



LOW-TORQUE PRECISION

# **IQi Series**

ELECTRIC SCREWDRIVER



**Efficiency. Productivity. Quality.  
Cost of Ownership.**

# LOW-TORQUE PRECISION

# **IQi Series**

# ELECTRIC SCREWDRIVER

## Performance and Productivity.

Elevate performance and productivity on the assembly line with the IQi Series, an intelligent low-torque fastening solution that combines advanced technology, precision engineering, and intuitive design. Experience increased efficiency with faster set up, automated workflows and remote system access, while improving quality through advanced fastening strategies, real-time data traceability and the industry's first tilt angle control.

Designed to withstand over 1 million maintenance-free cycles, IQi Series minimizes downtime and maximizes productivity. From high-volume assembly to quality-critical manufacturing, IQi Series delivers unmatched efficiency, precision and reliability at a reduced total cost of ownership.

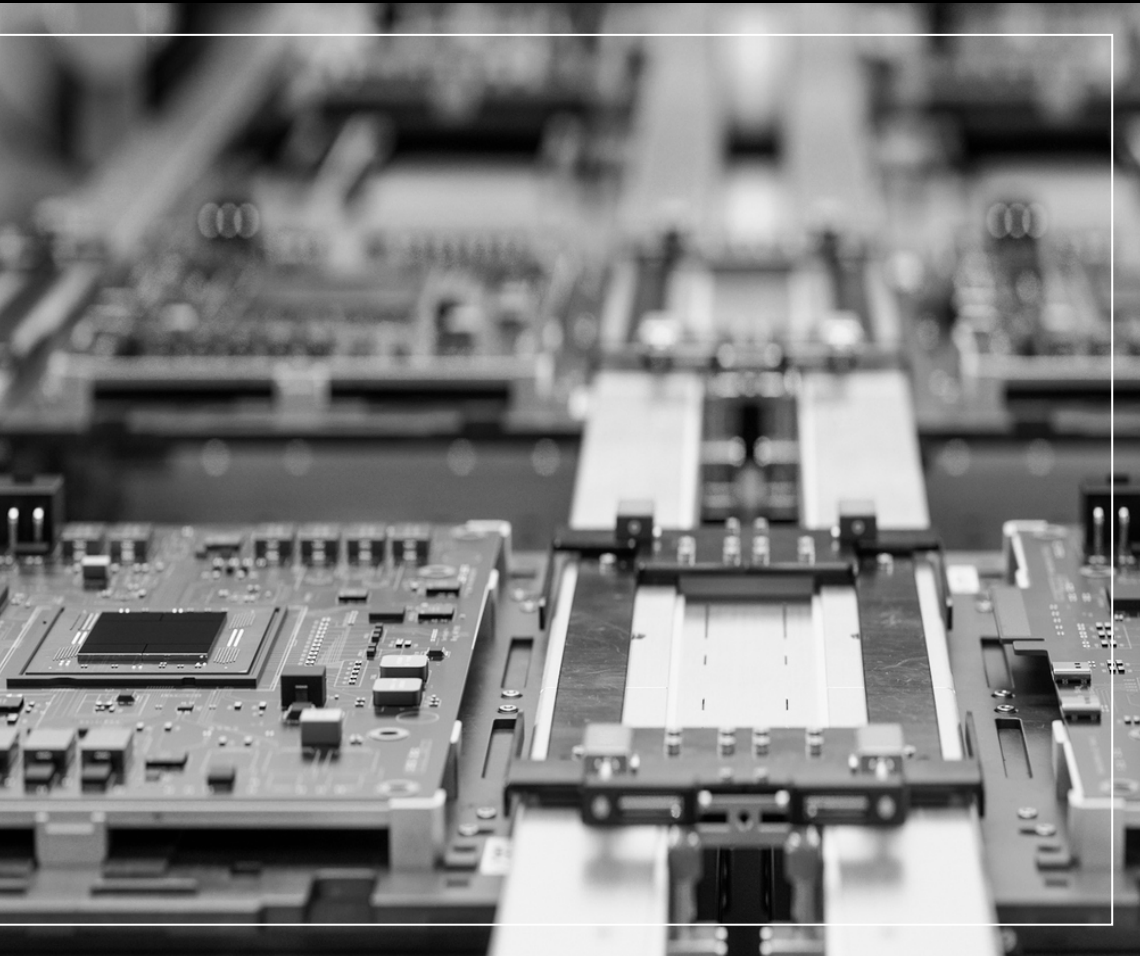


### Transducerized Screwdrivers

- **Superior Accuracy**  
Real-time torque and angle monitoring with  $\pm 3.5\%$  precision.
- **Error-Proofing Features**  
Advanced torque and angle control strategies reduces tightening defects like floating screws, misalignment, and cross-threading etc.
- **Complete Process Traceability**  
Tightening data is recorded for compliance, audits, and quality assurance
- **Industry 4.0 Ready**  
Seamless integration with MES, Fieldbus, and automated workflows.

### Current Control Screwdrivers

- **Consistent Torque Output**  
Maintains  $\pm 7\%$  accuracy for repeatable results
- **Optimized for Productivity**  
Batch control and multi-step tightening reduce human error and cycle times compared to clutch tools.
- **Ergonomic and Lightweight**  
Designed for operator comfort and reduced fatigue.
- **Cost-Effective Performance**  
Ideal for consumer electronics, general manufacturing, and durable goods, where reliability and speed matter most.



### INCREASE EFFICIENCY

- Reduce setup time by 50% reducing costly workflow interruptions with an intuitive web-based interface that eliminates the need for manual controller adjustments. Rapid deployment ensures seamless operational readiness.
- Seamless MES and Fieldbus integration automates tool and job selection, reducing manual errors and improving uptime. Operators can focus on high-value tasks for increased efficiency.

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### IMPROVE QUALITY

- Achieve fastening precision with 3.5% accuracy to minimize assembly errors and significantly lower rework costs with precise torque and angle control, ensuring consistent, high-quality results.
- Improve assembly quality with the industry-leading tilt angle control that ensures precise tool alignment, prevents cross-threading, and maintains optimal joint integrity.

### MAXIMIZE PRODUCTIVITY

- With real-time traceability, live access to production data enhances continuous quality control, enabling quick issue identification and resolution to improve productivity and compliance.
- Program troubleshoot, and monitor systems remotely. Real-time adjustments from anywhere reduce the on-site presence and operational costs while enhancing scalability for production teams.

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### REDUCE TOTAL COST OF OWNERSHIP

- Designed to withstand 1 million maintenance-free cycles, reducing maintenance frequency and downtime for long-term operational efficiency.
- The robust design and durable brushless motors extend tool lifespan, minimizing replacement needs and lowering total cost of ownership.

# IQi SERIES

Boost precision  
with  $\pm 3.5\%$ \* accuracy  
to minimize errors  
and rework costs

2 Platforms  
Transducerized  
and Current Control

Ergonomic lever design

Ergonomic grip design  
>34mm on tools below 2.5Nm

All Tools ESD safe

Color Identification Ring:  
Red = Transducerized  
Black = Current Control

Quick change and  
half moon drive

2 Different Body Sizes  
0.02-2.5Nm  
2-15Nm

Reverse lever

Durable brushless  
motor 1 million  
maintenance-free cycles

Rubber over mold grip  
for operator comfort

Gearbox designed for  
durability and precision

Color changed 360 degree  
LED status beam:  
Red = NOK Tightening  
Green = OK Tightening  
White = Task Light  
Blue = Reverse



\*Accuracy for Transducerized Tools is  $\pm 3.5\%$ , while Current Control tools is  $\pm 7\%$ .



Remote browser support

7" color capacitive touch screen display

Integrated Ports  
Ethernet Port x 2\*  
USB 2.0 x 2  
USB 3.0 x 2  
RS232 x 1

Configure up to  
32 Psets  
and 64 jobs

Supports quick  
software upgrades

Rapid software-based  
backup and restore

Live Trace during  
fastening  
operation

Up to 1M  
fastening  
records

Intuitive user  
interface

7x5 integrated  
digital I/O's

Integrated MES and  
Fieldbus support Open  
protocol, Ethernet IP,  
Profinet & Others

Modular mounting  
options for:  
Bench mounts &  
Wall mounts



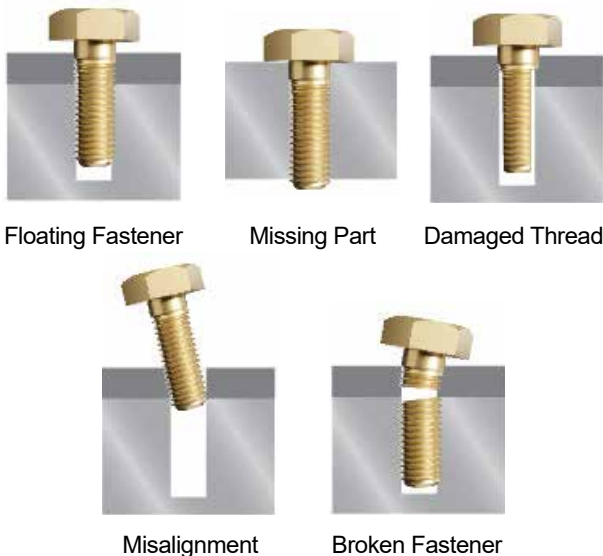
\*One Ethernet Port, and one USB to Ethernet Port using an adapter.

# IQi Series Advanced Features

## Advanced Tightening Control

Program advanced torque, angle, prevailing torque and seating torque strategies.

**Benefit:** Operators can detect and prevent common tightening errors in real-time, reducing time consuming rework and quality costs.



## Tilt Angle Control

With the first configurable tilt angle control in the industry, program the working limit to ensure precise tool alignment at the correct angle against the joint

**Benefit:** Ensures each fastener is applied with optimal tool alignment to eliminate cross-threading, prevent joint damage and minimizing costly rework.



**iQ Stop:** The advanced shift-down mode by Ingersoll Rand® delivers a seamless transition from rundown speed to final tightening speed without stopping

**Benefit:** Compared to traditional shift-down methods, iQ Stop redefines fastening by providing a faster, more efficient and highly accurate tightening process, helping manufacturers maximize output without compromising quality

## Why iQ Stop?

- **Instant Transition** - No pauses, just smooth controlled speed adjustments.
- **Faster Cycle Times** - Boosts productivity by reducing fastening time.
- **High Accuracy** - Ensures precise torque application with reduced overshoot.
- **Optimized for Efficiency** - Designed for high-speed assembly lines where every second matters.

*\*Tested under lab conditions*

# Software



**64**  
JOBS



**32**  
PSETs



User  
Management



Web-Based  
Programming

**Not  
Required**



- PC Software
- PC License

- ✓ Quick navigation to set up PSET and Job
- ✓ High-fidelity Cycle Results display
- ✓ Logic rules for JOB sequencing
- ✓ Advanced shutdown strategies
- ✓ Life Trace transfer
- ✓ Tilt Angle Control
- ✓ Barcode function: USB, Serial, Ethernet
- ✓ Unrestricted programming from controller or web browser
- ✓ Embedded, context specific help
- ✓ Multi-language support

## Onboard Data Storage

- ✓ Removable SSD card stores ALL settings and data
- ✓ Complete controller settings and data recovery through SSD swap
- ✓ Full USB backup and restore function

**1M**

Tightening Results

## Connectivity

**2**

MES Protocol  
Options



Ethernet IP, ProfiNet

**2**

MES Protocol  
Options



Open Protocol, ToolsNet

# Hardware



**60**sec

Boot  
Time



**2**

Tool Families  
Transducerized &  
Current Control



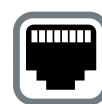
**4**

USB 2.0 x 2  
USB 3.0 x 2



**7"**

Full-color  
Capacitive  
Touch Screen



**1**

Ethernet Port



**1**

Serial Port

# IQi Series Specifications

## Transducerized Inline Screwdriver Specifications

Activation	Model Number	Power Supply	Torque Nm	Torque in-lbs	RPM	Weight g	Weight lbs	Drive Type	Length mm	Length in
Lever Start	IQI2LT0017TQ4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	420	1.01	1/4" QC	243	9.57
	IQI2LT0017TM4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	420	1.01	Half moon	243	9.57
	IQI2LT0050TQ4	IQI-PS-1	0.1-0.5	0.88-4.4	20-1000	480	1.01	1/4" QC	243	9.57
	IQI2LT0100TQ4	IQI-PS-1	0.2-1	1.8-8.8	20-1000	540	1.01	1/4" QC	243	9.57
	IQI2LT0200TQ4	IQI-PS-1	0.4-2	3.5-17.7	20-800	540	1.01	1/4" QC	243	9.57
	IQI2LT0250TQ4	IQI-PS-1	0.5-2.5	4.4-22.1	20-525	600	1.01	1/4" QC	243	9.57
	IQI4LT0500TQ4	IQI-PS-2	2-5	17.7-44	20-900	1180	1.87	1/4" QC	248	9.76
	IQI4LT1000TQ4	IQI-PS-2	4-10	35-88	10-500	1280	1.87	1/4" QC	248	9.76
	IQI4LT1500TQ4	IQI-PS-2	5-15	44-133	10-300	1380	1.87	1/4" QC	248	9.76
Push To Start/ Lever Start	IQI2LT0017PQ4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	568	1.08	1/4" QC	269	10.59
	IQI2LT0017PM4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	568	1.08	Half moon	269	10.59
	IQI12LT0050PQ4	IQI-PS-1	0.1-0.5	0.88-4.4	20-1000	568	1.08	1/4" QC	269	10.59
	IQI12LT0100PQ4	IQI-PS-1	0.2-1	1.8-8.8	20-1000	587	1.08	1/4" QC	269	10.59
	IQI12LT0200PQ4	IQI-PS-1	0.4-2	3.5-17.7	20-800	587	1.08	1/4" QC	269	10.59
	IQI12LT0250PQ4	IQI-PS-1	0.5-2.5	4.4-22.1	20-525	587	1.08	1/4" QC	269	10.59
	IQI14LT0500PQ4	IQI-PS-2	2-5	17.7-44	20-900	1010	1.94	1/4" QC	272	10.71
	IQI14LT1000PQ4	IQI-PS-2	4-10	35-88	10-500	1010	1.94	1/4" QC	272	10.71
	IQI14LT1500PQ4	IQI-PS-2	5-15	44-133	10-300	1010	1.94	1/4" QC	272	10.71



# IQi Series Specifications & Accessories

## Current Control Inline Screwdriver Specifications

Activation	Model Number	Power Supply	Torque Nm	Torque in-lbs	RPM	Weight g	Weight lbs	Drive Type	Length mm	Length in
Lever Start	IQI2LC0017TQ4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	310	0.68	1/4" QC	216	8.50
	IQI2LC0017TM4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	310	0.68	Half moon	216	8.50
	IQI2LC0050TQ4	IQI-PS-1	0.1-0.5	0.88-4.4	20-1000	410	0.90	1/4" QC	216	8.50
	IQI2LC0100TQ4	IQI-PS-1	0.2-1	1.8-8.8	20-1000	410	0.90	1/4" QC	216	8.50
	IQI2LC0200TQ4	IQI-PS-1	0.4-2	3.5-17.7	20-800	410	0.90	1/4" QC	216	8.50
	IQI2LC0250TQ4	IQI-PS-1	0.5-2.5	4.4-22.1	20-525	410	0.90	1/4" QC	216	8.50
	IQI4LC0500TQ4	IQI-PS-2	2-5	17.7-44	20-900	760	1.67	1/4" QC	242	9.53
	IQI4LC1000TQ4	IQI-PS-2	4-10	35-88	10-500	760	1.67	1/4" QC	242	9.53
	IQI4LC1500TQ4	IQI-PS-2	5-15	44-133	10-300	760	1.67	1/4" QC	242	9.53
Push To Start/ Lever Start	IQI2LC0017PQ4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	340	0.75	1/4" QC	242	9.53
	IQI2LC0017PM4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	340	0.75	Half moon	242	9.53
	IQI12LC0050PQ4	IQI-PS-1	0.1-0.5	0.88-4.4	20-1000	420	0.93	1/4" QC	242	9.53
	IQI12LC0100PQ4	IQI-PS-1	0.2-1	1.8-8.8	20-1000	420	0.93	1/4" QC	242	9.53
	IQI12LC0200PQ4	IQI-PS-1	0.4-2	3.5-17.7	20-800	420	0.93	1/4" QC	242	9.53
	IQI12LC00250PQ4	IQI-PS-1	0.5-2.5	4.4-22.1	20-525	420	0.93	1/4" QC	242	9.53
	IQI14LC0500PQ4	IQI-PS-2	2-5	17.7-44	20-900	790	1.74	1/4" QC	263	9.53
	IQI14LC1000PQ4	IQI-PS-2	4-10	35-88	10-500	790	1.74	1/4" QC	263	10.35
	IQI14LC1500PQ4	IQI-PS-2	5-15	44-133	10-300	790	1.74	1/4"QC	263	10.35

Note: For the complete system, tool, controller, tool cable, and power adapter are necessary.

Accessories	Model Number	Description
Tool Cables	IQI-CABLE-2M	IQI cable 2 meter
	IQI-CABLE-5M	IQI cable 2 meter
Controller	IQI11-FM	IQI Series controller with fieldbus and MES
Power Adapters	IQI-PS-1	IQI 200W Power Adapter
	IQI-PS-2	IQI 400W Power Adapter



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