

# RUPES®



Via Marconi, 3/A - Loc. VERMEZZO  
20071 VERMEZZO CON ZELO (MI) - ITALY  
Tel +39 02 946941 - Fax +39 02 94941040  
e-mail: info\_rupes@rupes.it - www.rupes.com

## HR81M - HR81ML

3	IT	Lucidatrice	<b>ISTRUZIONI ORIGINALI PER L'USO</b>
8	EN	Polisher	<b>ORIGINAL OPERATING INSTRUCTIONS</b>
13	FR	Polisseuse	<b>TRADUCTION DES INSTRUCTIONS DE FONCTIONNEMENT ORIGINALES</b>
18	DE	Polierer	<b>ÜBERSETZUNG DES ORIGINALBETRIEBSANLEITUNG</b>
23	ES	Pulidora	<b>TRADUCCIÓN DEL MANUAL DE INSTRUCCIONES ORIGINAL</b>
28	PT	Polidora	<b>TRADUÇÃO DAS INSTRUÇÕES DE OPERAÇÃO ORIGINAIS</b>
33	NL	Polijstmachine	<b>VERTALING VAN ORIGINELE GEBRUIKSAANWIJZING</b>
38	FI	Kiillotuskone	<b>ALKUPERÄISTEN KÄYTTÖOHJEIDEN KÄÄNNÖS</b>
43	DA	Poleremaskine	<b>OVERSÆTTELSE AF ORIGINALE BETJENINGSINSTRUKTIONER</b>
48	NO	Polermaskin	<b>OVERSETTELSE AV ORIGINAL DRIFTSINSTRUKS</b>
53	SV	Polermaskin	<b>ÖVERSÄTTNING AV ORIGINAL DRIFTSINSTRUKTIONER</b>
58	RU	Полировочная машина	<b>ПЕРЕВОД ОРИГИНАЛЬНОЙ ИНСТРУКЦИИ ПО ЭКСПЛУАТАЦИИ</b>
64	PL	Polerka	<b>TŁUMACZENIE ORYGINALNYCH INSTRUKCJI OBSŁUGI</b>
69	EL	Στιλβωτής	<b>ΜΕΤΑΦΡΑΣΗ ΠΡΩΤΟΤΥΠΩΝ ΟΔΗΓΙΩΝ ΛΕΙΤΟΥΡΓΙΑΣ</b>
74	BG	Полираща машина	<b>ПРЕВОД НА ОРИГИНАЛНИ ИНСТРУКЦИИ ЗА ЕКСПЛОАТАЦИЯ</b>
79	CS	Leštička	<b>PŘEKLAD ORIGINÁLNÍHO NÁVODU K OBSLUZE</b>
84	ET	Poleerija	<b>ORIGINAALKASUTUSJUHENDI TÖLGE</b>
89	HI	पॉलशिर	<b>संचालन व रखरखाव के निर्देश</b>
94	HU	Polírozó	<b>AZ EREDETI HASZNÁLATI UTASÍTÁS FORDÍTÁSA</b>
99	LV	Pulētājs	<b>ORIGINĀLĀS LIETOŠANAS INSTRUKCIJAS TULKOJUMS</b>
104	LT	Poliravimo mašina	<b>ORIGINALŲ NAUDOJIMO INSTRUKCIJŲ VERTIMAS</b>
109	RO	Mașină de lustruit	<b>TRADUCEREA INSTRUCȚIUNILOR ORIGINALE DE OPERARE</b>
114	SL	Polirnik	<b>PREVOD IZVIRNIH NAVODIL ZA DELOVANJE</b>
119	SK	Leštička	<b>PREKLAD ORIGINÁLNEHO NÁVODU NA OBSLUHU</b>
124	TR	Polisaj makinesi	<b>ORIJINAL KULLANIM TALIMATLARININ TERCÜMESİ</b>
129	AR	أداة التلميع	<b>تعليمات التشغيل والصيانة</b>
134	ZH	抛光机	<b>操作与维护使用说明书</b>
139	JA	ポリリッシャー	<b>使用メンテナンス説明書</b>



CONSERVARE QUESTE ISTRUZIONI • SAVE THESE INSTRUCTIONS • CONSERVER CES INSTRUCTIONS • DIESE ANWEISUNGEN AUFBEWAHREN • CONSERVE ESTAS INSTRUCCIONES • GUARDAR ESSAS INSTRUÇÕES • BEWAAR DEZE INSTRUCTIES • SÄILYÄ NÄMÄ OHJEET • GEM DISSE INSTRUKTIONER • SPARA DESSA INSTRUKTIONER • РЕКОМЕНДУЕТСЯ ХРАНИТЬ ЭТО РУКОВОДСТВО С ИНСТРУКЦИЯМИ • ZACHOWAJ TE INSTRUKCJE • ΟΙ ΟΔΗΓΙΕΣ ΧΡΗΣΗΣ ΘΑ ΠΡΕΠΕΙ ΝΑ ΦΥΛΑΣΣΟΝΤΑΙ • СЪХРАНЕТЕ ТЕЗИ ИНСТРУКЦИИ • USCHOVEJTE TYTO POKYNY • HOIDKE JUHEND ALLES • इन निर्देशों को सुरक्षित रखें • ÖRIZZE MEG AZ ÚTMUTATÓT • GLAB JIET ŠO INSTRUKCIJU • SAUGOKITE ŠIAS INSTRUKCIJAS • SĀLVĀTI ACESTE INSTRUKCIJINI • SHRANITE TA NAVODILA • USCHOVAJTE TIETO POKYNY • BU TALIMATLAR KİTAPÇIĞINI MUHAFAZA EDİNİZ • احتفظ بهذه التعليمات • 保存该使用说明书 • 説明書は大切に保管しておいてください

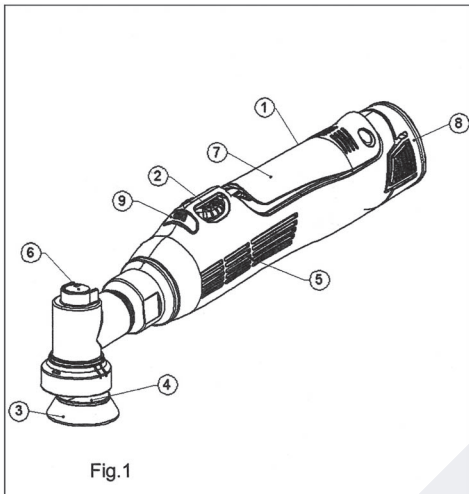


Fig. 1

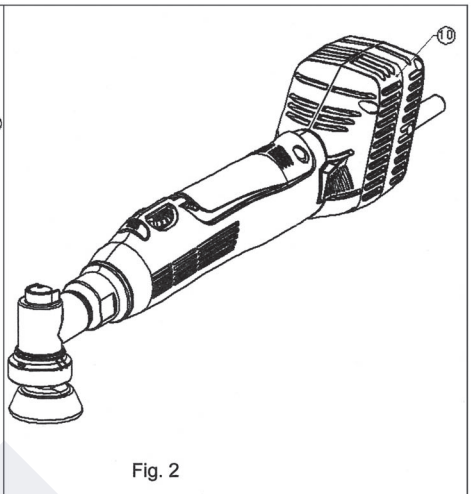


Fig. 2

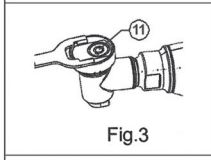


Fig. 3

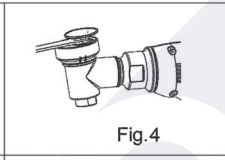


Fig. 4

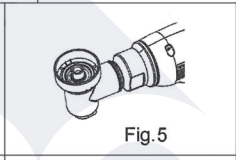


Fig. 5

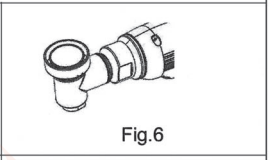


Fig. 6

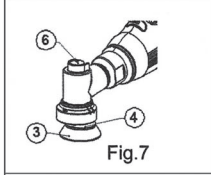


Fig. 7

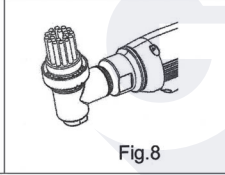


Fig. 8

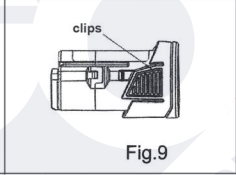


Fig. 9

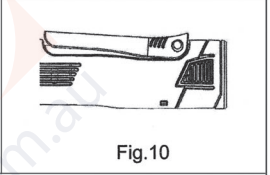


Fig. 10

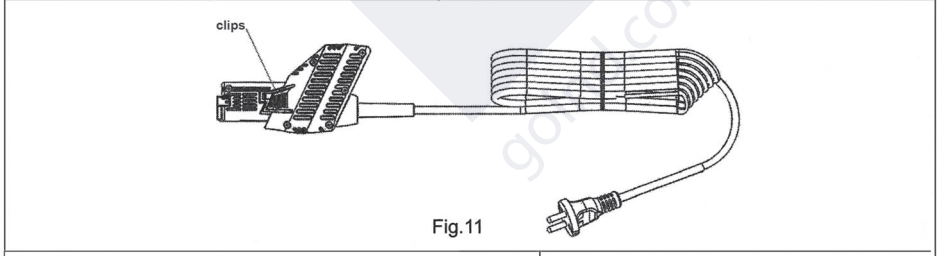


Fig. 11

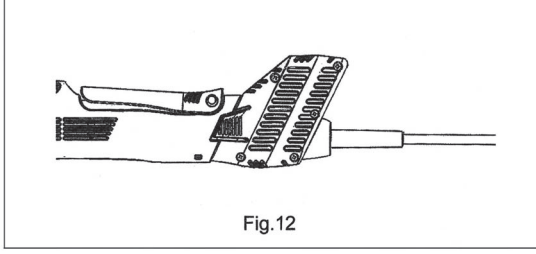


Fig. 12

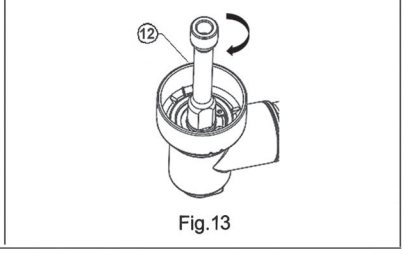













Fig. 13

## ENGLISH

Summary of device labels containing safety information			
	WARNING: To reduce the risk of injury, user must read instruction manual		
	CE mark for EU market		Direct current
	Wear ear protection		Wear a gloves
	Wear eye protection		Wear a mask
	Disposal of decommissioned (WEEE Directive)		Product contains Lithium-Ion Do not dispose this product with household rubbish
	Eurasian conformity mark	Ah	Ampere per hour
Wh	Watt per hour	V	Volt
n0	No-load speed	/min	Per minute
	Arrow – act in the direction indicated by the arrow direction		


## TECHNICAL SPECIFICATIONS

TYPE	HR81M	HR81ML
Voltage (VDC)	10.8/12	10.8/12
RPM *	2000-5000*	2000-5000*
Battery life (min)	~30**	~30**
Charging time (min)	~20**	~20**
Electronic speed control	•	•
Overcurrent protection	•	•
Soft start	•	•
LED indication	•	•
Dimensions (mm)	287x70x47***	332x70x47***
Weight (g)	470***	520***


\* 2000 RPM when speed regulation Knob (2) is at position 1, 2800RPM at position 2, 3500RPM at position 3, 4300RPM at position 4, 5000 RPM at position 5.

\*\* The value is referred to a use of the battery pack 9HB125LT/9HB120LT, fully charged with a charger 9HC120LT and normal use with a Rupes polishers HR81M/HR81ML and functional unit orbit 12mm and Ø30mm buffer pad.

\*\*\* Measured without a functional unit, battery pack, and power supply.

 **WARNING! Read all safety warnings, instructions, illustrations and specifications provided with this power tool.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference.** The safety and accident prevention instructions are reported in the "SAFETY INSTRUCTION" booklet which is an integral part of these documents. This **operating instructions manual** indicates the additional information required for the specific use of the tool.

### CORRECT USAGE

 **CAUTION: DO NOT PUSH SHAFT LOCKING BUTTON (6) DURING USE! PUSH THE BUTTON ONLY WHEN THE SWITCH (2) IS IN OFF POSITION**

#### Safety instructions for all operations

- This tool is designed to be used as a polisher, sander, cleaner, brusher.
- This tool is not intended to be used for metal brushing and cutting-off operations. The use of this tool for unintended applications may cause hazards and injuries to people.
- The tool must be used with accessories that have been specifically designed or recommended by the manufacturer. The fixing of the accessory to the tool does not guarantee a safe operation.
- The rated speed of the accessories must be at least equivalent to the maximum speed specified on the tool. Using the accessories at speeds above the rated one, may cause them to break or thrown into the air.
- The external diameter and thickness of the accessories must match the specifications of the tool. Accessories with incorrect dimensions cannot be adequately protected or controlled.
- The configuration of accessories must match the tool. The use of accessories that cannot be perfectly fitted on the tool may result in imbalance, excessive vibrations and in the impossibility of controlling the tool.

- **Do not use damaged accessories.** Before use, inspect all the accessories. If the tool or accessory has fallen, verify that it is not damaged or install a new accessory. After inspecting or installing an accessory, test the operation of the tool at maximum speed and without load for one minute, keeping at a safety distance. If the accessories are damaged, they will break during this test.
- **Wear personal protective equipment.** Depending on the application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments. The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- **Keep bystanders a safe distance away from work area.** Anyone entering the work area must wear personal protective equipment. Fragments of workpiece or a broken accessory may fly away and cause injury beyond immediate area of operation.
- **Always hold the tool firmly in your hand(s) during the start-up.** The reaction torque of the motor, as it accelerates to full speed, can cause the tool to twist.
- **Use clamps to support workpiece whenever practical. Never hold a small workpiece in one hand and the tool in the other hand while in use.** Clamping a small workpiece allows you to use your hand(s) to control the tool. Rounded-shaped materials such as cylindrical bars, ducts or tubes have a tendency to rotate during processing, with the risk of hitting the operator.
- **Position the cord clear of the spinning accessory.** If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
- **Never lay the power tool down until the accessory has come to a complete stop.** The spinning accessory may grab the surface and pull the power tool out of your control.
- **After changing backing pad and/or abrasive sheet, make sure they are properly fixed.** Loose adjustment devices can unexpectedly shift, causing loss of control, loose rotating components will be violently thrown.
- **Do not run the power tool while carrying it at your side.** Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- **Regularly clean the power tool's air vents.** The motors fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- **Do not operate the power tool near flammable materials.** sparks could ignite these materials.
- **Do not use accessories that require liquid coolants.** Using water or other liquid coolants may result in electrocution or shock.

## PROPER HANDLING

The tool is designed for as a one handed control operation for polishing, brushing, cleaning and sanding operations.

## PARTS OF THE TOOL

- |                                    |  |
|------------------------------------|--|
| 1 - Identification plate           | 8 - Battery pack 10,8V cod. 9HB125LT/9HB120LT (optional)               |
| 2 - ON/OFF / speed regulation Knob | 9 - Battery level LED  |
| 3 - Buffer pad (not supplied)      | 10 - Power supply cod. 9HP120LT (optional)                             |
| 4 - Velcro faced disc pad          | 11 - Functional unit shaft: Red color orbit 12,<br>Blue color orbit 3, |
| 5 - Motor ventilation slots        | Green color rotary version   |
| 6 - Shaft locking button           | 12 - Extension shaft 291.390   |
| 7 - ON/OFF switch lever            |  |

## MOTOR

**WARNING: To reduce the risk of injury, only the Li-ION Battery Pack 9HB125LT/9HB120LT (8) or the Power supply 9HP120LT (10) (optional) for the motor supply should be used with this product.**

The tool is operated by a DC motor. Since the batteries other than those offered by Rupes have not been tested with this product, use of such batteries with this tool could cause the injury and property damage.

## SWITCH

**WARNING: To reduce the risk of injury, turn the knob (2) until OFF position after any use.**

To turn the unit on, rotate the potentiometer knob (2) and set up the speed from 1 to 5 value. Push the switch lever (7) towards the body of the tool.

To turn it off, release the lever and rotate the potentiometer knob until OFF position.

## ELECTRONIC CONTROLLER

The main functions of electronic controller are: Speed control, Batteries and motor protection, Battery pack level indication, soft start.

### Speed control

The speed of your tool can be changed by rotating the speed regulation knob (2) to the desired setting. The speed regulation knob (2) can be set for any speed between 2000 and 5000 RPM.

### Batteries and motor protection

The electronic protection protects the motor and batteries from overheating. Also it guarantee a longer life of both.

**NOTICE: in a case of overcurrent caused by repeated starts or excessive overloads, the protection in the current turns off the tool and the RED blinking light will be shown in a battery pack level indication.**

### Battery pack level indication

The battery level LED shows the charge level of the batteries changing the colour:

- GREEN: from 100% to 50% batteries charge
- YELLOW: from 50% to 20% batteries charge
- RED: from 20% to 0% batteries charge
- RED BLINKING: 0% battery charge: the tool does not start.

### Soft start

The soft start guarantees the motor and battery protection and reduce the risk of injury for the operator.

### STARTING UP

Before starting-up the tool ensure that:

- the packaging is complete and does not show signs of having been damaged during storage or transport;
- the tool is complete; check that the number and type of components complies with that reported in this instruction booklet.

### ACCESSORIES ASSEMBLY



**WARNING:** Before (dis)assembling the tool assure that the speed regulation Knob (2) is in OFF position



**WARNING:** Do not force the screw it could break. The maximum allowed screw force is 2 Nm. To screw use only a clockwise direction when the tool is positioned as show in a Fig. 4 and Fig. 6 (to unscrew use counterclockwise direction).

### COUNTERWEIGHT

Push the shaft-locking button (6) (Fig. 1) and screw the unit on a tool shaft. Use the provided key to hold a counterweight (Fig.3).

### DISC PAD OR BRUSH (provided or optional)

Dual action version (Fig.4): place the disc pad/brush in the red/blue shaft (4) and screw this one on a shaft (holding it with a provided key). To remove, hold the shaft with a provided key and unscrew.

Rotary version (Fig.5): place the disc pad/brush in a green shaft (4), hold the shaft locking button (6) and screw the disc pad on a shaft (Fig. 6). To remove, hold the shaft locking button (6) and unscrew.

### ACCESSORY ASSEMBLY 291.390

Push the shaft-locking button (6) (Fig. 1) and screw the extension on a tool shaft (Fig.13).

Use only the accessories listed:

- 9.BF3030 – Nylon brush hard
- 9.BF3015 – Nylon brush soft
- 9.BF3000 – Horsehair brush
- 997.001 – Sanding backing Pad  $\varnothing$ 30
- 995.001 – Polishing backing Pad  $\varnothing$ 30

### BUFFER PAD (Not provided)



**CAUTION:** Accessories must be rated for at least the speed recommended on the tool-warning label.

**Accessories running over rated speed can fly apart and cause injury. Accessory ratings must always be above tool speed as shown on tool nameplate.**

Assemble the buffer pad (3) (Fig. 7) on the velcro surface of the disc pad (4). Press the buffer pad to attach it to the disc pad.

### BATTERY PACK (Provided or Optional)



**WARNING:** Avoid short circuiting the contacts. Avoid mechanical damage of the battery pack. Do not open or disassemble. Advice on protection against fire and explosion. Keep away from open flames, hot surfaces and sources of ignition.

Temperature in excess of 45°C reduce the performance of the battery pack. Avoid extended exposure to heat or sunshine. Storage at room temperature (approx. 20°C) at approx. 20~60% of the nominal capacity. Every six months of storage, charge the battery pack as normal.

### Intended use

The battery pack 9HB125LT/9HB120LT (Fig. 9) is used as the power source for Rupes BIGFOOT iBrid NANO tool HR81M/HR81ML.

### Battery pack 9HB125LT/9HB120LT specifications



**WARNING:** for technical data refer to the label of Battery pack 9HB125LT/9HB120LT.

**WARNING:** to reduce the risk of injury or explosion, never burn or incinerate a tool's battery pack even if it is damaged, dead or completely discharged. When burned, toxic fumes and materials are created.

Model	Chemistry	Voltage (V)	Capacity (Ah)	Energy (Wh)	Weight (kg)
9HB125LT	Lithium Ion	10.8	2,5	27÷27,75	0.183 ±0.005
9HB120LT	Lithium Ion	10.8	2,0	21,6	0.183 ±0.005

**⚠ WARNING: charge Rupes Li-ION Battery pack 9HB125LT/9HB120LT only in the Rupes Li-ION Battery Charger 9HC120LT. Other types of batteries may cause personal injury and damage.  
This tool's battery pack and charger are not compatible with NiCd or NiMH systems.**

#### When to charge

Charge your battery tool when convenient for you and your job. The Rupes BIGFOOT iBrid NANO tool Battery pack does not develop "memory" when charged after only a partial discharge. It is not necessary to run down the battery tool pack before placing it on the charger. Use the led Battery pack 9HB125LT/9HB120LT level indication on the Rupes BIGFOOT iBrid NANO tool HR81M/HR81ML to determine when to charge the Rupes Battery pack.

#### Charge the battery pack 9HB125LT/9HB120LT

The battery pack(s) contained in the kit shall be charged before use. The provided battery is charged <30%. In order to charge connect the Li-ion battery with a charging station 9HC120LT till the charging is completed.

**⚠ ⚡ WARNING: For your personal safety, READ and UNDERSTAND the instruction manual of charging station 9HC120LT before using.**

#### Assemble battery pack 9HB125LT/9HB120LT

**⚠ WARNING: Before (dis)assembling the tool assure that the speed regulation Knob (2) is in OFF position.**

In order to assemble the battery pack push two clips (Fig. 9) at the same time and insert the battery pack in the tool till it is fixed. In order to disassemble push two clips at the same time and extract the battery from a tool (Fig. 10).

#### POWER SUPPLY (provided or optional)

**⚠ ⚡ WARNING: For your personal safety, READ and UNDERSTAND the instruction manual of Power supply 9HP120LT before using.**

#### Assemble power supply 9HP120LT (10)

**⚠ WARNING: Before (dis)assembling the tool assure that the speed regulation Knob (2) is in OFF position.**

In order to assemble the power supply block push two clips (Fig. 11) at the same time and insert the power supply block in the tool till it is fixed. In order to disassemble push two clips at the same time and extract the power supply block from a tool (Fig. 12)

#### BEFORE STARTING THE TOOL

Ensure that :

- the electric system conforms with the characteristics indicated on a label and the power supply cable and plug are in perfect condition (when the tool is used with the Power Supply 9HP120LT)
- the battery pack is in a perfect condition and is charged (see Battery pack level indication)
- the ON/OFF switch works properly with the Power supply 9HP120LT/battery pack disconnected;
- all the parts of the tool have been assembled in the proper manner and that there are no signs of damage;
- the ventilation slots are not obstructed.

#### STARTING AND STOPPING

- **Starting:** rotate the potentiometer knob (2) and set up the speed from 1 to 5 value. Push the switch lever (7) towards the body of the tool.
- **Stopping:** release the lever and rotate the potentiometer knob until OFF position.

**⚠ WARNING: if a case of unusual vibration, or mismatching of the backing pad is present after a start of the tool, switch-off the tool immediately and eliminate the fault.**

#### FAILURE TO START

If a tool is failed to start, in a case of:

- 1) **the machine is used with a battery** – assure that the battery pack is charged (see Battery pack level indication (9)); assure the battery was inserted correctly;
- 2) **the machine is used with a power supply** – check to make sure the prongs on the cord plug are making good contact in the outlet; check if the current is present in the plug. Also, check for blown fuses or open circuit breakers in the line.

#### NOISE EMISSION VALUES

Noise emission values determined according to EN 62841-1:



**Use ear protection**


	HR81M / HR81ML	
SOUND PRESSURE LEVEL	db (A)	70
SOUND POWER LEVEL	db (A)	80
UNCERTAINTY (K)	db (A)	3

#### VIBRATION EMISSION VALUES


Vibration total values ah (triax vector sum) and uncertainty K determined according to EN 62841-1:

	HR81M	HR81ML
3 AXIS VIBRATION LEVEL (ah)	m/s <sup>2</sup> 2.50	1.85
UNCERTAINTY (K)	m/s <sup>2</sup> 0.28	0.20

Displayed emission values are comparative and are to be employed for a provisional assessment of the operator's risk exposure during the work period. Appropriate evaluation of work period must also include tool's idle and stop periods. These emission values represent the tool's main applications. If the tool is used for other applications, with other accessories, or if it does not undergo regular maintenance, emission values can significantly increase during operations.

 **CAUTION:** The indicated measurements refer to new power tools. Daily usage causes the noise and vibration values to change.

#### MAINTENANCE AND SERVICING

 **WARNING:** To reduce the risk of injury, turn unit off and disconnect it from power source (when machine is connected to a power supply) or battery pack (when machine is connected to a battery pack) before installing and removing accessories, before adjusting or when making repairs. Be sure the switch is in the "OFF" position. An accidental start-up can cause injury.

#### CLEANING

At the end of each work session, or when required, remove any dust from the body of the tool using a soft cloth, paying particular attention to the motor ventilation slots.


#### LUBRICATION

This tool has been lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions. No further lubrication is necessary.

#### REPAIRS

Maintenance and cleaning of the inner parts like ball bearings, gears etc. or others, must be carried out only by an authorized customer service workshop.

#### DISPOSAL (WEEE DIRECTIVE)

 **For EU countries only:** According to the European Directive on Waste from electrical and electronic equipment and its implementation in conformity with national standards, exhausted electrical equipment must be collected separately, in order to be recycled in an environmentally friendly way. The product, when it reaches the end of its life, must not be dispersed in the environment or thrown away as household waste. It must be disposed at authorized recycling centres (contact your local authorities to know where to dispose of the product according to the law). The correct disposal of the product contributes to the health and preservation of the environment. Illegal disposal of the product will entail penalties against the offenders.

#### Rupes BIGFOOT iBrid NANO tool Part Numbers:

HR81M	- Short neck Rupes BIGFOOT iBrid NANO tool
HR81ML	- Long neck Rupes BIGFOOT iBrid NANO tool
9HC120LT	- Li-ION Battery Charger
9HB125LT/9HB120LT	- Li-ION Battery pack
9HP120LT	- Rupes BIGFOOT iBrid NANO tool Power Supply

#### EU DECLARATION OF CONFORMITY

We declare on our responsibility that the represented tool is in conformity with the directives:  
**2006/42/EC, 2014/30/EU, 2011/65/EU.**

The tests have been carried out in accordance with standard:

**EN 62841-1:2015 + AC:2015**

**EN 62841-2-3:2021 + A11:2021**

**EN 62841-2-4:2014 + AC:2015**

**EN 55014-1:2021**

**EN 55014-2:2021**

**EN 61000-3-2:2019 + A1:2021**

**EN 61000-3-3:2013 + A1:2019 + A2:2021**

**IEC EN 63000:2018**

Vermezzo (MI), 14/06/2022

Technical file at:

RUPES S.p.A.

Via Marconi, 3/A - Loc. Vermezzo  
20071 - VERMEZZO CON ZELO (MI) - Italy

**RUPES**<sup>®</sup> S.p.A. a socio unico  
The President  
  
G. Valentini



**RUPES S.p.A. a socio unico**

Via Marconi, 3/A - Loc. Vermezzo  
20071 VERMEZZO CON ZELO (MI) - Italy  
Tel. +39 02 946941 - Fax +39 02 94941040  
e-mail: [info\\_rupes@rupes.it](mailto:info_rupes@rupes.it) - web: <http://www.rupes.com>

Uff. Vendite e assistenza clienti:  
tel. + 39 02 94694312

Sede legale:  
Viale Bianca Maria 13 - 20122 MILANO - ITALY