

ENTORQUER™

INDUSTRY-READY TORQUE SOLUTIONS



**WORLD CLASS
ASSEMBLY TOOLS**

**TORQUE FASTENING &
MEASUREMENT SOLUTIONS**

WIRELESS SIGNAL TORQUE WRENCHES

RADIO TRANSMITTER MODULE FOR TORQUE WRENCH ERF-MI

Entorquer-KvL Radio transmitter module for transforming clicker torque wrenches to wireless signal wrenches!



High endurance, industrial design, (Long life-term, more than 200,000 tightening with the same battery, The 867 MHz is freely usable frequency band in India.

Transmission range 5 to 20 meters in factory environment, Disturbance protected, secured radio contact. (Does not disturb the DECT, WLAN, PMR systems.)

Easy installation, no expertise required. System design verified in industrial environment.

LED indications for OK & low battery (Works with Most of the Click type torque wrench makes and models available internationally).

TORQUE WRENCH RADIO DATA RECEIVER: ERF- KVL-R3

Can connect to an I/O device (e.g. PLC). Can receive Entorquer-KvL compatible radio signals, and can send commands to the device. The device transmits the result (OK) to the PLC.

ERF-R3 can connect and receive signals from 3 transmitters at a time. Error -proof, secure communication between the transmitter and the receiver. The transmission method was designed to ensure that no part of the message is lost within the area of reception. The frequency bands used will not interfere with any DECT, WLAN, PMR, or RFID systems. 3 color LED for confirmation of each transmitter signal

Power supply 24V DC, Current consumption <5mA Control output max50mA, load short circuit protection, Frequency 867 MHz

MODEL	PART NO	RANGE Nm	FITTING SIZE mm
ERF 25H	02100	5-25	9x12
ERF 50H	02110	10-50	9x12
ERF 150H	02120	30-150	9x12
ERF 200H	02125	40-200	14x18
ERF 300H	02130	60-340	14x18
ERF 440H	02135	100-440	14x18

RECEIVER:

MODEL	PART NO	NO. OF TOOLS
ERF-KVL-R3	02500	3
ERF-KVL-R1	02510	1

Wrenches are with 867Mhz Transmitter ERF-MI mounted on it.

*interchangeable ratchet heads and open ends are available as per application requirements



BOLT COUNTER

BOLT COUNTER

Counts Number of bolts & batch LCD display with tool status indication, Interlocking with PLC

ENTORQUER™

ENTORQUER™

Entroquer Preset wrenches are designed and made for the assembly plant, where they need to perform repetitive torque application to present value.

- ⊗ +/-4% accuracy
- ⊗ Classified to ISO6789:2003
- ⊗ Preset Adjustable with special tool
- ⊗ 52 tooth Ratchet
- ⊗ Industrial grade construction
- ⊗ Molded grip for operator
- ⊗ Light weight

PRESET TYPE PRODUCTION TORQUE WRENCHES



MODEL	PART NO	RANGE Nm	FITTING SIZE mm	LENGTH mm	WEIGHT kg
ETP 12H	01090	2-12	9x12	125	0.30
ETP 25H	01100	5-25	9x12	180	0.35
ETP 50H	01110	10-50	9x12	242	0.04
ETP 150H	01120	30-150	9x12	400	0.62
ETP 200H	01131	40-200	14x18	478	1.1
ETP 340H	01141	60-340	14x18	558	1.5
ETP 440H	01145	100-440	14x18	730	1.6

REVERSIBLE RATCHET HEADS

PART NO	SQ DRIVE	FITTING SIZE mm
01200	1/2"	9x12
01201	3/8"	9x12
01202	1/2"	14x18
01203	3/4"	14x18
01204	1/4"	9x12

14x18 OPEN END FITTINGS

PART NO	A/F SIZE mm
01320	16
01321	17
01322	18
01323	19
01324	21
01325	22
01326	24
01327	27
01328	30
01329	32
01330	34
01331	36

9x12 OPEN END FITTINGS

PART NO	A/F SIZE mm
01300	7
01301	8
01302	9
01303	10
01304	11
01305	12
01306	13
01307	14
01308	15
01309	16
01310	17
01311	18
01312	19
01313	21
01314	22
01315	24





TW010,TW020,TW050,TW100



TW200,TW340

PRO	SUPER	AUDITOR	RANGE (N.m)	ADAPTER	RATCHET	L (mm)	W (kg)
TW010P	TW010S	TAW010	1-10	9x12	1/4" / 3/8"	410	0.85
TW020P	TW020S	TAW020	2-20	9x12	1/4" / 3/8"	410	0.85
TW050P	TW050S	TAW050	5-50	9x12	3/8"	410	0.85
TW100P	TW100S	TAW100	10-100	9x12	3/8"	410	0.85
TW200P	TW200S	TAW200	20-200	14x18	1/2"	625	1.3
TW340P	TW340S	TAW340	34-340	14x18	1/2"	625	1.3
TW600P	TW600S	TAW600	60-600	24x32	3/4"	1250	4
TW800P	TW800S	TAW800	80-800	24x32	3/4"	1360	6
TW1000P	TW1000S	TAW1000	100-1000	24x32	3/4"	1360	6
TW1500P	TW1500S	TAW1500	150-1500	27x36	1"	1600	8
TW2000P	TW2000S	TAW2000	200-2000	27x36	1"	1600	8



ONE-WAY WIRELESS UPGRADE(Zigbee)

Model#

One-way wireless wrench upgrade

TW****W

Separate wireless receiver required

WCBR

WCRB

CLS WIRELESS CLICK WRENCH

Error proofing management and data acquisition from 2 to 350N·m

- Small, light, ergonomic and robust
- Productivity of a click wrench with data traceability
- Accurate and repeatable
- Fulfill industry 4.0 with torque & angle value



The speed and productivity of a clicker torque wrench combined with the traceability of a transducerized electronic wrench



FIM-EVO

FIM-EVO can manage up to 12 SCS Concept tools (CL/CLS, Freedom3, Freedom4, CDM, etc) and is designed to manage error proofing, data collection and communication protocol. A controller can manage 2 stations in same time. Please see the leaflet for more information.

FEATURES

Autonomy : 9 hours to 18 hours (5 hours to charge)
Click accuracy : 4% to fulfill ISO6789
Torque accuracy: +/- 1% of the read value
Angle accuracy : +/- 1% of the read value
Torque range : 10 to 100%
Untightening detection
First peak and max torque applied send to the controller
Bidirectional RF communication between the wrench and our controller

- PRODUCTIVITY
- Data traceability
- Error proofing management
- Untightening detection

CLS Torque & Angle Click Wrench

CLS torque & angle click wrench is design for error proofing and data traceability with FIM-EVO.

DESIGNATION	CAPACITY (N.m)	DRIVE	L (mm)	W (kg)
FREEDOM CLS 20	2-20	9x12	190	0.43
FREEDOM CLS 50	5-50	9x12	270	0.673
FREEDOM CLS 100	10-100	9x12	330	0.795
FREEDOM CLS 200	20-200	14x18	445	1.18
FREEDOM CLS 350	35-350	14x18	690	1.98

LAB

Laboratory

- Joint analysis
- Prototype
- Material studies
- Pre-series
- Onboard results analysis
- Onboard traces
- Results and traces analysis on PC with Explorer software

SPC

Quality Control

- Residual torque check on a production line
- Route and job management via software (SQnet+ or QS torque)
- Onboard results analysis
- Data traceability
- VIN management
- Onboard traces
- Results, traces and statistic analysis on PC with SQNET + software



FEATURES

- Autonomy : up to 8 hours
- Torque accuracy : 0.5% of the read value
- Torque range : 10 to 100%
- Memory 16 GB: >50 000 operations, traces and results
- Angle accuracy : +/-1° over 360°
- SPC functionalities
- LAB functionalities
- Full quality control strategy following VDI/VDE 2645-3:2019

DESIGNATION	WIRELESS CRADLE	CAPACITY (N.m)	DRIVE	L (mm)	W (kg)
FREEDOM ⁴ 15	197 13 0049: 15 N.m	1.5-15	9x12	364	1.0
FREEDOM ⁴ 30	197 13 0049: 30 N.m	3-30	9x12	364	1.0
FREEDOM ⁴ 50	197 13 0049: 50 N.m	5-50	9x12	364	1.0
FREEDOM ⁴ 70	197 13 0050: 70 N.m	7-70	9x12	470.5	1.0
FREEDOM ⁴ 100	197 13 0050: 100 N.m	10-100	9x12	470.5	1.0
FREEDOM ⁴ 200	197 13 0051: 200 N.m	20-200	14x18	604.5	1.2
FREEDOM ⁴ 300	197 13 0052: 300 N.m	30-300	14x18	754.5	1.2
FREEDOM ⁴ 400	197 13 0053: 400 N.m	40-400	14x18	854.5	1.4
FREEDOM ⁴ 600	197 13 0054: 600 N.m	60-600	14x18	1034.5	1.4
FREEDOM ⁴ 800	197 13 0055: 800 N.m	80-800	22x28	1255	
FREEDOM ⁴ 1000	197 13 0056: 1000 N.m	100-1000	SPECIAL	1470	
FREEDOM ⁴ 1200	197 13 0063: 1200 N.m	120-1200	SPECIAL	1570	

- Light, robust and accurate
- Automatic obstacle detection & incorrect hand position
- Wireless communication for data traceability
- End-fitting recognition
- High memory capacity

PRW

Production

- Production tightening
- Wireless management
- Data traceability
- Barcode reader / VIN management
- Advance solution for production from 0 to 1200 N·m



OBSTACLE DETECTION (PATENTED) ELIMINATE DAMAGE OF YOUR PARTS AND PROTECT YOUR WRENCH

FEATURES

- Autonomy: up to 8 hours
- Torque accuracy: 0.5% of the read value
- Torque range: 10 to 100%
- Angle accuracy: +/-1° over 360°
- Memory 16 GB: >50 000 operations, traces and results
- Wireless communication WIFI/Bt
- WIFI 802.11 a/b/g/n
- Bluetooth V2
- Full security management
- WEP, WPA, WPA 2, EAP-TLS, LEAP, PEAP
- PRW functionalities
- LAB functionalities
- Untightening detection

HAND POSITION DETECTION TO ENSURE CORRECT OPERATION

GUIDANCE SOLUTION



A large color touch screen help the operator during the assembly process.

COMPATIBLE WITH FIM-EVO

MANAGE UP TO 12 ASSEMBLY TOOLS AND 6 STATIONS
 FIELDBUS
 COMPATIBILITY
 AND DATA TRACEABILITY
 WEBSERVER APPLICATION





CORDLESS SCREWDRIVER TECHNOLOGY

Programmable screwdriver with shut-off clutch
Screwdriver with Torque and angle Transducer

PROGRAMMABLE SHUT - OFF TOOL WITH SCREW COUNTING

TorqBee - SO Series

- Battery-Shut-Off-Tool
- Precision shut-off clutch
- Optional: Barcode scanner & Wi-Fi
- Programmable via USB with HST-Tool-Manager
- Programmable parameters:
 - Current
 - Angle
 - RPM
 - Time
- Multi step programming (6 steps)
- Handle vibration alarm
- Multi-colored status-LED
- Intelligent battery management
- Display of tightening results
- OLED-Display
- Screw counter
- Recovery (counter memory-function)
- 100 individual programs
- Min. 150.000 results incl. tightening curves are saved in the tool
- Documentation of the date and time of each tightening connection

PROGRAMMABLE SHUT-OFF CLUTCH DC TOOL WITH TORQUE RESULTS

TorqBee - SOP SERIES

- Programmable Battery-Shut-Off-DC-Tool
- Precision shut-off clutch and torque reaction sensor
- Optional: Barcode scanner & Wi-Fi
- Programmable via USB with HST-Tool-Manager
- Programmable parameters:
 - Torque
 - Current
 - Angle
 - RPM
 - Time
- Multi step programming (6 steps)
- Handle vibration alarm
- Multi colored status-LED
- Intelligent battery management
- Display of tightening result
- OLED-Display
- Screw counter
- Recovery (counter memory-function)
- 100 individual programs
- Min. 150.000 results incl. tightening curves are saved in the tool
- Documentation of the date and time of each tightening connection

PROGRAMMABLE CORDLESS EC SCREWDRIVER

TorqBee - SCREWDRIVER ECO SERIES

- Programmable Battery-DC-Tool
- Torque reaction sensor
- Optional: Barcode scanner & Wi-Fi
- Programmable via USB with HST-Tool-Manager
- Programmable parameters:
 - Torque
 - Current
 - Angle
 - RPM
 - Time
- Multi step programming (6 steps)
- Handle vibration alarm
- Multi colored status-LED
- Intelligent battery management
- Display of tightening result
- OLED-Display
- Screw counter
- Recovery (counter memory-function)
- 100 individual programs
- Min. 150.000 results incl. tightening curves are saved in the tool
- Documentation of the date and time of each tightening connection

Intelligent Screwdriving Technology

Not only very exact, also intelligent.
Control of all relevant parameters



Process Handling

Complete process monitoring thanks to display, barcode scanner, Wi-Fi and controller



SO SERIES PISTOL SCREWDRIVER

MODEL	TORQUE RANGE	MAX.RPM (NO LOAD)	DRIVE	DIMENSIONS IN mm (LxBxH)	WEIGHT kg
TBPSO-4*	1-4 Nm	1250rpm	¼" form E	230x51x211 mm	1.20
TBPSO-6*	1.5-6.5 Nm	1000rpm	¼" form E	230x51x211 mm	1.20
TBPSO-10*	1.5-9 Nm	700rpm	¼" form E	230x51x211 mm	1.20
TBPSO-12*	3-13 Nm	600rpm	¼" form E	230x51x211 mm	1.20

SO SERIES ANGLE SCREWDRIVER

TBASO-12*	3-13 Nm	30-480rpm	SQ DRIVE 3/8"	452x72x94 mm	1.50
TBASO-20*	5-20 Nm	20-340rpm	SQ DRIVE 3/8"	436x73x92 mm	1.50
TBASO-30*	15-30 Nm	10-200rpm	SQ DRIVE 3/8"	510x72x94 mm	2.20
TBASO-55*	25-55 Nm	10-120rpm	SQ DRIVE ½"	580x72x94 mm	2.67
TBASO-85*	30-85 Nm	10-80rpm	SQ DRIVE ½"	630x72x94 mm	3.00
TBASO-100*	35-100 Nm	6-70rpm	SQ DRIVE ½"	642x72x94 mm	3.67

SOP SERIES PISTOL SCREWDRIVER

TBSSOP-4-*	1-4 Nm	1300rpm	¼" form E	230x72x211 mm	1.20
TBSSOP-6-*	1.5-6.5 Nm	1000rpm	¼" form E	230x72x211 mm	1.20
TBSSOP-10-*	1.5-9 Nm	740rpm	¼" form E	230x72x211 mm	1.20
TBSSOP-12-*	3-13 Nm	530rpm	¼" form E	230x72x211 mm	1.20

SOP SERIES-ANGLE SCREWDRIVER

TBASOP-10-*	2-9 Nm	40-740rpm	SQ DRIVE ¼"	460x72x94 mm	1.50
TBASOP-12-*	3-13 Nm	30-480rpm	SQ DRIVE 3/8"	452x72x94 mm	1.50
TBASOP-20-*	5-20 Nm	20-340rpm	SQ DRIVE 3/8"	452x72x94 mm	1.50
TBASOP-30-*	15-30 Nm	10-200rpm	SQ DRIVE 3/8"	510x72x94 mm	2.20
TBASOP-55-*	25-55 Nm	10-120rpm	SQ DRIVE ½"	580x72x94 mm	2.67
TBASOP-85-*	30-85 Nm	10-80rpm	SQ DRIVE ½"	630x72x94 mm	3.00
TBASOP-120-*	35-120 Nm	3-70rpm	SQ DRIVE ½"	647x72x94 mm	3.40

ECO SERIES-PISTOL SCREWDRIVER

TBPECO-12-*	2-14 Nm	20-530rpm	¼" form E	230x72x211 mm	1.15
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ECO SERIES ANGLE SCREWDRIVER

TBAECO-12-*	5-12 Nm	20-480rpm	SQ DRIVE 3/8"	463x72x94 mm	1.45
TBAECO-20-*	5-20 Nm	15-340rpm	SQ DRIVE 3/8"	452x72x94 mm	1.45
TBAECO-30-*	10-30 Nm	10-200rpm	SQ DRIVE 3/8"	530x72x94 mm	2.25
TBAECO-55-*	20-55 Nm	5-120rpm	SQ DRIVE 3/8"	586x72x94 mm	2.67
TBAECO-85-*	30-85 Nm	4-80rpm	SQ DRIVE ½"	630x72x94 mm	3.00
TBAECO-120-*	35-120 Nm	3-70rpm	SQ DRIVE ½"	647x72x94 mm	3.40

*W=Option Wi-Fi ; B=Option barcode reader ; WB= Option Wi-Fi & barcode reader E = Default programming English

FIM EVO

FIM-EVO is an industrial universal controller able to manage up to 12 tools on a single communication point to reduce cost and simplify the integration on your network.

FIM-EVO will give you the full flexibility and scalability requested today by our industry.

Industrial Universal Hub Controller

- A single point connection for your tools
- Manage up to 12 tools and 6 stations

Easy and Clear Interface

- 7" Color touch screen
- VGA connection for external screen

Fully Scalable

- Quick backup and restore for faster maintenance
- Webserver application form easy setup and full version compatibility

Compatible with Following Accessories

- Barcode reader
- Printer
- Socket tray
- Label printer
- Input/Output 24V

DESCRIPTION

FIM_EVO

NUMBER OF TOOLS MANAGED	12
COMPATIBLE WITH SCS PRODUCTS	YES
MANAGE SEQUENCES, OPERATIONS	UNLIMITED
MANAGE TIGHTENING STRATEGIES	YES
MANAGE BARCODE READER	YES
MANAGE PRINTER/LABEL PRINTER	USB/SERIAL
NUMBER OF RESULT STORE	100 000
NUMBER OF TRACES STORE	100 000
2 SERIAL PORTS, 4 USB, 2 ETHERNETS, 1 CAN BUS	YES
FIELDBUS COMPATIBILITY (PROFINET, ETC)	YES
NUMBER OF INPUT/OUTPUT MANAGE	4 OUTPUTS / 16 I/O AS OPTION



Full Protocol Communication

- Fully compatible with the mains industries protocols
- Open protocol, Toolsnet, IPM, XML, PFCS
- 2 Ethernet ports



BPT CORDLESS PULSE TOOLS

New Low reaction tools nearly eliminate the reaction force in Torque applications delivering High speed accurate tightening with Real time data output!

MAIN FEATURE

- Digital torque and angle program in 15 preset numbers
- Low Reaction with oil pulse Unit
- High accuracy with transducer
- 1.25" AMOLED color display
- Monitoring fastening quality and count of screw numbers
- Error information by code display
- Easy parameter setting and monitoring by PC software
- Real time fastening data output
- Modbus protocol
- Mini USB, WIFI communication
- Built-in barcode scanner (Option)
- Data Memory 65,000



GENERAL SPECIFICATIONS

Electric power 18VDC 2.0Ah, 18VDC 5.0Ah, 25.2VDC 3.0Ah
 Motor BLDC motor T
 orque accuracy 10%
 Wi-Fi(Optional) IEEE 802.11a/b/g/n 2.4GHz & 5GHz dual band
 Weight 1.26-1.44 Kg (without battery)

MODEL	TORQUE (N.m)	SPEED (RPM) 18V/25V	W (kg)
BPT-20	8-20	1,000 - 3,200	1.26
BPT-45	20-45	1,000 - 3,200	1.26
BPT-60	25-60	1,000 - 3,200	1.44

STAND ALONE MODE

- Set the parameters with desired torque value using PC software.
- Fastening data is automatically stored in the tool internal memory. (Max 65,000data)
- Can download saved data using PC software.



ADVANCED MODE USING WIFI -CONTROLLER

- Support Wi-Fi Access Point & Connected to up to 8 BPT tools.
- Error-proofing by assembly sequencing and process monitoring.
- Simple & user-friendly sequence programming interface.
- USB 2.0 x 3(Wi-Fi adaptor, Barcode scanner, storage ...)
- Input x 16, Output x 16, for automation system
- Gigabit ethernet FTP server
- Display copy using HDMI cable



ELECTRIC NUT RUNNERS

HANDHELD NUTRUNNER TECHNOLOGY

HIGH ACCURACY

Handheld nutrunners have a torque sensor and a rotation angle sensor.

DIGITAL COMMUNICATION

The Handheld nutrunners communicate digitally with the control.

MAINTENANCE MANAGEMENT

The integrated maintenance management signals the technically and economically optimal time for the next nutrunner maintenance. Must be carried out only if it is required.



HSX MODEL

Angle, Pistol and Straight Models Different Models Ranging from 0.2 to 250Nm



DSX SERIES



MDT SERIES

COMMUNICATION WITH MOBILE END DEVICES

The new control generation allows for the greatest possible freedom and can be operated at any given time from any given location. The access to the control is carried out through a net-work connection and a browser-enabled end device. Programming, error diagnosis, and maintenance- each action is now possible in the new generation nutrunner independent of the location and time. In the case of fault messages, the operator is able to access the control directly via the mobile terminal. This convenient operation saves channels and money. Another innovation is the QR code attached to the controller. If it is scanned by a mobile terminal, the connection is established to the control.

BUILT-IN TIGHTENING TECHNIQUE (Machine mount nutrunners for Automation)

- Digital tightening technique
- Built-in nutrunners from 0.05 Nm to 2400 Nm
- Error-free setup through integrated parameter memory
- Maintenance-free brushless servo motor, clockwise / anti-clockwise
- Robust housing made of stainless steel and aluminium
- Diverse drive and attachment versions
- Digital data transmission.
- Status indicator over light field
- Speed continuously variable, clockwise / anti-clockwise
- Compact design



DS SERIES



ESX SERIES

Contact us for more details on models and ranges:

sales@micromeasures.com

SINGLE CHANNEL CONTROL-SMX200



The control can be parameterized completely on site via this display. The content of the production image can be configured specifically for each application

7" Touch-LCD Display

Interfaces

1 x Ethernet, 9 x digital output, 10 x digital input

1 x RS232/422/485 for Ident systems, 2 x USB Host for external equipment

Field bus interface (Optional)

Operating system, firmware and parameters on exchangeable MicroSD card
Integrated Webserver Technology -The user interface of the control will be displayed on any end device. Be it PC or smart phone

MULTIPRO 3G CONTROLLER

5.7" Touch Colour Display

Torque and angle Functions, 255 Programs, Max. 200 lines (instructions) per program / max. 3000 program lines Up to 99 steps per program can be used to create the assembly process. Measured values memory, graphics memory, error memory, statistics memory for each step. More than 40 instructions are available for sequence programming



MDT CONTROLLER

Torque and Angle Functions, 7" LCD Display, 15 Inputs and 8 Outputs, 15 parameters Preset, Modbus/ Open protocol.



Easy Operation

It will no longer be necessary to install special software on a PC or a mobile device for settings or to program fastening control. The new integrated web server frees the nutrunner world from compatibility and updating problems of the past. The control hardware already contains the required programming software. The only thing that our customers need in the future is a web browser - the user interface of the control will be displayed on any end device. Be it PC or smart phone - the image is adjusted to the display of the end device being used.

Contact us for more details on models and ranges:

sales@micromeasures.com

FEATURES

- Durable oil seal Sealing lower pressure oil
- Simple Structure Presents maximum torque output - patented -
- Protector For the protection of the work piece
- Direct air shut-off New mechanism - patented -
- Changeable driving end Multiple driving ends available - patented -
- Relief valve Easy to adjust range of torque
- Ergonomical handle for a better handling of the tool



The unique design of EYP pulse tools, combining pulse unit and air shut-off mechanism, provides the most excellent accuracy of shut-off torque while supply air pressure fluctuates between 4 bar and 6 bar or more. _____

While generating a pulse, some amount of high pressure oil is going through the internal oil passage (tunnel) in the wall of the anvil and flows into the oil chamber through the check valve orifice. During a series of pulses, the accumulated volume of oil in the chamber keeps increasing and finally activates the shut-off piston. _____

When the supplied air pressure goes down, the rotation of the air motor slows down and simultaneously, the number of pulses being generated becomes lower, also. As a result it takes more time to build up enough fluid pressure to activate the shut-off piston which will transmit fluid force to the air shut-off valve by way of the signal pin located in the center of the rotor. _____

This automatic self-controlled mechanism is called "DIRECT AIR SHUT-OFF", and it is patented.

EISIN WIRELESS POKAYOKE PULSE SHUT OFF TOOL

- Features Eliminates missing bolts.
- Counts down only a tool shut-off protecting from premature trigger release.
- Possible to stop whole operation or conveyor line using solenoid valve attachment as an option.
- Caution message automatically appears on the monitor and alerts maintenance service or oil replacement due for a tool based on the number of rundowns or cycles.
- Capable to track and monitor bolt count and batch count.
- User friendly programming, easy to customize.
- Outputs for lights and alarms.
- Compact and light weight pokayoke box.
- Eliminates air tube for signal transfer.



OIL PULSE WRENCH - SHUT-OFF TYPE - PISTOL GRIP

MODEL NAME	BOLT SIZE	TORQUE	RANGE	DRIVING END SIZE INCH	I.D OF HOSE MM	W (kg)	RPM UNDER NO LOAD	
		0.6 MPA	0.4 MPA				0.4 MPA	0.6 MPA
EYP-50AS-D	M4-M6	2.5-5.5Nm	2.5 - 5.5Nm	1/4 Hex	8.5	0.9	7,500	7,800
EYP-60AS (3/8)	M5-M6	4.5 - 10 Nm	4.5 - 10 Nm	3/8	8.5	1.1	7,500	7,800
EYP-60AS-D	M5-M6	4.5 - 10 Nm	4.5 - 10 Nm	1/4 Hex	8.5	1.1	7,500	7,800
EYP-70AS (3/8)	M6-M8	7 - 20 Nm	5 - 18 Nm	3/8	8.5	1.1	8,000	8,800
EYP-70AS (1/2)	M6-M8	7 - 20 Nm	5 - 18 Nm	1/2	8.5	1.1	8,000	8,800
EYP-70AS-D	M6-M8	7 - 20 nm	5 - 18 Nm	1/4 Hex	8.5	1.1	8,000	8,800
EYP-80AS (3/8)	M6-M8	18 - 35 Nm	15 - 33 Nm	3/8	8.5	1.1	6,700	7,200
EYP-80AS (1/2)	M6-M8	18 - 35 Nm	15 - 33 Nm	1/2	8.5	1.1	6,700	7,200
EYP-80AS-D	M6-M8	18 - 35 Nm	15 - 33 Nm	1/4 Hex	8.5	1.1	6,700	7,200
EYP-85AS 3/8	M10-M12	25 - 60Nm	20 - 55Nm	3/8	8.5	1.1	6,700	7,200
EYP-85AS 1/2	M10-M12	25 - 60Nm	20 - 55Nm	1/2	8.5	1.1	6,700	7,200
EYP-95AS	M10-M12	30 - 85 Nm	30 - 80 Nm	1/2	8.5	1.5	4,700	5,100
EYP-110AS	M14	70 - 120 Nm	70 - 120 Nm	1/2	8.5	1.84	4,100	4,600
EYP-120AS-H	M14	100 - 150 Nm	100 - 150 Nm	1/2	8.5	2.7	3,000	3,500
EYP-130AS	M16	120 - 210 Nm	110 - 210 Nm	3/4	9.5	3	3,000	3,500
EYP-150AS-H	M16	160 - 280 Nm	160 - 250 Nm	3/4	9.5	4.1	2,300	2,600



MODEL NAME	BOLT SIZE	TORQUE	RANGE	SIZE OF SQUARE INCH	I.D OF HOSE MM	W (kg)	RPM UNDER NO LOAD	
		0.6 MPA	0.4 MPA				0.4 MPA	0.6 MPA
EYPS-50AS-D	M4 - M6	2.5 - 5.5 Nm	2.5 - 5.5 Nm	1/4 Hex	8.5	0.9	7,500	7,800
EYPS-60AS	M5 - M6	5 - 10 Nm	5 - 10 Nm	3/8	8.5	1.0	4,800	5,400
EYPS-60AS-D	M5 - M6	5 - 10 Nm	5 - 10 Nm	1/4 Hex	8.5	1.0	4,800	5,400
EYPS-70AS	M6 - M8	7 - 18 Nm	7 - 16 Nm	3/8	8.5	1.0	4,800	5,400
EYPS-70AS-D	M6 - M8	7 - 18 Nm	7 - 16 Nm	1/4 Hex	8.5	1.0	4,800	5,400
EYPS-80AS	M6 - M8	15 - 30 Nm	15 - 30 Nm	3/8	8.5	1.0	4,800	5,400
EYPS-80AS-D	M6 - M8	15 - 30 Nm	15 - 30 Nm	1/4 Hex	8.5	1.0	4,800	5,400
EYP-200AS	M18 - M20	200 - 300 Nm	200 - 300 Nm	3/4	9.5	7.9	3,500	4,000
EYP-200AS-H	M18 - M20	300 - 400 Nm	300 - 400 Nm	3/4	9.5	7.9	3,500	4,000
EYP-300AS	M20 - M22	400 - 500 Nm	400 - 500 Nm	1	12.7	10.3	4,200	4,800
EYP-380AS	M20 - M22	500 - 600 Nm	500 - 600 Nm	1	12.7	10.7	3,300	4,000

RAD PNEUMATIC TORQUE WRENCHES

RAD SINGLE SPEED

- The ultimate in power-to-weight ratio
- Wide torque range to suit multiple applications
- Unmatched reliability delivered by one of the most advanced engineered gear boxes on the market
- Controlled torque-accuracy of +/- 4% and repeatability of +/- 2%

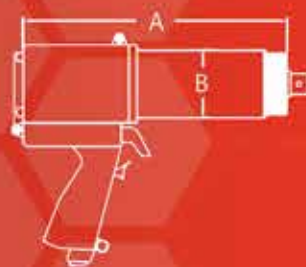


PART NUMBER	TOOL MODEL	DRIVE SIZE	TORQUE (Nm)		RPM	W (kg)	DIMENSION A (mm)			
			LOW	HIGH						
13573	475SL	0.75"	70	475	65	2.7	107	61	70	222
13539	10GX-M	0.75"	150	950	30	3.6	228	63	70	228
13549	14GX-M	0.75"	275	1,400	20	3.8	228	63	70	205
19135	20DX-M	1.0"	400	2,000	10	4.0	203	69	70	205
13565	34GX-M	1.0"	700	3,400	9	6.1	240	78	83	241
24717	40DX-M	1.0"	1,200	4,000	8	6.7	254	81	83	241
13571	46GX-M	1.0"	1,400	4,600	12	9.0	317	86	94	274
26133	70DX-M	1.5"	2,000	7,000	6.7	10.6	285	95	95	264
15805	80DX-M	1.5"	2,700	8,000	6.6	12.4	348	101	101	276
23299	110DX-M	1.5"	3,400	11,000	4	13.7	308	108	108	270
26153	150DX-M	1.5"	5,500	15,000	3	18.9	353	127	127	281

RAD HIGH SPEED

Extreme duty torque wrenches with high RPM productivity

- The two-speed models feature a unique full automatic gearbox design, eliminating the time consuming switch between high and low speed gear.



PART NUMBER	TOOL MODEL	DRIVE SIZE	TORQUE (Nm)		RPM	W (kg)	DIMENSION A (mm)			
			LOW	HIGH						
19774	14GX-2	0.75"	475	1400	85	4.5	261	63	70	205
19775	20DX-2	1.0"	700	2000	50	4.7	251	68	70	205
19776	34GX-2	1.0"	950	3400	44	7.5	305	78	84	254
24952	40DX-2	1.0"	1400	4000	49	7.3	309	81	83	254

E-RAD BLU

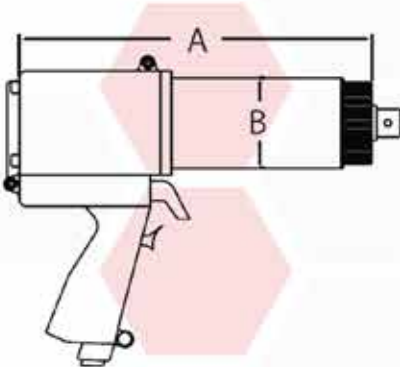
Ability to use different handles per controller case!

The system of choice for the wind industry, the E-RAD BLU precision torque wrench tools are designed to provide a high degree of accuracy (+/- 2.8%) and repeatability (+/- 2%). Using a patented gearbox design and the precision of an electric AC Servo motor, these tools deliver smooth continuous torque. Best of all, it's the most affordable system on the market.



E-RAD BLU TOUCH CONTROL CASE

The touch screen control case provides an easy to use interface that allows for pre-selectable presets, quick error-free torque and angle adjustments, complete recalibrations as well as data logging everything for easy export into spreadsheets on your laptop.



PART NUMBER	TOOL MODEL	DRIVE SIZE	TORQUE (Nm)		RPM	W (kg)	DIMENSION A (mm)	DIMENSION A (mm)	DIMENSION A (mm)	DIMENSION A (mm)
			LOW	HIGH						
21985	ERAD BLU 950-M	0.75"	136	949	20	5.4	336.6	63.5	76.2	209.6
24162	ERAD BLU 2000-M	1.0"	271	2034	8	5.9	337.3	68.6	76.2	209.6
21986	ERAD BLU 3400-COMP	1.0"	339	3390	5.5	8.1	375.9	76.2	76.2	209.6
22434	ERAD BLU 3400-M-90	1.0"	339	3390	6	8.1	245.1	76.2	78.7	209.6
21987	ERAD BLU 4000-M	1.0"	678	4068	5.5	10.6	425.5	86.4	88.9	222.3
21988	ERAD BLU 8000-M	1.5"	2034	8136	4	13.1	419.1	101.6	88.9	222.3
21989	ERAD BLU 10K-M	1.5"	2034	10170	1.5	14.9	431.8	108.0	108.0	232.2

B-RAD BL SELECT

NEW! Torque ranges up to 7000 Nm!

The newly designed B-RAD BL Select Series offers higher speed and longer battery life while incorporating a new torque display with buttons. The B-RAD BL Select allows the user to easily select the target torque. Patented Product.

- Now with digital torque settings, able to increase or decrease the value by 10 Nm
- Torque ranges up to 7000 Nm
- Equipped with the latest lithium-ion technology
- Suitable for pre-torque and service jobs where electricity or compressed air are not available
- Longer battery life as energy is used more efficiently



TOOL MODEL	DRIVE SIZE	TORQUE (Nm)		RPM	W (kg)
		LOW	HIGH		
B-RAD BL SELECT 700	0.75"	170	700	21.5	3.5
B-RAD BL SELECT 1400	0.75"	270	1400	10.5	3.5
B-RAD BL SELECT 1400-2	0.75"	270	1400	71	4.3
B-RAD BL SELECT 2000	1.0"	400	2000	6	4.0
B-RAD BL SELECT 2000-2	1.0"	400	2000	19.5	4.9
B-RAD BL SELECT 4000	1.0"	800	4000	3	6.0
B-RAD BL SELECT 4000-2	1.0"	800	4000	20	6.7
B-RAD BL SELECT 7000	1.5"	1350	7000	2.1	8.8

TOOL MODEL	DIMENSION A (mm)	DIMENSION B (mm)	DIMENSION C (mm)	DIMENSION D (mm)
B-RAD BL SELECT 700	231	63	67	262
B-RAD BL SELECT 1400	231	63	67	262
B-RAD BL SELECT 1400-2	279	63	67	262
B-RAD BL SELECT 2000	244	69	69	262
B-RAD BL SELECT 2000-2	298	69	69	262
B-RAD BL SELECT 4000	285	81	81	266
B-RAD BL SELECT 4000-2	337	81	81	266
B-RAD BL SELECT 7000	295	95	95	272

Accuracy of +/-5%, Repeatability of +/-2%

RAD TORQUE SYSTEMS

RADIO MODULES AND CONTROLS FOR CORDLESS SCREWDRIVERS

AUTOMOTIVE SOLUTIONS ABOUT THE PRODUCT LINE...

Radio module 867Mhz Radio module is easy to install and use. The device I/O uses M12 connector or USB2.0 to communicate, and is therefore compatible with all factory systems. The wireless system uses latest technology making them the most cost-effective radio transmitting solution available.



Together with Torque Bee, we can offer a valuable Wireless Fool proofing signal system:

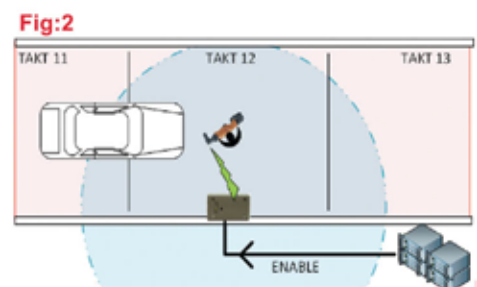
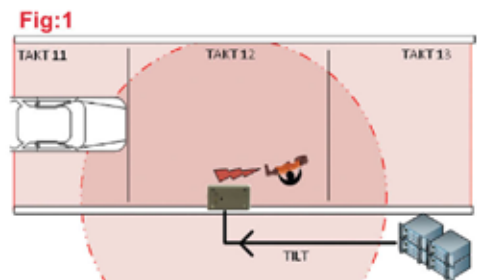
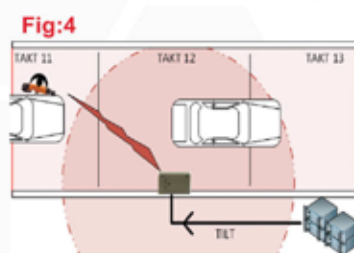
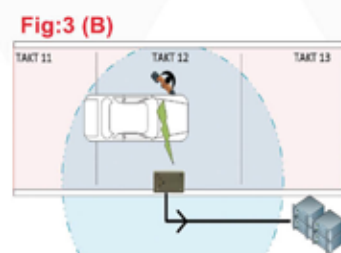
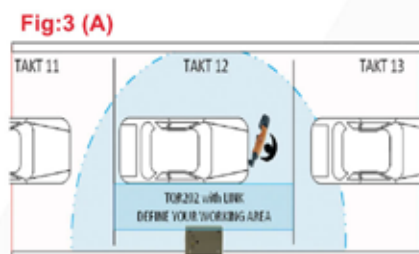
- Easy to install. The TQR202 modules were designed for fast installation and maintenance. If any issues arise, the modules can be replaced in one minute or less.
- Simple device pairing. To pair the transmitter and the receiver, simply press the receiver button and insert the battery for the Cordless Screw driver
- Multiple operating modes. The device can default to its normal mode, or Disabled mode. If normal mode is enabled by default, the device can be disabled at any time, to avoid errors. If disabled mode is enabled by default, operators can use the device at any time, at their own discretion.
- In sleep mode, the Radio module will switch off automatically when the device is left idle, to conserve battery life. The radio module will wake up from sleep mode immediately if it is moved.
- In Link mode, the device will detect whether it is near the receiver. If not (the device is used outside the usual work environment), it can be disabled

Typical usage (example from a car manufacturing plant)

The following is an example of the device in use, in a car manufacturing plant. The operator will wait for the car to approach his/her work location. The tool is in disabled mode by default, meaning that it cannot be engaged before or after the car assembly. This can cut down on damage due to improper use.

See Fig. 1. The line PLC (Line control device) disables the TQR202, using the disable Input. This ensures that the worker will not be able to use the tool until the assigned car model reaches the correct position.

As can be seen on the next image, Fig. 2 the Line PLC (Line control device) then enables the tool, allowing the operator to begin working. The device can then be positioned to work anywhere within the blue circle (a specified area) or on arrival of the assigned model of car at correct position



Beginning the work process, the operator starts tightening. All tightening feedback, including OK / not OK or Reverse tightening, is immediately sent back to the Line PLC for evaluation, fig 3(a) & 3(b). Once the number of tightening processes performed reaches the number assigned to the work process in question (for example, if the operator is tasked with tightening 4 screws, then once 4 OK tightening signals are sent to the PLC), the line PLC can disable the device, to avoid possible damage from improper use.

The worker tries to work on the next car, but because the tool is in disabled mode, it's not possible. It will be only possible when the device gets an enable signal from the Line PLC. Fig. 4

ABOUT THE COMPANY

Micromeasures offers complete line of assembly tools and torque measurement systems. Our torque fastening and measurement solutions include Electric servo nutrunners, Oil pulse tools, Pneumatic wrenches, manual torque wrenches, torque calibration and measurement instruments.

Our entorquer wireless torque wrenches ,Eisin oil pulse tools, DSM Servo nut runners, Torq Bee Cordless shut off and EC nut runners, RAD heavy duty torque tools etc., are already proven with customers.

Equiped with advanced electronic Torque calibration system up to 15000Nm, micromeasures' in house laboratory and service center can provide world class after sales service to our customers

Our mission is to develop and supply cost effective, technically acceptable and reliable assembly torque tools and solutions, focusing on quality torque application and cost reduction at our customer's assembly shops .



micromeasures

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