



DC ELECTRIC
PRECISION FASTENING SYSTEMS
Different, by Design



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SIMPLY INSIGHTFUL

When trying to achieve simple manufacturing goals in a complex manufacturing world, taking control of and understanding the fastening process doesn't have to be complicated. The new Ingersoll Rand® INSIGHTqc™ is different, by design. The INSIGHTqc™ controller is designed to be easy to use, easy to integrate, and provide a common platform to meet the global assembly needs of our customers. This controller offers advanced tightening control and a simple user experience to improve efficiency on production lines, and get the job done right, every time.



	SIMPLE	FLEXIBLE	CAPABLE
WHY DO I CARE?	EXPERTS NOT REQUIRED	EASILY IMPLEMENT CHANGE	MEET YOUR REQUIREMENTS
WHAT DOES THIS MEAN TO ME?	• Save on selection, training and installation costs • Reduce errors and downtime • Remove user dependencies	• Reduce line rebalancing costs • Easy line integration • Remove device dependency • Enhanced to Sync several tools to 1 independent controller	• Get the job right, every time • Assurance via traceability • Optimize your productivity • Seamlessly control the Multi Spindle Fastening Solutions
HOW DOES INGERSOLL RAND OFFER THIS?	• Intuitive, Visual Programming Interface • Plug and Play Accessories and Protocols • Backwards Capability • Integrated Backup and Recovery • Bundled Controller Options • Context Specific Integrated HELP	• Web Based programming use any operating system via any browser • Meets current industry communication needs • Adjustable to meet any tightening control requirements • Integrated logic controls • Easy hardware and software upgrades	• Touch Screen Interface • Industry leading cycle data storage • Robust audit and system logs • Advanced tightening strategies and features • Onboard diagnostics • Integrated statistical process controls • Preventative maintenance alarms • Configurable email alerts

The web-based software eliminates device dependencies and enables full programming capability with any device that can run an Internet browser, including smart phones, tablets or computers. The INSIGHTqc™ controller is easy to integrate with the manufacturing line, provides flexible logic controls for job sequencing, and helps reduce line rebalancing costs through a simple and intuitive user interface. The INSIGHTqc™ Controller Platform has been enhanced to support both single & multi-spindle fastening applications, syncing multiple uses and applications to one controller platform.

Bottom line, the INSIGHTqc™ controller is a Simply Insightful solution.

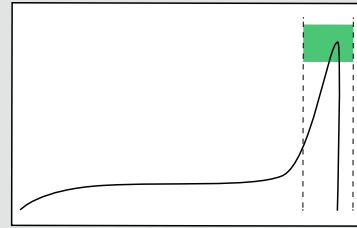
CAPABILITIES

Software Capability									
	Standard	F	M	FM		Standard	F	M	FM
Software Feature	•	•	•	•	License Update	•	•	•	•
Home Screen	•	•	•	•	License Activate	•	•	•	•
JOB Setup	•	•	•	•	Date & Time Settings	•	•	•	•
PSET Setup	•	•	•	•	System Initialization	•	•	•	•
ALL Tighteing Strategies	•	•	•	•	Spindle Management	•	•	•	•
Quick Programming	•	•	•	•	IP Address Settings	•	•	•	•
Advanced Programming	•	•	•	•	Email Alerts	•	•	•	•
Cycle Results	•	•	•	•	Digital IO Settings	•	•	•	•
JOB Results	•	•	•	•	EOR Data Out	•	•	•	•
Audit Log	•	•	•	•	Barcode	•	•	•	•
Event Log	•	•	•	•	User Managmeent	•	•	•	•
System Diagnostics	•	•	•	•	System Logs		•		•
Tool Diagnostics	•	•	•	•	Fieldbus Diagnostics		•		•
Digital IO Diagnostics	•	•	•	•	Fieldbus Settings		•		•
Statistics Settings	•	•	•	•	Ethernet IP		•		•
Statistics Summary	•	•	•	•					
Statistics Alarm Settings	•	•	•	•	ProfiBus		•		•
Statistics Alarm Summary	•	•	•	•					
Backup and Restore	•	•	•	•	MES Protocols Settings			•	•
Firmware Update	•	•	•	•	Atlas Copco Open Protocol			•	•
Preventative Maintenance Alarms	•	•	•	•	Atlas Copco ToolsNet			•	•
Tool Calibration	•	•	•	•	VW XML 2.1			•	•
Factory Reset	•	•	•	•	Nissan Serial EOR			•	•
Network System Discovery	•	•	•	•					

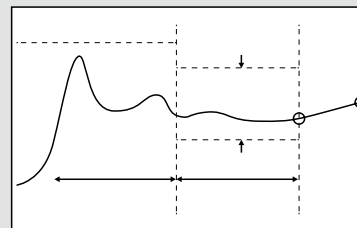
STATISTICAL PROCESS CONTROLS

Statistic Status	Description
Mean	Statistical average - used to derive the central tendency of the tightening data of a particular PSET
Capability	Calculated as $(6 * \sigma / \text{Mean}) * 100$ on a particular PSET
Pass %	Indicates the % of the cycles that have a cycle result of PASS from the sample population of a particular PSET
Fail %	Indicates the % of the cycles that have a cycle result of FAIL from the sample population of a particular PSET
Mean Shift	Calculated as: MEAN Result Value - TARGET Result Value for a particular PSET
Range	Calculated as: MAX Result Value - MIN Result Value of a particular PSET.
Standard Deviation (σ)	The calculated standard deviation (σ) of the Result Value of a particular PSET.
PP	Process Performance, calculated as: $(USL - LSL) / (6 * \sigma)$
CAM	Calculated as: $(USL - USL) / (6 * (W / d * S))$
PPK	Process Performance Index, Calculated as: $\text{MIN} ((\text{MEAN} - LSL) / (3 * \sigma) \text{ OR } (USL - \text{MEAN}) / (3 * \sigma))$

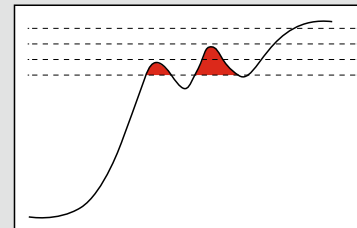
TORQUE/ANGLE CONTROL



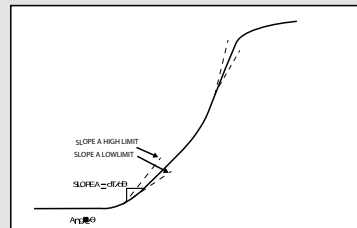
PREVAILING TORQUE



STICK SLIP DETECTION



GRADIENT/ SLOPE ANALYSIS



INSIGHTqc™ CONTROLLER FEATURES



INSIGHTqc™ CONTROLLER

SOFTWARE



256
JOBS PSETs



31
Steps per PSET



User Logins



Web-Based Programming

NOT Required



- PC Software
- PC License

- ✓ Logic rules for JOB sequencing
- ✓ Barcode function: USB, Serial, Ethernet
- ✓ Manual barcode entry option
- ✓ Tubenut controls (configurable modes)
- ✓ Quick programming mode
- ✓ Advanced programming mode
- ✓ Unrestricted programming from controller or remote
- ✓ Embedded, context-specific help
- ✓ Same hardware for single or multi spindle options
- ✓ Multi-language support
- ✓ Onboard tool diagnostics
- ✓ Trade transfer over open protocol

ONBOARD DATA STORAGE

- ✓ Removable SSD card stores ALL settings and data
- ✓ Complete controller settings and data recovery through SSD swap
- ✓ Tightening curve displayed on Home screen of controller
- ✓ Full USB backup and restore function

500k

- Audit Logs
- Event Logs
- System Logs
- Tightening Results
- Tightening Curves

CONNECTIVITY

3
Fieldbus Options



Ethernet IP

7
MES Protocol Options



Open Protocol, Ford Open Protocol, ToolsNet, Toyota PokeYoke, VW XML, IR Ethernet EOR, & Nissan Serial EOR

HARDWARE



60_{sec}
Boot Time
60 Seconds



8
Tool Families



10.9
Volume
10.9 dm³



4
USB
2.0 Ports



7"
Touch Screen
7 inch Color



2
Ethernet Ports
10/100, 10/100/1K

ONE CONTROLLER COUNTLESS CAPABILITIES

Ingersoll Rand's INSIGHTqc™ Controller Platform has been enhanced to support both Single-Spindle and Multi-Spindle fastening applications, syncing multiple uses and applications to one single controller platform. Starting with its simplified setup, this upgrade reduces wasted time and allows its users to quickly adapt to changing needs on the spot—all without the burden of managing multiple platforms.

- **Simplicity:** Now offered as a single controller platform for Multi- and Single-Spindle applications, the simplicity of the INSIGHTqc™ Controller Platform cannot be overstated. By using a single controller to navigate multiple needs and functions, this advanced system simplifies setup, streamlines operations and empowers you to complete intricate jobs accurately.
- **Flexibility:** Designed with the ability to quickly adapt to every changing need without the burden of managing multiple platforms, this single controller system features first-rate flexibility and decreased downtime. And, thanks to its flexibility in programming, users can customize and adjust settings based on their specific needs.
- **Productivity:** Backed by a unified controller platform that's easy to use and navigate, the Multi-Spindle fastening application works cohesively with the INSIGHTqc™ controller to keep your efficiency at an all-time high. Users will appreciate its ability to easily modify program parameters to switch between different profiles, making it simple to accommodate variations in fastener types, torque requirements or assembly configurations.
- **Performance:** As a direct result of its ability to apply torque with precision and consistency across all spindles, this newly enhanced system reduces the likelihood of product failures, loose connections or performance issues, resulting in higher product reliability and overall quality.

Our newly enhanced INSIGHTqc™ controller system works seamlessly with our Multi-Spindle Fastening Solutions to save time, effort and space—without sacrificing Ingersoll Rand's trademark toughness and reliability.



CONTROLLER MODELS

The INSIGHTqc™ Controller is 100% compatible with our QE and QM tools. With the INSIGHTqc™, these tools will have 500K tightening records and 500K tightening traces – compared to 10 to 30K in competitors’ products – which will let users understand all facets of the tightening process – torque, angle, time and date.

Model	SYSTEM OPTIONS				FIELDBUS OPTIONS				MES OPTIONS				
	Series	Display	Power	Hardware	Ethernet/IP	ProfiNet	ProfBUS	DeviceNET	IR Ethernet EOR	Open Protocol	ToolsNet	VW XML 2.1	Nissan SerialEOR
QCD31	QC	Display	230V AC	Standard					•				
QCD31-F	QC	Display	230V AC	Standard	•	•			•				
QCD31-M	QC	Display	230V AC	Standard					•	•	•	•	•
QCD31-FM	QC	Display	230V AC	Standard	•	•			•	•	•	•	•
QCD32-F	QC	Display	230V AC	Standard + ProfiBUS Card	•	•	•		•				
QCD32-FM	QC	Display	230V AC	Standard + ProfiBUS Card	•	•	•		•	•	•	•	•
QCD33-F	QC	Display	230V AC	Standard + DeviceNet Card	•	•		•	•				
QCD33-FM	QC	Display	230V AC	Standard + DeviceNet Card	•	•		•	•	•	•	•	•

Multi-Spindle Software License

Part Reference	Discription	BOM
MS-SW-OPT-1	Multi Spindle Software Lincense, OPT–1	1. Receptacle, flash drive 2. Adapter, USB to Ethernet 3. Activation Card 4. Information Label 5. Label
MS-SW-OPT-2	Multi Spindle Software Lincense, OPT–2	
MS-SW-OPT-3	Multi Spindle Software Lincense, OPT–3	

License Selector Example
For an 8x Spindle System the following licensing selection can be made:

- OPT 3 X 3 + OPT 1
- OPT 2 X 5

* In this case License Option (OPT) represents number of spindle licenses

QE SERIES HANDHELD AND FIXTURED TOOLS

The ultimate world-class combination — QE Series tools and INSIGHTqc controllers — team up to make meeting your critical fastening requirements simple. Offering flexibility, these durable, ergonomically designed tools are easy to use — no experience needed.





SIMPLE



FLEXIBLE



CAPABLE



- FEATURES
- Torque range from 0.3 to 400 Nm
 - Closed-loop transducerized control delivers excellent capability and traceability
 - Compact and lightweight design
 - Optional bright LED headlights illuminate work space
 - Multicolored light ring and TactAlert, our tactile feedback option, provide clear operator feedback
 - Seamlessly runs on any Ingersoll Rand® controller
 - ESD-safe and RoHS-compliant options
 - High durability cable
 - Comfortable, ergonomically contoured grip
 - Easy to use push-button reverse and indicator light options
 - Highly configurable platform allows users to select their output torque, body style, actuation and spindle type to create the perfect tool for the application

QE SERIES FEATURES



QM SERIES FIXTURED TOOLS

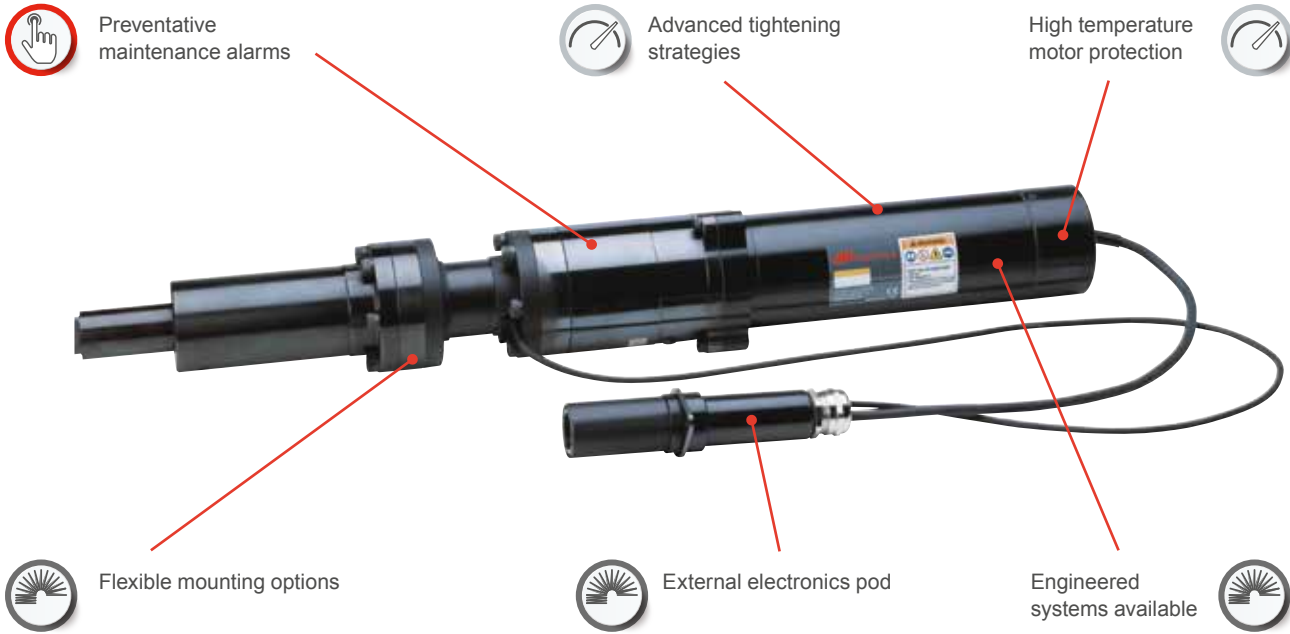
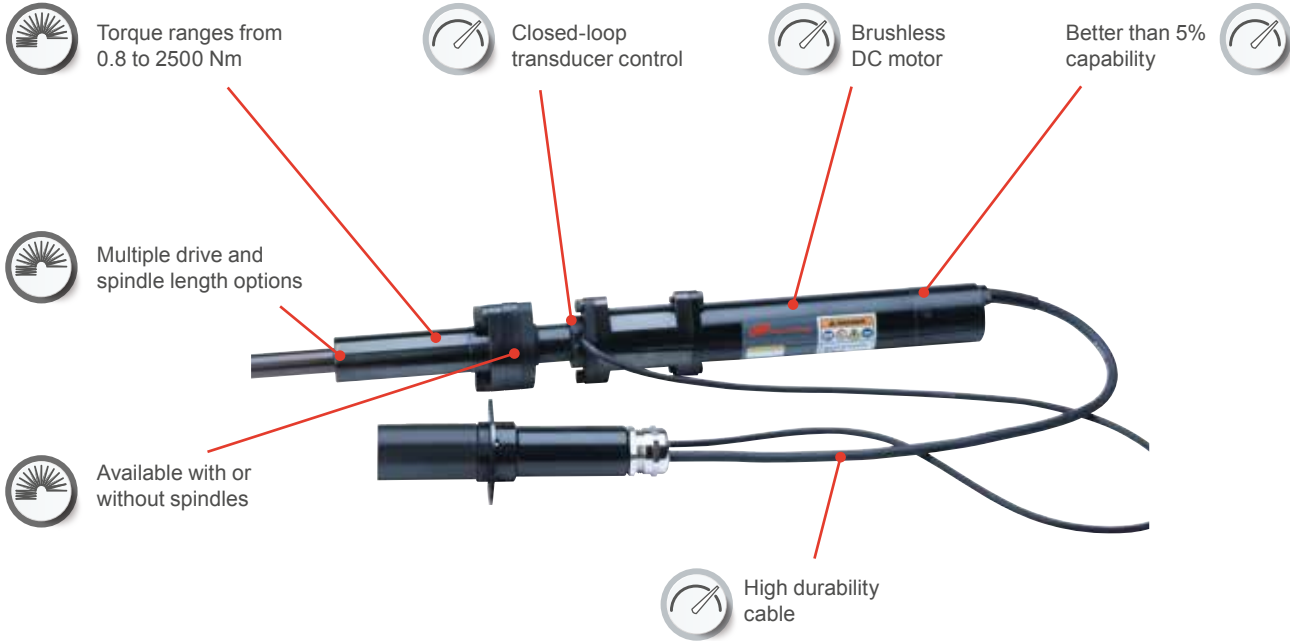
QM Series tools are the workhorse for your fixtured spindle applications. With four motor size platforms that provide broad torque, speed and size flexibility, Ingersoll Rand® QM spindles are different, by design. They are not only simple to use, but also offers excellent versatility that enables them to deliver the highest levels of performance in the industry. This series of spindles can be used in a wide range of assembly applications and fixture designs, offering ultimate flexibility.



FEATURES

- Torque coverage from 0.8 to 2500 Nm
- Closed-loop transducerized control delivers better than 5% capability across all four motor platforms
- Highly durable with minimal preventive maintenance required
- Seamlessly runs on any Ingersoll Rand® controller
- Multiple mounting options provide system integration flexibility
- External electronics pod simplifies mounting and connectivity
- Onboard motor temperature sensor protects tool damage due to excessive heat
- Easy to service — no special tools required
- Highly configurable platform allows users to select output torque, body style and spindle type to create the perfect tool for the application

QM SERIES FEATURES



SIMPLE

FLEXIBLE

CAPABLE

SYSTEM ACCESSORIES

The INSIGHTqc™ Controller provides optimal flexibility for the workstation with compatibility to a variety of plug n play accessories to maximize productivity for your manufacturing line. A variety of cables and extension cables are available to customize your production setup.

ACCESSORIES FOR ANY APPLICATION

- Socket selector trays
- 8 x 8 24 VDC USB DIO box
- Bit selector trays
- Light towers
- Bar code scanners
- USB to RS-232 serial adapter
- Mounting brackets
- Protective covers
- Reaction bars
- Extended lever kits

Model	Description
QC-SKTR	Socket Tray, 4 Position
QC-ADPT-1	Serial Interface Adaptor
QC-DIO-8CH	Digital I/O Box, 8 Channel
QC-DIO-366-K	DIO Box Mounting Bracket Kit
IC-BIT-8	Bit Tray
IC-19PIN-5M	Bit Selector Tray Cables
IC-19PIN-10M	Bit Selector Tray Cables



USB to Serial Adapter
QC-ADPT-1



Selector Tray Cables
IC-10PIN-6M for IC-Socket-4
IC-19PIN-5M for IC-Bit-8
This is required

CUSTOM SOLUTIONS

Engineered to Your Unique Specifications

Custom engineered assembly solutions are available for more complex applications with requirements such as adjustable bolt centers, multiple spindles, specialized clamping, indexing, custom fixture design and automation.

Ingersoll Rand’s worldwide network of solution centers can serve your ‘rail-to-floor’ project requirements from start to finish. Our full-range offering starts with joint analysis and process audits, then spans to system design, project management, installation and after-sales support.



TOOL CABLES

	(3m)	(6m)	(10m)
DC Tool Cables			
Tool Cable (QE2)	CPS2-CORD-3M	CPS2-CORD-6M	CPS2-CORD-10M
90 tool cable (qe2)	-	CPS2-CORD-6M-90	
Tool cable (qm, qe4/6/8)	GEA40-CORD-3M	GEA40-CORD-6M	GEA40-CORD-10M
90 cool cable (qm,qe4/6/8)	GEA40-CORD-3M-90	GEA50-CORD-6M-90	GEA40-CORDX-10-90
	(10m)	(20m)	(40m)
DC Tool Extension Cables			
Extension cable	GEA40-EXT-10M	GEA40-EXT-20M	GEA40-EXT-40M
	(50")	936	
90 extension cable***	GEA40-INT-01		

*** 90 degree extension cable requires a tool cable. Other lengths available.



SYSTEM ACCESSORIES
QE SERIES TOOLS

GENERAL ACCESSORIES



GEM120-K48

Flanged mounting plate ¹			
LEVER START	RANGE	PART NAME	CCN
QE4 – inline	< 27 Nm	15E4-K48	
QE4 – angle	115/150 Nm		
QE6/QE8 – inline	70/90 Nm	GEM120-K48	80112790
QE6/QE8 – angle	115/150 Nm		

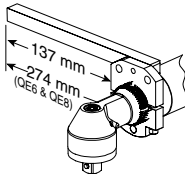


GEA4-K48

Square mounting plate ¹			
LEVER START	RANGE	PART NAME	CCN
QE4 – inline	< 56 Nm	GEA4-K48	4696456
QE4 – angle	< 90 Nm		
QE6/QE8 – inline	70/90 Nm	DAM120-K48	4340535
QE6/QE8 – angle	115/150 Nm		



GEA15-K48

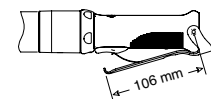


Reaction bar kit			
LEVER START	RANGE	PART NAME	CCN
QE2		CPS2-K48	
QE4 – inline	< 27 Nm	GEA15-K48	80132509
QE4TS	70/90 Nm	GEPTS15-K48	16046021
QE6/QE8 – inline	46 Nm	DEA120-K48 ²	4642369

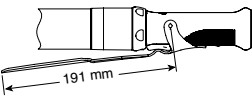


GEA40-K98EL

Lever Kit			
FOR QE4, QE6 & QE8		RANGE	PART NAME CCN
Short Lever Kit			GEA40-K98SL 80096985
Extended Lever Kit			GEA40-K98EL 80146541



Short Lever Kit



Extended Lever Kit



GEA40-K364

Swivel Hanger Kit			
LEVER START	RANGE	PART NAME	CCN
QE2		CPS2-A365	45592979
QE4		GEA15-K364	45484722
QE6/QE8		GEA40-K364	4695565



7L-365

Suspension bail – All QE Series			
LEVER START	RANGE	PART NAME	CCN
All QE Series		7L-365	3732922



GEA40-478

Maintenance and repair tool			
LEVER START	RANGE	PART NAME	CCN
All QE Series		GEA40-478	

(1) Require short coupling nut, ref. DAA4-27
(2) With a maximum torque of 150 Nm and for non-flanged models only

SYSTEM ACCESSORIES

QE SERIES TOOLS

TOOL HOLDERS



Ingersoll Rand Tools	QTA010	QTA020	QTA040	QTA100	QTA150	QTA270	QTA475
LEVER TO START							
QE4	—	CTC040-K1B	CTC040-K1B	—	—	—	—
QE6	—	CTC040-K2B	CTC040-K2B	—	—	—	—
QE8 with  (GEM120-K48)	—	—	—	—	CTC150-K2B	—	—
QE8 with  (integrated flange)	—	—	—	—	CTC150-K3B	CTC270-K3B	—
QE8 230 Nm	—	—	—	—	—	CTC270-K4B	—
QE8 400 Nm	—	—	—	—	—	—	CTC475-K5B
PUSH TO START							
QE4	CTC040-K1P	CTC040-K1P	CTC040-K1P	—	—	—	—

Note: Every Ingersoll Rand QE- or QA-specific tool holder listed in the table above accepts both angle and inline tools but requires an integrated flanged gear case or bolt-on mounting flange to attach the tool holder to the tool.

If your tool came with mounting style P (with letter „P“ in the model number) order Part No. 15E4-K48 for any Ingersoll Rand-specific tool holder that ends with „1B“ — Order Part No. GEM120-K48 for any Ingersoll Rand-specific tool holder that ends with „2B“ — Order Part No. QA4-K48 for any Ingersoll Randspecific tool holder that ends with „6B“.

PROTECTIVE ANGLE HEAD BOOTS



Angle Head Boots

TOOL ANGLE HEAD DIAMETER	DESCRIPTION	PART NAME	CCN
25 mm		131996	
28 mm	{QE2...all models} {QE4...013/ ...020}	131995	53454708
35 mm	{QE4...027/ ...034} {QE6...030/ ...040}	131997	53454724
43 mm	{QE6...055/ ...080} {QE8...065/ ...070/ ...090}	GEA40-172	80095409
48 mm	{QE8...115/ ...150}	GEA40-173	80095789
56 mm	{QE8...225}	GEA240-173	45533766

SYSTEM ACCESSORIES

TORQUE ARMS & TOOL HOLDERS

BENCH MOUNTED TORQUE REACTION ARMS

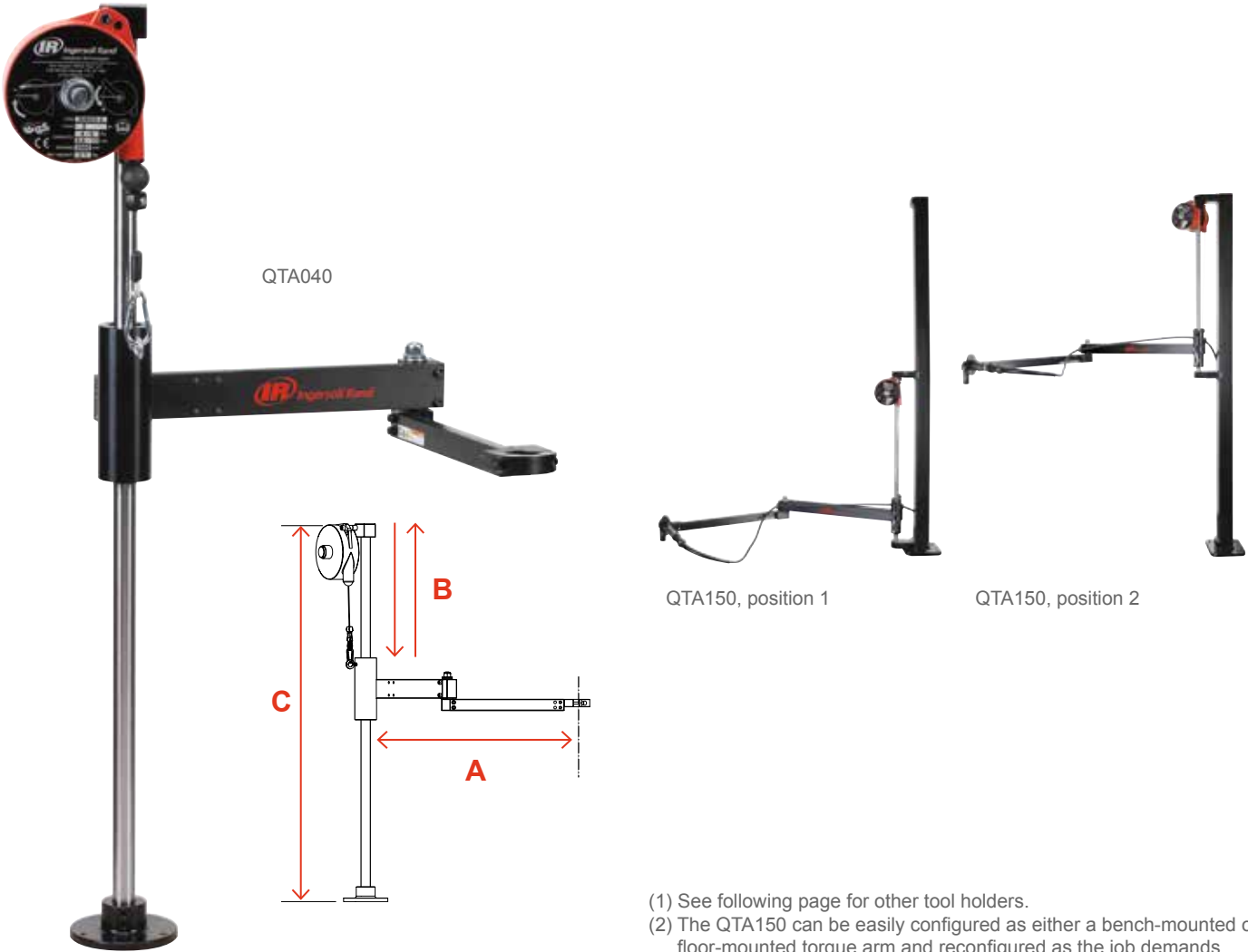


Specifications

Ref.	 MAX Nm	 kg	 A mm	 B mm	 C mm
QTA010	10	1.2	380	330	706
QTA020	20	2.3	508	368	808
QTA040	40	3.0	635	445	1008
QTA100	100	3.6	762	445	1008
QTA150 ⁽²⁾	150	4.5	1321	559	2000

STANDARD EQUIPMENT

- Anodized aluminum body on bearing and chrome-plated pole
- Die-cast aluminum spring balancer
- Standard inline tool holder up to 100 Nm(1)
- Cable management clips to route air hose or DC tool cable



(1) See following page for other tool holders.
(2) The QTA150 can be easily configured as either a bench-mounted or floor-mounted torque arm and reconfigured as the job demands.

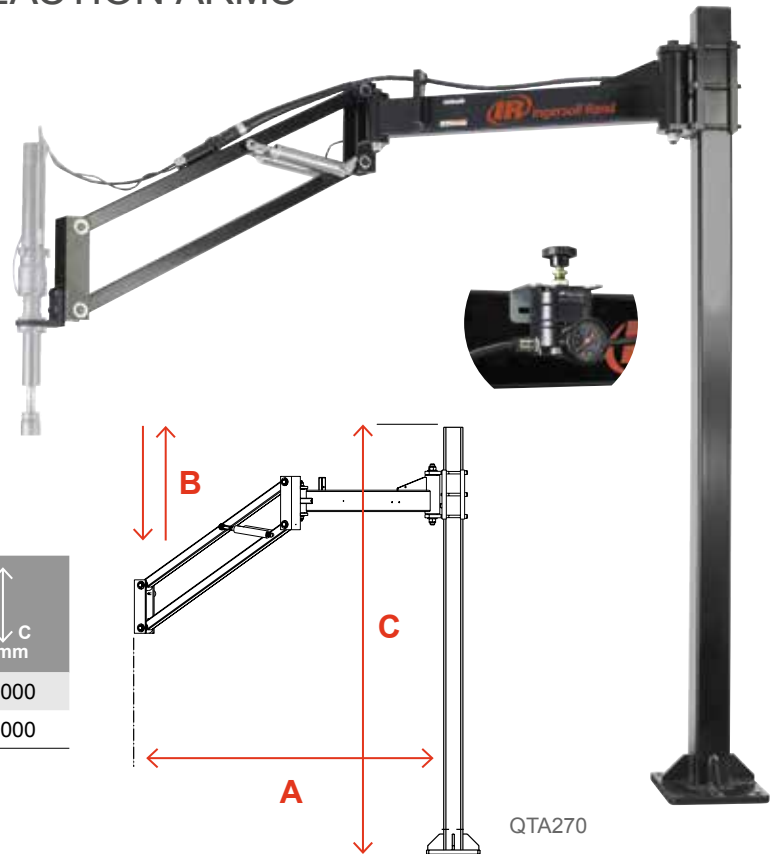
SYSTEM ACCESSORIES

TORQUE ARMS & TOOL HOLDERS

FLOOR MOUNTED TORQUE REACTION ARMS

STANDARD EQUIPMENT

- Adjustable arm height at column
- Air cylinders and regulator
- Cable management clips to route air hose or DC tool cable
- Safety stop



Specifications

Ref.	MAX Nm	kg	A mm	B mm	C mm
QTA270	270	10	1524	477	2000
QTA475	475	23	2007	590	2000

GENERIC CLAMP STYLE TOOL HOLDERS



Type – Tipo	QTA010	QTA020	QTA040	QTA100
Inline (included with arm)	ITC010-1C	ITC040-1C	ITC040-1C	ITC100-1C
1 Right Angle	ATC010-1C	ATC040-1C	ATC040-1C	ATC100-1C
2 Pistol	PTC010-1C	PTC040-1C	PTC040-1C	—
3 Rotating	RTC010-1C	RTC040-1C	RTC040-1C	—
4 1/4" NPT	NTC010-1T	—	—	—

Generic tool holders are available for arms up to 100 Nm (these arms are delivered with an inline tool holder as standard).

Flange mounting is recommended for inline tools with torque capacity above 40 Nm.

Please note the tool diameter range for generic holders: QTA010: 25 – 40 mm, QTA020/QTA040/QTA100: 28 – 52 mm.

See page 17 for QE series tool holders.

TOOLS SPECIFICATIONS

NAMING CONVENTIONS

QE2 Series tools



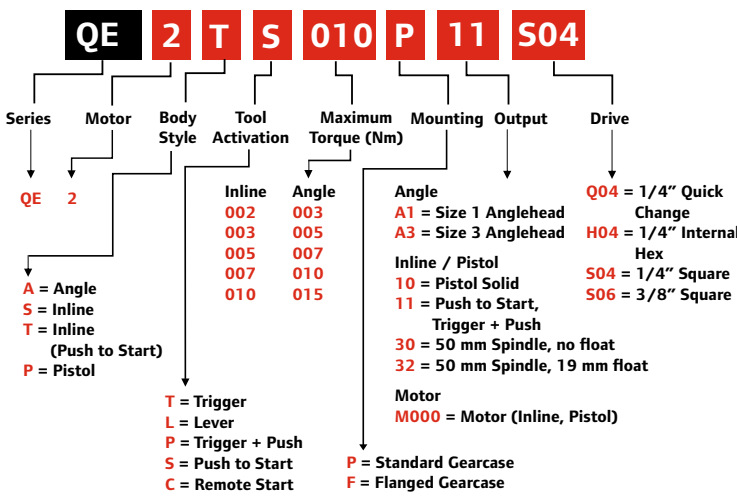
QE2PT003P10Q04



QE2SL005P10Q04



QE2AL003PA1S04



QE4, QE6, QE8 Series tools



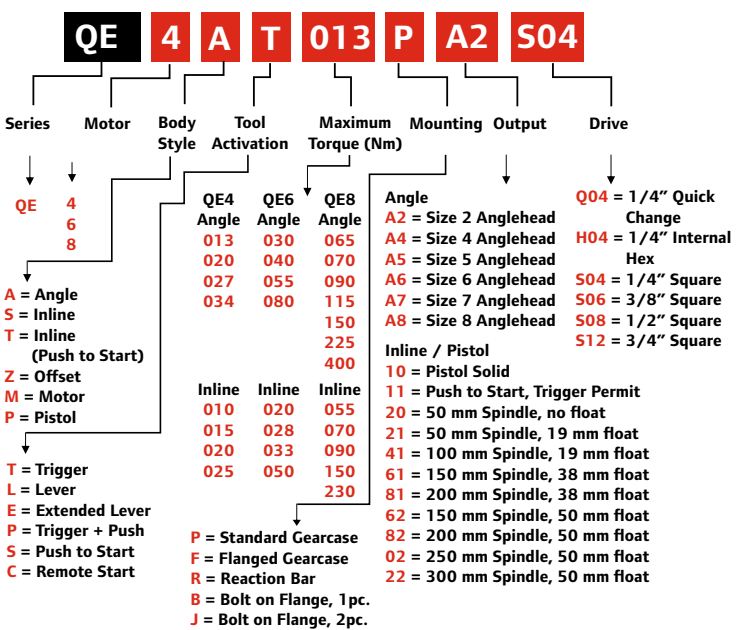
QE4SC010B21S06



QE6ZC020P52S06



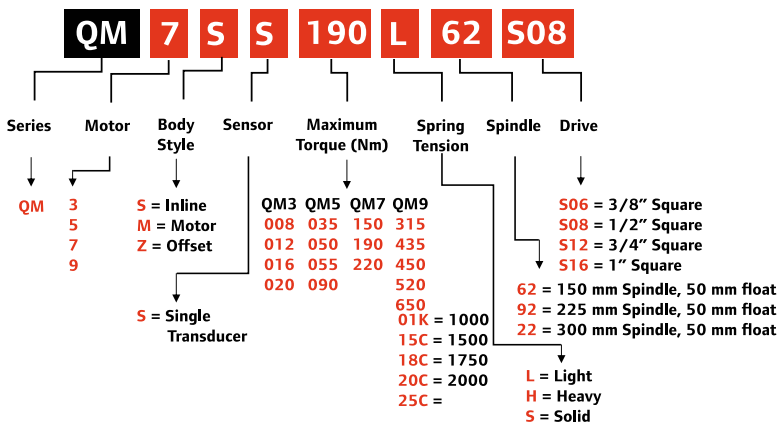
QE8AT065PA5S08



QM Series tools



QM7SS220H22S12



TOOLS SPECIFICATIONS



QE SERIES HANDHELD TOOLS
PISTOL



			 MAX							
Ref.	CCN	Nm	Nm		rpm	kg	mm	mm	in	V
TRIGGER CONTROL										
QE2PT002P10Q04	46774634	0.3 – 1.2	1.5	M2	3000	0.66	250	19	1/4"☉	QCD Controllers
QE2PT002P10S04	46774642	0.3 – 1.2	1.5	M2	3000	0.66	242	19	1/4"☐	QCD Controllers
QE2PT003P10Q04	46774667	0.6 – 2.4	3	M2	2450	0.66	250	19	1/4"☉	QCD Controllers
QE2PT003P10S04	46774675	0.6 – 2.4	3	M2	2450	0.66	242	19	1/4"☐	QCD Controllers
QE2PT005P10Q04	46774691	1.0 – 4.0	5	M2	1700	0.66	250	19	1/4"☉	QCD Controllers
QE2PT005P10S04	46774709	1.0 – 4.0	5	M2	1700	0.66	242	19	1/4"☐	QCD Controllers
QE2PT007P10Q04	46774725	1.3 – 5.6	7	M2	1250	0.66	250	19	1/4"☉	QCD Controllers
QE2PT007P10S04	46774733	1.3 – 5.6	7	M2	1250	0.66	242	19	1/4"☐	QCD Controllers
QE2PT010P10Q04	46774758	2.0 – 8.0	10	M4	850	0.66	250	19	1/4"☉	QCD Controllers
QE2PT010P10S04	46774766	2.0 – 8.0	10	M4	850	0.66	242	19	1/4"☐	QCD Controllers
QE4PT010P10Q04	80175607	2.0 – 8.0	10	M4	1820	1.20	243		1/4"☉	QCD Controllers
QE4PT010P10S04	80175615IRI	2.0 – 8.0	10	M4	1820	1.20	230		1/4"☐	QCD Controllers
QE4PT015P10Q04	80175706IRI	3.0 – 12.0	15	M5	1220	1.20	243		1/4"☉	QCD Controllers
QE4PT015P10S04	80175714IRI	3.0 – 12.0	15	M5	1220	1.20	230		1/4"☐	QCD Controllers
QE4PT020P10S06	80175805IRI	4.0 – 16.0	20	M6	900	1.20	234		1/4"☐	QCD Controllers
QE4PT025P10S06	80175888IRI	5.0 – 20.0	25	M6	710	1.20	234		1/4"☐	QCD Controllers
TRIGGER + PUSH START										
QE2PP002P11Q04	46774337	0.3 – 1.2	1.5	M2	3000	0.66	250	19	1/4"☉	QCD Controllers
QE2PP002P11S04	46774345	0.3 – 1.2	1.5	M2	3000	0.66	242	19	1/4"☐	QCD Controllers
QE2PP003P11Q04	46774360	0.6 – 2.4	3	M2	2450	0.66	250	19	1/4"☉	QCD Controllers
QE2PP003P11S04	46774378	0.6 – 2.4	3	M2	2450	0.66	242	19	1/4"☐	QCD Controllers
QE2PP005P11Q04	46774394	1.0 – 4.0	5	M2	1700	0.66	250	19	1/4"☉	QCD Controllers
QE2PP005P11S04	46774402	1.0 – 4.0	5	M2	1700	0.66	242	19	1/4"☐	QCD Controllers
QE2PP007P11Q04	46774428	1.3 – 5.6	7	M2	1250	0.66	250	19	1/4"☉	QCD Controllers
QE2PP007P11S04	46774436	1.3 – 5.6	7	M2	1250	0.66	242	19	1/4"☐	QCD Controllers
QE2PP010P11Q04	46774451	2.0 – 8.0	10	M4	850	0.66	250	19	1/4"☉	QCD Controllers
QE2PP010P11S04	46774469	2.0 – 8.0	10	M4	850	0.66	242	19	1/4"☐	QCD Controllers
PUSH START										
QE2PS002P11Q04	46774485	0.3 – 1.2	1.5	M2	3000	0.66	250	19	1/4"☉	QCD Controllers
QE2PS002P11S04	46774493	0.3 – 1.2	1.5	M2	3000	0.66	242	19	1/4"☐	QCD Controllers
QE2PS003P11Q04	46774519	0.6 – 2.4	3	M2	2450	0.66	250	19	1/4"☉	QCD Controllers
QE2PS003P11S04	46774527	0.6 – 2.4	3	M2	2450	0.66	242	19	1/4"☐	QCD Controllers
QE2PS005P11Q04	46774543	1.0 – 4.0	5	M2	1700	0.66	250	19	1/4"☉	QCD Controllers
QE2PS005P11S04	46774550	1.0 – 4.0	5	M2	1700	0.66	242	19	1/4"☐	QCD Controllers
QE2PS007P11Q04	46774576	1.3 – 5.6	7	M2	1250	0.66	250	19	1/4"☉	QCD Controllers
QE2PS007P11S04	46774584	1.3 – 5.6	7	M2	1250	0.66	242	19	1/4"☐	QCD Controllers
QE2PS010P11Q04	46774600	2.0 – 8.0	10	M4	850	0.66	250	19	1/4"☉	QCD Controllers
QE2PS010P11S04	46774618	2.0 – 8.0	10	M4	850	0.66	242	19	1/4"☐	QCD Controllers

TOOLS SPECIFICATIONS



QE SERIES HANDHELD TOOLS
ANGLE



											
Ref.	CCN	Nm	Nm		rpm	kg	mm	mm	mm	in	V
LEVER CONTROL											
QE2AL003PA1S04	46774006	0.8 – 3.2	4	M2	1750	0.83	312	27	9	1/4"□	QCD Controllers
QE2AL005PA3H04	46774196	1.0 – 4.0	5	M2	1590	0.95	318	34	13	1/4"⦿	QCD Controllers
QE2AL005PA3Q04	46774204	1.0 – 4.0	5	M2	1590	0.95	318	34	13	1/4"⦿	QCD Controllers
QE2AL005PA3S04	46774170	1.0 – 4.0	5	M2	1590	0.95	318	34	13	1/4"□	QCD Controllers
QE2AL005PA3S06	46774188	1.0 – 4.0	5	M2	1590	0.95	318	34	13	3/8"□	QCD Controllers
QE2AL007PA3H04	46774238	1.4 – 5.6	7	M2	1100	0.95	318	34	13	1/4"⦿	QCD Controllers
QE2AL007PA3Q04	46774246	1.4 – 5.6	7	M2	1100	0.95	318	34	13	1/4"⦿	QCD Controllers
QE2AL007PA3S06	46774220	1.4 – 5.6	7	M2	1100	0.95	318	34	13	3/8"□	QCD Controllers
QE2AL010PA3H04	46774279	2.0 – 8.0	10	M4	730	0.95	318	34	13	1/4"⦿	QCD Controllers
QE2AL010PA3Q04	46774287	2.0 – 8.0	10	M4	730	0.95	318	34	13	1/4"⦿	QCD Controllers
QE2AL010PA3S04	46774253	2.0 – 8.0	10	M4	730	0.95	318	34	13	1/4"□	QCD Controllers
QE2AL010PA3S06	46774261	2.0 – 8.0	10	M4	730	0.95	318	34	13	3/8"□	QCD Controllers
QE2AL015PA3H04	46774311	3.0 – 12.0	15	M4	560	0.95	318	34	13	1/4"⦿	QCD Controllers
QE2AL015PA3Q04	46774329	3.0 – 12.0	15	M4	560	0.95	318	34	13	1/4"⦿	QCD Controllers
QE2AL015PA3S04	46774295	3.0 – 12.0	15	M4	560	0.95	318	34	13	1/4"□	QCD Controllers
QE2AL015PA3S06	46774303	3.0 – 12.0	15	M4	560	0.95	318	34	13	3/8"□	QCD Controllers
QE4AT013PA2H04	16676876	3.0 – 10.0	13	M5	1200	1.30	383	32	13	1/4"⦿	QCD Controllers
QE4AT013PA2Q04	16676884	3.0 – 10.0	13	M5	1200	1.30	383	32	13	1/4"⦿	QCD Controllers
QE4AT013PA2S04	18427146	3.0 – 10.0	13	M5	1200	1.30	383	32	13	1/4"□	QCD Controllers
QE4AT013PA2S06	18427153	3.0 – 10.0	13	M5	1200	1.30	383	32	13	3/8"□	QCD Controllers
QE4AT020PA2H04	16676918	4.0 – 16.0	20	M6	820	1.30	383	32	13	1/4"⦿	QCD Controllers
QE4AT020PA2Q04	16676926	4.0 – 16.0	20	M6	820	1.30	383	32	13	1/4"⦿	QCD Controllers
QE4AT020PA2S04	18427179	4.0 – 16.0	20	M6	820	1.30	383	32	13	1/4"□	QCD Controllers
QE4AT020PA2S06	16675464IRI	4.0 – 16.0	20	M6	820	1.30	383	32	13	3/8"□	QCD Controllers
QE4AT027PA4S06	18427187	5.0 – 22.0	27	M8	600	1.30	387	42	17	3/8"□	QCD Controllers
QE4AT027PA4S08	18427195	5.0 – 22.0	27	M8	600	1.30	387	42	17	1/2"□	QCD Controllers
QE4AT034PA4S06	16675167	7.0 – 27.0	34	M8	470	1.30	387	42	17	3/8"□	QCD Controllers
QE4AT034PA4S08	16676967	7.0 – 27.0	34	M8	470	1.30	387	42	17	1/2"□	QCD Controllers
QE6AT030PA2S06	16674749	6.0 – 24.0	30	M8	1230	1.90	442	32	13	3/8"□	QCD Controllers
QE6AT030PA4S08	18427351	6.0 – 24.0	30	M8	1230	1.90	447	42	17	1/2"□	QCD Controllers
QE6AT040PA4S06	16675472	8.0 – 32.0	40	M8	910	1.90	447	42	17	3/8"□	QCD Controllers
QE6AT040PA4S08	16675480	8.0 – 32.0	40	M8	910	1.90	447	42	17	1/2"□	QCD Controllers
QE6AT055PA5S08	47130174	11.0 – 44.0	55	M10	650	1.90	453	45	22	1/2"□	QCD Controllers
QE6AT080PA5S08	16674947	16.0 – 64.0	80	M10	440	1.90	453	45	22	1/2"□	QCD Controllers
QE8AT065PA5S08	18427526	13.0 – 52.0	65	M10	1200	2.90	516	45	22	1/2"□	QCD Controllers
QE8AT070PA5S08	18427534	14.0 – 56.0	70	M10	1100	2.90	516	45	22	1/2"□	QCD Controllers
QE8AT090PA5S08	16675662	17.0 – 72.0	90	M10	850	2.90	516	45	22	1/2"□	QCD Controllers
QE8AT115PA6S08	15969975	23.0 – 92.0	115	M12	660	2.90	520	50	24	1/2"□	QCD Controllers
QE8AT150PA6S08	16675779	30.0 – 120.0	150	M12	510	2.90	520	50	24	1/2"□	QCD Controllers
QE8AT225PA7S12	16679086	45.0 – 180.0	225	M16	310	4.10	575	55	28	3/4"□	QCD Controllers
QE8AT400FA8S12	16679094	80.0 – 320.0	400	M18	170	6.00	635	69	33	3/4"□	QCD Controllers

TOOLS SPECIFICATIONS



QE SERIES HANDHELD TOOLS
INLINE



Ref.	CCN										
		Nm	Nm	rpm	kg	mm	mm	mm	mm	in	V
LEVER CONTROL											
QE2SL002F32S06	46774832	0.3 – 1.2	1.5	M2 3000	0.91	342	19	32	19	3/8" □	QCD Controllers
QE2SL002P10Q04	46774881	0.3 – 1.2	1.5	M2 3000	0.60	250			22	1/4" ○	QCD Controllers
QE2SL002P10S04	46774899	0.3 – 1.2	1.5	M2 3000	0.60	242			22	1/4" □	QCD Controllers
QE2SL003F32S06	46774840	0.6 – 2.4	3	M2 2450	0.91	342	19	32	19	3/8" □	QCD Controllers
QE2SL003P10Q04	46774915	0.6 – 2.4	3	M2 2450	0.60	250			22	1/4" ○	QCD Controllers
QE2SL003P10S04	46774923	0.6 – 2.4	3	M2 2450	0.60	242			22	1/4" □	QCD Controllers
QE2SL005F32S06	46774857	1.0 – 4.0	5	M2 1700	0.91	342	19	32	19	3/8" □	QCD Controllers
QE2SL005P10Q04	46774949	1.0 – 4.0	5	M2 1700	0.60	250			22	1/4" ○	QCD Controllers
QE2SL005P10S04	46774956	1.0 – 4.0	5	M2 1700	0.60	242			22	1/4" □	QCD Controllers
QE2SL007F32S06	46774865	1.3 – 5.6	7	M2 1250	0.91	342	19	32	19	3/8" □	QCD Controllers
QE2SL007P10Q04	46774972	1.3 – 5.6	7	M2 1250	0.60	250			22	1/4" ○	QCD Controllers
QE2SL007P10S04	46774980	1.3 – 5.6	7	M2 1250	0.60	242			22	1/4" □	QCD Controllers
QE2SL010F32S06	46774873	2.0 – 8.0	10	M4 850	0.91	342	19	32	19	3/8" □	QCD Controllers
QE2SL010P10Q04	46775003	2.0 – 8.0	10	M4 850	0.60	250			22	1/4" ○	QCD Controllers
QE2SL010P10S04	46775011	2.0 – 8.0	10	M4 850	0.60	242			22	1/4" □	QCD Controllers
QE4ST010B20S06		2.0 – 8.0	10	M4 1820	1.20	386		40	25	3/8" □	QCD Controllers
QE4ST010B21S06	16985327	2.0 – 8.0	10	M4 1820	1.20	386	19	40	25	3/8" □	QCD Controllers
QE4ST015B20S06	48389555	3.0 – 11.0	15	M5 1220	1.20	386		40	25	3/8" □	QCD Controllers
QE4ST015B21S06	16985350	3.0 – 11.0	15	M5 1220	1.20	386	19	40	25	3/8" □	QCD Controllers
QE4ST020B20S06	45501988	4.0 – 16.0	20	M6 900	1.20	386		40	25	3/8" □	QCD Controllers
QE4ST020B21S06	16985384	4.0 – 16.0	20	M6 900	1.20	386	19	40	25	3/8" □	QCD Controllers
QE4ST025B20S06	48394746	5.0 – 20.0	25	M6 710	1.20	386		40	25	3/8" □	QCD Controllers
QE4ST025B21S06	16985418	5.0 – 20.0	25	M6 710	1.20	386	19	40	25	3/8" □	QCD Controllers
QE6ST020F41S06	10564946IRI	4.0 – 16.0	20	M6 1840	2.10	501	19	113	27	3/8" □	QCD Controllers
QE6ST020F61S06	10565638	4.0 – 16.0	20	M6 1840	2.10	544	38	144	27	3/8" □	QCD Controllers
QE6ST028F41S06	16985434	6.0 – 22.0	28	M8 1360	2.10	501	19	113	27	3/8" □	QCD Controllers
QE6ST028F61S06	10565786	6.0 – 22.0	28	M8 1360	2.10	544	38	144	27	3/8" □	QCD Controllers
QE6ST033F41S06	16985442	7.0 – 26.0	33	M8 1130	2.10	501	19	113	27	3/8" □	QCD Controllers
QE6ST033F61S06	10566321IRI	7.0 – 26.0	33	M8 1130	2.10	544	38	144	27	3/8" □	QCD Controllers
QE6ST050F41S08	16985459	10.0 – 40.0	50	M10 760	2.10	501	19	113	27	1/2" □	QCD Controllers
QE6ST050F61S08	10566826IRI	10.0 – 40.0	50	M10 760	2.10	544	38	144	27	1/2" □	QCD Controllers
QE8ST055F41S08	10567956IRI	11.0 – 44.0	55	M10 1470	3.00	557	19	109	30	1/2" □	QCD Controllers
QE8ST055F61S08	10568004IRI	11.0 – 44.0	55	M10 1470	3.00	608	38	141	30	1/2" □	QCD Controllers
QE8ST070F41S08	16985475	14.0 – 56.0	70	M10 1160	3.00	557	19	109	30	1/2" □	QCD Controllers
QE8ST070F61S08	10568178IRI	14.0 – 56.0	70	M10 1160	3.00	608	38	141	30	1/2" □	QCD Controllers
QE8ST090F41S08	16675753	18.0 – 72.0	90	M10 900	3.00	557	19	109	30	1/2" □	QCD Controllers
QE8ST090F61S08	10568277IRI	18.0 – 72.0	90	M10 900	3.00	608	38	141	30	1/2" □	QCD Controllers
QE8ST150F41S08	16985483	30.0 – 120.0	150	M12 500	3.40	572	19	109	31	1/2" □	QCD Controllers
QE8ST150F61S08	10568327IRI	30.0 – 120.0	150	M12 500	3.40	623	38	150	31	1/2" □	QCD Controllers
QE8ST230F61S08	45497187	46.0 – 184.0	230	M18 340	5.50	710	38	150	36	1/2" □	QCD Controllers
QE8ST230F62S12	18427674	46.0 – 184.0	230	M18 340	5.50	717	38	155	36	3/4" □	QCD Controllers
QE8ST230F82S12	45601366	46.0 – 184.0	230	M18 340	5.50	768	38	155	36	3/4" □	QCD Controllers

TOOLS SPECIFICATIONS



QE SERIES HANDHELD TOOLS
INLINE

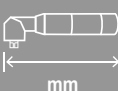


Ref.	CCN										
		Nm	Nm	rpm	kg	mm	mm	mm	mm	in	V
LEVER + PUSH START											
QE2SP002P11Q04	46775037	0.3 – 1.2	1.5	M2 3000	0.60	250			22	1/4" ○	QCD Controllers
QE2SP002P11S04	46775045	0.3 – 1.2	1.5	M2 3000	0.60	242			22	1/4" □	QCD Controllers
QE2SP003P11Q04	46775060	0.6 – 2.4	3	M2 2450	0.60	250			22	1/4" ○	QCD Controllers
QE2SP003P11S04	46775078	0.6 – 2.4	3	M2 2450	0.60	242			22	1/4" □	QCD Controllers
QE2SP005P11Q04	46775094	1.0 – 4.0	5	M2 1700	0.60	250			22	1/4" ○	QCD Controllers
QE2SP005P11S04	46775102	1.0 – 4.0	5	M2 1700	0.60	242			22	1/4" □	QCD Controllers
QE2SP007P11Q04	46775128	1.3 – 5.6	7	M2 1250	0.60	250			22	1/4" ○	QCD Controllers
QE2SP007P11S04	46775136	1.3 – 5.6	7	M2 1250	0.60	242			22	1/4" □	QCD Controllers
QE2SP010P11Q04	46775151	2.0 – 8.0	10	M4 850	0.60	250			22	1/4" ○	QCD Controllers
QE2SP010P11S04	46775169	2.0 – 8.0	10	M4 850	0.60	242			22	1/4" □	QCD Controllers
PUSH START											
QE2TS002P11Q04	46775185	0.3 – 1.2	1.5	M2 3000	0.57	250			22	1/4" ○	QCD Controllers
QE2TS002P11S04	46775193	0.3 – 1.2	1.5	M2 3000	0.57	242			22	1/4" □	QCD Controllers
QE2TS003P11Q04	46775219	0.6 – 2.4	3	M2 2450	0.57	250			22	1/4" ○	QCD Controllers
QE2TS003P11S04	46775227	0.6 – 2.4	3	M2 2450	0.57	242			22	1/4" □	QCD Controllers
QE2TS005P11Q04	46775243	1.0 – 4.0	5	M2 1700	0.57	250			22	1/4" ○	QCD Controllers
QE2TS005P11S04	46775250	1.0 – 4.0	5	M2 1700	0.57	242			22	1/4" □	QCD Controllers
QE2TS007P11Q04	46775276	1.3 – 5.6	7	M2 1250	0.57	250			22	1/4" ○	QCD Controllers
QE2TS007P11S04	46775284	1.3 – 5.6	7	M2 1250	0.57	242			22	1/4" □	QCD Controllers
QE2TS010P11Q04	46775300	2.0 – 8.0	10	M4 850	0.57	250			22	1/4" ○	QCD Controllers
QE2TS010P11S04	46775318	2.0 – 8.0	10	M4 850	0.57	242			22	1/4" □	QCD Controllers
QE4TS010R11Q04	16678955	2.0 – 8.0	10	M4 1820	1.20	363			25	1/4" ○	QCD Controllers
QE4TS010R11S04	16678963	2.0 – 8.0	10	M4 1820	1.20	343			25	1/4" □	QCD Controllers
QE4TS010R11S06	16678971	2.0 – 8.0	10	M4 1820	1.20	343			25	3/8" □	QCD Controllers
QE4TS015R11Q04	18427278	3.0 – 12.0	15	M5 1220	1.20	363			25	1/4" ○	QCD Controllers
QE4TS015R11S04	16678989	3.0 – 12.0	15	M5 1220	1.20	343			25	1/4" □	QCD Controllers
QE4TS015R11S06	16678997	3.0 – 12.0	15	M5 1220	1.20	343			25	3/8" □	QCD Controllers
QE4TS020R11S06	16679003	4.0 – 16.0	20	M6 900	1.20	343			25	3/8" □	QCD Controllers
QE4TS025R11S06	16679011	5.0 – 20.0	25	M6 710	1.20	343			25	3/8" □	QCD Controllers

TOOLS SPECIFICATIONS

QE SERIES FIXTURED TOOLS
ANGLE



Ref.	CCN	 Nm	 Nm	 rpm	 kg	 mm	 mm	 mm	 in	 V
REMOTE START										
QE4AC013BA2H04		3.0 – 10.0	13	M5	1200	1.30	383	32	13	1/4"☉ QCD Controllers
QE4AC013BA2Q04		3.0 – 10.0	13	M5	1200	1.30	383	32	13	1/4"☉ QCD Controllers
QE4AC013BA2S04	47125729	3.0 – 10.0	13	M5	1200	1.30	383	32	13	1/4"□ QCD Controllers
QE4AC013BA2S06		3.0 – 10.0	13	M5	1200	1.30	383	32	13	3/8"□ QCD Controllers
QE4AC020BA2H04		4.0 – 16.0	20	M6	820	1.30	383	32	13	1/4"☉ QCD Controllers
QE4AC020BA2Q04		4.0 – 16.0	20	M6	820	1.30	383	32	13	1/4"☉ QCD Controllers
QE4AC020BA2S04		4.0 – 16.0	20	M6	820	1.30	383	32	13	1/4"□ QCD Controllers
QE4AC020BA2S06	45669959	4.0 – 16.0	20	M6	820	1.30	383	32	13	3/8"□ QCD Controllers
QE4AC027BA4S06	80235666	5.0 – 22.0	27	M8	600	1.30	387	42	17	3/8"□ QCD Controllers
QE4AC027BA4S08		5.0 – 22.0	27	M8	600	1.30	387	42	17	1/2"□ QCD Controllers
QE6AC030FA2S06		6.0 – 24.0	30	M8	1230	1.90	442	32	13	3/8"□ QCD Controllers
QE6AC030FA4S08	47526343001	6.0 – 24.0	30	M8	1230	1.90	447	42	17	1/2"□ QCD Controllers
QE4AC034BA4S06	45645041	7.0 – 27.0	34	M8	470	1.30	387	42	17	3/8"□ QCD Controllers
QE4AC034BA4S08		7.0 – 27.0	34	M8	470	1.30	387	42	17	1/2"□ QCD Controllers
QE6AC040FA4S06		8.0 – 32.0	40	M8	910	1.90	447	42	17	3/8"□ QCD Controllers
QE6AC040FA4S08	47082037	8.0 – 32.0	40	M8	910	1.90	447	42	17	1/2"□ QCD Controllers
QE6AC055FA5S08	47096227	11.0 – 44.0	55	M10	650	1.90	453	45	22	1/2"□ QCD Controllers
QE8AC065FA5S08		13.0 – 52.0	65	M10	1200	2.90	516	45	22	1/2"□ QCD Controllers
QE8AC070FA5S08	18427450	14.0 – 56.0	70	M10	1100	2.90	516	45	22	1/2"□ QCD Controllers
QE6AC080FA5S08		16.0 – 64.0	80	M10	440	1.90	453	45	22	1/2"□ QCD Controllers
QE8AC090FA5S08	47096656	18.0 – 72.0	90	M10	850	2.90	516	45	22	1/2"□ QCD Controllers
QE8AC115FA6S08	80217300	23.0 – 92.0	115	M12	660	2.90	520	50	24	1/2"□ QCD Controllers
QE8AC150FA6S08	45634664	30.0 – 120.0	150	M12	510	2.90	520	50	24	1/2"□ QCD Controllers
QE8AC225FA7S12	80217292	45.0 – 180.0	225	M16	310	4.10	575	55	28	3/4"□ QCD Controllers
QE8AC400FA8S12	18427468	80.0 – 320.0	400	M18	170	6.00	635	69	33	3/4"□ QCD Controllers

TOOLS SPECIFICATIONS

QE SERIES FIXTURED TOOLS
INLINE



											
Ref.	CCN	Nm	Nm		rpm	kg	mm	mm	mm	in	V
REMOTE START											
QE2SC002F32S06	46774782	0.3 – 1.2	1.5	M2	3000	0.91	342	19	32	3/8"□	QCD Controllers
QE2SC003F32S06	46774790	0.6 – 2.4	3	M2	2450	0.91	342	19	32	3/8"□	QCD Controllers
QE2SC005F32S06	46774808IRI	1.0 – 4.0	5	M2	1700	0.91	342	19	32	3/8"□	QCD Controllers
QE2SC007F32S06	46774816	1.3 – 5.6	7	M2	1250	0.91	342	19	32	3/8"□	QCD Controllers
QE2SC010F32S06	46774824	2.0 – 8.0	10	M4	850	0.91	342	19	32	3/8"□	QCD Controllers
QE4SC010B20S06		2.0 – 8.0	10	M4	1820	1.20	386		40	3/8"□	QCD Controllers
QE4SC010B21S06	80239049	2.0 – 8.0	10	M4	1820	1.20	386	19	40	3/8"□	QCD Controllers
QE4SC010B41S06	16986721	2.0 – 8.0	10	M4	1820	1.20	437	19	74	3/8"□	QCD Controllers
QE4SC015B20S06		3.0 – 11.0	15	M5	1220	1.20	386		40	3/8"□	QCD Controllers
QE4SC015B21S06	45506961	3.0 – 11.0	15	M5	1220	1.20	386	19	40	3/8"□	QCD Controllers
QE4SC015B41S06	16986739	3.0 – 11.0	15	M5	1220	1.20	437	19	74	3/8"□	QCD Controllers
QE4SC020B20S06		4.0 – 16.0	20	M6	900	1.20	386		40	3/8"□	QCD Controllers
QE4SC020B21S06	45659398	4.0 – 16.0	20	M6	900	1.20	386	19	40	3/8"□	QCD Controllers
QE4SC020B41S06	16986747	4.0 – 16.0	20	M6	900	1.20	437	19	74	3/8"□	QCD Controllers
QE4SC025B20S06		5.0 – 20.0	25	M6	710	1.20	386		40	3/8"□	QCD Controllers
QE4SC025B21S06	47100953	5.0 – 20.0	25	M6	710	1.20	386	19	40	3/8"□	QCD Controllers
QE4SC025B41S06	16986754	5.0 – 20.0	25	M6	710	1.20	437	19	74	3/8"□	QCD Controllers
QE6SC020F41S06	18427369	4.0 – 16.0	20	M6	1840	2.10	501	19	113	3/8"□	QCD Controllers
QE6SC020F61S06	16986762	4.0 – 16.0	20	M6	1840	2.10	544	38	144	3/8"□	QCD Controllers
QE6SC020F81S06	18427377	4.0 – 16.0	20	M6	1840	2.10	594	38	195	3/8"□	QCD Controllers
QE6SC028F41S06	16993685	6.0 – 22.0	28	M8	1360	2.10	501	19	113	3/8"□	QCD Controllers
QE6SC028F61S06	16986770	6.0 – 22.0	28	M8	1360	2.10	544	38	144	3/8"□	QCD Controllers
QE6SC028F81S06		6.0 – 22.0	28	M8	1360	2.10	594	38	195	3/8"□	QCD Controllers
QE6SC033F41S06	18427385	7.0 – 26.0	33	M8	1130	2.10	501	19	113	3/8"□	QCD Controllers
QE6SC033F61S06	16986788	7.0 – 26.0	33	M8	1130	2.10	544	38	144	3/8"□	QCD Controllers
QE6SC033F81S06	48376503	7.0 – 26.0	33	M8	1130	2.10	594	38	195	3/8"□	QCD Controllers
QE6SC050F41S08	18427419	10.0 – 40.0	50	M10	760	2.10	501	19	113	1/2"□	QCD Controllers
QE6SC050F61S08	16986796	10.0 – 40.0	50	M10	760	2.10	544	38	144	1/2"□	QCD Controllers
QE6SC050F81S08		10.0 – 40.0	50	M10	760	2.10	594	38	195	1/2"□	QCD Controllers
QE8SC055F41S08	80240401	11.0 – 44.0	55	M10	1470	3.00	557	19	109	1/2"□	QCD Controllers
QE8SC055F61S08	16986804	11.0 – 44.0	55	M10	1470	3.00	608	38	140	1/2"□	QCD Controllers
QE8SC055F81S08	47087101	11.0 – 44.0	55	M10	1470	3.00	659	38	191	1/2"□	QCD Controllers
QE8SC070F41S08	18427575	14.0 – 56.0	70	M10	1160	3.00	557	19	109	1/2"□	QCD Controllers
QE8SC070F61S08	16986812	14.0 – 56.0	70	M10	1160	3.00	608	38	140	1/2"□	QCD Controllers
QE8SC070F81S08		14.0 – 56.0	70	M10	1160	3.00	659	38	191	1/2"□	QCD Controllers
QE8SC090F41S08	18427609	18.0 – 72.0	90	M10	900	3.00	557	19	109	1/2"□	QCD Controllers
QE8SC090F61S08	16985517	18.0 – 72.0	90	M10	900	3.00	608	38	140	1/2"□	QCD Controllers
QE8SC090F81S08	16985509	18.0 – 72.0	90	M10	900	3.00	659	38	191	1/2"□	QCD Controllers
QE8SC150F41S08	80165962	30.0 – 120.0	150	M12	500	3.40	572	19	109	1/2"□	QCD Controllers
QE8SC150F61S08	16986820	30.0 – 120.0	150	M12	500	3.40	623	38	140	1/2"□	QCD Controllers
QE8SC150F81S08	45634656	30.0 – 120.0	150	M12	500	3.40	674	38	191	1/2"□	QCD Controllers
QE8SC230F02S12		45.0 – 185.0	230		340	5.50	812	50	241	3/4"□	QCD Controllers
QE8SC230F22S12		45.0 – 185.0	230		340	5.50	853	50	291	3/4"□	QCD Controllers
QE8SC230F62S12	16989055	45.0 – 185.0	230		340	5.50	710	50	140	3/4"□	QCD Controllers
QE8SC230F82S12	16986838	45.0 – 185.0	230		340	5.50	761	50	191	3/4"□	QCD Controllers

TOOLS SPECIFICATIONS

QE SERIES FIXTURED TOOLS
OFFSET



Ref.	CCN	 Nm	 Nm		 rpm	 kg	 mm	 mm	 mm	 in	 V
QE6ZC020P42S06	10567030IRI	4.0 – 16.0	20	M6	1840	2.50	664	51	130	3/8"□	QCD Controllers
QE6ZC020P52S06	16986846IRI	4.0 – 16.0	20	M6	1840	2.50	647	51	130	3/8"□	QCD Controllers
QE6ZC028P52S06	16987315	5.0 – 20.0	28	M8	1360	2.50	647	51	130	3/8"□	QCD Controllers
QE6ZC033P52S06	10567436IRI	7.0 – 26.0	33	M8	1130	2.50	647	51	130	3/8"□	QCD Controllers
QE6ZC050P52S06	16678039	10.0 – 40.0	50	M10	760	2.50	647	51	130	3/8"□	QCD Controllers
QE8ZC055F52S06	10568376IRI	11.0 – 44.0	55	M10	1470	3.00	723	51	130	3/8"□	QCD Controllers
QE8ZC070F02S08		14.0 – 56.0	70	M10	1160	3.00	888	51	295	1/2"□	QCD Controllers
QE8ZC070F22S08		14.0 – 56.0	70	M10	1160	3.00	939	51	346	1/2"□	QCD Controllers
QE8ZC070F62S08	18427682	14.0 – 56.0	70	M10	1160	3.00	786	51	194	1/2"□	QCD Controllers
QE8ZC070F82S08		14.0 – 56.0	70	M10	1160	3.00	837	51	245	1/2"□	QCD Controllers
QE8ZC090F02S08		18.0 – 72.0	90	M10	900	4.00	888	51	295	1/2"□	QCD Controllers
QE8ZC090F22S08		18.0 – 72.0	90	M10	900	4.00	939	51	346	1/2"□	QCD Controllers
QE8ZC090F62S08	16985491	18.0 – 72.0	90	M10	900	4.00	786	51	194	1/2"□	QCD Controllers
QE8ZC090F82S08		18.0 – 72.0	90	M10	900	4.00	837	51	245	1/2"□	QCD Controllers
QE8ZC150F02S08		30.0 – 120.0	150	M12	500	4.00	888	51	295	1/2"□	QCD Controllers
QE8ZC150F22S08	42709741	30.0 – 120.0	150	M12	500	4.00	939	51	346	1/2"□	QCD Controllers
QE8ZC150F62S08	42712901	30.0 – 120.0	150	M12	500	4.00	786	51	194	1/2"□	QCD Controllers
QE8ZC150F82S08		30.0 – 120.0	150	M12	500	4.00	837	51	245	1/2"□	QCD Controllers

TOOLS SPECIFICATIONS

QM SERIES FIXTURED TOOLS
INLINE



Ref.	CCN	 Nm	 Nm		 rpm	 kg	 mm	 mm	 mm	 in	 V
REMOTE START											
QM3SS008H22S06	18453217	2.0 – 6.0	8	M4	1382	2.70	599	50	300	3/8"□	QCD Controllers
QM3SS008H22S08	18453225	2.0 – 6.0	8	M4	1382	2.70	599	50	300	1/2"□	QCD Controllers
QM3SS008H62S06	18453175	2.0 – 6.0	8	M4	1382	2.40	449	50	150	3/8"□	QCD Controllers
QM3SS008H62S08	18453183	2.0 – 6.0	8	M4	1382	2.40	449	50	150	1/2"□	QCD Controllers
QM3SS008H92S06	18453191	2.0 – 6.0	8	M4	1382	2.40	524	50	225	3/8"□	QCD Controllers
QM3SS008H92S08	18453209	2.0 – 6.0	8	M4	1382	2.50	524	50	225	1/2"□	QCD Controllers
QM3SS012H22S06	18453266	3.0 – 10.0	12	M4	927	2.70	599	50	300	3/8"□	QCD Controllers
QM3SS012H22S08	18453274	3.0 – 10.0	12	M4	927	2.70	599	50	300	1/2"□	QCD Controllers
QM3SS012H62S06	18427690	3.0 – 10.0	12	M4	927	2.40	449	50	150	3/8"□	QCD Controllers
QM3SS012H62S08	18453233	3.0 – 10.0	12	M4	927	2.40	449	50	150	1/2"□	QCD Controllers
QM3SS012H92S06	18453241	3.0 – 10.0	12	M4	927	2.50	524	50	225	3/8"□	QCD Controllers
QM3SS012H92S08	18453258	3.0 – 10.0	12	M4	927	2.50	524	50	225	1/2"□	QCD Controllers
QM3SS016H22S06	18453324	4.0 – 13.0	16	M4	686	2.70	599	50	300	3/8"□	QCD Controllers
QM3SS016H22S08	18453332	4.0 – 13.0	16	M4	686	2.70	599	50	300	1/2"□	QCD Controllers
QM3SS016H62S06	18453282	4.0 – 13.0	16	M4	686	2.40	449	50	150	3/8"□	QCD Controllers
QM3SS016H62S08	18453290	4.0 – 13.0	16	M4	686	2.40	449	50	150	1/2"□	QCD Controllers
QM3SS016H92S06	18453308	4.0 – 13.0	16	M4	686	2.50	524	50	225	3/8"□	QCD Controllers
QM3SS016H92S08	18453316	4.0 – 13.0	16	M4	686	2.50	524	50	225	1/2"□	QCD Controllers
QM3SS020H22S06	18453373IRI	5.0 – 16.0	20	M5	545	2.70	599	50	300	3/8"□	QCD Controllers
QM3SS020H22S08	18453381	5.0 – 16.0	20	M5	545	2.70	599	50	300	1/2"□	QCD Controllers
QM3SS020H62S06	18427708	5.0 – 16.0	20	M5	545	2.40	449	50	150	3/8"□	QCD Controllers
QM3SS020H62S08	16992604	5.0 – 16.0	20	M5	545	2.40	449	50	150	1/2"□	QCD Controllers
QM3SS020H92S06	18453357	5.0 – 16.0	20	M5	545	2.50	524	50	225	3/8"□	QCD Controllers
QM3SS020H92S08	18453365	5.0 – 16.0	20	M5	545	2.40	524	50	225	1/2"□	QCD Controllers
QM5SS035H22S06	18453431	9.0 – 28.0	35	M6	590	4.20	673	50	300	3/8"□	QCD Controllers
QM5SS035H22S08	18453449	9.0 – 28.0	35	M6	590	4.20	673	50	300	1/2"□	QCD Controllers
QM5SS035H62S06	18453399IRI	9.0 – 28.0	35	M6	590	3.90	523	50	150	3/8"□	QCD Controllers
QM5SS035H62S08	18453407	9.0 – 28.0	35	M6	590	3.90	523	50	150	1/2"□	QCD Controllers
QM5SS035H92S06	18453415	9.0 – 28.0	35	M6	590	4.00	598	50	225	3/8"□	QCD Controllers
QM5SS035H92S08	18453423	9.0 – 28.0	35	M6	590	4.00	598	50	225	1/2"□	QCD Controllers
QM5SS055H22S06	18453480	14.0 – 44.0	55	M6	507	4.20	673	50	300	3/8"□	QCD Controllers
QM5SS055H22S08	18453498	14.0 – 44.0	55	M6	507	4.20	673	50	300	1/2"□	QCD Controllers
QM5SS055H62S06	16992612	14.0 – 44.0	55	M6	507	3.90	523	50	150	3/8"□	QCD Controllers
QM5SS055H62S08	18453456IRI	14.0 – 44.0	55	M6	507	3.90	523	50	150	1/2"□	QCD Controllers
QM5SS055H92S06	18453464	14.0 – 44.0	55	M6	507	4.00	598	50	225	3/8"□	QCD Controllers
QM5SS055H92S08	18453472	14.0 – 44.0	55	M6	507	4.00	598	50	225	1/2"□	QCD Controllers
QM5SS090H22S08	18453514	23.0 – 72.0	90	M8	280	4.20	673	50	300	1/2"□	QCD Controllers
QM5SS090H62S08	18427716	23.0 – 72.0	90	M8	280	3.90	523	50	150	1/2"□	QCD Controllers
QM5SS090H92S08	18453506IRI	23.0 – 72.0	90	M8	280	4.00	598	50	225	1/2"□	QCD Controllers

TOOLS SPECIFICATIONS

QM SERIES FIXTURED TOOLS

INLINE



Ref.	CCN	 Nm	 MAX Nm		 rpm	 kg	 mm	 mm	 mm	 in	 V
QM7SS190H22S08	18453548IRI	48.0 – 152.0	190	M10	273	8.90	794	50	300	1/2"□	QCD Controllers
QM7SS190H22S12	18453555	48.0 – 152.0	190	M10	273	8.90	794	50	300	3/4"□	QCD Controllers
QM7SS190H62S08	18453522	48.0 – 152.0	190	M10	273	8.40	645	50	150	1/2"□	QCD Controllers
QM7SS190H62S12	18427724	48.0 – 152.0	190	M10	273	8.40	645	50	150	3/4"□	QCD Controllers
QM7SS190H92S08	18453530	48.0 – 152.0	190	M10	273	8.60	720	50	225	1/2"□	QCD Controllers
QM7SS190H92S12		48.0 – 152.0	190	M10	273	8.60	720	50	225	3/4"□	QCD Controllers
QM7SS220H22S12	18453563	55.0 – 176.0	220	M10	233	8.90	794	50	300	3/4"□	QCD Controllers
QM7SS220H62S12	18427732IRI	55.0 – 176.0	220	M10	233	8.40	645	50	150	3/4"□	QCD Controllers
QM7SS220H92S12	80176076	55.0 – 176.0	220	M10	233	8.60	720	50	225	3/4"□	QCD Controllers
QM9SS315H22S12	18453605	79.0 – 250.0	315	M10	278	19.50	860	50	300	3/4"□	QCD Controllers
QM9SS315H22S16	18453613IRI	79.0 – 250.0	315	M10	278	19.60	860	50	300	1"□	QCD Controllers
QM9SS315H62S12	18427740	79.0 – 250.0	315	M10	278	18.60	711	50	150	3/4"□	QCD Controllers
QM9SS315H62S16	18453571	79.0 – 250.0	315	M10	278	18.70	711	50	150	1"□	QCD Controllers
QM9SS315H92S12	18453589	79.0 – 250.0	315	M10	278	19.10	786	50	225	3/4"□	QCD Controllers
QM9SS315H92S16	18453597	79.0 – 250.0	315	M10	278	19.20	786	50	225	1"□	QCD Controllers
QM9SS435H22S12	18453662	109.0 – 346.0	435	M12	203	19.50	860	50	300	3/4"□	QCD Controllers
QM9SS435H22S16	18453670	109.0 – 346.0	435	M12	203	19.60	860	50	300	1"□	QCD Controllers
QM9SS435H62S12	18453621	109.0 – 346.0	435	M12	203	18.60	711	50	150	3/4"□	QCD Controllers
QM9SS435H62S16	18453639	109.0 – 346.0	435	M12	203	18.70	711	50	150	1"□	QCD Controllers
QM9SS435H92S12	18453647	109.0 – 346.0	435	M12	203	19.10	786	50	225	3/4"□	QCD Controllers
QM9SS435H92S16	18453654	109.0 – 346.0	435	M12	203	19.20	786	50	225	1"□	QCD Controllers
QM9SS520H22S12	18453720	130.0 – 410.0	520	M12	170	19.50	860	50	300	3/4"□	QCD Controllers
QM9SS520H22S16	18453738	130.0 – 410.0	520	M12	170	19.60	860	50	300	1"□	QCD Controllers
QM9SS520H62S12	18453688	130.0 – 410.0	520	M12	170	18.60	711	50	150	3/4"□	QCD Controllers
QM9SS520H62S16	18453696	130.0 – 410.0	520	M12	170	18.70	711	50	150	1"□	QCD Controllers
QM9SS520H92S12	18453704	130.0 – 410.0	520	M12	170	19.10	786	50	225	3/4"□	QCD Controllers
QM9SS520H92S16	18453712	130.0 – 410.0	520	M12	170	19.20	786	50	225	1"□	QCD Controllers
QM9SS650H62S16	18427757IRI	163.0 – 516.0	650	M14	136	18.70	711	50	150	1"□	QCD Controllers
QM9SS650H92S16	18453746	163.0 – 516.0	650	M14	136	19.60	786	50	225	1"□	QCD Controllers
QM9SS01KH62S16	80204761	250.0 – 800.0	1000	M16+	51	24.50	857	50	150	1"□	QCD Controllers
QM9SS15CH62S24	80220718	250.0 – 1300.0	1500	M16+	51	32.00	869	50	150	11/2"□	QCD Controllers
QM9SS18CH62S24	80220734	270.0 – 1500.0	1800	M16+	37	32.00	869	50	150	11/2"□	QCD Controllers
QM9SS20CH62S24	80220759	300.0 – 1700.0	2000	M16+	31	32.00	869	50	150	11/2"□	QCD Controllers
QM9SS22CH62S24	45487535	330.0 – 1900.0	2250	M16+	25	32.00	869	50	150	11/2"□	QCD Controllers

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTES

[illegible]

NOTES

[illegible]



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.

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