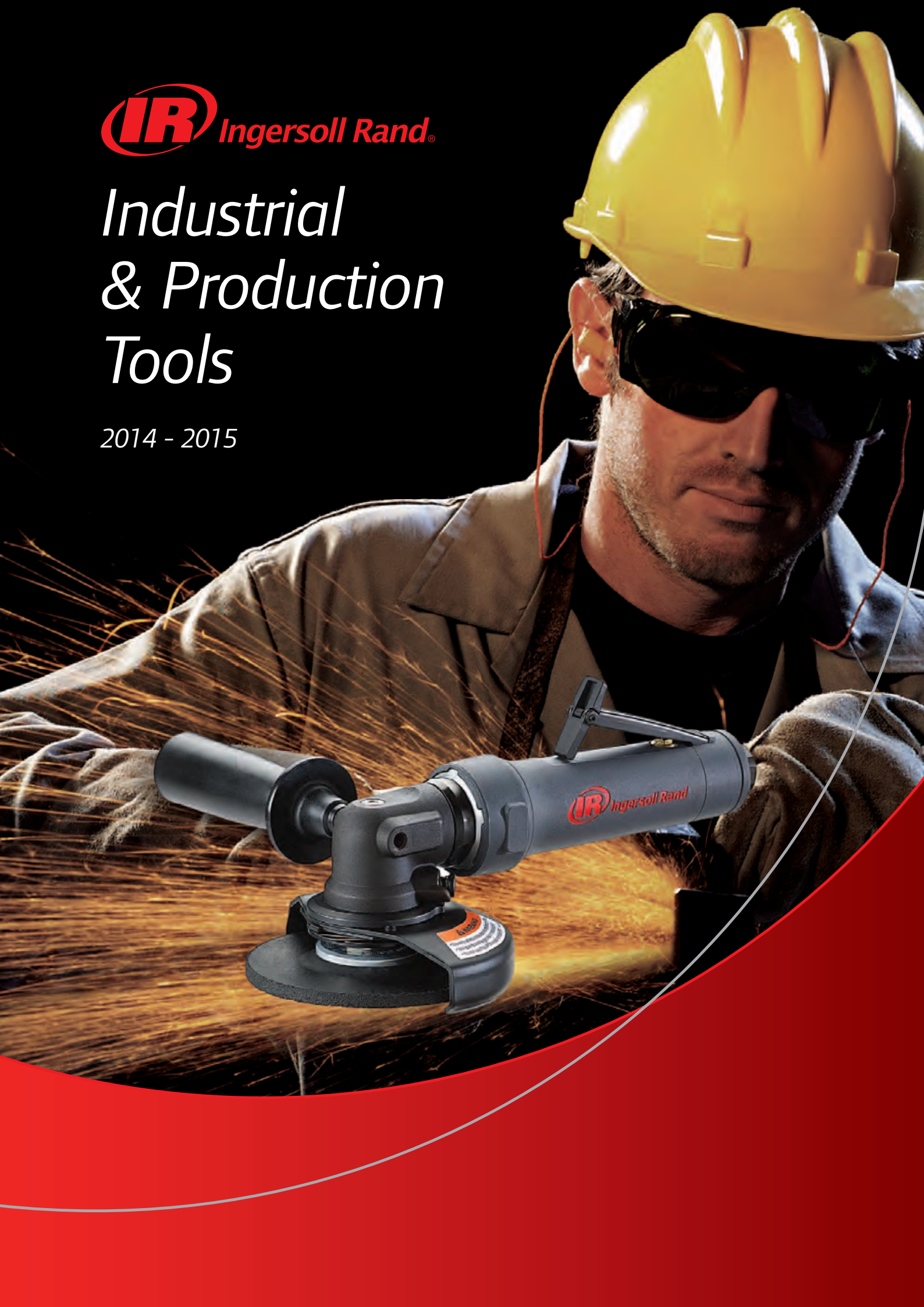




# Industrial & Production Tools

2014 - 2015



# Technical Symbols

## Tools Performance Classification



### Super-duty tools

These tools are designed to tackle the most extreme jobs. Advanced technology gives these tools superior strength and durability across the widest range of applications.



### Heavy-duty tools































The heavy-duty tools are top-quality models that exceed the requirements of highly demanding applications and environments. They are engineered with special features for top power, speed and comfort.



### Maintenance-duty tools

Maintenance-duty tools are durable, high-quality, impressively powerful.

For ease of use, specification tables frequently use symbols in column headings. Please reference the chart below for exact descriptions.

	Voltage		Piston stroke
	Maximum torque in reverse		Collet capacity
	Recommended forward torque range		Shank diameter
	Torque range / Cutch spring size		Wheel diameter
	Blows per minute		Pad diameter
	Maximum free speed		Maximum chuck capacity
	Tool weight		Spindle thread
	Tool length		Side to centre distance
	Tool height		Orbital movement
	Maximum air consumption / flow		Rivet capacity
	Air inlet diameter		Spindle attachment
	Minimum hose diameter		Drilling capacity in steel
	Sound pressure		Reaming capacity in steel
	Vibration level		Tapping capacity in steel
	Rated power		Belt size

## Cordless Tools

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Cordless Tools

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Bolting

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Drilling & Fastening

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Grinding & Finishing

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Percussive Tools

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Accessories



★★★★ Super-duty tools

★★★ Heavy-duty tools

★ Maintenance-duty tools

## Cordless Tools

*As a world leader in enhancing productivity, Ingersoll Rand is the only company offering cordless tools specifically engineered for industrial MRO tool users. Our cordless tools deliver portability with the reliability of advanced battery/charger technologies and proven Ingersoll Rand power and durability. With Ingersoll Rand you get cordless tools that work as hard as you. Do the Job, Do it Fast, Do it Every Time.*

### **Ingersoll Rand offers:**

---

- ▶ 20V Impacttools, Ratchet Wrenches, Drill/Driver and Task Light → Pages **5-6**
- ▶ 12V Impacttools, Ratchet Wrenches, Drill/Driver, Screwdriver and Task Light → Pages **7-8**

## IQV20 Series

As power tools are called on to perform, our cordless IQV20 Series 20-volt tools is specially designed by our engineers for industrial MRO and manufacturing applications.

**Performance** with high power and long-life 20V lithium-ion battery that delivers max torque.

**Durability** with robust, patented metal reinforced housing withstands repeated drops.

**Versatility** as cordless portability delivers performance where you need it the most.



## IQV20 Impact Wrenches ★ Maintenance-duty classification



W7150EU  
(with BL2010)



W5151P  
(with BL2005)



W5111  
(with BL2005)



W7150EU-K2 (1)

### Technical Specifications

	Model No.	CPN	V	in	Recom. Nm	Max. Nm	1 min. rpm	1 min.	kg	mm	dB(A)	m/s <sup>2</sup> / K(2)
<b>Impacttools</b>												
Tool only	<b>W5131P</b>	48620819	20	3/8" SQ pin type	35-160	215	1 900	2 800	1.60	150	86.0	4.7 / 1.2
Kit (1)	<b>W5131PEU-K2</b>	47497449										
Tool only	<b>W5130</b>	48377840	20	3/8" SQ ring type	35-180	245	1 700	2 900	1.60	162	91.0	8.8 / 2.6
Kit (1)	<b>W5130EU-K2</b>	47497441001										
Tool only	<b>W5151P</b>	48620827	20	1/2" SQ pin type	35-160	215	1 900	2 800	1.60	153	86.0	4.7 / 1.2
Kit (1)	<b>W5151PEU-K2</b>	47497451001										
Tool only	<b>W5150</b>	48620801	20	1/2" SQ ring type	35-180	245	1 700	2 900	1.60	162	91.0	8.8 / 2.6
Kit (1)	<b>W5150EU-K2</b>	47497445001										
Tool only	<b>W7150EU</b>	48391692	20	1/2" SQ ring type	68-880	1 057	1 900	2 300	3.10	238	89.0	12.2 / 1.8
Kit (1)	<b>W7150EU-K2</b>	48391734										
<b>1/4" Hex Impact Driver</b>												
Tool only	<b>W5111</b>	48620793	20	1/4" HEX	35-160	215	1 900	2 800	1.60	154	86.0	4.7 / 1.2
Kit (1)	<b>W5111EU-K2</b>	47497447001										

(1) Kits include a carrying case with the tool, 2 Li-Ion batteries (3.0 Ah for W7150EU, 1.5 Ah for the other wrenches) and universal charger.

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

# Cordless Tools



## IQV20 Ratchet Wrenches ★ Maintenance-duty classification

### Technical Specifications

	Model No.	CPN	V	in	Recom. Nm	Max. Nm	1 min. rpm	kg	mm	dB(A)	m/s <sup>2</sup> / K <sup>(3)</sup>
<b>Ratchet Wrenches</b>											
Tool only	<b>R3130</b>	48621023	20	3/8" SQ	14-61	73	225	2.00	408	86.0	2.8 / 0.7
Kit <sup>(1)</sup>	<b>R3130EU-K1</b>	48626097									
Tool only	<b>R3150</b>	48621056	20	1/2" SQ	14-61	73	225	2.00	408	86.0	2.8 / 0.7
Kit <sup>(1)</sup>	<b>R3150EU-K1</b>	48626113									

## IQV20 Drill/Driver ★ Maintenance-duty classification

### Technical Specifications

	Model No.	CPN	V	Max. Ø mm	Max. Nm	1 min. rpm	kg	mm	dB(A)	m/s <sup>2</sup> / K <sup>(3)</sup>
<b>Drill/Driver</b>										
Tool only	<b>D5140</b>	48489546	20	13	80	500/1900	2.45	245	75.0	< 2.5
Kit <sup>(2)</sup>	<b>D5140-K2-EU</b>	48498497								

- (1) Kits include a carrying case with the tool, 1 Li-Ion battery 1.5 Ah and universal charger.  
 (2) Kit includes a carrying case with the tool, 2 Li-Ion batteries 3.0 Ah and universal charger.  
 (3) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



### IQV20 Cordless Tools Accessories

Model No.	CPN	Description	Compatibility
<b>BC1120-EU</b>	17028960	Charger for 20 V batteries	All IQV20 tools
<b>BL2005</b>	48386783	20 V, 1.5 Ah Li-Ion battery	All IQV20 tools except W7150EU and D5140
<b>BL2010</b>	48386791	20 V, 3.0 Ah Li-Ion battery	All IQV20 tools
<b>L5110</b>	48489561	LED Task-light 180 LUX	All IQV20 batteries
<b>W7150-BOOT</b>	48401855	Protective tool boot in vinyl material	W7150EU
<b>W5130-BOOT</b>	48624753	Protective tool boot in vinyl material	W5130, W5150
<b>W5111-BOOT</b>	47499747001	Protective tool boot in vinyl material	W5131P, W5151P, W5111

## IQV12 Series

The IQV12 Series 12-volt tools is offering versatile performance, cordless convenience and rugged durability in a light weight and compact tool combined with an ergonomic design that improve accessibility and minimize the operator fatigue.

**Accessibility:** the compact, cordless design of every IQV12 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:** reinforced, chemical and impact resistant housings, designed to withstand tough environments.



D1130

## IQV12 Impacttools and Screwdrivers Maintenance-duty classification



W1130  
(with BL1203)



W1110  
(with BL1203)













D1410  
(with BL1203)



W1130EU-K2 (1)

### Technical Specifications

	Model No.	CPN	 V	 in	 Recom. Nm	 Max. Nm	 1 min. rpm	 1 min.	 kg	 mm	 dB(A)	 m/s <sup>2</sup> / K(2)
<b>Impacttool</b>												
Tool only	<b>W1130</b>	47500084001	12	3/8" SQ ring type	20-100	135	2 700	3 300	1.04	150	82.0	3.8 / 2.7
Kit (1)	<b>W1130EU-K2</b>	47500089001										
<b>1/4" Hex Impact Driver</b>												
Tool only	<b>W1110</b>	47500078001	12	1/4" HEX	20-100	135	2 700	3 300	1.05	150	82.0	4.5 / 3.0
Kit (1)	<b>W1110EU-K2</b>	47500087001										
<b>Screwdriver</b>												
Tool only	<b>D1410</b>	47500114001	12	1/4" HEX	2-20	23	400/1600	—	0.95	130	64.0	< 2.5
Kit (1)	<b>D1410EU-K2</b>	47500117001										

(1) Kits include a bag with the tool, 2 Li-Ion batteries and universal charger.

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



See accessories on following page

# Cordless Tools



R1130 (with BL1203)



D1130 (with BL1203)



R1130EU-K1 kit <sup>(1)</sup>



D1130EU-K2 <sup>(2)</sup>

## IQV<sup>12</sup> Ratchet Wrenches ★ Maintenance-duty classification

### Technical Specifications

	Model No.	CPN	V	in	Recom. Nm	Max. Nm	1 min. rpm	kg	mm	dB(A)	m/s <sup>2</sup> / K <sup>(3)</sup>
<b>Ratchet Wrenches</b>											
Tool only	<b>R1120</b>	47500060001	12	1/4" SQ	7-34	40	260	0.98	280	76.0	< 2.5
Kit <sup>(1)</sup>	<b>R1120EU-K1</b>	47500064001									
Tool only	<b>R1130</b>	47500062001	12	3/8" SQ	7-34	40	260	0.98	280	76.0	< 2.5
Kit <sup>(1)</sup>	<b>R1130EU-K1</b>	47500065001									

## IQV<sup>12</sup> Drill/Driver ★ Maintenance-duty classification

### Technical Specifications

	Model No.	CPN	V	Max. Ø mm	Max. Nm	1 min. rpm	kg	mm	dB(A)	m/s <sup>2</sup> / K <sup>(3)</sup>
<b>Drill/Driver</b>										
Tool only	<b>D1130</b>	47500112001	12	10	23	400 / 1 600	1.10	190	64.0	< 2.5
Kit <sup>(2)</sup>	<b>D1130EU-K2</b>	47500116001								

(1) Kits include a bag with the tool, 1 Li-Ion battery and universal charger.

(2) Kit includes a bag with the tool, 2 Li-Ion batteries and universal charger.

(3) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

BC1110-EU



BL1203



L1110



### IQV<sup>12</sup> Cordless Tools Accessories

Model No.	CPN	Description	Compatibility
<b>BC1110-EU</b>	47499973001	Charger for 12 V batteries	All IQV12 tools
<b>BL1203</b>	24206179	12 V, 2 Ah Li-Ion battery	All IQV12 tools
<b>L1110</b>	47500109001	LED Task-light 180 LUX	BL1203 battery



★★★★ Super-duty tools

★★★ Heavy-duty tools

★ Maintenance-duty tools



# Pneumatic Bolting

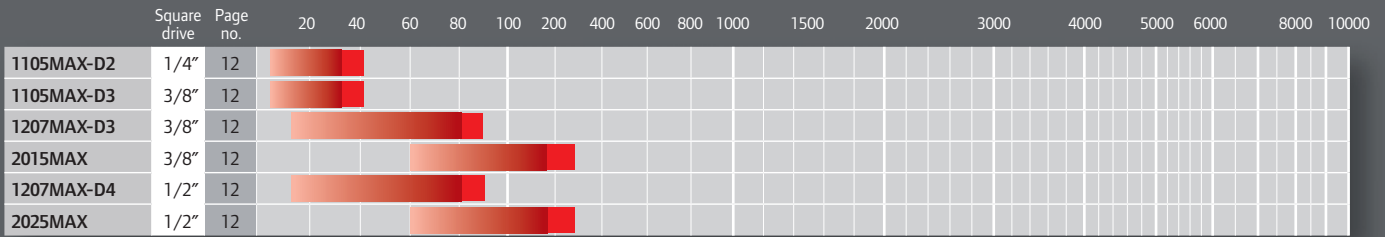
*Productivity has come a long way since Ingersoll Rand introduced the first Impactool™ in 1934. What has not changed is our reputation for world-class tools that set the industry standard for power, durability, and reliability. Every Impactool bearing the Ingersoll Rand name reflects our commitment to delivering cutting-edge tool designs that work as hard as you do and provide maximum comfort, safety, efficiency, and serviceability. Throughout this catalog, you will find Ingersoll Rand Impactools offering several different impact technologies to best suit your wide range of applications.*

## **Ingersoll Rand offers:**

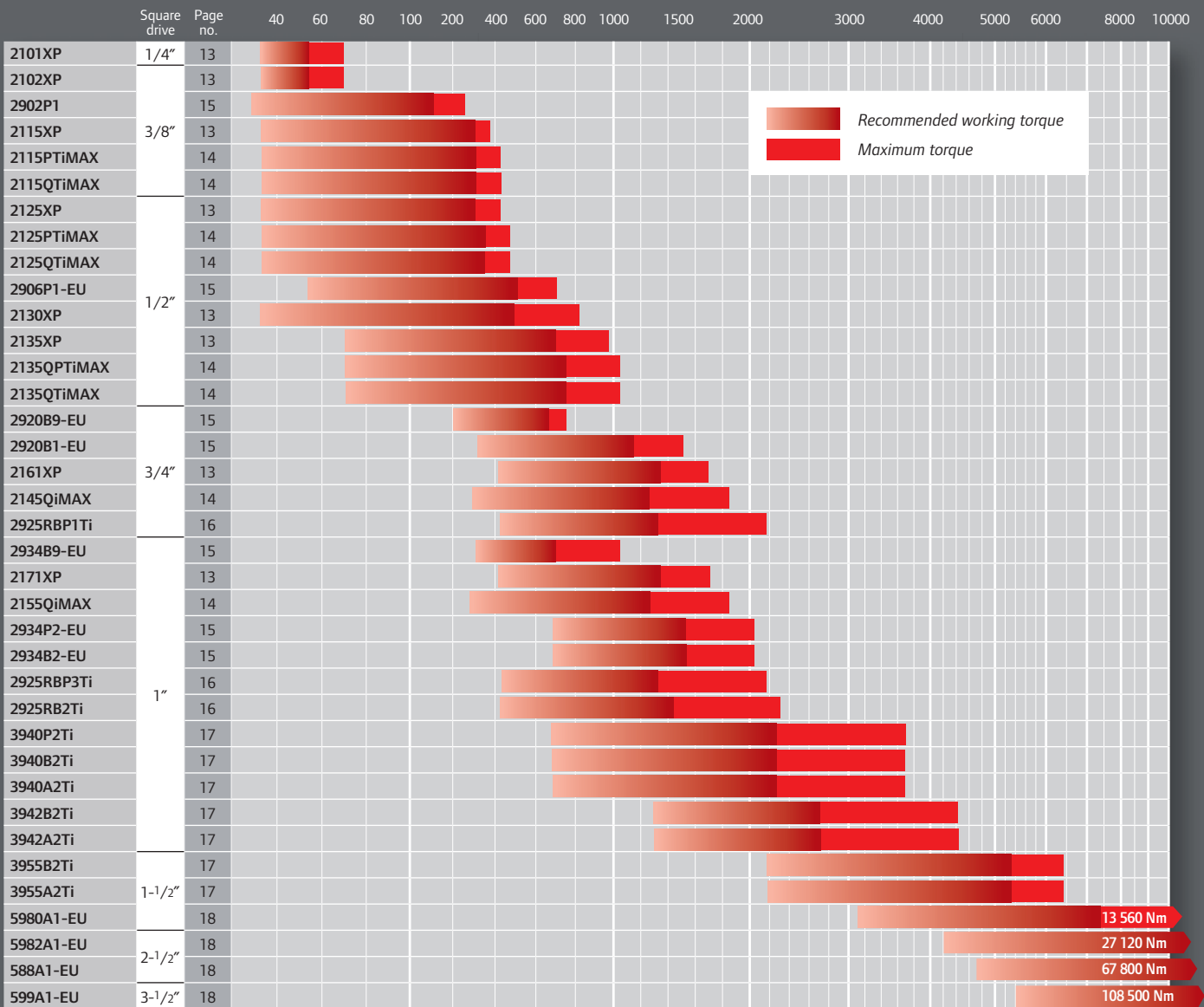
- ▶ Air Right Angle Wrenches, 41-244 Nm → Page **12**
- ▶ Air Impactools, 68-108 500 Nm → Pages **13-18**
- ▶ ATEX Certified Air Impactools, 813-2710 Nm → Page **19**
- ▶ Impactools Accessories → Pages **20-22**

# Pneumatic Bolting - Selection Chart

## Right Angle Wrenches

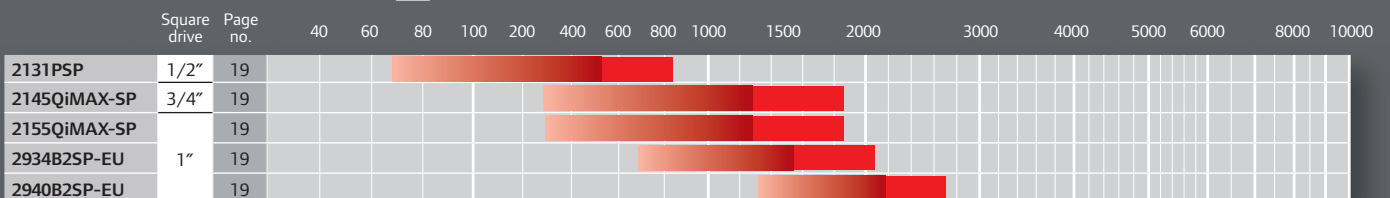


## Impactools





█ Recommended working torque  
█ Maximum torque

## ATEX Certified Impactools



**DIN267 Bolt Grade:** bolt grade consists of two figures which refer to the following characteristics of the bolt:

**1st digit** = 10% of breaking load in kg/mm<sup>2</sup> — **2nd digit** = 10% of ratio between minimum elastic limit and minimum breaking load.

Bolt grade DIN267 →		3.6	4.6	4.8	5.6	5.8	6.8	8.8	10.9	12.9
		Maximum torque in Nm								
M4	7	0.85	1.1	1.5	1.4	1.9	2.3	2.9	4.1	4.9
M5	9	1.7	2.2	3.0	2.8	3.7	4.5	6.0	8.5	10
M6	10	2.9	3.8	5.1	4.8	6.4	7.7	10	14	17
M8	13	7.0	9.3	12	12	16	19	25	35	41
M10	17	14	19	25	23	31	37	49	69	83
M12	19	24	32	43	40	54	65	86	120	145
M14	22	39	51	68	64	86	105	135	190	230
M16	24	59	79	105	98	130	155	210	295	355
M18	27	81	110	145	135	180	215	290	405	485
M20	30	115	155	205	190	255	305	410	580	690
M22	32	155	205	275	260	345	415	550	780	930
M24	36	200	265	350	330	440	530	710	1000	1200
M27	41	295	390	520	490	650	780	1050	1500	1800
M30	46	395	530	710	660	880	1050	1450	2000	2400
M33	50	540	720	960	900	1200	1450	1900	2700	3250
M36	55	690	920	1250	1150	1550	1850	2450	3450	4150
M39	60	920	1200	1600	1500	2000	2400	3200	4500	5400
M42	65	1100	1500	1950	1850	2450	2950	3950	5550	6650
M45	70	1400	1850	2450	2300	3100	3700	4950	6950	8350
M48	75	1700	2250	3000	2800	3750	4450	5950	8400	10100
M52	80	2150	2900	3850	3600	4800	5750	7650	10800	12900
M56	85	2700	3600	4800	4500	5950	7150	9550	13400	16100
M60	90	3350	4450	5950	5550	7400	8900	11900	16700	20000
M64	95	4000	5350	7150	6700	8950	10700	14300	20100	24100
M68	100	4850	6500	8650	8100	10800	13000	17300	24300	29100

## Impact Mechanisms

Ingersoll Rand Impacttools and Wrenches are available in a choice of configurations with straight or pistol grip handles and inside or outside triggers - Square drives from 3/8" to 2-1/2" are offered. They use the most advanced materials and design to provide unequalled power to weight ratios – some tools are specially designed for use in hazardous industrial areas.

### Three powerful impact mechanism designs available

**Twin Hammer**, delivers more power per pound and is less sensitive to air pressure fluctuations than any other design – Smooth, balanced blow – High power-to-weight ratio – Suitable for hard or soft-draw applications. This Ingersoll Rand technology has become the industry standard. An automatic pressure feed grease system supplies grease to the impact mechanism.

**Jumbo Hammer**, performs similarly to the Twin Hammer but contains only three working parts. An automatic pressure feed grease system supplies grease to the impact mechanism.

**Ball & Cam** mechanisms are ideal for soft draw applications and are commonly used in larger impacttools.



# Pneumatic Bolting

## MAX-Series Right Angle Wrenches Maintenance-duty classification

The MAX Series air wrenches combines best-in-class performance and a full complement of premium features to give professional technicians power, control and comfort. It's another in the long line of tools designed to help make your job easier – and you more productive.













**Performance:** up to 244 Nm of maximum torque in reverse. 2015MAX and 2025MAX models are fitted with a Jumbo Hammer impact mechanism; the power of an impact with the reach of an angle wrench !

**Control:** feather-touch trigger allows precise delivery of power and speed.

**Comfort:** ergonomic composite housing is lightweight, protects from cold air and offers great operator comfort.



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	 in	 Recom. Nm	 Max. Nm	 1 min. rpm	 1 min.	 kg	 L mm	 AIR in (NPT)	 AIR mm	 l/s	 dB(A)	 m/s <sup>2</sup> / K(2)
<b>Air Ratchet Wrenches</b>													
1105MAX-D2	45649035	1/4" SQ	7-34	41	300	—	0.65	187	1/4"	10	9.4	88.9	5.7 / 1.0
1105MAX-D3	45649480	3/8" SQ	7-34	41	300	—	0.65	187	1/4"	10	9.4	88.9	5.7 / 1.0
1207MAX-D3	45653276	3/8" SQ	14-81	88	200	—	1.45	275	1/4"	10	10.8	85.0	3.2 / 1.1
1207MAX-D4	45654225	1/2" SQ	14-81	88	200	—	1.45	275	1/4"	10	10.8	85.0	3.2 / 1.1
<b>Air Right Angle Impact Wrenches</b>													
2015MAX (1)	45533775	3/8" SQ	61-190	244	7 100	2 100	1.54	332	1/4"	10	9.0	96.6	17.4 / 3.0
2025MAX (1)	47099247	1/2" SQ	61-190	244	7 100	2 100	1.54	332	1/4"	10	9.0	96.6	17.4 / 3.0

(1) Fitted with Jumbo Hammer impact mechanism.

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

### Angle Wrenches Accessories

103-BOOT



Model No.	CPN	Description	Compatibility
103-BOOT	45505310	Protective tool boot in vinyl material	1105MAX-D2, 1105MAX-D3
2015-BOOT	47109715	Protective tool boot in vinyl material	2015MAX, 2025MAX

## 2100XP-Series Air Impacttools



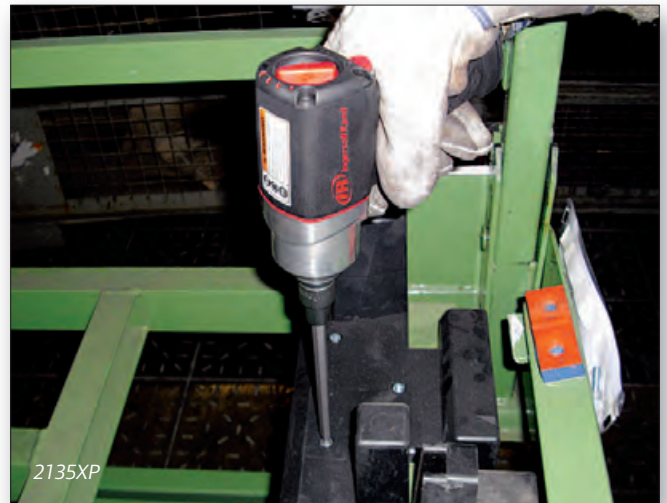
Maintenance-duty classification

Perfect for any maintenance and repair application, the 2100XP Series tools deliver maximum power and control, along with unmatched reliability that comes from more than a century of proven engineering and innovation.

**Performance:** Ingersoll Rand Twin Hammer impact mechanism is the strongest, most durable and longest life mechanism in the industry.

**Control:** one-hand forward/reverse switch for easy operation and power regulator.

**Comfort:** ergonomic handle design and textured finish provide a secure and comfortable grip.



Bolting



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	in	Recom. Nm	Max. Nm	1 min. rpm	1 min.	kg	L mm	AIR in (NPT)	AIR mm	I/s	dB(A)	m/s <sup>2</sup> / K <sup>1</sup>
<b>Air Impacttools / Simple Hammer Mechanism</b>													
<b>2101XP</b>	16599466	1/4" ring type	34-54	68	11 000	1 250	0.62	165	1/4"	10	8.6	85.8	4.4 / 0.8
<b>2102XP</b>	16619686	3/8" ring type	34-54	68	11 000	1 250	0.63	165	1/4"	10	8.6	85.8	4.4 / 0.8
<b>Air Impacttools / Twin Hammer Mechanism</b>													
<b>2115XP</b>	45632130	3/8" ring type	34-285	370	15 000	1 500	1.13	151	1/4"	10	8.0	94.0	7.5 / 1.8
<b>2125XP</b>	45632999	1/2" ring type	34-310	410	15 000	1 500	1.14	155	1/4"	10	8.0	94.0	7.5 / 1.8
<b>2130XP</b>	80136112	1/2" ring type	34-474	816	9 500	1 200	1.90	187	1/4"	10	10.4	94.3	8.9 / 2.0
<b>2135XP</b>	45606704	1/2" ring type	68-680	935	8 900	1 250	1.90	187	1/4"	10	11.3	95.5	13.3 / 4.6
<b>2161XP</b>	01372085	3/4" ring type	407-1356	1 695	6 000	1 025	5.35	216	3/8"	13	21.5	94.7	9.8 / 1.8
<b>2171XP</b>	01378165	1" ring type	407-1356	1 695	6 000	1 025	5.47	226	3/8"	13	21.5	94.7	10.3 / 1.3

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

### 2100XP-Series Accessories

Model No.	CPN	Description	Compatibility
<b>2115M-BOOT</b>	45602174	Protective tool boot in vinyl material	2115XP, 2125XP
<b>2130-BOOT</b>	45505369	Protective tool boot in vinyl material	2130XP
<b>2135-BOOT</b>	45505377	Protective tool boot in vinyl material	2135XP
<b>2161-BOOT</b>	45505401	Protective tool boot in vinyl material	2161XP, 2171XP

# Pneumatic Bolting

## 2100MAX-Series Air Impacttools ★★ Heavy-duty classification

The 2100MAX Series are premium quality tools for the most demanding applications. Engineered with special features for maximum power, control and reliability. Their new design includes enhanced controls for even greater comfort and convenience

**Performance:** Ingersoll Rand Twin Hammer impact mechanism is the strongest, most durable and longest life mechanism in the industry.

**Control:** feather-touch trigger, wider range of power regulator settings in forward, always maximum power in reverse.













**Comfort:** ergonomic composite housing is lightweight, protects from cold air and offers great operator comfort. Patented Quiet Tool technology - reduces sound levels caused by air pulsating through the impact motor.



2100MAX-Series power and reverse controls



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	 in	 Recom. Nm	 Max. Nm	 1 min. rpm	 1 min.	 kg	 mm	 AIR in (NPT)	 AIR mm	 l/s	 dB(A)	 m/s <sup>2</sup> / K(1)
<b>Air Impacttools / Twin Hammer Mechanism</b>													
<b>2115PTiMAX</b>	45587540	3/8" pin type	34-312	407	15 000	1 500	1.13	151	1/4"	10	8.0	93.2	7.5 / 1.8
<b>2115QTiMAX</b>	45587326	3/8" ring type	34-312	407	15 000	1 500	1.13	151	1/4"	10	8.0	93.2	7.5 / 1.8
<b>2125PTiMAX</b>	45587565	1/2" pin type	34-340	450	15 000	1 500	1.14	155	1/4"	10	8.0	93.2	7.5 / 1.8
<b>2125QTiMAX</b>	45587524	1/2" ring type	34-340	450	15 000	1 500	1.14	155	1/4"	10	8.0	93.2	7.5 / 1.8
<b>2135QPTiMAX</b>	45535572	1/2" pin type	68-746	1 057	9 800	1 250	1.84	187	1/4"	10	11.3	94.2	13.3 / 4.6
<b>2135QTiMAX</b>	45535598	1/2" ring type	68-746	1 057	9 800	1 250	1.84	187	1/4"	10	11.3	94.2	13.3 / 4.6
<b>2145QiMAX</b>	45624327	3/4" ring type	271-1220	1 830	1 150	1 150	3.35	217	3/8"	13	15.1	96.3	8.7 / 2.7
<b>2155QiMAX</b>	47123450	1" ring type	271-1220	1 830	1 150	1 150	3.40	225	3/8"	13	15.1	96.3	8.7 / 2.7

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



### 2100MAX-Series Accessories

Model No.	CPN	Description	Compatibility
<b>2115M-BOOT</b>	45602174	Protective tool boot in vinyl material	2115PTiMAX, 2115QTiMAX, 2125PTiMAX, 2125QTiMAX
<b>2135-BOOT</b>	45505377	Protective tool boot in vinyl material	2135QPTiMAX, 2135QTiMAX
<b>2145M-BOOT</b>	48385033	Protective tool boot in vinyl material	2145QiMAX, 2155QiMAX

## 2900-Series Air Impacttools ★★ ★ Super-duty classification

The 2900 Series is designed with durability in mind, from the vanes turning the motor to the hammer frames and anvil for intensive and heavy-duty industrial maintenance and production applications.

**Control:** 5-position power regulator helps adjusting the power to the application on 2902P1 and 2906P1. 90° angle drive available on 2920 and 2934 impacttools.

**Reliability:** Ingersoll Rand Twin Hammer impact mechanism (except 2902P1). Pressure-fed mechanism lubrication.

**Comfort:** integral muffler reducing operator's fatigue. Ergonomic auxiliary handle provides excellent maneuverability.



2920B1-EU



2902P1









2906P1-EU

2934P2-EU

2934B1-EU

2920B9-EU

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	Profile	 in (1)	Recom. Nm	Max. Nm	1 min. rpm	1 min. 	kg	 mm	 in (NPT)	 mm	 l/s	 dB(A)	 m/s <sup>2</sup> / K <sup>2</sup>
<b>Air Impacttool / Jumbo Hammer Mechanism</b>														
<b>2902P1</b>	01198498	<b>P</b>	3/8" pin type	27-163	244	10 000	1 500	1.25	140	1/4"	10	7.0	79.7	7.6 / 1.8
<b>Air Impacttool / Twin Hammer Mechanism</b>														
<b>2906P1-EU</b>	01337609	<b>P</b>	1/2" pin type	54-475	678	5 000	1 200	2.72	175	1/4"	10	10.8	83.7	7.2 / 0.8
<b>2934P2-EU</b>	01337989	<b>P</b>	1" hole type	678-1490	2 034	5 300	825	9.07	219	1/2"	19	22.1	92.4	18.3 / 5.3
<b>2920B1-EU</b>	01338045	<b>B</b>	3/4" hole type	339-1085	1 492	5 000	950	5.98	318	3/8"	13	17.0	87.9	19.9 / 6.6
<b>2934B2-EU</b>	01337591	<b>B</b>	1" hole type	678-1490	2 034	6 600	750	8.39	286	1/2"	19	22.1	97.9	18.8 / 3.7
<b>2920B9-EU</b>	01338896	<b>B9</b>	3/4" hole type	203-678	746	5 000	950	10.75	445	3/8"	13	17.0	91.8	19.9 / 6.6
<b>2934B9-EU</b>	01338227	<b>B9</b>	1" hole type	339-678	1 017	5 300	780	16.2	473	1/2"	19	22.1	96.2	30.8 / 10.2

(1) Hole-type square drives for use with socket retaining rings (see description page 21).

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

### 2900-Series Accessories

Model No.	CPN	Description	Compatibility
<b>212-BOOT</b>	45505344	Protective tool boot in vinyl material	2902P1

# Pneumatic Bolting

## 2925-Series Air Impacttools



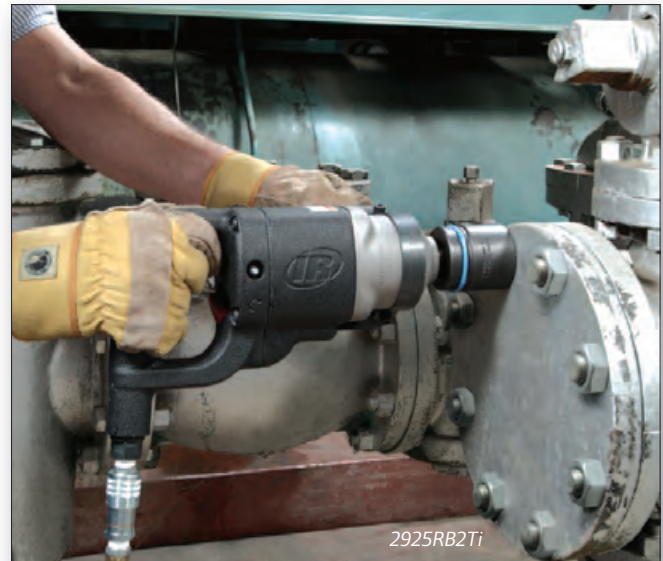
Super-duty classification

The 2925 Series comes with an unbeatable feature list which meets the most demanding requirements for enhanced performance and unbeatable durability in super heavy industrial applications.

**Performance:** Ingersoll Rand Twin Hammer impact mechanism.

**Durability:** Titanium hammer case is lightweight with unparalleled durability. Corrode-X™-corrosion resistant treatment on internal parts guards against contaminants in the air system.

**Adaptability:** the motor can be easily converted to provide maximum torque in forward direction for fastening applications.



2925RB2Ti



2925RBP3Ti



2925RB2Ti

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	Profile	in (1)	Nm	Nm	rpm	min.	kg	mm	in (NPT)	mm	l/s	dB(A)	m/s <sup>2</sup> / K(2)
<b>Air Impactool / Twin Hammer Mechanism</b>														
<b>2925RBP1Ti</b>	80147036	<b>P</b>	3/4" hole type	407-1288	2 169	5 200	1 050	5.44	225	3/8"	13	28.0	98.0	10.5/1.0
<b>2925RBP3Ti</b>	80147044	<b>P</b>	1" hole type	407-1288	2 169	5 200	1 050	5.54	230	3/8"	13	28.0	98.0	10.5/1.0
<b>2925RB2Ti</b>	80147051	<b>B</b>	1" hole type	407-1356	2 304	6 500	900	6.89	334	3/8"	13	28.0	100.2	9.8/1.3

(1) Hole-type square drives for use with socket retaining rings (see description page 21).

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



See our impact sockets and impact socket sets on pages 21-22



## 3900-Series Air Impacttools ★★ ★ Super-duty classification

The revolutionary design of the 3900 Series gives more power and greater durability than any competitive model. From the inside out, the comprehensive list of features and benefits makes it the only choice for professionals in the oil and gas, power generation and other demanding industries.

**Performance:** 6780 Nm (5 000 ft-lb) of maximum torque in reverse. Twin Hammer impact mechanism. High-performance motor package includes 7-vane rotor and bronze end-plates – can be easily converted to provide maximum torque in forward direction for fastening applications.













**Durability:** lightweight titanium hammer case with unparalleled durability. Corrosion- and wear-resistant bronze end-plates.



Bolting



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	Profile	 in (1)	 Recom. Nm	 Max. Nm	 1 min. rpm	 1 min. l/min	 kg	 mm	 in (NPT)	 mm	 l/s	 dB(A)	 m/s <sup>2</sup> / K(2)
<b>Air Impacttool / Twin Hammer Mechanism</b>														
<b>3940P2Ti</b>	80162597	<b>P</b>	1" hole type	678-2237	3 729	5 300	800	9.3	256	1/2"	19	35	97.8	14.2 / 2.0
<b>3940B2Ti</b>	10568301	<b>B</b>	1" hole type	678-2237	3 729	6 000	800	9.6	341	1/2"	19	35	106.6	13.1 / 1.6
<b>3942B2Ti</b>	80152978	<b>B</b>	1" hole type	1356-2644	4 407	5 000	850	10.5	361	1/2"	19	44	103.4	16.9 / 4.6
<b>3955B2Ti</b>	80151103	<b>B</b>	1-1/2" hole type	2170-5290	6 780	2 750	700	15.7	423	1/2"	19	37	102.0	20.8 / 8.5
<b>3940A2Ti</b>	80150402	<b>A</b>	1" hole type	678-2237	3 729	6 000	800	9.6	341	1/2"	19	35	106.6	13.1 / 1.6
<b>3942A2Ti</b>	80152960	<b>A</b>	1" hole type	1356-2644	4 407	5 000	850	10.5	361	1/2"	19	44	103.4	16.9 / 4.6
<b>3955A2Ti</b>	80153562	<b>A</b>	1-1/2" hole type	2170-5290	6 780	2 750	700	15.7	423	1/2"	19	37	102.0	20.8 / 8.5

(1) Hole-type square drives for use with socket retaining rings (see description page 21).

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

# Pneumatic Bolting

## 5000-Series Air Impacttools



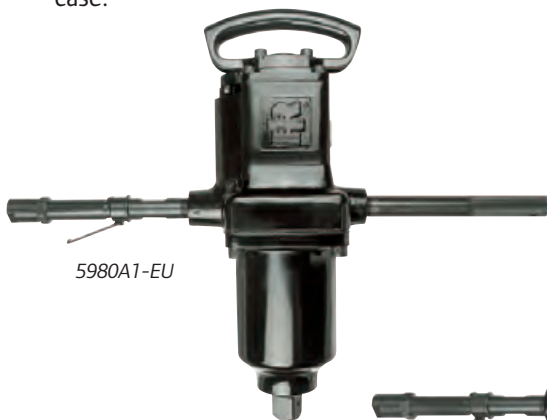
Super-duty classification

The 5000 Series is designed with durability in mind, from the vanes turning the motor to the hammer frames and anvils. Proprietary hardening and treatment processes and excellence in manufacturing all add up to the longest lasting, hardest hitting impact tools in the business. Up to 108 000 Nm of power, for the most demanding applications in the world.

**Performance:** for fast removal and tightening of large fasteners. 599A1-EU model is the most powerful Impacttool in the world.

**Convenience:** portable, easy to handle or suspend with vertical and horizontal hangers.

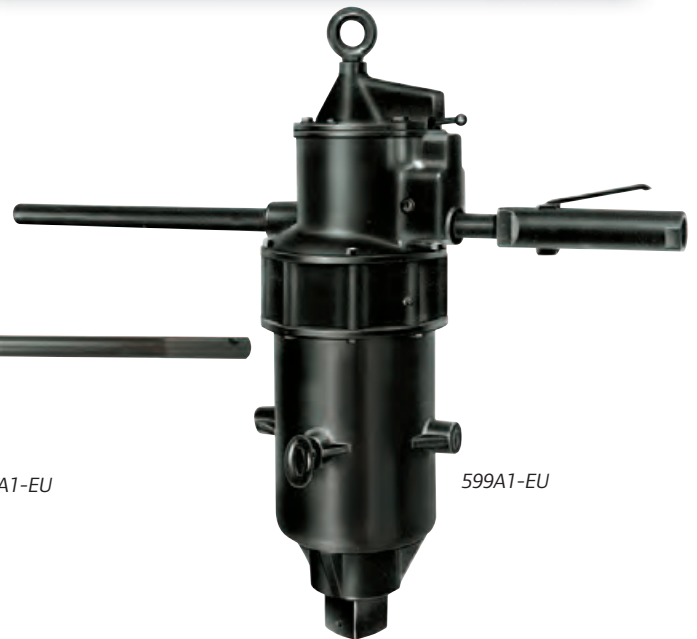
**Durability:** built-in lubricator and high resistance hammer case.



5980A1-EU



5982A1-EU



599A1-EU

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	in (1)	Recom. Nm	Max. Nm	1 min. rpm	1 min.	kg	L mm	in (NPT)	mm	l/s	dB(A)
<b>Air Impacttool / Ball &amp; Cam Impact Mechanism</b>												
5980A1-EU	01337799	1-1/2" hole type	3119-7460	13 560	830	1000	39.9	584	3/4"	25	65	106.1
5982A1-EU	01338516	2-1/2 hole type	5424-13560	27 120	830	850	54.5	645	3/4"	25	61	105.1
588A1-EU	01337880	2-1/2 hole type	16270-33900	67 800	355	550	97.5	646	1"	25	73	113.0
599A1-EU	01345099	3-1/2 hole type	35250-57000	108 500	295	500	272	952	1-1/2"	38	177	108.6

(1) Hole-type square drives for use with socket retaining rings (see description page 21).



## ATEX Certified Air Impacttools



Super-duty classification

Ingersoll Rand has always offered products to be used in hazardous atmospheres. As well as the standard classic Impacttools with housings in a special spark resistant alloy, investment in low static spark composite technology has made possible a new range of lightweight impacttools which are fully certified to classifications under the new European Directives 94/9/EC and 1999/92/EC – commonly known as the ATEX Directives. These are the tool of choice for specialized applications within the petrochemical and mining industries, and in any production or processing areas where hazardous atmospheres can occur.

**Safety:** ATEX certification EX I M2 c IIB 95°C X and EX II 2 GD c IIB 95°C X allows these tools to be used in potentially explosive atmosphere in compliance with European Community Directives 94/9/EC and 1999/92/EC .

**Reliability:** Ingersoll Rand Twin Hammer impact mechanism. Pressure-fed mechanism lubrication.

**Control:** feather-touch trigger allows precise delivery of power and speed.



2145QiMAX-SP

Bolting



2145QIMAX-SP



2155QIMAX-SP



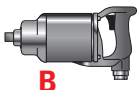
2131PSP



2940B2SP-EU



P



B

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	Profile	in (1)	Nm	Nm	rpm	1 min.	kg	mm	in (NPT)	mm	l/s	dB(A)	m/s <sup>2</sup> / K(2)
<b>Air Impacttool / Twin Hammer Mechanism</b>														
<b>2131PSP</b>	45471687	<b>P</b>	1/2" hole type	68-542	813	9 500	1 250	2.00	190	1/4"	10	11.0	93.7	8.3 / 1.1
<b>2145QiMAX-SP</b>	47122585	<b>P</b>	3/4" hole type	271-1220	1 830	6 300	1 150	3.35	217	3/8"	13	15.1	96.3	8.7 / 2.7
<b>2155QiMAX-SP</b>	47122619	<b>P</b>	1" hole type	271-1220	1 830	6 300	1 150	3.36	225	3/8"	13	15.1	96.3	8.7 / 2.7
<b>2934B2SP-EU</b>	01337682	<b>B</b>	1" hole type	678-1490	2 034	6 600	750	10.0	286	1/2"	19	22.0	97.9	18.8 / 3.7
<b>2940B2SP-EU</b>	01337583	<b>B</b>	1" hole type	1360-2170	2 710	5 000	850	8.40	311	1/2"	19	27.0	97.8	17.8 / 3.4

(1) Hole-type square drives for use with socket retaining rings (see description page 21).

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

# Pneumatic Bolting

## 1/2" Square Drive Impactool Kits

Durable carrying cases with tool and ten 1/2" square drive Impact sockets (10, 11, 12, 13, 14, 17, 19, 21, 22, and 24 mm).

- Twin Hammer impact mechanism.
- Ring-type anvil.
- Wide range of power regulator settings in forward, always maximum power in reverse.



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	Recom. Nm	Max. Nm	1 min. rpm	1 min.	kg	L mm	AIR in (NPT)	AIR mm	l/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Air Impactool Kits / Twin Hammer Mechanism</b>												
<b>2130XP-K</b>	16985301	34-474	816	9 500	1 200	1.90	187	1/4"	10	10.4	94.3	8.9 / 2.0
<b>2135XP+SK</b>	17022112	68-680	935	8 900	1 250	1.90	187	1/4"	10	11.3	95.5	13.3 / 4.6
<b>2135QTiMAX-SK</b>	17020033	68-748	1 057	9 800	1 250	1.84	187	1/4"	10	11.3	94.2	13.3 / 4.6

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



## Service Kits

	A CPN	B CPN
<b>3/8" Square Drive Wrenches &amp; Impactools</b>		
2015MAX	47100474	47100359
2115PTiMAX	45585189	45585932
2115QTiMAX	45585189	45585932
2115XP	45585189	45585932
<b>1/2" Square Drive Wrenches &amp; Impactools</b>		
2025MAX	47100474	47100359
2125PTiMAX	45585189	45585932
2125QTiMAX	45585189	45585932
2125XP	45585189	45585932
2130XP	80142375	80140528
2131PSP	45535028	80122153
2135QTiMAX	45535028	80122153
2135QTiMAX	45535028	80119571
2135XP	45535028	80119571
2906P1-EU	03802360	-
<b>3/4" Square Drive Impactools</b>		
2145QiMAX	47100011	47102561
2145QiMAX-SP	47100011	47102561
2161XP	04621744	-
2161XP-6	04621744	-
2920B1-EU	03803095	-
2920B9-EU	03803095	-
2925RBP1Ti	04621736	-

	A CPN	B CPN
<b>1" Square Drive Impactools™</b>		
2155QiMAX	47100011	47102561
2155QiMAX-SP	47100011	47102561
2171XP	04621744	80137698
2925RB2Ti	10326163	-
2925RBP3Ti	04621736	-
2934B2-EU	03803111	-
2934B2SP-EU	03803111	-
2934B9-EU	03803111	-
2934P2-EU	03803111	-
2940B2SP-EU	03803129	-
3940A2Ti	80167943	-
3940B2Ti	80167943	-
3940P2Ti	80167943	-
3942A2Ti	80167950	-
3942B2Ti	80167950	-
<b>1-1/2" Square Drive Impactools</b>		
3955A2Ti	80166689	-
3955B2Ti	80166689	-

## Metric Impact Socket Sets ★ ★ ★ Super-duty classification

- Impact-grade toughness – designed for high-torque applications.
- Forged chrome-molybdenum steel for high strength durability.
- Electro-phosphate finish on 1/4 to 1" drive sizes – projects a sleek look and high visibility.
- Laser-etched socket size labelling for easy size identification.



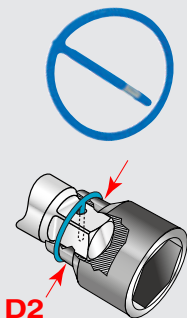
Sockets sold individually. See next page

	Square drive and CPN	Description
Model no. <b>SK2M12</b> 	<b>1/4"</b> CPN: 81287336	Contains 6, 7, 8, 9, 10, 11, 12, 13 and 14 mm sockets, 50 and 100 mm extensions bars, 3/8"F to 1/4"M adapter.
Model no. <b>SK3M10</b> 	<b>3/8"</b> CPN: 81287344	Contains 9, 10, 11, 12, 13, 14, 15, 16, 17 and 19 mm sockets.
Model no. <b>SK4M5L</b> 	<b>1/2"</b> CPN: 81287369	Contains 5 deep sockets (17, 19, 21, 22 and 24 mm).
Model no. <b>SK4M14</b> 	<b>1/2"</b> CPN: 81287351	Contains 14 sockets (10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23 and 24 mm).

	Square drive and CPN	Description
Model no. <b>SK4M18</b> 	<b>1/2"</b> CPN: 81287385	Contains 9 standard sockets (10, 11, 13, 14, 17, 19, 21, 22 and 24 mm), 4 deep sockets (13, 14, 21 and 24 mm), 3 deep / thin wall sockets (17, 19 and 21 mm), 125 mm extension bar and 1/2" square drive power joint.
Model no. <b>SK4M7U</b> 	<b>1/2"</b> CPN: 80171093	Contains 7 sockets, pre-fitted on power joints to facilitate works with very limited accessibility (13, 14, 15, 17, 19, 21 and 22 mm)
Model no. <b>SK6M6L</b> 	<b>3/4"</b> CPN: 81287401	Contains 6 extended sockets (24, 27, 30, 32, 33 and 36 mm).
Model no. <b>SK8M4L</b> 	<b>1"</b> CPN: 81287419	Contains 4 extended sockets (27, 30, 32 and 33 mm).

Bolting

## Retaining Rings



Part no.	CPN	Qty.	Internal Ø	Material
RR10001	49825524	10	15.0 mm	Plastic
RR10002	49825532	10	17.0 mm	Plastic
RR10003	49825540	10	19.0 mm	Plastic
RR10004	49825557	10	20.0 mm	Plastic
RR10005	49825565	10	22.0 mm	Plastic
RR10006	49825573	10	24.0 mm	Plastic
RR10007	49825581	10	24.0 mm	Plastic
RR10008	49825599	10	29.0 mm	Plastic
RR10005S	03816055	1	32.0 mm	Plastic + Steel insert
RR10009	49825607	10	33.0 mm	Plastic
RR10032S	03809258	1	36.5 mm	Plastic + Steel insert

Part no.	CPN	Qty.	Internal Ø	Material
RR10010	80206477	10	37.0 mm	Plastic
RR10034S	03809266	1	41.5 mm	Plastic + Steel insert
RR10008S	03809274	1	44.5 mm	Plastic + Steel insert
RR10010S	03809282	1	49.0 mm	Plastic + Steel insert
RR10015S	03809290	1	54-57 mm	Plastic + Steel insert
RR10017S	03816063	1	63.5 mm	Plastic + Steel insert
RR10019S	03809308IRI	1	67.0 mm	Plastic + Steel insert
RR10020S	03809316	1	76.0 mm	Plastic + Steel insert
RR10025S	03809324	1	86.0 mm	Plastic + Steel insert
RR10030S	03809332	1	98.5 mm	Plastic + Steel insert
RR10035S	03809340	1	111.0 mm	Plastic + Steel insert

Because of the elasticity of the material, the diameter at the female square drive of the socket (D2) can be slightly larger than the ring.  
 Note: The retainer rings must have a tight fit on the socket.

# Pneumatic Bolting

## Metric Impact Sockets Super-duty classification

A/F	1/4"	3/8"		1/2"		3/4"		1"		1-1/2"		2-1/2"
	Standard socket	Standard socket	Deep socket	Standard socket	Deep socket	Standard socket	Deep socket	Standard socket	Deep socket	Standard socket	Deep socket	Standard socket
4 mm	S62M4	—	—	—	—	—	—	—	—	—	—	—
5 mm	S62M5	—	—	—	—	—	—	—	—	—	—	—
6 mm	S62M6	—	—	—	—	—	—	—	—	—	—	—
7 mm	S62M7	S63M7	S63M7L	—	—	—	—	—	—	—	—	—
8 mm	S62M8	S63M8	S63M8L	S64M8	S64M8L	—	—	—	—	—	—	—
9 mm	S62M9	S63M9	S63M9L	S64M9	S64M9L	—	—	—	—	—	—	—
10 mm	S62M10	S63M10	S63M10L	S64M10	S64M10L	—	—	—	—	—	—	—
11 mm	S62M11	S63M11	S63M11L	S64M11	S64M11L	—	—	—	—	—	—	—
12 mm	S62M12	S63M12	S63M12L	S64M12	S64M12L	—	—	—	—	—	—	—
13 mm	S62M13	S63M13	S63M13L	S64M13	S64M13L	—	—	—	—	—	—	—
14 mm	S62M14	S63M14	S63M14L	S64M14	S64M14L	—	—	—	—	—	—	—
15 mm	—	S63M15	S63M15L	S64M15	S64M15L	—	—	—	—	—	—	—
16 mm	—	S63M16	S63M16L	S64M16	S64M16L	—	—	—	—	—	—	—
17 mm	—	S63M17	S63M17L	S64M17	S64M17L	S66M17	S66M17L	—	—	—	—	—
18 mm	—	S63M18	S63M18L	S64M18	S64M18L	S66M18	—	—	—	—	—	—
19 mm	—	S63M19	S63M19L	S64M19	S64M19L	S66M19	S66M19L	S68M19	S68M19L	—	—	—
20 mm	—	S63M20	S63M20L	S64M20	S64M20L	S66M20	S66M20L	—	—	—	—	—
21 mm	—	S63M21	S63M21L	S64M21	S64M21L	S66M21	S66M21L	S68M21	S68M21L	—	—	—
22 mm	—	S63M22	S63M22L	S64M22	S64M22L	S66M22	S66M22L	S68M22	S68M22L	—	—	—
23 mm	—	—	—	S64M23	S64M23L	S66M23	S66M23L	S68M23	S68M23L	—	—	—
24 mm	—	—	—	S64M24	S64M24L	S66M24	S66M24L	S68M24	S68M24L	—	—	—
25 mm	—	—	—	S64M25	S64M25L	S66M25	S66M25L	S68M25	S68M25L	—	—	—
26 mm	—	—	—	S64M26	S64M26L	S66M26	S66M26L	S68M26	S68M26L	—	—	—
27 mm	—	—	—	S64M27	S64M27L	S66M27	S66M27L	S68M27	S68M27L	—	—	—
28 mm	—	—	—	S64M28	S64M28L	S66M28	S66M28L	S68M28	S68M28L	—	—	—
29 mm	—	—	—	S64M29	S64M29L	S66M29	S66M29L	S68M29	S68M29L	—	—	—
30 mm	—	—	—	S64M30	S64M30L	S66M30	S66M30L	S68M30	S68M30L	S612M30	—	—
31 mm	—	—	—	—	—	S66M31	S66M31L	—	—	—	—	—
32 mm	—	—	—	S64M32	S64M32L	S66M32	S66M32L	S68M32	S68M32L	S612M32	—	—
33 mm	—	—	—	S64M33	S64M33L	S66M33	S66M33L	S68M33	S68M33L	—	—	—
34 mm	—	—	—	S64M34	S64M34L	S66M34	S66M34L	S68M34	S68M34L	—	—	—
35 mm	—	—	—	—	—	S66M35	S66M35L	S68M35	S68M35L	S612M35	—	—
36 mm	—	—	—	S64M36	S64M36L	S66M36	S66M36L	S68M36	S68M36L	S612M36	—	—
37 mm	—	—	—	—	—	S66M37	—	—	—	—	—	—
38 mm	—	—	—	—	—	S66M38	S66M38L	S68M38	S68M38L	S612M38	—	—
40 mm	—	—	—	—	—	S66M40	S66M40L	S68M40	S68M40L	—	—	—
41 mm	—	—	—	—	—	S66M41	S66M41L	S68M41	S68M41L	S612M41	S612M41L	—
42 mm	—	—	—	—	—	S66M42	S66M42L	S68M42	S68M42L	—	—	—
43 mm	—	—	—	—	—	S66M43	S66M43L	—	—	—	—	—
45 mm	—	—	—	—	—	—	—	S68M45	S68M45L	—	—	—
46 mm	—	—	—	—	—	S66M46	S66M46L	S68M46	S68M46L	S612M46	S612M46L	—
48 mm	—	—	—	—	—	—	—	S68M48	S68M48L	—	—	—
50 mm	—	—	—	—	—	S66M50	S66M50L	S68M50	S68M50L	S612M50	S612M50L	—
52 mm	—	—	—	—	—	—	—	S68M52	S68M52L	—	—	—
54 mm	—	—	—	—	—	—	—	S68M54	S68M54L	S612M54	S612M54L	—
55 mm	—	—	—	—	—	—	—	S68M55	S68M55L	S612M55	S612M55L	—
56 mm	—	—	—	—	—	—	—	S68M56	S68M56L	—	—	—
58 mm	—	—	—	—	—	—	—	S68M58	S68M58L	S612M58	—	—
60 mm	—	—	—	—	—	—	—	S68M60	S68M60L	S612M60	S612M60L	—
65 mm	—	—	—	—	—	—	—	S68M65	S68M65L	S612M65	S612M65L	—
70 mm	—	—	—	—	—	—	—	S68M70	S68M70L	S612M70	S612M70L	—
75 mm	—	—	—	—	—	—	—	S68M75	S68M75L	S612M75	S612M75L	S620M75
80 mm	—	—	—	—	—	—	—	S68M80	S68M80L	S612M80	S612M80L	S620M80
85 mm	—	—	—	—	—	—	—	S68M85	S68M85L	S612M85	S612M85L	S620M85
90 mm	—	—	—	—	—	—	—	S68M90	S68M90L	S612M90	S612M90L	S620M90
95 mm	—	—	—	—	—	—	—	S68M95	S68M95L	S612M95	S612M95L	S620M95
100 mm	—	—	—	—	—	—	—	—	—	S612M100	S612M100L	S620M100
105 mm	—	—	—	—	—	—	—	—	—	S612M105	S612M105L	S620M105
110 mm	—	—	—	—	—	—	—	—	—	S612M110	S612M110L	S620M110
115 mm	—	—	—	—	—	—	—	—	—	S612M115	S612M115L	S620M115
120 mm	—	—	—	—	—	—	—	—	—	S612M120	S612M120L	S620M120
125 mm	—	—	—	—	—	—	—	—	—	S612M125	—	S620M125
130 mm	—	—	—	—	—	—	—	—	—	—	—	S620M130
135 mm	—	—	—	—	—	—	—	—	—	—	—	S620M135
140 mm	—	—	—	—	—	—	—	—	—	—	—	S620M140
145 mm	—	—	—	—	—	—	—	—	—	—	—	S620M145
150 mm	—	—	—	—	—	—	—	—	—	—	—	S620M150
155 mm	—	—	—	—	—	—	—	—	—	—	—	S620M155
160 mm	—	—	—	—	—	—	—	—	—	—	—	S620M160
165 mm	—	—	—	—	—	—	—	—	—	—	—	S620M165
170 mm	—	—	—	—	—	—	—	—	—	—	—	S620M170
175 mm	—	—	—	—	—	—	—	—	—	—	—	S620M175
180 mm	—	—	—	—	—	—	—	—	—	—	—	S620M180



★★★★ Super-duty tools

★★★ Heavy-duty tools

★ Maintenance-duty tools

Drilling & Fastening

# Pneumatic Drilling & Fastening

*Ingersoll Rand production drills and screwdrivers are designed for continuous use in the most demanding industrial applications.*

*The Q2-Series and Power-Pulse Plus Tools set high-level standards for ergonomic comfort, performance and long term accuracy.*

*The P33 Series of modular drills provides unmatched performance and flexibility for production drilling environments where accessibility and drilling speeds vary from part to part or shift to shift.*

*Large drills with a drilling capacity of up to 76 mm in steel complete the drilling range.*

## **Ingersoll Rand offers:**

- ▶ Pistol grip Drills, Straight Drills and Modular Drills → Pages **24-29**
- ▶ Large Drills up to 76 mm capacity → Page **30**
- ▶ Air Screwdrivers and Pulse Nutrunners / Screwdrivers → Pages **31-32**

# Pneumatic Drilling & Fastening

## Q2-Series Air Production Drills ★★ Heavy-duty classification

The Q2 Series features excellent ergonomics with a compact, form fitting, lightweight design. These drills deliver more power in a smaller package to get the job done in less time.

**Performance:** excellent power-to-weight ratio gets the job done with less fatigue.

**Control:** variable speed control allows slow starting and high speed for fast drilling. Speeds from 500 to 5100 rpm.

**Comfort:** soft-touch grip handle.



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	1 min. rpm	Max. ∅ mm	Max. Nm	kg	mm	mm	in (NPT)	mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Pistol Grip Drills</b>												
QP051D	01376177	500	6	9.8	0.70	184	15	1/4"	6	7.5	76.4	< 2.5
QP091D	01376136	900	6	5.8	0.70	184	15	1/4"	6	7.5	75.4	< 2.5
QP151D	01376086	1500	6	3.4	0.70	184	15	1/4"	6	7.5	75.4	< 2.5
QP152D	01376052	1500	10	3.4	0.80	184	18	1/4"	6	7.5	75.4	< 2.5
QP201D	01376037	2000	6	2.8	0.70	184	15	1/4"	6	7.5	74.9	< 2.5
QP202D	01376011	2000	10	2.8	0.80	184	18	1/4"	6	7.5	74.9	< 2.5
QP301LD	01379403	3000	6	1.8	0.65	171	15	1/4"	6	7.5	77.6	< 2.5
QP302LD	01379981	3000	10	1.8	0.75	171	18	1/4"	6	7.5	77.6	< 2.5
QP381D	01375914	3800	6	1.5	0.70	184	15	1/4"	6	7.5	77.6	< 2.5
QP511LD	01380062	5100	6	1.1	0.65	171	15	1/4"	6	7.5	77.6	< 2.5
QP512LD	01380088	5100	10	1.1	0.75	171	18	1/4"	6	7.5	77.6	< 2.5
<b>Straight Drills</b>												
QS151D	01387257	1500	6	3.80	0.62	205	15	1/4"	6	7.5	80.2	3.4 / 1.2
QS301D	01387273	3000	6	1.90	0.62	205	15	1/4"	6	7.5	78.9	3.4 / 1.2
QS381D	01387281	3800	6	1.50	0.62	205	15	1/4"	6	7.5	79.5	3.4 / 1.2
QS511D	01387299	5100	6	1.20	0.62	205	15	1/4"	6	7.5	79.3	3.4 / 1.2

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



### Drills Chucks 3/8"-24 female thread

Model No.	CPN	Description	Chuck key
R0K-99	03114774	Standard chuck in steel, 13 mm capacity	R1T-J253 (CPN 03130887)
728-99-KC5	04276564	Keyless chuck in composite material, 10 mm capacity	—
728-99-KC8	04276556	Keyless chuck in composite material, 13 mm capacity	—



# Pneumatic Drilling & Fastening

## P33-Series Production Drills ★★ ★ Super-duty classification

A range of powerful drills, offering a wide selection of rotational speeds up to 18 000 rpm – suitable for all precision drilling applications.

**Performance:** 0.33 kW lube free air motor with steel rotor, lightweight aerospace alloy flanges, and self-lubricating composite vanes.

**Control:** high starting torque air motor and variable speed control allow slow speed starting and high speed drilling.

**Comfort:** compact and lightweight tools. Chuck guard as standard.



P33022-PSL



P33054-DSL

P33054-PSL

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	1 min. rpm	Max. ∅ mm	Max. Nm	kg	L mm	mm	AIR in (BSP)	AIR mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Pistol Grip Drills</b>												
P33006-PSL	53430302	660	10	16.0	1.15	209	22	1/4"	9	10	75.8	< 2.5
P33011-PSL	53430344	1100	10	9.5	1.15	209	22	1/4"	9	10	75.8	< 2.5
P33016-PSL	53430385	1600	8	6.8	1.15	209	22	1/4"	9	10	75.8	< 2.5
P33022-PSL	53430435	2200	8	4.5	1.05	194	22	1/4"	9	10	75.8	< 2.5
P33032-PSL	53430468	3200	8	3.2	1.05	194	22	1/4"	9	10	75.8	< 2.5
P33054-PSL	53430500	5400	6	1.9	1.05	194	22	1/4"	9	10	75.8	< 2.5
<b>Straight Drills</b>												
P33006-DSL	53430294	660	10	16.0	1.0	235	22	1/4"	9	10	75.8	< 2.5
P33011-DSL	53430336	1100	10	9.50	1.0	235	22	1/4"	9	10	75.8	< 2.5
P33016-DSL	53430377	1600	8	6.80	0.94	227	22	1/4"	9	10	75.8	< 2.5
P33022-DSL	53430419	2200	8	4.50	0.90	212	22	1/4"	9	10	75.8	< 2.5
P33032-DSL	53430450	3200	8	3.20	0.90	212	22	1/4"	9	10	75.8	< 2.5
P33054-DSL	53430492	5400	6	1.90	0.90	212	22	1/4"	9	10	75.8	< 2.5
P33110-DSL	53430526	11000	6	0.90	0.96	227	22	1/4"	9	10	75.8	< 2.5
P33180-DSL	53430542	18000	6	0.55	0.90	212	22	1/4"	9	10	75.8	< 2.5

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



118303



131655

### P33 Accessories

Model No.	CPN	Description	Chuck key
131899	53446571	Dead handle	—
118303	04360640	Horizontal hanger (for pistol models)	—
128065	53490207	Vertical hanger (for straight models)	—
117269	04363081	Steel chuck, 0-6 mm capacity (3/8"-24 thread)	117271 (CPN 04372884)
117311	04372801	Steel chuck, 0-10 mm capacity (3/8"-24 thread)	117312 (CPN 04372876)
131655	53438743	Safety lever (for straight models only)	—

# Pneumatic Drilling & Fastening

## P33-Series Air Modular Drills ★★ ★ Super-duty classification

The P33 modular Series provides unmatched performance and flexibility for production drilling environments. With six pistol motors, eight in-line motors and twenty one unique interchangeable heads, choose only the base motors you need and then swap and configure attachment heads to suit the application.

**Flexibility:** patented quick change technology that allows the attachment heads to be removed and connected safely and securely with any motor in less than 3 seconds. 360° rotation with 20° increments.

**Performance:** 0.33 kW lube-free air motor.

**Control:** sensitive and progressive trigger / lever for precise speed control.

Accessory: safety lever 131655, CPN 53438743



P33016-PMSL



R33M090D17P64



P33022-DMSL



Button control

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	1 min. rpm	Max. Nm	kg	L mm	mm	in (BSP)	mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Pistol Grip Motors / Trigger Control</b>											
P33006-PMSL	53442604	660	16	0.92	161	21.3	1/4"	9	10	76	< 2.5
P33011-PMSL	53442612	1100	9.5	0.92	161	21.3	1/4"	9	10	76	< 2.5
P33016-PMSL	53442620	1600	6.8	0.92	161	21.3	1/4"	9	10	76	< 2.5
P33022-PMSL	53442638	2200	4.5	0.81	146	21.3	1/4"	9	10	76	< 2.5
P33032-PMSL	53442646	3200	3.2	0.80	146	21.3	1/4"	9	10	76	< 2.5
P33054-PMSL	53442653	5400	1.9	0.80	146	21.3	1/4"	9	10	76	< 2.5
<b>Straight Motors / Button Control</b>											
P33032-DMSL-B	53433892	3200	3.2	0.64	164	22	1/4"	9	10	76	< 2.5
P33054-DMSL-B	53433900	5400	1.9	0.63	164	22	1/4"	9	10	76	< 2.5
<b>Straight Motors / Lever Control</b>											
P33006-DMSL	53430328	660	16	0.79	179	22	1/4"	9	10	76	< 2.5
P33011-DMSL	53430369	1100	9.5	0.79	179	22	1/4"	9	10	76	< 2.5
P33016-DMSL	53430393	1600	6.8	0.79	179	22	1/4"	9	10	76	< 2.5
P33022-DMSL	53430443	2200	4.5	0.68	164	22	1/4"	9	10	76	< 2.5
P33032-DMSL	53430476	3200	3.2	0.67	164	22	1/4"	9	10	76	< 2.5
P33054-DMSL	53430518	5400	1.9	0.67	164	22	1/4"	9	10	76	< 2.5

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

# Pneumatic Drilling & Fastening

## Modular Drill Attachments

660 rpm  
1100 rpm  
1600 rpm  
2200 rpm  
3200 rpm  
5400 rpm

18 x 20°

660 rpm  
1100 rpm  
1600 rpm  
2200 rpm  
3200 rpm  
5400 rpm

**Collets**

P45 P64 P80 F80

See drill collets page 29

Drilling & Fastening

	Model No.	CPN	Max. Ø mm	A mm	B mm	C mm	D mm	kg
	1 R33M000F1/4	53447702	8.0	A + 40	-	-	-	0.16
	2 R33M000F5/16	53447710	8.0	A + 40	-	-	-	0.16
	3 R33M000P64	53444592	6.4	A + 42	-	-	-	0.16
	4 R33M000M80	53444584	8.0	A + 81	-	-	-	0.38
	5 R33M030D17F1/4	53447579	6.4	A+118	24.0	18	-	0.24
	6 R33M030D17P45	53430575	4.5	A+112	19.5	18	-	0.24
	7 R33M030D17P64	53430609	6.4	A+124	31.5	18	-	0.26
	8 R33M090D17F1/4	53447553	6.4	A+105	36.0	18	-	0.24
	9 R33M090D17P45	53430567	4.5	A+105	36.0	18	-	0.24
	10 R33M090D17P64	53430591	6.4	A+105	43.5	18	-	0.26
	11 R33M090D25F1/4	53447140	8.0	A + 78	44.0	25	-	0.34
	12 R33M090D25F5/16	53447165	8.0	A + 78	44.0	25	-	0.34
	13 R33M090D25F80	53430641	8.0	A + 78	50.0	25	-	0.36
	14 R33M090D25M80	53430633	8.0	A + 81	98.5	30	-	0.54
	15 R33M090D25P80	53430625	8.0	A + 78	54.0	25	-	0.39
	16 R33M180D17F1/4	53447496	6.4	A+124	64.0	18	36	0.30
	17 R33M180D17P45	53430583	4.5	A+120	64.0	18	32	0.30
	18 R33M180D17P64	53430617	6.4	A+131	64.0	18	44	0.32
	19 R33M180D25F1/4	53447124	8.0	A + 99	87.5	25	44	0.40
	20 R33M180D25F5/16	53447157	8.0	A + 99	87.5	25	44	0.40
	21 R33M180D25P80	53447116	8.0	A+109	87.5	25	54	0.45

# Pneumatic Drilling & Fastening

## P33-Series Air Precision Drills ★★★ Super-duty classification

Based on the P33 modular Series, the P33 precision drills are available in 3 different angle configurations: 30°, 90° and 180°. Each angle head can easily be oriented through 360° using a simple nut / lock nut system.

The P33 precision drills fit perfectly into any kind of application and the design of the angle heads makes their orientation simple. Superior drilling quality is achieved through engineered excellence on the angle heads.

- 0.33 kW lube-free air motor
- Sensitive and progressive trigger / lever for precise speed control
- Available with P45 and P64 collets

Accessory: safety lever 131655, CPN 53438743

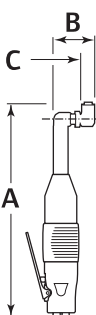


Model No.	CPN	1 min. rpm	Max. Ø mm	Max. Nm	kg	A mm	B mm	C mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
<b>With 30° Angle Head</b>											
P33006-DASL030P45	53448122	660	1.0 - 4.5	16	0.88	284	19.5	17	10	75.8	< 2.5
P33006-DASL030P64	53448130	660	1.6 - 6.4	16	0.88	296	31.5	17	10	75.8	< 2.5
P33011-DASL030P45	53448205	1100	1.0 - 4.5	9.5	0.88	284	19.5	17	10	75.8	< 2.5
P33011-DASL030P64	53448197	1100	1.6 - 6.4	9.5	0.88	296	31.5	17	10	75.8	< 2.5
P33016-DASL030P45	53448254	1600	1.0 - 4.5	6.8	0.88	284	19.5	17	10	75.8	< 2.5
P33016-DASL030P64	53448262	1600	1.6 - 6.4	6.8	0.88	296	31.5	17	10	75.8	< 2.5
P33022-DASL030P45	53433934	2200	1.0 - 4.5	4.5	0.77	269	19.5	17	10	75.8	< 2.5
P33022-DASL030P64	53448403	2200	1.6 - 6.4	4.5	0.77	281	31.5	17	10	75.8	< 2.5
P33032-DASL030P45	53434031	3200	1.0 - 4.5	3.2	0.76	269	19.5	17	10	75.8	< 2.5
P33032-DASL030P64	53448460	3200	1.6 - 6.4	3.2	0.76	281	31.5	17	10	75.8	< 2.5
P33054-DASL030P45	53448494	5400	1.0 - 4.5	1.9	0.76	269	19.5	17	10	75.8	< 2.5
P33054-DASL030P64	53448502	5400	1.6 - 6.4	1.9	0.76	281	31.5	17	10	75.8	< 2.5
<b>With 90° Angle Head</b>											
P33006-DASL090P45	53448148	660	1.0 - 4.5	16	0.88	277	31	17	10	75.8	< 2.5
P33006-DASL090P64	53448155	660	1.6 - 6.4	16	0.89	277	43	17	10	75.8	< 2.5
P33011-DASL090P45	53433918	1100	1.0 - 4.5	9.5	0.88	277	31	17	10	75.8	< 2.5
P33011-DASL090P64	53448221	1100	1.6 - 6.4	9.5	0.89	277	43	17	10	75.8	< 2.5
P33016-DASL090P45	53448288	1600	1.0 - 4.5	6.8	0.88	277	31	17	10	75.8	< 2.5
P33016-DASL090P64	53448296	1600	1.6 - 6.4	6.8	0.89	277	43	17	10	75.8	< 2.5
P33022-DASL090P45	53433959	2200	1.0 - 4.5	4.5	0.77	262	31	17	10	75.8	< 2.5
P33022-DASL090P64	53448429	2200	1.6 - 6.4	4.5	0.78	262	43	17	10	75.8	< 2.5
P33032-DASL090P45	53434049	3200	1.0 - 4.5	3.2	0.77	262	31	17	10	75.8	< 2.5
P33032-DASL090P64	53448478	3200	1.6 - 6.4	3.2	0.78	262	43	17	10	75.8	< 2.5
P33054-DASL090P45	53448510	5400	1.0 - 4.5	1.9	0.76	262	31	17	10	75.8	< 2.5
P33054-DASL090P64	53448528	5400	1.6 - 6.4	1.9	0.77	262	43	17	10	75.8	< 2.5

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.  
Air inlet 1/4" BSP – Recommended hose internal diameter 9 mm.

# Pneumatic Drilling & Fastening

Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	1 min. rpm	Max. Ø mm	Max. Nm	kg	A mm	B mm	C mm	D mm	L/s	dB(A)	m/s <sup>2</sup> / K(1)
<b>With 180° Angle Head</b>												
 <b>P33006-DASL180P45</b>	53448163	660	1.0 - 4.5	16	0.94	292	63.2	17	31	10	75.8	< 2.5
<b>P33006-DASL180P64</b>	53448171	660	1.6 - 6.4	16	0.96	304	63.2	17	43	10	75.8	< 2.5
<b>P33011-DASL180P45</b>	53448239	1100	1.0 - 4.5	9.5	0.94	292	63.2	17	31	10	75.8	< 2.5
<b>P33011-DASL180P64</b>	53448247	1100	1.6 - 6.4	9.5	0.96	304	63.2	17	43	10	75.8	< 2.5
<b>P33016-DASL180P45</b>	53448320	1600	1.0 - 4.5	6.8	0.94	292	63.2	17	31	10	75.8	< 2.5
<b>P33016-DASL180P64</b>	53448387	1600	1.6 - 6.4	6.8	0.96	304	63.2	17	43	10	75.8	< 2.5
<b>P33022-DASL180P45</b>	53433967	2200	1.0 - 4.5	4.5	0.83	277	63.2	17	31	10	75.8	< 2.5
<b>P33022-DASL180P64</b>	53448437	2200	1.6 - 6.4	4.5	0.85	289	63.2	17	43	10	75.8	< 2.5
<b>P33032-DASL180P45</b>	53434189	3200	1.0 - 4.5	3.2	0.82	277	63.2	17	31	10	75.8	< 2.5
<b>P33032-DASL180P64</b>	53448486	3200	1.6 - 6.4	3.2	0.84	289	63.2	17	43	10	75.8	< 2.5
<b>P33054-DASL180P45</b>	53448536	5400	1.0 - 4.5	1.9	0.82	277	63.2	17	31	10	75.8	< 2.5
<b>P33054-DASL180P64</b>	53448544	5400	1.6 - 6.4	1.9	0.84	289	63.2	17	43	10	75.8	< 2.5

((1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.  
Air inlet 1/4" BSP – Recommended hose internal diameter 9 mm.

## Drill Collets



### For P33 drills / P45 Head

Part No.	CPN	Ø (mm)
120071	04371894	1.0
120072	04371902	1.5
120073	04371910	2.0
120102	04371928	2.2
120106	04371936	2.4
120074	04371944	2.5
120075	04371951	3.0
120105	04371969	3.1
120109	04374336	3.2
120104	04371985	3.25
120113	04370540	3.3
120076	04372009	3.5
123991	04372017	3.6
121552	04372025	3.7
125783	04372033	3.8
120107	04372041	3.9
120077	04372058	4.0
120103	04362232	4.1
120110	04370557	4.2
120078	04372082	4.5

### For P33 drills / P64 Head

Part No.	CPN	Ø (mm)
128250	04372140	1.6
128251	04372157	1.8
128252	04372165	2.0
128253	04372173	2.2
128254	04372181	2.4
128255	04372199	2.6
128256	04372207	2.8
128257	04372215	3.0
128258	04370573	3.2
128259	04372231	3.4
128260	04372249	3.6
128261	04372256	3.8
128262	04372264	4.0
128263	04370581	4.2
128264	04372280	4.4
128265	04372298	4.0
128266	04370599	4.8
128267	04372314	5.0
128268	04372322	5.2
128269	04372330	5.4
128270	04372348	5.6
128271	04372355	5.8
128272	04372363	6.0
128273	04372371	6.2
128274	04372389	6.4

### For P33 drills / P80 Head

Part No.	CPN	Ø (mm)
128280	04372397	2.4
128281	04372405	2.6
128283	04372421	3.0
128285	04372447	3.4
128286	04372454	3.6
128287	04372462	3.8
128288	04372470	4.0
128290	04372496	4.4
128291	04372504	4.6
128292	04372512	4.8
128293	04372520	5.0
128294	04372538	5.2
128296	04372553	5.6
128297	04372561	5.8
128298	04372579	6.0
128299	04372587	6.2
128300	04372595	6.4
128301	04372603	6.6
128302	04372611	6.8
128303	04372629	7.0
128304	04372637	7.2

### For P33 drills / F80 Head

Part No.	CPN	Ø (mm)
128310	04372686	2.0
128311	04372694	2.5
128312	04372702	3.0
128313	04372710	3.5
128314	04372728	4.0
128315	04372736	4.5
128316	04372744	5.0
128317	04372751	5.5
128318	04372769	6.0
128319	04372066	6.5
128320	04372116	7.0
128321	04371993	7.5
128322	04372074	8.0

See our Assembly Tools Catalogue for further information on our production drills and screwdrivers ranges.



# Pneumatic Drilling & Fastening

## Large Drills ★★★★★ *Super-duty classification*

These heavy duty drills are ideal for opening and closing large valves, or drilling large diameter holes between 14 mm - 76 mm.

### 22 Series:

- Ball bearing support for long life and efficient operation.
- Durable spur gearing.
- Governed motor regulates air to the motor to keep drill working at the peak of its power curve.
- Selection of speeds to match all applications.

### 33, 44 and 551 Series:

- Graduated roll throttle for excellent speed control.
- Ball bearing support for long life and efficient operation.
- Strong, lightweight heat-treated aluminum housing for strength without weight.



33SKA-EU

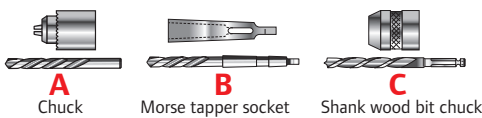


22MA2-EU

22KWA1-EU

33SKA-EU

551SMA-EU



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. Nm	Chuck	Max. Steel mm	Max. Steel mm	Max. Steel mm	mm	H mm	AIR mm	AIR in (BSP)	L/s	m/s <sup>2</sup> /K <sup>(1)</sup>
<b>Large Drills</b>													
<b>22KA1-EU</b>	01341809	1.30	725	A 0-1/2"	14	11	11	7.0	448	3/8"	13	26	< 2.5
<b>22KWA1-EU</b>	01340108	1.30	725	C 1/2" <sup>(2)</sup>	14	-	-	6.5	438	3/8"	13	26	< 2.5
<b>22MA2-EU</b>	01338292	1.30	350	B No. 2	22	16	16	6.5	473	3/8"	13	26	< 2.5
<b>33SKA-EU</b>	01338623	2.20	300	B No. 3	32	25	28	11.7	355	1/2"	19	40	< 2.5
<b>33SMA-EU</b>	01339449	2.20	185	B No. 3	32	32	41	14.1	427	1/2"	19	40	< 2.5
<b>44SMA-EU</b>	01338953	2.68	155	B No. 4	51	51	51	19.8	463	1/2"	19	48	< 2.5
<b>551SMA-EU</b>	01340959	4.66	120	B No. 5	76	64	64	31.3	556	1"	25	75	< 2.5

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

(2) 1/2" stub taper, threaded.

## Q2-Series Air Screwdrivers



Heavy-duty classification

The Q2 Series pistol grip screwdrivers features excellent ergonomics with a lightweight design. They are available in adjustable shut-off clutch, adjustable cushion clutch or direct drive versions for use in a wide range of assembly applications.

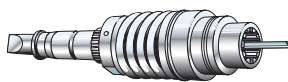
**Control:** trigger start with variable speed control.

- **Adjustable shut-off clutch**, excellent for applications where precise torque control is required / all screw sizes.
- **Adjustable cushion clutch** models for all screw sizes, where torque control is important. Not suitable for tapping screws where tapping torque exceeds the final torque.
- **Direct drive** models for medium and large screws sizes, without torque control. For experienced operators.

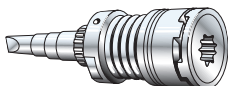
**Comfort:** compact and light weight, well-balanced design. Comfortable swift-touch grip handle.



QP1S15S1TD



Adjustable shut-off clutch



Adjustable cushion clutch



Direct drive



QP1T20S1TD



QP1S10D1TD

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No. (1)	CPN	Nm	Nm	Nm	rpm	kg	mm	NPTF	mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(2)</sup>
<b>Adjustable Shut-off Clutch Models</b>												
QP1S20S1TD	01383348	0.3 - 1.1	0.9 - 2.5	–	2000	0.84	223	1/4"	6	7.5	76.2	< 2.5
QP1S15S1TD	45602414	0.3 - 1.1	0.9 - 3.1	–	1500	0.84	223	1/4"	6	7.5	77.2	< 2.5
QP1S10S1TD	01383363	0.3 - 1.1	0.9 - 2.5	1.5 - 4.5	1000	0.84	223	1/4"	6	7.5	78.1	< 2.5
QP1S05S1TD	01383371	0.3 - 1.1	0.9 - 3.2	1.5 - 5.4	500	0.84	223	1/4"	6	7.5	75.9	< 2.5
QP1S02S1TD	49817919	0.3 - 1.1	0.9 - 3.2	1.5 - 5.4	250	0.84	223	1/4"	6	7.5	77.2	< 2.5
<b>Adjustable Cushion Clutch Models</b>												
QP1S15C1TD	45602349	0.3 - 1.1	0.9 - 3.1	–	1500	0.84	223	1/4"	6	7.5	77.2	< 2.5
QP1S10C1TD	01383512	0.3 - 1.1	0.9 - 2.5	1.5 - 4.5	1000	0.84	223	1/4"	6	7.5	78.1	< 2.5
QP1S05C1TD	01383520	0.3 - 1.1	0.9 - 3.2	1.5 - 5.4	500	0.84	223	1/4"	6	7.5	75.9	< 2.5
<b>Direct Drive Models</b>												
QP1S20D1TD	01383546	–	2.9	–	2000	0.68	162	1/4"	6	7.5	76.2	< 2.5
QP1S15D1TD	45602372	–	3.4	–	1500	0.68	162	1/4"	6	7.5	77.2	< 2.5
QP1S10D1TD	01383561	–	5.2	–	1000	0.68	162	1/4"	6	7.5	78.1	< 2.5
QP1S05D1TD	01383579	–	9.8	–	500	0.68	162	1/4"	6	7.5	75.9	< 2.5

(1) 1/4" hex quick change drive (for power bits).

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

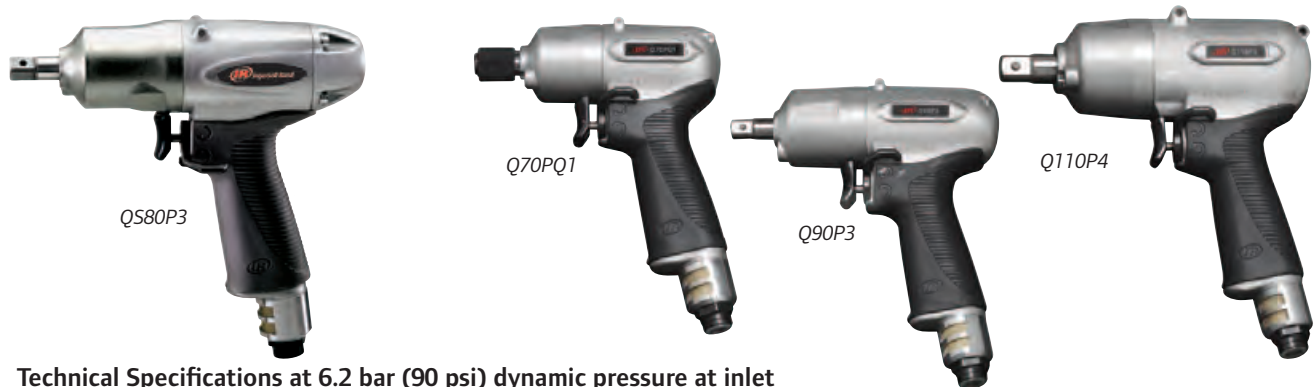
# Pneumatic Drilling & Fastening

## Power-Pulse Plus Air Nutrunners ★★ Heavy-duty classification












Pulse tools feature an air-driven hydraulic impulse mechanism that creates an internal pressure differential and a resulting “rotary-type” blow. By adjusting the pressure differential the user is able to control the torque output of the tool.

**Efficiency:** high speed rundown of fasteners, exceptional accuracy and consistency in torque deliver. Easy torque adjustment — quick setup for repeatable torque accuracy.

**Comfort:** ergonomic grip and one-hand reverse improves operator comfort. Lube-free, dual-chamber air motor and self-lubricating blades and cylinder reduce oil mist in the environment. Twin blade pulse mechanism — compact size and low weight.



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	 in (1)	 Recom. Nm	 1 min. rpm	 kg	 mm	 mm	 in (NPT)	 mm	 l/s	 dB(A)	 m/s <sup>2</sup> / K <sup>(2)</sup>
<b>Shut-off Models</b>												
QS50PQ1	48622112	1/4" HEX	4-12	4 300	0.95	164	23	1/4"	10	4.2	67.4	< 2.5
QS60PQ1	47135900	1/4" HEX	5-13	5 300	1.00	164	23	1/4"	10	5.7	71.0	< 2.5
QS70PQ1	47135926	1/4" HEX	13-28	6 800	1.10	177	23	1/4"	10	6.1	76.0	2.9 / 1.4
QS50P3	48622120	3/8" SQ	4-12	4 300	0.95	164	23	1/4"	10	4.2	67.4	< 2.5
QS60P3	47135892	3/8" SQ	7-15	5 300	1.10	164	23	1/4"	10	5.7	71.0	< 2.5
QS70P3	47135918	3/8" SQ	15-32	6 800	1.10	177	23	1/4"	10	6.1	76.0	2.9 / 1.4
QS80P3	47135934	3/8" SQ	30-55	6 800	1.10	187	25	1/4"	10	7.6	76.4	3.1 / 0.7
QS110P4	47149208	1/2" SQ	50-85	5800	1.51	194	57	1/4"	10	8.3	85.8	3.2 / 0.7
QS120P4	47149216	1/2" SQ	70-115	5400	1.80	201	62	1/4"	10	8.7	83.2	3.2 / 0.7
QS140P4	47149224	1/2" SQ	110-150	5200	2.10	214	65	1/4"	10	11.8	85.3	6.8 / 1.4
QS150P6	48622138	3/4" SQ	77-177	4 400	3.00	237	39	1/4"	10	11.8	87.8	4.4 / 1.5
<b>Non Shut-off Models</b>												
Q60PQ1	47136171	1/4" HEX	11-20	4 000	0.80	130	22	1/4"	10	5.2	72.4	< 2.5
Q70PQ1	80199326	1/4" HEX	20-28	7 000	0.80	131	22	1/4"	10	5.7	79.3	3.5 / 1.2
Q80PQ1	80199342	1/4" HEX	24-35	7 000	0.90	138	22	1/4"	10	5.7	80.8	3.7 / 1.0
Q60P3	47147681	3/8" SQ	13-22	4 000	0.80	130	22	1/4"	10	5.2	72.4	< 2.5
Q70P3	80199318	3/8" SQ	24-35	7 000	0.80	131	22	1/4"	10	5.7	79.3	3.5 / 1.2
Q80P3	80199334	3/8" SQ	34-50	7 000	0.90	138	22	1/4"	10	5.7	80.8	3.7 / 1.0
Q90P3	80199359	3/8" SQ	47-65	6 500	1.00	148	23	1/4"	10	6.6	78.3	4.6 / 0.9
Q110P4	80199367	1/2" SQ	65-100	5 500	1.40	164	27	1/4"	10	9.5	84.4	5.4 / 0.9
Q140P4	45631512	1/2" SQ	130-160	5 400	2.20	190	33	1/4"	10	13	85.0	6.7 / 1.1

(1) 1/4" HEX = 1/4" quick change for power bits — SQ = Square drive  
 (2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



★★★ Super-duty tools

★★ Heavy-duty tools

★ Maintenance-duty tools



## Pneumatic Grinding & Finishing

*Advancements in manufacturing and production continue to transform the nature of industrial finishing. In many segments, increases in precision and reductions in waste are changing overall demands. New materials require different tool speeds and attachments; parts and components must match surrounding surfaces with greater accuracy. For more than 100 years, Ingersoll Rand has helped transform the way the industry works. Our designs reflect emerging trends in finishing tool use, changing technology, and new materials. Whatever the application, Ingersoll Rand finishing tools bring out the best in your operators' skills, and contribute to the ultimate quality of your products and processes.*

### Ingersoll Rand offers:

- ▶ Air Grinders 0.3-2.25 kW → Pages **35-38** & **40-42**
- ▶ Air Sander and Polishers 0.3-1.50 kW → Pages **39** & **43**
- ▶ Special Grinders / Sanders and Engraving Pen → Pages **44-45**
- ▶ Random Orbital Sanders → Pages **46-47**

# Pneumatic Grinding - Selection Chart

## Wheel Types and Collets

### STRAIGHT GRINDERS

G Series

M Series



PRO Series

Type 1 wheels

Page 38

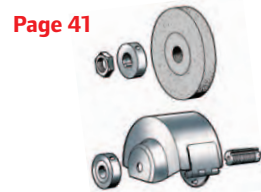


Ø 3" (75 mm)  
Ø 4" (100 mm)



3/8"-24

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Ø 3" (75 mm)  
Ø 4" (100 mm)  
Ø 6" (150 mm)  
Ø 8" (200 mm)



3/8"-24  
1/2"-13  
5/8"-11

### ANGLE GRINDERS

G Series

MAX Series

M Series



PRO Series

Type 27 and 28 depressed centre flat wheels

Page 38



Ø 3" (75 mm)  
Ø 4.5" (115 mm)  
Ø 5" (125 mm)  
Ø 6" (150 mm)



5/8"-24  
M14

Page 41



Ø 7" (180 mm)  
Ø 9" (230 mm)



5/8"-11

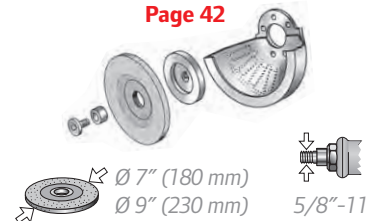
### VERTICAL GRINDERS

PRO Series



Type 27 and 28 depressed centre flat wheels

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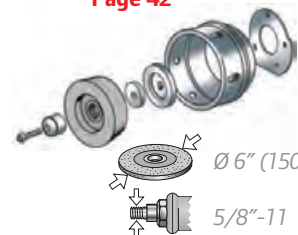
Ø 7" (180 mm)  
Ø 9" (230 mm)



5/8"-11

Type 6 and 11 cup wheels

Page 42



Ø 6" (150 mm)

5/8"-11

### CONE AND PLUG WHEEL GRINDERS

PRO Series



Type 16, 17, 18, 18R, and 19 cone and plug wheels

Page 41



Ø 1.25" (32 mm)  
Ø 3" (75 mm)



3/8"-24  
Ø 5/8"-11

### COLLET TYPE GRINDERS

MAX Series

G Series

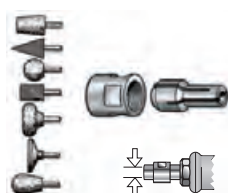
M Series



PRO Series

Mounted wheels and high speed steel or carbide burs

Pages 35, 37 & 40



Ø 6 mm  
Ø 1/4"  
Ø 8 mm  
Ø 3/8"

## MAX-Series Grinders

★ Maintenance-duty classification

Our MAX-series air die grinders and air angle grinders are economical, long-life tools. They are compact, lightweight, easy to handle and include all bearing construction for increased reliability.

### Die Grinders:

- 0.3 kW motor – Lube-free design eliminates contamination of the work environment.
- Enhanced grip design and low-profile throttle lever provide for extended run time without fatigue.
- Piped away exhaust kit included.

Accessories:

301-700 (CPN 04552600): 1/4" collet.

301-700B (CPN 80128952): 6 mm collet.

301-700C (CPN 80102346): 1/8" collet.



### Angle Grinders:

- 0.88 hp and 12 000 rpm motor.
- Internal governor maximizes speed under load, increasing your rate of material removal.
- Low weight and enhanced grip design enables extended usage without fatigue.



Turbine motor, 2.2 kW

## VT22 Turbine Grinder

★★★ Super-duty classification

Our new VT22 Series turbine grinder offers a speed governor that maintains the most efficient speed while under load. This tool is made for an unsurpassed material removal rate in the toughest application environment.

- 22.5 mm spindle offset – Cuts deeper! Cutting depth up to 40 mm.
- One button spindle lock for quick abrasive changes – adjustable guard – directional exhaust – reduced vibration adjustable side handle – trigger safety lock.



Accessory: top handle VT22-A59, CPN: 17028614

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm	mm	mm	kg	L	AIR	AIR	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Die Grinders</b>												
5102MAX	48488357	0.30	20 000	6 mm + 1/4"	–	0.64	180	1/4" NPT	10	11.8	84.1	3.3 / 1.1
5108MAX	48488340	0.30	25 000	6 mm + 1/4"	–	0.46	172	1/4" NPT	10	11.8	83.3	1.8 / 0.8
<b>Angle Grinders</b>												
3445MAX-M	45664240	0.66	12 000	–	115	M14	1.53	245	1/4" NPT	10	19.3	79.6 / 6.4 / 2.0
345MAX-M	45664257	0.66	12 000	–	125	M14	1.56	245	1/4" NPT	10	19.3	79.6 / 7.9 / 0.7
VT22-120P95M	17027962	2.20	12 000	–	125	M14	1.80	295	1/2" BSP	13	30.0	86.4 / 5.7 / 2.1

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

Grinding & Finishing

# Pneumatic Grinding & Finishing

## G and M Series Grinders / Sanders ★ ★ ★ Super-duty classification

From the compact 0.3 kW (0.4 hp) G1 Series to the powerful 1.0 kW (1.35 hp) G3 Series, these grinders are made for any grinding, cutting, and material removal needs. Engineered and built with Ingersoll Rand reliability and durability, the G and M Series has the features operators want most.



### G1 Series:

For light material removal, cleaning rough castings and welds, deburring parts.

- 0.3 kW (0.4 hp) motor.
- Easily interchangeable front/rear exhaust.
- Piped-away exhaust as standard.

**NEW**

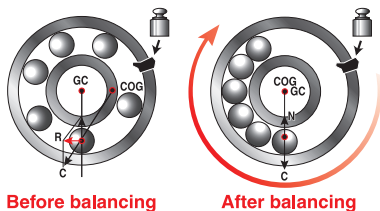


### M2 Series:

For heavier-duty applications in grinding, cutting, cleaning, and polishing.

- Powerful 0.75 kW (1 hp) lube-free air motor.
- Internal motor governor maintains grinder speed and manages air flow for efficient energy use.
- Spindle lock on angle models, allows faster, easier accessory changes.
- Piped-away exhaust as standard.

### Auto balancing system on G3 Series



### G3 Series:

For heavy material removal with burrs, grinding wheels, and coated abrasives. Internal contamination-free air controller helps maintain tool speed regardless of the load.

- High torque 1 kW (1.35 hp) air motor.
- Internal motor governor maximizes speed under load, increasing your rate of material removal.
- Auto balancing system and anti-vibration dead handle on G3 "AV" models significantly reduces vibrations and increases life of grinding wheels.
- Piped-away exhaust as standard.

## G and M Series Angle Die Grinders ★ ★ ★ Super-duty classification

Erickson Collet



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm								
Angle Die Grinders											
<b>G1A200PG4M</b>	80155211	0.30	20 000	6 mm	0.50	152	1/4"	8	11.8	80.6	5.6 / 1.1
<b>M2A120RG4</b>	48421648	0.75	12 000	6 mm + 1/4"	1.62	227	3/8"	10	19.8	87.1	< 2.5
<b>M2A180RG4</b>	48421697		18 000	6 mm + 1/4"	1.62	227	3/8"	10	19.8	88.8	3.1 / 1.0
<b>G3A120PG4M</b>	80177462	1.00	12 000	6 mm	1.90	241	3/8"	13	26.0	84.7	5.5 / 0.9

(1) Sound pressure without pipe away exhaust (up to 6 dB(A) less with piped away exhaust).

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.








# Pneumatic Grinding & Finishing

## G and M Series Straight Die Grinders ★★ ★ Super-duty classification

 Erickson Collet



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm								
Straight Die Grinders											
<b>G1H200PG4M</b>	80155245	0.30	20 000	6mm	0.41	156	1/4"	8	9.0	78.5	2.9 / 1.7
<b>G1H250PG4M</b>	80155286		25 000	6mm	0.41	156	1/4"	8	9.4	79.2	2.5 / 1.4
<b>G1H350PG4M</b>	80155310		35 000	6mm	0.41	156	1/4"	8	11.8	81.1	< 2.5
<b>M2H180RG4</b>	48421580	0.75	18 000	6 mm + 1/4"	0.77	213	3/8"	10	19.8	84.7	4.2 / 1.6
<b>M2H200RG4</b>	48421572		20 000	6 mm + 1/4"	0.77	213	3/8"	10	19.8	84.9	4.4 / 1.1
<b>M2H250RG4</b>	48393003		25 000	6 mm + 1/4"	0.77	213	3/8"	10	19.8	88.2	< 2.5
<b>G3H150PG4M</b>	80224231	1.00	15 000	6mm	1.05	230	3/8"	13	15.6	83.5	3.7 / 2.6
<b>G3H180PG4M</b>	80223787		18 000	6mm	1.05	230	3/8"	13	26.0	83.5	< 2.5
Straight Extended Die Grinders											
<b>G1X200PG4M</b>	80155336	0.30	20 000	6 mm	0.59	232	1/4"	8	11.8	77.9	< 2.5
<b>G1X250PG4M</b>	80155351		25 000	6 mm	0.59	232	1/4"	8	11.8	80.0	< 2.5
<b>G1X350PG4M</b>	80155377		35 000	6 mm	0.59	232	1/4"	8	11.8	81.9	< 2.5
<b>M2X075RG4</b>	48405294	0.75	7 500	6 mm + 1/4"	1.35	304	3/8"	10	19.8	88.0	< 2.5
<b>M2X180RG4</b>	48418396		18 000	6 mm + 1/4"	1.22	332	3/8"	10	19.8	88.8	2.8 / 0.9
<b>M2X200RG4</b>	48421655		20 000	6 mm + 1/4"	1.22	332	3/8"	10	19.8	84.9	< 2.5
<b>M2X250RG4</b>	48421663		25 000	6 mm + 1/4"	1.22	332	3/8"	10	19.8	88.2	< 2.5
<b>G3X150PG4M</b>	80155765	1.00	15 000	6 mm	1.70	359	3/8"	13	15.6	87.9	3.6 / 0.8
<b>G3X180PG4M</b>	50155732		18 000	6 mm	1.70	359	3/8"	13	26.0	86.4	< 2.5

(1) Sound pressure without pipe away exhaust (up to 6 dB(A) less with piped away exhaust).

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

### Erickson Collets for G1Series



Model No.	CPN	Size
<b>DG110-700-G2</b>	03641743	1/8"
<b>DG110-700-6MM</b>	04261053	6 mm
<b>DG110-700-G4</b>	03641602	1/4"

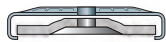
### Erickson Collets for M2 and G3 Series



Model No.	CPN	Size
<b>G160HD-700-6MM</b>	04261061	6 mm
<b>G160HD-700-1/4</b>	03493962	1/4"
<b>DG121HD-700-M8</b>	03641321	8 mm
<b>DG120HD-700-G6</b>	03641313	3/8"

# Pneumatic Grinding & Finishing

## G and M Series Grinders ★★ ★ Super-duty classification



Type 27 and 28 wheels



M2A120RP945



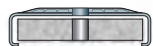
G1A200PP63

G3A120PP95AV



G3X180PH63

See also our VT22 turbine grinder page 35



Type 1 wheel



G1H250PH63



M2X180RH63

G3X180PH63

G3X150PH64

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm	mm	mm	kg	mm	in (NPT)	mm	L/s	dB(A) (1)	m/s <sup>2</sup> / K (2)
<b>Angle Grinders</b>												
G1A200PP63	80155419	0.30	20 000	75	3/8"-24	0.59	152	1/4"	8	11.8	79.9	16.8 / 6.2
M2A090RP95	48421622	0.75	9 000	125	M14	1.62	236	3/8"	10	19.8	87.7	4.6 / 1.6
M2A120RP945	48391981		12 000	115	M14	1.71	236	3/8"	10	19.8	87.0	5.1 / 1.5
M2A120RP95	48421606		12 000	125	M14	1.77	236	3/8"	10	19.8	87.0	5.0 / 0.9
G3L086PP95 (3)	80232408		8 600	125	M14	2.32	330	3/8"	13	26.0	84.0	5.0 / 1.6
G3A100PP96AV	80217052	1.0	10 000	150	M14	2.32	245	3/8"	13	26.0	86.1	4.8 / 1.9
G3A120PP945AV	80217037		12 000	115	M14	2.18	245	3/8"	13	15.6	88.7	4.8 / 1.5
G3A120PP95AV	80217045		12 000	125	M14	2.09	245	3/8"	13	26.0	88.7	5.0 / 1.9
<b>Straight Grinders</b>												
G1H250PH63	80155443	0.30	25 000	75	3/8"-24	0.57	156	1/4"	8	9.4	81.1	10.7 / 3.3
M2X180RH63	48421580	0.75	18 000	75	3/8"-24	1.48	339	3/8"	10	19.8	85.3	< 2.5
G3X150PH64	80155799	1.0	15 000	100	3/8"-24	2.04	359	3/8"	13	15.6	84.5	2.5 / 0.8
G3X180PH63	80155781		18 000	75	3/8"-24	2.04	359	3/8"	13	26.0	88.8	2.8 / 0.9

(1) Sound pressure without pipe away exhaust (up to 6 dB(A) less with piped away exhaust).

(2) ISO28927 - 3-axis measurement: vibration level / measurement uncertainty.

(3) Extended angle grinder.

# Pneumatic Grinding & Finishing

## G and M Series Sanders ★ ★ ★ Super-duty classification



### Sanding Pads for G and M Series

Model No	CPN	Description	Size
<b>02A-MEDPD</b>	80199177	For G1 Series	Ø 50 mm (2")
<b>03A-MEDPD</b>	80198963		Ø 75 mm (3")
<b>77A-AM825-5</b>	03675477	For M2 and G3 Series ( <b>medium</b> )	Ø 125 mm (5")
<b>77A-AM825-7</b>	03675469		Ø 180 mm (7")
<b>77A-AM825-9</b>	03675451	For M2 and G3 Series ( <b>firm</b> )	Ø 230 mm (9")

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm			kg					dB(A) <sup>(1)</sup>	
Sanders												
<b>G1A120PS4</b>	80155468	0.30	12 000	Option	1/4"-20	0.50	152	1/4"	8	9.0	80.6	3.0 / 1.0
<b>G1A200PS4</b>	80155534		20 000									< 2.5
<b>M2L025RS9</b>	48421788	0.75	2 500	(see table)	M14	1.90	318	3/8"	10	19.8	87.0	4.0 / 1.4
<b>M2L040RS9</b>	48421796		4 000									2.8 / 1.8
<b>M2L055RS9</b>	48421812		5 500									3.7 / 1.1
<b>G3L086PS10</b>	80223803	1.0	8 600		5/8"-11	1.93	330	3/8"	13	15.6	82.0	< 2.5

(1) Sound pressure without pipe away exhaust (up to 6 dB(A) less with piped away exhaust).  
 (2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

## G Series Belt Sanders



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm		kg					dB(A) <sup>(1)</sup>	
Belt Sanders											
<b>G1A120PS418</b>	80155484	0.30	12 000	457 x 6.35	0.54	356	1/4"	8	9.0	82.4	< 2.5
<b>G1A120PS812</b>	80155500		12 000	305 x 12.7	0.54	273	1/4"	8	9.0	82.4	< 2.5
<b>G1A200PS812</b>	80155559		20 000	305 x 12.7	0.54	273	1/4"	8	11.8	83.6	2.6 / 0.7

(1) Sound pressure without pipe away exhaust (up to 6 dB(A) less with piped away exhaust).  
 (2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



### Sanding Belts 3/8"-24 female thread

Model No.	CPN	Dimensions	Grit
<b>LG1-SB812-60-10</b>	04025649	12.7 x 305 mm (1/2" x 12")	60
<b>LG1-SB812-80-10</b>	04025656		80
<b>LG1-SB812-100-10</b>	04025664		100
<b>LG1-SB418-60-10</b>	04279832	6.35 x 457 mm (1/4" x 18")	60
<b>LG1-SB418-80-10</b>	04279840		80
<b>LG1-SB418-100-10</b>	04279857		100

# Pneumatic Grinding & Finishing

## Pro Series Grinders / Sanders ★★★ Super-duty classification

Pro Series grinders incorporate a patented motor controller which is designed to increase productivity while enhancing operator safety. Adjustable side handles, an ergonomic main handle, and self-locking throttle all help to reduce operator fatigue.

### Reliability:

- Solid steel motor and arbor housing provide maximum durability.
- Built-in mist lubricator automatically oils motor when throttle is activated.

### Efficiency:

- Heavy-duty, double-row ball bearings assure long life and smooth operation.
- Auto balancing system on angle and vertical models – reduces vibration and increases abrasives lifetime.



77H90L10-EU

**Auto balancing system on Pro-Series angle and vertical models**

**Before balancing**      **After balancing**

**Pro-Series motor controller** prevents over-speeding and manages air flow for efficient energy use

## Pro-Series Straight Grinders / Collet ★★★ Super-duty classification

★★★ Super-duty classification

Erickson Collet



61H120G4-EU

Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm		 kg	 mm	 in (NPT)	 mm	 L/s	 dB(A)	 m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Straight Grinders - Erickson Collet</b>											
<b>61H150G4-EU</b>	01339316	1.00	15 000	6mm	1.9	394	3/8"	13	18.9	89.8	< 2.5
<b>61H120G4-EU</b>	01338391	0.93	12 000	6mm	1.9	394	3/8"	13	17.5	86.6	< 2.5

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

### Erickson Collets for 61H Series

Model No.	CPN	Size
<b>G160HD-700-6MM</b>	04261061	6 mm
<b>G160HD-700-1/4</b>	03493962	1/4"
<b>DC121HD-700-M8</b>	03641321	8 mm
<b>DG120HD-700-G6</b>	03641313	3/8"



# Pneumatic Grinding & Finishing

## Pro-Series Angle Grinders










★★★ Super-duty classification

 Type 27 and 28 wheels



77A60P107M-EU

Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm	 mm	 mm	 kg	 mm	 in (NPT)	 mm	 L/s	 dB(A)	 m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Angle Grinders</b>												
<b>77A60P107M-EU</b>	01338300	1.12	6 000	180	5/8"-11	4.1	447	3/8"	13	18.4	85.9	<2.5
<b>77A75P107M-EU</b>	01338771	1.12	7 500	180	5/8"-11	4.2	447	3/8"	13	18.4	85.9	2.6 / 0.8
<b>77A60P109M-EU</b>	01338201	1.12	6 000	230	5/8"-11	4.2	447	3/8"	13	18.4	104.7	2.4 / 0.8

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

## Pro-Series Straight Grinders ★★★ Super-duty classification

 Type 1 wheel

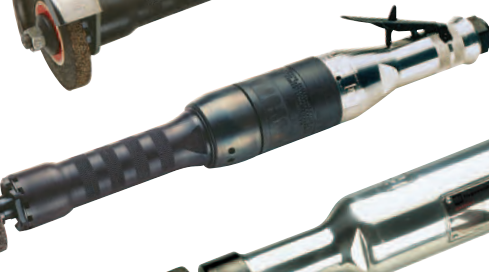
 Type 16, 17, 18, 18R and 19 wheels



99HL45H108-EU



61H120H63-EU












61H120L6-EU



77H90L10-EU

Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm	 mm	 mm	 kg	 mm	 in (NPT)	 mm	 L/s	 dB(A)	 m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Straight Grinders – Type 1 Wheels</b>												
<b>61H120H63-EU</b>	01339290	0.93	12 000	75	3/8"-24	2.16	400	3/8"	13	18.9	86.6	<2.5
<b>61H150H63</b>	01238567	1.00	15 000	75	3/8"-24	2.16	400	3/8"	13	17.5	86.4	<2.5
<b>77H120H84-EU</b>	01339308	1.12	12 000	100	1/2"-13	2.95	438	3/8"	13	18.4	85.4	2.8 / 1.2
<b>88HL60H106-EU</b>	01339407	1.50	6 000	150	5/8"-11	5.14	508	1/2"	19	28.8	79.4	<2.5
<b>99HL45H108-EU</b>	01339563	1.75	4 500	200	5/8"-11	6.76	514	1/2"	19	33.0	82.0	<2.5
<b>99HL60H106-EU</b>	01339373	2.25	6 000	150	5/8"-11	6.14	521	1/2"	19	39.7	85.8	<2.5
<b>Straight Grinders – Type 16, 17 18, 18R and 19 Wheels</b>												
<b>61H120L6-EU</b>	01340454	0.93	12 000	—	3/8"-24	1.93	375	3/8"	13	17.5	86.6	<2.5
<b>61H150L6-EU</b>	01340561	1.00	15 000	—	3/8"-24	1.93	375	3/8"	13	18.9	89.8	<2.5
<b>77H90L10-EU</b>	01339118	1.12	9 000	—	5/8"-11	2.73	418	3/8"	13	17.5	80.9	<2.5
<b>77H120L10-EU</b>	01340280	1.12	12 000	—	5/8"-11	2.73	418	3/8"	13	18.4	85.4	4.2 / 3.5

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

# Pneumatic Grinding & Finishing

## Pro-Series Vertical Grinders

★★★ Super-duty classification

 Type 27 and 28 wheels

 Type 6 and 11 wheels



88V60P107M-EU












99V60P109M-EU



99V60S106M-EU

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm	 mm		 kg	 H mm	 AIR in (NPT)	 AIR mm	 L/s	 dB(A)	 m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Vertical Grinders – Type 27 and 28 Wheels</b>												
88V60P107M-EU	01337948	1.56	6 000	180	5/8"-11	4.0	154	1/2"	19	28.8	89.2	3.1 / 0.9
88V85P107M-EU	01337658	1.64	8 500	180	5/8"-11	4.0	154	1/2"	19	31.2	86.9	4.1 / 1.3
99V60P107M-EU	01338425	2.25	6 000	180	5/8"-11	5.1	174	1/2"	19	39.7	84.4	2.8 / 0.9
99V85P107M-EU	01338599	2.25	8 500	180	5/8"-11	5.1	174	1/2"	19	39.7	106.0	3.6 / 1.1
88V60P109M-EU	01337716	1.56	6 000	230	5/8"-11	4.2	154	1/2"	19	28.8	89.2	3.6 / 1.1
99V60P109M-EU	01337575	2.25	6 000	230	5/8"-11	5.1	174	1/2"	19	39.7	85.5	3.4 / 1.1
<b>Vertical Grinders – Type 6 and 11 Cup Wheels</b>												
88V60S106M-EU	01340058	1.56	6 000	150	5/8"-11	3.8	154	1/2"	19	28.8	89.2	< 2.5
99V60S106M-EU	01339068	2.25	6 000	150	5/8"-11	4.8	174	1/2"	19	39.7	85.4	< 2.5

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



88V60-K184

### Accessories

Model No.	CPN	Description
88V60-K184	03643962	Piped-away exhaust system for 88V models
99V60-K184	03625589	Piped-away exhaust system for 99V models

# Pneumatic Grinding & Finishing

## Pro-Series Sanders and Polishers

★★★ Super-duty classification



77H30B106-EU



77A60W107-EU



7S60L-EU



88S60W107-EU

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm	mm	mm	kg	mm	mm	in (NPT)	mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Straight Sanders</b>													
77H30B106-EU	01339670	1.12	3 000	150	5/8"-11	3.32	449	—	3/8"	13	17.5	85.2	5.9 / 2.1
77H50B106-EU	01340397	1.12	5 000	150	5/8"-11	3.32	449	—	3/8"	13	18.4	94.4	7.8 / 2.7
<b>Angle Sanders</b>													
77A25F107-EU	01340835	1.12	2 500	180	5/8"-11	3.81	446	—	3/8"	13	17.5	89.2	< 2.5
77A60W107-EU	01340165	1.12	6 000	180	5/8"-11	3.55	446	—	3/8"	13	18.4	85.9	< 2.5
77A45W109-EU	01339720	1.12	4 500	230	5/8"-11	3.55	446	—	3/8"	13	17.5	83.3	< 2.5
<b>Vertical Sanders</b>													
7P24L-EU	01339712	0.6	2 400	180	5/8"-11	1.47	—	162	1/4"	10	10.4	82.7	< 2.5
7S48L-EU	01340348	0.6	4 800	180	5/8"-11	1.47	—	162	1/4"	10	10.4	81.4	< 2.5
7S60L-EU	01338318	0.6	6 000	180	5/8"-11	1.47	—	162	1/4"	10	10.4	82.0	< 2.5
88S60W107-EU	01338037	1.50	6 000	180	5/8"-11	3.24	—	152	1/2"	19	28.8	80.2	< 2.5
88S45W109-EU	01339126	1.35	4 500	230	5/8"-11	3.24	—	152	1/2"	19	23.6	77.6	< 2.5

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



77A-AM825-5

77A-AM825-9

P500-850

### Sanding Pads

Model No.	CPN	Description	Size
77A-AM825-5	03675477	Medium sanding pad (for all models)	Ø 125 mm (5")
77A-AM825-7	03675469		Ø 180 mm (7")
77A-AM825-9	03675451	Firm sanding pad (for all models)	Ø 230 mm (9")
P500-850	03379542	Wool polishing bonnet (for 7 and 77 models)	Ø 180 mm (7")

# Pneumatic Grinding & Finishing

## Special Grinders / Sanders



### Pencil Grinders ★★ *Heavy-duty classification*

Excellent for intricate grinding applications, including mold finishing.

- Comfortable design enables precise control.
- Delivered with 1/8" collet insert, 6 mm air hose (length 1.80 m) and 0.45 m rear exhaust over-hose.
- DG600G2K-EU kit includes six additional carbide burrs in a moulded carrying case.

#### Accessories

Model No	CPN	Description
47568-2	04136164	Collet Ø 3 mm
47568-3	04136172	Collet Ø 3/32"

### Engraving Pen

#### ★★ *Heavy-duty classification*

Ingersoll Rand engraving pen is designed to meet your industrial engraving needs. Variable zoom throttle permits a wide range of engraving possibilities from hard alloys to brittle ceramics.

- Moulded carrying case with EP50 engraving pen, air hose and 3 assorted styli (fine, medium and coarse point).
- Knurled zoom throttle – Variable speed.



#### Accessories

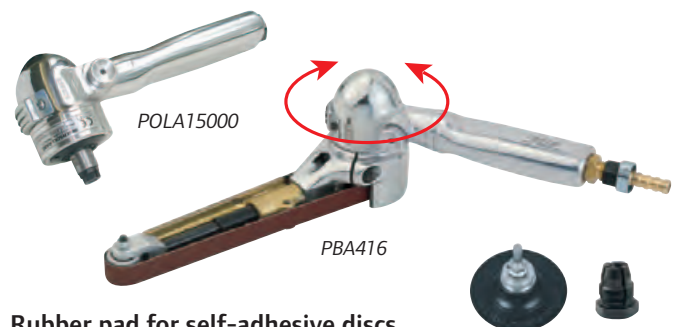
Model No.	CPN	Description
EP50-514	03800760	Stylus grinding collet
EP50-515	03800778	Fine point stylus (black)
EP50-516	03800786	Medium point stylus (grey)
EP50-517	03800794	Coarse point stylus (green)



### Multi-tools ★★ *Heavy-duty classification*

Compact and versatile tools for high precision work.

- Usable with carbide burr, grinding disc or sanding belt.
- 360° rotative head on PBA model.
- POLA15000 delivered with collet (without pad).



#### Rubber pad for self-adhesive discs

Model No.	CPN	Description
117155	04373478	Ø 20 mm
116920	04373486	Rubber pad for self-adhesive discs, Ø 30 mm
116930	04373494	Ø 46 mm
116940	04371464	Ø 76 mm)
002300	04373031	Grit 36
002301	04373049	Grit 40
002302	04373056	475 x 15 mm sanding belts (pack of 10 belts)
002303	04373064	Grit 50
002304	04373072	Grit 60
002305	04373080	Grit 80
002305	04373080	Grit 100
122629	04363503	6 mm collet

#### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	kW <sub>att</sub>	1 min. rpm	1 min. mm	mm	kg	mm	in	mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>	
DG600G2-EU	04613931	0.08	60 000	—	1/8"	—	0.40	136	1/8" NPT	6	3.3	77	3.5 / 0.8
EP50K-EU	01339506	—	—	18 750	—	—	0.14	137	1/8" NPT	6	—	75.5	—
POLA15000	04368379	0.22	15 000	—	6 mm	—	0.65	—	1/4" BSP	10	6.5	NA	NA
PBA416	04368387	0.22	14 800	—	—	475 x 15	1.05	—	1/4" BSP	10	6.6	NA	NA

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

# Pneumatic Grinding & Finishing

## Mini Sanders/Polishers

★ Maintenance-duty classification

These very compact and handy tools are the ideal tools for applications in hard-to-reach places.

- 0.15 kW motor (0.2 hp) – Durable ball-bearing construction ensures smooth power delivery.
- Tools available alone or with complete accessory kit.



3103XP sander  
(tool alone)

3103K sander kit



3128XP orbital sander  
(tool alone)



3129XP polisher  
(tool alone)



3129K polisher kit



3128K orbital sander kit

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	CPN Kit	kW <sub>att</sub>	1 min. rpm	mm	mm	kg	L mm	AIR in (NPT)	AIR mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
3103XP	16619595	80195597	0.15	15 000	75	1/4"-20	0.45	125	1/4"	10	9.2	84.9	3.5 / 1.3
3128XP	16599458	80195613	0.15	15 000	75	5/16"-24	0.50	140	1/4"	10	6.9	78.2	5.2 / 0.9
3129XP	16599441	80195605	0.22	6 000	75	5/16"-24	0.60	152	1/4"	10	9.4	83.5	3.5 / 1.3

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty



### 50 and 75 mm quick-change pads & abrasives

CPN	Description	Qty.
<b>50 mm (2") diameter discs</b>		
80199177	Quick-change pad	1
16593386	Coarse coating removal	25
16593428	Medium coating removal	25
80207574	Quick-strip discs	25
80215023	Aluminum oxide sanding, grit 36	25
16593196	Aluminum oxide sanding, grit 80	25
<b>75 mm (3") diameter discs</b>		
80198963	Quick-change pad	1
80206238	Coarse coating removal	25
80206220	Medium coating removal	25
80216690	Quick-strip discs	10
16593238	Aluminum oxide sanding, grit 36	25
16593253	Aluminum oxide sanding, grit 80	25



### 75 mm (3") hook-and-loop pad, discs & bonnets

CPN	Description	Qty.
80199136	Hook & loop pad Ø 75 mm (3"),	1
<b>Aluminum oxide sanding discs</b>		
80207582	Grit 40	50
80206279	Grit 100	50
80206295	Grit 180	50
80206303	Grit 220	50
80206329	Grit 320	50
80206352	Grit 500	50
80205404	Grit 800	50
<b>Polishing bonnets</b>		
80206170	Wool bonnet (for compounding)	6
80206188	Waffle bonnet (for compounding)	6
80206196	Waffle bonnet (for polishing)	6

# Pneumatic Grinding & Finishing

## 41-Series Random Orbital sanders ★★ Heavy-duty classification

The 41-Series vacuum-ready sanders have established new standards for ergonomic design, power and speed in sanding applications. All models deliver unsurpassed reliability, with moisture-resistant composite rotors, fully machined counterweights and large counterweight bearings.

**Performance:** powerful 0.15 kW motor produces the best speed under load for a swirl-free finish. Fully machined counterweight significantly reduces vibration.

**Comfort:** lightweight composite housing makes this sander the lightest tool in its class. Three sizes of interchangeable rubber grip rings available to fit all hand sizes.



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	mm	mm	NPTF	<b>kW<sub>att</sub></b>	<b>1 min.</b> rpm	kg	<b>H</b> mm	L/s	dB(A)	m/s <sup>2</sup> / K(2)
<b>Vacuum-Ready Sanders</b>											
<b>4151-HL</b>	01371624	150 <sup>(1)</sup>	5.0	5/16"-24	0.15	12 000	0.86	109	8	7.5	7.5 / 1.6
<b>4151-HL-2</b>	22041198	150 <sup>(1)</sup>	5.0	5/16"-24	0.15	12 000	1.12	109	8	7.5	6.2 / 1.0
<b>4152-HL</b>	80134356	150 <sup>(1)</sup>	2.5	5/16"-24	0.15	12 000	0.86	109	8	7.5	8.2 / 1.7
<b>4152-HL-SR</b>	16674301	75 <sup>(1)</sup>	2.5	5/16"-24	0.15	12 000	0.84	109	8	7.5	4.7 / 1.3

(1) Hook and loop backing pad.

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

### Accessories



### Rubber grips rings – Replacement sanding pads

Model No.	CPN	Description
<b>49801</b>	04248571	Rubber grip, small hand size (not for 4151HI-2)
<b>49798</b>	04248555	Rubber grip, medium hand size (not for 4151HI-2)
<b>49799</b>	04248563	Rubber grip, large hand size (not for 4151HI-2)
<b>49840</b>	04252938	Rubber grips (3 pieces: small, medium & large)
<b>010056</b>	15969223	Hook & loop pad, Ø 75 mm
<b>49693</b>	04214797	Hook & loop pad, Ø 125 mm
<b>49835</b>	04250171	Hook & loop pad, Ø 150 mm
<b>49096-1</b>	04320578	Vinyl, grooved pad, Ø 125 mm
<b>VPAD-6</b>	80126683	Vinyl, grooved pad, Ø 150 mm

### Self generating vacuum system for 41-Series Sanders

Model No.	CPN	Description
<b>4151JV</b>	04662896	Vacuum system conversion kit
<b>49988</b>	04324455	Dust collection bags (20 pieces)
<b>49987</b>	04324448	Dust collection bags (250 pieces)

## 8000MAX-Series Random Orbital sanders ★★ Heavy-duty classification

In keeping with the tradition of Ingersoll Rand MAX tools, 8000MAX-Series random orbital sanders deliver MAX power and MAX productivity for all of your body, prep, and finishing work – and now offer a new level of MAX comfort, with less vibration and a lightweight ergonomic design.

**MAX Comfort:** low vibration and lightweight ergonomic design reduce operator fatigue.

**MAX Power:** powerful 0.20 kW motor and variable-speed regulator deliver the performance required for ALL of your finishing jobs.

**MAX Productivity:** reduced vibration and improved stability increase abrasive pad life and help create a smoother finish.



Pad wrench storage.



Air flow valve

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	mm	mm	M8	$kW_{att}$	rpm	kg	mm	NPTF	mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(3)</sup>
<b>Vacuum-Ready Sanders</b>													
<b>8201MAX</b>	48622005	150 <sup>(1)</sup>	2.5	M8	0.20	11 500	0.75	92	1/4"	8	6.0	76.0	7.2 / 2.4
<b>8202MAX</b>	48622013	150 <sup>(1)</sup>	5.0	M8	0.20	10 500	0.75	92	1/4"	8	6.0	76.0	6.9 / 2.3
<b>8203MAX</b>	48622021	150 <sup>(1)</sup>	10.0	M8	0.20	9 500	0.80	92	1/4"	8	6.0	76.0	6.8 / 2.2
<b>Non-Vacuum Sanders</b>													
<b>8101MAX</b>	48621973	150 <sup>(2)</sup>	2.5	M8	0.20	11 500	0.75	92	1/4"	8	6.0	76.0	7.2 / 2.4
<b>8102MAX</b>	48621981	150 <sup>(2)</sup>	5.0	M8	0.20	10 500	0.75	92	1/4"	8	6.0	76.0	6.9 / 2.3
<b>8103MAX</b>	48621999	150 <sup>(2)</sup>	10.0	M8	0.20	9 500	0.80	92	1/4"	8	6.0	76.0	6.8 / 2.2

(1) Hook and loop backing pad.

(2) For PSA backed discs

(3) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

### Replacement sanding pads

Model No.	CPN	Description
<b>8000MAX-750</b>	48621940	150 mm hook & loop backing pad + screw
<b>8000MAX-700</b>	48621932	150 mm PSA backing pad + screw

★★★★ Super-duty tools

★★★ Heavy-duty tools

★ Maintenance-duty tools



## Percussive Tools

*Ingersoll Rand offers a host of percussive tools to accomplish a variety of surface preparation tasks, whether heavy-duty or intricate in nature. We provide a wide line of riveters, cutting tools, scalers, needle scalers, chippers and accessories.*

### **Ingersoll Rand offers:**

- ▶ Air Impact Riveters → Page **49**
- ▶ Air Hammers and Reciprocating Saws → Page **50**
- ▶ Air Scalers and Needle Scalers → Page **51**
- ▶ Air Chippers → Pages **52-53**



## AVC-Series Impact Riveters ★★ Heavy-duty classification

Ingersoll Rand lightweight riveters are time-tested performers for industrial riveting, hammering and cutting applications.

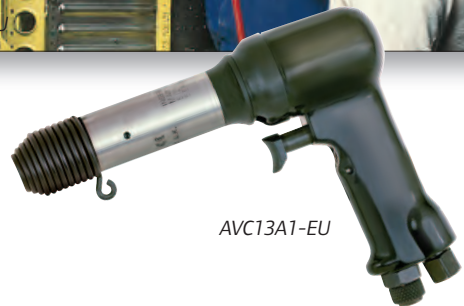
- Accurate and easily controlled tease throttle.
- Standard beehive retainer - allows use of wide variety of accessories.
- Built-in power regulators on A1 and B1 Models - the operator can change power on the job with no downtime.
- Available in straight, pistol, and gooseneck handles.



AVC10A1-EU



AVC12A1-EU

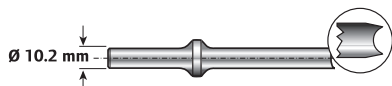


AVC13A1-EU

### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

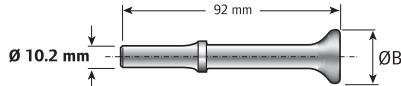
Model No.	CPN	1 min.	mm	mm	Aluminum mm	Dural & soft iron (mm)	kg	mm	NPTF	mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Straight Handle</b>													
AVC10C1-EU	01341858	3 200	10.2	48	3	3	0.94	172	1/4"	8	5.7	92.0	13.3 / 1.9
<b>Pistol Grip Handle</b>													
AVC10A1-EU	01338995	3 200	10.2	48	3	3	1.28	152	1/4"	8	5.7	92.0	13.3 / 1.9
AVC12A1-EU	01338722	2 100	10.2	76	5	5	1.53	197	1/4"	8	6.0	91.1	8.0 / 1.8
AVC13A1-EU	01338078	1 725	10.2	101	6	6	1.67	222	1/4"	8	6.0	94.2	8.0 / 1.8
AVC26A1-EU	01339142	1 120	12.7	152	10	8	2.30	287	1/4"	13	6.6	92.6	8.0 / 1.8
<b>Gooseneck handle</b>													
AVC26B1-EU	01340926	1 120	12.7	152	10	8	3.20	354	1/4"	13	6.6	92.6	8.0 / 1.8

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



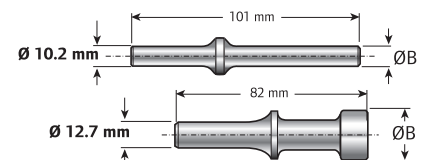
### Brazier head jacket

Model No.	CPN	mm
AV1-22C-4	91136622	3 mm
AV1-22C-5	91136630	4 mm
AV1-22C-6	91136648	5 mm
AV1-22C-8	91136655	6 mm
AV1-22C-10	91136663	8 mm



### Flush head jacket

Model No.	CPN	Ø B (mm)
AV1-126D	03218534	25



### Jackset blank

Model No.	CPN	Shank Ø (mm)	Ø B (mm)
AV1-22S-16	03218062	10.2	13
AV1-22S-20	03218070	10.2	16
AV1-22S-24	03218088	10.2	19
AV1-22S-28	03218096	10.2	22
AV24-222S-26	03218724	12.7	21
AV24-222S-38	03218732	12.7	30

### Beehive (safety) spring retainers



Model No.	CPN	Compatible tools
AVC1-83	03010659	All except AVC26
AVC24-283	03012010	AVC26

# Pneumatic Percussive Tools

## MAX-Series Hammers ★ Maintenance-duty classification

Ingersoll Rand hammer will deliver the punch you need to get the job done fast and comfortably!

**MAX Comfort:** anti-vibration feature reduces tool vibration by over 30% when compared to standard air hammers in its class, plus, an ergonomic grip that provides comfort for extended use.

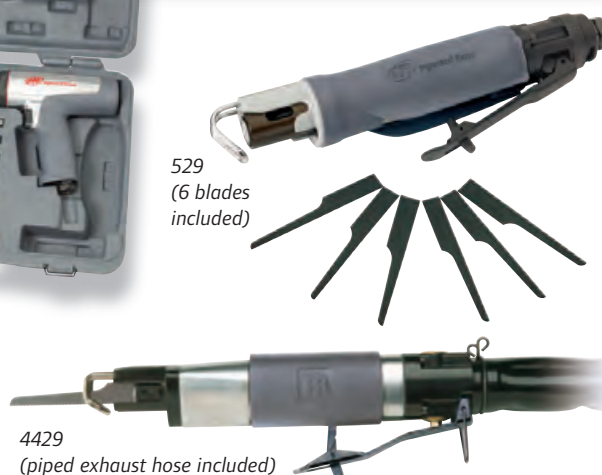
**MAX Productivity:** quick-change retainer allows for faster chisel changeovers, so you can get the job done.



## Saws ★ Maintenance-duty classification

Get a bigger bite and better cuts with Ingersoll Rand saws.

- Fast, quiet operation – Anti-vibration handle.
- Robust tools for heavy duty applications.



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN Tool only	CPN Kit	1 min.	mm (1)	mm	kg	mm	NPTF	mm	L/s	dB(A)	m/s <sup>2</sup> / K(2)
<b>Air Hammers</b>												
118MAX	47124490	47125877	2 500	10.2 ○	89	2.10	314	1/4"	10	1.4	92.6	4.0 / 1.4
122MAX	47124482	47125869	3 500	10.2 ○	67	1.80	218	1/4"	10	1.4	94.2	5.5 / 1.8
118MAXH	46816732	46816765	2 500	10.2 ◻	89	2.10	314	1/4"	10	1.4	92.6	4.0 / 1.4
122MAXH	46816740	46816757	3 500	10.2 ◻	67	1.80	218	1/4"	10	1.4	94.2	5.5 / 1.8
<b>Saws</b>												
4429	01371822	—	5 750	—	10	0.74	235	1/4"	6	3.6	66.2 (3)	9.5 / 2.4
529	47125885	—	9 500	—	10	0.70	246	1/4"	6	0.5	84.3	3.1 / 1.0

(1) ○ = Round shank — ◻ = Hexagonal shank.

(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

(3) Piped-away exhaust system.

### Saw blades



Model No.	CPN	Description
P4FS-6	45525474	12 teeth/cm - Quantity 6
P4CS-6	45525508	10 teeth/cm - Quantity 6

### Hammer accessories



Model No.	CPN	Description
9510	80167752	Replacement quick-change retainer
9500	80117427	Chisels, round shank (5 pieces)
116H-K5	92536093	Chisels, hexagonal shank (5 pieces)

## 172 / 182-Series Scalars ★★ ★ Super-duty classification

These scalars provide you with the means to aggressively prepare a surface for the next steps in an industrial surface preparation application. Whether its paint removal from the deck of a ship to rust removal from bridge girders, these tools get the job done quickly and efficiently.

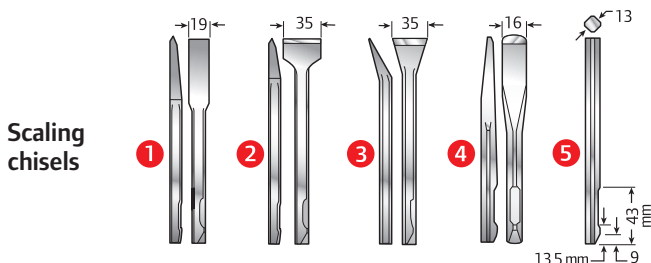
- Proven designs and materials to ensure the toughest tools.
- Long nozzle sections extend retainer life and strengthened head blocks stand up to the hardest use.



### Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	1 min.	mm	mm	kg	mm	NPTF	mm	L/s	dB(A)	m/s <sup>2</sup> / K <sup>(1)</sup>
<b>Chisel and Needle Scalars</b>											
172L-EU	01337823	5 500	14	24	1.69	194	1/4"	8	5.7	107.5	11.6 / 2.6
172LNA1-EU	01337724	5 500	14	24	2.38	349	1/4"	8	5.7	107.5	12.5 / 1.8
182L-EU	01337625	4 000	27	24	1.84	229	1/4"	8	6.1	107.2	12.7 / 2.0
182G-EU	01339605	4 000	27	24	2.41	325	1/4"	8	6.1	107.2	8.5 / 1.2
182LNA1-EU	01337617	4 000	27	24	2.61	381	1/4"	8	6.1	107.2	10.1 / 1.7
182K1-EU	01337955	4 000	27	24	1.84/2.61	229/381	1/4"	8	6.1	107.2	12.7 / 2.0

(1) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.



Model No.	CPN	Length (mm)
① WF-14F-7	03223948	178
① WF-14F-12	92745629	305
② WF-14B6 1/8	91136259	156
② WF-14B-11 1/2	03223914	292
③ WF-14A-6 1/8	91136283	156
④ WF-14G-6	03223955	152
⑤ WF-14-7 1/8	03223872	181

### Replacement needles (sets of 19 needles)

Model No.	CPN	Material	Needle length (mm)
NS11-22-19	03676335	Steel	127
NS11-B22-19	03676350	Beryllium copper	127
NS11-S22-19	03676343	Stainless steel	127
NS11-122-19	03676368	Steel	178

### Attachment for conversion of models 172L and 182L



Model No.	CPN	Opening type	Needle length (mm)
NS11A	03468360	Round	127
NS11A7	03468394	Round	178
NS11B7	03468436	Rectangular	178

# Pneumatic Percussive Tools

## WA and SA Series Chippers ★★★ *Super-duty classification*

Renowned for its valve life and handle durability, this classic tool is widely used throughout industry. It is ideal for light demolition work, metal removal, form stripping, and many other applications.

- Swan neck handle with outside trigger.
- Time tested valve durability.
- Replaceable piston.
- Long nozzle for extra life.
- Grooved barrel, lock spring retainer on SA Series. Threaded barrel and rubber buffered retainer for increased steel and retainer life on WA-Series.



### SA Series

Plain arrow retainer



1A2 SA-EU



### WA Series

Rubber buffered retainer



3A1SA-EU



W2 A1-EU



W3A1-EU



Technical Specifications at 6.2 bar (90 psi) dynamic pressure at inlet

Model No.	CPN	1 min.	mm (1)	mm	mm	kg	mm	NPTF	mm	L/s	dB(A)	m/s <sup>2</sup> / K(2)
<b>SA series / Plain Arrow Retainer</b>												
1A2SA-EU	01341015	2 500	17 ○	25	29	6.70	394	3/8"	13	13.2	109.9	18.1 / 5.4
2A2SA-EU	01339860	2 300	17 ○	51	29	6.88	406	3/8"	13	13.2	109.8	18.0 / 5.4
3A2SA-EU	01342914	1 725	17 ○	76	29	7.56	454	3/8"	13	13.7	112.2	17.7 / 5.3
4A2SA-EU	01341882	1 480	17 ○	102	29	7.95	480	3/8"	13	13.7	112.9	18.9 / 6.2
1A1SA-EU	01340447	2 500	15 ◻	25	29	6.70	394	3/8"	13	13.2	109.9	18.1 / 5.4
2A1SA-EU	01339951	2 300	15 ◻	51	29	6.88	406	3/8"	13	13.2	109.8	18.0 / 5.4
3A1SA-EU	01340884	1 725	15 ◻	76	29	7.56	454	3/8"	13	13.7	112.2	17.7 / 5.3
4A1SA-EU	01340488	1 480	15 ◻	102	29	7.95	480	3/8"	13	13.7	112.9	18.9 / 6.2
<b>WA Series / Rubber Buffered Retainer</b>												
W1A2-EU	01341643	2 500	17 ○	25	29	6.70	403	3/8"	13	13.2	109.9	17.5 / 5.8
W2A2-EU	01340207	2 300	17 ○	51	29	6.88	416	3/8"	13	13.2	109.8	17.3 / 5.7
W3A2-EU	01340827	1 725	17 ○	76	29	7.56	464	3/8"	13	13.7	112.2	13.7 / 4.5
W4A2-EU	01341106	1 480	17 ○	102	29	7.95	489	3/8"	13	13.7	112.9	18.5 / 5.9
W1A1-EU	01339399	2 500	15 ◻	25	29	6.70	403	3/8"	13	13.2	109.9	17.5 / 5.8
W2A1-EU	01338649	2 300	15 ◻	51	29	6.88	416	3/8"	13	13.2	109.8	17.3 / 5.7
W3A1-EU	01340389	1 725	15 ◻	76	29	7.56	464	3/8"	13	13.7	112.2	13.7 / 4.5
W4A1-EU	01340215	1 480	15 ◻	102	29	7.95	489	3/8"	13	13.7	112.9	18.5 / 5.9

(1) ○ = Round shank — ◻ = Hexagonal shank.

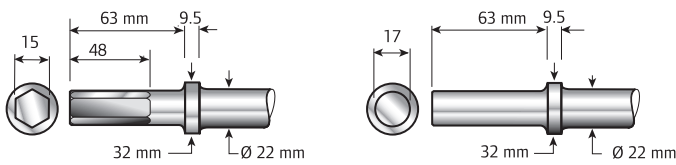
(2) ISO28927 – 3-axis measurement: vibration level / measurement uncertainty.

# Pneumatic Percussive Tools

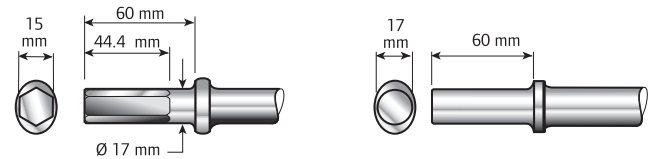
## Chisels for W and SA Series chippers



Round collar for rubber buffered retainer (for W Series)



Oval collar for plain arrow retainer (for SA Series)



Model No.	CPN	Length (mm)	Weight (kg)
<b>Round Shank</b>			
<b>A</b> H3R-215F-12	03225661	305	0.8
<b>A</b> H3R-215F-18	03225687	455	1.1
<b>A</b> H3R-215F-24	03225703	610	1.3
<b>A</b> H3R-215F-36	03225729	915	2.4
<b>B</b> H3R-215B-12	03225745	305	0.8
<b>C</b> H3R-215M-12	03225596	305	0.8
<b>C</b> H3R-215M-18	92731769	455	1.1
<b>C</b> H3R-215M-24	56748650	610	1.3
<b>Hexagonal Shank</b>			
<b>A</b> H3R-214F-12	03225133	305	0.8
<b>A</b> H3R-214F-18	03225158	455	1.1
<b>A</b> H3R-214F-24	03225174	610	1.3
<b>A</b> H3R-214F-36	03225190	915	2.4
<b>B</b> H3R-214B-12	03225364	305	0.8
<b>C</b> H3R-214M-12	03225059	305	0.8
<b>C</b> H3R-214M-18	03225083	455	1.1
<b>C</b> H3R-214M-24	03225109	610	1.3
<b>C</b> H3R-214M-36	03225125	915	2.4

Model No.	CPN	Length (mm)	Weight (kg)
<b>Round Shank</b>			
<b>A</b> HH1-215F-12	03487923	305	0.8
<b>A</b> HH1-215F-18	03487931	455	1.1
<b>A</b> HH1-215F-24	03487949	610	1.3
<b>A</b> HH1-215F-36	03487956	915	2.4
<b>B</b> HH1-215B-12	91137075	305	0.8
<b>C</b> HH1-215M-12	91137034	305	0.8
<b>C</b> HH1-215M-18	03487972	455	1.1
<b>C</b> HH1-215M-24	03487980	610	1.3
<b>Hexagonal Shank</b>			
<b>A</b> HH1-214F-12	03221983	305	0.8
<b>A</b> HH1-214F-18	03487477	455	1.1
<b>A</b> HH1-214F-24	03487485	610	1.3
<b>A</b> HH1-214F-36	03487493	915	2.4
<b>B</b> HH1-214B-12	91137281	305	0.8
<b>C</b> HH1-214M-12	03222064	305	0.8
<b>C</b> HH1-214M-18	03487501	455	1.1
<b>C</b> HH1-214M-24	03487519	610	1.3
<b>C</b> HH1-214M-36	03487527	915	2.4



# Airline & Additional Accessories

Get the most out of your tools! Ingersoll Rand takes a systematic approach to providing a complete solution to maximize your productivity as efficiently and safely as possible. To that end, we have supplemented our line of tools with air line accessories, ergonomic accessories and tools lubricants.

## Ingersoll Rand offers:

- ▶ Air Filters, Regulators and Lubricators → Page **55**
- ▶ Quick Release Couplings, Nipples and Hoses → Pages **56-57**
- ▶ Spring Balancers → Page **58**
- ▶ Grease and Oil → Page **58**

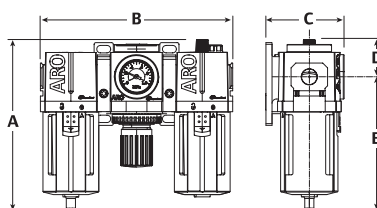
See our accessories catalogue for a complete information on our tools accessories





## ARO-Flo Series

### Filter + Regulator + Lubricator

- Operating temperature: -5 to +79 °C.
- Maximum inlet pressure: 17.2 bar (250 psig).
- Pressure gauge: 0 to 9.7 bar (0-140 psig).
- 5 micron filter element.

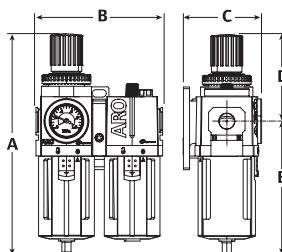




Model No.	CPN	 BSP	 L/s (1)	Bowl material / drain type mm	5µ filter element CPN
<b>C381B1-821</b>	15302961	1/4"	21.7	Metal / Automatic	15299183
<b>C382C1-811</b>	15315633	3/8"	40.0	Metal / Automatic	15299662
<b>C383D1-811</b>	15304108	1/2"	70.8	Metal / Automatic	15299407
<b>C383E1-811</b>	15304181	3/4"	80.7	Metal / Automatic	15299407
<b>C384F1-811</b>	15317639	1"	101.5	Metal / Automatic	15299878

Dimensions	A mm	B mm	C mm	D mm	E mm
<b>C381B1-821</b>	149	120	80	42	107
<b>C382C1-811</b>	199	168	84	45	154
<b>C383D1-811</b>	216	221	90	43	173
<b>C383E1-811</b>	216	221	90	43	173
<b>C384F1-811</b>	292	282	109	55	237

### Filter / Regulator + Lubricator

- Operating temperature: -5 to +52 °C.
- Maximum inlet pressure: 10.3 bar (150 psig).
- Pressure gauge: 0 to 9.7 bar (0-140 psig).
- 5 micron filter element.

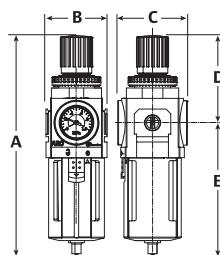




Model No.	CPN	 BSP	 L/s (1)	Bowl material / drain type mm	5µ filter element CPN
<b>C381B1-600</b>	15302896	1/4"	20.7	Polycarbonate / Manual	15299183
<b>C382C1-600</b>	15315567	3/8"	33.5	Polycarbonate / Manual	15299662
<b>C383D1-600</b>	15304033	1/2"	56.7	Polycarbonate / Manual	15299407
<b>C383E1-600</b>	15304116	3/4"	67.0	Polycarbonate / Manual	15299407
<b>C384F1-610</b>	15317605	1"	98.2	Metal / Manual	15299878

Dimensions	A mm	B mm	C mm	D mm	E mm
<b>C381B1-600</b>	157	80	80	67	90
<b>C382C1-600</b>	209	112	84	86	123
<b>C383D1-600</b>	252	145	90	100	152
<b>C383E1-600</b>	252	145	90	100	152
<b>C384F1-610</b>	351	186	109	133	218

### Filter / Regulator

- Operating temperature. With polycarbonate bowl: -5 to +52°C. With metal bowl: -5 to +79°C.
- Maximum operating pressure. With polycarbonate bowl: 10.3 bar (150 psig). With metal bowl: 17.2 bar (250 psig).
- Pressure gauge: 0 to 9.7 bar (0-140 psig).
- 5 micron filter element.



Model No.	CPN	 BSP	 L/s (1)	Bowl material / drain type mm	Fixing bracket CPN	5µ filter element CPN
<b>P391B4-600</b>	15302813	1/4"	22.1	Polycarbonate / Manual	15307416	15299183
<b>P391B4-624</b>	15302847	1/4"	22.1	Metal / Automatic	15307416	15299183
<b>P392C4-600</b>	15315260	3/8"	42.5	Polycarbonate / Manual	15307424	15299662
<b>P392C4-614</b>	15315294	3/8"	42.5	Metal / Automatic	15307424	15299662
<b>P393D4-600</b>	15305337	1/2"	79.5	Polycarbonate / Manual	15307432	15299407
<b>P393D4-614</b>	15305360	1/2"	79.5	Metal / Automatic	15307432	15299407
<b>P393E4-600</b>	15305931	3/4"	81.6	Polycarbonate / Manual	15307432	15299407
<b>P393E4-614</b>	15305964	3/4"	81.6	Metal / Automatic	15307432	15299407

Dimensions	A mm	B mm	C mm	D mm	E mm
<b>P391B4-600</b>	157	40	74	67	90
<b>P391B4-624</b>	175	40	74	67	108
<b>P392C4-600</b>	207	56	79	86	121
<b>P392C4-614</b>	229	56	79	86	143
<b>P393D4-600</b>	253	70	80	100	153
<b>P393D4-614</b>	276	70	80	100	176
<b>P393E4-600</b>	253	70	80	100	153
<b>P393E4-614</b>	276	70	80	100	176

(1) At 6.2 bar (90 psig)

# Airline & Additional Accessories

## Quick Release Couplings & Nipples



**Standard coupling**  
Direct disconnection



**Safety coupling**  
Decompression of the air and disconnection



**EURO**  
7.2 - 7.4



Ø 7.2 - 7.4 mm		Nipples BSP		Standard couplings		Safety couplings		Safety couplings		
		Part no.	CPN	Part no.	CPN	Part no.	CPN	Part no.	CPN	
				Max: 16 bar - 25 L/s <sup>(1)</sup>		Max: 16 bar - 25 L/s <sup>(1)</sup>		Max: 12 bar - 30 L/s <sup>(1)</sup>		
	Male thread	1/4" BSP	77NMC2	88104070	7N7CCMC2	25010505	7S7CCMC2	25010398	7S7CMC2	88104187
		3/8" BSP	77NMC3	88104088	7N7CCMC3	25010513	7S7CCMC3	25010406	7S7CMC3	88104195
		1/2" BSP	77NMC4	88104096	7N7CCMC4	25010521	7S7CCMC4	25010414	7S7CMC4	88104203
	Female thread	1/4" BSP	77NFC2	88104047	7N7CCFC2	25010471	7S7CCFC2	25010364	7S7CFC2	88104153
		3/8" BSP	77NFC3	88104054	7N7CCFC3	25010489	7S7CCFC3	25010372	7S7CFC3	88104161
		1/2" BSP	77NFC4	88104062	7N7CCFC4	25010497	7S7CCFC4	25010380	7S7CFC4	88104179
	For hose	Ø 6 mm	77NH06	88104104	7N7CCH06	25010539	7S7CCH06	25010422	7S7CH06	88104211
		Ø 8 mm	77NH08	88104112	7N7CCH08	25010547	7S7CCH08	25010430	7S7CH08	88104229
		Ø 10 mm	77NH10	88104138	7N7CCH10	25010562	7S7CCH10	25010455	7S7CH10	88104245
		Ø 13 mm	77NH13	88104146	7N7CCH13	25010570	7S7CCH13	25010463	7S7CH13	88104252



**ISO 6150B**  
MIL-C4109

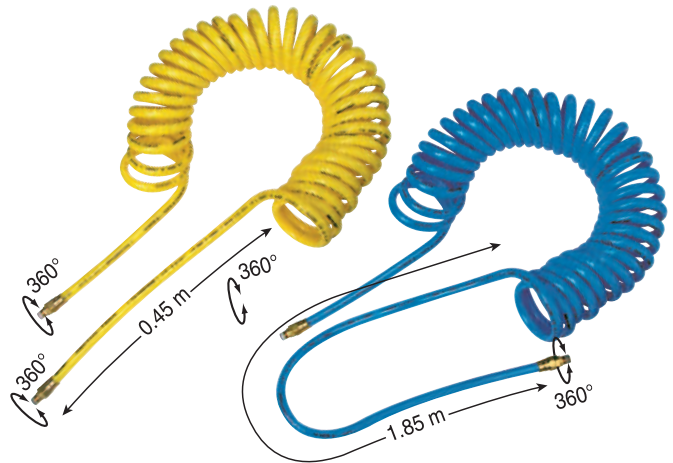


Ø 6 mm (1/4")		Nipples BSP		Standard couplings		Safety couplings		Safety couplings		
		Part no.	CPN	Part no.	CPN	Part no.	CPN	Part no.	CPN	
				Max: 12 bar - 13 L/s <sup>(1)</sup>		Max: 16 bar - 15 L/s <sup>(1)</sup>		Max: 12 bar - 13 L/s <sup>(1)</sup>		
	Male thread	1/4" BSP	IB6NMC2	88103015	IBN6CMC2	88103197	IBS6CCMC2	25010075	IBS6CMC2	88103098
		3/8" BSP	IB6NMC3	88103023	IBN6CMC3	88103205	IBS6CCMC3	25010083	IBS6CMC3	88103106
		1/2" BSP	-	-	IBN6CMC4	88103213	IBS6CCMC4	25010091	IBS6CMC4	88103114
	Female thread	1/4" BSP	IB6NFC2	88102991	IBN6CFC2	88103163	IBS6CCFC2	25010042	IBS6CFC2	88103064
		3/8" BSP	IB6NFC3	88103007	IBN6CFC3	88103171	IBS6CCFC3	25010059	IBS6CFC3	88103072
		1/2" BSP	-	-	IBN6CFC4	88103189	IBS6CCFC4	25010067	IBS6CFC4	88103080
	For hose	Ø 6 mm	IB6NH06	88103031	IBN6CH06	88103221	-	-	IBS6CH06	88103122
		Ø 8 mm	IB6NH08	88103049	IBN6CH08	88103239	IBS6CCH08	25010117	IBS6CH08	88103130
		Ø 10 mm	IB6NH10	88103056	IBN6CH10	88103247	IBS6CCH10	25010125	IBS6CH10	88103148
Ø 8 mm (3/8")				Max: 12 bar - 33 L/s <sup>(1)</sup>		Max: 16 bar - 30 L/s <sup>(1)</sup>		Max: 12 bar - 33 L/s <sup>(1)</sup>		
	Male thread	1/4" BSP	IB8NMC2	88103296	IBN8CMC2	88104567	-	-	IBS8CMC2	88103395
		3/8" BSP	IB8NMC3	88103304	IBN8CMC3	88104575	IBS8CCMC3	25010158	IBS8CMC3	88103403
		1/2" BSP	IB8NMC4	88103312	IBN8CMC4	88104583	IBS8CCMC4	25010166	IBS8CMC4	88103411
	Female thread	1/4" BSP	IB8NFC2	88103262	IBN8CFC2	88104534	-	-	IBS8CFC2	88103361
		3/8" BSP	IB8NFC3	88103270	IBN8CFC3	88104542	IBS8CCFC3	25010133	IBS8CFC3	88103379
		1/2" BSP	IB8NFC4	88103288	IBN8CFC4	88104559	IBS8CCFC4	25010141	IBS8CFC4	88103387
	For hose	Ø 8 mm	IB8NH08	88103320	-	-	IBS8CCH08	25010174	IBS8CH08	88103429
		Ø 10 mm	IB8NH10	88103338	IBN8CH10	88104609	IBS8CCH10	25010182	IBS8CH10	88103437
		Ø 13 mm	IB8NH13	88103346	IBN8CH13	88104617	IBS8CCH13	25010190	IBS8CH13	88103445
Ø 11 mm (1/2")						Max: 16 bar - 70 L/s <sup>(1)</sup>				
	Male thread	3/8" BSP	IB11NMC3	25014028	-	-	IBS11CCMC3	25013939	-	-
		1/2" BSP	IB11NMC4	25014036	-	-	IBS11CCMC4	25013947	-	-
		3/4" BSP	-	-	-	-	IBS11CCMC6	25013954	-	-
	Female thread	3/8" BSP	IB11NFC3	25014002	-	-	IBS11CCFC3	25013905	-	-
		1/2" BSP	IB11NFC4	25014010	-	-	IBS11CCFC4	25013913	-	-
		3/4" BSP	-	-	-	-	IBS11CCFC6	25013921	-	-
	For hose	10 mm	IB11NH10	25014044	-	-	IBS11CCH10	25013962	-	-
		13 mm	IB11NH13	25014051	-	-	IBS11CCH13	25013970	-	-
		16 mm	IB11NH16	25014069	-	-	IBS11CCH16	25013988	-	-
		19 mm	IB11NH19	25014077	-	-	IBS11CCH19	25013996	-	-



## Polyurethane Recoil Hoses

- Operating temperature: -40 to +38 °C.
- Operating pressure: 8 bar (115 psi) at 24 °C.



Part No.	CPN	mm	NPT	m	m	m
<b>Yellow Hose</b>						
34102	92833375	6	1/4"	3	2.5	0.15
34202	92833383	6	1/4"	6	5	0.31
34302	92833391	6	1/4"	9	8	0.43
35102	92833409	8	1/4"	3	2.5	0.14
35202	92832526	8	1/4"	6	5	0.30
35302	92833417	8	1/4"	9	8	0.46
IR36103	92835172	9.5	1/4"	3	2.5	0.15
IR36203	92835180	9.5	1/4"	6	5	0.34
IR36303	92835198	9.5	1/4"	9	8	0.52
IR36102	92835149	9.5	3/8"	3	2.5	0.15
IR36202	92835156	9.5	3/8"	6	5	0.34
IR36302	92835164	9.5	3/8"	9	8	0.52
IR37102	92835206	13	1/2"	3	2.5	0.16
IR37202	92835214	13	1/2"	6	5	0.38
<b>Blue Hose</b>						
IR36713	88098991	9.5	3/8"	6	5	0.34
IR36715	88099015	9.5	3/8"	9	7.5	0.52

## PVC Round Hose, 30 m Coil

- Safety factor 4:1.



Part No.	CPN	mm	mm	Max. operating pressure at 20° C
RH-6	92545730	6 mm	11 mm	18 bar
RH-8	92536036	8 mm	13 mm	15 bar
RH-10	92536044	10 mm	14 mm	13 bar
RH-12	92536051	13 mm	17 mm	11 bar
RH-16	92536069	16 mm	21 mm	11 bar
RH-19	92536077	19 mm	24 mm	11 bar

## Hose Whips



Part No.	CPN	NPT	L
33104	91486340	1/4" NPT	300 mm
33204	91486357	3/8" NPT	300 mm
33304	91488205	1/2" NPT	300 mm

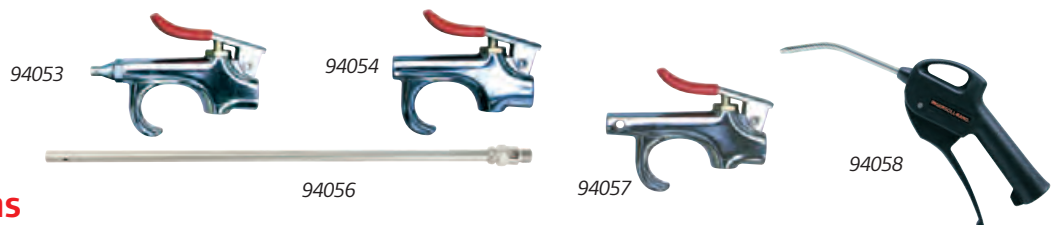
## Hose clamps



Part No.	CPN	mm	Quantity
CO-0911	56753080	∅ 9 - 11 mm	100
CO-1113	56753098	∅ 11 - 13 mm	100
CO-1315	56753106	∅ 13 - 15 mm	100
CO-1518	56753122	∅ 15 - 18 mm	100
CO-1821	56753148	∅ 18 - 21 mm	100
CO-2225	56753163	∅ 22 - 25 mm	100

## Safety Blow Guns

- OSHA compliant with outlet pressure reduced to 2 bar for increased operator safety.



Part No.	CPN	Max. air pressure	Description	mm
94053	91487520	6-7 bar	Brass air screen tip produces conical air stream around direct centre air stream	1/4" BSP
94054	91488775	6-7 bar	For use with blow pipes only (1)	1/4" BSP
94057	91489732	6-7 bar	Tamper-proof vent holes increase total air flow	1/4" BSP
94058	25011222	10 bar	Composite material. Built-in blow pipe	1/4" BSP

(1) Blow pipe, 150 mm long, part no. 94055 (CPN: 91488783) – Blow pipe, 450 mm long, part no. 94056 (CPN: 91488791).

# Airline & Additional Accessories

## Spring balancers



Model No.	CPN	Load capacity kg	Maximum stroke m	kg
<b>BLD Series – Light-Duty</b>				
<b>BLD-1</b>	92073956	0.4 - 1.0	1.6	0.6
<b>BLD-2</b>	92073964	1.0 - 2.0	1.6	0.6
<b>BLD-3</b>	92073972	2.0 - 3.0	1.6	0.7
<b>BMD Series – Medium-Duty</b>				
<b>BMDS-2</b>	92842152	1.0 - 2.5	2.0	2.0
<b>BMDS-4</b>	92842160	2.0 - 4.0	2.0	2.0
<b>BMDS-6</b>	92842178	4.0 - 6.0	2.0	2.3
<b>BMDS-8</b>	92842186	6.0 - 8.0	2.0	2.5
<b>BMDLN-4</b>	17023730	2.0 - 4.0	2.5	2.9
<b>BMDLN-6</b>	17023748	4.0 - 6.0	2.5	3.2
<b>BMDLN-8</b>	17023755	6.0 - 8.0	2.5	3.5
<b>BMDLN-10</b>	17023763	8.0 - 10	2.5	3.7
<b>BMDLN-12</b>	17023771	10.0 - 14	2.5	4.0
<b>BMDLLN-4<sup>(1)</sup></b>	17023789	2.0 - 4.0	2.5	3.0
<b>BMDLLN-6<sup>(1)</sup></b>	17023797	4.0 - 6.0	2.5	3.3
<b>BMDLLN-8<sup>(1)</sup></b>	17023805	6.0 - 8.0	2.5	3.6
<b>BMDLLN-10<sup>(1)</sup></b>	17023813	8.0 - 10	2.5	3.8
<b>BIDS Series – Intermediate-Duty</b>				
<b>BIDS-7</b>	25015967	4.0 - 7.0	2.0	5.0
<b>BIDS-10</b>	25015975	7.0 - 10	2.0	5.5
<b>BIDS-14</b>	25015983	10 - 14	2.0	5.5
<b>BIDS-18</b>	25015991	14 - 18	2.0	6.5
<b>BIDS-22</b>	25016007	18 - 22	2.0	6.0
<b>BIDS-26</b>	25016015	22 - 25	2.0	6.6
<b>BHD Series – Heavy-Duty</b>				
<b>BHD-15</b>	92841956	10 - 15	2.0	10.3
<b>BHD-20</b>	92841964	15 - 20	2.0	10.6
<b>BHD-25</b>	92841972	20 - 25	2.0	11.2
<b>BHD-30</b>	92841980	25 - 30	2.0	11.5
<b>BHD-35</b>	92841998	30 - 35	2.0	11.8
<b>BHD-45</b>	92842004	35 - 45	2.0	12.4
<b>BHD-55</b>	92842012	45 - 55	2.0	12.5
<b>BHD-65</b>	92842020	55 - 65	2.0	13.6

(1) Locking type balancer: sharp pull on the wire rope will lock it in position allowing attached load to be manipulated freely – without weight compensation.



## Hose Reel Balancers

Model No.	CPN	Load capacity kg	Maximum stroke m	kg
<b>BHR-8</b>	92073923	0.4 - 0.8	1.3	1.5
<b>BHR-15</b>	92073931	0.7 - 1.5	1.3	1.5
<b>BHR-25</b>	92073949	1.2 - 2.5	1.3	1.5



## Grease and Oil

Model No.	CPN	No.	Recommended use	Capacity
<b>Grease</b>				
<b>67-4T</b>	04637336	67	For angle head tools	0.12 L (tube)
<b>67-1 LB</b>	03773009			0.45 kg
<b>105-4T-6</b>	04618930	105	with metal housing	6 tubes of 0.12 L
<b>105-1LB</b>	04279147			0.45 kg
<b>105-8LB</b>	04264875			3.60 kg
<b>115-4T</b>	04616157	115	For Impacttools with composite housing	0.12 L (tube)
<b>115-1LB</b>	04192480			0.45 kg
<b>Oil</b>				
<b>10Z4</b>	03875671	10	For Impacttools, drills, screwdrivers and percussive tools	0.12L (tube)
<b>10P</b>	03875689			0.50 L
<b>10G</b>	03875697			3.80 L
<b>50P</b>	03875705	50	For grinders and Impacttools	0.50 L
<b>50G</b>	03875713			3.80 L

115-LBK1



VT22-T24



VT22-SK1



## Lubricant Kits

Part No.	CPN	Compatible tools
<b>67-LBK1</b>	04637344	For angle head tools
<b>105-LBK1</b>	04616090	For Impacttools with metal housing
<b>115-LBK1</b>	04616108	For Impacttools with composite housing
<b>VT22-SK1<sup>(1)</sup></b>	17028549	Lubricant kit (250 ml of oil + syringe)

(1) Contains: grease 80 g, oil 0.12 L and grease pump.

(2) Note: VT22-T24 spindle lock key is required for oil change.

R000A2-228



P25-228



GTH-1

## Grease Guns

Part No.	CPN	Description
<b>P25-228</b>	03026978	For hydraulic-type fittings
<b>R000A2-228</b>	03095015	For flush-type fittings
<b>GTH-1</b>	04616124	For Ingersoll Rand 0.12 l tube of grease

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
1105MAX-D2	12	345MAX-M	35	99V60S106M-EU	42	P33006-PMSL	26	Q70PQ1	32
1105MAX-D3	12	3940A2Ti	17	99V85P107M-EU	42	P33006-PSL	25	Q80P3	32
118MAX	50	3940B2Ti	17	AVC10A1-EU	49	P33011-DASL030P45	28	Q80PQ1	32
118MAXH	50	3940P2Ti	17	AVC10C1-EU	49	P33011-DASL030P64	28	Q90P3	32
1207MAX-D3	12	3942A2Ti	17	AVC12A1-EU	49	P33011-DASL090P45	28	QP051D	24
1207MAX-D4	12	3942B2Ti	17	AVC13A1-EU	49	P33011-DASL090P64	28	QP091D	24
122MAX	50	3955A2Ti	17	AVC26A1-EU	49	P33011-DASL180P45	29	QP151D	24
122MAXH	50	3955B2Ti	17	AVC26B1-EU	49	P33011-DASL180P64	29	QP152D	24
172L-EU	51	3A1SA-EU	52	D1130	8	P33011-DMSL	26	QP1502S1TD	31
172LNA1-EU	51	3A2SA-EU	52	D1410	7	P33011-DSL	25	QP1505C1TD	31
182G-EU	51	4151-HL	46	D5140	6	P33011-PMSL	26	QP1505D1TD	31
182K1-EU	51	4151-HL-2	46	DG600G2-EU	44	P33011-PSL	25	QP1505S1TD	31
182L-EU	51	4152-HL	46	EP50K-EU	44	P33016-DASL030P45	28	QP1510C1TD	31
182LNA1-EU	51	4152-HL-SR	46	G1A120PS4	39	P33016-DASL030P64	28	QP1510D1TD	31
1A1SA-EU	52	4429	50	G1A120PS418	39	P33016-DASL090P45	28	QP1510S1TD	31
1A2SA-EU	52	445MA-EU	30	G1A120PS812	39	P33016-DASL090P64	28	QP1515C1TD	31
2015MAX	12	4A1SA-EU	52	G1A200PG4M	36	P33016-DASL180P45	29	QP1515D1TD	31
2025MAX	12	4A2SA-EU	52	G1A200PP63	38	P33016-DASL180P64	29	QP1515S1TD	31
2101XP	13	5102MAX	35	G1A200PS4	39	P33016-DMSL	26	QP1520D1TD	31
2102XP	13	5108MAX	35	G1A200PS812	39	P33016-DSL	25	QP1520S1TD	31
2115PTiMAX	14	529	50	G1H200PG4M	37	P33016-PMSL	26	QP201D	24
2115QTiMAX	14	5515MA-EU	30	G1H250PG4M	37	P33016-PSL	25	QP202D	24
2115XP	13	588A1-EU	18	G1H250PH63	38	P33022-DASL030P45	28	QP301LD	24
2125PTiMAX	14	5980A1-EU	18	G1H350PG4M	37	P33022-DASL030P64	28	QP302LD	24
2125QTiMAX	14	5982A1-EU	18	G1X200PG4M	37	P33022-DASL090P45	28	QP381D	24
2125XP	13	599A1-EU	18	G1X250PG4M	37	P33022-DASL090P64	28	QP511LD	24
2130XP	13	61H120G4-EU	40	G1X350PG4M	37	P33022-DASL180P45	29	QP512LD	24
2130XP-K	20	61H120H63-EU	41	G3A100PP96AV	38	P33022-DASL180P64	29	QS150P6	32
2131PSP	19	61H120L6-EU	41	G3A120PG4M	36	P33022-DMSL	26	QS151D	24
2135QPTiMAX	14	61H150G4-EU	40	G3A120PP945AV	38	P33022-DSL	25	QS301D	24
2135QTiMAX	14	61H150H63-EU	41	G3A120PP95AV	38	P33022-PMSL	26	QS381D	24
2135QTiMAX-SK	20	61H150L6-EU	41	G3H150PG4M	37	P33022-PSL	25	QS50P3	32
2135XP	13	77A25F107-EU	43	G3H180PG4M	37	P33032-DASL030P45	28	QS50PQ1	32
2135XP+SK	20	77A45W109-EU	43	G3L086PP95	38	P33032-DASL030P64	28	QS511D	24
2145QiMAX	14	77A60P107M-EU	41	G3L086PS10	39	P33032-DASL090P45	28	QS60P3	32
2145QiMAX-SP	19	77A60P109M-EU	41	G3X150PG4M	37	P33032-DASL090P64	28	QS60PQ1	32
2155QiMAX	14	77A60W107-EU	43	G3X150PH64	38	P33032-DASL180P45	29	QS70P3	32
2155QiMAX-SP	19	77A75P107M-EU	41	G3X180PG4M	37	P33032-DASL180P64	29	QS70PQ1	32
2161XP	13	77H120H84-EU	41	G3X180PH63	38	P33032-DMSL	26	QS80P3	32
2171XP	13	77H120L10-EU	41	M2A090RP95	38	P33032-DMSL-B	26	R1120	8
22KA1-EU	30	77H30B106-EU	43	M2A120RG4	36	P33032-DSL	25	R1130	8
22KWA1-EU	30	77H50B106-EU	43	M2A120RP945	38	P33032-PMSL	26	R3130	6
22MA2-EU	30	77H90L10-EU	41	M2A120RP95	38	P33032-PSL	25	R3150	6
2902P1	15	7P24L-EU	43	M2A180RG4	36	P33054-DASL030P45	28	VT22-120P95M	35
2906P1-EU	15	7S48L-EU	43	M2H180RG4	37	P33054-DASL030P64	28	W1110	7
2920B1-EU	15	7S60L-EU	43	M2H200RG4	37	P33054-DASL090P45	28	W1130	7
2920B9-EU	15	8101MAX	47	M2H250RG4	37	P33054-DASL090P64	28	W1A1-EU	52
2925RB2Ti	16	8102MAX	47	M2L025RS9	39	P33054-DASL180P45	29	W1A2-EU	52
2925RBP1Ti	16	8103MAX	47	M2L040RS9	39	P33054-DASL180P64	29	W2A1-EU	52
2925RBP3Ti	16	8201MAX	47	M2L055RS9	39	P33054-DMSL	26	W2A2-EU	52
2934B2-EU	15	8202MAX	47	M2X075RG4	37	P33054-DMSL-B	26	W3A1-EU	52
2934B2SP-EU	19	8203MAX	47	M2X180RG4	37	P33054-DSL	25	W3A2-EU	52
2934B9-EU	15	88HL60H106-EU	41	M2X180RH63	38	P33054-PMSL	26	W4A1-EU	52
2934P2-EU	15	88S45W109-EU	43	M2X200RG4	37	P33054-PSL	25	W4A2-EU	52
2940B2SP-EU	19	88S60W107-EU	43	M2X250RG4	37	P33110-DSL	25	W5111	5
2A1SA-EU	52	88V60P107M-EU	42	P33006-DASL030P45	28	P33180-DSL	25	W5131P	5
2A2SA-EU	52	88V60P109M-EU	42	P33006-DASL030P64	28	PBA416	44	W5151P	5
3103XP	45	88V60S106M-EU	42	P33006-DASL090P45	28	POLA15000	44	W7150EU	5
3128XP	45	88V85P107M-EU	42	P33006-DASL090P64	28	Q110P4	32		
3129XP	45	99HL45H108-EU	41	P33006-DASL180P45	29	Q140P4	32		
335KA-EU	30	99HL60H106-EU	41	P33006-DASL180P64	29	Q60P3	32		
335MA-EU	30	99V60P107M-EU	42	P33006-DMSL	26	Q60PQ1	32		
3445MAX-M	35	99V60P109M-EU	42	P33006-DSL	25	Q70P3	32		



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