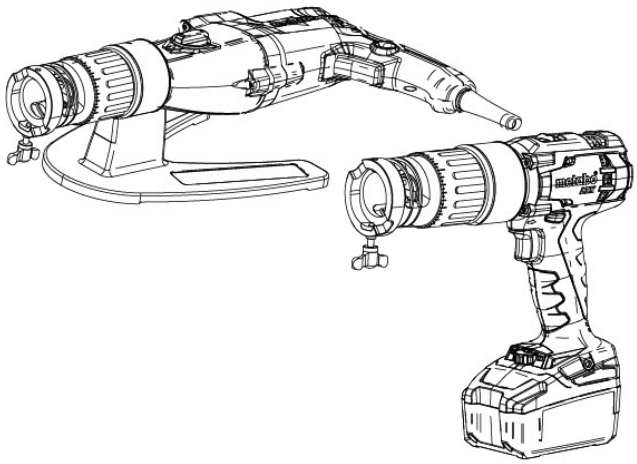
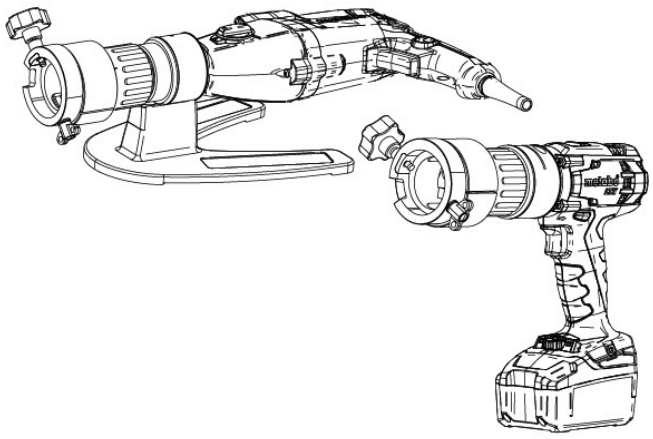
# RPG ONE (Akku/Kabel) / 1.5 (Akku/Kabel)

en **Tube squaring machines**

Translation of original operating instructions and spare parts list





790 036 765 REV 02 | 2309

orbitalum

An ITW Company

# Table of Contents


**1 About these instructions ..... 3**

1.1 Warning messages ..... 3

1.2 Further icons and displays ..... 3

1.3 Abkürzungen ..... 4

**2 Information and safety instructions for the owner ..... 5**

2.1 Requirements for the owner-operator ..... 5

2.2 Using the machine ..... 5

2.2.1 Proper use ..... 5

2.2.2 Improper use ..... 5

2.2.3 Machine constraints ..... 6

2.2.4 Shutting down the machine ..... 6

2.3 Environmental protection and disposal ..... 6

2.3.1 REACh (Registration, Evaluation, Authorization and Restriction of Chemicals) ..... 6

2.3.2 Chips and gear lubricant ..... 6

2.3.3 Electric tools and accessories ..... 7

2.3.4 Return of accumulators and batteries 7

2.4 Basic safety precautions ..... 7

2.5 Warning signs ..... 11

**3 Description ..... 12**

3.1 RPG ONE Electric ..... 12

3.2 RPG ONE battery ..... 13

3.3 RPG 1.5 Electric ..... 14

3.4 RPG 1.5 battery ..... 15

3.5 Accessories ..... 15

3.5.1 Multifunctional tool (MFW) ..... 16

3.5.2 Tool holder (WH) for beveling and squaring. ..... 17

3.5.3 Stainless steel clamping collars (optional) ..... 18

3.5.4 Warning signs ..... 18

**4 Characteristics and range of applications ..... 19**

4.1 Characteristics ..... 19

4.2 Scope of application ..... 19

**5 Technical specifications ..... 20**

**6 Commissioning ..... 21**

6.1 Scope of delivery ..... 21

6.2 Requirements for connection ..... 21

6.3 Mounting base plate ..... 22

**7 Storage and transport ..... 23**

7.1 Transporting the machine ..... 23

**8 Set-up and mounting ..... 24**

8.1 Determining pipe dimension ..... 26

8.2 Mounting the multifunctional tool (MFW) and tool holder (WH) ..... 26

8.2.1 Mounting multifunctional tool ..... 26

8.2.2 Mounting the tool holder ..... 26

8.3 Mounting/replacing clamping shells ..... 26

8.3.1 Mounting clamping shells ..... 26

8.3.2 Removing clamping shells ..... 28

8.4 Clamping pipe ..... 28

**9 Operation ..... 30**

9.1 Shutdown (including in case of emergency) ... 32

9.2 Setting the speed ..... 33

9.2.1 Setting speed with RPG Electric machines ..... 33

9.2.2 Setting speed with RPG Battery machines ..... 34

9.3 Switching on machine ..... 35

9.3.1 RPG Electric ..... 35

9.3.2 RPG Battery ..... 36

9.4 Infeeding the tool ..... 36

9.4.1 Feed with scale classification ..... 36

9.5 Switching off machine ..... 36

9.6 Processing in confined space ..... 38

9.6.1 Change drive position ..... 38

**10 Maintenance, service and troubleshooting ..... 39**

10.1 Maintenance ..... 39

10.2 What to do if...? – General troubleshooting .... 39

10.3 Servicing/Customer service ..... 40

**11 ERSATZTEILLISTE / SPARE PARTS LIST ..... 42**

11.1 RPG ONE Akku | RPG ONE Cordless ..... 43

11.2 RPG ONE Elektro | RPG ONE Electric ..... 47

11.3 RPG 1.5 Akku | RPG 1.5 Cordless ..... 51

11.4 RPG 1.5 Elektro | RPG 1.5 Electric ..... 55

**12 Declaration of Conformity ..... 59**

# 1 About these instructions

## 1.1 Warning messages

The warnings used in these instructions warn you of injuries or damage to property.

Always read and observe these warnings!



This is a warning icon. It warns against dangers of injury. In order to avoid injuries or death observe the measures marked with a safety sign.

| | WARNING LEVEL | MEANING |
|---|---|---|
| ⚠ | **DANGER** | Imminently hazardous situation that results in death or serious injuries if the safety measures are not observed. |
| ⚠ | **WARNING** | Potentially hazardous situation that may result in death or serious injuries if the safety measures are not observed. |
| ⚠ | **CAUTION** | Potentially hazardous situation that may result in slight injuries if the safety measures are not observed. |
| ❗ | *NOTE!* | Potentially hazardous situation that may result in material damage if the safety measures are not observed. |

## 1.2 Further icons and displays

| SYMBOL | MEANING |
|---|---|
| ℹ | Important information for comprehension. |
| 1. | Request for action in a sequence of actions: Action is required here. |
| 2. | |
| 3. | |
| … | |
| ► | Single request for action: Action is required here. |

## 1.3 Abkürzungen

| ABBREVIATION | MEANING |
|---|---|
| RPG Electric | Tube squaring machine with electric drive |
| RPG Battery | Tube squaring machine with battery drive |
| MFW | Multifunctional tool |
| WH | Tool holder |

# 2 Information and safety instructions for the owner

## 2.1 Requirements for the owner-operator

**Workshop/outdoor/field use:** The owner is responsible for safety in the danger zone around the machine, and should allow only qualified personnel to enter the zone or operate the machine in the danger zone.

**Employee safety:** The safety instructions described in the chapter *Information and safety instructions* of the operating instructions and the general safety instructions described in the safety regulations as well as safety-conscious work with all required safety equipment must be maintained.

## 2.2 Using the machine

### 2.2.1 Proper use

- The machine must only be used for squaring or beveling of pipes made of materials and pipe dimensions, as listed in chapter *Scope of application* of the operating instructions.
- Only use dimension-specific clamping shells by Orbitalum Tools GmbH to fixate the pipes.
- Only operate the machine within the voltages specified on the type plate of the drive (see chapter *Technical specifications* of the operating instructions).
- Only use the RPG motors code 790 038 190 to 790 038 192 as a drive for the electric variants.
- The drive motor may only be used in connection with the machine.
- The machine may only be used on empty, unpressurized pipes and tanks in a non-explosive atmosphere.

Intended use also includes:

- Observing all safety and warning information of these operating instructions and the general tube squaring machine safety information
- Complying with all inspection and maintenance work
- Using it only in its original condition with genuine accessories, spare parts and operating materials
- Processing only those materials named in the operating instructions.

### 2.2.2 Improper use

- Any use that differs from or goes beyond the use and stated limits specified under "Intended use" is improper due to the danger involved.
- The owner shall be responsible for any damage which results from improper use. The manufacturer accepts no liability.
- No tools should be used that have not been authorized by the manufacturer of this machine.
- Tubes of non-metal material should not be processed.
- The removal of safety devices is not permissible.
- Do not misuse the machine.
- The machine is not intended for use by private consumers.
- The machine is intended solely for commercial and industrial use.
- It is impermissible to exceed the technical values specified for normal operation.
- Do not use the machine as a drive for any applications other than that named as the intended use (see chapter *Intended use*).
- Do not clamp machine between legs.

### 2.2.3 Machine constraints

- Keep your working area clean. Disorder or unlit working areas can lead to accidents.
- The workplace can be in the tube preparation, in plant construction or the plant itself.
- Work lighting: min. 300 Lux.
- Operation by one person.
- Climate conditions: Temperature range for machine operation: –15 ° to 40 °C.
- Only operate the machine in dry surroundings (not in misty, rainy or stormy conditions... (< 80% rel. humidity)).

### 2.2.4 Shutting down the machine

EMERGENCY STOP or shutdown function descriptions, *see chapter Shutdown (including in case of emergency)*.

## 2.3 Environmental protection and disposal

### 2.3.1 REACh (Registration, Evaluation, Authorization and Restriction of Chemicals)

The regulation (EC) 1907/2006 of the European Parliaments and of the Council concerning the registration, evaluation, authorization and restriction of chemicals (REACh) regulates the production, placing on the market and use of chemical substances and the mixtures produced from these.

Our products are "products" in the sense of the REACh regulation. In accordance with Article 33 of the REACh regulation, suppliers of products must inform their customers if the supplied product contains a substance specified in the REACh SVHC candidate list exceeding 0.1 percent by mass of the object. On June 27, 2018, lead (CAS: 7439-92-1 / EINECS: 231-100-4) was included in the SVHC candidate list. This inclusion activates an obligation to inform along the chain of delivery.

We herewith inform you that individual partial components of our products contain lead in quantities exceeding 0.1 % by mass of the object as an alloy component in steel, aluminum and copper alloys as well as in solders and capacitors of electronic components. The lead content lies within the exceptions specified in the RoHS Directive.

Since lead as an alloy component is firmly bound and therefore no exposure is to be expected in the case of proper use, no additional specification of its safe use are required.

### 2.3.2 Chips and gear lubricant

Dispose of chips and replaced gear lubricant as prescribed.

### 2.3.3 Electric tools and accessories



*(as per RL 2012/19/EU)*

Used-up power tools and accessories contain a large amount of valuable raw materials and plastics which can be recycled. For this reason:

- Electrical and electronic devices marked with the symbol at the right may not be disposed of with household garbage as per EU directive.
- By actively using the offered return and collection systems, you are doing your part to reuse and recycle used electrical and electronic devices.
- Used electric and electronic devices contain parts which must be handled specially as per EU directives. Separate collection and selective treatment are the basis for environmentally responsible disposal and protection of human health.
- We will properly dispose of devices and machines from us purchased after August 13, 2005, if they are sent to us postage-paid.
- In the case of used devices which may represent a risk to human health or safety due to contamination during use, we have the option of refusing return.
- The user is responsible for disposing of used devices purchased before August 13, 2005. For this purpose, please contact a professional disposal company in your area.
- **Important note for Germany:** Our devices and machines may not be disposed of at communal dumps, as they are only used in the commercial sector.

### 2.3.4 Return of accumulators and batteries



*Cd*

- Accumulators and batteries that are marked with the adjacent symbol may not be disposed of with household garbage as per EU Directive 2006/66/EC.
- In the case of accumulators and batteries containing hazardous materials the chemical sign for the heavy metal contained is specified below the refuse bin: Cd = cadmium Hg = mercury Pb = lead
- **Applies for Germany:** The end consumer is obliged to return defective or used accumulators and batteries to the distributor or to the returning facilities set up to this purpose.

## 2.4 Basic safety precautions

The machine is a state-of-the-art accessory designed for safe use. Remaining risks are described in the following operating instructions. Use other than that described in these instructions can lead to severe personal injury and damage to property. For this reason:

- Warning information must be observed.
- Along with these operating instructions, the general warning information for electric tools (see supplement) also apply, which must always be kept.
- Store all documentation near the machine.
- Generally valid regulations for the prevention of accidents must be observed.
- Observe country-specific regulations, standards and guidelines.
- Use the machine only in perfect technical condition, otherwise have it repaired at a service point. Observe the maintenance specifications (chapter *Maintenance, service and troubleshooting* of the operating instructions).
- Only operate the machine if all the safety equipment such as the restart inhibitor protection and overload protection are in good working order, the viewing window is closed. The machine must have a solid footing. Check whether the substrate is able to take sufficient loads. A radial space requirement/freedom of movement of approx. 1 m around the machine is required for people.

- Report deviations in operating behavior of the machine to the person in charge immediately.
- Use only the dimensions and materials listed in these instructions. Other materials may only be used after consulting with Orbitalum Tools customer service.
- Use only genuine tools, spare parts, operating materials and accessories from Orbitalum Tools.
- Repair and maintenance work on the electrical equipment may only be carried out by a qualified electrician.
- At the end of each working cycle, before transportation, changing tools, cleaning and performing any maintenance, adjustment or repair work, switch off the machine, wait until the machine/tool stops running and pull the mains plug or remove the battery.
- Do not carry the machine by its cable and do not use the cable to pull the power plug out of the socket outlet (except in case of an emergency). Protect the cable against heat, oil and sharp edges (chips).
- Do not reach into the tools while machining is being carried out.
- Ensure that the workpiece is clamped properly.
- Only switch on the machine if a pipe is clamped.
- Do not use the machine in wet surroundings. Only work in surroundings having a roof or canopy.
- In extreme conditions of use, conductive dust can settle inside the machine. For this reason and for better safety, an on-site SPE-PRCD or ground-fault circuit is required between the mains network and the machine, to be installed and tested if necessary by a professional electrician.
- When working with the machine wear safety shoes (as per EN ISO 20345 at least S1), safety goggles (as per DIN EN 166 Class 2, basic strength S), snug-fitting safety gloves (as per DIN EN 388, Class 2 resistance to abrasion, cut resistance Class 3, tear resistance Class 2, perforation resistance Class 3 and as per EN 407 at least Performance level 1 against contact heat) and hearing protection (as per DIN EN 352-4 or comparable).
- Operator age: The respectively valid country-specific laws/standards/guidelines/directives have to be followed.
- Do not use click-in socket outlets and click-in power plugs (blue CEE power plugs) for power connection, otherwise the EMERGENCY STOP does not function. The user must check whether the power plug can be pulled out of the outlet by the cable, *see chapter Shutdown (including in case of emergency) of the operating instructions*.
- Do not use angled power plugs.

***NOTICE!***



**The suggestions for personal safety equipment apply exclusively and specifically to the product described. Other requirements arising from ambient conditions at the location of use, other products or the link with other products are not taken into account. These suggestions do not relieve the owner (employer) of his/her legal duties regarding work-safety and health protection of employees in any way.**

**DANGER**



**If the power cable is damaged, exposed parts can be energized with lethal voltage!**

Fatal electric shock.

► Do not allow the power cable of the motor to be near the machine, especially the cutting tool (MFW).

► Do not operate machine unattended.

► Keep an eye on the power cable at all times when processing is being carried out.

► Keep machine clean and thoroughly remove lubricant residue on the machine.

**DANGER**



**Damaged insulation!**

Fatal electric shock.

► Do **not** screw signs to the drive motor.

► Use adhesive signs.

**DANGER**



**Loss of insulation due to collection of metal dust in the motor housing!**

Fatal electric shock.

► Clean the machine at least once daily with the brush supplied according to its level of soiling.

**DANGER**



**Damaged plug.**

Fatal electric shock.

► Do **not** use adapter plugs together with protectively grounded power tools.

► Connecting plugs of the machine must fit into the outlet

**DANGER**



**Risk of danger through the use of the machine outdoors!**

Fatal electric shock.

► Do **not** use the machine in wet surroundings.

**WARNING**



**The electrical motor can overheat with operation in a 110 V network!**

Severe injury or death.

► Only use the machine in the specified temperature range.

**DANGER**



**Grounded body!**

Fatal electric shock.

► Avoid contact with grounded surfaces such as tubes, heating, cookers or refrigerators.

**DANGER**



**Danger of fire from charging the battery with a wrong charger!**

Severe injury or death.

► Only charge the batteries with chargers recommended by the manufacturer.

**DANGER**



**Danger of fire from short-circuiting between the battery contacts!**

Severe injury or death.

► Keep the unused battery away from paper clips, coins, keys, nails, screws or other small metal objects that may cause a bypassing of the contacts.

**DANGER**



**Defective safety parts due to soiling and wear!**

Bodily injury due to failure of safety parts.

► Do **not** misuse the cable, for example by suspending or carrying the machine by the cable.

► Replace defective safety parts immediately and check daily for proper functioning.

► Have an expert replace defective power cables immediately.

► Clean and maintain machine after every use.

► Keep cable away from heat, oil, sharp edges and moving device parts.

► Check machine daily for externally visible damage and defects and have them remedied by a professional if necessary.

**WARNING**



**Falling objects or tilting and bending tubes!**

Irreversible crushing.

- ► Wear safety shoes (in accordance with EN ISO 20345, at least S1).
- ► Place sufficient supports under the tube.
- ► Transport the machine as shown in chapter *Transporting the machine* of the operating instructions.

**WARNING**



**Danger from vibration and unergonomic, monotonous work!**

Discomfort, fatigue and malfunctioning of the moving apparatus!
Limited response capability and cramps.

- ► Perform "loosening-up" exercises.
- ► Ensure a varied range of activities.
- ► Assume an upright, fatigue-free and comfortable body position during operation

**WARNING**



**Parts thrown off/tool breakage and rotating pipe!**

Various injuries and damage to property.

- ► **No** damaged or deformed cutting tools (MFW) should be used.
- ► Firmly clamp the tube to be processed into the clamping unit.
- ► Change worn tool immediately.
- ► Ensure proper mounting of the cutting tools.
- ► Keep the clamping surface of the clamping shells free of chips and dirt.
- ► The inner diameter of the clamping shells must be identical to the outer diameter of the tube to be machined. The specific inner diameter is specified on the clamping shells. The outer diameter of the tube must be determined.
- ► Avoid tool breakage by ensuring low (measured) infeed (max. clamping thickness: 0.2 mm) and correct speed setting (see operating instructions chap. *Setting the speed*).
- ► Check that the tool holder (WH) and multifunctional tool (MFW) are seated firmly, and tighten if required.
- ► After adjusting the tool, remove the hexagon key from the working area.
- ► Before switching on the machine, always bring the viewing window (on RPG 1.5 only) or the protective flap (on RPG 3.0, RPG 4.5, RPG 8.6 only) to the closed position after removing the chips.

**WARNING**



**Pressing the ON/OFF button unintentionally!**

Various injuries and damage to property.

- ► At the end of each working cycle, before transportation, changing tools, cleaning and performing any maintenance, adjustment or repair work, shut the machine down, wait until the machine/tool stops running and pull the mains plug or remove the battery and cover the battery.

**WARNING**



**Liquid leaking from the battery due to wrong use!**

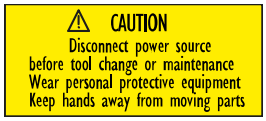
Various injuries and damage to property.

- ► Wash with water if touched accidentally.
- ► If liquid enters the eyes, contact a doctor.

## 2.5 Warning signs

The warning signs and safety signs located on the machine must be observed.

The warning signs are part of the machine. They must not be removed or modified. Missing or illegible warning signs must be replaced immediately.

| IMAGE | POSITION ON MACHINE | MEANING | CODE |
|---|---|---|---|
|  | RPG ONE (battery): Enclosure | Warning: Danger of injury due to rotating tool. | 790 046 196 |
| | RPG 1.5 (battery): Viewing window | WARNING: Danger of injury due to rotating tool. | 790 033 070 |
|  | Adapter | Rule: Wear safety goggles according to DIN EN 166, hearing protection according to DIN EN 352 and snug-fitting safety gloves according to DIN EN 388 and EN 407. Read operating instructions. | 790 086 200 |
|  | Motor (for US and GB version 110/120 V only) | Warning: Pull power plug before tool change or maintenance. Wear protective clothing. Keep hands away from moving parts. | 790 086 199 |

# 3 Description

## 3.1 RPG ONE Electric




| NO. | DESIGNATION |
|---|---|
| 1 | Enclosure |
| 2 | Infeed handle with adjustable scale |
| 3 | Drive motor |
| 4 | Locking screw ON/OFF button |
| 5 | ON/OFF button |
| 6 | Base plate |
| 7 | Tensioning screw |
| 8 | Tool holder |
| 9 | Protection |
| 10 | Cable with power plug |
| 11 | Adapter |

## 3.2 RPG ONE battery




| NO. | DESIGNATION |
|---|---|
| 1 | Enclosure |
| 2 | Infeed handle with adjustable scale |
| 3 | Battery motor |
| 4 | Exchangeable battery |
| 5 | ON/OFF button |
| 6 | Tensioning screw |
| 7 | Tool holder |
| 8 | Protection |
| 9 | Adapter |
| 10 | RPM regulator **NOTICE! Always work in drill setting!** |

## 3.3 RPG 1.5 Electric




| NO. | DESIGNATION |
|---|---|
| 1 | Tensioning screw |
| 2 | Enclosure |
| 3 | Viewing window (adjustable) |
| 4 | Infeed handle with adjustable scale |
| 5 | Drive motor |
| 6 | Locking screw ON/OFF button |
| 7 | ON/OFF button |
| 8 | Base plate (removable) |
| 9 | Clamping screw |
| 10 | Tool holder |
| 11 | Cable with power plug |
| 12 | Protection |
| 13 | Adapter |

## 3.4 RPG 1.5 battery




| NO. | DESIGNATION |
|---|---|
| 1 | Tensioning screw |
| 2 | Viewing window |
| 3 | Infeed handle with adjustable scale |
| 4 | Battery motor |
| 5 | Exchangeable battery |
| 6 | ON/OFF button |
| 7 | Clamping screw |
| 8 | Enclosure |
| 9 | Tool holder |
| 10 | Adapter |
| 11 | Protection |
| 12 | RPM regulator **NOTICE! Always work in drill setting!** |

## 3.5 Accessories

**WARNING**

**Danger due to the use of inadequate accessories and tools which have not been approved by Orbitalum Tools!**

Various injuries and damage to property.

► Use only genuine tools, spare parts, operating materials and accessories from Orbitalum.

***NOTICE!***

► Please check the outer diameter of the pipes before ordering the clamping collars. The various standards sometimes mean a standard size (particularly with pipes according to DIN 2430).

## 3.5.1 Multifunctional tool (MFW)

The standard scope of delivery includes 1 MFW.

With 2 cutting edges and process-specific tool wear protective coating.

Can be used with all the machines of the RPG series.



| ITEM | QUANTITY | CODE |
|---|---|---|
| Multifunctional tool MFW-P-2 | 10 | 790 038 315 |
| Torx screw | 1 | 790 086 220 |

## 3.5.2 Tool holder (WH) for beveling and squaring.

1 tool holder (WH) (code 790 037 152) is included with standard supply.

Fits multifunctional tool. Incl. Torx fastening screw.



| TOOL HOLDER/CODE | | PIPE AD | | MACHINE METHOD | | BEVEL ANGLE |
|---|---|---|---|---|---|---|
| | | RPG ONE | RPG 1.5 | Squaring | Beveling | [°] |
| WH12-I/Standard* | [mm] | 6.0 - 25.4 | 6.0 - 38.1 | x | – | – |
| Code 790 037 152 | [inch] | 0,236 - 1.0 | 0,236 - 1.5 | | | |
| WH12-I | [mm] | 3.0 - 6.0 | 3.0 - 6.0 | x | – | – |
| Code 790 037 161 | [inch] | 0,118 - 0,236 | 0,118 - 0,236 | | | |
| WH12-I/Micro-fittings** | [mm] | – | 3.0 - 21.2 | x | – | – |
| Code 790 037 156 | [inch] | – | 0.118 - 0.84 | | | |
| WH3-V-30 | [mm] | – | max. 35.0 | – | x | 30° |
| Code 790 037 158 | [inch] | – | max. 1.378 | | | |
| WH3-V-35 | [mm] | – | max. 33.7 | – | x | 35° |
| Code 790 037 159 | [inch] | – | max. 1.327 | | | |
| WH3-V-45*** | [mm] | – | max. 33.7 | – | x | 45° |
| Code 790 037 157 | [inch] | – | max. 1.327 | | | |

** Included in the standard scope of delivery.*

*** Only to be used with stainless steel clamping collars for micro-fittings.*

**** Cannot be used with the RPG ONE.*

### 3.5.3 Stainless steel clamping collars (optional)



Not included in scope of delivery.

For deformation-free clamping of tubes.

Extremely resistant.

Ensures precise clamping of tubes and rapid clamping collar change without tool.

Please see our current product catalog for a selection of clamping collar dimensions with code numbers.

### 3.5.4 Warning signs

Warning signs overview with order numbers, *see chapter* Warning signs [▶ 11].

# 4 Characteristics and range of applications

## 4.1 Characteristics

The Tube Squaring Machine RPG ONE, RPG 1.5 (battery) have the following features:

- Pipe end preparation for standard compliant weld seam
- Only one multifunctional tool required for:
  - Various pipe wall thicknesses (up to 3 mm)
  - Various pipe materials (excluding ferritic materials)
- Multifunctional tool:
  - Cutting geometry adjusted to application
  - Multicutter tool
  - Only one screw needed for fastening and mounting the tools
  - Tool coating TiN
- Battery drive:
  - Revolving/removable
  - Motor with high performance and small size
  - No memory effect
  - Single cell monitoring in the battery pack
  - Electronic overload protection with integrated temperature monitoring
  - Robust battery packs with capacity display
  - Low self-discharge
  - Environmentally friendly
  - AIR COOLED technology for short charging time and long service life
- Electric drive:
  - Revolving/removable
  - Speed-regulated electric motor with speed stabilization
  - Start-up protection in order to prevent unintentional restart after reconnection to power source or power restoration after power cut
  - Setting wheel to pre-select the speed
  - Robust Marathon motor
  - Overload protection
  - Cut-off carbon brushes
  - Carbon wear display
- Quick-change system for clamping shells
- Feed with scale (values, *see chapter* Technical specifications [▶ 20] )

## 4.2 Scope of application

| APPLICATION AREA | | RPG ONE (BATTERY): | RPG 1.5 (BATTERY): |
|---|---|---|---|
| Pipe OD min.-max. | [mm] | 3.0* - 25.4 | 3.0* - 38.1 |
| | [inch] | 0.118* - 1.0 | 0.118* - 1.5 |
| Wall thickness max. | [mm] | 2.0 | 3.0 |
| | [inch] | 0,079 | 0,118 |
| Materials | High-alloyed steels (special steel material no. 1.40... - 1.45... according to DIN 17455 and DIN 17456), unalloyed and low-alloyed steels, aluminum. | | |

** Field of application with standard tool holder (Code 790 037 152) as of 6.0 mm/0.236” possible. With special tool holder (Code 790 037 161) as of 3.0 mm/0.118".*

# 5 Technical specifications

| MACHINE MODEL | | RPG ONE | RPG ONE BATTERY | RPG 1.5 | RPG 1.5 BATTERY |
|---|---|---|---|---|---|
| Dimensions | [mm] | 390x70x200 | 252 x 77 x 255 | 400x160x350 | 266 x 87 x 255 |
| (lxwxh) | [inch] | 15.4x2.8x7.9 | 9.9 x 3.0 x 10 | 15.8x6.3x13.8 | 10.5 x 3.4 x 10 |
| Weight (without accessories) | [kg] | 4.140 | 2.880 | 4.700 | 3.440 |
| | [lbs] | 9.13 | 6.35 | 10.36 | 7.58 |
| Versions | [V, Hz] | 230 V, 50/60 Hz<br>110 V, 50/60 Hz<br>120 V, 50/60 Hz | 230 V, 50/60 Hz<br>115 V, 60 Hz | 230 V, 50/60 Hz<br>110 V, 50/60 Hz<br>120 V, 50/60 Hz | 230 V, 50/60 Hz<br>115 V, 60 Hz |
| Power | [W] | 1100 | – | 1100 | – |
| Exchangeable battery voltage | [V] | – | 18 | – | 18 |
| Capacity | [Ah] | – | 4.0 | – | 4.0 |
| Tool speed | [rpm] | 145 - 980 | 0 - 500 | 145 - 980 | 0 - 500 |
| Sound pressure level at the workplace (EN 23741) | [dB (A)] | Approx. 78 | Approx. 78 | Approx. 78 | Approx. 78 |
| Vibration level (EN 60745) | [m/s²] | < 2.5 | < 2.5 | < 2.5 | < 2.5 |
| Feed total | [mm] | 10.0 | 10.0 | 10.0 | 10.0 |
| | [inch] | 0,394 | 0,394 | 0,394 | 0,394 |
| Feed per rotation | [mm] | 3.0 | 3.0 | 3.0 | 3.0 |
| | [inch] | 0,118 | 0,118 | 0,118 | 0,118 |
| Feed per scale line | [mm] | 0.05 | 0.05 | 0.05 | 0.05 |
| | [inch] | 0,002 | 0,002 | 0,002 | 0,002 |

# 6 Commissioning

## 6.1 Scope of delivery

| MACHINE MODEL | | RPG ONE | RPG ONE BATTERY | RPG 1.5 | RPG 1.5 BATTERY |
|---|---|---|---|---|---|
| Tube squaring machine | PCS. | 1 | 1 | 1 | 1 |
| transport case | PCS. | 1 | 1 | 1 | 1 |
| Exchangeable batteries | PCS. | – | 2 | – | 2 |
| Charger | PCS. | – | 1 | – | 1 |
| Tool holder WH | PCS. | 1 | 1 | 1 | 1 |
| Code 790 ... | | ... 037 152 | ... 037 152 | ... 037 152 | ... 037 152 |
| Multifunctional tool MFW Code 790 038 314 | PCS. | 1 | 1 | 1 | 1 |
| Tool key | set | 1 | 1 | 1 | 1 |
| RPG L operating instructions & spare parts list<br>Download links PDF:<br>https://www.orbitalum.com/de/download.html | PDF | 1 | 1 | 1 | 1 |
| General safety information tube squaring machine | PCS. | 1 | 1 | 1 | 1 |
| Base plate for battery machines is optionally available on request (Code 790 037 169) | | | | | |

*We reserve the right to make changes.*

► Check the delivery for completeness and damage caused by transport.

► Report any missing parts or damage caused by transport to your supplier immediately.

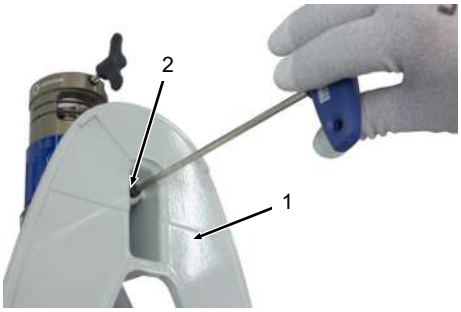
## 6.2 Requirements for connection

The power connection must fulfill the following requirements:

- 1-phase alternating current, protection class II:
  - 230 V, 50/60 Hz
  - 110 V, 50/60 Hz
  - 120 V, 50/60 Hz
  - 230 V, 50/60 Hz EU, battery: 18 V
  - 115 V, 60 Hz US, battery: 18 V
- Fusing at least 10 A
- Residual current circuit breaker

## 6.3 Mounting base plate

Baseplate (1) for battery machines is optionally available on request (Code 790 037 169).




The base plate (1) for the RPG ONE and RPG 1.5 Electric must be mounted to the machine before commissioning.

► Use hexagon bolt SW4x150 (2) to attach base plate to machine.

# 7 Storage and transport

**CAUTION**

**Improper machine storage!**

Various injuries and damage to property.

► Store the machine in its original case and in dry conditions.

**DANGER**

**Fatal electric shock!**

► Before transportation or changing the workplace, switch off the machine, wait until the machine/tool stops running and pull the mains plug. In the case of battery drives remove the battery and cover the battery.

**WARNING**

**During transport, the ON/OFF button could be pressed inadvertently, starting up the machine!**

Various injuries and damage to property.

► Before transportation or changing the workplace, switch off the machine, wait until the machine/tool stops running, pull the mains plug and set the transport lock.

► In the case of battery drives remove the battery and set the transport lock (switch lock) (center setting of the clockwise/counter-clockwise rotation). Cover the battery.

## 7.1 Transporting the machine

The RPG is a portable machine. Special transport aids are not required.

For safe machine transport, hold the machine as shown below.



*RPG ONE Electric and RPG 1.5 Electric*



*RPG ONE Electric and RPG 1.5 Electric*

# 8 Set-up and mounting

**DANGER**

**Machine startup due to unintentionally pressing the ON/OFF button!**

Fatal electric shock.

Various injuries and damage to property.

► At the end of each working cycle, before transportation, changing tools, cleaning and performing any maintenance, adjustment or repair work, switch off the machine, wait until the machine/tool stops running and pull the mains plug. In the case of battery drives remove the battery and cover the battery.

**WARNING**

**Starting up of the machine due to inadvertent actuation of the ON/OFF button!**

Various injuries and damage to property.

► When carrying out a tool change, cleaning, maintenance, adjustment and repair to the machine, **do not** hold it as shown below so that the ON/OFF button is pressed against the workbench or the like (see circle).



*Illustration: ON/OFF button pressed against the workbench*

**WARNING**

**Protruding tool holder!**

Hands may be crushed and the machine damaged.

► Tool holder with MFW must not protrude over the edge of the tool holder.

► Before switching on the machine ensure that sufficient distance is between the MFW and the housing.

► Before switching on the machine, always bring the viewing window (on RPG 1.5 only) or the protective flap (on RPG 3.0, RPG 4.5, RPG 8.6 only) to the closed position after removing the chips.

**WARNING**

**Danger from falling machine and pipe!**

Irreversible crushing.

► Check machine condition and secure it to prevent it falling.

► Ensure that the machine has a solid footing and stands on a sufficiently stable substrate.

► Place sufficient supports under the tube.

**WARNING**



**Fingers jammed between the clamping unit, clamping shells and tube!**

Irreversible crushing.

- ► Do not place fingers between the clamping unit, clamping shells and tube.
- ► At the end of each working cycle, before transportation, changing tools, cleaning and performing any maintenance, adjustment or repair work, shut the machine down, wait until the machine/tool stops running and pull the mains plug or remove the battery and cover the battery.
- ► Always bring the viewing window (on RPG 1.5 only) or protective flap (on RPG 3.0, RPG 4.5, RPG 8.6 only) to the closed position after removing the chips.

**WARNING**



**The MFW multifunctional tool may be damaged by wrong inserting of a tube!**

Damage to tool.

- ► Before clamping the tube, ensure sufficient distance between the MFW and the tube.

**WARNING**



**Parts thrown off/tool breakage and rotating pipe!**

Various injuries and damage to property.

- ► No damaged or deformed cutting tools (MFW) should be used.
- ► Firmly clamp the tube to be processed into the clamping unit.
- ► Change worn tool immediately.
- ► Ensure proper mounting of the cutting tools.
- ► Keep the clamping surface of the clamping shells free of chips and dirt.
- ► The inner diameter of the clamping shells must be identical to the outer diameter of the tube to be machined. The specific inner diameter is specified on the clamping shells. The outer diameter of the tube must be determined.
- ► Avoid tool breakage by ensuring low (measured) infeed (max. clamping thickness: 0.2 mm) and correct speed setting (see chap. *Setting the speed*).
- ► Check that the tool holder (WH) and multifunctional tool (MFW) are seated firmly, and tighten if required.
- ► After adjusting the tool, remove the hexagon key from the working area.

**WARNING**



**Flying hot and sharp chips, pipe surfaces, cutting edges and tools!**

Danger of injury to eyes and hands.

- ► Do not reach into the rotating tool during working.
- ► Never work without an installed cover hood or protection.
- ► Wear recommended protective clothing, as described in chap. Basic safety precautions [▸ 7].
- ► At the end of each working cycle, switch off the machine, wait until the machine/tool stops running and pull the mains plug or remove the battery. Remove chips with snug-fitting safety shoes (according to DIN EN 388 and EN 407) with a suitable tool (e.g. tongs).
- ► Make sure that the protective flap is closed.

# 8.1 Determining pipe dimension

1. Determine the pipe dimension to be processed.
2. Select tool holder, multifunctional tool and clamping shells (*see chapter* Accessories [▶ 15]).

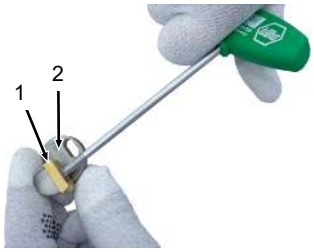
***NOTICE!***

► Please check the outer diameter of the pipes before ordering the clamping collars. The various standards sometimes mean a standard size (particularly with pipes according to DIN 2430).

# 8.2 Mounting the multifunctional tool (MFW) and tool holder (WH)

## 8.2.1 Mounting multifunctional tool

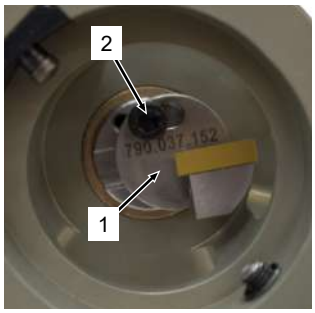
► Screw multifunctional tool (1) to tool holder (2) with Torx screwdriver.




## 8.2.2 Mounting the tool holder

1. Insert tool holder (1) into the front of the groove guide with multifunctional tool and position according to desired pipe outer diameter.
2. Tighten screw (2) of tool holder with hexagon bolt.
3. Check that the tool holder (WH) and multifunctional tool (MFW) are seated firmly, and tighten if required.

⇨ The tool holder is now mounted with multifunctional tool.

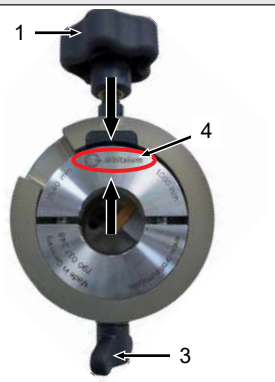



# 8.3 Mounting/replacing clamping shells

## 8.3.1 Mounting clamping shells

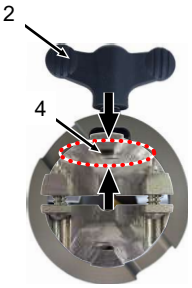
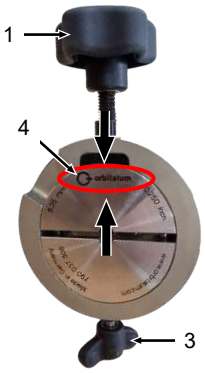
| RPG ONE (BATTERY) | RPG 1.5 (BATTERY) |
|---|---|

► Select correct clamping shell according to the pipe dimension (*see chapter* Stainless steel clamping collars (optional) [▶ 18]).

| RPG ONE (BATTERY) | RPG 1.5 (BATTERY) |
|---|---|
|  |  |
| *Clamping shells for pipes* | *Clamping shells for pipes* |

- Compress the clamping shell slightly and insert it into the housing.
  The Orbitalum logo (4) on the clamping shell must correspond with the clamp screw (1) (see arrows).

| | |
|---|---|
| • **Clamping shells for pipes** have to be inserted in such a way that the **Orbitalum logo** (4) is **facing away from the motor**.<br>• **Clamping shells for microfittings** have to be inserted in such a way that the **Orbitalum logo** (4) is **facing toward from the motor**. | • **Clamping shells for pipes** and **clamping shells for microfittings** have to be inserted in such a way that the Orbitalum logo (4) is **facing toward the motor**. |

| | |
|---|---|
|  |  |
| *Clamping shells for microfittings* | *Clamping shells for microfittings* |




*Clamping shells for microfittings, logo side*

***NOTICE!***

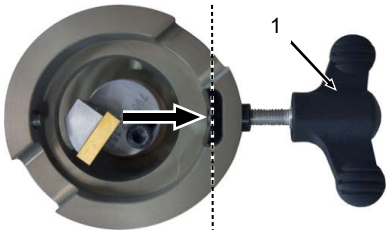
**The clamping shell is correctly installed when it clicks into place. If the clamping shell does not click into place, you can adjust it by gently turning the clamping shell.**

| | |
|---|---|
| ► **RPG ONE:** Tighten the clamping shell with the tensioning screw (2). | ► **RPG 1.5:** Tighten clamping shell using the tensioning screw (1) and the clamping screw (3). |

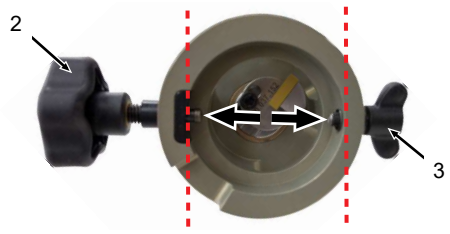
=> The clamping shell is now correctly inserted.

### 8.3.2 Removing clamping shells

1. Disassemble the tensioning screw:
   **RPG ONE (battery):** Screw out the tensioning screw (1) (flush with housing on the inside, see arrow).
   **RPG 1.5 (battery):** Undo the tensioning screw (2) and the clamping screw (3) (flush with housing on the inside, see arrow).
2. Squeeze and remove the clamping shell.




*RPG ONE (battery)*




*RPG 1.5 (battery)*

## 8.4 Clamping pipe

**WARNING**

**Parts thrown off/tool breakage and rotating pipe!**

Various injuries and damage to property.

- ► No damaged or deformed cutting tools (MFW) should be used.
- ► Firmly clamp the tube to be processed into the clamping unit.
- ► Change worn tool immediately.
- ► Ensure proper mounting of the cutting tools.
- ► Keep the clamping surface of the clamping shells free of chips and dirt.
- ► The inner diameter of the clamping shells must be identical to the outer diameter of the tube to be machined. The specific inner diameter is specified on the clamping shells. The outer diameter of the tube must be determined.
- ► Avoid tool breakage by ensuring low (measured) infeed (max. clamping thickness: 0.2 mm) and correct speed setting (see chap. *Setting the speed*).
- ► Check that the tool holder (WH) and multifunctional tool (MFW) are seated firmly, and tighten if required.
- ► After adjusting the tool, remove the hexagon key from the working area.

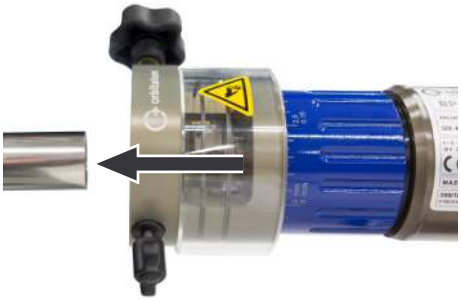
***NOTICE!***

**When using a pipe support, make sure that the pipe and machine axis are in alignment. If not, the pipe end may be processed at an incorrect angle.**

1. Insert pipe in clamping shell of the RPG or, if using an RPG Battery, lead the machine to the pipe and attach with clamping shell.
2. To clamp the pipe, rotate the tensioning screw (2) clockwise until the stop.
   **NOTICE! RPG ONE only: When clamping a microfitting, rotate it in such a way that the projecting section of pipe rests in one of the recesses (1) in the housing.**
3. Check that the pipe is fixated properly.

⇨ The tube can now be machined.

► To release the pipe from the machine, rotate the tensioning screw (2) counter-clockwise until the stop.

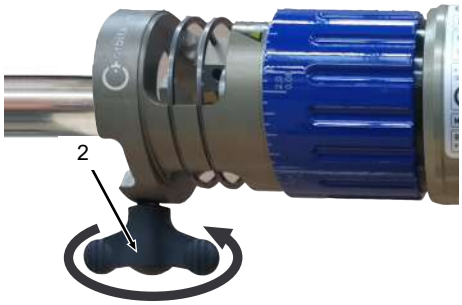





Unscrew tensioning screw (2) RPG 1.5




*Recesses (1) in the housing for microfittings RPG ONE*




*Unscrew tensioning screw (2) RPG ONE*

# 9 Operation

**DANGER**



**Machine startup due to unintentionally pressing the ON/OFF button!**

Fatal electric shock.

Various injuries and damage to property.

- ► At the end of each working cycle, before transportation, changing tools, cleaning and performing any maintenance, adjustment or repair work, switch off the machine, wait until the machine/tool stops running and pull the mains plug. In the case of battery drives remove the battery and cover the battery.

**DANGER**



**Unexpected start up!**

Severe injury or death.

- ► Electric drive: Before connecting the machine to the power supply the ON/OFF switch must be switched off.
- ► Battery drive: When connecting the battery to the motor, do not press the ON/OFF button.

**DANGER**



**Catching of loose/long clothing, long hair or jewelry by rotating machine parts!**

Severe injury or death.

- ► Wear tight-fitting clothing when using the machine.
- ► Secure long hair against being caught.

**WARNING**



**Parts thrown off/tool breakage and rotating pipe!**

Various injuries and damage to property.

- ► **No** damaged or deformed cutting tools (MFW) should be used.
- ► Firmly clamp the tube to be processed into the clamping unit.
- ► Change worn tool immediately.
- ► Ensure proper mounting of the cutting tools.
- ► Keep the clamping surface of the clamping shells free of chips and dirt.
- ► The inner diameter of the clamping shells must be identical to the outer diameter of the tube to be machined. The specific inner diameter is specified on the clamping shells. The outer diameter of the tube must be determined.
- ► Avoid tool breakage by ensuring low (measured) infeed (max. clamping thickness: 0.2 mm) and correct speed setting (*see chapter* Setting the speed [▶ 33]).
- ► Check that the tool holder (WH) and multifunctional tool (MFW) are seated firmly, and tighten if required.
- ► After adjusting the tool, remove the hexagon key from the working area.

**WARNING**



**Danger from falling machine and pipe!**

Irreversible crushing.

- ► Check machine condition and secure it to prevent it falling.
- ► Ensure that the machine has a solid footing and stands on a sufficiently stable substrate.
- ► Place sufficient supports under the tube.

**WARNING**



**Fingers jammed between the clamping unit, clamping shells and tube!**

Irreversible crushing.

- ► Do not place fingers between the clamping unit, clamping shells and tube.
- ► At the end of each working cycle, before transportation, changing tools, cleaning and performing any maintenance, adjustment or repair work, shut the machine down, wait until the machine/tool stops running and pull the mains plug or remove the battery and cover the battery.
- ► Always bring the viewing window (on RPG 1.5 only) or protective flap (on RPG 3.0, RPG 4.5, RPG 8.6 only) to the closed position after removing the chips.

**WARNING**



**Body parts can get caught between the cutting tool and the pipe!**

Severe injury.

- ► **Do not** put body parts between the cutting tool and the pipe.

**WARNING**



**Flying hot and sharp chips, pipe surfaces, cutting edges and tools!**

Danger of injury to eyes and hands.

- ► Do not reach into the rotating tool during working.
- ► Never work without an installed cover hood or protection.
- ► Wear recommended protective clothing, as described in chapter Basic safety precautions [▶ 7].
- ► At the end of each working cycle, switch off the machine, wait until the machine/tool stops running and pull the mains plug or remove the battery. Remove chips with snug-fitting safety shoes (according to DIN EN 388 and EN 407) with a suitable tool (e.g. tongs).
- ► Ensure that the cover hood or protection is functional.

**CAUTION**



**Restarting the machine after blockage!**

Various injuries and damage to property.

- ► In case of blockage, always disconnect the machine from the power supply before eliminating the problem. In the case of battery drives remove the battery.
- ► If necessary, remove tensioned parts before restarting the machine.

**CAUTION**



**A non-right-angled tube end can damage the tool with low distance between the cutting edge and the tube end!**

Damage to tool.

- ► Before switching on the machine ensure that the tool has sufficient axial distance around the complete tube circumference.
- ► Approach the rotating tool only with a low feed rate (max. 0.2 mm/rotation).
- ► *See the chapter* Maintenance, service and troubleshooting [▶ 39]

**CAUTION**



**RPG Battery:**

**If the tool hooks into the pipe during processing and the ON/OFF button remains pressed, the drive may become damaged (due to overheating)!**

- ► Immediately release ON/OFF button and detach machine from pipe.

**CAUTION**



**RPG Battery:**

**If the speed is reduced too quickly during processing, the pipe can become hooked and the tool stop!**

- ► Always reduce feed evenly.

# 9.1 Shutdown (including in case of emergency)

**WARNING**

**EMERGENCY STOP function not available by unplugging the power plug!**

Various injuries and damage to property.

- ► **Do not** use angled power plugs.
- ► **Do not** use click-in socket outlets and click-in power plugs (blue CEE power plugs) for power connection, otherwise the EMERGENCY STOP does not function. The user must check whether the power plug can be pulled out of the outlet by the cable.
- ► Only use genuine spare parts from Orbitalum Tools.
- ► Ensure free access to the power plug.
- ► Remove from the danger zone until the machine stops.
- ► A radial space requirement/freedom of movement of approx. 2 m around the machine is required for people.

In order to be able to stop the machine (including in an emergency), carry out respective step and immediately remove from danger zone until the machine comes to a halt:

With the Electric variant:

**If the locking button (1) is not activated:**

► Release the ON/OFF button (2) (also for battery).

**If the locking button (1) is activated:**

► Press and release the ON/OFF button (2)

**If the ON/OFF button (2) does not function:**

► Unplug the power plug, or leave the danger zone as quickly as possible and then unplug the power plug.




*RPG Electric*

With the battery variant:

► Release the ON/OFF button (3).




*RPG Battery*

## 9.2 Setting the speed

The RPG motors have 2 gear steps. It is recommended to only work with gear step 1.

### 9.2.1 Setting speed with RPG Electric machines

***NOTICE!***

**The machining behavior can be influenced by the speed.**

► Do not operate motor in pulse setting.

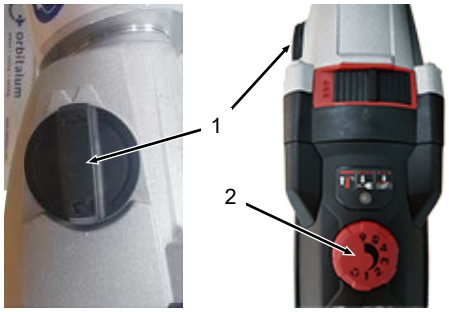
With the RPG Electric machines the gear step is preset via the RPM regulator (1).
Depending on the pipe outer diameter, the setting wheel (2) can be used for fine adjustments:

**Increasing the speed:**

► Increase speed via setting wheel (2).

**Decreasing the speed:**

► Reduce speed via setting wheel (2).




| GUIDE VALUES FOR SPEED (N) | EXTERIOR PIPE Ø OD | | SPEED SETTING WHEEL (2) FINE ADJUSTMENT |
|---|---|---|---|
| **[Machine model]** | **[mm]** | **[inch]** | **[level]** |
| RPG ONE | 3.18 | 0,125 | 3 |
| RPG ONE | 6.35 | 0,250 | 2 |
| RPG ONE | 12.70 | 0,500 | 1 |
| RPG ONE | 25.40 | 1,000 | 1 |
| RPG 1.5 | 3.18 | 0,125 | 3 |
| RPG 1.5 | 6.35 | 0,250 | 2 |
| RPG 1.5 | 12.70 | 0,500 | 1 |
| RPG 1.5 | 38.10 | 1,500 | 1 |

## 9.2.2 Setting speed with RPG Battery machines

With the RPG Battery machines the speed level is finely set via the speed controller (1).

***NOTICE!***

**The deeper the ON/OFF button is pressed, the higher the speed.**

**The machining behavior can be influenced by the speed.**

**When processing pipes, the speed can be reduced or influenced and can be adjusted with the ON/OFF button.**

**The larger the tube diameter the lower the speed must be set, to gain optimal cutting conditions.**

**Adjusting the speed:**

► Using ON/OFF button (1).




**Increasing the speed:**

► Press ON/OFF button (1) deeper.

**Decreasing the speed:**

► Release ON/OFF button (1).

***NOTICE!***

**The battery drives have a torque pre-selection.**

► Only work at maximum torque (max. Nm)!



# 9.3 Switching on machine

## 9.3.1 RPG Electric

1. Check whether the viewing window is closed; if necessary, close it.
2. Set desired speed via RPM regulator (1).
3. Press the ON/OFF button (2).

⇨ The machine starts.





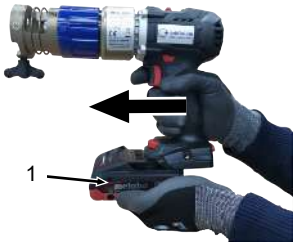


| | | |
|---|---|---|
| ***NOTICE!*** | | ► **Do not** use the locking button as this inhibits the shutdown process, *see chapter* Shutdown (including in case of emergency) [▶ 32] |
| ***NOTICE!*** | | **If the tool chatters after machine start-up, cutting speed is too high.**<br>► Reduce the speed, *see chapter* Setting the speed [▶ 33]. |
| ***NOTICE!*** | | **Do not operate motor in pulse setting.** |

### 9.3.2 RPG Battery

1. Check whether the viewing window is closed; if necessary, close it (for RPG 1.5 only).
2. Connect battery (1) to RPG.
3. Press the ON/OFF button (2).

⇨ The machine starts.







| *NOTICE!* | **If the tool chatters after machine start-up, cutting speed is too high.** |
|---|---|
| | ► Reduce the speed, *see chapter* Setting the speed [▶ 33]. |

## 9.4 Infeeding the tool

### 9.4.1 Feed with scale classification

Each scale line means 0.05 mm infeed. During machining, do not exceed a machining thickness of 0.05 mm.
If it is exceeded, with the RPG Battery, the speed may be reduced or the machine may stop (*see chapter* What to do if...? – General troubleshooting [▶ 39]). Wear recommended protective clothing (see *chapter* Basic safety precautions [▶ 7]).

1. With feed (1) lead the tool to the pipe until the tool is gripped.

   If the tool cutting edge is cutting on the entire circumference of the pipe:
2. Further infeed the tool with an even pressure until the desired processing result is reached.
3. In order to attain a right-angled pipe end, the tool should rotate without infeed after 2 - 3 rotations.




## 9.5 Switching off machine

1. Release the ON/OFF button (1).
   ⇨ The machine stops.
2. Disconnect the mains plug from power source/remove the battery from battery drive
3. Release the tube from the machine (*see chapter* Clamping pipe [▶ 28]).
4. Remove the chips from the housing with suitable tools (tongs) after each machining process.
5. With the RPG 1.5 (Battery) close the viewing window after removing the chips.




*ON/OFF button electric variant*




*ON/OFF button battery variant*

# 9.6 Processing in confined space

For better operation, the setting of the machine can be changed to the pipe in the following way.

## 9.6.1 Change drive position

1. Release screw (1) on back of housing.
2. Turn drive to desired position.
3. Mount screw (1).



# 10 Maintenance, service and troubleshooting

***NOTICE!***



**Some of the tasks named are heavily dependent on use and ambient conditions. The stated cycles are minimum values. In individual cases, different maintenance cycles are possible. To ensure machine safety, have the maintenance performed annually by authorized service points with VDE testing. Should the machine not function as described above, it must also be sent to an authorized service point.**

**DANGER**



**Risk of death from electric shock!**

Non-compliance can result in death or severe injury.

- ► At the end of each working cycle, before transportation, changing tools, cleaning and performing any maintenance, adjustment or repair work, switch off the machine, wait until the machine/tool stops running and pull the mains plug. In the case of battery drives remove the battery and cover the battery.

**DANGER**



**Electrical hazards from improperly assembled electrical system!**

Fatal electric shock.

- ► At the end of each working cycle, before transportation, changing tools, cleaning and performing any maintenance, adjustment or repair work, switch off the machine, wait until the machine/tool stops running and pull the mains plug. In the case of battery drives remove the battery and cover the battery.
- ► Repair and maintenance work on the electrical equipment may only be carried out by a qualified electrician.
- ► Check components for damage, e.g. cables, plugs

## 10.1 Maintenance

| TIME FRAME | ACTIVITY |
|---|---|
| Before beginning work | Check pipe clamping, if the pipe is already mounted to the machine. |
| During every cleaning process | Clean clamping shells and tool holders for MFW. |
| At every tool change | Clean the tool holder and MFW.<br>Remove soiling from the contact surface of the tool holder. |

## 10.2 What to do if...? – General troubleshooting

| MALFUNCTION | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Tool (MFW) hooks in during machining. | Feed too great or battery nearly empty. | ► Dismantle the tool holder and take the pipe out of the machine. |
| | | ► Remove chippings by using a side cutter and file off the recess. |
| | | ► Feed carefully during the next machining. |
| | MFW or WH loose. | ► Tighten the MFW or WH. |
| Exchangeable battery drive of the RPG battery does not run. | Battery completely flat. | ► Charge battery (see the included operating instructions of the charger). |
| | | ► Use replacement battery. |
| | Battery not connected to RPG battery. | ► Connect battery to RPG battery. |
| Tool tends to chatter. | Speed too high. | ► Reduce the speed (*see chapter* Setting the speed [▷ 33]). |

| MALFUNCTION | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Strong tendency to chatter. | Axial or radial play in the components. | ► Check the machine for radial play. |
| | MFW loose. | ► Check that the multifunctional tool (MFW) is seated firmly. |
| The processed pipe is coarse or its burr is too great. | MFW blunt. | ► Replace MFW. |

## 10.3 Servicing/Customer service

The following data are required to order spare parts:

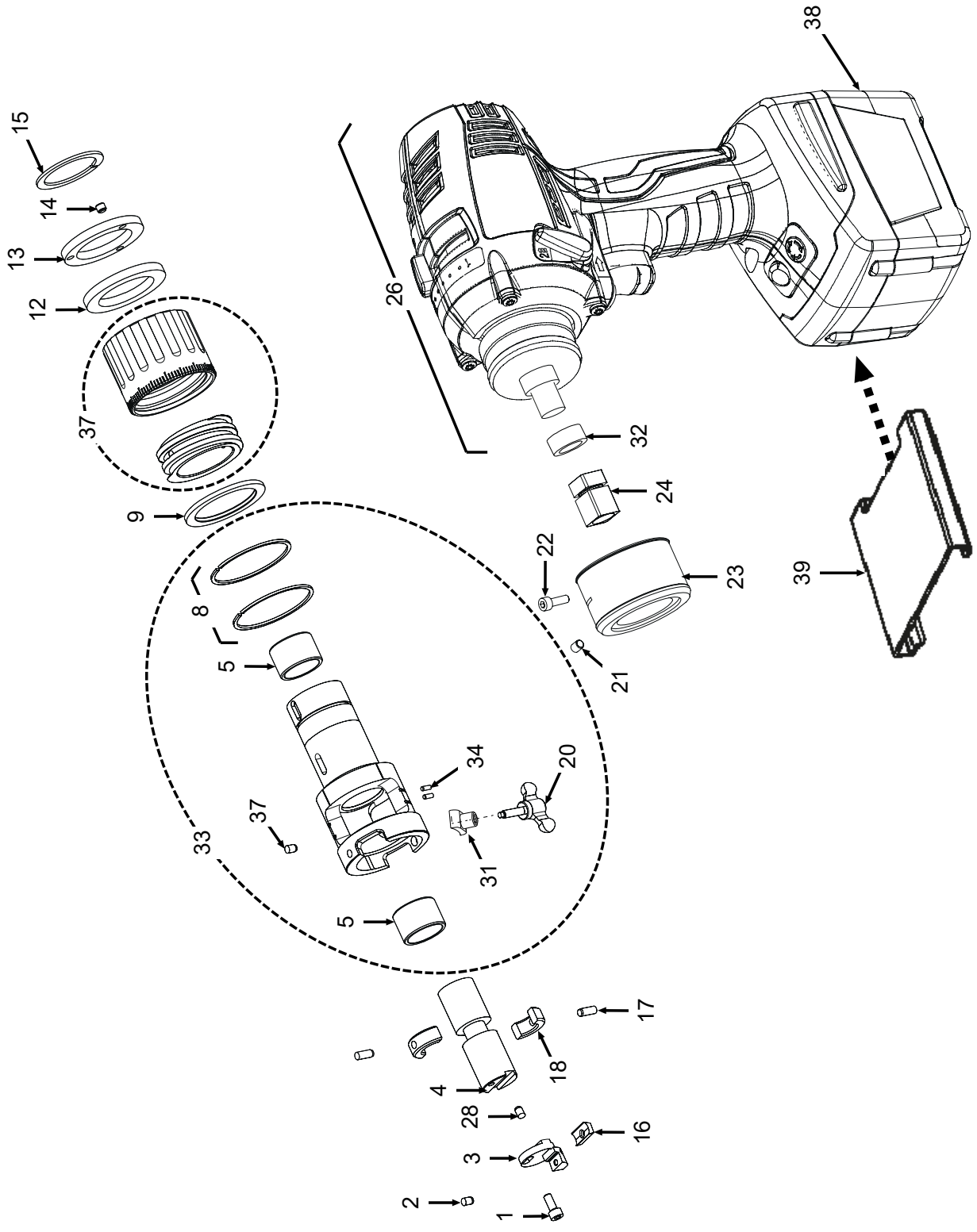
- Machine model: Tube squaring machine
  - RPG ONE (Battery)
  - RPG ONE (Electric)
  - RPG 1.5 (Battery)
  - RPG 1.5 (Electric)
- Machine No.: See type plate

► For ordering spare parts, see the spare part list.

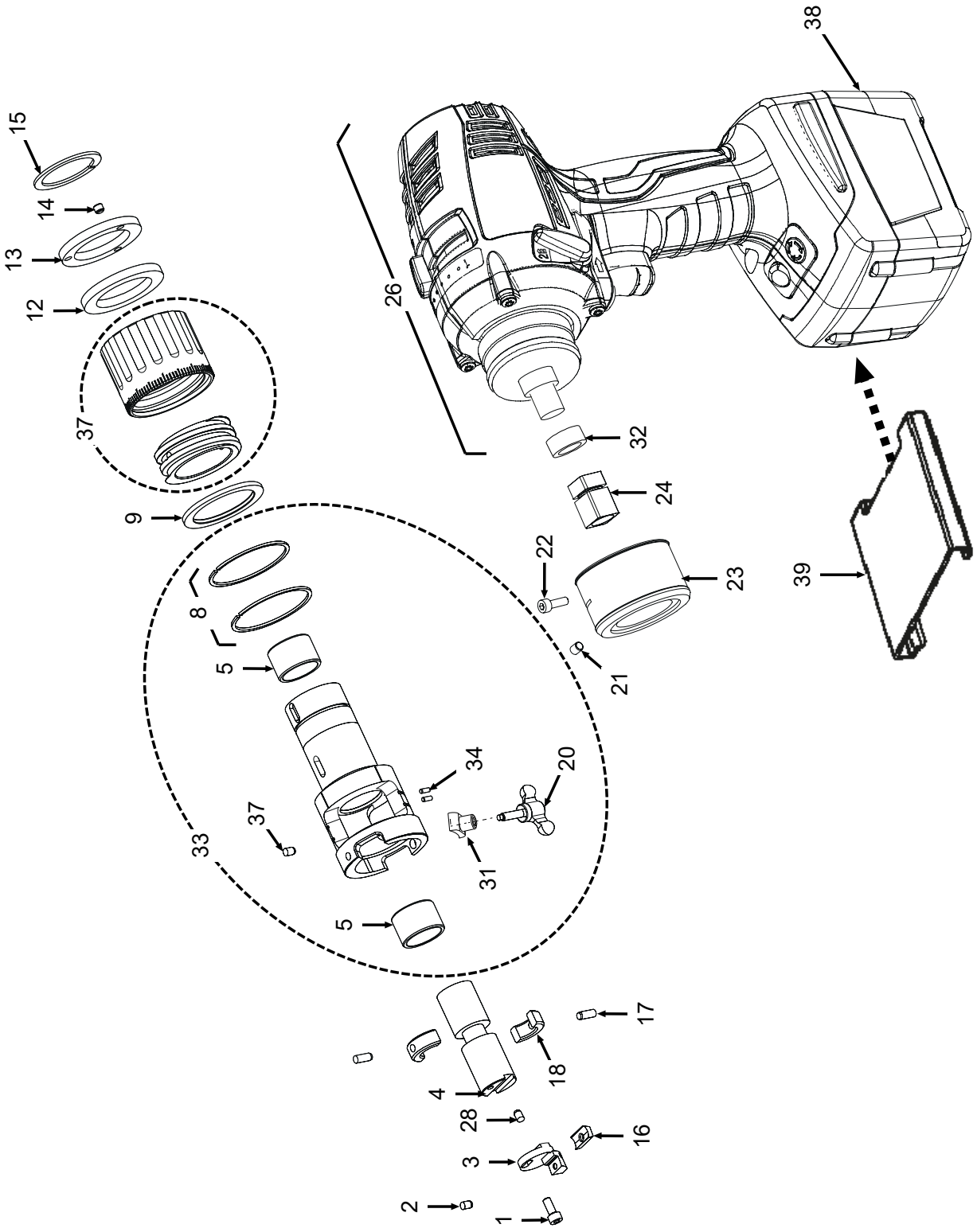
► Contact your local branch directly in order to eliminate problematic situations.

# 11 ERSATZTEILLISTE / SPARE PARTS LIST

## 11.1 RPG ONE Akku | RPG ONE Cordless



| POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION | POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 1 | 305 501 163 | 1 | Zylinderschraube ISO4762-M5x10-8.8<br>Cylinder screw ISO4762-M5x10-8.8 | 15 | 554 158 340 | 1 | Sicherungsring DIN471-40x1.75<br>Circlip DIN471-40x1.75 |
| 2 | 790 086 220 | 1 | Spannschraube TORX M4x10<br>Clamping screw TORX M4x10 | 16 | 790 038 314 | 1 | Multifunktions-Werkzeug MFW-P-2<br>Multifunctional tool MFW-P-2 |
| 3 | 790 037 152 | 1 | Werkzeughalter WH12-I (Standard)<br>Tool holder WH12-I (standard) | 17 | 565 808 316 | 2 | Zylinderstift ISO8735-5M5x16-ST<br>Cylinder pin ISO8735-5M5x16-ST |
| 4 | 790 037 148 | 1 | Werkzeugaufnahme<br>Tool support | 18 | 790 030 132 | 2 | Gleitschale<br>Slide shell |
| 5 | 790 037 144 | 2 | Gleitlagerbuchse<br>Slide bearing bushing | 20 | 790 036 180 | 1 | Klemmschraube<br>Clamping screw |
| 8 | 790 036 406 | 2 | Sprengring SB52<br>Snap ring SB52 | 21 | 445 101 213 | 1 | Gewindestift DIN914-M6x10-45H<br>Grub screw DIN914-M6x10-45H |
| 9 | 790 037 174 | 1 | Lagerring<br>Bearing ring | 22 | 305 501 166 | 1 | Zylinderschraube ISO4762-M5x16-8.8<br>Cylinder screw ISO4762-M5x16-8.8 |
| 12 | 790 037 176 | 1 | Lagerscheibe<br>Bearing plate | 23 | 790 037 149 | 1 | Adapter METABO 1010<br>Adapter METABO 1010 |
| 13 | 790 037 186 | 1 | Druckscheibe<br>Thrust washer | 24 | 790 037 118 | 1 | Vierkantmutter METABO 1010<br>Square nut METABO 1010 |
| 14 | 445 001 210 | 3 | Gewindestift DIN913-M6x5-45H-TUFLOK/FL<br>Grub screw DIN913-M6x5-45H-TUFLOK/FL | | | | |

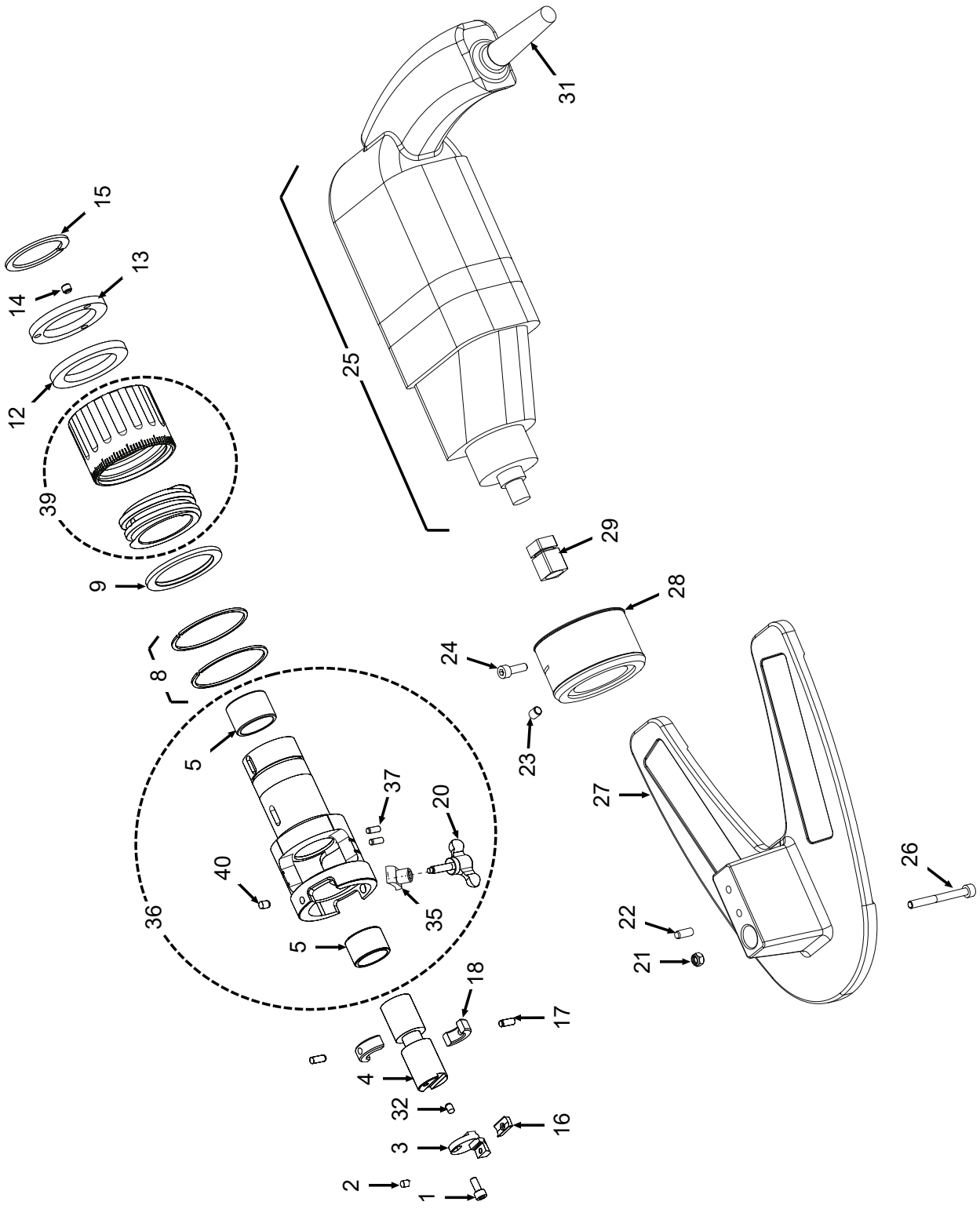

38
15
14
13
12
37
26
32
24
9
22
23
39
8
5
21
34
20
37
33
31
5
17
18
4
28
16
3
2
1

| POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION |
|---|---|---|---|
| 26 | 790 037 530 | 1<br>1 | Akkumotor inkl. Ladegerät und 2 Akkus EU<br>Cordless motor with charger and 2 batteries EU |
| | 790 037 531 | | Akkumotor RPG 120 V 50/60 Hz US<br>Cordless motor RPG 120 V 50/60 Hz US |
| 28 | 445 101 114 | 1 | Gewindestift DIN914-M4x12-45H<br>Grub screw DIN914-M4x12-45H |
| 31 | 790 033 138 | 1 | Gewindeeinsatz<br>Threaded insert |
| 32 | 790 036 407 | 1 | Buchse 19x13<br>Bushing 19x13 |
| 33 | 790 036 410 | 1 | Gehäuse, kpl.<br>Housing, cpl. |
| 34 | 565 808 213 | 2 | Zylinderstift ISO8734-3x6-A-ST<br>Cylinder pin ISO8734-3x6-A-ST |
| 36 | 790 037 125 | 1 | Vorschubeinheit<br>Feed unit |
| 37 | 565 802 331 | 1 | Zylinderstift ISO2338-5M6x10-ST<br>Cylinder pin ISO2338-5M6x10-ST |

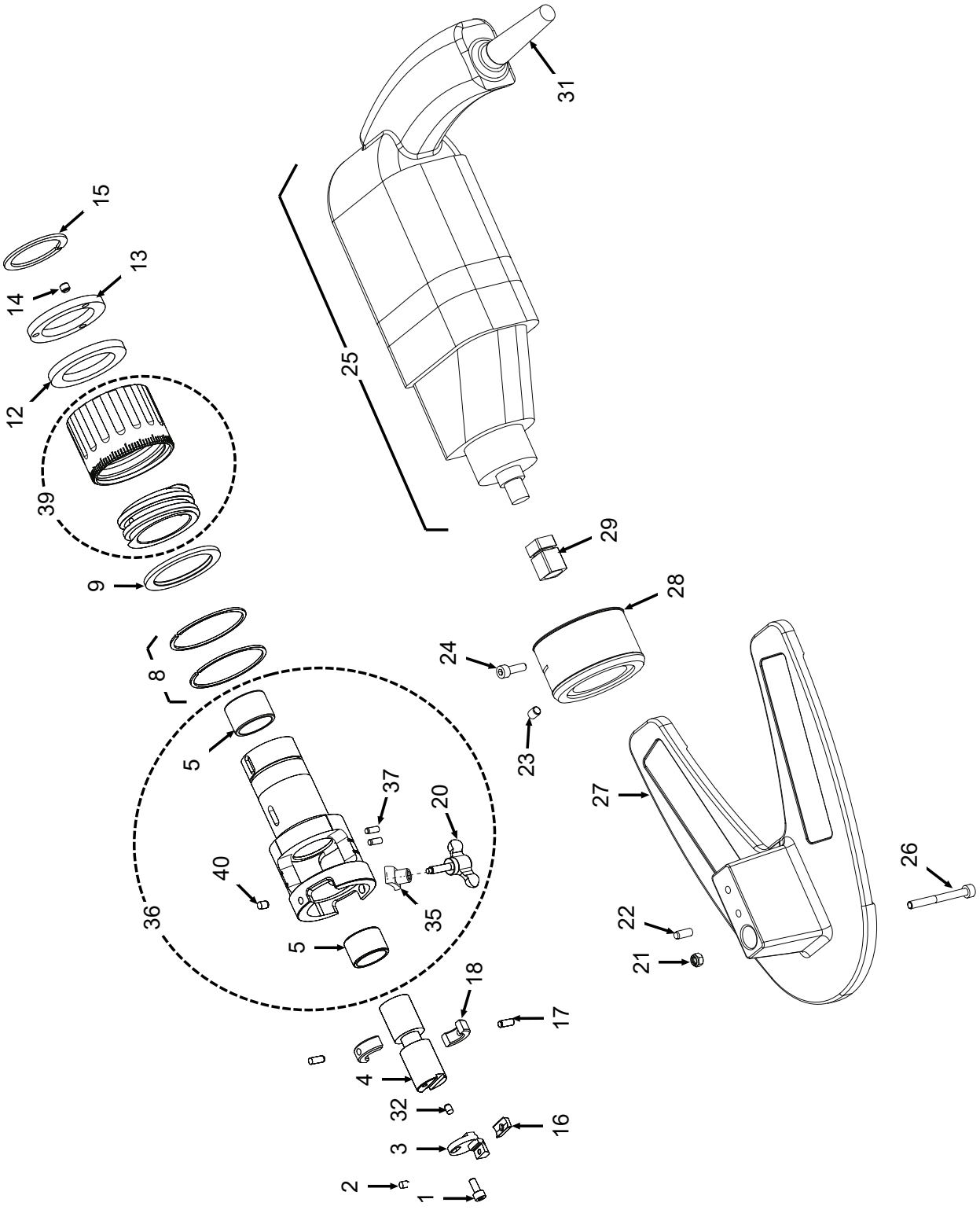
**Ohne Abbildung | Without illustration**

| POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION |
|---|---|---|---|
| 38 | 790 037 488 | 1 | Akku-Pack 4.0 Ah<br>Battery 4.0 Ah |
| 39 | 790 038 235 | 1 | Kappe Akku<br>Cap battery |
| 40 | 790 037 533 | 1 | Akku-Ladegerät EU<br>Battery charger EU |
| | 790 037 534 | | Akku-Ladegerät US<br>Battery charger US |

## 11.2 RPG ONE Elektro | RPG ONE Electric

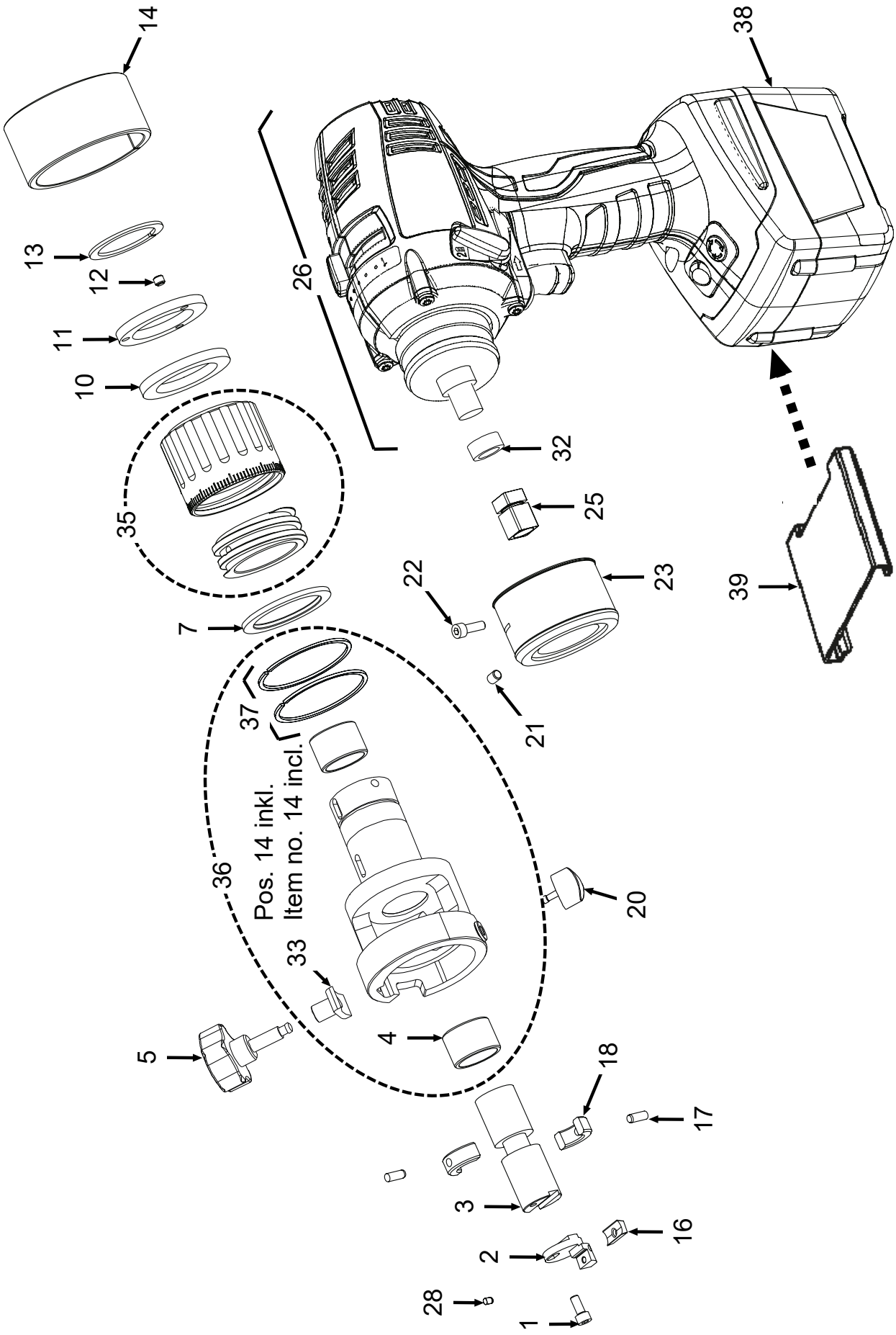


| POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION | POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 1 | 305 501 163 | 1 | Zylinderschraube ISO4762-M5x10-8.8<br>Cylinder screw ISO4762-M5x10-8.8 | 15 | 554 158 340 | 1 | Sicherungsring DIN471-40x1.75<br>Circlip DIN471-40x1.75 |
| 2 | 790 086 220 | 1 | Spannschraube TORX M4x10<br>Clamping screw TORX M4x10 | 16 | 790 038 314 | 1 | Multifunktions-Werkzeug MFW-P-2<br>Multifunctional tool MFW-P-2 |
| 3 | 790 037 152 | 1 | Werkzeughalter WH12-I (Standard)<br>Tool holder WH12-I (standard) | 17 | 565 808 316 | 2 | Zylinderstift ISO8735-5M5x16-ST<br>Cylinder pin ISO8735-5M5x16-ST |
| 4 | 790 037 148 | 1 | Werkzeugaufnahme<br>Tool support | 18 | 790 030 132 | 2 | Gleitschale<br>Slide shell |
| 5 | 790 037 144 | 2 | Gleitlagerbuchse<br>Slide bearing bushing | 20 | 790 036 180 | 1 | Klemmschraube<br>Clamping screw |
| 8 | 790 036 406 | 2 | Sprengring SB52<br>Snap ring SB52 | 21 | 501 607 310 | 1 | Sechskantmutter ISO10511-M5-05-ZN<br>Hexagon nut ISO10511-M5-05-ZN |
| 9 | 790 037 174 | 1 | Lagerring<br>Bearing ring | 22 | 565 808 315 | 1 | Zylinderstift ISO8734-5M6x14-ST<br>Cylinder pin ISO8734-5M6x14-ST |
| 12 | 790 037 176 | 1 | Lagerscheibe<br>Bearing plate | 23 | 445 101 213 | 1 | Gewindestift DIN914-M6x10-45H<br>Grub screw DIN914-M6x10-45H |
| 13 | 790 037 186 | 1 | Druckscheibe<br>Thrust washer | 24 | 305 501 166 | 1 | Zylinderschraube ISO4762-M5x16-8.8<br>Cylinder screw ISO4762-M5x16-8.8 |
| 14 | 445 001 210 | 3 | Gewindestift DIN913-M6x5-45H-TUFLOK/FL<br>Grub screw DIN913-M6x5-45H-TUFLOK/FL | | | | |

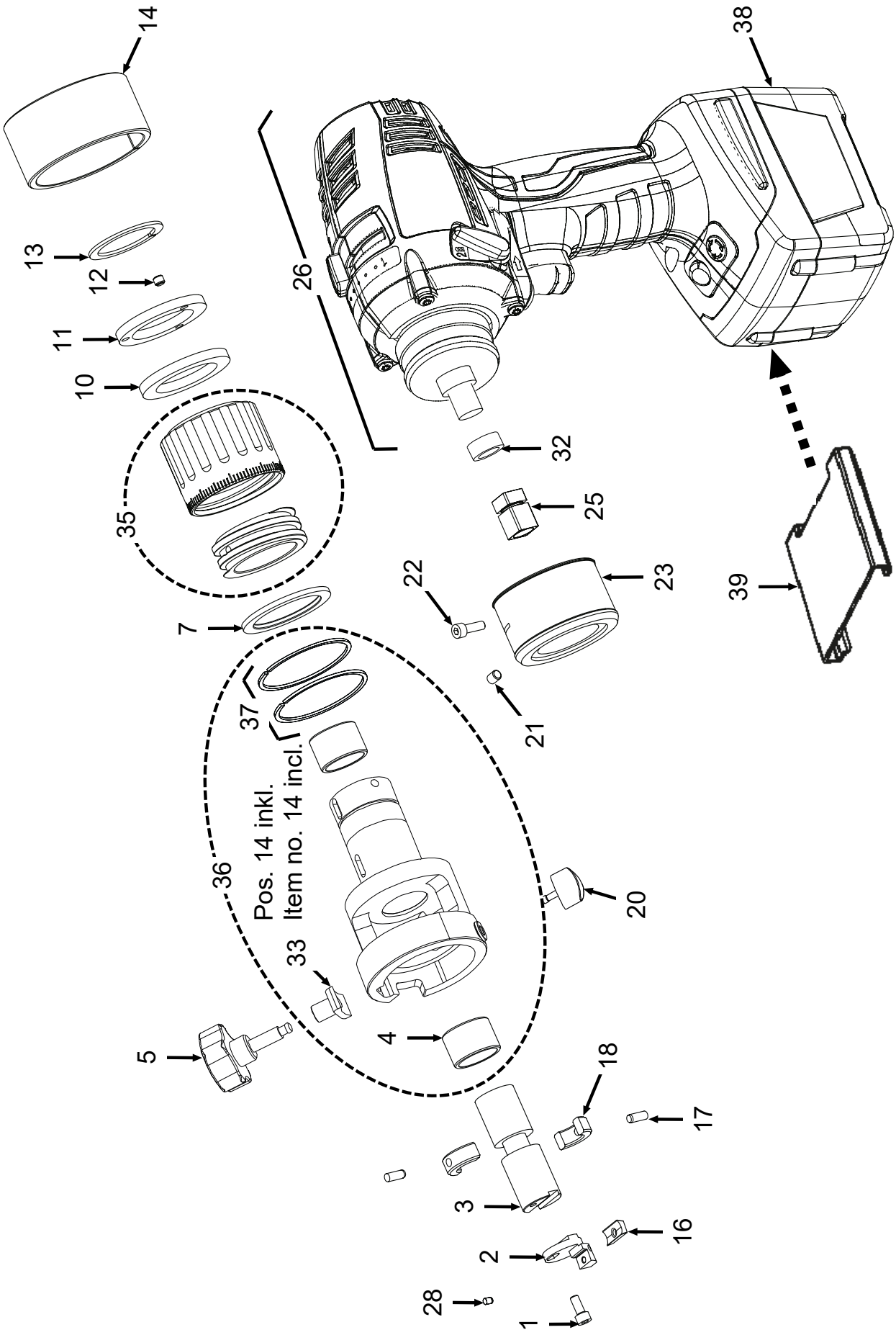

31
25
15
13
14
12
39
9
29
28
24
8
5
23
27
37
20
40
35
36
5
26
22
21
18
17
4
32
16
3
2
1

| POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION | POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 25 | 790 038 190 | 1 | RPG Motor, 230 V, 50/60 Hz EU<br>RPG motor, 230 V, 50/60 Hz EU | 36 | 790 036 410 | 1 | Gehäuse, kpl.<br>Housing, cpl. |
| | 790 038 191 | 1 | RPG Motor, 120 V, 50/60 Hz US<br>RPG motor, 120 V, 50/60 Hz US | 37 | 565 808 213 | 2 | Zylinderstift ISO8734-3x6-A-ST<br>Cylinder pin ISO8734-3x6-A-ST |
| | 790 038 192 | 1 | RPG Motor, 110 V, 50/60 Hz GB<br>RPG motor, 110 V, 50/60 Hz GB | 39 | 790 037 125 | 1 | Vorschubeinheit<br>Feed unit |
| 26 | 305 601 182 | 1 | Zylinderschraube ISO4762-M5x50/22-8.8-ZN<br>Cylinder screw ISO4762-M5x50/22-8.8-ZN | 40 | 565 802 331 | 1 | Zylinderstift ISO2338-5M6x10-ST<br>Cylinder pin ISO2338-5M6x10-ST |
| 27 | 790 037 171 | 1 | Grundplatte, kpl.<br>Base plate, cpl. | – | 790 038 089 | 4 m | Kabel mit Stecker 230V, 4m<br>Cable with plug 230V, 4m |
| 28 | 790 037 149 | 1 | Adapter METABO 1010<br>Adapter METABO 1010 | | | | |
| 29 | 790 037 118 | 1 | Vierkantmutter METABO 1010<br>Square nut METABO 1010 | | | | |
| 31 | 790 048 225 | 1 | SBE 1100 Plus Kabelschutzschlauch<br>SBE 1100 Plus cable protective hose | | | | |
| 32 | 445 101 114 | 1 | Gewindestift DIN914-M4x12-45H<br>Grub screw DIN914-M4x12-45H | | | | |
| 35 | 790 033 138 | 1 | Gewindeeinsatz<br>Threaded insert | | | | |

## 11.3 RPG 1.5 Akku | RPG 1.5 Cordless

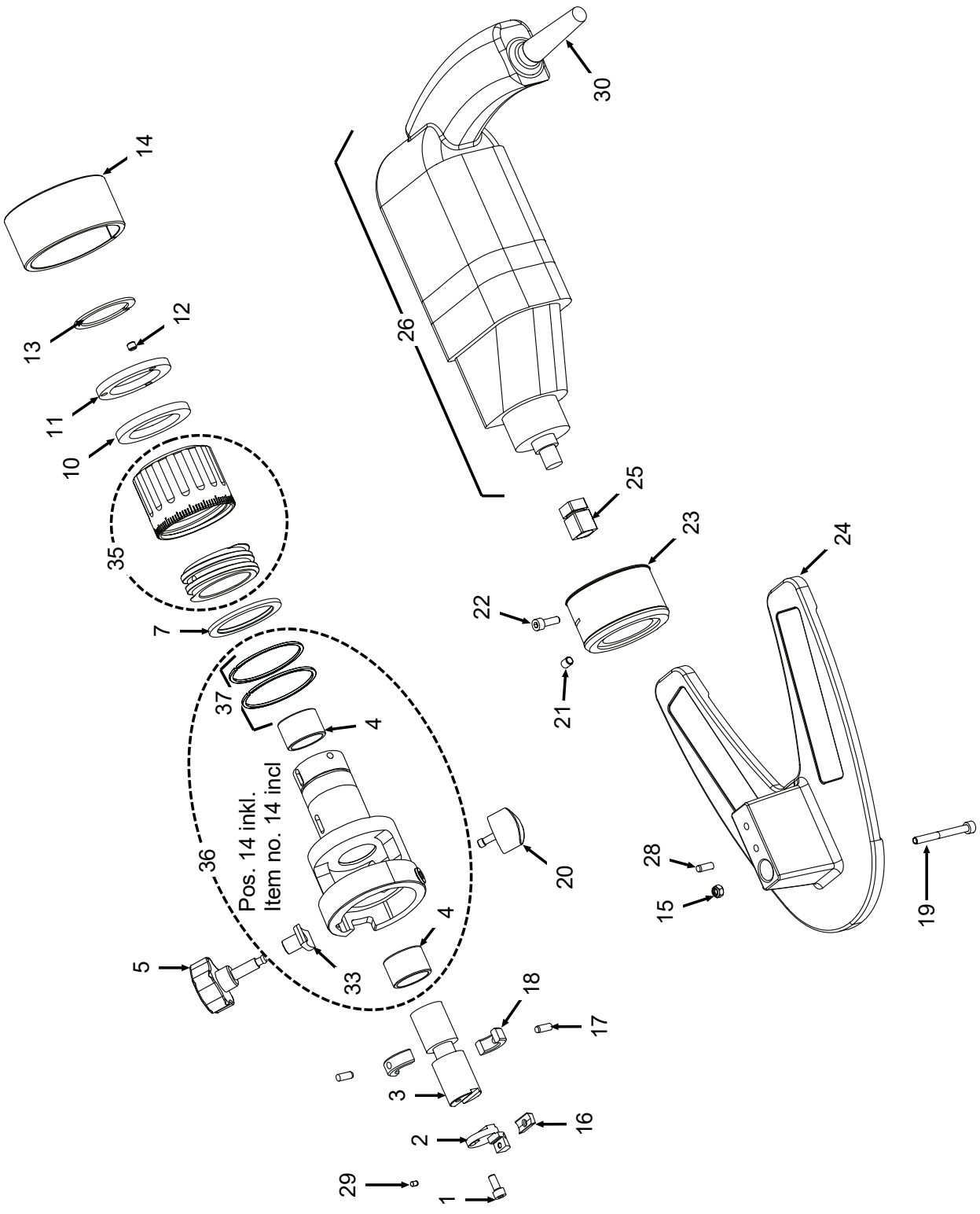


| POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION | POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 1 | 305 501 163 | 1 | Zylinderschraube ISO4762-M5x10-8.8<br>Cylinder screw ISO4762-M5x10-8.8 | 14 | 790 037 147 | 1 | Schutz<br>Protection |
| 2 | 790 037 152 | 1 | Werkzeughalter WH12-I (Standard)<br>Tool holder WH12-I (standard) | 16 | 790 038 314 | 1 | Multifunktions-Werkzeug MFW-P-2<br>Multifunctional tool MFW-P-2 |
| 3 | 790 037 148 | 1 | Werkzeugaufnahme<br>Tool support | 17 | 565 808 316 | 2 | Zylinderstift ISO8735-5M5x16-ST<br>Cylinder pin ISO8735-5M5x16-ST |
| 4 | 790 037 144 | 2 | Gleitlagerbuchse<br>Slide bearing bushing | 18 | 790 030 132 | 2 | Gleitschale<br>Slide shell |
| 5 | 790 037 164 | 1 | Spanngriff, kpl.<br>Clamping grip. cpl. | 20 | 790 037 165 | 1 | Spannschalenarretierung, kpl.<br>Clamping shell locking, cpl. |
| 7 | 790 037 174 | 1 | Lagerring<br>Bearing ring | 21 | 445 101 213 | 1 | Gewindestift DIN914-M6x10-45H<br>Grub screw DIN914-M6x10-45H |
| 10 | 790 037 176 | 1 | Lagerscheibe<br>Bearing plate | 22 | 305 501 166 | 1 | Zylinderschraube ISO4762-M5x16-8.8<br>Cylinder screw ISO4762-M5x16-8.8 |
| 11 | 790 037 186 | 1 | Druckscheibe<br>Thrust washer | 23 | 790 037 149 | 1 | Adapter METABO 1010<br>Adapter METABO 1010 |
| 12 | 445 001 210 | 3 | Gewindestift DIN913-M6x5-45H-TUFLOK/FL<br>Grub screw DIN913-M6x5-45H-TUFLOK/FL | 25 | 790 037 118 | 1 | Vierkantmutter METABO 1010<br>Square nut METABO 1010 |
| 13 | 554 158 340 | 1 | Sicherungsring DIN471-40x1.75<br>Circlip DIN471-40x1.75 | | | | |

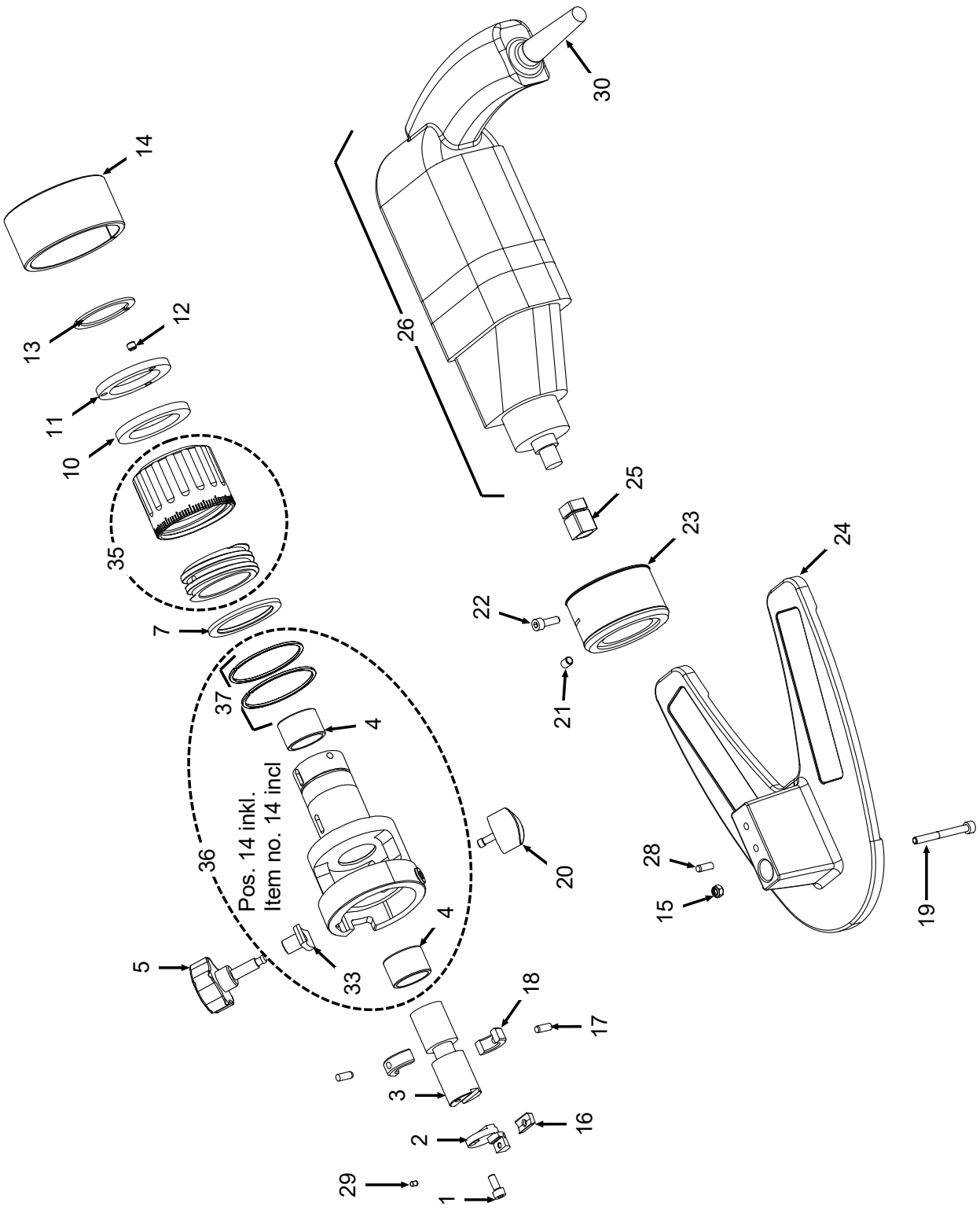

14
38
13
12
26
11
10
32
35
25
22
23
39
7
37
21
Pos. 14 inkl.
Item no. 14 incl.
36
33
20
5
4
18
17
3
16
2
28
1

| POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION |
|---|---|---|---|
| 26 | 790 037 530 | 1<br>1 | Akkumotor inkl. Ladegerät und 2 Akkus EU 230 V<br>Cordless motor+charger+2 batteries EU 230 V |
| | 790 037 531 | | Akkumotor inkl. Ladegerät und 2 Akkus US 120 V<br>Cordless motor+charger+2 batteries US 120 V |
| 28 | 790 086 220 | 1 | Spannschraube TORX M4x10<br>Clamping screw TORX M4x10 |
| 32 | 790 036 407 | 1 | Buchse 19x13<br>Bushing 19x13 |
| 33 | 790 037 451 | 1 | Gewindeeinsatz<br>Threaded insert |
| 35 | 790 037 125 | 1 | Vorschubeinheit<br>Feed unit |
| 36 | 790 037 168 | 1 | Gehäuse, kpl.<br>Housing, cpl. |
| 36 | 790 037 168 | 1 | Gehäuse, kpl.<br>Housing, cpl. |
| 37 | 790 037 427 | 2 | Sprengring SB65<br>Snap ring SB65 |
| 38 | 790 037 488 | 1 | Akku-Pack 4.0 Ah<br>Battery 4.0 Ah |
| 39 | 790 038 235 | 1 | Kappe Akku<br>Cap battery |
| **Ohne Abbildung \| Without illustration** | | | |
| 40 | 790 037 533 | 1 | Akku-Ladegerät EU<br>Battery charger EU |
| | 790 037 534 | | Akku-Ladegerät US<br>Battery charger US |

## 11.4 RPG 1.5 Elektro | RPG 1.5 Electric



| POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION | POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 1 | 305 501 163 | 1 | Zylinderschraube ISO4762-M5x10-8.8<br>Cylinder screw ISO4762-M5x10-8.8 | 14 | 790 037 147 | 1 | Schutz<br>Protection |
| 2 | 790 037 152 | 1 | Werkzeughalter WH12-I (Standard)<br>Tool holder WH12-I (standard) | 15 | 501 607 310 | 1 | Sechskantmutter ISO10511-M5-05-ZN<br>Hexagon nut ISO10511-M5-05-ZN |
| 3 | 790 037 148 | 1 | Werkzeugaufnahme<br>Tool support | 16 | 790 038 314 | 1 | Multifunktions-Werkzeug MFW-P-2<br>Multifunctional tool MFW-P-2 |
| 4 | 790 037 144 | 2 | Gleitlagerbuchse<br>Slide bearing bushing | 17 | 565 808 316 | 2 | Zylinderstift ISO8735-5M5x16-ST<br>Cylinder pin ISO8735-5M5x16-ST |
| 5 | 790 037 164 | 1 | Spanngriff, kpl.<br>Clamping grip. cpl. | 18 | 790 030 132 | 2 | Gleitschale<br>Slide shell |
| 7 | 790 037 174 | 1 | Lagerring<br>Bearing ring | 19 | 305 601 182 | 1 | Zylinderschraube ISO4762-M5x50/22-8.8-ZN<br>Cylinder screw ISO4762-M5x50/22-8.8-ZN |
| 10 | 790 037 176 | 1 | Lagerscheibe<br>Bearing plate | 20 | 790 037 165 | 1 | Spannschalenarretierung, kpl.<br>Clamping shell locking, cpl. |
| 11 | 790 037 186 | 1 | Druckscheibe<br>Thrust washer | 21 | 445 101 213 | 1 | Gewindestift DIN914-M6x10-45H<br>Grub screw DIN914-M6x10-45H |
| 12 | 445 001 210 | 3 | Gewindestift DIN913-M6x5-45H-TUFLOK/FL<br>Grub screw DIN913-M6x5-45H-TUFLOK/FL | 22 | 305 501 166 | 1 | Zylinderschraube ISO4762-M5x16-8.8<br>Cylinder screw ISO4762-M5x16-8.8 |
| 13 | 554 158 340 | 1 | Sicherungsring DIN471-40x1.75<br>Circlip DIN471-40x1.75 | 23 | 790 037 149 | 1 | Adapter METABO 1010<br>Adapter METABO 1010 |


Pos. 14 inkl.
Item no. 14 incl
1
2
3
4
4
5
7
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
28
29
30
33
35
36
37

| POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION | POS. NO. | CODE PART NO. | STK. QTY. | BEZEICHNUNG DESCRIPTION |
|---|---|---|---|---|---|---|---|
| 24 | 790 037 171 | 1 | Grundplatte, kpl.<br>Base plate, cpl. | 36 | 790 037 168 | 1 | Gehäuse, kpl.<br>Housing, cpl. |
| 25 | 790 037 118 | 1 | Vierkantmutter METABO 1010<br>Square nut METABO 1010 | 37 | 790 037 427 | 2 | Sprengring SB65<br>Snap ring SB65 |
| 26 | 790 038 190 | 1 | RPG Motor, 230 V, 50/60 Hz EU<br>RPG motor, 230 V, 50/60 Hz EU | – | 790 038 089 | 4 m | Kabel mit Stecker 230V, 4m<br>Cable with plug 230V, 4m |
| | 790 038 191 | 1 | RPG Motor, 120 V, 50/60 Hz US<br>RPG motor, 120 V, 50/60 Hz US | | | | |
| | 790 038 192 | 1 | RPG Motor, 110 V, 50/60 Hz GB<br>RPG motor, 110 V, 50/60 Hz GB | | | | |
| 28 | 565 808 315 | 1 | Zylinderstift ISO8734-5M6x14-ST<br>Cylinder pin ISO8734-5M6x14-ST | | | | |
| 29 | 790 086 220 | 1 | Spannschraube TORX M4x10<br>Clamping screw TORX M4x10 | | | | |
| 30 | 790 048 225 | 1 | SBE 1100 Plus Kabelschutzschlauch<br>SBE 1100 Plus cable protective hose | | | | |
| 33 | 790 037 451 | 1 | Gewindeeinsatz<br>Threaded insert | | | | |
| 35 | 790 037 125 | 1 | Vorschubeinheit<br>Feed unit | | | | |

# 12 Declaration of Conformity

## ORIGINAL

**de EG-Konformitätserklärung**
**en EC Declaration of conformity**
**fr CE Déclaration de conformité**
**it CE Dichiarazione di conformità**
**es CE Declaración de conformidad**
**nl EG-conformiteitsverklaring**
**cz ES Prohlášení o shodě**
**sk EÚ Prehlásenie o zhode**
**pl Deklaracja zgodności WE**

**Orbitalum Tools GmbH**
**Josef-Schüttler-Straße 17**
**78224 Singen, Deutschland**
**Tel. +49 (0) 77 31 792-0**

Maschine und Typ (inklusive optional erhältlichen Zubehörartikeln von Orbitalum): / Machinery and type (including optionally available accessories from Orbitalum): / Machine et type (y compris accessoires Orbitalum disponibles en option): / Macchina e tipo (inclusi gli articoli accessori acquistabili opzionalmente da Orbitalum): / Máquina y tipo (incluidos los artículos de accesorios de Orbitalum disponibles opcionalmente): / Machine en type (inclusief optioneel verkrijgbare accessoires van Orbitalum): / Stroj a typ stroje (včetně volitelného příslušenství firmy Orbitalum): / Stroj a typ (vrátane voliteľne dostupného príslušenstva od Orbitalum): / Maszyna i typ (wraz z opcjonalnie dostępnymi akcesoriami firmy Orbitalum):

**Rohrplanmaschinen**
- **RPG ONE**
- **RPG ONE Akku**
- **RPG 1.5**
- **RPG 1.5 Akku**

Seriennummer: / Series number: / Nombre de série: / Numero di serie: / Número de serie: / Serienummer: / Sériové číslo: / Sériové číslo / :Numer seryjny

Baujahr: / Year: / Année: / Anno: / Año: / Bouwjaar: / Rok výroby: / Rok výroby:

Hiermit bestätigen wir, dass die genannte Maschine entsprechend den nachfolgend aufgeführten Richtlinien gefertigt und geprüft worden ist: / Herewith our confirmation that the named machine has been manufactured and tested in accordance with the following standards: / Par la présente, nous déclarons que la machine citée ci-dessus a été fabriquée et testée en conformité aux directives: / Con la presente confermiamo che la macchina sopra specificata è stata costruita e controllata conformemente alle direttive qui di seguito elencate: / Por la presente confirmamos que la máquina mencionada ha sido fabricada y comprobada de acuerdo con las directivas especificadas a continuación: / Hiermee bevestigen wij, dat de vermelde machine in overeenstemming met de hieronder vermelde richtlijnen is gefabriceerd en gecontroleerd: / Tímto potvrzujeme, že uvedený stroj byl vyroben a testován v souladu s níže uvedenými směrnicemi: / Týmto potvrdzujeme, že uvedený stroj bol zhotovený a odskúšaný podľa nižšie uvedených smerníc: / Niniejszym potwierdzamy, że powyższa maszyna została wyprodukowana i przetestowana zgodnie z wymienionymi poniżej wytycznymi:

- **Maschinen-Richtlinie 2006/42/EG**
- **EMV-Richtlinie 2014/30/EU**
- **RoHS-Richtlinie 2011/65/EU**

Folgende harmonisierte Normen sind angewandt: / The following harmonized norms have been applied: / Les normes suivantes harmonisées où applicables: / Le seguenti norme armonizzate ove applicabili: / Las siguientes normas armonizadas han sido aplicadas: / Onderstaande geharmoniseerde normen zijn toegepast: / Jsou použity následující harmonizované normy: / Boli aplikované tieto harmonizované normy: / Stosowane są następujące normy zharmonizowane:

- **EN ISO 12100:2011-03**
- **EN ISO 62841-1:2016-07**

Bevollmächtigt für die Zusammenstellung der technischen Unterlagen: / Authorised to compile the technical file: / Autorisé à compiler la documentation technique: / Incaricato della redazione della documentazione tecnica: / Autorizado para la elaboración de la documentación técnica: / Gemachtigde voor het samenstellen van het technisch dossier: / Osoba zplnomocněná k sestavení technické dokumentace: / Splnomocnenec pre zostavenie technických podkladov: / Uprawniony do sporządzania dokumentacji technicznej:

**Gerd Riegraf**
**Orbitalum Tools GmbH**
**D-78224 Singen**

Bestätigt durch: / Confirmed by: / Confirmé par: / Confermato da: / Confirmado por: / Bevestigd door: / Potvrdil: / Potvrdil: / Bestätigt durch:



Singen, 22.06.2023:

Jürgen Jäckle - Product Compliance Manager

# ORIGINAL

**de UKCA-Konformitätserklärung**
**en UKCA Declaration of conformity**

**Orbitalum Tools GmbH**
**Josef-Schüttler-Straße 17**
**78224 Singen, Deutschland**
**Tel. +49 (0) 77 31 792-0**

Maschine und Typ (inklusive optional erhältlichen Zubehörartikeln von Orbitalum): / Machinery and type (including optionally available accessories from Orbitalum):

**Rohrplanmaschinen**
- **RPG ONE**
- **RPG ONE Akku**
- **RPG 1.5**
- **RPG 1.5 Akku**

Seriennummer: / Series number:

Baujahr: / Year:

Hiermit bestätigen wir, dass die genannte Maschine entsprechend den nachfolgend aufgeführten Richtlinien gefertigt und geprüft worden ist: / Herewith our confirmation that the named machine has been manufactured and tested in accordance with the following regulations:

- **S.I. 2008/1597 Supply of Machinery (Safety)**
- **S.I. 2016/1091 Electromagnetic Compatibility**
- **S.I. 2012/3032 Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment**

Schutzziele folgender Richtlinien werden eingehalten: / Protection goals of the following guidelines are observerd:

- **S.I. 2016/1101 Electrical Equipment (Safety)**

Folgende harmonisierte Normen sind angewandt: / The following harmonized standards have been applied:

- **EN ISO 12100:2011-03**
- **EN ISO 62841-1:2016-07**

Bevollmächtigt für die Zusammenstellung der technischen Unterlagen: / Authorised to compile the technical file:

Bestätigt durch: / Confirmed by:



Singen, 11.08.2023:

Jürgen Jäckle - Product Compliance Manager

## Notizen

## Notizen

## Notizen

**Orbitalum Tools GmbH offers global customers the best in the field of pipe cutting and beveling as well as orbital welding technology from a single source.**

# worldwide | sales + service

## NORTH AMERICA

USA

Orbitalum North America
Headquarters
281 Lies Rd E
Carol Stream, IL 60188
USA
Tel. +1 847 484 9100
24-Hour Emergency Response:
Tel. +1 847 484 9100

Northeast US
Orbitalum - New Jersey
1001 Lower Landing Road, Suite 208
Blackwood, New Jersey 08012
USA
Tel. +1 856 579 8747
24-Hour Emergency Response:
Mob. +1 609 414 21638

PACIFIC NORTHWEST US
Orbitalum - Oregon
2056 NE Aloclek Drive, Suite 314
Hillsboro, Oregon 97124
USA
Tel. +1 503 941 9270
24-Hour Emergency Response:
Mob. +1 971 777 2603

Southeast US
Orbitalum - South Carolina
171 Johns Road, Unit A
Greer, South Carolina 29650
USA
Tel. +1 864 655 4771
24-Hour Emergency Response:
Mob. +1 470 806 6663

SOUTHWEST US
Orbitalum - Arizona
Customer Support Center
3106 W Thomas Road, Suite 1117
Phoenix, AZ 85017
USA
Tel. +1 602 540 0813
24-Hour Emergency Response:
Tel. +1 805 433 3270

SOUTHWEST US
Orbitalum - Arizona
Customer Support Center
3106 W Thomas Road, Suite 1117
Phoenix, AZ 85017
USA
Tel. +1 602 540 0813
24-Hour Emergency Response:
Tel. +1 805 433 3270

CANADA

Wachs Canada Ltd - East
Eastern Canada Sales,
Service & Rental Center
1250 Journey's End Circle, Unit 5
Newmarket, Ontario L3Y 0B9
Canada
Tel. +1 905 830 8888
Toll Free: 888 785 2000
24-Hour Emergency Response:
Mob. +1 647 278 0537

Wachs Canada Ltd - West
Western Canada Sales, Service & Rental Center
5411 82 Ave NW
Edmonton, Alberta T6B 2J6
Canada
Tel. +1 780 469 6402
Toll Free: 800 661 4235
24-Hour Emergency Response:
Mob. +1 847 537 8800

## EUROPE

GERMANY

Orbitalum Tools GmbH
Josef-Schuettler-Str. 17
78224 Singen
Germany
Tel. +49 (0) 77 31 - 792 0

MIDDLE EAST

UNITED ARAB EMIRATES

ITW Welding Middle East
S3 A2SR10, Jebel Ali Free Zone, Dubai
United Arab Emirates
Phone: [+971] [0] 42559194
Mobile: [+971] 547904400

## ASIA

CHINA

Orbitalum Tools GmbH
189 Huayuan Road
Kunshan, Jiangsu Province
China
Mob. +86 (0) 183 5165 7838
Tel. +86 (0) 512 5016 7816

INDIA

ITW India Pvt. Ltd
Plot No.28/22, D-2 Block
Near KSB Chowk
MIDC, Chinchwad
Pune - 411019
Maharashtra - India
Mob. +91 (0) 91 00 99 45 78

SINGAPORE

Orbitalum
23 Tagore Lane #04-06/07
Tagore 23 Warehouse
787601
Singapore

orbitalum

*An ITW Company*