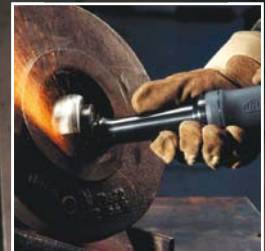




# *The Solution Providers*

*Industrial Productivity Solutions*



*Quality and performance on the toughest jobs*

# GRINDERS



GH011A-600-1



325SG4A / 335SG4A



312AC4A



G1A200RP63



3445MAX/WI / 345MAX/WI



DG15W-A / DG18W-A



4151



314

## DIE GRINDERS (STRAIGHT)

Model	Rated Power hp	Free Speed rpm	Weight kg	Length mm	Configuration	Recommended Hose Size mm
GH011A-600-1	0.1	60000	0.07	136	1/8" collet	5
7980-A	0.1	85000	0.40	143	1/8" collet	5
325SG4A	0.4	25000	0.57	141	1/4" collet	10
335SG4A	0.37	35000	0.59	141	1/4" collet	10
3108*	0.33	25000	0.58	171	1/4" collet	10
DG18C-A	0.9	18000	1.76	334	1/4" collet	10
DG21C-A	0.9	21000	1.76	334	1/4" collet	10
325SC4A	0.40	25000	0.43	166	1/4" collet	10
330SC4A	0.33	30000	0.43	166	1/4" collet	10
335SC4A	0.37	35000	0.43	166	1/4" collet	10

\* For light duty application

## DIE GRINDERS (ANGLE)

Model	Rated Power hp	Free Speed rpm	Weight kg	Length mm	Height Over Spindle mm	Side to Center Distance mm	Configuration	Recommended Hose Size mm	Air Inlet Size
312AC4A	0.40	12000	0.55	170	19	64	1/4" collet	10	
314AC4A	0.33	14000	0.55	170	19	64	1/4" collet	10	
320AC4A	0.40	20000	0.55	170	19	64	1/4" collet	10	
3102*	0.33	20000	0.58	171			1/4" collet	10	1/4" NPT

\* For light duty application

## ANGLE GRINDERS

Model	Rated Power hp	Free Speed rpm	Weight kg	Length mm	Wheel Capacity inch	Recommended Hose Size mm	Air Inlet Size
G1A200RP63	0.4	20000	0.7	154	3"	8	1/4" NPT
G2A120RP64	0.8	12000	1.2	195	4"	10	1/4" NPT
G2A090RP64	0.8	9000	1.2	224	4"	10	1/4" NPT
701AGL-7600	1.4	7600	2.8	315	7"	12	1/4" NPT
3445MAX/WI	0.88	12000	1.5	244	4.5"	10	1/4" NPT
345MAX/WI	0.88	12000	1.6	244	5"	10	1/4" NPT

## HORIZONTAL GRINDERS

Model	Rated Power hp	Free Speed rpm	Weight kg	Length mm	Wheel Capacity Dia mm	Wheel Capacity Thickness mm	Recommended Hose Size mm
DG15W-A	0.9	15000	2.02	337	76	12.7	10
DG18W-A	0.9	18000	2.02	337	76	12.7	10

## SANDERS, POLISHERS & BUFFERS

Model	Free Speed rpm	Pad or Wheel Dia/Dim mm	Net Weight kg	Overall Length mm	Average Air Cons. cfm	Air Inlet in	Hose Bore mm
<b>SANDERS</b>							
301PS-1500	15000	125	5	2.00	-	21	1/4
313A	5000	175	7	1.91	320	8	1/4
319A	5000	175	7	2.09	203	6	1/4
312A	8000	93 x 170	2.09	181	6	1/4	10
<b>ORBITAL SANDERS</b>							
415-HL*	12000	150	6	0.87	172	8	1/4
310	10000	150	6	2.09	274	4	1/4
<b>POLISHERS &amp; BUFFERS</b>							
314A	2500	175	7	1.91	320	8	1/4
318A	2800	175	7	2.04	203	6	1/4
3129K	6000	76.2	3	0.60	-	19.85	1/4

\* Jet - VC Conversion Kit (IR -4151 JV)

Performance figures are at 620 kPa (90 psi) air pressure

# DRILLS



2LD-2500-B



7807R



2PD-2500



7811KC



22MA2

## STRAIGHT HANDLE

Model	Chuck Capacity mm	Motor Power hp	Free Speed rpm	Overall Length mm	Weight kg
1S30MF4	6	0.25	3000	215	0.5
2LD-2500-B	6	0.33	2500	170	0.9
2LD-3800-B	6	0.33	3800	170	0.9
251LD-2000	10	0.55	2000	195	1.1
251LD-3000	10	0.55	3000	195	1.1
2LD-1000-B	10	0.33	1000	205	1.2

## RIGHT ANGLE TYPE

Model	Collet/Chuck Capacity mm	Motor Power hp	Free Speed rpm	Overall Length mm	Weight kg
ILJ1A*	6	0.25	3700	221	0.5
ILL1A1*	6	0.25	2700	234	0.5
7807R	10	0.30	1800	206	1.1

\*Collet type (order collet separately)

## PISTOL TYPE

Model	Chuck Capacity mm	Motor Power hp	Free Speed rpm	Overall Length mm	Weight kg
IP38ST4	6	0.25	3800	168	0.6
1AL1	6	0.25	2800	168	0.6
1P09ST4	6	0.25	900	181	0.7
1P06ST4	6	0.25	600	181	0.7
2PD-2500	6	0.33	2500	160	1.0
2PD-3800	6	0.33	3800	160	1.0
2PD-15000	6	0.33	15000	175	1.0
7802A	10	0.50	2000	198	1.09
7802AKC	10	0.50	2000	163	1.13
251PD-2000	10	0.55	2000	185	1.2
251PD-3000	10	0.55	3000	185	1.2
7803A	13	0.50	500	229	1.4
3P-800	13	0.86	800	240	2.3

# Reversible Model

Collets for model 2RL(C) : Available from 3.2 mm to 6.3 mm in steps of 0.1 mm

Standard collet : 6 mm

Horse Power at approximately 50% of free speed.

Straight drills also available without lever as 2LDX and 251LDX models.

78 series are also available in reversible model

## LARGE DRILLS

Model	Free Speed rpm	Capacity in steel Drilling mm	Capacity in steel Reaming mm	Weight kg	Height Over Spindle mm	Side to Center Distance mm	cfm
22JA1	1025	14	10	6.80	416	36	55
22KA1	725	14	11	6.92	448	36	55
22MA2	350	22	16	6.46	473	36	55
22NA1	280	22	16	7.48	517	36	55
33SJA	450	25	24	11.7	355	47	85
33SKA	300	32	25	11.7	355	47	85
33SMA	185	32	32	14.1	427	49	85
44SMA	155	51	51	19.8	463	59	102
551SMA	120	76	64	31.3	556	75	160
551SOA	77	Heavy	Heavy	31.5	556	75	160

Series 22 Drills have 3/8" NPT air inlet, 1/2" (13 mm) size hose recommended.

Series 33S and 44 Drills 1/2" NPT inlet, 3/4" (19 mm) size hose recommended.

Series 551 Drills have 1" NPT air inlet; 1" (25mm) size hose recommended.

Performance figures are at 620 kPa (90 psi) air pressure



## IMPACT WRENCHES



2925B2Ti



2934B9



588A1



2015MAX / 2025MAX

Model	Drive	Handle	rpm	Max Torque	Recommended Torque Range		Weight kg	Recommended Hose Size mm
					Nm	lbf-ft		
211/WI	3/8" Sq.	S	10000	203	27	170	1.09	10
212/WI	3/8" Sq.	P	10200	244	27	170	1.3	10
216B	3/8" Sq.	S	8500	271	20	217	1.27	10
2115TiMAX	3/8" Sq.	P	15000	407	34	312	1.12	10
2115PTiMAX	3/8" Sq.	P	15000	407	34	312	1.1	10
2115QTiMAX	3/8" Sq.	P	15000	407	34	312	1.13	10
2015MAX	3/8" Sq.	Angle	7100	244	61-217	61-190	1.54	10
2135PTiMAX	1/2" Sq.	P	9800	1054	68	746	1.79	10
2135QTiMAX	1/2" Sq.	P	9800	1054	68	746	1.82	10
2125QTiMAX	1/2" Sq.	P	15000	450	34	340	1.14	10
2125PTiMAX	1/2" Sq.	P	15000	450	34	340	1.14	10
231C	1/2" Sq.	P	8000	813	34	407	2.63	10
231HA	1/2" Sq.	P	8000	800	34	407	2.63	10
231HA-2	1/2" Sq.	P	8000	800	34	407	2.76	10
236	1/2" Sq.	P	7400	610	34	306	2.4	10
2025MAX	1/2" Sq.	Angle	7100	244	61-217	61-190	1.54	10
259	3/4" Sq.	P	6000	1424	271	1085	4	10
2145QiMAX	3/4" Sq.	P	7000	1830	271	1220	3.4	13
2155QiMAX	1" Sq.	P	7000	1830	271	1220	3.4	13
261	3/4" Sq.	P	5500	1627	272	1224	5.62	13
261-3	3/4" Sq.	P	5500	1627	272	1224	5.9	13
261-6	3/4" Sq.	P	5500	1627	272	1224	6.21	13
2920B9	3/4" Sq.@90°	Grip I.T	5000	746	170	542	10.75	13
2925B2Ti	1" Sq.	Grip I.T	6500	2169	475	1695	6.89	13
2925P3Ti	1" Sq.	P	5200	1966	475	1492	5.54	13
2940B2	1" Sq.	Grip I.T	5000	2710	1360	2669	9.98	19
2940P2	1" Sq.	P	4000	2710	1360	2169	10.4	19
2934B9	1" Sq.@90°	Grip I.T	5300	1017	339	678	16.2	19
2950B7	1-1/2 Sq.	Grip I.T	3750	4067	2169	3390	14.8	19
5980A1	1-1/2 Sq.	Lever	830	13560	3118	7437	39.9	25
3955B2Ti	1-1/2"	Grip I.T	2750	6779	2169	5288	15.7	19
588A1	2-1/2 Sq.	Lever	355	67800	16,270	33,900	97.5	25

Please contact IR for further details on Torque Wrenches

## RATCHET WRENCHES



1207MAX

Model	Square Drive in	Free Speed rpm	Working Torque range Nm	Max Torque Nm	Net Weight kg	Overall Length mm	Air Inlet in	Hose Bore mm
1099XPA	1/2	220	14-87	103	1.40	302	1/4	10
1105MAX-D2	1/4	300	7-34	41	0.65	187	1/4	10
1105MAX-D3	3/8	300	7-34	41	0.65	187	1/4	10
1207MAX-D3	3/8	200	14-81	88	1.45	275	1/4	10
1207MAX-D4	1/2	200	14-81	88	1.45	275	1/4	10

## SAWS & HAMMER



4429



121

Model	Shank Opening		Stroke Per min	Blows Per min	Bore Dia mm	Stroke Length mm	Net Weight kg	Overall Length mm	Average Air Cons. cfm	Air Inlet in	Hose Bore mm
	mm	in									
121*	10.1	0.401	-	3000	19	58	1.59	194	3	1/4	10
4429**	-	-	5750	-	-	-	0.74	235	7	1/4	10
2LDR-3800	-	-	-	-	-	-	0.90	160	5	1/4	8
7802SA	-	-	4200	-	-	-	1.27	239	4	1/4	8

\* Add suffix K6 for tool with complete kit of chisels (6 Chisel).

\*\* Blade package also available, please contact Ingersoll Rand for details.

## CHIPPING HAMMERS



W3A2



K2LA2SA

### HEAVY DUTY CHIPPERS

Model	Weight Less Chisel kg	Length mm	Piston Stroke mm	Bore mm	Blows per Minute	Hose Connector Pipe Tap in	Recommended Hose Size mm	cfm
<b>"W" Series with 0.580" Hex Nozzle - to use Hex Shank Round Collared Accessories</b>								
W1A1	6.69	403	25	28	2500	3/8	13	28
W2A1	7.03	416	51	28	2300	3/8	13	28
W3A1	7.54	464	76	28	1725	3/8	13	29
W4A1	7.94	489	102	28	1480	3/8	13	29
<b>"W" Series with 0.680" Round Nozzle - to use Round Collared Accessories</b>								
W1A2	6.69	403	25	28	2500	3/8	13	28
W2A2	7.03	416	51	28	2300	3/8	13	28
W3A2	7.54	464	76	28	1725	3/8	13	29
W4A2	7.94	489	102	28	1480	3/8	13	29
<b>With 0.580" Hex Nozzle - for use with Hex Shank Oval Collar Chisels</b>								
K2LA1	2.72	276	44	22	3600	1/4	13	18
K2LA1SA	3.63	305	44	22	3600	1/4	13	18
<b>With 0.680" Round Nozzle - to use Round Shank Oval Collar Chisels</b>								
K2LA2	2.72	276	44	22	3600	1/4	13	18
K2LA2SA	3.63	305	44	22	3600	1/4	13	18

## SCALERS/NEEDLE SCALERS



172LNA1



180PG

Model	Weight Less Chisel kg	Length mm	Piston Stroke mm	Bore mm	Blows per Minute	Hose Connector in	Recommended Hose Size mm	cfm
<b>SCALERS</b>								
172L*	1.69	194	14	24	5500	1/4	8	12
182L*	1.84	229	27	24	4000	1/4	8	13
<b>NEEDLE SCALERS</b>								
172LNA1	2.38	349	14	24	5500	1/4	8	12
182LNA1	2.61	381	27	24	4000	1/4	8	13
<b>PISTOL GRIP SCALERS</b>								
170PG	3.0	314	36	24	3000	1/4	8	5.5
180PG	4.0	343	39	29	2200	1/4	8	8
170PG-CS#	2.5	315	36	24	3000	1/4	8	5.5
180PG-CS#	3.0	315	39	29	2200	1/4	8	8

\* Throttle is lever type

# 1/2" Square shank is standard on both units (5/8 hex is optional for the 180 PG-CS)

For Needle Scalers kit, please order 182K1 comprising 182L scaler, set of 19 needles (5" & 7" long), one (angle, straight, flat) chisel and vinyl carrying case.

## SAND RAMMERS



130A1M

Model	Type	Weight w/Butt kg	Barrel Bore mm	Piston Stroke mm	Butt Diameter mm	cfm
130A1M	Bench	5.24	25	63	-	14
241A1M	Floor	12.2	33	102	-	29
341A1M	-	15.8	41	102	146	29
441A2	-	21.4	51	102	146	36



# IQ<sup>V20</sup> AND IQ<sup>V</sup> SERIES CORDLESS TOOLS

## Tough Tools for Tough Jobs

Cordless tools haven't really had a place in industrial environments, where tools typically get a lot of heavy use and abuse. They get dropped and break; their housings can't withstand the corrosive effects of harsh fluids or chemicals. Battery mounts wear out, contacts get fouled, and the batteries themselves don't hold a charge and have short usable lives.

The Ingersoll Rand IQ<sup>V</sup>™ Series cordless tools, the first family of cordless tools specifically designed for the service and production industries — delivering best-in-class power, durability, and a strong commitment to your productivity.

Also introducing Ingersoll Rand IQV20 Series™ cordless tools, that are specifically designed for vehicle services, industrial maintenance and manufacturing applications. These tools make quick work of tough jobs that the professional technician does every day — something that until now, only an air tool could do.



Railway Industry



Energy Industry



Water Solution



Elevator Solution



Road Equipment



Bus Builders



Furniture Industry



Vehicle Service Station



HVAC Ducting

# IQ<sup>V20</sup> AND IQ<sup>V</sup> SERIES CORDLESS TOOLS



Specifications	W5130		W5150	
Battery	BL2005	BL2010	BL2005	BL2010
Drive	3/8"	3/8"	1/2"	1/2"
Max Reverse Torque	180 ft-lb (245 Nm)	190 ft-lb (260 Nm)	180 ft-lb (245 Nm)	190 ft-lb (260 Nm)
Forward Torque Range	25-135 ft-lb (35-180 Nm)	25-140 ft-lb (35-190 Nm)	25-135 ft-lb (35-180 Nm)	25-140 ft-lb (35-190 Nm)
Blows per Minute	2,900 (bpm)	2,900 (bpm)	2,900 (bpm)	2,900 (bpm)
Maximum Free Speed	1,700 rpm	1,700 rpm	1,700 rpm	1,700 rpm
Length	6.6" (162 mm)	6.6" (162 mm)	6.6" (162 mm)	6.6" (162 mm)
Weight with Battery	3.6 lb (1.6 kg)	4.1 lb (1.9 kg)	3.6 lb (1.6 kg)	4.1 lb (1.9 kg)
Sound Level († Pressure, L <sub>p</sub> )	91	91	91	91
Vibration Level	8.8 m/s <sup>2</sup> (2.6*K)	9.8 m/s <sup>2</sup> (1.6*K)	8.8 m/s <sup>2</sup> (2.6*K)	9.8 m/s <sup>2</sup> (1.6*K)

Specifications	W7150 standard anvil	W7250 2" extended anvil
Drive	1/2"	1/2"
Max Reverse Torque	780 ft-lb (1057 Nm)	780 ft-lb (1057 Nm)
Forward Torque Range	50 – 650 ft-lb (68 – 880 Nm)	50 – 650 ft-lb (68 – 880 Nm)
Nut-Busting Torque (NBT)	1,100 ft-lb	1,100 ft-lb
Blows per Minute	2,300	2,300
Maximum Free Speed	1,900 rpm	1,900 rpm
Length	9.4" (238 mm)	11.2" (285 mm)
Weight with Battery	6.8 lb (3.1 kg)	6.9 lb (3.1 kg)
Sound Level († Pressure, L <sub>p</sub> )	89 dbA	89 dbA
Vibration Level	12.2 m/s <sup>2</sup> (1.8 *K)	12.2 m/s <sup>2</sup> (1.8 *K)

Specifications	W040	D550	D650
Drive	1/4"	1/2"	1/2"
Max Reverse Torque	54 Nm	62 Nm	73 Nm
Free Speed	0 - 2200 rpm	0 - 360/1300 rpm	0 - 360/1300 rpm
Weight with Battery	1.2	1.9	2.0
Voltage – volts	7.2	14.4	19.2

Sold separately: BC20 battery charger; BL072 Li-Ion for W040; BL144 Li-Ion for D550; BL192 Li-Ion for D650).





## GS25 / GR25 CORDLESS DIE GRINDERS

(tool-only model number\*)

Specifications	GS25	GR25
Type	Straight	Right angle
Collet Size - in	1/4"	1/4"
Power - hp	0.35	0.35
Free Speed - rpm	27,500	20,000
Voltage - volts	14.4	14.4
Tool Weight with Li-Ion - kg	1.4	1.5
Switch Type	Variable speed	Variable speed

\*Sold separately: BC-20 battery charger, BL144 Li-Ion battery and N144 NiCd battery.



## CORDLESS LED TASK LIGHT

### Performance

Bright white LED offers upto 15 hours of runtime — so it can work as long as you do.

### Durability

Rugged design features an engineered composite housing that can withstand repeated drops and corrosive fluids.

### Versatility

Multi-position head, hands-free standing base, and hang hook allow for lighting from any angle, high or low.

**Patented aluminium head** dissipates heat and is lightweight yet heavy-duty

**Ultra-bright white LED** casts 180 lumens and lasts up to 20,000 hours

**Easy-to-use battery interface** makes changing the battery quick and simple

**IQV20 Series™ intelligent battery management system** provides:

- upto 15 hours of runtime on a single-charge 3.0 Ah battery
- upto 8 hours of runtime on a 1.5 Ah battery

**Impact-resistant housing** protects against fluids, chemicals, and repeated drops

**Multi-position head and standing base** allow for lighting from above or below

**Hanging hook** allows for versatile positioning at any angle

**Compatible with IQV20 Series battery**, which is used in our W7150 cordless Impactool™ (Batteries sold separately)



Model	Product Weight lbs (kg)	Product Length in (cm)	Product Height in (cm)	Light Output lumens	Runtime (hr)		HeadPositions
					3.0 Ah	1.5 Ah	
L5110	0.9 (0.4)	3.4 (8.6)	9.5 (12.1)	180	15	8	6

## BATTERY AND CHARGERS

IQV20 Series 20V  
Battery Charger  
**BC1120**

IQV20 Series 20V, 3.0Ahr  
Lithium-Ion Battery Pack  
**BL2010**

IQV20 Series 20V, 1.5Ahr  
Lithium-Ion Battery Pack  
**BL2005**



### Lithium-Ion Battery and Charger

**BL072** 7.2 Volts  
**BL144** 14.4 Volts  
**BL192** 19.2 Volts  
**BC20**



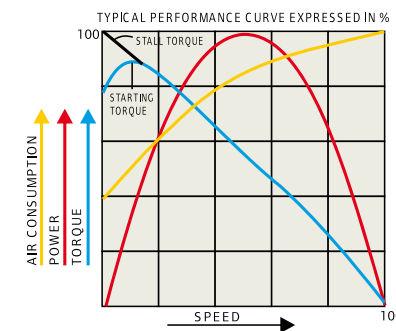
## AIR MOTORS

Ingersoll Rand air motors provide compact, light weight and safe source of smooth vibrationless power. Air motors can not be damaged by overloading, frequent and continuous stalling or unlimited reversals.

Air motors are unaffected by hot, corrosive or wet atmospheres, shocks and vibrations, thereby making them suitable for operations in hazardous areas.

A typical performance curve for air motors is shown in the figure.

High power to weight ratio, easy installation, portability, minimum maintenance and simple controls are other features that make Ingersoll Rand air motors an attractive option for a number of industrial applications.



Model	Length mm	Weight kg	Max Power hp	Free Speed rpm	Speed At Max Power rpm	Torque At Max Power Nm	Stall Torque Nm
<b>0.28 - 0.32 HP Non-Reversible, Flange Mounted</b>							
2M-55	180	1.1	0.28	65	30*	74.5*	112.5*
2M-90	180	1.1	0.29	100	45*	48.8*	76.3*
2M-225	180	1.1	0.30	275	135	15.9	32.8
2M-400	150	0.8	0.30	450	225	9.5	18.6
2M-600	150	0.8	0.31	700	350	6.4	12.3
2M-1000	150	0.8	0.31	1100	550	4.1	7.7
2M-2500	125	0.5	0.32	3000	1500	1.5	3.1
2M-4000	125	0.5	0.32	4500	2250	1.1	1.9

Reversible Models are also available.

Models : 22M - 360/540/900/2250/3600

Horse Power Range : 0.26 - 0.28

Stall Torque Range (Nm) : 14.9 - 1.6

**0.38 - 0.44 HP Non-Reversible, Flange Mounted**

202M-50	190	1.3	0.38	55	25*	119.2*	177.5*
202M-80	190	1.3	0.39	90	35*	77.2*	120.6*
202M-200	190	1.3	0.41	225	110	26.7	51.5*
202M-350	160	1.0	0.41	400	200	14.7	30.5
202M-550	160	1.0	0.42	600	300	10.1	19.7
202M-850	160	1.0	0.43	1000	500	6.1	12.9
202M-2250	135	0.7	0.43	2700	1350	2.3	4.7
202M-3500	135	0.7	0.44	4200	2100	1.5	3.1

Reversible Models are also available.

Models : 2202M-320/480/750/2000/3200

Horse Power Range : 0.36 - 0.38

Stall Torque Range (Nm) : 27.1 - 2.7

**0.83 - 0.86 HP Non-Reversible, Flange Mounted**

3M-240	190	1.8	0.83	270	135	43.9	84.0
3M-450	190	1.8	0.85	500	250	24.3	48.8
3M-800	190	1.8	0.86	950	475	12.9	23.0

Reversible Models are also available.

Models : 33M-220/405/720

Horse Power Range : 0.72 - 0.75

Stall Torque Range (Nm) : 65.7 - 19.9

\* For Safe working limit maximum torque to 33Nm

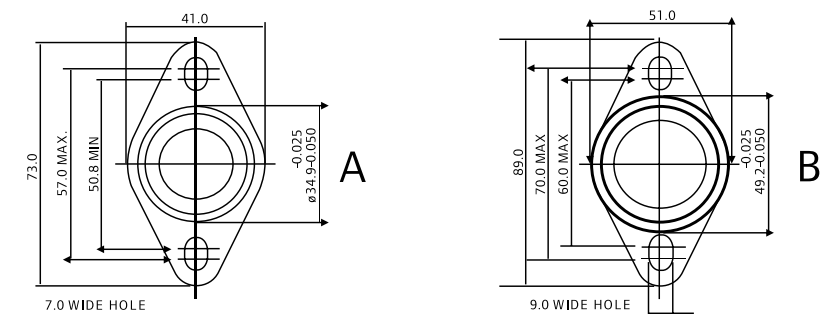
Starting Torques are approx. 75% of stall torques

Model	Body Dia	Air Consumption (1)	Air Consumption (2)	Air Inlet	Hose Bore	Spindle	Mounting Flange
2M	40	16	11	1/4 BSP	6	Dia 9.5/9.52 1/8" SQ KEY	A
22M	40	16	11	1/4 BSP	6	Dia 9.5/9.52 1/8" SQ KEY	A
202M	40	16	11	1/4 BSP	6	Threaded Spindle 1/2"x 20 UNF	B
2202M	40	16	11	1/4 BSP	6	Dia 9.5/9.52 1/8" SQ KEY	B
3M	50	42	31	1/4 BSP	12	Threaded Spindle 1/2"x 20 UNF	B
33M	52	39	28	1/4 BSP	12	Dia 12.7h7 KEY TYPE	B

(1) Value in cfm at free speed (2) Value in cfm at max. power

Model numbers in bold face are fast moving and will be available on shorter delivery.

All performances figures are at 6.3kg/cm<sup>2</sup> (90PSI), which is optimum operating air pressure.



Performance figures are at 620 kPa (90 psi) air pressure

Models shown above are a representative selection of our extensive range. Please contact Ingersoll Rand for details on additional models.

# TORQUE WRENCHES

## QL/QL

### Ratchet Head Type Adjustable Torque Wrench



QL100N4

Model	Torque Range		Metric Model	Torque Range		American Model	Torque Range		Overall Length mm	Square Drive mm	Weight (g)
	Min.-Max. Nm	Grade Nm		Min.-Max. kgf.cm	Grade kgf.cm		Min.-Max. lbf.in	Grade lbf.in			
QL1.5N4	0.3-1.5	0.01	15QL4	3-15	0.1	15QL4-A	3-15	0.1	160	6.35	0.16
QL3N4	0.6-3	0.02	30QL4	6-30	0.2	30QL4-A	6-30	0.2	160	6.35	0.16
QL6N4	1-6	0.05	60QL4	10-60	0.5	QL50I-2A	10-50	0.5	195	6.35	0.19
QL12N4	2-12	0.1	120QL4	20-120	1	QL100I-2A	20-100	1	195	6.35	0.25
QL25N	5-25	0.25	225QL4	50-250	2.5	QL200I-3A	50-200	2.5	230	9.53	0.25
QL50N	10-50	0.5	450QL4	100-500	5	QL400I-3A	100-400	5	260	9.53	0.45
-	-	-	-	-	-	QL750I-3A	150-750	10	335	9.53	0.69
-	-	-	-	-	-	-	<b>lbf-ft</b>	<b>lbf-ft</b>	-	-	-
-	-	-	-	-	-	QL750F-3A	15-75	1	335	9.53	0.69
QL100N4	20-100	1	900QL4	200-1000	10	-	-	-	335	12.7	0.69
QL140N	30-140	1	1400QL3	300-1400	10	QL100F-4A	30-100	1	400	12.7	0.88
QL200N4	40-200	2	1800QL4	400-2000	20	QL150F-4A	30-150	2	490	12.7	1.4
-	-	-	-	-	-	-	<b>kgf.m</b>	<b>kgf.m</b>	-	-	-
QL280N	40-280	2	2800QL3	4-28	0.2	-	-	-	695	19.05	2.0
QL420N	60-420	2	4200QL2	6-42	0.2	QL300F-6A	60-300	2	995	19.05	3.4
QLE550N	100-550	5	5500QLE	10-55	0.5	QL400F-6A	100-400	5	1195	19.05	5.1
QLE750N	100-750	5	7500QLE	10-75	0.5	QL600F-6A	100-600	5	1370	19.05	7.1
QLE1000N	100-1000	5	10000QLE	10-100	0.5	QL700F-8A	100-700	5	1540	25.4	9.5
QLE1400N	200-1400	10	14000QLE	20-140	1	QL1000F-8A	150-1000	10	1795	25.4	13.1
QLE2100N	500-2100	20	21000QLE	50-210	2	QL1500F-8A	600-1500	20	1950	25.4	20.0

## QSP

### Ratchet Head Type Preset Torque Wrench



QSP 100N4

Model	Torque Range Min.-Max. Nm	Torque Range Min.-Max. kgf.cm	Torque Range Min.-Max. lbf.in	Overall Length mm	Square Drive mm	Weight (g)
QSP1.5N4	0.3 - 1.5	3-15	3-13	165	6.35	0.16
QSP3N4	0.6 - 3	6-30	6-25	165	6.35	0.16
QSP6N4	1-6	10-60	10-50	165	6.35	0.19
QSP12N4	2-12	20-120	20-100	175	6.35	0.25
QSP25N3	5-25	50-250	50-200	215	9.53	0.25
QSP50N3	10-50	100-500	100-400	240	9.53	0.4
QSP100N4	20-100	200-1000	-	315	12.7	0.65
QSP140N3	30-140	300-1400	300-1000	380	12.7	0.7
QSP200N4	40-200	400-2000	350-1600	465	12.7	1.2
-	-	<b>kgf.m</b>	-	-	-	-
QSP280N3	40-280	4-28	350-2500	665	19.05	1.8
QSP420N3	60-420	6-42	600-3600	970	19.05	3.1

## DB/DBE/DBR

### Dial Indicating Torque Wrench



DB12N4

DB100N

Model	Torque Range		Metric Model	Torque Range		American Model	Torque Range		Overall Length mm	Square Drive mm	Weight (g)
	Min.-Max. Nm	Grade Nm		Min.-Max. kgf.cm	Grade kgf.cm		Min.-Max. lbf.in	Grade lbf.in			
DB1.5NA4-S	0.2-1.5	0.02	15DB4-S	2-15	0.2	DB13I-2AS	0-13	0.2	205	6.35	0.4
DB3N4-S	0.3-3	0.05	30DB4-S	3-30	0.5	DB26I-2AS	0-26	0.5	205	6.35	0.4
DB6N4-S	0.6-6	0.1	60DB4-S	6-60	1	DB40I-2AS	0-40	0.5	205	6.35	0.4
DB12N4-S	1-12	0.2	120DB4-S	10-120	2	DB75I-2AS	0-75	1	205	6.35	0.4
DB25N-S	3-25	0.5	230DB3-S	30-250	5	DB150I-3AS	0-150	2	245	9.5	0.6
DB50N-S	5-50	0.5	450DB3-S	50-500	5	DB300I-3AS	0-300	5	320	9.5	0.6
-	-	-	-	-	-	DB600I-3AS	0-600	10	400	9.5	0.6
DB100N-S	10-100	1	900DB3-S	100-1000	10	DB600I-4AS	0-600	10	400	12.5	0.7
-	-	-	-	-	-	-	<b>lbf-ft</b>	<b>lbf-ft</b>	-	-	-
-	-	-	-	-	-	DB25F-3AS	0-25	0.5	320	9.5	0.6
-	-	-	-	-	-	DB50F-3AS	0-50	0.5	400	9.5	0.7
-	-	-	-	-	-	DB50F-4AS	0-50	0.5	400	12.7	1.0
DB200N-S	20-200	2	1800DB3-S	200-2000	20	DB100F-4AS	0-100	1	500	12.7	1.0

# Ingersoll Rand's Other Products Solutions

## ARO FLUID PRODUCTS

Our fluid products provide the industry-leading ARO brand air operated diaphragm and piston pumps for a broad spectrum of fluid transfer applications. Also count on us for high quality pneumatic valves, cylinders, motion control components and FRLs. The focus is on reducing downtime and increasing return on investment by extending the life of your equipment and improving productivity.

### ARO Diaphragm Pumps

- Patented "unstallable" air valve and "quick-dump" exhaust valves allow for ice-free operation and maximum operating efficiency
- Multiple materials of construction for chemical compatibility and flow rates ranging from 17.4-1,041 L/min (4.6-275 gpm)



### ARO Piston Pumps & Packages

- Pumps for fluid viscosities ranging from 500-1,000,000 cPs including oils, paints, inks, sealants, caulking & more
- Multiple package seal options, including leather, UHMW-PE and PTFE for chemical compatibility
- Optional Ultra-Coating for tubes and plungers reduces abrasion and scoring



### ARO Lubrication Equipment

- Piston and diaphragm pumps and packages specifically designed to handle all types of oil, grease, and specialty-type fluid applications
- Specialty pumps for antifreeze/water mixing, solvents transfer, calcium chloride tire fill and high-pressure wash
- Diaphragm pumps meet U.L. 79 specification code for fuel related applications



### ARO Filters, Regulators & Lubricators(FRL's)

- Best-in-class air flow with flow rates from 0.9-50 m³/min (32-1,770 scfm)
- Modular design for 1000 - 3000 series facilitates easy installation and maintenance
- Positive thumb-locking switch on polycarbonate bowls for enhanced safety



### ARO Pneumatic Valves & Cylinders

- Valves with flow rates up to 7.8 Cv (280 scfm) and cylinders with stroke lengths up to 250 mm (99")
- 2-, 3- and 4-way valves with electrical, manual, mechanical & pneumatic actuators and various body styles to fit all applications
- NFPA interchangeable, round repairable and disposable, square and round compact cylinders to accommodate different environments



## MATERIAL HANDLING

Ingersoll Rand has been serving the material handling needs of the toughest industries around the globe for nearly a century. We apply R&D expertise to introduce new products and technologies which integrate the latest electronics and controls. By using Ingersoll Rand solutions you can expect improved productivity and operator performance as well as reduced downtime.

### Air, Electric & Hydraulic Utility Winches

- Available in a wide range of capacities from 300-10,000 kg (660-22,000 lbs)
- Top reliability with our Liftstar®, Pullstar®, BU, EU, Force 5® Third Generation and Infinity winch series
- Lifting, pulling and positioning applications for the world's toughest industries



### ManRider Winches

- Available in capacities from 150-3,125 kg (330-6,875 lbs)
- LS2-150RLP, FA150KGi, Force 5® Third Generation and Infinity winch series ensure your personnel gets lifted safely
- Meeting the toughest personnel lifting requirements in the offshore industry



### Balancers & Air, Electric & Hydraulic Hoists

- Balancers, CLK, MLK, HLK, ARO, Quantum, Liftchain®, Hercul-Link® and BOP Handling Systems that can handle load capacities from 0.12-200 tons
- Air balancers with float to position load by hand for precision spotting
- Hoists for high-speed production, food grade applications and the harshest industrial, underground and marine environments



### Manual Hoists

- Manual and lever chain hoists from 0.5-25 ton capacity
- Overload protection to reduce downtime and repair costs
- Versatility to be used in construction, maintenance and rigging applications



### Workstation Bridge & Jib Cranes (Support Structures)

- Overhead and floor supported enclosed track workstation cranes with <1% rolling resistance and articulation for maximum ease of use
- Standard low profile enclosed track rail jib cranes with 220 and 360 degree coverage
- Standard and custom applications with bridge cranes upto 1,360 kg (3,000 lbs) and jib cranes up to 907 kg (2,000 lbs)



### Handling Devices

- Custom and standard solutions and devices including clamping, vacuum, probing rotary action handlers and hook/trap action to overcome your material handling challenges
- Vacuum load capacities from 27-136 kg (60-300 lbs) and clamp load capacities from 27-45 kg (60-100 lbs)



ARO - Three letters. 80 years. One goal.

Safety is Our top priority.



Ingersoll Rand (NYSE:IR) advances the quality of life by creating and sustaining safe, comfortable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Schlage®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings, transport and protect food and perishables, secure homes and commercial properties, and increase industrial productivity and efficiency. Ingersoll Rand products range from complete compressed air systems, tools and pumps to material handling systems. The diverse and innovative products, services and solutions enhance our customers' energy efficiency, productivity and operations. Ingersoll Rand is a \$14 billion global business committed to a world of sustainable progress and enduring results.



**Ingersoll Rand Industrial Products (P) Ltd.**

37-A, Site IV Sahibabad Industrial Area, Ghaziabad - 201010

Phone : (0120) 438 9200 / 438 9400

Fax : (0120) 438 9444

E-mail : [airsolutionsindia@irco.com](mailto:airsolutionsindia@irco.com)

[www.ingersollrandproducts.com](http://www.ingersollrandproducts.com)

[www.ingersollrand.co.in](http://www.ingersollrand.co.in)

**Customer Support Center 1-800-102-7926**

[customersupportindia@irco.com](mailto:customersupportindia@irco.com)

**Regional Offices' Phone Numbers**

**WEST** Mumbai : (022) 61540500, Nagpur/Raipur : (0712) 2533697/2533386, Pune : (020) 41005400,  
Surat : (0261) 2350064/3917335, Indore : (0731) 2435622

**EAST** Kolkata : (033) 24011224/24014258, Jamshedpur : (0657) 2233128/129

**SOUTH** Bangalore, Karnataka : (080) 22166001, Chennai, TN & Kerala : (044) 28523362/28520900,  
Coimbatore : (0) 9344601020, Secunderabad, AP : (040) 27849813/16/24

**NORTH** Chandigarh : (0172) 3247151/2664334, Gurgaon : (0124) 6729000, Haridwar : (0) 9358631990

Ingersoll Rand, IR and the IR logo are trademarks of Ingersoll Rand, its subsidiaries and/or affiliates.

Nothing contained within this brochure is intended to extend any warranty or representation, expressed or implied, regarding the products described herein. Any such warranties or other items or conditions of sale of products shall be in accordance with Ingersoll Rand's standard terms and conditions of sale for such products, which are available upon request. Product improvement is a continuing goal at Ingersoll Rand. Designs and specifications are subject to change without notice or obligation.