7	Hex 1/4"
135010/ESD	KDS-PL10/ESD	0.8 - 10	50 - 600	251 x 40	0.7	Hex 1/4"
135015/ESD	KDS-PL15/ESD	0.5 - 15	50 - 320	251 x 40	0.7	Hex 1/4"
135020	KDS-PL20	2 - 20	10 - 210	297 x 43	1.3	Sq 3/8"
135035	KDS-PL35	3 - 35	10 - 140	318 x 43	1.8	Sq 3/8"
135050	KDS-PL50	5 - 50	10 - 90	322 x 43	1.8	Sq 1/2"

Inline KDS Screwdrivers with front LED lights

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
175015/LED/ESD	KDS-MT1.5/LED/ESD	0.1 - 1.5	50 - 850	254 x 40	0.7	Hex 1/4"
135006/LED/ESD	KDS-PL6/LED/ESD	0.5 - 6	50 - 850	251 x 40	0.7	Hex 1/4"
135010/LED/ESD	KDS-PL10/LED/ESD	0.8 - 10	50 - 600	251 x 40	0.7	Hex 1/4"
135015/LED/ESD	KDS-PL15/LED/ESD	0.5 - 15	50 - 320	251 x 40	0.7	Hex 1/4"

Pistol grip KDS Screwdrivers with bottom connector

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
175016/ESD	KDS-MT1.5P/ESD	0.1 - 1.5	50 - 850	186 x 172 x 50	0.7	Hex 1/4"
135007/ESD	KDS-PL6P/ESD	0.5 - 6	50 - 850	186 x 170 x 50	0.7	Hex 1/4"
135011/ESD	KDS-PL10P/ESD	0.8 - 10	50 - 600	186 x 170 x 50	0.7	Hex 1/4"
135016/ESD	KDS-PL15P/ESD	0.5 - 15	50 - 320	186 x 170 x 50	0.7	Hex 1/4"

Pistol grip KDS Screwdrivers with top connector

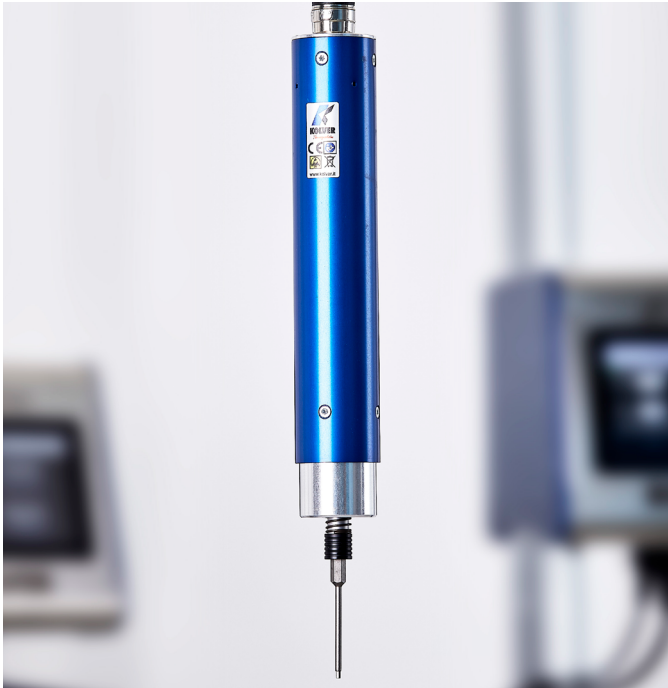
Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
175016/U/ESD	KDS-MT1.5P/U/ESD	0.1 - 1.5	50 - 850	186 x 172 x 50	0.7	Hex 1/4"
135007/U/ESD	KDS-PL6P/U/ESD	0.5 - 6	50 - 850	186 x 170 x 50	0.7	Hex 1/4"
135011/U/ESD	KDS-PL10P/U/ESD	0.8 - 10	50 - 600	186 x 170 x 50	0.7	Hex 1/4"
135016/U/ESD	KDS-PL15P/U/ESD	0.5 - 15	50 - 320	186 x 170 x 50	0.7	Hex 1/4"

Angle head KDS Screwdrivers

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
175015/A/ESD	KDS-MT1.5ANG/ESD	0.1 - 1.5	50 - 850	288 x 40	0.7	Hex 1/4"
135006/A/ESD	KDS-PL6/ANG/ESD	0.5 - 5.5	50 - 850	288 x 40	0.7	Hex 1/4"
135010/A/ESD	KDS-PL10/ANG/ESD	0.8 - 9	50 - 600	288 x 40	0.7	Hex 1/4"
135015/A/1-4/ESD	KDS-PL15/ANG/1-4/ESD	0.5 - 12	50 - 320	326 x 40	0.9	Hex 1/4"
135030/A	KDS-PL30ANG	3 - 30	10 - 140	429 x 43	2.1	Sq 3/8"
135045/A	KDS-PL45ANG	4 - 45	10 - 90	450 x 43	2.8	Sq 1/2"
135070/A	KDS-PL70ANG	7 - 70	10 - 50	453 x 43	2.8	Sq 1/2"

2D and 3D drawings available on kolver.it // **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.



KDS Screwdrivers for Automation | Torque range 0.05 – 50 Nm

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 0.1 - 50 Nm.

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.

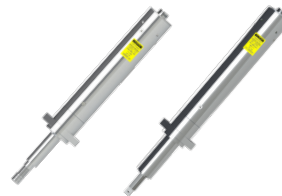
Designed for Industry 4.0

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).

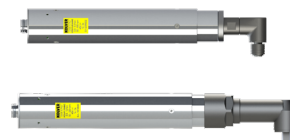
Available housings



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 Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
165150	KDS-NT70CA	0.05 - 0.5	20 - 700	221 x 27	0.3	Hex 1/4"
165150/HM	KDS-NT70CA/HM	0.05 - 0.5	20 - 700	221 x 27	0.3	Half moon 4 mm
175115	KDS-MT1.5CA	0.1 - 1.5	50 - 850	237 x 40	0.9	Hex 1/4"
135106	KDS-PL6CA	0.5 - 6	50 - 850	248 x 40	0.9	Hex 1/4"
135110	KDS-PL10CA	0.8 - 10	50 - 600	248 x 40	0.9	Hex 1/4"
135115	KDS-PL15CA	0.5 - 15	50 - 320	248 x 40	0.9	Hex 1/4"
135120	KDS-PL20CA	2 - 20	10 - 210	297 x 48	1.3	Sq 3/8"
135135	KDS-PL35CA	3 - 35	10 - 140	318 x 57	1.8	Sq 3/8"
135150	KDS-PL50CA	5 - 50	10 - 90	322 x 57	1.8	Sq 1/2"

Aluminium housing KDS Screwdrivers with flange mount

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
175115/FN	KDS-MT1.5CA/FN	0.1 - 1.5	50 - 850	316 x 40	1.1	Hex 1/4"
135106/FN	KDS-PL6CA/FN	0.5 - 6	50 - 850	350 x 40	1.1	Sq 3/8"
135110/FN	KDS-PL10CA/FN	0.8 - 10	50 - 600	350 x 40	1.1	Sq 3/8"
135115/FN	KDS-PL15CA/FN	0.5 - 15	50 - 320	350 x 40	1.1	Sq 3/8"
135120/FN	KDS-PL20CA/FN	2 - 20	10 - 210	383 x 48	1.6	Sq 3/8"
135135/FN	KDS-PL35CA/FN	3 - 35	10 - 140	409 x 57	2.1	Sq 3/8"
135150/FN	KDS-PL50CA/FN	5 - 50	10 - 90	420 x 43	2.3	Sq 1/2"

Aluminium housing KDS Screwdrivers with angle head

Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
135106/A	KDS-PL6CA/ANG	0.5 - 5.5	50 - 850	280 x 40	0.7	Hex 1/4"
135110/A	KDS-PL10CA/ANG	0.8 - 9	50 - 600	280 x 40	0.7	Hex 1/4"
135115/A	KDS-PL15CA/ANG	0.5 - 12	50 - 320	280 x 40	0.9	Hex 1/4"

2D and 3D drawings available on kolver.it // **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.



KDU Controllers | K-Ducer Power Units

The KDU Series of controllers give you full control of your fastening operation in an industry leading compact size.

Features

With features like touch screen color display, multiple programs and sequences, intuitive programming interface, torque and angle control and graphs output, the KDU-1A and KDU-NT units provide unmatched performance and value.

KDU controllers will operate all KDS series of tools.

Easy to use

Set-up and operation are really an easy task. Units may be programmed either through the touch screen or via our free K-Expand PC software, which also features data acquisition and statistical process control functionality.

Connectivity and Industry 4.0

Industry 4.0 – The Fourth Industrial Revolution – is driving the evolution of the assembly process. The digitalization of manufacturing and assembly means shifting the way we look at manufacturing in terms of production optimization and automation.

KDU-1A advanced controllers feature Modbus TCP and Open Protocol connectivity through a built-in ethernet port. Most other industrial communication protocols are also available with the support of external modules.

The more informed you are, the better decisions you can make. Having smart tools on your line means that you have specific tightening information fed into the production system – information concerning critical details of your components, materials and tightening process. This provides a valuable opportunity to increase efficiency and results in pro-active problem solving, alongside with considerable energy savings from efficiency improvements.

KDU control units

Code	Model	Description	Weight kg	Dimensions mm
035001/A	KDU-1A	For KDS (non-NT)	2.5	190 x 205 x 120
033001	KDU-NT	For KDS-NT	1.5	184 x 169 x 69

Optional supports

A table stand or wall mount are available for KDU units.

Wall mounts can be easily installed on any vertical surface and allow KDU controllers to tilt up/down and left/right – place your KDU unit anywhere and adjust its position to best suit your needs.

A table stand ensures quick access to cables when placing your KDU unit on a flat surface. It is the best option in case you'd like to keep your KDU controller right at hand.

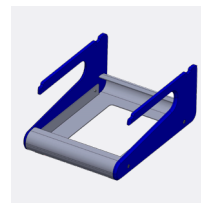
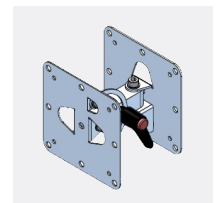


Table stand



Pivoting table stand



Wall bracket

Supports for KDU control units

Code	Model	Description
010400	Table stand	For table use
010401	Wall mount tilting bracket	For wall or column use
010402	Pivoting table stand	For table use, tiltable



Features	KDU-1A For any KDS screwdriver (except for KDS-NT)	KDU-NT For KDS-NT screwdrivers
5" Touch Screen	•	•
Number of programs	64	64
Sequences	8	8
Input NPN	20	4
Outputs	21	4
Torque graph	•	•
Bar code reading, linear and 2D	•	•
Torque & angle control	•	•
Multiple parameters	•	•
RS 232 (2)	•	•
Mini USB	•	•
USB	•	•
Modbus TCP	•	•
Open Protocol	•	•
Devicenet	+	+
CC-Link	+	+
Profibus	+	+
Ethernet / IP	+	+
Profinet	+	+
Profinet FO	+	+
Ethercat	+	+
CC-Link IE Field	+	+
Powerlink	+	+

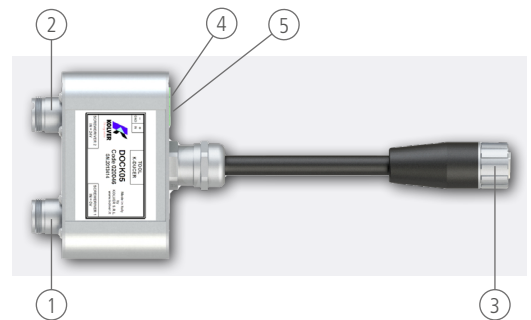
+ = Requires separate module to convert Modbus TCP to the desired protocol

KOLVER EXCLUSIVE

Kolver's unique DOCK05 (code 020046) makes it possible to use two KDS screwdrivers with just one KDU-1A control unit – this means you can cut costs dramatically by purchasing one control unit instead of two.

Whenever two KDS screwdrivers are meant to be used one at a time, a DOCK05 is the best solution to maximize productivity at the lowest possible cost.

- Unique product – the first ever double output connector for transducerized tools in the market.
- Cut K-Ducer purchase costs by 40%.
- Fully compatible with KDU-1A – get the most out of your K-Ducer system.
- Instant tool recognition.
- Set up to 32 different programs for each screwdriver.

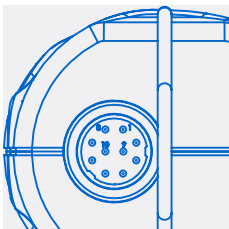


(1) KDS Screwdriver #1 (2) KDS Screwdriver #2 (3) KDU Control unit (4) Pin GND (5) Pin IN

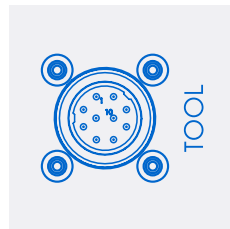


Cables | K-Ducer Screwdrivers and Control Units

Cables are required to complete any K-Ducer system, as they connect KDS screwdrivers to KDU control units. They're made of sturdy materials to guarantee exceptional resistance to wear and tear. Also, they're superquick to connect thanks to their one-click connector. Two different lengths (2.5 m and 5 m) are available to meet any production requirement.



Driver connector (KDS view)



Unit connector (KDU view)

Cables to connect KDS screwdrivers to KDU units

Code	Model	Description
250363	Cable 2.5 m for KDS-NT	M12 8pin 2.5 m
250363/S	Cable 5 m for KDS-NT	M12 8pin 5 m
250064	Cable 2.5 m	M16 10pin 2.5 m
250064/H	Cable 2.5 m, heavy duty	M16 10pin 2.5 m
250564	Cable 5 m	M16 10pin 5 m
250564/H	Cable 5 m, heavy duty	M16 10pin 5 m