



Industrial power tools for:

- Shipyard
- Solar Energy
- Construction
- Petrochemical
- Assembly Line
- Mining Industry
- Aviation Industry
- Casting Foundry
- Fabrication Shop
- Automotive Service
- Railway Construction

The **ZIPP GROUP** is an allied group of CPC(Taiwan) and CEI(USA), serving customers of various industries in the global marketplace. **ZIPP GROUP** supplies: assembly line air tools, professional automotive servicing air tools, industrial air tools, construction air tools, precision planetary gear reducers as well as the metal lubricant intensifier.

All of our lines are wrapped up into one innovative brand that is distributed through well selected agents worldwide, recognizable by the **ZIPP**[®] trade-marked logo.

Our belief is that your success is our success, the **ZIPP GROUP** will keep introducing the most advanced designs of superior quality and competitive pricing that are delivered on time and backed up with our reliable customer service.

The **ZIPP GROUP** adheres to ISO 9001 standards to assure the quality of all ZIPP branded products and we also provide CE certifications for our European customers.

In order to know more about our operation or to request detailed product specifications, please feel free to email, fax or call us.

Warranty Policy

The **ZIPP** warranty is for the original user against defective material or workmanship for a period of 1 year from the date of purchase on repair parts and labor. It's limited to the repair or replacement of defective parts.

We reserves the right to determine whether the part or parts failed due to defective material, workmanship or other causes. Failures caused by accident, alteration and misuse are not covered by this warranty.

All warranty repairs must be done by **ZIPP** Authorised Service Center or by **ZIPP's** Agent / Distributor. Any repair to the equipment other than by these authorized facilities voids this warranty.

Conversion Table

PRESSURE				
Pa	Mpa	bar	psi	Kg/cm ²
1,000,000	1	10	145	10.197
100,000	0.1	1	14.5	1.0197
6.890	0.00689	0.0689	1	0.0703
98.070	0.09807	0.9807	14.223	1
620,000	0.62	6.2	90	6.3

psi>>kg/cm²: 90psi x 0.0703=6.327kg/cm²
bar>>psi: 7bar x 14.5=101.5psi

TORQUE				
N-m	Kg-m	Kg-cm	ft-lb	in-lb
1	0.102	10.1972	0.7376	8.8507
9.8067	1	100	7.233	86.77
0.0986	0.01	1	0.0723	0.8677
1.3558	0.1383	13.83	1	12

N-m>>ft-lb: 10N-m x 0.7376=7.376 ft-lb
N-m>>kg-m: 10N-m x 0.102=1.02 kg-m

FLOW RATE			
m ³ /min	cfm	l/min	l/s
1	35.317	1,000	16.668
0.0283	1	28.3168	0.4719
0.001	0.035	1	0.0165
0.061	2.1189	60.606	1

cfm>>l/min: 10cfm x 28.3168=283.168 l/min
m³/min>>cfm: 10m³/min x 35.317=353.17cfm

Po: PSI
SCFM=CFM*((Po+14.7)/14.7)

LENGTH			
mm	m	Inch	ft
1	0.01	0.03941	0.0033
1,000	1	39.37	3.2809
25.4	0.0254	1	0.0833
304.8	0.3048	12	1

mm>>inch: 10mm x 0.0394=0.394 inch
Inch>>mm: 10inch x 25.4=254mm

WEIGHT OR FORCE		
lb	kg	N
1	0.4536	4.4484
2.2046	1	9.807
0.2248	0.102	1

kg>>N: 10kg x 9.807=98.07N
N>>kg: 10N x 0.102=1.02kg

POWER	
KW	HP
1	1.341
0.746	1

HP>>KW: 10HP x 0.746=7.46KW



"My name is Brian Obiedzinski. I normally go by "Obie." I have been working on General Motors automobiles for close to 14 years. I specialize in the Cadillac brand of cars and have completed all of the General Motors factory training and assessments. My certifications include General Motors Master Technician and ASE Certified Master Technician. I also achieved the Top 20 Mark of

Excellence Award in 2016.

I have been using pneumatic tools my entire career. I started using ZIPP Air Tools in 2016 after speaking with the team in Kent, Ohio. Along with working on cars, I also race in the NASCAR Whelen All American Series at many tracks across the southeastern United States. ZIPP Air Tools USA is one of my sponsors that I stand behind. I thought my tools were performing properly, but after making the switch to ZIPP, I found that I was wrong.

The longevity and durability of the ZIPP Air Tools line is not matched by any of the competition. These lightweight tools carry large torque and have proved time and time again to out perform other brands. Besides good performance the tools have a great sleek appearance and excellent feel in the hand of the operator. One of my favorite benefits is how quiet the tools operates. It does not have excessive vibration, hammering, and volume. In addition to the tools, the ZIPP Air Tools team is extremely knowledgeable and the product support is better then any competitor. The team will help you choose the right tool for your application, and can get it to you fast. This enables you to get your tasks done quicker.



I highly recommend the ZIPP Air Tools line to anyone in the automotive repair industry and racing industry. The pneumatic tools give me the confidence that my fasteners are tight every time, and allow me to focus on other things knowing that the tool is going to perform each time I pick it up out of my tool box."

Obie
#29

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USA Made Direct Fit Hydraulic Wrench	17	120	Rust & Paint Removal Tool
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USA Made Hydraulic Pumps	22	125	Mini Sander / Mini Polisher
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ZIW1038 Pinless mechanism

1" Impact wrench

ZIW1038-6 Pinless mechanism

1" Impact wrench w/6" extension

- Working Torque (5 secs): 1800ft-lb (2440NM)



ZIW1075 Pinless mechanism

1" Impact wrench

ZIW1075-8 Pinless mechanism

1" Impact wrench w/8" extension

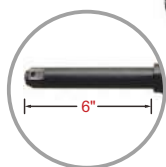
- Working Torque (5 secs): 2300ft-lb (3118NM)



ZIW1076 Pinless mechanism

1-1/2" Impact wrench

- Working Torque (5 secs): 2300ft-lb (3118NM)



ZIW812 Rear Exhaust

1" Impact wrench

ZIW812L Rear Exhaust

1" Impact wrench w/6" extension

- Working Torque (5 secs): 1000ft-lb (1356NM)



ZIW818 Rear Exhaust

1" Impact wrench

ZIW818L Rear Exhaust

1" Impact wrench w/6" extension

- Working Torque (5 secs): 1600ft-lb (2169NM)

New
Twin Hammer
Design



- Adjustable 3 stages speed for Forward/Reverse
- Use for heavy automotive and truck repair, construction or assembly line.
- With new twin hammer design and hot forged alloy steel made Hammer cage & Anvil to create more torque and 3 times longer life span than traditional design.

Model	Square Drive inch(mm)	Free Speed R.P.M.	Max. Torque (15 secs) ft-lb(NM)	Working torque (5 secs) ft-lb(NM)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Impact mechanism
ZIW1038 ZIW1038-6	1(25)	3,600	2,200(2,982)	1,800(2,440)	11(311)	23.6(10.7) 25.8(11.7)	1/2	Twin Hammer
ZIW1075 ZIW1075-8	1(25)	3,500	2,500(3,389)	2,300(3,118)	12(339)	31.7(14.4) 35.7(16.2)	1/2	Pin Less
ZIW1076	1-1/2(37)	4,000	2,500(3,389)	2,300(3,118)	12(339)	31.3(14.2)	1/2	Pin Less
ZIW812 ZIW812L	1(25)	6,000	1,200(1,627)	1,000(1,356)	24.7(700)	9.35(4.25) 11.3(5.13)	1/4	Twin Hammer
ZIW818 ZIW818L	1(25)	4500	1,800(2,400)	1,600(2,169)	11.3(320)	11.88(5.5) 13.61(6.3)	3/8	Twin Hammer



ZIW611 Rear Exhaust

3/4" Impact wrench

ZIW611L Rear Exhaust

3/4" Impact wrench w/6" extension

- Working Torque (5 secs): 900ft-lb (1220NM)



ZIW6511 Rear Exhaust

3/4" Impact wrench

ZIW6511L Rear Exhaust

3/4" Impact wrench w/6" extension

- Working Torque (5 secs): 850ft-lb (1153NM)



ZIW6514 Rear Exhaust

3/4" Impact wrench

ZIW6514L Rear Exhaust

3/4" Impact wrench w/6" extension

- Working Torque (5 secs): 1100ft-lb (1492NM)



ZIW685 Rear Exhaust

3/4" Impact wrench

ZIW685L Rear Exhaust

3/4" Impact wrench w/6" extension

- Working Torque (5 secs): 650ft-lb (881NM)

New Twin Hammer Design



- Adjustable 3 stages speed for Forward/Reverse
- Use for heavy automotive and truck repair, construction or assembly line.
- With new twin hammer design and hot forged alloy steel made Hammer cage & Anvil to create more torque and 3 times longer life span than traditional design.

Model	Square Drive inch(mm)	Std. Bolt Size inch(mm)	Free Speed R.P.M.	Max. Torque (10 secs) ft-lb(NM)	Working torque (5 secs) ft-lb(NM)	Operating Air Pressure PSI(bar)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Min. Hose Size inch(mm)	Air Inlet Size inch-NPT/PT
ZIW611 ZIW611L	3/4(19)	1-1/2(38)	6,000	1,100(1,492)	900(1,220)	90(6.2)	24.7(700)	9.13(4.15) 10.45(4.75)	3/8(10)	1/4
ZIW6511 ZIW6511L	3/4(19)	1-1/4(32)	7,200	1,100(1,492)	850(1,153)	90(6.2)	8.12(230)	5.8(2.64) 7(3.2)	3/8(10)	1/4
ZIW6514 ZIW6514L	3/4(19)	1-1/2(38)	4,500	1,400(1898)	1,100(1,492)	90(6.2)	26.4(747)	11(5) 12.9(5.87)	3/8(10)	1/4
ZIW685 ZIW685L	3/4(19)	1-9/64(29)	7,500	850(1,153)	650(881)	90(6.2)	7.42(210)	5.61(2.55) 6.78(3.08)	3/8(10)	1/4

NEW
1000 FT-LB



ZIW4100 Rear Exhaust

1/2" Impact Wrench

Noise:94(dBA), Vibration:2.5(M/S²)

ZIW4100Q Rear Exhaust

1/2" Impact wrench-Low noise

Noise:85(dBA), Vibration:2.5(M/S²)



ZIW4510 Rear Exhaust

1/2" Impact wrench

ZIW4510L Rear Exhaust

1/2" Impact wrench w/2" extension

- Working Torque (5 secs):
750ft-lb (1017NM)



ZIW480 Rear Exhaust

1/2" Impact wrench

ZIW480L Rear Exhaust

1/2" Impact wrench w/2" extension

- Working Torque (5 secs):
600ft-lb (814NM)

New Twin Hammer Design



- Adjustable 3 stages speed for Forward/Reverse
- Use for heavy automotive and truck repair, construction or assembly line.
- With new twin hammer design and hot forged alloy steel made Hammer cage & Anvil to create more torque and 3 times longer life span than traditional design.



ZIW465R Rear Exhaust

1/2" Impact Wrench

- Working Torque (5 secs): 380ft-lb (515NM)



ZIW465 Front Exhaust

1/2" Impact Wrench

- Working Torque (5 secs): 380ft-lb (515NM)

New Twin Hammer Design



- Use for heavy automotive and truck repair, construction or assembly line.
- With new twin hammer design and hot forged alloy steel made Hammer cage & Anvil to create more torque and 3 times longer life span than traditional design.



ZIW465K / ZIW465RK

- ZIW465R Impact Wrench X 1
OR ZIW465 Impact Wrench X 1
- 1/2" sockets X5
(14,16,17,19,22mm)
OR (15/16,7/8,3/4,5/8,1/2inch)
- 5mm hex. wrench
- 3" extension anvil

Model	Square Drive inch(mm)	Std. Bolt Size inch(mm)	Free Speed R.P.M.	Max. Torque (10 secs) ft-lb(NM)	Working torque (5 secs) ft-lb(NM)	Operating Air Pressure PSI(bar)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Min. Hose Size inch(mm)	Air Inlet Size inch-NPT/PT
ZIW4100 ZIW4100Q	1/2(12.7)	29/32(23)	9,000 7,000	1,000(1,356)	750(1,017)	90(6.2)	5.1(144)	3.89(1.8)	3/8(10)	1/4
ZIW4510 ZIW4510L	1/2(12.7)	1-9/64(29)	7,200	1,000(1,356)	750(1,017)	90(6.2)	8.12(230)	5.7(2.6) 5.94(2.7)	3/8(10)	1/4
ZIW480 ZIW480L	1/2(12.7)	1-1/16(27)	7,500	800(1,085)	600(814)	90(6.2)	7.42(210)	5.5(2.5) 5.72(2.6)	3/8(10)	1/4
ZIW465R ZIW465	1/2(12.7)	3/4(19)	7,000 8,000	450(610)	380(515)	90(6.2)	7(200) 7.7(220)	5.7(2.6)	3/8(10)	1/4

Air Impact Wrench



142mm

1.5KG

ZIW440 Rear Exhaust

1/2" Mini Impact Wrench

- Working Torque (5 secs): 258ft-lb (350NM)



142mm

1.5KG

ZIW335 Rear Exhaust

3/8" Mini Impact Wrench

- Working Torque (5 secs): 221ft-lb (300NM)

New Twin Hammer Design



- Adjustable 3 stages speed for Forward/Reverse
- Most power and compact, deliver best Power-to-Size ratio in this class
- Use for heavy automotive and truck repair, construction or assembly line.
- With new twin hammer design and hot forged alloy steel made Hammer cage & Anvil to create more torque and 3 times longer life span than traditional design.



360°

ZIW305 Rear Exhaust

3/8" Impact Wrench



ZIW304S Side Exhaust

3/8" Straight Impact Wrench



360°

ZIW344 Rear Exhaust

3/8" Air Impact Wrench

Two Hammer



- Two Hammer Design
- Forward/Reverse
- Use for general automotive repair or assembly line.

- Double-Chamber 9 vanes motor provides the highest output power comparing with conventional motor for the highest productivity.
- Double Pin Hammer mechanism.
- One piece front end plate & cylinder design to improve motorefficiency.
- User friendly side reverse switch.

Model	Square Drive inch(mm)	Std. Bolt Size inch(mm)	Free Speed R.P.M.	Max. Torque (10 secs) ft-lb(NM)	Operating Air Pressure PSI(bar)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Min. Hose Size inch(mm)	Air Inlet Size inch-NPT/PT
ZIW440	1/2(12.7)	5/8(16)	11,000	400(543)	90(6.2)	7(200)	3.3(1.5)	3/8(10)	1/4
ZIW335	3/8(10)	9/16(14)	11,000	350(475)	90(6.2)	7(200)	3.3(1.5)	3/8(10)	1/4
ZIW305	3/8(10)	5/16(8)	8,500	1 sec. 45(61)	90(6.2)	5.6(160)	2.3(1.05)	1/4(6.35)	1/4
ZIW304S	3/8(10)	5/16(8)	8,000	1 sec. 43(58)	90(6.2)	5.6(160)	2.2(1)	1/4(6.35)	1/4
ZIW344	3/8(10)	5/16(8)	5,000	44(60)	90(6.2)	17.7(500)	2(0.93)	1/4(6.35)	1/4

Features

- Adjustable 3 stages speed for Forward/Reverse
- Most power and compact, deliver best Power-to-Size ratio in this class
- Use for heavy automotive and truck repair, construction or assembly line.
- With new twin hammer design and hot forged alloy steel made Hammer cage & Anvil to create more torque and 3 times longer life span than traditional design.



Jumbo Hammer Design



New Twin Hammer Design



ZIW4207J Rear Exhaust
1/2" Micro Mini Air
Impact Wrench

ZIW3207J Rear Exhaust
3/8" Micro Mini Air
Impact Wrench

ZIW4206T Rear Exhaust
1/2" Micro Mini Air
Impact Wrench

ZIW3206T Rear Exhaust
3/8" Micro Mini Air
Impact Wrench

w/ 8pcs metric sockets

ZIW4207JK-M 1/2" mini impact kit
ZIW3207JK-M 3/8" mini impact kit
ZIW4206TK-M 1/2" mini impact kit
ZIW3206TK-M 3/8" mini impact kit

w/ 8pcs imperial sockets

ZIW4207JK-E 1/2" mini impact kit
ZIW3207JK-E 3/8" mini impact kit
ZIW4206TK-E 1/2" mini impact kit
ZIW3206TK-E 3/8" mini impact kit



[Accessories]

- Mini air impact X 1
- Oiler X 1
- 3" Extension bar X 1
- 8 pcs Metric or SAE Cr-Mo sockets
10, 13, 14, 16, 17, 19, 21, 22mm
or 5/16", 3/8", 7/16", 1/2", 9/16",
5/8", 11/16", 3/4"

Model	Square Drive inch(mm)	Std. Bolt Size inch(mm)	Free Speed R.P.M.	Max. Torque (10 secs) ft-lb(NM)	Operating Air Pressure PSI(bar)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Min. Hose Size inch(mm)	Air Inlet Size inch-NPT/PT
ZIW4206T	1/2(12.7)	5/8(16)	11,000	450(610)	90(6.2)	7(200)	3(1.37)	3/8(10)	1/4
ZIW3206T	3/8(10)	5/8(16)	11,000	400(542)	90(6.2)	7(200)	3(1.37)	3/8(10)	1/4
ZIW4207J	1/2(12.7)	5/8(16)	11,000	500(678)	90(6.2)	7(200)	3(1.37)	3/8(10)	1/4
ZIW3207J	3/8(10)	5/8(16)	11,000	450(610)	90(6.2)	7(200)	3(1.37)	3/8(10)	1/4



New patented anvil design to add the grease into the impact mechanism without disassembly the tool.



Jumbo Hammer Design



ZIW417JA
ZIW417JAQ With Muffler
1/2" Super Light
Mini Air Impact Wrench

Handle Exhaust

ZIW417J
ZIW417JQ With Muffler
1/2" Super Duty
Mini Air Impact Wrench

Handle Exhaust

Jumbo Hammer Design



ZIW418T
ZIW418TQ With Muffler
1/2" Super Duty
Mini Air Impact Wrench

Handle Exhaust

New Twin Hammer Design



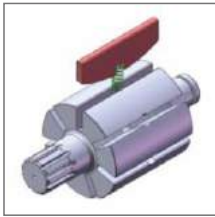
Model	Square Drive inch(mm)	Std. Bolt Size inch(mm)	Free Speed R.P.M.	Max. Torque (10 secs) ft-lb(NM)	Operating Air Pressure PSI(bar)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Min. Hose Size inch(mm)	Air Inlet Size inch-NPT/PT
ZIW417JA	1/2(12.7)	5/8(16)	10,000	700(949)	90(6.2)	7.42(210)	3(1.37)	3/8(10)	1/4
ZIW417JAQ	1/2(12.7)	5/8(16)	8,500	700(949)	90(6.2)	7.42(210)	3(1.37)	3/8(10)	1/4
ZIW417J	1/2(12.7)	5/8(16)	9,500	700(949)	90(6.2)	7.42(210)	3.19(1.45)	3/8(10)	1/4
ZIW417JQ	1/2(12.7)	5/8(16)	8,000	700(949)	90(6.2)	7.42(210)	3.19(1.45)	3/8(10)	1/4
ZIW418T	1/2(12.7)	5/8(16)	10,000	750(1017)	90(6.2)	7.42(210)	3.3(1.5)	3/8(10)	1/4
ZIW418TQ	1/2(12.7)	5/8(16)	9,500	750(1017)	90(6.2)	7.42(210)	3.3(1.5)	3/8(10)	1/4



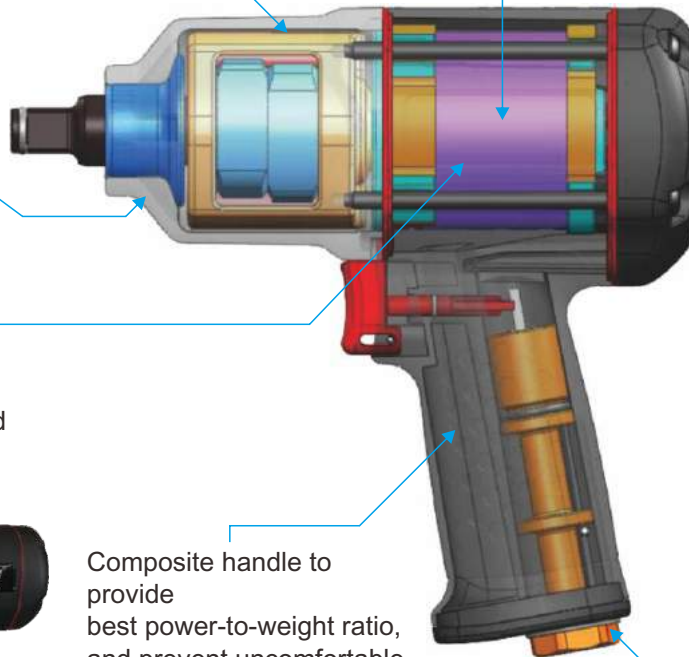
Twin hammer impact mechanism to perform best torque output, and Special Hardened-Treatment to maintain best durability.

Special Hardened Cylinder, Front plate and Rear plate to generate best durability.

Titanium clutch case to re-enforce the strength (ZIWI063CT).



Vane with spring mounted to prevent dead-lock or power-less problem.



3 different speed adjustment at Forward direction, 1 full speed at Reverse direction.



OPT.
Pin Type Anvil

Composite handle to provide best power-to-weight ratio, and prevent uncomfortable usage during the temperature change.

360 degree swivel air inlet to prevent air hose twisted.

ZIW1015C

1/2" Composite Air Impact Wrench



ZIW1015CTL

1/2" Composite Torque Limited Impact Wrench



ZIW1077C

3/4" Composite Air Impact Wrench



ZIW1078C

1" Composite Air Impact Wrench



Titanium Case

ZIW1063CT

1/2" Composite Air Impact Wrench

Model	Square Drive inch(mm)	Free Speed R.P.M.	Max. Torque (15 secs) ft-lb(NM)	Working torque (5 secs) ft-lb(NM)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Impact mechanism
ZIW1015C	1/2(12.7)	8,500	820(1,100)	650(880)	4.9(139)	4.6(2.1)	Twin Hammer
ZIW1015CTL	1/2(12.7)	8,500	820(1,111)	55~66(75~90)	5.5(158)	4.6(2.1)	Twin Hammer
ZIW1077C	3/4(19)	5,500	1,500(2,030)	1,200(1,630)	4.9(139)	8.2(3.7)	Twin Hammer
ZIW1078C	1(25)	5,500	1,500(2,030)	1,200(1,630)	4.9(139)	8.2(3.7)	Twin Hammer
ZIW1063CT	1/2(12.7)	8,500	820(1,100)	650(880)	4.9(139)	4.8(2.2)	Twin Hammer



ZIW1200 Handle Exhaust

1" Composite Impact Wrench

- Working Torque (5 secs): 2200ft-lb (2970NM)



ZIW1200-6 Handle Exhaust

1" Composite Impact Wrench w/6" extension

- Working Torque (5 secs): 2200ft-lb (2970NM)



ZIW1201 Side Exhaust

1" Composite Impact Wrench

- Working Torque (5 secs): 2200ft-lb (2970NM)



ZIW1201-8 Side Exhaust

1" Composite Impact Wrench w/8" extension

- Working Torque (5 secs): 2200ft-lb (2970NM)



- Twin hammer Anvil Material
- Japan SNCM 616



- Cast iron cylinder
- Cylinder Material FCD45
- Heat treatment HRC 47~52°



- Blade auxiliary spring means Spring Material Stainless steel (304) Customized spring holder.
- 1 million tests by stretching test pass.

Model	Square Drive inch(mm)	Free Speed R.P.M.	Max. Torque (15 secs) ft-lb(NM)	Working torque (5 secs) ft-lb(NM)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Impact mechanism
ZIW1200	1(25)	5,500	2400(3240)	2200(2970)	7.5(212)	12.98(5.9)	1/4	Twin Hammer
ZIW1200-6	1(25)	5,500	2400(3240)	2200(2970)	7.5(212)	14.96(6.8)	1/4	Twin Hammer
ZIW1201	1(25)	5,500	2400(3240)	2200(2970)	7.5(212)	14.3(6.5)	1/4	Twin Hammer
ZIW1201-8	1(25)	5,500	2400(3240)	2200(2970)	7.5(212)	17.16(7.9)	1/4	Twin Hammer



ZP161 0.5HP
1/2" Air Ratchet Wrench



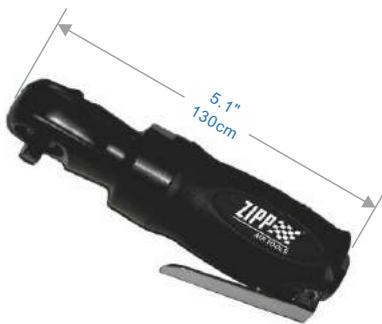
ZP163 0.5HP
3/8" Air Ratchet Wrench



ZP161K/ZP163K 0.5HP
Air Ratchet Wrench Kit

Specifications:

- 1PC Ratchetwrench
- 7PC SSockets
- 1PC Nipple
- 1PC UniversalJoint
- 1PC 75mmExtensionBar
- 1PC BlowMoldedCase



ZP168
1/4" Air Stubby Ratchet Wrench



ZP169
3/8" Air Stubby Ratchet Wrench

Model	Square Drive inch(mm)	Std Bolt Size inch(mm)	Free Speed R.P.M.	Max. Torque ft-lb(Nm)	Avg. Air Cons. cfm(l/min)	Air Inlet Size inch	Net Weight lb(kg)	Overall Length inch(mm)	Min Hose Size inch(mm)	Operating Air Pressure PSI(kg/cm ²)
ZP161	1/2(12.7)	1/4(6.4)	175	50(68)	3(85)	1/4	2.6(1.18)	10-13/32(265)	3/8(10)	90(6.2)
ZP163	3/8(10)	1/4(6.4)	175	50(68)	3(85)	1/4	2.6(1.18)	10-13/32(265)	3/8(10)	90(6.2)
ZP168	1/4(6.4)	1/4(6.4)	260	20(27)	2.5(70)	1/4	0.99(0.45)	5-1/4(133)	1/4(6.4)	90(6.2)
ZP169	3/8(10)	1/4(6.4)	260	20(27)	2.5(70)	1/4	0.99(0.45)	5-1/4(133)	1/4(6.4)	90(6.2)



ZID-036 Side Exhaust
Impact Driver



ZID-040P Rear Exhaust
Impact Driver

Two Hammer



- Two hammer design with Q.C. collect
- Forward/Reverse switch
- Two stages push type trigger
- Use for general automotive industries, electric or and assembly lines

Two Hammer

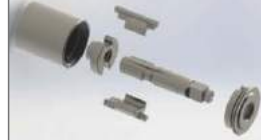


ZID-350P Rear Exhaust
Impact Driver

Noise:88(dBA), Vibration:2.5(M/S²)

- Two hammer design with Q.C. collect
- Adjustable 3 stages speed for Forward/Reverse
- Use for general automotive industries, electric or and assembly lines

Two Hammer



ZIS-237 Rear Exhaust
1/4" Air Impact Driver

- Double-Chamber 9 vanes motor provides the highest output power comparing with conventional motor for the highest productivity.
- Double Pin Hammer mechanism.
- One piece front end plate & cylinder design to improve motorefficiency.
- User friendly side reverse switch.

Model	Hex. Drive inch(mm)	Bolt Size Capacity mm	Free Speed R.P.M.	Max. Torque ft-lb(NM)	Operating Air Pressure PSI(bar)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Overall Length inch(mm)	Air Inlet Size inch-NPT/PT
ZID-036	1/4(6.4)	(6~8)	8,000	41(55)	90(6.2)	4.6(130)	2.2(1)	7-13/16(198)	1/4
ZID-040P	1/4(6.4)	(6~8)	8,500	42(57)	90(6.2)	5.6(160)	2.2(1)	6-25/32(172)	1/4
ZID-350P	1/4(6.4)	(10~12)	11,000	350(474)	90(6.2)	8.12(230)	3.5(1.6)	5-25/32(147)	1/4
ZIS-237	1/4(6.4)	(6~8)	5,300	37(50)	90(6.2)	17.7(500)	1.9(0.84)	—	1/4

Features Of Pulse Mechanism



Pulse Screwdriver (Pistol Type)



PS042
PS052
PS062

Pistol Type



PS072

Pistol Type

Specifications : Auto Shut-Off Type

Model	Hex Drive	Bolt Capacity mm	Torque Range Nm(Lb-ft)	Free Speed rpm	Air Cons. m ³ /min	Noise Level dB(A)	Net Weight kg
PS042	1/4"HEX	M4~M6	5~10(3.7~7.4)	4,500	0.4	80	1.06
PS052	1/4"HEX	M5~M8	9~15(6.6~11.1)	5,800	0.4	85	1.06
PS062	1/4"HEX	M6~M8	13~25(9.6~18.4)	5,800	0.43	85	1.08
PS072	1/4"HEX	M8~M10	20~35(14.8~25.8)	5,500	0.45	88	1.3



PN042
PN052
PN062

Pistol Type



PN072

Pistol Type

Specifications : Non Shut-Off Type

Model	Hex Drive	Bolt Capacity mm	Torque Range Nm(Lb-ft)	Free Speed rpm	Air Cons. m ³ /min	Noise Level dB(A)	Net Weight kg
PN042	1/4"HEX	M5~M8	7~14(5.2~10.3)	5,600	0.4	80	0.95
PN052	1/4"HEX	M6~M8	13~21(9.6~15.5)	6,000	0.4	85	0.95
PN062	1/4"HEX	M6~M8	17~30(12.5~22.1)	6,000	0.43	85	0.94
PN072	1/4"HEX	M8~M10	25~42(18.4~31)	5,500	0.45	88	1.35

- Air Inlet Size : NPT 1/4"
- Recommended Gauge Air Pressure: 60~90PSI(4kg/cm²~6kg/cm²)(0.4Mpa~0.6Mpa)
- Air Hose Size : 10mm x 6.5mm (for 042~062 model), 12mm x 8mm (for 072 model)
- Above DATA Are All Measured At 4kg/cm²~6kg/cm² Gauge Air Pressure



**PS043
PS053
PS063**

Pistol Type



**PS073
PS084**

Pistol Type



PS094

Pistol Type

Specifications : Auto Shut-Off Type

Model	Square Drive	Bolt Capacity mm	Torque Range Nm(Lb-ft)	Free Speed rpm	Air Cons. m³/min	Noise Level dB(A)	Net Weight kg
PS043	3/8"SD	M4~M6	5~10(3.7~7.4)	4,500	0.4	80	1.06
PS053	3/8"SD	M6~M8	10~17(7.4~12.5)	5,800	0.4	85	1.06
PS063	3/8"SD	M6~M8	15~28(11.1~20.7)	5,800	0.43	85	1.08
PS073	3/8"SD	M8~M10	25~42(18.4~31)	5,500	0.45	88	1.3
PS084	1/2"SD	M10~M12	30~50(22.1~36.9)	5,500	0.5	88	1.42
PS094	1/2"SD	M10~M12	40~80(29.5~59)	5,500	0.55	88	1.61



**PN043
PN053
PN063**

Pistol Type



**PN073
PN084**

Pistol Type



PN094

Pistol Type

Specifications : Non Shut-Off Type

Model	Square Drive	Bolt Capacity mm	Torque Range Nm(Lb-ft)	Free Speed rpm	Air Cons. m³/min	Noise Level dB(A)	Net Weight kg
PN043	3/8"SD	M6~M8	9~17(6.6~12.5)	5,600	0.4	80	0.95
PN053	3/8"SD	M6~M8	15~25(11.1~18.4)	5,800	0.4	85	0.95
PN063	3/8"SD	M8~M10	20~34(14.8~25.1)	5,800	0.43	85	0.94
PN073	3/8"SD	M8~M10	28~48(20.7~35.4)	5,500	0.45	88	1.35
PN084	1/2"SD	M10~M12	35~57(25.8~42)	5,500	0.5	88	1.35
PN094	1/2"SD	M10~M12	50~90(36.9~66.4)	5,000	0.55	88	1.6

- Air Inlet Size : NPT 1/4"
- Recommended Gauge Air Pressure: 60~90PSI(4kg/cm²~6kg/cm²)(0.4Mpa~0.6Mpa)
- Air Hose Size : 10mm x 6.5mm (for 043~063 model), 12mm x 8mm (for 073~094 model)
- Above DATA Are All Measured At 4kg/cm²~6kg/cm² Gauge Air Pressure

Pulse Screwdriver (In Line Type)

SS042
SS052
SS062
SS072

In Line Type



Specifications : Auto Shut-Off Type

Model	Hex Drive	Bolt Capacity mm	Torque Range Nm(Lb-ft)	Free Speed rpm	Air Cons. m³/min	Noise Level dB(A)	Net Weight kg
SS042	1/4"HEX	M4~M6	5~10(3.7~7.4)	4,500	0.4	80	0.87
SS052	1/4"HEX	M5~M8	9~15(6.6~11.1)	6,000	0.4	85	0.85
SS062	1/4"HEX	M6~M8	13~25(9.6~18.4)	6,000	0.4	85	0.88
SS072	1/4"HEX	M8~M10	20~35(14.8~25.8)	6,000	0.45	88	1.29

SN042
SN052
SN062
SN072

In Line Type



Specifications : Non Shut-Off Type

Model	Hex Drive	Bolt Capacity mm	Torque Range Nm(Lb-ft)	Free Speed rpm	Air Cons. m³/min	Noise Level dB(A)	Net Weight kg
SN042	1/4"HEX	M5~M8	7~14(5.2~10.3)	5,600	0.4	80	0.87
SN052	1/4"HEX	M6~M8	13~21(9.6~15.5)	6,000	0.4	85	0.85
SN062	1/4"HEX	M6~M8	17~30(12.5~22.1)	6,000	0.4	85	0.88
SN072	1/4"HEX	M8~M10	25~42(18.4~31)	6,000	0.45	88	1.29

- Air Inlet Size : NPT 1/4"
- Recommended Gauge Air Pressure: 60~90PSI(4kg/cm²~6kg/cm²)(0.4Mpa~0.6Mpa)
- Air Hose Size : 10mm x 6.5mm (for 042~062 model), (for 072 model)
- Above DATA Are All Measured At 4kg/cm²~6kg/cm² Gauge Air Pressure

SS043
SS053
SS063
SS073
SS084

In Line Type

Specifications : Auto Shut-Off Type

SN043
SN053
SN063
SN073
SN084

In Line Type

Specifications : Non Shut-Off Type

Model	Square Drive	Bolt Capacity mm	Torque Range Nm(Lb-ft)	Free Speed rpm	Air Cons. m ³ /min	Noise Level dB(A)	Net Weight kg
SS043	3/8"SD	M4~M6	5~10(3.7~7.4)	4,500	0.4	80	0.87
SS053	3/8"SD	M6~M8	10~17(7.4~12.5)	6,000	0.4	85	0.85
SS063	3/8"SD	M6~M8	15~28(11.1~20.7)	6,000	0.4	85	0.88
SS073	3/8"SD	M8~M10	25~42(18.4~31)	6,000	0.45	88	1.29
SS084	1/2"SD	M10~M12	30~50(22.1~36.9)	6,000	0.45	88	1.3
SN043	3/8"SD	M6~M8	9~17(6.6~12.5)	5,600	0.4	80	0.87
SN053	3/8"SD	M6~M8	15~25(11.13~18.4)	6,000	0.4	85	0.85
SN063	3/8"SD	M8~M10	20~34(14.8~25.1)	6,000	0.4	85	0.88
SN073	3/8"SD	M8~M10	28~48(20.7~35.4)	6,000	0.45	88	1.29
SN084	1/2"SD	M10~M12	35~57(25.8~42)	6,000	0.45	88	1.3

- Air Inlet Size : NPT 1/4"
- Recommended Gauge Air Pressure: 60~90PSI(4kg/cm²~6kg/cm²)(0.4Mpa~0.6Mpa)
- Air Hose Size : 10mm x 6.5mm (for 043~063 model), (for 073~084 model)
- Above DATA Are All Measured At 4kg/cm²~6kg/cm² Gauge Air Pressure



ZPO-1L

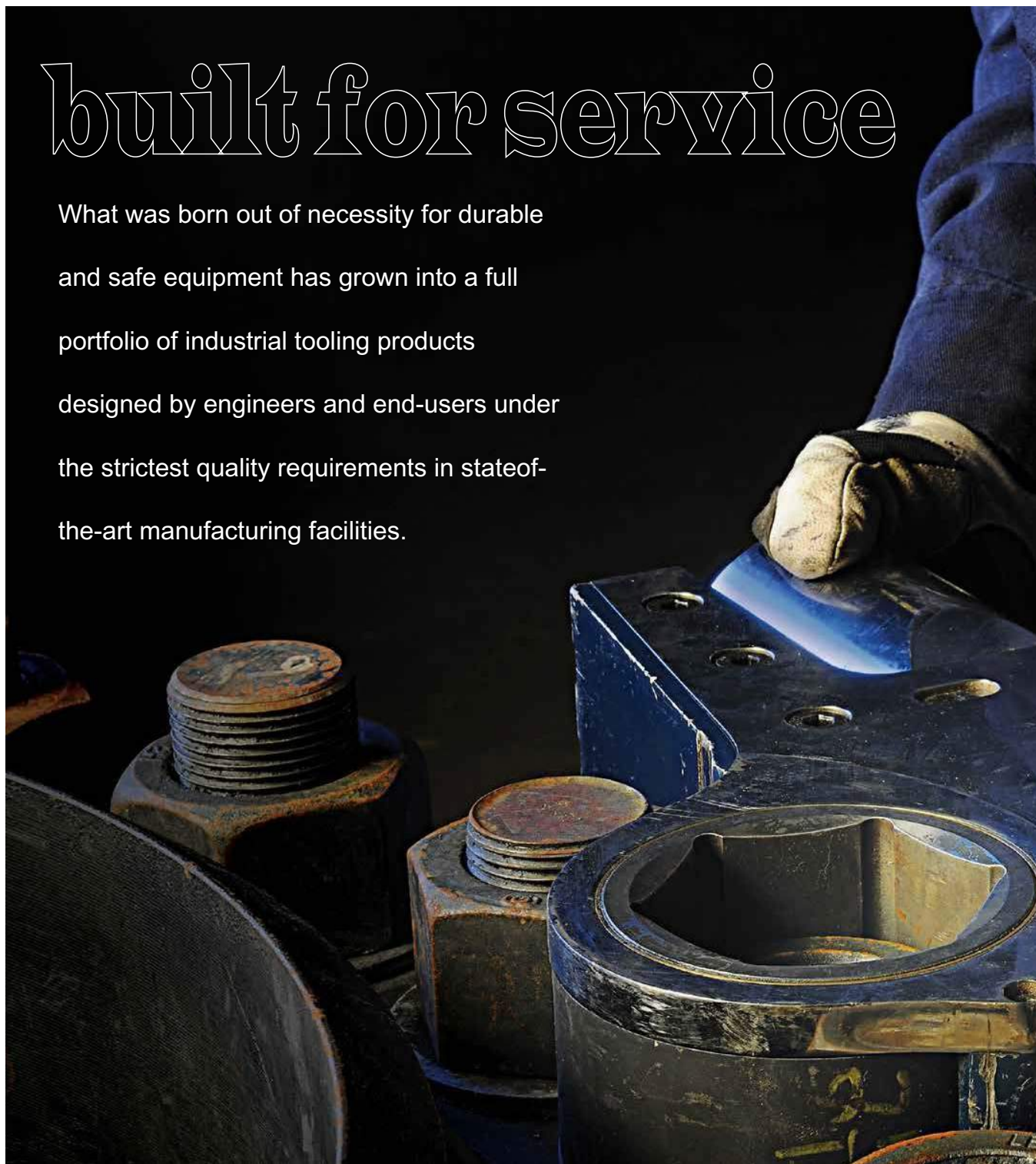
Synthetic pulse tool oil

Features

- New ZPO-1L is a fully synthetic hydraulic oil formulated with the most advanced technology and superior than other similar oils in the field.
- Applicable to all Pulse tools.
- Exceptional torque and auto shut off performance under environment temperature as low as 15°C.
- Great wear resistance to prolong the life of metal components.

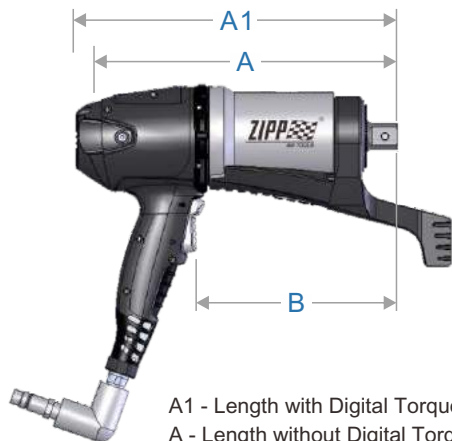
built for service

What was born out of necessity for durable and safe equipment has grown into a full portfolio of industrial tooling products designed by engineers and end-users under the strictest quality requirements in state-of-the-art manufacturing facilities.



Cyclone Magnum Pneumatic Torque Wrench

The future of pneumatic torquing is here. The Cyclone Magnum features an optional digital torque readout, purpose built motor, industry-leading gear durability and numerous ergonomic features. The Cyclone Magnum is the new leader in torque accuracy (+/-5%), durability and comfort.



**Start torquing efficiently today!
Reduce your project downtime!**

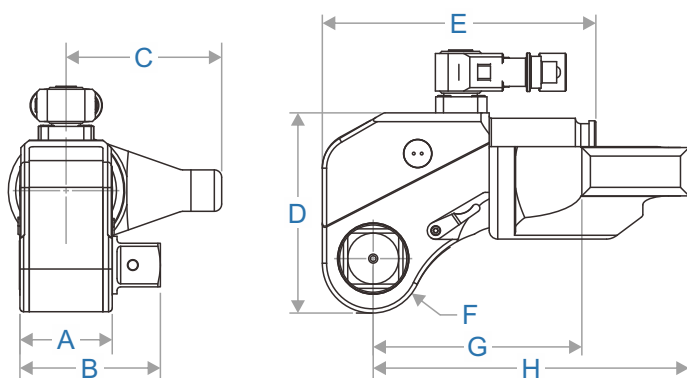


US PATENT NO. D638,682S
CANADIAN PATENT NO. 139501
EUROPEAN REGISTERED DESIGN NO. 001834300-0001
REGISTERED DESIGN NO. 001834300-0002
CHINA AND TAIWAN PATENT PENDING

Square Drive		Torque Range	Dimension A1	Dimension A	Dimension B	Ring Diameter	Net Weight		
Model	Size inch	ft-lbs(Nm)	inch(mm)	inch(mm)	inch(mm)	inch(mm)	lbs(kgs)		
ZAT400CMPLT ZAT400DR-CMPLT	3/4	44-400(60-540)	9.85(250.3)	9.7(247.2)	5.4(136.3)	2.25(57.2)	10.2(4.6)		
ZAT800CMPLT ZAT800DR-CMPLT	3/4	88-800(120-1100)	9.85(250.1)	9.7(247.1)	5.1(129.8)	2.97(75.3)	11.9(5.4)		
ZAT1800CMPLT ZAT1800DR-CMPLT	1	200-1800(275-2450)	12.12(307.9)	11.7(297.5)	7.5(191.3)	3.42(86.9)	17.7(8)		
ZAT3000CMPLT ZAT3000DR-CMPLT	1	333-3000(450-4070)	13(330)	12.8(326.9)	8.6(220.2)	3.8(96.5)	22.8(10.3)		
Removable Drives for Low-Cost Maintenance (Note: Use of hex drives may require special reaction bars.)									
Hex Size	5/8"	3/4"	7/8"	1"	1-1/4"	14 mm	17 mm	19 mm	22 mm
ZAT400	ZAT400-HX1	ZAT400-HX2				ZAT400-HX7	ZAT400-HX8	ZAT400-HX9	
ZAT800	ZAT800-HX1	ZAT800-HX2				ZAT800-HX7	ZAT800-HX8	ZAT800-HX9	
ZAT1800		ZAT1800-HX2	ZAT1800-HX3	ZAT1800-HX4			ZAT1800-HX8	ZAT1800-HX9	ZAT1800-HX10
ZAT3000		ZAT3000-HX2	ZAT3000-HX3	ZAT3000-HX4	ZAT3000-HX5			ZAT3000-HX9	ZAT3000-HX10

ZLW Series Lightweight Aluminum Square Drive Hydraulic Wrench

The ZLW square drive hydraulic wrench is the most efficient and heavily used tool in any turnaround trailer. Used for disassembly and reassembly, the ZLW offers unparalleled performance and durability for getting the job completed on time and with an accurate torque control of +/-5%



DURABILITY...
original square drive has
been in service since 1991.

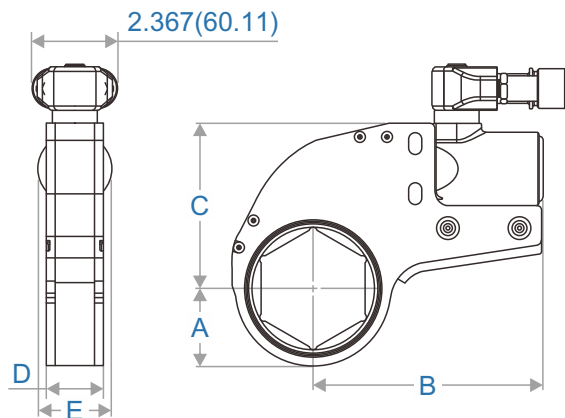
Maximum Operating Pressure 10,000 psi (700 bar)

Item Number	Drive Size inch	Max Torque ft-lbs(Nm)	Dimension A inch(mm)	Dimension B inch(mm)	Dimension C inch(mm)	Dimension D inch(mm)	Dimension E inch(mm)	Dimension F inch(mm)	Dimension G inch(mm)	Dimension H inch(mm)	Weight with Reaction Bar lbs(kgs)
ZLW1	3/4	1282(1738)	1.99(50.5)	2.86(72.6)	3.63(92.2)	3.81(96.8)	5.74(145.8)	1.03(26.2)	3.37(85.6)	6.89(175)	5.5(2.5)
ZLW3	1	3250(4406)	2.70(68.6)	3.77(95.8)	4.9(124.5)	5.04(128)	7.07(179.6)	1.35(34.3)	4.48(114)	9.09(230.9)	11(5)
ZLW5	1-1/2	5552(7528)	3.18(80.8)	4.88(124)	5.56(141.2)	5.92(150.4)	8.36(212.3)	1.55(39.4)	5.44(138.2)	10.74(272.8)	17(7.8)
ZLW8	1-1/2	7500(10169)	3.57(90.7)	5.32(135.1)	6.55(166.4)	6.63(168.4)	8.81(223.8)	1.87(47.5)	6.07(154.2)	11.63(295.4)	24(10.9)
ZLW10	1-1/2	11000(14914)	3.97(100.8)	5.64(143.3)	7.07(179.6)	7.23(183.6)	9.74(247.4)	2.02(51.3)	6.11(155.2)	12.6(320)	33(15)
ZLW20	2-1/2	19050(25828)	4.76(120.9)	7.27(184.7)	8.46(214.9)	8.73(221.7)	12.21(310.1)	2.34(59.4)	7.38(187.5)	15.22(386.6)	58(26.3)
ZLW25	2-1/2	24500(33218)	5.44(138.2)	7.94(201.7)	9.05(229.9)	9.81(249.2)	12.82(325.6)	2.62(66.5)	7.90(200.7)	15.92(404.4)	77(34.9)
ZLW35	2-1/2	34400(46640)	6.07(154.2)	8.58(217.9)	9.67(245.6)	11.2(284.4)	14.79(375.7)	3.06(77.7)	9.57(243.1)	18.48(469.4)	110(49.9)



ZTL Series Low Clearance / Direct Fit Hydraulic Wrench

Designed to fit where no other tool will go. The Torque Link low clearance torque wrench is the best solution for tightening in a constrained space environment. The TL eliminates side loading issues through in-line reaction and offers a controlled torque accuracy of $\pm 3\%$. The integrated cylinder eliminates the need to match cylinders to links and ensures that every TL in your fleet is operationally ready to perform.



Custom torque wrench solutions available D upon request.

Item Number with Swivel and Aluminum Reaction Surface	Item Number with Swivel and Steel Reaction Surface	Hexagon Size	Max Torque ft-lbs(Nm)	Dimension A inch(mm)	Dimension B inch(mm)	Dimension C inch(mm)	Dimension D inch(mm)	Dimension E inch(mm)	Weight with Swivel and Aluminum Reaction Surface Weight lbs(kgs)
ZTL210625	ZTL210625-S	1-1/16"	1336(1812)	0.96(24.2)	4.769(121.1)	2.834(72)	1.280(32.5)	1.563(39.7)	5(2.3)
ZTL227MM	ZTL227MM-S	27mm	1336(1812)	0.96(24.2)	4.769(121.1)	2.834(72)	1.280(32.5)	1.563(39.7)	5(2.3)
ZTL21250	ZTL21250-S	1-1/4"	1336(1812)	1.07(27.2)	4.775(121.3)	2.807(71.3)	1.264(32.1)	1.563(39.7)	5.1(2.3)
ZTL230MM	ZTL230MM-S	30mm	1336(1812)	1.07(27.2)	4.775(121.3)	2.807(71.3)	1.264(32.1)	1.563(39.7)	5.1(2.3)
ZTL214375	ZTL214375-S	1-7/16"	1451(1968)	1.17(29.8)	5.002(127.1)	3(76.2)	1.264(32.1)	1.563(39.7)	5.1(2.3)
ZTL234MM	ZTL234MM-S	34mm	1451(1968)	1.17(29.8)	5.002(127.1)	3(76.2)	1.264(32.1)	1.563(39.7)	5.1(2.3)
ZTL236MM	ZTL236MM-S	36mm	1451(1968)	1.17(29.8)	5.002(127.1)	3(76.2)	1.264(32.1)	1.563(39.7)	5.1(2.3)
ZTL21625	ZTL21625-S	1-5/8"	1499(2033)	1.29(32.8)	5.002(127.1)	3.097(78.7)	1.264(32.1)	1.563(39.7)	5.2(2.3)
ZTL241MM	ZTL241MM-S	41mm	1499(2033)	1.29(32.8)	5.002(127.1)	3.097(78.7)	1.264(32.1)	1.563(39.7)	5.2(2.3)
ZTL218125	ZTL218125-S	1-13/16	1543(2092)	1.39(35.3)	5.079(129)	3.162(80.3)	1.264(32.1)	1.563(39.7)	5.2(2.4)
ZTL246MM	ZTL246MM-S	46mm	1543(2092)	1.39(35.3)	5.079(129)	3.162(80.3)	1.264(32.1)	1.563(39.7)	5.2(2.4)
ZTL22000	ZTL22000-S	2"	1579(2141)	1.47(37.3)	5.073(128.9)	3.223(81.9)	1.264(32.1)	1.563(39.7)	5.3(2.4)
ZTL250MM	ZTL250MM-S	50mm	1579(2141)	1.47(37.3)	5.073(128.9)	3.223(81.9)	1.264(32.1)	1.563(39.7)	5.3(2.4)
ZTL221875	ZTL221875-S	2-3/16"	1640(2224)	1.569(39.9)	5.074(128.9)	3.279(83.3)	1.264(32.1)	1.563(39.7)	5.5(2.5)
ZTL255MM	ZTL255MM-S	55mm	1640(2224)	1.569(39.9)	5.074(128.9)	3.279(83.3)	1.264(32.1)	1.563(39.7)	5.5(2.5)
ZTL22375	ZTL22375-S	2-3/8"	1576(2137)	1.7(43.2)	5.221(132.6)	3.479(88.4)	1.264(32.1)	1.563(39.7)	5.7(2.6)
ZTL258MM	ZTL258MM-S	58mm	1576(2137)	1.7(43.2)	5.221(132.6)	3.479(88.4)	1.264(32.1)	1.563(39.7)	5.7(2.6)
ZTL260MM	ZTL260MM-S	60mm	1576(2137)	1.7(43.2)	5.221(132.6)	3.479(88.4)	1.264(32.1)	1.563(39.7)	5.7(2.6)

Specifications (continued)

Item Number with Swivel and Aluminum Reaction Surface	Item Number with Swivel and Steel Reaction Surface	Hexagon Size	Max Torque ft-lbs(Nm)	Dimension A inch(mm)	Dimension B inch(mm)	Dimension C inch(mm)	Dimension D inch(mm)	Dimension E inch(mm)	Weight with Swivel and Aluminum Reaction Surface Weight lbs(kgs)
ZTL418125	ZTL418125-S	1-13/16"	3800(5153)	1.47(37.3)	6.065(154.1)	3.929(99.8)	1.875(47.6)	2.036(51.7)	9.2(4.2)
ZTL446MM	ZTL446MM-S	46mm	3800(5153)	1.47(37.3)	6.065(154.1)	3.929(99.8)	1.875(47.6)	2.036(51.7)	9.2(4.2)
ZTL42000	ZTL42000-S	2"	3956(5364)	1.6(40.6)	6.11(155.2)	4.217(107.1)	1.625(41.3)	2.036(51.7)	10(4.5)
ZTL450MM	ZTL450MM-S	50mm	3956(5364)	1.6(40.6)	6.11(155.2)	4.217(107.1)	1.625(41.3)	2.036(51.7)	10(4.5)
ZTL421875	ZTL421875-S	2-3/16"	3989(5409)	1.72(43.7)	6.182(157)	4.209(106.9)	1.625(41.3)	2.036(51.7)	10.5(4.8)
ZTL455MM	ZTL455MM-S	55mm	3989(5409)	1.72(43.7)	6.182(157)	4.209(106.9)	1.625(41.3)	2.036(51.7)	10.5(4.8)
ZTL42375	ZTL42375-S	2-3/8"	4007(5433)	1.83(46.5)	6.186(157.1)	4.288(108.9)	1.625(41.3)	2.036(51.7)	10.6(4.8)
ZTL458MM	ZTL458MM-S	58mm	4007(5433)	1.83(46.5)	6.186(157.1)	4.288(108.9)	1.625(41.3)	2.036(51.7)	10.6(4.8)
ZTL460MM	ZTL460MM-S	60mm	4007(5433)	1.83(46.5)	6.186(157.1)	4.288(108.9)	1.625(41.3)	2.036(51.7)	10.6(4.8)
ZTL425625	ZTL425625-S	2-9/16"	3988(5408)	1.95(49.5)	6.318(160.5)	4.5(114.3)	1.625(41.3)	2.036(51.7)	10.8(4.9)
ZTL465MM	ZTL465MM-S	65mm	3988(5408)	1.95(49.5)	6.318(160.5)	4.5(114.3)	1.625(41.3)	2.036(51.7)	10.8(4.9)
ZTL42750	ZTL42750-S	2-3/4"	4057(5501)	2.04(51.8)	6.393(162.4)	4.52(114.8)	1.625(41.3)	2.036(51.7)	10.9(5)
ZTL470MM	ZTL470MM-S	70mm	4057(5501)	2.04(51.8)	6.393(162.4)	4.52(114.8)	1.625(41.3)	2.036(51.7)	10.9(5)
ZTL429375	ZTL429375-S	2-15/16"	4086(5541)	2.16(54.9)	6.374(161.9)	4.618(117.3)	1.625(41.3)	2.036(51.7)	11(5)
ZTL43125	ZTL43125-S	3-1/8"	4220(5722)	2.26(57.4)	6.574(167)	4.725(120)	1.625(41.3)	2.036(51.7)	11.1(5)
ZTL475MM	ZTL475MM-S	75mm	4220(5722)	2.26(57.4)	6.574(167)	4.725(120)	1.625(41.3)	2.036(51.7)	11.1(5)
ZTL480MM	ZTL480MM-S	80mm	4220(5722)	2.26(57.4)	6.574(167)	4.725(120)	1.625(41.3)	2.036(51.7)	11.1(5)
ZTL82000	ZTL82000-S	2"	7531(10212)	1.749(44.4)	7.578(192.5)	4.927(125.2)	2.25(57.2)	2.54(64.5)	19.6(8.9)
ZTL850MM	ZTL850MM-S	50mm	7531(10212)	1.749(44.4)	7.578(192.5)	4.927(125.2)	2.25(57.2)	2.54(64.5)	19.6(8.9)
ZTL821875	ZTL821875-S	2-3/16"	7945(10773)	1.85(47)	7.708(195.8)	4.927(125.2)	2.25(57.2)	2.54(64.5)	19.6(8.9)
ZTL855MM	ZTL855MM-S	55mm	7945(10773)	1.85(47)	7.708(195.8)	4.927(125.2)	2.25(57.2)	2.54(64.5)	19.6(8.9)
ZTL82375	ZTL82375-S	2-3/8"	8100(10984)	1.94(49.3)	7.67(194.8)	4.927(125.2)	2.25(57.2)	2.54(64.5)	19.7(8.9)
ZTL858MM	ZTL858MM-S	58mm	8100(10984)	1.94(49.3)	7.67(194.8)	4.927(125.2)	2.25(57.2)	2.54(64.5)	19.7(8.9)
ZTL860MM	ZTL860MM-S	60mm	8100(10984)	1.94(49.3)	7.67(194.8)	4.927(125.2)	2.25(57.2)	2.54(64.5)	19.7(8.9)
ZTL825625	ZTL825625-S	2-9/16"	8165(11072)	2.02(51.3)	7.67(194.8)	4.99(126.8)	2.25(57.2)	2.54(64.5)	19.9(9)
ZTL865MM	ZTL865MM-S	65mm	8165(11072)	2.02(51.3)	7.67(194.8)	4.99(126.8)	2.25(57.2)	2.54(64.5)	19.9(9)
ZTL82750	ZTL82750-S	2-3/4"	8029(10887)	2.15(54.6)	7.762(197.2)	5.11(129.8)	2.25(57.2)	2.54(64.5)	20.2(9.2)
ZTL870MM	ZTL870MM-S	70mm	8029(10887)	2.15(54.6)	7.762(197.2)	5.11(129.8)	2.25(57.2)	2.54(64.5)	20.2(9.2)
ZTL829375	ZTL829375-S	2-15/16"	8095(10977)	2.23(56.6)	7.91(200.9)	5.22(132.6)	2.25(57.2)	2.54(64.5)	20.5(9.3)
ZTL83125	ZTL83125-S	3-1/8"	7921(10741)	2.33(59.2)	7.977(202.6)	5.22(132.6)	2.25(57.2)	2.54(64.5)	21(9.5)
ZTL875MM	ZTL875MM-S	75mm	7921(10741)	2.33(59.2)	7.977(202.6)	5.22(132.6)	2.25(57.2)	2.54(64.5)	21(9.5)
ZTL880MM	ZTL880MM-S	80mm	7921(10741)	2.33(59.2)	7.977(202.6)	5.22(132.6)	2.25(57.2)	2.54(64.5)	21(9.5)
ZTL83500	ZTL83500-S	3-1/2"	8351(11324)	2.56(65)	8.039(204.2)	5.593(142.1)	2.25(57.2)	2.54(64.5)	22(10)
ZTL885MM	ZTL885MM-S	85mm	8351(11324)	2.56(65)	8.039(204.2)	5.593(142.1)	2.25(57.2)	2.54(64.5)	22(10)
ZTL83875	ZTL83875-S	3-7/8"	8093(10974)	2.78(70.6)	8.278(210.3)	5.753(146.1)	2.25(57.2)	2.54(64.5)	23(10.4)
ZTL890MM	ZTL890MM-S	90mm	8093(10974)	2.78(70.6)	8.278(210.3)	5.753(146.1)	2.25(57.2)	2.54(64.5)	23(10.4)
ZTL895MM	ZTL895MM-S	85mm	8093(10974)	2.78(70.6)	8.278(210.3)	5.753(146.1)	2.25(57.2)	2.54(64.5)	23(10.4)
ZTL1429375	ZTL1429375-S	2-15/16"	12865(17445)	2.439(62)	9.247(234.9)	6.25(158.8)	2.9(73.7)	3.1(78.7)	36.7(16.6)
ZTL143125	ZTL143125-S	3-1/8"	13091(17751)	2.537(64.4)	9.373(238.1)	6.486(164.8)	2.9(73.7)	3.1(78.7)	38.7(17.5)
ZTL1475MM	ZTL1475MM-S	75mm	13091(17751)	2.537(64.4)	9.373(238.1)	6.486(164.8)	2.9(73.7)	3.1(78.7)	38.7(17.5)
ZTL1480MM	ZTL1480MM-S	80mm	13091(17751)	2.537(64.4)	9.373(238.1)	6.486(164.8)	2.9(73.7)	3.1(78.7)	38.7(17.5)
ZTL143500	ZTL143500-S	3-1/2"	14272(19353)	2.73(69.3)	9.455(240.2)	6.486(164.8)	2.75(69.9)	3.1(78.7)	37.1(16.8)
ZTL1485MM	ZTL1485MM-S	85mm	14272(19353)	2.73(69.3)	9.455(240.2)	6.486(164.8)	2.75(69.9)	3.1(78.7)	37.1(16.8)
ZTL143875	ZTL143875-S	3-7/8"	14140(19174)	2.88(73.2)	9.561(242.9)	6.486(164.8)	2.5(63.5)	3.1(78.7)	34.9(15.8)
ZTL1490MM	ZTL1490MM-S	90mm	14140(19174)	2.88(73.2)	9.561(242.9)	6.486(164.8)	2.5(63.5)	3.1(78.7)	34.9(15.8)
ZTL1495MM	ZTL1495MM-S	95mm	14140(19174)	2.88(73.2)	9.561(242.9)	6.486(164.8)	2.5(63.5)	3.1(78.7)	34.9(15.8)
ZTL144250	ZTL144250-S	4-1/4"	14172(19217)	3.07(78)	9.667(245.5)	6.806(172.9)	2.5(63.5)	3.1(78.7)	36(16.3)
ZTL14100MM	ZTL14100MM-S	100mm	14172(19217)	3.07(78)	9.667(245.5)	6.806(172.9)	2.5(63.5)	3.1(78.7)	36(16.3)
ZTL14105MM	ZTL14105MM-S	105mm	14172(19217)	3.07(78)	9.667(245.5)	6.806(172.9)	2.5(63.5)	3.1(78.7)	36(16.3)
ZTL144625	ZTL144625-S	4-5/8"	14030(19025)	3.25(82.6)	9.667(245.5)	6.983(177.4)	2.5(63.5)	3.1(78.7)	36.4(16.5)
ZTL14110MM	ZTL14110MM-S	110mm	14030(19025)	3.25(82.6)	9.667(245.5)	6.983(177.4)	2.5(63.5)	3.1(78.7)	36.4(16.5)
ZTL14115MM	ZTL14115MM-S	115mm	14030(19025)	3.25(82.6)	9.667(245.5)	6.983(177.4)	2.5(63.5)	3.1(78.7)	36.4(16.5)
ZTL203500	ZTL203500-S	3-1/2"	18052(24479)	2.771(70.4)	10.947(278.1)	6.85(174)	2.75(69.9)	3.625(92.1)	50.2(22.8)
ZTL2085MM	ZTL2085MM-S	85mm	18052(24479)	2.771(70.4)	10.947(278.1)	6.85(174)	2.75(69.9)	3.625(92.1)	50.2(22.8)
ZTL203875	ZTL203875-S	3-7/8"	19153(25971)	3.011(76.5)	10.987(279.1)	7.092(180.1)	2.75(69.9)	3.625(92.1)	50(22.7)
ZTL2090MM	ZTL2090MM-S	90mm	19153(25971)	3.011(76.5)	10.987(279.1)	7.092(180.1)	2.75(69.9)	3.625(92.1)	50(22.7)
ZTL2095MM	ZTL2095MM-S	95mm	19153(25971)	3.011(76.5)	10.987(279.1)	7.092(180.1)	2.75(69.9)	3.625(92.1)	50(22.7)
ZTL204250	ZTL204250-S	4-1/4"	20755(28144)	3.322(84.4)	11.580(294.1)	7.46(189.5)	2.75(69.9)	3.625(92.1)	55.8(25.3)
ZTL20100MM	ZTL20100MM-S	100mm	20755(28144)	3.322(84.4)	11.580(294.1)	7.46(189.5)	2.75(69.9)	3.625(92.1)	55.8(25.3)
ZTL20105MM	ZTL20105MM-S	105mm	20755(28144)	3.322(84.4)	11.580(294.1)	7.46(189.5)	2.75(69.9)	3.625(92.1)	55.8(25.3)
ZTL204625	ZTL204625-S	4-5/8"	20132(27299)	3.455(87.8)	11.682(296.7)	7.667(194.7)	2.75(69.9)	3.625(92.1)	57.1(25.9)
ZTL20110MM	ZTL20110MM-S	110mm	20132(27299)	3.455(87.8)	11.682(296.7)	7.667(194.7)	2.75(69.9)	3.625(92.1)	57.1(25.9)
ZTL20115MM	ZTL20115MM-S	115mm	20132(27299)	3.455(87.8)	11.682(296.7)	7.667(194.7)	2.75(69.9)	3.625(92.1)	57.1(25.9)
ZTL205000	ZTL205000-S	5"	20249(27458)	3.731(94.8)	11.925(302.9)	7.837(199.1)	2.75(69.9)	3.625(92.1)	58.4(26.5)
ZTL20120MM	ZTL20120MM-S	120mm	20249(27458)	3.731(94.8)	11.925(302.9)	7.837(199.1)	2.75(69.9)	3.625(92.1)	58.4(26.5)
ZTL205375	ZTL205375-S	5-3/8"	20000(27120)	3.896(99)	11.972(304.1)	8.144(206.9)	2.75(69.9)	3.625(92.1)	59(26.8)
ZTL20135MM	ZTL20135MM-S	135mm	20000(27120)	3.896(99)	11.972(304.1)	8.144(206.9)	2.75(69.9)	3.625(92.1)	59(26.8)
ZTL304250	ZTL304250-S	4-1/4"	31690(42972)	3.367(85.5)	12.466(316.6)	8.313(211.2)	3.24(82.3)	4.25(108)	76(34.5)
ZTL30100MM	ZTL30100MM-S	100mm	31690(42972)	3.367(85.5)	12.466(316.6)	8.313(211.2)	3.24(82.3)	4.25(108)	76(34.5)
ZTL30105MM	ZTL30105MM-S	105mm	31690(42972)	3.367(85.5)	12.466(316.6)	8.313(211.2)	3.24(82.3)	4.25(108)	76(34.5)
ZTL304625	ZTL304625-S	4-5/8"	31690(42972)	3.56(90.4)	12.466(316.6)	8.313(211.2)	3.24(82.3)	4.25(108)	76(34.5)
ZTL30110MM	ZTL30110MM-S	110mm	31690(42972)	3.56(90.4)	12.466(316.6)	8.313(211.2)	3.24(82.3)	4.25(108)	76(34.5)
ZTL30115MM	ZTL30115MM-S	115mm	31690(42972)	3.56(90.4)	12.466(316.6)	8.313(211.2)	3.24(82.3)	4.25(108)	76(34.5)
ZTL305000	ZTL305000-S	5"	30329(41126)	3.82(97)	12.872(327)	8.371(212.6)	3.24(82.3)	4.25(108)	76(34.5)
ZTL30120MM	ZTL30120MM-S	120mm	30329(41126)	3.82(97)	12.872(327)	8.371(212.6)	3.24(82.3)	4.25(108)	76(34.5)
ZTL305375	ZTL305375-S	5-3/8"	30985(42016)	3.936(100)	12.871(326.9)	8.371(212.6)	3.24(82.3)	4.25(108)	76(34.5)
ZTL30135MM	ZTL30135MM-S	135mm	30985(42016)	3.936(100)	12.871(326.9)	8.371(212.6)	3.24(82.3)	4.25(108)	76(34.5)
ZTL305750	ZTL305750-S	5-3/4"	32279(43770)	4.1(104.1)	12.871(326.9)	8.815(223.9)	3.24(82.3)	4.25(108)	78(35.4)
ZTL306125	ZTL306125-S	6-1/8"	32031(43434)	4.22(107.2)	12.871(326.9)	8.694(220.8)	3.24(82.3)	4.25(108)	79(35.8)
ZTL30150MM	ZTL30150MM-S	150mm	32031(43434)	4.22(107.2)	12.871(326.9)	8.694(220.8)	3.24(82.3)	4.25(108)	79(35.8)
ZTL30155MM	ZTL30155MM-S	155mm	32031(43434)	4.22(107.2)	12.871(326.9)	8.694(220.8)	3.24(82.3)	4.25(108)	79(35.8)



ZBT Delta Series Hydraulic Tensioners

Hydraulic stud tensioners deliver fast, safe, accurate and direct axial load to a threaded fastener without the inaccuracy of torquing due to friction.

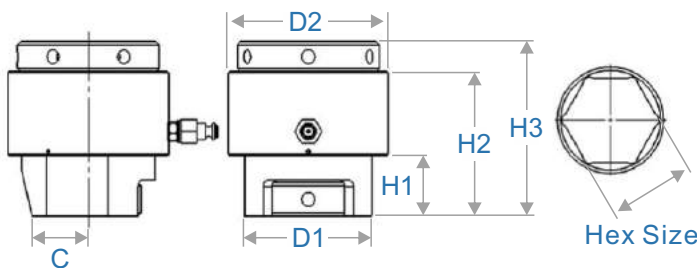
Overstroke Indicator
Piston overstroke indicator to ensure safe operation

Load Cell
Designed to maximize load and minimize OD to ensure a proper fit

Quick Connect Fittings

Durable Seals
Patented high-pressure/low-friction seals are designed to outlast the competition

Quality Materials
Made with high-strength, corrosion-resistance coated steel



Sub sea tensioners also available

- 100% water-based (no hydraulic oil)
- Quick-release reaction nut simplifies and saves the diver crucial time to engage the bolt
- Dual hydraulic ports
- Lift strap



Item Number	Standard Size Stud Diameter	Thread Pitch	Hex Size inch(mm)	Ram Area sq inch(mm)	Maximum Load lb(kN)	Stroke inch(mm)	Dimension H1 inch(mm)	Dimension H2 inch(mm)	Dimension H3 inch(mm)	Dimension D1 inch(mm)	Dimension D2 inch(mm)	Dimension C inch(mm)	Net Weight lbs(kgs)
ZBT075	3/4"	8 TPI	1.25(32)	1.276(823)	27,753(123.45)	0.25(6.4)	1.06(27)	3.3(84)	3.8(96)	2.12(54)	2.4(61)	1.01(26)	3.4(1.5)
ZBTM20	M20	2.5	1.181(30)	1.276(823)	27,753(123.45)	0.25(6.4)	1.06(27)	3.3(84)	3.8(96)	2.12(54)	2.4(61)	1.01(26)	3.4(1.5)
ZBT100	1"	8 TPI	1.625(41)	2.945(1900)	64,054(284.93)	0.35(9)	1.23(31)	4.2(107)	5.2(132)	2.66(67)	3.5(89)	0.96(24)	9.7(4.4)
ZBTM24	M24	3	1.417(36)	2.945(1900)	64,054(284.93)	0.35(9)	1.23(31)	4.2(107)	5.2(132)	2.66(67)	3.5(89)	0.96(24)	9.7(4.4)
ZBT113	1-1/8"	8 TPI	1.813(46)	2.945(1900)	64,054(284.93)	0.35(9)	1.23(31)	4.2(107)	5.2(132)	2.66(67)	3.5(89)	0.96(24)	9.7(4.4)
ZBT125	1-1/4"	8 TPI	2(51)	3.24(2090)	70,470(313.47)	0.35(9)	1.51(38)	4.475(114)	5.48(139)	3.26(83)	3.88(98)	1.36(35)	11.4(5.2)
ZBTM30	M30	3.5	1.811(46)	3.24(2090)	70,470(313.47)	0.35(9)	1.51(38)	4.475(114)	5.48(139)	3.26(83)	3.88(98)	1.36(35)	11.4(5.2)
ZBT138	1-3/8"	8 TPI	2.188(56)	4.91(3168)	106,793(475.04)	0.5(12.7)	1.48(37)	4.45(113)	5.45(138)	3.61(92)	4.38(111)	1.54(39)	14.6(6.6)
ZBT150	1-1/2"	8 TPI	2.375(60)	6.075(3919)	132,131(587.75)	0.5(12.7)	1.75(44)	5(127)	6.13(156)	4.14(105)	4.75(121)	1.73(44)	20.5(9.3)
ZBTM36	M36	4	2.165(55)	6.075(3919)	132,131(587.75)	0.5(12.7)	1.75(44)	5(127)	6.13(156)	4.14(105)	4.75(121)	1.73(44)	20.5(9.3)
ZBT163	1-5/8"	8 TPI	2.563(65)	6.075(3919)	132,131(587.75)	0.5(12.7)	1.75(44)	5(127)	6.13(156)	4.14(105)	4.75(121)	1.73(44)	20.5(9.3)
ZBT175	1-3/4"	8 TPI	2.75(70)	8.504(5486)	184,962(822.75)	0.5(12.7)	2(51)	5.25(133)	6.38(162)	4.56(116)	5.38(137)	1.95(50)	26.2(11.9)
ZBTM42	M42	4.5	2.559(65)	8.504(5486)	184,962(822.75)	0.5(12.7)	2(51)	5.25(133)	6.38(162)	4.56(116)	5.38(137)	1.95(50)	26.2(11.9)
ZBT188	1-7/8"	8 TPI	2.938(75)	8.504(5486)	184,962(822.75)	0.5(12.7)	2(51)	5.25(133)	6.38(162)	4.56(116)	5.38(137)	1.95(50)	26.2(11.9)
ZBT200	2"	8 TPI	3.125(79)	11.33(7310)	246,428(1096.17)	0.5(12.7)	2.25(57)	5.39(137)	6.5(165)	4.77(121)	6(152)	2.1(53)	30.9(14)
ZBTM48	M48	4	2.953(75)	11.33(7310)	246,428(1096.17)	0.5(12.7)	2.25(57)	5.39(137)	6.5(165)	4.77(121)	6(152)	2.1(53)	30.9(14)
ZBT225	2-1/4"	8 TPI	3.5(89)	13.24(8542)	287,970(1280.95)	0.5(12.7)	2.75(70)	5.89(149)	7.14(181)	5.86(149)	7(178)	2.65(67)	44.8(20.3)
ZBTM56	M56	5.5	3.346(85)	13.24(8542)	287,970(1280.95)	0.5(12.7)	2.75(70)	5.89(149)	7.14(181)	5.86(149)	7(178)	2.65(67)	44.8(20.3)
ZBT250	2-1/2"	8 TPI	3.875(98)	13.24(8542)	287,970(1280.95)	0.5(12.7)	2.75(70)	5.89(149)	7.14(181)	5.86(149)	7(178)	2.65(67)	44.8(20.3)
ZBTM64	M64	6	3.740(95)	13.24(8542)	287,970(1280.95)	0.5(12.7)	2.75(70)	5.89(149)	7.14(181)	5.86(149)	7(178)	2.65(67)	44.8(20.3)
ZBT275	2-3/4"	8 TPI	4.25(108)	23.45(15129)	510,038(2268.76)	0.5(12.7)	2.88(73)	6.26(159)	7.76(197)	6.9(175)	8(203)	2.74(70)	64.2(29.1)
ZBT300	3"	8 TPI	4.625(117)	25.51(16458)	554,843(2468.06)	0.5(12.7)	3.23(82)	6.63(168)	8.08(205)	7.06(179)	8.5(216)	2.99(76)	71.7(32.5)
ZBTM72	M72	6	4.134(105)	25.51(16458)	554,843(2468.06)	0.5(12.7)	3.23(82)	6.63(168)	8.08(205)	7.06(179)	8.5(216)	2.99(76)	71.7(32.5)
ZBT325	3-1/4"	8 TPI	5(127)	27.49(17735)	597,908(2659.63)	0.5(12.7)	3.96(101)	7.36(187)	8.86(225)	8.34(212)	9.5(241)	3.47(88)	93.6(42.4)
ZBTM80	M80	6	4.528(115)	27.49(17735)	597,908(2659.63)	0.5(12.7)	3.96(101)	7.36(187)	8.86(225)	8.34(212)	9.5(241)	3.47(88)	93.6(42.4)
ZBT350	3-1/2"	8 TPI	5.375(137)	27.49(17735)	597,908(2659.63)	0.5(12.7)	3.96(101)	7.36(187)	8.86(225)	8.34(212)	9.5(241)	3.47(88)	93.6(42.4)
ZBTM90	M90	6	5.118(130)	27.49(17735)	597,908(2659.63)	0.5(12.7)	3.96(101)	7.36(187)	8.86(225)	8.34(212)	9.5(241)	3.47(88)	93.6(42.4)
ZBT375	3-3/4"	8 TPI	5.75(146)	37.69(24316)	819,758(3646.47)	0.5(12.7)	4.11(104)	7.51(191)	8.39(213)	8.75(222)	11(279)	3.63(92)	109(49.4)
ZBT400	4"	8 TPI	6.125(156)	42.73(27568)	929,378(4134.08)	0.5(12.7)	4.3(109)	7.7(196)	8.58(218)	9.08(231)	11.7(297)	3.98(101)	121.4(55.1)
ZBTM100	M100	6	5.709(145)	42.73(27568)	929,378(4134.08)	0.5(12.7)	4.3(109)	7.7(196)	8.58(218)	9.08(231)	11.7(297)	3.98(101)	121.4(55.1)

Modular Components

Item Number	Pullers Part Number	Pullers Stud Diameter	Pullers Thread Pitch	Sockets Part Number	Sockets Hex Size	Bridges Part Number	Tommy Bar Part Number	Tommy Bar Dia	Load Cell Part Number
ZBT075	ZBT075-01	3/4	8 UN	ZBT075-05	1-1/4"	ZBT075-04	10-800-2000	0.375	ZBT075-06
	ZBT075-01-A	3/4	10 UN	ZBT075-05	1-1/4"				
	ZBT075-01-M20	M20	2.5	ZBT075-05-M20	30mm				
ZBT100	ZBT100-01	1	8 UN	ZBT100-05	1-5/8"	ZBT100-04	10-800-2000	0.375	ZBT100-06
	ZBT100-01-088	7/8	8 UN	ZBT100-05-088	1-7/16"				
	ZBT100-01-088-A	7/8	9 UN	ZBT100-05-088-A	1-7/16"				
ZBT113	ZBT100-01-M24	M24	3	ZBT100-05-M24	36mm	ZBT113-04	10-800-2000	0.375	ZBT113-06
	ZBT113-01	1-1/8	8 UN	ZBT113-05	1-13/16"				
	ZBT113-01-100	1	8 UN	ZBT113-05-100	1-5/8"				
ZBT125	ZBT113-01-M24	M24	3	ZBT113-05-M24	36mm	ZBT125-04	10-800-2000	0.375	ZBT125-06
	ZBT113-01-M27	M27	3	ZBT113-05-M27	41mm				
	ZBT125-01	1-1/4	8 UN	ZBT125-05	2"				
ZBT138	ZBT125-01-113	1-1/8	8 UN	ZBT125-05-113	1-13/16"	ZBT138-04	10-800-3000	0.5	ZBT138-06
	ZBT125-01-M27	M27	3	ZBT125-05-M27	41mm				
	ZBT125-01-M30	M30	3.5	ZBT125-05-M30	46mm				
ZBT150	ZBT138-01	1-3/8	8 UN	ZBT138-05	2-3/16"	ZBT150-04	10-800-3000	0.5	ZBT150-06
	ZBT138-01-125	1-1/4	8 UN	ZBT138-05-125	2"				
	ZBT138-01-M30	M30	3.5	ZBT138-05-M30	46mm				
ZBT163	ZBT138-01-M33	M33	3.5	ZBT138-05-M33	50mm	ZBT163-04	10-800-3000	0.5	ZBT163-06
	ZBT138-01-M36	M36	4	ZBT138-05-M36	55mm				
	ZBT150-01	1-1/2	8 UN	ZBT150-05	2-3/8"				
ZBT175	ZBT150-01-A	1-1/2	6 UN	ZBT150-05	2-3/8"	ZBT175-04	10-800-3000	0.5	ZBT175-06
	ZBT163-01	1-5/8	8 UN	ZBT163-05	2-9/16"				
	ZBT163-01-M36	M36	4	ZBT163-05-M36	55mm				
ZBT188	ZBT163-01-M39	M39	3	ZBT163-05-M39	60mm	ZBT188-04	10-800-3000	0.5	ZBT188-06
	ZBT163-01-M42	M42	4.5	ZBT163-05-M42	65mm				
	ZBT163-01	1-5/8	8 UN	ZBT163-05	2-9/16"				
ZBT200	ZBT150-01	1-1/2	8 UN	ZBT150-05	2-3/8"	ZBT200-04	10-800-3000	0.5	ZBT200-06
	ZBT150-01-A	1-1/2	6 UN	ZBT150-05	2-3/8"				
	ZBT163-01	1-5/8	8 UN	ZBT163-05	2-9/16"				
ZBT225	ZBT163-01-M36	M36	4	ZBT163-05-M36	55mm	ZBT225-04	10-800-4000	0.625	ZBT225-06
	ZBT163-01-M39	M39	3	ZBT163-05-M39	60mm				
	ZBT163-01-M42	M42	4.5	ZBT163-05-M42	65mm				
ZBT250	ZBT175-01	1-3/4	8 UN	ZBT175-05	2-3/4"	ZBT250-04	10-800-4000	0.625	ZBT250-06
	ZBT188-01	1-7/8	8 UN	ZBT188-05	2-15/16"				
	ZBT188-01-M48	M48	5	ZBT188-05-M48	75mm				
ZBT275	ZBT188-01-M45	M45	4.5	ZBT188-05-M45	70mm	ZBT275-04	10-800-4000	0.625	ZBT275-06
	ZBT188-01-M42	M42	4.5	ZBT188-05-M42	65mm				
	ZBT188-01	1-7/8	8 UN	ZBT188-05	2-15/16"				
ZBT300	ZBT188-01-175	1-3/4	8 UN	ZBT188-05-175	2-3/4"	ZBT300-04	10-800-4000	0.625	ZBT300-06
	ZBT188-01-M48	M48	5	ZBT188-05-M48	75mm				
	ZBT188-01-M45	M45	4.5	ZBT188-05-M45	70mm				
ZBT325	ZBT188-01-M42	M42	4.5	ZBT188-05-M42	65mm	ZBT325-04	10-800-4000	0.625	ZBT325-06
	ZBT200-01	2	8 UN	ZBT200-05	3-1/8"				
	ZBT200-01-188	1-7/8	8 UN	ZBT200-05-188	2-15/16"				
ZBT350	ZBT200-01-M48	M48	5	ZBT200-05-M48	75mm	ZBT350-04	10-800-4000	0.625	ZBT350-06
	ZBT200-01-M52	M52	5	ZBT200-05-M52	80mm				
	ZBT225-01	2-1/4	8 UN	ZBT225-05	3-1/2"				
ZBT375	ZBT250-01	2-1/2	8 UN	ZBT250-05	3-7/8"	ZBT375-04	10-800-4000	0.625	ZBT375-06
	ZBT250-01-M64	M64	6	ZBT250-05-M64	95mm				
	ZBT250-01-M56	M56	5.5	ZBT250-05-M56	85mm				
ZBT400	ZBT250-01-M60	M60	5.5	ZBT250-05-M60	90mm	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT250-01	2-1/2	8 UN	ZBT250-05	3-7/8"				
	ZBT225-01	2-1/4	8 UN	ZBT225-05	3-1/2"				
ZBT400	ZBT250-01-M64	M64	6	ZBT250-05-M64	95mm	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT250-01-M56	M56	5.5	ZBT250-05-M56	85mm				
	ZBT250-01-M60	M60	5.5	ZBT250-05-M60	90mm				
ZBT400	ZBT275-01	2-3/4	8 UN	ZBT275-05	4-1/4"	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT275-01-250	2-1/2	8 UN	ZBT275-05-250	3-7/8"				
	ZBT275-01-M72	M72	6	ZBT275-05-M72	105mm				
ZBT400	ZBT275-01-M68	M68	6	ZBT275-05-M68	100mm	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT275-01-M64	M64	6	ZBT275-05-M64	95mm				
	ZBT300-01	3	8 UN	ZBT300-05	4-5/8"				
ZBT400	ZBT300-01-275	2-3/4	8 UN	ZBT300-05-275	4-1/4"	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT300-01-M72	M72	6	ZBT300-05-M72	105mm				
	ZBT325-01	3-1/4	8 UN	ZBT325-05	5"				
ZBT400	ZBT325-01-300	3	8 UN	ZBT325-05-300	4-5/8"	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT325-01-M72	M72	6	ZBT325-05-M72	105mm				
	ZBT325-01-M76	M76	6	ZBT325-05-M76	110mm				
ZBT400	ZBT325-01-M80	M80	6	ZBT325-05-M80	115mm	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT350-01	3-1/2	8 UN	ZBT350-05	5-3/8"				
	ZBT350-01-325	3-1/4	8 UN	ZBT350-05-325	5"				
ZBT400	ZBT350-01-M90	M90	6	ZBT350-05-M90	130mm	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT350-01-M85	M85	6	ZBT350-05-M85	120mm				
	ZBT350-01-M80	M80	6	ZBT350-05-M80	115mm				
ZBT400	ZBT375-01	3-3/4	8 UN	ZBT375-05	5-3/4"	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT375-01-M90	M90	6	ZBT375-05-M90	130mm				
	ZBT375-01-M95	M95	6	ZBT375-05-M95	135mm				
ZBT400	ZBT400-01	4	8 UN	ZBT400-05	6-1/8"	ZBT400-04	10-800-4000	0.625	ZBT400-06
	ZBT400-01-M100	M100	6	ZBT400-05-M100	145mm				



Destroyer Nut Splitter

The ZDANS & ZQD Nut Splitters offer a fast and efficient method of getting rid of those galled, stripped or stubborn nuts. The ZDANS is the most compact high-pressure design on the market.

Nut Splitter Selection Chart

Nut Size inch	Nut Splitter Item Number	Chisel Item Number
7/8	ZQD4NS	ZQD4NS-3
15/16	ZQD4NS	ZQD4NS-3
1-1/16	ZQD4NS	ZQD4NS-3-1.063
1-1/4	ZQD8NS	ZQD8NS-3
1-7/16	ZQD8NS	ZQD8NS-3-1.4375
1-7/16	ZQD14NS	ZQD14NS-3
1-5/8	ZQD14NS	ZQD14NS-3-1.62
1-13/16	ZQD30NS	ZQD30NS-3
2	ZDANS2000	ZDANS2000-5
2	ZQD30NS	ZQD30NS-3
2-3/16	ZDANS2375	ZDANS2375-5
2-3/16	ZQD30NS	ZQD30NS-3
2-3/8	ZDANS2375	ZDANS2375-5
2-3/8	ZQD30NS	ZQD30NS-3
2-9/16	ZDANS2563	ZDANS2563-5
2-3/4	ZDANS2750	ZDANS2750-5
2-15/16	ZDANS3125	ZDANS3125-5
3-1/8	ZDANS3125	ZDANS3125-5
3-1/2	ZDANS3875	ZDANS3875-5
3-7/8	ZDANS3875	ZDANS3875-5
4-1/4	ZDANS4625	ZDANS4625-5
4-5/8	ZDANS4625	ZDANS4625-5
5	ZDANS5000	ZDANS5000-5
5-3/8	ZDANS5375	ZDANS5375-5
5-3/4	ZDANS5750	ZDANS5750-5
6-1/8	ZDANS6125	ZDANS6125-5

Double Acting
Advance and retract the
nut splitter hydraulically.
This design reduces the
length of the tool >7
inches over traditional
nut splitters that rely on
spring retraction

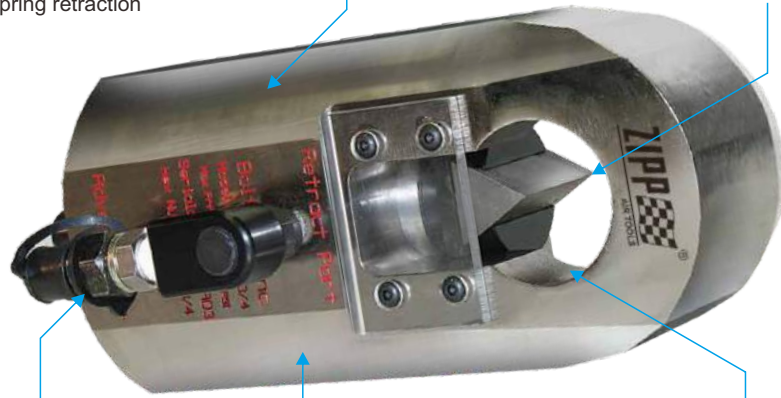
Corrosion-Resistant Finish
Durable electroless nickel
coating

Three-Sided, Quick Change Chisel
Rotate the chisel three times to extend
the number of fractures before
replacing. Change the chisel in
seconds. Constructed from high-
strength heat treated steel

Multi-Axis Swivel
Reduces interference and
offers options when faced
with space restrictions

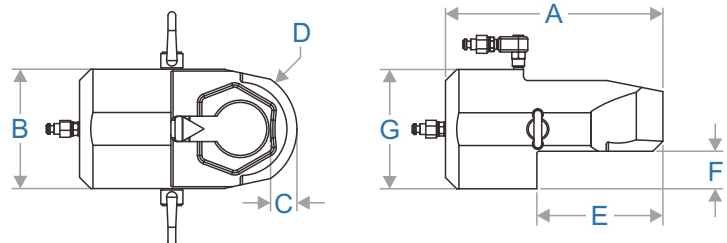
High-Pressure Design
The force delivered
through operating
pressure of 21,750 psi
guarantees the fracture of
all B7 or B16 nuts

High Hex Range
Splits nuts up to 6-1/8" hex,
with dedicated sizing to
ensure the tool fits any
application



(ZDANS) Series — 21,750 psi Double Acting
State-of-the-Art Super Lightweight Double Acting Nut Splitter

- Powered by ZTP30K-DAN air pump
- Split nuts up to 6-1/8" hex
- Three-sided quick-change ULTRA chisel
- Fits ANSI B16.5 and API 6A flanges
- The most compact design available

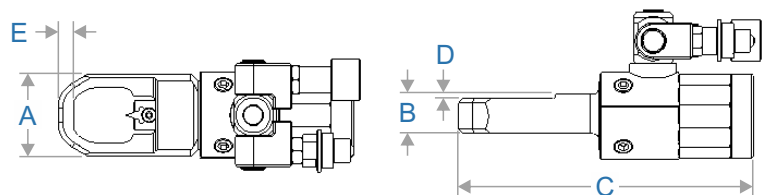


Maximum Operating Pressure 21,750 psi (1,500 bar)

Item Number	Dimension A inch(mm)	Dimension B inch(mm)	Dimension C inch(mm)	Dimension D inch(mm)	Dimension E inch(mm)	Dimension F inch(mm)	Dimension G inch(mm)	Net Weight lbs(kgs)
ZDANS2000	8.042(204.3)	3.75(95.3)	0.625(15.9)	1.75(44.5)	4.065(103.3)	1.095(27.8)	3.75(95.3)	20(9.1)
ZDANS2375	9.195(233.6)	4.25(108)	0.895(22.7)	1.75(44.5)	4.813(122.3)	1.25(31.8)	4.25(108)	27.7(12.6)
ZDANS2563	9.252(235)	4.475(113.7)	0.75(19.1)	2.238(56.9)	4.691(119.2)	1.288(32.7)	4.475(113.7)	33.2(15.1)
ZDANS2750	9.707(246.6)	4.65(118.1)	0.879(22.3)	2.325(59.1)	4.963(126.1)	1.32(33.5)	4.7(119.4)	37.6(17)
ZDANS3125	10.36(263.1)	5.063(128.6)	1.072(27.2)	2.75(69.9)	5.628(143)	1.469(37.3)	5.063(128.6)	43.3(19.6)
ZDANS3875	12.298(312.4)	6.75(171.5)	1.367(34.7)	3.375(85.7)	7.13(181.1)	2.125(54)	6.75(171.5)	80(36.3)
ZDANS4625	13.923(353.6)	7.5(190.5)	1.57(39.9)	3.75(95.3)	8.5(215.9)	1.774(45.1)	7.121(180.9)	120(54.4)
ZDANS5000	15.652(397.6)	8(203.2)	1.622(41.2)	3.759(95.5)	8.891(225.8)	2.438(61.9)	8.125(206.4)	144(65.3)
ZDANS5375	16.89(429)	8.875(225.4)	1.978(50.2)	4.25(108)	9.53(242.1)	2.469(62.7)	8.875(225.4)	200(90.7)
ZDANS5750	17.339(440.4)	9(228.6)	2.05(52.1)	4.75(120.7)	9.978(253.4)	2.532(64.3)	9(228.6)	205(93)
ZDANS6125	19.159(486.6)	9.75(247.6)	2.264(57.5)	4.875(123.8)	11.078(281.4)	2.781(70.6)	9.75(247.7)	266(120.7)

ZQD Series — 10,000 psi Double Acting

- Powered by ZQD HydraLinks cylinder
- Quick-change chisel design
- Fits ANSI B16.5 and API 6A flanges
- Large range on nut sizes
- Multi-axis swivel for hydraulic lines
- The most compact design available



Item Number	Dimension A inch(mm)	Dimension B inch(mm)	Dimension C inch(mm)	Dimension D inch(mm)	Dimension E inch(mm)	Net Weight lbs(kgs)
ZQD4NSCMLPT	2.21(56.1)	1.08(27.4)	7.92(201)	0.13(3.2)	0.41(10.4)	6.51(3)
ZQD8NSCMLPT	2.97(75.4)	1.63(41.3)	10.52(267.2)	0.19(4.8)	0.54(13.7)	13.7(6.2)
ZQD14NSCMLPT	3.25(82.6)	1.8(45.7)	11.25(285.8)	0.24(6.1)	0.6(15.2)	18.87(8.6)
ZQD30NSCMLPT	4.56(115.9)	2.7(68.6)	15.43(391.8)	0.24(6.1)	0.85(21.6)	44.28(20.1)

Hydraulic Pumps

These pumps are designed and engineered specifically for the most rigorous conditions and to work seamlessly with the full range of ZAT, ZLW, ZBT, ZDANS, ZQD tools.

Electric Powered Torquing



ZBTE39-10K

Light Duty,
Low Amp Draw



ZBTE2-10K

Medium Duty,
Industry Workhorse



ZBTE45-10K

Heavy Duty,
High Speed Applications



ZBTA2-10K

Medium Duty,
Industry Workhorse

4-Port manifold is now standard on all ZBCE2 & ZBTA2 Torque Wrench Pumps - allowing the use of up to four tools simultaneously!

Air Powered Tensioning / Nut Splitting



ZTP30K-HN



ZTP30K-SSN & ZTP30K-DAN



ZTP30K-E2-110



Z16P80-1

Electric Powered Torquing

Item Number	Power	Amps	Fluid	Max Pressure psi(bar)	Max flow cu. in./min(L/sec)	Fluid Capacity Gal(L)	Dimension (Height x Width x Depth) inch(mm)	Weight-Filled lbs(kgs)
ZBTE39-10K	110/115 VAC	14.5	Oil	10,000(690)	225(0.061)	0.5(1.89)	23.7 x 10.8 x 13.8(600 x 274 x 350)	47(21.3)
ZBTE2-10K-4P*	110/115 VAC	25	Oil	10,000(689)	704(0.1923)	2.5(9.4)	18.1 x 17.1 x 9.5(460 x 434 x 241)	62(28)
ZBTE45-10K*	110/115 VAC	17	Oil	10,000(690)	575(0.157)	1.5(6.75)	26.6 x 14 x 17.7(675 x 356 x 450)	98(37.6)

Special Features: 4-Port, Dual Cooling, Speeds up to 2x as fast

*Four-tool manifold allows use of up to four tools simultaneously

Air Powered Torquing

Item Number	Power	Fluid	Max Pressure psi(bar)	Max flow cu. in./min(L/sec)	Fluid Capacity Gal(L)	Dimension (Height x Width x Depth) inch(mm)	Weight-Filled lbs(kgs)
ZBTA2-10K	Air	Oil	10,000(690)	465(0.127)	2.5(9.4)	19.83 x 16.55 x 9.5(504 x 420 x 241)	74(44.4)

Special Features: 3HP Air Motor, 50 cfm at 80 psi

*Four-tool manifold allows use of up to four tools simultaneously

Air Powered Tensioning / Nut Splitting

Item Number	Power	Fluid	Max Pressure psi(bar)	Max flow cu. in./min(L/sec)	Fluid Capacity Gal(L)	Dimension (Height x Width x Depth) inch(mm)	Weight-Filled lbs(kgs)
ZTP30K-HN	Air	Oil	30,000(2068)	17(0.0048)	2(7.6)	19.5 x 12.5 x 11.5(495 x 318 x 292)	46(20.9)
ZTP30K-SSN (Sub Sea Tensioning)	Air	Water	30,000(2068)	85(0.0232)	3(11.4)	19.5 x 12.5 x 11.5(495 x 318 x 292)	46(20.9)
ZTP30K-DAN (Nut Splitting)	Air	Oil	30,000(2068)	85(0.0232) ADV 135(0.0368) RET	2(7.6)	20.3 x 16 x 16(514 x 406 x 406)	74(33.6)

Electric Powered Tensioning

Item Number	Power	Amps	Fluid	Max Pressure psi(bar)	Max flow cu. in./min(L/sec)	Fluid Capacity Gal(L)	Dimension (Height x Width x Depth) inch(mm)	Weight-Filled lbs(kgs)
ZTP30K-E2-110	110/115 VAC	11	Oil	21,750(1500)	168(0.046)	1(3.8)	16.3 x 7.8 x 14.1(414 x 198 x 358)	53.5(24.3)

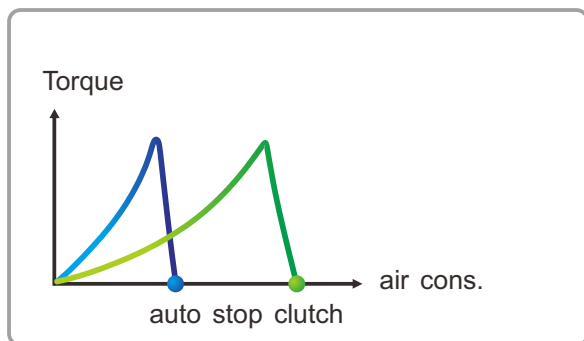
Hand Pump

Item Number	Power	Fluid	Max Pressure psi(bar)	Max flow cu. in./min(L/sec)	Fluid Capacity Gal(L)	Dimension (Height x Width x Depth) inch(mm)	Weight-Filled lbs(kgs)
Z16P80-1	Mechanical	Oil	23,206(1600)	N/A	0.6(2.3)	11 x 4.8 x 27(297 x 120 x 686)	20(9)

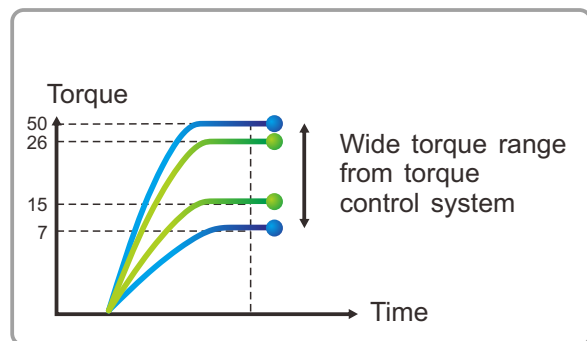
*Hose not included.



Motor Comparison



Torque schematic diagram





**ZB21MC/ZB31MC/ZB41MC
ZB46MC/ZB49MC/ZB51MC
ZB56MC/ZB59MC/ZB61MC
ZB66MC/ZB71MC/ZB76MC
ZB79MC**

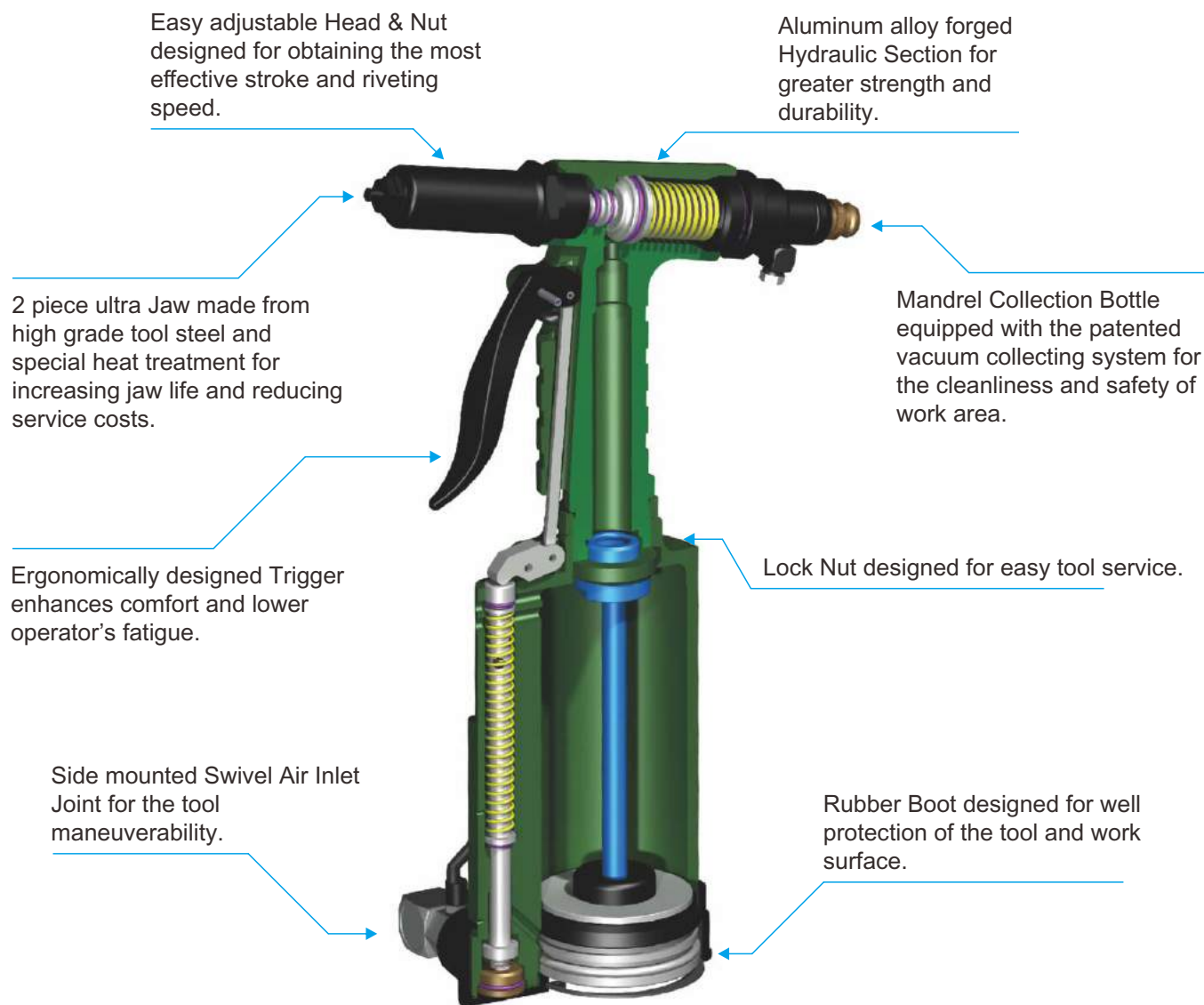


**ZB46CCQ/ZB49CCQ/ZB52CCQ
ZB58CCQ/ZB59CCQ/ZB61CCQ
ZB66CCQ/ZB71CCQ/ZB76CCQ
ZB79CCQ**

*Performance specification @ 6.0kg/cm² (90psi).
*Output torque adjusts to 50% of maximum rated torque.

Model	Free Speed R.P.M.	Weight g	O.A.L mm	Dia. mm	High mm	Air Pressure Kg/cm ³	Min. air hose bore mm	Air Consumption m ³ /min	Torque range Kgf-cm	Standard Deviation %	Fastening Machine Screw Dia.	Capacity Tapping Screw Dia.
ZB21MC	1,000	520	210	31	-	6.0	5.0	0.20	0.5-2	±3	M1.0-M2.2	M1.1-M1.7
ZB31MC	1,000	520	210	31	-	6.0	5.0	0.20	1-8	±3	M1.7-M3.3	M1.3-M2.7
ZB41MC	1,800	520	210	31	-	6.0	5.0	0.28	3-17	±3	M2.2-M4.2	M1.7-M3.2
ZB46MC	2,200	520	210	31	-	6.0	5.0	0.28	3-20	±3	M2.2-M4.5	M1.7-M3.5
ZB49MC	1,800	520	210	31	-	6.0	5.0	0.28	3-25	±3	M2.2-M4.7	M1.7-M3.8
ZB51MC	1,000	520	210	31	-	6.0	5.0	0.28	5-30	±3	M2.8-M5.0	M2.3-M4.0
ZB56MC	800	520	210	31	-	6.0	5.0	0.3	8-40	±3	M3.3-M5.7	M2.7-M4.4
ZB59MC	1,700	820	245	39	-	6.0	8.0	0.55	5-45	±3	M2.8-M5.8	M2.2-M4.7
ZB61MC	1,400	820	245	39	-	6.0	8.0	0.55	7-50	±3	M2.9-M6.0	M2.6-M4.9
ZB66MC	1,000	820	245	39	-	6.0	8.0	0.55	7-65	±3	M2.9-M6.4	M2.6-M5.4
ZB71MC	550	820	245	39	-	6.0	8.0	0.55	15-95	±3	M4.1-M7.0	M3.1-M6.0
ZB76MC	300	840	245	39	-	6.0	8.0	0.55	30-180	±3	M5.0-M9.3	M4.0-M7.2
ZB79MC	250	840	245	39	-	6.0	8.0	0.55	50-280	±3	M6.0-M11.0	M4.9-M8.7
ZB46CCQ	2,200	640	190	35	190	6.0	5.0	0.28	3-20	±3	M2.2-M4.5	M1.7-M3.5
ZB49CCQ	1,800	640	190	35	190	6.0	5.0	0.28	3-25	±3	M2.2-M4.7	M1.7-M3.8
ZB52CCQ	1,000	640	190	35	190	6.0	5.0	0.28	5-35	±3	M2.8-M5.2	M2.2-M4.2
ZB58CCQ	550	640	190	35	190	6.0	5.0	0.28	10-50	±3	M3.6-M6.0	M2.8-M4.7
ZB59CCQ	1,700	980	220	43	220	6.0	8.0	0.55	7-50	±3	M2.9-M6.0	M2.6-M4.9
ZB61CCQ	1,400	980	220	43	220	6.0	8.0	0.55	10-60	±3	M3.6-M6.2	M2.8-M5.1
ZB66CCQ	1,000	980	220	43	220	6.0	8.0	0.55	12-75	±3	M3.8-M6.6	M3.0-M5.6
ZB71CCQ	550	980	220	43	220	6.0	8.0	0.55	30-110	±3	M5.0-M7.3	M4.0-M6.2
ZB76CCQ	300	1100	220	43	220	6.0	8.0	0.55	30-180	±3	M5.0-M9.3	M4.0-M7.2
ZB79CCQ	250	1250	220	43	220	6.0	8.0	0.55	50-280	±3	M6.0-M11.0	M4.9-M8.7

Features



Wherever the fastening methods like: welding, sheet metal screw, bolt, nut, washer, tubular, semi-tubular and solid rivets and adhesives are applied, can be substituted by blind rivets.
All models above are good for setting standard blind rivets and structural blind rivets.

Patent pending in other countries



R.O.C.PAT.:
092648



P.R.C.PAT.:
ZL 94 2 22569.4



U.S.A.PAT.NO.:
6,149,356



ZT0318VS

5/32" Air Hydraulic Riveter
(Vacuum type)

Max. 4.0mm blind rivet in Alum./Steel



ZT0618VS

3/16" Air Hydraulic Riveter
(Vacuum type)

Max. 4.8mm blind rivet in Steel/Steel



ZT0918VS

3/16" Air Hydraulic Riveter
(Vacuum type)

Max. 4.8mm blind rivets in all materials



[Accessories]

- Riveter X 1
- Small Wrench X 1
- Large Wrench X 1
- Collection Bottle X 1

DO NOT apply air pressure over 110 psi / 7.5 bar to these tools.

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Operating Air Pressure PSI(bar)	Air inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Nosepieces Equipped inch(mm)
ZT0318VS	770(350)	11/16(18)	2.86(1.3)	90(6.2)	1/4	3/8(10)	3/32(2.4)1/8(3.2) 5/32(4.0)
ZT0618VS	1,320(596)	11/16(18)	3.41(1.55)	90(6.2)	1/4	3/8(10)	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)
ZT0918VS	1,983(900)	11/16(18)	4.07(1.85)	90(6.2)	1/4	3/8(10)	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)



ZT1214VS-5

3/16" Air Hydraulic Riveter
(Vacuum type)

Max. 4.8mm blind rivets in all materials



ZT1214VS-6

1/4" Air Hydraulic Riveter
(Vacuum type)

Max. 6.4mm blind rivet in Steel/Steel



ZT1819VS

1/4" Air Hydraulic Riveter
(Vacuum type)

Max. 6.4mm blind rivets in all materials



[Accessories]

- Riveter X 1
- Small Wrench X 1
- Large Wrench X 1
- Collection Bottle X 1

DO NOT apply air pressure over 110 psi / 7.5 bar to these tools.

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Operating Air Pressure PSI(bar)	Air inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Nosepieces Equipped inch(mm)
ZT1214VS-5	2,640(1,200)	9/16(14)	4.27(1.94)	90(6.2)	1/4	3/8(10)	5/32(4.0) 3/16(4.8)
ZT1214VS-6	2,640(1,200)	9/16(14)	4.27(1.94)	90(6.2)	1/4	3/8(10)	3/16(4.8) 1/4(6.4)
ZT1819VS	3,960(1,800)	3/4(19)	5.27(2.6)	90(6.2)	1/4	3/8(10)	3/16(4.8) 1/4(6.4)

Air Hydraulic Blind Rivet Installation Tool



ZT0618T



ZT0918T



ZT1214T



ZT1819T



ZT0918L



ZT1214L



ZT1819L



ZT0918LV



ZT1214LV



ZT1819LV

DO NOT apply air pressure over 110 psi / 7.5 bar to these tools.

*T : Trigger Type, No-Vacuum. *L : Lever Type, No-Vacuum. *LV : Lever Type, With Vacuum

*Please refer to the blind rivet specification to ensure the tensile strength is lower than the traction power of the model you select.

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Nosepieces Equipped inch(mm)	Max. Capacity
ZT0618T	1,320(596)	11/16(18)	3.30(1.50)	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)	Max. 3/16"(4.8mm) blind rivets in steel/steel
ZT0918T	1,983(900)	11/16(18)	3.96(1.80)	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)	Max. 3/16"(4.8mm) standard & structural blind rivets in all materials
ZT1214T	2,460(1,200)	9/16(14)	4.16(1.89)	5/32(4.0)3/16(4.8) 1/4(6.4)	Max. 1/4"(6.4mm) blind rivets in steel/steel
ZT1819T	3,960(1,800)	3/4(19)	5.61(2.55)	3/16(4.8)1/4(6.4)	Max. 1/4"(6.4mm) standard & structural blind rivets in all materials
ZT0918L ZT0918LV	1,983(900)	11/16(18)	3.96(1.80) 4.07(1.85)	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)	Max. 3/16"(4.8mm) standard & structural blind rivets in all materials
ZT1214L ZT1214LV	2,460(1,200)	9/16(14)	4.16(1.89) 4.27(1.94)	5/32(4.0)3/16(4.8) 1/4(6.4)	Max. 1/4"(6.4mm) blind rivets in steel/steel
ZT1819L ZT1819LV	3,960(1,800)	3/4(19)	5.60(2.55) 5.72(2.60)	3/16(4.8)1/4(6.4)	Max. 1/4"(6.4mm) standard & structural blind rivets in all materials

*Operating Air Pressure:90PSI/6.2bar *Air Inlet Size:1/4 inch-NPT/PT *Min. Hose Size:3/8"(10mm)

Features

- Module unit mechanism enables more common parts to be used in similar designed tools.
- Designed with patented" Module units assembled in composite clam shell housing for operator's comfort and ease of service.
- Ergonomic texture coated composite housing for operator's comfort.
- Build-in exhaust muffler to minimize the tool noise efficiently.
- Rocker type trigger for ease of operational control.
- Perfect tool for automotive & general industries.
- Optional Jaw Pusher & Nose Pieces for small size rivets.

Patented Vacuum Mandrel Collection System holds the rivets in the Nosepiece regardless of tool position also assure perfect shock absorption.



Aluminum alloy forged and heat treated Hydraulic Section for greater strength and durability.

The rear cap of Collection Bottle can be rotated to direct exhaust air at any direction.



Designed with patented "tools assembled with module units in composite housing" for operator's comfort and ease of service.

Easy adjustable Head & Nut designed for obtaining the most effective stroke and riveting speed.



Rocker type Trigger, ideal for long time work.

Applications

Wherever the fastening methods like: welding, sheet metal screw, bolt, nut, washer, tubular, semi-tubular and solid rivets and adhesives are applied, can be substituted by blind rivets.

All models above are good for setting standard blind rivets and structural blind rivets.

Patent pending in other countries



R.O.C.PAT.:
092648



P.R.C.PAT.:
ZL 94 2 22569.4



U.S.A.PAT.NO.:
6,149,356



DEUTSCHLAND PAT.:
Nr.20 2007 007 127.2



ZT1017VSN-5

3/16" Air Hydraulic Riveter
(Vacuum type)

Max. 4.8mm blind rivets in all materials



[Accessories]

- Riveter X 1
- Small Wrench X 1
- Large Wrench X 1
- Collection Bottle X 1

Optional

- P/N 1017VSN-1
1/4"(6.4mm) Pulling Kit
- P/N 1017VSN-2
3/32" & 1/8"(2.4mm & 3.2mm) Pulling Kit



ZT1017VSN-6

1/4" Air Hydraulic Riveter
(Vacuum type)

Max. 6.4mm blind rivets in Alum./Steel



[Accessories]

- Riveter X 1
- Small Wrench X 1
- Large Wrench X 1
- Collection Bottle X 1

Optional

- P/N 1017VSN-2
3/32" & 1/8"(2.4mm & 3.2mm) Pulling Kit
- P/N 1017VSN-3
5/32" & 3/16"(4.0mm & 4.8mm) Pulling Kit

DO NOT apply air pressure over 110 psi / 7.5 bar to these tools.

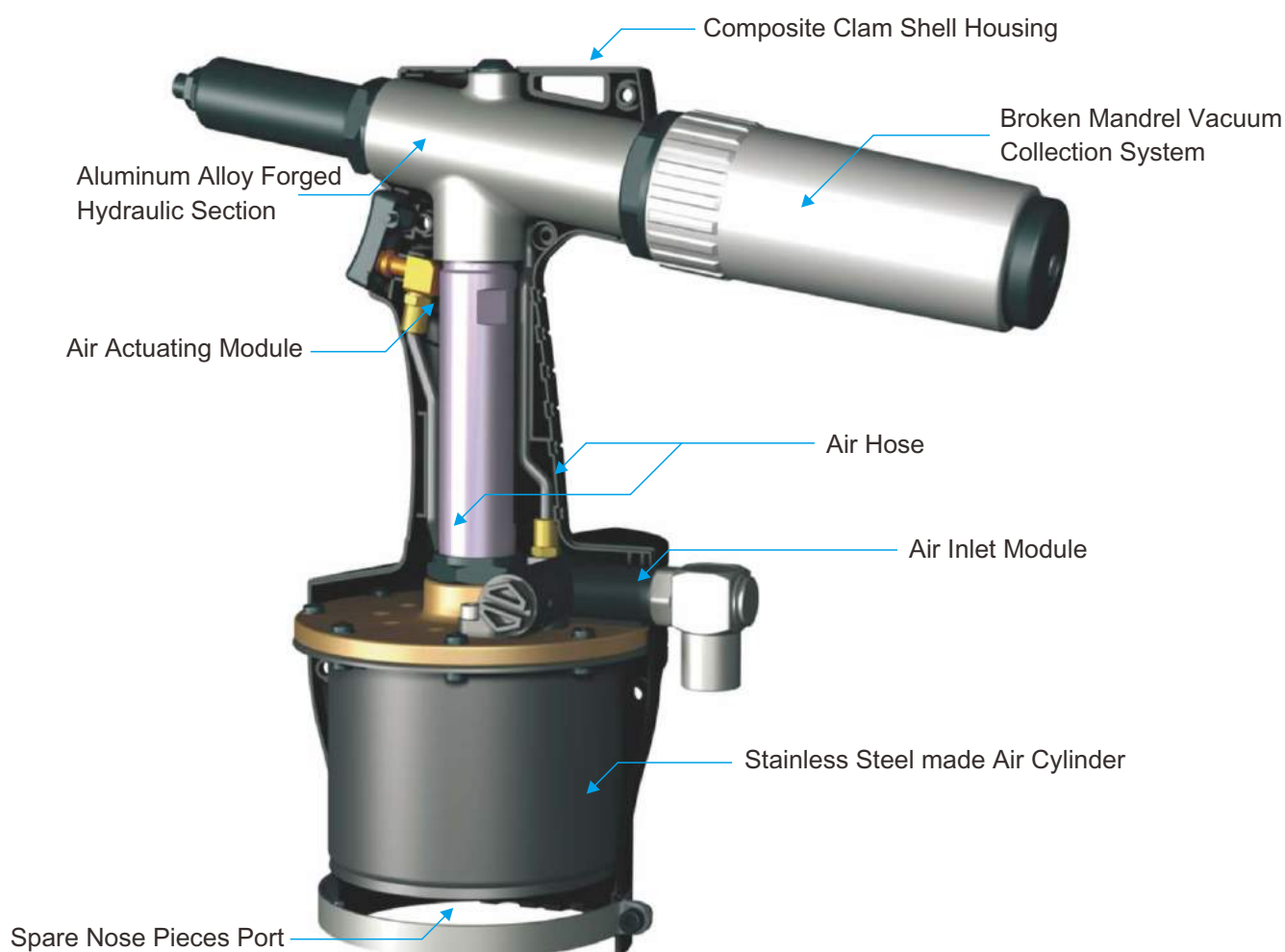
*Please refer to the blind rivet specification to ensure the tensile strength is lower than the traction power of the model you select.

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Operating Air Pressure PSI(bar)	Air inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Nosepieces Equipped inch(mm)
ZT1017VSN-5	2,248(1,022)	43/64(17)	4.3(1.95)	90(6.2)	1/4	3/8(10)	5/32(4.0) 3/16(4.8)
ZT1017VSN-6	2,248(1,022)	43/64(17)	4.3(1.95)	90(6.2)	1/4	3/8(10)	1/4(6.4)

Full Composite Housing Series

Features

- Built with patented “Module units assembled in composite clam shell housing” for the ease of tool service.
- Patented “Broken mandrel vacuum collection system” for the cleanliness and safety of work area.
- Forged and heat treated aluminum alloy made Hydraulic Section for the best rigidity.
- Stainless steel made Air Cylinder for the best rigidity and durability of the tool.
- Easy adjustable Head & Nut designed for obtaining the most effective stroke.
- Ergonomic texture coated composite housing for operator’s comfort.
- Equipped with safety valve to avoid damage due to over pressure.
- Swivel air inlet design for maneuverability of works.
- The lightest model among compatible designs.



Patent pending in other countries



R.O.C.PAT.:
092648



P.R.C.PAT.:
ZL 94 2 22569.4



DEUTSCHLAND PAT.:
Nr.20 2007 007 127.2

Full Composite Housing Series



ZT0919VS

3/16" Composite
Air Hydraulic Riveter

Max. 4.8mm standard & structural
blind rivets in all materials



ZT1821VS

1/4" Composite
Air Hydraulic Riveter

Max. 6.4mm standard & structural
blind rivets in all materials



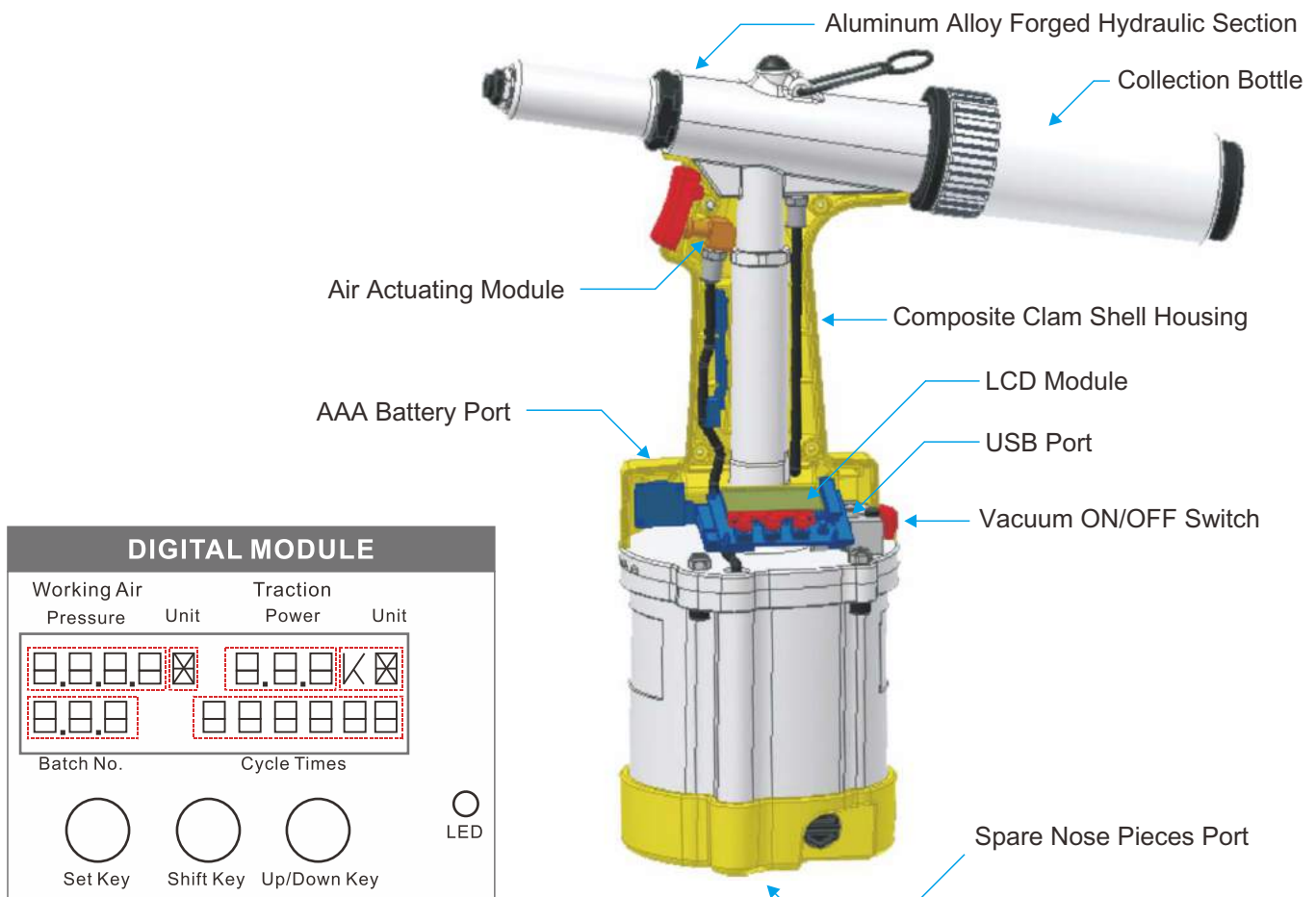
DO NOT apply air pressure over 110 psi / 7.5 bar to these tools.

*Please refer to the blind rivet specification to ensure the tensile strength is lower than the traction power of the model you select.

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Operating Air Pressure PSI(bar)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Nosepieces Equipped inch(mm)
ZT0919VS	1,980(900)	3/4(19)	3.3(1.5)	90(6.2)	1/4	3/8(10)	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)
ZT1821VS	4,013(1,800)	13/16(21)	5.1(2.3)	90(6.2)	1/4	3/8(10)	3/16(4.8)1/4(6.4)

Features

- Features with the most advanced patented digital module to enable operators know the rivet tool setting capacity instantly under various air supply condition and the rivet setting cycles performed during their working period.
- It will also remind operators when to do service or maintenance to the tool in proper interval.
- It will help to cease the controversy about warranty issue especially if the tool has been misused or abused with abnormal high air pressure which exceeds the design specification.
- Built with patented "Module units assembled in composite clam shell housing" for the ease of tool service.
- Patented "Broken mandrel vacuum collection system" for the cleanliness and safety of work area.
- Forged and heat treated aluminum alloy made Hydraulic Section for the best rigidity.
- Easy adjustable Head & Nut designed for obtaining the most effective stroke.
- Ergonomic texture coated composite housing for operator's comfort.
- Swivel air inlet design for maneuverability works.



Patent pending in other countries



R.O.C.PAT.:
355976



R.O.C.PAT.:
092648



P.R.C.PAT.:
ZL 94 2 22569.4



U.S.A.PAT.NO.:
6,149,356



DEUTSCHLAND PAT.:
Nr.20 2007 007 127.2

Air Hydraulic Blind Rivet Installation Tool



W/Digital Module

ZT0520/ZT0520D
ZT0715/ZT0715D

5/32" Air Hydraulic Riveter
3/16" Air Hydraulic Riveter



W/Digital Module

ZT0922/ZT0922D
ZT1218/ZT1218D

3/16" Air Hydraulic Riveter
1/4" Air Hydraulic Riveter



W/Digital Module

ZT1528/ZT1528D
ZT1725/ZT1725D

1/4" Air Hydraulic Riveter



W/Digital Module

ZT2021/ZT2021D
ZT2318/ZT2318D

1/4" Air Hydraulic Riveter



W/Digital Module

ZT2021-8/ZT2021D-8
ZT2318-8/ZT2318D-8

5/16" Air Hydraulic Riveter

DO NOT apply air pressure over 110 psi / 7.5 bar to these tools.

*Please refer to the blind rivet specification to ensure the tensile strength is lower than the traction power of the model you select.

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Nosepieces Equipped inch(mm)	Max. Capacity
ZT0520 ZT0520D	1,100(500)	51/64(20)	3.8(1.7)	3/32(2.4)1/8(3.2) 5/32(4.0)	Max. 5/32"(4.0mm) structural rivets in all materials
ZT0715 ZT0715D	1,500(700)	19/32(15)	3.8(1.7)	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)	Max. 3/16"(4.8mm) blind rivets in steel/steel
ZT0922 ZT0922D	2,000(920)	7/8(22)	4.2(1.9)	5/32(4.0)3/16(4.8) Monobolt 3/16(4.8)	Max. 3/16"(4.8mm) structural rivets in all materials
ZT1218 ZT1218D	2,523(1,150)	23/32(18)	4.2(1.9)	5/32(4.0)3/16(4.8) 1/4(6.4)	Max. 1/4"(6.4mm) blind rivets in steel/steel
ZT1528 ZT1528D	3,300(1,500)	1-1/8(28)	5.6(2.5)	3/16(4.8)1/4(6.4) Monobolt 3/16(4.8)1/4(6.4)	Max. 1/4"(6.4mm) structural rivets in all materials
ZT1725 ZT1725D	3,700(1,700)	63/64(25)	5.6(2.5)	3/16(4.8)1/4(6.4) Monobolt 3/16(4.8)1/4(6.4)	Max. 1/4"(6.4mm) structural rivets in all materials
ZT2021 ZT2021D	4,400(2,000)	53/64(21)	5.6(2.5)	3/16(4.8)1/4(6.4) Monobolt 3/16(4.8)1/4(6.4)	Max. 1/4"(6.4mm) structural rivets in all materials
ZT2021-8 ZT2021D-8	4,400(2,000)	53/64(21)	5.6(2.5)	5/16(7.8)	Max. 5/16"(7.8mm) blind rivets in steel/steel
ZT2318 ZT2318D	5,000(2,300)	23/32(18)	5.6(2.5)	3/16(4.8)1/4(6.4) Monobolt 3/16(4.8)1/4(6.4)	Max. 1/4"(6.4mm) structural rivets in all materials
ZT2318-8 ZT2318D-8	5,000(2,300)	23/32(18)	5.6(2.5)	5/16(7.8)	Max. 5/16"(7.8mm) structural rivets in all materials

*Operating Air Pressure:90PSI/6.2bar *Air Inlet Size:1/4 inch-NPT/PT *Min. Hose Size:3/8"(10mm)

Features

- Sets 3/32" to 3/16" rivets with up to 1983 lbs. of pulling capacity
- Tougher and durable
- Easy operation
- Aluminum housing, strong & light weight.
- Simply structure, easy to service.
- Power by air only, no need refill hydraulic oil.
- Quick cycle times, 2.0 seconds on average.



ZAR0921

3/16" Air Riveter

ZAR0921V

3/16" Air Riveter-Vacuum



ZAR0818

3/16" Air Riveter

ZAR0818V

3/16" Air Riveter-Vacuum

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Operating Air Pressure PSI(bar)	Avg. Air Cons. cu.ft/stroke	Min. Hose Size inch(mm)	Sound Pressure dBA	Vibration m/s ²	Nosepieces Equipped inch(mm)
ZAR0921 ZAR0921V	1,896(860)	3/4(19)	3.1(1.4)	60~90	0.03	3/8(10)	79	<2.5	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)
ZAR0818 ZAR0818V	1,763(800)	23/32(18)	3.3(1.5)	60~110	-	3/8(10)	81	<2.5	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)

Features

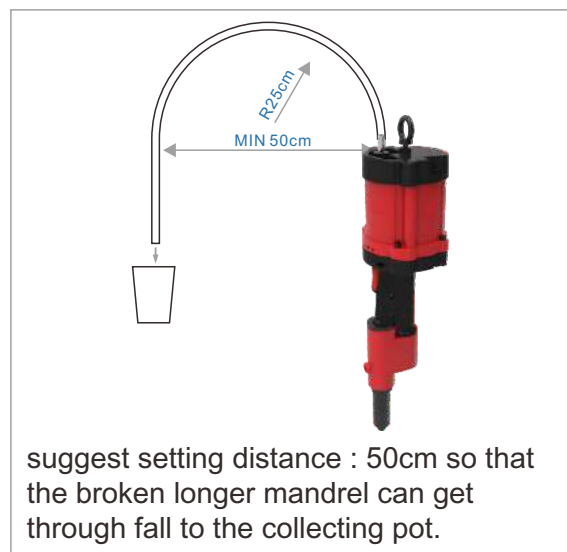
- Ergonomic in-line design.
- Vacuum mandrel collection system.
- Designed for assembly line with balancer approach.



ZIR0922

3/16" Air Hydraulic

In-Line Riveter-Vacuum



Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Nosepieces Equipped inch(mm)	Max. Capacity
ZIR0922	2,000(920)	7/8(22)	4.2(1.9)	5/32(4.0)3/16(4.8) Monobolt 3/16(4.8)	Max. 3/16"(4.8mm) structural rivets in all materials

Features

- Stronger Traction Power.
- Good Balance To Minimum Operator Fatigue.
- Trigger Is Comfortable Operation At Any Direction.
- Screw Plug Is Easy For Refilling Oil.
- Forged Aluminum Alloy For Strong Hydraulic Section.



ZT0616

5/32" Air Hydraulic Riveter

ZT0616V

5/32" Air Hydraulic Riveter-Vacuum

Max. 4.0mm standard & structural
blind rivet in all material

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Operating Air Pressure PSI(bar)	Min. Hose Size inch(mm)	Sound Pressure dBA	Vibration m/s ²	Nosepieces Equipped inch(mm)
ZT0616	1,300(600)	5/8(16)	3(1.4)	90(6.2)	3/8(10)	79	<2.5	3/32(2.4)1/8(3.2) 5/32(4.0) all material
ZT0616V	1,500(700)	5/8(16)	3(1.4)	90(6.2)	3/8(10)	79	<2.5	3/32(2.4)1/8(3.2) 5/32(4.0) all material

Economy Riveter



ZPR1016T

3/16" Air
Hydraulic Riveter



ZPR1016TK

3/16" Air
Hydraulic Riveter Kit



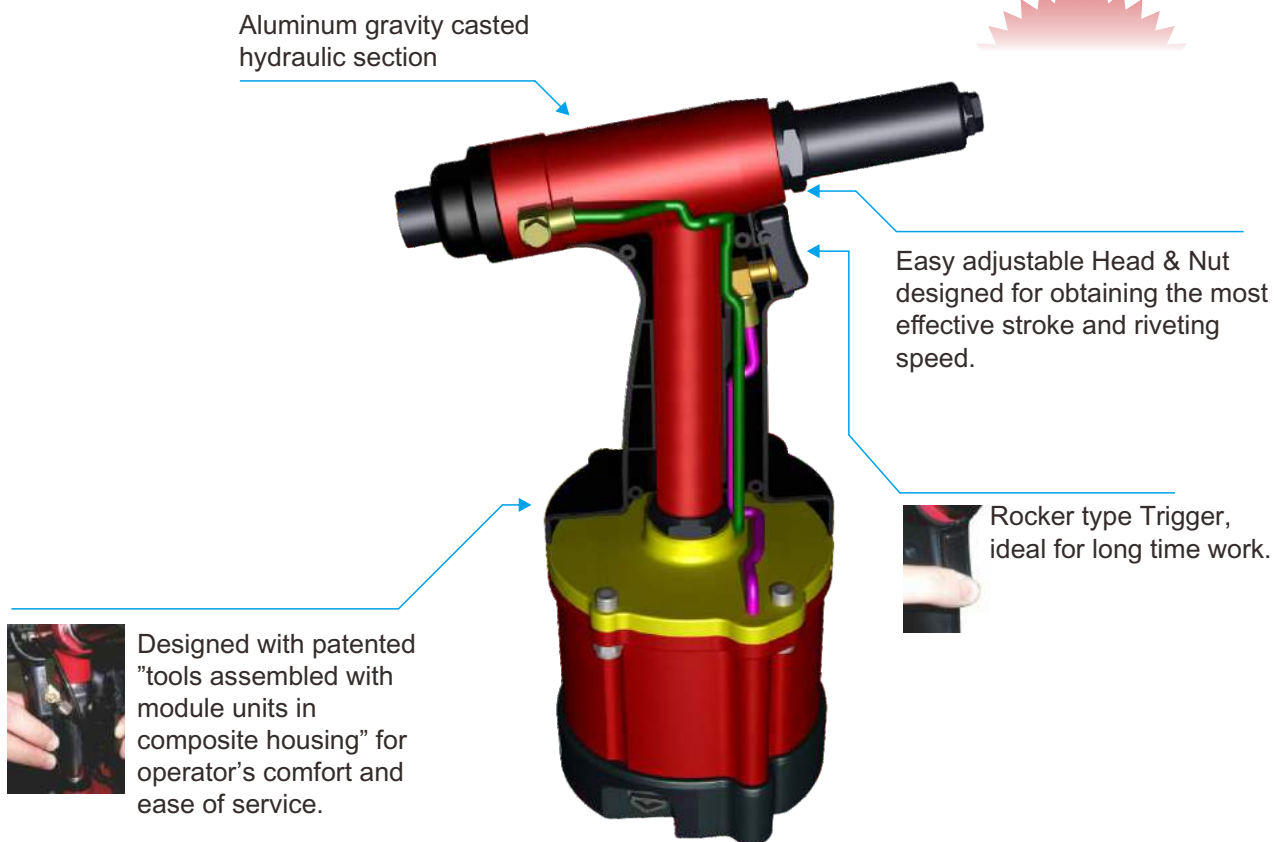
ZT1918T

1/4" Air
Hydraulic Riveter

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Operating Air Pressure PSI(bar)	Avg. Air Cons. cu.ft/stroke	Min. Hose Size inch(mm)	Sound Pressure dBA	Vibration m/s ²	Nosepieces Equipped inch(mm)
ZPR1016T ZPR1016TK	2,304 (1,045)	5/8(16)	3.262 (1.48)	90(6.2)	0.125(3.5)	1/4(6.4)	70	<2.5	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)
ZT1918T	4,200 (1,900)	23/32(18)	4.3(2)	90(6.2)	0.125(3.5)	3/8(10)	70	<2.5	3/32(2.4)1/8(3.2) 5/32(4.0)3/16(4.8)1/4(6.4)

Features

- Module unit mechanism enables more common parts to be used in similar designed tools.
- Designed with patented" Module units assembled in composite clam shell housing for operator's comfort and ease of service.
- Ergonomic texture coated composite housing for operator's comfort.
- Build-in exhaust muffler to minimize the tool noise efficiently.
- Rocker type trigger for ease of operational control.
- Perfect tool for automotive & general industries.
- Optional Jaw Pusher & Nose Pieces for small size rivets.



Applications

Wherever the fastening methods like: welding, sheet metal screw, bolt, nut, washer, tubular, semi-tubular and solid rivets and adhesives are applied, can be substituted by blind rivets.

All models above are good for setting standard blind rivets and structural blind rivets.

DO NOT apply air pressure over 110 psi / 7.5 bar to these tools.

*Please refer to the blind rivet specification to ensure the tensile strength is lower than the traction power of the model you select.

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Operating Air Pressure PSI(bar)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Nosepieces Equipped inch(mm)
ZT-1020	2,248(1,022)	43/64(17)	4.3(1.95)	90(6.2)	1/4	3/8(10)	3/32(2.4)1/8(3.2)
ZT-1020V							5/32(4.0)3/16(4.8)1/4(6.4)

Features

- The ZT0922CM is an air hydraulic tool designed especially for installation of CherryMAX® and nut plate rivets.
- This tool utilizes straight, offset and right angle pulling heads, all of which can install -4, -5 and -6 diameter CherryMAX® bulb type rivets in all head styles, materials and grip lengths
- Features with the most advanced patented digital module to enable operators know the rivet tool setting capacity instantly under various air supply condition and the rivet setting cycles performed during their working period.
- It will also remind operators when to do service or maintenance to the tool in proper interval.
- It will help to cease the controversy about warranty issue especially if the tool has been misused or abused with abnormal high air pressure which exceeds the design specification.
- Built with patented "Module units assembled in composite clam shell housing" for the ease of tool service.
- Patented "Broken mandrel vacuum collection system" for the cleanliness and safety of work area.
- Forged and heat treated aluminum alloy made Hydraulic Section for the best rigidity.
- Swivel air inlet design for maneuverability works.



CherryMAX® is the registered trademark of Cherry Aerospace LLC.

CherryMAX® Compact Single Jaw Offset Pulling Heads		CherryMAX® Straight Pulling Heads		CherryMAX® Right Angle Pulling Heads	
 H781B-456		 H701B-456		 H753A-456	
Stroke: 3/4" Weight: 0.5(0.23) lbs(kgs)		Install: 1/8", 5/32" & 3/16" Nominal & Oversize CherryMAX Rivets		Install: 1/8", 5/32" & 3/16" Nominal & Oversize CherryMAX Rivets	
Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Nosepieces Equipped inch(mm)	Max. Capacity
ZT0922CM ZT0922CMD	2,000(920)	7/8(22)	4.2(1.9)	Pulling head need to purchase separately.	Max. 3/16"(4.8mm) structural rivets in all materials
ZT1218CM ZT1218CMD	2,523(1,150)	23/32(18)	4.2(1.9)	Pulling head need to purchase separately.	Max. 1/4"(6.4mm) blind rivets in steel/steel
ZT0920SCM	2,000(920)	51/64(20)	2.2(1)	Pulling head need to purchase separately.	Max. 3/16"(4.8mm) structural rivets in all materials

*Operating Air Pressure:90PSI/6.2bar *Air Inlet Size:1/4 inch-NPT/PT *Min. Hose Size:3/8"(10mm)



ZRA-48

3/16" Riveter Adaptor



ZRA-64

1/4" Riveter Adaptor



ZARA-48

3/16" Riveter Angle Adaptor

Model	Riveter Adaptor inch(mm)	Min. torque strength ft/lbs(Nm)	Max. rpm	Nosepiece inch(mm)	Hex shank inch(mm)	Dimension mm
ZRA-48	3/16"(4.8)	8(11)	1,000	3/32"(2.4), 1/8"(3.2) 5/32"(4.0), 3/16"(4.8)	1/4"(6.35)	59 x 158
ZRA-64	1/4"(6.4)	37(50)	8,00	1/8"(3.2), 5/32"(4.0) 3/16"(4.8), 1/4"(6.4)	1/4"(6.35)	59 x 173
ZARA-48	3/16"(4.8)	8(11)	1,000	3/32"(2.4), 1/8"(3.2) 5/32"(4.0), 3/16"(4.8)	1/4"(6.35)	L195 x H185 x W58.5

Rivet Nut Adaptor Kit

Features

- A revolutionary accessory to insert rivet nuts.
- Simply attach this adaptor to your cordless, electric & pneumatic drills become a rivet nut tool.
- Can set up to max. M10 (5/16"-18) steel rivet nuts.

Applications

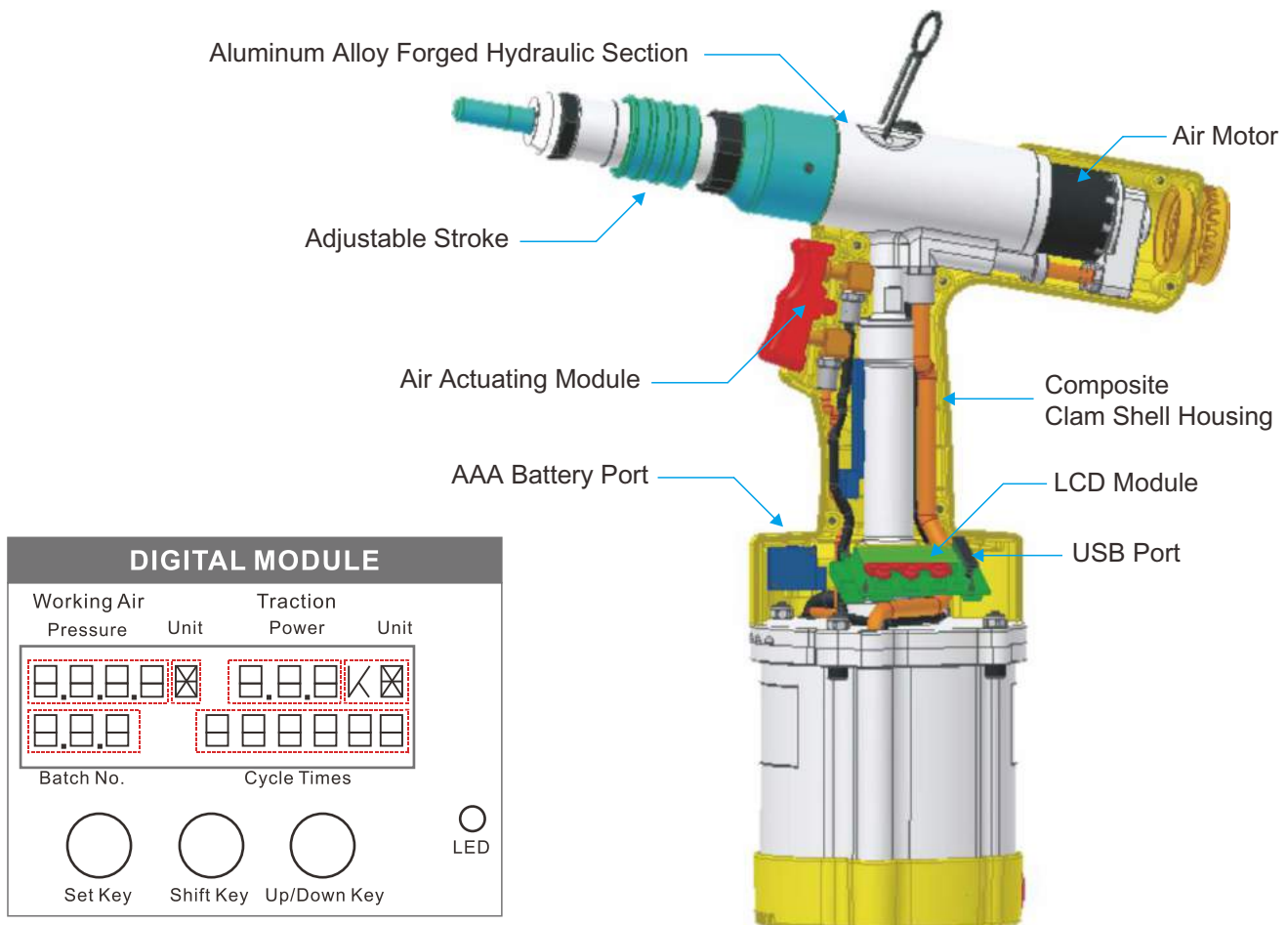
- Automotive aftermarket
- Small aircraft and boat repair
- Outdoor rivet nut insert jobs when there is no air supply.
- Residential and commercial construction
- General facility maintenance and repair



Model	Min. torque strength	Max. rpm	Nut Nosepiece	Hex shank mm	Dimension mm
ZNRA-410D For Metric	73.7 ft/lbs(100Nm)	800	M4-M5-M6-M8-M10	8.00	59 x 180
ZNRA-410DE For Imperial	73.7 ft/lbs(100Nm)	800	#8-32, #10-24, #10-32 1/4"-20, 5/16"-18, 3/8"-16	8.00	59 x 180

Features

- Features with the most advanced patented digital module to enable operators know the rivet tool setting capacity instantly under various air supply condition and the rivet setting cycles performed during their working period.
- It will also remind operators when to do service or maintenance to the tool in proper interval.
- It will help to cease the controversy about warranty issue especially if the tool has been misused or abused with abnormal high air pressure which exceeds the design specification.
- Built with patented “Module units assembled in composite clam shell housing” for the ease of tool service.
- Forged and heat treated aluminum alloy made Hydraulic Section for the best rigidity.
- Easy adjustable Head & Nut designed for obtaining the most effective stroke.
- Ergonomic texture coated composite housing for operator’s comfort.
- Swivel air inlet design for maneuverability works.



Patent pending in other countries



R.O.C.PAT.:
355976



R.O.C.PAT.:
092648



P.R.C.PAT.:
ZL 94 2 22569.4



U.S.A.PAT.NO.:
6.149.356



DEUTSCHLAND PAT.:
Nr.20 2007 007 127.2



FOR IMPERIAL SYSTEM

ZRN1606E
ZRN1606ED
W/Digital Module

Rivet Nut Tool

ZRN1606M
ZRN1606MD
W/Digital Module

FOR METRIC SYSTEM



NEW
PATENTED
DIGITAL
MODULE

FOR IMPERIAL SYSTEM

ZRN2508E
ZRN2508ED
W/Digital Module

Rivet Nut Tool

ZRN2508M
ZRN2508MD
W/Digital Module

FOR METRIC SYSTEM



FOR IMPERIAL SYSTEM

ZRS1606E
ZRS1606ED
W/Digital Module

Rivet Stud Tool

ZRS1606M
ZRS1606MD
W/Digital Module

FOR METRIC SYSTEM



FOR IMPERIAL SYSTEM

ZRS2508E
ZRS2508ED
W/Digital Module

Rivet Stud Tool

ZRS2508M
ZRS2508MD
W/Digital Module

FOR METRIC SYSTEM

DO NOT apply air pressure over 110 psi / 7.5 bar to these tools.

*Please refer to the blind rivet specification to ensure the tensile strength is lower than the traction power of the model you select.

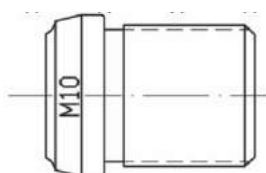
Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Rivet Nut / Rivet Stud Setting Capacity
ZRN1606E ZRN1606ED	3,500(1,600)	1/4(6)	4.9(2.2)	#8-32~3/8"-16 rivet nut in Hex./Steel 1/2"-13 need 100psi/7 bar operating pressure
ZRN1606M ZRN1606MD	3,500(1,600)	1/4(6)	4.9(2.2)	M4~M10 rivet nut in Hex./Steel M12 need 100psi/7 bar operating pressure
ZRN2508E ZRN2508ED	5,500(2,500)	5/16(8)	5.4(2.4)	#8-32~1/2"-13 rivet nut in all materials
ZRN2508M ZRN2508MD	5,500(2,500)	5/16(8)	5.4(2.4)	M4~M12 rivet nut in all materials
ZRS1606E ZRS1606ED	3,500(1,600)	1/4(6)	4.9(2.2)	#8-32~3/8"-16 rivet stud in all materials
ZRS1606M ZRS1606MD	3,500(1,600)	1/4(6)	4.9(2.2)	M4~M10 rivet stud in all materials
ZRS2508E ZRS2508ED	5,500(2,500)	5/16(8)	5.4(2.4)	#8-32~3/8"-16 rivet stud in all materials
ZRS2508M ZRS2508MD	5,500(2,500)	5/16(8)	5.4(2.4)	M4~M10 rivet stud in all materials

Parts Break Down For Rivet Nut/Rivet Stud:

Customers are welcome to order Bushing or Pull Rod separately.

Examples: order247B32+247A32=order complete set of M4 Bushing+Pull Rod
order247B32=order M4 Bushing

Rivet Nut



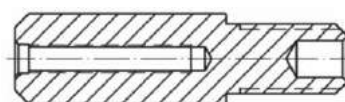
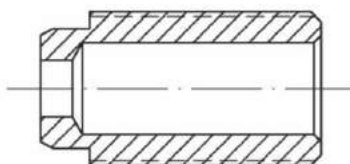
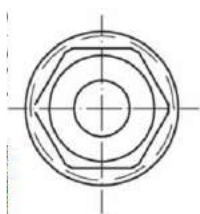
Bolt Bushing

Metric		inch	
P/N	Used For	P/N	Used For
258B11	M3	258B21	#6-32
258B12	M4	258B22	#8-32
258B13	M5	258B23	#10-24
258B14	M6	258B24	#10-32
258B15	M8	258B25	1/4"
258B16	M10	258B26	5/16"
258B17	M12	258B27	3/8"
		258B28	1/2"

Pull Rod

Metric		inch	
P/N	Used For	P/N	Used For
258A11	M3	258A21	#6-32
258A12	M4	258A22	#8-32
258A13	M5	258A23	#10-24
258A14	M6	258A24	#10-32
258A15	M8	258A25	1/4"-20
258A16	M10	258A26	5/16"-18
258A17	M12	258A27	3/8"-16
		258A28	1/2"-13

Rivet Stud



Bolt Bushing

Metric		inch	
P/N	Used For	P/N	Used For
247B32	M4	247B42	#8-32
247B33	M5	247B43	#10-24
247B34	M6	247B44	#10-32
247B35	M8	247B45	1/4"
247B36	M10	247B46	5/16"
		247B47	3/8"

Pull Rod

Metric		inch	
P/N	Used For	P/N	Used For
247A32	M4	247A42	#8-32
247A33	M5	247A43	#10-24
247A34	M6	247A44	#10-32
247A35	M8	247A45	1/4"-20
247A36	M10	247A46	5/16"-18
		247A47	3/8"-16

Features

- Forged and heat treated aluminum alloy made Hydraulic Section for the best rigidity.
- Easy adjustable Head & Nut designed for obtaining the most effective stroke.
- Ergonomic composite housing for operator's comfort.
- Swivel air inlet design for maneuverability works.



Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Min. Hose Size inch(mm)	Rivet Nut / Rivet Stud Setting Capacity
ZRN2308E	5,000(2,300)	5/16(8)	5.28(2.4)	3/8(9.5)	#8-32~3/8"-16 All materials
ZRN2308M	5,000(2,300)	5/16(8)	5.28(2.4)	3/8(9.5)	M4~M10 All materials

*Operating Air Pressure:90PSI/6.2bar *Air Inlet Size:1/4 inch-NPT/PT *Working stroke: Variable adjustment:1~8 mm (Max. 8mm)

Products and specifications subject to change without prior notice 45

Features

- Compatible with " **ORIGINAL** " HUCK® - C6L® & Magna Grip®, AVDEL® - Avdelok® & Maxlok® lock bolt and Magna-Lok® and BOM® nose assemblies.
- Features with the most advanced patented digital module to enable operators know the rivet tool setting capacity instantly under various air supply condition and the rivet setting cycles performed during their working period.
- It will also remind operators when to do service or maintenance to the tool in proper interval.
- It will help to cease the controversy about warranty issue especially if the tool has been misused or abused with abnormal high air pressure which exceeds the design specification.
- Built with patented "Module units assembled in composite clam shell housing" for the ease of tool service.
- Forged and heat treated aluminum alloy made Hydraulic Section for the best rigidity.
- Ergonomic texture coated composite housing for operator's comfort.
- Swivel air inlet design for maneuverability of works.



Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Nosepieces Equipped inch(mm)	Max. Capacity
ZT2318-HA ZT2318-HAD	5,000(2,300)	23/32(18)	5.6(2.5)	Compatible With for original HUCK® & AVDEL® nose assemblies	1/4" lock bolts

C6L®, Magna-Grip®, Magna-Lok® and BOM® are registered trademarks of Alcoa Fastening Systems & Rings.

Avbolt®, Monobolt®, Maxlok®, Avdelok® are registered trademarks of Stanley Engineered Fastening.

**ZT2318H(D)** W/Digital Module

1/4" Air Hydraulic Lock Bolt Tool

ZT2318B(D) W/Digital Module

1/4" Air Hydraulic Blind Bolt Tool

ZT2318HK(D) W/Digital Module

1/4" Air Hydraulic Lock Bolt Tool Kit

- ZT2318H(D) / ZT2318B(D) come with "ONE" nose assembly only.
- ZT2318HK(D) included with "FOUR" sets of lock bolt nose assemblies & 3/16", 1/4" blind rivet conversion kit.

Standard Nose Assembly	Optional Extended Nose Assembly
	
 For Fixed Grip Lock Bolts	
3/16" P/N: 202HC1 1/4" P/N: 231HC2 3/16" P/N: 202HC1H - Compatible with HUCK® tools 1/4" P/N: 231HC2H - Compatible with HUCK® tools	3/16" P/N: 202HC1L 1/4" P/N: 231HC2L 3/16" P/N: 202HC1LH - Compatible with HUCK® tools 1/4" P/N: 231HC2LH - Compatible with HUCK® tools
 For Multi Grip Lock Bolts	
3/16" P/N: 202HM1 1/4" P/N: 202HM2 3/16" P/N: 202HM1H - Compatible with HUCK® tools 1/4" P/N: 202HM2H - Compatible with HUCK® tools	3/16" P/N: 202HM1L 1/4" P/N: 202HM2L 3/16" P/N: 202HM1LH - Compatible with HUCK® tools 1/4" P/N: 202HM2LH - Compatible with HUCK® tools
 For Blind Bolts	
1/4" P/N: 202HB2	
	
Blind Rivet Conversion Kit	Blind Rivet Conversion Kit
P/N: 2318RS - 2pc Jaws for 3/16" or 1/4" blind rivets	P/N: 2318RS-4 - 2pc Jaws for 1/8" or 5/12" blind rivets P/N: 2318RS-8 - 3pc Jaws for 5/16" blind rivets

DO NOT apply air pressure over 110 psi / 7.5 bar to these tools.

*Please refer to the blind rivet specification to ensure the tensile strength is lower than the traction power of the model you select.

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Nosepieces Equipped	Max. Capacity
ZT2318H(D)	5,000(2,300)	23/32(18)	5.6(2.5)	Choose one of 202HM1, 202HC1, 202HM2 or 231HC2	1/4" lock bolts
ZT2318HK(D)	5,000(2,300)	23/32(18)	5.6(2.5)	Kit includes 202HM1, 202HC1, 202HM2 231HC2 & 2318RS Nose Assemblies	1/4" lock bolts
ZT2318B(D)	5,000(2,300)	23/32(18)	5.6(2.5)	P/N 202HB2	1/4" blind bolt

HUCK® is a registered trademark of Alcoa Fastening Systems & Rings.

Products and specifications subject to change without prior notice 47

Features

- Optional feature with the most advanced patented digital module to enable operators know the rivet tool setting capacity instantly under various air supply condition and the rivet setting cycles performed during their working period.
- It will also remind operators when to do service or maintenance to the tool in proper interval.
- It will help to cease the controversy about warranty issue especially if the tool has been misused or abused with abnormal high air pressure which exceeds the design specification.
- Built with patented "Module units assembled in composite clam shell housing" for the ease of tool service.
- Forged and heat treated aluminum alloy made Hydraulic Section for the best rigidity.
- Ergonomic texture coated composite housing for operator's comfort.
- Swivel air inlet design for maneuverability of works.
- 3 pulls required for Monobolt®.
- Nose assembly need to purchase separately.



DIGITAL MODULE

Working Air

Pressure

Unit

Traction

Power

Unit

The digital module display is divided into two main sections: 'Working Air Pressure' and 'Traction Power'. Each section has a 'Unit' label. The 'Working Air Pressure' section shows a four-digit display with a decimal point, a 'Unit' label, and a 'Batch No.' label. The 'Traction Power' section shows a four-digit display with a decimal point, a 'Unit' label, and a 'Cycle Times' label. The 'Batch No.' and 'Cycle Times' labels are also present below the respective displays.

Working Air Pressure	Unit	Traction Power	Unit
0.0.0.0	⊗	0.0.0.0	⊗
0.0.0.0		0.0.0.0	
0.0.0.0		0.0.0.0	
0.0.0.0		0.0.0.0	

Batch No.

Cycle Times

Set Key

Shift Key

Up/Down Key

LED

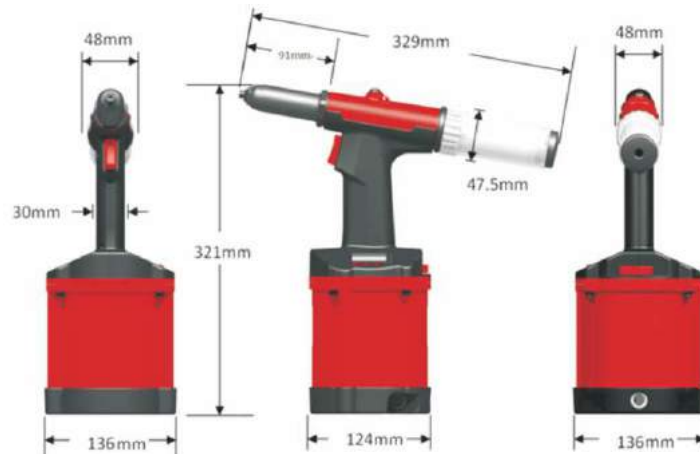
Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Net Weight lbs(kgs)	Nosepieces Equipped inch(mm)	Max. Capacity
ZT3213 ZT3213D	7,050(3,200)	33/64(13)	6.4(2.9)	Need to purchase separately	3/8" Alum. Multi Grip Lock Bolt

Monobolt® is the registered trademark of Stanley Engineered Fastening.



ZT0520/D | ZT0715/D

ZT0922/D | ZT1218/D



ZT1725/D | ZT1528/D | ZT2021/D | ZT2318/D | ZT2318H/HD



**ZRN1606E/ED | ZRN1606M/MD
ZRS1606E/ED | ZRS1606M/MD**

**ZRN2508E/ED | ZRN2508M/MD
ZRS2508E/ED | ZRS2508M/MD**

- Forged & heat treated aluminum alloy made hydraulic section for the best rigidity.
- Light weight pistol head
- Easy to reaches inaccessible area
- Utility Pouch for Shoulder or Waist



Split Type Rivet Nut Tool

Split Type Lock Bolt Tool



*Below specification are measured with 1 meter length, 1/8" I.D hydraulic hose

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Handle Net Weight lbs(kgs)	Nosepieces Equipped inch(mm)	Max. Capacity
ZT0518S	1,100(500)	23/32(18)	2.2(1)	3/32(2.4)1/8(3.2) 5/32(4.0)	Max. 5/32"(4.0mm) structural rivets in all materials
ZT0920S	2,000(920)	51/64(20)	2.2(1)	5/32(4.0)3/16(4.8) Monobolt 3/16(4.8)	Max. 3/16"(4.8mm) structural rivets in all materials
ZT1626S	3,500(1,600)	1-1/32(26)	2.75(1.25)	3/16(4.8)1/4(6.4) Monobolt 3/16(4.8)1/4(6.4)	Max. 1/4"(6.4mm) structural rivets in all materials
ZT2420-8S	5,200(2,400)	51/64(20)	2.75(1.25)	5/16(7.8)	Max. 5/16"(7.8mm) structural rivets in all materials
ZT2420HSN	5,200(2,400)	51/64(20)	2.75(1.25)	Need to purchase separately, compatible with HUCK® & AVDEL® nose assemblies	1/4" lock bolts
ZT2420HS	5,200(2,400)	51/64(20)	2.75(1.25)	Choose one of 202HM1, 202HC1, 202HM2 or 231HC2	1/4" lock bolts
ZT2420HSK	5,200(2,400)	51/64(20)	2.75(1.25)	Kit includes 202HM1,202HC1,202HM2 231HC2 & 2318RS Nose Assemblies	1/4" lock bolts

AVDEL® is the registered trademark of Stanley Engineered Fastening.

Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Handle Net Weight lbs(kgs)	Rivet Nut Setting Capacity
ZRN1811ES	3,900(1,800)	7/16(11)	3.3(1.5)	#8-32~1/2"-13 rivet nut in Hex./Steel
ZRN1811MS	3,900(1,800)	7/16(11)	3.3(1.5)	M4~M12 rivet nut in Hex./Steel

Split type tool - Product Code Creator

A horizontal number line with 10 empty square boxes. A minus sign is placed after the 9th box. Below the line, two upward-pointing arrows are positioned under the 5th and 10th boxes.

length of hydraulic hose (1or3)

Features

- Light weight pistol handle easy to use and reach to inaccessible area.
- Designed to install a wide range of 3/8" blind fasteners also Pin & Collar Fasteners.
- Low operating hydraulic pressure design for more durable hydraulic sealing mechanism.
- Forged & heat treated aluminum alloy made hydraulic section for the best rigidity.
- Portable intensifier instead of high cost hydraulic power unit.
- Custom designs are welcome.
- 3M length hydraulic hose set is included.
- Nose assembly need to purchase separately.
- ZT4125S capable to set 3/8" C6L[®], Magna-Grip[®], Magna-Lok[®], Avdelok[®], Maxlok[®], Monobolt[®] & Avtainer[®] fasteners.



Model	Traction Power lbf(kgf)	Stroke Length inch(mm)	Handle Net Weight lbs(kgs)	Nosepieces	Max. Capacity
ZT4125S	9,039(4,100)	63/64(25)	3.86(1.75)	need to purchase separately	Max. 3/8"(9.5mm) lock bolt

C6L[®], Magna-Grip[®], Magna-Lok[®] is the registered trademark of Alcoa Fastening System & Rings.
Avdelok[®], Maxlok[®], Monobolt[®] & Avtainer[®] is the registered trademark of Stanley Engineered Fastening.

Features

ZIPP offers a range of standard fastener tools as well as high performance ZIPP hydraulic powerigs to complement the larger diameter fixed grip lock bolt fasteners is suitable for numerous assembly applications for multiple industries.

ZIPP installation equipment / tooling systems work with the fastener to pull and clamp the application together quickly and safely. A typical installation equipment system comprises a tool, nose assembly, hose set and powerig unit. The powerig drives the tool and the nose assembly provides the installation link between the fastener and the tool. Installation tools and nose assemblies are designed to install specific fastener types and diameters – the choice of the installation equipment system is determined by the fastener type, diameter, application and intended usage.

The majority of the fasteners in the system have been designed to meet or exceed SAE Grade 5 or ASTM A-325 and ISO (8.8) strength requirements, ensuring high clamp force, tensile and shear strength depending on the application.



ZT10
Standard
Installation Tool



ZV10
Standard
Installation Tool



ZT30
Standard
Installation Tool



ZV30
Standard
Installation Tool



ZT51
Standard
Installation Tool



ZV50
Standard
Installation Tool

Nose Assembly (to suit installation tool)	
ZT10-10NA	10mm (3/8") Fixed Grip Fastener
ZT10-10MGNA	10mm (3/8") Multi Grip Fastener
ZT30-13NA	13mm (1/2") Fixed Grip Fastener
ZT30-16NA	16mm (5/8") Fixed Grip Fastener
ZT30-19NA	19mm (3/4") Fixed Grip Fastener
ZT30-19BNA	19mm (3/4") Blind Bolt Fastener
ZT51-22NA	22mm (7/8") Fixed Grip Fastener
ZT51-25NA	25mm (1") Fixed Grip Fastener
ZT51-28NA	28mm (1-1/8") Fixed Grip Fastener

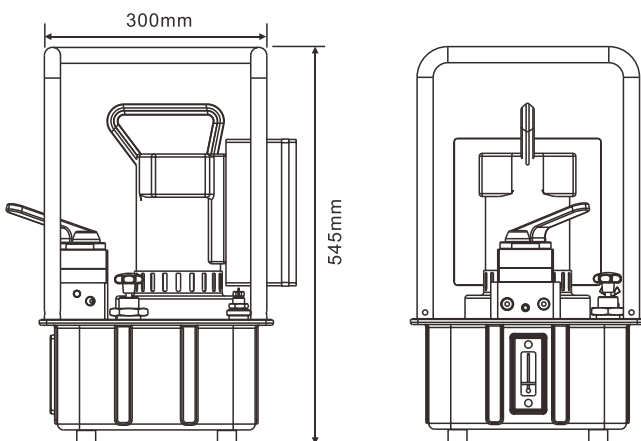
Model	Stroke inch(mm)	Pull Force Lbf(KN)	Pull Pressure PSI(MPa)	Return Pressure PSI(MPa)	Net Weight w/o Nose Assembly lbs(kgs)	Vibration m/sec
ZT10	1(25)	13,040(58)	8,000(55.2)	3,000(20.7)	7.72(3.5)	8.6
ZT30	1.6(41)	39,340(175)	8,000(55.2)	3,000(20.7)	17.6(8)	8.6
ZT51	2.56(65)	78,680(350)	8,000(55.2)	3,000(20.7)	40.78(18.5)	8.6
ZV10	0.98(25)	12,365(55)	7,400(51)	2,900(20)	7.7(3.5)	2.5
ZV30	1.6(41)	39,340(175)	7,400(51)	2,900(20)	15.3(6.9)	2.5
ZV50	2.17(55)	76,435(340)	7,400(51)	2,900(20)	29.8(13.5)	8.6



ZHEP-665

Hydraulic Electric Pump

- External adjustable pressure regulator.
- ZHEP-665TQ use with Hydraulic Torque Wrench.
- ZHEP-665TQH for use with hydraulic lock bolt tools.
- ZHEP-665TQJ use with Hydraulic lift applications.
- 3M(10ft) remote motor control.
- Stainless frame easy to carry.



Series

- Reservoir Capacity:8-20L
- Flow at rated pressure:11.3-0.9 L
- Motor Size:0.84kW (1-1/8 hp)
- Maximum Operating Pressure:700 bar



Custom build your Electric Pump

ZHEP-665 **TQJ** **1** **5** **1** **8** **4** **WOG**
0 1 2 3 4 5 6

O.Type

- TQ= use with Torque Wrench
- TQH=use with hydraulic lock bolt tools.
- TQJ= use in lift applications

1.Voltage

- 1=115V
- 2=230V

2.Hz

- 5=50Hz I 60Hz

3.Phase

- 1=1ph

4.Reservoir (Lx0.26=gal)

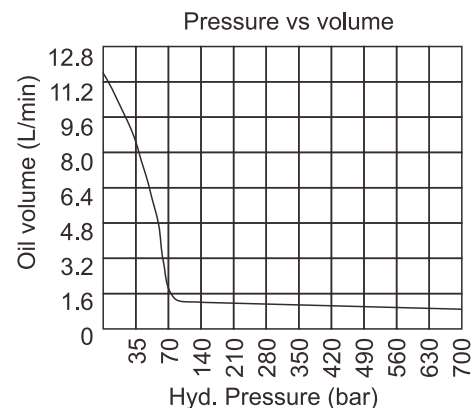
- 8=8L(2.1 gal)
- 20=20L(5.2gal)
- *User can order suitable reservoir.

5.Valve (just use in TQJ series)

- 3=Manual 3Way
- 4=Manual 4Way
- 7=Check Solenoid 3Way
- 8=Check Solenoid 4Way

6.Optional

- W=Castor wheel
- O=Cool system
- G=Pressure Gauge

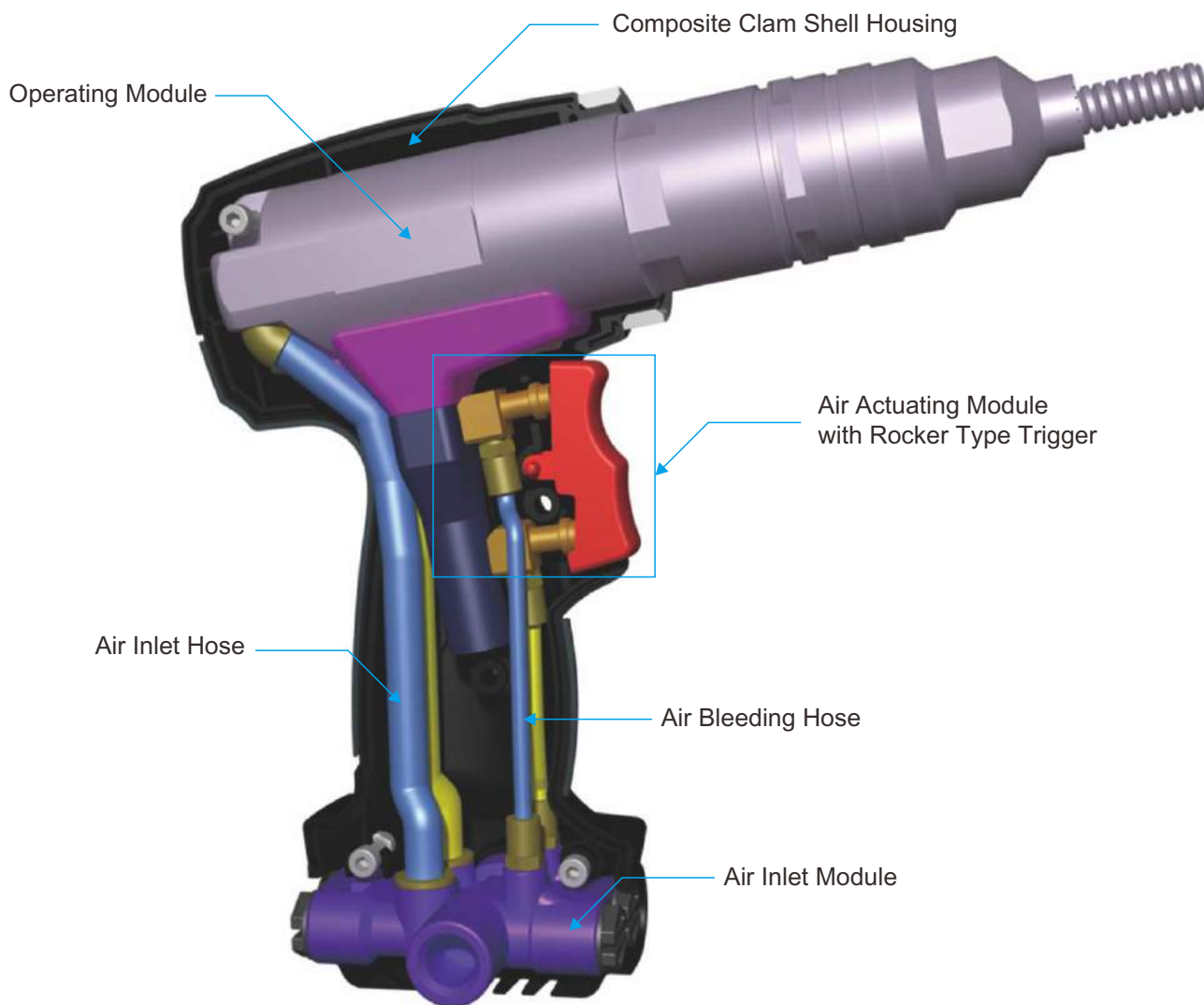


Model	Amp at 700bar A	Flow rate @230VAC(L/min)				Oil tank L	Usable Oil L	Weight With Oil lbs(kgs)
		0 bar	50 bar	350 bar	700 bar			
ZHEP-665	25/110V 10.7/230V	11.3	7.1	1.2	0.9	8	7	70.6(32)

Clam Shell Composite Housing

Features

- Designed with patented “Module units assembled in composite clam shell housing” for easy tool service.
- Ergonomic texture coated composite housing for operator’s comfort.
- Less friction loss along the air passage to increase tool power & performance.
- Module unit mechanism enables more common parts to be used in similar designed tools.
- Rocker type trigger and both left or right hand side air inlet for ease of operational control.



Patent pending in other countries



R.O.C.PAT.:
M306920 / 174032



P.R.C.PAT.:
ZL 2006 2 0131894.9



U.S.PAT.:
6,149,356



DEUTSCHLAND PAT.:
Nr.20 2007 007 127.2

Model number with "Q"
means equipped with
Quick Change Head.



ZRN106
ZRN106Q

w/Quick Change Head

Composite Air Rivet Nut Tool-M6

Optional Nose Assembly			
Size	B-Type (Screw-On)	Q-Type (Quick Change)	Model for other sizes:
M3	P/N:103800B	P/N:103800Q	ZRN103 or ZRN103Q
M4	P/N:104800B	P/N:104800Q	ZRN104 or ZRN104Q
M5	P/N:105800B	P/N:105800Q	ZRN105 or ZRN105Q
M6	P/N:106800B	P/N:106800Q	ZRN106 or ZRN106Q
#6-32	P/N:632800B	P/N:632800Q	ZRN163 or ZRN163Q
#8-32	P/N:832800B	P/N:832800Q	ZRN183 or ZRN183Q
#10-24	P/N:124800B	P/N:124800Q	ZRN124 or ZRN124Q
#10-32	P/N:132800B	P/N:132800Q	ZRN132 or ZRN132Q
1/4"-20	P/N:114800B	P/N:114800Q	ZRN120 or ZRN120Q

Model number with "Q"
means equipped with
Quick Change Head.



ZRN508
ZRN508Q

w/Quick Change Head

Composite Air Rivet Nut Tool-M8

Optional Nose Assembly			
Size	B-Type (Screw-On)	Q-Type (Quick Change)	Model for other sizes:
M6	P/N:106800B	P/N:106800Q	ZRN506 or ZRN506Q
M8	P/N:208800B	P/N:208800Q	ZRN508 or ZRN508Q
1/4"-20	P/N:114800B	P/N:114800Q	ZRN520 or ZRN520Q
5/16"-18	P/N:516800B	P/N:516800Q	ZRN518 or ZRN518Q

ZRN210
ZRN212



Composite Air Rivet Nut Tool-M10/M12

Optional Nose Assembly			
Size	B-Type (Screw-On)	Q-Type (Quick Change)	Model for other sizes:
M10	P/N:210800B	P/N:210800Q	ZRN210 or ZRN210Q
M12	P/N:212800B		ZRN212
1/2"-13	P/N:12C800B		ZRN213
1/2"-20	P/N:12F800B		ZRN220
3/8"-16	P/N:238800B	P/N:238800Q	ZRN216 or ZRN216Q
3/8"-24	P/N:38F800B		ZRN224

* There is ONLY one size of rivet head come along with each tool, please specify the model you require when ordering.

Model	Max. Rivet Nut Setting Capacity Round Rivet Nut(mm)	Free Speed R.P.M.	Net Weight lbs(kgs)	Avg. Air Cons. cu.ft/stroke	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Sound Pressure dBA	Vibration m/s ²
ZRN106	M6 Round/Steel	1,500	3.06(1.39)	9.9(280)	1/4	3/8(10)	86	<2.5
ZRN106Q	M6 Round/Steel	1,500	2.42(1.10)	9.9(280)	1/4	3/8(10)	86	<2.5
ZRN508	M8 Hex./All Materials	500	3.08(1.4)	9.9(280)	1/4	3/8(10)	86	<2.5
ZRN508Q	M8 Hex./All Materials	500	2.50(1.13)	9.9(280)	1/4	3/8(10)	86	<2.5
ZRN210	M10 Hex./All Materials	280	3.08(1.4)	9.9(280)	1/4	3/8(10)	86	<2.5
ZRN212	M12 Hex./Steel	280	3.08(1.4)	9.9(280)	1/4	3/8(10)	86	<2.5

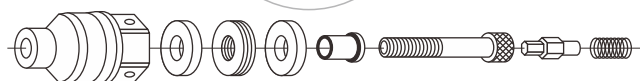
Features

- Powerful Precise Motor.
- Exclusive Quick Reversible Trigger.
- Handle Exhaust
- Lightweight
- Smooth, Direct Driver.



ZRN280 / ZRN500 / ZRN700 0.7HP

Aluminum Housing Air Rivet Nut Tool



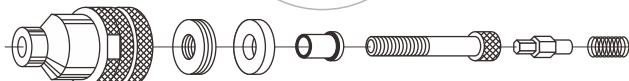
B type Nose Head

Metric System		
Optional Nose Assembly		
Size	B-Type (Screw-On)	Q-Type (Quick Change)
M3	P/N:103800B	P/N:103800Q
M4	P/N:104800B	P/N:104800Q
M5	P/N:105800B	P/N:105800Q
M6	P/N:106800B	P/N:106800Q
M8	P/N:208800B	P/N:208800Q
M10	P/N:210800B	P/N:210800Q



ZRN1600 0.7HP

Aluminum Housing Air Rivet Nut Tool



Quick Change type Nose Head

Imperial System		
Optional Nose Assembly		
Size	B-Type (Screw-On)	Q-Type (Quick Change)
#6-32	P/N:632800B	P/N:632800Q
#8-32	P/N:832800B	P/N:832800Q
#10-24	P/N:124800B	P/N:124800Q
#10-32	P/N:132800B	P/N:132800Q
1/4"-20	P/N:114800B	P/N:114800Q
5/16"-18	P/N:516800B	P/N:516800Q
3/8"-16	P/N:238800B	P/N:238800Q

* There is ONLY one size of rivet nut head come along with each tool, please specify the model you require when ordering.

Model	Max. Rivet Nut Setting Capacity Round Rivet Nut(mm)	Free Speed R.P.M.	Net Weight lbs(kgs)	Avg. Air Cons. cu.ft/stroke	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Sound Pressure dBA	Vibration m/s ²
ZRN280 (B or Q)	M10 Round / Alum.	280	2.87(1.3)	5(141)	1/4	3/8(10)	86	<2.5
ZRN500 (B or Q)	M6 Hex. / All Materials	500	2.87(1.3)	5(141)	1/4	3/8(10)	86	<2.5
ZRN700 (B or Q)	M5 Round / Alum.	720	2.87(1.3)	5(141)	1/4	3/8(10)	86	<2.5
ZRN1600 (B or Q)	M4 Round / Steel	1,700	2.2(1)	5(141)	1/4	3/8(10)	86	<2.5

Features

- Can be used in areas with restricted operator space
- Available with in-line handle and top or bottom hose configuration - optimized ergonomic performance for improved productivity
- Average cycle time of less than 2 seconds - increased productivity - up to 1500 fasteners per hour
- High capacity, magazine fed fasteners - reduced component handling and subsequent spillage
- Lightweight construction and zero action recoil - reduced operator fatigue
- Long life, self-priming intensifier - consistent actuation and hence joint formation
- Long reach barrel - can be used in many difficult access applications
- Low maintenance hand tool - productive time is maximized - no requirement for specialist maintenance training
- Robust & durable construction - suitable for most industrial environments



ZT0430
Speed Riveter

This tool is designed for Speed Rivet as Shown on the tables below.

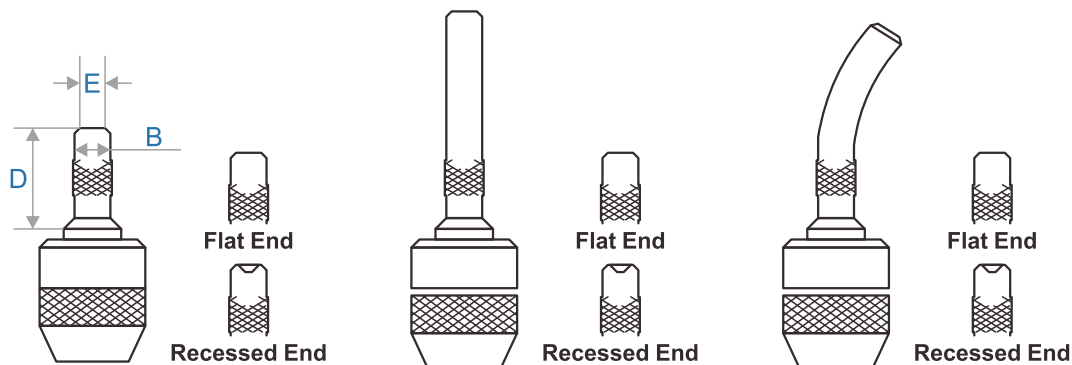
	2.4mm	3.0mm	3.5mm	3.2mm	4.0mm	4.8mm
Speed Rivet	Aluminum, Brass	N/A	N/A	Aluminum, Steel, Brass, Stainless	Aluminum, Steel, Brass, Stainless	Aluminum, Steel, Brass, Stainless
Speed Chovet	Aluminum, Brass	N/A	N/A	Aluminum, Steel	Aluminum, Steel	Aluminum, Steel
Speed Screw	N/A	Steel	Steel	N/A	N/A	N/A

Model	Air Supply Pressure Minimum/Maximum bar	Free Air Volume Required bar(liters)	Stroke inch(mm)	Pull Force lbf(kgf)	Cycle Time Approximately	Noise Level Less than db(a)	Net Weight lbs(kgs)	Vibration Less than m/s ²
ZT0430	5~7	5.1(2.6)	1-3/16(30)	874(389)	1second	70	2.38(1.08)	2.7

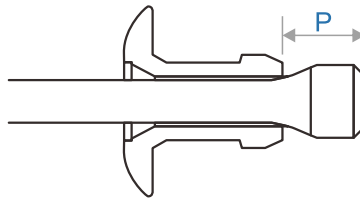
*Overall Length 475mm *Intensification Ratio: 30:1

Products and specifications subject to change without prior notice 57

Front Jaws



Rivet Size	Item#	Size & End form	Dimensions(mm)			M/F Spring
			B	D	E	
3.2	ZNJ-4001	Standard Flat	11.5	30.3	5.5	Standard
	ZNJ-4002	Standard Recessed	11.5	30.3	8.5	
	ZNJ-4003	Long Flat	9.6	59.5	5.5	Long
	ZNJ-4004	Long Recessed	9.6	59.5	8.5	
	ZNJ-4005	Long Curved Flat	9.6	59.5	5.5	
	ZNJ-4006	Long Curved Recessed	9.6	59.5	8.5	
4.0	ZNJ-5001	Standard Flat	12.5	30.3	7.0	Standard
	ZNJ-5002	Standard Recessed	12.5	30.3	10.5	
	ZNJ-5003	Long Flat	12.5	59.5	7.0	Long
	ZNJ-5004	Long Recessed	12.5	59.5	10.5	
	ZNJ-5005	Long Curved Flat	12.5	59.5	7.0	
	ZNJ-5006	Long Curved Recessed	12.5	59.5	10.5	
4.8	ZNJ-6001	Standard Flat	14.5	30.3	10.0	Standard
	ZNJ-6002	Standard Recessed	14.5	30.3	12.5	
	ZNJ-6003	Long Flat	14.5	60.5	10.0	Long
	ZNJ-6004	Long Recessed	14.5	60.5	12.5	
	ZNJ-6005	Long Curved Flat	14.5	60.5	10.0	
	ZNJ-6006	Long Curved Recessed	14.5	60.5	12.5	



MANDRELS FOR SPEED RIVET

Rivet size	Hole size	Mandrel Item#	Mandrel size	P	M.F Spring #
2.4mm(3/32inch) Aluminum, Brass	2.4(As recommended)	ZM-0183	1.83	3.02	ZS-3001
	2.4+0.1	ZM-0193	1.93	3.12	
	2.4+0.2	ZM-0201	2.01	3.20	
3.2mm(1/8inch) Aluminum, Steel, Brass	3.3(As recommended)	ZM-0234	2.34	3.05	ZS-4001
	3.3+0.13	ZM-0246	2.46	3.20	
	3.3+0.25	ZM-0259	2.59	3.38	
4.0mm(5/32inch) Aluminum, Steel, Brass	4.05(As recommended)	ZM-0279	2.79	3.45	ZS-5001
	4.05+0.13	ZM-0292	2.92	3.61	
	4.05+0.25	ZM-0305	3.05	3.78	
4.8mm(3/16inch) Aluminum, Steel, Brass	4.89(As recommended)	ZM-0358	3.58	3.99	ZS-6001
	4.89+0.13	ZM-0371	3.71	4.17	
	4.89+0.25	ZM-0384	3.84	4.32	
3.2mm(1/8inch) Stainless Steel	3.3(As recommended)	ZM-S249	2.49	2.95	ZS-4001
	3.3+0.13	ZM-S262	2.62	3.10	
4.0mm(5/32inch) Stainless Steel	4.05(As recommended)	ZM-S305	3.05	3.20	ZS-5001
	4.05+0.13	ZM-S318	3.18	3.35	
4.8mm(3/16inch) Stainless Steel	4.89(As recommended)	ZM-S389	3.89	3.81	ZS-6001
	4.89+0.13	ZM-S401	4.01	3.96	

MANDRELS FOR SPEED CHOVET

2.4mm(3/32inch) Aluminum, Brass	2.4(As recommended)	ZCM-0184	1.84	5.00	ZS-3001
	2.4+0.04	ZCM-0188	1.88	5.00	
	2.4+0.09	ZCM-0193	1.93	5.00	
3.2mm(1/8inch) Aluminum, Steel, Brass	3.3(As recommended)	ZCM-0234	2.34	7.11	ZS-4001
	3.3+0.13	ZCM-0249	2.49	7.11	
	3.3+0.25	ZCM-0259	2.59	7.11	
4.0mm(5/32inch) Aluminum, Steel, Brass	4.05(As recommended)	ZCM-0272	2.72	8.20	ZS-5001
	4.05+0.13	ZCM-0292	2.92	8.20	
	4.05+0.25	ZCM-0310	3.10	8.20	
4.8mm(3/16inch) Aluminum, Steel, Brass	4.89(As recommended)	ZCM-0335	3.35	9.90	ZS-6001
	4.89+0.13	ZCM-0371	3.71	9.30	
	4.89+0.25	ZCM-0396	3.96	9.30	

Features

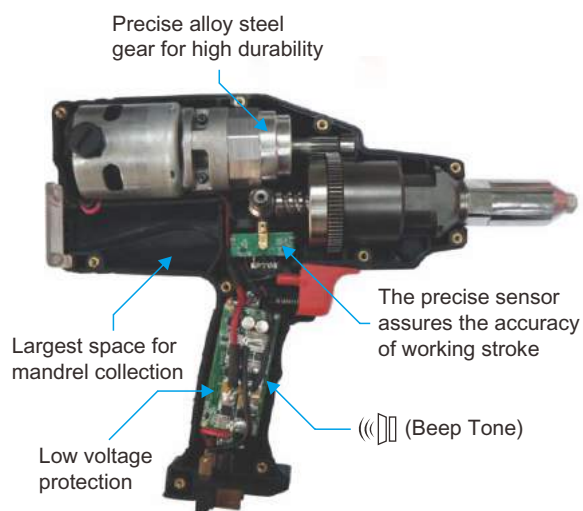
- Ball screw mechanism provides highest power.
- Precision IC board control.
- Alloy steel gear box for high durability.
- Easy access replaceable carbon brushes for longer motor life.
- Short cycle times at full stroke.
- Mandrel collector means no more mandrels on floor
- High capacity Li-ion battery pack delivers longer run-time.
- Balanced, ergonomic handle.

Applications

- Boat
- Construction
- Display shelves
- Furniture
- Heating, Air Conditioning
- Lighting fixtures
- Restaurant equipment
- Signs
- Trailers, Cargo container
- Vending machines



ZCR920BS



Li-ion Battery Pack	Charger	Power cord (for charger use)		
				
BB920C-340	B84B	E86B-UL	E86B-VD	
Description	Description			
14.4V 4.0A.h	Input: 100~240 VAC Output: 10.8~14.4 VDC for Ni-MH & Li-ion	E86B-AS	E86B-UK	
Size (L x W x H)	Weight	Part No.	Description	Weight
108 x 78 x 70mm	0.51kg (1.12lb)	E86B-UL	for USA region	62g (0.13lb)
Charger Time		E86B-VD	for Europe region	79g (0.17lb)
65min		E86B-AS	for Australia region	105g (0.23lb)
Weight		E86B-UK	for England region	151g (0.33lb)
0.60kg (1.32lb)				

Model	Voltage VDC	Motor Type	Rivet capacity	Stroke length inch(mm)	Traction power lbs(N)	Weight with Li-ion battery pack lbs(kgs)	Battery pack	Charge Time
ZCR920BS	14.4	Replaceable carbon brush	2.4~4.8mm all material	51/64(20)	2,030(9,000)	5.25(2.39)	Li-ion/4.0A.h	approx 60 mins

Features

- Ball screw mechanism provides highest power.
- Precision IC board control.
Alloy steel gear box for high durability.
- Brushless motor reduce the maintenance cost.
- Short cycle times at full stroke.
- Mandrel collector means no more mandrels on floor
- High capacity Li-ion battery pack delivers longer run-time.
- Balanced, ergonomic handle.

Applications

- Boat
- Construction
- Display shelves
- Furniture
- Heating, Air Conditioning
- Lighting fixtures
- Restaurant equipment
- Signs
- Trailers, Cargo container
- Vending machines



ZCR180BL

Optional

Li-ion Battery Pack	Charger	Power cord (for charger use)		
				
BB180C-340	B84192B	E86B-UL	E86B-VD	
Description	Description			
18V 4.0A.h	Input: 100~240 VAC Output: 18~19.2 VDC for Ni-MH & Li-ion	E86B-AS	E86B-UK	
Size (L x W x H)	Weight	Part No.	Description	Weight
127 x 78 x 70mm	0.51kg (1.12lb)	E86B-UL	for USA region	62g (0.13lb)
Charger Time		E86B-VD	for Europe region	79g (0.17lb)
65min		E86B-AS	for Australia region	105g (0.23lb)
Weight		E86B-UK	for England region	151g (0.33lb)
0.64kg (1.41lb)				

Model	Voltage VDC	Motor Type	Rivet capacity	Stroke length inch(mm)	Traction power lbs(N)	Weight with Li-ion battery pack lbs(kgs)	Battery pack	Charge Time
ZCR180BL-2	18	Brushless motor	2.4~6.4mm all material	51/64(20)	2,900(13,000)	4.63(2.1)	Li-ion 2.0A.h	approx 40 mins
ZCR180BL-4	18	Brushless motor	2.4~6.4mm all material	51/64(20)	2,900(13,000)	5.18(2.35)	Li-ion 4.0A.h	approx 80 mins

Features

- Brushless motor running without spark (safety using in oily environment)
- Brushless motor life time longer than Brush motor 6~10 times
- Brushless motor do not have electromagnetic interference
- Extend the battery pack life time to 2-3 times
- Dormant function to save power
- Battery power indication
- Overloading protection
- High efficient ventilation
- Easy release slide battery pack
- LED light indicator
- Double injection housing



ZCD18BL

18V Brushless Cordless Drill Driver Set

- 3-Speed setting
- 2 speed gear transmission with selection switch
- 16 torque settings 15 Drive + 1 Drill
- 3/8" (9.5mm) / 1/2" (13mm) Keyless chuck
- Variable speed reversible switch with electric brake
- Fully metal gearbox
- Ergonomic grip



ZCID18BL

18V Brushless Cordless Impact Driver Set

- 3 Stage impact power selection
- Automatic shut off power function
- 1/4" (6.35mm) hex drive shank chuck
- Variable speed reversible switch with electric brake
- High output impact transmission
- Fully metal gearbox
- Ergonomic grip



ZCR18BL

18V Brushless Cordless Rivet Tool Set (6.4mm)

- Automatic reversing
- Set blind rivets up to 6.4mm (1/4") Alum. blind rivet
- 2-Speed adjustment
- Stroke of 26mm
- pulling force 1900lb (8500N)
- Fully metal gearbox
- Ergonomic grip



ZCRN18BL

18V Brushless Cordless Rivet Nut Tool Set (M10)

- Automatic reversing
- Set M5, M6, M8, M10 rivet nut, max. M10 Round-Aluminum rivet nut.
- Patented pull mechanism
- 2-Speed adjustment
- Fully metal gearbox
- Ergonomic grip



ZCSFD18BL

18V Brushless Cordless Screw Fastening Driver Set

- 3 Stage impact power selection
- Drive 1"-2 3/16" (25mm~55mm) collated screws
- Variable speed reversible switch with electric brake
- Easy-to-drive making on adjustable nosepiece
- Depth-of drive adjustment for flush drive or countersink

Optional

Li-ion Battery Pack



BL18-20LI

Description

18V 2.0Ah Li-ion

Size (L x W x H)

119 x 76 x 46mm

Charger Time

105min

Weight

0.35kg (0.77lb)

Charger



BL18C-20LI

Description

Input: AC100~240V 50/60 Hz
Output: DC 24V 1A
Charging Time 105min

Weight

0.37kg (0.85lb)

Power cord (for charger use)



T86B-UL



T86B-VD

Part No.	Description	Weight
T86B-UL	for USA region	126g (0.13lb)
T86B-VD	for Europe region	143g (0.17lb)

Model	Voltage DC	Unload speed RPM	Chuck / Shaft	Max torque ft-lb(NM)	Weight with Li-ion battery pack lbs(kgs)	Housing
ZCD18BL	18	L 0~500/H 0~1200	3/8" (9.5mm) 1/2" (13mm) Keyless chuck	0.74~9.9(1~13.4)	3.26(1.48)	PA6 + GF 30%
ZCID18BL	18	0~2700	1/4" (6.35mm) Hex drive	295(400)	3.04(1.38)	PA6 + GF 30%
ZCR18BL	18	0~2400	—	—	3.75(1.7)	PA6 + GF 30%
ZCRN18BL	18	L 0~370 H 0~1120	—	—	3.35(1.52)	PA6 + GF 30%
ZCSFD18BL	18	2500~3200	Auto feed mechanism	—	4.19(1.9)	PA6 + GF 30%



[Includes]

- Tool X 1
- Battery X 1
- Charger X 1
- Blow Molded Case X 1

ZIW1802

1/2" Cordless Impact Wrench - 18V Brush motor

- All metal gear and impact mechanism
- Max. torque 600 N.M.- 443 FT-LB
- Build-in LED illuminates
- Variable speed with elec feedback for increased power and control
- Soft grip handle
- External changeable carbon brush
- 4.0Ah battery (Li-Ion)



[Includes]

- Tool X 1
- Battery X 1
- Charger X 1
- Blow Molded Case X 1

ZRT1820

3/16" Cordless Riveter - 18V Brush motor

- Ergonomic and light weight
- 21mm stroke
- Broken mandrel self reject mechanism
- Build-in LED illuminates
- Variable speed with elec feedback for increased power and control
- Soft grip handle
- External changeable carbon brush
- 2.0Ah battery (Li-Ion)

Optional

Li-ion Battery Pack		Charger	Power cord (for charger use)		
					
ZB1820	ZB1840	ZBC1801	E86B-UL	E86B-VD	
Description	Description	Description			
18V 2.0A.h	18V 4.0A.h	Input: 100~220 VAC Output: 18VDC/3A for Ni-MH & Li-ion	E86B-AS	E86B-UK	
Size (L x W x H)	Size (L x W x H)	Weight	Part No.	Description	Weight
Charger Time	Charger Time	0.5kg (1.1lb)	E86B-UL	for USA region	62g (0.13lb)
40min	80min		E86B-VD	for Europe region	79g (0.17lb)
Weight	Weight		E86B-AS	for Australia region	105g (0.23lb)
0.4kg (0.88lb)	0.6kg (1.32lb)		E86B-UK	for England region	151g (0.33lb)

Model	Voltage DC	Max. Torque ft-lb(NM)	Unload speed RPM	I.P.M	Weight with Li-ion battery pack lbs(kgs)	Capacities inch(mm)
ZIW1802	18	443(600)	0-1,800	2,400	5.73(2.6)	1/2(12.7)

Model	Voltage DC	Rivet capacity	Stroke length inch(mm)	Traction power lbs(N)	Weight with Li-ion battery pack lbs(kgs)
ZRT1820	18	4.8mm all materials	0.83(21)	2,900(13,000)	5.73(2.6)

Certified Cordless Screwdriver Evolution-One According to ISO 5359, VDI / VDE 2647



Clutch

- Two-Phase Clutch Design for Higher CMK
- One Million Cycle Maintenance Free

MOTOR

- Brushless, Maintenance Free
- New Patented Motor Accelerator For Better Tool Performance & The Enhancement of Efficiency



ERGONOMICS

- Anti-Slip Clamping Grip for Safe Handling
- LED Job Light
- Perfectly Balanced Tool

PCB Board

- Trouble-Shooting Display

BATTERY

- New Li-Ion Battery: Lighter & Compact
- Power Saving Mode: ECO, Normal, Sport For Longer Life and More Productive Use
- Long-Life Battery: 10.8V/4.0Ah (Order No. LBP32-02)



Certified Cordless Screwdriver Evolution-One

According to ISO 5393, VDI / VDE 2647

Evolution One Series			The bits specification: 6.35 mm(1/4" Hex) For Industrial Use.		Specification are subject to change without prior notice.
Model	Torque Range Nm	Idle Speed r.p.m.	Voltage	Weight w/2.0Ah battery kg	CMK Value According to VDI 2647
ZBCP051500	1.0-5.0	320-1500	10.8V	1.3	CMK>2.2±10%
ZBCP061200	1.0-6.0	320-1200	10.8V	1.3	CMK>2.2±10%
ZBCP080850	1.5-8.0	120-850	10.8V	1.3	CMK>2.2±10%
ZBCP120300	1.5-12.0	120-300	10.8V	1.3	CMK>2.2±10%
ZBCP120400	2.0-12.0	110-400	10.8V	1.3	CMK>2.2±10%
ZBCP140300	2.0-14.0	110-300	10.8V	1.3	CMK>2.2±10%
New Evolution One Series			The bits specification: 6.35 mm(1/4" Hex) For Industrial Use.		Specification are subject to change without prior notice.
Model	Torque Range Nm	Idle Speed r.p.m.	Voltage	Weight w/2.0Ah battery kg	CMK Value According to VDI 2647
ZBCP090900	1.5-9.0	120-900	10.8V	1.3	CMK>2.5±10%
ZBCP120750	2.0-12.0	110-750	10.8V	1.3	CMK>2.5±10%

[Custom-made] Customized models available upon request. Please contact us for further information.

More Features of New Evolution One

- New Patented Magnetic Levitation Motor
- Non-Vibration Bit Holder for A More Precise and Sensitive Tightening Process
- High Accuracy: CMK Value >2.5 ± 10%
- CMK Test Report Included(Dynamic)
- USB Interface For Parameter Setting on Motor
- New PCB-Board: Diagnostic & Report

DC IN Model Are Also Available

Optional

Li-ion Battery Pack		DC-IN	Charger
			
LBP31-02	LBP32-02	CH002	6C1001
Description	Description		Description
10.8V 2.0Ah	10.8V 4.0Ah		Input: 100~240 VAC
Weight	Weight		Charge Time: 60min
265g	440g		
USB KIT		Bits	Power cord (for charger use)
			
E-6C1011	Order No. DH Series High Quality & HRC 67		
Color Ring		Torque Adjusting Ring	
			
5L2023		5L2001	
Hook		Belt Hook	
			
E-HK001		#The Battery Is Not Included	
		7Q5103	
			Part No.
			Description
			CH002-02
			for USA region
			CH002-03
			for India (Big) region
			CH002-04
			for Europe region
			CH002-05
			for UK region
			CH002-06
			for Australia region
			CH002-07
			for India (Small) region
			CH002-08
			for USA region

Features

- Brush-less motor and no external power supply.
- Available in 100~120V & 220~240V.
- Easy to operate lever to control of motor speed.
- on/off switch, for easy and safe handling.
- Longer body enables optional two-hand grip.
- Brush-less motor means no need to change brushes, less down time.



Model	Power W	Orbit inch(mm)	Size of pad inch(mm)	Max. Speed rpm	Voltage main supply VAC	Weight Kg	Plug Type
ZES-6DC22	350	3/16(5)	6(150)	2,000~10,000	220~240	0.92	Please specify when ordering

Features

- Automatic syncs by both air tool and power tool.
- Lightweight and Powerful.
- Triple Filtration System.
- Light weight composite housing design.
- Use for both Electric & Air sanders.
- Two types startup control: manual or automatic startup.
- Speed adjustment for various sanding application.
- Ideal for wood furniture industry & automotive body shops.



ZVC5111ES

Industrial Vacuum Cleaner with Rack

- LxWxH: 640x465x1290mm



[Accessories]

- 5M length vacuum & air hose set X 1
- Replaceable Filter X 1
- Dust collection bag X 1



ZVC5111E

Industrial Vacuum Cleaner

- LxWxH: 640x465x500mm

* Please specify the type of plug when ordering.

Model	Voltage	Power Consumption W	Max Vacuum mmH2O	Air Flow m ³ /min	Drum Capacity L	Weight Kg
ZVC5111ES	220~240V	1200	2450	2.9	40	24.5
ZVC5111E	220~240V	1200	2450	2.9	40	16

"C" Yoke Riveters

Features

- Specially designed for airplane construction to ensure fast, economical riveting where two-man operation is impractical.
- Features strong, steady, silent squeeze action, which is easily controlled for a large variety of rivets.
- Ideal for dimpling, punching, stamping and pressing. Widely used for truck, bus and automotive applications.
- Extra powerful, portable tandem cylinder also available with double the compressive force for larger riveting capacity.



ZCR030



ZCR060

Model	Rivet Capacity Diameter		Standard Yoke Dimensions		Max Force lb(KN)	Set Holder		Overall Length inch(mm)	Weight lbs(kgs)
	Alum	Steel	Reach	Gap		Max Travel	Stroke at Max Power		
ZCR030	1/8(3.2)	3/32(2.4)	1-1/2(38.1)	11/16(17.45)	3,000(13.35)	9/16(14.27)	0.05(1.3)	10-1/4(260.35)	4.5(2.04)
ZCR060	3/16(4.8)	5/32(4)	1-1/2(38.1)	11/16(17.45)	6,000(26.7)	9/16(14.27)	0.05(1.3)	14(355.6)	5.4(2.49)

Note: Please specify the model no. With CXX you may require while ordering.

Applications

CP214 Compatible Yoke



C030C15



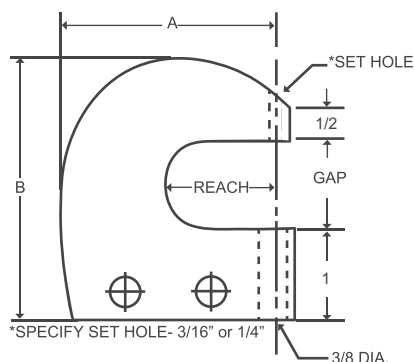
C030C30



C030C40



C030L25
(Longeron Yoke)



Model	Reach	Gap	"A"	"B"
C030C15	1.5"	1-1/4	3-1/4	3-3/4
C030C30	3"	1-1/4	4-3/4	3-3/4
C030C40	4"	1-1/4	6-1/4	3-3/4
C030L25	2.5"	1-1/4	4	4

“Alligator” Yoke Riveters

Features

- For squeezing a large variety of size and type of rivets.
- Strong squeeze action is easily controlled to provide uniformity and accuracy of work.
- Ideally used for dimpling, punching and pressing.
- Extra powerful, portable tandem cylinder also available with double the compressive force for large riveting capacity.



ZCR030A15 Single Cylinder



ZCR060A15 Tandem Cylinder



ZCR030A30 Single Cylinder



ZCR060A30 Tandem Cylinder

Model	Rivet Capacity Diameter		Standard Yoke Dimensions Reach	Max Force lb(KN)	Set Holder		Overall Length inch(mm)	Weight lbs(kgs)
	Alum	Steel			Max Travel	Stroke at Max Power		
ZCR030A15	1/8(3.2)	3/32(2.4)	1-1/2(38.1)	3,000(13.35)	5/8(15.9)	0.05(1.3)	9-3/16(230)	3.75(1.7)
ZCR030A30	3/32(2.4)	1/16(1.6)	3(76.2)	1,800(8)	3/4(19.05)	0.05(1.3)	10-3/4(270)	4.5(2.1)
ZCR060A15	3/16(4.8)	5/32(4)	1-1/2(38.1)	6,000(26.7)	5/8(15.9)	0.05(1.3)	11-3/16(280)	4.75(2.2)
ZCR060A30	1/8(3.2)	3/32(2.4)	3(76.2)	4,100(18.24)	3/4(19.05)	0.05(1.3)	13-1/2(340)	5.5(2.5)



A15



A30

Model	Reach	Gap	Closed Height
A15	1.54"	0.89"	7/8"
A30	3"	0.89"	7/8"

Features

- High quality industrial grade compression rivet squeezers, for the installation of solid rivets.
- Compact size and lighter in weight compare to current pneumatic squeezers on the market.
- CONSTANT FORCE over the entire stroke range.
- Built from high quality aircraft grade materials and features held to close tolerances, for years of dependable operation.
- The reduction in weight and constant force decreases operator fatigue, and improves the quality of every riveting work.



Commercial users of these Squeezers include:

AIRBUS
ALCOA
BARNES AEROSPACE
BEECHCRAFT
BOEING AIRCRAFT
CANADA NATIONAL DEFENCE
DELTA AIRLINES
GE AIRCRAFT ENGINES
HONDA AIRCRAFT
KOREAN AEROSPACE
LODE KING INDUSTRIES

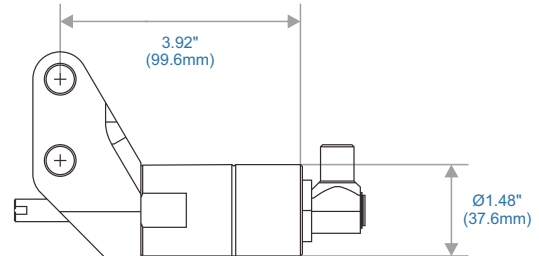
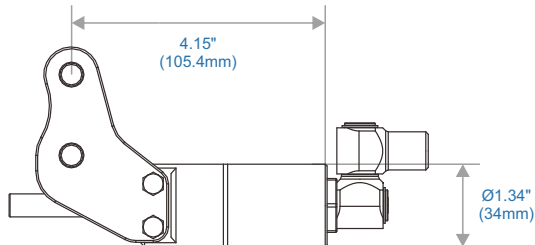
MUSCO SPORTS LIGHTING
NORTHROP GRUMMAN
ORENDA AEROSPACE
ROLLS ROYCE - UK
ROLLS ROYCE - US
SCHILLING ROBOTICS
SPIRIT AEROSYSTEMS
UTC AEROSPACE SYSTEMS
U.S. ARMY
U.S. AIR FORCE
Evergreen Aviation Precision Corp. (EGAP)



Z3000C
3K FORCE



Z3500C
3.5K FORCE



ZPI-9009

Pneudraulic Intensifier



ZPI-11016

Pneudraulic Intensifier



Z3390-6

6'(1.8m) Hydraulic Hose Set

Z3390-8

8'(2.4m) Hydraulic Hose Set

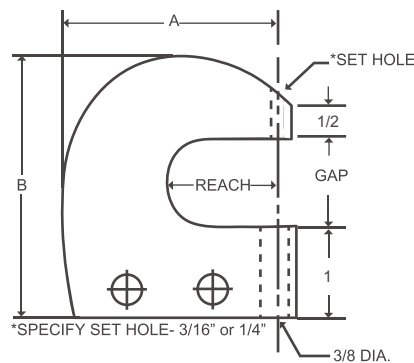
Z3390-10

10'(3m) Hydraulic Hose Set



Z4F210G

Foot Pedal, Guarded



CP214 Compatible Yoke

Model	Reach	Gap	"A"	"B"
C030C15	1.5"	1.25"	3.25"	3.75"
C030C30	3"	1.25"	4.75"	3.75"
C030C40	4"	1.25"	6.25"	3.75"
C030L25	2.5"	1.25"	—	4

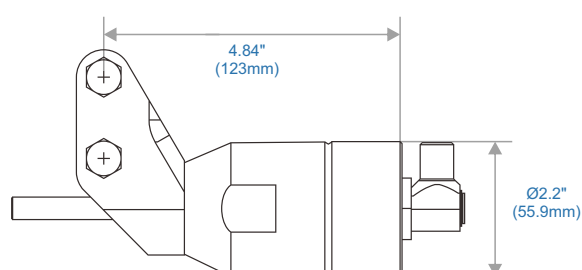
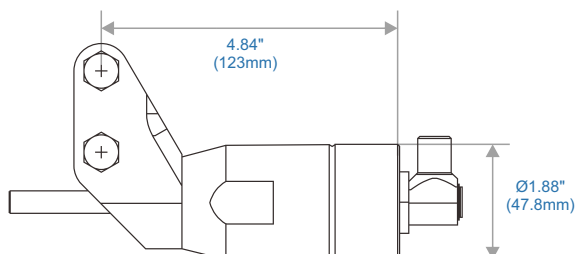
Squeezer Model	Rivet Capacity Diameter		Fluid Disp Required in ³ (cc)	Force At Normal Hyd Pressure Lbf (KN)	Hydraulic Pressure		Rivet Set (compression Pin) Travel inch(mm)	Weight (no Yoke) lb(Kg)
	Alum	Steel			Normal psi (MPa)	MAX psi (MPa)		
Z3000C	1/8(3.2)	3/32(2.4)	0.39(6.4)	2,690(11.9)	3,500(24.1)	4,500(31)	0.5(12.7)	1.05(0.47)
Z3500C	5/32(4)	1/8(3.2)	0.55(9)	3,480(15.5)	3,500(24.1)	4,500(31)	0.55(14)	1.25(0.56)
C-Yoke Squeezer System		Contents included						
Z3000CK-0		Z3000C+ZPI-9009 3K SQUEEZER SYSTEM, W/O YOKE						
Z3500CK-0		Z3500C+ZPI-11016 3.5K SQUEEZER SYSTEM, W/O YOKE						



Z6000C
6K FORCE



Z9000C
9K FORCE



ZPI-15047F
Pneudraulic Intensifier



Z3390-6
6'(1.8m) Hydraulic Hose Set
Z3390-8
8'(2.4m) Hydraulic Hose Set
Z3390-10
10'(3m)Hydraulic Hose Set



Z4F210G
Foot Pedal, Guarded

CP214 Compatible Heavy Duty Yoke



Z3028-1
1.5" Reach HD Yoke



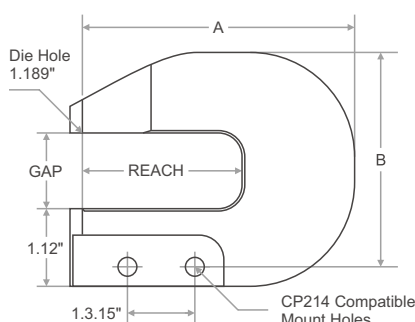
Z3028-3
3" Reach HD Yoke



Z3028-2
2" Reach HD Yoke

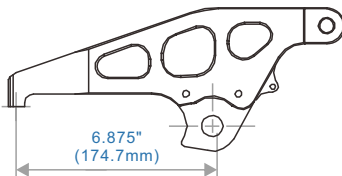


Z3028-4
4" Reach HD Yoke



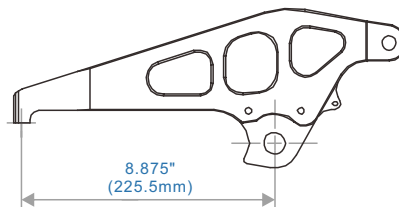
Model	Reach	Gap	"A"	"B"
Z3028-1	1.32"	1.5"	3.23"	3.72"
Z3028-2	2.07"	1.5"	4.23"	4.22"
Z3028-3	3.07"	1.5"	5.23"	4.22"
Z3028-4	4.07"	1.5"	6.35"	4.22"

Squeezer Model	Rivet Capacity Diameter		Fluid Disp Required in ³ (cc)	Force At Normal Hyd Pressure Lbf (KN)	Hydraulic Pressure		Rivet Set (compression Pin) Travel inch(mm)	Weight (no Yoke) lb(Kg)
	Alum	Steel			Normal psi (MPa)	MAX psi (MPa)		
Z6000C	3/16(4.8)	5/32(4)	0.97(15.9)	6,185(27.5)	3,500(24.1)	4,500(31)	0.55(14)	1.72(0.78)
Z9000C	1/4(6.4)	3/16(4.8)	0.32(21.6)	8,420(37.4)	3,500(24.1)	4,500(31)	0.55(14)	2(0.91)
C-Yoke Squeezer System		Contents included						
Z6000CK-0		Z6000C+ZPI-15047F 6K SQUEEZER SYSTEM, W/O YOKE						
Z9000CK-0		Z9000C+ZPI-15047F 9K SQUEEZER SYSTEM, W/O YOKE						



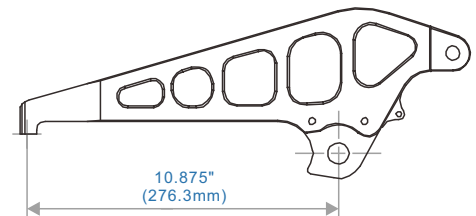
Z9000A

6" Alligator Squeezer



Z7000A

8" Alligator Squeezer



Z5000A

10" Alligator Squeezer



ZPI-15047F

Pneudraulic Intensifier



Z3390-6

6'(1.8m) Hydraulic Hose Set

Z3390-8

8'(2.4m) Hydraulic Hose Set

Z3390-10

10'(3m) Hydraulic Hose Set



Z4F210G

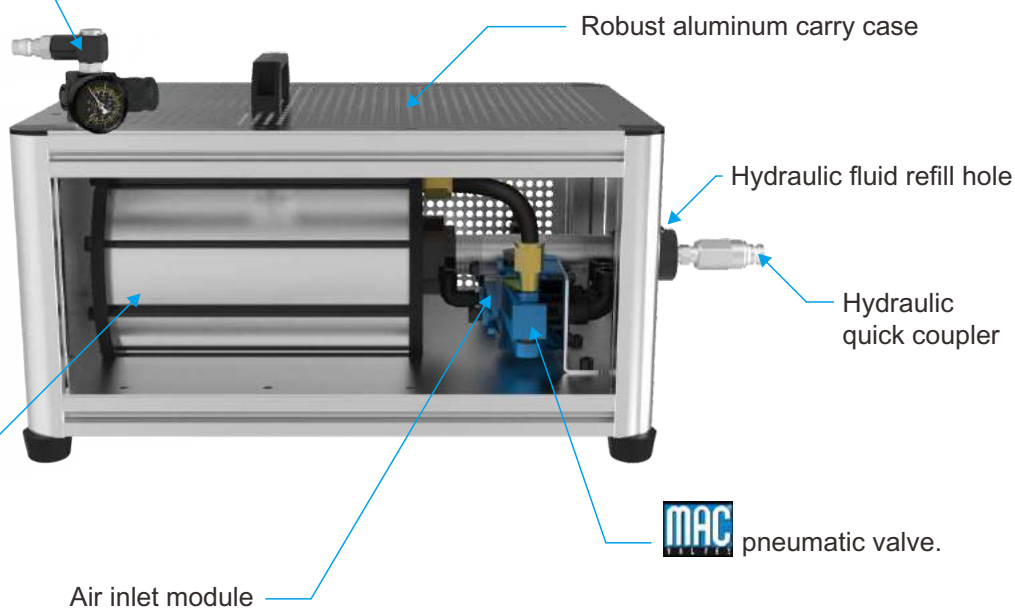
Foot Pedal, Guarded

Alligator Model	Rivet Capacity Diameter		Fluid Disp Required in³ (cc)	Force At Normal Hyd Pressure Lbf (KN)	Hydraulic Pressure		Weight lbs(kgs)
	Alum	Steel			Normal psi (MPa)	MAX psi (MPa)	
Z9000A	1/4(6.4)	3/16(4.8)	1.99(32.6)	9,021(40.1)	3,500(24.1)	4,500(31)	13.4(6.1)
Z7000A	1/4(6.4)	3/16(4.8)	1.68(27.5)	6,988(31)	3,500(24.1)	4,500(31)	15.2(6.9)
Z5000A	3/16(4.8)	5/32(4)	1.68(27.5)	5,073(22.5)	3,500(24.1)	4,500(31)	17.4(7.9)
Alligator System	Contents included						
Z9000AK	Z9000A 6" ALLIGATOR+ZPI-15047F INTENSIFIER						
Z7000AK	Z7000A 8" ALLIGATOR+ZPI-15047F INTENSIFIER						
Z5000AK	Z5000A 10" ALLIGATOR+ZPI-15047F INTENSIFIER						

Features

- The ZIPP Pneudraulic Intensifier is designed to operate ZIPP Rivet C-Squeezers, such as the Model Z6000C (6K force) and Model Z9000C (9K force), as well as the Model Z5000A, Z7000A, and Z9000A Alligator Squeezers. It can also operate other devices requiring a small volumetric output of high pressure fluid. The unit is a “one shot” intensifier, meaning it will fully displace the hydraulic fluid with one stroke of the air piston in the cylinder. These types of intensifiers tend to be faster than pumping type air operated intensifiers of similar size. These models also allows for “feathering” of the riveter (subtle positioning of the squeezer rivet set), when controlled by a foot operated valve.
- Optional electrical module. upgrade are available upon request.
- Portable intensifier instead of high cost hydraulic power unit.
- Low operating hydraulic pressure design for more durable hydraulic sealing mechanism.
- Custom design are welcome.
- Before using these Intensifier, please fully read and understand this operation manual.

Swivel air inlet with pressure regulator



Flexible air cylinder design to meet customer's requirements

Air inlet module

MAC pneumatic valve.

Model	Max. Inlet Air Pressure psi(kg/cm ²)	Max. Output Hydraulic Pressure psi (Kg/cm ²)	Delivered Hyd. Fluid Volume CC
ZPI-10017	90(6.3)	5556(389)	17
ZPI-12525	90(6.3)	5493(385)	25
ZPI-15047F	90(6.3)	5062(354)	47
ZPI-18081	90(6.3)	5062(354)	81
ZPI-20098	90(6.3)	5760(403)	98
ZPI-300377	90(6.3)	5062(354)	377
ZPI-400785	90(6.3)	5760(403)	785

Features

- These Pneudraulic Intensifier is designed to operate the Model Z3000C and Z3500C C-yoke Rivet Squeezer, or other devices requiring a small volumetric output of high pressure fluid. The unit is a “one shot” intensifier, meaning it will fully displace the hydraulic fluid with one stroke of the air piston in the cylinder. These types of intensifiers tend to be faster than pumping type air operated intensifiers of similar size. The models also allows for “feathering” of the riveter (subtle positioning of the squeezer rivet set), when controlled by a foot operated valve.
- Before using these Pneudraulic Intensifier, please fully read and understand this operation manual.



ZPI-9009
Pneudraulic Intensifiers

ZPI-11016
Pneudraulic Intensifiers

Model	Max. Inlet Air Pressure psi(kg/cm ²)	Max. Output Hydraulic Pressure psi (Kg/cm ²)	Delivered Hyd. Fluid Volume CC
ZPI-9009	90(6.3)	4978(350)	9
ZPI-11016	90(6.3)	4267(300)	16

DIMPLE PUNCH & DIE SET



RS426-3
3/32"



RS426-4
1/8"



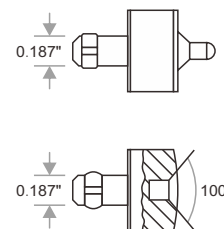
RS426-5
5/32"



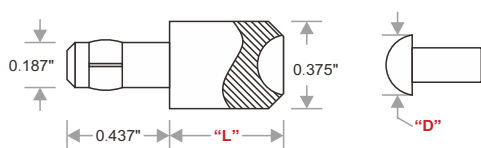
RS509-4
#6



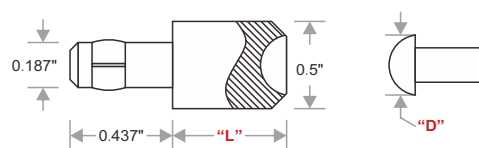
RS509-5
#8



ROUND HEAD



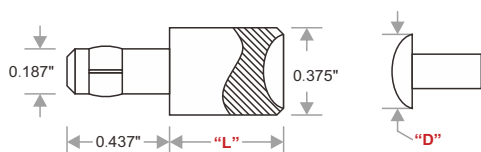
RS-1000



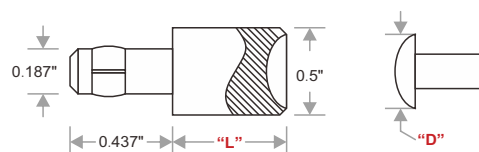
RS-2000/RS-2100

Rivet Head Diameter							
RS-1000		RS-2000		RS-2100			
"D" 0.187"		"D" 0.250"		"D" 0.219"		"D" 0.273"	
NO.	L	NO.	L	NO.	L	NO.	L
-1X	1/8	-8X	1/8	-01X	1/8	-01XA	1/8
-1	1/4	-8	1/4	-01	1/4	-01A	1/4
-2	3/8	-9	3/8	-02	3/8	-02A	3/8
-3	1/2	-10	1/2	-03	1/2	-03A	1/2
		-11	5/8				
		-12	3/4				

BRAZIER HEAD



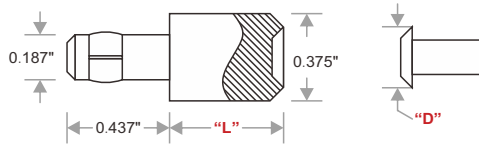
RS-1001



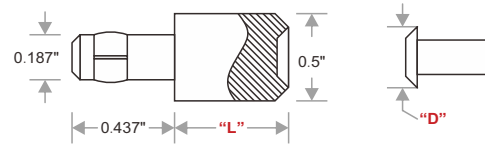
RS-2001

Rivet Head Diameter					
RS-1001		RS-2001			
"D" 0.312"		"D" 0.312"		"D" 0.391"	
NO.	L	NO.	L	NO.	L
-8X	1/8	-8X	1/8	-15X	1/8
-8	1/4	-8	1/4	-15	1/4
-9	3/8	-9	3/8	-16	3/8
-10	1/2	-10	1/2	-17	1/2
-11	5/8	-11	5/8		
-12	3/4	-12	3/4		
-13	7/8	-13	7/8		
-14	1	-14	1		

UNIVERSAL HEAD



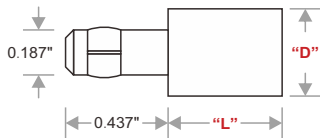
RS-1002



RS-2002

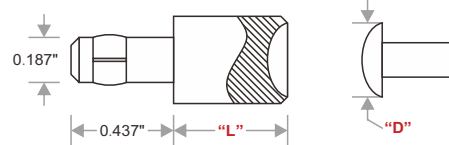
Rivet Head Diameter									
RS-1002				RS-2002					
"D" 0.187"		"D" 0.250"		"D" 0.187"		"D" 0.250"		"D" 0.312"	
NO.	L	NO.	L	NO.	L	NO.	L	NO.	L
-1X	1/8	-8X	1/8	-1X	1/8	-8X	1/8	-15X	1/8
-1	1/4	-8	1/4	-1	1/4	-8	1/4	-15	1/4
-2	3/8	-9	3/8	-2	3/8	-9	3/8	-16	3/8
-3	1/2	-10	1/2	-3	1/2	-10	1/2	-17	1/2
-4	5/8	-11	5/8	-4	5/8	-11	5/8	-18	5/8
-5	3/4	-12	3/4	-5	3/4	-12	3/4	-19	3/4
-6	7/8	-13	7/8	-6	7/8	-13	7/8	-20	7/8
-7	1	-14	1	-7	1	-14	1	-21	1

FLUSH STYLE



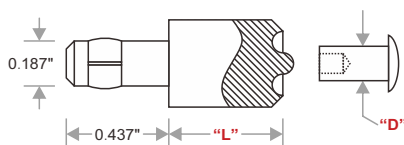
Rivet Head Diameter	
RS-2003	
"D" 0.5"	
NO.	L
-16	1/8
-18	1/4
-20	3/8
-22	1/2
-24	5/8
-26	3/4
-28	7/8

OVAL/TRUSS HEAD



Rivet Head Diameter	
RS-2004	
"D" 0.375"	
NO.	L
-23	3/8

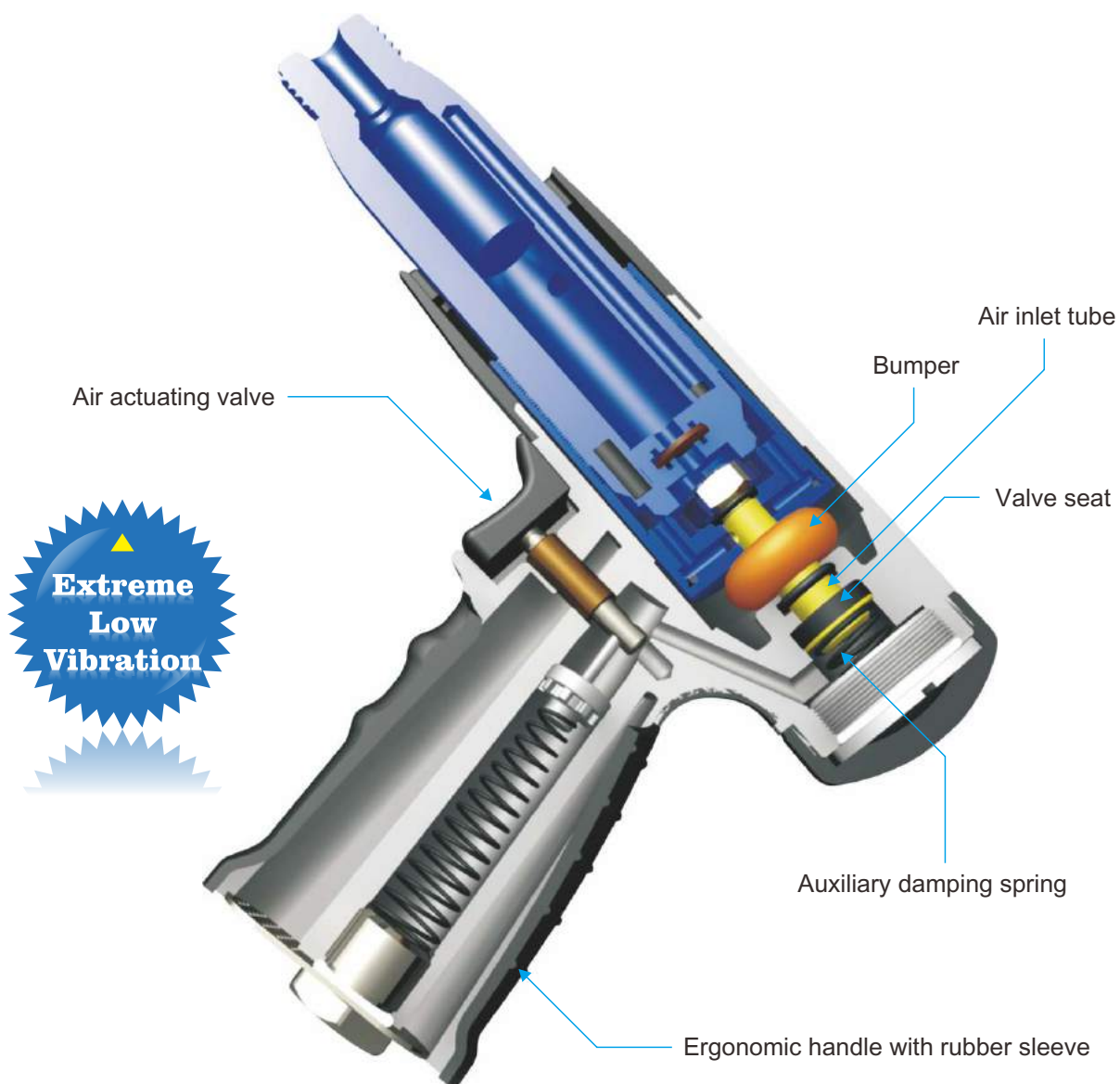
TUBULAR RIVETS



Rivet Head Diameter	
RS-2005	
"D" 0.187"	
NO.	L
-24	1/2

Features

- Designed with following patents for assuring the best shock reduction and operator's comfort.
 - 1) Portable pneumatic tool assembled with module units.
 - 2) Suspension vibration-reducing means for portable pneumatic tools.
- Alloy steel made impact parts, heat-treated for durability.
- Quick Change Retainer for simple accessory changes.
- Ergonomic handle with rubber made exhaust muffler for added operator's comfort.
- Optional patented universal swivel air inlet joint for the best maneuverability of the tool.



Patent pending in other countries



R.O.C.PAT.:
174,032
184,745



U.S.A.PAT.:
6,149,356
5,615,746



P.R.C.PAT.:
ZL 00 2 53627.7

Extreme Low Vibration



ZAH-392 -Round
ZAH-392H -Hex.



ZAH-393 -Round
ZAH-393H -Hex.



ZAH-394 -Round
ZAH-394H -Hex.



ZAH-592 -Round
ZAH-592H -Hex.



ZAH-593 -Round
ZAH-593H -Hex.



ZAH-594 -Round
ZAH-594H -Hex.

ZAH-392K
ZAH-392HK
ZAH-592K
ZAH-592HK



ZAH-393K
ZAH-393HK
ZAH-593K
ZAH-593HK



ZAH-394K
ZAH-394HK
ZAH-594K
ZAH-594HK



[Accessories]

- Shock Reduced Air Hammer X 1
- 192913 Retainer Spring
- CH641RL 7" Single End Cutter X 1
- CH645RL 7" Cut Off Chisel X 1
- CH649RL 7" Rivet Cutter Chisel X 1
- CH672RL 7" Special Panel Cutter X 1
- CH627RL 7" Shear Chisel X 1

*ZAH-393H, ZAH-593H, ZAH394H, ZAH594H chisel shank size are 0.410"(10.4mm) Hex. shank.



ZNS-392

Shock Reduced
Needle Scaler



CA2321

*No. of Needles: 19pcs

Needle Scaler Attachment



ZCH-394B

Shock Reduced
Construction Air Hammer



ZCH-394BK

[Accessories]

- Shock Reduced Air Hammer X1
- 294903 Retainer Spring
- CA132910 7" Moil Point Chisel



294903



CA132910

Model	Chisel Shank Opening inch(mm)	Bore Diameter inch(mm)	Stroke Length inch(mm)	Blow Per Min. B.P.M.	Avg. Air Cons cfm(l/min)	Net Weight lbs(kgs)	Min. Hose Size inch(mm)	Vibration m/s ²
ZAH-392 ZAH-392H	0.401(10.2) 0.410(10.4)	3/4(19)	1-31/32(50)	4,000	15.2(430)	3.4(1.5)	3/8(10)	2.5
ZAH-393 ZAH-393H	0.401(10.2) 0.410(10.4)	3/4(19)	2-5/8(66)	3,000	4.95(140)	4(1.8)	3/8(10)	10
ZAH-394 ZAH-394H	0.401(10.2) 0.410(10.4)	3/4(19)	3-1/2(89)	2,100	5.65(160)	4.6(2.1)	3/8(10)	5.5
ZAH-592 ZAH-592H	0.401(10.2) 0.410(10.4)	3/4(19)	1-31/32(50)	4,000	15.2(430)	3.4(1.5)	3/8(10)	2.5
ZAH-593 ZAH-593H	0.401(10.2) 0.410(10.4)	3/4(19)	2-5/8(66)	3,000	4.95(140)	4(1.8)	3/8(10)	10
ZAH-594 ZAH-594H	0.401(10.2) 0.410(10.4)	3/4(19)	3-1/2(89)	2,100	5.65(160)	4.6(2.1)	3/8(10)	5.5
ZNS-392	0.401(10.2)	3/4(19)	1-31/32(50)	4,000	15.2(430)	3.4(1.5)	3/8(10)	2.5
ZCH-394B	0.401(10.2)	3/4(19)	3-1/2(89)	2,100	6(170)	4.6(2.1)	3/8(10)	5.3

*(H)-Chisel Shank Opening 0.410"(10.4mm) *Operating Air Pressure:90PSI/6.2bar. *Air Inlet Size:1/4" PT/NPT

Features

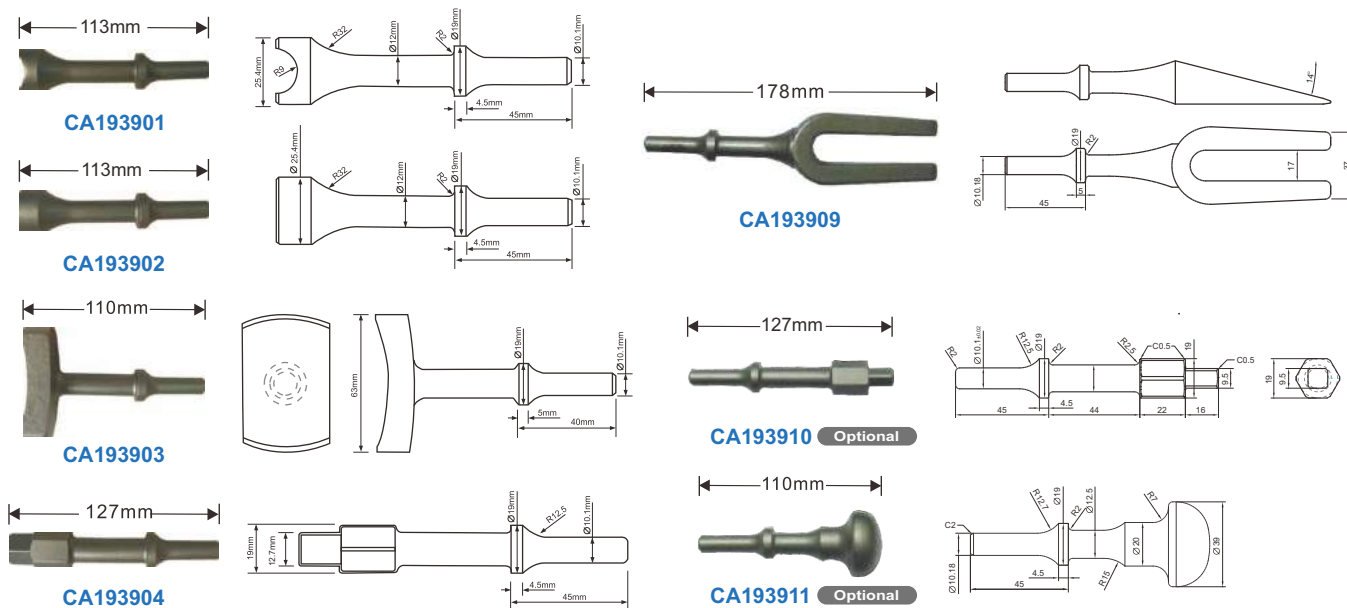
- Designed with following patents for assuring the best shock reduction and operator's comfort.
 - 1) Portable pneumatic tool **assembled with module units**.
 - 2) **Suspension vibration-reducing** means for portable pneumatic tools.
- Alloy steel made impact parts, heat-treated for durability.
- Quick Change Retainer for simple accessory changes.
- Ergonomic handle with rubber** made exhaust muffler for added operator's comfort.
- Optional patented universal swivel air inlet joint for the best maneuverability of the tool.



ZAH-393S

Shock Reduced Air Hammer
With Special Chassis Chisel Sets

Accessories



Model	Chisel Shank Opening inch(mm)	Bore Diameter inch(mm)	Stroke Length inch(mm)	Blow Per Min. B.P.M.	Avg. Air Cons cfm(l/min)	Net Weight lbs(kgs)	Min. Hose Size inch(mm)	Vibration m/s ²
ZAH-393S	0.401(10.2)	3/4(19)	2-5/8(66)	3,000	4.95(140)	4(1.8)	3/8(10)	10



ZRH-131P
1X Air Riveting Hammer
-Pistol



ZRH-132P
ZRH-132PAP
2X Air Riveting Hammer
-Pistol



ZRH-133P
ZRH-133PAP
3X Air Riveting Hammer
-Pistol



ZRH-134P
ZRH-134PAP
4X Air Riveting Hammer
-Pistol



ZRH-131S
1X Air Riveting Hammer
-Straight



ZRH-132S
2X Air Riveting Hammer
-Straight



ZRH-133S
3X Air Riveting Hammer
-Straight



ZRH-134S
4X Air Riveting Hammer
-Straight



ZRH-195P
5X Air Riveting Hammer-Pistol



ZRH-197P
7X Air Riveting Hammer-Pistol



ZRH-199P
9X Air Riveting Hammer-Pistol

Use for aero space & general automotive industries, etc.

Model	Chisel Shank Opening inch(mm)	Bore Diameter inch(mm)	Stroke Length inch(mm)	Blows Per Minute B.P.M	Operating Air Pressure PSI(bar)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Min. Hose Size inch(mm)	Rivet Size Steel Alum	
ZRH-131P	0.401(10.2)	9/16(14.3)	1-3/8(35)	2,850	90(6.2)	6.4(180)	2.3(1.0)	3/8(10)	1/8	5/32
ZRH-132P	0.401(10.2)	1/2(12.7)	2-1/4(57.2)	2,580	90(6.2)	7.8(221)	2.7(1.2)	3/8(10)	3/32	1/8
ZRH-133P	0.401(10.2)	1/2(12.7)	2-7/8(73)	2,160	90(6.2)	7.78(220)	2.9(1.3)	3/8(10)	5/32	3/16
ZRH-134P	0.401(10.2)	1/2(12.7)	3-1/16(77.8)	1,740	90(6.2)	7.78(220)	3.1(1.4)	3/8(10)	3/16	1/4
ZRH-132PAP	0.401(10.2)	9/16(14.3)	2-1/4(57.2)	2,580	90(6.2)	5.7(160)	2.7(1.2)	3/8(10)	3/32	1/8
ZRH-133PAP	0.401(10.2)	9/16(14.3)	2-7/8(73)	2,160	90(6.2)	4.9(140)	2.9(1.3)	3/8(10)	5/32	3/16
ZRH-134PAP	0.401(10.2)	9/16(14.3)	3-1/16(77.8)	1,740	90(6.2)	6.4(180)	3.1(1.4)	3/8(10)	3/16	1/4
ZRH-131S	0.401(10.2)	9/16(14.3)	1-3/8(35)	2,850	90(6.2)	6.4(180)	1.9(0.86)	3/8(10)	1/8	5/32
ZRH-132S	0.401(10.2)	1/2(12.7)	2-1/4(57.2)	2,580	90(6.2)	6(170)	2.4(1.06)	3/8(10)	3/32	1/8
ZRH-133S	0.401(10.2)	1/2(12.7)	2-7/8(73)	2,160	90(6.2)	6(170)	2.6(1.16)	3/8(10)	5/32	3/16
ZRH-134S	0.401(10.2)	1/2(12.7)	3-1/16(77.8)	1,740	90(6.2)	6.4(180)	2.8(1.27)	3/8(10)	3/16	1/4
ZRH-195P	0.498(12.6)	3/4(19.1)	2-11/16(68.3)	1,560	90(6.2)	7.78(220)	4.6(2.1)	3/8(10)	3/16	1/4
ZRH-197P	0.498(12.6)	3/4(19.1)	5-13/16(132)	900	90(6.2)	9.19(260)	5.5(2.5)	3/8(10)	5/16	3/8
ZRH-199P	0.498(12.6)	3/4(19.1)	3-7/8(98.4)	1,140	90(6.2)	7.78(220)	5(2.3)	3/8(10)	1/4	5/16

Features

- The new ZRH riveting hammer is designed to minimize the vibration while maintaining high tool performance. Vibration is reduced by an effective air cushion behind the hammer piston.
- Parts are interchangeable with RRH series.
- Streamline profile & adjustable power.
- Equipped with universal swivel air inlet joint for the best maneuverability.



ZRH-04
Shock Reduced
Air Riveting Hammer



ZRH-06
Shock Reduced
Air Riveting Hammer



ZRH-08
Shock Reduced
Air Riveting Hammer

Use for aero space & general automotive industries, etc.

Model	Chisel Shank Opening	Bore Diameter mm	Piston Stroke mm	B.P.M	Overall Length mm	Air Inlet PT	Air Hose (I.D) mm	Weight kg	Air Consumption cfm	Max. Rivet Diameter Capacity Dural mm(inch) steel mm(inch)
ZRH-04	0.401	15.24	40	3,960	180	1/4	9.5	1	6	2~5 (3/32~3/16) 1~4 (3/21~5/32)
ZRH-06	0.401	15.24	102	2,160	225	1/4	9.5	1.33	19	4~7 (5/32~1/4) 3~6 (1/8~1/4)
ZRH-08	0.401	15.24	137	1,440	280	1/4	9.5	1.33	21	5~8 (3/16~5/16) 4~7 (5/32~1/4)

Features

An efficient riveting system consists of shock reduced bucking bar with shock reduced riveting hammers.

- Self-adjustable - SA models feature a self-adjusting shock reducing system with compressed air supply. SP models use a spring as shock reducing element and consequently do not require the air supply.
- Flexible - The bucking bars can fitted with serval different interchangeable dolly configurations via a quick change retainer for maximum flexibility.



ZBB10SP
Shock Reduced Bucking Bars



ZBB16SP
Shock Reduced Bucking Bars

Model	Net Weight lbs(kgs)	Diameter inch(mm)	Air Consumption l/s(cfm)
ZBB10SP	2.4(1.1)	2.0(48)	—
ZBB10SA	2.9(1.3)	2.0(48)	0.5(1.1)
ZBB16SP	3.7(1.7)	2.0(48)	—
ZBB16SA	4.2(1.9)	2.0(48)	0.5(1.1)



ZBB10SA
Shock Reduced Bucking Bars



ZBB16SA
Shock Reduced Bucking Bars

Features

- Designed with following patents for assuring the best shock reduction and operator's comfort.
 - 1) Portable pneumatic tool **assembled with module units**.
 - 2) **Suspension vibration-reducing** means for portable pneumatic tools.
- Alloy steel made impact parts, heat-treated for durability.
- Spool valve allows slow heavy blows needed to drive rivets.
- **Ergonomic handle with rubber** made exhaust muffler for added operator's comfort.
- Optional patented universal swivel air inlet joint for the best maneuverability of the tool.



Patent pending in other countries



R.O.C.PAT.:
174,032
184,745



U.S.A.PAT.:
6,149,356
5,615,746



P.R.C.PAT.:
ZL 00 2 53627.7

Features

- Patented Shock Reduced Mechanism.
- Low vibration design to prevent operator's injury after long time use.
- Ergonomic handle with rubber made exhaust muffler for added operator's comfort.
- Optional patented Universal Swivel Air Inlet Joint for the best maneuverability of the tool.

Use for aero space & general automotive industries, etc.



ZRH-132N
ZRH-132NP Low Vibration
2X Shock Reduced
Air Riveting Hammer



- [KIT Contents]
- CA132901 X1
 - CA132902 X1
 - CA132903 X1
 - CA132904 X1
 - CA132905 X1
 - 192902 Retainer Spring X1



ZRH-133N
ZRH-133NP Low Vibration
3X Shock Reduced
Air Riveting Hammer



- [KIT Contents]
- CA132901 X1
 - CA132902 X1
 - CA132903 X1
 - CA132904 X1
 - CA132905 X1
 - 192902 Retainer Spring X1



ZRH-134N
ZRH-134NP Low Vibration
4X Shock Reduced
Air Riveting Hammer



- [KIT Contents]
- CA132901 X1
 - CA132902 X1
 - CA132903 X1
 - CA132904 X1
 - CA132905 X1
 - 192902 Retainer Spring X1

ZRH-132NK
ZRH-132NPK

ZRH-133NK
ZRH-133NPK

ZRH-134NK
ZRH-134NPK

Patent pending
in other countries



R.O.C.PAT.:
184,745



P.R.C.PAT.:
ZL 00 2 53627.7



U.S.A.PAT.NO.:
5,533,579

Model	Chisel Shank Opening inch(mm)	Bore Diameter inch(mm)	Stroke Length inch(mm)	Blows Per Minute B.P.M	Operating Air Pressure PSI(bar)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Vibration m/s ²	Rivet Size Steel Alum	
ZRH-132N	0.401(10.2)	1/2(12.7)	2-1/4(57.2)	2,580	90(6.2)	6.71(190)	2.9(1.3)	6	3/32	1/8
ZRH-132NP	0.401(10.2)	9/16(14.3)	2-1/4(57.2)	2,580	90(6.2)	6.71(190)	2.9(1.3)	6	3/32	1/8
ZRH-133N	0.401(10.2)	1/2(12.7)	2-7/8(73)	2,164	90(6.2)	7.42(210)	2.9(1.3)	6	5/32	3/16
ZRH-133NP	0.401(10.2)	9/16(14.3)	2-7/8(73)	2,164	90(6.2)	7.42(210)	2.9(1.3)	6	5/32	3/16
ZRH-134N	0.401(10.2)	1/2(12.7)	3-1/16(77.8)	1,740	90(6.2)	7.42(210)	3.7(1.7)	6	3/16	1/4
ZRH-134NP	0.401(10.2)	9/16(14.3)	3-1/16(77.8)	1,740	90(6.2)	7.42(210)	3.7(1.7)	6	3/16	1/4

For ZRH-131P ZRH-131PA, ZRH-131S

- Round 10.08mm
- Material SCM440 Alloy
- Hardness : 48~51°



For ZRH-132P, ZRH-132PAP, ZRH-132S ZRH-133P, ZRH-133PAP, ZRH-133S ZRH-134P, ZRH-134PAP, ZRH-134S ZRH-132N, ZRH-133N, ZRH-134N

- Round 10.18mm
- Material SCM440 Alloy
- Hardness : 48~51°

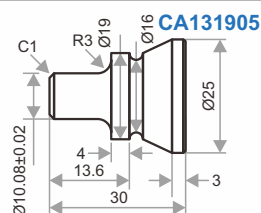
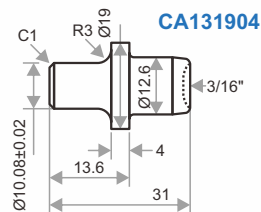
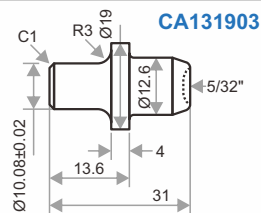
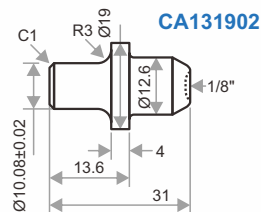
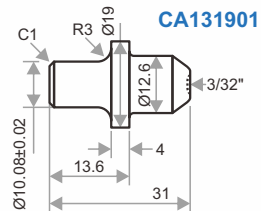


For ZRH-195P, ZRH-197P, ZRH-199P

- Round 12.6mm
- Material SCM440 Alloy
- Hardness : 48~51°



131901



192902

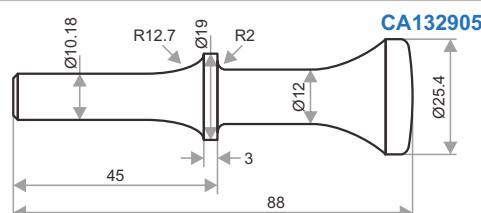
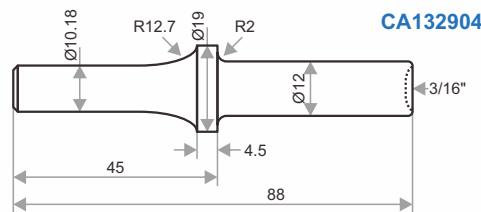
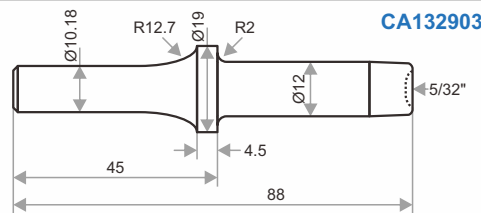
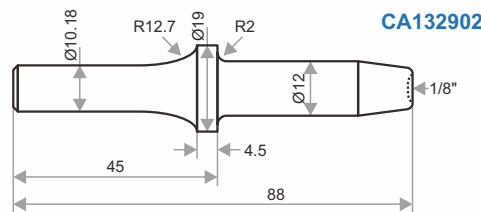
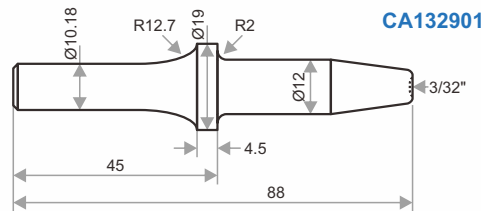


Optional

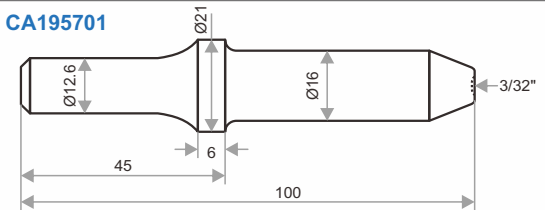
192903



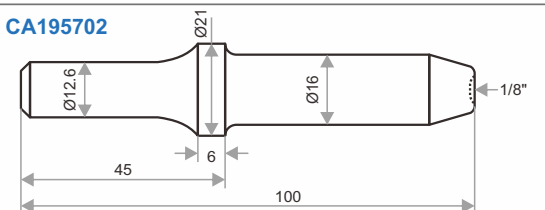
132914



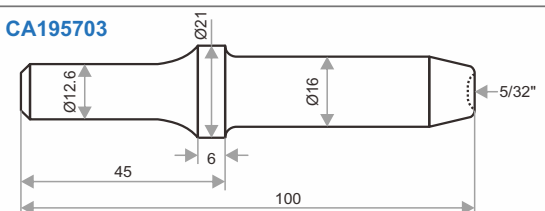
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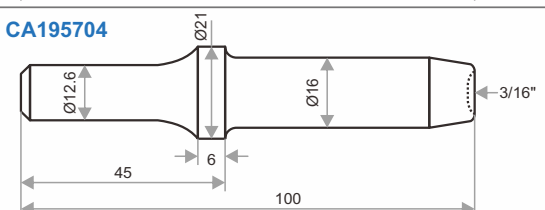
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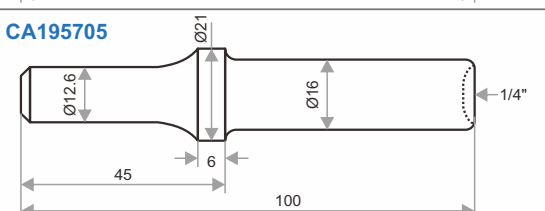
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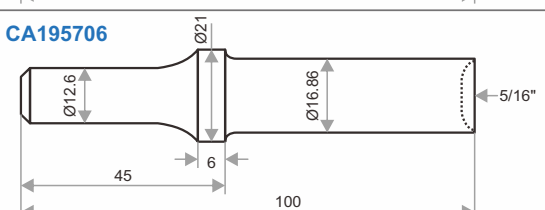
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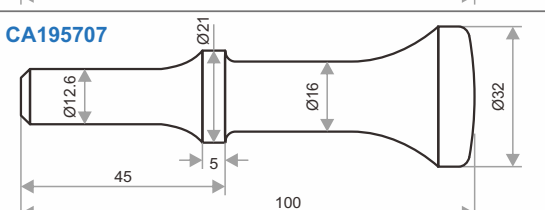
CA195705



CA195706



CA195707



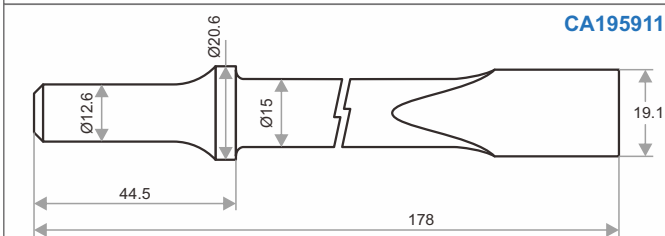
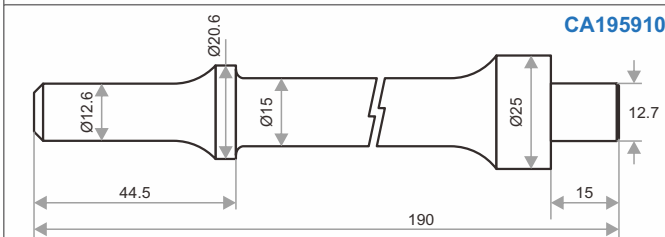
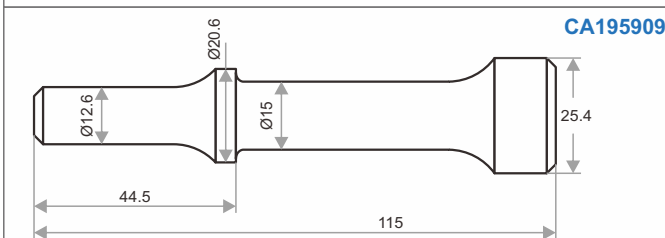
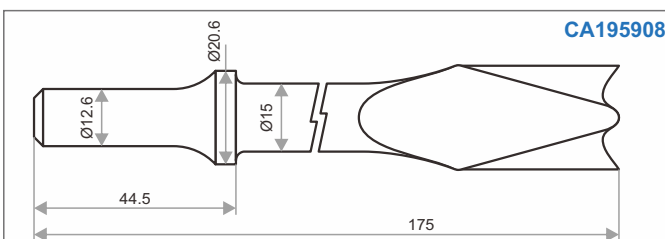
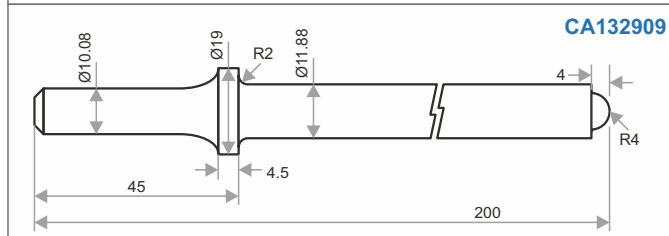
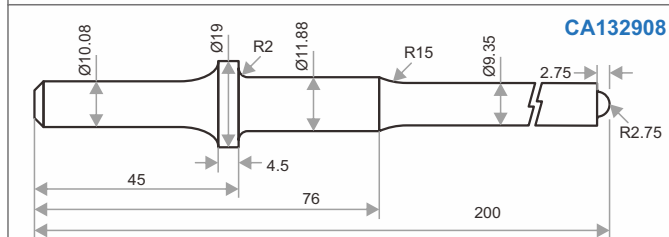
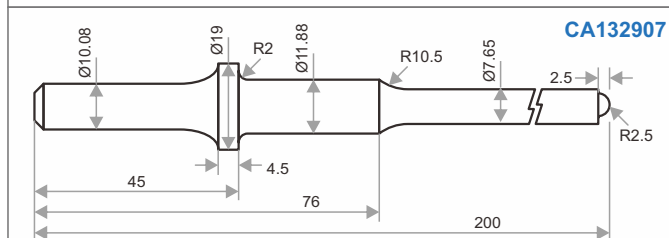
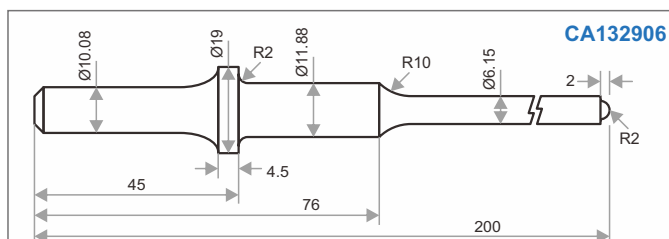
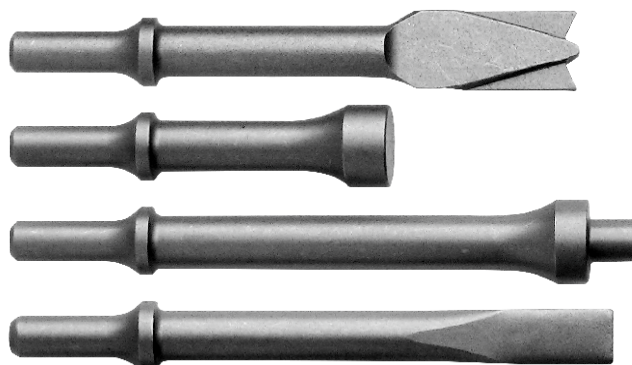
For ZRH-132P, ZRH-132PAP, ZRH-132S
ZRH-133P, ZRH-133PAP, ZRH-133S
ZRH-134P, ZRH-134PAP, ZRH-134S
ZRH-132N, ZRH-133N, ZRH-134N

- Round 10.18mm
- Material SCM440 Alloy
- Hardness : 48~51°



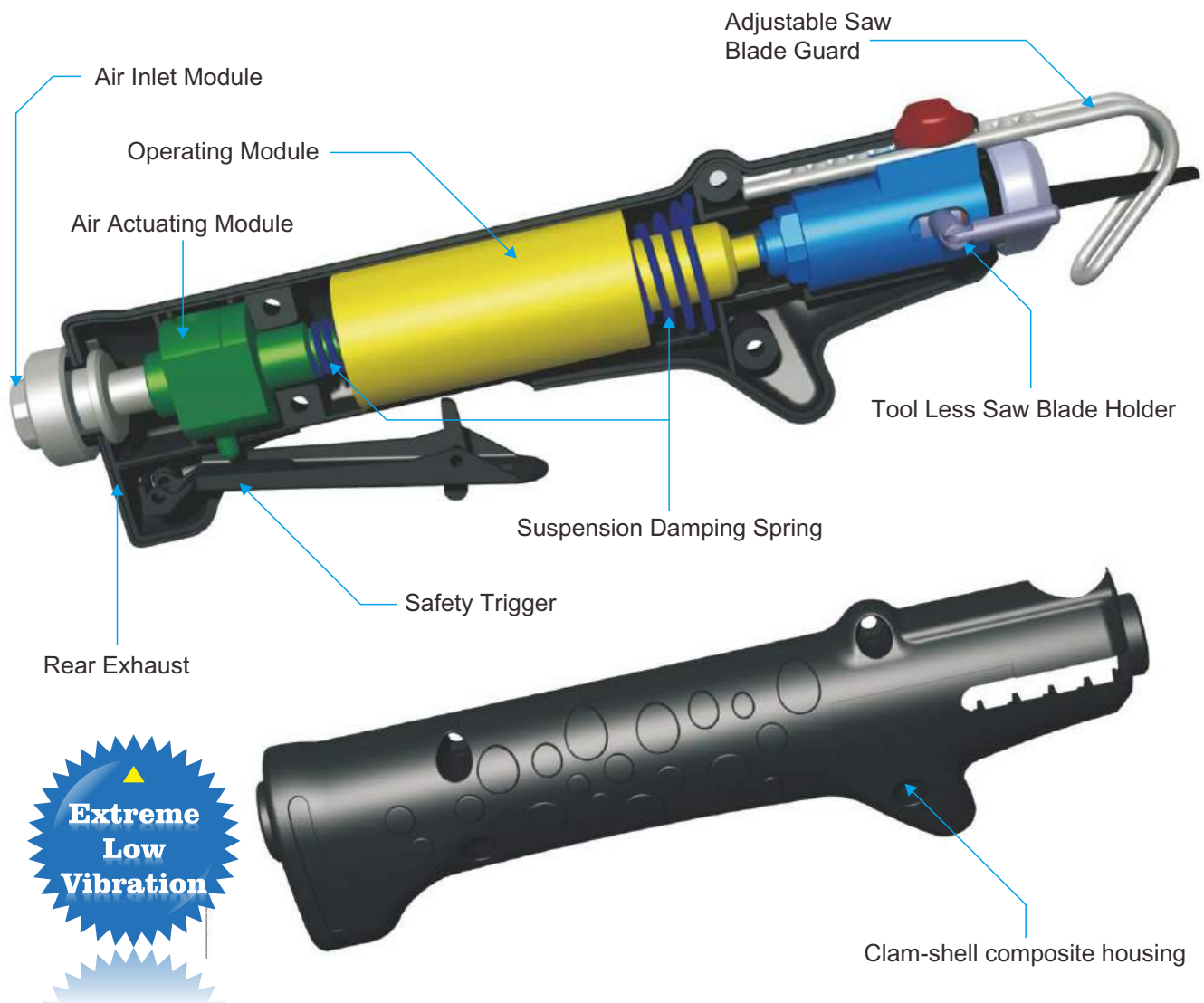
For ZRH-195P, ZRH-197P, ZRH-199P

- Round 12.6mm
- Material SCM440 Alloy
- Hardness : 48~51°



Features

- Designed with following patents to assure extreme low vibration and operator's comfort.
 - 1) Portable pneumatic tool assembled with module units in clam shell composite housing.
 - 2) Suspension vibration-reducing means for portable pneumatic tools.
- Engineering plastic made clam-shell housing designed for easy service.
- Patented universal swivel air inlet joint for the best maneuverability of the tool.
- Safety trigger to prevent accidental start ups and provide operator's comfort.
- Rear exhaust directs air away from work-piece.



Patent pending in other countries



R.O.C.PAT.:
174,032
184,745



U.S.A.PAT.:
6,149,356
5,615,746



P.R.C.PAT.:
ZL 00 2 53627.7



ZS311
Metal Housing

ZS311K
Kit include:
• Bi-metal blades
18T X 5
24T X 5
32T X 5



ZS317
Metal Housing

ZS317K
Kit include:
• Bi-metal blades
14T X 5
18T X 5



ZS319
Clam-Shell Composite Housing

ZS319K
Kit include:
• Bi-metal blades
18T X 5
24T X 5
32T X 5



ZS329
Clam-Shell Composite Housing

ZS329K
Kit include:
• Bi-metal blades
14T X 5
18T X 5



ZS319H
Clam-Shell Composite Housing

ZS319HK
Kit include:
• Bi-metal blades
18T X 5
24T X 5
32T X 5



ZS329H
Clam-Shell Composite Housing

ZS329HK
Kit include:
• Bi-metal blades
14T X 5
18T X 5

*10mm stroke models are good for 2mm steel sheet cutting.

*25mm stroke models are good for 5mm steel sheet or Pipe cutting.

COMPARISON CHART WITH COMPETITIVE DESIGNS IS AVAILABLE UPON REQUEST.

Model	Blow Per Min B.P.M.	Stroke Length mm	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Vibration m/s ²	Sound Pressure dB(A)
ZS311	9,500	10	3.5(100)	1.5(0.7)	1/4	3/8(10)	1.8	85
ZS317	5,000	25	3(90)	2.1(0.96)	1/4	3/8(10)	3.9	85
ZS319	9,500	10	3(90)	1.12(0.51)	1/4	3/8(10)	3.7	85
ZS329	5,000	25	2.8(80)	1.68(0.76)	1/4	3/8(10)	4.3	85
ZS319H	9,500	10	3.5(100)	1.12(0.51)	1/4	3/8(10)	3.7	85
ZS329H	5,000	25	3.5(100)	1.58(0.76)	1/4	3/8(10)	4.3	85

*Operating Air Pressure:90PSI/6.2bar



10mm stroke

ZS319-T2B

Clam-Shell Composite Housing



20mm stroke

ZS317M

Vibration Reduced Mini Air Pipe Saw
Metal Housing



ZS317MK

Kit include:
• Bi-metal blades
14T X 5
18T X 5
24T X 5



10mm stroke

ZS311M

Vibration Reduced Mini Air Body Saw
Metal Housing



ZS311MK

Kit include:
• Bi-metal blades
18T X 5
24T X 5
32T X 5



10mm stroke

ZS312M

Vibration Reduced Mini Air Body Saw
Metal Housing



ZS312MK

Kit include:
• Bi-metal blades
18T X 5
24T X 5
32T X 5

COMPARISON CHART WITH COMPETITIVE DESIGNS IS AVAILABLE UPON REQUEST.

Model	Blow Per Min B.P.M.	Stroke Length mm	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Vibration m/s ²	Sound Pressure dB(A)
ZS319-T2B	9,500	10	3(90)	1.17(0.53)	1/4	3/8(10)	3.7	85
ZS311M	10,000	10	7.6(215)	1.0(0.45)	1/4	3/8(10)	4.3	80.4
ZS312M	10,000	10	7.6(215)	1.0(0.45)	1/4	3/8(10)	4.3	80.4
ZS317M	5,800	20	6.9(195)	1.17(0.53)	1/4	3/8(10)	8.4	81.5

*Operating Air Pressure:90PSI/6.2bar

Products and specifications subject to change without prior notice 91

Vibration Reduced Pneumatic Roofing Cutter

- Designed to assure extreme low vibration for operator's comfort.
- Portable pneumatic tool assembled with module units in clam shell composite housing.
- Engineering plastic made clam-shell housing designed for easy service.
- Universal swivel air inlet joint for the best maneuverability of the tool.
- Blades offer efficient and fast cutting in cold weather to reduce down time.
- These blades cut through a variety of material including shingles, roofing paper, and asphalt roll roofing, etc.
- Blades offer seamless cutting of straight edges provides more efficient to the applications.
- Can be used on ANY ZIPP vibration reduced air saws for the best performance.



Shingles



Asphalt Roll Roofing



Roofing paper



ZRC-311
Metal Housing



ZRC-319
Composite Housing



3.5" Hook Roofing
Cutter Blade Kit



ZRC-311K

Kit include:

- Bi-metal blades
18T X 5
24T X 5
32T X 5
- 3.5" cutting blade X3



ZRC-319K

Kit include:

- Bi-metal blades
18T X 5
24T X 5
32T X 5
- 3.5" cutting blade X3

Accessories	
314990-3	3pcs
314990-5	5pcs
314990-10	10pcs

Each cutter includes 3pcs 3.5Hook Roofing Cutter Blades

Model	Blow Per Min. B.P.M.	Stroke Length mm	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Vibration m/s ²	Sound Pressure dB(A)
ZRC-311	9,500	10	3.5(100)	1.5(0.7)	1/4	3/8(10)	1.8	85
ZRC-319	9,500	10	3.5(100)	1.12(0.51)	1/4	3/8(10)	3.7	85

*Operating Air Pressure:90PSI/6.2bar



Cutting Capacity			
Pipe Material	Steel	Steel	Steel
Wall Thickness	2.4mm	3.5mm	5mm
Pipe O.D.	22mm	34mm	80mm
Saw Blade	14T.P.I Bacho Blades		
Cut Off Time(sec.)	9	21	470
Test under same condition as: 1) 90PSI air pressure. 2) 5kg standard load weight on the tool while testing.			



- [Standard Accessories]
- Patented Universal Swivel Joint X 1
 - Carrying Box X 1
 - Oiler Pot X 1
 - each of 300mm 14TPI & 8/12TPI Bi-Metal BAHCO Saw Blades (½" W x 12" L x 0.025" T) X 1
 - 3mm Hex Wrench X 1
 - Hand Grip X 1

Model	Blow Per Min B.P.M.	Stroke Length mm	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Vibration m/s ²	Sound Pressure dB(A)
ZS350D	1,200	45	4.6(130)	6.17(2.8)	1/4	3/8(10)	5	85

*Operating Air Pressure:90PSI/6.2bar

Applications

The most powerful Industrial Air Saw for clean, burr-free cuts with standard hacksaw blades in serving a wide range of industries and emergency services where reliability and durability are really matter such as Petrochemicals, Oil Rigs, Power Stations, Public Transport Facilities, Coal Mines, Fire Brigades, Airways & Airport Facilities, Railway, Garages, Car Manufacturers, Commercial Vehicle Builders, Boat Building, Reinforced Fiberglass, Shipyard use, Ministry of Defense-Army, Navy, Air Force, etc.

Capacity Features

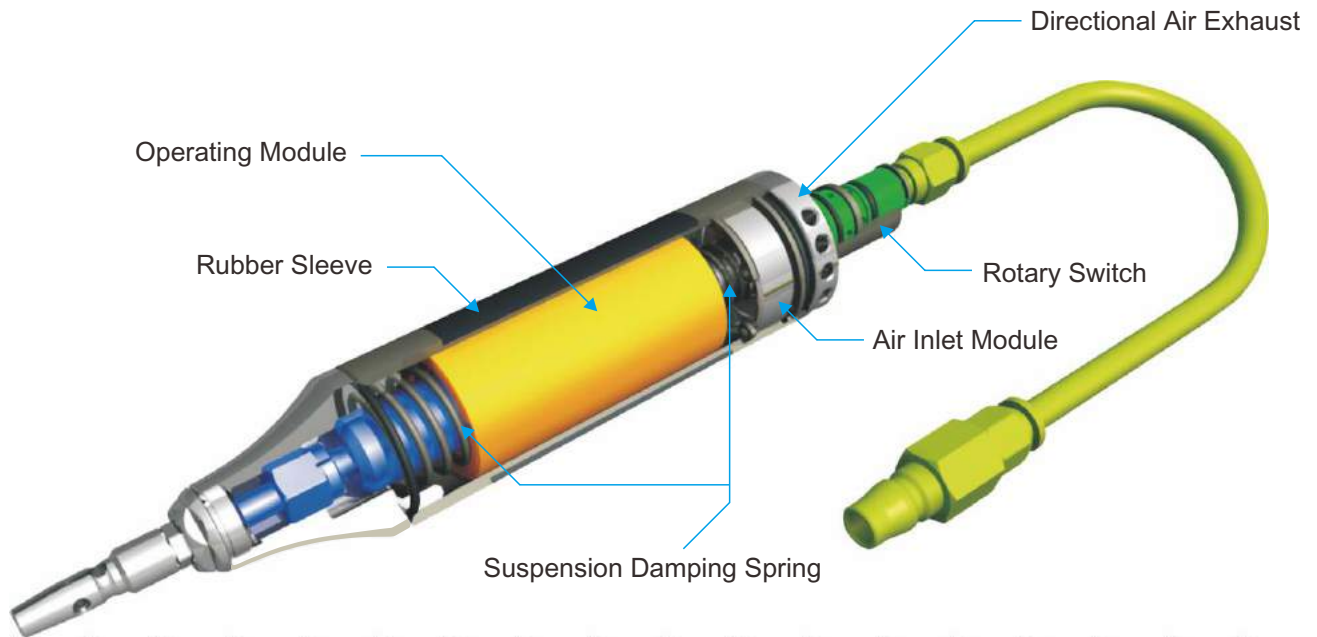
- Excellent sawing work of various materials, trims or shapes sheet metal, plastics, plates, fiberglass, plywood, or cut pipe, rod, bar in any place.
- Available anywhere in ship, in oil tank, in mining tunnel, in construction site, in plant, in water, for rescue work, in car accident, etc.
- Most versatile maintenance tool-used throughout industry.
- Clean and burr-free cuts with standard hacksaw blades.
- Adaptable for cutting a variety of materials with proper saw blades.
- Ideal for sustained usage and suitable for the most awkward places.
- Used throughout fiberglass boat building and car body repair shop industries.
- Powerful enough to easily and quickly cut through steel-flexible enough to enough to efficiently and accurately cut in even the most awkward place.

Construction Features

- Designed with a patented vibration reduced mechanism to ensure the lowest vibration and most operator comfort.
- Few moving parts means breakdowns are virtually eliminated-ensuring total reliability and long trouble-free service.
- Safety Switch-essential for when changing blades.
- Quiet in operation-enables you to use it anywhere.
- Electro-chemical treated bores giving long-wearing quality.
- Slim, compact and lightweight design for easy portability.
- Blade and work piece cooled by exhausted air and oil.
- Special alloy steel made Nosepiece ensures the highest level of durability.
- Automatic and visible lubrication.
- Extremely low air consumption. Operates on normal compressed air supply.
- Safe to use in non-flame areas.
- 45MM stroke length and ability to accept short pieces of blades making it ideal for cutting in confined spaces and "Double skin" panels.

Features

- High frequency with 1mm, 5mm & 10mm strokes for various kind of surface finishing works such as precise and delicate lapping of die & mold surface, finishing in confined area and general filing works.
- Designed with following patents to ensure extreme low vibration and operator's comfort.
 - Portable Pneumatic Tool assembled with module units.
 - Suspension Vibration-Reducing means for portable pneumatic tools.
- Throttle type flexible hose equipped for the best maneuverability of the tool.
- Adjustable side exhaust directs air away from operators.
- Rubber sleeve designed for operator's comfort.



Patent pending in other countries



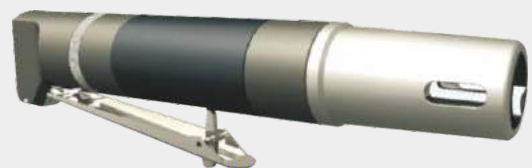
R.O.C.PAT.:
174,032
184,745



U.S.A.PAT.:
6,149,356
5,615,746



P.R.C.PAT.:
ZL 00 2 53627.7



All rotary type Switch can be converted to safety lever type Switch upon request.

Features

- Ideal for precise and delicate filing castings, also perfect for lapping die and mold surface.
- High frequency with 0.5~1mm stroke for ZF-1, ZF-1T, ZF-1M, ZF-1MT
- High frequency with 3~5mm stroke for ZF-5, ZF-5T, ZF-5M, ZF-5MT
- High frequency with 7~10mm stroke for ZF-10, ZF-10T, ZF-10M, ZF-10MT



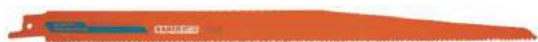
COMPARISON CHART WITH COMPETITIVE DESIGNS IS AVAILABLE UPON REQUEST.

Model	Blows Per Minute B.P.M	Stroke Length mm	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Vibration m/s ²	Sound Pressure dB(A)
ZF-1(T)	21,000	0.5~1	4(120)	1.26(0.57)	1/4	3/8(10)	0.8	72
ZF-5(T)	12,000	3~5	2.82(80)	1.54(0.7)	1/4	3/8(10)	3.6	83
ZF-10(T)	9,000	7~10	3.89(110)	1.65(0.75)	1/4	3/8(10)	4.6	71
ZF-1M(MT)	21,000	0.5~1	4(120)	0.73(0.33)	1/4	3/8(10)	0.8	72
ZF-5M(MT)	12,000	3~5	2.82(80)	0.73(0.33)	1/4	3/8(10)	3.6	83
ZF-10M(MT)	9,000	7~10	3.89(110)	0.73(0.33)	1/4	3/8(10)	4.6	71

*Operating Air Pressure:90PSI/6.2bar

Saw Blade

-For ZS350D



350812L(300-8/12-SL)

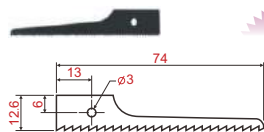


350914L(300-14-ST)

-For ZS311, ZS311M, ZS315, ZS319, ZS319H, ZS319-T2R, ZS319-T2B



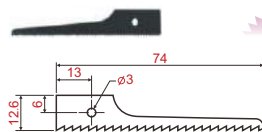
**18
T.P.I**



**314918Z-5(5pcs)
314918Z-10(10pcs)**



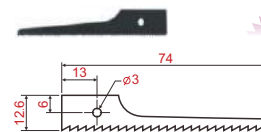
**24
T.P.I**



**314924Z-5(5pcs)
314924Z-10(10pcs)**



**32
T.P.I**

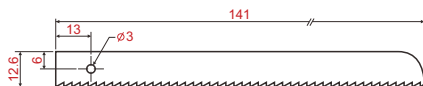


**314932Z-5(5pcs)
314932Z-10(10pcs)**

-For ZS317, ZS317M, ZS329, ZS329H



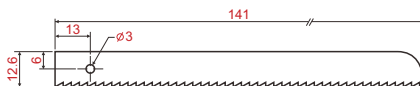
**14
T.P.I**



**317914Z-5(5pcs)
317914Z-10(10pcs)**



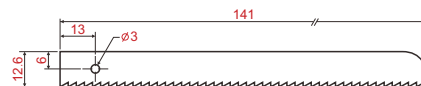
**18
T.P.I**



**317918Z-5(5pcs)
317918Z-10(10pcs)**



**24
T.P.I**



**317924Z-5(5pcs)
317924Z-10(10pcs)**

Regular File

-For ZF-5, ZF-5T, ZF-5M, ZF-5MT, ZF-10, ZF-10T, ZF-10M, ZF-10MT Type Air File, 5mm Shank Diameter



325901
Rectangular File



325902
Round File



325903
Half Round File



325904
Triangular File

Diamond File

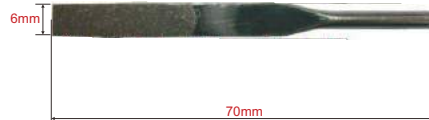
-For ZF-1, ZF-1T, ZF-1M, ZF-1MT Type Air Lapper, 3mm Shank Diameter



201952
2mm Rectangular Diamond File



201954
4mm Rectangular Diamond File



201956
6mm Rectangular Diamond File

ZP226

Air Metal Shear

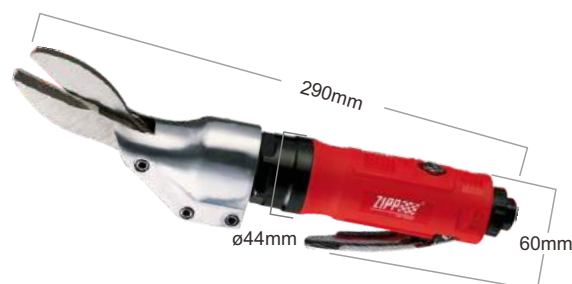
- The ZP226 Air Shear is ideal for the trimming , outlining and shearing of various sheet.
- The heavy-duty cutting blades make clean cut in cold rolled steel up to 18-gauge.
- The shear is ideal for body shop, sheet metal shop, and machine shop.



ZP227

Air Scissors

- The ZP227 Air Scissors is ideal for contour snip.
- The heavy duty blades make quick and clean snip.
- The scissors is ideal for body shop and machine shop.



ZP228

Pistol-Grip Air Shear

- Lightweight and durable composite pistol-grip for great control.



ZP229

Pistol-Grip Air Scissors

- Lightweight and durable composite pistol-grip for great control.



ZS-01
Shear Head



ZS-02
Scissors Head

Model	Cutting Capacity Steel	Cutting Capacity Aluminum	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZP226	1.2mm	1.6mm	2.2(1)	10(255)	2,600	1/4	3/8(10)	3.7
ZP227	1.2mm	1.6mm	2.2(1)	11.4(290)	2,600	1/4	3/8(10)	3.7
ZP228	1.2mm	1.6mm	2.2(1)	7.8(200)	2,600	1/4	3/8(10)	3.7
ZP229	1.2mm	1.6mm	2.2(1)	9.4(240)	2,600	1/4	3/8(10)	3.7



ZDG-S220 0.8HP

Industrial 1/4" Air Die Grinder

- Can be used as sander for expandable / flap wheels, brushes.



ZDG-S216 0.8HP

Industrial 1/4" Air Die Grinder

- With 360° rotating rear exhaust muffler Safety Trigger.
- Use for heavy grinding works.



ZDG-S206 0.8HP

Industrial 1/4" Air Die Grinder

- Can be used as sander for expandable / flap wheels, brushes.



ZDG-S235 0.8HP

Industrial 1/4" Air Die Grinder

- Can be used as sander for expandable / flap wheels, brushes.



P/N:
24182-10 3/8"-24
24182-13 1/2"-20

Optional combo arbor (interchange with # 24182 arbor set) with 1/2"-20 or 3/8"-24 female thread for up to 3" wide wheels with 5/8" or 1" diameter center hole for use on model# **ZDG-S220**, **ZDG-S206** & **ZDG-S235** grinders.

Model	Size of Collet inch(mm)	Free Speed R.P.M.	Operating Air Pressure PSI(bar)	Avg. Air Consumption cfm(l/min)	Net Weight lbs(kgs)	Overall Length inch(mm)	Min. Hose Size inch(mm)	Air Inlet Size inch-NPT/PT
ZDG-S220	1/4(6)	2,200	90(6.2)	5(141)	2(0.92)	8-5/8(220)	3/8(10)	1/4
ZDG-S216	1/4(6)	15,000	90(6.2)	5(141)	1.8(0.8)	8(200)	3/8(10)	1/4
ZDG-S206	1/4(6)	600	90(6.2)	5(141)	2.6(1.2)	10(250)	3/8(10)	1/4
ZDG-S235	1/4(6)	3,500	90(6.2)	5(141)	2(0.92)	8-5/8(220)	3/8(10)	1/4



ZDG-S215 0.3HP

Industrial 1/4" Air Die Grinder



ZDG-S24B 0.3HP

Industrial 1/4" Air Die Grinder

- High power, efficient motor for heavy grinding works.
- Side exhaust.
- Roll type throttle.
- Compact and durable steel housing for long service life.

Model	Size of Collet inch(mm)	Free Speed R.P.M.	Operating Air Pressure PSI(bar)	Avg. Air Consumption cfm(l/min)	Net Weight lbs(kgs)	Overall Length inch(mm)	Min. Hose Size inch(mm)	Air Inlet Size inch-NPT/PT
ZDG-S215	1/4(6)	24,000	90(6.2)	7.8(220)	1.46(0.66)	6-11/16(170)	3/8(10)	1/4
ZDG-S24B	1/4(6)	24,000	90(6.2)	7.8(220)	1.7(0.77)	7-3/64(179)	3/8(10)	1/4



ZAG213A 0.3HP

Air Angle Grinder



ZAG213B 0.3HP

Air Angle Grinder



ZAG213AF 0.3HP

Air Angle Grinder



ZAG213BF 0.3HP

Air Angle Grinder

Model	Grinding Wheel inch(mm)	Free Speed R.P.M.	Operating Air Pressure PSI(bar)	Avg. Air Consumption cfm(l/min)	Net Weight lbs(kgs)	Overall Length inch(mm)	Min. Hose Size inch(mm)	Air Inlet Size inch-NPT/PT
ZAG213A	2(50)	15,000	90(6.2)	7.8(220)	1.46(0.66)	6-3/16(157)	3/8(10)	1/4
ZAG213B	2(50)	15,000	90(6.2)	6.7(190)	1.64(0.74)	7-13/32(188)	3/8(10)	1/4
ZAG213AF	1/4(6)	15,000	90(6.2)	7.8(220)	1.44(0.65)	6-3/16(157)	3/8(10)	1/4
ZAG213BF	1/4(6)	15,000	90(6.2)	6.7(190)	1.61(0.73)	7-13/32(188)	3/8(10)	1/4

- Ergonomic cushion-grip handle-Insulates against cold temperature in the hand, helps ease user fatigue, and insulates against vibration.
- Power/Speed Regulator-Allows for easy RPM adjustment.
- Rear exhaust-Directs the exhaust away from the user and the working areas.
- Twin-Bearing Spindle-This quality design results in super precise spindle concentricity less than 0.05mm and minimal vibration.

ZDG-2319 0.3HP (7,600RPM)

Medium Speed Mini Air Die Grinder

- Low profile for grinding restricted areas.
- Light weight for fatigue free use.
- Medium speed for specific grinding accessories.



ZDG-231AL 0.3HP

3" Extension Mini Air Die Grinder



ZDG-231L 0.3HP

5" Extension Mini Air Die Grinder



ZDG-231 0.3HP

Mini Air Die Grinder

- The ZDG-231 Mini Die Grinder is suitable for light weld grinding, porting and polishing applications. It features a spindle concentricity less than 0.05mm.



ZDG-231K 0.3HP

Mini Die Grinder Tool Kit

Specifications:

- 1PC Die Grinder
- 2PCS Spanners
- 5PCS 1/4" Shank Grinding Stones
- 5PCS 1/8" Shank Grinding Stones
- 1PC 1/8" Collet
- 1PC Nipple
- 1PC Blow Case



ZDG-236 0.3HP

Mini Air Angle Die Grinder

- The ZDG-236 Mini Angle Die Grinder allows easy handling in confined areas, and is capable of using carbide burs and other attachments for polishing, porting, and light metal removal.



ZDG-236K 0.3HP

Mini Angle Die Grinder Tool Kit

Specifications:

- 1PC Angle Die Grinder
- 1PC 2" Roloc Pad
- 5PCS 2" Roloc Scotch Discs
- 1PC 1/8" Collet
- 1PC Nipple
- 2PCS Spanners
- 5PCS 1/8" Shank Grinding Stones
- 5PCS 1/4" Shank Grinding Stones
- 1PC Blow Case



Model	Collet Size in.(mm)	Net Weight lbs(kgs)	Length in.(mm)	RPM	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Avg. Air Consumption cfm
ZDG-231	1/4(6)	0.9(0.4)	6.1(155)	25,000	1/4	3/8(10)	3
ZDG-236	1/4(6)	1.1(0.5)	6.1(155)	20,000	1/4	3/8(10)	3
ZDG-2319	1/4(6)	1.3(0.6)	7.3(185)	7,600	1/4	3/8(10)	3
ZDG-231AL	1/4(6)	1.3(0.5)	8.6(220)	25,000	1/4	3/8(10)	2.6
ZDG-231L	1/4(6)	1.5(0.7)	10.1(259)	25,000	1/4	3/8(10)	2.6

Air Die Grinder / Air Angle Die Grinder

ZP313 0.5HP

Air Die Grinder

- The ZP313 Die Grinder is suitable for Many automotive and industrial high speed grinding applications. The grinder can be used to clean dies, rotors, backing plates and brake pad mounts.
- Grind valve seats, dress welds and enlarge holes.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding accessories.



ZP313K 0.5HP

Air Die Grinder Tool Kit

Specifications:

- 1PC Die Grinder
- 2PCS Spanners
- 5PCS 1/4" Shank Grinding Stones
- 5PCS 1/8" Shank Grinding Stones
- 1PC 1/8" Collet
- 1PC Nipple
- 1PC Blow Case



ZP314 0.5HP

3" Air Extension Die Grinder

- Extension Die Grinder is designed for high speed grinding and polishing in hard-to-reach areas.
- Features an extended reach of 3".
- By using 1/4"(6mm) or 1/8"(3mm) grinding accessories, the grinder can be used in a wide range of grinding and polishing applications.



ZP319 0.5HP

Air Angle Die Grinder

- The ZP319 Angle Die Grinder is ideal for high speed grinding and polishing.
- It can be used in finishing dies and metal molds, smoothing and shaping sheet metal and cast iron, weld finishing and other high speed polishing applications.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding accessories.

ZP319K 0.5HP

Angle Die Grinder Tool Kit

Specifications:

- 1PC Angle Die Grinder
- 5PCS 2" Roloc Scotch Discs
- 5PCS 3" Roloc Scotch Discs
- 1PC 1/8" Collet
- 1PC Nipple
- 2PCS Spanners
- 5PCS 1/8" Shank Grinding Stones
- 5PCS 1/4" Shank Grinding Stones
- 1PC Blow Molded Case
- 2PCS Roloc Pad
- 2PCS Bolts

ZDG-356A 0.5HP (2,600RPM)

ZDG-376A 0.5HP (3,600RPM)

Low Speed Air Die Grinder

- In-Line Die Grinder is designed for low speed application.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding accessories.



ZDG-376AL 0.5HP (3,600RPM)

Low Speed Air Extension Die Grinder

- The die grinder come with 1/4"(6mm) or 3/8"(8mm) double angle collets for industrial application.



ZST-200E-29
6mm COLLET

ZST-200E-29-1
1/4" COLLET



ZP315 0.5HP

5" Air Extension Die Grinder

- Extension Die Grinder is designed for high speed grinding and polishing in hard-to-reach areas.
- Features an extended reach of 5".
- By using 1/4"(6mm) or 1/8"(3mm) grinding accessories, the grinder can be used in a wide range of grinding and polishing applications.



ZDG-3226 0.5HP

115° Air Angle Die Grinder

- The ZDG-3226 Angle Die Grinder is ideal for high speed grinding and polishing.
- It can be used in finishing dies and metal molds, smoothing and shaping sheet metal and cast iron, weld finishing and other high speed polishing applications.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding accessories.



ZAG-341 0.5HP

2" Air Angle Grinder

- The Angle Grinder features versatile application for grinding, including depressed disc.



ZBT288544-2GD060
(#60Grit), 2"DISC WHEEL

Model	Collet Size Inch(mm)	Net Weight lbs(kgs)	Length in.(mm)	RPM	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Avg. Air Consumption cfm
ZP313	1/4(6)	1.3(0.6)	7(178)	22,000	1/4	3/8(10)	3.7
ZDG-356A/376A	1/4(6)	1.5(0.7)	7.8(200)	2,600/3,600	1/4	3/8(10)	3.7
ZDG-376AL	1/4(6)	2.2(1)	12(305)	3,600	1/4	3/8(10)	3.5
ZP314	1/4(6)	1.5(0.7)	9.4(240)	22,000	1/4	3/8(10)	3.7
ZP315	1/4(6)	1.8(0.8)	11(280)	22,000	1/4	3/8(10)	3.7
ZP319/ZDG-3226	1/4(6)	1.5(0.7)	7(178)	18,000	1/4	3/8(10)	3.7
ZAG-341	Grinding Wheel 2"	1.5(0.7)	7(178)	15,000	1/4	3/8(10)	3.5

ZDG-301L300 1HP

ZDG-3076L300 1HP

12" Air Extension Die Grinder

ZDG-301L500 1HP

ZDG-3076L500 1HP

21-3/8" Air Extension Die Grinder

ZDG-301L800 1HP

ZDG-3076L800 1HP

31-1/2" Air Extension Die Grinder



ZST-200E-29 6mm COLLET
ZST-200E-29-2 8mm COLLET

ZST-200E-29-1 1/4" COLLET
ZST-200E-29-4 3/8" COLLET

Benefits

- Industrial extended shaft long die grinder design for high speed grinding & polishing in hard-to-reach areas
- By using 1/4" (6mm) or 3/8" (8mm) Double Angle Collets, the die grinder can be used in a wide range of grinding and polishing applications with various wheels
- 4000rpm models are excellent for grinding applications with flap sanding wheel
- High productivity
- Highest durability in demanding applications

Features

- 12" (305 mm), 21-3/8" (543 mm), 31-1/2" (800 mm) extended body by Aluminum alloy structure.
- Comfort grip over-housing
- Streamlined safety lever
- Rear exhaust
- 1/4" (6mm) & 3/8" (8mm) industrial grade Double Angle collet holder
- 1.0 hp motor
- 22,000 rpm free speed models and 3,500 rpm free speed models



* The length of extended body can be customize to extended as requirement.

Model	Collet size inch(mm)	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZDG-301L300	1/4(6)	2.9(1.3)	17.5(445)	22,000	1/4	3/8(10)	4.2
ZDG-301L500	1/4(6)	3.9(1.8)	27(688)	22,000	1/4	3/8(10)	4.2
ZDG-301L800	1/4(6)	4.9(2.2)	37.1(943)	22,000	1/4	3/8(10)	4.2
ZDG-3076L300	1/4(6)	3.5(1.6)	18.7(477)	3,500	1/4	3/8(10)	4.2
ZDG-3076L500	1/4(6)	4.5(2)	28.3(719)	3,500	1/4	3/8(10)	4.2
ZDG-3076L800	1/4(6)	5.5(2.5)	38.3(974)	3,500	1/4	3/8(10)	4.2



ZPD327 0.3HP
Micro Die Grinder



ZPD212 0.12HP
Micro Die Grinder



ZPD312 0.12HP
Micro Die Grinder



ZPD412 0.15HP
Micro Die Grinder



ZPD322 0.12HP
90° Air Micro Grinder



ZPD323 0.12HP
120° Air Micro Grinder

Model	Free Speed R.P.M.	Collet Size inch(mm)	Air Inlet Size inch-NPT/PT	Air Pressure kg(cm ²)	Air Cons. L/min	Net Weight kg	Tool Dimension mm	Tool Length mm	Hose Length mm	Exhaust System
ZPD327	30,000	1/4(6)	1/4	6	300	0.3	26.5	150	1,500	Rear
ZPD212	60,000	1/8(3)	1/4	6	180	0.24	17	140	1,500	Rear
ZPD312	60,000	1/8(3)	1/4	6	180	0.24	18	125	1,500	Rear
ZPD412	70,000	1/8(3)	1/4	6	180	0.13	17	140	1,500	Rear
ZPD322	22,000	-	1/4	6	240	0.345	-	140	1,500	Rear
ZPD323	22,000	-	1/4	6	240	0.355	-	140	1,500	Rear



ZP209

Air Engraving Stylus
Lightweight, small diameter & metal body.

Model	Stroke Length mm	Blow Per Min. B.P.M.	Operating Air Pressure PSI(bar)	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)
ZP209	1.2	34000	90(6.2)	0.24(6.8)	0.53(0.24)	1/4	1/4(6.5)



ZAS132
Air Flux Chipper



ZP232 0.15HP
Air Scraper

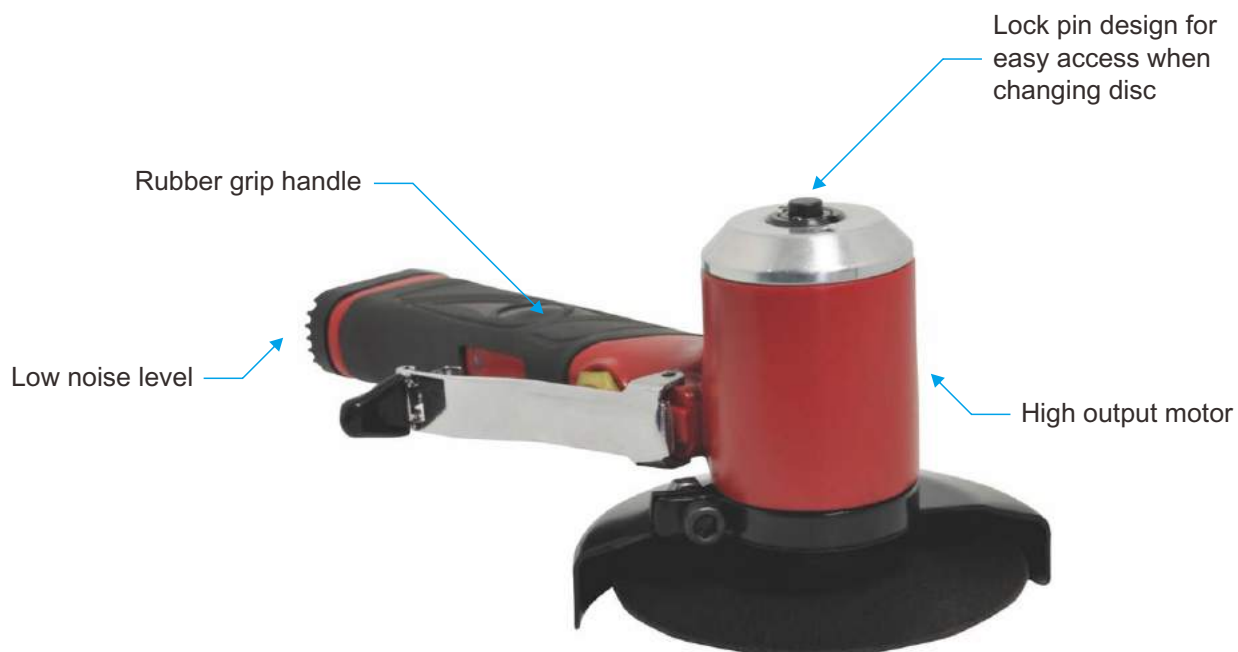


ZP232K 0.15HP
Air Scraper Kit

Model	Bore Diameter Inch(mm)	Stroke Length Inch(mm)	Blow Per Min. B.P.M.	Operating Air Pressure PSI(bar)	Avg. Air Consumption cfm(l/min)	Net Weight lbs(kgs)	Min. Hose Size Inch(mm)	Air Inlet Size inch-NPT/PT
ZAS132	(18x14)	15/16(24)	2,800	90(6.2)	2.12(60)	2.0(0.9)	3/8(10)	1/4
ZP232	1/2(12.7)	1/4(6.3)	4,800	90(6.2)	2.8(80)	1.59(0.72)	3/8(10)	1/4

Features

- Low Vibration & Ergonomic handle design.
- Easy access to changing discs.



ZAG-386 0.5HP
3" Air Cut Off Tool



ZAG-387 0.7HP
4" Air Cut Off Tool

Model	Free Speed rpm	Capacity Size PAD	Horse Power HP	Air Inlet	Air Pressure kg/cm ²	Air Cons. cfm	Weight kg	Overall Length mm
ZAG-386	18,000	3"	0.82	1/4	6.3	4	0.83	225x115x105
ZAG-387	14,000	4"	0.8	1/4	6.3	4.5	0.93	240x105x125



ZP219 0.5HP
Air Nibbler

Benefits

- Easy to operate and control
- Perfect for accurate cutting and best for tight corners and circles
- Used for nibbling plastic, tin, aluminum and others metals original
- Ideal for paint and auto body shops, tinsmiths, and sheet metal shops

Features

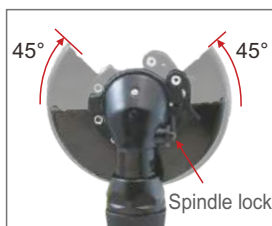
- 4.5mm diameter punch cuts rolled steel sheet up to 0.0478" /1.2mm (18 gauge) and aluminum up to 0.064"/1.628mm (14 gauge).
- The nibbler is capable of cutting 4.5mm in radius with accuracy and without distorted edges.
- Easy access to punch and die for quick replacement.
- Balanced, lightweight tool.



ZAC-354 0.5HP
3" Air Angle Cutter



ZAC-354L 0.5HP
3" Extended Air Angle Cutter



ZAC-304 1HP
3" Air Angle Cutter



ZBT25134-3GD
3" Disc Wheel (3"X3/8"X1/16")

ZP250 0.5HP
Air Cutter

- The 3"Cutter is ideal for a wide range of cutting applications.

Model	Cutting Capacity Steel	Cutting Capacity Aluminum	Grinding Wheel	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZP219	1.2mm	1.6mm	—	2.2(1)	7.2(185)	2,600	1/4	3/8(10)	3.7
ZAC-354	—	—	Cutting Wheel 3"	2.7(1.2)	8.6(220)	16,000	1/4	3/8(10)	3.5
ZAC-354L	—	—	Cutting Wheel 3"	2.9(1.3)	11.4(290)	16,000	1/4	3/8(10)	3.5
ZAC-304	—	—	Cutting Wheel 3"	2.9(1.3)	8.6(220)	16,000	1/4	3/8(10)	4.1
ZP250	—	—	Cutting Wheel 3"	1.8(0.8)	7.6(193)	21,000	1/4	3/8(10)	3.5

ZAG-306B 1HP (Spindle Thread 5/8"-11)

ZAG-306BM 1HP (Spindle Thread M14x2P)

4" Air Angle Grinder & Cutter

ZAG-30656B 1HP (Spindle Thread 5/8"-11)

ZAG-30656BM 1HP (Spindle Thread M14x2P)

4-1/2" Air Angle Grinder & Cutter

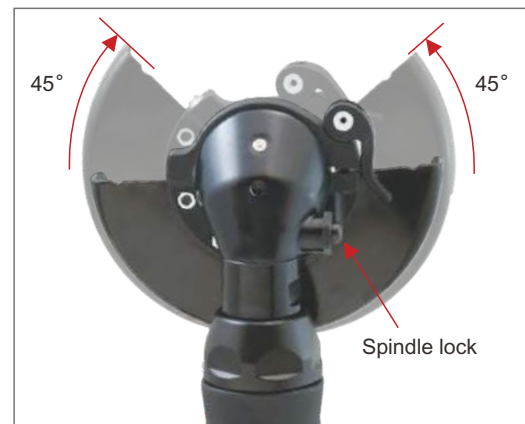


Benefits

- Compact head design.
- Superior Ergonomics.
- Easy to Use.
- Safety & Convenience.
- Powerful at 1.0 hp.
- Durable.
- Ideal for a variety of applications such as sanding with flap discs, grinding especially in tight spaces.

Features

- High quality alloy steel's bevel gear with precision teeth design for tool performance durable & longevity.
- Spindle lock button feature allows for faster grinding wheel changeovers.
- 9 position adjustable swivel guard-120° adjustable for better operator protection & greater visibility of cutting operations.
- 4" (100mm) & 4.5" (115 mm) wheel capacity.
- 5/8"-11 & M14 x 2P spindle thread.
- 1.0hp motor & 11,000 rpm free speed.



Model	Grinding Wheel	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZAG-306B	4"	2.2(1)	8.7(220)	11,000	1/4	3/8(10)	4.1
ZAG-306BM	4"	2.2(1)	8.7(220)	11,000	1/4	3/8(10)	4.1
ZAG-30656B	4-1/2"	2.2(1)	8.7(220)	11,000	1/4	3/8(10)	4.1
ZAG-30656BM	4-1/2"	2.2(1)	8.7(220)	11,000	1/4	3/8(10)	4.1

ZAC-30540 1HP

4" Extended Air Cutter

ZAC-305640 1HP

4-1/2" Extended Air Cutter



Benefits

- Extended Length & Compact Gear Housing at height 39mm
- Ergonomic Grip
- Easy to Use
- Safety & Convenient
- Powerful at 1.0hp
- Durable
- Ideal for cutting composite, metal, exhaust pipes, hangers, body panels, hoses, and U-bolts, ... especially in tight spaces

Features

- Cutting disc size: 4"/100mm, 4-1/2"/115 mm
- 7" = 180mm for better reach and easy access to restricted areas
- Composite ergonomic grip to reduce cold air transmission to operators
- Spindle lock system for easier wheel changing
- 9 position adjustable swivel guard - 120° adjustable for better operator protection & greater visibility of cutting operations
- Built-in speed regulator for easy adjustment
- Safety throttle lever to prevent accidental start up
- Rear exhaust with low noise
- 1 HP motor & 14000 rpm
- High quality bearing (larger bearing size) for better support internal gears
- High quality alloy steel for spiral bevels gears with precision teeth design for tool longevity



Model	Grinding Wheel	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZAC-30540	4"	3.2(1.4)	13.6(345)	14,000	1/4	3/8(10)	4.1
ZAC-305640	4-1/2"	3.2(1.4)	13.6(345)	14,000	1/4	3/8(10)	4.1

Super Power Air Tools

- 0.9HP and 1HP air grinders come with 1/4" (6mm) or 3/8" (8mm) double angle collets for industrial application.



ZST-200E-29
6mm COLLET

ZST-200E-29-1
1/4" COLLET



ZDG-301 0.9HP

Air Die Grinder

- The ZDG-301 Die Grinder is suitable for many automotive and industrial high speed grinding applications. The grinder can be used to clean dies, rotors, backing plates and brake pad mounts.
- Grind valve seats, dress welds and enlarge holes.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding accessories.



ZDG-302 0.9HP

Air Angle Die Grinder

- The ZDG-302 Angle Die Grinder is ideal for high speed grinding and polishing.
- It can be used in finishing dies and metal molds, smoothing and cast iron, weld finishing and other high speed polishing application.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding accessories.



ZDG-301AL 1HP

3.5" Air Extension Die Grinder

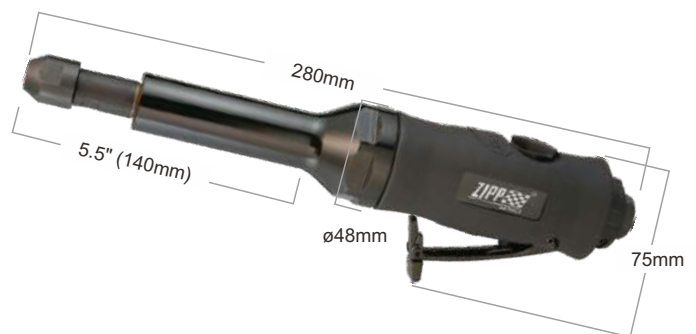
- Extension Die Grinder is designed for high speed grinding and polishing in hard-to-reach areas.
- Features an extended reach of 3.5".
- By using 1/4"(6mm) or 1/8"(3mm) grinding accessories, the grinder can be used in a wide range of grinding and polishing applications.



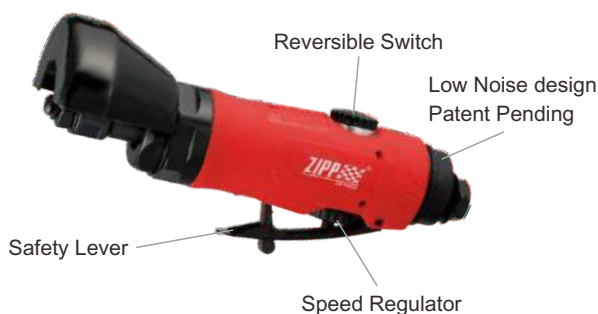
ZDG-301L 1HP

5.5" Air Extension Die Grinder

- Extension Die Grinder is designed for high speed grinding and polishing in hard-to-reach areas.
- Features an extended reach of 5.5".
- By using 1/4"(6mm) or 1/8"(3mm) grinding accessories, the grinder can be used in a wide range of grinding and polishing applications.



Model	Collet size inch(mm)	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZDG-301	1/4(6)	1.4(0.5)	7(180)	23,000	1/4	3/8(10)	4.1
ZDG-302	1/4(6)	1.8(0.8)	7(180)	18,000	1/4	3/8(10)	4.1
ZDG-301AL	1/4(6)	1.8(0.8)	9.4(240)	22,000	1/4	3/8(10)	4.1
ZDG-301L	1/4(6)	2(0.9)	11(280)	22,000	1/4	3/8(10)	4.1



ZRD368 0.7HP

3/8" 90° Angle Air Reversible Drill



ZRC-361R 0.7HP

3" Reversible Air Cutter

- Directs sparks away for personal safety.
- Reversible cutting providing powerful cutting application.
- Best cutting tool for restricted areas.



ZRDG-363 0.7HP

Reversible Air Die Grinder

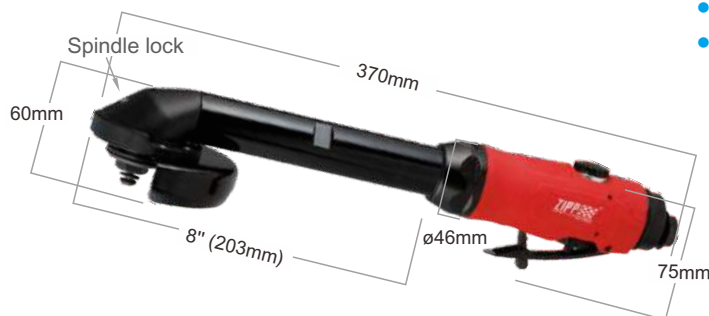
- Directs sparks away for personal safety.
- Reversible grinding for versatility.



ZRAC-365B 0.7HP

4" Extended Reversible Air Axial Cutter

- Directs sparks away for personal safety.
- Excellent for hard to reach areas.
- Low profile for restricted area applications.
- Versatile cutting applications for any cutting jobs.
- Spindle lock for disc replacement.



ZRAG-366B 0.7HP (13,000RPM)

4" Reversible Air Axial Grinder

ZRAG-367B 0.7HP (15,000RPM)

4" Reversible Air Axial Cutter

- Newly designed lower profile axial cutter providing versatile cutting applications.
- Best for restricted areas.
- Light weight ensures fatigue-free use.
- Spindle lock for disc replacement.



Model	Cutting Wheel	Collet size inch(mm)	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZRC-361R	3"	—	2(0.9)	8(205)	18,000	1/4	3/8(10)	3.6
ZRAC-365B	4"	—	2.4(1.1)	14.5(370)	15,000	1/4	3/8(10)	3.6
ZRAG-366B/367B	4"	—	2.4(1.1)	9.4(240)	13,000/15,000	1/4	3/8(10)	3.6
ZRDG-363	—	1/4(6)	1.6(0.7)	7.6(195)	18,000	1/4	3/8(10)	3.6
ZRD368	—	3/8(10)	2.4(1.1)	8.2(210)	1,600	1/4	3/8(10)	3.6

ZDGL-311 0.5HP

Low Noise Air Die Grinder

- The ZDGL-311 Die Grinder is suitable for many automotive and industrial high speed grinding applications. The grinder can be used to clean dies, rotors, backing plates and brake pad mounts.
- Grind valve seats, dress welds and enlarge holes.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding.



ZDGL-311AL 0.5HP

Low Noise 3" Air Extension Die Grinder

- Extension Die Grinder is designed for high speed grinding and polishing in hard-to-reach areas.
- Features an extended reach of 3".
- By using 1/4"(6mm) or 1/8"(3mm) grinding accessories, the grinder can be used in a wide range of grinding and polishing applications.



ZDGL-321 0.5HP

Low Noise Air Angle Die Grinder

- The ZDGL-321 & LA-2115 Angle Die Grinders are ideal for high speed grinding and polishing.
- It can be used in finishing dies and metal molds, smoothing and shaping sheet metal and cast iron, weld finishing and other high speed polishing applications.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding accessories.



ZDGL-356A 0.5HP (2,600RPM)

ZDGL-376A 0.5HP (3,600RPM)

Low Speed, Low Noise Air Die Grinder

- In-Line Die Grinder is designed for low speed application.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding accessories.



ZDGL-311L 0.5HP

Low Noise 5" Air Extension Die Grinder

- Extension Die Grinder is designed for high speed grinding and polishing in hard-to-reach areas.
- Features an extended reach of 5".
- By using 1/4"(6mm) or 1/8"(3mm) grinding accessories, the grinder can be used in a wide range of grinding and polishing applications.



ZDGL-3226 0.5HP

Low Noise 115° Air Angle Die Grinder

- The ZDGL-321 & ZDGL-3226 Angle Die Grinders are ideal for high speed grinding and polishing.
- It can be used in finishing dies and metal molds, smoothing and shaping sheet metal and cast iron, weld finishing and other high speed polishing applications.
- Can use with 1/4"(6mm) or 1/8"(3mm) grinding accessories.



Model	Collet size inch(mm)	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZDGL-311	1/4(6)	1.3(0.6)	7(180)	22,000	1/4	3/8(10)	3.1
ZDGL-356A/376A	1/4(6)	1.5(0.7)	8.2(210)	2,600/3,600	1/4	3/8(10)	3.1
ZDGL-311AL	1/4(6)	1.5(0.7)	9.6(245)	22,000	1/4	3/8(10)	3.1
ZDGL-311L	1/4(6)	1.8(0.8)	11.2(285)	22,000	1/4	3/8(10)	3.1
ZDGL-321/3226	1/4(6)	1.5(0.7)	7(180)	18,000	1/4	3/8(10)	3.1



ZAGL-341 0.5HP

Low Noise 2" Air Angle Grinder

- The Angle Grinder features versatile application for grinding, including depressed disc.



ZASL-342A 0.5HP

Low Noise 2" Angle Sander

- Includes locking-type pad(2" diameter or 3" diameter).
- The Angle Sander is ideal for all types of sanding on small areas.



ZACL-361 0.5HP

Low Noise Air Cutter

- The 3" Cutter is ideal for a wide range of cutting applications.



ZP163-LN 0.5HP

Low Noise 3/8" Air Ratchet Wrench

ZP161-LN 0.5HP

Low Noise 1/2" Air Ratchet Wrench

- The ZP161-LN & ZP163-LN Air Ratchets are rugged, variable speed, reversible air ratchets.
- It's paddle-style trigger provides better speed control and the polyurethane handle helps maintain temperature and insulate vibration.
- Unique ratchet head design insures the wrench free of failure.



Model	Grinding Wheel	Sanding Wheel	Cutting Wheel	Square Drive	Max. Torque ft-lb(Nm)	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZAGL-341	2"	—	—	—	—	1.5(0.7)	7(180)	15,000	1/4	3/8(10)	3.1
ZASL-342A	—	2", 3"	—	—	—	1.5(0.7)	7(180)	15,000	1/4	3/8(10)	3.1
ZACL-361	—	—	3"	—	—	1.6(0.8)	7.6(195)	21,000	1/4	3/8(10)	3.1
ZP163-LN ZP161-LN	—	—	—	3/8" 1/2"	50(69)	2.6(1.2)	10.4(265)	175	1/4	3/8(10)	3.1



ZD45L3A/ZD45L3B 0.3HP
ZD45L5A/ZD45L5B 0.5HP
45° Industrial Angle Drill



ZD90L3A/ZD90L3B 0.3HP
ZD90L5A/ZD90L5B 0.5HP
90° Industrial Angle Drill



ZD363A/ZD363B 0.3HP
ZD365A/ZD365B 0.5HP
360° Offset Industrial Angle Drill



ZD453A/ZD453B 0.3HP
ZD455A/ZD455B 0.5HP
45° Industrial Angle Drill



ZD903A/ZD903B 0.3HP
ZD905A/ZD905B 0.5HP
90° Industrial Angle Drill



ZD5A/ZD5B 0.5HP
90° 1/4" Industrial Angle Drill

Model	Spindle Size inch	Free Speed R.P.M.	Net Weight lbs(kgs)	Overall Length mm	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)
ZD45L3A	1/4"-28 i	2,800	1.98(0.9)	342	1/4	3/8(10)
ZD90L3A	1/4"-28 i	2,800	1.98(0.9)	330	1/4	3/8(10)
ZD903A	1/4"-28 i	2,800	1.77(0.8)	235	1/4	3/8(10)
ZD453A	1/4"-28 i	2,800	1.77(0.8)	265	1/4	3/8(10)
ZD363A	1/4"-28 i	2,800	1.98(0.9)	254	1/4	3/8(10)
ZD45L3B	1/4"-28 i	5,000	1.98(0.9)	342	1/4	3/8(10)
ZD90L3B	1/4"-28 i	5,000	1.98(0.9)	330	1/4	3/8(10)
ZD903B	1/4"-28 i	5,000	1.77(0.8)	235	1/4	3/8(10)
ZD453B	1/4"-28 i	5,000	1.77(0.8)	265	1/4	3/8(10)
ZD363B	1/4"-28 i	5,000	1.98(0.9)	254	1/4	3/8(10)
ZD45L5A	1/4"-28 i	2,400	2.2(1)	357	1/4	3/8(10)
ZD90L5A	1/4"-28 i	2,400	2.2(1)	345	1/4	3/8(10)
ZD905A	1/4"-28 i	2,400	1.98(0.9)	268	1/4	3/8(10)
ZD455A	1/4"-28 i	2,400	1.98(0.9)	281	1/4	3/8(10)
ZD365A	1/4"-28 i	2,400	2.2(1)	270	1/4	3/8(10)
ZD5A	3/8"-24i 1/4" chuck	1,800	2.65(1.2)	276	1/4	3/8(10)
ZD45L5B	1/4"-28 i	3,700	2.2(1)	357	1/4	3/8(10)
ZD90L5B	1/4"-28 i	3,700	2.2(1)	345	1/4	3/8(10)
ZD905B	1/4"-28 i	3,700	1.98(0.9)	268	1/4	3/8(10)
ZD455B	1/4"-28 i	3,700	1.98(0.9)	281	1/4	3/8(10)
ZD365B	1/4"-28 i	3,700	2.2(1)	270	1/4	3/8(10)
ZD5B	3/8"-24i 1/4" chuck	2,800	2.65(1.2)	276	1/4	3/8(10)



ZD300/ZD600/ZD900 0.7HP
1/2" Industrial Air Drill



ZD3600 0.7HP
3/8" Industrial Air Drill
ZRD1600/ZRD2400 0.7HP
3/8" Industrial Air Reversible Drill



ZRD220/ZRD400 0.7HP
ZRD700 0.7HP
1/2" Industrial Air Reversible Drill



ZRD3625C/ZRD3645C 0.7HP
1/2" Air Reversible Drill Composite Housing



ZRD3600C 0.7HP
3/8" Air Reversible Drill Composite Housing



ZRR21 0.9HP
Blind Rivet & Rivet Nut Removal Tool
Adjustable precise shaving in 0.01mm increment.

Model	Capacity inch(mm)	Spindle Size inch	Shaver skirt & Bits dia.	Free Speed R.P.M.	Avg. Air Cons cfm(l/min)	Net Weight lbs(kgs)	Overall Length mm	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)
ZRD220 ZRD400	1/2(13)	3/8"-24	—	220 410	5(141)	3.8(1.7)	230	1/4	3/8(10)
ZRD700	1/2(13)	3/8"-24	—	700	5(141)	3.8(1.7)	230	1/4	3/8(10)
ZD300 ZD600	1/2(13)	3/8"-24	—	300 600	5(141)	3.8(1.7)	230	1/4	3/8(10)
ZD900	1/2(13)	3/8"-24	—	900	5(141)	3.8(1.7)	230	1/4	3/8(10)
ZRD1600 ZRD2400	3/8(10)	3/8"-24	—	1,600 2,400	5(141)	2.5(1.1)	185 165	1/4	3/8(10)
ZD3600	3/8(10)	3/8"-24	—	3,500	5(141)	2.5(1.1)	185	1/4	3/8(10)
ZRD3600C	3/8(10)	3/8"-24	—	1,500	5(141)	2.2(1)	175	1/4	3/8(10)
ZRD3625C	1/2(13)	3/8"-24	—	220	5(141)	3.3(1.5)	185	1/4	3/8(10)
ZRD3645C	1/2(13)	3/8"-24	—	500	5(141)	3.3(1.5)	185	1/4	3/8(10)
ZRR21-5/16	—	—	5/16"	21,000	17(180)	3.3(1.5)	265	1/4	3/8(10)
ZRR21-3/8	—	—	3/8"	21,000	17(180)	3.3(1.5)	265	1/4	3/8(10)
ZRR21-7/16	—	—	7/16"	21,000	17(180)	3.3(1.5)	265	1/4	3/8(10)
ZRR21-1/2	—	—	1/2"	21,000	17(180)	3.3(1.5)	265	1/4	3/8(10)
ZRR21-9/16	—	—	9/16"	21,000	17(180)	3.3(1.5)	265	1/4	3/8(10)
ZRR21-5/8	—	—	5/8"	21,000	17(180)	3.3(1.5)	265	1/4	3/8(10)

- High-torque air motor; slow-speed start-up trigger.
- TPR grip and removable side handle.



ZRD327 0.7HP
ZRD327D 0.7HP (Feathering Control)
1/2" Air Reversible Drill



ZRD327P 0.7HP
ZRD327DP 0.7HP (Feathering Control)
1/2" Air Reversible Drill



ZD6637 0.7HP (2,600RPM)
ZD6651 0.7HP (4,000RPM)
3/8" Air Drill



ZD6681 0.7HP (700RPM)
1/2" Air Drill



ZD6637P 0.7HP (2,600RPM)
ZD6651P 0.7HP (4,000RPM)
3/8" Air Drill



ZD6681P 0.7HP (700RPM)
1/2" Air Drill

Model	Chuck Size inch(mm)	Spindle Thread	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZRD327/327P/327D/327DP	1/2(13)	3/8"-24	2.6(1.2)	9(230)	700	1/4	3/8(10)	4
ZD6637/6651	3/8(10)	3/8"-24	2.8(1.3)	8.6(220)	2,600	1/4	3/8(10)	4.9
ZD6637P/6651P	3/8(10)	3/8"-24	2.8(1.3)	8.6(220)	4,000	1/4	3/8(10)	4.9
ZD6681/ZD6681P	1/2(13)	3/8"-24	2.9(1.3)	10.2(260)	700	1/4	3/8(10)	4.9

ZAD-3004P 1HP

(22,000RPM)

3/8" Air Drill



ZAD-3004PC 1HP

(22,000RPM)

3/8" Air Drill



ZAD-336 0.5HP

3/8" 90° Angle Air Drill

- The Angle Air Drill is ideal for drilling applications of restricted areas.
- The powerful air motor provides high power output and stall torque resistance.



ZAE-371 0.5HP (2,600RPM)

ZAE-3714 0.5HP (3,600RPM)

Air Eraser

- Smart Eraser is designed for every user to get rid of any kind of marks on the plastic plate or painted surface.
- The user can do the removal very fast and clear without any damages on the surface.
- The original painting will as like the original.



Z26036
Rubber Eraser
3-8/15"X7/12"



Z26036-7
Rubber Eraser
4"X7/12"



Z26036-2
Rubber Eraser
3-8/15"X7/12"

ZAD-356 0.5HP (2,600RPM)

ZAD-376 0.5HP (3,600RPM)

3/8" Air Drill

- In-Line Drill is designed for low speed/high torque applications, such as drilling, sanding, and polishing.
- Keyless chuck comes with both ZAD-356 and ZAD-376.



ZTB-383 0.5HP

Air Tire Buffer

- The Tire Buffer is ideal for general purpose tire buffering.
- Featuring high power and stall torque resistance makes the tire buffering easy and efficient.



ZBT265A6026TB
Tire Buffer Metal Wheel

ZAD-356P 0.5HP (2,600RPM)

ZAD-376P 0.5HP (3,600RPM)

3/8" Air Drill

- In-Line Drill is designed for low speed/high torque applications, such as drilling, sanding, and polishing.
- Keyless chuck comes with both ZAD-356P and ZAD-376P.



ZP384 0.5HP (2,600RPM)

ZP3843 0.5HP (3,600RPM)

Air Tire Buffer

- The Tire Buffer is ideal for general purpose tire buffering.
- Featuring high power and stall torque resistance makes the tire buffering easy and efficient.



Model	Chuck Size in.(mm)	Spindle Thread in.	Net Weight lbs(kgs)	Length in.(mm)	RPM	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Avg. Air Cons. cfm
ZAD-3004P	3/8(10)	—	1.5(0.7)	7.2(185)	22,000	1/4	3/8(10)	4.1
ZAD-336	3/8(10)	3/8"-24	2(0.9)	7.6(195)	1,800	1/4	3/8(10)	3.7
ZAD-356/356P	3/8(10)	3/8"-24	1.8(0.8)	8.8(225)	2,600	1/4	3/8(10)	3.7
ZAD-376/376P	3/8(10)	3/8"-24	1.8(0.8)	8.8(225)	3,600	1/4	3/8(10)	3.7
ZAE-371/3714	—	5/16"-24	1.8(0.8)	8.8(225)	2,600/3,600	1/4	3/8(10)	3.7
ZTB-383	—	5/16"-24	1.8(0.8)	8.8(225)	2,600	1/4	3/8(10)	3.7
ZP384/3843	—	3/8"-24	1.8(0.8)	8.8(225)	2,600/3,600	1/4	3/8(10)	3.5

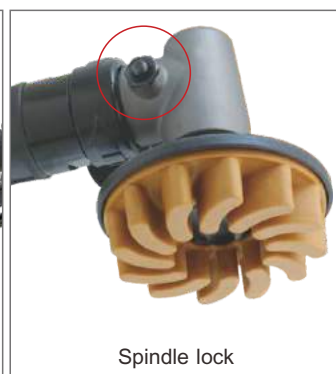
Benefits

- Superior Ergonomics.
- Easy to use & offer greater visibility on work surface.
- Safety & Convenience.
- Powerful at 1.0 hp.
- Durable.
- Specially tool developed for the removal of pinstripes, Car Decals and Stickers, double faced tapes.



Features

- High quality alloy steel's bevel gear with precision teeth design for tool performance durable & longevity.
- Spindle lock button feature allows for faster eraser wheel changeovers.
- Fully adjustable side handle.
- 4" Eraser Wheel with eraser wheel hub for secured fastened on spindle & more stable operation.
- Eraser wheel's pad as spiral oriented design as running direction for smoothly removal operation.
- 5/16"-24 spindle female thread.
- 1.0hp motor & 2,400 rpm free speed.



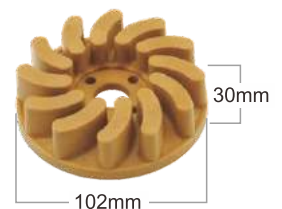
ZAE-3308E 0.5HP (2,400RPM)
Air Angle Eraser



ZAE-30836E 1HP (2,400RPM)
Air Angle Eraser



ZST-BT29756-1
Eraser Wheel Hub



ZBT29756
Eraser Wheel
4"(102mm)

Model	Spindle Thread	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min. Hose Size inch(mm)	Avg. Air Cons. cfm
ZAE-30836E	5/16"-24	3.1(1.4)	8.8(225)	2,400	1/4	3/8(10)	4.1
ZAE-3308E	5/16"-24	2.2(1)	8.8(225)	2,400	1/4	3/8(10)	3.5

Rust & Paint Removal Tools

Non-Vacuum

ZTU-391 0.5HP

Low Noise



Central-Vacuum

ZTU-391C 0.5HP



Self-Generated Vacuum

ZTU-391S 0.5HP



HB-46-2
HOSE & BAG

- Innovative 180° rotational handle for precise leverage and control.
- Unique double side safety guards and integrated dust extraction.
- system for safe and clean operation.
- Planetary gear system for increased torque.
- Ergonomic cushion grip insulates against cold and vibration.
- Swivel exhaust outlet in rear of tool allows easy operations.
- Paddle style trigger for precise speed control.
- Increase the baffle and prevent hands from being injured.
- Integrated Safety and Dust Extraction System.



Removable Double
Side Safety Guard.
(Patent Pending)



Integrate Safety and Dust
Extraction System.
(Patent Pending)



180° Rotational Handle
(Patent Pending)



Model	Spindle Thread mm	Weight Lbs.(kg)	Length in.(mm)	RPM	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Avg. Air Cons. cfm
ZTU391/391C/391S	9	2.7(1.2)	10(254)	4,000	1/4	3/8(10)	3.5

Non-Vacuum

ZTU-391K 0.5HP

Specifications:

- 1PC Paint Removal Tool
- 1PC Rubber Eraser Wheel
- 1PC Stripping Wheel
- 1PC Hub
- 3PCS Wire Wheel
- 1PC Nipple
- 1PC Hex
- 1PC Screw
- 1PC Blow Molded Cast



Central-Vacuum

ZTU-391CK 0.5HP

Specifications:

- 1PC Paint Removal Tool
- 1PC Rubber Eraser Wheel
- 1PC Stripping Wheel
- 1PC Hub
- 3PCS Wire Wheel
- 1PC Nipple
- 1PC Hex
- 1PC Screw
- 1PC Blow Molded Cast



ZST-BTRE115-30

Rubber eraser wheel
Wheel diameter 4"(103mm)
Wheel width 1.2"(30mm)



ZST-BTRE115-30A

Water based eraser
Wheel diameter 4"(103mm)
Wheel width 1.2"(30mm)



ZBT246655

Rubber eraser wheel
Wheel diameter 4"(103mm)
Wheel width 1.2"(30mm)



ZST-BT246652

Stripping wheel
Wheel diameter 4"(103mm)
Wheel width 1.2"(30mm)



ZBTWW103-23-7

Wire wheel(Coarse)
Wire diameter 0.028"(0.7mm)
Wheel diameter 4"(103mm)
Wheel width 0.91"(23mm)



ZBTWW103-23-5.5

Wire wheel(Medium)
Wire diameter 0.019"(0.5mm)
Wheel diameter 4"(103mm)
Wheel width 0.91"(23mm)



ZBTWW103-23-5

Wire wheel(Fine)
Wire diameter 0.019"(0.5mm)
Wheel diameter 4"(103mm)
Wheel width 0.91"(23mm)



ZST-BT246655A-K03

Hub
Hub width 0.91"(23mm)



ZBTWW103-23-7ASS

Stainless steel wire(Coarse)
Wire diameter 0.028"(0.7mm)
Wheel diameter 4"(103mm)
Wheel width 0.91"(23mm)



ZBTWW103-23-5ASS

Stainless steel wire(Medium)
Wire diameter 0.019"(0.5mm)
Wheel diameter 4"(103mm)
Wheel width 0.91"(23mm)



ZBTWW103-23-5SS

Stainless steel wire(Fine)
Wire diameter 0.019"(0.5mm)
Wheel diameter 4"(103mm)
Wheel width 0.91"(23mm)



ZBTWW103-11-7AM

Wire wheel(Coarse)
Wire diameter 0.028"(0.7mm)
Wheel diameter 4"(103mm)
Wheel width 0.43"(11mm)



ZBTWW103-11-5AM

Wire wheel(Medium)
Wire diameter 0.019"(0.5mm)
Wheel diameter 4"(103mm)
Wheel width 0.43"(11mm)



ZBTWW103-11-5M

Wire wheel(Fine)
Wire diameter 0.019"(0.5mm)
Wheel diameter 4"(103mm)
Wheel width 0.43"(11mm)



ZST-BT28068-K03

Hub
Hub width 0.43"(11mm)



ZBTWW103-11-7ASS

Stainless steel wire(Coarse)
Wire diameter 0.028"(0.7mm)
Wheel diameter 4"(103mm)
Wheel width 0.43"(11mm)



ZBTWW103-11-5ASS

Stainless steel wire(Medium)
Wire diameter 0.019"(0.5mm)
Wheel diameter 4"(103mm)
Wheel width 0.43"(11mm)



ZBTWW103-11-5SS

Stainless steel wire(Fine)
Wire diameter 0.019"(0.5mm)
Wheel diameter 4"(103mm)
Wheel width 0.43"(11mm)



Benefits

- Mini compact design with angle head Housing at height 75 mm
- Ergonomic Grip
- Easy to use & convenient
- 0.3hp Powerful & Durable
- Ideal for use in paint shop applications for sanding nibs or for sanding small areas and for car headlights polish.
- Dual action for provide uniform sanding surface with a superior finish , ready for buffing application as next steps.

Features

- Angle head dual action sander with 2" Velcro Pad, 1.2" Velcro Pad , Triangle mini Velcro Pad
- High quality bearing provide long tool life
- High quality alloy steel for spiral bevels gears with precision teeth design for tool longevity
- One piece balancer design for reducing vibration of dual action

ZSR-242 0.3HP

Spot Repair Sander

ZSR-242K 0.3HP

Spot Repair Sander Kit

[Specifications]

- 1PC Spot Repair Sander
- 1PC 2" Velcro Pad
- 1PC 1.2" Velcro Pad
- 1PC Triangle mini Velcro Pad
- 1PC Nipple
- 1PC 2" Wool Pad
- 1PC 1.2" Wool Pad
- 1PC 2" Polishing Pad
- 1PC 1.2" Polishing Pad
- 10PCS 2" 120# Sandpapers
- 10PCS 2" 180# Sandpapers
- 10PCS 2" 320# Sandpapers
- 10PCS 2" 600# Sandpapers
- 10PCS 2" 1000# Sandpapers
- 10PCS 2" 1500# Sandpapers
- 10PCS Triangle mini 120# Sandpapers
- 10PCS Triangle mini 180# Sandpapers
- 10PCS Triangle mini 320# Sandpapers
- 10PCS Triangle mini 600# Sandpapers
- 10PCS Triangle mini 1000# Sandpapers
- 10PCS Triangle mini 1500# Sandpapers
- 10PCS 1.2" 120# Sandpapers
- 10PCS 1.2" 180# Sandpapers
- 10PCS 1.2" 320# Sandpapers
- 10PCS 1.2" 600# Sandpapers
- 10PCS 1.2" 1000# Sandpapers
- 10PCS 1.2" 1500# Sandpapers
- 1 PC Blow Molded Case



Model	Diameter Orbit mm	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZSR-242	2	1.1(0.5)	6.1(155)	13,000	1/4	3/8(10)	2.6



30mm

ZST13145
1.2" Velcro Pad



38mm

ZST13144
Triangle mini Velcro Pad



48mm

ZST13146
2" Velcro Pad



ZBT131-30-1
1.2" Wool Pad



ZBT131-2-1
2" Wool Pad



ZBT131-30-2
1.2" Polishing Pad



ZBT131-2-2
2" Polishing Pad



ZP-131-32-120
120# Sandpaper (32mm)



ZP-131-32-180
180# Sandpaper (32mm)



ZP-131-32-320
320# Sandpaper (32mm)



ZP-131-32-600
600# Sandpaper (32mm)



ZP-131-32-1000
1000# Sandpaper (32mm)



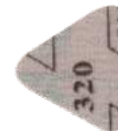
ZP-131-32-1500
1500# Sandpaper (32mm)



ZP-131-40-3-120
120# Sandpaper (40mm)



ZP-131-40-3-180
180# Sandpaper (40mm)



ZP-131-40-3-320
320# Sandpaper (40mm)



ZP-131-40-3-600
600# Sandpaper (40mm)



ZP-131-40-3-1000
1000# Sandpaper (40mm)



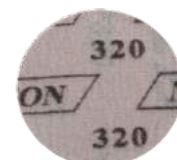
ZP-131-40-3-1500
1500# Sandpaper (40mm)



ZP-ZOS-2-120
120# Sandpaper (50.8mm)



ZP-ZOS-2-180
180# Sandpaper (50.8mm)



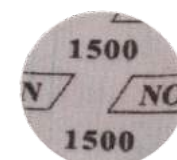
ZP-ZOS-2-320
320# Sandpaper (50.8mm)



ZP-ZOS-2-600
600# Sandpaper (50.8mm)



ZP-ZOS-2-1000
1000# Sandpaper (50.8mm)



ZP-ZOS-2-1500
1500# Sandpaper (50.8mm)



Benefits

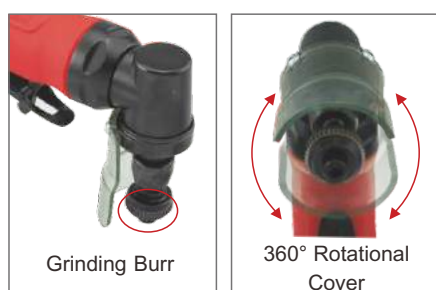
- Compact angle head housing design for quick and easy use.
- Ergonomic Grip
- 0.5hp Powerful & Durable
- Ideal tool & specifically designed to deal with the latest technique in vehicle assembly laser welding

Features

- High speed cutting wheel made of a specially hardened metal. Depth of cut limitation-optional at either 0.8-1.0mm. The depth limiter ensures that the lower panel doesn't get damaged.
- Protection guard (transparent acetate material) design for safety protection.
- High quality manufacturing and materials guarantee durability.
- High quality alloy steel for internal gears with precision gear teeth design for prolong the gear life.

ZWR-3212 0.5HP

Laser welding removal Tool



Grinding Burr

360° Rotational Cover



Transparent Acetate Guard



ST210145
Cutting Wheel
25 x 4mm Diameter

- Solid Tungsten Carbide Cutting wheel with TiAlNcoating.
- Superior for high speed and dry cutting

ZWR-3212K 0.5HP

Laser welding removal Tool Kit

[Specifications]

- 1 PC Laser welding removal Tool
- 2PCS Spanners
- 1 PC Cutting Wheel
- 1PC Hex
- 1PC Depth 0.8mm Shaft
- 1PC Depth 1.0mm Shaft
- 1PC Blow Molded Case



ZST210144
(Shaft for 6mm collet)

ZST210144.1
(Shaft for 1/4" collet)

Shaft for Cutting Depth
0.8mm for 25mm Cutting
Wheel



ZST210144.2
(Shaft for 6mm collet)

ZST210144.3
(Shaft for 1/4" collet)

Shaft for Cutting Depth
1.0mm for 25mm Cutting
Wheel

Model	Collet Size inch(mm)	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZWR-3212	1/4(6)	1.5(0.7)	7(180)	11,000	1/4	3/8(10)	3.5


ZP385M / ZP385A 0.3HP

Air Mini Orbital Sander


[KIT Contents]

- 2" / 3" Mini Orbital Sander (ZP385M or ZP385A) 1pc
- 320 Grit Sanding Disc 10 pcs
- 400 Grit Sanding Disc 10 pcs
- 600 Grit Sanding Disc 10 pcs
- 2" Hook & Loop Type Pad 1pc
- 3" Hook & Loop Type Pad 1pc


ZP386A 0.3HP

Air Mini Sander


[KIT Contents]

- 3" Mini Sander (ZP386A) 1pc
- 80 Grit Sanding Disc 10 pcs
- 100 Grit Sanding Disc 10 pcs
- 120 Grit Sanding Disc 10 pcs
- Coarse Preparation Disc 1pc
- Medium Preparation Disc 1pc
- Fine Surface Preparation Disc 1pc


ZP387M / ZP387A 0.3HP

Air Mini Polisher


[KIT Contents]

- 3" Mini Polisher (ZP387M or ZP387A) 1pc
- 3" Hard Compounding Pad 1 pc
- 3" Soft Compounding Pad 1 pc
- 3-1/2" Lambs wool Bonnet 1 pc
- 3" Hook & Loop Backing Pad 1pc

ZP387MK / ZP387AK 0.3HP

Air Mini Polisher Kit

Model	Pad Size inch(mm)	Spindle Thread inch(mm)	Free Speed R.P.M.	Avg. Air Cons. cfm(l/min)	Net Weight lbs(kgs)	Overall Length inch(mm)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)
ZP385M	2(51) or 3(76)	(M6)	16,000	4(113)	2(0.98)	4-11/16(120)	1/4	3/8(10)
ZP385A	2(51) or 3(76)	5/16-24 UNC	16,000	4(113)	2(0.98)	4-11/16(120)	1/4	3/8(10)
ZP386A	3(76)	1/4-20 UNC	18,000	4(113)	1.5(0.68)	4-11/16(120)	1/4	3/8(10)
ZP387M	3(76)	(M6)	2,000	4(113)	1.6(0.75)	5-1/4(138)	1/4	3/8(10)
ZP387A	3(76)	5/16-24 UNC	2,000	4(113)	1.6(0.75)	5-1/4(138)	1/4	3/8(10)

ZVP-7N-7747 0.6HP

5" Vertical Sander / Polisher

- Includes ST-231A locking-type pad (3" diameter and 2" diameter).
- The Angle Sander is ideal for all types of sanding on small areas.



ZP388 0.25HP

3" Mini Polisher - 1/4"-20 or M6x1.0

ZP389 0.25HP

3" Mini Polisher - 5/16"-24

Features:

- Composite Motor Housing
- Handle Exhaust
- Low Noise 80 dB(A)



ZNRS-71-6346 0.3HP

Nib Removal Sander - Orbit Dia. 3 mm

Features:

- Small Diameter Head Size for Better Visibility, Less Buffing
- Lightweight, Easy-Grip, Right Angle Tool
- Better Visibility, Less Buffing
- Precise Speed Control
- Rear Exhaust with Available Overhose



Air Regulator

ZP388K 0.25HP

3" Mini Polisher - 1/4"-20 or M6x1.0

ZP389K 0.25HP

3" Mini Polisher - 5/16"-24



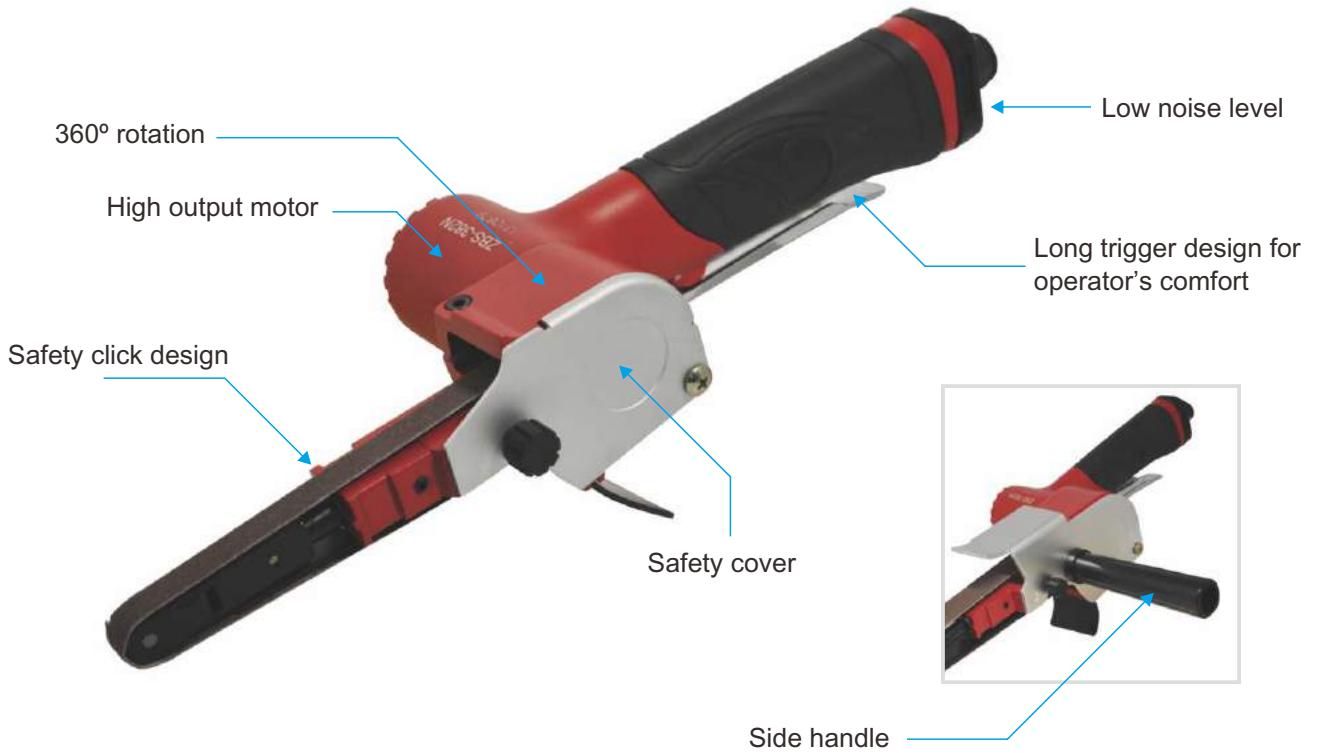
[Accessories]

- 1pc 3" Mini Polisher
- 1pc Key Wrench
- 1pc 3" Velcro Sanding Pad (Installed)
- 1pc 3-1/2" Bonnet
- 1pc 3-1/2" Yellow Compounding Pad
- 1pc 3-1/2" White Compounding Pad

Model	Free Speed rpm	Pad Size inch(mm)	Orbit Diameter inch(mm)	Spindle Thread	Air Consumption l/min(cfm)	Length inch(mm)	Net Weight lb(kg)	Sound Level db(A)
ZVP-7N-7747	3,500	5(125)	—	5/16"-24	110(3.9)	144x205x214mm	2.2(1)	80
ZNRS-71-6346	12,000	1-1/4(32)	1/8(3)	—	28.3(1)	7-7/8(197)	1.1(0.5)	80
ZP388	3,200	3(75)	—	1/4"-20 or M6X1.0	91(3.2)	4.6(116)	1.59(0.72)	80
ZP389	3,200	3(75)	—	5/16"-24	91(3.2)	4.6(116)	1.59(0.72)	80

*Operating Air Pressure:90PSI/6.2bar *Air Inlet Size:1/4 inch-NPT/PT *Min. Hose Size:3/8"(10mm)

- Low Vibration & Ergonomic handle design
- Easy changing sand belt
- 360° degree sanding direction

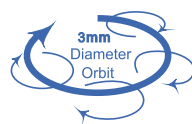


Model	Size of Belt mm	Free Speed R.P.M.	Horse Power HP	Air Inlet Size inch-NPT/PT	Air Pressure kg/cm ²	Avg. Air Cons. cfm	Net Weight kg
ZBS-382N	10X330	16,500	0.5	1/4	6.3	4	0.88
ZBS-383N	20X520	16,500	0.5	1/4	6.3	4	1.33
ZBS-383N1	20X330	16,500	0.5	1/4	6.3	4	0.9
ZBS-385N	30X540	16,500	0.8	1/4	6.3	4.5	1.5

AS-110

110° Air Angle Sander

- Rubber Sleeve for operator's comfort.
- Safety Trigger.
- 110° degree one piece housing design for longer life time.
- Adjustable Speed Regulator.
- Rear Exhaust.



AOS-90-030

90° 2" Air Angle Orbital Sander

- Rubber Sleeve for operator's comfort.
- Safety Trigger.
- 90° degree one piece housing design for longer life time.
- Adjustable Speed Regulator.
- Rear Exhaust.



ZDS-66122 0.7HP

ZDS-66119 0.7HP

4-1/2", 5" Dia. Disc Sanders

- Each model includes ZDS-66122 Disc Pad Assembly for slotted center-hole abrasive discs.
- Gearless motor for reduced maintenance and downtime.
- Governor-controlled to maintain RPM under heavy load.
- Removable side handle.

ZDS-6637S 0.7HP

ZDS-6651S 0.7HP

5" Dia. Disc Sanders

- Includes ZDS-6637S Locking-Type Pad (5" diameter): pad mounts to tool spindle without adapters.
- Governor speed control maintains RPM under load.
- Gearless for reduced maintenance and down-time.
- Removable side handle.

ZOS-343 0.5HP

3" Orbital Sander

- Ideal for headlamp, windshield and small area repair and finishing.
- 2.5mm orbital diameter.



ZP351 0.25HP

*Non-vacuum.

3" Mini Orbital Palm Sander



ZP354-5 Non-vacuum.

ZP354-5C Central vacuum.

ZP354-5S Self-Generated Vacuum

5" Air Random Orbital Sander



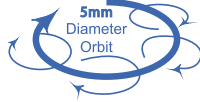
ZP354-6 Non-vacuum.

ZP354-6C Central vacuum.

ZP354-6S Self-Generated Vacuum

6" Air Random Orbital Sander

Model	Pad Size inch(mm)	Free Speed R.P.M.	Avg. Air Cons. cfm(l/min)	Operating Air Pressure PSI(bar)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Sound Pressure dB(A)
AS-110	2(51) or 3(76)	18,000	7.07(200)	90(6.2)	1.19(0.54)	1/4	3/8(10)	85
AOS-90-030	2(51)	15,000	7.07(200)	90(6.2)	1.43(0.65)	1/4	3/8(10)	87
ZDS-66119/66122	5(127)	8,000/11,000	0.7	90(6.2)	2(0.9)	1/4	3/8(10)	—
ZDS-6637S/6651S	5(127)	2,600/4,000	4	90(6.2)	2(0.9)	1/4	3/8(10)	—
ZP351	3(76)	12,000	2.5(70.8)	90(6.2)	1.54(0.7)	1/4	3/8(10)	81
ZOS-343	3(76)	15,000	3.5(99.1)	90(6.2)	1.5(0.7)	1/4	3/8(10)	86
ZP354-5/6	5(127)/6(152)	12,000	2.5(70.8)	90(6.2)	1.8(0.8)	1/4	3/8(10)	82
ZP354-5C/6C	5(127)/6(152)	12,000	2.5(70.8)	90(6.2)	1.8(0.8)	1/4	3/8(10)	82
ZP354-5S/6S	5(127)/6(152)	12,000	2.5(70.8)	90(6.2)	1.7(0.78)	1/4	3/8(10)	82

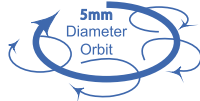


ZOS-5N / ZOS-6N 0.3HP

5"/6" Non-Vac.
Random Orbital Sander

ZOS-5NF / ZOS-6NF 0.3HP

5"/6" Oil-Free Non-Vac.
Random Orbital Sander

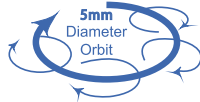


ZOS-5C / ZOS-6C 0.3HP

5"/6" Central-Vacuum
Random Orbital Sander

ZOS-5CF / ZOS-6CF 0.3HP

5"/6" Oil-Free Central-Vacuum
Random Orbital Sander



ZOS-5S / ZOS-6S 0.3HP

5"/6" Self-Generated
Vacuum Random Orbital Sander

ZOS-5SF / ZOS-6SF 0.3HP

5"/6" Oil-Free Self-Generated
Vacuum Random Orbital Sander

Model	Pad Size inch(mm)	Free Speed R.P.M.	Avg. Air Cons. cfm(l/min)	Operating Air Pressure PSI(bar)	Net Weight lbs(kgs)	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Sound Pressure dB(A)
ZOS-5N ZOS-6N	5(127) 6(152)	12,000	6(170)	90(6.2)	0.84 0.89	1/4	3/8(10)	83
ZOS-5C ZOS-6C	5(127) 6(152)	12,000	6(170)	90(6.2)	0.91 0.96	1/4	3/8(10)	83
ZOS-5S ZOS-6S	5(127) 6(152)	12,000	6(170)	90(6.2)	0.91 0.96	1/4	3/8(10)	83
ZOS-5NF ZOS-6NF	5(127) 6(152)	12,000	6(170)	90(6.2)	0.73 0.78	1/4	3/8(10)	83
ZOS-5CF ZOS-6CF	5(127) 6(152)	12,000	6(170)	90(6.2)	0.8 0.85	1/4	3/8(10)	83
ZOS-5SF ZOS-6SF	5(127) 6(152)	12,000	6(170)	90(6.2)	0.8 0.85	1/4	3/8(10)	83



Random Orbital Polisher

- Excellent for swirl-free polishing
- Probably the best polisher in the world!

ZOP-35 0.3HP (Orbital 5mm)

3" Random Orbital Polisher



ZBT1650-03W
3" WOOL WHEEL



ZBT1650-03Y
3" SPONGE WHEEL



ZBT1650-03G
3" FINE GRAY
POLISHING PAD

ZOP-55 0.3HP (Orbital 5mm)

5" Random Orbital Polisher



ZBT1650-05W
5" WOOL WHEEL



ZBT1650-05Y
5" SPONGE WHEEL



ZBT1650-05G
5" FINE GRAY
POLISHING PAD

ZHOP-510 0.5HP (Orbital 10mm)

5" Random Orbital Polisher



ZBT1650-05W
5" WOOL WHEEL



ZBT1650-05Y
5" SPONGE WHEEL



ZBT1650-05G
5" FINE GRAY
POLISHING PAD

Model	Pad Dia inch(mm)	Net Weight lbs(kg)	Dia. Orbit mm	Noise Level dBA	Vibration m/s ²	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZOP-35	3(75)	1.3(0.5)	5	80	0.8	11,000	1/4	3/8(10)	1.6
ZOP-55	5(125)	1.5(0.7)	5	80	0.8	11,000	1/4	3/8(10)	1.6
ZHOP-510	5(125)	2.6(1.2)	10	80	0.8	11,000	1/4	3/8(10)	3

ZOS-216-N5 **0.3HP** (3/16"(5mm)Orbit) (5"(125mm)Pad)
ZOS-216-N6 **0.3HP** (3/16"(5mm)Orbit) (6"(150mm)Pad)
ZOS3-216-N5 **0.3HP** (3/32"(2.5mm)Orbit) (5"(125mm)Pad)
ZOS3-216-N6 **0.3HP** (3/32"(2.5mm)Orbit) (6"(150mm)Pad)

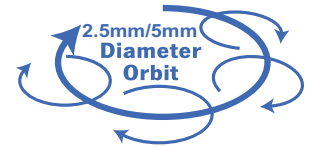
Non-Vacuum Random Orbital Sanders

Benefits

- Low profile & ergonomic housing design
- Powerful & productivity
- Less Vibration
- Balanced design for smooth operation and greater comfort

Features

- Ergonomic housing design.
- Hardened Steel Alloy Cylinder for more durable & longevity.
- Innovative Anti-Dust Protection system .
- Lube Free Design eliminates contamination of the work environment.



ZOS-216-C5 **0.3HP** (3/16"(5mm)Orbit) (5"(125mm)Pad)
ZOS-216-C6 **0.3HP** (3/16"(5mm)Orbit) (6"(150mm)Pad)
ZOS3-216-C5 **0.3HP** (3/32"(2.5mm)Orbit) (5"(125mm)Pad)
ZOS3-216-C6 **0.3HP** (3/32"(2.5mm)Orbit) (6"(150mm)Pad)

Central Vacuum Random Orbital Sanders

Benefits

- Low profile & ergonomic housing design.
- Powerful & productivity.
- Less Vibration.
- Balanced design for smooth operation and greater comfort.
- 3-in-1 hose design same as FESTOOL IAS 2 Connection. ; supplies air, extracts dust, and provides an exhaust all through one hose.

Features

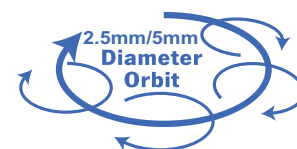
- Ergonomic housing design.
- Hardened Steel Alloy Cylinder for more durable & longevity.
- Innovative Anti-Dust Protection system.
- Lube Free Design eliminates contamination of the work environment.
- 3-in-1 hose design same as FESTOOL IAS 2 Connection.



Model	Pad Dia inch(mm)	Net Weight lbs(kg)	Dia. Orbit inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZOS-216-N5/C5	5(125)	2(0.9)	3/16(5)	11,000	1/4	3/8(10)	1.6
ZOS-216-N6/C6	6(150)	2(0.9)	3/16(5)	11,000	1/4	3/8(10)	1.6
ZOS3-216-N5/C5	5(125)	2(0.9)	3/32(2.5)	11,000	1/4	3/8(10)	1.6
ZOS3-216-N6/C6	6(150)	2(0.9)	3/32(2.5)	11,000	1/4	3/8(10)	1.6

Random Orbital Sanders

- Low vibration for swirl-free finishes.
- Durable, lightweight composite housing design.
- Include low profile balanced sanding pad.



2.5mm (3" 80g PAD) Random Orbital Sanders

Non-Vacuum

ZOS3-214-N3 0.3HP 3"(75mm)



Central Vacuum

ZOS3-214-C3 0.3HP 3"(75mm)



Self-Generated Vacuum

ZOS3-214-S3 0.3HP 3"(75mm)



2.5mm Random Orbital Sanders

Non-Vacuum

ZOS3-214-N5 0.3HP 5"(125mm)

ZOS3-214-N6 0.3HP 6"(150mm)



Central Vacuum

ZOS3-214-C5 0.3HP 5"(125mm)

ZOS3-214-C6 0.3HP 6"(150mm)



Self-Generated Vacuum

ZOS3-214-S5 0.3HP 5"(125mm)

ZOS3-214-S6 0.3HP 6"(150mm)



5mm Random Orbital Sanders

Non-Vacuum

ZOS-214-N5 0.3HP 5"(125mm)

ZOS-214-N6 0.3HP 6"(150mm)



Central Vacuum

ZOS-214-C5 0.3HP 5"(125mm)

ZOS-214-C6 0.3HP 6"(150mm)



Self-Generated Vacuum

ZOS-214-S5 0.3HP 5"(125mm)

ZOS-214-S6 0.3HP 6"(150mm)



Model	Pad Dia inch(mm)	Net Weight lbs(kg)	Dia. Orbit inch(mm)	Noise Level dBA	Vibration m/s ²	RPM	Air Inlet inch	Min. Hose Size inch(mm)	Avg. Air Cons. cfm
ZOS-214-N5/C5/S5	5(125)	2(0.9)	3/16(5)	80	0.8	11,000	1/4	3/8(10)	1.6
ZOS-214-N6/C6/S6	6(150)	2(0.9)	3/16(5)	80	0.8	11,000	1/4	3/8(10)	1.6
ZOS3-214-N5/C5/S5	5(125)	2(0.9)	3/32(2.5)	80	0.8	11,000	1/4	3/8(10)	1.6
ZOS3-214-N6/C6/S6	6(150)	2(0.9)	3/32(2.5)	80	0.8	11,000	1/4	3/8(10)	1.6
ZOS3-214-N3/C3/S3	3(75)	1.8(0.8)	3/32(2.5)	80	0.8	11,000	1/4	3/8(10)	1.6

- Low vibration for swirl-free finishes.
- Durable, lightweight composite housing design.
- Include low profile balanced sanding pad.



2.5mm Random Orbital Sanders

Non-Vacuum

ZOS01-3-N5 0.3HP 5"(125mm)

ZOS01-3-N6 0.3HP 6"(150mm)



Central Vacuum

ZOS01-3-C5 0.3HP 5"(125mm)

ZOS01-3-C6 0.3HP 6"(150mm)



Self-Generated Vacuum

ZOS01-3-S5 0.3HP 5"(125mm)

ZOS01-3-S6 0.3HP 6"(150mm)



HB-46-2
HOSE & BAG

5mm Random Orbital Sanders

Non-Vacuum

ZOS01-N5 0.3HP 5"(125mm)

ZOS01-N6 0.3HP 6"(150mm)



Central Vacuum

ZOS01-C5 0.3HP 5"(125mm)

ZOS01-C6 0.3HP 6"(150mm)



Self-Generated Vacuum

ZOS01-S5 0.3HP 5"(125mm)

ZOS01-S6 0.3HP 6"(150mm)



HB-46-2
HOSE & BAG

10mm Random Orbital Sanders

Non-Vacuum

ZOS01-9-N5 0.3HP 5"(125mm)

ZOS01-9-N6 0.3HP 6"(150mm)



Central Vacuum

ZOS01-9-C5 0.3HP 5"(125mm)

ZOS01-9-C6 0.3HP 6"(150mm)



Self-Generated Vacuum

ZOS01-9-S5 0.3HP 5"(125mm)

ZOS01-9-S6 0.3HP 6"(150mm)



HB-46-2
HOSE & BAG

Model	Pad Dia inch(mm)	Net Weight lbs(kg)	Dia. Orbit inch(mm)	Noise Level dBA	Vibration m/s ²	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZOS01-N5/C5/S5	5(125)	2(0.9)	3/16(5)	80	0.8	11,000	1/4	3/8(10)	1.6
ZOS01-N6/C6/S6	6(150)	2(0.9)	3/16(5)	80	0.8	11,000	1/4	3/8(10)	1.6
ZOS01-3-N5/C5/S5	5(125)	2(0.9)	3/32(2.5)	80	0.8	11,000	1/4	3/8(10)	1.6
ZOS01-3-N6/C6/S6	6(150)	2(0.9)	3/32(2.5)	80	0.8	11,000	1/4	3/8(10)	1.6
ZOS01-9-N3/C3/S3	5(125)	2(0.9)	3/8(10)	80	0.8	11,000	1/4	3/8(10)	1.6
ZOS01-9-N3/C3/S3	6(150)	2(0.9)	3/8(10)	80	0.8	11,000	1/4	3/8(10)	1.6

ZTHS-C5 0.5HP (3/16"(5mm)Orbit) (5"(125mm)Pad)

ZTHS-C6 0.5HP (3/16"(5mm)Orbit) (6"(150mm)Pad)

Central Vacuum 2-Hand Random Orbital Sanders

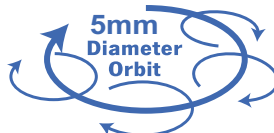


Benefits

- Powerful and lightweight.
- Lube Free Design eliminates contamination of the work environment.
- 3-in-1 hose design same as FESTOOL IAS 2 Connection. ; supplies air, extracts dust, and provides an exhaust all through one hose.

Features

- Ergonomic housing design.
- Hardened Steel Alloy Cylinder for more durable & longevity.
- Innovative Anti-Dust Protection system.
- Lube Free Design eliminates contamination of the work environment



ZTHG-C5 0.5HP (3/16"(5mm)Orbit) (5"(125mm)Pad)

ZTHG-C6 0.5HP (3/16"(5mm)Orbit) (6"(150mm)Pad)

Central Vacuum 2-Hand Gear-Driven Sanders



Benefits

- Powerful and lightweight.
- 900 RPM motor produces excellent low speed torque.
- Unique epicycloidal pad motion generates torque-enhanced power, for consistent material removal.
- Lube Free Design eliminates contamination of the work environment.
- 3-in-1 hose design same as FESTOOL IAS 2 Connection. ; supplies air, extracts dust, and provides an exhaust all through one hose.

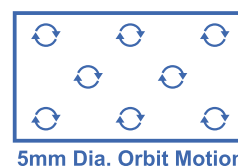
Features

- Long handle design for easy two-handed control.
- High quality alloy steel of gear driven gear with precision teeth design for durable tool life.
- Speed control lever is conveniently located for easy thumb adjustment.
- 3-in-1 hose design same as FESTOOL IAS 2 Connection.



ZTHS-CL4 0.5HP (3/16"(5mm)Orbit)

Central Vacuum Heavy Duty Jitterbug Sander



Benefits

- Powerful and lightweight.
- For all types of surface preparation and rapid removal of material from large areas.
- Lube Free Design eliminates contamination of the work environment.
- 3-in-1 hose design same as FESTOOL IAS 2 Connection. ; supplies air, extracts dust, and provides an exhaust all through one hose.

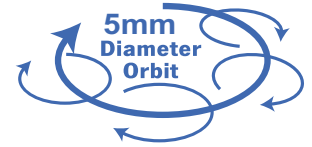
Features

- Ergonomic housing design.
- Hardened Steel Alloy Cylinder for more durable & longevity.
- Innovative Anti-Dust Protection system.
- Lube Free Design eliminates contamination of the work environment.



Model	Pad Dia inch(mm)	Net Weight lbs(kg)	Dia. Orbit inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZTHS-C5	5(125)	2.6(1.2)	3/16(5)	10,000	1/4	3/8(10)	3
ZTHS-C6	6(150)	2.6(1.2)	3/16(5)	10,000	1/4	3/8(10)	3
ZTHG-C5	5(125)	3.3(1.5)	3/16(5)	900	1/4	3/8(10)	3
ZTHG-C6	6(150)	3.5(1.6)	3/16(5)	900	1/4	3/8(10)	3
ZTHS-CL4	—	3.3(1.5)	3/16(5)	7,500	1/4	3/8(10)	3

- The 2-hand handle and low vibration combined to provide superior control and flawless finishes.
- Durable lightweight composite housing design.



5mm 2-Hand Random Orbital Sanders

Non-Vacuum

ZP347-5 0.5HP 5"(125mm)

Central Vacuum

ZP347-C5 0.5HP 5"(125mm)

Self-Generated Vacuum

ZP347-S5 0.5HP 5"(125mm)



Non-Vacuum

ZP347-6 0.5HP 6"(150mm)

Central Vacuum

ZP347-C6 0.5HP 6"(150mm)

Self-Generated Vacuum

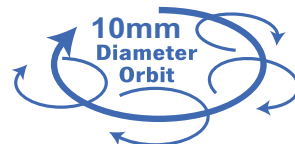
ZP348 0.5HP 6"(150mm)



Model	Pad Dia inch(mm)	Net Weight lbs(kg)	Dia. Orbit inch(mm)	Noise Level dBA	Vibration m/s ²	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZP347-5/C5/S5	5(125)	2.6(1.2)	3/16(5)	80	0.8	10,000	1/4	3/8(10)	3
ZP347-5/C6	6(150)	2.6(1.2)	3/16(5)	80	0.8	10,000	1/4	3/8(10)	3
ZP348	6(150)	2.6(1.2)	3/16(5)	80	0.8	10,000	1/4	3/8(10)	3

2-Hand Random Orbital Sanders

- Large orbit for removing heavy material with swirl-free finish.
- Durable lightweight composite housing design.



10mm 2-Hand Random Orbital Sanders

Non-Vacuum

ZP349-5 0.5HP 5"(125mm)



Central Vacuum

ZP349-C5 0.5HP 5"(125mm)



Self-Generated Vacuum

ZP349-S5 0.5HP 5"(125mm)



Non-Vacuum

ZP349-6 0.5HP 6"(150mm)



Central Vacuum

ZP349-C6 0.5HP 6"(150mm)



Self-Generated Vacuum

ZP350 0.5HP 6"(150mm)



Model	Pad Dia inch(mm)	Net Weight lbs(kg)	Dia. Orbit inch(mm)	Noise Level dBA	Vibration m/s ²	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZP349-5/C5/S5	5(125)	2.6(1.2)	3/8(10)	80	0.8	10,000	1/4	3/8(10)	3
ZP349-6/C6/S6	6(150)	2.6(1.2)	3/8(10)	80	0.8	10,000	1/4	3/8(10)	3

- The strength and power of this sander lets you remove heavy material and body filler on large, flat surfaces leaving a swirl-free finish.
- A long life, vibration-free performance



2-Hand Gear-Driven Sanders

Non-Vacuum

ZP337-5 0.5HP 5"(125mm)



Central Vacuum

ZP337-C5 0.5HP 5"(125mm)



Self-Generated Vacuum

ZP337-S5 0.5HP 5"(125mm)



Non-Vacuum

ZP337-6 0.5HP 6"(150mm)



Central Vacuum

ZP337-C6 0.5HP 6"(150mm)



Self-Generated Vacuum

ZP337-S6 0.5HP 6"(150mm)



Non-Vacuum

ZGS-N8 0.5HP 8"(200mm)



Central Vacuum

ZGS-C8 0.5HP 8"(200mm)



Self-Generated Vacuum

ZGS-S8 0.5HP 8"(200mm)



Model	Pad Dia inch(mm)	Net Weight lbs(kg)	Dia. Orbit inch(mm)	Noise Level dBA	Vibration m/s ²	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZP337-5/C5/S5	5(125)	3.3(1.5)	3/16(5)	82	<2.5	900	1/4	3/8(10)	3
ZP337-6/C6/S6	6(150)	3.5(1.6)	3/16(5)	82	<2.5	900	1/4	3/8(10)	3
ZGS-N8/C8/S8	8(200)	3.5(1.6)	3/16(5)	82	<2.5	900	1/4	3/8(10)	3

Heavy Duty Jitterbug Sanders

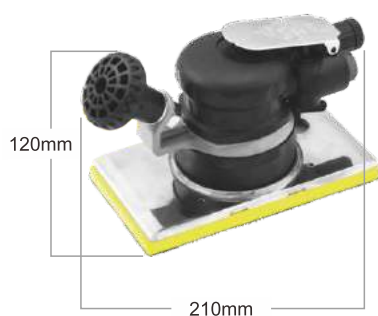
- Smooth, reliable and powerful.
- Long lasting durability with low maintenance.
- For all types of surface preparation and rapid removal of material from large areas.

Heavy Duty Jitterbug Sanders

Non-Vacuum

ZJS-NL4C 0.3HP

ZJS-NL4AC 0.3HP (Clip type)



Central Vacuum

ZJS-CL4C 0.3HP



Self-Generated Vacuum

ZJS-SL4C 0.3HP



Non-Vacuum

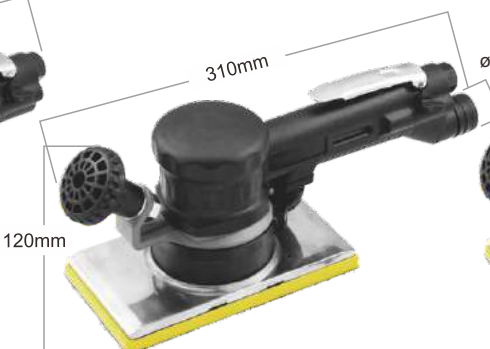
ZHS-NL4C 0.5HP

ZHS-NL4AC 0.5HP (Clip type)



Central Vacuum

ZHS-CL4C 0.5HP



Self-Generated Vacuum

ZHS-SL4C 0.5HP



Model	Net Weight lbs(kg)	Dia. Orbit inch(mm)	Noise Level dBA	Vibration m/s ²	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZJS-NL4C/NL4AC/CL4C/SL4C	2.6(1.2)	1/8(3.2)	80	0.8	8,500	1/4	3/8(10)	1.6
ZHS-NL4C/NL4AC/CL4C/SL4C	3.3(1.5)	3/16(5)	80	0.8	8,500	1/4	3/8(10)	3

- Compact design and comfortable grip.
- Heavy-duty construction for durable operations.
- Pad size: 75mm*100mm for ZP339, 100mm*110mm for ZOS-7511g a swirl-free finish.

Jitterbug Sanders

Non-Vacuum

ZP339 0.3HP



Central Vacuum

ZP339C 0.3HP



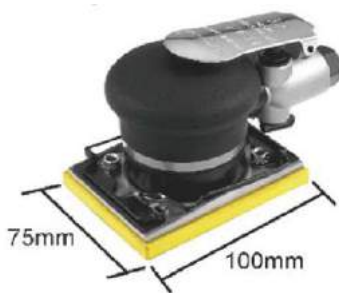
Self-Generated Vacuum

ZP339S 0.3HP



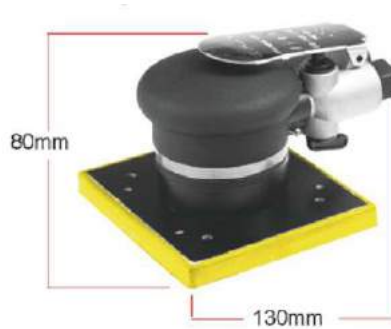
Non-Vacuum

ZP339A 0.3HP (Clip type)



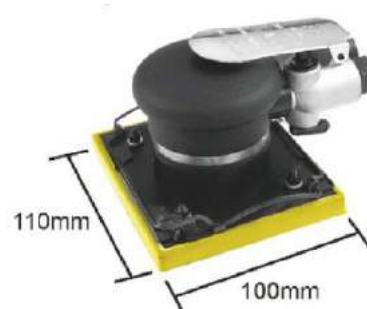
Non-Vacuum

ZOS-7511 0.3HP



Non-Vacuum

ZOS-7511A 0.3HP (Clip type)



- Compact design and comfortable grip.
- Heavy-duty construction for durable operations.
- Ideal for all types of surface sanding, polishing and scrubbing.

Delta Sanders

Non-Vacuum

ZP338 0.3HP



Central Vacuum

ZP338C 0.3HP



Self-Generated Vacuum

ZP338S 0.3HP



Model	Net Weight lbs(kgs)	Diameter Orbit	Noise Level dBA	Vibration m/s ²	RPM	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Avg. Air Cons. cfm
ZP339/339C/339S/339A	1.5(0.7)	3.2	80	0.8	10,000	1/4	3/8(10)	1.6
ZOS-7511/7511A	1.5(0.7)	3.2	80	0.8	10,000	1/4	3/8(10)	1.6
ZP338/338C/338S	1.5(0.7)	3.2	80	0.8	10,000	1/4	3/8(10)	1.6

- Smooth, reliable and powerful.
- Long lasting durability with low maintenance.
- For all types of surface preparation and rapid removal of material from large areas.

Heavy Duty Jitterbug Sanders

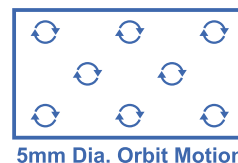
Non-Vacuum

ZOS-927 0.3HP



Non-Vacuum

ZOS-927A 0.3HP (Clip type)



5mm Dia. Orbit Motion

Non-Vacuum

ZP356 0.3HP

ZP356A 0.3HP (Clip type)



Central Vacuum

ZP356-C 0.3HP



Self-Generated Vacuum

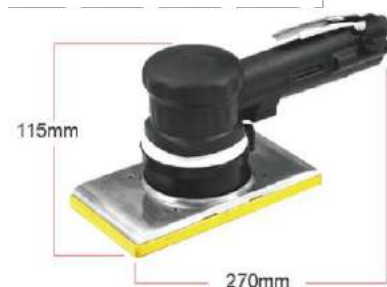
ZP356-S 0.3HP



Non-Vacuum

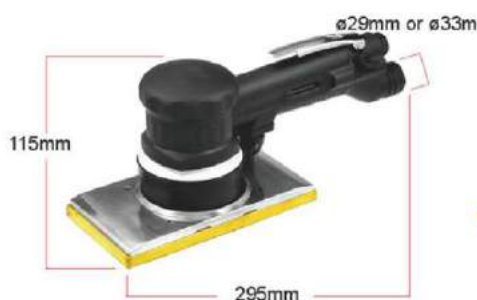
ZHS-NL4 0.5HP

ZHS-NL4A 0.5HP (Clip type)



Central Vacuum

ZHS-CL4 0.5HP

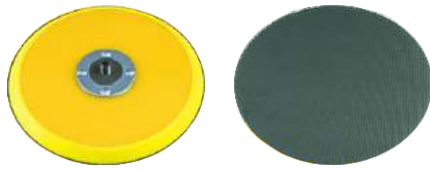


Self-Generated Vacuum

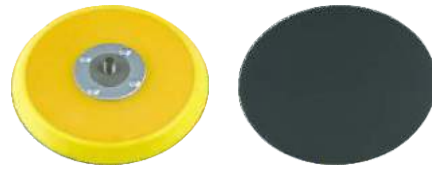
ZHS-SL4 0.5HP



Model	Net Weight lbs(kgs)	Diameter Orbit	Noise Level dBA	Vibration m/s ²	RPM	Air Inlet Size inch-NPT/PT	Min. Hose Size inch(mm)	Avg. Air Cons. cfm
ZOS-927/927A	2.4(1.1)	3.2	80	0.8	8,500	1/4	3/8(10)	1.6
ZP356/356A	2.6(1.2)	3.2	80	0.8	8,500	1/4	3/8(10)	1.6
ZP356-C	2.6(1.2)	3.2	80	0.8	8,500	1/4	3/8(10)	1.6
ZP356-S	2.6(1.2)	3.2	80	0.8	8,500	1/4	3/8(10)	1.6
ZHS-NL4/NL4A	3.3(1.5)	5	80	0.8	7,500	1/4	3/8(10)	3.1
ZHS-CL4	3.3(1.5)	5	80	0.8	7,500	1/4	3/8(10)	3.1
ZHS-SL4	3.3(1.5)	5	80	0.8	7,500	1/4	3/8(10)	3.1



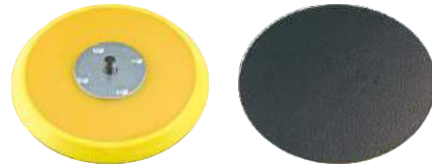
ZBTOB-38-6V0Y-T10
6" PAD Hook-up (No-Hole)



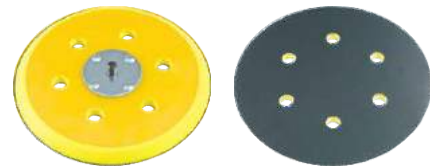
ZBTOB-38-5V0Y-T10
5" PAD Hook-up (No-Hole)



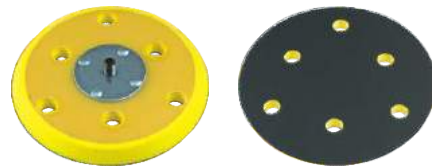
ZBTOB-38-6P0Y-T10
6" PAD PSA (No-Hole)



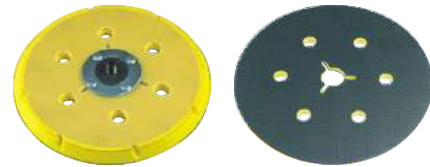
ZBTOB-38-5P0Y-T10
5" PAD PSA (No-Hole)



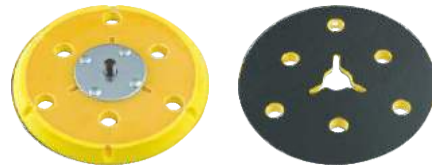
ZBTOB-38-6V6Y-T10
6" PAD Hook-up (6-Hole)



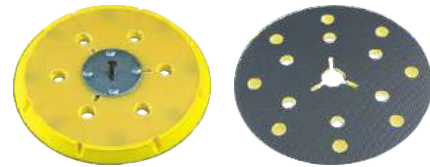
ZBTOB-38-5V6Y-T10
5" PAD Hook-up (6-Hole)



ZBTOB-38-6V7Y-T10
6" PAD Hook-up (7-Hole)



ZBTOB-38-5V7Y-T10
5" PAD Hook-up (7-Hole)



ZBTOB-38-6V15Y-T10
6" PAD Hook-up (15-Hole)



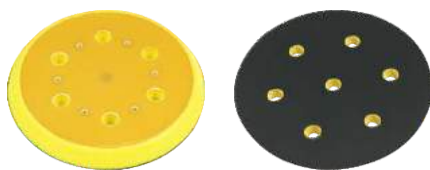
ZBTOB-38-3V0Y-W80
3" PAD Hook-up (No-Hole)



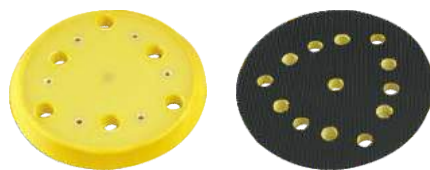
ZBTOB-38-3V0Y-W30
3" PAD Hook-up (No-Hole)



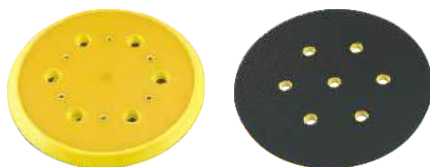
ZBTOB-38-3V3Y-W80
3" PAD Hook-up (3-Hole)



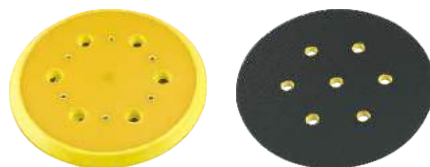
ZBT2HG-51-5V0Y
5" PAD Hook-up (No-Hole)



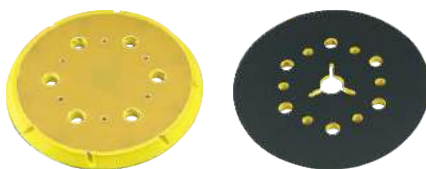
ZBT2HG-51-5V6Y
5" PAD Hook-up (6-Hole)



ZBT2HG-51-6V0Y
6" PAD Hook-up (No-Hole)



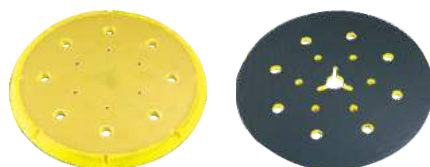
ZBT2HG-51-6P0Y
6" PAD PSA (No-Hole)



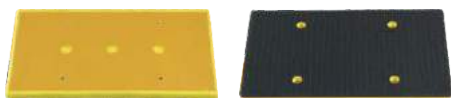
ZBT2HG4-49-6V7Y
6" PAD Hook-up (7-Hole)



ZBT2HG4-49-8V0Y
8" PAD Hook-up (No-Hole)



ZBT2HG4-49-8V9Y
8" PAD Hook-up (9-Hole)



ZBTL4-40V-100*180-Y
Hook-up (No-Hole)
95mm x 175mm PAD



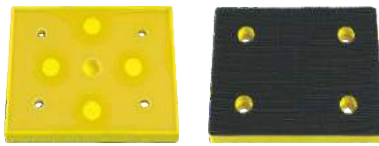
ZBTL4-40P-100*180-Y
PSA (No-Hole)
95mm x 175mm PAD



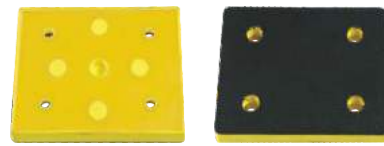
ZBTL4-40V-100*180-Y-3*2*3
Hook-up (8-Hole)
95mm x 175mm PAD



ZBTL4-40V-100*180-Y-4*4
Hook-up (8-Hole)
95mm x 175mm PAD



ZBT81339V-75*100-Y
Hook-up (No-Hole)
75mm x 100mm PAD



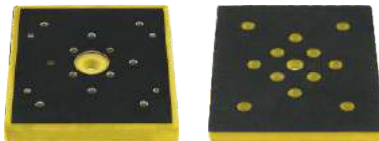
ZBT81339P-75*100-Y
PSA (No-Hole)
75mm x 100mm PAD



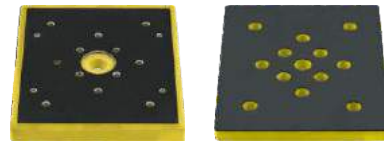
ZBT813S37V-75*100-Y
Hook-up (4-Hole)
75mm x 100mm PAD



ZBT813S37P-75*100-Y
PSA (4-Hole)
75mm x 100mm PAD



ZBT81438V-97*109-Y
Hook-up (No-Hole)
100mm x 110mm PAD



ZBT81438P-97*109-Y
PSA (No-Hole)
100mm x 110mm PAD



ZBT81539V-Y
Hook-up (No-Hole)
ZBT81539P-Y
PSA (No-Hole)
75mm x 110mm PAD



ZBT815S41-V-Y
Hook-up (No-Hole)
75mm x 110mm PAD



ZBT81642V-100*110*1.5-YV-100*110-Y
Hook-up (No-Hole)
100mm x 110mm PAD(PSA)



ZBT81642P-100*110*1.5-Y(PSA)
PSA (No-Hole)
100mm x 110mm PAD(PSA)



Sandpaper (75mm x 100mm)

ZP-813-4-0-80#	ZP-813-4-0-400#
ZP-813-4-0-100#	ZP-813-4-0-600#
ZP-813-4-0-120#	ZP-813-4-0-800#
ZP-813-4-0-150#	ZP-813-4-0-1000#
ZP-813-4-0-180#	ZP-813-4-0-1200#
ZP-813-4-0-240#	ZP-813-4-0-1500#
ZP-813-4-0-320#	



Sandpaper (75mm x 100mm)

ZP-813-4-4-80#	ZP-813-4-4-400#
ZP-813-4-4-100#	ZP-813-4-4-600#
ZP-813-4-4-120#	ZP-813-4-4-800#
ZP-813-4-4-150#	ZP-813-4-4-1000#
ZP-813-4-4-180#	ZP-813-4-4-1200#
ZP-813-4-4-240#	ZP-813-4-4-1500#
ZP-813-4-4-320#	



Sandpaper (100mm x 110mm)

ZP-814-4-0-80#	ZP-814-4-0-400#
ZP-814-4-0-100#	ZP-814-4-0-600#
ZP-814-4-0-120#	ZP-814-4-0-800#
ZP-814-4-0-150#	ZP-814-4-0-1000#
ZP-814-4-0-180#	ZP-814-4-0-1200#
ZP-814-4-0-240#	ZP-814-4-0-1500#
ZP-814-4-0-320#	



Sandpaper (75mm x 100mm)

ZP-815-3-0-80#	ZP-815-3-0-400#
ZP-815-3-0-100#	ZP-815-3-0-600#
ZP-815-3-0-120#	ZP-815-3-0-800#
ZP-815-3-0-150#	ZP-815-3-0-1000#
ZP-815-3-0-180#	ZP-815-3-0-1200#
ZP-815-3-0-240#	ZP-815-3-0-1500#
ZP-815-3-0-320#	



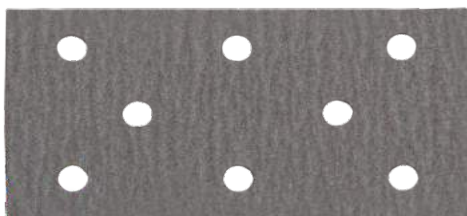
Sandpaper (75mm x 100mm)

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ZP-815-3-4-100#	ZP-815-3-4-600#
ZP-815-3-4-120#	ZP-815-3-4-800#
ZP-815-3-4-150#	ZP-815-3-4-1000#
ZP-815-3-4-180#	ZP-815-3-4-1200#
ZP-815-3-4-240#	ZP-815-3-4-1500#
ZP-815-3-4-320#	



Sandpaper (95mm x 175mm)

ZP-L4-4-0-80#	ZP-L4-4-0-400#
ZP-L4-4-0-100#	ZP-L4-4-0-600#
ZP-L4-4-0-120#	ZP-L4-4-0-800#
ZP-L4-4-0-150#	ZP-L4-4-0-1000#
ZP-L4-4-0-180#	ZP-L4-4-0-1200#
ZP-L4-4-0-240#	ZP-L4-4-0-1500#
ZP-L4-4-0-320#	



Sandpaper (95mm x 175mm)

ZP-L4-3X2X3-80#	ZP-L4-3X2X3-320#
ZP-L4-3X2X3-100#	ZP-L4-3X2X3-600#
ZP-L4-3X2X3-120#	ZP-L4-3X2X3-800#
ZP-L4-3X2X3-150#	ZP-L4-3X2X3-1000#
ZP-L4-3X2X3-180#	ZP-L4-3X2X3-1200#
ZP-L4-3X2X3-240#	ZP-L4-3X2X3-1500#

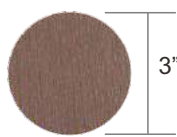


Sandpaper (95mm x 175mm)

ZP-L4-4x4-80#	ZP-L4-4x4-400#
ZP-L4-4x4-100#	ZP-L4-4x4-600#
ZP-L4-4x4-120#	ZP-L4-4x4-800#
ZP-L4-4x4-150#	ZP-L4-4x4-1000#
ZP-L4-4x4-180#	ZP-L4-4x4-1200#
ZP-L4-4x4-240#	ZP-L4-4x4-1500#
ZP-L4-4x4-320#	

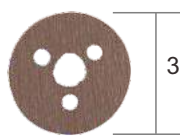
Feature & Benefit

- Premium P-graded, heat-treated aluminum oxide abrasive for superior life, fast cut rate, and consistent finish.
- Unique fiber-reinforced, B-wt latex-saturated backing provides a 50-60% improvement in tear strength.
- Flexible; can be used wet.
- Water-based stearate, non-pigmented, No-Fil coating provides maximum load resistance and extended life with no color transfer to work.
- Typical applications include preparing primed and painted surfaces for finishing, stripping primer and paint, sanding plastic and fiberglass, and bare wood sanding.



Sandpaper (3")

ZP-ZOS-3X0-80# ZP-ZOS-3X0-400#
 ZP-ZOS-3X0-100# ZP-ZOS-3X0-600#
 ZP-ZOS-3X0-120# ZP-ZOS-3X0-800#
 ZP-ZOS-3X0-150# ZP-ZOS-3X0-1000#
 ZP-ZOS-3X0-180# ZP-ZOS-3X0-1200#
 ZP-ZOS-3X0-240# ZP-ZOS-3X0-1500#
 ZP-ZOS-3X0-320#



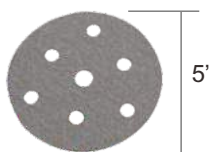
Sandpaper (3")

ZP-ZOS-3X4-80# ZP-ZOS-3X4-400#
 ZP-ZOS-3X4-100# ZP-ZOS-3X4-600#
 ZP-ZOS-3X4-120# ZP-ZOS-3X4-800#
 ZP-ZOS-3X4-150# ZP-ZOS-3X4-1000#
 ZP-ZOS-3X4-180# ZP-ZOS-3X4-1200#
 ZP-ZOS-3X4-240# ZP-ZOS-3X4-1500#
 ZP-ZOS-3X4-320#



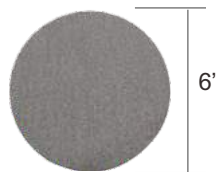
Sandpaper (5")

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 ZP-ZOS-5X0-100# ZP-ZOS-5X0-600#
 ZP-ZOS-5X0-120# ZP-ZOS-5X0-800#
 ZP-ZOS-5X0-150# ZP-ZOS-5X0-1000#
 ZP-ZOS-5X0-180# ZP-ZOS-5X0-1200#
 ZP-ZOS-5X0-240# ZP-ZOS-5X0-1500#
 ZP-ZOS-5X0-320#



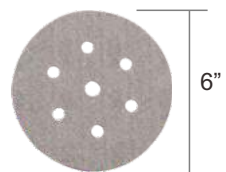
Sandpaper (5")

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 ZP-ZOS-5X7-100# ZP-ZOS-5X7-600#
 ZP-ZOS-5X7-120# ZP-ZOS-5X7-800#
 ZP-ZOS-5X7-150# ZP-ZOS-5X7-1000#
 ZP-ZOS-5X7-180# ZP-ZOS-5X7-1200#
 ZP-ZOS-5X7-240# ZP-ZOS-5X7-1500#
 ZP-ZOS-5X7-320#



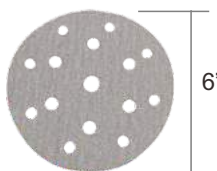
Sandpaper (6")

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 ZP-ZOS-6X0-150# ZP-ZOS-6X0-1000#
 ZP-ZOS-6X0-180# ZP-ZOS-6X0-1200#
 ZP-ZOS-6X0-240# ZP-ZOS-6X0-1500#
 ZP-ZOS-6X0-320#



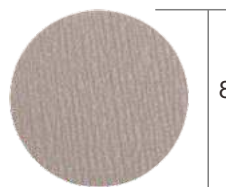
Sandpaper (6")

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 ZP-ZOS-6X7-150# ZP-ZOS-6X7-1000#
 ZP-ZOS-6X7-180# ZP-ZOS-6X7-1200#
 ZP-ZOS-6X7-240# ZP-ZOS-6X7-1500#
 ZP-ZOS-6X7-320#



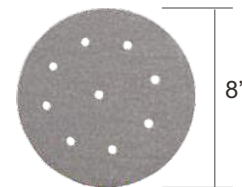
Sandpaper (6")

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 ZP-ZOS-6X15-150# ZP-ZOS-6X15-1000#
 ZP-ZOS-6X15-180# ZP-ZOS-6X15-1200#
 ZP-ZOS-6X15-240# ZP-ZOS-6X15-1500#
 ZP-ZOS-6X15-320#



Sandpaper (8")

ZP-ZOS-8X0-80# ZP-ZOS-8X0-400#
 ZP-ZOS-8X0-100# ZP-ZOS-8X0-600#
 ZP-ZOS-8X0-120# ZP-ZOS-8X0-800#
 ZP-ZOS-8X0-150# ZP-ZOS-8X0-1000#
 ZP-ZOS-8X0-180# ZP-ZOS-8X0-1200#
 ZP-ZOS-8X0-240# ZP-ZOS-8X0-1500#
 ZP-ZOS-8X0-320#



Sandpaper (8")

ZP-HG4-8X9-80# ZP-HG4-8X9-400#
 ZP-HG4-8X9-100# ZP-HG4-8X9-600#
 ZP-HG4-8X9-120# ZP-HG4-8X9-800#
 ZP-HG4-8X9-150# ZP-HG4-8X9-1000#
 ZP-HG4-8X9-180# ZP-HG4-8X9-1200#
 ZP-HG4-8X9-240# ZP-HG4-8X9-1500#
 ZP-HG4-8X9-320#



ZAP-342L 0.5HP (2,600RPM)
Right Angle Buffer, 3" Diameter
(3" Rotary Right Angle Polisher)



ZAP3308 0.5HP (4,000RPM)
ZAP330825 0.5HP (2,400RPM)
Angle Sander / Polisher



Z26041 3/8"x16NC
ZBT22749 M16-x2
ZBT22750 M14-x2
ZBT22751 5/8"x11NC
Z23138 1/4"x20

ADAPTERS



ZAP308 1HP (4,000RPM)
ZAP30825 1HP (2,400RPM)
Angle Sander / Polisher



ZBT1650-05G
5" FINE GRAY
POLISHING PAD



ZBT1650-03G
3" FINE GRAY
POLISHING PAD



ZBT1650-05Y
5" COARSE YELLOW
POLISHING PAD



ZBT1650-03Y
3" COARSE YELLOW
POLISHING PAD



ZBT1650-05W
5" WOOL WHEEL



ZBT1650-03W
3" WOOL WHEEL



180° Rotational Handle



Z210K-8
3" POLOC PAD



ZBT22748
STRIPPING WHEEL



Z26036-7
RUBBER ERASER



ZBTOB-386V0Y-T10
5" PAD (Hook-up)



ZBTOB-38-3V0Y-W80
3" 80g PAD (Hook-up)

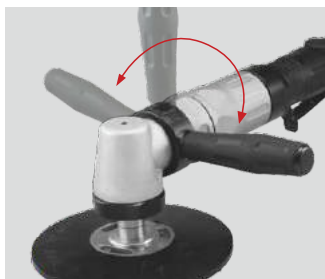
Model	Spindle Thread	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZAP-342L	5/16"-24	2.6(1.2)	12.1(307)	2,600	1/4	3/8(10)	3.5
ZAP3308/ZAP330825	5/16"-24	2.2(1)	8.8(225)	4,000/2,400	1/4	3/8(10)	3.5
ZAP308/ZAP30825	5/16"-24	2.2(1)	8.8(225)	4,000/2,400	1/4	3/8(10)	4.1

- Excellent for roughing body filler, rust removal, and smoothing welds.
- Both hands operating.
- Lightweight for easy handling.
- Outperforms than regular ones.

ZAS-982 **1.3HP** (4,500RPM)
7" Angle Sander



ZAS-983 **1.3HP** (2,500RPM)
7" Angle Polisher



180° Rotational Handle



Spindle Lock



Low noise design



ZBT871-07W
7" Wool pad



ZST77152 (5/8"-11 Thread)
ZST77152-1 (M14x2 Thread)
7" Pad Hook-up



ZST87158 (5/8"-11 Thread)
ZST87158.1 (M14x2 Thread)
7" Plastic Pad



ZST870S60 (5/8"-11 Thread)
ZST870S60.1 (M14x2 Thread)
7" Rubber Backing Pad

Model	Spindle Thread	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZAS-982	5/8"-11, M14x2	5.1(2.3)	12.9(328)	4,500	1/4	3/8(10)	3.8
ZAS-983	5/8"-11, M14x2	5.1(2.3)	12.9(328)	2,500	1/4	3/8(10)	3.8

ZAP-882 1HP (2,500RPM)

7" Angle Polisher

Benefits

- Powerful motor for productivity
- Maximize operator comfort
- Lightweight with side handle for easy handling
- Excellent for buffing and polishing flat and contoured surfaces

Features

- Heavy-duty angle polisher
- 1.0 hp precision motor
- Built-in air regulator
- High quality alloy steel bevel gears with well hardened and ground
- Delivered with 7" Hook-up polishing pad and with 7" pad



ZAS-883 1HP (4,000RPM)

7" Angle Sander

Benefits

- Powerful motor for productivity
- Low vibrations and durability
- Lightweight with side handle for easy handling
- Perfect for weld smoothing, paint, rust and stone removal

Features

- Heavy-duty angle sander
- 1.0 hp precision motor
- Built-in air regulator
- High quality alloy steel bevel gears with well hardened and ground
- Delivered with 7" (178 mm) pad
- Muffled rear exhaust



ZBT871-07W
7" Wool pad



ZST77152 (5/8"-11 Thread)
ZST77152-1 (M14x2 Thread)
7" Pad Hook-up



ZST87158 (5/8"-11 Thread)
ZST87158.1 (M14x2 Thread)
7" Plastic Pad

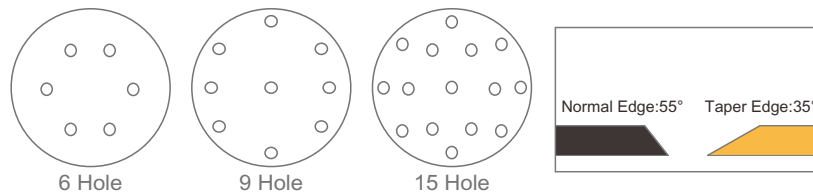


ZST870S60 (5/8"-11 Thread)
ZST870S60.1 (M14x2 Thread)
7" Rubber Backing Pad

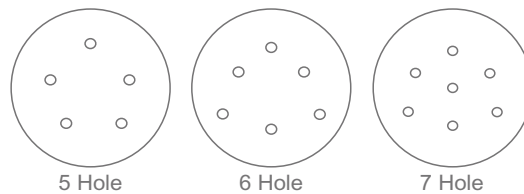
Model	Spindle Thread	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZAP-882	5/8"-11, M14x2	3.9(1.7)	13.6(345)	2,500	1/4	3/8(10)	3.8
ZAS-883	5/8"-11, M14x2	3.9(1.7)	13.6(345)	4,000	1/4	3/8(10)	3.8



VELCRO 12,000 RPM maximum, 5/16"-24 male thread



Model	Description	Thickness	Weight	Color
ZY-Q60-V/ZB-Q60-V	0 Hole	3/8"	130g/120g	Yellow/Black
ZY-Q66-V/ZB-Q66-V	6 Holes	3/8"	130g/120g	Yellow/Black
ZY-S66-V/ZB-S66-V	6 Holes Taper	3/8"	130g/120g	Yellow/Black
ZY-T609-V/ZB-T609-V	9 Holes	1/2"	130g/120g	Yellow/Black
ZY-T69-V/ZB-T69-V	15 Holes	1/2"	130g/120g	Yellow/Black



Model	Description	Thickness	Weight	Color
ZY-Q50-V/ZB-Q50-V	0 Hole	3/8"	130g/95g	Yellow/Black
ZY-Q55-V/ZB-Q55-V	5 Holes	3/8"	130g/95g	Yellow/Black
ZY-Q56-V/ZB-Q56-V	6 Holes	3/8"	130g/95g	Yellow/Black
ZY-Q57-V/ZB-Q57-V	7 Holes	3/8"	130g/95g	Yellow/Black



Model	Description	Thickness	Thread	Weight	Color
ZY-Q30-V6/ZB-Q30-V6	0 Hole	3/8"	M6	35g/25g	Yellow/Black
ZY-B30-V8/ZB-Q30-V8	0 Hole	3/8"	M8	35g/25g	Yellow/Black
ZB-T30-V	0 Hole	5/8"	M8	80g	Black



Model	Description	Thickness	Thread	Weight	Color
ZY-Q20-V6/ZB-Q20-V6	0 Hole	3/8"	M6	25g	Yellow/Black
ZY-Q20-V8/ZB-Q20-V8	0 Hole	3/8"	M8	25g	Yellow/Black

SUPER SOFT 6,000 RPM maximum



Model	Description	Thickness	Weight	Color
ZO-Q66-V	6" 6 Holes	3/8"	130g/120g	Orange
ZO-S66-V	6" 6 Holes Taper	3/8"	130g/120g	Orange
ZO-Q50-V	5" 0 Hole	3/8"	130g/95g	Orange

Anti-Vibration Pads



PSA 12,000 RPM maximum, 5/16"-24 male thread



Model	Description	Thickness	Weight	Color
ZY-Q60-P/ZB-Q60-P	0 Hole Blue Vinyl	3/8"	130g/120g	Yellow/Black
ZY-Q60-C/ZB-Q60-C	0 Hole Basketball Vinyl	3/8"	130g/120g	Yellow/Black
ZY-Q60-D/ZB-Q60-D	0 Hole Black Vinyl	3/8"	130g/120g	Yellow/Black



Model	Description	Thickness	Weight	Color
ZY-Q50-P/ZB-Q50-P	0 Hole Blue Vinyl	3/8"	130g/95g	Yellow/Black
ZY-Q50-C/ZB-Q50-C	0 Hole Basketball Vinyl	3/8"	130g/95g	Yellow/Black
ZY-Q50-D/ZB-Q50-D	0 Hole Black Vinyl	3/8"	130g/95g	Yellow/Black



Model	Description	Thickness	Thread	Weight	Color
ZY-Q30-P6/ZB-Q30-P6	0 Hole Blue Vinyl	3/8"	M6	35g/25g	Yellow/Black
ZY-Q30-P8/ZB-Q30-P8	0 Hole Blue Vinyl	3/8"	M8	35g/25g	Yellow/Black
ZY-Q30-C6/ZB-Q30-C6	0 Hole Basketball Vinyl	3/8"	M6	35g/25g	Yellow/Black
ZY-Q30-C8/ZB-Q30-C8	0 Hole Basketball Vinyl	3/8"	M8	35g/25g	Yellow/Black



Model	Description	Thickness	Thread	Weight	Color
ZY-Q20-P6/ZB-Q20-P6	0 Hole Blue Vinyl	3/8"	M6	25g	Yellow/Black
ZY-Q20-P8/ZB-Q20-P8	0 Hole Blue Vinyl	3/8"	M8	25g	Yellow/Black
ZY-Q20-C6/ZB-Q20-C6	0 Hole Basketball Vinyl	3/8"	M6	25g	Yellow/Black
ZY-Q20-C8/ZB-Q20-C8	0 Hole Basketball Vinyl	3/8"	M8	25g	Yellow/Black

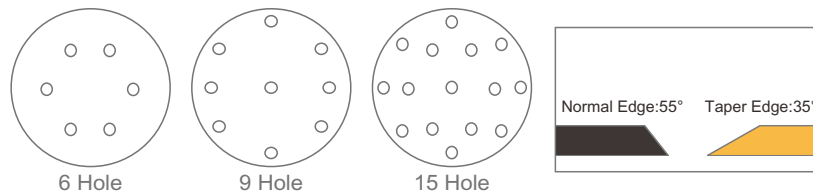
SUPER SOFT 6,000 RPM maximum



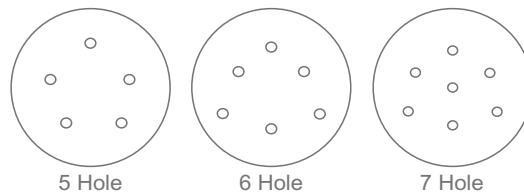
Model	Description	Thickness	Weight	Color
ZO-Q60-P	6" 0 Hole Blue Vinyl	3/8"	130g/120g	Orange
ZO-Q50-P	5" 0 Hole Blue Vinyl	3/8"	130g/95g	Orange
ZO-Q60-C	6" 0 Hole Basketball Vinyl	3/8"	130g/120g	Orange
ZO-Q50-C	5" 0 Hole Basketball Vinyl	3/8"	130g/95g	Orange
ZO-Q60-D	6" 0 Hole Black Vinyl	3/8"	130g/120g	Orange
ZO-Q50-D	5" 0 Hole Black Vinyl	3/8"	130g/95g	Orange



SHORT NAP 12,000 RPM maximum, 5/16"-24 male thread



Model	Description	Thickness	Weight	Color
ZY-Q60-E/ZB-Q60-E	0 Hole	3/8"	130g/120g	Yellow/Black
ZY-Q66-E/ZB-Q66-E	6 Holes	3/8"	130g/120g	Yellow/Black
ZY-S66-SV/ZB-S66-SV	6 Holes Taper	3/8"	130g/120g	Yellow/Black
ZY-T609-E/ZB-T609-E	9 Holes	1/2"	130g/120g	Yellow/Black
ZY-T69-E/ZB-T69-E	15 Holes	1/2"	130g/120g	Yellow/Black



Model	Description	Thickness	Weight	Color
ZY-Q50-E/ZB-Q50-E	0 Hole	3/8"	130g/95g	Yellow/Black
ZY-Q55-E/ZB-Q55-E	5 Holes	3/8"	130g/95g	Yellow/Black
ZY-Q56-E/ZB-Q56-E	6 Holes	3/8"	130g/95g	Yellow/Black
ZY-Q57-E/ZB-Q57-E	7 Holes	3/8"	130g/95g	Yellow/Black



Model	Description	Thickness	Thread	Weight	Color
ZY-Q30-E6/ZB-Q30-E6	0 Hole	3/8"	M6	35g/25g	Yellow/Black
ZY-Q30-E6/ZB-Q30-E8	0 Hole	3/8"	M8	35g/25g	Yellow/Black



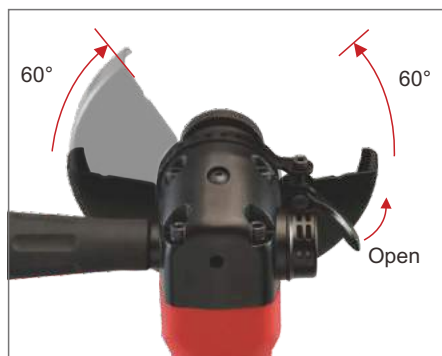
Model	Description	Thickness	Thread	Weight	Color
ZY-Q20-E6/ZB-Q20-E6	0 Hole	3/8"	M6	25g	Yellow/Black
ZY-Q20-E8/ZB-Q20-E8	0 Hole	3/8"	M8	25g	Yellow/Black

Air Angle Grinders

ZP321R 1.2HP 100° 4" Heavy Duty Grinder

ZP322R 1.2HP 100° 4-1/2" Heavy Duty Grinder

ZP323R 1.2HP 100° 5" Heavy Duty Grinder



ZBT80541
5" Disc Wheel
5"x1/4"x7/8"

ZAG-965R 1.3HP 4" Angle Grinder

ZAG-9656R 1.3HP 4-1/2" Angle Grinder

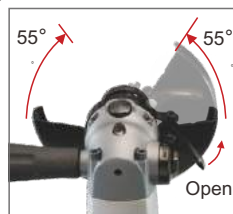
ZAG-966R 1.3HP 5" Angle Grinder

- 1.3 HP Motor for stall resistance.
- Safety lock-off throttle lever.
- One piece housing reduces maintenance costs.
- Heavy duty air cooled spiral gears and double bearings for durability.
- Ergonomic composite grip for comfort and reduced vibration.
- ANSI compliance wheel guard design.

Best for: Continuous use, heavy duty surface preparation, and material removal.

ZAG-966C 1.3HP

4" H.D. Angle Grinder With Central Vacuum Wheel Guard



The trigger can be opened and adjust the shroud up to 55° so as to avoid from the hurt during operating

Model	Spindle Thread	Grinding Wheel	Net Weight lbs(kg)	Length inch(mm)	RPM	Air Inlet inch	Min.Hose Size inch(mm)	Avg. Air Cons. cfm
ZP321/321R	3/8"-24, M10x1.5	4"	3.1(1.4)	8.2(210)	10,000	1/4	3/8(10)	3.5
ZP322/322R	5/8"-11, M14x2	4-1/2"	3.1(1.4)	8.2(210)	10,000	1/4	3/8(10)	3.5
ZP323/323R	5/8"-11, M14x2	5"	3.1(1.4)	8.2(210)	10,000	1/4	3/8(10)	3.5
ZAG-965R	3/8"-24, M10x1.5	4"	4(1.8)	9(230)	11,000	1/4	3/8(10)	3.8
ZAG-9656R	5/8"-11, M14x2	4-1/2"	4(1.8)	9(230)	11,000	1/4	3/8(10)	3.8
ZAG-966R	5/8"-11, M14x2	5"	4(1.8)	9(230)	11,000	1/4	3/8(10)	3.8
ZAG-966C	5/8"-11, M14x2	5"	4(1.8)	9(230)	11,000	1/4	3/8(10)	3.8



ZAG4140AF / ZAG4140AM 0.9HP
ZAG4140AN 0.9HP
ZAG5110AF / ZAG5110AN 0.75HP
ZAG5110AM / ZAG5110AC 0.75HP
ZAG5110AP 0.75HP



ZAG4140BF / ZAG4140BM 0.9HP
ZAG4140BN 0.9HP
ZAG5110BF / ZAG5110BN 0.75HP
ZAG5110BM / ZAG5110BC 0.75HP
ZAG5110BP 0.75HP



ZAG7075AC / ZAG7075AN 1.6HP
ZAG7075AP 1.6HP
ZAG9060AC / ZAG9060AM 2.5HP
ZAG9060AN 2.5HP



ZAG7075BC / ZAG7075BN 1.6HP
ZAG7075BP 1.6HP
ZAG9060BC / ZAG9060BM 2.5HP
ZAG9060BN 2.5HP



ZAG460AC 0.4HP
ZAG460AM 0.4HP



ZAG460BC 0.4HP
ZAG460BM 0.4HP

Model	Throttle Type	Grinding Wheel inch(mm)	Free Speed R.P.M.	Spindle Thread Size	Angle Head Height inch(mm)	Overall Length inch(mm)	Net Weight kg	Max. Air Cons. cfm(m³/min)
ZAG4140AF	Roll	4(100)	13,600	3/8x24UNF	3(76)	8-3/16(208)	1.5	33(0.95)
ZAG4140AM	Roll	4(100)	13,600	M8x1.25P	3(76)	8-3/16(208)	1.5	33(0.95)
ZAG4140AN	Roll	4(100)	13,600	M10x1.5P	3(76)	8-3/16(208)	1.5	33(0.95)
ZAG4140BF	Lever	4(100)	13,600	3/8x24UNF	3(76)	9-11/16(246)	1.3	33(0.95)
ZAG4140BM	Lever	4(100)	13,600	M8x1.25P	3(76)	9-11/16(246)	1.3	33(0.95)
ZAG4140BN	Lever	4(100)	13,600	M10x1.5P	3(76)	9-11/16(246)	1.3	33(0.95)
ZAG5110AF	Roll	5(125)	10,900	3/8x24UNF	3(76)	8-3/16(208)	1.6	33(0.95)
ZAG5110AM	Roll	5(125)	10,900	M8x1.25P	3(76)	8-3/16(208)	1.6	33(0.95)
ZAG5110AC	Roll	5(125)	10,900	5/8x11UNC	3(76)	8-3/16(208)	1.6	33(0.95)
ZAG5110AN	Roll	5(125)	10,900	M10x1.5P	3(76)	8-3/16(208)	1.6	33(0.95)
ZAG5110AP	Roll	5(125)	10,900	M14x2.0P	3(76)	8-3/16(208)	1.6	33(0.95)
ZAG5110BF	Lever	5(125)	10,900	3/8x24UNF	3(76)	9-11/16(246)	1.4	33(0.95)
ZAG5110BM	Lever	5(125)	10,900	M8x1.25P	3(76)	9-11/16(246)	1.4	33(0.95)
ZAG5110BC	Lever	5(125)	10,900	5/8x11UNC	3(76)	9-11/16(246)	1.4	33(0.95)
ZAG5110BN	Lever	5(125)	10,900	M10x1.5P	3(76)	8-3/16(208)	1.6	33(0.95)
ZAG5110BP	Lever	5(125)	10,900	M14x2.0P	3(76)	8-3/16(208)	1.6	33(0.95)
ZAG7075AC	Roll	7(180)	7,600	5/8x11UNC	3-27/64(87)	10(253)	3.1	56(1.6)
ZAG7075AN	Roll	7(180)	7,600	M10x1.5P	3-27/64(87)	10(253)	2.9	56(1.6)
ZAG7075AP	Roll	7(180)	7,600	M14x2.0P	3-27/64(87)	10(253)	2.9	56(1.6)
ZAG7075BC	Lever	7(180)	7,600	5/8x11UNC	3-27/64(87)	11-13/16(300)	3.0	56(1.6)
ZAG7075BN	Lever	7(180)	7,600	M10x1.5P	3-27/64(87)	11-13/16(300)	2.8	56(1.6)
ZAG7075BP	Lever	7(180)	7,600	M14x2.0P	3-27/64(87)	10(253)	2.9	56(1.6)
ZAG9060AC	Roll	9(230)	5,900	5/8x11UNC	4-1/2(115)	11(280)	4.32	67(1.9)
ZAG9060AM	Roll	9(230)	5,900	M14x2.0P	4-1/2(115)	11(280)	4.32	67(1.9)
ZAG9060AN	Roll	9(230)	5,900	M10x1.5P	4-1/2(115)	11(280)	4.32	67(1.9)
ZAG9060BC	Lever	9(230)	5,900	5/8x11UNC	4-1/2(115)	12-13/64(310)	4.06	67(1.9)
ZAG9060BM	Lever	9(230)	5,900	M14x2.0P	4-1/2(115)	12-13/64(310)	4.06	67(1.9)
ZAG9060BN	Lever	9(230)	5,900	M10x1.5P	4-1/2(115)	12-13/64(310)	4.06	67(1.9)
ZAG460AC	Roll	-	6,000	5/8x11UNC	3-55/64(98)	8-3/16(208)	1.4	33(0.95)
ZAG460AM	Roll	-	6,000	M14x2.0P	3-55/64(98)	8-3/16(208)	1.4	33(0.95)
ZAG460BC	Lever	-	6,000	5/8x11UNC	3-55/64(98)	8-3/16(208)	1.4	33(0.95)
ZAG460BM	Lever	-	6,000	M14x2.0P	3-55/64(98)	8-3/16(208)	1.4	33(0.95)



ZVG5120-BC 1.4HP 5/8-11UNC
ZVG5120-BP 1.4HP M14 x 2.0P



ZVG770-BC 2HP 5/8-11UNC
ZVG784-BC 2HP 5/8-11UNC
ZVG770-BP 2HP M14 x 2.0P
ZVG784-BP 2HP M14 x 2.0P



ZVG960B 4HP
ZVG945B 3.8HP



ZVG660B 4HP
ZVG645B 3.8HP

Model	Grinding Wheel mm	Max. Dia Cup Wheel mm	Free Speed R.P.M.	Net Weight kg	Air Hose Size inch(mm)	Max. Air Cons. cfm(m³/min)
ZVG5120-BC	125x6x22.2	—	12,000	2.8	1/2(12.7)	42.4(1.2)
ZVG5120-BP	125x6x22.2	—	12,000	2.8	1/2(12.7)	42.4(1.2)
ZVG770-BC	180x6x22.2	—	7,000	4	1/2(12.7)	56.5(1.6)
ZVG770-BP	180x6x22.2	—	7,000	4	1/2(12.7)	56.5(1.6)
ZVG784-BC	180x6x22.2	—	8,400	4	1/2(12.7)	56.5(1.6)
ZVG784-BP	180x6x22.2	—	8,400	4	1/2(12.7)	56.5(1.6)
ZVG960B	230x10x22.2	—	6,000	5.8	3/4(19)	98.9(2.8)
ZVG945B	230x10x22.2	—	4,500	5.8	3/4(19)	87.7(2.4)
ZVG660B	—	150x50x22.2	6,000	5.9	3/4(19)	98.9(2.8)
ZVG645B	—	150x50x22.2	4,500	5.9	3/4(19)	87.7(2.4)



ZSG-105A 1.3HP
ZSG-106A 1.3HP
Roll Throttle Type



ZSG-105B 1.3HP
ZSG-106B 1.3HP
Lever Throttle Type



ZSG105AH 1.4HP
ZSG106AH 1.4HP
Roll Throttle Type



ZSG105BH 1.4HP
ZSG106BH 1.4HP
Lever Throttle Type



ZSG206B 1.4HP
Lever Throttle Type



ZSG306B 1.4HP
Lever Throttle Type

Model	Throttle Type	Grinding Wheel Inch(mm)	Free Speed R.P.M.	Spindle Thread Size	Overall Length Inch(mm)	Net Weight kg	HP	Air Hose Size	Air Inlet Thread Size	Max. Air Consumption SCFM
ZSG-105A	Roll	5x3/4x1/2(inch) 125x19x12.7(mm)	7,600	1/2x12	15-3/4(400)	2.79	1.3	12.7	3/8	20
ZSG-105B	Lever	5x3/4x1/2(inch) 125x19x12.7(mm)	7,600	1/2x12	19-11/16(501)	2.79	1.3	12.7	3/8	20
ZSG105AH	Roll	5x3/4x1/2(inch) 125x19x12.7(mm)	7,600	1/2x12	15-3/4(400)	2.79	1.3	12.7	3/8	20
ZSG105BH	Lever	5x3/4x1/2(inch) 125x19x12.7(mm)	7,600	1/2x12	19-11/16(501)	2.79	1.3	12.7	3/8	20
ZSG-106A	Roll	6x1x5/8(inch) 150x25x15.8(mm)	6,300	5/8x11	16-47/64(425)	4.14	1.4	12.7	3/8	24
ZSG-106B	Lever	6x1x5/8(inch) 150x25x15.8(mm)	6,300	5/8x11	20-33/64(521)	4.14	1.4	12.7	3/8	24
ZSG106AH	Roll	6x1x5/8(inch) 150x25x15.8(mm)	6,300	5/8x11	16-47/64(425)	4.14	1.4	12.7	3/8	24
ZSG106BH	Lever	6x1x5/8(inch) 150x25x15.8(mm)	6,300	5/8x11	20-33/64(521)	4.14	1.4	12.7	3/8	24
ZSG206B	Lever	6x1x5/8(inch) 150x25x15.8(mm)	6,300	5/8x11	20(510)	3.27	1.4	12.7	3/8	24
ZSG306B	Lever	5/8" Cone Wheel	6,300	5/8x11	20(510)	4.1	1.4	12.7	3/8	24



ZSR-412



ZSR-302



ZSR-303



ZSR-302L



ZSR-303L



ZSR-304L

Model	Speed B.P.M	Piston Diameter mm	Stroke mm	Overall Length mm	Weight kg	Min. Hose Size inch(mm)	Air Inlet Size inch-NPT/PT	Avg. Air Cons. cfm(m³/min)
ZSR-412	1,500	18	50	280~360	1.6	3/8(10)	1/4	14(0.4)
ZSR-302	1,000	22	65	380~470	2.95	3/8(10)	3/8	17(0.5)
ZSR-302L	1,000	22	65	870~980	3.75	3/8(10)	3/8	17(0.5)
ZSR-303	800	25.4	100	500~660	6	3/8(10)	3/8	24(0.7)
ZSR-303L	800	25.4	100	1060~1210	8	1/2(12.7)	1/2	24(0.7)
ZSR-304L	700	32	125	1080~1250	9.79	1/2(12.7)	1/2	30(0.85)



High power, quality design

Features & Benefits

- Texturing concrete
- Cleaning & stress relieving weld seams and joints
- Removing coatings, corrosion & other accumulated materials
- Chisel scalars for splitting, chipping, pointing and brick raking
- Convert to chisels in seconds
- Dust shroud attachments available
- Adjustable front tube extends needle life
- Heat treated piston and cylinder ensure excellent durability and long life





ZKJ221-19 (19pcs x Ø3)
ZKJ221-29 (29pcs x Ø2)
ZKJ221A Vacuum Type
Medium Duty Pistol Grip Needle Scaler



ZKJ3221-19 (19pcs x Ø4)
ZKJ3221-28 (28pcs x Ø3)
Heavy Duty Pistol Grip Needle Scaler



ZKJ222
Medium Duty Chisel Scaler



ZKJ3222
Heavy Duty Chisel Scaler



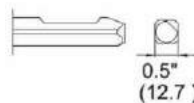
ZKJ211-2B-19 (19pcs x Ø3)
ZKJ211-2B-29 (29pcs x Ø2)
ZKJ211A Vacuum Type
Medium Duty Needle Scaler



ZKJ799NS-12 (12pcs x Ø3)
ZKJ799NS-27 (27pcs x Ø2)
Light Duty Needle Scaler

Vacuum System

Chisel Shank 0.5"(12.7mm)



110A025
Needle scalars can be fitted with dust shroud

Model	Blows Per Min BPM	Numbers of Needles Pcs	Piston Diameter Inch(mm)	Piston Stroke Inch(mm)	Air Inlet NPT	Min. Hose Size Inch(mm)	Avg. Air Consumption cfm(l/min)	Needle Diameter Øinch(Ømm)	Overall Length Inch(mm)	Net Weight kg(lb)
ZKJ3221-19 ZKJ3221-28	2,700	19 28	1.2(29.5)	0.86(22)	1/4	3/8(10)	3(85)	4x180(5/32x7) 3x180(1/8x7)	13.4(340)	3.9(8.6)
ZKJ3222	2,000	-	1.2(29.5)	0.86(22)	1/4	3/8(10)	2(51)	-	11.6(295)	2.7(6)
ZKJ221-19 ZKJ221-29 ZKJ221A	3,700	19 29 -	0.9(23)	1.3(33)	1/4	3/8(10)	3(85)	3x180(1/8x7) 2x180(5/64x7) -	13(330)	2.7(6)
ZKJ222	2,700	-	0.9(23)	1.3(33)	1/4	3/8(10)	3(85)	-	11.6(295)	2.2(4.8)
ZKJ211-2B-19 ZKJ211-2B-29 ZKJ211A	3,700	19 29 -	0.9(23)	1.3(33)	1/4	3/8(10)	3(85)	3x180(1/8x7) 2x180(5/64x7) -	14.8(375)	2.8(6.2)
ZKJ799NS-12 ZKJ799NS-27	4,200	12 27	0.7(18)	1(26)	1/4	3/8(10)	2(60)	3x180(1/8x7) 2x180(5/64x7)	14.2(360)	1.6(3.5)



Warning: Facial and operation of pneumatic tools, must wear eye protection. Recommended air pressure must equal or below @90PSI (6.2 Bar).

**ZKJ211**

Medium Duty Chisel Scaler

**ZKJ799F**

Light Duty Chisel Scaler

**ZFC-2540**

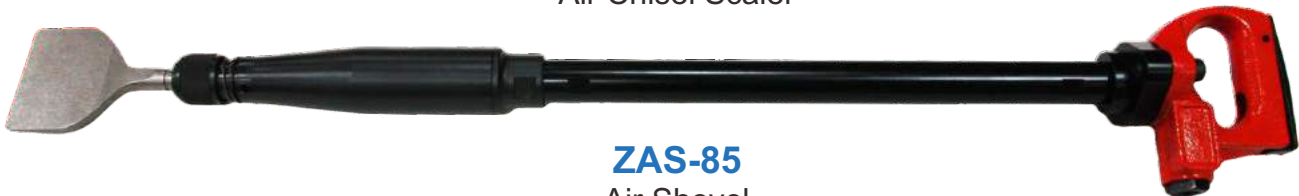
Air Chisel Scaler

**ZKJ362L**

Air Chisel Scaler

**ZKJ372L**

Air Chisel Scaler

**ZAS-85**

Air Shovel

**ZAS-85i**

Air Shovel

Model	Blows Per Min BPM	Piston Diameter Inch(mm)	Piston Stroke Inch(mm)	Air Inlet NPT	Min. Hose Size Inch(mm)	Avg. Air Consumption cfm(l/min)	Overall Length Inch(mm)	Net Weight kg(lb)
ZKJ211	2,700	0.9(23)	1.3(33)	1/4	3/8(10)	3(85)	13.2(335)	2.2(4.8)
ZKJ799F	3,800	0.7(18)	1(26)	1/4	3/8(10)	2.5(70)	13(330)	1.6(3.5)
ZFC-2540	4,000	63/64(25)	1-11/32(34)	1/4	3/8(10)	14(392)	7-1/2(190)	1.5(3.3)
ZKJ362L	4,000	63/64(25)	1-11/32(34)	1/4	3/8(10)	14(392)	28-3/4(730)	2.6(5.7)
ZKJ372L	4,600	1(25.4)	1-1/8(28.6)	3/8	3/8(10)	14(392)	29-5/8(752)	2.9(6.4)
ZAS-85	1,700	1-3/8(35)	3-11/32(85)	3/8	1/2(12.7)	10.7(300)	35.4(900)	14.8(6.7)
ZAS-85i	1,700	1-3/8(35)	3-11/32(85)	3/8	1/2(12.7)	10.7(300)	36.6(930)	12.1(5.5)



Warning: Facial and operation of pneumatic tools, must wear eye protection. Recommended air pressure must equal or below @90PSI (6.2 Bar).

Features & Benefits

- Needle scaler for industrial application
- Sturdy and simple design for heavy and wide applications
- Superior design with internal spring components provides greater durability



ZKJ27

Pistol Grip Needle Scaler



ZNS-1228



ZKJ31-12 (12pcs x Ø3)
ZKJ31-27 (27pcs x Ø2)

Composite Straight Needle Scaler



ZKJ39-14 (14pcs x Ø4)

ZKJ39-28 (28pcs x Ø3)

ZKJ39-66 (66pcs x Ø2)

ZKJ39A Vacuum Type
Pistol Grip Needle Scaler



ZNS1919



ZKJ35-23 (23pcs x Ø3)

ZKJ35-53 (53pcs x Ø2)

Pistol Grip Needle Scaler

Vacuum System



28A023

Needle scalers can be
fitted with dust shroud



ZKJ831

Pistol Grip
Needle Scaler



ZNS1919C

Model	Blows Per Min BPM	Numbers of Needles Pcs	Piston Diameter Inch(mm)	Piston Stroke Inch(mm)	Air Inlet NPT	Min. Hose Size Inch(mm)	Avg. Air Consumption cfm(l/min)	Needle Diameter Øinch(Ømm)	Overall Length Inch(mm)	Net Weight kg(lb)
ZKJ27	4,000	19	0.6(16)	0.6(16)	1/4	3/8(10)	2.5(70)	2x180(5/64x7)	11.2(285)	1.6(3.5)
ZKJ31-12 ZKJ31-27	4,000	12 27	0.8(20)	1.06(27)	1/4	3/8(10)	4(115)	3x180(1/8x7) 2x180(5/64x7)	13.6(345)	2.4(5.3)
ZKJ35-23 ZKJ35-53	4,000	23 53	0.94(24)	1.06(27)	1/4	3/8(10)	7(198)	3x180(1/8x7) 2x180(5/64x7)	13.2(335)	2.8(6.2)
ZKJ39-14 ZKJ39-28 ZKJ39-66 ZKJ39A	3,500	14 28 66 -	1.1(28)	1.1(28)	1/4	3/8(10)	7.4(210)	4x180(5/32x7) 3x180(1/8x7) 2x180(5/64x7) -	13.8(350)	3.6(7.9)
ZKJ831	3,500	19	0.75(19)	2.7(70)	1/4	3/8(10)	6.6(187)	3x180(1/8x7)	14.6(370)	2.7(6)
ZNS-1228	2,800	12	0.75(19)	1.6(41)	1/4	3/8(10)	2.1(60)	3x126	11.6(295)	1.1(2.4)
ZNS1919	4,000	19	0.75(19)	1.6(41)	1/4	3/8(10)	7.4(210)	3x180	12(305)	2.2(4.9)
ZNS1919C	4,000	19	0.75(19)	1.6(41)	1/4	3/8(10)	7.4(210)	3x180	13(330)	2.2(4.9)



Warning: Facial and operation of pneumatic tools, must wear eye protection. Recommended air pressure must equal or below @90PSI (6.2 Bar).



ZKJ379F
ZKJ379FL (Locking Lever Type)
Medium Duty Chisel Scaler



ZNS-1944NS
ZNS-1944NSL (Locking Lever Type)
ZNS-1944A Vacuum Type
Medium Duty Needle Scaler



ZKJ479F
Medium Duty Chisel Scaler



ZKJ479NS
Medium Duty Pistol
Grip Needle Scaler



ZKJ279F
Medium Duty Chisel Scaler

Chisel Shank 3/8"(9.5mm)



ZKJ279NS
Medium Duty Pistol
Grip Needle Scaler



Scaler Kits
ZKJ379K

- 1Pc Needle Scaler
- 1Pc Moil Point Chisel
- 1Pc 20mm Flat Chisel
- 1Pc 35mm Bent Chisel
- 1Pc 1/4" Air Nipple
- 1Set Needle Attachment
- Net Weight 4 kg

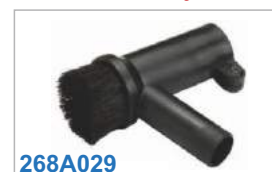


ZNS361



ZNS371

Vacuum System



268A029

Needle scalars can be fitted with dust shroud

Model	Blows Per Min BPM	Numbers of Needles Pcs	Piston Diameter Inch(mm)	Piston Stroke Inch(mm)	Air Inlet NPT	Min. Hose Size Inch(mm)	Avg. Air Consumption cfm(l/min)	Needle Diameter Øinch(Ømm)	Overall Length Inch(mm)	Net Weight kg(lb)
ZKJ279NS	4,600	19	1(25)	1.5(38)	1/4	3/8(10)	8.2(232)	3x180(1/8x7)	18.1(460)	3.2(7)
ZKJ279F	4,800	-	1(25)	1.5(38)	1/4	3/8(10)	8.2(232)	-	14.8(375)	2.4(5.3)
ZNS-1944NS ZNS-1944NSL ZNS-1944A	4,600	19	1(25)	1.5(38)	1/4	3/8(10)	8.2(232)	3x180(1/8x7)	18.1(460)	2.8(6.2)
ZKJ379F ZKJ379FL	4,800	-	1(25)	1.5(38)	1/4	3/8(10)	8.5(240)	-	15(380)	2.1(4.6)
ZKJ479NS	4,600	19	1(25)	1.5(38)	1/4	3/8(10)	8.6(243)	3x180(1/8x7)	21.3(540)	3.3(7.3)
ZKJ479F	4,800	-	1(25)	1.5(38)	1/4	3/8(10)	8(227)	-	17.3(440)	2.5(5.5)
ZNS361	4,000	-	63/64(25)	1-11/32(34)	1/4	3/8(10)	14(392)	-	16-1/4(413)	2.6(5.7)
ZNS371	4,600	-	1(25.4)	1-1/8(28.6)	1/4	3/8(10)	14(392)	-	17(432)	2.8(6.2)



Warning: Facial and operation of pneumatic tools, must wear eye protection. Recommended air pressure must equal or below @90PSI (6.2 Bar).

Features & Benefits

- Needle scaler designed to tackle a wide range of surface preparation tasks in construction, marine and petrochemical.
- Heaviest in the range of scalers.
- Heavy duty semi pistol grip.
- Adjustable front tube for longer needle life.
- The heavy duty scaler for the toughest applications such as roughing and dressing concrete and aggregate exposure, also ideal for removing the hardest scale and corrosion.
- Heavy rust and scale removal from steel structures such as bridges, ships and offshore platforms.
- Stippling of plain concrete for keying and decorative finishes.

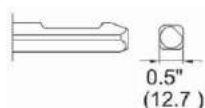


Focus on the front exhaust, effectively blocking dust, Welding slag.



The control rod installation of safety devices, to increase the user security.

Chisel Shank 0.5"(12.7mm)



ZKJ231-35 (35pcs x Ø4)

ZKJ231-49 (49pcs x Ø3)

ZKJ231-66 (66pcs x Ø2)

ZKJ231A Vacuum Type
Heavy Duty Semi
Pistol Grip Needle Scaler



ZKJ231-3B-19 (19pcs x Ø4)

ZKJ231-3B-28 (28pcs x Ø3)

Heavy Duty Semi
Pistol Grip Needle Scaler



ZKJ383F

ZKJ383FL Safety lever
Heavy Duty Chisel Scaler



ZKJ231B

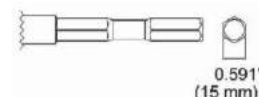
Heavy Duty Chisel Scaler



ZKJ383NS

ZKJ383NSL Safety lever
Heavy Duty Needle Scaler

Chisel Shank 0.591"(15mm)



Vacuum System



120A025

Needle scalers can be
fitted with dust shroud



ZKJ381

Medium Duty Needle Scaler

Model	Blows Per Min BPM	Numbers of Needles Pcs	Piston Diameter Inch(mm)	Piston Stroke Inch(mm)	Air Inlet NPT	Min. Hose Size Inch(mm)	Avg. Air Consumption cfm(l/min)	Needle Diameter Øinch(Ømm)	Overall Length Inch(mm)	Net Weight kg(lb)
ZKJ231-35 ZKJ231-49 ZKJ231-66	2,500	35 49 66	1.3(33)	2(52)	1/4	3/8(10)	7.4(210)	4x180(5/32x7) 3x180(1/8x7) 2x180(5/64x7)	18.1(460)	6(13.2)
ZKJ231-3B-19 ZKJ231-3B-28	3,000	19 28	1.1(28)	1.5(39)	1/4	3/8(10)	6.2(176)	4x180(5/32x7) 3x180(1/8x7)	17.5(445)	4.7(10.4)
ZKJ383NS ZKJ383NSL	3,500	19	0.9(23)	1.06(27)	1/4	3/8(10)	6.4(182)	3x180(1/8x7)	16.9(430)	2.8(6.2)
ZKJ231B	2,000	-	1.3(33)	2(52)	1/4	3/8(10)	7.4(210)	-	17.7(450)	5(11)
ZKJ383F ZKJ383FL	4,000	-	0.9(23)	1.06(27)	1/4	3/8(10)	6.4(182)	-	14.2(360)	1.9(4.2)
ZKJ381	4600	19	1(25)	1.3(33)	1/4	3/8(10)	6(170)	3x180(1/8x7)	16.5(420)	2.7(6)



Warning: Facial and operation of pneumatic tools, must wear eye protection. Recommended air pressure must equal or below @90PSI (6.2 Bar).



ZKJ271

Triple Headed Scaling Hammer



ZKJ271L

Triple Headed Scaling Hammer (straight)

Features & Benefits

- Lightweight, easy to handle.
- Detachable taper fit cutter head reduces cost of replacement and extends piston life.
- Bush hammer tungsten carbide tipped pistons.
- Alternative cruciform tungsten carbide tipped pistons.
- Removal of rust, coatings, scale from steel structures and surface.
- Cleaning of cast iron, steel pipe and bell joints of gas lines maintained by utilities and gas companies.
- Removal of stubborn coatings and mastic residue from floor.
- Reduced Vibration improves operators control.



ZKJ311T

Single Headed Scaling Hammer



ZKJ311

Single Headed Scaling Hammer



Standard Side Handle
(fitted as standard)



Cruciform taper
tungsten cutterhead
(fitted as standard)



Single head cruciform piston
(fitted as standard)



Single head cruciform
tungsten piston
(Optional)

Model	Blows Per Min BPM	Piston Diameter Inch(mm)	Piston Stroke Inch(mm)	Air Inlet NPT	Min. Hose Size Inch(mm)	Avg. Air Consumption cfm(l/min)	Overall Length Inch(mm)	Net Weight kg(lb)
ZKJ271	2,400	1.06(27)	1.024(26)	3/8"	3/8(10)	7.8(223)	21.7(550)	4(8.8)
ZKJ271L	2,400	1.06(27)	1.024(26)	3/8"	3/8(10)	7.8(223)	20.5(520)	4(8.8)
ZKJ311	7,000	1.18(30)	1.496(38)	1/4"	3/8(10)	3.3(94)	22(560)	2.3(5.1)
ZKJ311T	7,000	1.18(30)	1.496(38)	3/8"	3/8(10)	3.3(94)	21.7(550)	2.4(5.3)



Warning: Facial and operation of pneumatic tools, must wear eye protection. Recommended air pressure must equal or below @90PSI (6.2 Bar).

Applications

- Ice
- Floor tiles
- Residue
- Metal slag
- Adhesive
- Rubber coatings
- Asbestos
- Roofing materials
- Linoleum
- Chemical spillages
- Carpeting
- Bituminous

Features

- Quick change chisel release
- Unique, light weight version
- Air efficient & economical to use
- Available in 3L, 4L, 5L and 6L lengths
- Three tools in one: chipping, scraping, de-scaling



Corrosion removal for inaccessible area

One tool, multiple applications

Long Reach Scraper Kits



ZKJ241K

- 1Pc Long Reach Scraper
- 4Pcs Flat Chisel (40 / 50 / 70 / 100mm)
- 2Pcs Grip Tube 500mm
- 1Pc Grip Tube 300mm
- 1Pc Rubber Handle Grip
- 2Pcs Hex Wrench (6 / 2.5mm)
- 1Pc 1/4" Air Nipple
- Net Weight 11.5kg (241K) / 6.2kg (341K)



ZKJ341K

2 tools in one



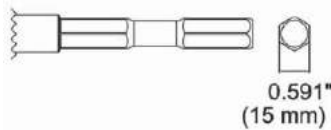
SCRAPING

DESCALING

Features & Benefits

- Light weight aluminium tools for flexible vertical and floor application.
- Low air consumption, will run from small 2HP compressor.
- Clean up of paint & chemical spillages.
- Rail track and infrastructure maintenance.
- Peeling Paint removal in hard to reach areas.
- Quickly clean large areas.
- Remove paint from checker plate using needle attachment.
- Removal of glue residues from carpet tiles.
- Use close to wall for finishing large areas.
- Ceramic & linoleum floor tile removal using chisel or scraper.
- "Pointing" tool for mortar removal.
- Weld seam cleaning.
- Plaster and render removal.

Chisel Shank 0.591"(15mm) Hex



ZKJ241-3L

Long Reach Scraper

ZKJ241NS

Long Reach Needle Scraper



ZKJ241-4L

Long Reach Scraper 47" (1200mm)

ZKJ2415NS

Long Reach Needle Scraper 47" (1200mm)



ZKJ241-5L

Long Reach Scraper 59" (1500mm)

ZKJ2416NS

Long Reach Needle Scraper 59" (1500mm)



ZKJ341-3L

Aluminium Long Reach Scraper

ZKJ341NS

Aluminium Long Reach Needle Scraper



ZKJ341-4L

Aluminium Long Reach Scraper 47" (1200mm)

ZKJ3415NS

Aluminium Long Reach Needle Scraper 47" (1200mm)



ZKJ341-5L

Aluminium Long Reach Scraper 59" (1500mm)

ZKJ3416NS

Aluminium Long Reach Needle Scraper 59" (1500mm)



Model	Blows Per Min BPM	Numbers of Needles Pcs	Piston Diameter Inch(mm)	Piston Stroke Inch(mm)	Air Inlet NPT	Min. Hose Size Inch(mm)	Avg. Air Consumption cfm(l/min)	Needle Diameter Øinch(Ømm)	Net Weight kg(lb)
ZKJ241-3L ZKJ241NS	2,400	- 28	1.12(28.5)	1.5(38)	1/4"	3/8(10)	2.8(80)	3x180(1/8x7)	4.8(10.6)
ZKJ241-4L ZKJ2415NS	2,400	- 28	1.12(28.5)	1.5(38)	1/4"	3/8(10)	3.2(90)	3x180(1/8x7)	6.5(14.3)
ZKJ241-5L ZKJ2416NS	2,400	- 28	1.12(28.5)	1.5(38)	1/4"	3/8(10)	4(114)	3x180(1/8x7)	7.3(16.1)
ZKJ341-3L ZKJ341NS	2,400	- 28	1.12(28.5)	1.5(38)	1/4"	3/8(10)	2.8(80)	3x180(1/8x7)	3.7(8.2)
ZKJ341-4L ZKJ3415NS	2,400	- 28	1.12(28.5)	1.5(38)	1/4"	3/8(10)	3.2(90)	3x180(1/8x7)	4.6(10.1)
ZKJ341-5L ZKJ3416NS	2,400	- 28	1.12(28.5)	1.5(38)	1/4"	3/8(10)	4(114)	3x180(1/8x7)	4.9(10.8)



Warning: Facial and operation of pneumatic tools, must wear eye protection. Recommended air pressure must equal or below @90PSI (6.2 Bar).

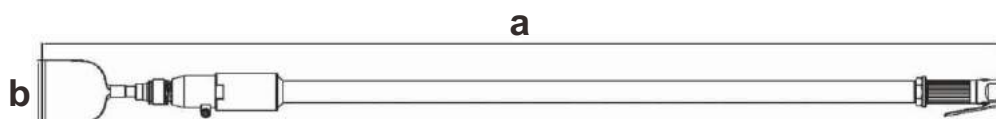
Dimensions

Long Reach Scrapers

Model	Description	
	a Inch(mm)	b Inch(mm)
ZKJ241-3L	23.6(600)	3.93(100)
ZKJ241-4L	47.2(1,200)	3.93(100)
ZKJ241-5L	59(1,500)	3.93(100)
ZKJ341-3L	23.6(600)	3.93(100)
ZKJ341-4L	47.2(1,200)	3.93(100)
ZKJ341-5L	59(1,500)	3.93(100)

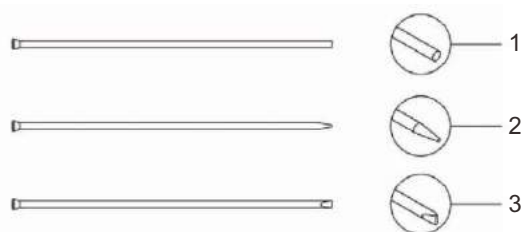
Long Reach Needle Scaler

Model	Description	
	a Inch(mm)	b Inch(mm)
ZKJ241NS	24(610)	3.93(100)
ZKJ2415NS	47.2(1,200)	3.93(100)
ZKJ2416NS	59(1,500)	3.93(100)
ZKJ341NS	24(610)	3.93(100)
ZKJ3415NS	47.2(1,200)	3.93(100)
ZKJ3416NS	59(1,500)	3.93(100)



Optional Accessories

Needle Sets



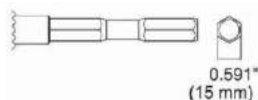
Item	Length Inch(mm)	Width Inch(mm)
1	7(180)	5/64"(2)
1	5.9(150)	5/64"(2)
1	4.9(125)	1/8"(3)
1	7(180)	1/8"(3)
2	7(180)	5/64"(2)
2	7(180)	1/8"(3)
3	7(180)	1/8"(3)
3	7(180)	5/64"(2)

Needle attachment



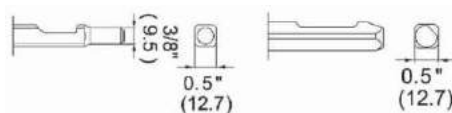
1. Needle holder for 28 needles
Ø 3mm (1/8")
2. Needle holder for 19 needles
Ø 4mm (5/32")

Chisel Shank 0.59" (15mm) Hex



Item	Model	Description	Length Inch(mm)	Width Inch(mm)
1	ZST-13040	1-1/2" Flat Chisel	8.7(220)	1.57(40)
2	ZST-13050	1-1/3" Flat Chisel	8.7(220)	1.96(50)
3	ZST-13070	2-3/4" Flat Chisel	8.7(220)	2.75(70)
4	ZST-130100	4" Flat Chisel	8.7(220)	3.93(100)

Chisel Shank 0.37" (9.5mm)



Item	Model	Description	Length Inch(mm)	Width Inch(mm)
1	ZST-26850	2" Flat Chisel	7(175)	1.96(50)
2	ZST-26835	1-1/3" Flat Chisel	7(175)	1.37(35)
3	ZST-26820	3/4" Flat Chisel	7(175)	0.78(20)
4	ZST-26801	Moil Point Chisel	7(175)	-
5	ZST-27050	2" Flat Chisel	7(175)	1.96(50)
6	ZST-27035	1-1/3" Flat Chisel	7(175)	1.37(35)
7	ZST-27020	3/4" Flat Chisel	7(175)	0.78(20)
8	ZST-27001	Moil Point Chisel	7(175)	-

Chisel Shank 0.5" (12.7mm)





ZCH280G-F (2.6kg)



ZP281GF (5.5kg)



ZP283GF (6.5kg)



ZCH280AG-F (2.6kg)



ZP282GF (5.9kg)



ZP284GF (7.0kg)



ZND5002 (5.4kg)



ZND5004 (8.5kg)



ZND5003 (8.04kg)



ZND5005 (8.88kg)



ZP363L (9.16kg)

Model	Chisel Shank Round Inch(mm)	Chisel Shank Hex Inch(mm)	Piston Diameter mm	Piston Stroke Length Inch(mm)	Blows Per Minute B.P.M	Overall Length Inch(mm)	Air Inlet Size inch-NPT/PT	Min. Hose Size Inch	Avg. Air Cons. cfm
ZCH280G-F	0.55(14)	0.47(12)	20	1-3/4(45)	3,000	9-9/16(243)	1/4	3/8	14
ZCH280AG-F	0.55(14)	0.47(12)	20	1-3/4(45)	3,000	9-9/16(243)	1/4	3/8	14
ZP281GF	0.68(17.3)	0.58(14.7)	28.5	1(25.4)	2,820	12-1/8(308)	3/8	1/2	21
ZP282GF	0.68(17.3)	0.58(14.7)	28.5	2(50)	2,150	12-7/8(327)	3/8	1/2	21
ZP283GF	0.68(17.3)	0.58(14.7)	28.5	3(76)	1,900	14-7/8(378)	3/8	1/2	24
ZP284GF	0.68(17.3)	0.58(14.7)	28.5	4(102)	1,500	16-1/8(410)	3/8	1/2	28
ZND5002	0.68(17.3)	0.58(14.7)	27.9	1.81(46)	2,940	14-1/2(390)	3/8	1/2	17
ZND5003	0.68(17.3)	0.58(14.7)	28.5	3.03(77)	2,200	14(365)	3/8	1/2	34
ZND5004	0.68(17.3)	0.58(14.7)	28.5	3.7(94)	1,900	15-1/4(400)	3/8	1/2	33
ZND5005	0.68(17.3)	0.58(14.7)	28.5	4.02(102)	1,500	16-1/2(425)	3/8	1/2	30
ZP363L	0.68(17.3)	0.58(14.7)	28.5	3.7(94)	2,280	35-3/8(900)	1/2	1/2	33

Features

- Newly Patented Shock Reduced Mechanism.
- Gravity cast Aluminum Alloy 4 bolts handle withstands rugged use.
- Spline locking device prevents loosening of Handle & Cylinder. Grooved barrel for use with retainers.
- Alloy steel made Cylinder & Piston heat-treated for durability.
- Choice of Bushing- round bushing for chisel freely rotating or hexagonal Bushing for use with hexagonal Chisels.



ZCH-2SRTI

ZCH-3SRTI

ZCH-4SRTI



APPLICATIONS

The New ZCH series heavy duty Chipping Hammers are designed for rugged use in foundries, shipyards, refineries, fabrication shops and construction applications.

Available in 2" thru 4" stroke versions to offer the power levels necessary for a variety of use from light to medium chipping and trimming through heavy cutting.

Opt. Retainer type



Model	Chisel Shank Round inch(mm)	Chisel Shank Hex inch(mm)	Piston Diameter mm	Piston Stroke Length inch(mm)	Blows Per Minute B.P.M	Net Weight kg	Air Consumption CFM (m³/min)	Vibration m/s²	Power (Joule)
ZCH-2SRTI	0.68(17.3)	0.58(14.7)	28.5	2(50)	2150	8.6	30(0.85)	5	22.9
ZCH-3SRTI	0.68(17.3)	0.58(14.7)	28.5	3(76)	1900	9.2	32(0.9)	5	28
ZCH-4SRTI	0.68(17.3)	0.58(14.7)	28.5	4(102)	1500	9.3	33(0.95)	7	30.46

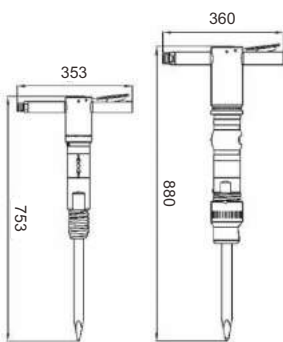
*Air Inlet Size: 3/8(10) inch-NPT/PT, Min. Hose Size: 1/2 inch(mm)

Features & Benefits

- Simple structure for less maintenance.
- Powerful hitting power and low reacting.
- Use for destroy the concretes, asphalt path, building and infrastructure.
- Medium size service/general demolition breaker.
- Long stroke cylinder provides maximum impact energy, giving a harder impact than similarly sized standard breakers.
- The best choice for applications in medium hard materials and where you need lower weight or low air consumption.



Reinforced cup retainer.



ZKJ21S

ZKJ41S



Unique Nut for (ZKJ21S ZKJ41S)



Hose Nipple 1/2", 1/4"



Hitch Cutter Retainer



Beehive Retainer Spring



ZKJ21S
Concrete Breaker

ZKJ41S
Concrete Breaker

Item	Model	Description	Length Inch(mm)	Width Inch(mm)
1	ZST-10S01R	Tapered Punch	17.7(450)	-
2	ZST-30S01R	Tapered Punch	17.7(450)	-
3	ZST-30S45R	Flat Chisel	17.7(450)	1.8(45)

Model	Blows Per Min BPM	Shank Size Inch(mm)	Piston Diameter Inch(mm)	Piston Stroke Inch(mm)	Hose Int. Ø Inch(mm)	Avg. Air Consumption cfm(l/min)	Overall Length Inch(mm)	Net Weight kg(lb)
ZKJ21S	1,300	1.02(26)	1.38(35)	5.9(150)	12.7(1/2)	35(990)	28.9(753)	14.1(31.1)
ZKJ41S	1,000	1.18(30)	1.57(40)	9.2(235)	19(3/4)	42(1,189)	34.6(880)	24.6(54.2)

Warning: Facial and operation of pneumatic tools, must wear eye protection. Recommended air pressure must equal or below @90PSI (6.2 Bar).

Features

ZCH 2, 3, and 4" stroke chipper has a durable 4 bolt D handle and inside trigger for chipping concrete in parking garages, highway pillars and light demolition and building restoration.

- Machined from premium alloy steel
- Forged G handle
- Cast D handle with inside rubberized trigger
- High shock tool steel piston
- Rotatable exhaust deflector
- Inlet 3/8" with bushing, 7/8" with out bushing
- Available with .680 Round Chuck Model ZCH 2,3, or 4, R
- Available with .580 Hex Chuck ZCH 2,3,or 4, H
- Standard with oval collar retainer
- Optional Universal BALL retainer available
- Optional whip hose with oiler available



**ZCH-02C(H)
ZCH-03C(H)
ZCH-04C(H)**
"C" Type



**ZCH-02D(H)
ZCH-03D(H)
ZCH-04D(H)**
"D" Type Outer Trigger



**ZCH-02DI(H)
ZCH-03DI(H)
ZCH-04DI(H)**
"D" Type Inner Trigger

Model	Net Weight lbs(kgs)	Length inch(mm)	Bore inch(mm)	Stroke inch(mm)	Blows Per Minute	Air Inlet Size inch-NPT/PT	Avg. Air Cons. cfm(m³/m)	Chuck Sizes inch(mm)
ZCH-02C(H) ZCH-02D(H) ZCH-02DI(H)	13(6)	14(356)	1.125(29)	2(51)	2,300	3/8(10)	29.75(0.84)	0.58(14.8) Hex 0.68(17.5) Rnd
ZCH-03C(H) ZCH-03D(H) ZCH-03DI(H)	14(6.4)	15.3(387)	1.125(29)	3(75)	2,200	3/8(10)	31.5(0.89)	0.58(14.8) Hex 0.68(17.5) Rnd
ZCH-04C(H) ZCH-04D(H) ZCH-04DI(H)	15(7)	17(432)	1.125(29)	4(102)	1,800	3/8(10)	33.23(0.94)	0.58(14.8) Hex 0.68(17.5) Rnd

Features

Designed for light demolition jobs, hardpan and digging clay. Can be used horizontally with D handle and internal trigger.

- Forged alloy construction with one piece cylinder
- 4 bolt backhead
- Internal oiler
- Removable front head with latch
- Replaceable check bushing
- Optional muffler

DO NOT apply air pressure over 100 psi / 7 bar to these tools.



ZCD-30
Clay Digger

Model	Net Weight lbs(kgs)	Length inch(mm)	Bore inch(mm)	Stroke inch(mm)	Blows Per Minute	Air Inlet Size inch-NPT/PT	Avg. Air Cons. cfm(m³/m)	Chuck Sizes inch(mm)
ZCD-30	30(14)	23(584)	1.75(44)	3.375(86)	1,550	3/8(10)	49(1.4)	1 x 4-1/4(25 x 108) 7/8 x 3-1/4(22 x 83)

Features

Designed for light concrete demolition, all angles or confined spaces. D handle with external thumb trigger

- Rotatable exhaust muffler
- One piece machined premium alloy cylinder
- Safe bridged or stepped internal cylinder (piston will not exit bottom of tool)
- Utilizes 11X jumbo steels
- Spring held retainer
- Standard upper and lower hardened sleeves
- Urethane bumper for longer life
- Requires whip hose and oiler



ZRB-6
Rivet Buster

Features

Designed for light concrete demolition, all angles or confined spaces. D handle with external thumb trigger

- ZRB-8 designed for medium & ZRB-11 designed for heavy concrete demolition or cutting rivet heads. D handle with internal variable speed trigger.
- Rotatable rubber exhaust muffler or optional rotatable steel clip exhaust
- One piece machined premium alloy cylinder
- Safe bridged or stepped internal cylinder (piston will not exit bottom of the tool)
- Standard upper & lower hardened sleeves
- Replaceable auto valve for extened life
- Utilizes 11X jumbo steels
- Spring retainer
- Urethane bumper for longer life
- Screened 1/2" NPT inlet
- Requires whip hose and oiler



Optional Steel clip
Exhaust

ZRB-8/ZRB-11
Rivet Buster

DO NOT apply air pressure over 100 psi / 7 bar to these tools.

Model	Net Weight lbs(kgs)	Length inch(mm)	Bore inch(mm)	Stroke inch(mm)	Blows Per Minute	Air Inlet Size inch-NPT/PT	Avg. Air Cons. cfm(m³/m)	Chuck Sizes
ZRB-6	23(10.5)	17(432)	1.418(36)	2.75(70)	1,560	3/4(19) 7/8(22.2)	40(1.2)	11 x JUMBO
ZRB-8	30(14)	22(572)	1.188(30)	8(203)	1,140	1/2(12)	44(1.3)	11 x JUMBO
ZRB-11	33(15)	25-1/2(648)	1.188(30)	11(279)	850	1/2(12)	50(1.41)	11 x JUMBO



ZRD-9
Hammer Drill

Features

Designed for a wide variety of construction and maintenance applications such as driving or setting masonry anchors and drilling holes in concrete, bricks or rock. As a hammer, these tools can be used for chipping, scarifying, scaling and cleaning welds.

- Excellent power-to-weight ratio helps drill holes faster and easier than comparable electric rotary hammers
- Built-in oiler provides continuous lubrication
- Teasing throttle for precise control
- Rotation release button converts tool to a hammer
- Cushioned piston for smooth operation and long life
- With an adaptor, can be used with electric hammer drill bits
- Round spline version available



ZRD-20
Light Weight Rock Drill

Features

Designed for anchoring, shallow holes. D type handle allow horizontal drilling & collaring holes.

- D type handle with thumb trigger
- Forged alloy construction
- Built-in oiler
- Replaceable chuck, 7/8" x 3-1/4" Hex.



ZRD-30
Rock Drill

Features

Designed for light construction or soft rock drill with high speed & excellent flushing ability.

- Forged alloy construction
- Requires constant feed inline oiler
- Replaceable chuck, 7/8" x 4-1/4" or 7/8" x 3-1/4"
- Single throttle with three drilling speed: Stop, Blow, 1, 2, 3. 1 or slow is for collaring holes and remove drill from drilling hole.
- Optional wet kit available
- RPM : 240
- Water Consumption : 4.8 l/min



ZRD-50
Rock Drill

Features

Designed for medium to heavy duty construction drill suit for drilling medium rocks.

- Forged alloy construction
- Requires constant feed inline oiler
- Replaceable chuck, 1" x 4-1/4" or 7/8" x 3-1/4"
- Adjustable drilling speed
- Optional muffler & wet kit available
- RPM : 180
- Water Consumption : 6.7 l/min
- Performance in Granite at 85-90psi(6-7bar) : 24.4"/m(62 cm/m)



ZRD-75
Rock Drill

Features

Designed for heavy duty Quarry drill suit for drill granite.

- Forged alloy construction
- Internal oiler
- Replaceable chuck, 1" x 4-1/4" or 7/8" x 4-1/4"
- Three drilling speed: Stop, Blow, 1, 2, 3. 1 or slow is for collaring holes and remove drill from drilling hole.
- Optional wet kit available
- Optional muffler
- Optional constant feed inline oiler (6' 3/4" whip)
- RPM : 200

Model	Net Weight lbs(kgs)	Length inch(mm)	Bore inch(mm)	Stroke inch(mm)	Blows Per Minute	Air Inlet Size inch-NPT/PT	Avg. Air Cons. cfm(m³/m)	Chuck Sizes inch(mm)
ZRD-9	9(4)	15(375)	1-1/4(32)	1(25.4)	3,400	3/8(10)	20(0.9)	3/4" Hex. Round spline shank
ZRD-20	16.5(7.5)	19(483)	1.94(49.18)	1.89(48)	2,900	3/8(10)	36(1.2)	7/8 x 3-1/4(22 x 83)
ZRD-30	29(13)	19.5(495)	2.44(62)	1.44(37)	2,700	3/4(19)	73(2.1)	7/8 x 4-1/4(22 x 108) 7/8 x 3-1/4(22 x 83)
ZRD-50	51(23)	20.5(521)	3(76)	2(51)	2,300	3/4(19)	92.2(2.6)	1 x 4-1/4(25 x 108) 7/8 x 4-1/4(22 x 108) 7/8 x 3-1/4(22 x 83)
ZRD-75	61(27.5)	23.75(603)	2.63(67)	3.22(82)	2,250	3/4(19)	98(2.77)	1 x 4-1/4(25 x 108) 7/8 x 4-1/4(22 x 108) 7/8 x 3-1/4(22 x 83)

Features

Designed for light demolition works. 2" to 4" concrete sidewalks, pavement and breaking asphalt.

- One piece cylinder & 4 bolt backhead
- Forged alloy construction
- Replaceable chuck bushing
- Removable front head
- Internal oiler
- Optional muffler



ZPB-30
Pavement Breaker

Features

Designed for light or medium demolition works. 2" to 4" plus hard concrete, bridge deck resurfacing and asphalt.

- 4 bolt backhead
- Forged alloy construction
- Replaceable chuck bushing
- Removable front head (bolt on)
- Tool requires inline oiler
- Optional muffler



ZPB-40
Pavement Breaker

Features

Designed for medium demolition works on rocks and 3" to 4" thick concrete pavement and asphalt.

- 4 bolt backhead
- Forged alloy construction
- Heavy duty side rod bolts and springs
- Replaceable chuck bushing
- Removable front head
- Internal oiler
- Optional muffler



ZPB-60
Pavement Breaker

Features

Designed for heavy demolition works, rocks, reinforced concrete and 5" to 6" plus thick concrete and pavement.

- 4 bolt backhead
- Forged alloy construction
- Heavy duty side rod bolts and springs
- Replaceable chuck bushing
- Removable front head
- Internal oiler
- Optional muffler



ZPB-90
Pavement Breaker

DO NOT apply air pressure over 100 psi / 7 bar to these tools.

Model	Net Weight lbs(kgs)	Length inch(mm)	Bore inch(mm)	Stroke inch(mm)	Blows Per Minute	Air Inlet Size inch-NPT/PT	Avg. Air Cons. cfm(m³/m)	Chuck Sizes inch(mm)
ZPB-30	34(15)	22.5(572)	1.75(44)	3.375(86)	1,550	3/8(10)	49(1.4)	1 x 4-1/4(25 x 108) 7/8 x 3-1/4(22 x 83)
ZPB-40	39(18)	31(777)	1.69(43)	2.75(70)	1,800	3/8(10)	49(1.4)	1 x 4-1/4(25 x 108)
ZPB-60	67(30)	25.63(651)	2.25(57)	4.1(104)	1,400	3/4(19)	59(1.7)	1-1/4 x 6(32 x 154) 1-1/8 x 6(28 x 154)
ZPB-90	92.5(42)	28.75(730)	2.625(67)	6.06(154)	1,250	3/4(19)	75(2.1)	1-1/4 x 6(32 x 154) 1-1/8 x 6(28 x 154)

Features

This temper is designed for soil compaction, temporary filling of holes or asphalt packing. Applications range from foundation and pavement repair to the installation of power or telephone poles. Comes with standard 6" cast iron butt.

- Side handle throttle
- Precision ground alloy cylinder
- Requires whip hose (oiler optional)
- Optional butts - Pole of half moon butt / 6" Aluminum butt

ZBT-6
Back Fill Tamper



DO NOT apply air pressure over 100 psi / 7 bar to these tools.

Model	Net Weight lbs(kgs)	Length inch(mm)	Bore inch(mm)	Stroke inch(mm)	Blows Per Minute	Air Inlet Size inch-NPT/PT	Avg. Air Cons. cfm(m³/m)	Taper
ZBT-6	40(18)	48.25(1226)	1.5(38)	5.5(140)	800	1/2(13)	38.5(1.1)	804

Features

Designed with long rech handle for digging in trenches & foundations. Used for clay, hardpan or forzen ground.

- 4 bolt backhead & one piece cylinder
- Forged alloy long handle
- Removable front head
- Replaceable chuck bushing
- Internal oiler
- Optional muffler

ZTD-19
Trench Digger



DO NOT apply air pressure over 100 psi / 7 bar to these tools.

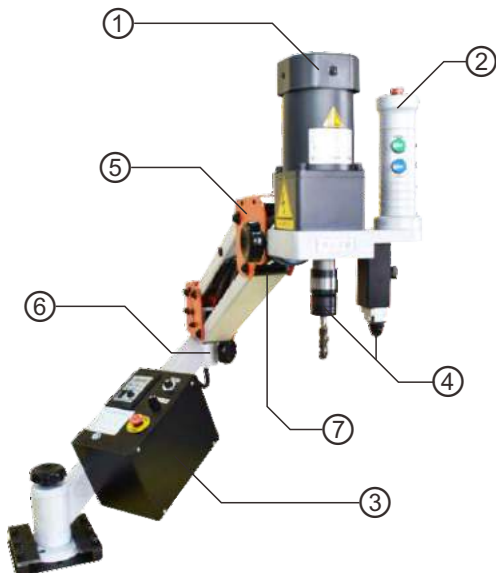
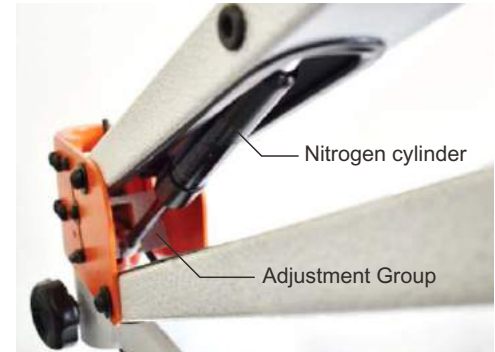
Model	Net Weight lbs(kgs)	Length inch(mm)	Bore inch(mm)	Stroke inch(mm)	Blows Per Minute	Air Inlet Size inch-NPT/PT	Avg. Air Cons. cfm(m³/m)	Chuck Sizes inch(mm)
ZTD-19	39(18)	31(777)	1.69(43)	2.75(70)	1,800	3/8(10)	49(1.4)	1 x 4-1/4(25 x 108) 7/8 x 3-1/4(22 x 83)

Use

The most suitable for machining parts, such as laser cutting parts, punching and folding metal parts, aluminum castings, fast tapping.

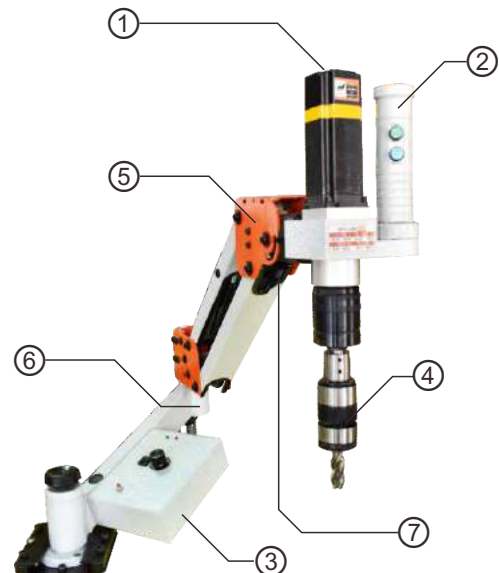
Characteristic

Efficient, safe and easy to operate, Machining depth up to 1 meter, Fast vertical or multiple angle positioning, Strengthen the capacity constraints machining, Improve operational efficiency, Association with CNC milling machine and CNC laser cutting machining, Rapid completion and tapping operations.



ZET312

Rotary arm tapping machine
(W/Depth Device & Torque Collect)



ZET324

Rotary arm tapping machine
(W/Torque Collect)

Item	Details	
①	Motor	220V
②	Operating lever	Function (Forward, Reverse, Single action)
③	Electronic control box	Motor driver, Switch, Speed control, Reversion
④	Chuck	Torque collet
⑤	Parallel arm	Z-axis
⑥	Radial jib	X-axis
⑦	Universal drill	Multi-angle

Model	Drive Power	Range	Free Speed rpm	Working Radius	Universal Drill	Depth Device	Tap Chuck
ZET312	220V	M3~M12	300	300~1000	Necessary	Necessary	Torque collet
ZET324	220V	M3~M24	300	300~1000	Necessary	N/A	Torque collet



Torque collet Chuck

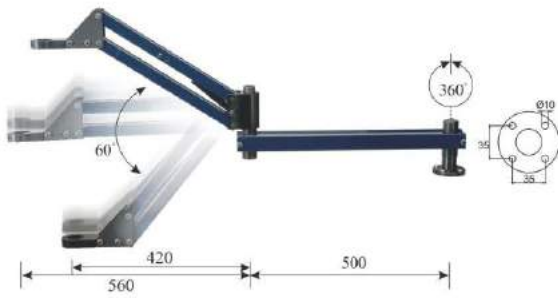
METRIC THREAD					
No.1 Torque collet Chuck		JIS		ISO	
		Handle Diameter	Opposite	Handle Diameter	Opposite
M3	P0.5	4	3.2	3.15	2.5
M4	P0.7	5	4	4	3.15
M5	P0.8	5.5	4.5	5	4
M6	P1.0	6	4.5	6.3	5
M8	P1.25	6.2	5	8	6.3
M10	P1.5	7	5.5	10	8
M12	P1.75	8.5	6.5	9	7.1

METRIC THREAD					
No.2 Torque collet Chuck		JIS		ISO	
		Handle Diameter	Opposite	Handle Diameter	Opposite
M14	P2.0	10.5	8	11.2	9
M16	P2.0	12.5	10	12.5	10
M18	P2.5	14	11	14	11.2
M20	P2.5	15	12	14	11.2
M22	P2.5	17	13	16	12.5
M24	P3.0	19	15	18	14

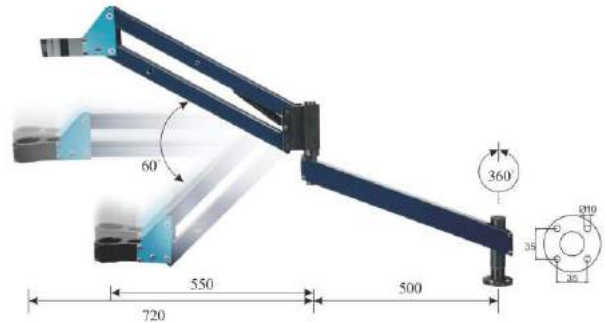
METRIC THREAD					
No.3 Torque collet Chuck		JIS		ISO	
		Handle Diameter	Opposite	Handle Diameter	Opposite
M30	P3.5	23	17	20	16
M32		24	19		
M33	P3.5	25	19		
M34		26	21		
M35		26	21		
M36		28	21		
M38		28	21		
M39		30	23		
M40		30	23		
M42	P4.5	32	26		

IMPERIAL THREAD		
Torque collet Chuck	JIS	
	Handle Diameter	Opposite
W 1/8	4	3.2
W 3/16	5.5	4.5
W 1/4	6	4.5
W 5/16	6.1	5
W 3/8	7	5.5
W 7/16	8	6
W 1/2	9	7
W 9/16	10.5	8
W 5/8	12	9
W 3/4	14	11
W 7/8	17	13
W 1	20	15
W 1-1/8	22	17
W 1-1/4	24	19
W 1-3/8	26	21
W 1-1/2	30	23
W 1-5/8	32	26

JIS Pipe / Tube				
PT	PS	PF	Handle Diameter	Opposite
1/8	1/8	1/8	8	6
1/4	1/4	1/4	11	9
3/8	3/8	3/8	14	11
1/2	1/2	1/2	18	14
		5/8	19	15
5/8			20	15
3/4	3/4	3/4	23	17
		7/8	24	19
1	1	1	26	21
	1-1/8	1-1/8	28	21
1-1/4	1-1/4	1-1/4	32	26
1-3/8	1-3/8	1-3/8	35	26
1-1/2	1-1/2	1-1/2	38	29



RB16 Robot Arm



RB24 Robot Arm

Model	New Weight kg	Tool Diameter mm	Clamping Jaw
RB16	5.89	38/44	
RB24	10.75	56.6	



ZAT22AKH
3/8" Air Tapping Tool



ZAT415B2
3/8" Air Tapping Tool



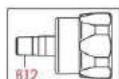
ZAT712AKI
3/8" Air Tapping Tool



Model	Tapping Capacity Aluminum mm	Tapping Capacity Iron mm	Free Speed rpm	Air Consumption l/min(cfpm)	Overall Length inch(mm)	Air Inlet P.T	Net Weight lb(kg)	Sound Level db(A)
ZAT22AKH	3-12	3-8	150	184(6.5)	7.87(200)	1/4	3.79(1.72)	82
ZAT415B2	1-3	1-3	1000	141(5)	11.02(280)	1/4	1.63(0.74)	77
ZAT712AKI	6-12	6-8	150	198(7)	9.65(245)	1/4	3.9(1.77)	82

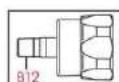
Specification(air pressure at 90psi, 6.2bar, 6.3kg/cm²)

Products and specifications subject to change without prior notice 175



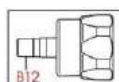
Handle
exhaust

ZAT22AK
Air Tapping Tool



Rear
exhaust

ZAT19AK
Air Tapping Tool



Rear
exhaust

ZAT23AK
Air Tapping Tool



Please specify tapping tool code
& chuck standard while ordering.

Air Tapping Tool Order Code Reference

Model	ZAT22AK	ZAT19AK	ZAT23AK
Size	Order Code		
M2		ZAT19AK-2	
M3	ZAT22AK-3	ZAT19AK-3	ZAT23AK-3
M4	ZAT22AK-4	ZAT19AK-4	ZAT23AK-4
M5	ZAT22AK-5	ZAT19AK-5	ZAT23AK-5
M6	ZAT22AK-6	ZAT19AK-6	ZAT23AK-6
M8	ZAT22AK-8	ZAT19AK-8	ZAT23AK-8
M10	ZAT22AK-10		ZAT23AK-10
M12	ZAT22AK-12		ZAT23AK-12

NOTICE:

When different sizes or standard chucks are needed, please refer to the chuck standards and size list and note on the purchase order, otherwise, the chuck will be JIS.

Chuck standards and size list

FOR TAP	JIS			ISO			DIN 371			DIN 376		
Thread	Ød	□	Order Code	Ød	□	Order Code	Ød	□	Order Code	Ød	□	Order Code
M2	3	2.5	TCJISM2									
M3	4	3.2	TCJISM3	3.15	2.5	TCISOM3	3.5	2.7	TC DIN371M3	2.2	—	TC DIN376M3
M4	5	4	TCJISM4	4	3.15	TCISOM4	4.5	3.4	TC DIN371M4	2.8	2.1	TC DIN376M4
M5	5.5	4.5	TCJISM5	5	4	TCISOM5	6	4.9	TC DIN371M5	3.5	2.7	TC DIN376M5
M6	6	4.5	TCJISM6	6.3	5	TCISOM6	6	4.9	TC DIN371M6	4.5	3.4	TC DIN376M6
M8	6.2	5	TCJISM8	8	6.3	TCISOM8	8	6.2	TC DIN371M8	6	4.9	TC DIN376M8
M10	7	5.5	TCJISM10	10	8	TCISOM10	10	8	TC DIN371M10	7	5.5	TC DIN376M10
M12	8.5	6.5	TCJISM12	9	7.1	TCISOM12				9	/	TC DIN376M12
FOR TAP	ANSI											
Thread	Ød	□	Order Code									
1/2"	9.322	6.985	TCANSIW1/2									

Model	Tapping Capacity Aluminum mm	Capacity Iron mm	Free Speed rpm	Air Consumption l/min(cfm)	Overall Length inch(mm)	Air Inlet P.T	Net Weight lb(kg)	Sound Level db(A)
ZAT22AK	3-12	3-8	150	184(6.5)	10.04(255)	1/4	3.81(1.73)	82
ZAT19AK	2-8	2-4	350	226(8)	11.42(290)	1/4	3.7(1.68)	87
ZAT23AK	3-12	3-10	100	226(8)	12.2(310)	1/4	4.1(1.86)	87

Specification(air pressure at 90psi, 6.2bar, 6.3kg/cm²)


Patented

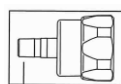
JIS, ISO, DIN371, DIS376, ANSI all standards chuck and sizes can using



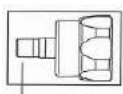
NEW
ZPTC-DT6

Professional Tapping Chuck

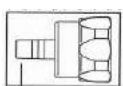
For {
Drilling Machine
Electric Drill
Air Drill

**B12****ZPTC-B12A**

Professional Tapping Chuck

**B12****ZATC-B12B**

Adjustable Tapping Chuck

**B16****ZATC-B16C**

Adjustable Tapping Chuck



Torque Adjustment Scale

Dead Lever

The method Adjusting Torque

SPECIFICATION (air pressure at 90psi, 6.2bar, 6.3kg/cm²)

Model	Tapping Size mm	Overall Length inch(mm)	Net Weight lb(kg)
ZPTC-DT6	3~8	120(4.72)	1.32(0.6)
ZPTC-B12A	3~8	120(4.72)	1.32(0.6)
ZATC-B12B	3~12	120(4.72)	1.9(0.86)
ZATC-B16C	3~12	120(4.72)	1.9(0.86)

Features

- Patented water atomization mechanism.
- Patented 2 in 1 cap for use with regulator bottle or PET bottles.
- Easiest and fastest wet or dry cleaning tool for automotive interiors, engine bay, carpets, floor mats, etc.





PATENTED



plastic

stainless

ZTG-1211

Storm Cleaning Gun
- Plastic tube

ZTG-1211S

Storm Cleaning Gun
- Stainless tube



For
USA

For
EUROPE

ZTG3125/ZTG3127

Storm cleaning gun
with brush - Ball type

ZTG3125BS

Storm cleaning gun
& suction kit
(large cover) - Ball type

ZTG3125BSS

Storm cleaning gun
& suction kit
(small cover) - Ball type



ZCCWT-1311BS

Large cover suction kit



Tube type

ZTG1311A

Storm cleaning gun
with brush - Tube type

ZTG1311BS

Storm cleaning gun
& suction kit
(large cover) - Tube type

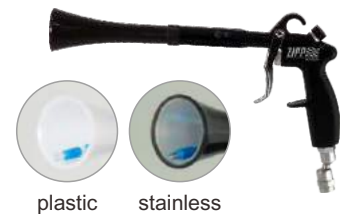
ZTG1311BSS

Storm cleaning gun
& suction kit
(small cover) - Tube type



ZCTB-3125BSS

Small cover suction kit



plastic

stainless

ZTG-1211N

Storm Cleaning Gun
- Plastic tube

ZTG-1211SN

Storm Cleaning Gun
- Stainless tube



ZFG1411

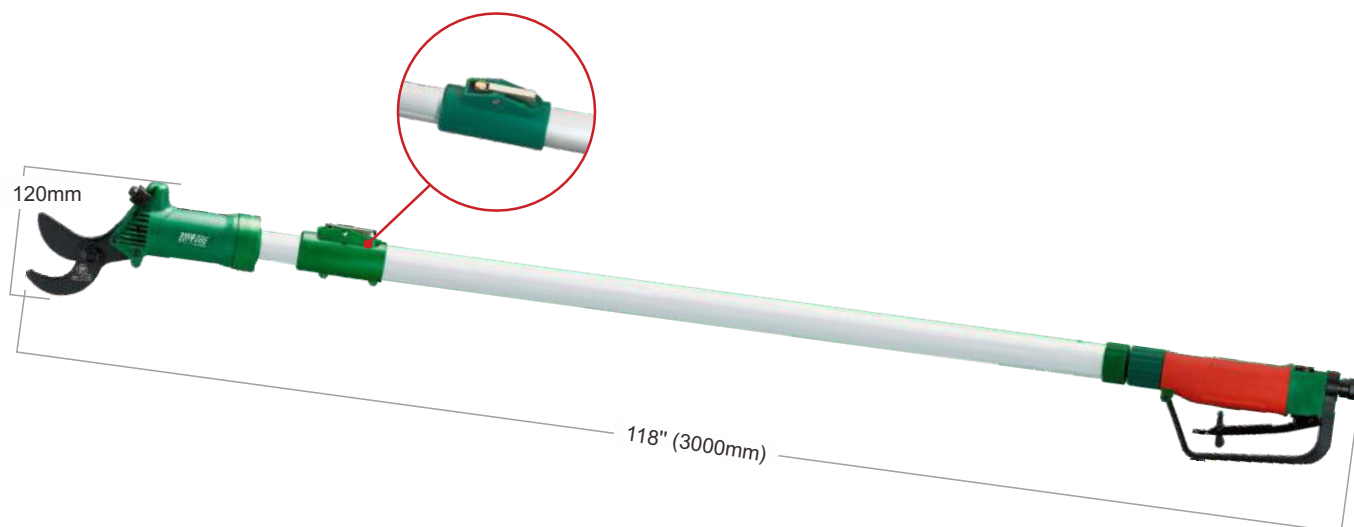
Foam gun

Model	Free Speed R.P.M.	Air Inlet inch	L*W*H mm	Suggested Air Pressure PSI	Net Weight lbs(kgs)	Avg. Air Cons. cfm	CUP	
ZTG3125 ZTG3125BS ZTG3125BSS	8,000	1/4	330*120*240 360*120*275 360*120*275	90	1.54(0.7) 2.65(1.2) 2.4(1.1)	9	1L	for European market only.
ZTG3127	8,000	1/4	330*120*240	90	1.54(0.7)	9	1L	for USA market only.
ZTG1311A ZTG1311BS ZTG1311BSS	8,000	1/4	330*120*240 360*120*275 360*120*275	90	1.54(0.7) 2.65(1.2) 2.4(1.1)	9	1L	can't sell to USA & Japan.
ZTG1211 ZTG1211S	3,000	1/4	305*120*240	90	1.35(0.61)	6	1L	can't sell to USA
ZTG1211N ZTG1211SN	—	1/4	305*43*160	90	0.88(0.4)	6	—	can't sell to USA
ZFG1411	—	1/4	295*120*260	90	1.76(0.8)	13	1L	can't sell to Japan.

ZPS-471L

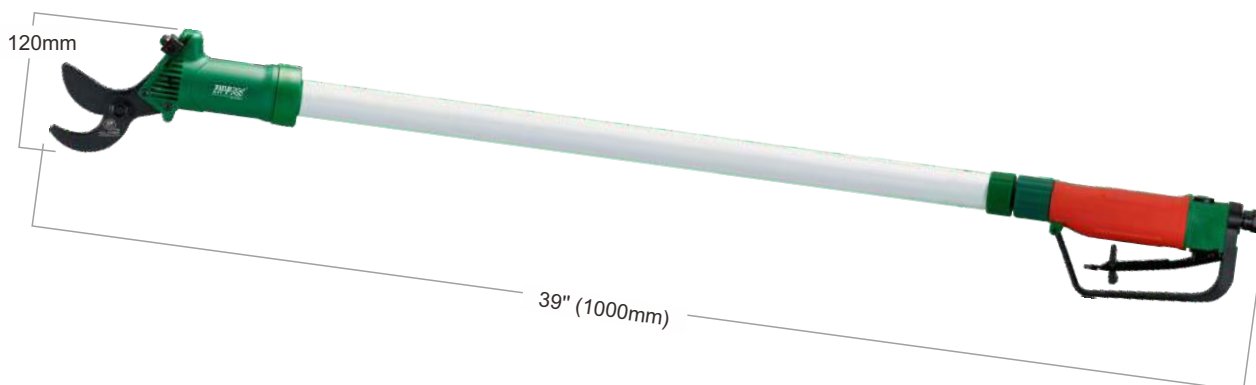
Telescopic Pneumatic Pruning Shear

- Can be extended up to 3.0M



ZPS-471M

Telescopic Pneumatic Pruning Shear



ZPS-471

Pneumatic Pruning Shear

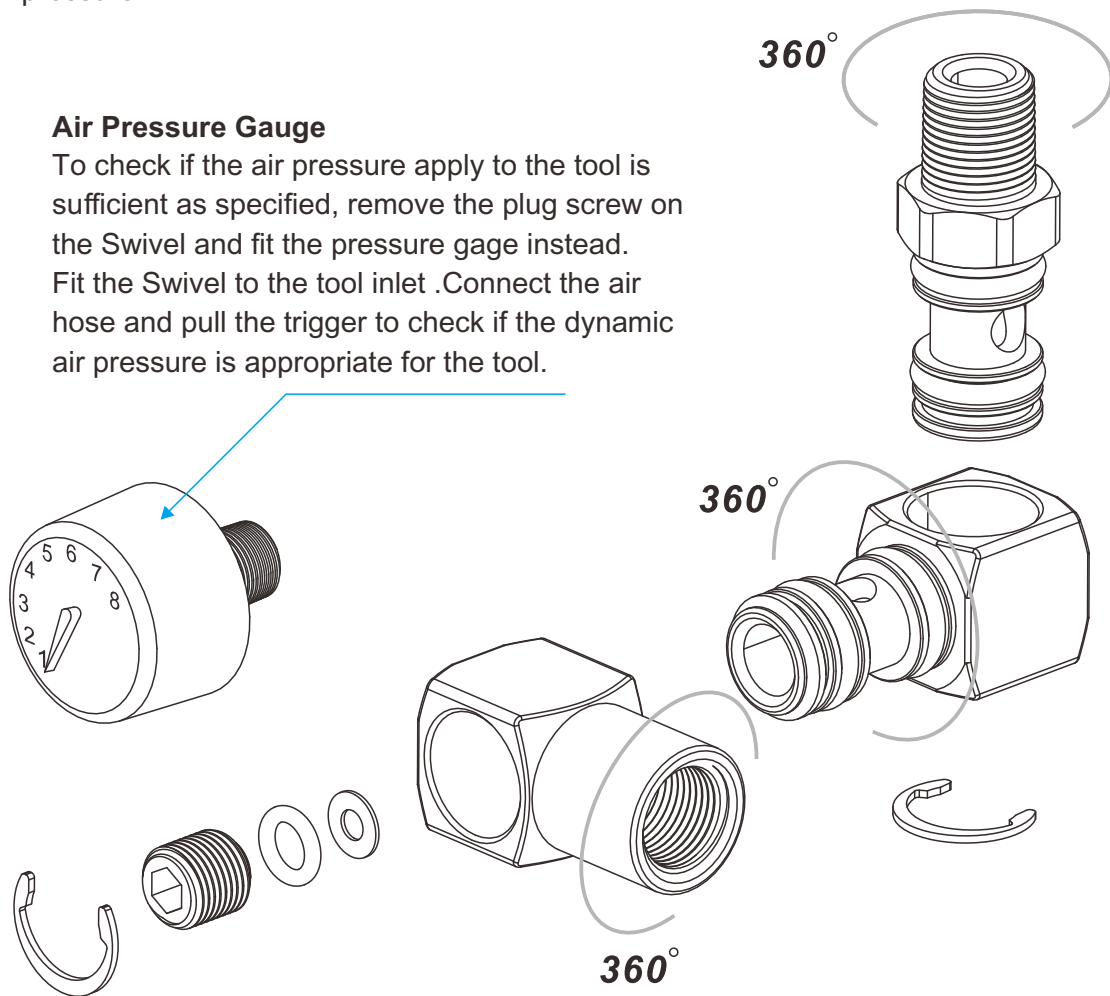
- Durable construction delivers long hours of cutting power.
- Light Weight and easy operation.
- An unique safety lock associated with safety trigger preventing accident start-up.
- Forged blades for long last cutting.
- Telescopic extension pole for longer reach.
- Innovative tilt and rotation adjustment provides excellent reach and cutting application.

Air consumption: 0.073 Liter/Per triggering
Cutting capacity: 25 m/m
Net weight: 700 g
Working pressure: 90 psi



ZIPP SWIVEL-360° Free-directional rotation air hose universal joints.

- The ZIPP SWIVEL is a patented, uniquely designed “Universal Swivel Air Inlet Joint” that connects portable air tools to an air line. it swivels 360° to allow the hose hanging straight down to the floor no matter how the tool is held.
- The ZIPP SWIVEL is available in 5 types covering most popular sizes of Air tools in the field for superior maneuverability while increasing operator comfort and productivity.
- It will increase the life of air hoses and inlet fitting as well.
- The ZIPP SWIVEL can be efficiently used on Air Drills, Grinders, Polishers, Sanders, Staplers, Spray Gun, etc. **It is applicable with percussive or impact tools.**
- All types can be attached with a miniature 1" air pressure gauge for checking the most precise dynamic working air pressure right at the tool inlet.
- Unique pressure relief valve available as an option to prevent the tool working under abnormal higher air pressure.



Patent pending in other countries



U.S.A.PAT.:
4,823,835



P.R.C.PAT.:
ZL 2006 2 0001776.6

Universal Swivel Air Inlet Joint



ZA-922P(K)

1/4" Swivel Joint Composite



ZA-922(K)

1/4" Swivel Joint-Alum.



ZA-933(K)

3/8" Swivel Joint-Alum.



ZA-944(K)

1/2" Swivel Joint-Alum.



ZA-92R2(K)

1/4" Swivel Joint
w/Regulator



ZA-92S2(K)

1/4" Swivel Joint-Alum.
w/Full Close type Regulator



**KIT
ZA-9XX(K)**

Affix (K) denotes
the Swivel Joint
Packed with
Pressure Gauge



CA-1025B

1/4" Mini Oiler



82R2

1/4" Air Regulator

[Accessories]

- Male thread: 1/4" PT/NPT
- Female thread: 1/4" PF
- Hex O.D.: 22mm



CA-1037B

3/8" Mini Oiler



AG18

Pressure gauge



HN-G1

Digital Pressure gauge



ZA-5SG2

Pressure regulator w/gauge

3 units selectable:

PSI, BAR, Kpa

Features

- Proof pressure: 200 PSI
- Burst pressure: 250 PSI (5 SEC)
- Accuracy: ± 1.2 PSI ± 1 digit @ 25°C
- Media: clean air or non-corrosive gases
- Display: LCD size : 11 x 21 mm
- Battery: 1.5V DC x 2, non changeable
- Battery life: 3 yrs (working 1 hour/day) ; 2,500 hrs (continue working)
- User interface: On/Off and change unit
- Operating temperature: 0~45 °C (32~115 °F)
- Storage temperature: -10~60 °C (14~140 °F)
- Face label: Toluene be able to wipe
- HN-G1 digital pressure gauge: IP63
- Auto-offtime set: 90 (SEC)
- Pressure port: brass 1/8" NPT male

Model	Pipe Thread Size -Male PT/NPT	Pipe Thread Size -Female PF	Side Width J*: Hex mm	Side Width J*: SQ. mm	Air Flow Rate m³/min	Material
ZA-922P	1/4	1/4	17	19	0-0.75	Nylon+GF+Teflon
ZA-922	1/4	1/4	17	19	0-0.75	Alum. Alloy & Steel
ZA-933	3/8	3/8	17	19	0-1.35	Alum. Alloy & Steel
ZA-944	1/2	1/2	22	25.4	0-1.95	Alum. Alloy & Steel
ZA-92R2	1/4	1/4	17	19	0-0.75	Alum. Alloy Brass & Steel
ZA-92S2	1/4	1/4	17	19	0-0.75	Alum. Alloy & Steel
82R2	1/4	1/4	22	—	0-0.75	Brass & Steel



ZC-130-3A

3/8" F.R.L. Unit



ZC-130-4A

1/2" F.R.L. Unit

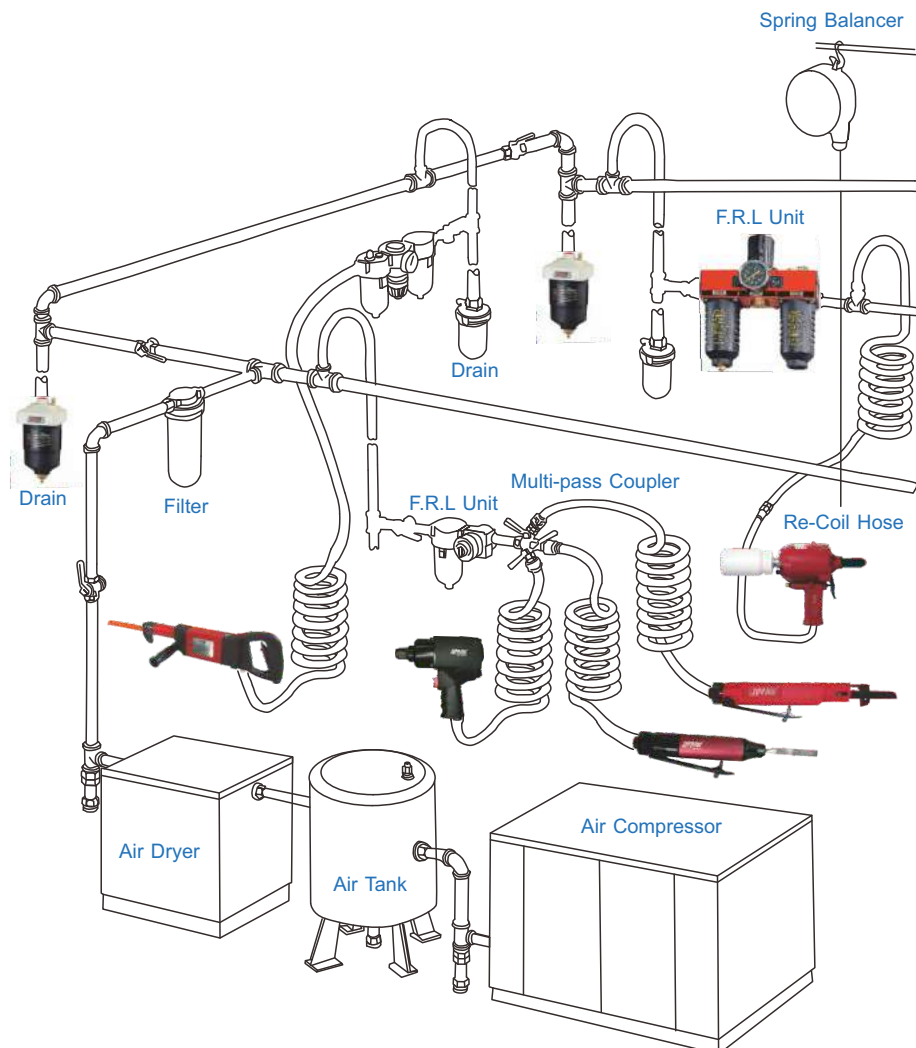


ZD-130

Auto Drain

Model	Tubing Connection inch-PT/NPT	Filter Grade μ	Pressure Range. PSI	Max. Service Pressure PSI	Range of Service Temperature °C	Lubricant Storing Capacity cc	Net Weight kg
ZC-130-3A	3/8	5~40	20~130	145	5~60	120	2.9
ZC-130-4A	1/2	5~40	20~130	145	5~60	120	2.9
ZD-130	1/2	-	28~130	-	10~63	-	1.3

Air Supply System





Rear end magnet
& rotatable device



HOOK



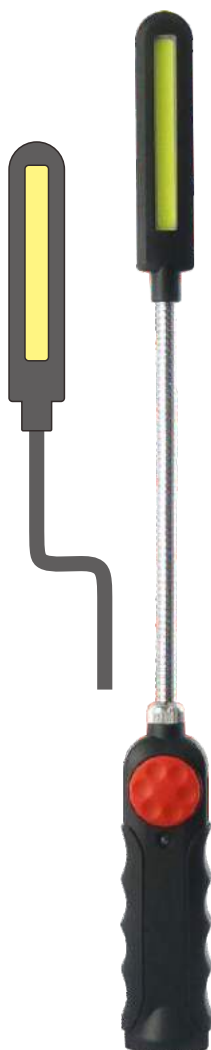
Adjustable
knob



USB
charging port



ZL-9470W
15W COB LED
Work Light - White



ZL-8800W
8W COB LED
Work Light - White

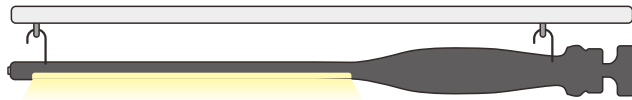


ZL-5800W
5W LED
Work Light - White



ZL-5641W
8W COB LED
Work Light - White

Model	Capacity of LED	Lithium Battery	Lighting up	Distance illumination of 50cm	Frequency	L*W*H mm	Weights g
ZL-9470W	15W COB LED	3.7V 2200mAh	2.5H(full light) 6H(micro light)	935 LUX / 458 LUM	50/60Hz	375*45*35	200
ZL-8800W	8W COB LED	3.7V 2200mAh	2.5H(full light) 6H(micro light)	450 LUX / 280 LUM	50/60Hz	445*38*33	226
ZL-5800W	5W LED	3.7V 2200mAh	2.5H(full light) 6H(micro light)	450 LUX / 260 LUM	50/60Hz	380*38*33	230
ZL-5641W	8W COB LED	3.7V 2200mAh	2.5H(full light) 6H(micro light)	450 LUX / 318 LUM	50/60Hz	210*26*28	127



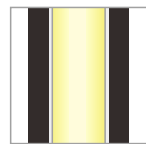
Front end hook



Rear end hook



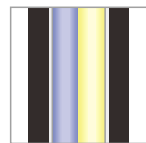
Front end magnet

**ZL-9880W**

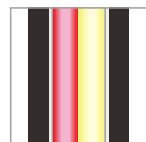
20W LED - White

**ZL-9880WY**Dual color 10W LED
- White & Yellow

- Single White color or Dual White & Yellow colors.
- Dual color model is perfect for car polishing inspection.
- Engine room lighting.

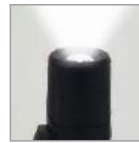
**ZL-9880WU**Dual color 10W LED
- White & UV light

- Dual White color & UV light
- Engine interior refrigerant detection by UV light.
- Engine room lighting by white light.

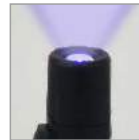
**ZL-9880WR**Dual color 10W LED
- White & Red flashing light

- Dual White color & Red flashing light
- Red flashing warning light.

475mm

**ZL-8740W**8W COB Light
3W LED TIP Light

- Use 8W light to make large area lighting.
- Use 3W lights for depth lighting.

**ZL-8740WU**8W COB Light
3W LED Tip UV light

- Use 8W light to make large area lighting.
- Engine interior refrigerant detection by UV light.

3W white or UV
light with adjustable
focal lengthAdjustable
knobUSB
charging portBack hook
with magnetColor switch for
Dual color modelRear end magnet
& rotatable device

Light switch

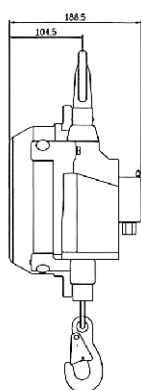
230mm

Model	Capacity of LED	Lithium Battery	Lighting up	Distance illumination of 50cm	IP	L*W*H mm	Weights g
ZL-9880W	20W	3.7V 3350mAh	3.5H(full light) 6H(micro light)	880 LUM / 1300 LUX (White)	IP54	475*50*42	280
ZL-9880WY	10W	3.7V 3350mAh	3.5H(full light) 6H(micro light)	620 LUM / 1000 LUX (White) 600 LUM / 950 LUX (Yellow)	IP54	475*50*42	280
ZL-9880WU	10W	3.7V 3350mAh	3.5H(full light) 6H(micro light)	620 LUM / 1000 LUX (White)	IP54	475*50*42	280
ZL-9880WR	10W	3.7V 3350mAh	3.5H(full light) 6H(micro light)	620 LUM / 1000 LUX (White) 142 LUM / 170 LUX (Red)	IP54	475*50*42	280
ZL-8740W	8W	3.7V/2200mAh	3H	400 LUM (8W)	IP44	230*30*40	145
ZL-8740WU	8W	3.7V/2200mAh	3H	400 LUM (8W)	IP44	230*30*40	145

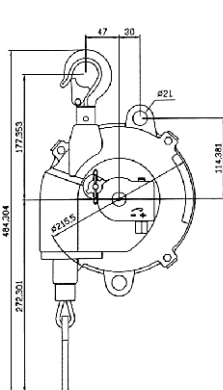
- Yellow / white mixed light (ZL-9880WY): 770 LUM / 1400 LUX
- Frequency: 50/60Hz

Features

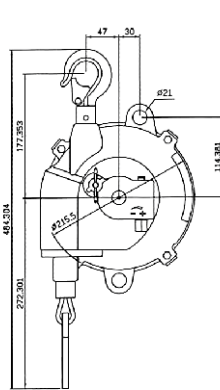
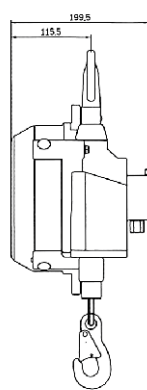
- Labor Saving: The spiral type outputs consistent suspension force.
- Productive: The user can easily drag the tool to where he wants and stop at easier access position to achieve smoother and more efficient operation.
- Efficient: The operator can handle the tool easily; thus, avoiding wasting time and consuming labor by lowering the tool and picking it again when taking the object at the same time.
- Cost-efficient: Rigid mechanism design makes the product more durable while bringing down the maintenance cost.
- Anti-Falling Device will lock the cable in case of spring breakage.



ZSB40K/ZSB50K



ZSB60K/ZSB70K



Tension Indicator



Tension Adjust
by Worm Gear



Lock Spring Drum Position

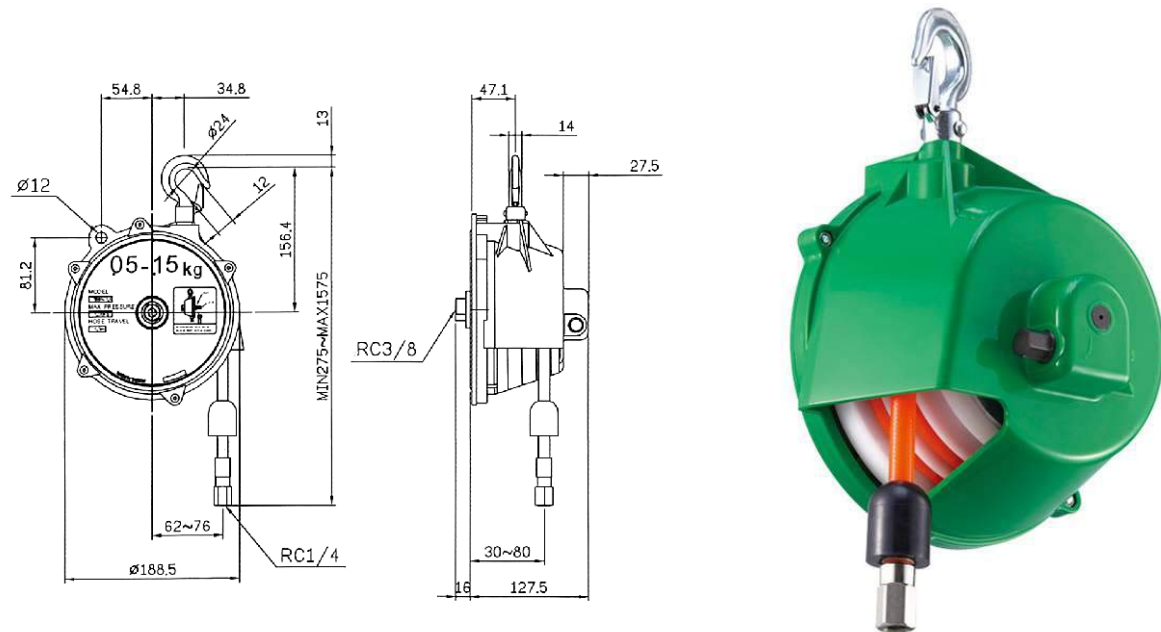


360° Swivel Hanger

Model	Capacity Kg	Weight Kg	Travel m	Rope option	Rope Dia mm
ZSB40K	30~40	9.7	1.5	Cable	4.8
ZSB50K	40~50	10.1	1.5	Cable	4.8
ZSB60K	50~60	11.1	1.5	Cable	4.8
ZSB70K	60~70	11.4	1.5	Cable	4.8

Features

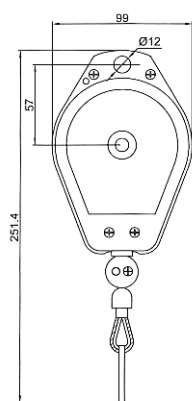
- Adopting 8.0 mm inner diameter hose to provide enough air flow to air tool and equipment.
- It achieves neat and orderly production line for enhancing the working efficiency.
- Tool anti-falling device is provided in case of the spring breaking.
- The installation is fast and convenient with 360 degrees install hook.
- Worm gear provides more precise force adjustment.



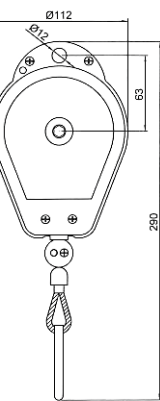
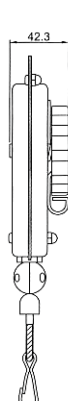
Model	Capacity Kg	Weight Kg	Travel m	Hose Material	Hose Dia mm
ZTHB15	0.5~1.5	2.2	1.3	PU Braided	8*12
ZTHB25	1.5~2.5	2.3	1.3	PU Braided	8*12
ZTHB35	2.5~3.5	2.4	1.3	PU Braided	8*12
ZTHB50	3.5~5.0	2.4	1.3	PU Braided	8*12
ZTHB65	5.0~6.5	2.5	1.3	PU Braided	8*12

Features

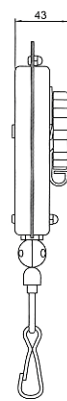
- Cost-efficient, practical and compact. It uses rotatory Adjusting Cover for easier tension adjustment without burden.
- Fast and convenient installation. In addition, anti-falling steel wire mounting holes are provided, which must be installed to avoid the failure of the original mounting location.
- The housing is made of rustproof iron shell. The steel wires and nylon ropes are available for option. Further, a ball-shape damper also can stop tool at a fixed height in its recover stroke.



ZSB600/ZSB1200/ZSB2000



ZSB3000/ZSB5000



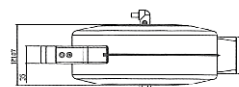
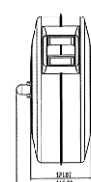
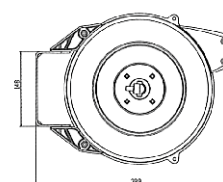
Tension Adjust Cap



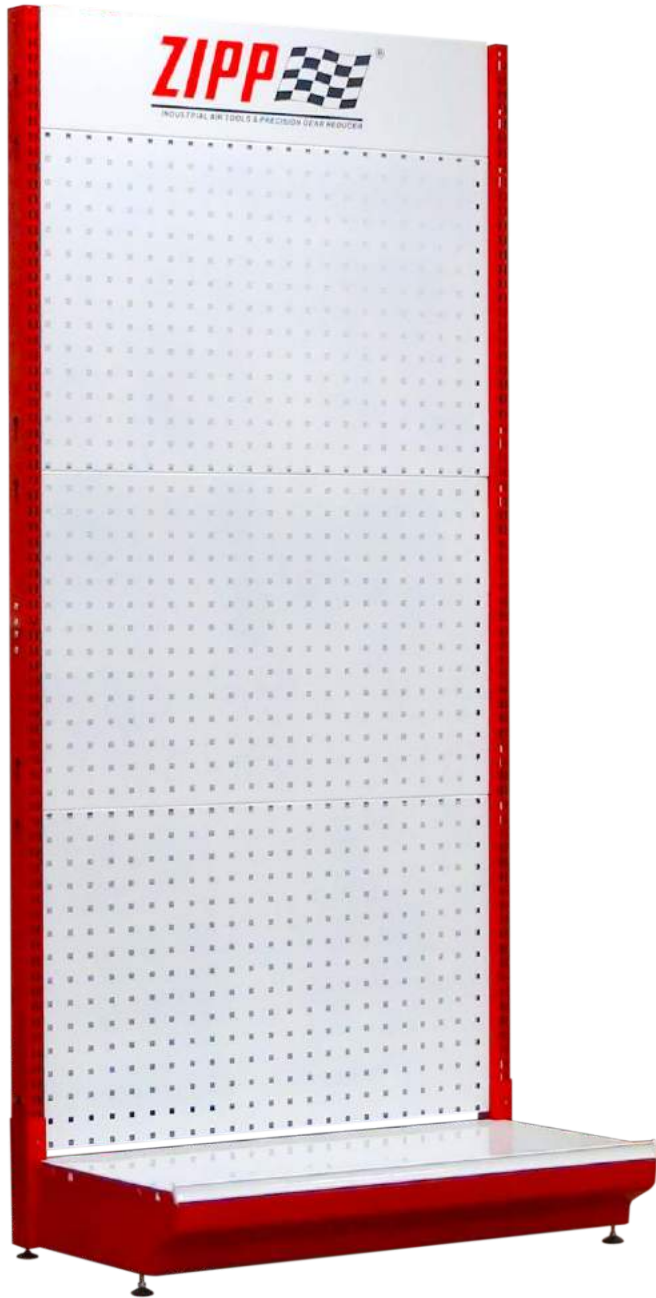
Model	Capacity Kg	Weight Kg	Travel m	Rope option	Rope Dia mm
ZSB600	0.3~0.8	0.49	1.4	Nylon/Cable	2.5
ZSB1200	0.6~1.5	0.52	1.4	Nylon/Cable	2.5
ZSB2000	1.0~2.0	0.53	1.4	Nylon/Cable	2.5
ZSB3000	1.5~3.0	0.76	1.4	Cable	2.5
ZSB5000	3.0~5.0	0.81	1.4	Cable	2.5

Features

- Adopt 8mm inner dia, PU Braided hose.



Model	Mox.pressure psi	Weight Kg	Hose Lenght m	Hose Material	Hose Dia mm
ZHR-10	200	4.9	10	PU Braided	8*12



ZDS-2
Display Stand

	W inch(mm)	D inch(mm)	H inch(mm)
Over all size	37.2(945)	19.3(490)	82.7(2,100)
	N.W. kgs	G.W. kgs	Cuft
Packing	31.5	33	2.73'

ZSH-1
1" Single Hook



ZSH-2
2" Single Hook



ZSH-4
4" Single Hook



ZSH-8
8" Single Hook



ZUH-1
U Shaped Hook



ZDH-1
1" Double Hook



ZDH-2
2" Double Hook



ZDH-4
4" Double Hook



ZDH-8
8" Double Hook



ZDS-1S
Up Shelf w/ Bracket

	W inch(mm)	D inch(mm)	H inch(mm)
Over all size	35.8(910)	15(382)	7.9(20)
	N.W. kgs	G.W. kgs	Cuft
Packing	3.5	3.9	0.3'

⚠ WARNING Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the public to cause cancer, birth defects or other reproductive harm. Some products with high pressure system and the following safety precautions must be followed at all time along with any other existing safety rules.

1. Read all manuals included with each product carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Only persons well acquainted with these rules of safe operation should be allowed to use the air tool.
3. Do not exceed any pressure rating of any component in the system.

⚠ DANGER Do NOT exceed the maximum operating pressure of the air tool (normally 90PSI). The air tool could explode and result in death or serious injury.

4. Disconnect the air tool from air supply before changing tools or attachments and during non-operation.

⚠ WARNING Always wear approved safety glasses with shields & hearing protection.

5. Do not wear loose fitting clothing or apparel which contains loose straps or ties, etc. which could become entangled in moving parts of the tool and results in serious personal injury.
6. Do not wear jewelry, watches, identifications, necklace. etc. when operating any tool, they may be caught in moving parts and result in serious injury.
7. Do not depress trigger when connecting the air supply hose.
8. Always use attachments designed for use with air powered tools. Do not use damaged or worn attachments.

⚠ WARNING DO NOT use hand tool sockets. Use impact quality sockets only.

9. Never trigger the tool when not applied to a work object. Attachments must be securely attached.
Loose attachments can cause serious injury.
10. Protect air lines from damage or puncture.
11. Never point an air tool at oneself or any other person. Serious injury could occur.
12. Check air hoses for weak or worn condition before each use. Make sure all connections are secure.
13. Keep all nuts, bolts and screws tight and ensure equipment is in safe working condition.
14. Do not put hands near or under moving parts.

⚠ WARNING Do NOT misuse the product, excessive exposure to vibration, work in awkward position and repetitive work motion.

Maintenance

Air tools require lubrication throughout the lifetime of the tools. The air motor and bearing use compressed air to power the tool, due to the moisture of the compressed air will rust the air motor and other parts inside of the tools, therefore lubrication is required air daily. Failure to lubricate the air tool properly will dramatically shorten the life of the tool and will void the warranty.

⚠ CAUTION This air tool requires lubrication BEFORE initial use. also before and after each additional use.

To lubricate the air tool manually:

1. Remove any attachment on the drive of air tools such as sockets, chisels and etc.
2. Disconnect the tool from the air supply source, place the air inlet faces up.
3. Depress the trigger or throttle and place about 5 c.c. of air tool oil into the air inlet.
(Depressing the trigger or throttle will help circulating oil in the motor.)

NOTE:

Use SAE #10 grade oil if air tool oil is not available.

Keep out of the reach of children. If taken internally, do not induce vomiting, call a doctor immediately.

4. Connect the tool to air source, cover the exhaust end with a towel and run for about 20 to 30 seconds.

⚠ WARNING Any excess oil in the motor is immediately expelled from the exhaust port. Always direct exhaust port away from people or objects.

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