

# havasis

**ÇÖZÜMÜN  
İLK ADI**



Kurumsal & Ürünler

**havasis.com.tr**



Sipariş & Danışma Hattı

**0549 449 3535**

Teklif & Ürün Bilgi

hemendene@havasis.com.tr

Kalibrasyon & Bakım Onarım Merkezi

servisdestek@kalibo.com.tr



**DUROFIX™**

**ASSEMBLY  
TOOL**

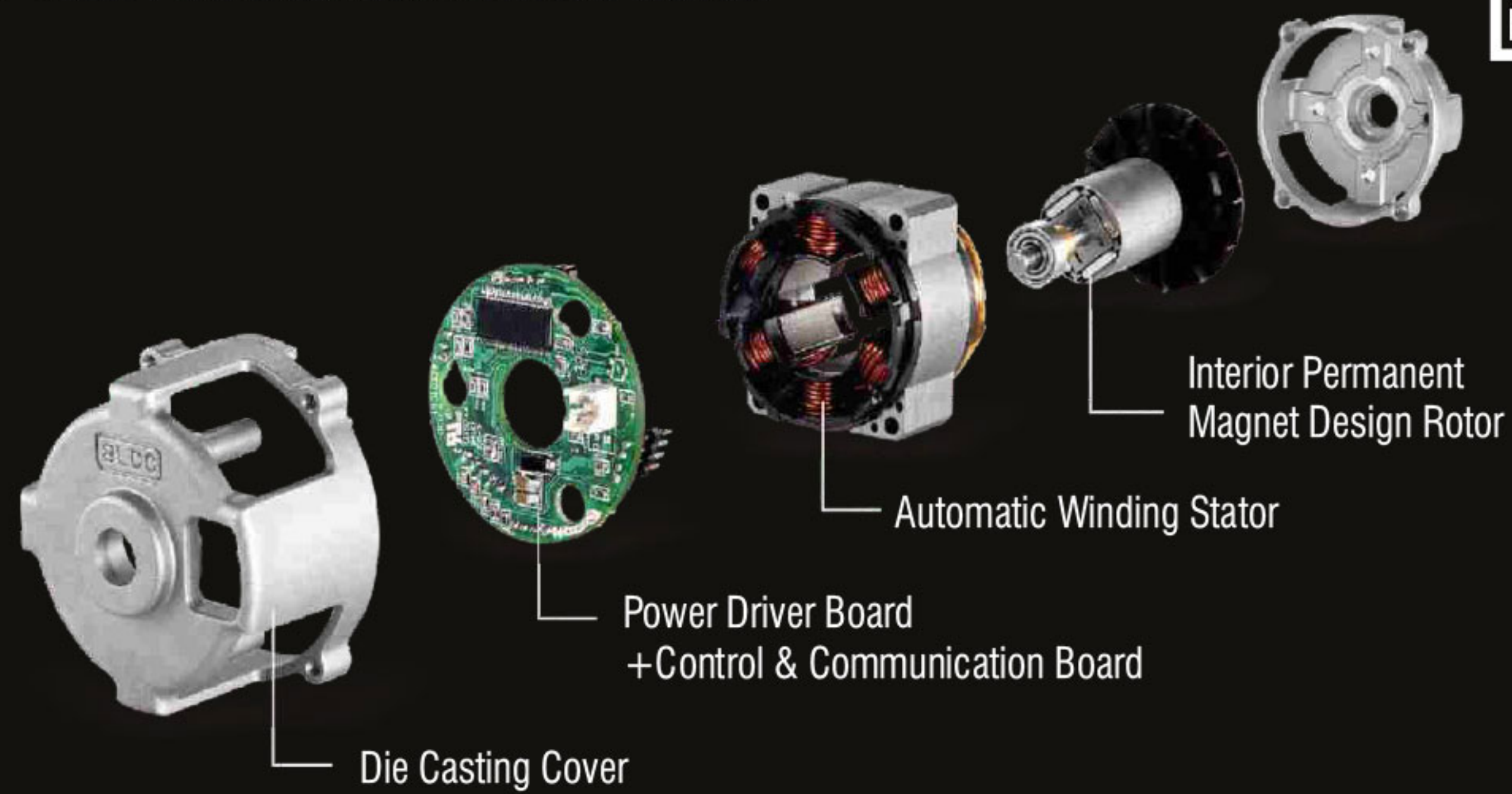
# PRO-ASSEMBLY SERIES

## SOLUTION

FOR ASSEMBLY WORKS

### CONTROL + MOTOR ALL-IN-ONE DESIGN

✓ HIGH PERFORMANCE WITH AIO MOTOR



### ASSEMBLY PROCESSES OPTIMISATION

No cables, air hoses or compressors to get in the way

### HIGH ACCURACY REPEATABILITY

Auto shut-off mechanisms ensure accuracy and precision every time.

### LONGER LIFESPAN & BETTER ENERGY EFFICIENCY

Lithium-ion batteries and brushless motors get the job done

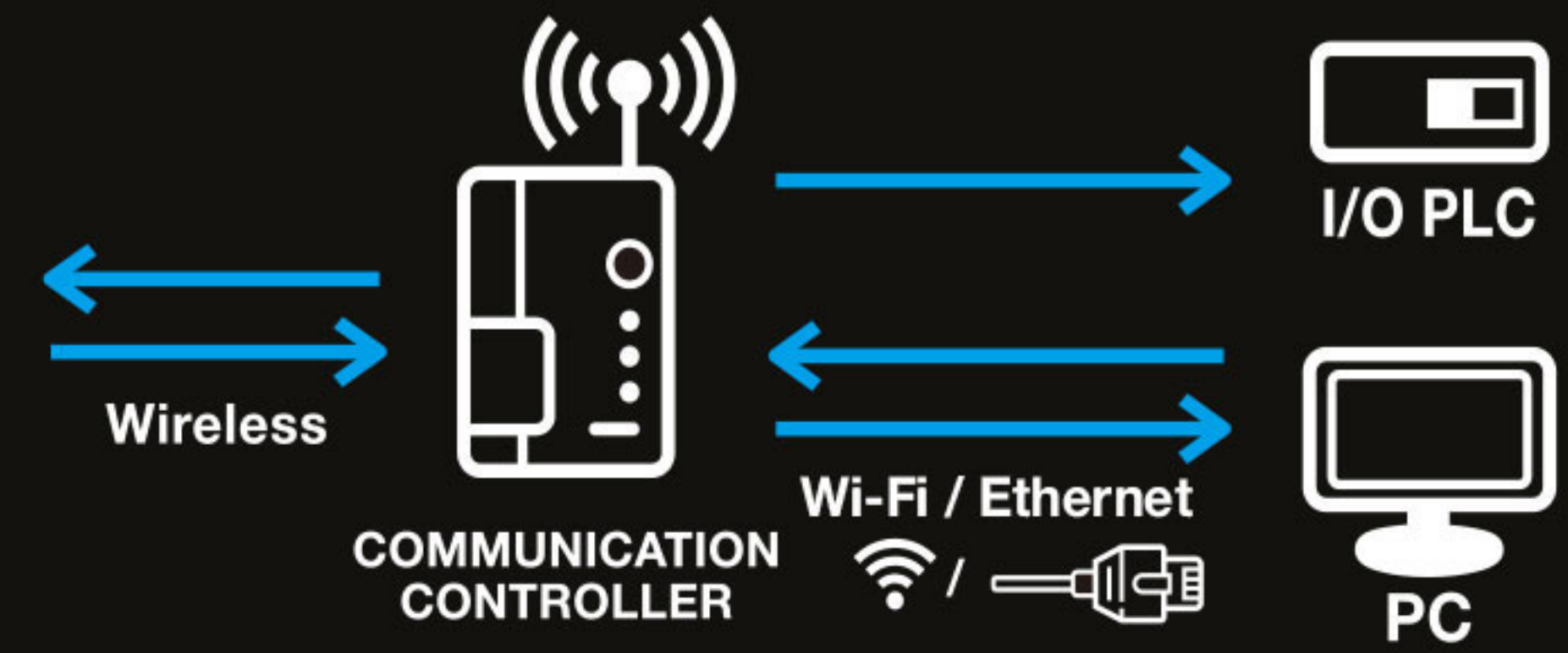




Pro-Assembly Wireless Data Comm. allow plant manager to remotely control and monitor devices through the wireless receiver/communication controller (DR001, DR002, sold separately) connected to the existing PLC system or PC. The tool can store up to 1,000 joint rundowns which can be downloaded wireless in bulk at the end of the day or accessed in real time via the PLC system or PC.

## DESIGNED for VERSATILITY

Wireless



## WINDOWS APP SYSTEM GO WIRELESS



WINDOWS APP

### Windows App Features:

- Remotely fine tune torque and other settings for more precise applications (Max speed / duty, operation cycle & rotation, turns, screw runtime)
- Record torque settings pattern
- Real-time monitoring of up to 10 tools at job site
- Collect all fastening data in the assembly process

### Wireless Receiver Features:

- Wireless connection with Pro-Assembly tool
- Compatible with plant PLC system
- Collect fastening data in assembly process directly to PLC

## RV2054 - 20V BRUSHLESS TRANSDUCERIZED PRECISION TOOL



### EPS (Electro-Pulse System)

- Reducing average reaction force experienced by the operator **Up to 30%**
- Allowing for one-handed operation in certain situations with less strain placed on the use

## RV2052 - 20V BRUSHLESS TRANSDUCERIZED PRECISION TOOL



RV2054-WR8 / RV2054-WR18



RV2054-3-WR8 / RV2054-3-WR18 / RV2054-3-WR24

### FEATURES



- Brushless Motor - Energy saving, higher efficient and longer life-span
- Auto shut-off when torque reaches the set value
- Low maintenance costs due to long service life
- Reduces life-cycle costs due to wear-free components
- Improved ergonomics, lightweight and reaction force with Li-ion compact battery for fatigue-free working
- Battery indicator

### SPECIFICATION

Model No.	RV2054-WR8	RV2054-WR18
Voltage	20V	
Drive	1/4" Hex Shank	
Programmable Speed	50-1,200 rpm	50-800 rpm
Torque Range	1-8 Nm	3-18 Nm
Weight (w/o battery pack)	1.00 kg (2.20 lbs)	
Dimension (LxWxH)	212 x 78 x 256 mm	

Model No.	RV2054-3-WR8	RV2054-3-WR18	RV2054-3-WR24
Voltage	20V		
Drive	3/8" Square		
Programmable Speed	50-1,200 rpm	50-800 rpm	50-600 rpm
Torque Range	1-8 Nm	3-18 Nm	6-24 Nm
Weight (w/o battery pack)	1.00 kg (2.20 lbs)		
Dimension (LxWxH)	212 x 78 x 256 mm		



RV2052-WR8 / RV2052-WR18 / RV2052-WR24



RV2052-3-WR18 / RV2052-3-WR24

### FEATURES



- Brushless Motor - Energy saving, higher efficient and longer life-span
- Auto shut-off when torque reaches the set value
- Low maintenance costs due to long service life
- Reduces life-cycle costs due to wear-free components
- Improved ergonomics, lightweight and reaction force with Li-ion compact battery for fatigue-free working
- Battery indicator

### SPECIFICATION

Model No.	RV2052-WR8	RV2052-WR18	RV2052-WR24
Voltage	20V		
Drive	1/4" Hex Shank		
Programmable Speed	50-1,200 rpm	50-800 rpm	50-600 rpm
Torque Range	1-8 Nm	3-18 Nm	6-24 Nm
Weight (w/o battery pack)	1.00 kg (2.20 lbs)		
Dimension (LxWxH)	202 x 78 x 236 mm		

Model No.	RV2052-3-WR18	RV2052-3-WR24
Voltage	20V	
Drive	3/8" Square	
Programmable Speed	50-800 rpm	50-600 rpm
Torque Range	3-18 Nm	6-24 Nm
Weight (w/o battery pack)	1.00 kg (2.20 lbs)	
Dimension (LxWxH)	202 x 78 x 236 mm	

## RV2053 - 20V BRUSHLESS TRANSDUCERIZED ANGLE PRECISION TOOL

## RV2070 - 20V BRUSHLESS TORQUE MULTIPLIERS



### FEATURES

- Brushless Motor - Energy saving, higher efficient and longer life-span
- EPS (Electro-Pulse System) Reducing the torque reaction during tightening
- Real-Time feedback by transducer control
- Collect all Fastening data in process
- LED indicator & Buzzer
- Precision & Accuracy
- Battery indicator



### OLED DISPLAY & ONBOARD KEYPAD

Easy for programming tightening parameters

### SPECIFICATION

Model Number	RV2053-WR45	RV2053-WR80	RV2053-WR120
Voltage	20V		
Drive	3/8" Square	1/2" Square	
Programmable Speed	20-200 RPM	20-130 RPM	20-100 RPM
Torque Range	8-45 Nm (5.9-33.2 ft-lbs)	12-80 Nm (8.85-59 ft-lbs)	40-120 Nm (29.5-88.5 ft-lbs)
Weight (w/o battery pack)	2,10 kg	2,24 kg	2,24 kg

### FEATURES

- Integrated gearbox provides premium quality and accuracy
- Multi-function display module with cycle status alert and audible alarm offers instant feedback and easy setup
- 360° adjustable handle, with 6 mm threaded port for eye hooks or other tethering points, provides operator comfort, flexibility and safety options
- Standard or custom reaction arms available
- Optional wireless communication for process control with I/O and data collections.



### SPECIFICATION

Model Number	RV2070-200	RV2070-860	RV2070-1620	RV2070-2160
Voltage	20V			
Drive Size	3/4"	3/4"	1"	1"
Torque Range (Nm)	26-208	144-864	270-1,620	540-2,160
Speed (rpm)	46	17	9	7
Length	338 mm	338 mm	370.5 mm	370.5 mm
Width	50 mm	70 mm	75 mm	75 mm
Weight (w/o battery pack)	3.15 kg	3.61 kg	5.18 kg	5.18 kg

## RZ4014 - 40V BRUSHLESS OIL PULSE TOOL



## RZ2013 - 20V BRUSHLESS OIL PULSE TOOL

### FEATURES



- New oil-pulse system boosts heat dissipation and run time.
- Integrated pulse and motor design for faster, quieter, and smoother operation.
- Achieves precise torque with automatic stop.
- Smart press detection to reduce user error.
- Upgraded oil hydraulics lower the risk of leaks and wear.



Tightening Torque Adjustment



LED Shut-Off Indicator to Confirm OK / NG Joint Status

### SPECIFICATION

Model Number	RZ4014-WR90
Voltage	40V
Drive	1/2" Square
Programmable Speed	1,000-6,000 rpm
Torque Range	55-90 Nm
Weight(with Battery)	2.55 kg
Dimension (LxWxH)	274 mm x 78 mm x 256 mm

### FEATURES



- New oil-pulse system boosts heat dissipation and run time.
- Integrated pulse and motor design for faster, quieter, and smoother operation.
- Achieves precise torque with automatic stop.
- Smart press detection to reduce user error.
- Upgraded oil hydraulics lower the risk of leaks and wear.



Tightening Torque Adjustment



LED Shut-Off Indicator to Confirm OK / NG Joint Status

### SPECIFICATION

Model Number	RZ2013-D-WR30	RZ2013-3-WR40	RZ2013-3-WR55
Voltage	20V		
Drive	1/4" Hex Shank	3/8" Square	3/8" Square
Programmable Speed	1,500-6,000 rpm		
Torque Range	12-30 Nm	15-40 Nm	35-55 Nm
Weight(with Battery)	1.65 kg	1.62 kg	1.78 kg
Dimension (LxWxH)	190 x 77 x 239 mm	192 x 77 x 239 mm	210 x 77 x 239 mm



RZ2013-D-WR30

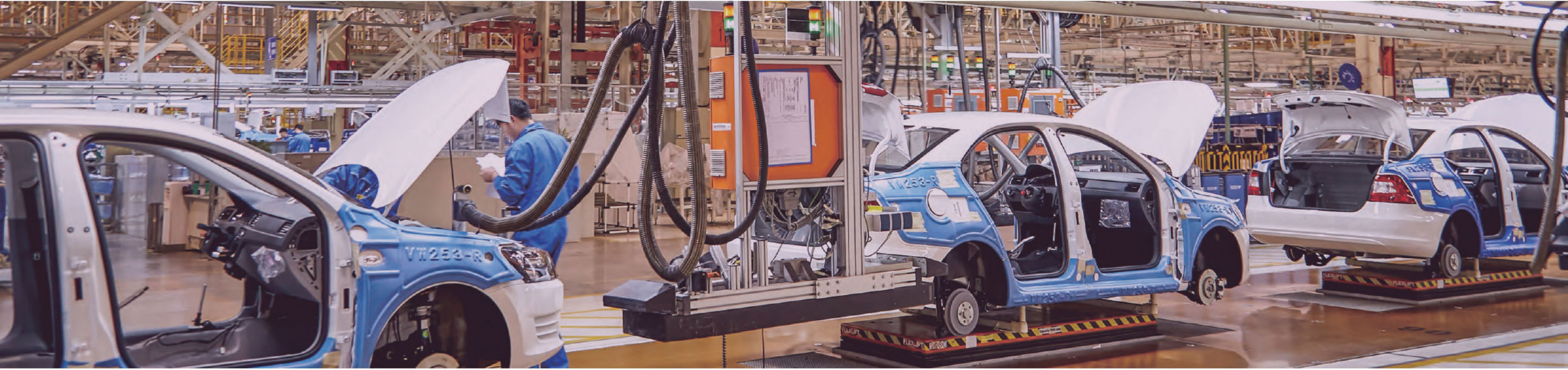


RZ2013-3-WR40



RZ2013-3-WR55

## DIGITAL TORQUE & ANGLE CONTROL SCREWDRIVER



## DIGITAL TORQUE & ANGLE CONTROL SCREWDRIVER

### FEATURES

- 5" LCD touch screen
- RS232C and Wi-Fi 6 Connection to PC & PLC (Modbus)
- 1,000 memory and available slot for memory expansion
- Transducerized tool for 10% accuracy
- Real time graphing for fastening analysis
- 15 presets & 15 jobs setting
- TC/AM or AC/TM mode for torque and angle control
- Statistic data analysis on PC software



DR102

MV4082-7

### SPECIFICATION

**BLDC**  
MOTOR



Model Number	MV4082-7
Input Voltage	DC40V
Torque	1-7 Nm / 10-71 kgf-cm / 8.9-62 in-lbs
Programmable Speed	50-670 rpm
Weight	0.77 kg
Dimension	285.5 mm



**Wireless**

Model Number	DR102	Output Current (max.)	15 A
Input Voltage	AC 100V~240V	Output Power (max.)	600 W
Input Frequency	50-60 Hz	Weight	3.30 kg
Output Voltage	DC 40V	Dimension (LxWxH)	225.5 x 155 x 115 mm

### COMMUNICATION PORT

- Rs232 (Scanner gun)
- 25P I/O (PLC)
- USB (Download / Read data, update software)
- Ethernet



# PRECISION TOOL

PRECISE FASTENING FROM THE FIRST SCREW... TO THE LAST

**LIGHT-WEIGHT & ERGONOMIC DESIGN**

Allows extended use periods and increases mobility

**PRECISION SHUT-OFF CLUTCH**

## RV2048 - 20V BRUSHLESS PRECISION TOOL



Adjustable High Precision Shut-Off Clutch



LED Indicator & Buzzer to Confirm Shut-Off OK / NG Joint Status.



Color Rings for Quick Identification of Torque Range



**BLDC MOTOR** **Wireless**

### FEATURES

- Brushless Motor - Energy saving, higher efficient and longer life-span
- Auto shut-off when torque reaches the set value
- Battery indicator
- Low maintenance costs due to long service life
- Reduces life-cycle costs due to wear-free components
- Improved ergonomics, lightweight and reaction force with Li-ion compact battery for fatigue-free working

### SPECIFICATION

Model Number	RV2048-WR12	RV2048-WR6	RV2048-WR2
Voltage	20 V		
Drive	1/4" Hex Shank		
Torque Range	3-12 Nm (2.2-8.9 ft-lbs)	1-6 Nm (0.7-4.4 ft-lbs)	0.5-2 Nm (0.37-1.5 ft-lbs)
Programmable Speed	700-1,000 rpm	700-1,000 rpm	700-1,000 rpm
Weight	1.75 kg (3.85 lbs)		
Dimension (LxWxH)	212 mm x 78 mm x 256 mm (8.3" x 3.1" x 10.1")		



TORQUE RANGE  
0.7-4.4  
ft-lbs

RV2048-WR6

TORQUE RANGE  
2.2-8.9  
ft-lbs

RV2048-WR12

TORQUE RANGE  
0.37-1.5  
ft-lbs

RV2048-WR2



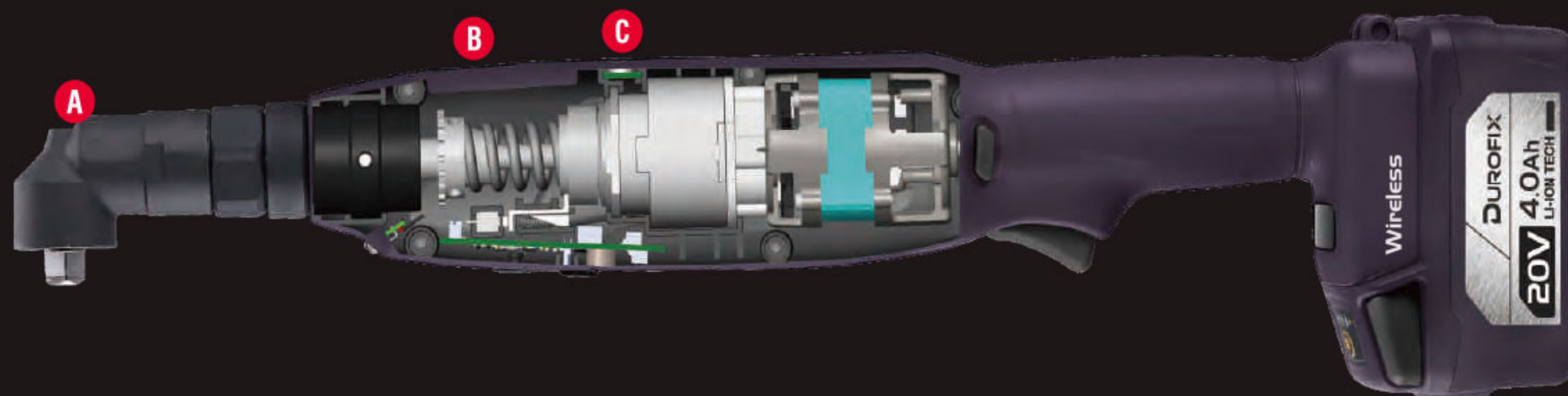
# ANGLE PRECISION TOOL

POWERFUL FASTENING SOLUTION IN NARROW SPACES

**CONSTANT & PRECISE TIGHTENING TORQUE**

The torque can be precisely set over large range and retrieved with repeat accuracy

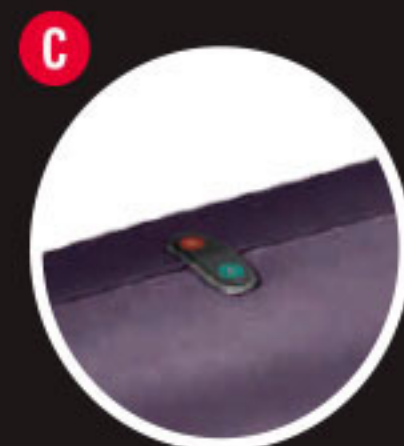
**PRECISION SHUT-OFF CLUTCH**



All Metal Angle Head



Adjustable High Precision Shut-Off Clutch



LED Indicator & Buzzer to Confirm Shut-Off OK / NG Joint Status.

## RV2047 - 20V BRUSHLESS ANGLE PRECISION TOOL



**BLDC MOTOR** **Wireless**

### FEATURES

- Brushless Motor - Energy saving, higher efficient and longer life-span
- Auto shut-off when torque reaches the set value • Battery indicator
- Low maintenance costs due to long service life
- Reduces life-cycle costs due to wear-free components
- Improved ergonomics, lightweight and reaction force with Li-ion compact battery for fatigue-free working

### SPECIFICATION

Model Number	RV2047-3-WR12	RV2047-D-WR12	RV2047-2-WR12
Voltage	20V		
Drive	3/8" Square	1/4 Hex Shank	1/4" Square
Torque Range (Nm)	3-12 Nm (2.2-8.8 ft-lbs)	3-12 Nm (2.2-8.8 ft-lbs)	3-12 Nm (2.2-8.8 ft-lbs)
Programmable Speed	840-1200 RPM	840-1200 RPM	840-1200 RPM
Weight (w/o battery pack)	1.60 kg (3.52 lbs)	1.60 kg (3.52 lbs)	1.60 kg (3.52 lbs)
Dimension (LxWxH)	115 mm x 78 mm x 493 mm	115 mm x 78 mm x 493 mm	115 mm x 78 mm x 493 mm

Model Number	RV2047-WR30	RV2047-WR45	RV2047-WR70	RV2047-WR90
Voltage	20V			
Drive	3/8" Square	3/8" Square	1/2" Square	1/2" Square
Torque Range (Nm)	8-30 Nm (5.9-22.13 ft-lbs)	18-45 Nm (13.3-33.2 ft-lbs)	20-70 Nm (14.75-51.63 ft-lbs)	40-90 Nm (29.5-66.4 ft-lbs)
Programmable Speed	210-300 RPM	210-300 RPM	160 RPM	100 RPM
Weight (w/o battery pack)	1.70 kg (3.74 lbs)	1.70 kg (3.74 lbs)	2.10 kg (4.62lbs)	2.10 kg (4.62lbs)
Dimension (LxWxH)	115 mm x 78 mm x 493 mm	115 mm x 78 mm x 493 mm	115 mm x 78 mm x 539 mm	115 mm x 78 mm x 539 mm

## RV2017 / RV2027 / RV2037 - 20V TUBE NUT WRENCH

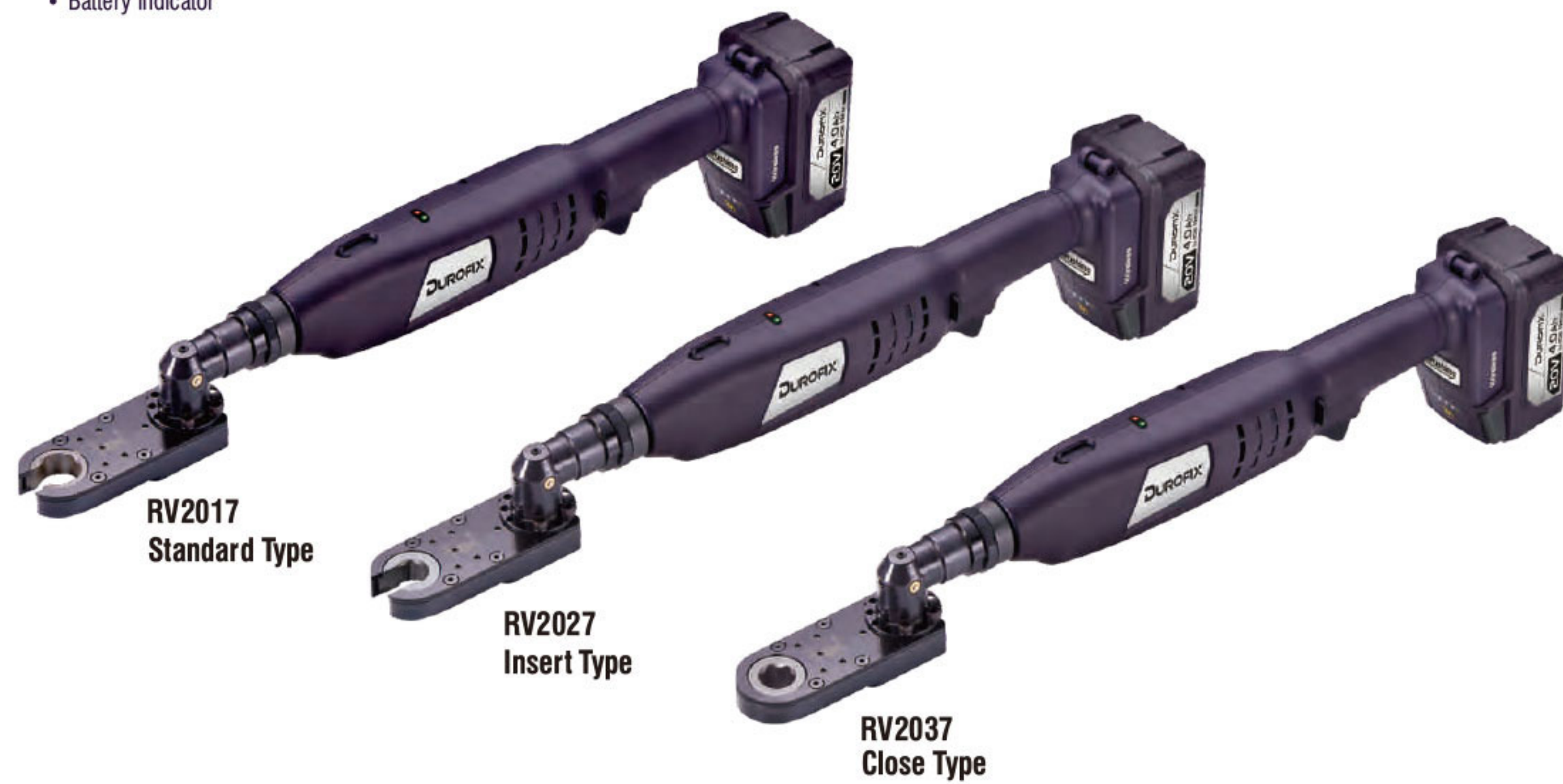


## RV2017 / RV2027 / RV2037 - 20V TUBE NUT WRENCH

### FEATURES

- Brushless Motor - Energy saving, higher efficient and longer life-span
- Auto shut-off when torque reaches the set value
- Low maintenance costs due to long service life
- Reduces life-cycle costs due to wear-free components
- Improved ergonomics, lightweight and reaction force with Li-ion compact battery for fatigue-free working
- Battery indicator

**BLDC MOTOR** **Wireless**



### SPECIFICATION

Standard Type	Hex Size (mm)	Torque Range	RPM	Length	Weight
RV2017-WR12 series	7,8,9,10,11,12,13,14,15,16	3-12 Nm	525-750	539 mm	2.65 kg
RV2017-WR20 series	17,18,19,20,21,22,23,11/16"	6-20 Nm	350-500	563 mm	2.79 kg
RV2017-WR27 series	24,26,27,29,30,32	8-27 Nm	262-375	587 mm	3.02 kg

Insert Type	Hex Size (mm)	Torque Range	RPM	Length	Weight
RV2027-WR12 series	7,8,9,10,11	3-12 Nm	525-750	539 mm	2.65 kg
RV2027-WR20 series	12,13,14,15,16	6-20 Nm	350-500	563 mm	2.79 kg
RV2027-WR27 series	17,18,19,20,21,22	8-27 Nm	262-375	587 mm	3.02 kg

Close Type	Hex Size (mm)	Torque Range	RPM	Length	Weight
RV2037-WR12 series	7,8,9,10,11,12,13,14,15,16	3-12 Nm	525-750	541 mm	2.67 kg
RV2037-WR20 series	17,18,19,20,21,22,23,11/16"	6-20 Nm	350-500	565 mm	2.81 kg
RV2037-WR27 series	24,26,27,29,30,32	8-27 Nm	262-375	589 mm	3.04 kg



## RI20126 - 20V BRUSHLESS ETC IMPACT WRENCH



## RI2036 - 20V BRUSHLESS ETC JUMBO IMPACT WRENCH



### FEATURES

- 1/2" Square drive, 50-stage Pre-set Torque
- Electronic Torque Control & Auto shut-off
- LED & Buzzer indicator confirms joint status for OK (green) or NG (red)
- Display showing torque stage & error message
- Max. 375 Nm reverse torque
- P20 battery platform with LED battery level indicator
- USB port for uploading program & downloading data

### SPECIFICATION

Model Number	RI20126	RI20126R	RI20126A1	RI20126R1
Voltage	20 Vdc			
Drive	1/2" Square			
Max. Reverse Torque	375 Nm			
Max. Torque	250 Nm			
Torque Setting Range	30-180 Nm	30-180 Nm	10-100 Nm	10-100 Nm
Auto Shut-Off Stage	50 stage	50 stage	50 stage	50 stage
	Fwd.	Fwd. / Rev.	Fwd.	Fwd. / Rev.
Application	M10-M16	M10-M16	M8-M10	M8-M10
No Load Speed	0-2,600 RPM			
Impacts per Minute	0-3,000 IPM			
Tool Weight	1.66 kg (3.65 lbs)			



RI20126  
RI20126R



RI20126A1  
RI20126R1



### FEATURES

- Patented Electronic Torque Clutch (ETC).
- Loosen tire lug nuts with 1,100 Nm reverse torque to conquer greasiness, rust, dirt & over-torque by air impact tools.
- Durable metal gearbox housing
- Battery indicator
- Built-in LED light

### SPECIFICATION

Model Number	RI2036A1	RI2036A2	RI2036A3
Voltage	20 Vdc		
Drive	1/2" Square		
Max. Reverse Torque	1,100 Nm (810 ft-lbs)		
Max. Tightening Torque	800 Nm (590 ft-lbs) <b>Non Shut-Off</b>		
Torque Setting Range	80-480 Nm (60-355 ft-lbs) <b>Auto Shut-Off</b>	100-700 Nm (73-515 ft-lbs) <b>Auto Shut-Off</b>	60-600 Nm (44-443 ft-lbs) <b>Auto Shut-Off</b>
	No Load Speed		
0-2,200 RPM			Impacts per Minute
0-2,000 IPM			Tool Weight
3.20 kg (7.04 lbs)			



RI2036A1

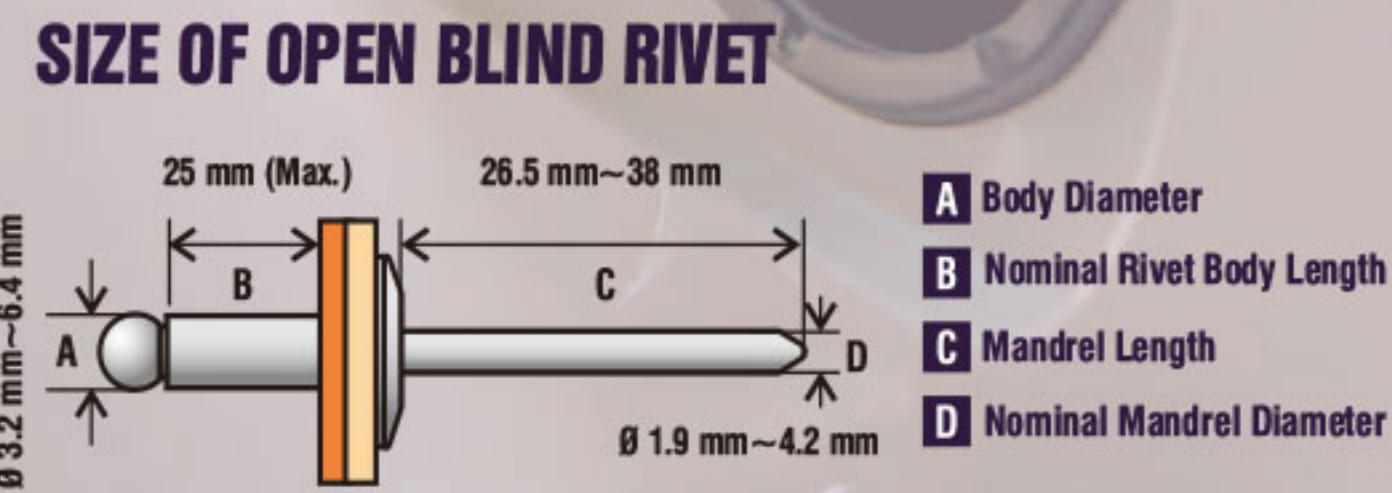


RI2036A2



RI2036A3

## RV20108 - 20V BRUSHLESS RIVETING TOOL



### FEATURES Protector for Tools

- Good for up to 1/4" (6.4 mm) stainless steel rivets
- One-touch trigger & auto-reverse function
- Integrated mandrel collection container (patented)
- Holding mechanism for rivet
- Battery indicator

### INTEGRATED MANDREL COLLECTION CONTAINER (PATENTED)



- A** Collecting up to 600 rivet mandrels
- B** Patented container integrated with holding and changing nozzle

### SPECIFICATION

Model Number	RV20108
Voltage	20 Vdc
Blind Rivet Size	3.2 / 4.0 / 4.8 / 6.4 mm
Max. Setting Force	4,500 lbf (20,000 N)
Stroke	25 mm
Tool Weight	2.30 kg (5.06 lbs)
Dimension (LxWxH):	331 mm x 84 mm x 284 mm



### 20V BATTERY PACKS



### PROTECTOR FOR BATTERY PACKS



**DP014**  
Applicable Battery:  
B2036LB / B2036LA

**DP015**  
Applicable Battery:  
B2036LB-2 / B2036LA-2

### UNIVERSAL CHARGERS



**DC20UN26-C60**

- Active Voltage Control
- Battery Thermal Protection System
- Fast Charging Time

**DC20US28-C30**

Weight: 570g

Weight: 490g

### I/O RECEIVER



**DR002**  
1 to 10 Communication  
Compatible with PLC



**DR001**  
1 to 1 Communication  
Compatible with PLC



24 Vdc  
Power Adapter

### LI-ION BATTERY TECHNOLOGY



#### INTELLIGENT BATTERY MANAGEMENT SYSTEM

Built-in individual cell voltage detection circuit for charge control in battery pack.



#### HIGH-POWER EXTENDED LIFE BATTERY

Delivers high charger capacity with low internal impedance for maximum power delivery and exceptional run time.



#### LONGTIME STORAGE

No memory effect, low self discharge and always ready for use.



#### BATTERY INDICATOR

Provides visual charge level of battery power.



# RIVETING TOOL

**BLIND RIVET SIZE UP TO 1/4" (6.4 MM)**

Large working range

**ONE PRESS FOR ONE CYCLE**

Rivet pull → Cut → Spent mandrel ejection

**AUTO-REVERSE FUNCTION**

Short processing time



## RV20104 - 20V BRUSHLESS RIVETING TOOL



### FEATURES

- Blind Rivet Size Up To 1/4" (6.4 mm)
- One Press For One Cycle
- Auto-reverse Function
- Built-in LED light
- Battery Indicator

### SPECIFICATION

Model Number	RV20104
Voltage	20 Vdc
Blind Rivet Size	1/8", 5/32", 3/16" & 1/4" (3.2 / 4.0 / 4.8 / 6.4 mm)
Max. Setting Force	3,375 lbf (15,000 N)
No Load Speed	0-3,000 RPM (Auto reverse mode)
Tool Weight	2.30 kg (5.06 lbs)
Dimension (LxWxH)	294 mm x 78 mm x 241 mm (11.6" x 3.1" x 9.5")



## RV20103 - 20V BRUSHLESS RIVET NUT TOOL

## RV20105 - 20V BRUSHLESS RIVET NUT TOOL



### FEATURES

- Electronic torque & speed control
- Simple and safe drilling of the blind rivet nuts
- Fast and simple change system for threaded mandrels
- Automatic switchover from setting to drilling
- Constant setting speed
- Built-in LED light • Battery indicator

### SPECIFICATION

Model Number	RV20103
Voltage	20 Vdc
Rivet Nut Size	M4 / M5 / M6 / M8 / M10
Max. Torque	100 / 180 / 220 Nm (73 / 133 / 162 ft-lbs)
No Load Speed	0-1,200 / 0-1,900 / 0-3,000 RPM
Tool Weight	2.15 kg (4.73 lbs)
Dimension (LxWxH)	250 mm x 78 mm x 241 mm (9.8" x 3.1" x 9.5")



### FEATURES

- Electronic torque & speed control
- Simple and safe drilling of the blind rivet nuts
- Automatic switchover from setting to drilling
- Constant setting speed
- Built-in LED light • Battery indicator

### SPECIFICATION

Model Number	RV20105
Voltage	20 Vdc
Rivet Nut Size	1/2"
Max. Torque	100 / 180 / 220 Nm (73 / 133 / 162 ft-lbs)
No Load Speed	0-1,200 / 0-1,900 / 0-3,000 RPM
Tool Weight	2.02 kg (4.44 lbs)
Dimension (LxWxH)	252 mm x 78 mm x 241 mm (9.9" x 3.1" x 9.5")



# havasis

ÇÖZÜMÜN İLK ADI

Mersinli 2823/1 No: 2/130 Konak / İzmir

ONLINE ALIŞVERİŞ

[pahaliyaalma.com](http://pahaliyaalma.com)



Sipariş & Danışma Hattı

**0549 449 3535**

KURUMSAL İLETİŞİM

[havasis.com.tr](http://havasis.com.tr)

Bursa Bölge

**0530 060 1029**

Ankara Bölge

**0553 251 5537**

İstanbul Bölge

**0532 440 2191**



Teklif & Ürün Bilgi

[hemendene@havasis.com.tr](mailto:hemendene@havasis.com.tr)

Kalibrasyon & Bakım Onarım Merkezi

[servisdestek@kalibo.com.tr](mailto:servisdestek@kalibo.com.tr)