



PRECISION FASTENING SYSTEM

QX Series Precision Screwdriver

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QX Series Angle Wrenches

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### **REAL TOOLS FOR REAL WORK.**

# Next-Generation Productivity.

The innovative QX Series is a revolutionary step for your entire facility, one that shows how a smarter tool can improve process control, operator comfort and data communication in a single package, while increasing productivity, lowering costs and ensuring a high-quality product at the end of your line—all at a price you can afford today.

Tools that put you in total control are the future of assembly. That future is here, that future is REAL.

## NOT JUST TORQUE CONTROL, BUT TOTAL CONTROL.

### **Accuracy:**

• Ingersoll Rand's patented closed-loop transducer control at the heart of the tool delivers precise torque and accurate, traceable results—it's precision where you need it most

### **Control**:

- A multi-function display module allows for quick setup and feedback on every QX Series tool
- Eight user-programmable configurations per tool for torque, angle and speed make it one tool that does the work of eight, reducing costs and workspace clutter

### **Comfort:**

- · Compact, lightweight and ergonomically balanced so the operator can work without restraints
- Cordless and compact, the QX Series is designed for safe and clean operation

### **Communication:**

- A wireless communication option facilitated by Ingersoll Rand's dedicated Process Communication Module (PCM) helps integrate the tool and the assembly line into a true plant-wide network
- Manage data, process control and the ability to adjust tool configurations in real time using Ethernet, Fieldbus or I/O



# A Technological Vision.

Ingersoll Rand's design team started with a bold idea—to engineer a new class of advanced cordless fastening tools that could deliver closed-loop, multi-configuration control and precision at an affordable price. This idea has become a reality with the QX Series.

The QX Series Precision Screwdriver and Angle Wrench are designed with innovative technological features that set them apart from all other tools in their categories.

### The Building Blocks of Ingenious Engineering.

Control: Multi-Function Display Module

### **Precision**: Patented Closed-Loop Transducer



- User-friendly display shows results and accepts programming inputs
- Up to eight user-programmable fastening configurations
- Stores cycle data for up to 1,200 rundowns

**Efficiency**: Advanced Power Board

### **Communication:** Intelligent Radio Board



- Controls DC motor to drive tools through userprogrammed torque, angle and speed profiles
- · Modulates power from lithiumion battery to optimize performance



- An optional feature that transmits end-of-run data wirelessly to the Process Communication Module (PCM)
- PCM transmits data to database or assembly line control system via Ethernet, Fieldbus or I/O



• Accurately senses torque to manage the fastening cycle

Ultimate process control

• Advanced strategies like angle control, prevailing torque and torque monitoring

### **Power Management: Digital Signal Processor**



- Accurately controls motor for precision fastening
- Monitors torque, angle and motor current while communicating end-ofrun data
- Eliminates the need for costly external controller

### **Durability**:

DC Brushless Motor



- Drives QX Series precision power train
- No brushes to wear out or leave carbon residue
- Efficient rare earth magnet motor designed for more than a million cycles





# Engineering The Future.



# A Plant-Wide Network for Plant-Wide Productivity.

Ingersoll Rand doesn't just give you unprecedented technology; we want to give you total control of that technology. Our Process Communication Module allows for control that translates into maximum productivity and efficiency.

### 10 to 1:

Every Process Communication Module can communicate with up to 10 individual QX Series tools.





### **Process Control**



When not using the wireless networking option, each QX Series tool can communicate with a computer via USB port.



# **Real-Time Monitoring Data Archiving**



# Configured For Versatility.

The QX Series can be tailored to meet the needs of your lines.

### **QX Series Specifications**

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	CDN		N				·	Õ
Model	CPN	Nm	rpm	kg*	mm*	mm	in	Communication
OXX2PT04P04	Precision Screwdriv 47104062	er 0.8–4	1,500	0.91	215.4	20.3-26.0	1/4" 🔘	Wireless Enabled
QXX2PT04PS4	47104002	0.8-4	1,500	0.91	208.3	20.3-26.0	1/4"	Wireless Enabled
QXX2PT04PS6	47104070	0.8-4	1,500	0.91	200.5	20.3-26.0	3/8"	Wireless Enabled
QXX2PT08PQ4	47104005	1.6-8	1,150	0.91	212.0	20.3-26.0	1/4" O	Wireless Enabled
QXX2PT04P54	47104003	1.6-8	1,150	0.91	208.3	20.3-26.0	1/4"	Wireless Enabled
QXX2PT08PS6	47104021	1.6-8	1,150	0.91	212.0	20.3-26.0	3/8"	Wireless Enabled
0XX2PT12P04	47103940	2.4-12	750	0.91	215.4	20.3-26.0	1/4" O	Wireless Enabled
QXX2PT12PS4	47103957	2.4-12	750	0.91	208.3	20.3-26.0	1/4"	Wireless Enabled
QXX2PT12PS6	47103965	2.4–12	750	0.91	212.0	20.3-26.0	3/8" 🗗	Wireless Enabled
QXX2PT18PQ4	47516834002	3.6-18	500	0.91	215.4	20.3-26.0	1/4" 🗅	Wireless Enabled
QXX2PT18PS6	47516834004	3.6–18	500	0.91	212.0	20.3-26.0	3/8"	Wireless Enabled
QXC2PT04PQ4	47104039	0.8-4	1,500	0.91	215.4	20.3-26.0	1/4" 🔿	Via USB Cable
QXC2PT04PS4	47104047	0.8-4	1,500	0.91	208.3	20.3-26.0	1/4" 🗅	Via USB Cable
QXC2PT04PS6	47104054	0.8-4	1,500	0.91	212.0	20.3-26.0	3/8"	Via USB Cable
QXC2PT08PQ4	47103973	1.6-8	1,150	0.91	215.4	20.3-26.0	1/4" 🔿	Via USB Cable
QXC2PT08PS4	47103981	1.6-8	1,150	0.91	208.3	20.3-26.0	1/4" 🗅	Via USB Cable
QXC2PT08PS6	47103999	1.6-8	1,150	0.91	212.0	20.3-26.0	3/8" 🗅	Via USB Cable
QXC2PT12PQ4	47103916	2.4–12	750	0.91	215.4	20.3-26.0	1/4" 🔿	Via USB Cable
QXC2PT12PS4	47103924	2.4–12	750	0.91	208.3	20.3-26.0	1/4" 🗗	Via USB Cable
QXC2PT12PS6	47103932	2.4–12	750	0.91	212.0	20.3-26.0	3/8" 🗅	Via USB Cable
QXC2PT18PQ4	47516834001	3.6–18	500	0.91	215.4	20.3-26.0	1/4" 🗅	Via USB Cable
QXC2PT18PS6	47516834003	3.6–18	500	0.91	212.0	20.3-26.0	3/8" 🗅	Via USB Cable
QX Series Cordless	Angle Wrench		_					
QXX2AT05PQ4	47510887005	1.0–5	1,213	1.14	552	9.2	1/4" 🔘	Wireless Enabled
QXX2AT10PS6	47510887004	2.0–10	936	1.18	525	12.5	3/8" 🗅	Wireless Enabled
QXX2AT15PS6	47510887003	3.0–15	600	1.18	525	12.5	3/8" 🗅	Wireless Enabled
QXX2AT18PQ4	47510887002	3.6–18	500	1.27	542	13	1/4" 🔿	Wireless Enabled
QXX2AT18PS6	47510887001	3.6–18	500	1.27	542	13	3/8" 🗆	Wireless Enabled
QXX2AT27PS6	47515592002	5.4–27	330	1.68	552	17	3/8" 🗅	Wireless Enabled
QXC2AT05PQ4	47510887010	1.0-5	1,213	1.14	552	9.2	1/4" O	Via USB Cable
QXC2AT10PS6	47510887009	2.0-10	936	1.18	525	12.5	3/8"	Via USB Cable
QXC2AT15PS6	47510887008	3.0-15	600	1.18	525	12.5	3/8"	Via USB Cable
QXC2AT18PQ4	47510887007	3.6-18	500	1.27	542	13	1/4" 🔿	Via USB Cable
QXC2AT18PS6	47510887006	3.6-18	500	1.27	542	13	3/8"	Via USB Cable
QXC2AT27PS6	47515592001	5.4–27	330	1.68	552	17	3/8" 🗆	Via USB Cable
QX Series High Tor		40.20	1045	4 5	577.7	12.1	2/0" □	Wireless Enabled
QXX5AT20P506	47517880007	4.0-20	1045	4.5	577.7	13.1	3/8" 🗗	Wireless Enabled
QXX5AT30PS06 QXX5AT30PS08	47517880006	6.0-30	775	4.8	581.8	17.2	3/8"	Wireless Enabled
QXX5AT35P508	47517880005 47517880004	6.0–30 7.0–35	775 640	4.8	581.8 581.8	17.2 17.2	1/2" 🖸 3/8" 🖸	Wireless Enabled Wireless Enabled
QXX5AT35P508	47517880004	7.0-35	640	4.8	581.8	17.2	1/2"	Wireless Enabled
QXX5AT40P508	47517880003	8.0-40	545	5.0	586.1	21.6	1/2 D	Wireless Enabled
QXX5AT60P508	47517880002	12.0-60	375	5.0	586.1	21.6	1/2	Wireless Enabled
QXC5AT20P506	47517880014	4.0-20	1045	4.5	577.7	13.1	3/8"	Via USB Cable
QXC5AT30P506	47517880013	6.0-30	775	4.8	581.8	17.2	3/8"	Via USB Cable
QXC5AT30P508	47517880012	6.0-30	775	4.8	581.8	17.2	1/2"	Via USB Cable
QXC5AT35P506	47517880011	7.0-35	640	4.8	581.8	17.2	3/8"	Via USB Cable
QXC5AT35P508	47517880010	7.0-35	640	4.8	581.8	17.2	1/2"	Via USB Cable
QXC5AT40P508	47517880009	8.0-40	545	5.0	586.1	21.6	1/2 □	Via USB Cable
QXC5AT60P508	47517880008	12.0-60	375	5.0	586.1	21.6	1/2"	Via USB Cable
2/10/100 200	1/31/300000	12.0 00	212	5.0	500.1	21.0	1/2 0	

\*Weight and length do not include battery. Battery sold separately. Specifications are subject to change

### QX Series Process Communication Module (PCM)

		IC-PCM-2-EU
Main Power Supply	84737-A499-PCM-5V (supplied) 100-240 V AC input - 5V DC output	•
Tool Connections	Wireless tool connections	10
Software	ICS Connect software	•
Communication	Ethernet to ICS	•
Fieldbus Options	Ethernet/IP, DeviceNet, Interbus-S, Profibus, Modbus-TCP	•
Protocols	Open Protocol, Ethernet EOR, Serial EOR, Profinet-Communication	•
Printers/Devices	Serial RS232, bar code, label printing	•
I/0	8 inputs/8 outputs, with behavior assignable through ICS software, operates at 24V DC	•
I/O Power Supply	84737-A499-PCM-24V (supplied) 100-240 V AC input - 24V DC output	•
Indicators	Power ON, System Ready, Wireless Activity, Ethernet Activity	•

### **Batteries**

All QX Series tools are compatible with both the BL2010 and BL2005 batteries. The BL2010 is optimum for longer use applications, while the BL2005 is ideal for tighter spaces and reduced weight. The new QX Series IQV40 high torque tools utilize the BL4011 40V battery for increased torque and runtime.

















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