KOLVER®: MORE QUALITY THAN YOU MAY EVER NEED

You've got an assembly job to do, and there are a lot of people counting on you to get it done right. At KOLVER®, we know what you are looking for. We deliver the most innovative and cost-effective electric fastening systems in the industry and that's why our tools have countless happy users and... pale imitators worldwide!

KOLVER® solutions represent the true answer to your assembly needs. ISO 9001 certified since 1998, Kolver's mission has always been to fulfill customers' expectations, delivering the right quality products at the right time, at the right price.

About 50% of the products in our catalogue have been launched or upgraded during the last 3 years. Clutch tools, current-control tools, transducerized tools: inline, pistol, angle and fixtured, along with controllers and software in an outstanding combination of ergonomics, performance, error proofing and durability.
Kolver® range helps you maximize your productivity and stay ahead of your competition.

SERIES	CLUTCH TOOLS	TORQUE & ANGLE CURRENT CONTROL	TORQUE & ANGLE TRANSDUCERIZED	TORQUE RANGE Nm	TORQUE RANGE in.lbs
FAB	•			0.05-1.8	0.44-15.9
RAF	•			0.7-5.0	6.2-44.25
KBL	•			0.04-4.0	0.35-35.4
ACC	•			0.2-4.5	1.77-39.8
NATO		•		0.01-0.5	0.09-4.4
MITO		•		0.2-1.5	1.8-13.3
PLUTO		•		0.5-75	4.4-664
KDS			•	0.05-70	0.44-620

THE EFFICIENCY OF SCREWDRIVERS WITH INTEGRATED TRANSDUCER

K-DUCER screwdrivers represent the most advanced evolution in KOLVER fastening systems, designed to ensure the highest level of precision and high repeatability in assembly processes. They are the ideal solution to optimize productivity by guaranteeing error-proof fastening, with full traceability of results.

K-DUCER systems are flexible and intelligent, providing clear and comprehensive feedback on every fastening operation thanks to real-time monitoring of torque and angle parameters. Fully designed and manufactured in Italy, they are certified for use in ESD (electrostatic discharge) protected environments, ensuring high-quality standards even in the most critical applications.

The KOLVER® solution swith transducer offers:

- Class-A fastening precision
- Real-time torque and angle control and monitoring
- Prevailing torque compensation
- Ergonomic design and lightweight construction
- Extensive programmability with up to 200 programs and 24 sequences
- Intuitive touch-screen interface with data and graph visualization
- Multiple communication ports for integration into production systems

Advanteges of KOLVER® screwdrivers with transducer:

- Maximum reliability and repeatability of the fastening process
- Complete traceability of fastening data
- Advanced error control
- Seamless integration into automated lines and robotic systems

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

The K-DUCER is our A-class intelligent transducerized assembly system. 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 torque transducer provides closed-loop 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 12 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 - 0.7	20 - 700	223 x 27	0.3	Hex 1/4"
165050/HM	KDS-NT70/HM	0.05 - 0.7	20 - 700	223 x 27	0.3	Half moon 4 mm
165120	KDS-NT120	0.2 - 1.2	20 - 400	223 x 27	0.3	Hex 1/4"
165120/HM	KDS-NT120/HM	0.2 - 1.2	20 - 400	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"
135003/ESD	KDS-PL3/ESD	0.4 - 3	50 - 1800	251 x 40	0.64	Hex 1/4"
135006/ESD	KDS-PL6/ESD	0.5 - 6	50 - 850	251 x 40	0.64	Hex 1/4"
135010/ESD	KDS-PL10/ESD	0.8 - 10	50 - 600	251 x 40	0.64	Hex 1/4"
135015/ESD	KDS-PL15/ESD	0.5 - 15	50 - 320	251 x 40	0.64	Hex 1/4"
135020S	KDS-PL20S	2 - 20	20 - 240	263 x 40	0.64	Hex 1/4"
135020	KDS-PL20	2 - 20	20 - 210	297 x 43	1.3	Sq 3/8"
135035	KDS-PL35	3 - 35	20 - 140	318 x 43	1.8	Sq 3/8"
135050	KDS-PL50	5 - 50	20 - 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"
135003/LED/ESD	KDS-PL3/LED/ESD	0.4 - 3	50 - 1800	251 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"
135004/ESD	KDS-PL3P/ESD	0.4 - 3	50 - 1800	186 x 170 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"
135020S/P	KDS-PL20S/P	2 - 20	20 - 240	200 x 170 x 50	0.7	Hex 1/4"

Pistol grip KDS Screwdrivers with top connector

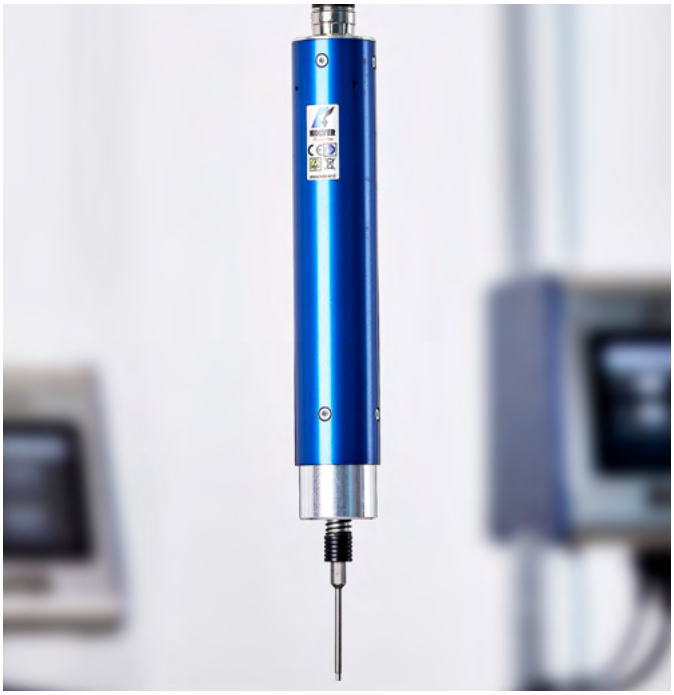
Code	Model	Torque Nm	RPM min-max	Dimensions mm	Weight kg	Bit Drive
175016/U/ESD	KDS-MT1.5P/U/ESD	0.1 - 1.5	50 - 850	186 x 172 x 50	0.7	Hex 1/4"
135004/U/ESD	KDS-PL3/U/ESD	0.4 - 3	50 - 1800	186 x 170 x 50	0.7	Hex 1/4"
135007/U/ESD	KDS-PL6P/U/ESD	0.5 - 6	50 - 850	186 x 170 x 50	0.7	Hex 1/4"
135011/U/ESD	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"
135020S/PU	KDS-PL20S/PU	2 - 20	20 - 240	200 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"
135003/A/ESD	KDS-PL3/ANG/ESD	0.4 - 3	50 - 1800	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/ESD	KDS-PL15/ANG/ESD	0.5 - 15	50 - 320	326 x 40	0.9	Sq 3/8"
135015/A/1-4/ESD	KDS-PL15/ANG/1-4/ESD	0.5 - 12	50 - 320	326 x 40	0.9	Hex 1/4"
135020S/ANG	KDS-PL20S/ANG	2 - 20	20 - 240	330 x 40	0.75	Sq 3/8"
135020/A	KDS-PL20/ANG	2 - 20	20 - 210	444 x 48	1.3	Sq 3/8"
135030/A	KDS-PL30ANG	3 - 30	20 - 140	446 x 48	2.1	Sq 3/8"
135045/A	KDS-PL45ANG	4 - 45	20 - 90	467 x 58	2.8	Sq 1/2"
135070/A	KDS-PL70ANG	7 - 70	10 - 50	470 x 58	2.8	Sq 1/2"

2D and 3D drawings available at kolver.com // IMPORTANT: Continuous use beyond 80% of the torque range is not recommended.

KDS screwdrivers work in combination with KDU series control units. For more information, see page 14.



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

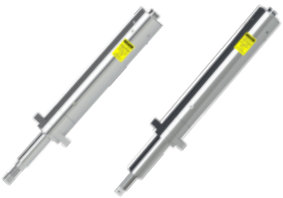
KDS CA transducerized screwdrivers are very easy to install on robots, automatic machines and autofeeding systems.
KDS CA/FN models are supplied with flange and telescopic spindle specifically designed for demanding applications. Models with 90° angle heads for hard-to-reach screws are also available.

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 - 0.7	20 - 700	221 x 27	0.3	Hex 1/4"
165150/HM	KDS-NT70CA/HM	0.05 - 0.7	20 - 700	221 x 27	0.3	Mezzaluna 4 mm
165151	KDS-NT120CA	0.2 - 1.2	20 - 400	221 x 27	0.3	Hex 1/4"
165151/HM	KDS-NT120CA/HM	0.2 - 1.2	20 - 400	221 x 27	0.3	Mezzaluna 4 mm
175115	KDS-MT1.5CA	0.1 - 1.5	50 - 850	237 x 40	0.9	Hex 1/4"
135103	KDS-PL3CA	0.4 - 3	50 - 1800	248 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"
135020S/CA	KDS-PL20SCA	2 - 20	50 -240	263 x 40	0.8	Hex 1/4"
135120	KDS-PL20CA	2 - 20	20 - 210	297 x 48	1.3	Sq 3/8"
135135	KDS-PL35CA	3 - 35	20 - 140	318 x 57	1.8	Sq 3/8"
135150	KDS-PL50CA	5 - 50	20 - 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
165150/FN	KDS-NT70CA/FN	0.05 - 0.7	20 - 700	316 x 40	1.1	Hex 1/4"
165151/FN	KDS-NT120CA/FN	0.2 - 1.2	20 - 400	316 x 40	1.1	Hex 1/4"
175115/FN	KDS-MT1.5CA/FN	0.1 - 1.5	50 - 850	316 x 40	1.1	Hex 1/4"
135103/FN-1/4	KDS-PL3CA/FN-1/4	0.4 - 3	50 - 1800	350 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"
135106/FN-1/4	KDS-PL6CA/FN-1/4	0.5 - 6	50 - 850	350 x 40	1.1	Hex 1/4"
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"
135020S/CA/FN	KDS-PL20SCA/FN	2 - 20	50 - 240	365 x 40	1.0	Sq 3/8"
135120/FN	KDS-PL20CA/FN	2 - 20	20 - 210	383 x 48	1.6	Sq 3/8"
135135/FN	KDS-PL35CA/FN	3 - 35	20 - 140	409 x 57	2.1	Sq 3/8"
135150/FN	KDS-PL50CA/FN	5 - 50	20 - 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
135103/A	KDS-PL3CA/ANG	0.4 - 3	50 - 1800	280 x 40	0.7	Hex 1/4"
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	322 x 40	0.9	Sq 3/8"
135120/A	KDS-PL20CA/ANG	2 - 20	20 - 210	313 x 48	1.3	Sq 3/8"

2D and 3D drawings available at kolver.com // IMPORTANT: Continuous use beyond 80% of the torque range is not recommended.

KDS screwdrivers work in combination with KDU series control units. For more information, see page 14.

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 & angle control, prevailing torque monitoring & compensation, and graphs output, our KDU units provide unmatched performance and value.
KDU-1A and KDU-NT controllers will operate, respectively, all KDS and KDS-NT screwdrivers.

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.

Our KDU 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.
Finally, all of our KDU controllers are ready to be paired with our K-TLS smart positioning system, no additional controller necessary!

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.

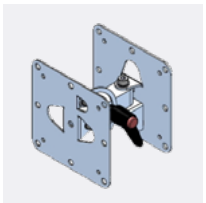
KDU control units

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.

Pivoting table stand



Wall bracket

Supports for KDU control units

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

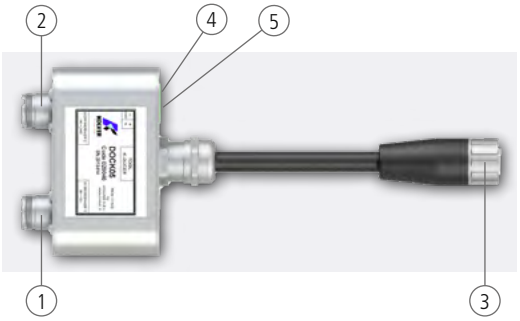
Features	**KDU-1A** For any KDS screwdriver (except for KDS-NT)	**KDU-NT** For KDS-NT screwdrivers
5" Touch Screen	•	•
Programs	200	64
Sequences	24	8
Digital Inputs	20	4
Digital Outputs	21	4
Torque & angle control	•	•
Real-time Torque graph	•	•
Bar code reading, linear and 2D	•	•
Multiple parameters	•	•
Prevailing Torque Monitoring & Compensation	•	•
Mini USB	•	•
USB Data Collection	•	•
Modbus TCP	•	•
Open Protocol	•	•
RS 232 (2)	•	
Industrial Protocols Support	•	•

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.

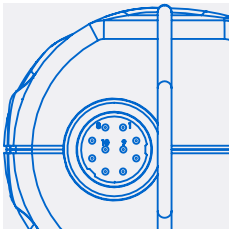
- Unique product – the first ever double output connector for transducerized tools in the market.
- Cut K-Ducer purchase costs by 40%.
- Fully compatible with KDU-1A – get the most out of your K-Ducer system.
- Instant tool recognition.
- Assign any KDU program or sequence to either screwdriver.



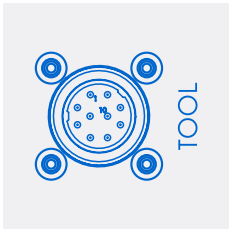
(1) KDS Screwdriver #1 (2) KDS Screwdriver #2 (3) KDU Control unit (4) Pin GND (5) Pin IN

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. Three different lengths (2.5, 5 and 7 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
250064/A	Cable 2.5 m, 90°, 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
250564/A	Cable 5 m, 90°, heavy duty	M16 10pin 5 m
250564/HS	Cable 5 m, spiral, heavy duty	M16 10pin 5 m
250764	Cable 7 m	M16 10pin 7 m