



A Series Vacuum Pump

Main Features:
 The integrated tank do maximize the vacuum.
 Large sight-glass, preventing oil-low.
 With high strength rubber, the handle is solid and comfortable.



New Refrigerant B & D Series

Suitable for R410A, R407C, R134a, R12, R22, R32, R1234YF refrigerant

V: with vacuum gauge and valve

Model		ZRU-1A ZRU-1AV	ZRU-1.5A ZRU-1.5AV	ZRU-2A ZRU-2AV	ZRU-3A ZRU-3AV	ZRU-4A ZRU-4AV
Flow Rate (cfm)	220V~/50Hz	2CFM 60L/min	3CFM 90L/min	4CFM 120L/min	6CFM 180L/min	8CFM 240L/min
	110V~/60Hz	2.5CFM 72L/min	3.6CFM 108L/min	4.8CFM 144L/min	7.2CFM 216L/min	9.6CFM 288L/min
Ultimate Vacuum	Partial Pressure	0.8Pa	0.8Pa	0.8Pa	0.8Pa	0.8Pa
	Total Pressure	60Microns	60Microns	60Microns	60Microns	60Microns
Power(HP)		1/4	1/4	1/3	1/2	3/4
Rotating Speed(r/min)	220V~/50Hz	1440	1440	1440	1440	1440
	110V~/60Hz	1720	1720	1720	1720	1720
Inlet Port		1/4SAE	1/4SAE	1/4SAE	1/4SAE	1/4SAE
Oil Capacity(ml)		250	200	250	320	700
Dimensions(mm)		249×121×230mm	249×121×230mm	315×125×240mm	340×135×260mm	390×145×280mm
Weight(kg)		7.2kg	7.2kg	8.8kg	9.8kg	15.5kg



C Series Double Stage Vacuum Pump

Main Features:
 The front and back stage connected by one same shaft, higher vacuum degree.
 PM material for back stage pump, higher wear resistance.
 Superiority design on oil entering system, oil and gas separated thoroughly, no oil mist.

V: with vacuum gauge and valve

Model		2ZRU-0.5C 2ZRU-0.5CV	2ZRU-1C 2ZRU-1CV	2ZRU-1.5C 2ZRU-1.5CV	2ZRU-2C 2ZRU-2CV	2ZRU-3C 2ZRU-3CV	2ZRU-4C 2ZRU-4CV
Flow Rate (cfm)	220V~/50Hz	1CFM 30L/min	2CFM 60L/min	3.2CFM 90L/min	4.2CFM 120L/min	6.4CFM 180L/min	8.5CFM 240L/min
	110V~/60Hz	1.2CFM 36L/min	2.5CFM 72L/min	3.8CFM 108L/min	5CFM 144L/min	7.6CFM 216L/min	10CFM 288L/min
Ultimate Vacuum	Partial Pressure	2×10 ⁻¹ Pa	2×10 ⁻¹ Pa	2×10 ⁻¹ Pa	2×10 ⁻¹ Pa	2×10 ⁻¹ Pa	2×10 ⁻¹ Pa
	Total Pressure	15Microns	15Microns	15Microns	15Microns	15Microns	15Microns
Power(HP)		1/4	1/3	1/3	1/2	3/4	3/4
Rotating Speed(r/min)	220V~/50Hz	1440	1440	1440	1440	1440	1440
	110V~/60Hz	1720	1720	1720	1720	1720	1720
Inlet Port		1/4SAE	1/4SAE	1/4SAE	1/4SAE	1/4SAE	1/4SAE
Oil Capacity(ml)		200	250	300	280	600	650
Dimensions(mm)		315×125×240mm	315×125×240mm	315×135×260mm	315×135×260mm	390×145×280mm	425×155×280mm
Weight(kg)		7kg	9kg	10kg	10kg	16kg	17kg

Single Stage

Model		ZR-1.5B		ZR-2.5B		ZR-3.5B		ZR-4.5B		ZR-6.0B		ZR-8.0B		ZR-10.0B	
Voltage	220V	110V	220V	110V	220V	110V	220V	110V	220V	110V	220V	110V	220V	110V	
	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	
Free Air Displacement	CFM	1.8	2	2.5	3	3.5	4	4.5	5	6	7	8	9	10	12
	L/min	42	50	70	84	100	114	128	142	170	198	226	254	283	340
Ultimate Vacuum	Pa	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	mbar	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Motor power		1/4HP		1/4HP		1/3HP		1/3HP		1/2HP		3/4HP		1HP	
Intake fitting		1/4" Flare		1/4" Flare		1/4" Flare		1/4" Flare		1/4"&3/8" Flare		1/4"&3/8" Flare		1/4"&3/8" Flare	
Oil Capacity		230		210		330		330		400		600		650	
Dimensions(mm)		270×119×216		270×119×216		278×119×216		278×119×216		320×134×232		370×140×250		390×140×250	
Net Weight		5		5.5		6		6.5		9		13.5		14	

Dual Stage

Model		2ZR-1.5B		2ZR-2.5B		2ZR-3.5B		2ZR-4.5B		2ZR-6.0B		2ZR-8.0B		2ZR-10.0B	
Voltage	220V	110V	220V	110V	220V	110V	220V	110V	220V	110V	220V	110V	220V	110V	
	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	/50Hz	/60Hz	
Free Air Displacement	CFM	1.8	2	2.5	3	3.5	4	4.5	5	6	7	8	9	10	12
	L/min	42	50	70	84	100	114	128	142	170	198	226	254	283	340
Ultimate Vacuum	Pa	3×10 ⁻¹		3×10 ⁻¹		3×10 ⁻¹		3×10 ⁻¹		3×10 ⁻¹		3×10 ⁻¹		3×10 ⁻¹	
	mbar	0.003		0.003		0.003		0.003		0.003		0.003		0.003	
Ultimate Vacuum	Microns	25		25		25		25		25		25		25	
		0.003		0.003		0.003		0.003		0.003		0.003		0.003	
Motor power		1/4HP		1/3HP		1/3HP		1/2HP		1/2HP		1HP		1HP	
Intake fitting		1/4" Flare		1/4" Flare		1/4"&3/8" Flare		1/4"&3/8" Flare		1/4"&3/8" Flare		1/4"&3/8" Flare		1/4"&3/8" Flare	
Oil Capacity		200		250		370		370		500		500		600	
Dimensions(mm)		270×119×216		278×119×216		320×134×232		320×134×232		370×140×250		370×140×250		390×140×250	
Net Weight		6		7		9.5		10		14		14.5		15	

Single/Dual Stage Vacuum Pump

V: with vacuum gauge and valve



Model	ZR-118V	ZR-136V	ZR-218V
Voltage	230V~/50-60Hz OR 115V~/60Hz		
Flow Rate	1.8CFM 50 l/min	3.6CFM 100 l/min	1.8CFM 50 l/min
Ultimate Vacuum	150micron		
Motor Power	1/6HP	1/5HP	1/4HP
Oil Capacity	220ml	120ml	90ml
N.W.	3.5kg	4.5kg	4.5kg
Dimensions	256×93×175mm		

2 Port Refrigerant Recovery Machine



RM-229

Fast recovery of most refrigerants including R-410A
The RM-229 Machine provides fast recovery of Class III, IV, and V refrigerants including R-410A.

- Connect hoses as described in the Setup Instructions

Technical Parameter:

- Compressor: 1/2HP, oil-less maintenance free
- Power supply: 110V/220V, 50/60hz
- NET Weight: 14kg
- Dimensions: 51cm x 27cm x 34cm

Recovery Rates:

- Vapour rate: 28kg/h
- Liquid rate: 90kg/h
- Push-pull rate: up to 250kg/h
- Operating temperature: 0-49°C

4 Port Refrigerant Recovery Machine



RM-230

Fast recovery of most refrigerants including R-410A
• Connect hoses as described in the Setup Instructions

Technical Parameter:

- Compressor: 1/2HP, oil-less maintenance free
- Power supply: 110V/220V, 50/60hz
- NET Weight: 16kg
- Dimensions: 51cm x 27cm x 34cm

Recovery Rates:

- Vapour rate: 32kg/h
- Liquid rate: 108kg/h
- Push-pull rate: up to 250kg/h
- Operating temperature: 0-49°C



R32 Recovery Machine

Suitable for R32, 1234yf refrigerant
oilless compressor
Multi-refrigerant capable with Self-clearing feature,
which prevents cross-contamination
One key operation, easy to use
Self-purge function
Installed 4-pole motor, more durable

Digital Programmable Charging Scale



LMC-200



LMC-210



LMC-300



LMC-310

Introduction:

Refrigerant Scale is used for weighing in refrigeration industry.
Maintenance man can use it to measure the weight of refrigerant in charge or recovery to judge the quantity of refrigerant that needs to be charged or recovered.

Application:

Measure the weight of refrigerant in charging and recovery

Item	LMC-200	LMC-210	LMC-300	LMC-310
Specification	Electronic Refrigerant Scale	Wireless Electronic Refrigerant Scale	Electronic Refrigerant Charging Scale	Wireless Electronic Refrigerant Charging Scale
Capacity	100kg / 220lb			
Accuracy	±0.05%rdg+0.35oz(10g)			
Resolution	5g			
Platform Size	265×265mm / 10.433×10.433inch			
Weight	3.2kg / 7.05lb			
Power	SAAA batteries			
Operating Temp	-10°C to 40°C			

Refrigerant Recovery Cylinders

The cylinder has a pressure vessel licensing and certification of national security



This cylinder is the reusable cylinder.
"Y" valve for LIQUID/VAPOR.
The unit have safety valve, if the cylinder pressure reached the limit of safety pressure in operating process, the safety valve will automatic open to delivery pressure, then the safety valve will automatic closed when the pressure in safety level.

Refrigerant Capacity: 13.6kg

Refrigerant Capacity: 22kg

Description
30 lb. R-410A cylinder 400 psi
50 lb. R-410A cylinder 400 psi

Description
"Y" valve for 30 lb. cylinder
"Y" valve for 50 lb. cylinder

Model	RR250			RR500		
Refrigerant	Category III : R12, R134a, R401C, R406A, R500, 1234yf Category IV : R22, R401A, R401B, R402B, R407C, R407D, R408A, R409A, R411A, R411B, R412A, R502, R509 Category V : R402A, R404A, R407A, R407B, R410A, R507, R32					
Power Supply	220-240 VAC 50-60Hz	110-120 VAC 60Hz	220-240 VAC 50-60Hz	110-120 VAC 60Hz	220-240 VAC 50-60Hz	110-120 VAC 60Hz
Motor	3/4HP, single cylinder system			1HP, a twin cylinder system		
Motor Speed	1450rpm@50Hz	1750rpm@60Hz	1450rpm@50Hz	1750rpm@60Hz	1450rpm@50Hz	1750rpm@60Hz
Compressor	Oil-less, Air-cooled, Piston			Oil-less, Air-cooled, Piston		
High Pressure Shut-off	38.5 bar/3850kPa(558psi)			38.5 bar/3850kPa(558psi)		
Recovery Rate	Category III	Category IV	Category V	Category III	Category IV	Category V
	Vapor	0.20kg/min	0.25kg/min	0.25kg/min	0.40kg/min	0.50kg/min
	Liquid	1.60kg/min	1.80kg/min	2.20kg/min	3.0kg/min	3.50kg/min
Push/Pull	4.60kg/min	5.60kg/min	6.30kg/min	7.50kg/min	8.50kg/min	9.50kg/min
Recovery Speed	96 Litres/Hour Liquid Cat 111 Refrigerant			180 Litres/Hour Liquid Cat 111 Refrigerant		
Operating Temperature	0°C~40°C/32~104°F			0°C~40°C/32~104°F		
Dimensions	400mm(L) x 250mm(W) x 360mm(H)			400mm(L) x 250mm(W) x 360mm(H)		
Net Weight	13.5kg			14.5kg		

Manifolds With 2-1/2" Gauges



ZR-M70336BA
With 36" hoses, R12/R22/R134A /R404a, PSI/BAR

ZR-M70336BB
With 36" hoses, R12/R22/R502, PSI/BAR



ZRM5060A
Aluminum body 60" RYB, 1/2" ACME 68mm, R134A, PSI/BAR

ZRM5060B
Aluminum body 60" RYB, 1/4" ACME 68mm, R134A, PSI/BAR



ZR-536G-R410A
Connection: 1/4SAE - 5/16SAE
Application:
R410A R22 R134a R404A
High quality C3771BD copper valve body.



ZR-S36G
Aluminum Valve Body
Connection: 1/4 SAE
Application:
R22 R134a R404A R407c

Accuracy class 1.6

Colour-coded For easy high and low side identification

Easy Knobs

Sight glass for easy process control

Handwheel Drehknopf
Complete valve set including piston

Hoses
-Suitable for all common refrigerants
-Supplied with PTFE gaskets
-Available sizes: 36", 60", 72"

ZRB-M20 Series

Manifolds With 3" Gauges



ZR-S60-1234
Manifold Gauge Set Aluminum Valve Body
Connection: M12 x 1.5
Application: R1234yf
Features:
High quality aluminum alloy valve body.
Gentle and comfortable design hand knob structure.
Prevalent streamline design pressure gauge.
Durable product quality.

Manifolds With 2-1/2" Gauges



QC-410a
1/4" SAE M - 5/16" SAE F

Multi-function Digital Manifold Gauge Set



ZRB-M550
Optional Refrigerant:
R134a, R14, R141B, R143A, R152, R170, R21, R218, R22, R227, R245, R290, R32, R401A, R401B, R401C, R402A, R402B, R403A, R403B, R404A, R405A, R406A, R407A, R407B, R407C, R408A, R409A, R409B, R410A, R410B, R41, R411A, R411B, R412A, R413A, R414A, R415A, R417A, R50, R500, R501, R502, R503, R504, R507, R507A, R508A, R508B, R509A, R600A, R744, R11, R113A, R114, R115, R116, R12, R123, R123A, R124, R125, R13

Include:
• Digital gauge
• Charging hoses (60" or 72")
• Vacuum sensor
• Temperature sensor
• Two valve manifold

4-Valve Test & Charging Manifold - °F/°C

Forged aluminum alloy body for increased strength and reliability

M75 Series



Features/Benefits:
• Large, easy-to-read 3-1/8" (80 mm) steel case red and blue, 1% accuracy (Class 1) gauges, front access for easy field recalibration, optional protective gauge boots available
• 3/8" vacuum port for use with larger hose to cut evacuation time by up to 33% (all other fittings on unit are 1/4")

Two Way Manifold With Sight Glass

M30 Series



1 Manifold with 68MM gauge boots

Manifolds With 2-1/2" Gauges

M40 Series



2 Manifold with standard fittings

2-Valve Aluminum Manifolds - Class 1 (1% accuracy) Gauges

MA0 Series



4 Manifold with 80MM Dry gauges

2-Valve Diaphragm Manifolds With Sightglass & 1/4" Sae Fittings

M50 Series



5 Manifold with compact ball valve hoses

Model	Features	Package
ZR-M50360AA	Aluminum body with 60" three hoses, R22/R134A/R404A/R410, PSI/BAR	Blister card
ZR-M50360AB	Aluminum body with 60" three hoses, R12/R22/R502/R134a, PSI/BAR	
ZR-M50360AC	Aluminum body with 60" three hoses, R22/R134a/R404A/R407c, PSI/BAR	
ZR-M50360AD	Aluminum body with 60" three hoses, R290/R32, PSI/BAR	
ZRB-M50360AA	ZR-M50360A A & Quick Connector & 1/4" SAE M - 5/16" SAE F	Plastic case
ZRB-M50360AB	ZR-M50360A B & Quick Connector & 1/4" SAE M - 5/16" SAE F	
ZRB-M50360AC	ZR-M50360A C & Quick Connector & 1/4" SAE M - 5/16" SAE F	
ZRB-M50360AD	ZR-M50360A & Quick Connector & 1/4" SAE M - 5/16" SAE F	

1/4", 3/8"&1/2" Heavy Duty Charging Hose



- 3500 psi (241 bar) rain. burst. 900 psi (62 bar) max. working pressure
- Operating temperature -20°F to 200°F (-28.8°C to 93.3°C).

Anti Blowback Hose, 1/4"



Anti Blowback Hose, 1/4"
Eco-safe hose with shut-off fitting on one end.

- 1/4" female flare x 1/4" female flare 45°
- Max. working pressure: 800 psi
- Burst: 4000 psi

Hose



CH14 Standard Hose, 1/4"

- 1/4" female flare x 1/4" female flare 45°
- Max. working pressure: 800 psi
- Burst: 4000 psi

CH38 Standard Hose, 3/8"

- 3/8" female flare x 3/8" female flare 45°
- Max. working pressure: 800 psi
- Burst: 4000 psi

Ball Valve Hose



CH14BV Ball Valve Hose, External, 1/4"

- 1/4" ball valve
- 1/4" male flare x 1/4" female

CH38BV Ball Valve Hose, External, 3/8"

- 3/8" ball valve
- 3/8" male flare x 3/8" female flare 45°

Tube Cutters



ZR-19
1/8" ~ 3/4" O.D.tubing
3-19mm



ZR-28
3/16" ~ 1-1/8" O.D.tubing
4-28mm



ZR-32
3/16" ~ 1-1/4" O.D.tubing
4-32mm



ZR-50
3/16" ~ 2" O.D.tubing
5-50mm

Can Tap Valve



ZRV135
1-3/8", 1/4"SAE



ZRV136
1-5/8", 1/2"ACME

Quick Connector & Gas Valve



400QC17L/H



R1234YFL/H

Pressure Gauge



RG-250GF



RG-500GF



YRC-250/500GF



PG-30



PGW-500/PGW-800

Wireless Pressure Gauge

Manifold Gauge With Single Valve



SM02H1/2/3/4
SM02L1/2/3/4



SM04H1/2/3/4
SM04L1/2/3/4



SM05H1/2/3/4
SM05L1/2/3/4

1: R-22, R-12, R-134A, R-502 2: R-22, R-134A, R-404A, R-407C
3: R-22, R-134A, R-404A, R-410A 4: R-32, R-290, R-410A

Wireless Pressure Gauges with Temperature



PT-500/800 Kits Contain:
PT-500 PT-800 Wireless Digital Pressure Gauge
Clamp-on temperature sensor --2
1/4 Male adapter --2 1/4 Female adapter --2
Bent adapter --1 T-joint --1 Hook&Loop --2



ZR-368
Tube Benders
1/4", 5/16", 3/8"



ZR-364
Tube Bender
3/4"(19mm)



ZR-525
45° Flaring and Burnishing Tool
3/16" to 5/8" & 5mm to 16mm



ZR-191
For 3/16" ~ 5/8" O.D. Tubing
For 5mm ~ 15mm O.D. Tubing



ZR-215
Capillary Tube Cutter



ZR-201
7" Pinch-off



ZR-102-04/05/06/07/08/10/12
Tube Bending
1/4", 5/18", 3/8", 7/16", 1/2", 5/8", 3/4"



ZR-210
Handy Deburrer



ZR-122/ZR-123
Ratchet Wrench



ZR-QT100
Recovery-Service
Piercing plier



ZR-208/ZR-211
Inner-outer Reamer
Plastic/Zinc

Tube Bender



ZR-999N
For 1/4", 5/16", 3/8", 1/2", 5/8", 3/4" & 7/8" O.D.
With tube bender, tube cutter, pipe expander etc. available

Hydraulic Tube Expander

- For expanding soft copper tubings
- For efficient, fitting free installation of pipes in sanitary heating, gas, refrigeration and air conditioning systems



ZR-300/L/M/ML ZR-300A



ZR-300L
For 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-3/8", 1-1/2" & 1-5/8" O.D. Tubing With ZR-50 & ZR-210

ZR-300ML
For 10mm, 12mm, 16mm, 19mm, 22mm, 25mm, 28mm, 32mm, 35mm, 38mm & 42mm O.D. Tubing With ZR-50 & ZR-210



ZR-300
For 3/8", 1/2", 5/8", 3/4", 7/8", 1" & 1-1/8" O.D. Tubing With ZR-50 & ZR-210

ZR-300M
For 10mm, 12mm, 16mm, 19mm, 22mm, 25mm & 28mm O.D. Tubing With ZR-50 & ZR-210

ZR-300A
For 3/8", 1/2", 5/8", 3/4", 7/8", 1-1/8", 1-3/8", 1-5/8"

Flaring Tool



ZR-808-N
Accurate Tube Flaring

- 45° eccentric flaring tool in metric and inch sizes
- Heavy duty wide-range bar type flaring tool
- Hardened bars provide positive clamping action with minimum distortion
- Easy to use and exact flaring result

Tube Expander



ZRS-22
Tube Expander
3/8", 1/2", 5/8", 3/4", 7/8"

Manual Expanding Tool



ZRKG-32 / ZR-100
For expanding soft copper tubings Φ 10-32mm
For efficient, fitting free installation of pipes in sanitary heating, gas, refrigeration and air-conditioning systems



The tool kit include: manual expanding tool with expander heads, internal and external deburrer, tube cutter, in a plastic carry case.

Model	ZRKG-32	ZR-100
Expanding Range(mm)	Φ 16~ Φ 32	Φ 10~ Φ 28
Expander Heads	5/8", 3/4", 1", 1-1/4"	3/8", 1/2", 5/8", 3/4", 7/8", 1", 1-1/8"
Wall thickness of Pipe(mm)	10	10
Weight (Kg)	3.5	3.6
Packing (mm)	500×220×65	

45° Eccentric Cone Type Flaring Tools Kits



ZRB-5B A/B/C/D

ZR-M50360AA/B/C Manifold Gauge, 60" Charging Hose, ZR-809 45° eccentric Cone Type Flaring Tools.
 A: R22 / R134A / R404 / R410
 B: R12 / R22 / R502 / R134A
 C: R22 / R134A / R404A / R407C
 D: R290 / R32



ZR-M50360A

45° Traditional Extrusion Type Flaring Tool Kits



ZR-275

- For 1/8", 3/16", 1/4", 5/16", 7/16", 1/2", 5/8" & 3/4" O.D.
- 5 Swage adapters
- For: 3-in-1(3/16", 1/4", 3/8"), 5/16", 1/2", 5/8" & 3/4" O.D.
- The 45° cone for flare.
- Packaging in a hand carrying plastic case and a color box.



ZR-278

- ZR-275 45° Flaring Tools & 5 Swage Adapters.
- ZR-274 Tube Cutter 1/8"~1-1/8" (4~28mm).
- ZR-122 Ratchet Wrench(1/4", 3/8", 3/16", 5/16")
- Packaging in a hand carrying plastic case and a color box.

45° New Type Eccentric Cone Type Flaring Tools



ZR-809A

- For 1/4", 5/16", 3/8", 1/2", 5/8" & 3/4" O.D.
- 6mm, 8mm, 10mm, 12mm, 16mm & 19mm O.D.
- Packaging in a carrying plastic case.

ZR-809

- ZR-809A & ZR-32 & ZR-210

Manual Hydraulic Radial Press

Pressing Aluminum Plastic Tubes, PEX Pipes, PB pipes with copper fittings, copper adapters.



ZRF-32Y

With built-in safety valve

Technical Parameter:

- Rugged and durable
- Rotatable flip-top head
- Faster operation with less force thanks to the 2-stage hydraulic system
- Built-in pressure relief valve for overload protection.
- Two-speed pump to reduce cycle time.
- Ram retraction by turning the release knob anticlockwise.

Model	ZRF-32Y
Output Force	12 ton
Crimp Range(mm)	16-32
Mould Type	round
Crimpling Dies	16, 20, 25, 32
Weight(Kg)	7
Packing Size(mm)	550×130×240

Manual Radial Press

Pressing Aluminum Plastic Tubes, PEX Pipes, PB pipes with copper fittings, copper adapters.



ZRF-32S

Technical Parameter:

- Flip-top crimping head, totating 360°
- Telescopic lever handles
- Fast change of pressing dies
- Effort-saving and low maintenance mech drive
- Plastic carry case

Model	ZRF-32S
Crimp Range(mm)	16-32
Mould Type	round
Crimpling Dies	16, 20, 25, 32
Weight(Kg)	6.3
Packing Size(mm)	610×210×110

Manual Hydraulic Axial Press



ZRLG-1632Y

Free of flame, heat, solder or solvent

- Cut the pipe to be joined cleanly and squarely, slip the jointing sleeve over the end of the pipe with the beveled end of the sleeve facing outwards and the grooved end of the sleeve at the furthest point from the end of pipe. Expand the pipe using the Manual Expand Tool in the tool kit.
- Insert the fitting into the expanded end of the pipe until the fitting reaches the pipe stop. Slide the jointing sleeve towards the fitting. Position the jointing sleeve and the fitting squarely with the jaws of Manual Hydraulic Axial Press. Draw the sleeve towards the fitting by closing the jaws until the sleeve reaches the shoulder of the fitting.
- Inspect the joint to ensure the sleeves are drawn all the way to the fitting shoulder and the beveled end of the sleeve is towards the fitting.

ZRLG-1632Y manual hydraulic axial press tool kit are specifically designed to press PEX pipe to ensure a simple effective joint. The tools are made from the highest quality materials and are designed to give years of trouble free service.

Each Tool Kit Includes:

- Manual Hydraulic Axial Press
- Two sets of pressing jaws
- Manual expanding tool with 3 expander heads (16-20,25,32mm)
- Manual pipe cutter
- Plastic carry case
- Weight: 5.5kg

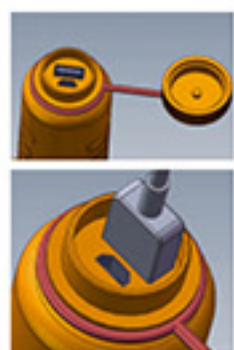




LED Torch Light

LED-01

- Battery: 3.7V/4400mAh Lithium battery
- Light: White LED 20PCS
- Light Time: High light about 2Hours/ Low light about 4.5Hours
- Charging time: about 4.5Hours
- Operation environment temperature: 0°C to 50°C



Infrared Digital Thermometer

HT390

- Measuring range: -32~390°C(-25.6~734°F)
- Accuracy: $\pm 1.5^{\circ}\text{C}/\pm 1.5\%$
- Resolution: 0.1°C or 0.1°F
- Distance spot ratio: 12:1
- Emissivity: 0.95(fixed)
- °C/°F unit selectable
- Auto power off & Data Hold
- Laser ON/OFF selectable
- Power: 2 X 1.5V AAA battery



VC3267B

Function	Range	Resolution	Accuracy
ACA	40A/400A	10mA	$\pm (2\%rdg + 5dgt)$
DCV	400mV/4V/40V/400V/600V	0.1mV	$\pm (0.8\%rdg + 5dgt)$
ACV	4V/40V/400V/600V	0.1mV	$\pm (1.2\%rdg + 5dgt)$
Frequency	10Hz/100Hz/1KHz/10KHz/100KHz/1000KHz/10MHz	0.01Hz	$\pm (0.5\%rdg + 5dgt)$
Capacitor	5nF/50nF/500nF/5uF/50uF/200uF	1pF	$\pm (3\%rdg + 5dgt)$
Temperature	-20°C-- +750°C	1°C	$\pm (3\%rdg + 5dgt)$
Resistance	400Ω/4K/40K/400K/4MΩ/40MΩ	0.1Ω	$\pm (1.2\%rdg + 5dgt)$
Continuity	When the resistance value less than 30Ω, the buzzer sounds.		
Diode	Open voltage: 1.5V		
Display	3 3/4 digits LCD display, Maximum display 3999		
Power	2*AAA battery		
Other Features	•Auto Range •Data hold •Overloading: Display OL		
	•Low Battery Indication: Display •"Func" Function •"Rel" Function •Auto power off		



Leak Detector

LD-100

- Wide detection range, besides the common halogen refrigerating fluid(R12 R22 R502 R134A R404A R407C R410A R600A), can also detect R123, R290, R32, R1234YF and other new refrigerants.
- Sensitivity Rating: sensitivity Level 7
 - Detection Precision: for R134a, Static, 3 Grams Per Year; dynamic 5 Grams Per Year
 - Operating Environment: 0°C~40°C; relative Humidity(50%~85%rh)
 - Probe Type: Semiconductor Sensor
 - Warm-up Time: 60"
 - Response Time: <10"
 - Resetting Time: 2"
 - Replaceable probe
 - Power Types: 5 Dry Cell
 - Conform to CE testing standard & SAEJ1627 standard



Infrared Leak Detector

ILD-200

- Can detect the latest refrigerant R32, R1234yf.
- Operating temperature & humidity: 0~50°C, low than 75% RH.
- Battery life: About 8 hour in a single charge, auto OFF after 10 minutes of inactivity.
- Response time: Less than 1s.
- Warm up time: 30s; automatic calibration.
- Overall size: 95.2x44.6x190.5mm.
- Probing rod length: 393.7mm.



DT-9905

Function	Range	Resolution
DC Voltage	200mV/2V/20V/200V/1000V	0.1mV/1mV/10mV/100mV/1V
AC Voltage	200mV/2V/20V/200V/750V	0.1mV/1mV/10mV/100mV/1V
DC Current	20 μA/2mA/20mA/200mA/20A	1nA/1 μA/10 μA/100 μA/10mA
AC Current	20mA/200mA/20A	10 μA/100 μA/10mA
Resistance	200Ω/2KΩ/20KΩ/200KΩ/2MΩ/20MΩ/200MΩ	0.1Ω/1Ω/10KΩ/100Ω/1KΩ/10KΩ/100KΩ
Capacitance	20nF/200nF/2 μF/200 μF	10pF/100pF/1nF/10nF
Power	9 V battery	
Other Features	•Auto power off •Low Battery Indication	
	•Data Hold •Diode test •hFE test •Overload protection •Live wire recognition	

Digital Vacuum Gauge



VGW-760

- Range: 760000 Microns to 1 Microns
- Usage: Full range
- Accuracy: $\pm 5\%$ (5k to ATM)
- Resolution: 1 micron(1-499), 5(500-2k), 50(2k-5k), 250(5k-15k), 1k(15k-ATM).
- Maximum Overpressure: 400psi
- Operating Temperature: 0-140°F
- Units: Microns, mTorr, kPa, mBar, in/Hg, psia
- Fitting: 1/4 Male SAE Flare

Charging Kit for R-134a System



ZR-1380

Reusable brass dispensing rale with hose and R-134a quick coupler charge A/C systems with R-134a can tap with 1/2" ACME fitting.



LD-50

Specifications and models	LD-50	LD-70	LD-100
Measurement Accuracy	$\pm 1 \text{ mm}^*$		
Unit	m/in/ft		
Measurement Range (no reflector)	0.03-50	0.03-70m	0.03-100m
Measurement Time	0.1-3 s		
Laser Light Level	II		
Laser Light Type	635 nm, <1 mw		
Dust Proof And Waterproof	IP54		
Turn Off The Laser Light Automatically	60 s		
Continuous Measurement (max/min)	√		
Addition/Subtraction	√		
Volume/Area/ Pythagorean Measurement Function	√		
Battery	AAA alkaline battery (2*1.5)		
Other Features	•Auto power off •Illumination		
	•Data clearing •Data storage •Signal strength indicator • Battery indicator		

Hand Torch



ZR-H102

- Product Description:**
- For soldering and brazing. Applicable in HVAC and plumbing.
 - Temperature can reach 1650°C
 - 360° rotation of torch tube is capable for various using environment.
 - The continuous working time of cylinder can reach 160mins.
 - Suited for 14.1-16oz cylinder, connection of CGA600 (1"-20UNEF).

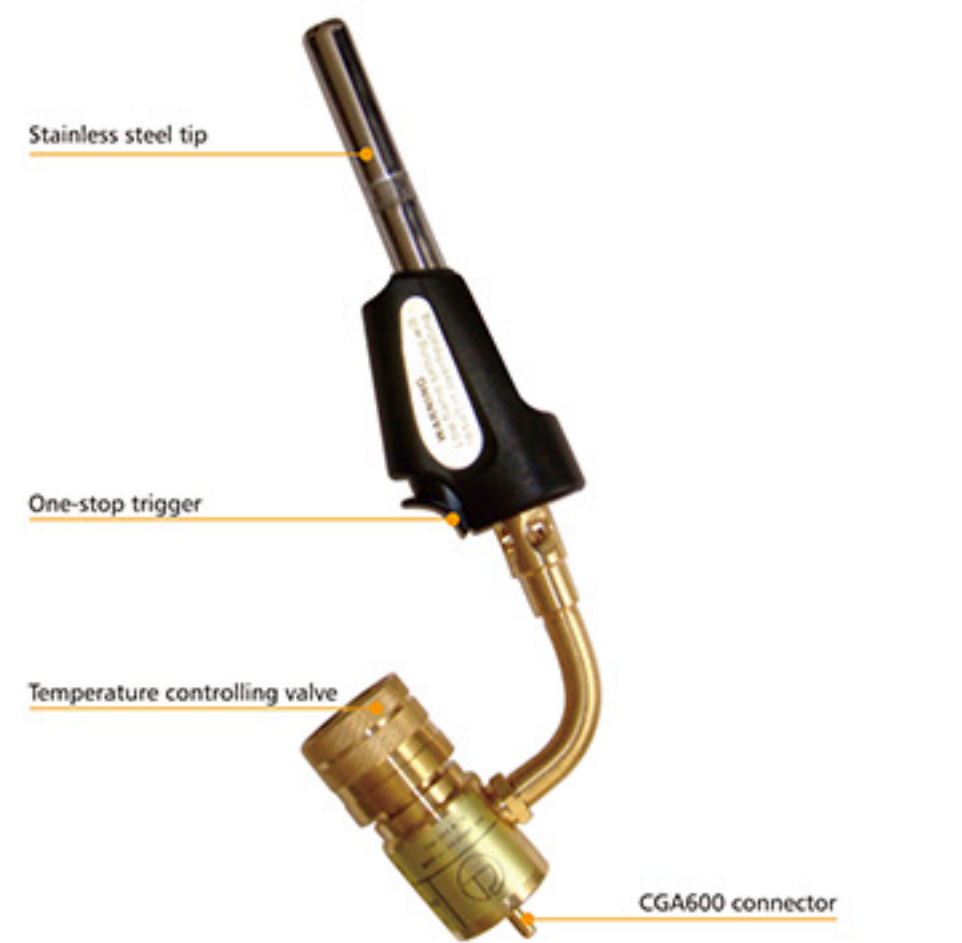


ZR-H101 TORCH KIT

Model	Include	CTN (PCS)	G.W. (KGS)	N.W. (KGS)	CTN Size (CM)
ZR-H101K1	or	6	16.11	8.52	56×37.5×33
ZR-H101K2	or	12	20.3	11.65	56×49.2×33

— MAPP GAS
 — PROPANE
 — ZR-H101/102/103/104

Hand Torch



ZR-15

- Product Description:**
- For soldering and brazing. Applicable in HVAC and plumbing.
 - Temperature can reach 1650°C
 - 360° rotation of torch tube is capable for various using environment.
 - The continuous working time of cylinder can reach 160mins.
 - Suited for 14.1-16oz cylinder, connection of CGA600 (1"-20UNEF).



ZRB-3B VACUUM TOOL KITS

Complete With	Description	Quantity
Vacuum Pump	1.8CFM	1PC
Manifold Gauge	ZRB-M50348A-R410a	1SET
Quick Coupler	400QC 17L/H	1SET
Package	Bag	1PC



ZRB-8B VACUUM TOOL KITS

Complete With	Description	Quantity
Vacuum Pump	ZR-118	1PC
Flaring Tool	ZR-808-M	1SET
Tube Cutter	ZR-32	1PC
Scraper	ZR-210	1PC
Manifold Gauge	ZRB-M50360A-R410a	1SET
Tube Expanders	ZRS-22	1PC
Gas	MAPP/PROPANE	1PC(optional)
Hangtorch	ZR-H101	1PC(optional)
Package	Aluminum Alloy Box	1PC