



# Industrial Assembly Solutions

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# Electric Assembly


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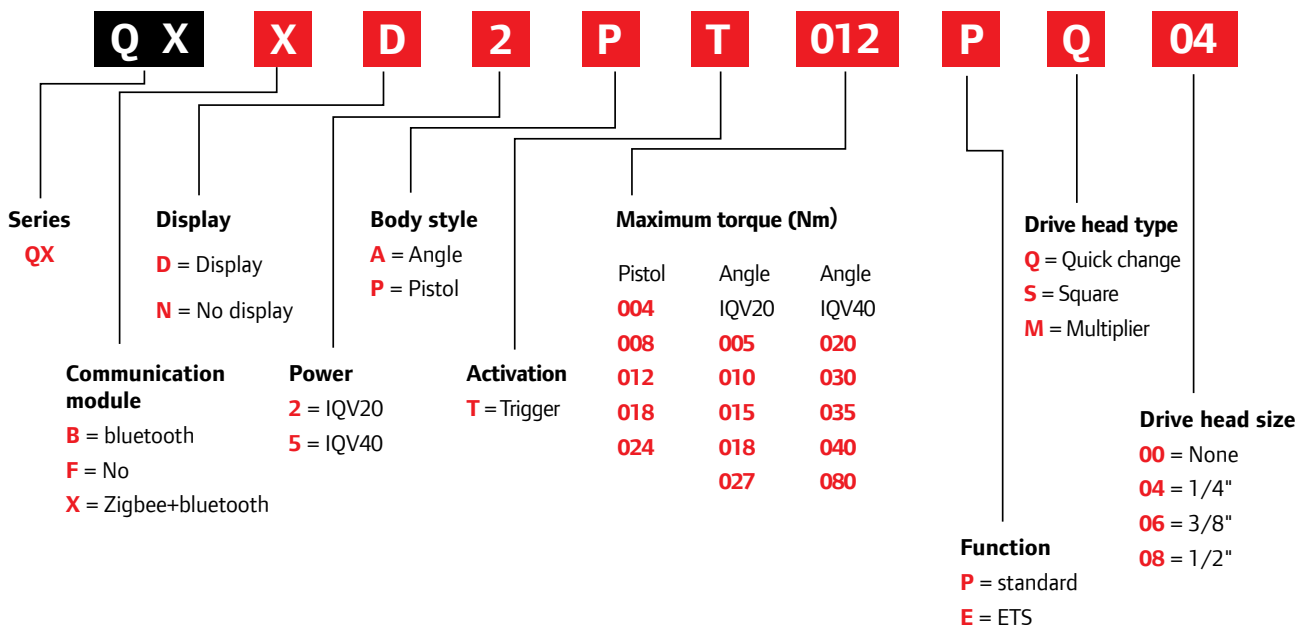
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Angle dimensions																
 QX Angle low torque	L1		L2		W1		W2		H1		H2		D			
	mm	(inch)	mm	(inch)	mm	(inch)	mm	(inch)	mm	(inch)	mm	(inch)	mm	(inch)		
									BL2012	BL2022						
QX __ 2AT05PQ4	550.2	(21.5)	541.0	(21.1)	57.0	(2.2)	78.1	(3.0)	80.6	(3.1)	100.0	(3.9)	45.0	(1.8)	35.5	(1.4)
QX __ 2AT10PS6	523.0	(20.4)	510.5	(19.9)	57.0	(2.2)	78.1	(3.0)	80.6	(3.1)	100.0	(3.9)	32.5	(1.3)	35.5	(1.4)
QX __ 2AT15PS6	523.0	(20.4)	510.5	(19.9)	57.0	(2.2)	78.1	(3.0)	80.6	(3.1)	100.0	(3.9)	32.5	(1.3)	35.5	(1.4)
QX __ 2AT18PQ4	541.1	(21.1)	527.8	(20.6)	57.0	(2.2)	78.1	(3.0)	80.6	(3.1)	100.0	(3.9)	50.9	(2.0)	35.5	(1.4)
QX __ 2AT18PS6	541.1	(21.1)	527.8	(20.6)	57.0	(2.2)	78.1	(3.0)	80.6	(3.1)	100.0	(3.9)	34.9	(1.4)	35.5	(1.4)
QX __ 2AT27PS6	559.1	(21.8)	541.9	(21.1)	57.0	(2.2)	78.1	(3.0)	80.6	(3.1)	100.0	(3.9)	42.6	(1.7)	46.0	(1.8)

 QX Angle high torque	L1		L2		W1		W2		H1		H2		D	
	mm	(inch)	mm	(inch)	mm	(inch)	mm	(inch)	mm	(inch)	mm	(inch)	mm	(inch)
QX __ 5AT20PS06	577.7	(22.5)	564.6	(22.0)	57.0	(2.2)	78.1	(3.0)	100.0	(3.9)	34.8	(1.4)	49.0	(1.9)
QX __ 5AT30PS06	581.8	(22.7)	564.6	(22.0)	57.0	(2.2)	78.1	(3.0)	100.0	(3.9)	42.6	(1.7)	49.0	(1.9)
QX __ 5AT30PS08	581.8	(22.7)	564.6	(22.0)	57.0	(2.2)	78.1	(3.0)	100.0	(3.9)	42.4	(1.7)	49.0	(1.9)
QX __ 5AT35PS06	581.8	(22.7)	564.6	(22.0)	57.0	(2.2)	78.1	(3.0)	100.0	(3.9)	42.6	(1.7)	49.0	(1.9)
QX __ 5AT35PS08	581.8	(22.7)	564.6	(22.0)	57.0	(2.2)	78.1	(3.0)	100.0	(3.9)	42.4	(1.7)	49.0	(1.9)
QX __ 5AT40PS08	586.1	(22.9)	564.5	(22.0)	57.0	(2.2)	78.1	(3.0)	100.0	(3.9)	45.6	(1.8)	49.0	(1.9)
QX __ 5AT80PS08	586.1	(22.9)	564.5	(22.0)	57.0	(2.2)	78.1	(3.0)	100.0	(3.9)	45.6	(1.8)	49.0	(1.9)

## QX™ Model Identification Guide



## Electric Assembly | QX Series

QXFN								
Model	Torque Nm	Free Speed rpm	Weight kg	Length mm	Voltage	Drive	Communication Type	Display Type
QXFN2PT004PQ04	0.8-4	1,500	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2PT004PS04	0.8-4	1,500	0.91	208.3	20V	1/4" Square	Via USB Cable	NO
QXFN2PT004PS06	0.8-4	1,500	0.91	212	20V	3/8" Square	Via USB Cable	NO
QXFN2PT008PQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2PT008PS04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Via USB Cable	NO
QXFN2PT008PS06	1.6-8	1,150	0.91	212	20V	3/8" Square	Via USB Cable	NO
QXFN2PT012PQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2PT012PS04	2.4-12	750	0.91	208.3	20V	1/4" Square	Via USB Cable	NO
QXFN2PT012PS06	2.4-12	750	0.91	212	20V	3/8" Square	Via USB Cable	NO
QXFN2PT018PQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2PT018PS06	3.6-18	500	0.91	212	20V	3/8" Square	Via USB Cable	NO
QXFN2AT005PQ04	1.0-5	1213	1.14	552	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2AT010PS06	2.0-10	936	1.18	525	20V	3/8" Square	Via USB Cable	NO
QXFN2AT015PS06	3.0-15	600	1.18	525	20V	3/8" Square	Via USB Cable	NO
QXFN2AT018PQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2AT018PS06	3.6-18	500	1.27	542	20V	3/8" Square	Via USB Cable	NO
QXFN2AT027PS06	5.4-27	330	1.68	552	20V	3/8" Square	Via USB Cable	NO
QXFN5AT020PS06	4.0-20	1045	2.04	577.7	40V	3/8" Square	Via USB Cable	NO
QXFN5AT030PS06	6.0-30	775	2.18	581.8	40V	3/8" Square	Via USB Cable	NO
QXFN5AT030PS08	6.0-30	775	2.18	581.8	40V	1/2" Square	Via USB Cable	NO
QXFN5AT035PS06	7.0-35	640	2.18	581.8	40V	3/8" Square	Via USB Cable	NO
QXFN5AT035PS08	7.0-35	640	2.18	581.8	40V	1/2" Square	Via USB Cable	NO
QXFN5AT040PS08	8.0-40	545	2.27	586.1	40V	1/2" Square	Via USB Cable	NO
QXFN5AT080PS08	12.0-80	375	2.27	586.1	40V	1/2" Square	Via USB Cable	NO
QXFN5AT110PS08	35-88	120	4.20	786	40V	1/2" Square	Via USB Cable	NO
QXFN5AT160PS08	35-128	120	4.70	957	40V	1/2" Square	Via USB Cable	NO
QXFN5AT250PS12	50-200	90	6.00	800	40V	3/4" Square	Via USB Cable	NO
QXBN								
QXBN2PT004PQ04	0.8-4	1,500	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2PT004PS04	0.8-4	1,500	0.91	208.3	20V	1/4" Square	Bluetooth Only	NO
QXBN2PT004PS06	0.8-4	1,500	0.91	212	20V	3/8" Square	Bluetooth Only	NO
QXBN2PT008PQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2PT008PS04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Bluetooth Only	NO
QXBN2PT008PS06	1.6-8	1,150	0.91	212	20V	3/8" Square	Bluetooth Only	NO
QXBN2PT012PQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2PT012PS04	2.4-12	750	0.91	208.3	20V	1/4" Square	Bluetooth Only	NO
QXBN2PT012PS06	2.4-12	750	0.91	212	20V	3/8" Square	Bluetooth Only	NO
QXBN2PT018PQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2PT018PS06	3.6-18	500	0.91	212	20V	3/8" Square	Bluetooth Only	NO
QXBN2AT005PQ04	1.0-5	1213	1.14	552	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2AT010PS06	2.0-10	936	1.18	525	20V	3/8" Square	Bluetooth Only	NO
QXBN2AT015PS06	3.0-15	600	1.18	525	20V	3/8" Square	Bluetooth Only	NO
QXBN2AT018PQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2AT018PS06	3.6-18	500	1.27	542	20V	3/8" Square	Bluetooth Only	NO
QXBN2AT027PS06	5.4-27	330	1.68	552	20V	3/8" Square	Bluetooth Only	NO
QXBN5AT020PS06	4.0-20	1045	2.04	577.7	40V	3/8" Square	Bluetooth Only	NO
QXBN5AT030PS06	6.0-30	775	2.18	581.8	40V	3/8" Square	Bluetooth Only	NO
QXBN5AT030PS08	6.0-30	775	2.18	581.8	40V	1/2" Square	Bluetooth Only	NO
QXBN5AT035PS06	7.0-35	640	2.18	581.8	40V	3/8" Square	Bluetooth Only	NO
QXBN5AT035PS08	7.0-35	640	2.18	581.8	40V	1/2" Square	Bluetooth Only	NO
QXBN5AT040PS08	8.0-40	545	2.27	586.1	40V	1/2" Square	Bluetooth Only	NO
QXBN5AT080PS08	12.0-80	375	2.27	586.1	40V	1/2" Square	Bluetooth Only	NO
QXBN5AT110PS08	35-88	120	4.20	786.0	40V	1/2" Square	Bluetooth Only	NO
QXBN5AT160PS08	35-128	120	4.70	957.0	40V	1/2" Square	Bluetooth Only	NO
QXBN5AT250PS12	50-200	90	6.00	800.0	40V	3/4" Square	Bluetooth Only	NO

QXFD								
Model	Torque Nm	Free Speed rpm	Weight kg	Length mm	Voltage	Drive	Communication Type	Display Type
QXFD2PT004PQ04	0.8-4	1,500	0.91	215.4	20V	1/4" Quick Change	USB only	YES
QXFD2PT004PS04	0.8-4	1,500	0.91	208.3	20V	1/4" Square	USB only	YES
QXFD2PT004PS06	0.8-4	1,500	0.91	212	20V	3/8" Square	USB only	YES
QXFD2PT008PQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	USB only	YES
QXFD2PT008PS04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	USB only	YES
QXFD2PT008PS06	1.6-8	1,150	0.91	212	20V	3/8" Square	USB only	YES
QXFD2PT012PQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	USB only	YES
QXFD2PT012PS04	2.4-12	750	0.91	208.3	20V	1/4" Square	USB only	YES
QXFD2PT012PS06	2.4-12	750	0.91	212	20V	3/8" Square	USB only	YES
QXFD2PT018PQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	USB only	YES
QXFD2PT018PS06	3.6-18	500	0.91	212	20V	3/8" Square	USB only	YES
QXFD2AT005PQ04	1.0-5	1213	1.14	552	20V	1/4" Quick Change	USB only	YES
QXFD2AT010PS06	2.0-10	936	1.18	525	20V	3/8" Square	USB only	YES
QXFD2AT015PS06	3.0-15	600	1.18	525	20V	3/8" Square	USB only	YES
QXFD2AT018PQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	USB only	YES
QXFD2AT018PS06	3.6-18	500	1.27	542	20V	3/8" Square	USB only	YES
QXFD2AT027PS06	5.4-27	330	1.68	552	20V	3/8" Square	USB only	YES
QXFD5AT020PS06	4.0-20	1045	2.04	577.7	40V	3/8" Square	USB only	YES
QXFD5AT030PS06	6.0-30	775	2.18	581.8	40V	3/8" Square	USB only	YES
QXFD5AT030PS08	6.0-30	775	2.18	581.8	40V	1/2" Square	USB only	YES
QXFD5AT035PS06	7.0-35	640	2.18	581.8	40V	3/8" Square	USB only	YES
QXFD5AT035PS08	7.0-35	640	2.18	581.8	40V	1/2" Square	USB only	YES
QXFD5AT040PS08	8.0-40	545	2.27	586.1	40V	1/2" Square	USB only	YES
QXFD5AT080PS08	12.0-80	375	2.27	586.1	40V	1/2" Square	USB only	YES
QXFD5AT110PS08	35-88	120	4.20	786.0	40V	1/2" Square	USB only	YES
QXFD5AT160PS08	35-128	120	4.70	957.0	40V	1/2" Square	USB only	YES
QXFD5AT250PS12	50-200	90	6.00	800.0	40V	3/4" Square	USB only	YES
QXBD								
QXBD2PT004PQ04	0.8-4	1,500	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2PT004PS04	0.8-4	1,500	0.91	208.3	20V	1/4" Square	Bluetooth Only	YES
QXBD2PT004PS06	0.8-4	1,500	0.91	212	20V	3/8" Square	Bluetooth Only	YES
QXBD2PT008PQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2PT008PS04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Bluetooth Only	YES
QXBD2PT008PS06	1.6-8	1,150	0.91	212	20V	3/8" Square	Bluetooth Only	YES
QXBD2PT012PQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2PT012PS04	2.4-12	750	0.91	208.3	20V	1/4" Square	Bluetooth Only	YES
QXBD2PT012PS06	2.4-12	750	0.91	212	20V	3/8" Square	Bluetooth Only	YES
QXBD2PT018PQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2PT018PS06	3.6-18	500	0.91	212	20V	3/8" Square	Bluetooth Only	YES
QXBD2AT005PQ04	1.0-5	1,213	1.14	552	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2AT010PS06	2.0-10	936	1.18	525	20V	3/8" Square	Bluetooth Only	YES
QXBD2AT015PS06	3.0-15	600	1.18	525	20V	3/8" Square	Bluetooth Only	YES
QXBD2AT018PQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2AT018PS06	3.6-18	500	1.27	542	20V	3/8" Square	Bluetooth Only	YES
QXBD2AT027PS06	5.4-27	330	1.68	552	20V	3/8" Square	Bluetooth Only	YES
QXBD5AT020PS06	4.0-20	1,045	2.04	577.7	40V	3/8" Square	Bluetooth Only	YES
QXBD5AT030PS06	6.0-30	775	2.18	581.8	40V	3/8" Square	Bluetooth Only	YES
QXBD5AT030PS08	6.0-30	775	2.18	581.8	40V	1/2" Square	Bluetooth Only	YES
QXBD5AT035PS06	7.0-35	640	2.18	581.8	40V	3/8" Square	Bluetooth Only	YES
QXBD5AT035PS08	7.0-35	640	2.18	581.8	40V	1/2" Square	Bluetooth Only	YES
QXBD5AT040PS08	8.0-40	545	2.27	586.1	40V	1/2" Square	Bluetooth Only	YES
QXBD5AT080PS08	12.0-80	375	2.27	586.1	40V	1/2" Square	Bluetooth Only	YES
QXBD5AT110PS08	35-88	120	4.20	786.0	40V	1/2" Square	Bluetooth Only	YES
QXBD5AT160PS08	35-128	120	4.70	957.0	40V	1/2" Square	Bluetooth Only	YES
QXBD5AT250PS12	50-200	90	6.00	800.0	40V	3/4" Square	Bluetooth Only	YES

# Electric Assembly | QX Series

QXXD								
Model	Torque Nm	Free Speed rpm	Weight kg	Length mm	Voltage	Drive	Communication Type	Display Type
QXXD2PT004PQ04	0.8-4	1,500	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2PT004PS04	0.8-4	1,500	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	YES
QXXD2PT004PS06	0.8-4	1,500	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2PT008PQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2PT008PS04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	YES
QXXD2PT008PS06	1.6-8	1,150	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2PT012PQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2PT012PS04	2.4-12	750	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	YES
QXXD2PT012PS06	2.4-12	750	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2PT018PQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2PT018PS06	3.6-18	500	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2AT005PQ04	1.0-5	1213	1.14	552	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2AT010PS06	2.0-10	936	1.18	525	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2AT015PS06	3.0-15	600	1.18	525	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2AT018PQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2AT018PS06	3.6-18	500	1.27	542	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2AT027PS06	5.4-27	330	1.68	552	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD5AT020PS06	4.0-20	1045	2.04	577.7	40V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD5AT030PS06	6.0-30	775	2.18	581.8	40V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD5AT030PS08	6.0-30	775	2.18	581.8	40V	1/2" Square	Wireless+Bluetooth+USB	YES
QXXD5AT035PS06	7.0-35	640	2.18	581.8	40V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD5AT035PS08	7.0-35	640	2.18	581.8	40V	1/2" Square	Wireless+Bluetooth+USB	YES
QXXD5AT040PS08	8.0-40	545	2.27	586.1	40V	1/2" Square	Wireless+Bluetooth+USB	YES
QXXD5AT080PS08	12.0-80	375	2.27	586.1	40V	1/2" Square	Wireless+Bluetooth+USB	YES
QXXD5AT110PS08	35-88	120	4.20	786	40V	1/2" Square	Wireless+Bluetooth+USB	YES
QXXD5AT160PS08	35-128	120	4.70	957	40V	1/2" Square	Wireless+Bluetooth+USB	YES
QXXD5AT250PS12	50-200	90	6.00	800	40V	3/4" Square	Wireless+Bluetooth+USB	YES
QXXN								
QXXN2PT004PQ04	0.8-4	1,500	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2PT004PS04	0.8-4	1,500	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	NO
QXXN2PT004PS06	0.8-4	1,500	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2PT008PQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2PT008PS04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	NO
QXXN2PT008PS06	1.6-8	1,150	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2PT012PQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2PT012PS04	2.4-12	750	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	NO
QXXN2PT012PS06	2.4-12	750	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2PT018PQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2PT018PS06	3.6-18	500	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2AT005PQ04	1.0-5	1213	1.14	552	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2AT010PS06	2.0-10	936	1.18	525	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2AT015PS06	3.0-15	600	1.18	525	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2AT018PQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2AT018PS06	3.6-18	500	1.27	542	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2AT027PS06	5.4-27	330	1.68	552	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN5AT020PS06	4.0-20	1045	2.04	577.7	40V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN5AT030PS06	6.0-30	775	2.18	581.8	40V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN5AT030PS08	6.0-30	775	2.18	581.8	40V	1/2" Square	Wireless+Bluetooth+USB	无
QXXN5AT035PS06	7.0-35	640	2.18	581.8	40V	3/8" Square	Wireless+Bluetooth+USB	无
QXXN5AT035PS08	7.0-35	640	2.18	581.8	40V	1/2" Square	Wireless+Bluetooth+USB	无
QXXN5AT040PS08	8.0-40	545	2.27	586.1	40V	1/2" Square	Wireless+Bluetooth+USB	无
QXXN5AT080PS08	12.0-80	375	2.27	586.1	40V	1/2" Square	Wireless+Bluetooth+USB	无
QXXN5AT110PS08	35-88	120	4.20	786.0	40V	1/2" Square	Wireless+Bluetooth+USB	无
QXXN5AT160PS08	35-128	120	4.70	957.0	40V	1/2" Square	Wireless+Bluetooth+USB	无
QXXN5AT250PS12	50-200	90	6.00	800.0	40V	3/4" Square	Wireless+Bluetooth+USB	无

QX ETS								
Model	Torque Nm	Free Speed rpm	Weight kg	Length mm	Voltage	Drive	Communication Type	Display Type
QXFN2PT008EQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2PT008ES04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Via USB Cable	NO
QXFN2PT008ES06	1.6-8	1,150	0.91	212	20V	3/8" Square	Via USB Cable	NO
QXFN2PT012EQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2PT012ES04	2.4-12	750	0.91	208.3	20V	1/4" Square	Via USB Cable	NO
QXFN2PT012ES06	2.4-12	750	0.91	212	20V	3/8" Square	Via USB Cable	NO
QXFN2PT018EQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2PT018ES06	3.6-18	500	0.91	212	20V	3/8" Square	Via USB Cable	NO
QXFN2AT018EQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Via USB Cable	NO
QXFN2AT018ES06	3.6-18	500	1.27	542	20V	3/8" Square	Via USB Cable	NO
QXFN2AT027ES06	5.4-27	330	1.68	552	20V	3/8" Square	Via USB Cable	NO
QXFN5AT040ES08	8.0-40	545	2.27	586.1	40V	1/2" Square	Via USB Cable	NO
QXFN5AT080ES08	12.0-80	375	2.27	586.1	40V	1/2" Square	Via USB Cable	NO
QXBN2PT008EQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2PT008ES04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Bluetooth Only	NO
QXBN2PT008ES06	1.6-8	1,150	0.91	212	20V	3/8" Square	Bluetooth Only	NO
QXBN2PT012EQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2PT012ES04	2.4-12	750	0.91	208.3	20V	1/4" Square	Bluetooth Only	NO
QXBN2PT012ES06	2.4-12	750	0.91	212	20V	3/8" Square	Bluetooth Only	NO
QXBN2PT018EQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2PT018ES06	3.6-18	500	0.91	212	20V	3/8" Square	Bluetooth Only	NO
QXBN2AT018EQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Bluetooth Only	NO
QXBN2AT018ES06	3.6-18	500	1.27	542	20V	3/8" Square	Bluetooth Only	NO
QXBN2AT027PS06	5.4-27	330	1.68	552	20V	3/8" Square	Bluetooth Only	NO
QXBN5AT040ES08	8.0-40	545	2.27	586.1	40V	1/2" Square	Bluetooth Only	NO
QXBN5AT080ES08	12.0-80	375	2.27	586.1	40V	1/2" Square	Bluetooth Only	NO
QXFD2PT008EQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	YES
QXFD2PT008ES04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Via USB Cable	YES
QXFD2PT008ES06	1.6-8	1,150	0.91	212	20V	3/8" Square	Via USB Cable	YES
QXFD2PT012EQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	YES
QXFD2PT012ES04	2.4-12	750	0.91	208.3	20V	1/4" Square	Via USB Cable	YES
QXFD2PT012ES06	2.4-12	750	0.91	212	20V	3/8" Square	Via USB Cable	YES
QXFD2PT018EQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Via USB Cable	YES
QXFD2PT018ES06	3.6-18	500	0.91	212	20V	3/8" Square	Via USB Cable	YES
QXFD2AT018EQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Via USB Cable	YES
QXFD2AT018ES06	3.6-18	500	1.27	542	20V	3/8" Square	Via USB Cable	YES
QXFD2AT027ES06	5.4-27	330	1.68	552	20V	3/8" Square	Via USB Cable	YES
QXFD5AT040ES08	8.0-40	545	2.27	586.1	40V	1/2" Square	Via USB Cable	YES
QXFD5AT080ES08	12.0-80	375	2.27	586.1	40V	1/2" Square	Via USB Cable	YES

## Electric Assembly | QX Series

QX ETS								
Model	Torque Nm	Free Speed rpm	Weight kg	Length mm	Voltage	Drive	Communication Type	Display Type
QXBD2PT008EQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2PT008ES04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Bluetooth Only	YES
QXBD2PT008ES06	1.6-8	1,150	0.91	212	20V	3/8" Square	Bluetooth Only	YES
QXBD2PT012EQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2PT012ES04	2.4-12	750	0.91	208.3	20V	1/4" Square	Bluetooth Only	YES
QXBD2PT012ES06	2.4-12	750	0.91	212	20V	3/8" Square	Bluetooth Only	YES
QXBD2PT018EQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2PT018ES06	3.6-18	500	0.91	212	20V	3/8" Square	Bluetooth Only	YES
QXBD2AT018EQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Bluetooth Only	YES
QXBD2AT018ES06	3.6-18	500	1.27	542	20V	3/8" Square	Bluetooth Only	YES
QXBD2AT027ES06	5.4-27	330	1.68	552	20V	3/8" Square	Bluetooth Only	YES
QXBD5AT040ES08	8.0-40	545	2.27	586.1	40V	1/2" Square	Bluetooth Only	YES
QXBD5AT080ES08	12.0-80	375	2.27	586.1	40V	1/2" Square	Bluetooth Only	YES
QXXD2PT008EQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2PT008ES04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	YES
QXXD2PT008ES06	1.6-8	1,150	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2PT012EQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2PT012ES04	2.4-12	750	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	YES
QXXD2PT012ES06	2.4-12	750	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2PT018EQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2PT018ES06	3.6-18	500	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2AT018EQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Wireless+Bluetooth+USB	YES
QXXD2AT018ES06	3.6-18	500	1.27	542	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD2AT027ES06	5.4-27	330	1.68	552	20V	3/8" Square	Wireless+Bluetooth+USB	YES
QXXD5AT040ES08	8.0-40	545	2.27	586.1	40V	1/2" Square	Wireless+Bluetooth+USB	YES
QXXD5AT080ES08	12.0-80	375	2.27	586.1	40V	1/2" Square	Wireless+Bluetooth+USB	YES
QXXN2PT008EQ04	1.6-8	1,150	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2PT008ES04	1.6-8	1,150	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	NO
QXXN2PT008ES06	1.6-8	1,150	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2PT012EQ04	2.4-12	750	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2PT012ES04	2.4-12	750	0.91	208.3	20V	1/4" Square	Wireless+Bluetooth+USB	NO
QXXN2PT012ES06	2.4-12	750	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2PT018EQ04	3.6-18	500	0.91	215.4	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2PT018ES06	3.6-18	500	0.91	212	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2AT018EQ04	3.6-18	500	1.27	542	20V	1/4" Quick Change	Wireless+Bluetooth+USB	NO
QXXN2AT018ES06	3.6-18	500	1.27	542	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN2AT027ES06	5.4-27	330	1.68	552	20V	3/8" Square	Wireless+Bluetooth+USB	NO
QXXN5AT040ES08	8.0-40	545	2.27	586.1	40V	1/2" Square	Wireless+Bluetooth+USB	NO
QXXN5AT080ES08	12.0-80	375	2.27	586.1	40V	1/2" Square	Wireless+Bluetooth+USB	NO

## INSIGHTqcx™ Controller

When trying to achieve simple manufacturing goals in a complex manufacturing world, understanding the fastening process doesn't have to be complicated. The new Ingersoll Rand®INSIGHTqcx™ is different, by design. This cordless controller is designed to be easy to use and integrate, while providing a common platform to meet your assembly requirements worldwide.



### Hardware Upgrade

- 7" Touch Screen
- 50K Cycle Data & 50K Trace Data Storage
- Dual Ethernet Port
- USB Extension



### Software Upgrade

- Browser Based Programming, No Software Needed
- Unified User Interface for PC, Tab and Phone  
Faster Start-up



### Feature Upgrade



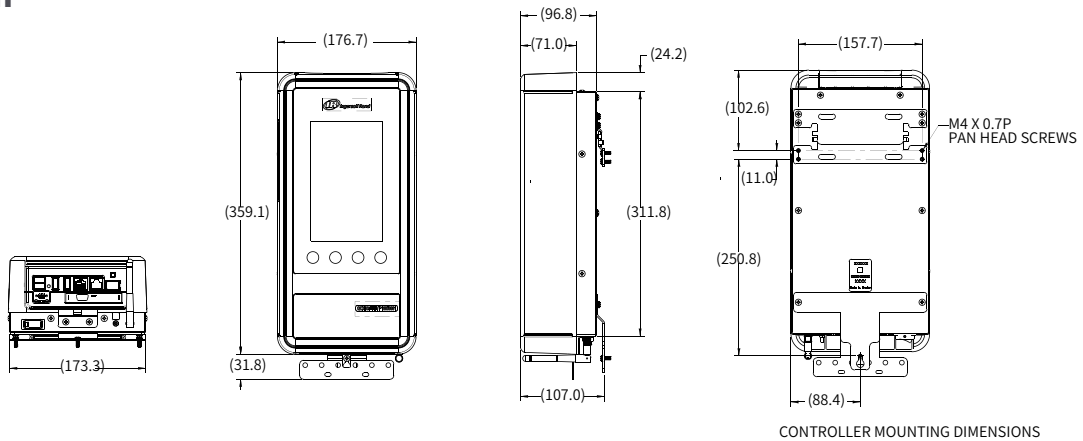
- Add Trace Data to QX Platform
- Add Job Feature
- Upgrade to 32 Pset
- Add Multi-Barcode Feature

### Experience Upgrade

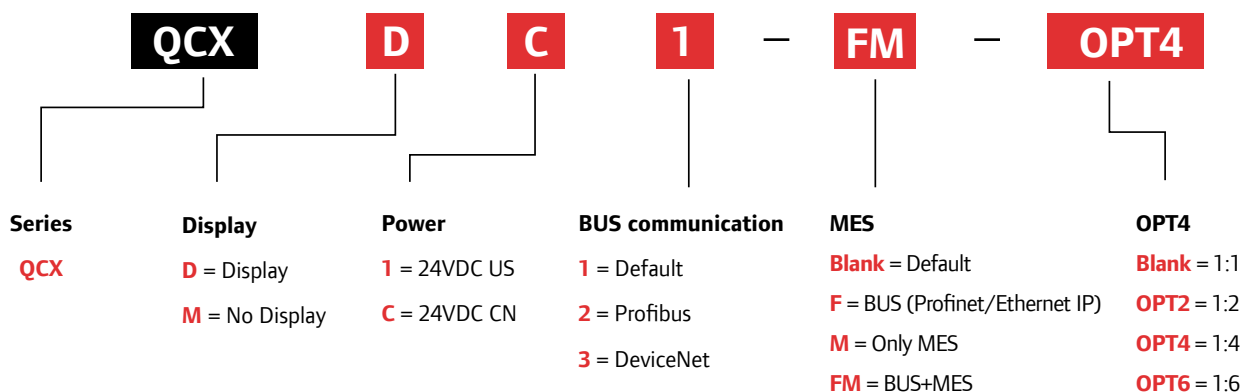


- Remote Backup and Restore
- Enhanced Diagnosis


## Dimension



## QCX™ Model Identification Guide



## Accessories



**20V Battery and Charger**

Charger	JAPAN	BC1121-AP3*
	AU/NZ	BC1121-AP4*
	KOREA	BC1121-AP5*
	SG/HK	BC1121-AP6*
2.5Ahr		BL2012**
5Ahr		BL2022***




**40V Battery and Charger**

Charger	JAPAN	BC1161-AP3
	AU/NZ	BC1161-AP4
	KOREA	BC1161-AP5
	SG/HK	BC1161-AP6
2.5Ahr		BL4011
	KOREA	BL4011-AP5

2.5Ahr Battery Boot  5Ahr Battery Boot 

BL2005-BOOT                      BL2010-BOOT

Battery Boot 

BL2010-BOOT

\*Upgraded BC1120    \*\*Upgraded BL2005    \*\*\*Upgraded BL2010

**Pistol Accessories**



		
Suspension Bale	Boot	Auxiliary Handle
VP1-365	VP1-BOOT	VP1-A48

**Angle Accessories**

**20V Angle Accessories**

Max. Torque	Angle Boot	Extended Boot	Hanger	Mounting Plate
5Nm	X	VA1-R18-170		
10Nm	X	VA1-R25-170	CPS2-A365	CPS2-K48
15Nm	X			
18Nm	GEA40-170	GAA2-170		
27Nm	GEA40-171	GAA4-170	GEA40-A365	X

**40V Angle Accessories**

Max. Torque	Angle Boot	Extended Boot	Hanger
20Nm	GEA40-170	GAA2-170	
30Nm	GEA40-171	GAA4-170	
35Nm			GEA40-A365
40Nm	GEA40-172	GAA5-170	
80Nm			

## Next-Generation Productivity.

The innovative QX Series™ Cordless Torque Multiplier will reduce your bolting time and cost, while ensuring repeatable accuracy for all torque-critical joints. Designed with a premium Norbar® gearbox and an efficient, time-tested closed-loop transducer, the Torque Multiplier offers proven quality, control and programmable configurations to maximize your productivity.

### NOT JUST TORQUE CONTROL BUT *TOTAL* CONTROL.

#### Accuracy:

- Ingersoll Rand's 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 allowing for quick setup and feedback on every QX Series™ tool
- User-programmable configurations such as torque, angle and gang count that reduce the number of tools needed for multiple applications

#### Comfort:

- Cordless and compact, the QX Series™ Torque Multiplier allows operators to move freely without the need of bulky air or hydraulic hoses, compressors, generators or powerpacks
- Tethering points to safely secure the tools

#### Communication:

- USB standard, wireless communication optional
- Data management, process control and the ability to adjust tool configurations (Ethernet, fieldbus and I/O capable)

#### Versatility:

- Fast programming that makes the tool adaptable to multiple applications
- Cordless and portable to allow operators to move freely around any workplace or environment



#### Pistol Type

The pistol type is accepted by the market widely by its high torque, wireless transmission, error proof and cordless since 2017.



#### Angle Type

The angle type is also based on the QX platform. The new design with angle tool brings you the flexibility in space. And its 40V power platform offers you higher speed and higher power.



## Adaptable to Your Application.



From pipeline flange bolts to truck frame assembly, the QX Series™ Cordless Torque Multiplier has the range, accuracy and configurations to tackle your bolting needs. Sharing the same IQV Series™ power platform with our industrial cordless and QX Series™ assembly tools, the Torque Multiplier expands our broad range of cordless bolting solutions.

### Oil and Gas



- Flanges
- Heat Exchanges
- High Pressure Valves

### Infrastructure



- Bridges
- Road Ways
- Steel Structures

### Heavy Equipment



- Excavators
- Diesel and Gas Engines
- Construction/Truck

### Wind



- Foundation Bolts
- Gearboxes
- General Maintenance

### Rail



- Rail Car Maintenance
- Locomotive Assembly
- Infrastructure Installation/  
Maintenance

### Power Gen



- Turbines
- Valves Connections and Flanges
- Generators

# Precision Engineered



## Precision Engineered

Cycle status lights and audible alarm provide instant validation during each operation

- Red – Above set high limit
- Yellow – Below set low limit
- Green – Within set range
- Blue – Active alarm condition

High strength, impact resistant lens guards against damage

Backlit display offers quick set-up and easy to read visual feedback



### 2 Speed Torque Multiplier



**Two Speed Multiplier**  
Maximizes your fastening productivity by using higher speed for run down & auto shifts down to slower speed for final torque.

## Superior communication and control

Ingersoll Rand® doesn't just give you unprecedented technology, we give you total control of that technology. With up to 32 programmable configurations per tool, the QX Series™ 40V Torque Multiplier allows operators to transition seamlessly between different bolting applications. You'll be able to use bolting strategies individually, or combined in one strategy depending on what works best for you.

### Common bolting strategies

#### Torque

Achieve desired torque within high and low limits



#### Angle

Achieve target rotation within high and low limits



#### Gang Count

Counts all rundowns to ensure all bolts have been fastened

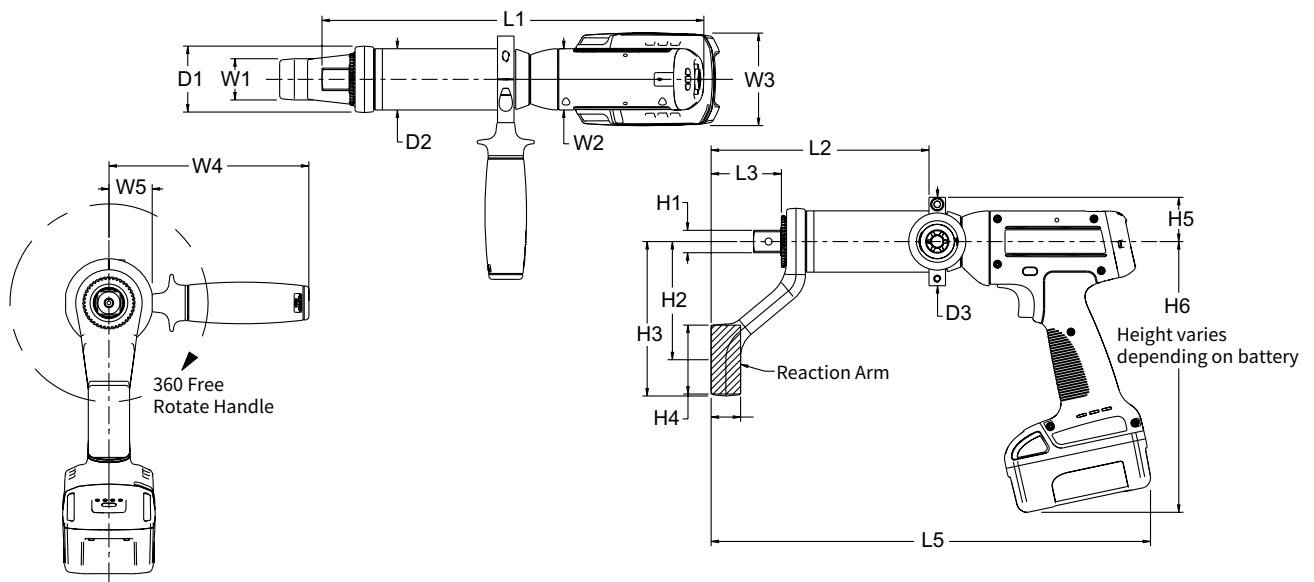


**+** If additional control is needed, Ingersoll Rand's INSIGHTqcx Controller or Insight Connect app gives you even more options to adapt to the most complicated bolting applications.

## QXM Series Pistol Type Specification

Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in	Voltage V	Communication Type
<b>QXM Pistol Type</b>								
QXFD2PT200PM12	40-200	45	3.62	373	56	3/4"	20V	USB
QXFD2PT500PM12	100-500	18	3.62	373	56	3/4"	20V	USB
QXFD2PT10CPM12	200-1,000	9	5.44	419	80	3/4"	20V	USB
QXFD2PT13CPM16	270-1,350	7	5.44	419	80	1"	20V	USB
QXFD2PT20CPM16	400-2,000	5	6.80	452	80	1"	20V	USB
QXFD2TT13CPM16	338-1,350	2 Speed 25/5	6.00	439	80	1"	20V	USB
QXXD2PT200PM12	40-200	45	3.62	373	56	3/4"	20V	Wireless Enabled
QXXD2PT500PM12	100-500	18	3.62	373	56	3/4"	20V	Wireless Enabled
QXXD2PT10CPM12	200-1,000	9	5.44	419	80	3/4"	20V	Wireless Enabled
QXXD2PT13CPM16	270-1,350	7	5.44	419	80	1"	20V	Wireless Enabled
QXXD2TT13CPM16	338-1,350	2 Speed 25/5	6.00	439	80	1"	20V	Wireless Enabled
QXXD2PT20CPM16	400-2,000	5	6.80	452	80	1"	20V	Wireless Enabled

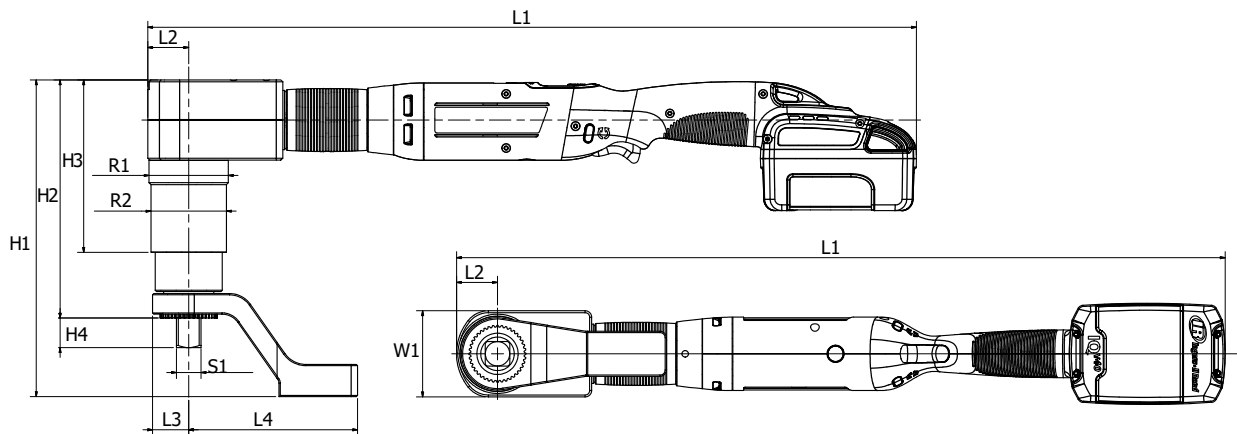
\*Weight and length do not include battery. Battery sold separately.



Unit (mm)	L1	L2	L3	L4	L5	W1	W2	W3	W4	W5	H1	H2	H3	H4	H5	H6 B2012	H6 BL2022	D1	D2	D3
QXFD2PT200PM12	324.1	184.9	59.6	25	373	35	52	78.5	170	36.7	3/4" SQ.	100.3	131	55	37.5	211	230	56	52	75
QXFD2PT500PM12	324.1	184.9	59.6	25	373	35	52	78.5	170	36.7	3/4" SQ.	100.3	131	55	37.5	211	230	56	52	75
QXFD2PT10CPM12	356.1	231	79.4	20	419	28.6	52	78.5	170	40	3/4" SQ.	145.4	167.1	62.5	40	211	230	80	72	75
QXFD2PT13CPM16	354.1	231	79.4	20	419	28.6	52	78.5	170	40	1" SQ.	145.4	167.1	62.5	40	211	230	80	72	75
QXFD2PT20CPM16	374.9	266.1	79.4	20	432.8	28.6	52	78.5	170	40	1" SQ.	145.4	167.1	62.5	40	211	230	80	72	75
QXFD2PT13CPM16	387.9	264.1	79.4	20	452	28.6	52	78.5	170	40	1" SQ.	145.4	167.1	62.5	40	211	230	80	72	75
QXXD2PT200PM12	324.1	184.9	59.6	25	373	35	52	78.5	170	36.7	3/4" SQ.	100.3	131	55	37.5	211	230	56	52	75
QXXD2PT500PM12	324.1	184.9	59.6	25	373	35	52	78.5	170	36.7	3/4" SQ.	100.3	131	55	37.5	211	230	56	52	75
QXXD2PT10CPM12	356.1	231	79.4	20	419	28.6	52	78.5	170	40	3/4" SQ.	145.4	167.1	62.5	40	211	230	80	72	75
QXXD2PT13CPM16	354.1	231	79.4	20	419	28.6	52	78.5	170	40	1" SQ.	145.4	167.1	62.5	40	211	230	80	72	75
QXXD2PT13CPM16	374.9	266.1	79.4	20	432.8	28.6	52	78.5	170	40	1" SQ.	145.4	167.1	62.5	40	211	230	80	72	75
QXXD2PT20CPM16	387.9	264.1	79.4	20	452	28.6	52	78.5	170	40	1" SQ.	145.4	167.1	62.5	40	211	230	80	72	75

## QXM Series Angle Type Specification

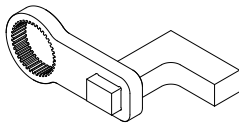
Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in	Voltage V	Communication Type
<b>QXM Angle Type</b>								
QXFD5A45T0270PM12	54-270	77	4.25	264	76.2	3/4"	40V	USB
QXFD2A52T0396PM12	79-395	21	3.54	216	76.2	3/4"	20V	USB
QXFD2A52T0594PM12	119-594	14	4.06	216	76.2	3/4"	20V	USB
QXFD5A52T0880PM12	180-880	23	4.60	264	76.2	3/4"	40V	USB
QXFD5A72T1080PM16	216-1,080	19	5.97	264	76.2	1"	40V	USB
QXFD5A72T1620PM16	324-1,620	13	5.97	264	76.2	1"	40V	USB
QXFD5A72T20CPM16	400-2,000	13	5.97	264	76.2	1"	40V	USB
QXXD5A45T0270PM12	54-270	77	4.25	264	76.2	3/4"	40V	Wireless Enabled
QXXD2A52T0396PM12	79-395	21	3.54	216	76.2	3/4"	20V	Wireless Enabled
QXXD2A52T0594PM12	119-594	14	4.06	216	76.2	3/4"	20V	Wireless Enabled
QXXD5A52T0880PM12	180-880	23	4.60	264	76.2	3/4"	40V	Wireless Enabled
QXXD5A72T1080PM16	216-1,080	19	5.97	264	76.2	1"	40V	Wireless Enabled
QXXD5A72T1620PM16	324-1,620	13	5.97	264	76.2	1"	40V	Wireless Enabled
QXXD5A72T20CPM16	400-2,000	13	5.97	264	76.2	1"	40V	Wireless Enabled



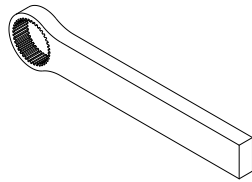
Unit (mm)	L1	L2	L3	L4	S1	W1	R1	R2	H1	H2	H3	H4
QXFD5A45T0270PM12	596.3	31.8	28.0	131.0	3/4" SQ.	66.8	61.5	58.5	218.8	157.8	133.7	23.0
QXFD2A52T0396PM12	557.3	29.3	28.0	131.0	3/4" SQ.	58.6	58.5	52	222.1	161.1	140.6	23.0
QXFD2A52T0594PM12	539.4	33.4	28.0	131.0	3/4" SQ.	66.8	58.5	52	236.5	175.5	155.0	23.0
QXFD5A52T0880PM12	596.3	31.8	28.0	131.0	3/4" SQ.	66.8	61.5	58.5	245.7	184.7	133.7	23.0
QXFD5A72T1080PM16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28.0
QXFD5A72T1620PM16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28.0
QXFD5A72T20CPM16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28.0
QXXD5A45T0270PM12	596.3	31.8	28.0	131.0	3/4" SQ.	66.8	61.5	58.5	218.8	157.8	133.7	23.0
QXXD2A52T0396PM12	557.3	29.3	28.0	131.0	3/4" SQ.	58.6	58.5	52	222.1	161.1	140.6	23.0
QXXD2A52T0594PM12	539.4	33.4	28.0	131.0	3/4" SQ.	66.8	58.5	52	236.5	175.5	155.0	23.0
QXXD5A52T0880PM12	596.3	31.8	28.0	131.0	3/4" SQ.	66.8	61.5	58.5	245.7	184.7	133.7	23.0
QXXD5A72T1080PM16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28.0
QXXD5A72T1620PM16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28.0
QXXD5A72T20CPM16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28.0

## Reaction Arms

Ingersoll Rand offers the following variety of reaction arms for different applications. Reaction arms are available in both 52 mm and 72 mm spline drives, depending on the size of the gearbox.



Cranked, 45 or 90 degrees



Straight, aluminum or steel (multiple lengths available)

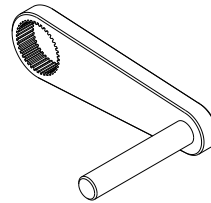
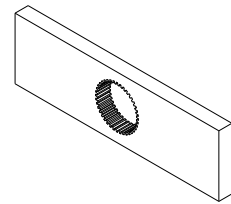
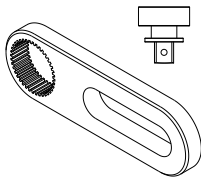


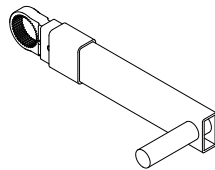
Plate and pin (multiple lengths available)



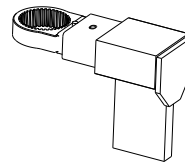
Double-sided



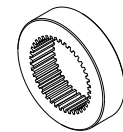
Sliding slave kit (multiple lengths available)



Sliding peg and yoke assembly (multiple lengths available)



Sliding yoke, paddle and yoke assembly (multiple lengths available)



Blank welding ring

## Custom Reaction Arm Options

Not all applications are equal — Ingersoll Rand offers custom reaction arms. Please see your certified distributor for more information.

## Power Platform

All QX Series™ 20V tools are compatible with both the 2.5 Ahr and 5.0 Ahr batteries. The 5.0 Ahr is optimum for longer use applications while the 2.5 Ahr is ideal for tighter spaces and reduced weight.

**IQ<sup>V20</sup> Series™ Battery Charger 20V**  
**BC1121-AP3 JAPAN**  
**BC1121-AP4 AU/NZ**  
**BC1121-AP5 KOREA**  
**BC1121-AP6 SG/SK**



**IQ<sup>V20</sup> Series™ Lithium Ion Battery Pack 20V, 5.0 Ahr**  
**BL2022**  
**BL2022-AP5 KOREA**



**IQ<sup>V20</sup> Series™ Lithium Ion Battery Pack 20V, 2.5 Ahr**  
**BL2012**  
**BL2012-AP5 KOREA**



**IQ<sup>V40</sup> Series™ Battery Charger 40V, 2.5 Ahr**  
**BC1161-AP3 JAPAN**  
**BC1161-AP4 AU/NZ**  
**BC1161-AP5 KOREA**  
**BC1161-AP6 SG/SK**



**IQ<sup>V40</sup> Series™ Lithium Ion Battery Pack 40V, 2.5 Ahr**  
**BL4011**  
**BL4011-AP5 KOREA**



## Accessories



Protective Boots



Spring Balancer

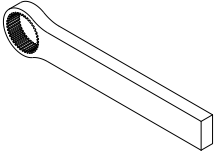
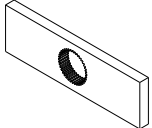
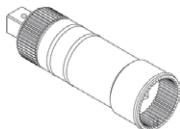


Tool Controller



3/4" and 1" Socket Kits

Reaction Arms

Item Description		200Nm 500Nm	1000Nm 1350Nm 2000Nm
	Cranked Reaction Arm (Standard), Steel	NSP-766-52CR	NSP-766-72CR
	Cranked Reaction Bar, Steel, 90 DEGS	NSP-766-52CR90	NSP-766-72CR90
	Reaction Arm, Straight, Steel, 6.67"		NSP-766-72STS070
	Reaction Arm, Straight, Steel, 10.0"	NSP-766-52ST	NSP-766-72ST
	Reaction Arm, Straight, Steel, 15.0"	NSP-766-52STS155	NSP-766-72STS155
	Reaction Arm, Straight, Aluminum, 10.0"	NSP-766-52STA100	NSP-766-72STA100
	Reaction Arm, Straight, Aluminum, 15.5"	NSP-766-52STA155	NSP-766-72STA155
	Reaction Arm, Double Sided, Straight, Steel, 9.84"	NSP-766-52TSD098	NSP-766-72TSD079
	Reaction Arm, Plate and Peg, Steel, 6.0"	NSP-766-52PPS060	NSP-766-72PP100
	Weld Ring	NSP-766-52WR	NSP-766-72WR
	Reaction Arm, Sliding Plate for Sliding Slave Square, Straight, Steel, 5.0"	NSP-766-52SLS050	
	Reaction Arm, Sliding Plate for Sliding Slave Square, Straight, Steel, 7.0"	NSP-766-52SL	NSP-766-72SL
	Slave Square Kit for Sliding Reaction Arm, 3/4" Square	NSP-766-52SLK12	NSP-766-72SLK12
	Slave Square Kit for Sliding Reaction Arm, 1" Square		NSP-766-72SLK16
	Reaction Arm, Yoke	NSP-766-52Y	NSP-766-72Y
	Reaction Arm, Yoke Tube and Peg, Steel	NSP-766-52-72YTP	
	Reaction Arm, Yoke	NSP-766-52Y	NSP-766-72Y
	Reaction Arm, Yoke Tube and Paddle, Steel	NSP-766-52-72YP	
	Nose Ext Assy - 6"; Wheel	NSP-766-52NXW060	NSP-766-72NXW060
	Nose Ext Assy - 9"; Wheel	NSP-766-52NXW090	NSP-766-72NXW120
	Nose Ext Assy - 6"; Requires Reaction	NSP-766-52NX060	NSP-766-72NX060
	Nose Ext Assy - 9"; Requires Reaction	NSP-766-52NX090	NSP-766-72NX090
	Nose Ext Assy - 12"; Requires Reaction	NSP-766-52NX120	NSP-766-72NX120

# NEXT-GENERATION PRODUCTIVITY

The next generation QX Series™ 40V Cordless Torque Multiplier, will reduce your bolting time and cost, while ensuring repeatable accuracy for all torque-critical joints. Designed with a premium Norbar® gearbox and an efficient, time-tested closed-loop transducer, the Torque Multiplier offers proven quality, control and programmable configurations to maximize your productivity.

## TRACEABLE CONFIDENCE IN EVERY HIGH TORQUE FASTENING

### Accuracy:

- Ingersoll Rand's 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 Automatically trace every tightening cycle to the day and minute with a persistent internal clock. Forget manual pen and paper recording.

### Control:

- A multi-function display module allowing for quick setup and real time feedback on every QX Series™ tool
- User-programmable configurations such as torque, angle and gang count that reduce the number of tools needed for multiple applications

### Comfort:

- Cordless and compact, the QX Series™ Torque Multiplier allows operators to move freely without the need of bulky air or hydraulic hoses, electrical cords, compressors, generators or powerpacks
- Integrated tethering ring included to safely secure the tools

### Communication:

- USB standard, Bluetooth and wireless communication optional.
- Direct connect the tool to the Insight Connect app on your bluetooth enabled device.
- Data management, process control and the ability to adjust tool configurations (Ethernet, fieldbus and I/O capable)

### Versatility:

- Fast programming that makes the tool adaptable to multiple applications
- Cordless and portable to allow operators to move freely around any workplace or environment
- Available in either pistol or angle configurations

QX™ Series 40V Torque Multiplier 1000NM Pistol Grip



QX Series™ Torque Multiplier 1620NM High Torque Angle Wrench



# PRECISION ENGINEERED



Cycle status lights and audible alarm provide instant validation during each operation  
Red – Above set high limit  
Yellow – Below set low limit  
Green – Within set range  
Blue – Active alarm condition



Bluetooth pairing to your Apple iOS or Goggle Android device



Fully integrated with the INSIGHTqcx™ Controller and INSIGHT Connect app for automatic data capture, easy results sharing and tool programming



# SUPERIOR COMMUNICATION AND CONTROL

Ingersoll Rand® doesn't just give you unprecedented technology, we give you total control of that technology. With up to 32 programmable configurations per tool, the QX Series™ 40V Torque Multiplier allows operators to transition seamlessly between different bolting applications. You'll be able to use bolting strategies individually, or combined in one strategy depending on what works best for you.

## COMMON BOLTING STRATEGIES

### Torque

Achieve desired torque within high and low limits



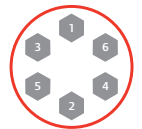
### Angle

Achieve target rotation within high and low limits



### Gang Count

Counts all rundowns to ensure all bolts have been fastened



+ If additional control is needed, Ingersoll Rand's INSIGHTqcx Controller or Insight Connect app gives you even more options to adapt to the most complicated bolting applications.

## ADVANCED COMMUNICATION OPTIONS FOR PROCESS CONTROL AND REAL-TIME MONITORING



The INSIGHT™ Connect app will help you stay productive, mobile and in control of your fastening process. It programs any Ingersoll Rand® QX Connect Series™ tool without the need for additional technical training, special software, plant network permissions or a laptop computer. Working from a smartphone or tablet, operators can use the app to quickly program the torque and angle control configurations on these closed-loop, transducerized tools.

You can quickly perform key tasks with your mobile device, including:

### SIMPLE

- Common Setting & General Tool Setup
- Multiple Language Support
- Retrieve Cycle Log and Share via Email
- Audit Logs
- Error Codes with Description

### FLEXIBLE

- Program All Standard QX Platform Tool
- Clone- Back Up and Restore
- Save and Load Configurations
- Firmware Update
- Virtual tool programming

### CAPABLE

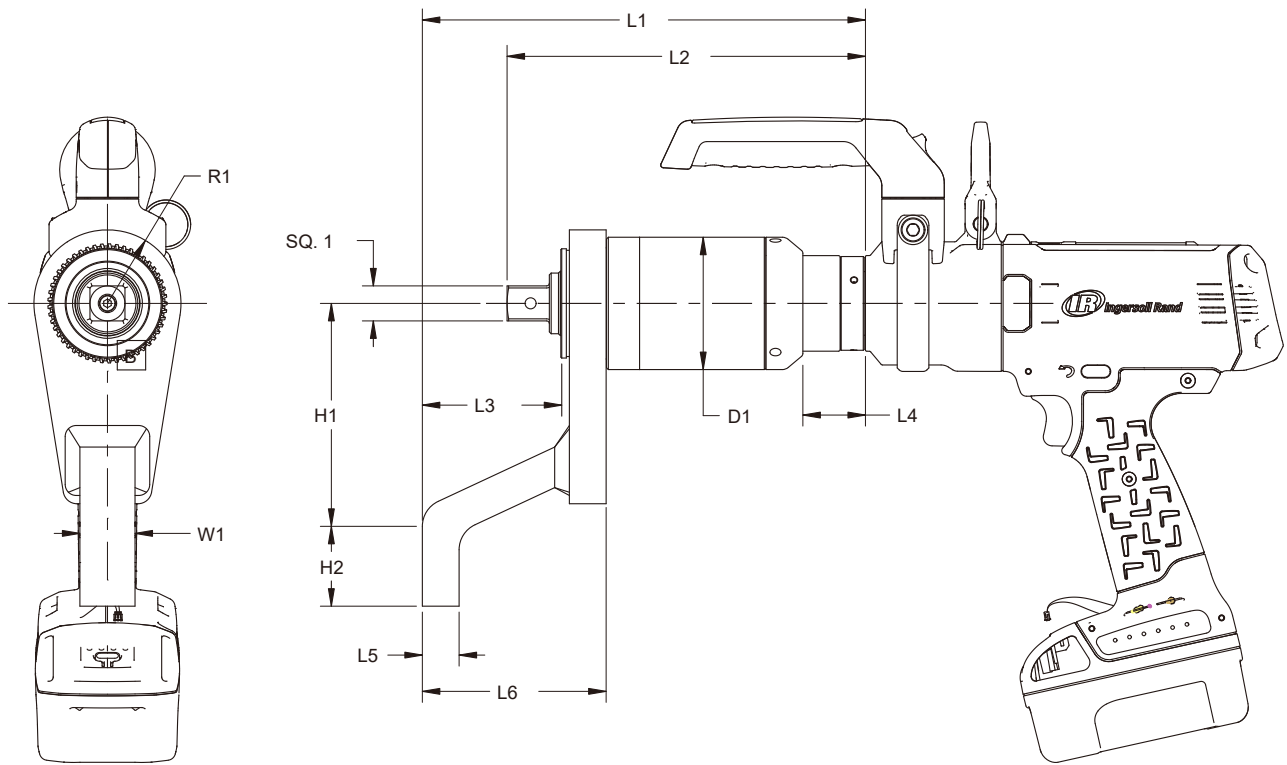
- Program Torque, Angle, Speed
- Multiple Configurations
- Multiple Step Programming
- End of Run (EOR) data on App
- Calibration and Cp/Cpk
- Programming via Bluetooth

When not using the wireless INSIGHTqcx™ Controller the optional Bluetooth enable tool can communicate with the INSIGHT™ Connect App.

Tool models without over the air communication capability can be connected via USB only.

### QX Series 40V Torque Multiplier Specification

QXM I Series						
Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Drive in	Voltage V
QXBD5PT10CPM12 QXXD5PT10CPM12 QXFD5PT10CPM12	200-1000	15	9.1	422.4	3/4"	40V
QXBD5PT13CPM16 QXXD5PT13CPM16 QXFD5PT13CPM16	270-1350	11	9.1	423.2	1"	40V
QXBD5PT20CPM16 QXXD5PT20CPM16 QXFD5PT20CPM16	400-2,000	6.8	9.5	456.7	1"	40V
QXBD5PT27CPM16 QXXD5PT27CPM16 QXFD5PT27CPM16	540-2700	5.5	9.5	430	1"	40V
QXBD5PT40CPM16 QXXD5PT40CPM16 QXFD5PT40CPM16	800-4000	3.3	12.5	480.3	1"	40V
QXBD5PT200PM12 QXXD5PT200PM12 QXFD5PT200PM12	40-200	83	6.3	390.4	3/4"	40V
QXBD5PT500PM12 QXXD5PT500PM12 QXFD5PT500PM12	100-500	27	6.3	392.9	3/4"	40V

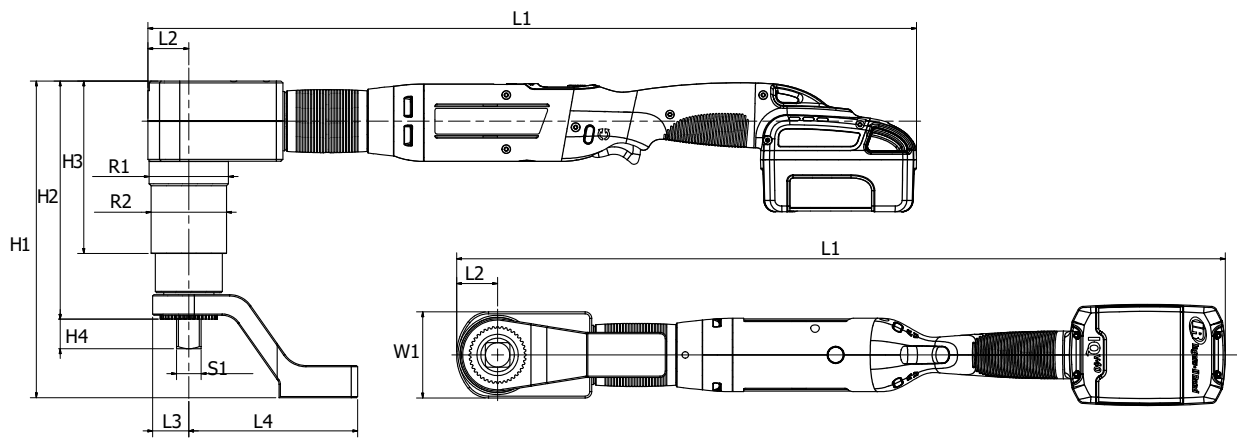


QXM II Series												
Unit (mm)	L1	L2	L3	L4	L5	L6	H1	H2	R1	W1	D1	SQ1
QXBD5PT13CPM16 QXXD5PT13CPM16 QXFD5PT13CPM16	241	193	75.4	34	20	100	121	43	40	30	72	25.4
QXBD5PT10CPM12 QXXD5PT10CPM12 QXFD5PT10CPM12	245	195	75.9	34	20	100	124	43	40	30	72	19
QXBD5PT20CPM16 QXXD5PT20CPM16 QXFD5PT20CPM16	278	227	75.4	67	20	100	124	43	40	30	72	25.4
QXBD5PT27CPM16 QXXD5PT27CPM16 QXFD5PT27CPM16	240	201	75.7	34	20	100	112	53	40	30	80	25.4
QXBD5PT40CPM16 QXXD5PT40CPM16 QXFD5PT40CPM16	293	254	75.9	34	28.5	105		60	46	30	72	25.4
QXBD5PT200PM12 QXXD5PT200PM12 QXFD5PT200PM12	199	163	59		25		70	61	28	35	52	19
QXBD5PT500PM12 QXXD5PT500PM12 QXFD5PT500PM12	199	163	59		25		70	61	28	35	52	19

## QXM Series Angle Type Specification

### QXM Series Angle Type

Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in	Voltage V	Communication Type
QXC5A45T0270PS12	54-270	77	4.25	264	76.2	3/4"	40V	USB
QXC5A52T0880PS12	180-880	23	4.6	264	76.2	3/4"	40V	USB
QXC5A72T1080PS16	216-1,080	19	5.97	264	76.2	1"	40V	USB
QXC5A72T1620PS16	324-1,620	13	5.97	264	76.2	1"	40V	USB
QXC5A72T2000PS16	400-2,000	13	5.97	264	76.2	1"	40V	USB
QXX5A45T0270PS12	54-270	77	4.25	264	76.2	3/4"	40V	Wireless Enabled
QXX5A52T0880PS12	180-880	23	4.6	264	76.2	3/4"	40V	Wireless Enabled
QXX5A72T1080PS16	216-1,080	19	5.97	264	76.2	1"	40V	Wireless Enabled
QXX5A72T1620PS16	324-1,620	13	5.97	264	76.2	1"	40V	Wireless Enabled
QXX5A72T2000PS16	400-2,000	13	5.97	264	76.2	1"	40V	Wireless Enabled

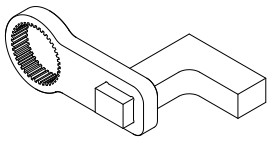


### QXM Series Angle Type

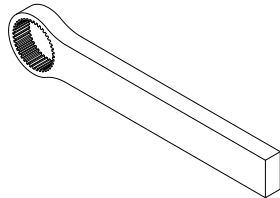
单位(mm)	L1	L2	L3	L4	S1	W1	R1	R2	H1	H2	H3	H4
QXC5A45T0270PS12	596.3	31.8	28	131	3/4" SQ.	66.8	61.5	58.5	218.8	157.8	133.7	23
QXC5A52T0880PS12	596.3	31.8	28	131	3/4" SQ.	66.8	61.5	58.5	245.7	184.7	133.7	23
QXC5A72T1080PS16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28
QXC5A72T1620PS16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28
QXC5A72T2000PS16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28
QXX5A45T0270PS12	596.3	31.8	28	131	3/4" SQ.	66.8	61.5	58.5	218.8	157.8	133.7	23
QXX5A52T0880PS12	596.3	31.8	28	131	3/4" SQ.	66.8	61.5	58.5	245.7	184.7	133.7	23
QXX5A72T1080PS16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28
QXX5A72T1620PS16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28
QXX5A72T2000PS16	605.9	41.4	40.5	165.5	1" SQ.	82.8	78.6	78.6	278.4	202.2	136.6	28

# REACTION ARMS

Ingersoll Rand® offers the following variety of reaction arms for different applications. Reaction arms are available in both 52 mm and 72 mm spline drives, depending on the size of the gearbox.



Cranked, 45 or 90 degrees



Straight, aluminum or steel  
(multiple lengths available)

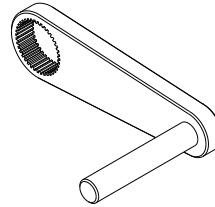
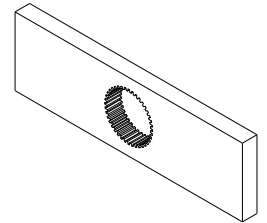
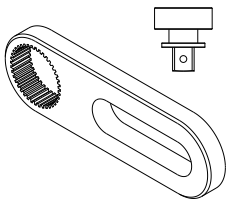


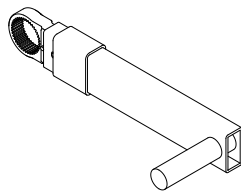
Plate and pin (multiple lengths available)



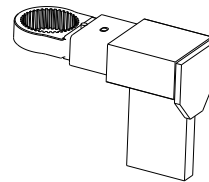
Double-sided



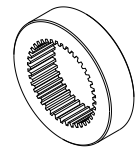
Sliding slave kit (multiple lengths available)



Sliding peg and yoke assembly (multiple lengths available)



Sliding yoke, paddle and yoke assembly (multiple lengths available)



Blank welding ring

## Custom Reaction Arm Options

Not all applications are equal — Ingersoll Rand offers custom reaction arms. Please see your certified distributor for more information.

## Power Platform

All QX Series™ 40V high torque tools are compatible with the 2.5 Ahr 40V battery are compatible with the IQV® 40.



**IQV40 Series™  
Battery Charger 40V,  
2.5 Ahr  
BC1161**



**IQV40 Series™ Lithium  
Ion Battery Pack 40V,  
2.5 Ahr  
BL4011**

## Accessories



Spring Balancer



INSIGHTqcx™ Controller



Hard Case



3/4" and 1" Socket Kits

## QE Series

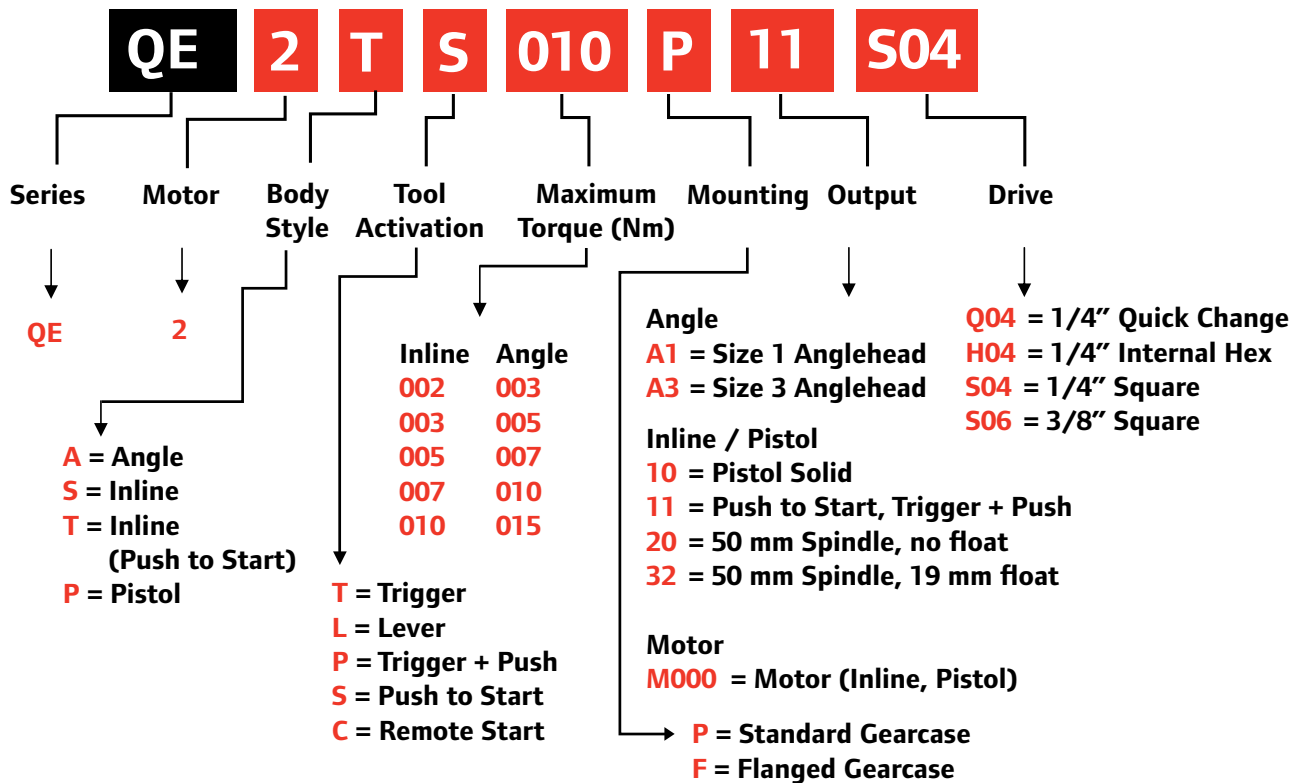
The ultimate world-class combination — QE Series tools and INSIGHTqc controllers — team up to make meeting your critical fastening requirements simple. Offering flexibility, these durable, ergonomically designed tools are easy to use — no experience needed.

### Features














































- Torque range: 0.3-400 Nm
- Speeds: Adjustable to 1382 rpm
- Integrated Handle Switch
- Pistol, push-to-start, straight, and angle
- Hexagon socket quick change, and square head
- Easy to use push-button reverse and indicator light options


















































## QE2 Model Identification Guide



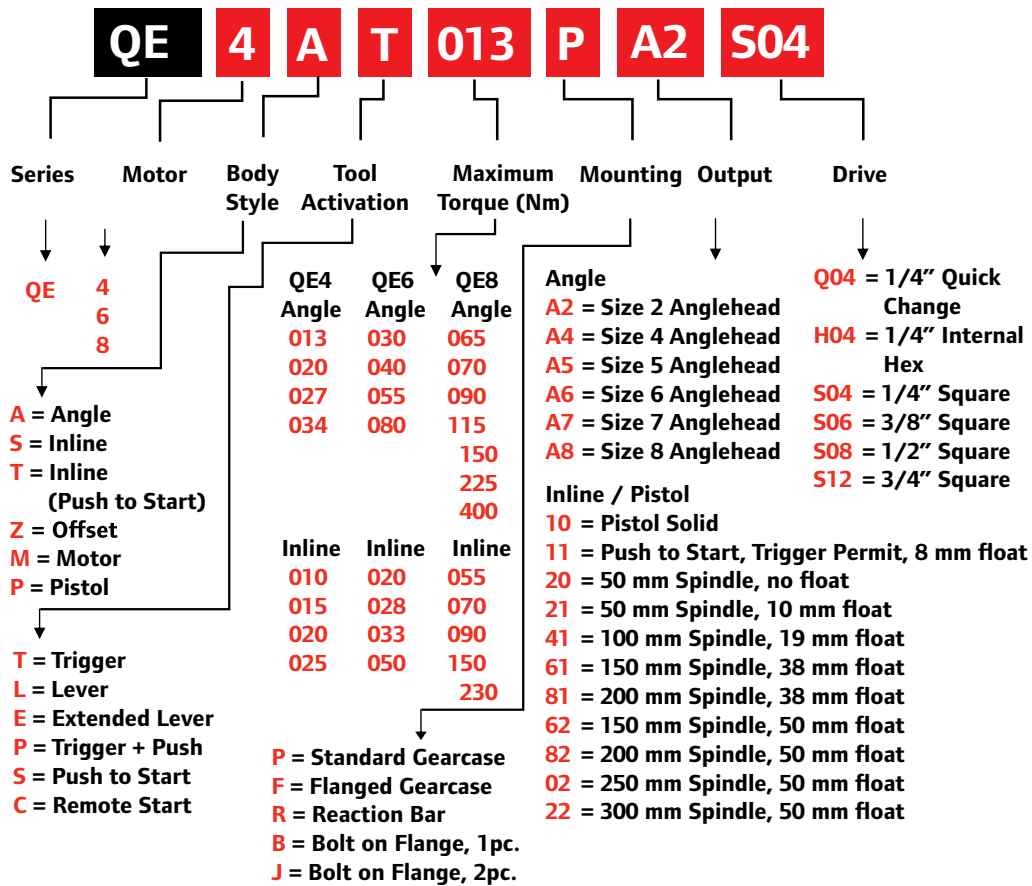
## QE2 Series

Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in
<b>QE2 Pistol Type, Push to Start</b>						
QE2PS002P11Q04	0.3—1.5	3,000	0.66	250	19	1/4" 
QE2PS002P11S04	0.3—1.5	3,000	0.66	242	19	1/4" 
QE2PS003P11Q04	0.6—3.0	2,450	0.66	250	19	1/4" 
QE2PS003P11S04	0.6—3.0	2,450	0.66	242	19	1/4" 
QE2PS005P11Q04	1.0—5.0	1,700	0.66	250	19	1/4" 
QE2PS005P11S04	1.0—5.0	1,700	0.66	250	19	1/4" 
QE2PS007P11Q04	1.3—6.5	1,250	0.66	250	19	1/4" 
QE2PS007P11S04	1.3—6.5	1,250	0.66	242	19	1/4" 
QE2PS010P11Q04	2.0—10.0	850	0.66	250	19	1/4" 
QE2PS010P11S04	2.0—10.0	850	0.66	242	19	1/4" 
<b>QE2 Pistol Type, Trigger</b>						
QE2PT002P10Q04	0.3—1.5	3,000	0.66	250	19	1/4" 
QE2PT002P10S04	0.3—1.5	3,000	0.66	242	19	1/4" 
QE2PT003P10Q04	0.6—3.0	2,450	0.66	250	19	1/4" 
QE2PT003P10S04	0.6—3.0	2,450	0.66	242	19	1/4" 
QE2PT005P10Q04	1.0—5.0	1,700	0.66	250	19	1/4" 
QE2PT005P10S04	1.0—5.0	1,700	0.66	242	19	1/4" 
QE2PT007P10Q04	1.3—6.5	1,250	0.66	250	19	1/4" 
QE2PT007P10S04	1.3—6.5	1,250	0.66	242	19	1/4" 
QE2PT010P10Q04	2.0—10.0	850	0.66	250	19	1/4" 
QE2PT010P10S04	2.0—10.0	850	0.66	242	19	1/4" 
<b>QE2 Pistol Type, Trigger + Push</b>						
QE2PP002P11Q04	0.3—1.5	3,000	0.66	250	19	1/4" 
QE2PP002P11S04	0.3—1.5	3,000	0.66	242	19	1/4" 
QE2PP003P11Q04	0.6—3.0	2,450	0.66	250	19	1/4" 
QE2PP003P11S04	0.6—3.0	2,450	0.66	242	19	1/4" 
QE2PP005P11Q04	1.0—5.0	1,700	0.66	250	19	1/4" 
QE2PP005P11S04	1.0—5.0	1,700	0.66	242	19	1/4" 
QE2PP007P11Q04	1.3—6.5	1,250	0.66	250	19	1/4" 
QE2PP007P11S04	1.3—6.5	1,250	0.66	242	19	1/4" 
QE2PP010P11Q04	2.0—10.0	850	0.66	250	19	1/4" 
QE2PP010P11S04	2.0—10.0	850	0.66	242	19	1/4" 
<b>QE2 Straight, Lever</b>						
QE2SL002P10Q04	0.3—1.5	3,000	0.6	250	22	1/4" 
QE2SL002P10S04	0.3—1.5	3,000	0.6	242	22	1/4" 
QE2SL002F32S06	0.3—1.5	3,000	0.91	342	19	3/8" 
QE2SL003P10Q04	0.6—3.0	2,450	0.6	250	22	1/4" 
QE2SL003P10S04	0.6—3.0	2,450	0.6	242	22	1/4" 
QE2SL003F32S06	0.6—3.0	2,450	0.91	342	19	3/8" 
QE2SL005P10Q04	1.0—5.0	1,700	0.6	250	22	1/4" 
QE2SL005P10S04	1.0—5.0	1,700	0.6	242	22	1/4" 
QE2SL005F32S06	1.0—5.0	1,700	0.91	342	19	3/8" 
QE2SL007P10Q04	1.3—6.5	1,250	0.6	250	22	1/4" 
QE2SL007P10S04	1.3—6.5	1,250	0.6	242	22	1/4" 
QE2SL007F32S06	1.3—6.5	1,250	0.91	342	19	3/8" 
QE2SL010P10Q04	2.0—10.0	850	0.6	250	22	1/4" 
QE2SL010P10S04	2.0—10.0	850	0.6	242	22	1/4" 
QE2SL010F32S06	2.0—10.0	850	0.91	342	19	3/8" 

QE2 Series





















						
Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in
<b>QE2 Straight, Push+Lever</b>						
QE2SP002P11Q04	0.3—1.5	3,000	0.6	250	22	1/4" 
QE2SP002P11S04	0.3—1.5	3,000	0.6	242	22	1/4" 
QE2SP003P11Q04	0.6—3.0	2,450	0.6	250	22	1/4" 
QE2SP003P11S04	0.6—3.0	2,450	0.6	242	22	1/4" 
QE2SP005P11Q04	1.0—5.0	1,700	0.6	250	22	1/4" 
QE2SP005P11S04	1.0—5.0	1,700	0.6	242	22	1/4" 
QE2SP007P11Q04	1.3—6.5	1,250	0.6	250	22	1/4" 
QE2SP007P11S04	1.3—6.5	1,250	0.6	242	22	1/4" 
QE2SP010P11Q04	2.0—10.0	850	0.6	250	22	1/4" 
QE2SP010P11S04	2.0—10.0	850	0.6	242	22	1/4" 
<b>QE2 Straight, Remote Start</b>						
QE2SC002F32S06	0.3—1.5	3,000	0.91	342	18.66	3/8" 
QE2SC003F32S06	0.6—3.0	2,450	0.91	342	18.66	3/8" 
QE2SC005F32S06	1.0—5.0	1,700	0.91	342	18.66	3/8" 
QE2SC007F32S06	1.3—6.5	1,250	0.91	342	18.66	3/8" 
QE2SC010F32S06	2.0—10.0	850	0.91	342	18.66	3/8" 
<b>QE2 Straight, Push to start</b>						
QE2TS002P11Q04	0.3—1.5	3,000	0.57	250	22	1/4" 
QE2TS002P11S04	0.3—1.5	3,000	0.57	242	22	1/4" 
QE2TS003P11Q04	0.6—3.0	2,450	0.57	250	22	1/4" 
QE2TS003P11S04	0.6—3.0	2,450	0.57	242	22	1/4" 
QE2TS005P11Q04	1.0—5.0	1,700	0.57	250	22	1/4" 
QE2TS005P11S04	1.0—5.0	1,700	0.57	242	22	1/4" 
QE2TS007P11Q04	1.3—6.5	1,250	0.57	250	22	1/4" 
QE2TS007P11S04	1.3—6.5	1,250	0.57	242	22	1/4" 
QE2TS010P11Q04	2.0—10.0	850	0.57	250	22	1/4" 
QE2TS010P11S04	2.0—10.0	850	0.57	242	22	1/4" 
<b>QE2 Angle, Lever</b>						
QE2AL003PA1S04	0.8—4	2,000	0.83	312	9	1/4" 
QE2AL005PA3S04	1—5	1,590	0.95	318	13	1/4" 
QE2AL005PA3S06	1—5	1,590	0.95	318	13	3/8" 
QE2AL005PA3Q04	1—5	1,590	0.95	318	13	1/4" 
QE2AL005PA3H04	1—5	1,590	0.95	318	13	1/4" 
QE2AL007PA3S06	1.4—7	1,100	0.95	318	13	3/8" 
QE2AL007PA3Q04	1.4—7	1,100	0.95	318	13	1/4" 
QE2AL007PA3H04	1.4—7	1,100	0.95	318	13	1/4" 
QE2AL010PA3S04	2—10	800	0.95	318	13	1/4" 
QE2AL010PA3S06	2—10	800	0.95	318	13	3/8" 
QE2AL010PA3Q04	2—10	800	0.95	318	13	1/4" 
QE2AL010PA3H04	2—10	800	0.95	318	13	1/4" 
QE2AL015PA3S04	3—15	560	0.95	318	13	1/4" 
QE2AL015PA3S06	3—15	560	0.95	318	13	3/8" 
QE2AL015PA3Q04	3—15	560	0.95	318	13	1/4" 
QE2AL015PA3H04	3—15	560	0.95	318	13	1/4" 


## QE4/6/8 Model Identification Guide














Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in
<b>QE4 Trigger+Push to start</b>						
QE4PP010P11Q04	1-10	1,820	1.2	340	20.3	1/4"
QE4PP010P11S04	1-10	1,820	1.2	340	20.3	1/4"
QE4PP010P11S06	1-10	1,820	1.2	340	20.3	3/8"
QE4PP015P11Q04	1.5-15	1,220	1.2	340	20.3	1/4"
QE4PP015P11S04	1.5-15	1,220	1.2	340	20.3	1/4"
QE4PP015P11S06	1.5-15	1,220	1.2	340	20.3	3/8"
QE4PP020P11S06	2-20	900	1.2	340	20.3	3/8"
QE4PP025P11S06	2.5-25	710	1.2	340	20.3	3/8"
<b>QE4 Push to start</b>						
QE4PS010P11Q04	1-10	1,820	1.2	340	20.3	1/4"
QE4PS010P11S04	1-10	1,820	1.2	340	20.3	1/4"
QE4PS010P11S06	1-10	1,820	1.2	340	20.3	3/8"
QE4PS015P11Q04	1.5-15	1,220	1.2	340	20.3	1/4"
QE4PS015P11S04	1.5-15	1,220	1.2	340	20.3	1/4"
QE4PS015P11S06	1.5-15	1,220	1.2	340	20.3	3/8"
QE4PS020P11S06	2-20	900	1.2	340	20.3	3/8"
QE4PS025P11S06	2.5-25	710	1.2	340	20.3	3/8"

# Electric Assembly | QE & QM Series



Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in
<b>QE4 Trigger</b>						
QE4PT010P10Q04	1-10	1,820	1.2	340	20.3	1/4" 
QE4PT010P10S04	1-10	1,820	1.2	340	20.3	1/4" 
QE4PT010P10S06	1-10	1,820	1.2	340	20.3	3/8" 
QE4PT015P10Q04	1.5-15	1,220	1.2	340	20.3	1/4" 
QE4PT015P10S04	1.5-15	1,220	1.2	340	20.3	1/4" 
QE4PT015P10S06	1.5-15	1,220	1.2	340	20.3	3/8" 
QE4PT020P10S06	2-20	900	1.2	340	20.3	3/8" 
QE4PT025P10S06	2.5-25	710	1.2	340	20.3	3/8" 
QE4PT264P10S12	52-264	62	2.8	311.4	26.0	3/4" 
QE4PT396P10S12	79-396	41.5	2.8	311.4	26.0	3/4" 
QE4PT525P10S12	105-525	30.5	2.8	311.4	26.0	3/4" 
QE4PT600P10S12	130-600	24	2.8	311.4	26.0	3/4" 
<b>QE4 Straight, Push to start</b>						
QE4TS010R11Q04	1-10	1,820	1.2	340	25.0	1/4" 
QE4TS010R11S04	1-10	1,820	1.2	340	25.0	1/4" 
QE4TS010R11S06	1-10	1,820	1.2	340	25.0	3/8" 
QE4TS015R11Q04	1.5-15	1,220	1.2	340	25.0	1/4" 
QE4TS015R11S04	1.5-15	1,220	1.2	340	25.0	1/4" 
QE4TS015R11S06	1.5-15	1,220	1.2	340	25.0	3/8" 
QE4TS020R11S06	2-20	710	1.2	340	25.0	3/8" 
QE4TS025R11S06	2.5-25	710	1.2	340	25.0	3/8" 








Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in	Floating Spindle Stroke mm
<b>QE4 Straight Type</b>							
QE4ST010B20Q04	1-10	1,820	1.2	406	24.25	1/4" 	0
QE4ST010B20S04	1-10	1,820	1.2	406	24.25	1/4" 	0
QE4ST010B20S06	1-10	1,820	1.2	406	24.25	3/8" 	0
QE4ST010B21Q04	1-10	1,820	1.2	406	24.25	1/4" 	38
QE4ST010B21S04	1-10	1,820	1.2	406	24.25	1/4" 	38
QE4ST010B21S06	1-10	1,820	1.2	406	24.25	3/8" 	38
QE4ST010B21S08	1-10	1,820	1.2	406	24.25	1/2" 	38
QE4ST010B41Q04	1-10	1,820	1.3	457	24.25	1/4" 	38
QE4ST010B41S04	1-10	1,820	1.3	457	24.25	1/4" 	38
QE4ST010B41S06	1-10	1,820	1.3	457	24.25	3/8" 	38
QE4ST010B41S08	1-10	1,820	1.3	457	24.25	1/2" 	38
QE4ST015B20Q04	1.5-15	1,220	1.2	406	24.25	1/4" 	0
QE4ST015B20S04	1.5-15	1,220	1.2	406	24.25	1/4" 	0
QE4ST015B20S06	1.5-15	1,220	1.2	406	24.25	3/8" 	0
QE4ST015B21Q04	1.5-15	1,220	1.2	406	24.25	1/4" 	10
QE4ST015B21S04	1.5-15	1,220	1.2	406	24.25	1/4" 	10
QE4ST015B21S06	1.5-15	1,220	1.2	406	24.25	3/8" 	10
QE4ST015B21S08	1.5-15	1,220	1.2	406	24.25	1/2" 	10
QE4ST015B41Q04	1.5-15	1,220	1.3	406	24.25	1/4" 	20
QE4ST015B41S04	1.5-15	1,220	1.3	406	24.25	1/4" 	20
QE4ST015B41S06	1.5-15	1,220	1.3	406	24.25	3/8" 	20
QE4ST015B41S08	1.5-15	1,220	1.3	406	24.25	1/2" 	20
QE4ST020B20Q04	2-20	900	1.2	406	24.25	1/4" 	0
QE4ST020B20S04	2-20	900	1.2	406	24.25	1/4" 	0
QE4ST020B20S06	2-20	900	1.2	406	24.25	3/8" 	0
QE4ST020B21Q04	2-20	900	1.2	406	24.25	1/4" 	38
QE4ST020B21S04	2-20	900	1.2	406	24.25	1/4" 	38

Model	 Torque Range Nm	 Free Speed RPM	 Weight kg	 Length mm	 Side-to-center distance mm	 Drive in	 Floating Spindle Stroke mm
QE4ST020B21S06	2-20	900	1.2	406	24.25	3/8" □	38
QE4ST020B21S08	2-20	900	1.2	406	24.25	1/2" □	38
QE4ST020B41Q04	2-20	900	1.3	457	24.25	1/4" ○	38
QE4ST020B41S04	2-20	900	1.3	457	24.25	1/4" □	38
QE4ST020B41S06	2-20	900	1.3	457	24.25	3/8" □	38
QE4ST020B41S08	2-20	900	1.3	457	24.25	1/2" □	38
QE4ST025B20Q04	2.5-25	710	1.2	406	24.25	1/4" ○	0
QE4ST025B20S04	2.5-25	710	1.2	406	24.25	1/4" □	0
QE4ST025B20S06	2.5-25	710	1.2	406	24.25	3/8" □	0
QE4ST025B21Q04	2.5-25	710	1.2	406	24.25	1/4" ○	38
QE4ST025B21S04	2.5-25	710	1.2	406	24.25	1/4" □	38
QE4ST025B21S06	2.5-25	710	1.2	406	24.25	3/8" □	38
QE4ST025B21S08	2.5-25	710	1.2	406	24.25	1/2" □	38
QE4ST025B41Q04	2.5-25	710	1.3	457	24.25	1/4" ○	38
QE4ST025B41S04	2.5-25	710	1.3	457	24.25	1/4" □	38
QE4ST025B41S06	2.5-25	710	1.3	457	24.25	3/8" □	38
QE4ST025B41S08	2.5-25	710	1.3	457	24.25	1/2" □	38






Model	 Torque Range Nm	 Free Speed RPM	 Weight kg	 Length mm	 Side-to-center distance mm	 Angle head Height mm	 Drive in
QE4 Angle Type							
QE4AT013PA2H04	2.6-13	1,200	1.3	370	12.9	31.5	1/4" ○
QE4AT013PA2Q04	2.6-13	1,200	1.3	370	12.9	31.5	1/4" ○
QE4AT013PA2S04	2.6-13	1,200	1.3	370	12.9	31.5	1/4" □
QE4AT013PA2S06	2.6-13	1,200	1.3	370	12.9	31.5	3/8" □
QE4AT020PA2H04	4.0-20	820	1.3	370	12.9	31.5	1/4" ○
QE4AT020PA2Q04	4.0-20	820	1.3	370	12.9	31.5	1/4" ○
QE4AT020PA2S04	4.0-20	820	1.3	370	12.9	31.5	1/4" □
QE4AT020PA2S06	4.0-20	820	1.3	370	12.9	31.5	3/8" □
QE4AT027PA4S06	5.4-27	600	1.3	370	17.0	42.0	3/8" □
QE4AT027PA4S08	5.4-27	600	1.3	370	17.0	42.0	1/2" □
QE4AT034PA4S06	6.8-34	470	1.3	370	17.0	42.0	3/8" □
QE4AT034PA4S08	6.8-34	470	1.3	370	17.0	42.0	1/2" □








**QE6 Series**

Model	 Torque Range Nm	 Free Speed RPM	 Weight kg	 Length mm	 Side-to-center distance mm	 Drive in	 Floating Spindle Stroke mm
<b>QE6 Straight Type</b>							
QE6ST020F41S06	4-20	1,840	2.1	500	27.35	3/8" □	38
QE6ST020F41S08	4-20	1,840	2.1	500	27.35	1/2" □	38
QE6ST020F61S06	4-20	1,840	2.2	550	27.35	3/8" □	38
QE6ST020F61S08	4-20	1,840	2.2	550	27.35	1/2" □	38
QE6ST020F81S06	4-20	1,840	2.3	600	27.35	3/8" □	38
QE6ST020F81S08	4-20	1,840	2.3	600	27.35	1/2" □	38
QE6ST028F41S06	5.6-28	1,360	2.1	500	27.35	3/8" □	38
QE6ST028F41S08	5.6-28	1,360	2.1	500	27.35	1/2" □	38
QE6ST028F61S06	5.6-28	1,360	2.2	550	27.35	3/8" □	38
QE6ST028F61S08	5.6-28	1,360	2.2	550	27.35	1/2" □	38
QE6ST028F81S06	5.6-28	1,360	2.3	600	27.35	3/8" □	38
QE6ST028F81S08	5.6-28	1,360	2.3	600	27.35	1/2" □	38
QE6ST033F41S06	6.6-33	1,130	2.1	500	27.35	3/8" □	38
QE6ST033F41S08	6.6-33	1,130	2.1	500	27.35	1/2" □	38
QE6ST033F61S06	6.6-33	1,130	2.2	550	27.35	3/8" □	38
QE6ST033F61S08	6.6-33	1,130	2.2	550	27.35	1/2" □	38
QE6ST033F81S06	6.6-33	1,130	2.3	600	27.35	3/8" □	38
QE6ST033F81S08	6.6-33	1,130	2.3	600	27.35	1/2" □	38
QE6ST050F41S08	10-50	760	2.1	500	27.35	1/2" □	38
QE6ST050F61S08	10-50	760	2.2	550	27.35	1/2" □	38
QE6ST050F81S08	10-50	760	2.3	600	27.35	1/2" □	38

Model	 Torque Range Nm	 Free Speed RPM	 Weight kg	 Length mm	 Side-to-center distance mm	 Angle head Height mm	 Drive in
<b>QE6 Angle Type</b>							
QE6AT030PA2S06	6-30	1,230	1.9	440	12.8	31.5	3/8" □
QE6AT030PA4S06	6-30	1,230	1.9	440	17.0	42.0	3/8" □
QE6AT030PA4S08	6-30	1,230	1.9	440	17.0	42.0	1/2" □
QE6AT040PA4S06	8-40	910	1.9	440	17.0	42.0	3/8" □
QE6AT040PA4S08	8-40	910	1.9	440	17.0	42.0	1/2" □
QE6AT055PA5S08	11-55	650	1.9	440	21.4	44.7	1/2" □
QE6AT080PA5S08	16-80	440	1.9	440	21.4	44.7	1/2" □

**QE8 Series**

Model	 Torque Range Nm	 Free Speed RPM	 Weight kg	 Length mm	 Side-to-center distance mm	 Drive in	 Floating Spindle Stroke mm
<b>QE8 Straight Type</b>							
QE8ST055F41S08	11-55	1,470	3	567	30.25	1/2" □	38
QE8ST055F61S08	11-55	1,470	3.1	607	30.25	1/2" □	38
QE8ST055F81S08	11-55	1,470	3.2	667	30.25	1/2" □	38
QE8ST070F41S08	14-70	1,160	3	557	30.25	1/2" □	38
QE8ST070F61S08	14-70	1,160	3.1	607	30.25	1/2" □	38
QE8ST070F81S08	14-70	1,160	3.2	657	30.25	1/2" □	38
QE8ST090F41S08	18-90	900	3	557	30.25	1/2" □	38
QE8ST090F61S08	18-90	900	3.1	607	30.25	1/2" □	38
QE8ST090F81S08	18-90	900	3.2	657	30.25	1/2" □	38
QE8ST150F41S08	30-150	500	3.4	557	30.55	1/2" □	38
QE8ST150F61S08	30-150	500	3.1	607	30.55	1/2" □	38
QE8ST150F81S08	30-150	500	3.2	657	30.55	1/2" □	38
QE8ST230F62S12	46-230	340	5.5	710	36.2	3/4" □	50
QE8ST230F82S12	46-230	340	5.6	760	36.2	3/4" □	50
QE8ST230F02S12	46-230	340	5.7	810	36.2	3/4" □	50
QE8ST230F22S12	23-230	340	5.5	870	36.2	3/4" □	50

Model	 Torque Range Nm	 Free Speed RPM	 Weight kg	 Length mm	 Side-to-center distance mm	 Angle head Height mm	 Drive in
<b>QE8 Angle Type</b>							
QE8AT065PA5S08	13-65	1,200	2.9	515	21.4	44.7	1/2" □
QE8AT065PA6S08	13-65	1,200	2.9	515	24.3	50.0	1/2" □
QE8AT070PA5S08	14-70	1,100	2.9	515	21.4	44.7	1/2" □
QE8AT070PA6S08	14-70	1,100	2.9	515	24.3	50.0	1/2" □
QE8AT090PA5S08	18-90	850	2.9	515	21.4	44.7	1/2" □
QE8AT090PA6S08	18-90	850	2.9	515	24.3	50.0	1/2" □
QE8AT115PA6S08	23-115	660	2.9	515	24.3	50.0	1/2" □
QE8AT150PA6S08	30-150	510	2.9	515	24.3	50.0	1/2" □
QE8AT225PA7S12	45-225	310	4.1	575	30.15	55.2	3/4" □
QE8AT400PA8S12	80-400	170	6.0	635	35.6	68.5	3/4" □

## QM Series DC Electric Fixtured Spindles

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 range: 2-2500 Nm
- Speeds: Adjustable to 1382 rpm
- Better than 5 percent capability
- High-duty cycle motors and components provide excellent durability
- External electronics pod simplifies integration
- Available with or without spindles in a variety of length and drive options



QM3

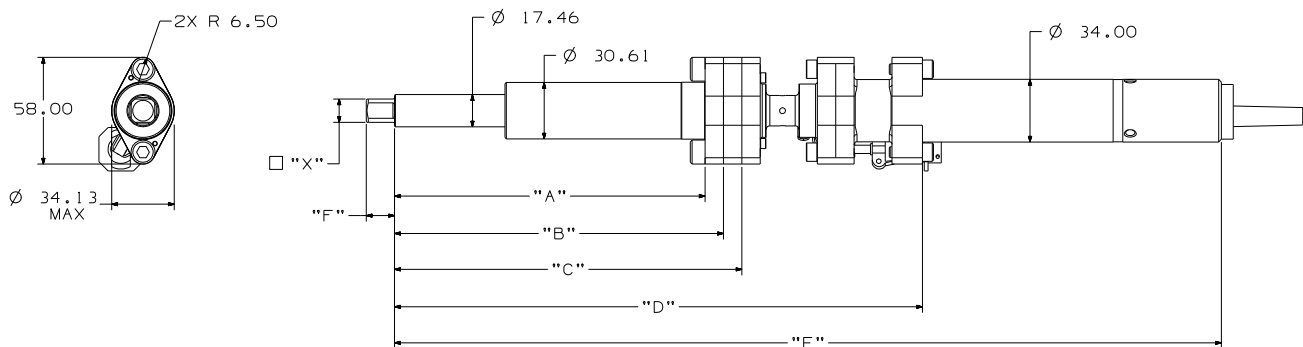


QM7



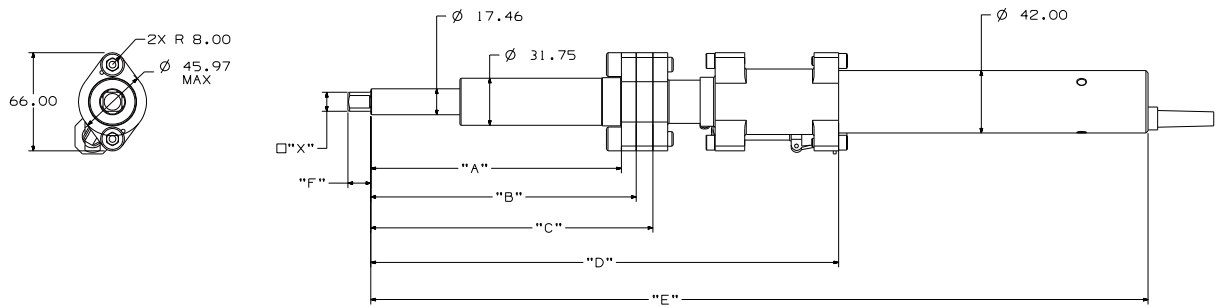
QM9

### QM3 Dimension



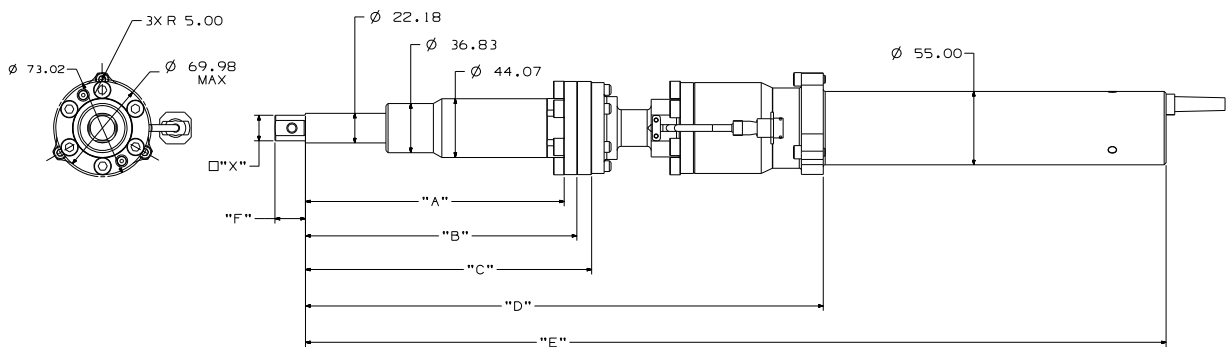
QM3 Dimension								
Model	"X"	"A"	"B"	"C"	"D"	"E"	"F"	Spindle float
QM35SXXX62506	3/8"	168.64	178.64	188.64	286.69	449.03	286.69	50.00
QM35SXXX92506	3/8"	243.64	253.64	263.64	361.69	524.03	361.69	50.00
QM35SXXX22506	3/8"	318.64	328.64	338.64	436.69	599.03	436.69	50.00
QM35SXXX62508	1/2"	168.64	178.64	188.64	286.69	449.03	286.69	50.00
QM35SXXX92508	1/2"	243.64	253.64	263.64	361.69	524.03	361.69	50.00
QM35SXXX22508	1/2"	318.64	328.64	338.64	436.69	599.03	436.69	50.00

## QM5 Dimension



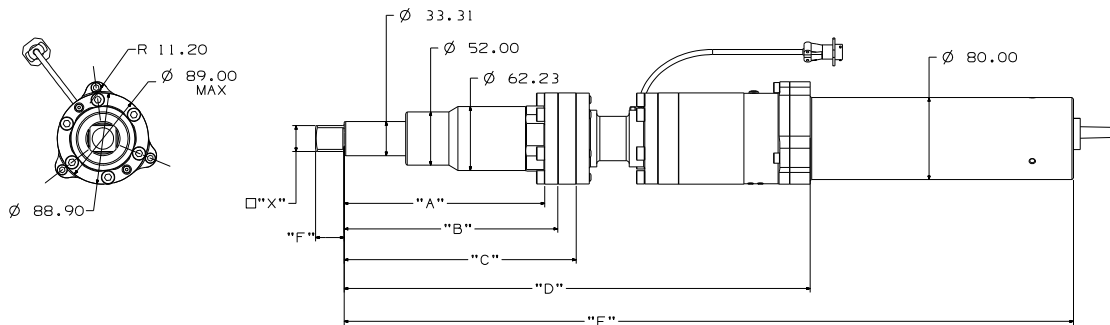
QM5 Dimension								
Model	"X"	"A"	"B"	"C"	"D"	"E"	"F"	Spindle float
QM5SXXXX62S06	3/8"	168.64	178.64	189.82	314.80	523.14	10.87	50.00
QM35SXXXX92S06	3/8"	243.64	253.64	264.82	389.80	598.14	10.87	50.00
QM5SXXXX22S06	3/8"	318.64	328.64	339.82	464.80	673.14	10.87	50.00
QM5SXXXX62S08	1/2"	168.64	178.64	189.82	314.80	523.14	15.37	50.00
QM5SXXXX92S08	1/2"	243.64	253.64	264.82	389.80	598.14	15.37	50.00
QM5SXXXX22S08	1/2"	318.64	328.64	339.82	464.80	673.14	15.37	50.00

## QM7 Dimension

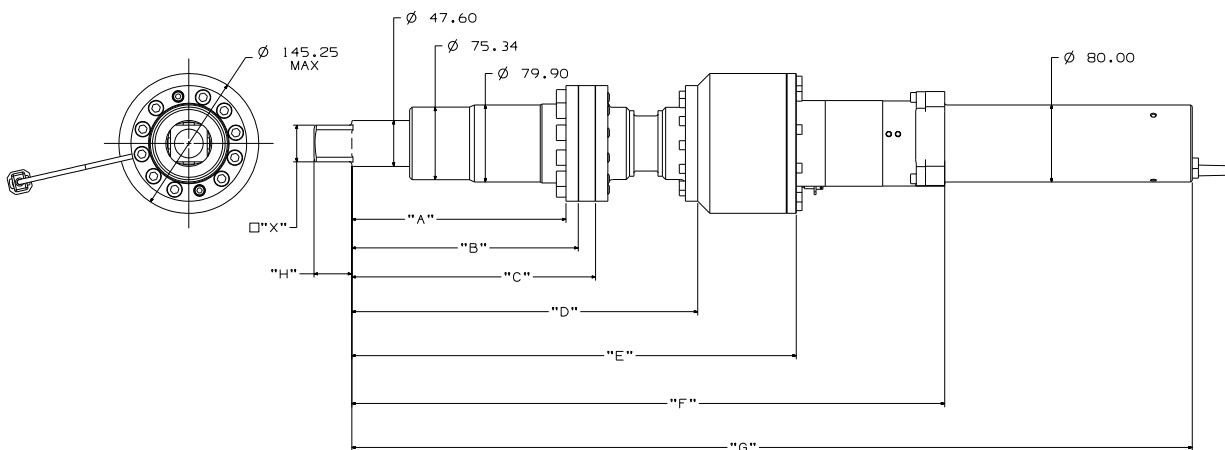


QM7 Dimension								
Model	"X"	"A"	"B"	"C"	"D"	"E"	"F"	Spindle float
QM7SXXXX62S12	3/4"	193.85	203.25	214.41	387.92	644.80	22.87	50.00
QM7SXXXX92S12	3/4"	268.85	278.25	289.41	462.92	719.80	22.87	50.00
QM7SXXXX22S12	3/4"	343.85	353.25	364.41	537.92	794.80	22.87	50.00
QM7SXXXX62S08	1/2"	193.85	203.25	214.41	387.92	644.80	15.37	50.00
QM7SXXXX92S08	1/2"	268.85	278.25	289.41	462.92	719.80	15.37	50.00
QM7SXXXX22S08	1/2"	343.85	353.25	364.41	537.92	794.80	15.37	50.00

**QM9 Dimension**

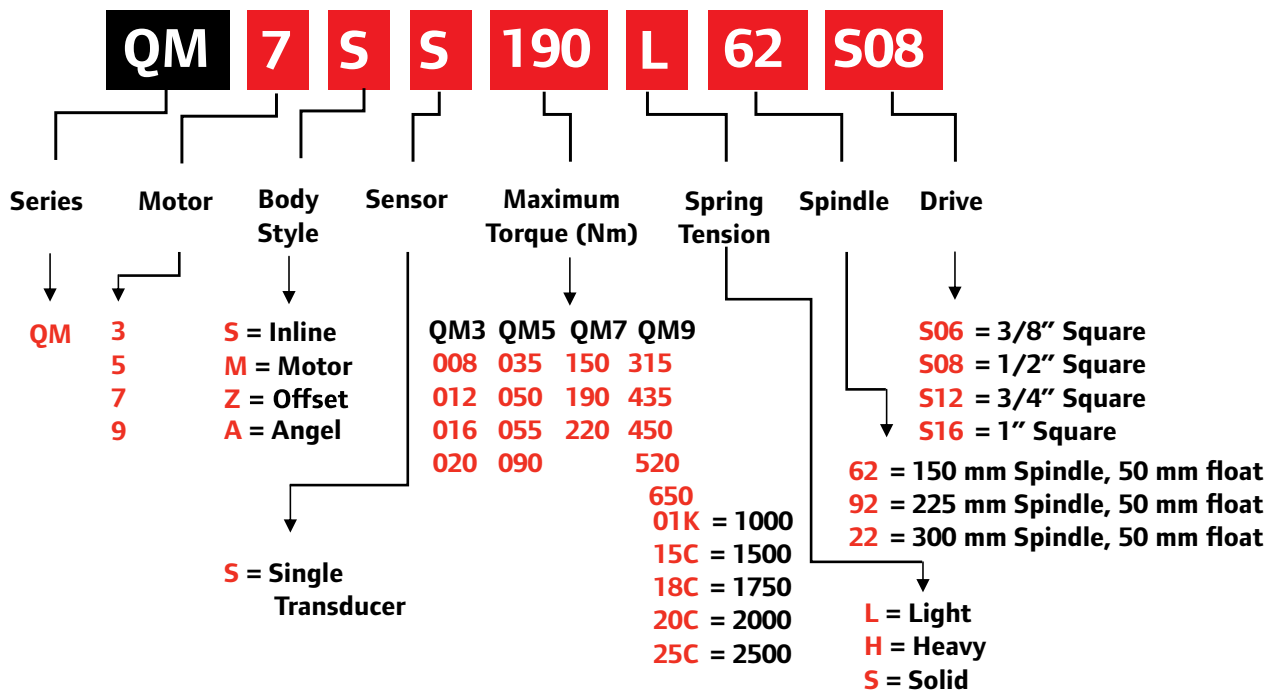


QM9 Dimension								
Model	"X"	"A"	"B"	"C"	"D"	"E"	"F"	Spindle float
QM9SXXXX62S12	3/4"	195.51	208.21	226.24	454.27	710.95	22.87	50.00
QM9SXXXX92S12	3/4"	270.51	283.21	301.24	529.27	785.95	22.87	50.00
QM9SXXXX22S12	3/4"	345.51	358.21	376.24	604.27	860.95	22.87	50.00
QM9SXXXX62S16	1"	195.51	208.21	226.24	454.27	710.95	27.87	50.00
QM9SXXXX92S16	1"	270.51	283.21	301.24	529.27	785.95	27.87	50.00
QM9SXXXX22S16	1"	345.51	358.21	376.24	604.27	860.95	27.87	50.00



QM9 Dimension										
Model	"X"	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	Spindle float
QM9SXXC62S24	1 1/2"	222.18	234.88	252.91	358.86	461.16	615.20	871.88	39.30	50.00

## QM Model Identification Guide



## QM Series Straight

Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in	Spindle Length mm
QM3 Straight Type							
QM3SS008H62S06	2-8	1382	2.4	449	17.0	3/8" □	150
QM3SS008H62S08	2-8	1382	2.4	449	17.0	1/2" □	150
QM3SS008H92S06	2-8	1382	2.4	524	17.0	3/8" □	225
QM3SS008H92S08	2-8	1382	2.5	524	17.0	1/2" □	225
QM3SS008H22S06	2-8	1382	2.7	599	17.0	3/8" □	300
QM3SS008H22S08	2-8	1382	2.7	599	17.0	1/2" □	300
QM3SS012H62S06	3-12	927	2.4	449	17.0	3/8" □	150
QM3SS012H62S08	3-12	927	2.4	449	17.0	1/2" □	150
QM3SS012H92S06	3-12	927	2.5	524	17.0	3/8" □	225
QM3SS012H92S08	3-12	927	2.5	524	17.0	1/2" □	225
QM3SS012H22S06	3-12	927	2.7	599	17.0	3/8" □	300
QM3SS012H22S08	3-12	927	2.7	599	17.0	1/2" □	300
QM3SS016H62S06	4-16	686	2.4	449	17.0	3/8" □	150
QM3SS016H62S08	4-16	686	2.4	449	17.0	1/2" □	150
QM3SS016H92S06	4-16	686	2.5	524	17.0	3/8" □	225
QM3SS016H92S08	4-16	686	2.5	524	17.0	1/2" □	225
QM3SS016H22S06	4-16	686	2.7	599	17.0	3/8" □	300
QM3SS016H22S08	4-16	686	2.7	599	17.0	1/2" □	300
QM3SS020H62S06	5-20	545	2.4	449	17.0	3/8" □	150
QM3SS020H62S08	5-20	545	2.4	449	17.0	1/2" □	150
QM3SS020H92S06	5-20	545	2.5	524	17.0	3/8" □	225
QM3SS020H92S08	5-20	545	2.5	524	17.0	1/2" □	225
QM3SS020H22S06	5-20	545	2.7	599	17.0	3/8" □	300
QM3SS020H22S08	5-20	545	2.7	599	17.0	1/2" □	300

QM Series Straight

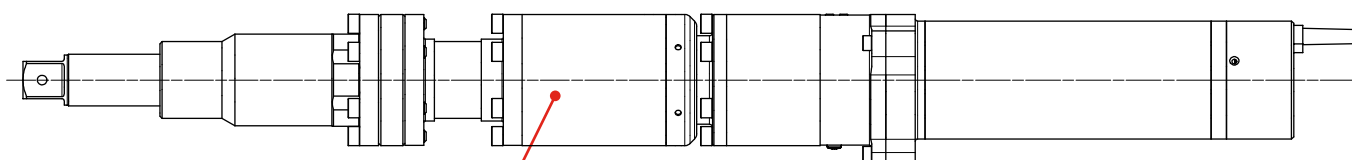
Model	Torque Range Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Drive in	Spindle Length mm
<b>QM5 Straight Type</b>							
QM5SS035H62S06	9-35	590	3.9	523	22	3/8" □	150
QM5SS035H62S08	9-35	590	4.0	523	22	1/2" □	150
QM5SS035H92S06	9-35	590	4.0	598	22	3/8" □	225
QM5SS035H92S08	9-35	590	4.0	598	22	1/2" □	225
QM5SS035H22S06	9-35	590	4.2	673	22	3/8" □	300
QM5SS035H22S08	9-35	590	4.2	673	22	1/2" □	300
QM5SS055H62S06	14-55	507	3.9	523	22	3/8" □	150
QM5SS055H62S08	14-55	507	3.9	523	22	1/2" □	150
QM5SS055H92S06	14-55	507	4.0	598	22	3/8" □	225
QM5SS055H92S08	14-55	507	4.0	598	22	1/2" □	225
QM5SS055H22S06	14-55	507	4.2	673	22	3/8" □	300
QM5SS055H22S08	14-55	507	4.2	673	22	1/2" □	300
QM5SS090H62S08	23-90	280	3.9	523	22	1/2" □	150
QM5SS090H92S08	23-90	280	4.0	598	22	1/2" □	225
QM5SS090H22S08	23-90	280	4.2	673	22	1/2" □	300
QM5SS250H62S12	65-255	103	6.5	-	-	3/4" □	-
QM5SS250H92S12	65-255	103	6.8	-	-	3/4" □	-
QM5SS250H22S12	65-255	103	7.2	-	-	3/4" □	-
<b>QM7 Straight Type</b>							
QM7SS190H62S08	48-190	273	8.4	645	35	1/2" □	150
QM7SS190H62S12	48-190	273	8.4	645	35	3/4" □	150
QM7SS190H92S08	48-190	273	8.6	720	35	1/2" □	225
QM7SS190H92S12	48-190	273	8.6	720	35	3/4" □	225
QM7SS190H22S08	48-190	273	8.9	794	35	1/2" □	300
QM7SS190H22S12	48-190	273	8.9	794	35	3/4" □	300
QM7SS220H62S12	55-220	233	8.4	645	35	3/4" □	150
QM7SS220H92S12	55-220	223	8.6	720	35	3/4" □	225
QM7SS220H22S12	55-220	233	8.9	794	35	3/4" □	300
<b>QM9 Straight Type</b>							
QM9SS315H62S12	79-315	278	18.6	711	44.5	3/4" □	150
QM9SS315H62S16	79-315	278	18.7	711	44.5	1" □	150
QM9SS315H92S12	79-315	278	19.1	786	44.5	3/4" □	225
QM9SS315H92S16	79-315	278	19.2	786	44.5	1" □	225
QM9SS315H22S12	79-315	278	19.5	860	44.5	3/4" □	300
QM9SS315H22S16	79-315	278	19.6	860	44.5	1" □	300
QM9SS435H62S12	109-435	203	18.6	711	44.5	3/4" □	150
QM9SS435H62S16	109-435	203	18.7	711	44.5	1" □	150
QM9SS435H92S12	109-435	203	19.1	786	44.5	3/4" □	225
QM9SS435H92S16	109-435	203	19.2	786	44.5	1" □	225
QM9SS435H22S12	109-435	203	19.5	860	44.5	3/4" □	300
QM9SS435H22S16	109-435	203	19.6	860	44.5	1" □	300
QM9SS520H62S12	130-520	170	18.6	711	44.5	3/4" □	150
QM9SS520H62S16	130-520	170	18.7	711	44.5	1" □	150
QM9SS520H92S12	130-520	170	19.1	786	44.5	3/4" □	225
QM9SS520H92S16	130-520	170	19.2	786	44.5	1" □	225
QM9SS520H22S12	130-520	170	19.5	860	44.5	3/4" □	300
QM9SS520H22S16	130-520	170	19.6	860	44.5	1" □	300
QM9SS650H22S16	65-650	136	19.6	860	44.5	1" □	300
QM9SS650H62S16	163-650	136	18.7	711	44.5	1" □	150
QM9SS650H92S16	163-650	136	19.6	786	44.5	1" □	225
QM9SS01KH22S16	100-1000	51	24.5	857	65	1" □	150
QM9SS01KH62S16	250-1000	51	24.5	857	65	1" □	225
QM9SS01KH92S16	100-1000	51	25.4	1006	65	1" □	300
QM9SS15CH62S24	375-1500	51	32.0	869	73	1-1/2" □	150
QM9SS18CH62S24	450-1800	37	32.0	869	73	1-1/2" □	150
QM9SS20CH62S24	500-2000	31	32.0	869	73	1-1/2" □	150
QM9SS25CH62S24	625-2500	25	32.0	869	73	1-1/2" □	150

## QM Series Angle

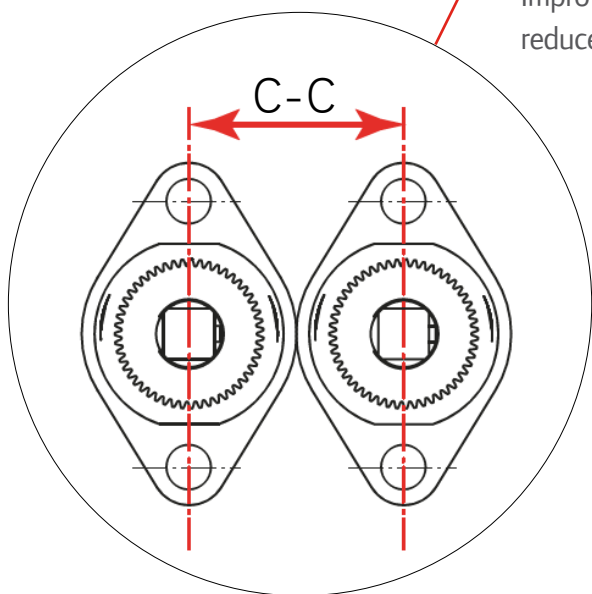
Model	Torque Range Nm	Max Torque Nm	Free Speed RPM	Weight kg	Length mm	Side-to-center distance mm	Angle head Height mm	Drive in	Bolt Capacity
XXXXX									
QM9AS500FA8S12	143-400	500	153	20	742	35.6	72	3/4" □	M12-M20
QM7AS400FA8S12	100-320	400	128	11.5	692	35.6	72	3/4" □	M12-M18
QM7AS345FA8S12	85-276	345	150	11.5	692	35.6	72	3/4" □	M10-M16
QM7AS250FA7S12	75-200	250	174	9.6	655	30.2	56.1	3/4" □	M10-M16
QM5AS150FA6S08	40-120	150	160	4.6	530	24.6	51.2	1/2" □	M10-M14
QM5AS095FA6S08	24.5-76	95	290	4.6	530	24.6	51.2	1/2" □	M8-M10
QM5AS060FA6S08	15-48	60	337	4.6	530	24.6	51.2	1/2" □	M6-M8
QM5AS060FA5S08	15-48	60	337	4.5	527	21.5	44.7	1/2" □	M6-M8
QM5AS040FA4S08	13.5-32	40	393	4	523	17	42	1/2" □	M6-M8
QM7AS01KPA7S16	350-800Nm	1000	31	11.6	660	34	170	1" □	M16+

## QM9C Series DC Electric Fixtured Spindles

The QM9 series welcomes a new generation successor, the QM9C series. For sizes from 1000Nm upwards, we have brought a completely new drive design. Just as precise, just as durable, but in a more compact size. Used in diesel engines, heavy trucks, construction machinery and many other applications.



Improved transmission mechanism substantially reduces minimum shaft spacing



MODEL	C-C
QM9CSS01KH62S16	89mm
QM9CSS15CH62S24	98mm
QM9CSS20CH62S24	98mm
QM9CSS25CH62S24	98mm

Ref. 型号	Nm	Max. Nm	1 min. rpm	kg	mm	mm	mm	in	M
QM9CSS01KH62S16	250-800	1000	51	22.5	870	150	50	1"	M16+
QM9CSS01KH92S16	250-800	1000	51	24.5	945	200	50	1"	M16+
QM9CSS01KH22S16	250-800	1000	51	26.5	1020	250	50	1"	M16+
QM9CSS15CH62S24	375-1200	1500	51	30	870	150	50	1-1/2"	M24+
QM9CSS20CH62S24	500-1600	2000	31	30	870	150	50	1-1/2"	M24+
QM9CSS25CH62S24	625-2000	2500	25	30	870	150	50	1-1/2"	M24+

## INSIGHTqc™ Controllers

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

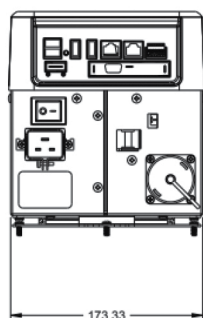
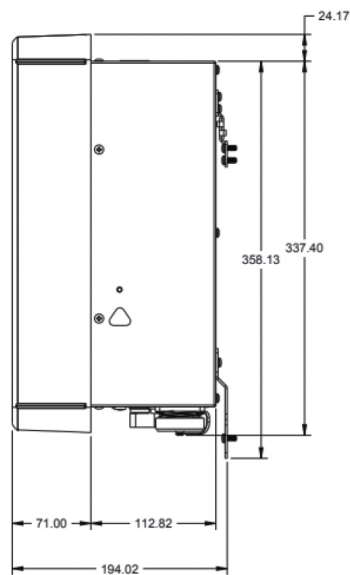
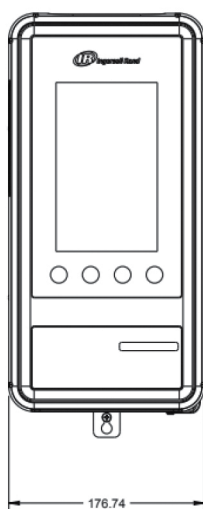
### Features

**Touch screen; Multi-language interface; Browser-based programming  
50,000 data storage 50,000 curve storage Supports multiple  
communication protocols; dynamic TR value; multiple tightening strategies;  
dual network port/multiple USB/serial ports**

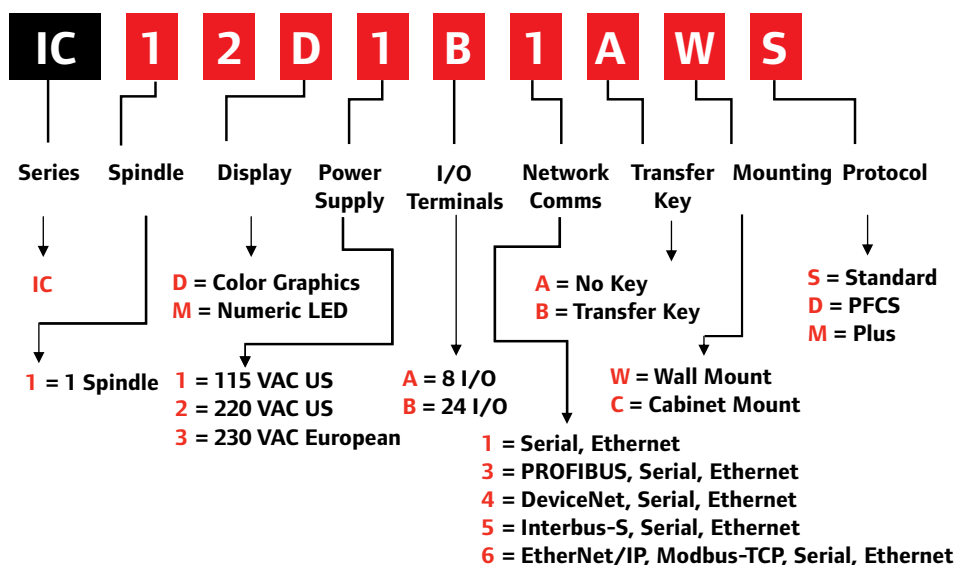


QCD 控制器

## Dimension



## INSIGHT qc™ Model Identification Guide



## Controller Models

The INSIGHTqc™ Controller is 100% compatible with our QE and QM tools. With the INSIGHTqc™, these tools will have 50K tightening records and 50K 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/P	ProfiNet	ProfBUS	DeviceNET	IR Ethernet EOR	Open Protocol	ToolsNet	VW XML 2.1	Nissan SerialEOR
QCD11	QC	Display	120V AC	Standard					•				
QCD11-F	QC	Display	120V AC	Standard	•	•			•				
QCD11-M	QC	Display	120V AC	Standard					•	•	•	•	•
QCD11-FM	QC	Display	120V AC	Standard	•	•			•	•	•	•	•
QCD12-F	QC	Display	120V AC	Standard plus ProfiNet Card	•	•	•		•				
QCD12-FM	QC	Display	120V AC	Standard plus ProfiNet Card	•	•	•		•	•	•	•	•
QCD13-F	QC	Display	120V AC	Standard plus DeviceNet Card	•	•		•	•				
QCD13-FM	QC	Display	120V AC	Standard plus DeviceNet Card	•	•		•	•	•	•	•	•
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 plus ProfiNet Card	•	•	•		•				
QCD32-FM	QC	Display	230V AC	Standard plus ProfiNet Card	•	•	•		•	•	•	•	•
QCD33-F	QC	Display	230V AC	Standard plus DeviceNet Card	•	•		•	•				
QCD33-FM	QC	Display	230V AC	Standard plus DeviceNet Card	•	•		•	•	•	•	•	•

## Product Specifications

Hardware	
Weight (Kg) lbs	(5.6) 12.3
Volume (dm3)	10.9
Color Touchscreen	7 inch
Ethernet Port (10/100)	1
Ethernet Port (10/100/1K)	1
USB 2.0 Ports	4
Hot Swap Tools	Y
Boot Time (seconds)	40
Voltage / Current Requirement	115V / 20A or 220V / 8A
IP Rating	IP52
Onboard Circuit Breaker	Y
Integrated E-Stop	Y
Software	
PC Software	Not Required
PC License	Not Required
Number of JOBS	256
Number of PSETs	256
Number of Steps	31
Logic Rules for JOB Sequencing	Y
Barcode function: USB, Serial, Ethernet	Y
Manual Barcode Entry Option	Y
Tubenut Controls (Configurable modes)	Y
Number of Configurable User Logins	Unlimited
Quick Programming Mode	Y
Advanced Programming Mode	Y
Unrestricted programming function from controller screen	Y
Unrestricted remote programming from any device via any authorized browser	Y
Embedded, Context-Specific Help	Y
Email Statistics Alarms Direct From Controller*	Y
Email Preventative Maintenance Alarms Direct from Controller*	5
Multi-language Support	Y
Onboard Tool Diagnostics	Y

\*Requires proper authorization and network settings by plant IT Administrator for each controller

Onboard Data Storage	
Removeable SSD Card that stores ALL settings and data	Y
Complete controller settings and data recovery through SSD swap	Y
Tightening Results	50,000
Tightening Curve	50,000
Tightening curve displayed on Home screen of controller	Y
Audit Log	50,000
Event Log	50,000
System Log	50,000
Full USB Backup and Restore Function	Y

Connectivity	
Fieldbus Options	
Ethernet IP, ProfiNet , ProfiBus, DeviceNet	
MES Protocol Options	
Open Protocol, Toolsnet, VW XML 2.1, Nissan Serial EOR, IR Ethernet EOR	
Supported Languages	
English, French, German, Italian, Spanish, Czech, Russian, Portuguese, Simplified Chinese	

## 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.



**DIO Box**  
QC-DIO-8CH  
QC-DIO-366-K  
mounting kit included



**Socket Tray**  
QC-SKTR



**USB to Serial Adapter**  
QC-ADPT1



**Bit Tray**  
IC-BIT-8  
If a bit tray is needed order IC-BIT-8, IC-19PIN-10M, & QC-DIO-8CH

## Accessories

### Standard and Extension Cables

Part Number	Description
CPS2-CORD-3M	3 m Standard Cable
CPS2-CORD-6M	6 m Standard Cable
CPS2-CORD-10M	10 m Standard Cable
CPS2-CORD-6M-90	6 m 90 Degree Cable
GEA40-CORD-3M	3 m Standard Cable
GEA40-CORD-6M	6 m Standard Cable
GEA40-CORD-10M	10 m Standard Cable
GEA40-CORD-3M-90	3 m 90 Degree Cable
GEA40-CORD-6M-90	6 m 90 Degree Cable
GEA40-CORD-10M-90	10 m 90 Degree Cable
GEA40-EXT-10M	10 m Extension Cable
GEA40-EXT-20M	20 m Extension Cable
GEA40-EXT-40M	40 m Extension Cable



Standard Cable



90 Degree Cable

### Lever Kits

Part Number	Description
GEA40-K98SL	Short Lever Kit
GEA40-K98EL	Extended Lever Kit

### Hanging and Mounting Accessories

Part Number	Description
GEA15-K364	Swivel Hanger Kit QE4
GEA40-K364	Swivel Hanger Kit QE6/QE8
7L-365	Suspension Bail All QE Series
CPS2-K48	Reaction Bar Kit QE2
GEA15-K48	Reaction Bar Kit QE4, QA4 inline up to 27 Nm
GEPTS15-K48	Reaction Bar Kit QE4TS
DEA120-K48	Reaction Bar Kit QE6 & QE8, QA4 inline 46 Nm
15E4-K48	Flange QE4, QA4 / QA8 inline up to 55 Nm, 90 Nm, angle 115 / 150 Nm
GEM120-K48	Flange QE6 & QE8, QA6 / QA8 inline 70 / 90 Nm, angle 115 / 150 Nm
GEA4-K48	Flange QE4, QA6 / QA8 inline up to 55 Nm, angle up to 90 Nm
DAM120-K48	Flange QE6 & QE8, QA6 / QA8 inline 70 / 90 Nm, angle 115 / 150 Nm



Flange Mounting Kit



Mounting Plate Kit



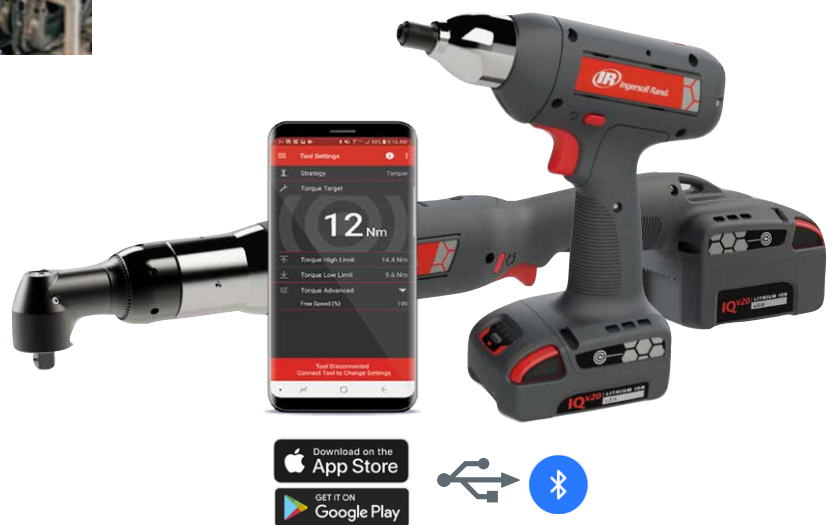
Swivel Hanger Kit

# INSIGHT™ CONNECT APP



The INSIGHT™ Connect app will help you stay productive, mobile and in control of your fastening process. It programs any Ingersoll Rand® QX Connect Series™ tool without the need for additional technical training, special software, plant network permissions or a laptop computer. Working from a smartphone or tablet, operators can use the app to quickly program the torque and angle control configurations on these closed-loop, transducerized tools.

Once installed, the INSIGHT™ Connect app can operate offline, so it functions in large facilities or other locations where Internet signal loss may be a problem, reducing downtime and maximizing ease of use. The INSIGHT Connect App is a perfect companion to complement QX Connect Series™ tools\*. With Bluetooth capability, the INSIGHT Connect App can communicate wirelessly via Bluetooth with the QX Connect tools.



You can quickly perform key tasks with your mobile device, including:

## **SIMPLE**

- Common Setting & General Tool Setup
- Multiple Language Support
- Retrieve Cycle Log and Share via Email
- Audit Logs
- Error Codes with Description

## **FLEXIBLE**

- Program All Standard QX Platform Tool
- Clone- Back Up and Restore
- Save and Load Configurations
- Firmware Update
- Virtual tool programming

## **CAPABLE**

- Program Torque, Angle, Speed
- Multiple Configurations
- Multiple Step Programming
- End of Run (EOR) data on App
- Calibration and Cp/Cpk
- Programming via Bluetooth

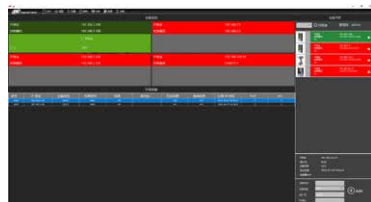
# Simple, Flexible, Powerful

## ToolsHub Data Management Platform

ToolsHub is dedicated to providing an easy-to-use software solution that integrates different Ingersoll Rand controllers or tools into the same data platform, helping you keep track of the working status of multiple controllers at your production site. ToolsHub supports data collection, breakpoint transmission, filtering statistics and report generation, which improves the transparency of the fastening status of different controllers in front of you, and quickly grasps the quality of your assemblies.



### Features



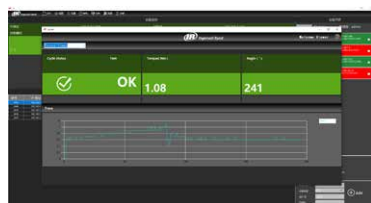
#### A clear view of the field

- Quickly add new controllers
- Controller connection at a glance
- Real-time display of fastening results for each controller



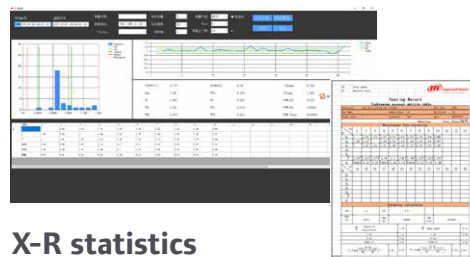
#### Ensure completeness of fastening data

- Software automatically recognizes breakpoints
- Supports automatic recovery of historical results from the new controllers QCD and QCXD.



#### Quick Review and Pset Statistics

- Fastening results and curves can be zoomed in at any time
- Support multiple filter conditions
- OK/NOK ratio can be calculated for Pset



#### X-R statistics

- Supports calculation of sums, averages and extreme deviations
- Supports calculation of CPK, PPK & PPM
- Statistics can be saved/restored quickly
- Deep drilling of fastening results and automatic generation of statistical reports

### Specification

ToolsHub Data Management Platform	
Model	Description
IC-ToolsHub	Free selection of the software license range according to the number of tools to be connected on site



# Equipment

- 52 Carbon Fiber Folding Arm
- 54 Carbon Fiber Telescopic Arm
- 58 Positioning Arm Controller
- 58 Industrial Handles
- 59 Sleeve Selector
- 59 Batch Header Selector
- 60 Spring Balancer
- 62 Lightweight Aluminum Rail Systems

# Value-added production lines

Smart accessories include lightweight aluminum rails, carbon fiber folding arms, carbon fiber telescoping arms, positioning arm controllers, industrial handles, socket/batch selectors, and spring balancers. Smart Attachments realize the full performance potential of assembly tools to increase productivity, reduce downtime, and add value to the production line.

## Improvement of production efficiency

Smooth and stable operation

Reduction of reaction forces

Balancing tool weight

Proper Grip Position

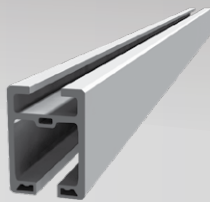
Easier to operate

Reduction of reaction forces

Increased comfort weight

Reduce fatigue

Reduced operating time



Lightweight Aluminium Track



Reaction force balance arm



Spring balance



clevis



Handles



**Reduced downtime**

**Earnings**

**Protect tools**

**Preventing incorrect operation**

**Function**

**More coherent work**

**Reduced rework**

**Experience**



**Positioning Arm Controller**



**Reaction force positioning arm**



**Socket/Batch selectors**

**Products**

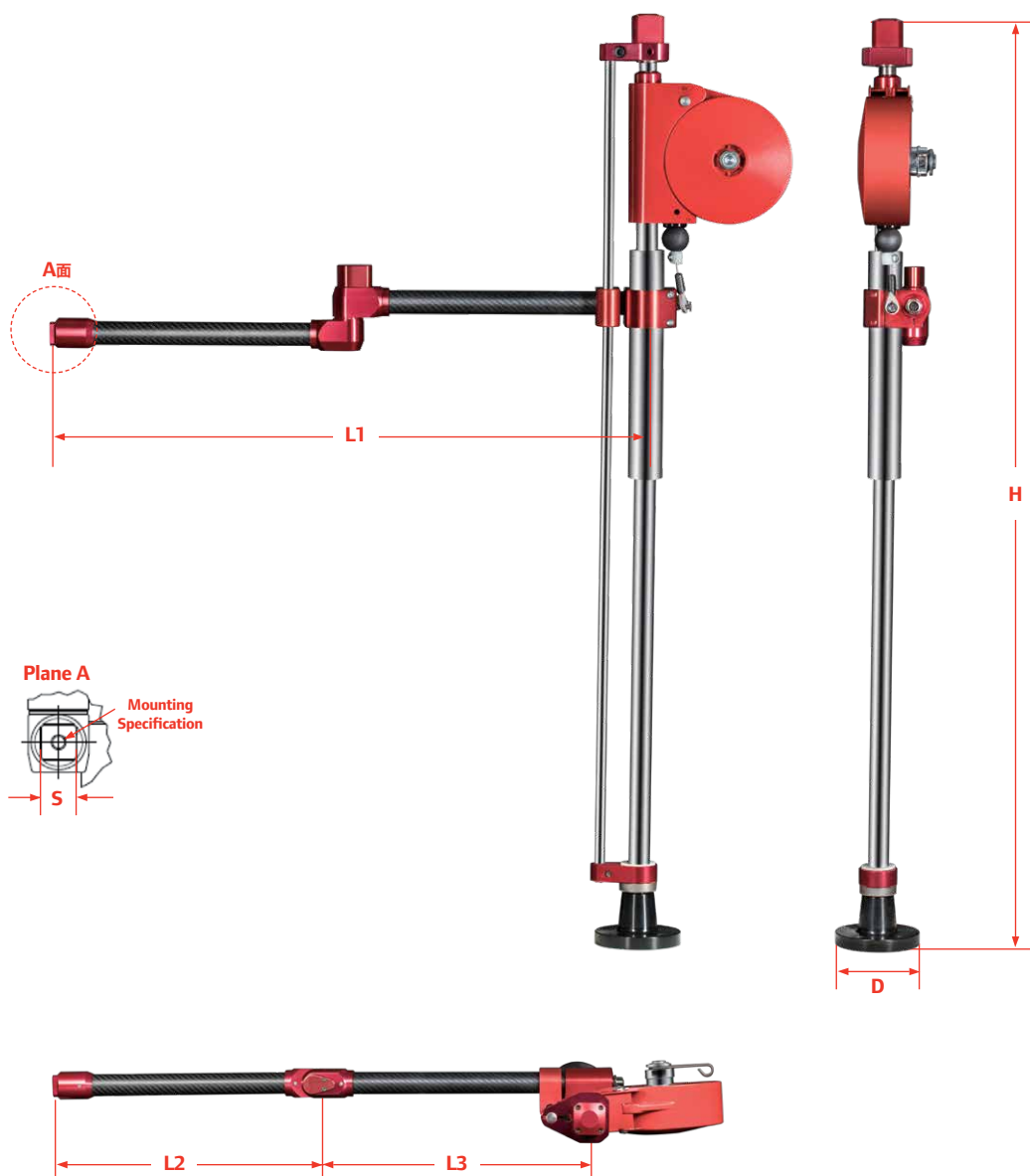
## Carbon Fiber Folding Arm

Carbon fiber folding arm adopts a new design of force arm, which greatly reduces the overall weight through the use of carbon fiber material. It makes the operator more comfortable to use and improves work efficiency. Spring balancers come standard and are easy to order.

Technical Specification							
Model	Type	Maximum Reaction Torque(Nm)	Maximum Payload (N)	Upper and lower stroke (mm)	Transverse radius (mm)	Standard spring balancer specification(kg)	
Without positioning function							
All guides are made of high-quality linear bearings to ensure precision and reliability	<b>RA-C08-010*</b>	Basic type	10	15	400	485	3
	<b>RA-C08-040</b>	Basic type	40	35	500	590	8
	<b>RA-C08-080</b>	Basic type	80	70	500	686	8
	<b>RA-C08-150</b>	Basic type	150	100	500	798	12
With positioning function							
DC24V power supply, 0~10V absolute analog output	<b>RA-C08-040P</b>	Targetable type	40	35	500	590	8
	<b>RA-C08-080P</b>	Targetable type	80	70	500	686	8
	<b>RA-C08-150P</b>	Targetable type	150	100	500	808	12

\*With a universal chuck, the gun is mounted vertically

Carbon Fiber Folding Arm Chuck Selection Table						
Step 1 Select tool		Step 2 Select the folding arm		Step 3 Choose the right chuck		
Confirm the tool type	Confirm the folding arm specifications	Vertical mounting universal collet	Horizontal mounting universal collet	Vertically mounted single axis rotatable	Horizontally mounted single axis rotatable	Horizontal mounting with two rotatable axes
QX Pistol-type		RAJ-C08G-QX2P			RAJ-C08GZ-QX2P	
QX Angled 20V		RAJ-C08G-QX2A	RAJ-C08G9-QX2A		RAJ-C08GZ-QX2A	
QX Angled 40V		RAJ-C08G-QX5A	RAJ-C08G9-QX5A		RAJ-C08GZ-QX5A	
QE2 Pistol-typ		RAJ-C08G-QE2P			RAJ-C08GZ-QE2P	
QE2 Straight Handle		RAJ-C08G-QE2S			RAJ-C08GZ-QE2S	
QE2 Angled		RAJ-C08G-QE2A	RAJ-C08G9-QE2A	RAJ-C08B-QE2A	RAJ-C08GZ-QE2A	RAJ-C08BZ-QE2A
QE4 Pistol-type		RAJ-C08G-QE4P			RAJ-C08GZ-QE4P	
QE4 Straight Handle		RAJ-C08G-QE4S			RAJ-C08GZ-QE4S	
QE4 Angled		RAJ-C08G-QE4A	RAJ-C08G9-QE4A	RAJ-C08B-QE4A	RAJ-C08GZ-QE4A	RAJ-C08BZ-QE4A
QE6 Straight Handle		RAJ-C08G-QE6S			RAJ-C08GZ-QE6S	
QE6 Angled		RAJ-C08G-QE6A	RAJ-C08G9-QE6A	RAJ-C08B-QE6A	RAJ-C08GZ-QE6A	RAJ-C08BZ-QE6A
QA4 Straight Handle		RAJ-C08G-QA4S			RAJ-C08GZ-QA4S	
QA4 Angled		RAJ-C08G-QA4A	RAJ-C08G9-QA4A	RAJ-C08B-QA4A	RAJ-C08GZ-QA4A	RAJ-C08BZ-QA4A
QA6 Straight Handle		RAJ-C08G-QA6S			RAJ-C08GZ-QA6S	
QA6 Angled		RAJ-C08G-QA6A	RAJ-C08G9-QA6A	RAJ-C08B-QA6A	RAJ-C08GZ-QA6A	RAJ-C08BZ-QA6A





**Carbon Fiber Folding Arm Size Chart**



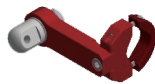
Model	L1	L2	L3	H	D	S	Bolt Specifications
<b>RA-C08-010</b>	481	237	244	772			
<b>RA-C08-040</b>	590	293	297	1036	Φ90	□ 20	M8x1.25-6H Φ8x90°
<b>RA-C08-040P</b>	590	293	297	1095	Φ90	□ 20	M8x1.25-6H Φ8x90°
<b>RA-C08-080</b>	686	345	341	1086	Φ100	□ 28	M10x1.5-6H Φ10x90°
<b>RA-C08-080P</b>	686	345	341	1145	Φ100	□ 28	M10x1.5-6H Φ10x90°
<b>RA-C08-150</b>	798	403	395	1186	Φ110	□ 30	M12x1.75-6H Φ12x90°
<b>RA-C08-150P</b>	798	403	395	1245	Φ110	□ 30	M12x1.75-6H Φ12x90°

## Carbon Fiber Telescopic Arm

Carbon fiber telescopic arms have the advantage of being easy to install and taking up little space, while also providing features such as anti-reverse force and tool positioning.

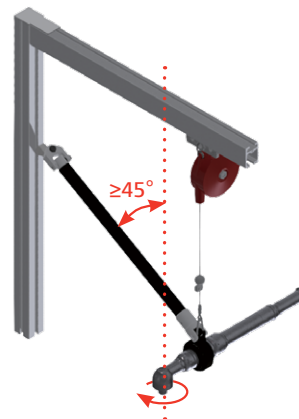
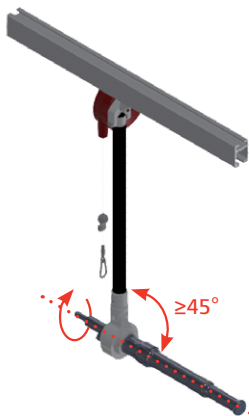
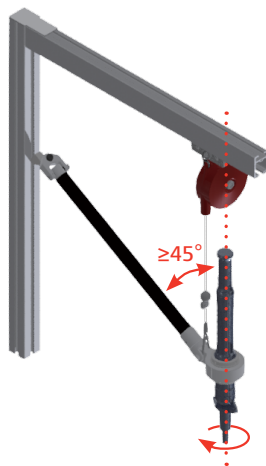
		Technical Specification				
		Modell	Maximum torque(Nm)	L min (mm)	L max (mm)	Telescopic Stroke (mm)
<b>Without positioning function</b>						
 <ul style="list-style-type: none"> <li>• Counteracts reaction forces of up to 400Nm</li> <li>• Light weight and high strength thanks to carbon fiber material</li> <li>• Small footprint, minimizing impact on existing equipment</li> <li>• Easy to install in mobile assembly lines</li> </ul>	RA-CA09-020A	20	460	1000	540	
	RA-CA09-020B	20	627	1500	873	
	RA-CA09-020C	15	794	2000	1206	
	RA-CA09-055A	55	559	1250	691	
	RA-CA09-055B	55	743	1800	1057	
	RA-CA09-055C	35	943	2400	1457	
	RA-CA09-100A	100	572	1250	678	
	RA-CA09-100B	80	756	1800	1044	
	RA-CA09-100C	60	956	2400	1444	
	RA-CA09-220A	220	578	1250	672	
	RA-CA09-220B	180	762	1800	1038	
	RA-CA09-220C	160	962	2400	1438	
	RA-CA09-400A	400	701	1250	549	
	RA-CA09-400B	350	885	1800	915	
RA-CA09-400C	300	1085	2400	1315		
<b>With positioning function</b>						
 <ul style="list-style-type: none"> <li>• <b>New Product!</b></li> <li>• Adds localization functionality</li> <li>• Integration with error-proofing systems</li> <li>• 1 encoder for length measurement</li> <li>• 2 encoders for length + angle measurement</li> </ul>	RA-CA09-020AP	20	587	1127	540	
	RA-CA09-020BP	20	809	1682	873	
	RA-CA09-055AP	55	688	1379	691	
	RA-CA09-055BP	55	872	1929	1057	
	RA-CA09-100AP	100	732	1410	678	
	RA-CA09-100BP	80	920	1960	1044	
	RA-CA09-100CP	60	1116	2560	1444	
	RA-CA09-220AP	220	738	1410	672	
	RA-CA09-220BP	180	922	1960	1038	
	RA-CA09-220CP	160	1122	2560	1438	
	RA-CA09-400AP	400	840	1389	549	
	RA-CA09-400BP	350	1024	1939	915	
	RA-CA09-400CP	300	1224	2539	1315	

### Carbon Fiber Telescopic Arm Collet Selection Chart

		Step 3 碳纤维伸缩臂夹头		
				
Step 1 Select Tools	Step 2 选择伸缩臂	Universal collet	Single axis rotatable	Specialized for positioning arms (not resistant to counterforce)
Tool Specifications	Confirm telescopic arm specifications			
QX Pistol-type		RAJ-C09G-QX2P		
QX Angled 20V		RAJ-C09G-QX2A		RAJ-C09P-QX2A
QX Angled 40V		RAJ-C09G-QX5A		
QE2 Pistol-type		RAJ-C09G-QE2P		
QE2 Straight Handle		RAJ-C09G-QE2S		
QE2 Angled		RAJ-C09G-QE2A	RAJ-C09B-QE2A	RAJ-C09P-QE2A
QE4 Pistol-type		RAJ-C09G-QE4P		
QE4 Straight Handle		RAJ-C09G-QE4S		
QE4 Angled		RAJ-C09G-QE4A	RAJ-C09B-QE4A	RAJ-C09P-QE4A
QE6 Straight Handle		RAJ-C09G-QE6S		
QE6 Angled		RAJ-C09G-QE6A	RAJ-C09B-QE6A	RAJ-C09P-QE6A
QA4 Straight Handle		RAJ-C09G-QA4S		
QA4 Angled		RAJ-C09G-QA4A	RAJ-C09B-QA4A	RAJ-C09P-QA4A
QA6 Straight Handle		RAJ-C09G-QA6S		
QA6 Angled		RAJ-C09G-QA6A	RAJ-C09B-QA6A	RAJ-C09P-QA6A

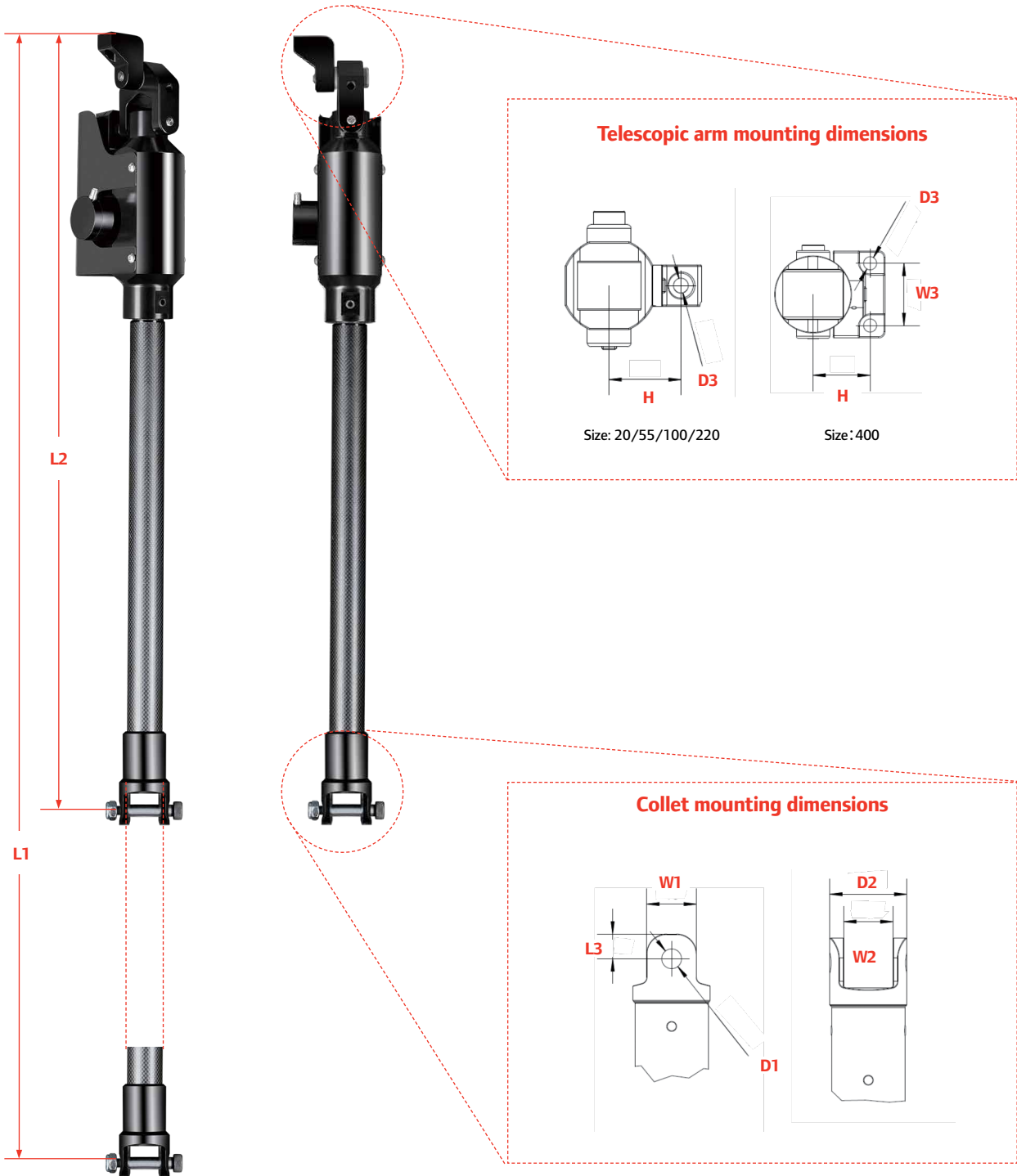


Make sure that the overall structure is sufficient to resist the reaction force!



# Carbon Fiber Telescopic Arm

## Carbon Fiber Telescopic Arm Dimensions

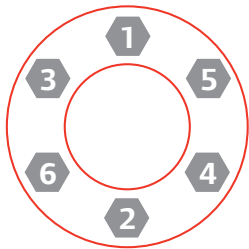


## Carbon Fiber Telescopic Arm Size Chart

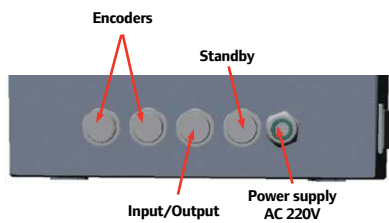
Model	L1	L2	L3	D1	D2	D3	W1	W2	W3	H
<b>Without positioning function</b>										
RA-CA09-020A	1000	460		Φ6 H7	Φ28	Φ6.1	18	14		29.5
RA-CA09-020B	1500	627		Φ6 H7	Φ28	Φ6.1	18	14		29.5
RA-CA09-020C	2000	794		Φ6 H7	Φ28	Φ6.1	18	14		29.5
RA-CA09-055A	1250	559		Φ8 H7	Φ36	Φ6.1	24	20		29.5
RA-CA09-055B	1800	743		Φ8 H7	Φ36	Φ6.1	24	20		29.5
RA-CA09-055C	2400	943		Φ8 H7	Φ36	Φ6.1	24	20		29.5
RA-CA09-100A	1250	572	14	Φ12 H7	Φ49	Φ8.1	30	30		41
RA-CA09-100B	1800	756	14	Φ12 H7	Φ49	Φ8.1	30	30		41
RA-CA09-100C	2400	956	14	Φ12 H7	Φ49	Φ8.1	30	30		41
RA-CA09-220A	1250	578	14	Φ16 H7	Φ49	Φ10.1	30	30		44
RA-CA09-220B	1800	762	14	Φ16 H7	Φ49	Φ10.1	30	30		44
RA-CA09-220C	2400	962	14	Φ16 H7	Φ49	Φ10.1	30	30		44
RA-CA09-400A	1250	701	20	Φ16 H7	Φ62	Φ10.5	40	39.5	50	46
RA-CA09-400B	1800	885	20	Φ16 H7	Φ62	Φ10.5	40	39.5	50	46
RA-CA09-400C	2400	1085	20	Φ16 H7	Φ62	Φ10.5	40	39.5	50	46
<b>With positioning function</b>										
RA-CA09-020AP	1127	587		Φ6 H7	Φ28	Φ6.1	18	14		29.5
RA-CA09-020BP	1682	809		Φ6 H7	Φ28	Φ6.1	18	14		29.5
RA-CA09-055AP	1379	688		Φ8 H7	Φ36	Φ6.1	24	20		29.5
RA-CA09-055BP	1929	872		Φ8 H7	Φ36	Φ6.1	24	20		29.5
RA-CA09-100AP	1410	732	14	Φ12 H7	Φ49	Φ8.1	30	30		41
RA-CA09-100BP	1960	920	14	Φ12 H7	Φ49	Φ8.1	30	30		41
RA-CA09-100CP	2560	1116	14	Φ12 H7	Φ49	Φ8.1	30	30		41
RA-CA09-220AP	1410	738	14	Φ16 H7	Φ49	Φ10.1	30	30		44
RA-CA09-220BP	1960	922	14	Φ16 H7	Φ49	Φ10.1	30	30		44
RA-CA09-220CP	2560	1112	14	Φ16 H7	Φ49	Φ10.1	30	30		44
RA-CA09-400AP	1389	840	20	Φ16 H7	Φ62	Φ10.5	40	39.5	50	46
RA-CA09-400BP	1939	1024	20	Φ16 H7	Φ62	Φ10.5	40	39.5	50	46
RA-CA09-400CP	2539	1224	20	Φ16 H7	Φ62	Φ10.5	40	39.5	50	46

## Positioning Arm Controller

The positioning arm controller (RA-COM) can be used in conjunction with a reaction arm with positioning function to realize the positioning error prevention function and traceability of the tool position.



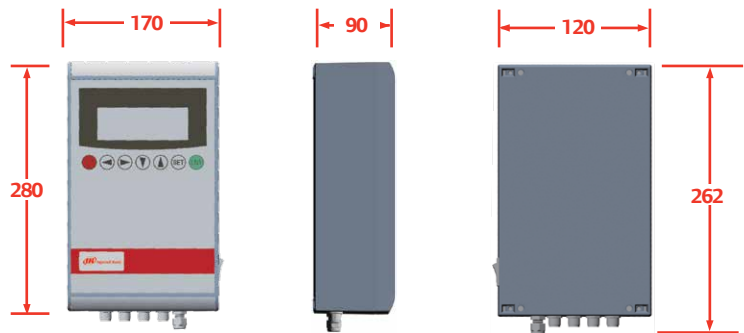
**The operator must tighten in the set process sequence.**  
For example when the tool is placed in the correct bolt position according to the current program, it is allowed to start the tool; when it is in the wrong position, the tool is locked and pulling the trigger will not start the tool.



### Dual Encoder Interface

Program selection signals can be output based on positioning results  
Programs can be customized according to specific needs

### Positioning arm controller sizes (mm)



## Industrial Handles

### Technical specification

	Model	Functional Description
<b>Non-adjustable grip angle</b>		
	HD-03-901	Pushbutton switch (1NO) Pushbutton switch (1NC+1NO) Dual color LED
	HD-03M-802	Connector, Adaptor 901
<b>Adjustable grip angle</b>		
	HD-03-401	Basic type
	HD-03-406	Pushbutton Switch (1NO) Toggle Switch (1NO)
	HD-03-410	Pushbutton Switch (1NO) Toggle switch (1NO) 2-color LED*2
	HD-03M-813	Connectors, adapted to 401/406/410

### Grip Attachment Mounting Sizes (mm)


#### HD-03M-802

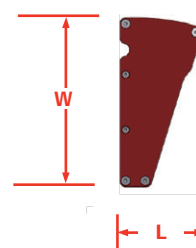
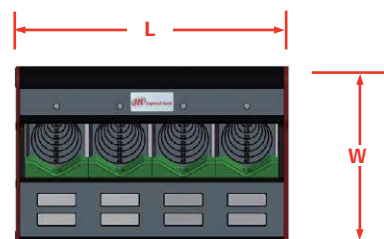


#### HD-03M-813




## Sleeve Selector

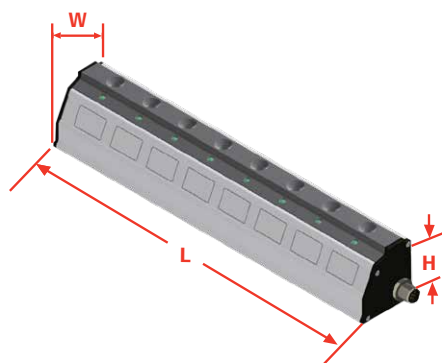
Sleeve selector (output type)			
	Model	Digit	Cable length (m)
	IC-SOCKET-4-C	4	5
	IC-SOCKET-4-C-10	4	10
	IC-SOCKET-4-C-16	4	16
	IC-SOCKET-8-C	8	5
	IC-SOCKET-8-C-10	8	10
	IC-SOCKET-8-C-16	8	16



Size (mm)			
Digit	L	W	H
4-digit Sleeve selector	215	138	67.6
8-digit Sleeve selector	415	138	67.6

## Batch Header Selector

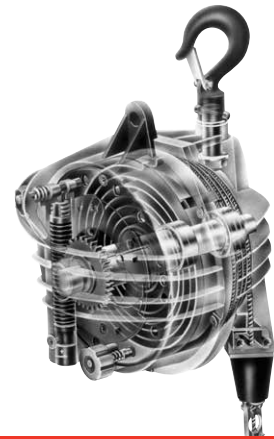
Batch header selector (input/output type)			
	Model	Digit	Feature
	IC-BIT-4-SIO	4	With indicator, without cable
	IC-BIT-4-SIO-05	4	With Indicator, 5 meters Cable
	IC-BIT-4-SIO-10	4	With Indicator, 10 meters Cable
	IC-BIT-8-SIO	8	With indicator, without cable
	IC-BIT-8-SIO-05	8	With Indicator, 5 meters Cable
	IC-BIT-8-SIO-10	8	With Indicator, 10 meters Cable




Size (mm)			
位数	L	W	H
4-digit batch header selector	162	48.6	52
8-digit batch header selector	302	48.6	52

# Spring Balancer


Spring balancer can reduce the burden that the weight of the tool places on the operator. The higher the torque to be tightened, the heavier the tool weight tends to be, so spring balancer are a good choice when used with a force arm.




Product Series	QXN kg	Self-lubricating	Adjustable Lifting capacity	Help with lifting	Fixed sliders	Safety self-locking in case of spring breakage	Low Friction	Swivel Hook	Anti-hook	Manual self-locking	Precise rope wrapping Anti-clogging	Quick rope change without dismantling the counterbalance crane
<b>BLD</b>	0.4~3	●	●	●	●							
<b>BMD</b>	1~10				●	●	●					
<b>BIDS</b>	4~25			●	●	●	●	●	●			
<b>BHD</b>	10~65				●	●	●	●		●	●	
<b>BSD</b>	15~165					●	●	●		●	●	●




BLD series				
Model	Load	Distance	Dead Weight	
<b>BLD1</b>	0.4-1.0	1.6	0.6	
<b>BLD2</b>	1.0-2.0	1.6	0.6	
<b>BLD3</b>	2.0-3.0	1.6	0.7	



BIDS series				
Model	Load	Distance	Dead Weight	
<b>BIDS-7</b>	4.0-7.0	2.0	5.0	
<b>BIDS-10</b>	7.0-10.0	2.0	5.5	
<b>BIDS-14</b>	10.0-14.0	2.0	5.5	
<b>BIDS-18</b>	14.0-18.0	2.0	6.5	
<b>BIDS-22</b>	18.0-22.0	2.0	6.0	
<b>BIDS-26</b>	22.0-25.0	2.0	6.6	



BMD series				
Model	Load	Distance	Dead Weight	
<b>BMDS-2</b>	1.0-2.5	2.0	2.0	
<b>BMDS-4</b>	2.0-4.0	2.0	2.0	
<b>BMDLN-4</b>	2.0-4.0	2.5	2.9	
<b>BMDS-6</b>	4.0-6.0	2.0	2.3	
<b>BMDLN-6</b>	4.0-6.0	2.5	3.2	
<b>BMDS-8</b>	6.0-8.0	2.0	2.5	
<b>BMDLN-8</b>	6.0-8.0	2.5	3.5	
<b>BMDLN-10</b>	8.0-10.0	2.5	3.7	
<b>BMDLN-12</b>	10.0-12.0	2.5	4.0	
<b>BMDLLN-4*</b>	2.0-4.0	2.5	3.0	
<b>BMDLLN-6*</b>	4.0-6.0	2.5	3.3	
<b>BMDLLN-8*</b>	6.0-8.0	2.5	3.6	
<b>BMDLLN-10*</b>	8.0-10.0	2.5	3.8	



BHD series				
Model	Load	Distance	Dead Weight	
<b>BHD-15</b>	10.0-15.0	2.0	10.3	
<b>BHD-20</b>	15.0-20.0	2.0	10.6	
<b>BHD-25</b>	20.0-25.0	2.0	11.2	
<b>BHD-30</b>	25.0-30.0	2.0	11.5	
<b>BHD-35</b>	30.0-35.0	2.0	11.8	
<b>BHD-45</b>	35.0-45.0	2.0	12.4	
<b>BHD-55</b>	45.0-55.0	2.0	12.5	
<b>BHD-65</b>	55.0-65.0	2.0	13.6	

\*Balancer with self-locking capability



**BSD series**

Model	Load	Distance	Dead Weight	Model	Load	Distance	Dead Weight
<b>BSD-20</b>	15.0-20.0	2.5	19.0	<b>BSD-80</b>	70.0-80.0	2.5	27.8
<b>BSDL-20</b>	15.0-20.0	3.0	19.1	<b>BSDL-80</b>	70.0-80.0	3.0	28.0
<b>BSDL-25</b>	20.0-25.0	3.0	19.9	<b>BSD-90</b>	80.0-90.0	2.5	28.8
<b>BSD-30</b>	20.0-30.0	2.5	19.8	<b>BSDL-90</b>	80.0-90.0	3.0	29.0
<b>BSDL-35</b>	25.0-35.0	3.0	20.9	<b>BSD-100</b>	90.0-100.0	2.5	35.6
<b>BSD-40</b>	30.0-40.0	2.5	20.8	<b>BSDL-100</b>	90.0-100.0	3.0	36.8
<b>BSDL-45</b>	35.0-45.0	3.0	23.8	<b>BSDL-115</b>	110.0-115.0	3.0	38.7
<b>BSD-50</b>	40.0-50.0	2.5	23.9	<b>BSD-120</b>	100.0-120.0	2.5	38.7
<b>BSDL-50</b>	40.0-50.0	3.0	23.9	<b>BSDL-130</b>	115.0-130.0	3.0	39.9
<b>BSD-60</b>	50.0-60.0	2.5	25.4	<b>BSD-140</b>	120.0-140.0	2.5	41.8
<b>BSDL-60</b>	50.0-60.0	3.0	25.3	<b>BSDL-140</b>	130.0-140.0	3.0	42.8
<b>BSD-70</b>	60.0-70.0	2.5	26.8	<b>BSD-150</b>	130.0-150.0	2.5	44.5
<b>BSDL-70</b>	60.0-70.0	3.0	26.7	<b>BSDL-150</b>	140.0-150.0	3.0	45.6
				<b>BSD-165</b>	150.0-165.0	2.5	48.2

**Swivel Hook**



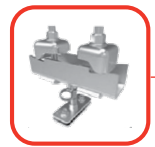
Model	Adaptation Tool System
<b>735-QX</b>	QX Angle
<b>505406</b>	QE4
<b>505446</b>	QE6QE8



# Lightweight Aluminium Track System

## Smooth operation, present a more comfortable operating experience

Ergonomically designed rail systems have a direct impact on improving productivity. Therefore, Ingersoll Rand has redefined the characteristics of SRA series aluminum alloy rail system to run smoothly and smoothly, which is easier and less laborious to operate and more convenient to install. It not only brings more comfortable operation experience to workers, but also healthier working environment. That's why Ingersoll Rand pays special attention to the optimal operating system when developing system components.



Steel Mounting



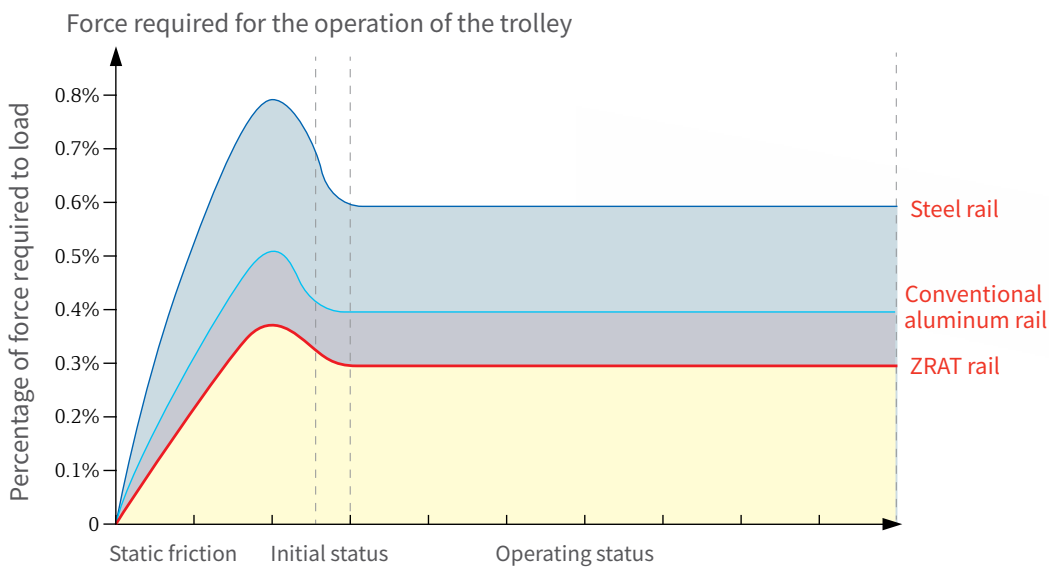
Z RAT Lightweight Aluminium Track



Rail Hanger



Tool Trolley



## Advantages

- Lightweight, high load capacity, ergonomic.
- Smooth operation of the rail system, with operating resistance as low as 0.3%.
- The safety coefficient of suspended parts and metal components reaches 5:1, which is safer and more reliable.
- To add secondary protection, we recommend at all suspension points (rigging and pulley) must be equipped with secondary protection devices.
- Simple bolting, easy installation, no need to destroy the track



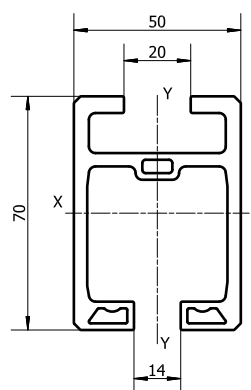
## Rail system application examples



## Lightweight Aluminium Track System

### ZRAT Lightweight Aluminium Track

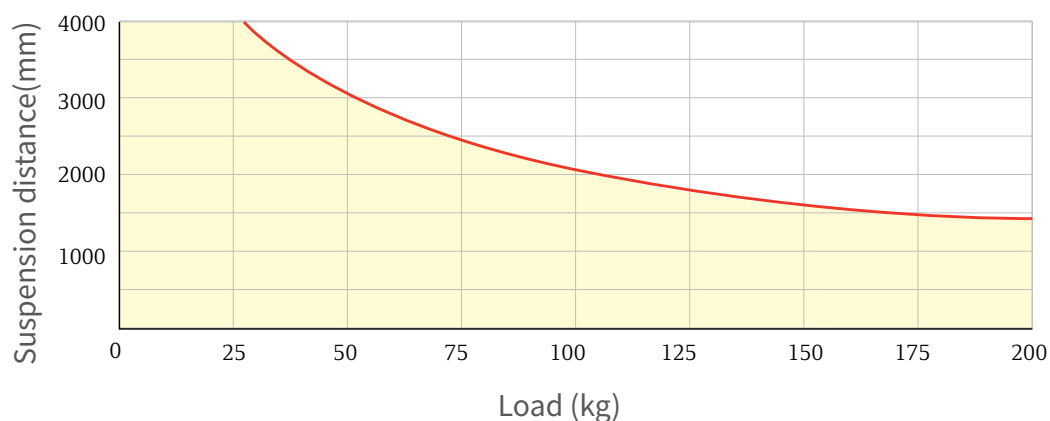
ZRAT lightweight aluminum alloy track system adopts a unique patented cross-section design, with light weight, strong bearing capacity and low running resistance of up to 0.3%, in line with ergonomic principles. ZRAT series are specially designed for hanging spring balancers, tightening tools, baskets, cables and other light loads in assembly lines.



ZRAT Features	
Features	Description
<b>Material</b>	6063-T66 Aluminum, anodic oxidation
<b>Weight</b>	2.37 kg/m
<b>Moment of inertia</b>	53.3 cm <sup>4</sup>

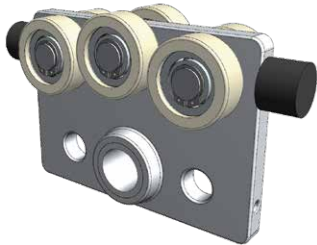
ZRAT Specification	
Model	Length
<b>31000-1000-2</b>	1000 mm
<b>31000-2000-2</b>	2000 mm
<b>31000-3000-2</b>	3000 mm
<b>31000-4000-2</b>	4000 mm
<b>31000-5000-2</b>	5000 mm
<b>31000-6000-2</b>	6000 mm

#### ZRAT Load chart



## Accessories

### Tool Trolley



Aluminum trolley adopts unique high-low roller design, which can withstand upward or downward loads, and the rated load can be up to 200kg. High-strength nylon walking wheels, low resistance, quiet and smooth operation. The tool trolley with other accessories can realize The tool trolley, together with other accessories, can be used to move freely on the lower track, or to directly hang light loads such as spring balancers or hanging baskets.

Tool Trolley Features				
Model	Rated Load kg	Weight kg	height mm	length mm
31056A	200	0.57	90	190

### Steel Mounting

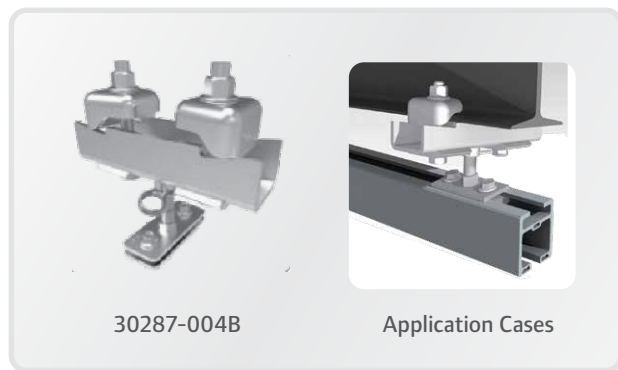
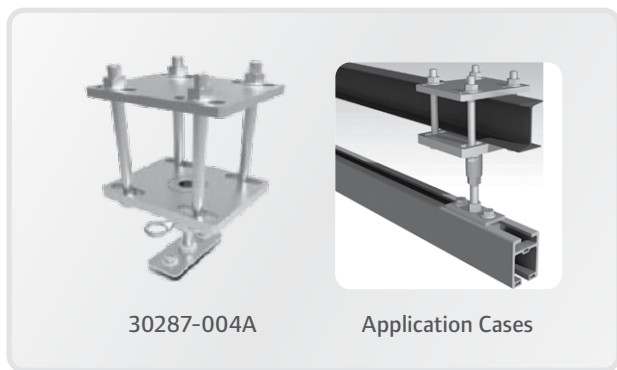
Steel Mountings are used to connect the rail to the steel structure above and are the safe load bearing part of the whole rail system. The rated load of a single mounting can be up to 500 kg. Added multiple anti-loosening design to ensures the safety and reliability of the entire rail system.

#### 30287-004A3 Steel Mounting

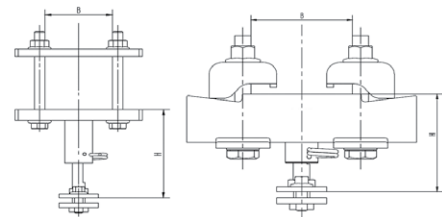
- Suspended below square pipes, rectangular pipes, I-beams, channels and other steel profiles
- Highly adaptable, different lengths of bolts need to be selected according to the profile specifications
- Provides 30mm height adjustment range to compensate for steel structure level height error

#### 30287-004B Steel Mounting

- Suitable for 10-16# I-beams
- Provides 30mm height adjustment range to compensate for steel structure level height error



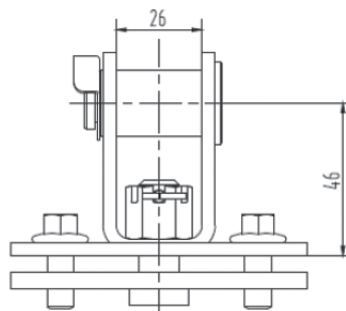
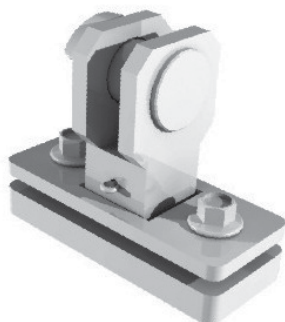
Steel mountings specification					
Model	Rated Load kg	Weight kg	Height adjustment mm	Width adjustment mm	Height adaptation mm
30287-004A	500	2.27	75 - 105	40 - 80	50 - 320
30287-004B	500	1.92	75 - 105	68 - 108	limitless



## Accessories

### Rail Hanger

The Rail Hanger is a standard component for the connection of upper and lower rails, usually used in conjunction with a tool trolley, with a rated load of up to 300kg. The lugs can be freely switched between 0° and 90° to meet different rail arrangements.



#### Rail hanger specification

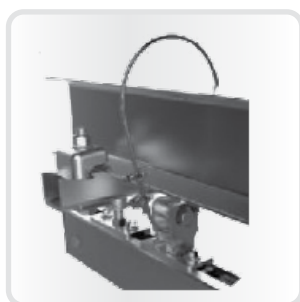
Model	Rated Load kg	Weight kg	Angle
ZHS30305A	300	0.49	0° and 90°

### Safety Systems Kit

Safety systems kit consists of secondary protection ropes and rail hangers that provide secondary protection for the upper and lower rails. We recommend equipping all suspension points with safety systems as an additional safety measure and to avoid safety hazards at the same time.



ZHS30305A-06



Upper track fall protection



Lower track fall protection

## Accessories

### End cap

End caps must be installed on all rail ends to prevent dust from entering the interior of the rail.



ZHS31022A



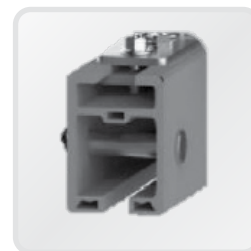
Application Cases

### End stop pin

End stop pins must be installed on all rail ends to prevent the trolley from coming off the rail during operation. When installing stop pins, it is necessary to punch holes in the end of the rail in advance.



ZHS31024A



Application Cases

### Movable limiter

The movable limiters can be installed anywhere on the track as needed, flexibly selecting and changing the limit points, and restricting the lower track or tool skid to a reasonable position according to the actual situation on the site. When installing the movable limiter, the track does not need to be drilled.



ZHS30738A



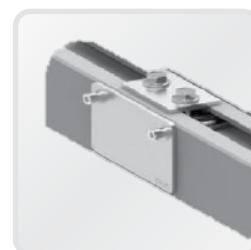
Application Cases

### Joint set

The joint set is used as a fixed rail butt joint, allowing standard lengths of rail to be combined to form the required length while ensuring smooth running of the tool trolley at the interface. The joint set is easy to install and can be mounted directly on the rail using the hanging cleat above the rail.



31020A



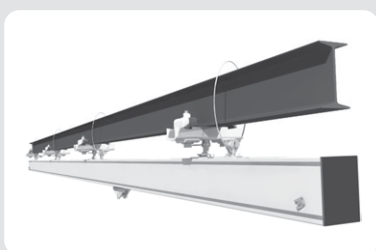
Application Cases

## Rail System Installation form

### Installation form

#### Monorail form

Suitable for conveying materials in a straight line.



#### Dual-track form

Suitable for conveying materials in a straight line.  
Double the load capacity compared to monorail form.

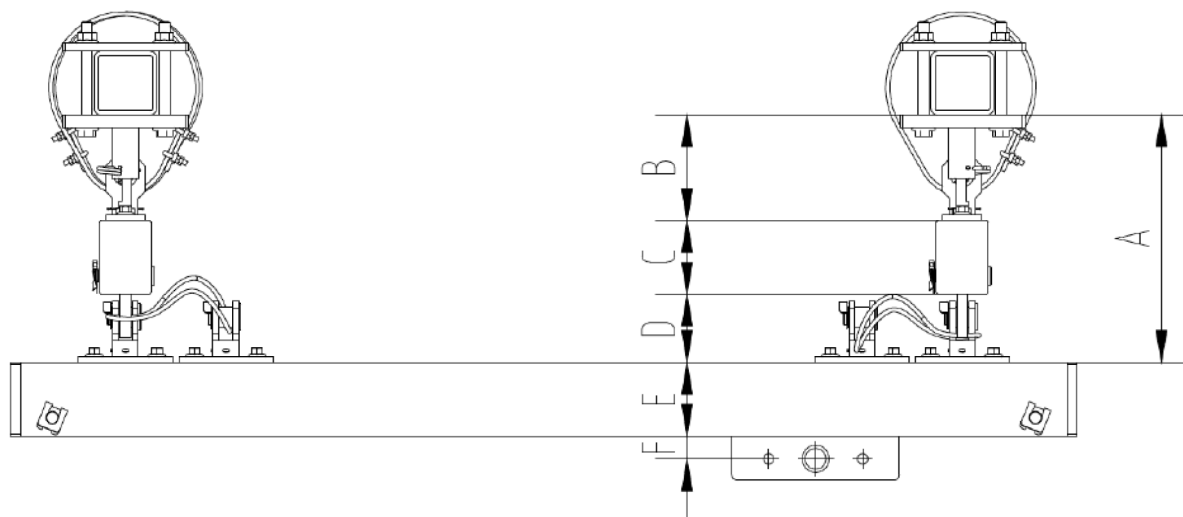


#### Upper and lower track form (single girder)

The most conventional form of rail mounting.  
Maximize the use of effective on-site space.



### Installation parameters



#### Installation parameters (mm)

Model	A min/A max	B min/B max	C	D	E	F
ZRAT	212.5 - 242.5	75 - 105	70	67.5	70	21.5



# IQ<sup>V</sup> Series™ Cordless

- 72 Impact Wrench
- 81 Ratchet Wrench
- 82 Angle Grinder
- 83 Hammer Drill
- 84 Grease Gun



# Cordless Convenience Uncompromising Power

The Ingersoll Rand IQV Series™ tools offer versatile performance, cordless convenience and rugged durability in compact packages with class-leading ergonomics—key benefits in the automotive services and MRO markets.

### Accessibility:

The compact, cordless design of every IQV Series™ tool makes accessing tight spaces easier.

### Comfort:

Lightweight design and small handles help minimize fatigue, making tools more ergonomic and comfortable to hold.

### Durability:

Chemical- and impact-resistant housings withstand tough environments and repeated drops, while protecting interior components.



General automotive repair



Collision repair



Heavy equipment repair



Facilities maintenance



Light assembly



General industrial



Grease Gun



1 inch ImpactWrench



1/2 inch Impact Wrench



Ratchet

# Uncompromising Power

The Ingersoll Rand IQ<sup>V20</sup> Series™ of 20-volt tools deliver hard-hitting, long-lasting power, with the uncompromising ability to stand up to the all day, every day demands of professionals. IQ<sup>V</sup> Series™ tools **Do the Job, Do it Fast, Do it Every Time.**

**Performance:** BL2022 5.0Ah, extended-life 20V lithium-ion battery delivers high-charge capacity and low internal impedance for maximum power delivery and exceptional runtime.



**Durability:** The intelligent Battery Management System (BMS) allows the battery to communicate with the tool and charger to offer triple battery protection, prevent over loading, over longer tool and battery life.

**Productivity:** An LED Fuel Gauge and audible alarm will let you know when your batteries are fully charged and ready to get back to work.



**Durability:** Engineered composite housing with stands wear, abrasions, drops and can be securely screw mounted to a wall or toolbox.

**Versatility :** The USB charge port on the side means you don't have to fight for an outlet with you tablet or smart phone. Let us take care of the clutter; you take care of what's next.

Part Number	Desc.	Weight kg
BL2022	5.0Ah Battery	0.72
BL2012	2.5Ah Battery	0.41
BC1121	12/20V Charger	-
BC1221	20V Dual Bay Charger	-

**Dual bay charger:** Check out the brand new dual bay charger which can charge 2 batteries at the same time. Ideal for your high paced daily work.



# IQV® 20V 1/2" & 3/8" COMPACT IMPACT WRENCHES

## W3131 & W3151



From the brand you trust for precise, high-performance fastening tools – Ingersoll Rand grows its IQV® 20V system with the W3131 IQV® 20V 3/8" Impact Wrench and the W3151 IQV® 20V 1/2" Impact Wrench. Its brushless motor delivers best in class breakaway torque to quickly complete demanding applications. A compact form factor with 5.3" tip-to-tail length and weight under 2.3 lbs provides excellent control and maneuverability in tight workspaces. Including 3 speed modes and a patented 360° shadowless LED light ring to fully eliminate shadows, the W3131 and W3151 Compact Impact Wrenches include a 3-year limited warranty and are compatible with all IQV® 20V batteries.



**W3131 3/8" IMPACT WRENCH**

**W3151 1/2" IMPACT WRENCH**

High Torque Performance: Break-away: Up to 400 ft-lbs  
Fastening: Up to 300 ft-lbs

High Torque Performance: Breakaway: Up to 450 ft-lbs  
Fastening: Up to 320 ft-lbs

3/8" Square Drive Anvil

Three Speed Modes

Powerful, Efficient Brushless Motor

Impact-Resistant Bumpers

Durable Metal Gear Case

Comfortable Overmolded Grip

1/2" Square Drive Anvil

360° LED Light Ring

Variable Speed Trigger

Compatible with all Ingersoll Rand® IQV® 20V Batteries

Compatible with all Ingersoll Rand® IQV® 20V Batteries



**W3131 W3151 IQV® 20V 1/2" & 3/8" compact impact wrenches**

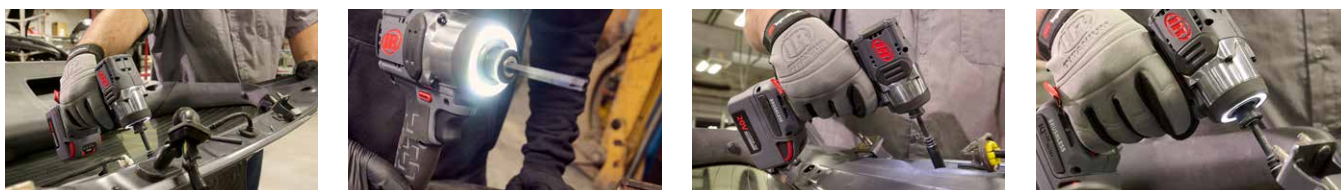
Model	System	Drive type	Light	Breakaway Torque ft-lbs	Free Speed RPM	Impacts/Min bpm	Weight lbs(kg)	Length in(mm)
<b>W3131</b>	IQV® 20V	3/8" Square	360° LED	400	2,800	4,200	2.3(1.0)	5.2"(132)
<b>W3151</b>	IQV® 20V	1/2" Square	360° LED	450	2,800	4,200	2.3(1.0)	5.3"(135)



# IQV® 20V 1/4" Compact Impact Driver

## W3111 1/4"

From the brand you trust for precise, high-performance fastening tools – Ingersoll Rand® grows its IQV® 20V system with the W3111 IQV® 20V 1/4" Compact Impact Driver. Its brushless motor delivers up to 4,200 in-lbs of breakaway torque to quickly complete demanding applications. A compact form factor with 5.2" tip-to-tail length and weight under 2.3 lbs provide excellent control and maneuverability in tight workspaces. Including 3 speed modes and patented 360° shadowless LED light ring to fully eliminate shadows, the durable W3111 Compact Impact Driver is compatible with all IQV® 20V batteries.



### High Torque Performance:

Breakaway: Up to 474 Nm  
Fastening: Up to 384 Nm

Quick-Change 1/4" Hex Chuck

360° Shadowless LED Light Ring

Variable Speed Trigger

Compatible with all Ingersoll  
Rand® IQV® 20V Batteries



Three Speed Modes

Powerful, Efficient Brushless Motor

Impact-Resistant Bumpers

Durable Metal Gear Case

Comfortable Overmolded Grip

IQV® 20V 1/4" Compact Impact Driver								
Model	System	Drive Type	Light	Fastening Torque Nm	Free Speed rpm	Impacts/Min bpm	Bare Weight kg (lbs)	Length mm (inches)
W3111	IQV® 20V	1/4" Hex	360° LED	384	2,800	4,200	1.0 (2.3)	132 (5.2)



W3111-K22-AP1

### Also available as a kit.

Item No.	Kit Details
W3111-K22-AP1	1/4" 20V IMPACT KIT, W3111-K22-AP1, Charger, BL2012*2
W3111-K22-KR	1/4" 20V IMPACT KIT, W3111-K22-KR, Charger, BL2012*2
W3111-K22-JP	1/4" 20V IMPACT KIT, W3111-K22-JP, Charger, BL2012*2

# IQ<sup>V20</sup> Series™ Impact Wrench

## W5133 3/8" & W5153 1/2"



**Tuned impact mechanism**

delivers 745 Nm nut-busting torque and 495 Nm of MAX torque from a tool that measures just 179 mm from tip to tail and weighs only 2.4 kg (with BL2022 battery)

**Shadowless 360 degree LED light ring**

with task light mode and 4 dimmable settings

**All-metal drivetrain and hammer mechanism**

is robust, durable and optimized for maximum power and efficiency

**Variable-speed switch with electronic brake**

provides maximum control of the tool and increases safety—release trigger, drive stops spinning

**Tough composite housing and patented steel-reinforced frame**

protects against aggressive fluids, chemicals and repeated drops

**Powerful brushless motor** delivers durability and efficiency as well as best-in-class power-to-weight ratio

**IQ<sup>V</sup> Power Control System** includes 4 modes — full power, mid power, wrench tight, and hand tight—so there is no need to switch tools



MODE	HAND TIGHT	WRENCH TIGHT	MID POWER	MAX POWER
**	3-12	13-33	312	380
Nm	495	495	495	495
RPM	0-800	0-1600	0-2100	0-2100
BOLT SIZE	M6-M12	M10-M16	M12-M32	M16-M32
SHUT OFF	✓	✓		



**Ideal for:**



General automotive repair



Heavy equipment repair



General industrial

\*\*Requires 5.0 Ah battery for maximum performance

**IQ<sup>V20</sup> Series™ Impact Wrench**

Model	Battery	Voltage DC	Drive Size, Type	Impacts per Minute	No-Load Speed rpm	Nut-Busting Torque Nm	MAX Torque Nm	Tool & Battery Weight kg	Length mm
W5133	BL2022-5.0 Ah	20	3/8", Square Socket Retaining Ring	3,300	0-2,100	745	495	2.40	179
W5153	BL2022-5.0 Ah	20	1/2", Square Socket Retaining Ring	3,300	0-2,100	745	495	2.44	183



W5133-K22

**Available in Kits**

Item No.	Kit Details
W5153-K22-XX	1/2" Impact Wrench, Charger, 1 BL2012 Battery, 1 BL2022 Battery
W5133-K22-XX	3/8" Impact Wrench, Charger, 1 BL2012 Battery, 1 BL2022 Battery

XX is for country code: JP KR SGHK and AN.

# IQ<sup>V20</sup> Series™ Right Angle Impact Wrench

## W5330 3/8" & W5350 1/2"

**245 Nm of reactionless torque** spares your knuckles, while showing hard-to-reach jobs no mercy

**Steel-lined aluminum hammer case** and a super-tough nylon housing make it ready to handle for every 1.83 m drop or shop fluid that comes its way

**Conveniently located forward/reverse switch** for maximum control

**Ergonomic handle and comfort grip** offers the same reach as a ratchet

**High-power, extended-life 20-volt Li-Ion battery** is compatible with BL2012 and BL2010

**Fully serviceable head** for extended tool life; save on parts and replacement tool costs by removing a few quick screws for better accessibility

**From 0-1,900 rpm instantly** just like your favorite impact wrench, the W5330 flies through bolts with the variable speed trigger for more control

**Patent-pending Inline battery design** can go places other impact wrenches only dream of—spaces that used to be reserved for a traditional ratchet or your bare hands

**Ideal for:**

- General automotive repair
- Facilities maintenance
- General industrial

IQ <sup>V20</sup> Series™ Right Angle Impact Wrench							
Model	Battery	Voltage DC	Drive Size, Type	No-Load Speed rpm	MAX Torque Nm	Weight kg	Tool & Battery Length mm
W5330	BL2012-2.5 Ah	20	3/8", Square Socket Retaining Ring	0-1,900	245	2.06	439
W5330	BL2022-5.0 Ah	20	3/8", Square Socket Retaining Ring	0-1,900	258	2.27	439
W5350	BL2012-2.5 Ah	20	1/2", Square Socket Retaining Ring	0-1,900	245	2.06	439
W5350	BL2022-5.0 Ah	20	1/2", Square Socket Retaining Ring	0-1,900	258	2.27	439



### Available in Kits

Item No.	Kit Details
W5350-K22-XX	1/2" Impact Wrench, Charger, 2 BL2012 Battery & Case
W5330-K22-XX	3/8" Impact Wrench, Charger, 2 BL2012 Battery & Case

XX is for country code: JP KR SGHK and AN.

# IQ<sup>V20</sup> Series™ Impact Wrench

## W7152 1/2", W7152P 1/2" & W7252 1/2"

### Tuned impact mechanism

delivers 2033 Nm nut-busting torque and 1360 Nm of MAX torque from a tool that measures just 207 mm from tip to tail and weighs only 3.4 kg (with BL2022 battery)

### Shadowless 360 degree LED light ring

with task light mode and 4 dimmable settings

### All-metal drivetrain and hammer mechanism

is robust, durable and optimized for maximum power and efficiency

### Variable-speed switch with electronic brake

provides maximum control of the tool and increases safety—release trigger, drive stops spinning

### Tough composite housing and patented steel-reinforced frame

protects against aggressive fluids, chemicals and repeated drops

**Powerful brushless motor** delivers durability and efficiency as well as best-in-class power-to-weight ratio

**IQ<sup>V</sup> Power Control System** includes 4 modes—full power, half power, wrench tight, and hand tight—so there is no need to switch tools



MODE	HAND TIGHT	WRENCH TIGHT	HALF POWER	MAX POWER
Nm	5-14	50-150	135-720	135-1360
Nm	1360	1360	1360	1360
RPM	600	1000	0-1450	0-1900
BOLT SIZE	M6-M12	M10-M16	M12-M32	M16-M32
SHUT OFF	✓	✓		



### Ideal for:



General automotive repair



Heavy equipment repair



General industrial

\*\*Requires 5.0 Ah battery for maximum performance

### IQ<sup>V20</sup> Series™ Impact Wrench

Model	Battery	Voltage DC	Drive Size, Type	Impacts per Minute	Free Speed rpm	Nut-Busting Torque Nm	MAX Torque Nm	Tool & Battery	
								Weight kg	Length mm
W7152	BL2022-5.0 Ah	20V	1/2", Socket Retaining Ring	2450	0-1900	2033	1360	3.4	207
W7152P	BL2022-5.0 Ah	20V	1/2", Square Pin Detent	2450	0-1900	2033	1360	3.4	207
W7252	BL2022-5.0 Ah	20V	1/2", Socket Retaining Ring	2450	0-1900	2033	1360	3.6	257



W7152-K22

### Available in Kits

Item No.	Kit Details
W7152-K22-XX	1/2" Impact Wrench, Charger, 2 BL2022 Battery
W7152P-K22-XX	1/2" Impact Wrench, Charger, 2 BL2022 Battery
W7252-K22-XX	1/2" Impact Wrench, Charger, 2 BL2022 Battery

XX is for country code: JP KR SGHK and AN.

# IQ<sup>V20</sup> Series™ Impact Wrench

## W7172 3/4"

### Tuned impact mechanism

2033 Nm nut-busting torque and 1360 Nm of MAX torque from a tool that measures just 215 mm from tip to tail and weighs only 3.5 kg (with BL2022 battery)

### Shadowless 360 degree LED light ring

with task light mode and 4 dimmable settings

### All-metal drivetrain and hammer mechanism

is robust, durable and optimized for maximum power and efficiency

### Variable-speed switch with electronic brake

provides maximum control of the tool and increases safety—release trigger, drive stops spinning

### Tough composite housing and patented steel-reinforced frame

protects against aggressive fluids, chemicals and repeated drops

### Ideal for:



General automotive repair



Heavy equipment repair



General industrial



**Powerful brushless motor** delivers durability and efficiency as well as best-in-class power-to-weight ratio

**IQ<sup>V</sup> Power Control System** includes 4 modes — full power, half power, wrench tight, and hand tight—so there is no need to switch tools

MODE	HAND TIGHT	WRENCH TIGHT	HALF POWER	MAX POWER
Nm	5-14	50-150	135-720	135-1360
	1360	1360	1360	1360
RPM	600	1000	0-1450	0-1900
BOLT SIZE	M6-M12	M10-M16	M12-M32	M16-M32
SHUT OFF	✓	✓		



\*Requires 5.0 Ah battery for maximum performance

### IQ<sup>V20</sup> Series™ Impact Wrench

Model	Battery	Voltage DC	Drive Size, Type	Impacts per Minute	Free Speed rpm	Nut-Busting Torque Nm	MAX Torque Nm	Weight kg	Length mm
W7172	BL2022-5.0 Ah	20V	3/4", Square Socket Retaining Ring & Thru-Hole	2450	0-1900	2033	1360	3.5	215



W7172-K22

### Available in Kits

Item No.	Kit Details
W7172-K22-XX	3/4" Impact Wrench, Charger, 2 BL2022 Battery

XX is for country code: JP KR SGHK and AN.

# IQ<sup>V20</sup> Series™ Impact Wrench

W9691 & W9491

**WORLD'S MOST POWERFUL** Cordless Impact Wrench

### Battery Platform

No need of expense on new batteries. Two IQV20 batteries deliver up to 250 fasteners per charge

### Control

IQV Power Control System- easily switch between MAX, MID or Snug modes quickly

### Power

4000Nm nut-busting torque and 2980Nm tightening torque, comparable to best in class 1" pneumatic impacts.

### Accessibility

6" extended anvil for better access.

### Durability

Backed up by IP56 rating, the tool has been put through the most rigorous testing to ensure it always performs in the face of the toughest applications.



MODE	REVERSE MAX	SNUG MODE	MID POWER	FORWARD MAX
MAX TORQUE (Nm)	2980	250	540	2980
FREE SPEED (RPM)	890	500	540	890
SHUTOFF		✓	✓	



### IQV Series W9691/9491 Cordless Impact Wrenches

Model	Item	Full Forward Torque Nm	Nut Busting Torque Nm	RPM	Weight kg	Length mm	Width mm	Drive Size in	Voltage	Noise Pressure dB	Vibration m <sup>2</sup> /s/K
W9691	Bare Tool	2980	4000	890	13.2	664	176	1	2x20V	95.9	23.5/7.7
W9491	Bare Tool	2980	3500	890	12.5	551	176	1	2x20V	94	25.8/8.5

### Available in Kits

Item No.	Kit Details
W9691-K4E-XX	1 6" extended tool, 4 BL2022 batteries, 1 dual bay charger
W9491-K4E-XX	1 standard tool, 4 BL2022 batteries, 1 dual bay charger

XX is for country code: JP KR SGHK and AN.



# IQ<sup>V20</sup> Series™ Ratchet Wrench

## R3130 3/8" & R3150 1/2"



**Proven engineered head** is the same durable ratchet head used in our air-powered ratchet, so it stands up to the toughest professional use

**All-metal gear train** is robust, durable and optimized for maximum power and efficiency

**Compact and durable motor** delivers optimal performance and long life

**Ergonomic handle and comfort grip** offers the same reach as an air ratchet

**High-power, extended-life 20-volt Li-Ion battery** is compatible across many IQ<sup>V20</sup> Series cordless tools

**73 Nm of torque** is the same kind of power delivered from an air tool

**Tough composite housing and patented steel-reinforced frame** protects against fluids, chemicals and repeated drops

**Variable-speed trigger** provides maximum control of the tool

**Unique slim-line design** provides easy access in tight spots; where you can get your arm, you can get your ratchet

**Ideal for:**

- 

General automotive repair
- 

Collision repair
- 

Facilities maintenance

**IQ<sup>V20</sup> Series™ Ratchet Wrench**

Model	Battery	Voltage DC	Drive Size, Type	No-Load Speed rpm	MAX Torque Nm	Tool & Battery	
						Weight kg	Length mm
R3130	BL2012-2.5 Ah	20	3/8", Square	0-225	73	2.0	445
R3130	BL2022-5.0 Ah	20	3/8", Square	0-225	73	2.3	445
R3150	BL2012-2.5 Ah	20	1/2", Square	0-225	73	2.0	445
R3150	BL2022-5.0 Ah	20	1/2", Square	0-225	73	2.3	445

**Available in Kits**

Item No.	Kit Details
R3130-K22-XX	3/8" Ratchet, Charger, 2 BL2012 Battery
R5130-K22-XX	1/2" Ratchet, Charger, 2 BL2012 Battery

XX is for country code: JP KR SGHK and AN.



R3130-K22

# IQ<sup>V20</sup> CORDLESS 4.5/5.0" ANGLE GRINDER



## G5351M 20V 115/125mm

Break free from the cord with the G5351 IQV<sup>®</sup> 20V Cordless 4.5/5.0" Angle Grinder & Cut-Off Tool that brings the power of pneumatic with the mobility of a cordless tool. Slim and well-balanced, the G5351 allows access to tight spaces and weighs 30% less than its leading competitor. Tool features an extended paddle switch and unique inline battery design that eliminates interference from the forearm during use. The G5351 couples a high-performance brushless motor with advanced features like anti-kickback and e-brake for safe, reliable performance. Its light weight, slim handle with overmolded grip makes the G5351 Cordless Grinder comfortable for extended use. Tool-free guard and spindle-lock button allow quick and easy accessory changes. The G5351 is compatible with all IQV<sup>®</sup> 20V batteries.



### G5351M IQV20 CORDLESS 4.5/5.0" ANGLE GRINDER

Model	Voltage	Wheel Size	Spindle Size	Style	Max Free Speed (rpm)	Power hp (kW)	Exhaust	Wheel Types	Length in (mm)	Weight lbs (kg)
G5351	20	4.5/5.0"	5/8" - 11"	Right Angle	8,000	1 (0.75)	Rear	Type 27 (Grinding) Type 1 (Cutting)	13.25 (337)	5.1 (2.31)



G5351M-K22-CN

### Also available as a kit.

Model	套装内容
G5351M-K22-CN	锂电角磨机 G5351M-K22-CN 套装加电池BL2022*2, BC1121-AP1

# IQ<sup>V20</sup> Hammer Drill

## D5241 1/2"



The Ingersoll Rand® D5241 IQV20™ Hammer Drill combines the ease and versatility of a cordless tool with the power and precision of our best-in-class, professional-grade portfolio. With 3 drill settings, 2 speed settings, a 1/2" chuck, and a 24-position clutch, it's designed to give you the precise torque you need, whether you're drilling through a thin layer of plaster or a solid cement wall.



### D5241 IQV20™ Hammer Drill

Model	System	Drive Type	Max Torque Nm	Free Speed RPM	Impact Rate BPM	Length in (mm)	Weight lb(kg)
D5241	IQV20™	1/2" Keyless	125	1,700	30,000	7.8(198.12)	3.5(1.58)



Kit

### Also available as a kit.

Item No.	Kit Details
D5241-K22-AP1	BL2022*2, and BC1121 suits BC1121-AP4 and BC1121-AP6
D5241-K22-KR	BL2022-AP5*2, and BC1121-AP5
D5241-K22-JP	BL2022*2, and BC1121-AP3

Cordless

# IQ<sup>V20</sup> Series™ Grease Gun

## LUB5130

**High operating pressure and flow rate** powers through clogged fittings, quickly delivering grease and reducing job time

**Extended durability** with a high-power, long-life motor and all-metal drivetrain

**Ideal for:**



**Electronic shutdown and high-pressure LED indicator** prevents grease spills and extends motor life

**Easy 3-way load system** for maximum versatility with cartridge, bulk and manual loading

**Standard 30" hose** improves reach, helps operators access tight spots

### IQ<sup>V20</sup> Series™ Grease Gun

Model	Battery	Voltage DC	Pressure Bar	Flow Rate g/min.	Cannister Capacity g	Grease Type NLGI	Grease Hose Length mm	Weight kg	Tool & Battery
									Size: LxWxH mm
LUB5130	BL2012 - 2.5 Ah	20	431	75	400	2-4	762	3.3	490x200x94
LUB5130	BL2022 - 5.0 Ah	20	431	75	400	2-4	762	3.5	490x200x94



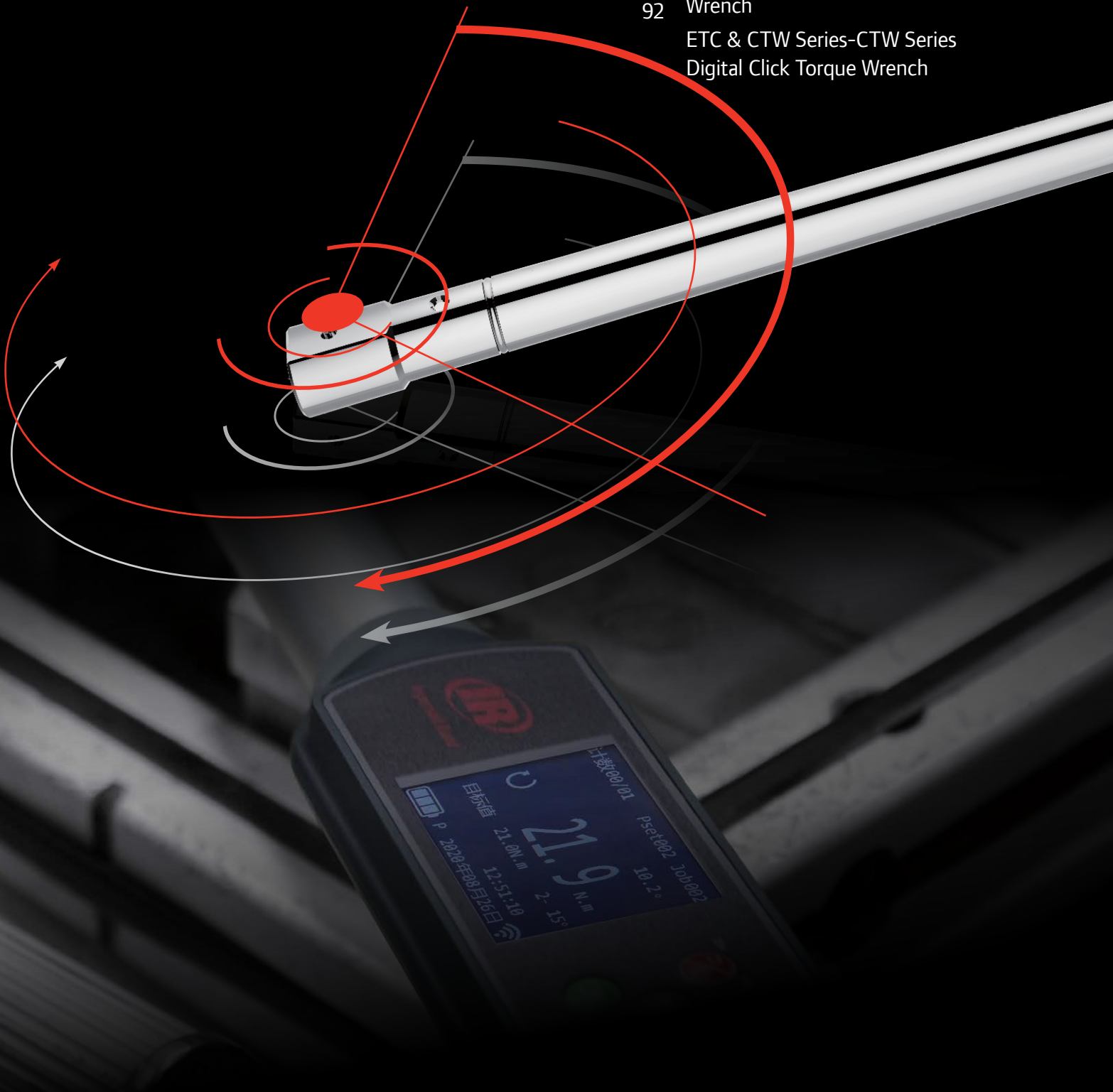
LUB5130-K12

### Available in Kits

Item No.	Kit Details
LUB5130-K12-XX	Grease Gun, Charger, 1 BL2012 Battery

# Quality Control

- 86 Insightqct™ Series Torque Testers And Analyzers
- 90 ETC & CTW Series-ETC Series Cordless Digital Display Wrench
- 92 ETC & CTW Series-CTW Series Digital Click Torque Wrench



# Fastening Industry

Competition is driving product quality requirements to new levels. Meeting these demands requires keeping your processes in control and your tools working within specifications.



## THE SOLUTION

### INSIGHTqCT™ Series calibration equipment

Our INSIGHTqCT™ Series calibration equipment is the ideal quality control companion for assembly operations with stringent torque control standards. Choose from our offering of easy-to-use torque testers, analyzers, transducers, and joint kits to set up and calibrate your full portfolio of precision tools.

### IQCTT SERIES TORQUE TESTERS

The IQCTT Series of torque testers includes four different models with integrated transducers that allow rapid and accurate torque checking of fastening tools from 0.1 to 30 Nm (1 to 265 in-lb). The IQCTT's enhanced features include track and peak modes for most hand and power tools, a pulse mode that measures and counts pulses for pulse tools, and a click mode for hand-click wrenches. Included trace and statistical functions support even the most detailed joint analysis and proper decision making.

### IQCTA SERIES TORQUE ANALYZER

The IQCTA Series torque analyzer shares the same compact, sleek design and impressive feature set, but is designed for portability. It can dynamically measure and record the output of precision fastening tools on the application or the workbench in both directions when coupled with our automatically recognized Smart or Industry Standard transducers. Joint simulators are also available to emulate different joint rates from hard to soft and can be used with both stationary and rotary transducers when working away from the application.



# Portfolio Overview

Ingersoll Rand® offers a full line of production fastening equipment, including pneumatic and electric screwdrivers, nutrunners, drills, riveters, pulse tools, as well as hand-held and multispindle fixtured DC nutrunners. Whether you need a solution for a single, specific application or an entire assembly line, you can trust our century of tool design experience to meet your needs.



## Calibration Equipment



### IQCTT TESTER

- Compact bench-mount unit
- Integrated torque transducer in (4) ranges from 1 to 30 Nm
- Large color screen
- Simple programming and navigation
- Full statistical and tightening trace analysis
- Variable rate rundown adapter included
- Rechargeable Li-Ion battery with auto-shutdown feature
- USB port for data export

Ideal for testing and calibration of lower torque assembly tools in a tool crib, calibration lab, or workstation.



### IQCTA ANALYZER

- Lightweight portable unit
- Compatible with full range of Industry Standard (IS) and Smart external transducers
- Large color screen
- Simple programming and navigation
- Full statistical and tightening trace analysis
- Rechargeable Li-Ion battery with auto-shutdown feature
- USB port for data export

Ideal for use with a broad range of external transducers to test output of assembly tools on the application or wherever torque verification is required.



### ACCESSORIES

- Rotary transducers
- Stationary transducers
- Joint simulator kits
- Rundown adapters
- Transducer cables
- Battery charger
- Calibration service

Take advantage of our extensive line of accessories and services to optimize your assembly and quality assurance processes.

### TRANSDUCERS

Rotary Stationary



### JOINT SIMULATION KITS

Rotary Stationary Rundown Adaptor



### OTHER ACCESSORIES

- |                       |            |
|-----------------------|------------|
| Cable - IS transducer | ETA2-TC    |
| Neck strap            | ETA2-STRAP |
| Port saver - 25 pin   | ETA2-P525  |
| Power Supply          | IQC-PS5    |

# INSIGHT<sub>qct</sub>™ SERIES

## Torque Testers and Analyzers

### POWER AND HAND TOOL COMPATIBILITY

means only one system is needed to setup and calibrate all of your precision tools

### FULL STATISTICAL CAPABILITIES

Include Count, Range, Mean, MIN, MAX, Standard Deviation, Cm, Cmk, Cp, Cpk

### COMPACT AND LIGHTWEIGHT

with rechargeable Li-Ion battery provides ease of use and portability on the assembly line and space savings on the workbench

**LARGE COLOR SCREEN** shows clear, easy-to-read test results, menus, and traces

**SOFT-TOUCH KEYPAD** and intuitive menus make navigation and test setup quick and simple

**AUDIBLE AND VISIBLE INDICATORS** give High, Low, and Pass cycle status



### TYPICAL SCREEN



- Monitors bi-directional torque, angle, time, RPM & pulse count
- Supports onboard trace analysis and data export
- Reads in peak, click, pulse, or track mode
- Stores 999 time-stamped readings
- Auto-recognition of Smart transducers
- Selectable filter frequencies
- USB data export for readings and trace data
- Configurable Auto-print function via USB
- Eleven (11) units of measure
- Adjustable power-save settings
- Multi-language support for English, French, German, Italian, and Spanish

**IQCTA SERIES – INSIGHT<sub>qct</sub>™ TORQUE ANALYZER**

Model	Compatible Transducer	Data Transfer	Auto Recognition	Screen Size (mm)
IQCTA	TRD TR TRDA TSD TS Industry Standard UTA	USB (csv) Printer	Yes	85x50 mm



**IQCTT SERIES – INSIGHT<sub>qct</sub>™ TORQUE TESTER**

Model	in-lb Range	Nm Range	Rundown Adaptor*	Service Kit
IQCTT-1	0.88 - 8.8	0.1 - 1	ETT-RA-1	ETT-RA-1-KIT
IQCTT-4	3.50 - 35	0.4 - 4	ETT-RA-4	ETT-RA-4-KIT
IQCTT-12	10.6 - 106	1.2 - 12	ETT-RA-12	ETT-RA-12-KIT
IQCTT-30	26.5 - 265	3.0 - 30	ETT-RA-30	ETT-RA-30-KIT

\* IQCTT tester includes rundown adaptor, carrying case, power supply, manuals, and a certificate of calibration. IQCTA analyzer includes carrying case, power supply, manuals, and neck strap.

**QUICK DOWNLOAD OF** results to printer or USB for data analysis, graphing, documentation, or calibration

**Dimensions**  
209 x 194 x 78 mm

**Weight**  
2.2 lb / 1.0 kg (IQCTA)  
4.5 lb / 2.1 kg (IQCTT)



**TRANSDUCERS**

ROTARY	Industry Standard	Smart Transducers		(in-lb) ft-lb	Nm	in
		Torque Only	Torque and Angle			
	TR2H4	-	-	(1.0 - 18)	0.10 - 2	1/4
	TR5H4	TRD5H4	TRDA5H4	(2.2 - 44)	0.25 - 5	1/4
	TR20H4	TRD20H4	TRDA20H4	(9.0 - 180)	1 - 20	1/4
	TR20S4	TRD20S4	TRDA20S4	(9.0 - 180)	1 - 20	1/4
	TR75S6	TRD75S6	TRDA75S6	2.8 - 55	3.8 - 75	3/8
	TR180S8	TRD180S8	TRDA180S8	6.7 - 133	9 - 180	1/2
	TR250S12	-	-	9.2 - 185	12.5 - 250	3/4
	TR500S12	TRD500S12	TRDA500S12	18.5 - 370	25 - 500	3/4
STATIONARY	TS30S4	TSD28S4	-	1.1 - 22	1.5 - 30	1/4
	TS150S6	TSD135S6	-	5.5 - 110	7.5 - 150	3/8
	TS300S8	TSD270S8	-	11 - 221	15 - 300	1/2
	TS1000S12	TSD1000S12	-	37 - 738	50 - 1000	3/4

**JOINT SIMULATORS**

ROTARY	Industry Standard	Includes Transducer	Joint Simulator Bolt Service Kit	ft-lb	Nm	in
	JKR20	No	JKS30-BKIT	0.75 - 15	1.0 - 20	1/4
	JKR75	No	JKS150-BKIT	2.8 - 55	3.8 - 75	3/8
	JKR180	No	JKS300-BKIT	6.7 - 133	9.0 - 180	1/2
	JKR500	No	JKS1000-BKIT	18.5 - 370	25.0 - 500	3/4
STATIONARY	JKS30	No	JKS30-BKIT	1.1 - 22	1.5 - 30	1/4
	JKS150	No	JKS150-BKIT	5.5 - 110	7.5 - 150	3/8
	JKS300	No	JKS300-BKIT	11.0 - 221	15 - 300	1/2
	JKS1000	No	JKS1000-BKIT	37.0 - 738	50 - 1000	3/4
	JKST30	TS30S4	JKS30-BKIT	1.1 - 22	1.5 - 30	1/4
	JKST150	TS150S6	JKS150-BKIT	5.5 - 110	7.5 - 150	3/8
	JKST300	TS300S8	JKS300-BKIT	11.0 - 221	15 - 300	1/2
	JKST1000	TS1000S12	JKS1000-BKIT	37.0 - 738	50 - 1000	3/4

# ETC Series Cordless Digital Display Wrench

- Dedicated controller
- Individual communication channel
- Integrated serial interface and IO port can connect multiple external devices
- Up to 8 wrenches can be communicated by 1 controller



LoRa controller

## Length and Weight

Torque Range	Driver Plug-in	Ratchet Head in Kit	Image	Length		Weight	
				mm	kg	mm	kg
1-10	9*12	1/4"		463	1	463	1
3-30	9*12	3/8"		463	1	463	1
10-100	9*12	1/2"		523	1.2	523	1.2
20-200	14*18	1/2"		533	1.2	533	1.2
40-400	14*18	3/4"		658	1.63	658	1.63
60-600	24*32	3/4"		880	3.1	880	3.1
80-800	24*32	3/4"		1170	4.1	1170	4.1
100-1000	24*32	3/4"		1170	4.1	1170	4.1

Kit contents: ETC digital display wrench, two batteries, charger, debugging data wire, ratchet head, manual, factory verification report.

# Lora Cordless Digital Wrench

Dedicated controller with integrated industrial interface

## Item Number

Max. Torque	1:1 Kit Module	1:8 Kit Module
10Nm	ETC2-10-L-AP	ETC2-10-D-AP
30Nm	ETC2-30-L-AP	ETC2-30-D-AP
100Nm	ETC2-100-L-AP	ETC2-100-D-AP
200Nm	ETC2-200-L-AP	ETC2-200-D-AP
400Nm	ETC2-400-L-AP	ETC2-400-D-AP
600Nm	ETC2-600-L-AP	ETC2-600-D-AP
800Nm	ETC2-800-L-AP	ETC2-800-D-AP
1000Nm	ETC2-1000-L-AP	ETC2-1000-D-AP

## Accessory



### Controller

1:1 Module-AP	QCWC1-M-AP
1:8 Module-AP	QCWC1-D-AP

## Specification

ETC Series	Specification
Torque Range (Nm)	1~1000
Torque Accuracy	+/- 1%
Angle Measurement	Angle sensor & Gyroscope
Angle Accuracy	+/- 1°
Battery Capacity	8 hours work or 500 bolts with wireless connection
LED Indicate	R/G/B ring
Wireless Connection	LoRa, 50m distance without occlusion
Controller IO Port	8I/8O
EOR Output	Open Protocol
Max. Job	100
Data Storage	1200 EOR & 10 Trace
Tighten Strategy	Torque/Torque Control & Angle Monitor/ Torque Monitor & Angle Control
Barcode Scanner	Integrated Serial Port
Display	130*42 Colorful Display

# Wifi Cordless Digital Wrench

Flexible and free working space

## Item Number

Max. Torque	1:1 Kit Module
10Nm	ETC2-10-W-AP
30Nm	ETC2-30-W-AP
100Nm	ETC2-100-W-AP
200Nm	ETC2-200-W-AP
400Nm	ETC2-400-W-AP
600Nm	ETC2-600-W-AP
800Nm	ETC2-800-W-AP
1000Nm	ETC2-1000-W-AP

## Specification

ETC Series	Specification
Torque Range (Nm)	1~1000
Torque Accuracy	+/- 1%
Angle Measurement	Angle sensor & Gyroscope
Angle Accuracy	+/- 1°
Battery Capacity	8 hours work or 500 bolts with wireless connection
LED Indicate	R/G/B 360°
Wireless Connection	WiFi, 2.4GHz/5GHz
EOR Output	Open Protocol
Max. Job	100
Data Storage	1200 fastening results + 31 Trace
Tighten Strategy	Torque/Torque Control & Angle Monitor/ Torque Monitor & Angle Control
Display	130*42 Colorful Display

# CTW Series Digital Click Torque Wrench

How to make 1+1 larger than 2?

CTW series products combine the data of smart tools with the high efficiency of click wrenches, adding accurate measurement of fastening results, wireless traceable data, and robust flexible error-proof functions to efficient production. The new products cover a maximum torque of 1000Nm and are widely used in vehicle manufacturing, construction machinery, railroad locomotive and other industries.

Improving productivity is the pursuit of modern production scenarios, and Ingersoll-Rand is committed to providing our customers with more convenient productivity tools.



## Length & Weight

Torque Range	Driver Plug-in	Ratchet Head in Kit	Image	Length		Weight	
				mm	kg	mm	kg
10-30	9*12	1/4"		300	0.7		
20-60	9*12	1/2"		360	0.8		
50-125	9*12	1/2"		405	0.95		
80-200	14*18	1/2"		465	1		
132-330	14*18	3/4"		540	1.5		
200-500	24*32	3/4"		750	4.4		
300-800	24*32	3/4"		950	5.3		
400-1000	24*32	3/4"		950	5.3		

Kit contents: ETC digital display wrench, two batteries, charger, debugging data wire, ratchet head, manual, factory verification report.

## Item Number

Max. Torque	1:1 Kit Module
30Nm	CTW-30-L-AP
60Nm	CTW-60-L-AP
125Nm	CTW-125-L-AP
200Nm	CTW-200-L-AP
330Nm	CTW-330-L-AP
500Nm	CTW-500-L-AP
800Nm	CTW-800-L-AP
1000Nm	CTW-1000-L-AP

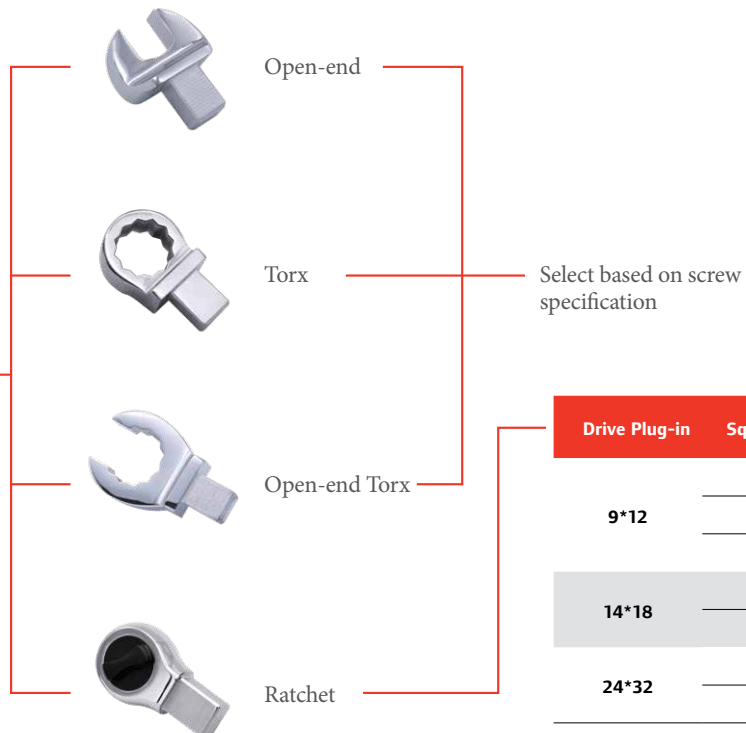
Controller specification	Model
1:1 Module	QCWC1-M-CTW-AP

## Specification


ETC Series	Specification
Torque Range (Nm)	10-1000
Torque Accuracy	+/- 3%
Battery Capacity	8 hours work or 500 bolts with wireless connection
LED Indicate	R/G/B 360°
Display	128*64 HD OLED LCD
Wireless Connection	LoRa, 50m distance without occlusion
Controller IO Port	8I/8O
EOR Output	Open Protocol
Data Storage	1200 EOR
Torque adjusting method	Mechanical adjustment of jump-off pre-load force


## Drive Head


Wrench	Drive Plug-in
10 Nm	9*12
30 Nm	9*12
100 Nm	9*12
200 Nm	14*18
400 Nm	14*18
600 Nm	24*32
800 Nm	24*32
1000 Nm	24*32



**Drive Head List**


Drive Type	Item Name	Plug-in (mm)	Square Size (in)	Tooth Number	Weight (g)
<b>Ratchet</b>					
	ET9-R-14	9*12	1/4"	45	135
	ET9-R-38	9*12	3/8"	45	160
	ET9-R-12	9*12	1/2"	45	160
	ET14-R-12	14*18	1/2"	45	265
	ET14-R-34	14*18	3/4"	45	305
	ET24-R-34	24*32	3/4"	45	1040
	ET24-R-1	24*32	1"	45	1140

Drive Type	Item Name	Plug-in (mm)	Square Size (in)	Tooth Number	Weight (g)
<b>开口头</b>					
	ET9-O-7	9*12	7	22	5
	ET9-O-8	9*12	8	22	5
	ET9-O-9	9*12	9	26	5.5
	ET9-O-10	9*12	10	26	5.5
	ET9-O-11	9*12	11	26	5.5
	ET9-O-12	9*12	12	30	7
	ET9-O-13	9*12	13	30	7
	ET9-O-14	9*12	14	35	8
	ET9-O-15	9*12	15	35	8
	ET9-O-16	9*12	16	38	8
	ET9-O-17	9*12	17	38	8
	ET9-O-18	9*12	18	42	8
	ET9-O-19	9*12	19	42	8
	ET9-O-20	9*12	20	48	8
	ET9-O-21	9*12	21	50	8
	ET9-O-22	9*12	22	50	8
	ET9-O-23	9*12	23	53	8
	ET9-O-24	9*12	24	53	8
	ET9-O-27	9*12	27	64	8
	ET9-O-30	9*12	30	70	8
	ET9-O-32	9*12	32	70	8
	ET9-O-34	9*12	34	80	8
	ET9-O-36	9*12	36	80	8
	ET9-O-38	9*12	38	82	8
	ET9-O-41	9*12	41	85	8
	ET9-O-46	9*12	46	100	8
	ET14-O-13	14*18	13	32	7
	ET14-O-14	14*18	14	35	8
	ET14-O-15	14*18	15	35	8
	ET14-O-16	14*18	16	38	9
	ET14-O-17	14*18	17	38	9
	ET14-O-18	14*18	18	42	10
	ET14-O-19	14*18	19	42	10
	ET14-O-21	14*18	21	50	11
	ET14-O-22	14*18	22	50	11
	ET14-O-24	14*18	24	53	13
	ET14-O-26	14*18	26	53	13
	ET14-O-27	14*18	27	64	13
	ET14-O-29	14*18	29	68	13
	ET14-O-30	14*18	30	70	13
	ET14-O-32	14*18	32	70	13
	ET14-O-34	14*18	34	78	13
	ET14-O-36	14*18	36	80	13
ET14-O-38	14*18	38	85	13	
ET14-O-41	14*18	41	90	13	
ET14-O-42	14*18	42	93	13	
ET14-O-43	14*18	43	95	13	





Drive Type	Item Name	Plug-in (mm)	Square Size (in)	Tooth Number	Weight (g)
	ET14-O-44	14*18	44	98	13
	ET14-O-46	14*18	46	100	13
	ET14-O-48	14*18	48	104	13
	ET14-O-50	14*18	50	106	13
	ET14-O-55	14*18	55	116	13
	ET14-O-60	14*18	60	121	13
	ET24-O-17	24*32	17	62	25
	ET24-O-19	24*32	19	65	25
	ET24-O-22	24*32	22	68	25
	ET24-O-24	24*32	24	70	25
	ET24-O-27	24*32	27	72	25
	ET24-O-30	24*32	30	75	25
	ET24-O-32	24*32	32	76	25
	ET24-O-34	24*32	34	78	25
	ET24-O-36	24*32	36	80	25
	ET24-O-38	24*32	38	91	25
	ET24-O-41	24*32	41	95	25
	ET24-O-46	24*32	46	100	25
	ET24-O-48	24*32	48	104	25
	ET24-O-50	24*32	50	106	25
	ET24-O-55	24*32	55	119	25
	ET24-O-60	24*32	60	121	25
	ET24-O-65	24*32	65	130	25
	ET24-O-70	24*32	70	132	25

**Torx**



	ET9-P-7	9*12	7	13	8
	ET9-P-8	9*12	8	14	8
	ET9-P-10	9*12	10	17	9
	ET9-P-11	9*12	11	18.5	9
	ET9-P-12	9*12	12	20	12
	ET9-P-13	9*12	13	22	12
	ET9-P-14	9*12	14	23	12
	ET9-P-15	9*12	15	24	12
	ET9-P-16	9*12	16	26	13
	ET9-P-17	9*12	17	27	13
	ET9-P-18	9*12	18	28.5	13
	ET9-P-19	9*12	19	30	13
	ET9-P-21	9*12	21	33	13
	ET9-P-22	9*12	22	34.5	13
	ET14-P-13	14*18	13	21.5	11
	ET14-P-14	14*18	14	23	11
	ET14-P-15	14*18	15	24	11
	ET14-P-16	14*18	16	26	12
	ET14-P-17	14*18	17	27	12
	ET14-P-18	14*18	18	28.5	12
	ET14-P-19	14*18	19	30.5	12
	ET14-P-21	14*18	21	33	15
	ET14-P-22	14*18	22	34.5	15
	ET14-P-24	14*18	24	37.5	15
	ET14-P-27	14*18	27	41.5	16
	ET14-P-30	14*18	30	45	16
	ET14-P-32	14*18	32	47.5	16
	ET14-P-34	14*18	34	51	16
	ET14-P-36	14*18	36	54	16
	ET14-P-41	14*18	41	61	16
	ET24-P-24	24*32	24	65	25
	ET24-P-27	24*32	27	68	25
	ET24-P-30	24*32	30	72	25
	ET24-P-32	24*32	32	74	25

## Quality Control | ETC & CTW Series

Drive Type	Item Name	Plug-in (mm)	Square Size (in)	Tooth Number	Weight (g)
	ET24-P-34	24*32	34	76	25
	ET24-P-36	24*32	36	80	25
	ET24-P-38	24*32	38	80	25
	ET24-P-41	24*32	41	80	25
	ET24-P-46	24*32	46	86	25
	ET24-P-50	24*32	50	98	25
	ET24-P-55	24*32	55	105	25
	ET24-P-60	24*32	60	110	25
	ET24-P-65	24*32	65	128	25
	ET24-P-70	24*32	70	128	25
	ET24-P-55	24*32	55	105	25
	ET24-P-60	24*32	60	110	25
	ET24-P-65	24*32	65	128	25
	ET24-P-70	24*32	70	128	25
<b>Open-end Torx</b>					
	ET9-OP-8	9*12	8	22	5
	ET9-OP-9	9*12	9	26	5.5
	ET9-OP-10	9*12	10	26	5.5
	ET9-OP-11	9*12	11	26	5.5
	ET9-OP-12	9*12	12	30	7
	ET9-OP-13	9*12	13	30	7
	ET9-OP-14	9*12	14	35	8
	ET9-OP-15	9*12	15	35	8
	ET9-OP-16	9*12	16	38	8
	ET9-OP-17	9*12	17	38	8
	ET9-OP-18	9*12	18	42	8
	ET9-OP-19	9*12	19	42	8
	ET9-OP-21	9*12	21	50	8
	ET9-OP-22	9*12	22	50	8
	ET9-OP-24	9*12	24	53	8
	ET9-OP-27	9*12	27	64	8
	ET9-OP-30	9*12	30	70	8
	ET9-OP-32	9*12	32	70	8
	ET9-OP-36	9*12	36	80	8
	ET9-OP-41	9*12	41	85	8
	ET9-OP-46	9*12	46	100	8
	ET14-OP-13	14*18	13	32	7
	ET14-OP-14	14*18	14	35	8
	ET14-OP-15	14*18	15	35	8
	ET14-OP-16	14*18	16	38	9
	ET14-OP-17	14*18	17	38	9
	ET14-OP-18	14*18	18	42	10
	ET14-OP-19	14*18	19	42	10
	ET14-OP-21	14*18	21	50	11
	ET14-OP-22	14*18	22	50	11
	ET14-OP-24	14*18	24	53	13
	ET14-OP-26	14*18	26	53	13
	ET14-OP-27	14*18	27	64	13
	ET14-OP-29	14*18	29	68	13
ET14-OP-30	14*18	30	70	13	
ET14-OP-32	14*18	32	70	13	
ET14-OP-34	14*18	34	78	13	
ET14-OP-36	14*18	36	80	13	
ET14-OP-38	14*18	38	85	13	
ET14-OP-41	14*18	41	90	13	
ET14-OP-44	14*18	44	98	13	
ET14-OP-46	14*18	46	100	13	



Drive Type	Item Name	Plug-in (mm)	Square Size (in)	Tooth Number	Weight (g)
	ET14-OP-50	14*18	50	106	13
	ET14-OP-55	14*18	55	116	13
	ET14-OP-60	14*18	60	121	13
	ET24-OP-19	24*32	19	65	25
	ET24-OP-24	24*32	24	70	25
	ET24-OP-27	24*32	27	72	25
	ET24-OP-30	24*32	30	75	25
	ET24-OP-32	24*32	32	76	25
	ET24-OP-34	24*32	34	78	25
	ET24-OP-36	24*32	36	80	25
	ET24-OP-38	24*32	38	91	25
	ET24-OP-19	24*32	19	65	25
	ET24-OP-24	24*32	24	70	25
	ET24-OP-27	24*32	27	72	25
	ET24-OP-30	24*32	30	75	25
	ET24-OP-32	24*32	32	76	25
	ET24-OP-34	24*32	34	78	25
	ET24-OP-36	24*32	36	80	25
	ET24-OP-38	24*32	38	91	25





**Customer  
Support**

# Customer Support



## Maintenance & calibration service

Moving parts such as output shafts, gears, bearings, motors, etc. will interact and wear out during the operation of the tool; the overall movement of the tool will also lead to wear of the cables; accumulation of dust, corrosion, and temperature effects on the circuit boards will also lead to anomalies and failures of the system; all of these may lead to the failure of the tool's function or even malfunction. Regular inspection, proper cleaning and maintenance can slow down component wear and prolong service life. Knowledge of the status of the internal parts of the tool can help to stockpile or replace some spare parts in advance in case of a sudden failure of the tool, shortening the maintenance cycle and downtime.

For precision fastening tool systems, the accuracy and repeatable performance of the tightening result is very important. Especially in the trend towards data-based production, where traceability of production data has been realized, the importance of maintaining the fastening accuracy of the tools is unquestionable. Regular calibration of the tools and correction of their operating parameters will go a long way towards ensuring that the torque output is always within the required accuracy range. This greatly facilitates the assurance and maintenance of fastening quality.

The Ingersoll Rand Tool Service team can provide customers in the construction machinery industry with a variety of maintenance and calibration services.

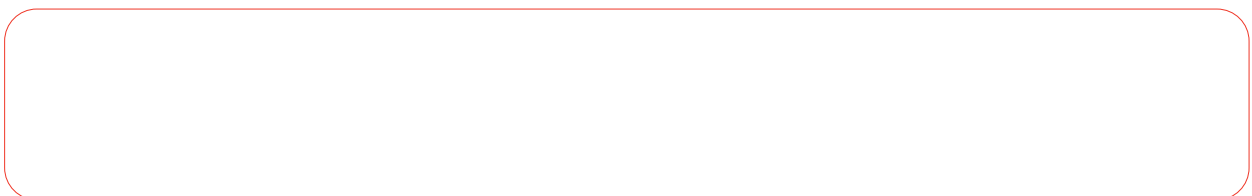
- Send tools to Ingersoll Rand Service Center for maintenance calibration service
- Annual protection plan, maintenance calibration package, all-round protection of the use and efficiency of tools
- On-site maintenance and calibration services upon customer request



## Contact Us

If you have any technical problems or after-sales service needs, please feel free to contact Ingersoll Rand service personnel or local distributors, and we will do our best to provide support to solve your problems. If you need repair, maintenance and other service needs, you can choose to send to Ingersoll Rand service center for service, please contact the local Ingersoll Rand service personnel to arrange for you!

For any after-sales questions and feedback, you can contact us through the After-Sales Service Center:







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](http://www.IRco.com).