Ingersoll Rand®

SIMPLE. DURABLE. PRECISE.

QC Series with Ingersoll Rand®
Proven Clutch Design

QC SERIES
CLUTCH TOOLS
SIMPLY PRECISE
CORDLESS PRECISION FASTENING SYSTEMS

QC SERIES CLUTCH TOOLS

SIMPLY PRECISE

QC Series Clutch Tools are engineered for robust performance and designed to last more than 500k cycles in demanding assembly environments to deliver precision in every fastening application. The clutch tool offers a seamless setup experience via the INSIGHT™ Connect app, enabling quick programming of advanced parameters to meet specific application needs.

Leveraging the Ingersoll Rand® proven clutch design, the QC Series provides accuracy and durability for customer-critical applications. Designed with user comfort and precision in mind, the balanced ergonomic build helps reduce fatigue, while the dual-speed non-contact trigger and a status beam light provide clear feedback for smooth, accurate, and efficient operation.

Simple

Easy **to Use**

- 360º status beam light on Pistol Tools and status beam headlight on Angle Tools
- Advanced programmable parameters using the INSIGHT™ Connect Mobile App
- IQV20™ cordless platform

Durable

Built **to Last**

- Lasts up to 500k cycles in a high-speed assembly environment

Precise

Work with **Accuracy**

- Proven clutch design achieves Cmk >1.67 at +/- 10% accuracy
- Lockable, tamper-proof clutch delivers up to 30 Nm of torque
- Programmable RPM helps tune the tool to meet application-specific requirements

QC SERIES **FEATURES**

Locking Clutch
door for torque adjustments

Brushless DC Motor for enhanced durability

Configurable LED ring light:
Red - NOK tightening,
Green - OK tightening,
White - task light

Cycle Status Indicator for PASS/FAIL

Patented Dual-speed,
non-contact trigger

Ergonomic and lightweight
product design

7 Programmable advanced parameter

Compatible with:

Advanced Parameters

- Rundown RPM
- Tightening RPM
- Tightening Direction
- Reverse Disable
- Cycle Delay
- Soft Start
- Rehit Detection

INSIGHT™ CONNECT APP

Improve Uptime and Productivity with Advanced Programmable Parameters

QC Series Clutch Tools allow users to easily configure advanced programmable parameters to tailor the tool for each specific application. Adjustable torque output, programmable speed control and other advanced parameters streamline operations, reducing downtime and improving productivity, even on the most complex jobs.

Stay in Control of your Fastening Processes with the INSIGHT™ Connect App

Tool setup and advanced programming is intuitive in the INSIGHT™ Connect App. Easily program the QC Series tools via a simple USB-C connection on mobile or desktop applications and eliminate the need for additional technical training, special software or plant network permissions.

Rundown Phase

Tightening direction: Choose between clockwise or counterclockwise

Speed (RPM): Set the free tool speed before shift-down conditions are met

Angle shift down: Define the shift from the rundown to tightening phase based on the predefined value of angle rotation, up to 18,000º

Time shift-down: Define the shift from the rundown to tightening phase based on a specific time duration up to 3 seconds

Tightening Phase

Speed (Programmable RPM): Tool speed is set to a user-defined value after high speed rundown, based on the specific shift-down conditions, ensuring precise and controlled tightening

Tool Parameters

Restart delay on OK cycle: Set a time interval to lock the tool after an OK tightening cycles

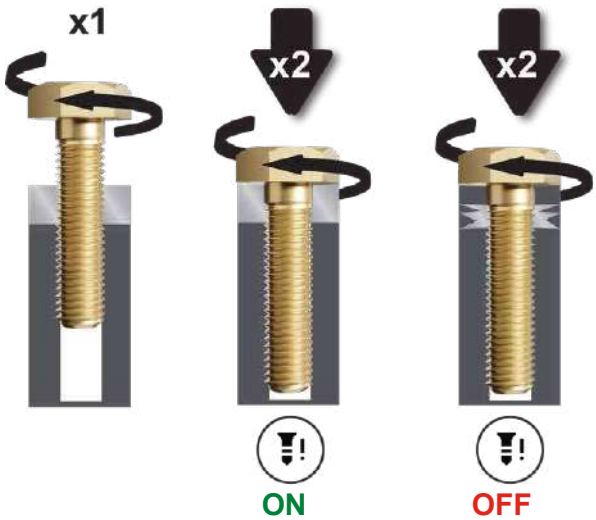
Restart delay on NOK cycle: Set a time interval to lock the tool after a NOK tightening cycle

Soft start (speed ramp up): The tool gradually ramps up at the beginning of a cycle

Reverse disable: The tool only operates in the tightening direction

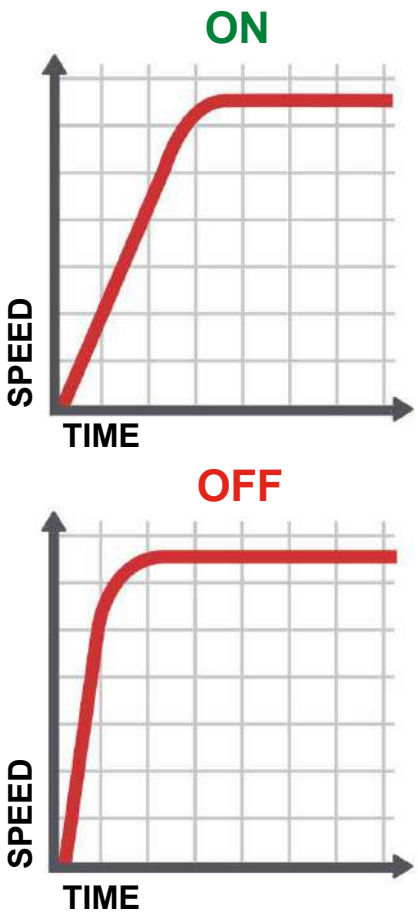
Rehit Detection Mode: When the tool detects a high load on a fastener at startup, Rehit Detection Mode immediately shuts off the tool, displays a cycle-fail indicator, alerting the operator that a fastener was previously tightened or has been cross-threaded.

Benefit: During a common fastening, there is a period of rundown during which the fastener encounters very little resistance. If high resistance is encountered at this stage, the fastener may have been tightened already, or the fastener has been cross-threaded. With Rehit Detection Mode enabled, the tool shuts down when it senses high resistance and will alert the operator that the fastener needs attention.



Soft-Start: The tool speed gradually ramps up at the beginning of a cycle.

Benefit: A gradual speed increase during soft start gives the operator more control as they get the fasteners started.



Reverse Disable: The tool only operates in the tightening direction.

Benefit: Maintain control in production when operators are only required to install fasteners. When Reverse Disable is on, the tool will only operate in the tightening direction. Therefore, the tool cannot be used for fastener removal or for rework.

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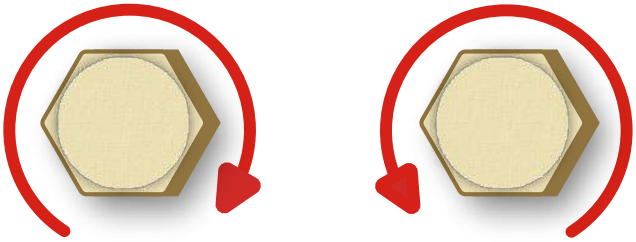
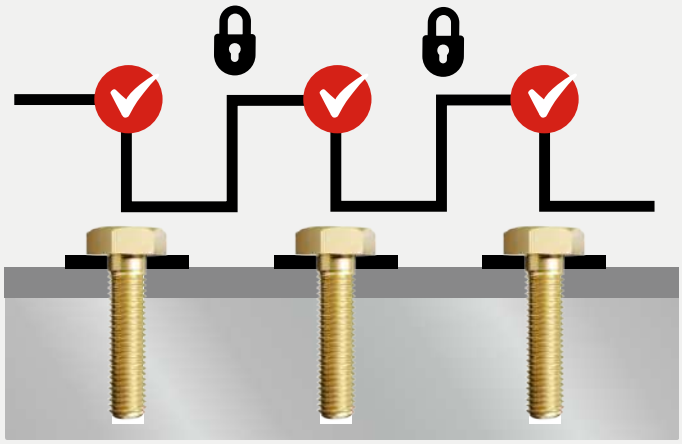
ADVANCED **FEATURES**

Tightening Direction: Can be programmed as clockwise or counter-clockwise to fasten joints.

Benefit: Tool can be operated in both clockwise and counterclockwise direction when in a shut-off mode.



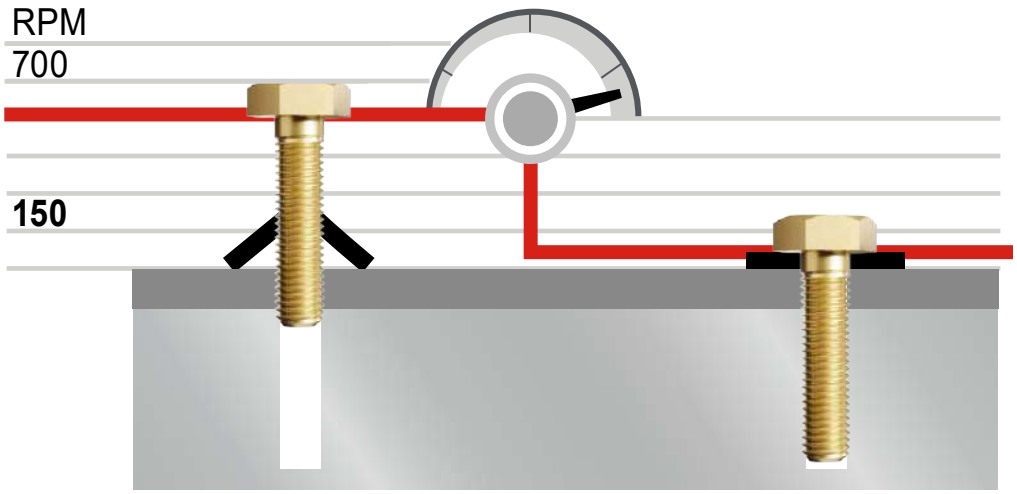


Restart Delay in OK/NOK Cycles: The Restart Delay function (also known as Rehit Prevention Mode) locks the tool, which disables the trigger for a specified period of time, and prevents operation when running an OK or NOK Tightening Cycle.

Benefit: Operator error can be lessened, especially during rapid tightening of a series of fasteners, when failure to advance to the next fastener or tightening of the same fastener twice may occur.

Programmable RPM: Set tool to shift down from **Run-Down Phase** to **Tightening Phase** based on a pre-defined shift down condition.

Benefit: Programmable RPM reduces risk of overtorquing. Damage to the workpiece is minimized when slower speed is used toward the end of the fastening process.



TECHNICAL **SPECIFICATIONS**

Specifications

Model	Tool Configuration	Drive	Torque Range (Nm)	Speed (RPM)	Weight w/o Battery (lbs)	Length w/o Battery (mm)	Height w/o Battery (mm)	Programmable
QCP2P02Q4	Pistol	1/4 Hex	0.5-2	350-1160	2.3	210	208.6	Yes
QCP2P04Q4	Pistol	1/4 Hex	1-4	350-1160	2.3	210	208.6	Yes
QCP2P08Q4	Pistol	1/4 Hex	3-8	140-700	2.3	210	208.6	Yes
QCP2P12Q4	Pistol	1/4 Hex	5-12	140-700	2.3	210	208.6	Yes
QCP2A30S6	Angle	3/8 Sq	15-30	60-300	3.5	510	66.3	Yes
QCN2P02Q4	Pistol	1/4 Hex	0.5-2	1160	2.3	210	208.6	No
QCN2P04Q4	Pistol	1/4 Hex	1-4	1160	2.3	210	208.6	No
QCN2P08Q4	Pistol	1/4 Hex	3-8	700	2.3	210	208.6	No
QCN2P12Q4	Pistol	1/4 Hex	5-12	700	2.3	210	208.6	No
QCN2A30S6	Angle	3/8 Sq	15-30	300	3.5	510	66.3	No

Battery and Charger Platform

IQV20™ Series 20V
Battery Charger
BC1121-AP3 (JP); BC1121-AP4 (AUS/NZ); BC1121-AP5 (KR); BC1121-AP6 (SG/HK)

IQV20™ Series 20V,
5.0Ahr - Lithium-Ion Battery
BL2022; BL2022-AP5 (KR)

IQV20™ Series 20V,
2.5Ahr- Lithium-Ion Battery
BL2012; BL2012-AP5 (KR)

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SIMPLY PRECISE

Simple

Durable

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Ingersoll Rand Inc. (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 50+ respected brands where our products and services excel in the most complex and harsh conditions. Our portfolio of products consists of air compressors, pumps, blowers, and systems for fluid management, loading and material handling as well as power tools. With over 18,000 employees globally, our team develops customers for life through their daily commitment to expertise, productivity and efficiency. For more information, visit www.IRCO.com.