



Ingersoll Rand®

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 setup, 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.

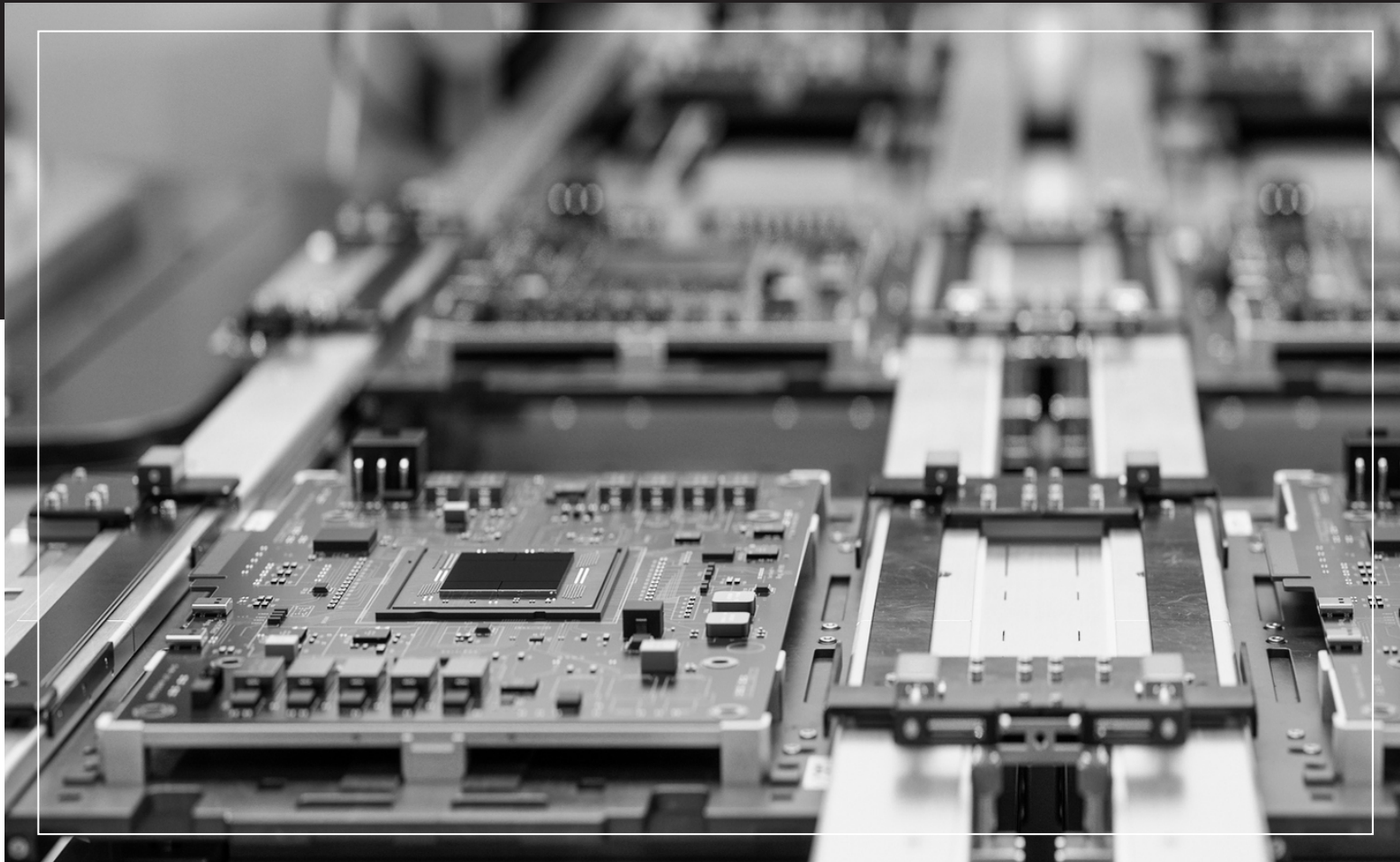
Designed to withstand over 1 million maintenance-free cycles, IQi Series minimizes downtime and maximizes productivity. From high-volume assembly to quality-critical manufacturing, IQi Series delivers unmatched efficiency, precision and reliability at a reduced total cost of ownership.

Transducerized Screwdrivers

- **Superior Accuracy**
Real-time torque and angle monitoring with $\pm 3.5\%$ precision.
- **Error-Proofing Features**
Advanced torque and angle control strategies reduce 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.

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.

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

Imagery depicts pistol grip kit installed on IQi Series Screwdriver

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

Model Number	Description
IQI2LTP00	IQI2L Transducerized Tool Pistol Grip Assembly Kit
IQI2LCP00	IQI2L Current Control Tool Pistol Grip Assembly Kit
IQI4LTP00	IQI4L Transducerized and Current Control Tool Pistol Grip Assembly Kit

Available in pistol configuration with compatible grip kit

*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

INSIGHT Qi IQI11-FM

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

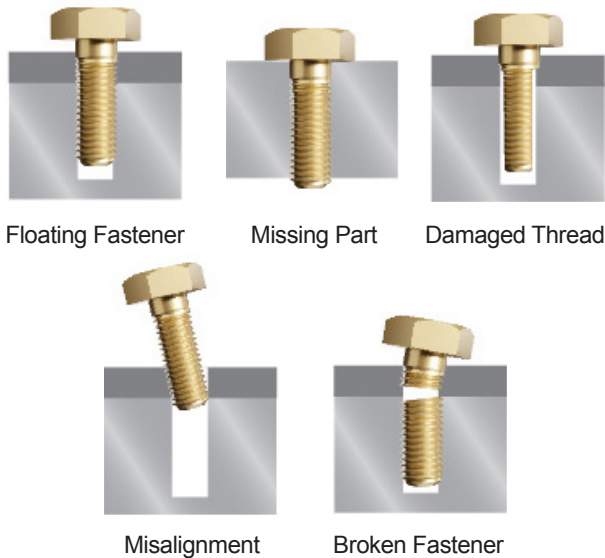
*One Ethernet Port, and one USB to Ethernet Port using an adapter.

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 minimize costly rework.



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

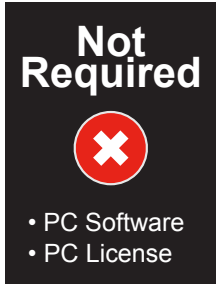
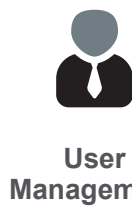
Benefit: Compared to traditional shiftdown methods, iQ Stop redefines fastening by providing a faster, more efficient and highly accurate tightening process, helping manufacturers maximize output without compromising quality

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



- ✓ Quick navigation to set up PSET and Job
- ✓ High-fidelity Cycle Results display
- ✓ Logic rules for JOB sequencing
- ✓ Advanced shiftdown strategies
- ✓ Live 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



Ethernet IP, ProfiNet



Open Protocol, ToolsNet

Hardware



IQi Series Specifications

Inline Screwdriver Specifications

	Activation	Model Number	Power Supply	Torque Nm	Torque in-lbs	RPM	Weight lbs	Drive Type	Length in	Compatible Pistol Grip*
Transducerized	Lever Start	IQI2LT0017TQ4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	1.01	1/4" QC	9.57	IQI2LTP00
		IQI2LT0017TM4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	1.01	Half moon	9.57	IQI2LTP00
		IQI2LT0050TQ4	IQI-PS-1	0.1-0.5	0.88-4.4	20-1000	1.01	1/4" QC	9.57	IQI2LTP00
		IQI2LT0100TQ4	IQI-PS-1	0.2-1	1.8-8.8	20-1000	1.01	1/4" QC	9.57	IQI2LTP00
		IQI2LT0200TQ4	IQI-PS-1	0.4-2	3.5-17.7	20-800	1.01	1/4" QC	9.57	IQI2LTP00
		IQI2LT0250TQ4	IQI-PS-1	0.5-2.5	4.4-22.1	20-525	1.01	1/4" QC	9.57	IQI2LTP00
		IQI4LT0500TQ4	IQI-PS-2	2-5	17.7-44	20-900	1.87	1/4" QC	9.76	IQI4LTP00
		IQI4LT1000TQ4	IQI-PS-2	4-10	35-88	10-500	1.87	1/4" QC	9.76	IQI4LTP00
		IQI4LT1500TQ4	IQI-PS-2	5-15	44-133	10-300	1.87	1/4" QC	9.76	IQI4LTP00
	Push To Start/ Lever Start	IQI2LT0017PQ4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	1.08	1/4" QC	10.59	IQI2LTP00
		IQI2LT0017PM4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	1.08	Half moon	10.59	IQI2LTP00
		IQI2LT0050PQ4	IQI-PS-1	0.1-0.5	0.88-4.4	20-1000	1.08	1/4" QC	10.59	IQI2LTP00
		IQI2LT0100PQ4	IQI-PS-1	0.2-1	1.8-8.8	20-1000	1.08	1/4" QC	10.59	IQI2LTP00
		IQI2LT0200PQ4	IQI-PS-1	0.4-2	3.5-17.7	20-800	1.08	1/4" QC	10.59	IQI2LTP00
		IQI2LT0250PQ4	IQI-PS-1	0.5-2.5	4.4-22.1	20-525	1.08	1/4" QC	10.59	IQI2LTP00
		IQI4LT0500PQ4	IQI-PS-2	2-5	17.7-44	20-900	1.94	1/4" QC	10.71	IQI4LTP00
		IQI4LT1000PQ4	IQI-PS-2	4-10	35-88	10-500	1.94	1/4" QC	10.71	IQI4LTP00
		IQI4LT1500PQ4	IQI-PS-2	5-15	44-133	10-300	1.94	1/4" QC	10.71	IQI4LTP00
Current Control	Lever Start	IQI2LC0017TQ4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	0.68	1/4" QC	8.50	IQI2LCP00
		IQI2LC0017TM4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	0.68	Half moon	8.50	IQI2LCP00
		IQI2LC0050TQ4	IQI-PS-1	0.1-0.5	0.88-4.4	20-1000	0.90	1/4" QC	8.50	IQI2LCP00
		IQI2LC0100TQ4	IQI-PS-1	0.2-1	1.8-8.8	20-1000	0.90	1/4" QC	8.50	IQI2LCP00
		IQI2LC0200TQ4	IQI-PS-1	0.4-2	3.5-17.7	20-800	0.90	1/4" QC	8.50	IQI2LCP00
		IQI2LC0250TQ4	IQI-PS-1	0.5-2.5	4.4-22.1	20-525	0.90	1/4" QC	8.50	IQI2LCP00
		IQI4LC0500TQ4	IQI-PS-2	2-5	17.7-44	20-900	1.67	1/4" QC	9.53	IQI4LTP00
		IQI4LC1000TQ4	IQI-PS-2	4-10	35-88	10-500	1.67	1/4" QC	9.53	IQI4LTP00
		IQI4LC1500TQ4	IQI-PS-2	5-15	44-133	10-300	1.67	1/4" QC	9.53	IQI4LTP00
	Push To Start/ Lever Start	IQI2LC0017PQ4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	0.75	1/4" QC	9.53	IQI2LCP00
		IQI2LC0017PM4	IQI-PS-1	0.02-0.17	0.17-1.5	50-1500	0.75	Half moon	9.53	IQI2LCP00
		IQI2LC0050PQ4	IQI-PS-1	0.1-0.5	0.88-4.4	20-1000	0.93	1/4" QC	9.53	IQI2LCP00
		IQI2LC0100PQ4	IQI-PS-1	0.2-1	1.8-8.8	20-1000	0.93	1/4" QC	9.53	IQI2LCP00
		IQI2LC0200PQ4	IQI-PS-1	0.4-2	3.5-17.7	20-800	0.93	1/4" QC	9.53	IQI2LCP00
		IQI2LC0250PQ4	IQI-PS-1	0.5-2.5	4.4-22.1	20-525	0.93	1/4" QC	9.53	IQI2LCP00
		IQI4LC0500PQ4	IQI-PS-2	2-5	17.7-44	20-900	1.74	1/4" QC	10.35	IQI4LTP00
		IQI4LC1000PQ4	IQI-PS-2	4-10	35-88	10-500	1.74	1/4" QC	10.35	IQI4LTP00
		IQI4LC1500PQ4	IQI-PS-2	5-15	44-133	10-300	1.74	1/4"QC	10.35	IQI4LTP00

	Model Number	Description
Tool Cables	IQI-CABLE-2M	IQI cable 2 meter
	IQI-CABLE-5M	IQI cable 5 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

*For the complete system, tool, controller, tool cable, and power adapter are necessary. Pistol Grip is not required unless configuration is desired.

IQi Torque Arms

Smart Torque Arm Systems

Precision Guidance for Perfect Assembly

The Ingersoll Rand® Smart Torque Arm transforms your assembly into a fully guided, intelligent fastening system leveraging built-in encoder technology. With ±1mm positional accuracy, and seamless integration into the IQi Series controller, the system delivers real-time, encoder-verified guidance that ensures operators fasten every screw in the correct location, sequence, and tolerance while providing torque-and-position traceability.

Integrated Operator Guidance

The operator guidance system provides real-time direction to ensure the tool is positioned at the correct fastening point and performed in the correct sequence.

- ✓ Reduces reliance on operator experience, and shortens training time
- ✓ Prevents missed or out-of-order screws, eliminating common assembly errors
- ✓ Improves assembly and process quality to ensure consistent, repeatable results



Integrated Operator Guidance is only available on a remote browser.

Torque Arm Models

	Model Number	Description
Articulating Arms	TA19B	Articulating Torque Arm, 19 Nm Max Torque, 640mm reach, Bench Mount
	TA02B	Carbon Fiber Articulating Torque Arm, 2 Nm Max Torque, 400mm reach, Bench Mount
	TA07B	Carbon Fiber Articulating Torque Arm, 7 Nm Max Torque, 600mm reach, Bench Mount
Carbon Fiber Telescopic Arms	TT10W	Carbon Fiber Telescopic Torque Arm, 10 Nm Max Torque, 660mm reach, Wall Mount
	TT19W	Carbon Fiber Telescopic Torque Arm, 19 Nm Max Torque, 610mm reach, Wall Mount
	TT19B	Carbon Fiber Telescopic Torque Arm, 19 Nm Max Torque, 610mm reach, Bench Mount
	TT19B-L	Carbon Fiber Telescopic Torque Arm, 19 Nm Max Torque, 610mm reach, Bench Mount, Long Reach
Linear Arms	TL15B	Linear Torque Arm, 15 Nm Max Torque, 300mm reach, Bench Mount
	TL30B	Linear Torque Arm, 30 Nm Max Torque, 300 mm reach, Bench Mount
Smart Articulating Arms	STA19B	Smart Encoder Articulating Torque Arm, 19 Nm
	STA02B	Smart Encoder Carbon Fiber Articulating Torque Arm, 2 Nm
	STA07B	Smart Encoder Carbon Fiber Articulating Torque Arm, 7 Nm
Smart Linear Arms	STL15B	Smart Encoder Linear Torque Arm, 15 Nm
	STL30B	Smart Encoder Linear Torque Arm, 30 Nm
Encoder Kits	TK-ST-EN-1	Smart Encoder Kit for STA02B
	TK-ST-EN-2	Smart Encoder Kit for STA07B, STA19B
	TK-ST-EN-3	Smart Encoder Kit for STL15B, STL30B



Learn more at www.irtools.com

Ingersoll Rand (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is dedicated to helping make life better for our employees, customers and communities. Customers lean on us for our technology-driven excellence in mission-critical flow creation and industrial solutions across 40+ respected brands where our products and services excel in the most complex and harsh conditions. Our employees develop customers for life through their daily commitment to expertise, productivity and efficiency.

