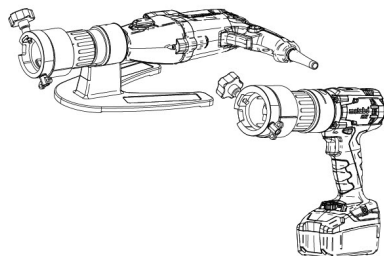
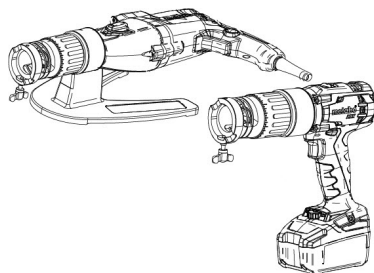


RPG ONE (Akku/Kabel) / 1.5 (Akku/Kabel)

en Tube squaring machines

Translation of original operating instructions and
spare parts list



750 036 765 REV 02 | 2309



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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
	Important information for comprehension.
1. 2. 3. ...	Request for action in a sequence of actions: Action is required here.
	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

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

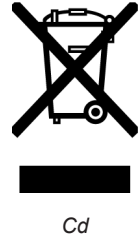
- Electrical and electronic devices marked with the symbol at the right may not be disposed of with household garbage as per EU directive.
- By actively using the offered return and collection systems, you are doing your part to reuse and recycle used electrical and electronic devices.
- Used electric 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.



(as per RL
2012/19/EU)

2.3.4 Return of accumulators and batteries

- 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.

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): View- ing 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 [▶ 16].

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 ▶ 26)

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 (lxwxh)	[mm]	390x70x200	252 x 77 x 255	400x160x350	266 x 87 x 255
	[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	230 V, 50/60 Hz	230 V, 50/60 Hz	230 V, 50/60 Hz
		110 V, 50/60 Hz	115 V, 60 Hz	110 V, 50/60 Hz	115 V, 60 Hz
		120 V, 50/60 Hz		120 V, 50/60 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/s ²]	< 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	PDF	1	1	1	1

Download links PDF:

<https://www.orbitalum.com/de/download.html>



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:

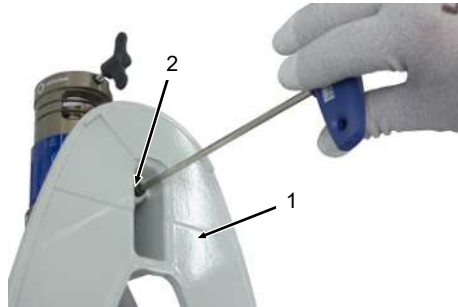
- 1-phase alternating current, protection class II:
 - 230 V, 50/60 Hz
 - 110 V, 50/60 Hz
 - 120 V, 50/60 Hz
 - 230 V, 50/60 Hz EU, battery: 18 V
 - 115 V, 60 Hz US, battery: 18 V
- Fusing at least 10 A
- Residual current circuit breaker

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.
- ▶ Close the viewing window before switching on the machine

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 set the sight glass – if existing at the machine – into 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 [▶ 10].
- ▶ 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.

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 [▶ 21]).

NOTICE!

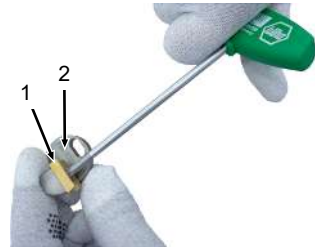


- ▶ Please check the outer diameter of the pipes before ordering the clamping collars. The various standards sometimes mean a standard size (particularly with pipes according to DIN 2430).

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

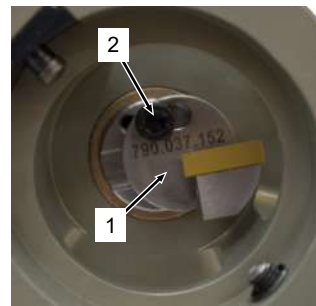
8.2.1 Mounting multifunctional tool

- ▶ 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

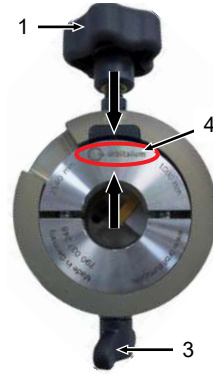
RPG ONE (BATTERY)

RPG 1.5 (BATTERY)

- Select correct clamping shell according to the pipe dimension (see *chapter* Stainless steel clamping collars (optional) [► 23]).



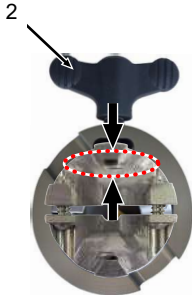
Clamping shells for pipes



Clamping shells for pipes

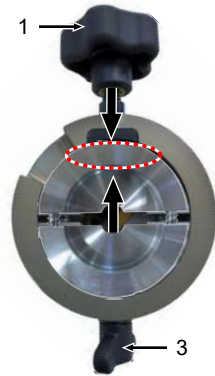
- Compress the clamping shell slightly and insert it into the housing. The Orbitalum logo (4) on the clamping shell must correspond with the clamp screw (1) (see arrows).
- **Clamping shells for pipes** have to be inserted in such a way that the **Orbitalum logo** (4) is **facing away from the motor**.
 - **Clamping shells for microfittings** have to be inserted in such a way that the Orbitalum logo (4) is **facing toward the motor**.

RPG ONE (BATTERY)



Clamping shells for microfittings

RPG 1.5 (BATTERY)

Clamping shells for microfittings,
logo side

Clamping shells for microfittings

NOTICE!

The clamping shell is applied correctly when it has locked in. If the clamping shell does not lock in, you can readjust by rotating the clamping shell slightly.

► **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.

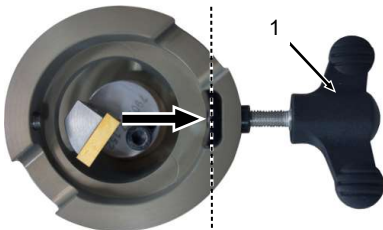
8.3.2 Removing clamping shells

1. Disassemble the tensioning screw:

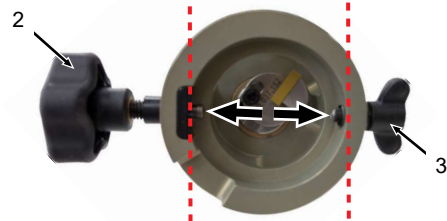
RPG ONE (battery): Screw out the tensioning screw (1) (flush with housing on the inside, see arrow).

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.

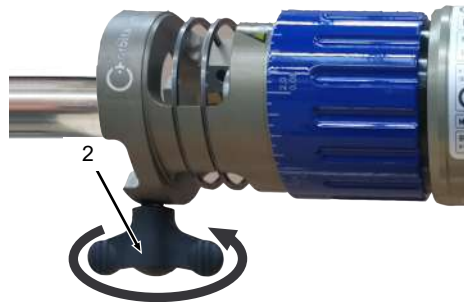
► To release the pipe from the machine, rotate the tensioning screw (2) counter-clockwise until the stop.



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 [▶ 44]).
- ▶ 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 set the sight glass – if existing at the machine – into 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 [▶ 10].
- ▶ 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 [▶ 50]
-

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.

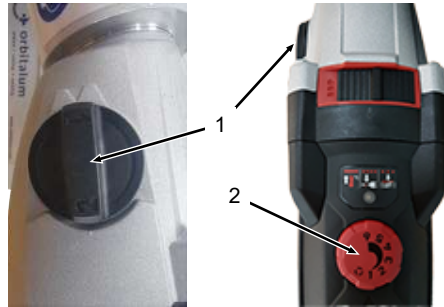
With the RPG Electric machines the gear step is preset via the RPM regulator (1). Depending on the pipe outer diameter, the setting wheel (2) can be used for fine adjustments:

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) [▶ 42]

NOTICE!



- If the tool chatters after machine start-up, cutting speed is too high.**

- ▶ Reduce the speed, see *chapter* Setting the speed [▶ 44].

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 [▶ 44].

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 [▶ 51]). Wear recommended protective clothing (see *chapter* Basic safety precautions [▶ 10]).

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 [▶ 36]).
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. 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.	<ul style="list-style-type: none"> ▶ 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.	<ul style="list-style-type: none"> ▶ Tighten the MFW or WH.
Exchangeable battery drive of the RPG battery does not run.	Battery completely flat.	<ul style="list-style-type: none"> ▶ Charge battery (see the included operating instructions of the charger). ▶ Use replacement battery.
	Battery not connected to RPG battery.	<ul style="list-style-type: none"> ▶ Connect battery to RPG battery.
Tool tends to chatter.	Speed too high.	<ul style="list-style-type: none"> ▶ Reduce the speed (see <i>chapter</i> Setting the speed [▶ 44]).
Strong tendency to chatter.	Axial or radial play in the components.	<ul style="list-style-type: none"> ▶ Check the machine for radial play.
	MFW loose.	<ul style="list-style-type: none"> ▶ Check that the multifunctional tool (MFW) is seated firmly.
The processed pipe is coarse or its burr is too great.	MFW blunt.	<ul style="list-style-type: none"> ▶ Replace MFW.

10.3 Servicing/Customer service

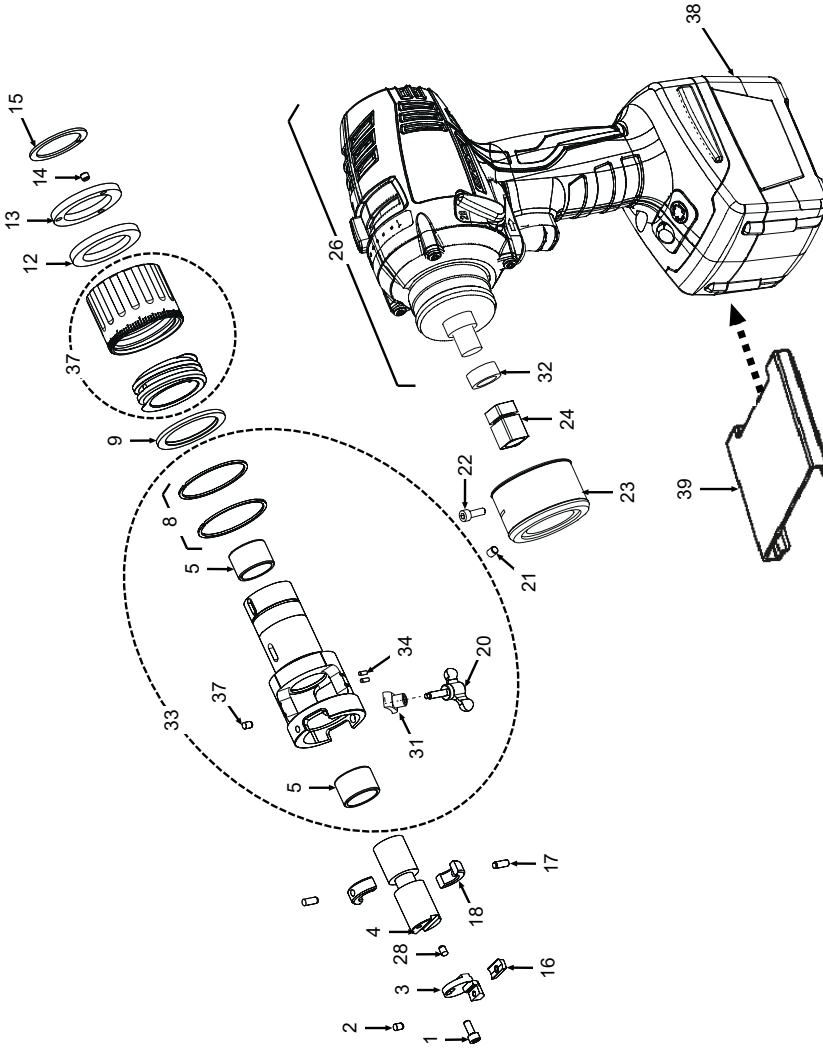
The following data are required to order spare parts:

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

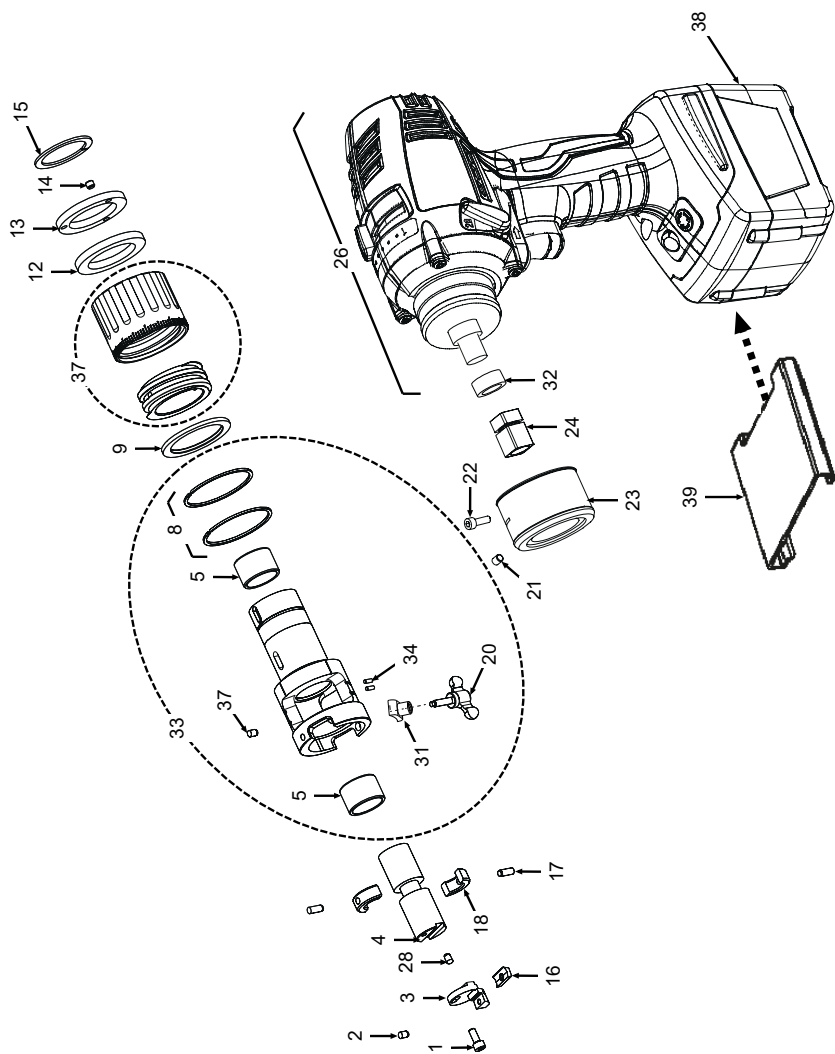
- ▶ For ordering spare parts, see the spare part list.
- ▶ Contact your local branch directly in order to eliminate problematic situations.

11 ERSATZTEILLISTE / SPARE PARTS LIST

11.1 RPG ONE Akku | RPG ONE Cordless

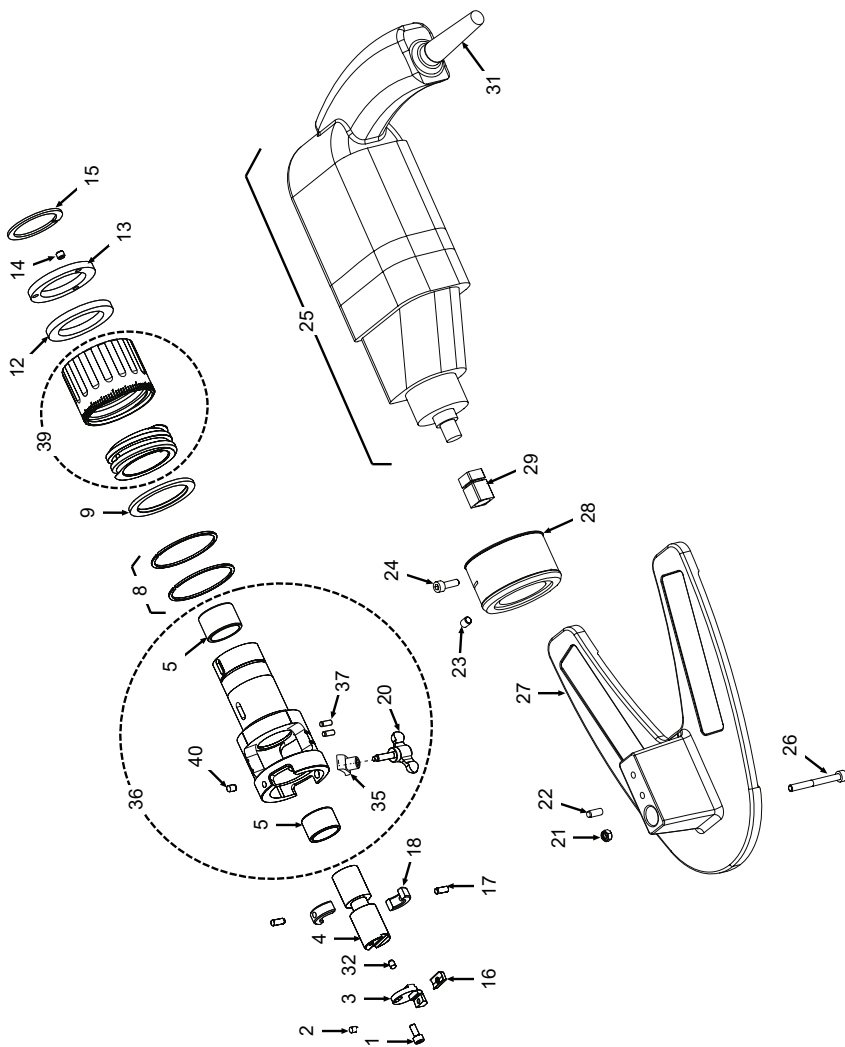


POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION	POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION
1	305 501 163	1	Zylinderschraube ISO4762-M5x10-8.8 Cylinder screw ISO4762-M5x10-8.8	15	554 158 340	1	Sicherungsring DIN471-40x1.75 Circlip DIN471-40x1.75
2	790 086 220	1	Spannschraube TORX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

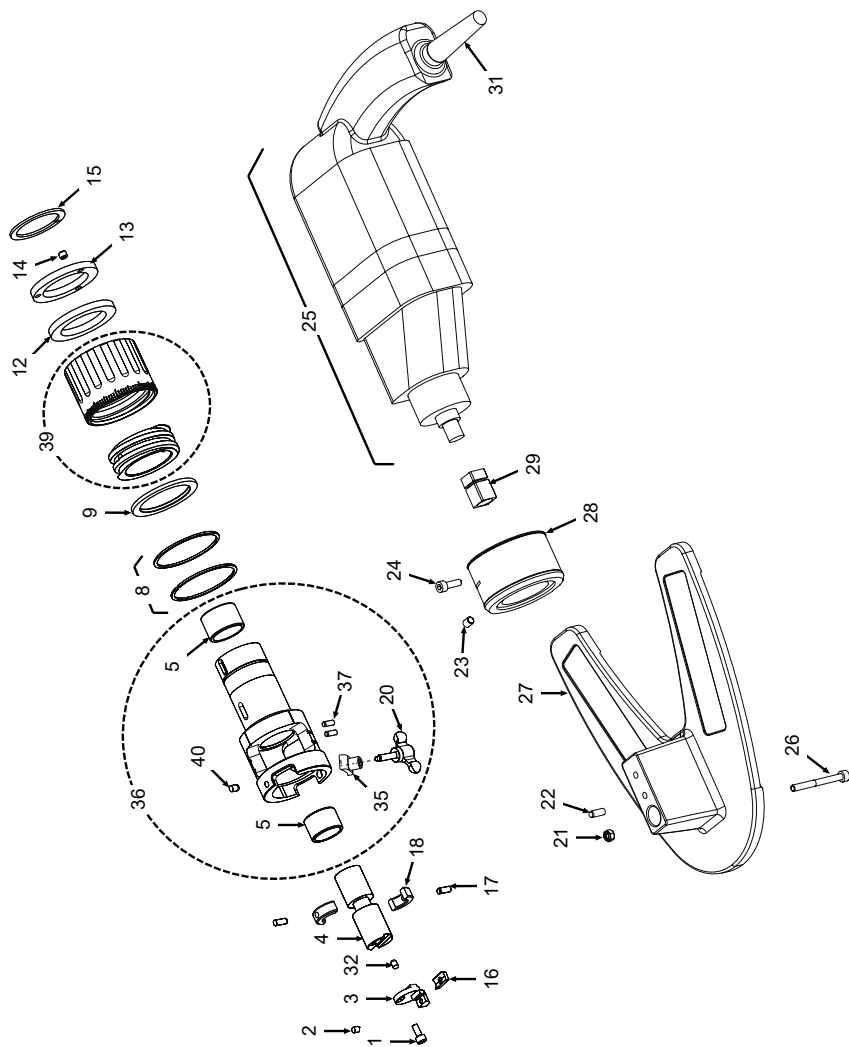


POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION	POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION
26	790 037 530	1	Akkumotor inkl. Ladegerät und 2 Akkus EU				
		1	Cordless motor with charger and 2 batteries EU				
Ohne Abbildung Without illustration							
	790 037 531		Akkumotor RPG 120 V 50/60 Hz US	38	790 037 488	1	Akku-Pack 4.0 Ah
			Cordless motor RPG 120 V 50/60 Hz US				Battery 4.0 Ah
28	445 101 114	1	Gewindestift DIN914-M4x12-45H	39	790 038 235	1	Kappe Akku
			Grub screw DIN914-M4x12-45H				Cap battery
31	790 033 138	1	Gewindeeinsatz	40	790 037 533		Akku-Ladegerät EU
			Threaded insert			1	Battery charger EU
32	790 036 407	1	Buchse 19x13		790 037 534		Akku-Ladegerät US
			Bushing 19x13				Battery charger US
33	790 036 410	1	Gehäuse, kpl.				
			Housing, cpl.				
34	565 808 213	2	Zylinderstift ISO8734-3x6-A-ST				
			Cylinder pin ISO8734-3x6-A-ST				
36	790 037 125	1	Vorschubeinheit				
			Feed unit				
37	565 802 331	1	Zylinderstift ISO2338-5M6x10-ST				
			Cylinder pin ISO2338-5M6x10-ST				

11.2 RPG ONE Elektro | RPG ONE Electric

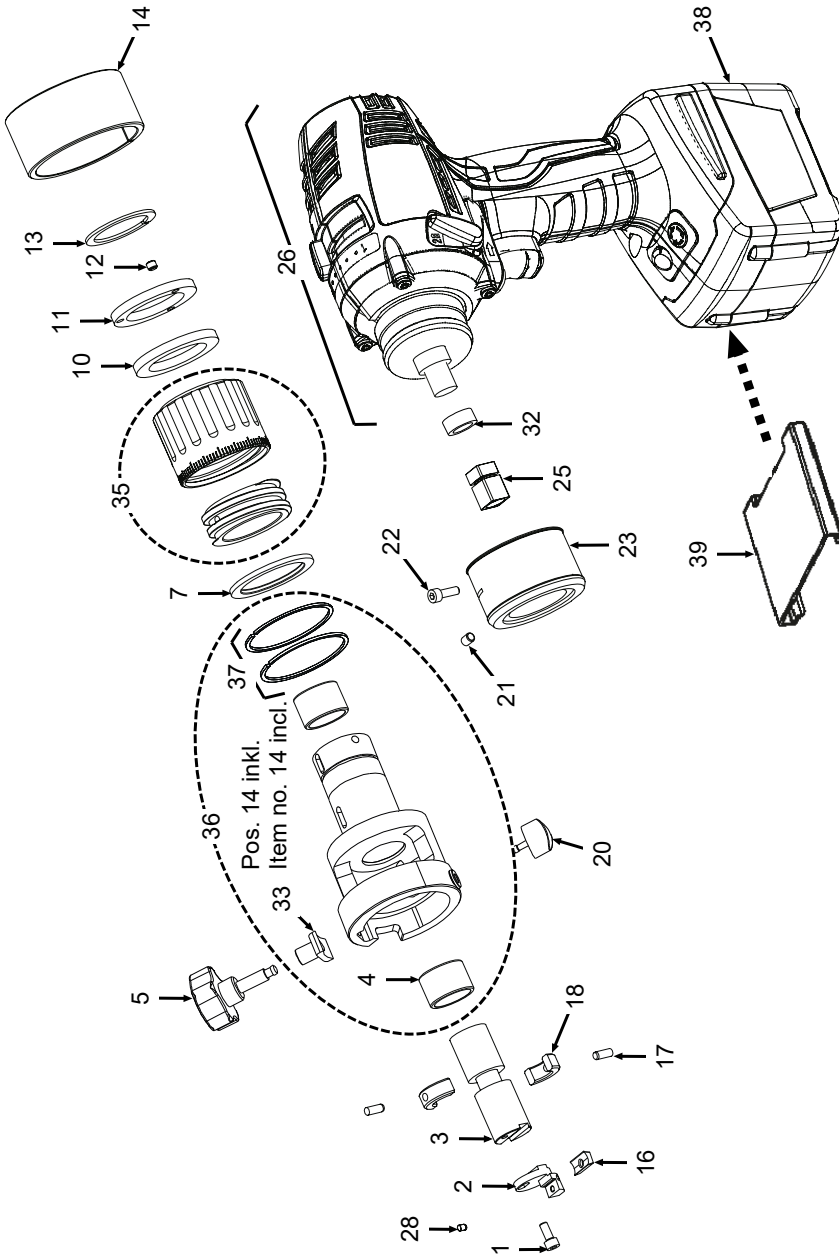


POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION	POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION
1	305 501 163	1	Zylinderschraube ISO4762-M5x10-8.8 Cylinder screw ISO4762-M5x10-8.8	15	554 158 340	1	Sicherungsring DIN471-40x1.75 Circlip DIN471-40x1.75
2	790 086 220	1	Spannschraube TORX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

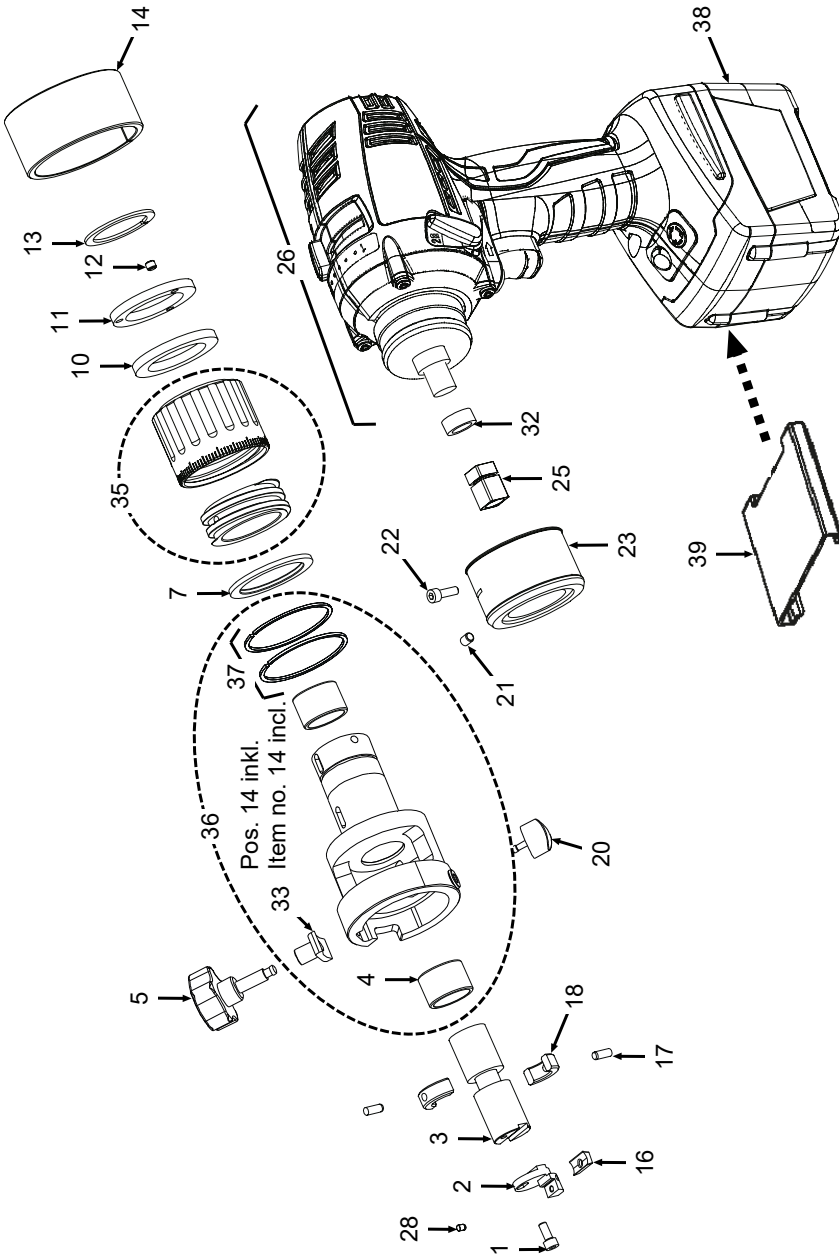


POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION	POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION
	790 038 190	1	RPG Motor, 230 V, 50/60 Hz EU RPG motor, 230 V, 50/60 Hz EU	36	790 036 410	1	Gehäuse, kpl. Housing, cpl.
25	790 038 191	1	RPG Motor, 120 V, 50/60 Hz US RPG motor, 120 V, 50/60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

11.3 RPG 1.5 Akku | RPG 1.5 Cordless

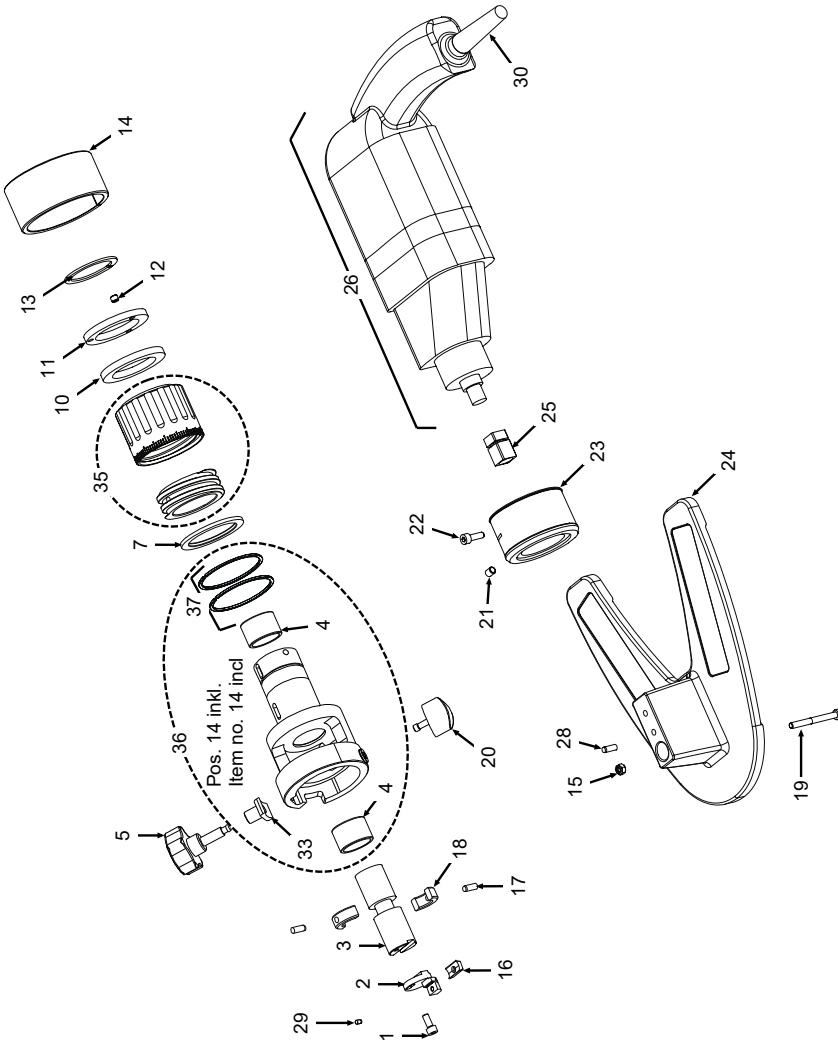


POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION	POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION
1	305 501 163	1	Zylinderschraube ISO4762-M5x10-8.8 Cylinder screw ISO4762-M5x10-8.8	14	790 037 147	1	Schutz Protection
2	790 037 152	1	Werkzeughalter WH12-I (Standard) Tool holder WH12-I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

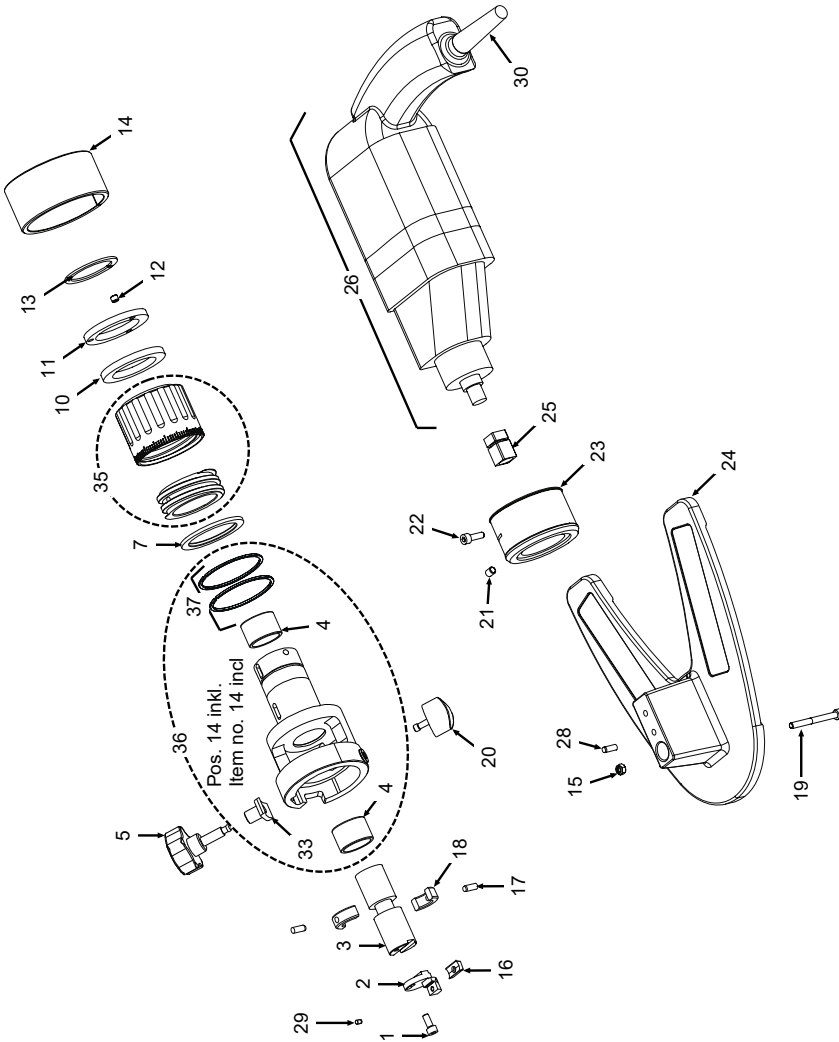


POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION	POS. NO.	CODE PART NO.	STK. QTY.	BEZEICHNUNG DESCRIPTION
26	790 037 530	1	Akkumotor inkl. Ladegerät und 2 Akkus EU 230 V	38	790 037 488	1	Akku-Pack 4.0 Ah
		1	Cordless motor+charger+2 batteries EU 230 V				Battery 4.0 Ah
	790 037 531		Akkumotor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

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 Cylinder screw ISO4762-M5x10-8.8	14	790 037 147	1	Schutz Protection
2	790 037 152	1	Werkzeughalter WH12-I (Standard) Tool holder WH12-I (standard)	15	501 607 310	1	Sechskantmutter ISO10511-M5-05-ZN Hexagon nut ISO10511-M5-05-ZN
3	790 037 148	1	Werkzeugaufnahme Tool support	16	790 038 314	1	Multifunktions-Werkzeug MFW-P-2 Multifunctional tool MFW-P-2
4	790 037 144	2	Gleitlagerbuchse Slide bearing bushing	17	565 808 316	2	Zylinderstift ISO8735-5M5x16-ST Cylinder pin ISO8735-5M5x16-ST
5	790 037 164	1	Spanngriff, kpl. Clamping grip. cpl.	18	790 030 132	2	Gleitschale Slide shell
7	790 037 174	1	Lagerring Bearing ring	19	305 601 182	1	Zylinderschraube ISO4762-M5x50/22-8.8-ZN Cylinder screw ISO4762-M5x50/22-8.8-ZN
10	790 037 176	1	Lagerscheibe Bearing plate	20	790 037 165	1	Spannschalenaarretierung, kpl. Clamping shell locking, cpl.
11	790 037 186	1	Druckscheibe Thrust washer	21	445 101 213	1	Gewindestift DIN914-M6x10-45H Grub screw DIN914-M6x10-45H
12	445 001 210	3	Gewindestift DIN913-M6x5-45H-TUFLOK/ FL Grub screw DIN913-M6x5-45H-TUFLOK/ FL	22	305 501 166	1	Zylinderschraube ISO4762-M5x16-8.8 Cylinder screw ISO4762-M5x16-8.8
13	554 158 340	1	Sicherungsring DIN471-40x1.75 Circlip DIN471-40x1.75	23	790 037 149	1	Adapter METABO 1010 Adapter METABO 1010



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. Base plate, cpl.	36	790 037 168	1	Gehäuse, kpl. Housing, cpl.
25	790 037 118	1	Vierkantmutter METABO 1010 Square nut METABO 1010	37	790 037 427	2	Sprengring SB65 Snap ring SB65
	790 038 190	1	RPG Motor, 230 V, 50/60 Hz EU RPG motor, 230 V, 50/60 Hz EU	-	790 038 089	4 m	Kabel mit Stecker 230V, 4m Cable with plug 230V, 4m
26	790 038 191	1	RPG Motor, 120 V, 50/60 Hz US RPG motor, 120 V, 50/60 Hz US				
	790 038 192	1	RPG Motor, 110 V, 50/60 Hz GB RPG motor, 110 V, 50/60 Hz GB				
28	565 808 315	1	Zylinderstift ISO8734-5M6x14-ST Cylinder pin ISO8734-5M6x14-ST				
29	790 086 220	1	Spannschraube TORX M4x10 Clamping screw TORX M4x10				
30	790 048 225	1	SBE 1100 Plus Kabelschutzhose SBE 1100 Plus cable protective hose				
33	790 037 451	1	Gewindeinsatz Threaded insert				
35	790 037 125	1	Vorschubeinheit 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 Zubehörtartikeln 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 voliteľného 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: / Seriennummer: / Sériové číslo: / Sériové číslo / :Numer serijnyj

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 směrnici: / 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 ou 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: / Spółnoczenec pre zostawienie technických podkladov: / Uprawniony do sporządzania dokumentacji technicznej:

Gerd Riegraf
 Orbitalum Tools GmbH
 D-78224 Singen

Bestätigt durch: / Confirmed by: / Confirmé par: / Confermato da: / Confirmando por: / Bevestigd door: / Potvrđil: / Potvrđil: / Bestätigt durch:

Singen, 22.06.2023:

Jürgen Jäckle - Product Compliance Manager

ORIGINAL

de UKCA-Konformitätserklärung
en UKCA Declaration of conformity



Orbitalum Tools GmbH
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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 observed:

- **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

Orbitalum Tools GmbH provides global customers one source for the finest in pipe & tube cutting, beveling and orbital welding products.

worldwide | sales + service

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