

**TVH** 

[WWW.TVH.COM](http://WWW.TVH.COM)



**PARTS**  
*THAT KEEP*  
**TELEHANDLERS**  
*GOING.*





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# KEEPS YOU GOING.

## ALL PARTS, ALL MAKES

TVH is your **all-round supplier of quality parts and accessories for material handling, construction, agricultural and industrial equipment.** You get fast answers on any inquiry, order or technical question from our dedicated sales and technical departments. We continually expand our product range by following new trends and by looking for new partnerships, to make sure you will find absolutely everything you need right here at TVH.



> 50 years  
of experience



> 5000 colleagues  
worldwide



67 nationalities  
57 spoken languages



90 branches  
worldwide



Parts for over  
680 makes



> 47 000 000 known  
references



> 930 000 different  
stock items



> 7250  
suppliers



> 100 000  
active customers  
in 182 countries



1600 m euro  
consolidated turnover  
(2022)



> 27 000 orders per day  
> 88 000 order lines  
per day



> 86% orders via  
e-commerce

## STRONG BRANDS, GUARANTEED QUALITY

TVH is your global one-stop shop for parts and accessories for material handling, construction, agricultural and industrial equipment. Regardless of the make, type and year of construction of equipment: TVH always has a solution.

Reliable products and services contribute to the day-to-day success of your company. That's why we at TVH choose top quality brands for our maintenance, repair and operation products, just like you do.

In addition, our strong house brands guarantee an excellent range and quality standard for mechanical and hydraulic attachments, internal transport equipment, battery chargers and accessories ...





## QUALITY IS OUR PRIORITY

Is quality also a priority in your business? Rely on TVH as your partner.

In-depth product knowledge and specific testing equipment allows us to continuously improve processes and quality standards.

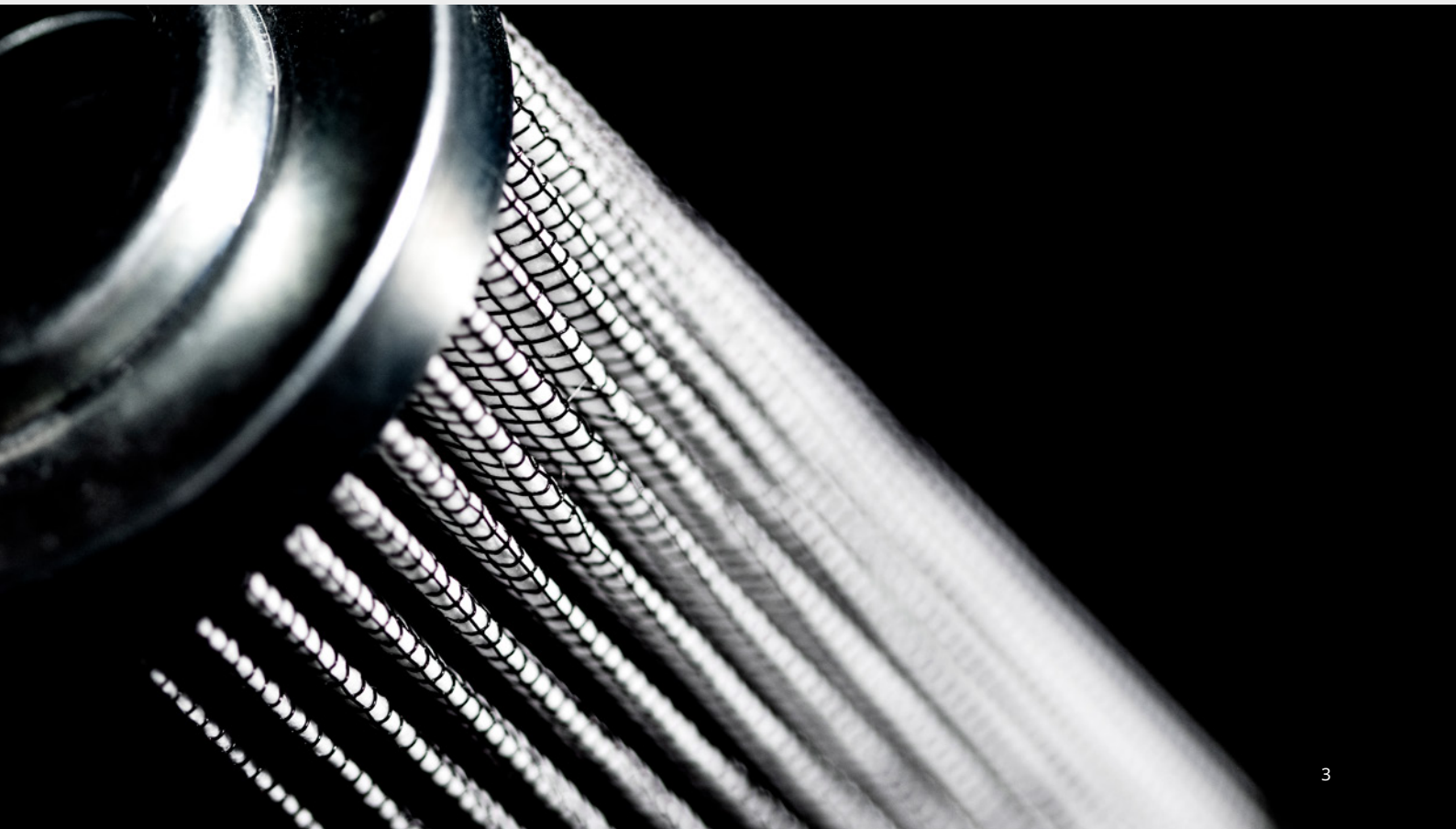
## PROFESSIONAL TRAINING CENTRE

TVH University provides **practice-oriented technical training courses** suitable for industrial vehicles such as forklifts, telehandlers, mobile elevating work platforms, small earth-moving equipment and tractors.

- **Get certified** in industry-related topics such as internal combustion engines, electrics/electronics, hydraulics, and power electronics
- **Highly qualified trainers** with years of practical experience
- Courses include both **in-person** training classes and **digital** training packages

For more information or enrolments:  
T +32 56 43 44 38 • [technicaltraining@tvh.com](mailto:technicaltraining@tvh.com)

**TVH**   
**UNIVERSITY**



**ABOUT TVH**

**HOW CAN WE HELP YOU?**

# **BUY SPARE PARTS & ACCESSORIES ONLINE**

- 95% same-day shipment, next-day delivery to all our customers
- A database of over 47 000 000 item numbers
- More than 930 000 different references are in stock

**Ordering the parts you need is quick and easy:**

- Digitally manage all your inquiries, orders, invoices
- Upload & maintain your machine data

**Discover all advantages and possibilities:**



Time-saving



Free of charge



Easy to use



Inquiries & orders



Pictures & technical info



## **READY FOR OUR ONLINE STORE?**

No access to our new webshop yet? We are currently working hard to transfer all our customers to the new system, so be sure to keep an eye out for further info.

[eshop.tvh.com](http://eshop.tvh.com)

# ABOUT TVH PARTS & ACCESSORIES FOR...

## TELEHANDLERS

Telehandlers, also known as telescopic handlers, are highly versatile machines. They're commonly used for lifting goods, collecting waste, and a range of other industrial, construction, and agricultural applications. Thanks to an extending boom, telehandlers can lift loads much higher than a regular forklift. Attachments can also be fitted to the boom to increase the machine's capabilities.

We currently offer more than 500 000 known references for telehandlers. Turn to TVH for all replacement parts and accessories! Our professionally trained staff are ready to help with your toughest questions to make sure you get the part you need, when you need it.

We offer parts and accessories suitable for all major makes: **Ausa, Bobcat, Case, Caterpillar, Claas, Deutz Fahr, Dieci, Faresin, Genie, Haulotte, JCB, JLG, John Deere, Kramer, Magni, Manitou, Massey Ferguson, Merlo, New Holland, Weidemann ...**

We have partnered up with major brands to ensure the optimal operation of telehandlers: **Baldwin, Casappa, Cobo MT, Cummins, Curtis, Danfoss, Denso, Deutz, Donaldson, Eaton, Fleetguard, GDI, Grammer, Hella, KAB Seating, Mann+Hummel, Parker, Perkins, Rexroth, Total ...**





# ABOUT TVH

## PARTS & ACCESSORIES FOR...



### **FIXED-FRAME TELEHANDLERS**

Whatever part or accessory you need for fixed-frame telehandler, TVH is the place to be. We offer a unique range on the market and our short delivery times will surely surprise you.

These parts and accessories are suitable for: **Ausa, Bobcat, Case, Caterpillar, Claas, Deutz Fahr, Dieci, Faresin, Genie, Haulotte, JCB, JLG, John Deere, Komatsu, Manitou, Massey Ferguson, Merlo, New Holland ...**



### **ROTATING TELEHANDLERS**

You can also turn to TVH for parts and accessories for rotating telehandlers. The turret of these machines can rotate 360°, making it possible to carry out various tasks without moving the telehandler.

These parts and accessories are suitable for: **Bobcat, Dieci, Genie, JCB, Magni, Manitou, Merlo ...**

# ABOUT TVH

## PRODUCT OVERVIEW

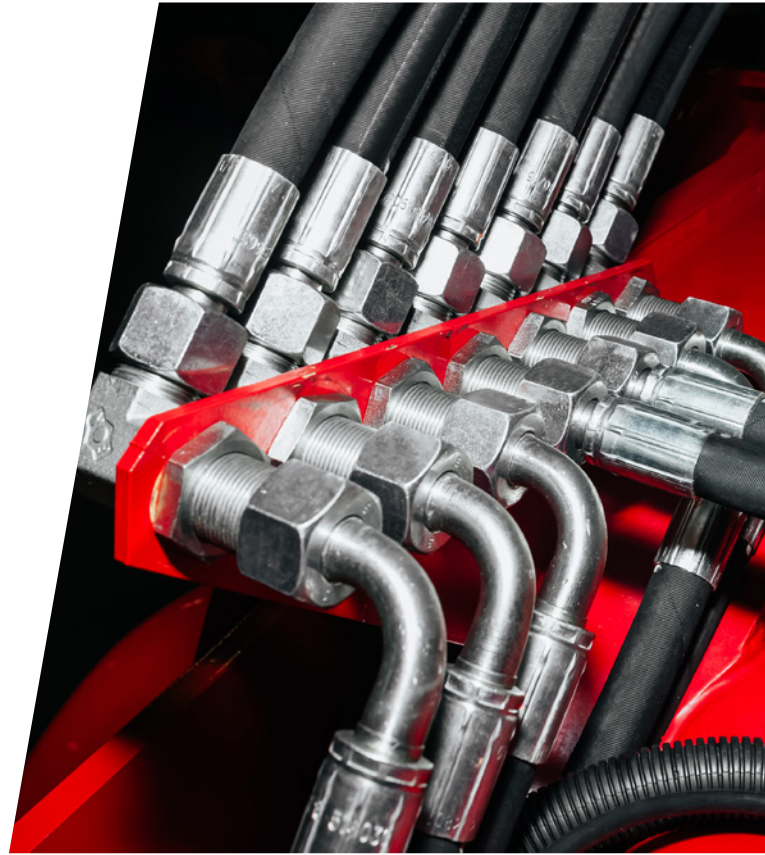
### HYDRAULIC PARTS

TVH offers an extensive range of hydraulic parts and accessories for maintaining telehandlers, including hydraulic pumps, orbitrols, hydraulic motors, hydraulic cylinders, distributor blocks, auxiliary valves and handle kits, transmission valves, solenoid valves, and more.

**rexroth**  
A Bosch Company

**Danfoss**

**Parker**



### TRANSMISSION, DRIVETRAIN & STEERING PARTS

The condition of the drive axle and drivetrain of a telehandler is incredibly important for ensuring safety and manoeuvrability. TVH offers a huge range of parts for steering and drive train maintenance, including steering wheels and knobs, clutch covers, discs and drums, automatic transmission discs, axle shafts, reductors, transmission pumps and valves, and much more.

**SAFIM**  
Bredas Co.

**KNOTT**

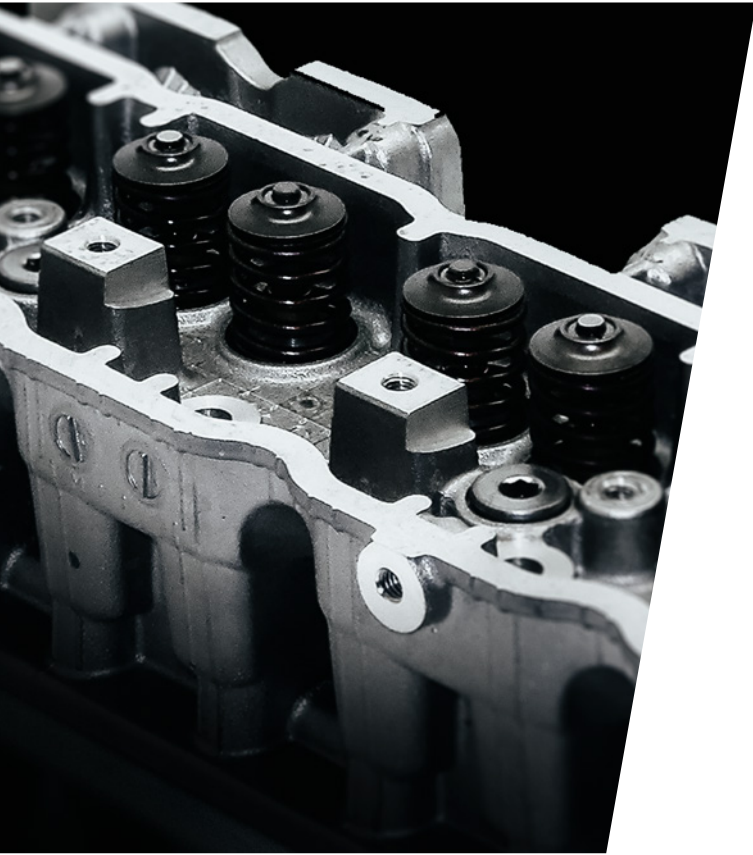
**CARRARO**





# ABOUT TVH

## PRODUCT OVERVIEW



### ENGINE, COOLING & FUEL SYSTEM

TVH not only offers new and remanufactured complete engines, we also stock a range of engine parts, with options suitable for all major makes and models. Cylinder heads and crankshafts are also available.



**BOSCH**  
Invented for life

**MAHLE**



THE IGNITION SPECIALIST



**Delphi**  
Technologies



**BorgWarner**



### FILTRATION

TVH offers a complete range of replacement filters for telehandlers. We offer air filters, oil filters, fuel filters and more, with options suitable for fixed-frame and rotating telehandlers of all major makes and models.



bersy  
catalysts and exhaust systems



Donaldson  
FILTRATION SOLUTIONS



**Hengst**  
FILTRATION

**MANN +  
HUMMEL**



**BALDWIN**  
FILTERS  
a CLARCOR company



# ABOUT TVH

## PRODUCT OVERVIEW

### FRAME & CABIN PARTS

We stock a large range of cabin parts and accessories to make sure the operator is able to work efficiently, from seat belts, mirrors, keys and key switches to customised seats.

High-quality windshields and windows are a necessity for enabling clear vision and maximising safety.

Sliding blocks help to protect the metal frame of a telehandler from wear and tear. It's important to choose high-quality sliding blocks, and to replace them regularly for ongoing protection.

Gas springs enable the safe lifting, positioning, lowering, and counterbalancing of weights.



### ELECTRICAL

All the electrical parts of a telehandler need to be working perfectly to ensure maximum efficiency. Find a full range of electrical parts and accessories at TVH, including hour meters, back-up alarms, access control systems, battery discharge indicators, horns, weighing systems, speed limiters, shock detectors, and more.

Telehandler lights improve visibility and safety on worksites. Find a full range of mandatory and additional safety lights at TVH, with LED, xenon and halogen versions to choose from. We have front lights, rear lights, marker lights, number plate lights, work lights and projection warning lights. E-approved options are available for machines that are driven on public roads.



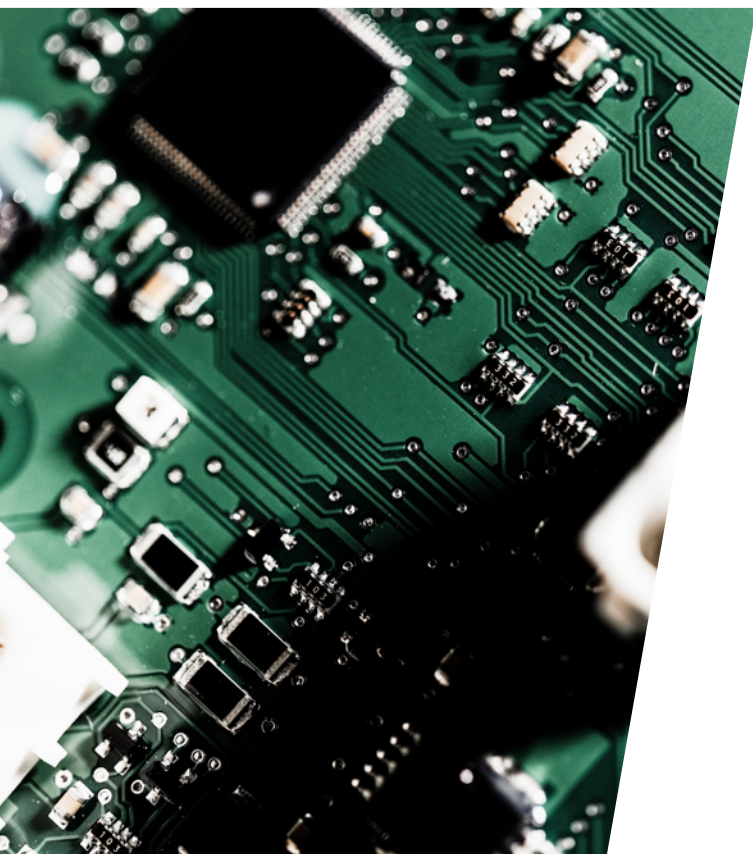
# ABOUT TVH

## PRODUCT OVERVIEW



### BATTERY, CONNECTORS & CHARGERS

Our range includes different types of batteries: gel, AGM, deep-cycle, semi-traction, monobloc batteries ... We also offer high-frequency universal battery chargers for wet and gel batteries. Conventional battery chargers also form part of our range. We guarantee that our chargers are of original quality.



### ELECTRONICS

The telehandler's printed circuit board ensures that the machine knows exactly what to do when the operator presses a button. TVH is a trusted supplier of parts that ensure that a machine works as it should, namely printed circuit boards, power controllers and displays. Are you looking for complete joysticks and lever handles, or their individual components? At TVH, you will find the solution that meets your requirements.





## **TYRES**

Choosing the right tyres for the circumstances a telehandler is used in, improves safety and manoeuvrability. TVH offers a wide range of tyres for a variety of applications. An excellent price-quality ratio and fast delivery are guaranteed.



## **GENERAL MECHANICAL COMPONENTS**

General components of high quality are the glue that holds the machine together. Bearings help reduce friction, while bushings minimise vibration. These parts, and many others (e.g. nuts and springs), increase comfort and safety. But they also experience a lot of wear over time. Only regular maintenance or even the replacement of these hardware components will guarantee efficiency.





# ABOUT TVH

## PRODUCT OVERVIEW



### **ATTACHMENTS FOR TELEHANDLERS**

Expand a telehandler's capabilities with attachments. TVH offers a range of high-quality attachments for telehandlers from the brand CAM attachments, including loading buckets, bale grippers, forks, floating forks carriages and pallet fork frames.



### **SAFETY & ACCESSORIES**

Ground protection is a must when using telehandlers on fragile terrain. Discover a range of ground protection options at TVH. Our extremely strong ground protection mats can carry up to 50 tonnes per plate. And outrigger pads provide telehandlers with sure footing. They not only stop the vehicle from slipping, but they also prevent it from sinking into softer subsoil that needs to be protected.



# ABOUT TVH

## PRODUCT OVERVIEW

### WAREHOUSE & WORKSHOP

TVH is your one-stop shop for all maintenance and repair products, such as safety products and accessories, clothes, consumables, measuring devices, hand and power tools, workshop and warehouse accessories, outdoor equipment and lifting accessories. No need to shop elsewhere: at TVH you can order your consumables and accessories in one go with your other parts. It's that easy!



Beta Utensil S.p.A. Authorized Dealer



PROFESSIONAL TOOLS



# HYDRAULICS

## HYDRAULIC COMPONENTS

### HYDRAULIC CYLINDERS

Hydraulic cylinders are mechanical actuators that use pressurised hydraulic fluid to create force. Telehandlers have multiple hydraulic cylinders. They wear out over time and need to be replaced. You'll find an extensive range of hydraulic cylinders for telehandlers at TVH. We have single-acting cylinders, double-acting cylinders, telescopic cylinders, tandem cylinders, and more. They come in a variety of shapes and sizes, with options suitable for every application. Our skilled technicians are available to offer expert advice on selecting the right hydraulic cylinder for your needs.

**WE CAN REPAIR ALL CYLINDERS FOR TELEHANDLERS (EXCEPT TELESCOPIC CYLINDERS), PLEASE USE OUR REPAIR FORM.**

For more information, contact your sales advisor.

#### HYDRAULIC CYLINDER



#### SPECIAL CYLINDER



#### STEERING CYLINDER



#### TILT CYLINDER



#### TILT CYLINDER OUR DOUBLE ACTING



#### BRAKE CYLINDER



#### LIFT CYLINDER OR SINGLE ACTING



#### LIFT CYLINDER



#### MASTER CYLINDER





# HYDRAULICS

## HYDRAULIC COMPONENTS

### HYDRAULIC SEALS & RINGS



Hydraulic seals prevent leakage and contamination in the telehandler's hydraulic system. They block and separate fluids in the hydraulic system, making them vital for the smooth operation of the telehandler. They're made of soft material and are secured in grooves or fixed in a combination of seal rings to form a seal assembly. Seals need to be in good shape to do their job properly. They should always be replaced at the first sign of wear.

#### DISCOVER OUR RANGE OF HYDRAULIC SEALS FOR TELEHANDLERS

There are many different types of hydraulic seals for telehandlers, each serving a unique and essential purpose. Discover a huge range of seals for telehandler hydraulics at TVH, including:

- **O-rings** – Static, endless, round sealing rings with a circular cross-section. They're manufactured as complete rings.
- **Back-up rings** – Used in combination with an O-ring, this seal prevents extrusion if there is excessive pressure on the O-ring.
- **V-rings** – Placed on the shaft of rotating parts, this flexible seal applies low-contact pressure against the counter surface that maintains the sealing function.
- **Oil seals** – Rotary seals that can withstand high temperatures and pressures, and rapid movements. They keep oil in and contaminants out.
- **Piston seals** – These use high pressure from the moving piston rod to maintain a seal between the piston and cylinder bore. They work in two directions.
- **Lip seals** – Performs the same function as a piston seal, but only works in one direction.
- **Guide rings** – These are not seals but are just as important. They guide moving parts over static parts to ensure proper alignment and prevent leaks.
- **Wiper rings** – Keeps contaminants like dust and dirt out of hydraulic cylinders.
- **Composite seals** – Similar to piston and lip seals, composite seals consist of multiple parts and function differently depending on the shape and application.
- **Bonded seals** – Made up of a metal and rubber part, bonded seals cover the heads of screws or bolts to completely seal the assembly.

#### SEALKIT HOPPER LIFT CYLINDER



REF [168TA6691](#)

#### SEALKIT PISTON ROD ASSEMBLY (POWERED TRACK ROD-FRONT)



REF [168TA6695](#)

#### SEAL ASSEMBLY KIT



**FORCE**  
PROFESSIONAL TOOLS



Professional tools to assemble o-rings without any damage. You get 4 different tools for each specific intervention.

REF [166TA2284](#)

# HYDRAULICS

## HYDRAULIC COMPONENTS

### HYDRAULIC PUMPS



TVH has a large stock of hydraulic pumps for all telehandler makes and models.

**We stock over 2000 different pumps.**

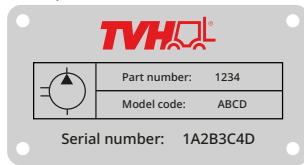
Our brands: **Bondioli & Pavesi, Bucher, Caproni, Chapel, Concentric (Haldex - John S Barnes), Eckerle, Galtech, HPI, Kawasaki, KYB, Linde Hydraulics, Marzocchi, Nihon Spindle, Roquet, Salami, Shimadzu ...**



### HOW TO FIND THE CORRECT HYDRAULIC PUMP

To identify the correct hydraulic pump we need the full details on the ID plate on the pump, the engravings in the pump housing or the complete machine details.

Example:



**IF YOU WANT TO HAVE A HYDRAULIC PUMP REPAIRED, PLEASE USE OUR REPAIR FORM.**

### GEAR PUMPS



### PISTON PUMPS



### REPAIR PARTS FOR PUMPS & MOTORS



At TVH, we understand the importance of efficiency and durability in the field, which is why we offer a comprehensive range of spare parts and repair options to consolidate all maintenance needs. From hydraulic pumps to hydraulic motors, we have you covered, ensuring minimal downtime and maximum productivity.

To further enhance the performance of hydraulic systems, we have established strategic partnerships with renowned industry leaders. Through collaboration with Rexroth, Danfoss, and Parker, we bring you the most advanced technology and expertise in the market. These partnerships ensure that our products meet the highest standards of quality and innovation, empowering equipment to achieve optimal efficiency and longevity.





# HYDRAULICS

## HYDRAULIC COMPONENTS

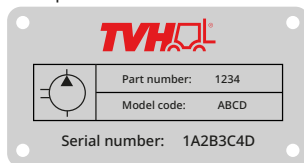
### HYDRAULIC PUMP UNITS



### HOW TO FIND THE CORRECT HYDRAULIC PUMP UNIT

To identify the correct hydraulic pump unit we need the full details on the ID plate on the pump unit, the engravings in the pump housing or the complete machine details.

Example:



**IF YOU WANT TO HAVE A HYDRAULIC PUMP UNIT REPAIRED, PLEASE USE OUR REPAIR FORM.**

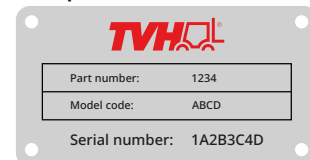
If you can't find the hydraulic pump unit you need, we can help with unique configurations!

### HYDRAULIC MOTORS



To order a hydraulic motor, give us the full details of the ID plate on the unit, engravings in the unit or by giving us the complete machine details.

Example:



If you want a repair of your Hydraulic pump, please contact your sales advisor.

# HYDRAULICS

## HYDRAULIC COMPONENTS

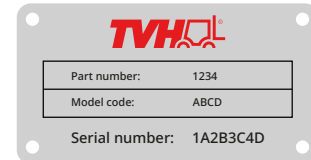
### COUNTERBALANCE VALVES



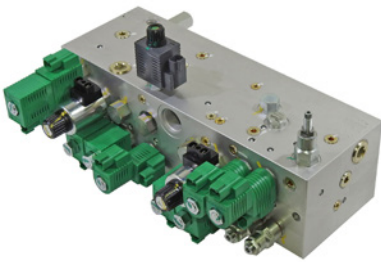
Counterbalance valves play an integral role in the important task of safely controlling an actuator, which may be holding a load or a person in the air. They help manage the pressure created by impacts and loads to stabilise loads, avoid equipment damage and cope with hose failure and more. They can be mounted directly onto control units, pumps and cylinders to shorten the hydraulic flow path and improve performance. This improves hose guidance and reduces the number of hydraulic connections, which in turn reduces leakages.

Please send us a clear picture of the ID tag on the hydraulic valve. This will help drastically in the search of the perfect part for your machine or application. If there is no ID tag, we can also use the machine information to offer the right replacement.

Example:



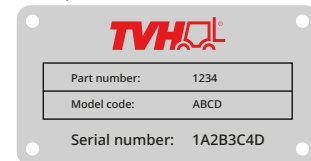
### HYDRAULIC INTEGRATED CIRCUITS (HICS)



Hydraulic Integrated Circuits (HICs) are like the brains of hydraulic systems. They combine multiple functions into a compact unit named hydraulic manifold. This integration reduces the need for extra components, saving space, weight, and cost. Plus, it enhances system efficiency, responsiveness, and reliability, making machines smarter and more efficient. HICs are a game-changer, streamlining hydraulic systems for better performance and cost-effectiveness.

Please send us a clear picture of the ID tag on the hydraulic valve. This will help drastically in the search of the perfect part for your machine or application. If there is no ID tag, we can also use the machine information to offer the right replacement.

Example:



# HYDRAULICS

## HYDRAULIC COMPONENTS

### ELECTROHYDRAULIC ACTUATORS



The PVE Electrohydraulic Actuator by Danfoss is a sophisticated device used in various hydraulic systems. It integrates electrical and hydraulic components to precisely control the position of hydraulic valves or other mechanisms. The actuator utilizes a proportional solenoid valve to regulate hydraulic flow, responding to electrical input signals with high accuracy. This enables precise control over the speed, direction, and force of hydraulic systems, making it ideal for applications requiring fine-tuned movement. The actuator features built-in sensors to provide feedback on position and performance, ensuring reliable operation and allowing for closed-loop control. Its compact design and robust construction make it suitable for use in diverse industrial applications, including construction equipment, agricultural machinery, and material handling systems. With its advanced technology and reliable performance, the PVE Electrohydraulic Actuator enhances the efficiency and productivity of hydraulic systems in various industries.

### DANFOSS ACTUATORS



Model	Fault detection	Voltage	Type connection	REF
11166859	Active	11/32	AMP	<a href="#">168TA8359</a>
11166858	Active	11/32	AMP	<a href="#">168TA8360</a>
11166849	Passive	11/32	AMP	<a href="#">168TA8361</a>
11166857	Active	11/32	Hirschmann	<a href="#">168TA8362</a>
157B4037	Passive	11/32	AMP	<a href="#">168TA8363</a>
157B4036	Active	11/32	AMP	<a href="#">168TA8364</a>
157B4035	Passive	11/32	AMP	<a href="#">168TA8365</a>
157B4034	Active	11/32	AMP	<a href="#">168TA8366</a>
157B4332	Active	11/32	Hirschmann	<a href="#">168TA8367</a>
157B4033	Passive	11/32	Hirschmann	<a href="#">165TA4097</a>
157B4032	Active	11/32	Hirschmann	<a href="#">160TA3585</a>

Model	Fault detection	Voltage	Type connection	REF
157B4737	Passive	11/32	AMP	<a href="#">168TA8368</a>
157B4736	Active	11/32	AMP	<a href="#">168TA8369</a>
157B4735	Passive	11/32	AMP	<a href="#">168TA8370</a>
157B4734	Active	11/32	AMP	<a href="#">160TA4093</a>
157B4416	Passive	11/32	DIN	<a href="#">168TA8371*</a>
157B4416	Passive	11/32	DIN	<a href="#">168TA8372*</a>
157B4116	Passive	11/32	DIN	<a href="#">147TA4253</a>
11166837	No	24	AMP	<a href="#">168TA8373**</a>
157B4901	No	12	AMP	<a href="#">168TA8374**</a>
157B4228	No	24	Hirschmann	<a href="#">165TA4095**</a>
157B4216	No	12	Hirschmann	<a href="#">160TA4052**</a>

\* For float position

\*\* On/off

Passive: fault detection signals the fault main does not stop the machine or engine

Active: detecting the fault and stops the machine or engine

### ELECTROHYDRAULIC ACTUATORS FROM A DIFFERENT BRAND



Used on Merlo

REF [168TA6466](#)



Used on Merlo, Genie, Manitou and Dieci

REF [152TA2159](#)



Used on Merlo

REF [168TA6467](#)



Used on JCB

REF [168TA9072](#)



# HYDRAULICS

## HYDRAULIC COMPONENTS

### HOSES, PIPES & FITTINGS



**HYDRAULIC HOSES**  
Hydraulic systems contain critical components that enable fluids to run from one point to another. At TVH, you'll find a comprehensive range of parts that guarantee a smooth and safe flow of hydraulic fluid through any system. We offer a wide variety of hoses, tubes, fittings, connectors, couplings, and adaptors. And by providing a huge range of material combinations, thread types, sealing methods and capabilities, we offer a solution for every application.

fittings, connectors, couplings, and adaptors. And by providing a huge range of material combinations, thread types, sealing methods and capabilities, we offer a solution for every application.



**HYDRAULIC PIPES**  
Hydraulic pipes are exposed to high pressure during operation. We offer a selected range of high-quality hydraulic pipes with various wall thicknesses that prevent possible failure and avoid serious long-term consequences for both the system and the environment.



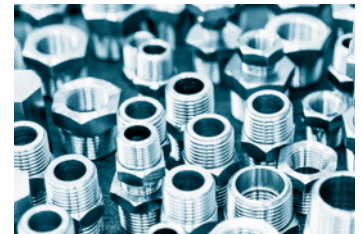
**HYDRAULIC ADAPTERS AND CRIMP FITTINGS**  
We offer a complete range of adaptors and crimp fittings in various materials such as brass and steel. Every part is manufactured to the highest standards, ensuring optimal fitting and reliable functioning. We offer several different

types of threads such as:

- Metric
- BSP
- JIC
- ORFS
- JIS
- Flanges

#### 3 TIPS AND TRICKS FOR OPTIMISING FLUID CONVEYANCE

1. By consulting the manufacturer's recommendations, you'll always achieve a perfect connection between hose and crimp fitting.
2. For easy assembly, dip the hose pillar into hydraulic oil.
3. To increase safety, replace all hydraulic hoses in line with the manufacturer's replacement recommendations.



#### BUY FLUID CONVEYANCE PARTS ONLINE VIA OUR ONLINE SHOP

All the parts you need are available through our online shop.

- Place orders and make enquiries at your convenience – Any day, any time.
- Find spare parts and accessories for all machines – Search using the equipment make and type using MyPartsFinder.
- Get all the details – For every product you look up, you immediately see the price, availability, pictures, technical details and expected delivery time.

### HYDRAULIC PARTS & ACCESSORIES CATALOG



In our new Hydraulic parts & accessories catalog, you can find an overview of hoses, crimp fittings, adaptors, quick couplings, cylinders and more for your machine.

REF 60834689

Please contact us to order your Hydraulic parts & accessories catalog.

# HYDRAULICS

## HYDRAULIC COMPONENTS

### HYDRAULIC ACCUMULATORS

#### TELEHANDLER HYDRAULIC ACCUMULATORS



Hydraulic accumulators improve a telehandler's efficiency and durability and enable a smoother, more comfortable ride for the operator. An accumulator offers advantages such as energy storage, pulsation dampening, and anti-roll stabilisation. Loud banging noises or contaminated hydraulic fluid can indicate the presence of unwanted air. If either of these signs are noticed, the accumulator should be checked to make sure it's working properly. If not, it needs to be replaced.

#### DISCOVER OUR RANGE OF TELEHANDLER HYDRAULIC ACCUMULATORS

Accumulators must be able to withstand high temperatures, extreme pressure, long power-on phases, and prolonged periods of service. That's why at TVH, we only provide telehandler hydraulic accumulators that are produced to the highest standards.

#### Our complete range of telehandler hydraulic accumulators includes:

- Bladder accumulators
- Diaphragm welded accumulators
- Diaphragm screwed accumulators
- Piston accumulators

Our wide range of hydraulic accumulators has options suitable for all types of telehandlers. At TVH, we keep a lot of stock on hand, so fast delivery is guaranteed.

#### TELEHANDLER HYDRAULIC ACCUMULATORS TO KEEP YOU GOING

In addition to our high-quality TotalSource brand, we also have telehandler hydraulic accumulators from well-known brands such as Freudenberg, Parker and Hydac in stock and ready to ship. You can discover all the available brands online in our online shop.

We can offer hydraulic accumulators suitable for telehandlers of any make and model, including: **Ausa, Bobcat, Case, Caterpillar, CLAAS, Deutz-Fahr, Dieci, Faresin, Genie, Haulotte, JCB, JLG, John Deere, Kramer, Magni, Manitou, Massey Ferguson, Merlo, New Holland, Weidemann ...**

### HYDRAULIC ORBITROL STEERING VALVES



#### TELEHANDLER ORBITROL STEERING VALVES

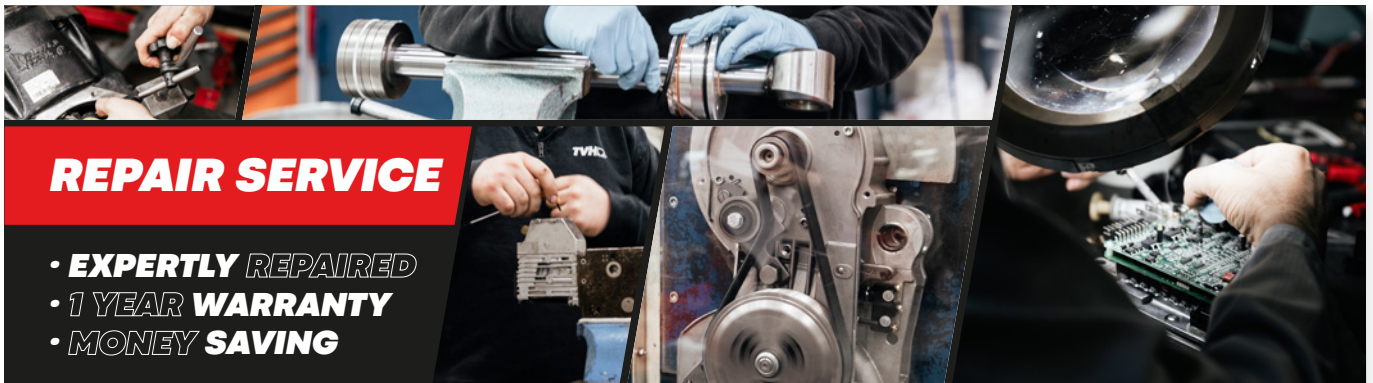
Orbitrol steering valves direct the flow of pressurised oil through telehandler hydraulics. They enable manual steering in the event of engine, belt or pump failure, making them integral for telehandler safety. When the wheel is turned, the orbitrol steering valve allows the oil to flow left or right in proportion to the turning of the wheel. Regular maintenance of the steering system is important to ensure optimal functioning and a long lifespan. If the telehandler becomes difficult to steer, is making a whining noise, or is leaking power-steering fluid, the orbitrol steering valve might need to be replaced.

#### DISCOVER OUR RANGE OF TELEHANDLER ORBITROL STEERING VALVES

Find the orbitrol steering valves you need to keep a telehandler's steering unit in tip-top shape at TVH, including spare parts and accessories. We always keep a lot of stock on hand, so fast delivery is guaranteed.

# HYDRAULICS

## HYDRAULIC COMPONENTS



### REPAIR SERVICE

- **EXPERTLY REPAIRED**
- **1 YEAR WARRANTY**
- **MONEY SAVING**

### TVH, YOUR REPAIR SPECIALIST

In addition to our extensive range, we offer the opportunity to repair your piston pump or piston motor.

When we receive a pump, we take measurements and conduct a visual inspection. Next, we disassemble it to inspect all individual parts. We clean and revise all parts to make sure they function as new again. By default, we replace all bearings and seals. After reassembly, we test the pump to evaluate its performance. The test results are written down in a report. Thanks to our procedures and work ethic, these reconditioned pumps perform as well as new ones. The result? You get a fully functioning pump that performs as well as new but at a reduced cost!

REMAN offers a notably quicker and more straightforward resolution. Customers can promptly obtain a reconditioned part within one day of placing their order within a limited selection of pump and motor models. Upon receiving the customer's faulty component, we refurbish it for future use. Additionally, we provide the previous pump owner with a refund for his old part.

We firmly believe in the quality of our repair centre. That is why we offer our reconditioned parts with the same warranty conditions as our new parts. The result? You get a reconditioned pump that performs as well as a new one but at a reduced price.

Thanks to extensive training, we built up knowledge to work with a wide range of brands. TVH is also the Official Repair Center for the following brands: **Danfoss, Parker.**



### OUR TEST INFRASTRUCTURE

Your business deserves the best. To remanufacture and repair parts, it's crucial to have the right tools at hand. Important tools in both our departments are our test benches. The test benches allow us to accurately detect faults or defects. Because of this, each repaired and remanufactured part that has been tested is always of high quality. For the majority of repairs, we provide a test report along with them.



### A QUALIFIED TEAM OF TECHNICIANS & ENGINEERS

Our highly skilled technicians and engineers in TVH's repair center possess strong mechanical and electrical engineering knowledge, allowing them to quickly diagnose and solve complex issues. We prioritize their continued education and provide regular coaching and training opportunities to keep them up-to-date with the latest technologies and techniques. Our technicians' passion and commitment to providing excellent service sets us apart, and we provide a supportive work environment to allow them to thrive and continue delivering high-quality service.



200+ technicians & engineers



50 000+ repairs per year



7500 m<sup>2</sup> workshop of which 3500 m<sup>2</sup> ESD-safe

### How does it work?

Fill in the repair request form. On the first question, indicate "Hydraulic, mechanical parts & electrical motors".

**FOR ALL MECHANICAL, HYDRAULIC AND ELECTRO MOTORS REPAIRS, PLEASE REGISTER YOUR REPAIR HERE.**



## BRAKE SYSTEM & PARTS

### HYDRAULIC BRAKES

#### MASTER CYLINDERS

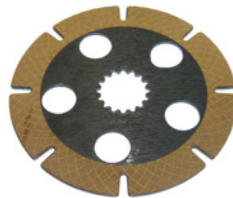


Telehandlers are powerful and heavy machines that use hydraulic brake systems to achieve the required stopping power. Their parts endure a lot of wear and tear under challenging conditions and need regular maintenance. You can find essential parts to keep your machines working smoothly at TVH.

The **master cylinder** gives the operator masterful control. At the heart of a telehandler's brake system lies the master cylinder which converts the force from the operator's foot into hydraulic pressure. This pressure is then regulated and channeled to the brake calipers at each wheel, ensuring precise control and reliable stopping power.

Stopping power that is transferred to the **friction brake disc**. A vital component of hydraulic brake systems. Crafted from robust materials to withstand the high temperatures and pressures of daily operation.

#### FRICTION BRAKE DISCS



The friction brake disc plays a crucial role in hydraulic brake systems transferring the stopping power generated during braking.

The **brake caliper** is the component that brings it all together. Housing the brake pads and braking cylinder which exert the force on the friction brake disc. The caliper assembly translates hydraulic signals into mechanical might. Stopping your telehandlers on a dime, time after time.

At TVH, you can find everything you need, from wear parts to spare mechanical components and more. We have the parts to keep your telehandlers going and growing!

#### CALIPERS



### BRAKE PADS

#### HANDBRAKES



Brake pads are essential telehandler parts that have to endure a lot. They can stop a vehicle at speed, which of course creates friction. Over time, they will need to be repaired or replaced. Rely on our vast offer of brake pads & pucks, brake shoe kits and brake linings to ensure telehandler safety.

#### BRAKES



At TVH, we do everything in our power to keep telehandlers up and running through a combination of fast delivery times and one of the most extensive ranges of brake pads on the market.

Brands and makes: **Dana**



## BRAKE SYSTEM & PARTS

### DIFFERENTIALS

#### DIFFERENTIAL AXLE SHAFTS



#### DIFFERENTIAL PARTS (GEARS)



#### HOUSINGS



#### GEAR PINIONS



The differential allows the telehandler wheels to turn at different speeds, which is the basic requirement to turn. Vibration, disturbing sounds and contaminated oil are indicators of a malfunctioning differential. If not handled in time, steering becomes a no-go. It isn't advised to repair/exchange only one of the damaged differential parts.

In the case of the gears, it is for example recommended to change the complete set.

At TVH, we offer a wide range of differential parts ranging from rack and pinion sets, gears, housings, bearings to axle shafts.

### DRIVE SHAFTS

#### DRAFT SHAFTS COMPLETE



The drive shaft is the part that drives a telehandler. In other words: no drive shaft means no production. No need to worry, though: our dedicated team of drive shaft experts is determined to find the ideal parts for you. And deliver them very quickly. When it comes to drive

#### UNIVERSAL JOINTS



shafts, every single part is crucial in keeping the telehandler up and running. We offer high-quality universal joints as well as complete drive shafts for telehandlers.

### TRANSMISSION PARTS

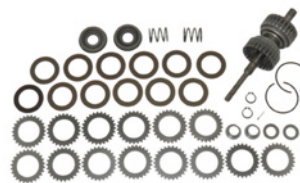
#### TRANSMISSION DISCS



#### TRANSMISSION FLANGES



#### TRANSMISSION PARTS



#### TRANSMISSION TORQUE CONVERTERS



Transmission parts form the heart and lungs of the drivetrain of a telehandler. But when transmission problems do occur, downtime should be kept to a minimum. At TVH, we have all the parts needed to fix the transmission and get you going again: From the vital transmission disc that transmits the power from the engine to the

transmission flanges. And since even the smallest transmission part plays a key role in maintaining a perfectly functioning telehandler, you can rely on us for pistons, breathers, torque converters, drums, flanges, disks and valves.

## BRAKE SYSTEM & PARTS

### REDUCTORS

#### REDUCTOR HUBS



A reductor is a versatile drivetrain component that reduces speed and increases torque, or vice versa. As such, it plays an essential role in the entire transmission system. However, a telehandler reductor will only perform at its best when all internal components are in optimal condition, so regular maintenance is vital.

#### REDUCTOR PARTS



At TVH, we offer the possibility of a hub reduction and a wide range of essential reductor components for telehandlers such as the housing and planetary reductor parts.

Brands and makes: **Dana, Omsi**



### STEERING AXLES

#### STEERING AXLE RODS



No accurate steering without the correct steering axle. And when it comes to steering, only the sturdiest axle and parts are good enough. The system has to withstand the velocity changes while driving and braking. We only offer the best, high-quality steering axle parts available. The steering axle kingpin is the axle around which the telehandler wheels rotate. No kingpin means no steering to the left or the right.

The steering knuckle is one of the components that make up the steering system. It contains wheel hubs (or spindles) and attaches to the suspension and steering components of the telehandler to transfer the movements of a steering wheel to the wheels.

#### STEERING AXLE KING PINS



#### STEERING AXLE KNUCKLES



The axle rod and rod ends connect the steering system to the knuckle and, consequently, the wheels. The rod end in particular converts the linear motion of the steering axle to a rotational motion, enabling the telehandler wheels to turn.

Additionally, we also sell high-quality steering axle knuckles and other steering components.

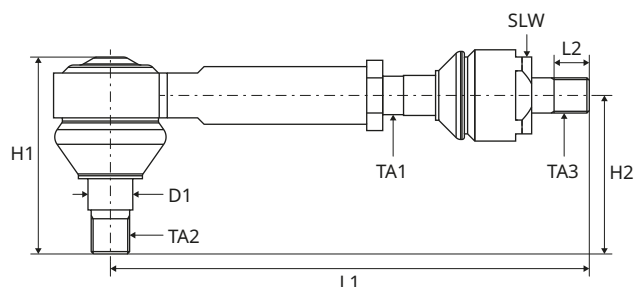
Brands and makes: **Dana, Omsi**





## BRAKE SYSTEM & PARTS

### TIE-ROD ENDS WITH AXIAL END



Below you can find a small selection of our range

Thread type TA1	Thread type TA2	Thread type TA3	RH/LH thread	Pitch mm	Connection height H2 mm	Length of thread L2 mm	Height of the tie-rod H1 mm	Taper diameter D1 mm	Length ball joint L1 mm	Wrench opening (width across flats) SLW mm	REF
<b>No grease nipple present</b>											
<b>Ball joint present</b>											
M30	M28	M27	RH	1.5	105	36	122.5	29	490	55	<a href="#">168TA9038</a>
M22	M24	M24	RH	1.5	95	30	120.5	27	475	50	<a href="#">168TA9039</a>
M22	M24	M24	RH	1.5	95	26	120	27	475	50	<a href="#">168TA9040</a>
M27	M28	M27	RH	1.5	95	36	120.5	29	505	54	<a href="#">168TA9041</a>
M27	M28	M27	RH	1.5	96	36	121	29.5	505	54	<a href="#">168TA9042</a>
M22	M24	M24	RH	1.5	95	25	120	27	540	50	<a href="#">168TA9043</a>
M30	M28	M27	RH	1.5	100	38	127.5	29	480	55	<a href="#">168TA9044</a>
M22	M24	M24	RH	1.5	95	30	120.5	27	468	50	<a href="#">168TA9045</a>
M30	M28	M27	RH	1.5	94	36	119	29	476	55	<a href="#">168TA9046</a>

# ENGINE, COOLING & FUEL SYSTEM

## FUEL SYSTEM

### PUMPS

#### EXPLORE OUR DIESEL INJECTION PUMPS

To provide the cylinders of a telehandler diesel engine, a fully functional injection pump is required. The system has a direct impact on the engine's performance, emissions, engine noise and in the worst case: a non-starting engine. Not only can we supply diesel injection pumps for various telehandler makes, but we also go one step further and offer all the associated engine components.

#### OUR RANGE OF FUEL PUMPS

##### ELECTRICAL FUEL PUMPS

These fuel pumps are an ideal pick for telehandlers that are standing still for longer periods. As soon as power is provided – through the ignition switch for example – fuel is being pushed towards the engine. A nice head start!

##### MECHANICAL FUEL PUMPS

Simple in design, but efficient in its functionalities. A mechanical fuel pump requires only one single line from the telehandler fuel tank: no extra wiring is needed. Furthermore, these fuel pumps tend to make less noise as well.

Our brands: **Atlas, Case, Cummins, Deutz, Perkins ...**

##### Why choose TVH?

Every machine type asks for a correct injection pump and/or fuel pump. We have a team of experts that will gladly guide you to the ideal part. To avoid misunderstandings, please mention the engine information when ordering.

### FUEL PUMPS

#### ELECTRICAL



#### MECHANICAL



#### PUMP WITH PIN



#### SPECIAL FUEL PUMP



#### HIGH PRESSURE PUMP



#### FUEL REGULATOR



# ENGINE, COOLING & FUEL SYSTEM

## FUEL SYSTEM

### INJECTION PUMPS



### INJECTORS, PARTS & ACCESSORIES

#### COMPLETE INJECTOR & NOZZLES



REF [168TA1839](#)



REF [168TA1840](#)

#### COMMON RAIL HIGH PRESSURE TESTER



- Power supply: 3.3 VDC
- Range: 0-2000 bar

REF [168TA1841](#)

#### INJECTOR WASHER 480 PCS



REF [168TA1842](#)

#### CONTROL VALVE



REF [168TA1843](#)

#### DIESEL ENGINE INJECTOR TESTER + LIQUID 1 L



REF [168TA1846](#)  
REF [168TA1847](#) - Liquid for injector 1 l

#### INJECTOR CLEANER



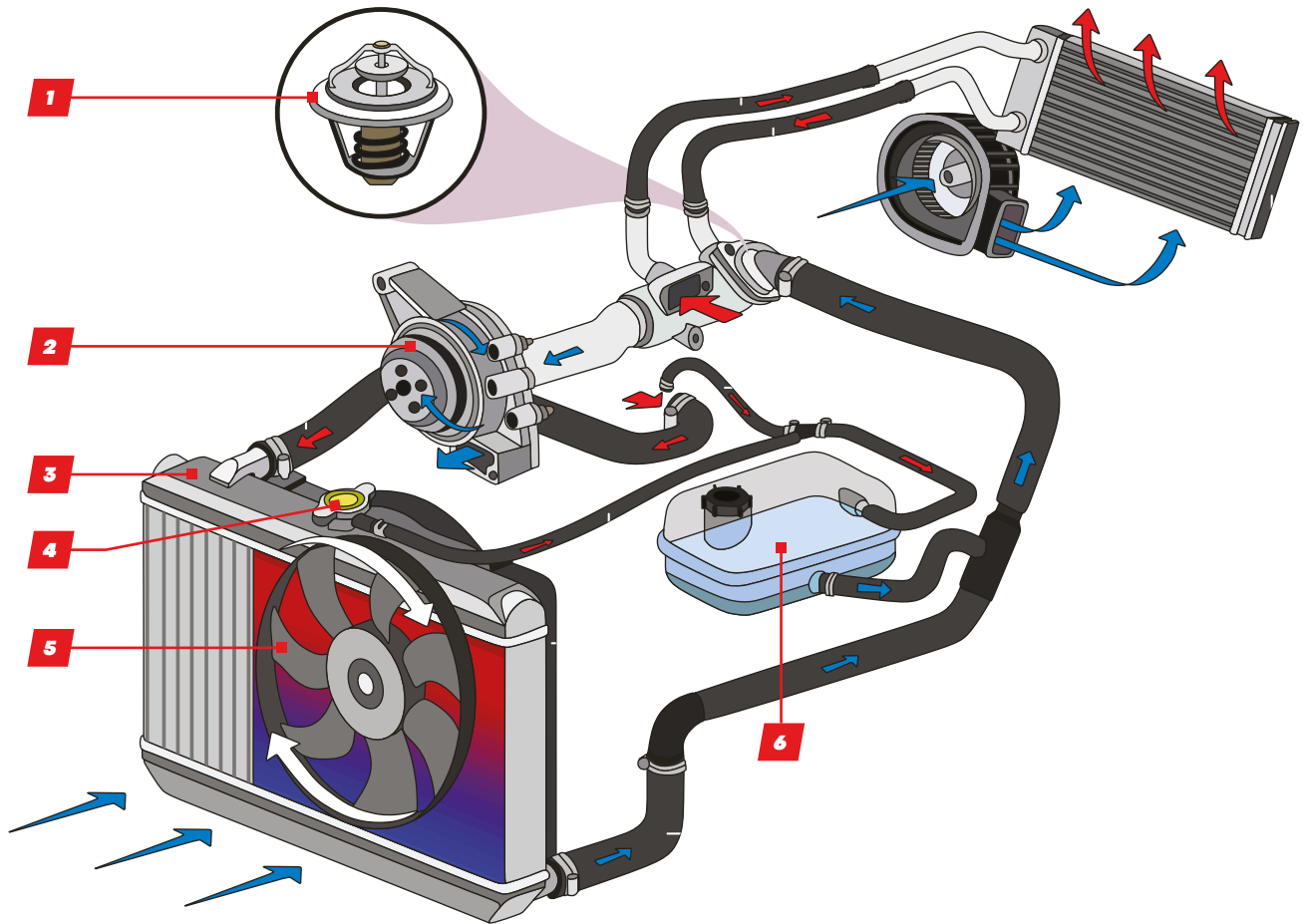
200 ml  
REF [142TA8247](#)






# ENGINE, COOLING & FUEL SYSTEM

## COOLING

### THERMOSTATS, WATERPUMPS, RADIATORS, RADIATOR CAPS, RADIATOR FANS, EXPANSION TANKS



	Type	Advantages
1.	 Thermostat	This valve directs fluid to regulate the system's temperature and enable maximum efficiency at all times.
2.	 Water pump	The beating heart of the cooling system. It circulates coolant through the cooling system and back to the engine.
3.	 Radiator	Cools down the system by filtering hot coolant through thin metal fins that transfer heat to the outside air.

	Type	Advantages
4.	 Radiator cap	Crucial component that regulates pressure to prevent the engine from overheating.
5.	 Radiator fan	Ensures the airflow through the radiator.
6.	 Expansion tank	Partially filled with air, this tank enables heated coolant to expand without causing overpressure.

# ENGINE, COOLING & FUEL SYSTEM

## EXHAUST SYSTEM

### EXHAUST SYSTEM

#### EXHAUST PARTS

Inlet, exhaust and after-treatment parts are a collection of components that influence the air intake, the disposal of exhaust gases, and the filtration of harmful particles. In addition, there are also forced induction components to make sure your engine is making the needed power.

Faulty or worn-out parts harm the mentioned systems and can result in a loss of power and/or an increase in air pollution. Therefore it's in everyone's interest to have these components in pristine condition. Replace timely with the high-quality parts provided by TVH.

Within our extensive range of inlet, exhaust, and after-treatment parts we have the following items for backhoe loaders or other small earth-movers:

- Manifolds
- Turbochargers
- Muffler & exhaust parts
- Exhaust after treatment
- ...

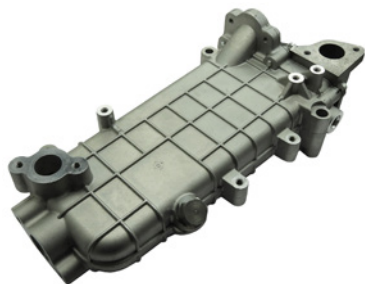
#### MUFFLERS



#### EXHAUST PIPES



#### EXHAUST PURIFICATION PARTS



# ENGINE, COOLING & FUEL SYSTEM EXHAUST SYSTEM

## ADBLUE



### HIGH PURITY NOX REDUCING AGENT

#### Specifications:

- Based on ureum and demineralized water
- ISO 22241 standard
- AUS32 Grade
- For diesel engines equipped with SCR technology
- Helps reducing harmful emissions of nitrogen oxides (NOX) and diesel particles
- Content: 10 l

**Do not pour into the fuel tank.**

REF [168TA9202](#)

## ADBLUE - OPTISPRAY



Is a ready-to-use urea solution used in the SCR system to treat nitrogen oxides (NOx).

#### Specifications:

- Prevents crystallization
- Protects the SCR system and engine
- Contributes to reducing your fuel consumption
- ISO 2224/Euro 6
- AUS32 Grade
- Content: 10 l

REF [168TA9203](#)



# ENGINE, COOLING & FUEL SYSTEM

## ENGINE COMPONENTS

### ENGINE



### COMPLETE NEW AND REMANUFACTURED/ EXCHANGED ENGINES FOR TELEHANDLERS

The engine is the heart of the equipment. If the engine fails, the machine can not be operated. Unexpected downtime results in decreased productivity, something that should be avoided at all times.

Luckily, you can rely on TVH to provide a new or exchanged engine for telehandlers. We have a large stock of complete engines to suit diesel engines.

#### AN EXTENSIVE OFFER

TVH offers an extensive range of remanufactured diesel and internal combustion engines (ICEs). Every engine is remanufactured according to its exact specifications, and always provided with

new pistons, bearings, valves, all seals, etc. After assembly, they are thoroughly tested to ensure you receive only the best quality.

All engine requests from customers are carefully treated separately by TVH in order to arrive at the best possible solution.

#### We have several options:

- Complete new engine with the possibility that TVH will take over the customer's old engine with credit of the deposit amount
- Exchange or remanufactured engine with return of core
- Exchange or remanufactured engine without return of the core
- Customer engine repair + extensive testing

### ENGINE CATALOG



In our Engine catalog you can find an overview of engine parts, cylinder heads, crankshaft for your machine.

REF 47494751

Please contact us to order your Engine catalog.

### ENGINE COMPONENTS

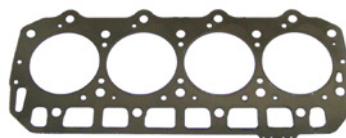
Keeping the engine of small earth-movers in good condition is essential to avoid engine failure and unnecessary downtime. In addition, high-quality engine components optimise the performance of machines

and improve their lifespan. Turn to TVH to find all necessary engine products, including belts, gears, fuel pumps, water pumps, silent blocks, gaskets, and more.

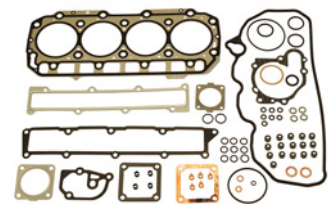
#### CYLINDER HEADS



#### CYLINDER HEAD GASKETS



#### GASKET SETS

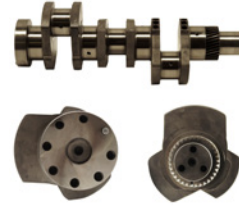
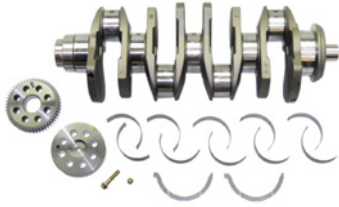


# ENGINE, COOLING & FUEL SYSTEM

## ENGINE COMPONENTS

### ENGINE COMPONENTS

#### CRANKSHAFTS



#### CAMSHAFTS



#### ENGINE VALVES



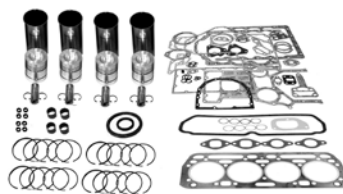
#### PISTONS



#### CONNECTING RODS



#### ENGINE OVERHAUL KIT



### TURBO CHARGERS



When it comes to machinery, speed is key. Connecting a turbo to the engine **increases power**. This means that even smaller engines can deliver more horsepower and torque. The result is **increased efficiency**, but also **less noxious emissions**.

#### EVERY SINGLE PART COUNTS

A turbocharger is more than just the combination of a **turbine** and a **compressor** housing. The exhaust gas from the engine passes through several complex parts and is used by the turbo to increase the intake of fresh air into the engine.

#### • The exhaust manifold:

The first component in the exhaust system is the exhaust manifold. It collects the exhaust fumes released from the engine cylinders and directs them to the catalytic converter. In turbocharged engines, the turbocharger is situated downstream of the exhaust manifold.

#### • Air and oil hoses:

- **Air hoses:** transport cool air to the engine.
- **Oil hoses:** provide the desired amount of lubrication to the turbocharger unit by transporting oil from the engine block directly to the bearing system. This gives the needed lubrication and cooling to the shaft of the turbo.

#### • Turbo charger:

- **Bearings:** small but essential parts in supporting and controlling the different movements of the turbo components. Also, they allow the turbo wheels to spin at a very high pace.
- **Compressor:** the part that draws in outside air, pressurizes it further and pushes it into the combustion chambers through the inlet manifold.
- **Turbine:** the 'hot side' of the turbo generates the rotational force used to power the compressor.
- **Complete turbo chargers:** the turbocharger forces compressed air into the cylinders. Combined with fuel, this creates a bigger bang and results in more power. The greatest advantage is that more power is available at a lower RPM. Subsequently, a faulty turbocharger is instantly noticeable by a loss of engine power. At TVH, we have turbo chargers for a wide variety of engines to ensure your machine keeps going.





# ENGINE, COOLING & FUEL SYSTEM

## ENGINE COMPONENTS

### BELT TENSIONERS



### BELT TENSIONERS: KEEP THE TENSION ON

Timing parts for telehandlers are crucial to synchronize the rotation of the camshaft and crankshaft. A timing belt is one of these vital parts: failure of this part while the telehandler's engine is running results in a lot of damage. To keep the timing belt in place – with the right amount of tension – we offer high-quality belt tensioners. When the timing belt itself needs replacement, it is necessary to change the belt tensioner as well.

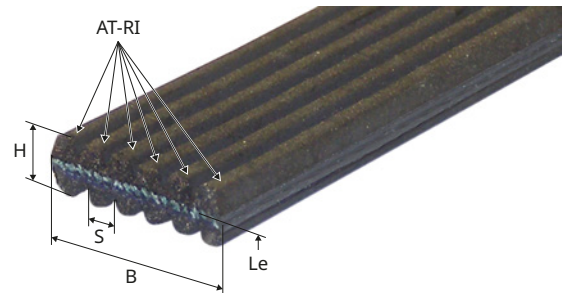
At TVH, we offer a wide range of different belt tensioner types, ranging from hydraulic to mechanical versions.

#### Why choose TVH?

- Telehandler tensioner belts of high-quality
- Fast delivery
- A dedicated team of engine experts

Our brands: **Optibelt, Gates, Bando, Goodyear ...**

### FLAT BELT - TYPE PK

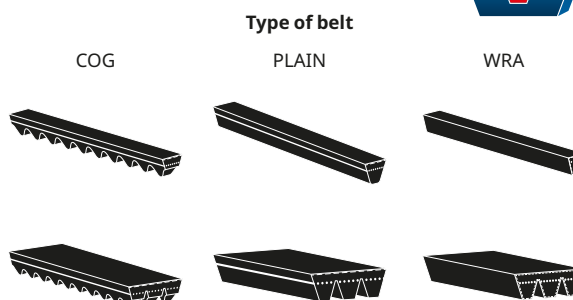
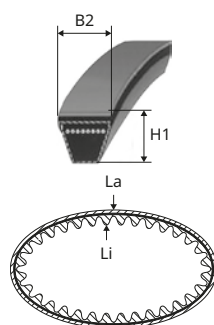


Effective length Le	Total width B	Total height H	Rib present	Number of ribs AT-RI	Rib width S	REF
mm	mm	mm	Yes/no		mm	
1060	21.5	4.2	Yes	6	3.56	<a href="#">140TA7315</a>
1300	28.3	4.5	Yes	7	3.56	<a href="#">168TA9047</a>
1370	28.5	4.9	Yes	8	3.56	<a href="#">168TA9051</a>
1381	28.1	5.0	Yes	8	3.56	<a href="#">145TA7132</a>
1404	28.5	4.6	Yes	8	3.56	<a href="#">168TA9048</a>
1406	28.0	4.6	Yes	8	3.56	<a href="#">137TA1743</a>
1473	28.5	4.6	Yes	8	3.56	<a href="#">137TA1640</a>
1670	28.6	4.7	Yes	8	3.56	<a href="#">137TA1694</a>
1860	28.0	4.4	Yes	8	3.56	<a href="#">168TA9050</a>
2008	28.0	4.2	Yes	8	3.56	<a href="#">168TA9049</a>

# ENGINE, COOLING & FUEL SYSTEM

## ENGINE COMPONENTS

### V-BELTS



La	Li	H1	B2	Type of belt	REF
mm	mm	mm	mm	mm	mm
710	656	9	10	COG	<a href="#">168TA3008</a>
726	685	6.5	10	WRA	<a href="#">168TA3002</a>
835	780	9	13.5	COG	<a href="#">106TA9079</a>
850	795	7.4	10	COG	<a href="#">106TA9055</a>
864	895	8	13	COG	<a href="#">106TA9083</a>
875	840	8.3	12	COG	<a href="#">106TA9081</a>
880	835	8.5	12.6	WRA	<a href="#">137TA1007</a>
920	865	9	12.5	COG	<a href="#">158TA9874</a>
925	875	8	10.2	COG	<a href="#">106TA9058</a>
950	843	7.5	10	COG	<a href="#">106TA9059</a>
969	900	11	17	COG	<a href="#">136TA9726</a>
975	912	9	12.5	COG	<a href="#">106TA9085</a>
1000	950	8.7	12.6	COG	<a href="#">168TA3006</a>
1008	960	8.5	12.5	WRA	<a href="#">136TA9766</a>
1025	970	8.1	12.5	COG	<a href="#">106TA9087</a>
1025	975	8.4	10.4	COG	<a href="#">136TA9725</a>
1030	990	8.6	12.6	COG	<a href="#">106TA9088</a>
1050	1001	7.9	10	COG	<a href="#">106TA9063</a>
1065	1022	8	13.3	PLAIN	<a href="#">160TA7031</a>
1070	1020	9	13.2	COG	<a href="#">106TA9089</a>

La	Li	H1	B2	Type of belt	REF
mm	mm	mm	mm	mm	mm
1075	1025	8	10	COG	<a href="#">106TA9064</a>
1100	1049	7.5	9.4	VM	<a href="#">106TA9065</a>
1120	1080	8	10.5	COG	<a href="#">106TA9066</a>
1140	1095	8	10.2	COG	<a href="#">158TA9873</a>
1150	1095	9.5	12.9	COG	<a href="#">106TA9092</a>
1158	1120	6.2	9.6	WRA	<a href="#">137TA1046</a>
1175	1120	8.2	10.5	COG	<a href="#">152TA3163</a>
1238	1196	7.3	10.5	COG	<a href="#">168TA3005</a>
1275	1312	7.8	10.1	COG	<a href="#">106TA9074</a>
1300	1249	8.5	10	WRA	<a href="#">137TA1025</a>
1335	1290	8	10	COG	<a href="#">168TA3007</a>
1350	1300	8.2	10.5	COG	<a href="#">106TA9075</a>
1475	1410	8.5	12.8	COG	<a href="#">136TA9708</a>
1500	1440	9	12.8	COG	<a href="#">106TA9102</a>
1500	1452	8	10.2	COG	<a href="#">137TA1058</a>
1570	1557	10	12.9	WRA	<a href="#">136TA9735</a>
1600	1550	7.9	10	COG	<a href="#">136TA9750</a>
1726	1676	11	16.7	WRA	<a href="#">136TA9707</a>
1800	1765	10	10	COG	<a href="#">136TA9655</a>
1841	1790	9.9	9.6	COG	<a href="#">136TA9733</a>

### BELT IDENTIFICATION TOOL



Tool for finding the right replacement belt.  
Indicates the exact internal length of the belt.

REF [106TA6951](#)

# FILTRATION FILTERS FOR TELEHANDLERS

## FILTERS FOR TELEHANDLERS



### ENGINE

N°	Type
1.	Oil filter
2.	Fuel filter Fuel pre-filter
3.	Air filter
4.	Ad blue filter

### CAB

N°	Type
5.	Cabin filter (inside/outside)

### HYDRAULICS

N°	Type
6.	Hydraulic filter (suction & return)

### DRIVETRAIN

N°	Type
7.	Transmission filter



# FILTRATION FILTERS FOR TELEHANDLERS

## FILTER KITS



After multiple operating hours, every filter needs to be replaced. Depending on the make and model of the machine, this needs to be done after a certain amount of time. At TVH, you can order all these filters and other tools in just a few clicks.

### DISCOVER OUR RANGE OF FILTER KITS

Instead of buying the filters separately, you can buy them in kits, which have exactly the same composition as those of the original manufacturer. This will save you time, money and effort. Furthermore, we can also offer various combinations of different filters:

- an air filter, hydraulic filter, inline fuel filter and oil filter
- two hydraulic filters, one air filter, two fuel filters and one oil filter
- a hydraulic tank filter element, filter cover gasket and tank breather

## FILTER ACCESSORIES



Filter accessories play a vital role in optimising the performance of filter assemblies. By choosing the right combination of accessories, it is possible to achieve optimal filtration efficiency, reduce maintenance costs, and extend the lifespan of the filter assembly.

In addition to our high-quality TotalSource brand, we also try to serve our customers with well-known filter brands such as **Baldwin**, **Donaldson**, **Fleetguard**, **Mann & Hummel**, **Parker** ... that we have in stock for a lot of applications. The brand that we deliver is mentioned on our online shop.

We can offer you filters suitable for various makes: **Merlo**, **Manitou**, **JCB**, **Kramer**, **Caterpillar**, **Dieci**, **Bobcat**, **Ausa**, **Terex**, **Faresin**, **Magni**, **CNH Industrial**, **Genie**,...



# FRAME & CABIN PARTS

## CABIN & COMFORT

**GLASSINTER®**

### THE CENTRE OF EXCELLENCE FOR CAB GLASS

Located in Beaufort-en-Vallée, France, is the heart of Glassinter. Here, 40 years of technical experience is utilised to develop cabin glass and accessories of the highest quality. As the European leader in cab glass for agriculture and construction equipment, we strive to deliver only the best to our customers.

#### CRYSTAL CLEAR QUALITY AND SAFETY

Every step in the process is monitored closely and quality checks are performed at every stage to ensure that our products meet expectations.

By doing so, we guarantee a perfect fit to original equipment and we also reach the highest safety standards. Our products are **100% compliant with European and American quality standards R43 and DOT, as well as CCC (China).**

Since cab glass is a critical part of any machine, we guarantee **fast and secure delivery to prevent downtime.** With the widest range and largest stock on the market – housed in over 10 000 m<sup>2</sup> of storage space – you can count on us to deliver on this promise.

#### 40 YEARS OF TECHNICAL EXPERTISE AT YOUR SERVICE

At Glassinter, we have our own design office consisting of specialists in the field. This team is constantly looking into **design quality, quality control**, and thorough stock inspections before products leave the warehouse for delivery.

We also aim to provide the best possible service before and after receipt of the goods. Our **dynamic team of technical advisors** is always available to assist you. These dedicated people are only a phone call away if you need help finding solutions tailored to you.



GLASSINTER®

# 40

YEARS  
OF EXPERTISE  
AND DEVELOPMENT

### THE LARGEST RANGE TO CATER TO YOUR NEEDS

Over the years we have created a wide range of windows and accessories. We have as many as 18 000 unique products in our assortment:

- Tempered glass
- Layered glass
- Coloured glass with holes
- Glass assemblies with handles
- Glass with heating
- Flat glass with cutout



In addition to cabin glass, you can also find a comprehensive range of **accessories** at Glassinter:

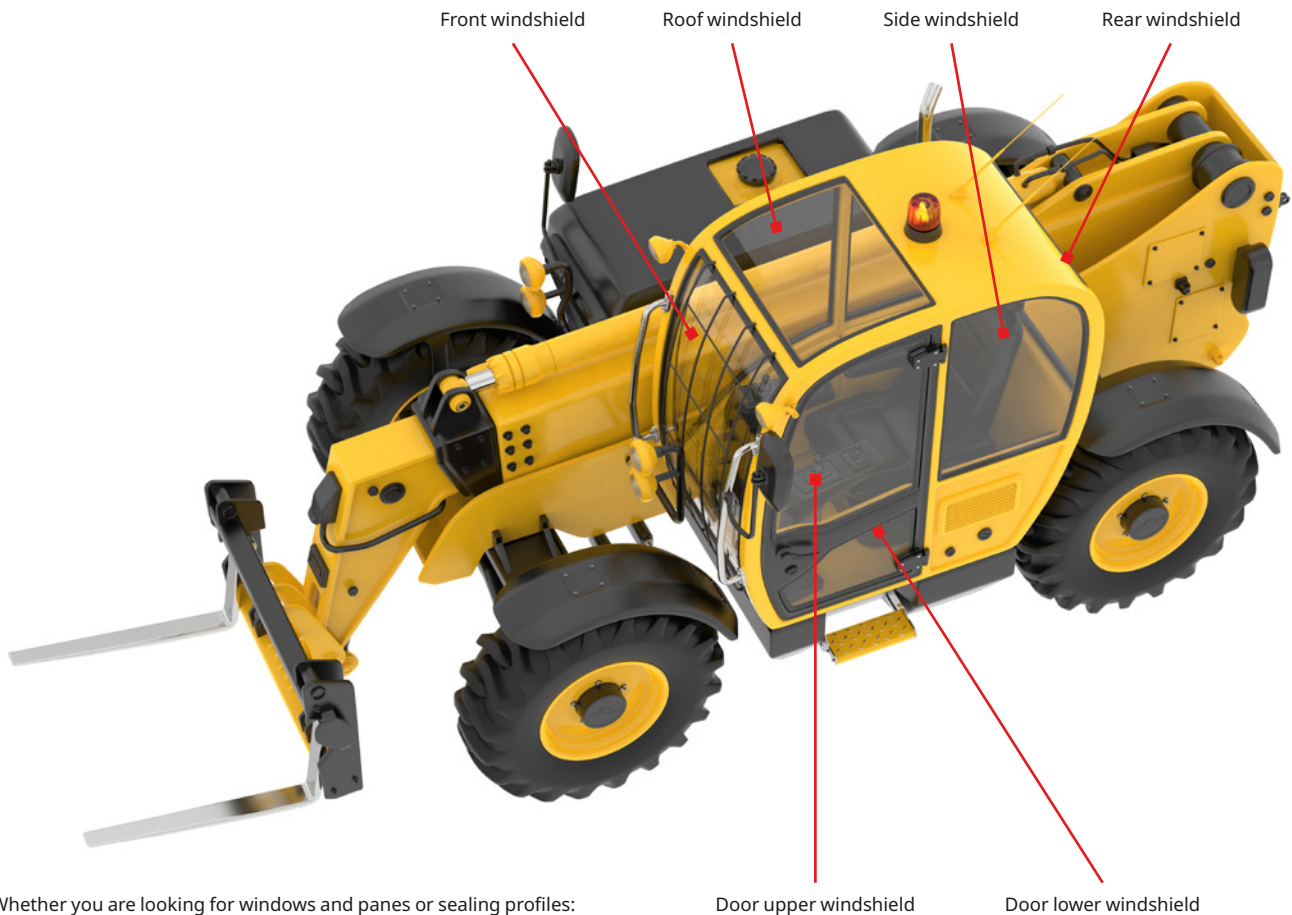
- Gas springs
- Rubbers
- Lexan Margard®
- Hinges and handles
- Adhesive kits
- Installation and disassembly tools, etc.



# FRAME & CABIN PARTS

## CABIN & COMFORT

### CABIN GLASS



Whether you are looking for windows and panes or sealing profiles: our wide range will undoubtedly meet your requirements. Hardened or tempered, with screen printing, recess or heating ... we have it all.

#### TEMPERED GLASS



#### LAYERED GLASS



#### COLOURED GLASS WITH HOLES



#### GLASS ASSEMBLIES WITH HANDLES



#### GLASS WITH HEATING



#### FLAT GLASS WITH CUTOUT







# FRAME & CABIN PARTS






## CABIN & COMFORT

### WIPER BLADES

	Type	Length mm	REF	
	Universal	280	<a href="#">161TA7073</a>	
	Universal	300	<a href="#">152TA2302</a>	
	Universal	330	<a href="#">152TA2303</a>	
	Universal	350	<a href="#">152TA2304</a>	
	Universal	380	<a href="#">161TA7074</a>	
	Universal	400	<a href="#">152TA2312</a>	
	Universal	450	<a href="#">152TA2313</a>	
	Universal	480	<a href="#">161TA7075</a>	
	Universal	500	<a href="#">152TA2314</a>	
	Universal	550	<a href="#">152TA2315</a>	
	Universal	600	<a href="#">152TA2305</a>	
	Universal	700	<a href="#">161TA7076</a>	
		16.5 - saddle type	500	<a href="#">152TA2309</a>
		16.5 - saddle type	600	<a href="#">152TA2310</a>
16.5 - saddle type		650	<a href="#">152TA2311</a>	
16.5 - saddle type		700	<a href="#">152TA2316</a>	
16.5 - saddle type		800	<a href="#">152TA2317</a>	

### WIPER ARMS

#### SINGLE WIPER ARMS






	Length mm	diameter mm	REF
	300-400	6	<a href="#">152TA2318</a>
	400-500	6	<a href="#">152TA2319</a>
	300-400	8-6	<a href="#">152TA2320</a>
	400-500	8-6	<a href="#">152TA2321</a>
	400-500	10-8	<a href="#">152TA2322</a>

# FRAME & CABIN PARTS



## CABIN & COMFORT

### WIPER ARMS

#### PARALLEL WIPER ARMS DOUBLE

	Type	Length mm	diameter mm	REF
	16.5 - saddle type	400-500	8-6 & M8	<a href="#">152TA2342</a>
	16.5 - saddle type	500-600	8-6 & M8	<a href="#">152TA2323</a>
	16.5 - saddle type	500	12-8 (2x)	<a href="#">152TA2324</a>
	16.5 - saddle type	550	12-8 (2x)	<a href="#">152TA2343</a>
	16.5 - saddle type	600	12-8 (2x)	<a href="#">152TA2344</a>
	16.5 - saddle type	650	12-8 (2x)	<a href="#">152TA2345</a>
	16.5 - saddle type	680	12-8 (2x)	<a href="#">152TA2346</a>
	16.5 - saddle type	700	12-8 (2x)	<a href="#">152TA2325</a>
	16.5 - saddle type	800	12-8 (2x)	<a href="#">152TA2347</a>


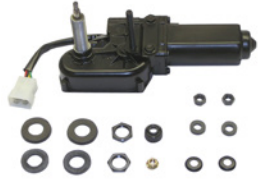

### WIPER MOTORS

	Volt	Wiping angle	Axle 1 mm	Axle 2 mm	Switch	REF
	12	80°	M12/A8xM6 - 79	M8 - 55	Yes	<a href="#">152TA2326</a>
	24	80°	M12/A8xM6 - 79	M8 - 55	Yes	<a href="#">152TA2327</a>
	12	90°	M12/A8xM6 - 79	M8 - 55	Yes	<a href="#">152TA2348</a>
	24	90°	M12/A8xM6 - 79	M8 - 55	Yes	<a href="#">152TA2349</a>
	12	110°	M12/A8xM6 - 79	M8 - 55	Yes	<a href="#">152TA2328</a>
	24	110°	M12/A8xM6 - 79	M8 - 55	Yes	<a href="#">152TA2350</a>
<b>Extra info: 1 speed, automatic park position, with thermal cut-off</b>						
	12	60°-70°-80°	M20/A12xM8 - 110	M20/A12xM8 - 110	No	<a href="#">152TA2351</a>
	24	60°-70°-80°	M20/A12xM8 - 110	M20/A12xM8 - 110	No	<a href="#">152TA2329</a>
<b>Extra info: 2 speeds, adjustable wiping angle, automatic park position, thermal cut-off</b>						

# FRAME & CABIN PARTS

## CABIN & COMFORT

### WIPER MOTORS

	Volt	Wiping angle	Axle 1 mm	Axle 2 mm	Switch	REF
	12	70°	M16/A8xM6 - 69	M8 - 55	Yes	<a href="#">152TA2352</a>
	12	90°	M16/A8xM6 - 69	M8 - 55	Yes	<a href="#">152TA2353</a>
	12	90°	M16/A8xM6 - 69	M8 - 55	No	<a href="#">152TA2354</a>
	24	90°	M16/A8xM6 - 69	M8 - 55	Yes	<a href="#">152TA2355</a>
	24	90°	M16/A8xM6 - 69	M8 - 55	No	<a href="#">152TA2330</a>
<b>Extra info: 1 speed, automatic park position, with thermal cut-off</b>						
	12	85°	M16/A8xM6 - 69	M8 - 33	Left	<a href="#">152TA2331</a>
	12	90°	M16/A8xM6 - 69	M8 - 33	Right	<a href="#">152TA2332</a>
	12	90°	M16/A8xM6 - 69	M8 - 33	Left	<a href="#">152TA2333</a>
	12	110°	M16/A8xM6 - 69	M8 - 33	Left	<a href="#">152TA2334</a>
	12	110°	M16/A10xM6 - 69	M8 - 33	Left	<a href="#">152TA2335</a>
<b>Extra info: 1 speed, automatic park position, without thermal cut-off</b>						
	12	60°	M20/A12xM8 - 108	M16/A10xM8 - 108	Left	<a href="#">152TA2336</a>
	24	75°	M20/A12xM8 - 108	M16/A10xM8 - 108	Right	<a href="#">152TA2337</a>
	12	80°	M20/A12xM8 - 75	M16/A10xM8 - 75	Left	<a href="#">152TA2338</a>
	24	80°	M20/A12xM8 - 75	M16/A10xM8 - 75	Left	<a href="#">152TA2339</a>
	12	80°	M20/A12xM8 - 108	M16/A10xM8 - 108	Left	<a href="#">152TA2340</a>
	24	80°	M20/A12xM8 - 108	M16/A10xM8 - 108	Left	<a href="#">152TA2341</a>
<b>Extra info: 2 speeds, automatic park position, with thermal cut-off</b>						

### ACCESSORIES

Description	REF	Description	REF
 Window adhesive cartridge	<a href="#">168TA9056</a>	 Rubber profile	<a href="#">152TA2299</a>
 Work tool	<a href="#">152TA2297</a>	 Rubber profile	<a href="#">152TA2300</a>
 Cartridge gun	<a href="#">152TA2298</a>	 Antifreeze screenwash	<a href="#">152TA2301</a>

# FRAME & CABIN PARTS

## CABIN & COMFORT

### CABIN



A telehandler cabin should be an enjoyable and safe environment for the operator. Trust TVH for creating these excellent working conditions.

Our cabin range includes all types of cabins, made of various materials. Depending on the type and make of your telehandler you can choose from our extensive range.

- Canvas cabs: This type consists of a canopy cab with a front screen. A canvas cab is definitely the most affordable option, yet it still provides a tough and safe environment for drivers.
- Canopy cabs: All our canvas canopies are designed and manufactured with the highest quality standards kept in mind. Besides, all canopies come with clear PVC windows that are as large as possible for maximum visibility. Perfect for any type of work environment.
- Canvas cabs with steel roof: This canvas cab is similar to the canvas cab mentioned above, but it has a steel roof. The steel roof offers sound suppression, so drivers can work in quiet circumstances. It comes with polycarbonate windows.
- Steel cabs with canvas doors: This steel cab with canvas doors is a combination of the canopy cab and steel cab. Safety is increased even more, making this an excellent choice.
- Steel cab: This steel cab doesn't only have a steel roof, but also steel doors, windows ...

### DOORS



Cabin doors can be overlooked but have their importance and functionalities, often related to safety or comfort. In a closed cabin, the noise emitted by the machine is reduced. Climate control is easier to maintain and weather conditions like rain or worse are less of a bother if you can close the cabin.

Additionally, they contribute to a full cabin enclosure. Telehandlers have one or multiple doors tailored to its cabin. Unfortunately,

these doors are prone to damage: loads can fall onto the telehandler, and the telehandler door can get impacted by an accident when either hitting another machine or getting hit by one. Sometimes the telehandler can even topple over when handling loads that are too heavy.

Fortunately, replacing a damaged door is quick and easy by finding and ordering a new one at TVH!

### LOCKS AND LATCHES



At TVH, you can find all that is required to keep all applications latched or locked, thanks to our wide range of doorlocks, window locks, hoodlatches and so on.

Latches allow to keep a door closed or open, so they are the perfect solution when a lock isn't required. When the door of a telehandler needs to be secured, a door lock is the way to go.



### GAS SPRINGS/SHOCK ABSORBERS

**STABILUS**







#### GAS SPRINGS

Heavy doors and hatches, vertically or horizontally hinged: these gas springs support and move them with ease. Just a couple of seconds and they're open with little effort from the driver required. Looking for a way to increase safety and efficiency? Gas springs are a step in the right direction.

#### SHOCK ABSORBER

Operating a telehandler on uneven terrain can be tough on both the operator's back and his/her productivity. These sturdy shock absorbers reduce the impact tremendously and increase working comfort. For both gas springs and shock absorbers, TVH has you covered. We offer a wide range for all applications and work together with well-known brands such as Stabilus, as well as with private labels who offer excellent quality standards. In this way, we can offer the ideal gas spring or shock absorber. Did you know that we even have specific storage for these products? This specific storage creates optimal seal lubrication that is very handy in case of longer stocks.

Below you can find a small selection of gas springs.

	Force N	Centre length mm	Working length mm	Connections	REF
	150	315	125	Type A	<a href="#">161TA6129</a>
	300	245	80	Type A	<a href="#">161TA6131</a>
	500	590	255	Type A	<a href="#">161TA6130</a>
	700	450	185	Type D	<a href="#">161TA6133</a>
	770	525	210	Type B	<a href="#">161TA6128</a>
	1000	445	185	Type D	<a href="#">161TA6132</a>

# FRAME & CABIN PARTS





## CABIN & COMFORT

### MIRRORS



Discover our mirrors for different kind of applications. Choose the item that best fits your needs from our wide product range. Most of them are E-approved. All our mirrors are universal and can therefore be used on any industrial machine.

Below you can find a small selection of our range.

	Material/shape	Dimensions mm	Technical details	REF
	Glass/multiple rectangular mirrors	371 x 199	Mounting kit with 3 mirrors	<a href="#">152TA1906</a>
	Glass/rectangular	158 x 98	With mounting bracket M8	<a href="#">152TA2013</a>
	Glass/oval	203 x 118	To mount on existing arms Diameter: ± 10 mm	<a href="#">152TA2026</a>
	Parabolic surface	225 x 125	With mounting bracket M8	<a href="#">152TA2021</a>

# FRAME & CABIN PARTS

## CABIN & COMFORT

### SLIDING BLOCKS

TVH is your supplier for sliding blocks. Below you can find a small selection of our range.

	Length mm	Width mm	Thickness mm	Thread or drilling size	REF
	150	75	14.5	M10 x 1.5	<a href="#">161TA6119</a>
	305	75	14.5	M10 x 1.5	<a href="#">161TA6120</a>
	150	60	22	M12 x 1.75	<a href="#">161TA6121</a>
	150	92.7	50	-	<a href="#">161TA6122</a>
	200	65.5	13	M12 x 1.75	<a href="#">161TA6127</a>

### AIR CONDITIONING, CABIN HEATING



Long and hot summer days can make for high temperatures inside a telehandler cabin. Our air conditioning range comes to the rescue so the operator can enjoy pleasant and cool temperatures all day long. Let's keep the cold air flowing! At TVH, we offer various air conditioning units with the corresponding components and accessories.











Our air conditioning range includes not only complete A/C units but also compressors, expansion valves and much more. Everything you need to fill telehandler cabins with much-welcomed cooled air:

- Complete rooftop units
- Split units
- Compressors
- Bespoke hoses
- Fans
- Expansion valves
- ...







# FRAME & CABIN PARTS

## CABIN & COMFORT

### KEYS

	Key n°	REF		Key n°	REF
	14603	<a href="#">139TA5092</a>		4A185	<a href="#">168TA9058</a>
	3000	<a href="#">151TA2456</a>		MC74	<a href="#">168TA9059</a>
	-	<a href="#">168TA9057</a>		-	<a href="#">160TA5374</a>
	-	<a href="#">129TA4010</a>		-	<a href="#">110TA3320</a>
	037	<a href="#">141TA3269</a>		-	<a href="#">168TA9060</a>

### KEY SWITCHES

	Number of connections	Built in diameter mm	Total length mm	Anti-restart	Key present	REF key n°	REF
Type of connection on ignition switch barrel: blade 6.3 mm-blade 9.5 mm							
	7	16	66	No	Yes	-	<a href="#">168TA9061</a>
	7	16	65	No	Yes	<a href="#">110TA3320</a>	<a href="#">152TA1741</a>
	4	25	80	Yes	Yes	<a href="#">129TA4104</a>	<a href="#">141TA2573</a>
	5	22	69	Yes	Yes	<a href="#">116TA7797</a>	<a href="#">168TA9062</a>
	10	26	78	Yes	Yes	<a href="#">141TA2654</a>	<a href="#">128TA5768</a>
	5	22	65	Yes	Yes	<a href="#">108TA4994</a>	<a href="#">110TA7657</a>



# FRAME & CABIN PARTS

## SEATS

### SEAT MSG20



- REF [110TA8675](#) – PVC seat + contact NO/NC + seat belt
- REF [110TA8676](#) – Fabric seat
- REF [110TA8681](#) – Seat cushion PVC
- REF [110TA8683](#) – Backrest PVC
- REF [105TA4857](#) – Seat belt

- REF [110TA8682](#) – Fabric seat cushion
- REF [110TA8684](#) – Fabric backrest
- REF [110TA8647](#) – Set contact NO/NC
- REF [140TA8270](#) – Contactor

### SEAT LOADER MSG85/721



- REF [110TA8716](#) – Seat PVC + seat belt
- REF [110TA8718](#) – Seat PVC + contact + seat belt
- REF [145TA2630](#) – Seat fabric + contact + seat belt

- REF [110TA8720](#) – Seat cushion PVC
- REF [110TA8722](#) – Backrest cushion PVC
- REF [125TA6316](#) – ELR seat belt
- REF [145TA2631](#) – Seat cushion fabric
- REF [145TA2632](#) – Backrest cushion fabric
- REF [108TA8537](#) – ALR seat belt
- REF [145TA2703](#) – Safety switch

### SEAT ACTIMO M



- REF [141TA5030](#) – Seat PVC
- REF [145TA2711](#) – Seat fabric

- REF [145TA2713](#) – Cushion PVC
- REF [145TA2714](#) – Cushion fabric
- REF [147TA3469](#) – Backrest cushion PVC
- REF [145TA2716](#) – Backrest cushion fabric

### WINGBACK MECHANICAL SUSPENSION



- REF [165TA8665](#) – Seat PVC + seat belt (orange) + switch
- REF [136TA1247](#) – Seat PVC + seat belt + switch + document holder

- REF [139TA6005](#) – PVC seat cushion + switch
- REF [139TA6006](#) – PVCbackres cushion
- REF [139TA6009](#) – Slide rails: 320 mm
- REF [139TA6007](#) – Switch

### SEAT XH2P2



- REF [141TA7757](#) – Seat PVC with slide rails
- REF [139TA6039](#) – Seat without suspension

- REF [144TA5372](#) – Slide rails: 297 mm

### SEAT 11E6



- REF [141TA7758](#) – Seat fabric, mechanical suspension

- REF [141TA7759](#) – Headrest
- REF [141TA7802](#) – Seat belt
- REF [141TA7803](#) – Armrest kit

# FRAME & CABIN PARTS

## SEATS

### ACTIVO STANDARD



REF [168TA3587](#) – Fabric version

### 9542566DMCBK



- REF [166TA7055](#) – Seat fabric + armrest (with suspension)
- REF [166TA7063](#) – Seat fabric + armrest (without suspension)
- REF [166TA7057](#) – Seat fabric + armrest + seat belt (with suspension)
- REF [166TA7060](#) – Seat fabric + seat belt (with suspension)
- REF [166TA7064](#) – Fabric seat cushion + switch
- REF [145TA2846](#) – Fabric backrest cushion
- REF [166TA7065](#) – Fabric headrest
- REF [166TA7066](#) – Armrest RH

### TS710



- REF [166TA8785](#) – Seat PVC
- REF [145TA2843](#) – Seat fabric
- REF [145TA2844](#) – Seat fabric + switch + document holder + seat belt
- REF [145TA2845](#) – Fabric seat cushion
- REF [147TA3006](#) – PVC seat cushion + switch
- REF [145TA2846](#) – Backrest cushion
- REF [145TA2842](#) – Slide rails: 325 mm
- REF [141TA5234](#) – Switch

### ALR SEAT BELT



REF [108TA4228](#)

### DOCUMENT HOLDER



- OEM quality
- Waterproof
- For A4 documents
- Outer dimensions: 365 x 280 x 55 mm
- Inner dimensions: 320 x 220 x 30 mm
- Material: high-density polyethylene

REF [123TA7529](#)

### DOCUMENT HOLDER



- Economic version
- For A4 documents
- Outer dimensions: 320 x 260 x 55 mm
- Inner dimensions: 295 x 230 x 40 mm
- Material: high-density polyethylene

REF [131TA2735](#)

## HORNS, BUZZERS & BACK-UP ALARMS



### DISCOVER OUR RANGE OF TELEHANDLER BUZZERS

When reversing a telehandler, dealing with the rear blind spot is a problem. Taking special care when manoeuvring is the operator's standard first call. As an extra safety measure, the backup alarm should be enabled. A telehandler backup alarm makes a pulsating noise whenever the telehandler is switched into reverse. It alerts everyone in the vehicle's path and prevents accidents and serious injuries.

We offer different types of backup alarms to suit all telehandler needs:

- The most common alarms are regular tonal (or bleeping) alarms. They come with either a fixed, adjustable or auto-adjusting volume. Some models offer the option to change the signal frequency from slow to fast and to change the tone of the alarm.
- White noise backup alarms emit a softer sound. They are ideal for working in residential areas, blending in better with environmental background noise.
- Nightshift reversing beepers are used in residential areas. They contain an override which can either completely override the alarm or restrict the volume during night time.

Not sure which telehandler backup alarm you need? Don't worry: our experts will gladly assist you in your search for the correct alarm.

### REVERSING ALARM BBS-TEK®, WITH WHITE NOISE



1



2

A white-noise alarm emits a low intensity sound, which immediately alerts those who hear it, because it is very different from sounds usually produced by human activity.

Most importantly, this sound can be immediately localised, triggering an avoidance response rather than turning heads and causing confusion.

Moreover, its multi-frequency character offers a vital safety advantage for the hearing impaired.

#### FIXED VOLUME MODELS

Fig	Voltage V	Volume dB	REF
<b>Normal use</b>			
1	12/24	82	<a href="#">111TA3741</a>
	12/24	87	<a href="#">111TA3742</a>
	12/24	92	<a href="#">134TA9511</a>
	12/24	97	<a href="#">134TA9513</a>
	36/80	82	<a href="#">111TA3743</a>
	36/80	87	<a href="#">111TA3744</a>
	36/80	92	<a href="#">134TA9512</a>
	36/80	97	<a href="#">134TA9514</a>
<b>Intensive use</b>			
2	12/24	102	<a href="#">134TA9515</a>
	12/24	107	<a href="#">134TA9516</a>

#### SMART MODELS WITH AUTOMATIC ADJUSTMENT

Fig	Voltage V	Volume dB	REF
<b>Moderately intensive use</b>			
1	12/24	77-97*	<a href="#">134TA9517</a>
<b>Intensive use</b>			
2	12/24	87-107*	<a href="#">134TA9518</a>

\* Volume adjustment: automatic

# ELECTRICAL ALARMS, MULTIMEDIA & ACCESSORIES

## CAMERA SYSTEMS



### FORK CAMERA

Allows the operator to easily see what is happening behind the telehandler to avoid accidents.



### HD WIRED CAMERA

Allows the operator to keep an eye on the front of the telehandler and surroundings with ease.

Battery pack	Camera set
--------------	------------

1 x 17h



12/24 V  
REF [165TA8457](#)

Battery pack	Camera set
--------------	------------

Twin screen  
one with  
battery pack  
1 x 4 h



12/24 V  
REF [168TA6822](#)

1 x 35h



12/24 V  
REF [151TA2975](#)

Wired



12 V  
REF [167TA6885](#)

2 x 17h



12/24 V  
REF [166TA1406](#)

Wireless



12/24 V  
REF [168TA6823](#)

Wired



12/24 V  
REF [165TA8458](#)



# ELECTRICAL ALARMS, MULTIMEDIA & ACCESSORIES

## WIRED 360° CAMERA SET



The 360° Around View camera system improves safety and helps the operator to avoid blind spots. It's specially designed for trucks, buses, emergency vehicles, etc., and is easy to install and calibrate. Working with a this system will ensure ultimate safety!

### Features:

- 4-channel 1080P 190° wide angle fish eye camera (support max 8-channel cameras), horizontal viewing angle >170°
- 4 x max 128 GB SD-cards for recording
- Simplified calibration
- 15 seconds pre-record function
- 4-channel 1080P/30 fps recording

- Image compression: H.264
- HD 1080P video output
- Wi-Fi

### Included:

- 1 x HD 360° control unit
- 4 x HD camera
- 1 x HD monitor
- Cables and mounting accessories

REF [166TA1409](#)

## WIRED REAR VIEW DVR CAMERA SET



### Included:

- 1 x 7" touch screen HD wired monitor
- 1 x DVR control unit
- 1 x HD camera
- 1 x remote control
- 10 m cable

REF [166TA1383](#)

### Recommended optional items:

- REF [166TA1381](#) - Spare camera
- REF [147TA6677](#) - 4 x 10 m cable

## BATTERY PACKS



REF [164TA5504](#) - 30-35 h  
REF [152TA1643](#) - 17 h



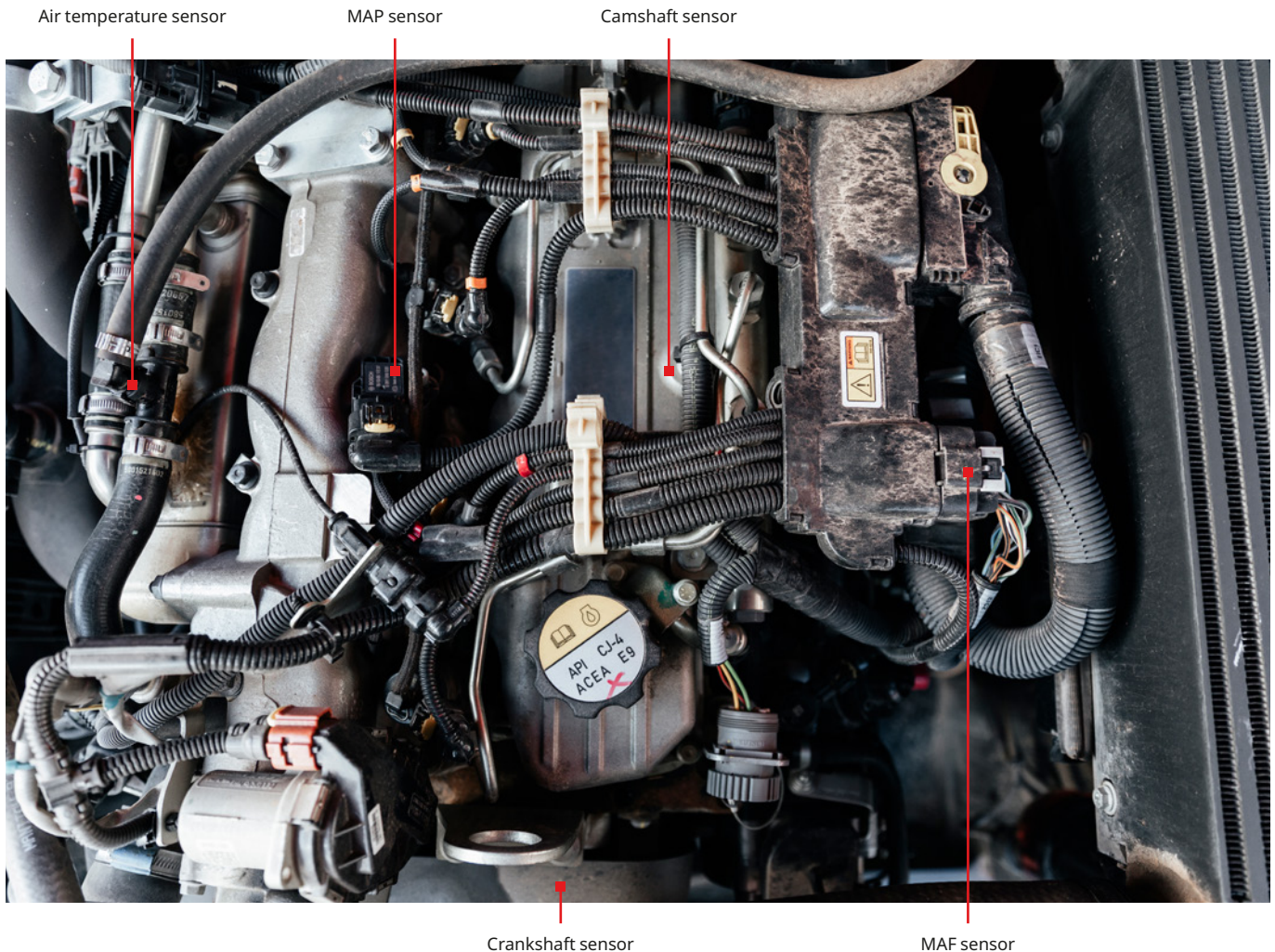
REF [166TA1376](#) - 30-35 h



REF [164TA5504](#) - 10-15 h  
REF [166TA1394](#) - 35 h

# ELECTRICAL SENSORS & SWITCHES

## SENSORS



## DISCOVER OUR RANGE OF TELEHANDLER SENSORS

Sensors detect specific physical parameters in or around a telehandler. They convert them into electrical signals which provide measurements or trigger automated actions. These indispensable compact instruments are vital in monitoring key operational and safety parameters on a telehandler.

TVH offers a wide range of sensors for telehandlers:

- Proximity sensors detect objects without direct contact. They use electromagnetic fields, acoustics or infrared beams and are essential for automation.
- Fluid level sensors monitor the amount of liquid in a container or tank. They can detect various liquids like water, oil and fuel. Fluid level

sensors will indicate when a telehandler needs to be refueled or when a liquid needs to be topped up.

- Pressure sensors gauge fluid or gas pressure in a system. They are important to keep an eye on things like the oil pressure in the hydraulic system or the air pressure in tyres.
- Temperature sensors measure heat levels in environments or objects. They're critical for ensuring a telehandler is operated within safe thermal limits. Deviations can be flagged for timely interventions, keeping the equipment and its operator safe.
- We also offer a wide range of other sensors, such as optical sensors, current sensors, air-intake sensors and many more.

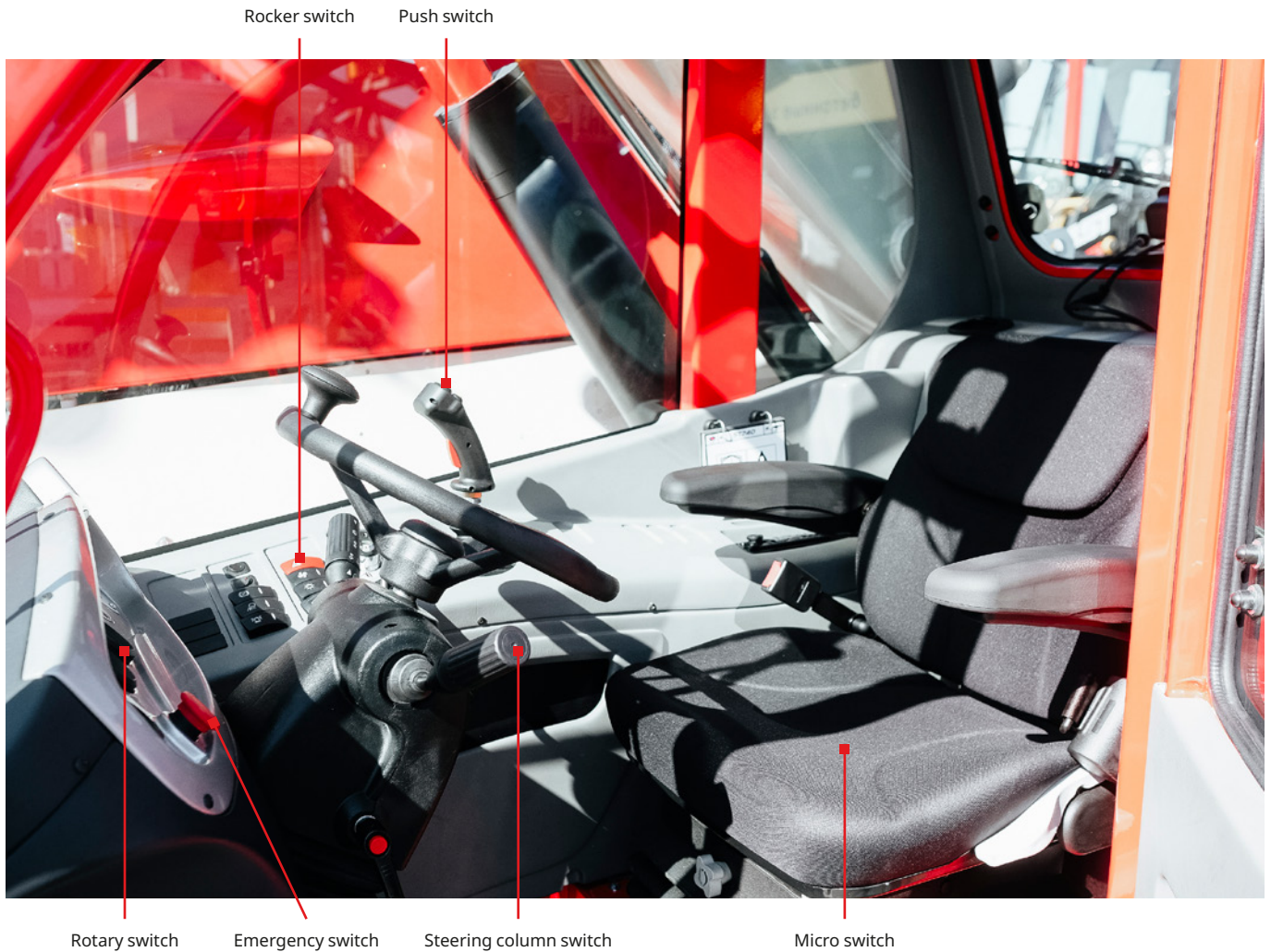


We also have the following brands in stock:  
Cummins, Deutz, Elobau, Omron, Sakae, VDO, Vishay



# ELECTRICAL SENSORS & SWITCHES

## SWITCHES & DASHBOARD CONTROLS



Rocker switch      Push switch

Rotary switch      Emergency switch      Steering column switch      Micro switch

### PRODUCT RANGE SWITCHES

To ensure that you definitely find the correct switch for a telehandler, we stock virtually all types of switches: limit switches, microswitches, rocker switches, toggle switches, battery switches, foot switches, mushroom-head switches, steering column switches, pull switches, turn switches, push buttons, control boxes ...

### QUALITY SWITCHES FOR TELEHANDLERS

All our products are of the highest quality. This is a small selection of the brands in our range:

- Crouzet, Omron, Burgess and Honeywell for microswitches
- Telemecanique (Schneider) and Pizzato for limit switches

All these switches meet the inspection marks. Furthermore, our electronics department – which has full control over the quality – performs extensive tests to make sure that all telehandlers perform optimally.



We also have the following brands in stock:  
Carlingswitch, Indak, Omron, Sensata, SWF, Telemecanique, VDO

# ELECTRICAL GAUGES

## GAUGES

Driving a telehandler without gauges is like driving with a blindfold; you have no idea what's going on. Gauges provide accurate readings about key parameters of a telehandler. In real time, the operator has a clear visual display and on which he can see if he needs to refuel, charge a battery or if he needs to top up a liquid.

### DISCOVER OUR RANGE OF TELEHANDLER GAUGES

We offer a wide range of gauges to suit all telehandler needs:

- Oil pressure meter: Keeps track of a telehandler's oil pressure in the blink of an eye.

- Fuel level gauge: Informs the driver how much fuel is left in the tank.
- Temperature meter: Displays the temperature of the oil or water.
- Speedometer: Indicates the current speed of the telehandler.
- Hour meters: Counts the number of hours a machine has been running.
- And more ...

Below you can find a small selection of our range.

### WATER TEMPERATURE GAUGE



- Diameter: 52 mm
- REF [168TA6825](#)

### TEMPERATURE GAUGE



- Diameter: 85 mm
- REF [168TA6831](#)

### OIL PRESSURE GAUGE



- Diameter: 57 mm
- REF [168TA6826](#)

### AMMETER



- Diameter: 41 mm
- REF [168TA6830](#)

### FUEL GAUGE



- Diameter: 52 mm
- REF [168TA6827](#)

### FUEL GAUGE



- Diameter: 52 mm
- REF [143TA7238](#)

### COMBINATION GAUGE



- Diameter: 90 mm
- REF [168TA6828](#)

### COMBINATION GAUGE



- Diameter: 99 mm
- REF [168TA6829](#)



# ELECTRICAL STARTERS & ALTERNATORS

## STARTERS

There's nothing worse than a telehandler's engine not starting on a cold winter morning. Efficient starters ensure reliable engine startup, even in cold weather. Maintain a telehandler's reliability, and make sure the starter is up to scratch.

Starters convert electrical energy from the battery into mechanical energy to start up the engine. They initiate the engine's operation by engaging the flywheel. This starts the combustion process, enabling the telehandler's engine to start.

TVH supplies starters to suit all manner of telehandler engines.

- Direct Drive (DD) starters are a type of engine starter where the armature directly turns the engine's crankshaft without a reduction gear. It's simpler in design than geared starters but requires more power to start larger engines. Direct Drive starters are often found in older industrial equipment.
- A Planetary Gear Reduction (PLGR) starter is an advanced starting mechanism used in industrial machinery. It uses a gear system to

amplify torque, enabling efficient engine startup. Its design ensures a robust and consistent ignition process for heavy-duty applications.

- Offset Gear Reduction (OSGR) starters use a set of gears to reduce the speed and increase the torque of the motor for efficient engine ignition. Positioned offset from the armature, it provides a compact design, combining the benefits of direct drive and gear reduction systems. Common in many modern heavy-duty applications.
- Other starters in our range include KB starters, GM starters, CAV starters and more.

Not sure which telehandler starter you need? Don't worry: our experts will gladly assist you in your search for the correct starter.

LucasElektrik

MAHLE®

Description	Brands	References
Direct drive (DD)	Mahle Lucas Bosch Mitsubishi	 <a href="#">167TA8908</a> <a href="#">103TA3234</a> <a href="#">167TA8917</a>
Planet gear reduction (PLGR)	Mahle Lucas Bosch Delco Remy Deutz Mitsubishi Perkins	 <a href="#">167TA8909</a> <a href="#">167TA8913</a> <a href="#">167TA9161</a> <a href="#">167TA8922</a> <a href="#">167TA8923</a> <a href="#">167TA8927</a>
Offset gear reduction (OSGR)	Denso Hitachi Lucas	 <a href="#">167TA8910</a> <a href="#">167TA8914</a> <a href="#">167TA8919</a> <a href="#">135TA5635</a> <a href="#">167TA8924</a> <a href="#">139TA6245</a> <a href="#">167TA8929</a> <a href="#">167TA8931</a>
Permanent magnet gear reduction (PMGR)	Mahle Bosh Delco Remy Deutz Lucas Valeo	 <a href="#">167TA8911</a> <a href="#">152TA2071</a> <a href="#">167TA8920</a> <a href="#">167TA8925</a> <a href="#">135TA5473</a> <a href="#">167TA8932</a>
GM starter	Delco Remy	 <a href="#">116TA7225</a>

# ELECTRICAL STARTERS & ALTERNATORS

## ALTERNATORS

The alternator is the power generator of a telehandler, converting mechanical energy into electrical energy. It recharges the telehandler's battery and powers components such as lights and other electrical equipment.

A faulty alternator can create major issues. It causes an inconsistent power supply and can leave a telehandler with a drained battery. Therefore, the alternator should be checked and replaced in time to avoid machine failure.

TVH offers a range of different types of alternators.

- Alternators with a stator winding use an electromagnet as a rotor. As the rotor spins, it induces an alternating current (AC) in the stator, producing electricity for the system.
- Permanent magnet alternators use fixed magnets in the rotor to generate a magnetic field. As the magnet rotor turns within the stator coil, it induces an alternating current (AC).

### THE BENEFITS OF TVH AS A DISTRIBUTOR OF ALTERNATORS

We can offer alternators suitable for various telehandler makes: **Ausa, Bobcat, Case, Caterpillar, CLAAS, Deutz-Fahr, Dieci, Faresin, Genie, Haulotte, JCB, JLG, John Deere, Kramer, Magni, Manitou, Massey Ferguson, Merlo, New Holland, Terex, Weidemann ...**

### Why choose TVH?

- Our specially trained employees have the technical skills needed to understand your unique requirements and answer all your questions.
- We offer same-day shipment, next-day delivery to all our customers.
- Easily search for parts via our online shop.

Description	Brands	References
With internal fan With/without pulley	Delco Remy	
	Bosch	
	Mitsubishi	
	Deutz	
	Valeo	
	Denso	
	Mahle	
Lucas	<a href="#">116TA7364</a> <a href="#">167TA8915</a> <a href="#">167TA8921</a> <a href="#">167TA8916</a> <a href="#">167TA8926</a> <a href="#">167TA8928</a>	
With external fan With/without pulley	Mahle	
	Lucas	
	Valeo	
	Denso	
	Bosch	
	Mitsubishi	
	Deutz	
	Delco remy	
Cummins	<a href="#">135TA1901</a> <a href="#">167TA8916</a> <a href="#">103TA3641</a>	
Prestolite		

# ELECTRICAL LIGHTS & ACCESSORIES

## LIGHTS & ACCESSORIES



### TELEHANDLER LIGHTS

To reduce worksite accidents and injuries, it's important to make sure that a telehandler can be operated in the safest way possible. Lights are key when it comes to maximising the safety of a machine. Safety lights indicate the direction in which the telehandler is travelling and illuminate a tailored safe zone around the machine. They let the operator see clearly, and everybody else see when they need to stand clear.

If a telehandler is operated on a public road, for example to move to a construction site, the machine also needs the mandatory essential lights: front lights, rear lights, marker lights, license plate lights.



# ELECTRICAL LIGHTS & ACCESSORIES

## LIGHTS & ACCESSORIES

### WORK LIGHTS

 TotalSource

 TotalSource



- Technology: halogen
- 12 V
- Dimensions (LxWxH): 155 x 100 x 92 mm

REF [161TA6003](#)



- Technology: halogen
- 12 V
- Dimensions (LxWxH): 122 x 91 x 112 mm

REF [161TA6005](#)

 TotalSource

 TotalSource



- Technology: halogen
- 12/24 V
- Dimensions (LxWxH): 155 x 100 x 92 mm

REF [161TA6008](#)



- Technology: LED
- 12/32 V
- Dimensions (WxH): 65 x 128 mm

REF [161TA6018](#)

 TotalSource

 TotalSource



- Technology: LED
- 12/32 V
- Dimensions (WxH): 65 x 128 mm
- CE-approved

REF [161TA6019](#)



- Technology: LED
- 12/32 V
- Dimensions (LxWxH): 127 x 58 x 109 mm
- CE-approved

REF [161TA6020](#)

 TotalSource



- Technology: LED
- 12/24 V
- Dimensions (LxWxH): 109 x 57 x 127 mm
- CE-approved

REF [161TA6021](#)



- Technology: halogen
- 24 V
- Dimensions (LxWxH): 112 x 94 x 112 mm

REF [161TA6006](#)



# ELECTRICAL LIGHTS & ACCESSORIES

## LIGHTS & ACCESSORIES

### NUMBER PLATE LIGHTS

TotalSource



- 12/24 V
- Dimensions (LxWxH): 86 x 32 x 30 mm
- Mounting: bolt
- E-approved

REF [161TA6025](#)



- 12/24 V
- Dimensions (LxWxH): 102 x 57 x 55 mm
- Mounting: hole without thread
- E-approved

REF [161TA6022](#)

### REAR LIGHTS

TotalSource



- 12 V
- Dimensions (LxWxH): 226 x 76 x 122 mm
- Functions: rear, stop, indicator, reversing, reflector
- E-approved
- ECE-approved

REF [161TA6053](#)



- 12 V
- Dimensions (LxWxH): 238 x 68 x 138 mm
- Functions: rear, stop, indicator, fog, reflector, license plate
- E-approved
- CE-approved
- ECE-approved

REF [161TA6049](#)

### FRONT LIGHTS



- Technology: halogen/incandescent
- 12 V
- Dimensions (LxWxH): 212 x 101 x 150 mm
- Functions: parking, dimmer, head, turn
- E-approved
- ECE-approved

REF [142TA2779](#)



- Technology: halogen/incandescent
- 12 V
- Dimensions (LxWxH): 212 x 101 x 150 mm
- Functions: parking, dimmer, head, turn
- E-approved
- ECE-approved

REF [168TA7813](#)



- Technology: halogen/incandescent
- 12 V
- Dimensions (LxWxH): 212 x 125 x 150 mm
- Functions: parking, dimmer, head, turn
- E-approved

REF [168TA8393](#)



- Technology: halogen/incandescent
- 12 V
- Dimensions (LxWxH): 227 x 100 x 150 mm
- Functions: parking, dimmer, head, turn
- E-approved

REF [161TA6070](#)

# ELECTRICAL LIGHTS & ACCESSORIES

## LIGHTS & ACCESSORIES

### FRONT LIGHTS



- Technology: halogen
- 12 V
- Dimensions (LxWxH): 227 x 101 x 151 mm
- Functions: parking, dimmer, head, turn
- E-approved

REF [161TA6069](#)



- Technology: halogen/incandescent
- 12 V
- Dimensions (LxWxH): 212 x 125 x 150 mm
- Functions: parking, dimmer, head, turn
- E-approved

REF [168TA8394](#)



- Technology: halogen/incandescent
- 12 V
- Dimensions (LxWxH): 225 x 130 x 150 mm
- Functions: parking, dimmer, head, turn
- E-approved
- ECE-approved

REF [168TA8391](#)



- Technology: halogen/incandescent
- 12 V
- Dimensions (LxWxH): 225 x 130 x 150 mm
- Functions: parking, dimmer, head, turn
- E-approved
- ECE-approved

REF [168TA8392](#)

### BEACONS



- 12 V
- Lens x base: 114 x 114 mm
- Type of mounting: magnetic
- E-approved

REF [147TA3334](#)



- 12/24 V
- Lens x base: 144 x 147 mm
- Type of mounting: bolt
- E-approved
- ECE-approved

REF [107TA1128](#)



- 12/24 V
- Lens x base: 151 x 151 mm
- Mounting: on pole
- E-approved

REF [107TA1129](#)



- 24 V
- Lens x base: 123 x 123 mm
- Mounting: on pole
- E-approved
- CE-approved

REF [149TA4368](#)

# ELECTRICAL LIGHTS & ACCESSORIES

## LIGHTS & ACCESSORIES

### CABIN LIGHTS



- 12 V
- Dimensions (LxWxH): 136 x 25 x 70 mm
- Type of switch: 3 positions
- Type of mounting: clip fixing
- Bulb included

REF [149TA7676](#)



- 12/24 V
- Dimensions (LxWxH): 118 x 23 x 50 mm
- Type of switch: 3 positions
- Type of mounting: suction cup
- Bulb included

REF [140TA8985](#)

### REFLECTORS



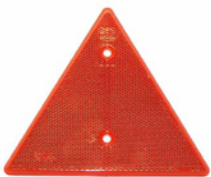
- Diameter: 80 mm
- Fixing: adhesive

REF [107TA8074](#)



- Dimensions (LxW): 94 x 44 mm
- Fixing: adhesive

REF [106TA1323](#)



- Height: 140 mm
- Fixing: screws

REF [106TA1324](#)



- Height: 350 mm
- Fixing: place

REF [107TA8060](#)



- Height: 365 mm
- Fixing: attach

REF [107TA8059](#)



- Dimensions (LxW): 94 x 44 mm
- Fixing: screws

REF [106TA1322](#)

# BATTERY, CONNECTORS & CHARGERS

## STARTER BATTERIES



### TRUST IN VARTA®

Wherever your journey may take you, VARTA® batteries provide all the power to take you there. Whether you own a vehicle with start/stop functionality, or you drive a highly equipped vehicle with high energy demands, VARTA® batteries offer the power you need. Today, you'll find our products in millions of cars, forklifts, tractors, MEWP's, construction equipments. Varta engineers put expertise and precision into each and every VARTA® battery. VARTA® batteries provide longer life, less corrosion and lower cost of ownership, qualities you'll find in all our products from our advanced start/stop automotive range to our professional powerboat products. When you choose VARTA®, you go for reliable precision technology that delivers best-in-class manufacturing quality.

#### Innovation with a purpose:

VARTA® batteries are the driving force behind fuel-saving innovations like start/stop engines. Manufactured with up to 20% fewer emissions, they'll reliably restart your vehicle's engine again and again, and effectively reduce your fuel consumption.

#### A powerful history:

The VARTA® brand has a history going back more than 130 years. VARTA® batteries are factory-fitted by major carmakers and trusted by drivers globally.

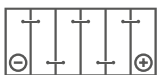
#### BACKED BY THE GLOBAL MARKET LEADER: CLARIOS

VARTA® automotive batteries are powered by Clarios, formerly Johnson Controls Power Solutions, a world leader in advanced energy storage solutions. We partner to meet increasing market demand for smarter applications, on a global scale. Varta's 16 000 employees develop, manufacture, and distribute a portfolio of evolving battery technologies for virtually every type of vehicle. Technologies that deliver uniquely sustainable, next-generation performance, and bring reliability, safety, and comfort to everyday lives. We add value at every link in the supply chain, contributing to the progress of the communities we serve and the planet we all share.

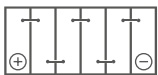
### LAY-OUT



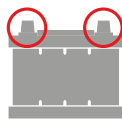
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### TERMINAL TYPES



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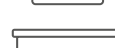
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### BASE HOLD DOWN



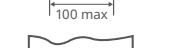
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B01



B13





# BATTERY, CONNECTORS & CHARGERS

## STARTER BATTERIES

### QUICK FINDER LIST



Short code	Ah (20h)	CCA (EN)	Case size	REF
<b>A</b>				
<b>VARTA® Silver Dynamic AGM</b>				
D52	60	680	H5/L2	<a href="#">167TA9371</a>
E39	70	760	H6/L3	<a href="#">167TA9372</a>
F21	80	800	H7/L4	<a href="#">167TA9373</a>
G14	95	850	H8/L5	<a href="#">167TA9374</a>
H15	105	950	H9/L6	<a href="#">167TA9375</a>
<b>VARTA® Blue Dynamic EFB</b>				
N60	60	640	H5/L2	<a href="#">167TA9376</a>
D54	65	650	T6/LB3	<a href="#">167TA9377</a>
N70	70	760	H6/L3	<a href="#">167TA9378</a>
E46	75	730	T7/LB4	<a href="#">167TA9379</a>
N80	80	800	H7/L4	<a href="#">167TA9380</a>
N95	95	850	H8/L5	<a href="#">167TA9381</a>
N65	65	650	D23	<a href="#">167TA9382</a>
N72	72	760	D26	<a href="#">167TA9383</a>
N85	85	800	D3	<a href="#">167TA9384</a>
<b>VARTA® Silver Dynamic EFB</b>				
AUX9	9	130	YTX9	<a href="#">168TA1153</a>
AUX14	13	200	YTX14	<a href="#">168TA1154</a>
AUX1	35	520	POB4	<a href="#">168TA1155</a>
<b>VARTA® Silver Dynamic</b>				
C6	52	520	T4/LB1	<a href="#">167TA8698</a>
C30	54	530	H4/L1	<a href="#">168TA1170</a>
D21	61	600	T5/LB2	<a href="#">168TA1171</a>
D15	63	610	H5/L2	<a href="#">168TA1156</a>
D39	63	610	H5R/L2R	<a href="#">168TA1157</a>
E38	74	750	T6/LB3	<a href="#">167TA8699</a>
E44	77	780	H6/L3	<a href="#">167TA8700</a>
F18	85	800	T7/LB4	<a href="#">167TA8701</a>
F19	85	800	H7/L4	<a href="#">168TA1158</a>
H3	100	830	H8/L5	<a href="#">167TA8702</a>
I1	110	920	H9/L6	<a href="#">167TA8703</a>
<b>VARTA® Blue Dynamic</b>				
B36	44	420	H3/L0	<a href="#">168TA1159</a>
B18	44	440	T4/LB1	<a href="#">167TA8704</a>
C22	52	470	H4/L1	<a href="#">167TA8705</a>

Short code	Ah (20h)	CCA (EN)	Case size	REF
<b>A</b>				
D59	60	540	T5/LB2	<a href="#">167TA8706</a>
D24	60	540	H5/L2	<a href="#">167TA8707</a>
D43	60	540	H5R/L2R	<a href="#">168TA1160</a>
E43	72	680	T6/LB3	<a href="#">167TA8708</a>
E11	74	680	H6/L3	<a href="#">167TA8709</a>
E12	74	680	H6/L3	<a href="#">167TA8710</a>
F17	80	740	T7/LB4	<a href="#">167TA8711</a>
F16	80	740	H7/L4	<a href="#">168TA1161</a>
G3	95	800	H8/L5	<a href="#">167TA8712</a>
A13	40	330	B19H	<a href="#">168TA1159</a>
A14	40	330	B19	<a href="#">167TA8704</a>
A15	40	330	B19R	<a href="#">167TA8705</a>
D47	60	540	D23R	<a href="#">167TA8706</a>
D48	60	540	D23R	<a href="#">167TA8707</a>
B31	45	330	B24	<a href="#">168TA1160</a>
B32	45	330	B24R	<a href="#">167TA8708</a>
B33	45	330	B24S	<a href="#">167TA8709</a>
B34	45	330	B24RS	<a href="#">167TA8710</a>
E23	70	630	D26	<a href="#">167TA8711</a>
E24	70	630	D26R	<a href="#">168TA1161</a>
G7	95	830	D31	<a href="#">167TA8712</a>
G8	95	830	D31R	<a href="#">167TA8722</a>
<b>VARTA® Black Dynamic</b>				
A16	40	340	H3/L0	<a href="#">168TA1165</a>
A17	41	360	T4/LB1	<a href="#">167TA8723</a>
B19	45	400	H4/L1	<a href="#">168TA1166</a>
B20	45	400	H4R/1LR	<a href="#">167TA8724</a>
C11	53	500	T5/LB2	<a href="#">168TA1167</a>
C14	56	480	H5/L2	<a href="#">168TA1168</a>
C15	56	480	H5R/L2R	<a href="#">167TA8725</a>
E9	70	640	T6/LB3	<a href="#">167TA8726</a>
E13	70	640	H6/L3	<a href="#">168TA1169</a>
F5	88	740	T8/L5	<a href="#">167TA8727</a>
F6	90	70	H8/L5	<a href="#">167TA8728</a>
B23	45	300	E2	<a href="#">168TA1172</a>
B24	45	300	E2R	<a href="#">168TA1173</a>

# BATTERY, CONNECTORS & CHARGERS

## STARTER BATTERIES



### VARTA PROMOTIVE

The VARTA® ProMotive range delivers reliable power that can handle a high amount of electrical consumers and vibration while minimizing downtime. The perfect choice for TCO savings.

- Optimum starting power
- Reliable power for ever increasing number of electrical consumers
- Excellent vibration resistance for construction and plant use

### QUICK FINDER LIST

Short code	Ah (20h)	CCA (EN)	Case size	REF
<b>A</b>				
<b>VARTA® ProMotive AGM</b>				
A1	210	1200	C	<a href="#">167TA9385</a>
<b>VARTA® ProMotive EFB</b>				
B90	190	1050	B	<a href="#">167TA9386</a>
C40	240	1200	C	<a href="#">167TA9387</a>
<b>VARTA® ProMotive Super Heavy-Duty</b>				
K8	140	800	A	<a href="#">167TA9388</a>
K7	145	800	A	<a href="#">167TA9389</a>
M9	170	1000	B	<a href="#">167TA8729</a>
M18	180	1000	B	<a href="#">167TA8730</a>
N9	225	1150	C	<a href="#">167TA8731</a>
<b>VARTA® ProMotive Heavy-Duty</b>				
E29	70	300	M1	<a href="#">168TA1174*</a>
I11	112	510	M4	<a href="#">168TA1175*</a>
K13	140	720	M4	<a href="#">168TA1176*</a>
L14	150	760	M5	<a href="#">168TA1177*</a>
N12	200	950	M6	<a href="#">168TA1178*</a>
B39	45	300	T4	<a href="#">167TA8732</a>
C20	55	420	H5	<a href="#">168TA1179</a>
D33	66	510	H6	<a href="#">168TA1180</a>
F10	88	680	H8	<a href="#">168TA1181</a>
G1	90	540	LOT7	<a href="#">168TA1182</a>
G2	90	540	LOT7	<a href="#">168TA1183</a>
H4	100	600	D	<a href="#">168TA1184</a>
H5	100	600	D	<a href="#">167TA8733</a>
H9	100	720	GB28	<a href="#">168TA1185</a>
H17	105	800	GR31	<a href="#">168TA1186</a>

Short code	Ah (20h)	CCA (EN)	Case size	REF
<b>A</b>				
H16	105	800	GR31	<a href="#">168TA1187</a>
I2	110	760	MAC110	<a href="#">167TA8734</a>
I5	110	680	LOT7	<a href="#">167TA8735</a>
I6	110	850	D	<a href="#">168TA1188</a>
I18	110	680	LOT7	<a href="#">168TA1189</a>
I9	120	780	LOT7	<a href="#">168TA1190</a>
I8	120	680	A	<a href="#">167TA8736</a>
I16	120	760	MAC120	<a href="#">167TA8737</a>
J1	125	720	WOR7	<a href="#">167TA8738</a>
J2	125	720	WOR7	<a href="#">167TA8739</a>
J3	125	950	NAT0	<a href="#">168TA1191</a>
J5	130	680	MAC130	<a href="#">167TA8740</a>
J8	135	680	12C135	<a href="#">167TA8741</a>
J10	135	1000	MAC110	<a href="#">167TA8742</a>
K4	143	950	MAC140	<a href="#">168TA1192</a>
K11	143	900	MAC132	<a href="#">168TA1193</a>
M11	154	1150	A	<a href="#">168TA1200</a>
L2	155	900	B	<a href="#">167TA8743</a>
L5	155	900	MAC154	<a href="#">168TA1194</a>
M6	170	1000	B	<a href="#">168TA1195</a>
M12	180	1400	B	<a href="#">167TA8744</a>
M7	180	1100	B	<a href="#">168TA1196</a>
M10	190	1200	B	<a href="#">168TA1197</a>
L3	190	1200	B	<a href="#">168TA1198</a>
N2	200	1050	C	<a href="#">167TA8745</a>
N5	220	1150	C	<a href="#">168TA1199</a>

\* 6 Volt

# BATTERY, CONNECTORS & CHARGERS

## STARTER BATTERIES

### EXELLENT BATTERIES



Model	Group n°	Capacity Ah	CCA (EN) A	Length mm	Width mm	Height mm	Weight kg	Layout	Fixation	Terminals	REF
<b>12 V</b>											
535.020.030SMF	B19	35	300	187	127	227	9.6	0	B00	3	<a href="#">165TA4536</a>
535.022.030SMF	B19	35	300	187	127	227	9.6	1	B00	3	<a href="#">165TA4537</a>
540.008.034SMF	L0	40	340	175	175	190	9.9	0	B13	1	<a href="#">168TA1201</a>
544.059.044SMF	LB1	44	440	207	175	175	11.3	0	B13	1	<a href="#">168TA1202</a>
545.023.033SMF	B24	45	330	238	129	227	11.7	0	B00	1	<a href="#">168TA1203</a>
545.024.033SMF	B24	45	330	238	129	227	11.7	1	B00	1	<a href="#">168TA1204</a>
545.084.033SMF	B24	45	330	238	129	227	11.7	0	B00	3	<a href="#">168TA1205</a>
545.051.033SMF	B24	45	330	238	129	227	11.7	1	B00	3	<a href="#">168TA1206</a>
545.077.030SMF	E2	45	300	219	135	225	11.3	0	B01	1	<a href="#">168TA1207</a>
545.079.030SMF	E2	45	300	219	135	225	11.3	1	B01	1	<a href="#">168TA1208</a>
552.054.047SMF	L1	52	470	207	175	190	12.4	0	B13	1	<a href="#">168TA1209</a>
553.059.047SMF	LB2	53	470	242	175	175	13.1	0	B13	1	<a href="#">168TA1210</a>
556.065.048SMF	L2	56	480	242	175	190	13.7	1	B13	1	<a href="#">168TA1211</a>
560.059.054SMF	L2	60	540	242	175	190	14.3	0	B13	1	<a href="#">168TA1212</a>
560.068.051SMF	D23	60	510	232	173	225	14.5	0	B00	1	<a href="#">168TA1213</a>
560.069.051SMF	D23	60	510	232	173	225	14.5	1	B00	1	<a href="#">168TA1214</a>
560.077.054SMF	LB2	60	540	242	175	175	14.3	0	B13	1	<a href="#">165TA4555</a>
566.019.064SMF	L2	66	640	242	175	190	15.2	0	B13	1	<a href="#">165TA4556</a>
568.024.055SMF	D26	68	550	261	175	220	17.0	1	B01	1	<a href="#">168TA1215</a>
568.029.055SMF	D26	68	550	261	175	220	17.0	0	B01	1	<a href="#">168TA1216</a>
570.026.064SMF	L3	70	640	278	175	190	16.9	1	B13	1	<a href="#">168TA1217</a>
572.013.068SMF	LB3	72	680	278	175	175	16.3	0	B13	1	<a href="#">168TA1218</a>
574.020.068SMF	L3	74	680	278	175	190	16.7	0	B13	1	<a href="#">168TA1219</a>
580.035.074SMF	LB4	80	740	315	175	175	18.3	0	B13	1	<a href="#">168TA1220</a>
580.043.074SMF	L4	80	740	315	175	190	18.7	0	B13	1	<a href="#">168TA1221</a>
583.015.072SMF	LB5	83	720	353	175	175	20.0	0	B13	1	<a href="#">168TA1222</a>
590.015.072SMF	L5	90	720	353	175	190	20.8	0	B13	1	<a href="#">168TA1223</a>
595.032.083SMF	D31	95	830	306	173	225	21.7	0	B01	1	<a href="#">168TA1224</a>
595.033.083SMF	D31	95	830	306	173	225	21.7	1	B01	1	<a href="#">168TA1225</a>
600.038.083SMF	L5	100	830	353	175	190	22.6	0	B13	1	<a href="#">168TA1226</a>

# BATTERY, CONNECTORS & CHARGERS

## STARTER BATTERIES

### AGM START/STOP TECHNOLOGY



#### AGM

Model	Group n°	Capacity Ah	CCA (EN) A	Length mm	Width mm	Height mm	Weight kg	Layout	Fixation	Terminals	REF
<b>12 V</b>											
XTR/560.901.056	L2	60	640	242	175	190	18.5	0	B13	1	<a href="#">167TA9363</a>
XTR/570.901.076	L3	70	760	278	175	190	21.2	0	B13	1	<a href="#">167TA9364</a>
XTR/580.901.079	L4	80	840	310	175	190	23.6	0	B13	1	<a href="#">140TA7517</a>
XTR/590.901.085	L5	95	860	353	175	190	27.0	0	B13	1	<a href="#">167TA9365</a>
XTR/605.901.095	L6	105	950	393	174	190	29.2	0	B13	1	<a href="#">167TA9366</a>

### EFB START/STOP TECHNOLOGY



**MAGIC EYE**

#### EFB

Model	Group n°	Capacity Ah	CCA (EN) A	Length mm	Width mm	Height mm	Weight kg	Layout	Fixation	Terminals	REF
<b>12 V</b>											
XTR/560.002.056	L2	60	560	242	175	190	16.8	0	B13	1	<a href="#">167TA9367</a>
XTR/565.002.056L	D23	65	560	230	170	220	16.5	0	B1	1	<a href="#">168TA1231</a>
XTR/565.002.056R	D23	65	560	230	170	220	16.5	1	B1	1	<a href="#">168TA1232</a>
XTR/565.002.068	LB3	65	680	278	175	175	17.4	0	B13	1	<a href="#">168TA1233</a>
XTR/570.002.068	L3	70	680	278	175	190	19.3	0	B13	1	<a href="#">168TA1234</a>
XTR/572.002.068	D26	72	680	260	170	220	19.3	0	B1	1	<a href="#">168TA1228</a>
XTR/575.002.074	LB4	75	740	310	175	175	19.7	0	B13	1	<a href="#">168TA1235</a>
XTR/580.002.074	L4	80	740	310	175	190	22.0	0	B13	1	<a href="#">167TA9369</a>
XTR/585.002.074	D31	85	740	304	173	220	22.3	0	B1	1	<a href="#">168TA1229</a>
XTR/590.002.084	L5	90	840	353	175	190	24.7	0	B13	1	<a href="#">167TA9368</a>



# BATTERY, CONNECTORS & CHARGERS

## STARTER BATTERIES

### ULTRA HIGH PERFORMANCE BATTERIES

**ODYSSEY**  
BATTERY



### ODYSSEY PERFORMANCE (ODP) AUTOMOTIVE

Model	C20 capacity	CCA	Reserve capacity (min)	Length	Width	Height	Weight	Layout	Terminals	REF
	Ah	A		mm	mm	mm	kg			
<b>12 V</b>										
ODP-AGM75 86	49	708	89	240	171	202	20	1	DT 1 + 21	<a href="#">168TA1478</a>
ODP-AGM96R	52	600	90	242	175	174	18	0	1	<a href="#">168TA1479</a>
ODP-AGM25	59	675	110	240	172	217	21	1	1	<a href="#">168TA1480*</a>
ODP-AGM35	59	675	110	240	172	217	21	0	1	<a href="#">168TA1388*</a>
ODP-AGM34	61	792	120	275	172	199	21	1	1	<a href="#">168TA1481</a>
ODP-AGM34R	61	792	120	275	172	199	21	0	1	<a href="#">168TA1482</a>
ODP-AGM78	61	792	120	275	172	187	21	1	21	<a href="#">168TA1483</a>
ODP-AGM24	63	725	155	276	172	225	23	1	1	<a href="#">168TA1484*</a>
ODP-AGM24F	63	725	155	276	172	225	23	0	1	<a href="#">168TA1485*</a>
ODP-AGM47 H5 L2	62	650	105	242	175	189	19	0	1	<a href="#">168TA1486</a>
ODP-AGM65	64	750	129	301	183	192	23	1	1	<a href="#">168TA1487</a>
ODP-AGM48 H6 L3	69	720	130	277	174	189	22	0	1	<a href="#">168TA1488</a>
ODP-AGM94R H7 L4	80	840	150	315	174	189	25	0	1	<a href="#">168TA1489</a>
ODP-AGM27	85	850	182	316	172	225	27	1	1	<a href="#">168TA1490*</a>
ODP-AGM27F	85	850	182	316	172	225	27	0	1	<a href="#">168TA1491*</a>
ODP-AGM49 H8 L5	94	950	160	353	174	189	29	0	1	<a href="#">168TA1389</a>
ODP-AGM31	100	925	200	330	172	243	32	1	8	<a href="#">168TA1492</a>
ODP-AGM31A	100	925	200	330	172	240	32	1	1	<a href="#">168TA1493</a>
ODP-AGMDINB	170	1300	370	518	226	218	53	3	1	<a href="#">168TA1390</a>
ODP-AGMDINC	220	1500	475	518	276	225	65	3	1	<a href="#">168TA1391</a>

\*Ask for availability

### ODYSSEY PERFORMANCE SERIES DIN B (168TA1990) & DIN C (168TA1391)



- The only battery that can truly meet the severe demands.
- With a deep-cycle capability of 660 cycles to 50% DOD, these batteries allow operators to keep onboard accessories and tail-lifts running day and night, and still be assured of an engine start – even in the coldest temperatures.

# BATTERY, CONNECTORS & CHARGERS

## STARTER BATTERIES

### ODYSSEY EXTREME (ODX)

Model	C20 capacity	CCA	Reserve capacity (min)	Length	Width	Height	Weight	Layout	Terminals	REF
	Ah	A		mm	mm	mm	kg			
<b>12 V</b>										
ODX-AGM34	68	850	134	276	172	202	23	1	1	<a href="#">168TA1392</a>
ODX-AGM34R	68	850	134	276	172	200	23	0	1	<a href="#">168TA1494</a>
ODX-AGM34 78	68	850	134	276	172	200	23	1	DT 1 + 21	<a href="#">168TA1393</a>
ODX-AGM65	74	950	135	301	183	190	25	1	1	<a href="#">168TA1394</a>
ODX-AGM31*	100	1150	205	330	173	241	35	1	8	<a href="#">168TA1395</a>
ODX-AGM31A	100	1150	205	330	173	246	35	1	1	<a href="#">168TA1495</a>

\*Available with Metal Jacket (MJ)

### DUAL PURPOSE CYCLIC BATTERIES



**Characteristics:**

- CaCa
- Maintenance-free
- Type: MF 12 V – 100 Ah – 1000 MCA

REF [168TA1419](#)



**Characteristics:**

- CaCa
- Maintenance-free
- Type: MF 12 V – 90 Ah – 800 A

REF [167TA9957](#)



**Characteristics:**

- CaCa
- Maintenance-free
- Type: MF 12 V – 80 Ah – 680 A

REF [168TA1417](#)



**Characteristics:**

- CaCa
- Maintenance-free
- Type: MF 12 V – 90 Ah – 750 A

REF [168TA1418](#)

### SPECIAL TYPES

Model	C20	C5	Length	Width	Height	Weight	Layout	Terminals	Magic Eye	REF
	Ah	Ah	mm	mm	mm	kg				
<b>Maintenance free deep-cycles CaCa dual purpose – 12 V</b>										
MF24DC	80	64	257	172	220	18.2	1	DT 1 + 8	Yes	<a href="#">168TA1417</a>
MF27DC	90	72	302	172	220	20.8	1	DT 1 + 8	Yes	<a href="#">168TA1418</a>
9.575.1 MF	90	75	353	175	190	22.5	0	1	No	<a href="#">167TA9957</a>
MF31DC	100	80	330	172	242	23.2	1	DT 1 + 8	Yes	<a href="#">168TA1419</a>

# BATTERY, CONNECTORS & CHARGERS

## BATTERY CHARGERS

### AQ-TRON SMART CHARGERS



REF [168TA1641](#)

### SMART CHARGING



These AQ-TRON chargers maximise the life of your batteries through a series of 4 to 10 steps in a unique charging process, during which the chargers constantly monitor the condition of the battery. When required, they take appropriate action: desulphating, reviving, charging, conditioning and maintaining. AQ-TRON chargers regulate the charge voltage to protect sensitive and expensive electronics. Some AQ-TRON chargers recondition and help revive deeply discharged batteries. Others even have a backup power supply mode, so the battery of a vehicle can be changed without losing any program settings. Once the charger is connected, it's no longer needed to keep track of how long the battery needs to be charged or whether it is sulphated. In what we call 'connect and forget', our chargers automatically take care of this.

Model	Watt	Voltage output	Current	Type	Dimensions	Weight	REF
	W	V	A	Ah	mm	kg	
<b>Voltage input: 220/240 V</b>							
LADAQ1000	20	6/12	1	All types 6/12 V lead-acid batteries	Max 30	130 x 60 x 34	0.25 <a href="#">168TA1638</a>
LADAQ2000	40	6/12	2	All types 6/12 V lead-acid & 12 V lithium batteries	Max 60	235 x 82 x 122	0.4 <a href="#">168TA1639</a>
LADAQ3500	70	6/12	3.5	All types 6/12 V lead-acid & 12 V lithium batteries	Max 120	265 x 92 x 122	0.52 <a href="#">168TA1640</a>
LADAQ7000	120	12/24	7/3.5	All types 12/24 V lead-acid & 12 V lithium batteries	14-230 (12 V) 14-115 (24 V)	310 x 118 x 142	0.85 <a href="#">168TA1641</a>
LADAQ15000	350	12/24	15/7.5	All types 12/24 V lead-acid & 12 V lithium batteries	50-400 (12 V) 25-200 (24 V)	437 x 125 x 207	1.5 <a href="#">168TA1642</a>

### DOCTOR CHARGE 50



For lead-acid, gel and AGM batteries



#### Voltage: 6 V

- Charging amp: 45 A
- Boost charge amp: 70 A
- Start amp: yes
- Battery capacity charge: 10-600 Ah
- Battery capacity maintenance: yes
- Charge - test - start

#### Voltage: 12 V

- Charging amp: 45 A
- Boost charge amp: 70 A
- Start amp: yes
- Battery capacity charge: 10-600 Ah
- Battery capacity maintenance: yes
- Charge - test - start

#### Voltage: 24 V











- Charging amp: 23 A
- Boost charge amp: 35 A
- Start amp: yes
- Battery capacity charge: 10-300 Ah
- Battery capacity maintenance: yes
- Charge - test - start

REF [145TA1806](#)

# BATTERY, CONNECTORS & CHARGERS

## BATTERY CHARGERS

### CTEK CHARGERS - HIGH-FREQUENCY

	Model	Voltage V	Charging current A	Battery capacity Ah	Battery type lead-acid V	Insulation	Charger type	REF
<b>Basic</b>								
	XS0.8	14.4	Max 0.8	1.2-32, maintenance charging up to 100	12	IP65	6 step, fully automatic charging cycle	<a href="#">166TA7562</a>
	MXS3.8	14.4/14.7	Max 3.8	1.2-85, maintenance charging up to 130	12	IP65	7 step fully automatic charging cycle	<a href="#">166TA7563</a>
	MXS5.0	14.4/14.7/15.8	Max 5	1.2-110, maintenance charging up to 160	12	IP65	8 step, fully automatic charging cycle	<a href="#">166TA7564</a>
	MXS7.0	14.4/14.7/15.8/ 13.6	Max 7	14-150, maintenance charging up to 225	12	IP65	8 step, fully automatic charging cycle	<a href="#">166TA7565</a>
	MXS10	14.4/14.7/15.8/ 13.6	Max 10	20-200, maintenance charging up to 300	12	IP65	8 step, fully automatic charging cycle	<a href="#">166TA7566</a>
<b>Pro</b>								
	MXS10EC	14.4/14.7/15.8/ 13.6	Max 10	20-200, maintenance charging up to 300	12	IP65	8 step, fully automatic charging cycle	<a href="#">166TA7567</a>
	PRO25S	14.4/15.8/13.6	Max 25	40-500	12	IP44	8 step, fully automatic charging cycle	<a href="#">166TA7568</a>
	PRO25S	13.8/14.4/13.3	Max 25	30-450	12 lithium (LiFePO4)	IP44	8 step, fully automatic charging cycle	<a href="#">166TA7568</a>
	MXTS40	14.4/14.7/15.8 and 28.8/29.4/ 31.6	Max 40/20	12 V: 20-1200 24 V: 10-600	12/24 lead-acid	IP20	8 step, fully automatic charging cycle with adjustable parameters	<a href="#">166TA7569</a>
	MXT4.0	28.8/29.4/31.6	Max 4	8-100, maintenance charging up to 250	24	IP65	8 step, fully automatic charging cycle	<a href="#">166TA7571</a>



# BATTERY, CONNECTORS & CHARGERS

## BATTERY CHARGERS

### NOCO CHARGERS



#### GENIUS RANGE

Model	AC voltage V	DC voltage V	DC current A	Charging times (hours)				Battery type			REF
				20 A	40 A	80 A	100 A	Wet	GEL/AGM	Lithium	
GENIUS1EU	120/240	6/12	1	15	30	60	75	Yes	Yes	Yes	<a href="#">168TA4359</a>
GENIUS2EU	120/240	6/12	2	5	10	20	25	Yes	Yes	Yes	<a href="#">168TA4360</a>
GENIUS2DEU	120/240	12	2	5	10	20	25	Yes	Yes	Yes	<a href="#">168TA4361</a>
GENIUS2X2	120/240	6/12	2 x 2	7.5	15	30	37.5	Yes	Yes	Yes	<a href="#">168TA4362</a>
GENIUS2X4	120/240	6/12	4 x 2	7.5	15	30	37.5	Yes	Yes	Yes	<a href="#">168TA4363</a>
GENIUS5EU	120/240	6/12	5	3	6	12	15	Yes	Yes	Yes	<a href="#">168TA4364</a>
GENIUS10EU	120/240	6/12	10	1.5	3	6	7.5	Yes	Yes	Yes	<a href="#">168TA4365</a>

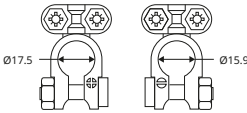
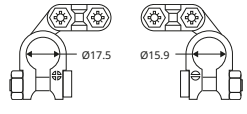

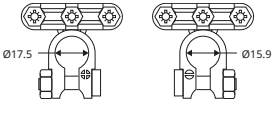
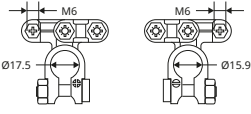

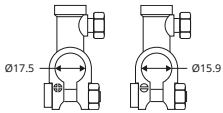



#### GENIUSPRO RANGE

Model	AC voltage V	DC voltage V	DC current A	Charging times (hours)						Battery type			REF
				25 A	50 A	100 A	200 A	500 A	1000 A	Wet	GEL/AGM	Lithium	
GENIUSPRO25	120/240	6/12/24	25	0.75	1.5	3	6	15	30	Yes	Yes	Yes	<a href="#">168TA4366</a>
GENIUSPRO50	120/240	6/12/24	50	-	0.75	1.5	3	6	15	Yes	Yes	Yes	<a href="#">168TA4367</a>

# BATTERY, CONNECTORS & CHARGERS

## BATTERY ACCESSORIES

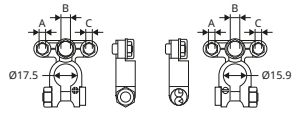
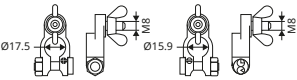
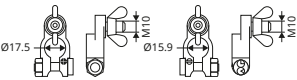
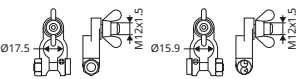
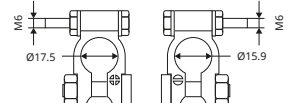
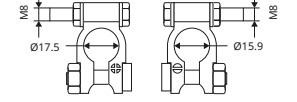
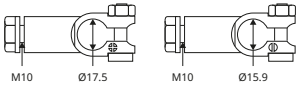
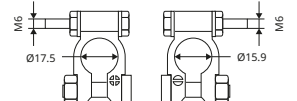
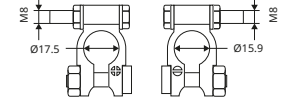
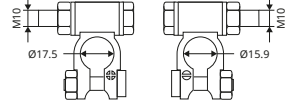
### BATTERY TERMINALS

Model	Type		Pole	Cable mm <sup>2</sup>	REF	
1050	Fixing cable by central plate		+	16-35	<a href="#">168TA7176</a>	
			-	16-35	<a href="#">168TA7177</a>	
			+	50-70	<a href="#">168TA7178</a>	
			-	50-70	<a href="#">168TA7178</a>	
1100	Fixing cable by side plate		+	16-35	<a href="#">168TA7179</a>	
			-	16-35	<a href="#">168TA7180</a>	
			+	50-70	<a href="#">168TA7181</a>	
			-	50-70	<a href="#">168TA7182</a>	
1200	Fixing cable by 2 side plates with auxiliary fixing		+	16-35	<a href="#">145TA2180</a>	
			-	16-35	<a href="#">168TA7183</a>	
			+	50-70	<a href="#">145TA2182</a>	
			-	50-70	<a href="#">145TA2183</a>	
1250	Fixing cable by double plate		+	16-35	<a href="#">168TA7184</a>	
			-	16-35	<a href="#">168TA7185</a>	
			+	50-70	<a href="#">168TA7186</a>	
			-	50-70	<a href="#">168TA7187</a>	
1260	Fixing cable by side plate with auxiliary fixing		+	16-35	<a href="#">168TA7188</a>	
			-	16-35	<a href="#">168TA7189</a>	
			+	50-70	<a href="#">168TA7190</a>	
			-	50-70	<a href="#">168TA7191</a>	
<b>Hole diameter F (mm)</b>						
1000	Fixing cable by screws		+	16-35	9 + 9.5	<a href="#">168TA7192</a>
			-	16-35	9 + 9.5	<a href="#">168TA7193</a>
			+	50	10.5 + 11	<a href="#">168TA7194</a>
			-	50	10.5 + 11	<a href="#">168TA7195</a>
			+	70	12.5 + 13	<a href="#">168TA7196</a>
			-	70	12.5 + 13	<a href="#">168TA7197</a>
1600	Fixing cable by hexagonal head screw		+	25-35	<a href="#">168TA7198</a>	
			-	25-35	<a href="#">168TA7199</a>	
			+	50-70	<a href="#">168TA7200</a>	
			-	50-70	<a href="#">168TA7201</a>	
1750	Fixing cable by special screw		+	16-35	<a href="#">152TA2632</a>	
			-	16-35	<a href="#">152TA2633</a>	
			+	50-70	<a href="#">152TA2634</a>	
			-	50-70	<a href="#">152TA2635</a>	
<b>Cable lug hole (mm)</b>						
1550	Fixing cable lug by hexagonal head screw		+		8	<a href="#">168TA7202</a>
			-		8	<a href="#">168TA7203</a>
			+		10	<a href="#">168TA7204</a>
			-		10	<a href="#">168TA7205</a>
			+		12	<a href="#">168TA7206</a>
			-		12	<a href="#">168TA7207</a>
<b>Thread      Length (mm)</b>						
1450	Fixing cable lug by hexagonal nut		+	M8	18	<a href="#">168TA7208</a>
			-	M8	18	<a href="#">168TA7209</a>
			+	M10	20	<a href="#">168TA7210</a>
			-	M10	20	<a href="#">168TA7211</a>
			+	M12 x 1.5	20	<a href="#">168TA7212</a>
			-	M12 x 1.5	20	<a href="#">168TA7213</a>

# BATTERY, CONNECTORS & CHARGERS

## BATTERY ACCESSORIES

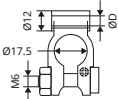
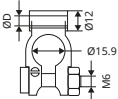
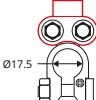
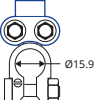

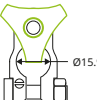
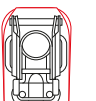
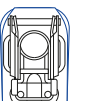
### BATTERY TERMINALS

Model	Type	Pole	Cable mm <sup>2</sup>	REF	
<b>Cable lug holes (mm)</b>					
<b>A-B-C</b>					
1280	Fixing cable lugs by hexagonal head screws		+	6-6-6	<a href="#">168TA7214</a>
			-	6-6-6	<a href="#">168TA7215</a>
			+	6-8-6	<a href="#">168TA7216</a>
			-	6-8-6	<a href="#">168TA7217</a>
		+	6-10-6	<a href="#">168TA7218</a>	
		-	6-10-6	<a href="#">168TA7219</a>	
		+	8-12-8	<a href="#">168TA7220</a>	
		-	8-12-8	<a href="#">168TA7221</a>	
<b>Cable lug hole (mm)</b>					
1400	Fixing cable lug by wing nut		+	8	<a href="#">168TA7222</a>
			-	8	<a href="#">168TA7223</a>
			+	10	<a href="#">168TA7224</a>
			-	10	<a href="#">168TA7225</a>
			+	12	<a href="#">168TA7226</a>
			-	12	<a href="#">168TA7227</a>
<b>Cable lug hole (mm)</b>					
1650	Fixing cable lug by hexagonal head screw		+	6	<a href="#">168TA7228</a>
			-	6	<a href="#">168TA7229</a>
			+	8	<a href="#">168TA7230</a>
			-	8	<a href="#">168TA7231</a>
			+	10	<a href="#">168TA7232</a>
			-	10	<a href="#">168TA7233</a>
<b>Cable lug hole (mm)</b>					
1950	Fixing cable lug by hexagonal head bolt		+	6	<a href="#">168TA7234</a>
			-	6	<a href="#">168TA7235</a>
			+	8	<a href="#">168TA7236</a>
			-	8	<a href="#">168TA7237</a>
			+	10	<a href="#">168TA7238</a>
			-	10	<a href="#">168TA7239</a>

# BATTERY, CONNECTORS & CHARGERS

## BATTERY ACCESSORIES

### BATTERY TERMINALS

Model	Type	Pole	Cable mm <sup>2</sup>	REF				
		Diameter (mm)						
1850	Fixing cable by soldering				+	10	4.0 + 5.0	<a href="#">168TA7240</a>
					-	10	4.0 + 5.0	<a href="#">168TA7241</a>
					+	16	5.0 + 6.0	<a href="#">168TA7242</a>
					-	16	5.0 + 6.0	<a href="#">168TA7243</a>
					+	25	6.5 + 7.5	<a href="#">168TA7244</a>
					-	25	6.5 + 7.5	<a href="#">168TA7245</a>
					+	35	8.0 + 9.0	<a href="#">168TA7246</a>
					-	35	8.0 + 9.0	<a href="#">168TA7247</a>
					+	16	5.5 + 6.5	<a href="#">168TA7248</a>
					-	16	5.5 + 6.5	<a href="#">168TA7249</a>
					+	25	6.5 + 7.5	<a href="#">168TA7250</a>
					-	25	6.5 + 7.6	<a href="#">168TA7251</a>
					+	35	8.0 + 9.0	<a href="#">168TA7252</a>
					-	35	8.0 + 9.0	<a href="#">168TA7253</a>
					+	50	10.0 + 11.0	<a href="#">168TA7254</a>
					-	50	10.0 + 11.0	<a href="#">168TA7255</a>
					+	50	10.0 + 11.0	<a href="#">168TA7256</a>
					-	50	10.0 + 11.0	<a href="#">168TA7257</a>
					+	70	11.5 + 12.5	<a href="#">168TA7258</a>
					-	70	11.5 + 12.5	<a href="#">168TA7259</a>
			+	95	14.0 + 15.0	<a href="#">168TA7260</a>		
			-	95	14.0 + 15.0	<a href="#">168TA7261</a>		
			+	10	4.0 + 5.0	<a href="#">168TA7262</a>		
			-	10	4.0 + 5.0	<a href="#">168TA7263</a>		
			+	16	5.5 + 6.5	<a href="#">145TA2163</a>		
			-	16	5.5 + 6.5	<a href="#">145TA2164</a>		
			+	25	6.5 + 7.5	<a href="#">145TA2165</a>		
			-	25	6.5 + 7.5	<a href="#">145TA2166</a>		
			+	35	8.0 + 9.0	<a href="#">145TA2167</a>		
			-	35	8.0 + 9.0	<a href="#">145TA2168</a>		
			+	50	10.0 + 11.0	<a href="#">145TA2169</a>		
			-	50	10.0 + 11.0	<a href="#">145TA2170</a>		
			+	70	12.0 + 13.0	<a href="#">145TA2171</a>		
			-	70	12.0 + 13.0	<a href="#">145TA2172</a>		
			+	95	14.0 + 15.0	<a href="#">168TA7264</a>		
			-	95	14.0 + 15.0	<a href="#">168TA7265</a>		
			+	120	16.0 + 17.0	<a href="#">168TA7266</a>		
			-	120	16.0 + 17.0	<a href="#">168TA7267</a>		
1090	Fixing cable lug by plate (with nylon protective cover)				+	16-70		<a href="#">168TA7268</a>
					-	16-70		<a href="#">168TA7269</a>
1420	Fixing cable lug by knob				+	8		<a href="#">168TA8351</a>
					-	8		<a href="#">168TA8352</a>
9050	Rapid type fixing cable by plate				+	16+35		<a href="#">168TA7270</a>
					-	16+35		<a href="#">168TA7271</a>
					+ -	16+35		<a href="#">168TA7272</a>





# BATTERY, CONNECTORS & CHARGERS

## BATTERY ACCESSORIES

### BATTERY SWITCHES

TotalSource



- 150–1000 A (5 sec)
- 1-pole (2 connections)

REF [134TA8697](#)



- 100–500 A (5 sec)
- 1-pole (2 connections)

REF [106TA1189](#)



- 50–500 A (5 sec)
- 1-pole (2 connections)

REF [106TA1187](#)



- 250–2500 A (5 sec)
- 1-pole (2 connections)

REF [144TA6015](#)



- 300–2500 A (5 sec)
- 1-pole (2 connections)

REF [111TA3918](#)



- 150–1000 A (5 sec)
- 1-pole (2 connections)
- Switch with independent SM aux contact

REF [163TA8470](#)



- 150–1000 A (5 sec)
- 1-pole (2 connections)

REF [134TA8699](#)



- 250–2500 A (5 sec)
- 1-pole (2 connections)

REF [106TA1183](#)

# BATTERY, CONNECTORS & CHARGERS

## BATTERY ACCESSORIES

### ENERGICAP BATTERYLESS JUMP STARTER 12/24 V 18 000/9000 PEAK AMP

#### SUPERCAPACITOR JUMP STARTER

ENERGIC Plus

##### MORE THAN JUST A JUMP STARTER

This supercapacitor jump starter is a professional, high-performance jump-starter that's lightweight and **starts any type of 12 V or 24 V vehicle system in less than two minutes**. It works on a capacitor instead of the battery, which enables a range of benefits.

REF [165TA3827](#)

**SUPER FAST RECHARGE: 15 SEC!**

**ULTRA LIGHTWEIGHT**

**ULTRA HIGH PERFORMANCE**

**ONE JUMP STARTER FOR A LIFETIME OF USAGE:  
1 MLN CYCLES!**

**AUTOMATIC RECHARGE**



##### SPECIFICATIONS

Jump starter		Charger		Cables	
Operating temperature	-45 to 65 °C	Amperage	3.6 A	Length	170 cm
Weight	12.8 kg	Voltage	220-230 VAC	Cable section	50 mm <sup>2</sup>
Measurements	25 x 25 x 50 cm	Frequency	50-60 Hz	Material	Pure copper
Charge time fully discharged	6-8 hours				

### BATTERIES, CHARGERS & ACCESSORIES CATALOG



In our new Batteries, chargers & accessories catalog, you can find an overview of Batteries, chargers, connectors & accessories for your machine.

REF 61851515

Please contact us to order your Batteries, chargers & accessories catalog.

## JALTEST MHE

### MULTI-BRAND AND MULTI-SYSTEM COVERAGE

Jaltest MHE is the benchmark in the telehandler sector due to its great advantages and possibilities to carry out an effective diagnosis.

Following the functionalities of the rest of Jaltest modules, this version is completed with a great coverage of makes, systems and technical information, as well as a wide range of cables to make a direct connection.

Jaltest unparalleled MHE diagnostics coverage sets up an industry leadership with the most extensive and detailed coverage. New functionalities, brands and modules are included in updates scheduled every 4 months using flexible and market-oriented focus.

Coverage – up to 75 makes: **Jungheinrich, Linde, Still, Manitou, Genie, Haulotte, Bobcat, Caterpillar, JCB, JLG, BT, Toyota ...**



Jaltest MHE



Software



Coverage



Hardware



Services



Cojali

### GUIDED DIAGNOSTICS

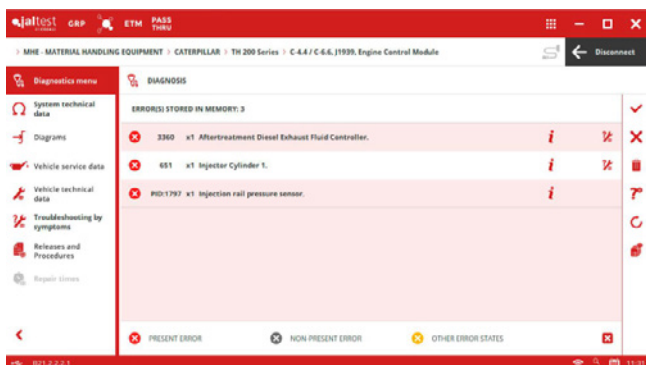


Jaltest MHE is a multi-brand and multi-system diagnostic tool developed to perform the most Jaltest MHE provides the necessary information to repair breakdowns of telehandlers in an easy and effective way.

1. Component technical data
2. Wiring, system and fuse diagrams
3. Machine service data for equipment inspections
4. Equipment technical data
5. Troubleshooting by symptoms of the most common failures on the machinery
6. Releases and procedures with manufacturer information

### JALTEST GUIDES YOU WITH ADDITIONAL INFORMATION TO ASSIST IN THE REPAIR PROCESS

### MORE THAN DIAGNOSTICS



With Jaltest, technicians will have access to a wide range of functionalities which will guide them through the equipment repair process.

**These are some of the features that make Jaltest the industry's leading diagnostics tool:**

1. GRP (Garage Resource Planning). Workshop and customer/vehicle record management
2. i-PARTS ASSIST. Cross-referencing platform. Installation guides
3. Diagnostics menu
4. System technical data
5. Wiring diagrams, and fuses and relay boxes
6. Vehicle service data
7. Vehicle technical information
8. Troubleshooting guides by symptoms
9. Technical releases
10. Troubleshooting guides by fault codes

## JALTEST MHE

### JALTEST MHE CABLE (RECOMMENDED)

Jaltest offers a range of specific cables that are suitable for diagnosing the most common telehandlers. They're available in a kit and separately.

Want a set of cables for the most common makes?  
Order REF [167TA7387](#).

**When you are interested in cables for less common applications, please contact your sales advisor.**

	REF Jaltest	REF TVH
Still diagnostics cable	JDC555A	<a href="#">167TA1262</a>
Jungheinrich diagnostics cable	JDC553A	<a href="#">166TA8779</a>
Linde round diagnostics cable	JDC552A	<a href="#">166TA8778</a>
JLG and Haulotte diagnostics cable	JDC549.9	<a href="#">167TA2312</a>

### JALTEST MHE TECHNICAL SUPPORT PACKAGE (RECOMMENDED)

Cojali offers technical support for TVH customers. The Cojali Technical Support team is available to provide customised solutions to any technical problem or question concerning Jaltest MHE. This includes:

- A technical assistance hotline service. Monday to Friday: 8:30 am – 7:30 pm (GMT+1)
- Access to technical information through the website: [www.jaltest.com](http://www.jaltest.com)
- Access to technical documents (electrical schemes, diagrams, etc.) via e-mail
- Technical explanations for document interpretation
- Search, location and breakdown interpretation support
- Support for electrical, electronic and pneumatic breakdowns, for all electronically controlled systems installed in a vehicle
- Online technical support
- Online presentations

This service is available in English and Spanish.

	REF TVH
One year technical support MHE. English language	<a href="#">167TA1636</a>
One year technical support MHE. Spanish language	<a href="#">167TA1637</a>

## NEED MORE INFORMATION?

Visit [www.tvh.com/jaltest](http://www.tvh.com/jaltest), contact your sales advisor or send an e-mail to [jaltest@tvh.com](mailto:jaltest@tvh.com)



## JOYSTICKS ELECTRICAL



## JOYSTICKS

The joystick is one of the most important parts of a telehandler. If the joystick breaks, the whole machine will be useless until it's replaced. Cabin joysticks are multifunctional devices that increase working efficiency. Each joystick offers the operator a variety of functions, allowing him/her to perform the assigned tasks faster and easier. At TVH, we're offering high-quality joysticks for every type of machine. They're tested, approved and ready to increase working precision.

### REMANUFACTURED JOYSTICKS

Joysticks are an essential part of a telehandler, but that doesn't mean a brand-new part is always needed. Our remanufactured joysticks are thoroughly tested in every possible way. This guarantees perfect functionality and safety. We have a large range of remanufactured joysticks on hand and ready to be shipped. We remanufacture all kinds of joysticks, whether they're analogue, digital or CAN bus. We repair all input devices, replace any faulty parts and replace all the wearing parts.

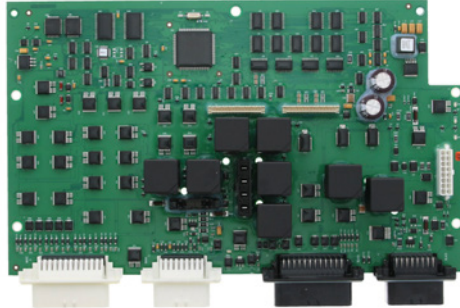
After that, the joystick is put through extensive functionality testing. Our remanufactured joysticks are as good as new, but cost you less. Your satisfaction is guaranteed: we give you the same warranty as a new part.

### The remanufactured joystick advantages:

- Save money. With remanufactured joysticks you can save up to 50% compared to new parts
- Save materials. Purchasing a remanufactured joystick is a more sustainable option than buying new.
- Keep old machines active for longer. If you need a replacement joystick for an old machine, a remanufactured version might be the only option.

**SAVE UP TO 50% COMPARED TO NEW PARTS**

## PRINTED CIRCUIT BOARDS FOR TELEHANDLERS



### PRODUCT RANGE

TVH has a very elaborate range of printed circuit boards, power controllers and displays.

**You can also find other electronic components at TVH:**

- Joysticks, accelerators and drive switches
- Chargers
- Contactors

#### MORE ADVANTAGES

Regardless of the price range, you will definitely find what you are looking for. We offer both original and remanufactured electronic parts. The quality is for both types optimal.

Thanks to our extensive stock of 60 000 new and 11 500 service exchange PCBs, we can offer you a fast delivery.

Do you have any old electronic parts lying around? If these are still in repairable condition, then we might purchase them to be repaired. Complete our 'Purchase faulty electronic components' form and mail it to us.

#### MORE INFO

Discover our Electronics department and learn more about our products and services, such as the repair of your electronic parts. Feel free to contact us should you require more info.

#### ABOUT THE ELECTRONICS DEPARTMENT

##### Need more information?

Do you have any questions or remarks?  
Please contact us, we will gladly help you!

#### QUALITY PRINTED CIRCUIT BOARDS FOR TELEHANDLERS

- We can offer you original and reconditioned printed circuit boards for all major makes: **Ausa, Bobcat, Case, Caterpillar, Claas, Deutz Fahr, Dieci, Faresin, Genie, Haulotte, JCB, JLG, John Deere, Kramer, Magni, Manitou, Massey Ferguson, Merlo, New Holland, Weidemann ...**
- All printed circuit boards were repaired in a highly professional manner.
- Upon completion of the repair, all printed circuit boards are extensively tested.
- As a finishing touch, we apply a new layer of lacquer to protect the printed circuit boards against moisture and dirt.
- Each of our engineers is specialised in a specific make, in order to guarantee you the highest quality. This quality is the result of an optimal knowledge.
- Thanks to this thorough way of working and elaborate know-how, we established partnerships with:



## TYRES

### PRODUCT RANGE TYRES FOR TELEHANDLERS

With regard to pneumatic tyres for telehandlers, we offer the brands Armour and Advance.

#### QUALITY TYRES FOR TELEHANDLERS

You are sure to receive an optimal price/quality ratio: the prices are competitive and all our tyres meet the international ETRO quality standard.

#### MORE ADVANTAGES

- The tyres can be used both on the road and on rough terrain thanks to their robust structure.
- Good traction on all surfaces thanks to the wide tread and the optimal design of the studs.
- A perfect stability thanks to a strong sidewall.
- We stock tyres for various applications. As a result, you can expect on a short delivery time.

Tyre size	Radial/bias	Tube type	Ply rating/ load speed index	Tread pattern	Tyre dia	Tyre width	Weight	REF	
					± 10 mm	± 5 mm			
					mm	mm	kg		
10.0/75-15.3	Bias	Tubeless	10	MPT	760	264	20	<a href="#">129TA7037</a>	
11.5/80-15.3	Bias	Tubeless	10	R1	867	290	27.5	<a href="#">129TA7038</a>	
10.5/80-18	Bias	Tubeless	12	R4	910	270	31	<a href="#">129TA7040</a>	
12.5/80-18	Bias	Tubeless	12	R4	990	340	42	<a href="#">129TA7041</a>	
12.5-18 (340/80-18)	Bias	Tubeless	12	R4	989	335	45	<a href="#">129TA7042</a>	
15.5/55R18	Radial	Tubeless	140A8	PG7	890	370	41	<a href="#">129TA7043</a>	
18-19.5	Bias	Tubeless	16	MPT	1133	447	64	<a href="#">166TA4172</a>	
10.5-20	Bias	Tubeless	10	MPT	950	278	36	<a href="#">129TA7047</a>	
12.5-20	Bias	Tubeless	12	MPT	1054	348	55	<a href="#">129TA7048</a>	
14.5-20 (375/75-20)	Bias	Tubeless	12	MPT	1107	359	65	<a href="#">129TA7050</a>	
405/70-20 (16/70-20)	Bias	Tubeless	14	R1	1070	405	70	<a href="#">129TA7045</a>	
18-22.5	Bias	Tubeless	16	MPT	1105	448	88	<a href="#">129TA7052</a>	
405/70-24 (16/70-24)	Bias	Tubeless	14	R1	1165	400	78	<a href="#">129TA7060</a>	
405/70R24 (16/70R24)	Radial	Tubeless	158A8	R4	1170	404	84	<a href="#">166TA4173</a>	
400/80-24 (15.5/80-24)	Bias	Tubeless	16	R1	1240	394	82	<a href="#">129TA7061</a>	
400/80-24 (15.5/80-24)	Bias	Tubeless	20	R4	1239	405	84	<a href="#">166TA4174</a>	
400/80R24 (15.5/80R24)	Radial	Tubeless	162A8	R4	1250	404	85	<a href="#">166TA4175</a>	
440/80-24 (16.9-24)	Bias	Tubeless	16	R4	1314	441	115	<a href="#">166TA4176</a>	
460/70-24 (17.5L-24)	Bias	Tubeless	12	R4	1230	420	73	<a href="#">129TA7058</a>	
460/70R24 (17.5LR24)	Radial	Tubeless	159A8	R4	1254	455	85	<a href="#">166TA4177</a>	
460/70R24 (17.5LR24)	Radial	Tubeless	159A8	R4	1237	456	87	<a href="#">166TA4178</a>	
19.5L-24	Bias	Tubeless	12	R4	1325	490	91	<a href="#">129TA7059</a>	

\*Other sizes and tread patterns on request

#### TREAD PATTERN

MPT



R1



R4



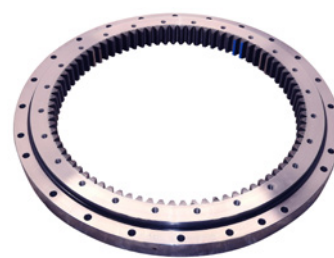
PG7



# GENERAL MECHANICAL COMPONENTS

## HARDWARE BEARING & BUSHINGS

### BEARING TAPERED ROLLERS, BALL JOINTS, BEARING ROLLERS, BEARING BALL JOINTS, BEARING NEEDLES, BEARING SLEWING RINGS



Bearings avoid metal-to-metal contact between moving parts relative to one another. They reduce friction, heat generation and prevent wear and tear.

Bearings come in many shapes and forms and have various applications in telehandlers. You can find them in wheel assemblies, gearboxes, engine components and many other parts.

TVH offers all the bearings you need to keep telehandlers going.

- **Ball bearings** contain small spherical balls that reduce friction between rotating parts, guaranteeing smooth motion.
- **Roller bearings** use parallel aligned cylindrical rollers instead of balls, supporting heavy radial and moderate thrust loads.
- **Tapered roller bearings** use conically-shaped rollers, ideal for supporting heavy radial and axial loads due to their unique design.

- **Needle bearings** are slim, cylindrical rollers used in applications with limited space, providing a high load capacity despite their slender shape.

- **Sensor bearings** integrate small electrical sensors into bearings. They enable real-time monitoring and control of various parameters.

- **Slewing rings** are large bearings with many uses in telehandlers. The larger ones enable 360° movement in the upper body of mini excavators, while smaller variants are found in reduction gearboxes.







Worn bearings can lead to friction, overheating so they should be replaced regularly. Well-adjusted bearings will reduce energy consumption, prevent breakage and guarantee smooth movements. On top of our wide range of bearings, we also offer bearing mounting kits, induction heaters and everything you needed for easy installation.









# GENERAL MECHANICAL COMPONENTS







## HARDWARE BEARING & BUSHINGS






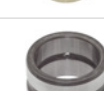
### PINS

	Diameter mm	Length mm	REF
	30	172	<a href="#">168TA2711</a>
	31.7	118	<a href="#">168TA2712</a>
	31.7	117	<a href="#">168TA2713</a>
	35	250	<a href="#">168TA2717</a>
	45	279	<a href="#">166TA4459</a>
	55	281	<a href="#">168TA2718</a>

	Diameter mm	Length mm	REF
	45	179	<a href="#">168TA2720</a>
	45	300	<a href="#">168TA2721</a>
	44.5	333	<a href="#">166TA4551</a>
	40	171.5	<a href="#">168TA2723</a>
	45	268	<a href="#">168TA2728</a>
	35	172	<a href="#">168TA2732</a>

### BUSHINGS

	Inner diameter mm	Outer diameter mm	Length mm	REF
	48.2	52.3	24	<a href="#">168TA2733</a>
	38	44.5	32	<a href="#">168TA2735</a>
	32	36.5	41.2	<a href="#">168TA2737</a>
	50	65	62.5	<a href="#">168TA2740</a>
	70.4	80.2	32	<a href="#">168TA2741</a>
	28	30.5	26	<a href="#">168TA2742</a>

	Inner diameter mm	Outer diameter mm	Length mm	REF
	90.2	105.2	47.8	<a href="#">168TA2743</a>
	35	45	65	<a href="#">168TA2745</a>
	85	100	84.3	<a href="#">168TA2748</a>
	40.1	50	49.9	<a href="#">168TA2750</a>
	45	55	60	<a href="#">168TA2751</a>
	35	45	30	<a href="#">168TA2752</a>

## CAM ATTACHMENTS



CAM attachments was established in Italy more than 40 years ago. Over the years, they acquired a lot of experience, as a result of which their quality and reliability has continued to improve.

CAM attachments offers a wide range of both hydraulic and mechanical attachments. The products successfully operate in all main sectors of markets like agriculture, construction, industry, food and beverage and paper handling. You can install them on different types of machines such as forklifts, skid steer loaders, telehandlers and tractor loaders.

Do you have special requirements? CAM attachments offers custom-made solutions and manufactures attachments tuned to your needs.

In the following pages you will find a selection of our range for your telehandler. Go to our website or brand new catalog to find more attachments for your telehandler.

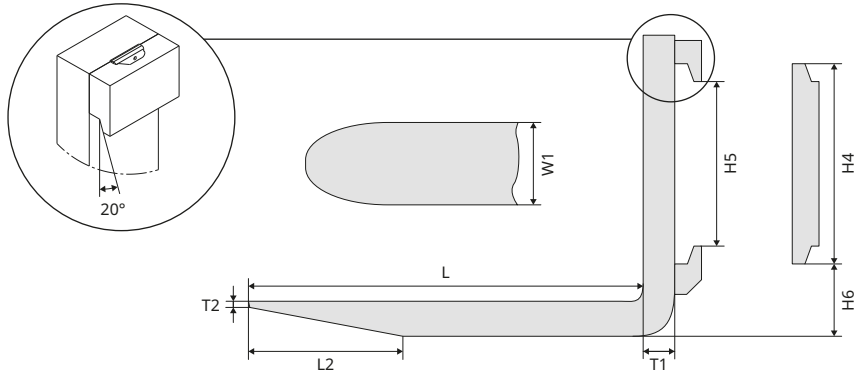


**VISIT OUR CAM ATTACHMENTS WEBSITE.**

**CHECK THE CAM ATTACHMENTS PRODUCT CATALOG.**



## FORKS



### TECHNICAL DATA

Class FEM	Lift truck capacity	Norm ISO 2328	H6	H4	H5	We propose to use fork section = W1 x T1			
	kg		mm	mm	mm	mm			
1	0-999	1A	76	331	306	80 x 35			
		1B	114			80 x 40 100 x 32			
2	1000-1500	2A	76	407	382	100 x 35 100 x 40			
		2B	152			100 x 40 100 x 45			
		2A	76			100 x 45 125 x 40			
		2B	152			100 x 45 125 x 40			
3	2800-3500	3A	76	508	477	100 x 45 100 x 50			
		3B	203			125 x 45 125 x 50			
	3500-4999	3A	76			125 x 45 125 x 50			
		3B	203			130 x 60			
	4	5000-9000	4A			127	635	598	150 x 50 130 x 60
			4B			254			150 x 60 150 x 70

- FEM forks meet ISO standards
- High-quality chromium-manganese steel to guarantees high mechanical strength
- Refined finish: manufactured on the basis of a rolled profile
- Forks comply with European standards

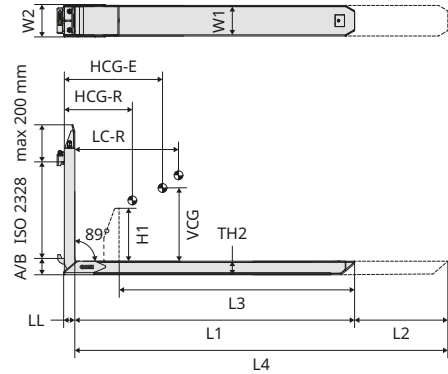
## FORKS



Fork section W1 x T1	Capacity/ pair	ISO 2328	Fork length L1																
			800 mm	900 mm	1000 mm	1070 mm	1100 mm	1150 mm	1200 mm	1300 mm	1400 mm	1500 mm	1600 mm	1800 mm	2000 mm	2200 mm	2400 mm	2500 mm	
80 x 40	2000/500	2A	<a href="#">BF38622</a>	<a href="#">BF38628</a>	<a href="#">BE44706</a>	-	<a href="#">BF38670</a>	<a href="#">BF38694</a>	<a href="#">BE44710</a>	<a href="#">BJ05664</a>	<a href="#">BF38762</a>	<a href="#">BF38790</a>	<a href="#">BF38826</a>	<a href="#">BF38860</a>	-	-	-	-	
100 x 35	1900/500	2A	<a href="#">BJ04664</a>	<a href="#">BF38630</a>	<a href="#">BF38642</a>	<a href="#">BF29396</a>	<a href="#">BF38672</a>	<a href="#">BF38696</a>	<a href="#">BF38712</a>	<a href="#">BF38744</a>	<a href="#">BF38764</a>	<a href="#">BF38792</a>	<a href="#">BF38828</a>	<a href="#">BF38862</a>	<a href="#">BF38892</a>	<a href="#">BJ05734</a>	<a href="#">BJ06820</a>	-	
100 x 40	2500/500	2A	<a href="#">BF38624</a>	<a href="#">BF38632</a>	<a href="#">BF38644</a>	<a href="#">BF29400</a>	<a href="#">BE44712</a>	<a href="#">BF38698</a>	<a href="#">BE44714</a>	<a href="#">BF38746</a>	<a href="#">BF38766</a>	<a href="#">BF38794</a>	<a href="#">BF38830</a>	<a href="#">BF38862</a>	<a href="#">BF38892</a>	<a href="#">BJ05734</a>	<a href="#">BJ06820</a>	-	
100 x 45	3000/500	2A	<a href="#">BJ04668</a>	<a href="#">BF38634</a>	<a href="#">BF38646</a>	<a href="#">BF38666</a>	<a href="#">BF38674</a>	<a href="#">BF38700</a>	<a href="#">BE44716</a>	<a href="#">BF38748</a>	<a href="#">BF38768</a>	<a href="#">BF38796</a>	<a href="#">BF38832</a>	<a href="#">BF38864</a>	<a href="#">BF38894</a>	<a href="#">BJ05736</a>	<a href="#">BJ05740</a>	-	
120 x 40	3000/500	2A	<a href="#">BJ06822</a>	-	<a href="#">BF38648</a>	<a href="#">BF29406</a>	<a href="#">BF38676</a>	<a href="#">BF38702</a>	<a href="#">BF38714</a>	<a href="#">BF38750</a>	<a href="#">BF38770</a>	<a href="#">BF38798</a>	<a href="#">BF38834</a>	<a href="#">BF38866</a>	<a href="#">BF38896</a>	<a href="#">BJ07058</a>	<a href="#">BF38930</a>	-	
125 x 40	3000/500	2A	-	-	<a href="#">BJ06826</a>	-	<a href="#">BF38678</a>	-	<a href="#">BF38716</a>	<a href="#">BJ06830</a>	<a href="#">BJ06832</a>	<a href="#">BF38800</a>	<a href="#">BJ06834</a>	<a href="#">BF38868</a>	<a href="#">BJ06836</a>	-	-	-	
125 x 45	4100/500	2A	-	-	<a href="#">BF38636</a>	<a href="#">BF38650</a>	-	<a href="#">BE44718</a>	<a href="#">BF38704</a>	<a href="#">BF38752</a>	<a href="#">BF38772</a>	<a href="#">BF38802</a>	<a href="#">BF38836</a>	<a href="#">BF38870</a>	<a href="#">BF38898</a>	<a href="#">BF38916</a>	<a href="#">BF38932</a>	-	
80 x 40	2000/500	2B	<a href="#">BJ04670</a>	<a href="#">BJ05950</a>	<a href="#">BF38652</a>	-	<a href="#">BF38680</a>	<a href="#">BJ05936</a>	<a href="#">BF38718</a>	-	<a href="#">BJ06902</a>	-	-	-	-	-	-	-	
100 x 35	1900/500	2B	-	-	<a href="#">BJ06760</a>	-	<a href="#">BJ04748</a>	-	<a href="#">BJ04786</a>	-	<a href="#">BJ06768</a>	-	-	-	-	-	-	-	
100 x 40	2500/500	2B	<a href="#">BF38626</a>	<a href="#">BF38638</a>	<a href="#">BF38654</a>	-	<a href="#">BF38682</a>	<a href="#">BF38706</a>	<a href="#">BF38720</a>	<a href="#">BJ04842</a>	<a href="#">BF38774</a>	<a href="#">BF38804</a>	<a href="#">BF38838</a>	<a href="#">BF38872</a>	<a href="#">BJ05032</a>	<a href="#">BJ06780</a>	-	-	
100 x 45	3000/500	2B	-	-	<a href="#">BJ04704</a>	-	<a href="#">BJ04758</a>	<a href="#">BJ06858</a>	<a href="#">BJ04796</a>	-	<a href="#">BJ04864</a>	<a href="#">BJ06756</a>	<a href="#">BJ04952</a>	<a href="#">BJ06758</a>	<a href="#">BJ06862</a>	-	-	-	
120 x 40	3000/500	2B	-	-	<a href="#">BF38656</a>	-	<a href="#">BJ04754</a>	<a href="#">BF38708</a>	<a href="#">BF38722</a>	<a href="#">BJ06872</a>	<a href="#">BF38776</a>	<a href="#">BJ06874</a>	<a href="#">BJ06876</a>	-	-	-	-	-	
125 x 45	4100/500	2B	-	-	<a href="#">BJ04702</a>	-	<a href="#">BF38724</a>	<a href="#">BJ06888</a>	<a href="#">BJ04866</a>	<a href="#">BJ06890</a>	<a href="#">BF38874</a>	<a href="#">BF38840</a>	<a href="#">BF38874</a>	<a href="#">BF38900</a>	-	-	-	-	
100 x 45	3000/500	3A	-	-	<a href="#">BJ04706</a>	-	<a href="#">BF38684</a>	<a href="#">BJ06914</a>	<a href="#">BF38726</a>	<a href="#">BJ04844</a>	<a href="#">BJ04868</a>	<a href="#">BF38806</a>	<a href="#">BF38842</a>	<a href="#">BJ04990</a>	<a href="#">BJ05036</a>	<a href="#">CC18704</a>	<a href="#">BJ07036</a>	-	
100 x 50	3900/500	3A	-	-	<a href="#">BJ04708</a>	-	<a href="#">BF38686</a>	<a href="#">BJ06920</a>	<a href="#">BF38728</a>	<a href="#">BJ06922</a>	<a href="#">BJ04870</a>	<a href="#">BF38808</a>	<a href="#">BJ04956</a>	<a href="#">BF38876</a>	<a href="#">BF38902</a>	<a href="#">BJ07038</a>	<a href="#">BJ05094</a>	-	
120 x 50	4500/500	3A	-	-	<a href="#">BJ04710</a>	-	<a href="#">BJ04764</a>	<a href="#">BJ06750</a>	<a href="#">BJ04802</a>	<a href="#">BJ06782</a>	<a href="#">BJ04872</a>	<a href="#">BJ04910</a>	<a href="#">BJ04958</a>	<a href="#">BJ04994</a>	<a href="#">BJ05040</a>	<a href="#">BJ06784</a>	<a href="#">BJ05096</a>	-	
125 x 45	4100/500	3A	-	-	<a href="#">BF38658</a>	<a href="#">BE39912</a>	<a href="#">BF38688</a>	<a href="#">BF38710</a>	<a href="#">BE44722</a>	<a href="#">BF38754</a>	<a href="#">BF38778</a>	<a href="#">BF38810</a>	<a href="#">BF38844</a>	<a href="#">BF38878</a>	<a href="#">BF38904</a>	<a href="#">BF38918</a>	<a href="#">BF38934</a>	<a href="#">CC18706</a>	
125 x 50	5000/500	3A	-	-	<a href="#">BF38640</a>	<a href="#">BJ04714</a>	<a href="#">BF38668</a>	<a href="#">BJ04768</a>	<a href="#">BJ07040</a>	<a href="#">BF38730</a>	<a href="#">BF38756</a>	<a href="#">BF38780</a>	<a href="#">BF38812</a>	<a href="#">BF38846</a>	<a href="#">BF38880</a>	<a href="#">BF38906</a>	<a href="#">BF38920</a>	<a href="#">BF38936</a>	
130 x 60	7200/500	3A	-	-	<a href="#">BJ06936</a>	-	<a href="#">BJ04772</a>	-	<a href="#">BJ04812</a>	<a href="#">BJ04852</a>	<a href="#">BJ04882</a>	<a href="#">BJ04968</a>	<a href="#">BJ05004</a>	<a href="#">BJ05040</a>	<a href="#">BJ05050</a>	<a href="#">BJ07042</a>	<a href="#">BJ05106</a>	-	
150 x 50	5800/500	3A	-	-	<a href="#">BF38660</a>	<a href="#">BF29442</a>	<a href="#">BF38690</a>	-	<a href="#">BF38732</a>	<a href="#">BJ04850</a>	<a href="#">BF38782</a>	<a href="#">BF38814</a>	<a href="#">BF38848</a>	<a href="#">BF38882</a>	<a href="#">BF38908</a>	<a href="#">BF38922</a>	<a href="#">BF38938</a>	-	
150 x 60	7000/600	3A	-	-	<a href="#">BJ06754</a>	-	<a href="#">BJ04810</a>	-	<a href="#">BJ04810</a>	-	<a href="#">BJ04880</a>	<a href="#">BJ04918</a>	<a href="#">BJ04966</a>	<a href="#">BJ05002</a>	<a href="#">BJ05048</a>	<a href="#">BJ05080</a>	<a href="#">BJ05104</a>	-	
100 x 50	3900/500	3B	-	-	<a href="#">BJ06944</a>	-	<a href="#">BJ04774</a>	-	<a href="#">BJ04814</a>	<a href="#">BJ06948</a>	<a href="#">BJ04884</a>	<a href="#">BJ04922</a>	<a href="#">BJ04970</a>	<a href="#">BJ06950</a>	<a href="#">BJ06952</a>	-	-	-	
125 x 45	4100/500	3B	-	-	<a href="#">BF38662</a>	-	<a href="#">BF38692</a>	-	<a href="#">BF38734</a>	<a href="#">BF38758</a>	<a href="#">BF38784</a>	<a href="#">BF38816</a>	<a href="#">BF38850</a>	<a href="#">BF38884</a>	<a href="#">BJ05052</a>	-	<a href="#">BJ05108</a>	-	
125 x 50	5000/500	3B	-	-	-	-	<a href="#">BJ04818</a>	<a href="#">BJ04856</a>	<a href="#">BJ04888</a>	<a href="#">BJ04856</a>	<a href="#">BJ04888</a>	<a href="#">BJ04926</a>	<a href="#">BJ04974</a>	<a href="#">BJ05008</a>	<a href="#">BJ05054</a>	-	<a href="#">BJ05110</a>	-	
150 x 50	5800/500	3B	-	-	-	-	<a href="#">BF38736</a>	<a href="#">BJ04858</a>	<a href="#">BJ04890</a>	<a href="#">BF38818</a>	<a href="#">BF38852</a>	<a href="#">BF38886</a>	<a href="#">BF38920</a>	<a href="#">BF38954</a>	<a href="#">BF38990</a>	<a href="#">BF38924</a>	<a href="#">BF38940</a>	-	
130 x 60	7200/500	4A	-	-	-	-	<a href="#">BJ04824</a>	<a href="#">BJ06982</a>	<a href="#">BJ04892</a>	<a href="#">BJ04932</a>	<a href="#">BJ04978</a>	<a href="#">BJ05014</a>	<a href="#">BJ05060</a>	<a href="#">BJ05060</a>	-	<a href="#">BJ07050</a>	-	-	
150 x 50	5000/600	4A	-	-	-	-	<a href="#">BF38738</a>	<a href="#">BJ06986</a>	<a href="#">BF85280</a>	<a href="#">BF38820</a>	<a href="#">BF38854</a>	<a href="#">BF38882</a>	<a href="#">BF38916</a>	<a href="#">BJ05016</a>	<a href="#">BJ05062</a>	<a href="#">BJ05084</a>	<a href="#">BJ05116</a>	-	
150 x 60	7000/600	4A	-	-	<a href="#">BF38664</a>	-	<a href="#">BF38740</a>	<a href="#">BF38786</a>	<a href="#">BF38760</a>	<a href="#">BF38786</a>	<a href="#">BF38822</a>	<a href="#">BF38856</a>	<a href="#">BF38890</a>	<a href="#">BF38924</a>	<a href="#">BF38958</a>	<a href="#">BF38992</a>	<a href="#">BF38942</a>	<a href="#">CC18708</a>	
150 x 65	8200/600	4A	-	-	-	-	<a href="#">BJ04822</a>	-	<a href="#">BJ04822</a>	-	<a href="#">BJ04930</a>	-	<a href="#">BJ05012</a>	<a href="#">BJ05058</a>	<a href="#">BJ06752</a>	<a href="#">BJ05114</a>	-	-	
150 x 70	9000/600	4A	-	-	-	-	<a href="#">BF38742</a>	<a href="#">BJ07008</a>	<a href="#">BF38788</a>	<a href="#">BF38824</a>	<a href="#">BF38858</a>	<a href="#">BF38892</a>	<a href="#">BF38926</a>	<a href="#">BF38960</a>	<a href="#">BF38994</a>	<a href="#">BF38944</a>	-	-	
200 x 60	9200/600	4A	-	-	-	-	<a href="#">BJ04832</a>	-	<a href="#">BJ04832</a>	-	<a href="#">BJ04940</a>	<a href="#">BJ06740</a>	<a href="#">BJ05022</a>	<a href="#">BJ05068</a>	<a href="#">BJ05090</a>	<a href="#">BJ05122</a>	-	-	
200 x 70	12000/600	4A	-	-	-	-	<a href="#">BJ06810</a>	-	<a href="#">BJ06810</a>	-	<a href="#">BJ06816</a>	<a href="#">BJ05954</a>	<a href="#">BJ05024</a>	<a href="#">BJ05070</a>	<a href="#">BJ05092</a>	<a href="#">BJ05124</a>	-	-	
150 x 50	5000/600	4B	-	-	-	-	<a href="#">BJ04834</a>	-	<a href="#">BJ04900</a>	<a href="#">BJ04942</a>	<a href="#">BJ07052</a>	<a href="#">BJ05026</a>	<a href="#">CC18702</a>	<a href="#">BJ05026</a>	<a href="#">CC18702</a>	-	-	-	
150 x 60	7000/600	4B	-	-	-	-	<a href="#">BJ04836</a>	-	<a href="#">BJ04902</a>	<a href="#">BJ04944</a>	<a href="#">BJ06790</a>	<a href="#">BJ05028</a>	<a href="#">BJ05072</a>	<a href="#">BJ05126</a>	-	-	-	-	
200 x 50	6500/600	4B	-	-	-	-	<a href="#">BJ04838</a>	-	<a href="#">BJ07054</a>	-	<a href="#">BJ07054</a>	-	-	-	-	-	-	-	
200 x 60	9200/600	4B	-	-	-	-	<a href="#">BJ04840</a>	-	<a href="#">BJ04840</a>	-	<a href="#">BJ04946</a>	-	<a href="#">BJ05030</a>	<a href="#">BJ06804</a>	-	<a href="#">BJ06808</a>	-	-	



## RHF - REACH FORKS



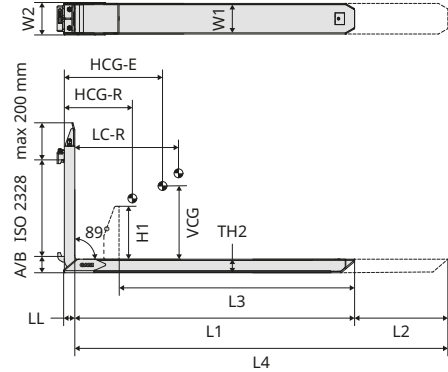
### TECHNICAL DATA

- L3: dimension measured from top of the fork to the pallet stop
- Telescopic forks delivered with external flow divider and 4 hoses
- Minimum oil flow: 8 l/min
- Recommended oil flow: 15 l/min
- Maximum oil flow: 25 l/min

- Minimum working pressure: 160 bar
- Recommended working pressure: 180 bar
- Maximum working pressure: 250 bar
- Oil fittings size: metric 12L

Model	Capacity/pair on load centre - retracted kg/mm	L3 mm	L4 mm	W1 mm	W2 mm	TH2 mm	L1 mm	L2 mm	H1 mm	LL mm	HCG-R mm	HCG-E mm	Weight/ pair kg	ISO 2328
<b>Without palletstop</b>														
<a href="#">CC31652</a>	2500/600	-	1200	131	139	58	1000	200	45	343	380	142	2A	
<a href="#">CC31654</a>	2500/600	-	1850	131	139	58	1100	750	45	385	542	149	2A	
<a href="#">CC31656</a>	2500/600	-	2000	131	139	58	1200	800	45	430	601	159	2A	
<a href="#">CC31658</a>	2500/600	-	2050	131	139	58	1200	850	45	430	612	159	2A	
<a href="#">CC31660</a>	2500/600	-	2350	131	139	58	1350	1000	45	499	718	173	2A	
<a href="#">CC31662</a>	3000/600	-	1200	131	139	58	1000	200	45	343	380	142	2A	
<a href="#">CC31664</a>	3000/600	-	1850	131	139	58	1100	750	45	385	542	149	2A	
<a href="#">CC31666</a>	3000/600	-	2000	131	139	58	1200	800	45	430	601	159	2A	
<a href="#">CC31668</a>	3000/600	-	2050	131	139	58	1200	850	45	430	612	159	2A	
<a href="#">CC31670</a>	3000/600	-	2350	131	139	58	1350	1000	45	499	718	173	2A	
<a href="#">CC31672</a>	3500/600	-	1200	131	139	63	1000	200	50	346	386	144	2A	
<a href="#">CC31674</a>	3500/600	-	1850	131	139	63	1100	750	50	389	558	152	2A	
<a href="#">CC31676</a>	3500/600	-	2000	131	139	63	1200	800	50	434	618	161	2A	
<a href="#">CC31678</a>	3500/600	-	2050	131	139	63	1200	850	50	434	629	161	2A	
<a href="#">CC31680</a>	3500/600	-	2350	131	139	63	1350	1000	50	503	738	176	2A	
<a href="#">CC31682</a>	3500/600	-	1200	131	139	63	1000	200	50	324	361	155	3A	
<a href="#">CC31684</a>	3500/600	-	1850	131	139	63	1100	750	50	365	522	162	3A	
<a href="#">CC31686</a>	3500/600	-	2000	131	139	63	1200	800	50	409	581	172	3A	
<a href="#">CC31688</a>	3500/600	-	2050	131	139	63	1200	850	50	409	591	172	3A	
<a href="#">CC31690</a>	3500/600	-	2350	131	139	63	1350	1000	50	476	697	187	3A	
<a href="#">CC31692</a>	4500/600	-	1850	161	169	58	1100	750	45	402	554	217	3A	
<a href="#">CC33152</a>	4500/600	-	2000	161	169	58	1200	800	45	447	619	229	3A	
<a href="#">CC31694</a>	4500/600	-	2050	161	169	58	1200	850	45	447	621	229	3A	
<a href="#">CC31696</a>	4500/600	-	2350	161	169	58	1350	1000	45	514	722	247	3A	
<b>With palletstop</b>														
<a href="#">CC31698</a>	2500/600	1000	1850	131	139	58	1100	750	400	45	374	557	156	2A
<a href="#">CC31700</a>	2500/600	1150	2000	131	139	58	1200	800	400	45	416	613	166	2A
<a href="#">CC31702</a>	2500/600	1150	2050	131	139	58	1200	850	400	45	416	625	166	2A
<a href="#">CC31704</a>	2500/600	1150	2350	131	139	58	1350	1000	400	45	489	737	180	2A
<a href="#">CC31706</a>	2500/600	1200	2350	131	139	58	1350	1000	400	45	491	740	180	2A

## RHF - REACH FORKS



Model	Capacity/pair on load centre – retracted kg/mm	L3 mm	L4 mm	W1 mm	W2 mm	TH2 mm	L1 mm	L2 mm	H1 mm	LL mm	HCG-R mm	HCG-E mm	Weight/ pair kg	ISO 2328
<a href="#">CC31708</a>	3000/600	1000	1850	131	139	58	1100	750	400	45	374	557	156	2A
<a href="#">CC31710</a>	3000/600	1150	2000	131	139	58	1200	800	400	45	416	613	166	2A
<a href="#">CC31712</a>	3000/600	1150	2050	131	139	58	1200	850	400	45	416	625	166	2A
<a href="#">CC31714</a>	3000/600	1150	2350	131	139	58	1350	1000	400	45	489	737	180	2A
<a href="#">CC31716</a>	3000/600	1200	2350	131	139	58	1350	1000	400	45	491	740	180	2A
<a href="#">CC31718</a>	3500/600	1000	1850	131	139	63	1100	750	400	50	371	562	161	2A
<a href="#">CC31720</a>	3500/600	1150	2000	131	139	63	1200	800	400	50	413	618	171	2A
<a href="#">CC31722</a>	3500/600	1150	2050	131	139	63	1200	850	400	50	413	632	171	2A
<a href="#">CC31724</a>	3500/600	1150	2350	131	139	63	1350	1000	400	50	486	746	186	2A
<a href="#">CC31726</a>	3500/600	1200	2350	131	139	63	1350	1000	400	50	488	749	186	2A
<a href="#">CC31728</a>	3500/600	1000	1850	131	139	63	1100	750	400	50	355	515	169	3A
<a href="#">CC31730</a>	3500/600	1150	2000	131	139	63	1200	800	400	50	396	592	179	3A
<a href="#">CC31732</a>	3500/600	1150	2050	131	139	63	1200	850	400	50	396	605	179	3A
<a href="#">CC31734</a>	3500/600	1150	2350	131	139	63	1350	1000	400	50	467	716	193	3A
<a href="#">CC31736</a>	3500/600	1200	2350	131	139	63	1350	1000	400	50	468	718	193	3A
<a href="#">CC31738</a>	4500/600	1000	1850	161	169	58	1100	750	400	45	354	513	206	3A
<a href="#">CC33150</a>	4500/600	1150	2000	161	169	58	1200	800	400	45	395	572	218	3A
<a href="#">CC31740</a>	4500/600	1150	2050	161	169	58	1200	850	400	45	395	577	218	3A
<a href="#">CC31742</a>	4500/600	1150	2350	161	169	58	1350	1000	400	45	466	683	236	3A
<a href="#">CC31744</a>	4500/600	1200	2350	161	169	58	1350	1000	400	45	467	685	236	3A

## WGF-L - IFORKS-32 WEIGHING FORKS



### IFORKS – 32 2500 FEM 2

REF [165TA2874](#)

### IFORKS – 32 3000 FEM 3

REF [164TA8627](#)

### IFORKS – 32 5000 FEM 3

REF [164TA8631](#)

### ADVANTAGES

- Installation in 5 minutes
- Completely wireless through Bluetooth: no cables
- Power forks through compact Li-ion battery packs
- Digital calibration
- Warning at tip or side loading
- Easy to install in combination with fork positioners
- Efficient energy management
- Tested for 1 000 000 cycles, at 125% capacity
- Automatic compensation in case of mast tilt

### FUNCTIONS

- Automatic and manual zero point correction
- Gross/net weighing
- Addition function, with sequential number
- Code input (5 digits)
- Integrated tilt correction in the forks
- Internal clock for date/time recording
- Standard: RS232 port connection for printer
- Bluetooth 4.0 for RAVAS WeightsApp
- Optional: WiFi or Bluetooth module for data communication
- Error message of tip loading during weighing
- Sleep mode for forks with automatic start
- Resistant to 200% overload on mechanical construction; according to ISO 2330

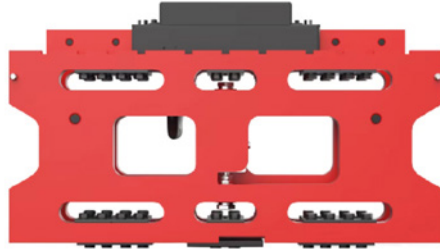
### STANDARD SPECIFICATIONS

- Capacity: 2500, 3000 or 5000 kg
- Multi-range scale
  - 1–2 kg at 2500 kg
  - 1–2 kg at 3000 kg
  - 2–5 kg at 5000 kg
- Max. inaccuracy: 0.1% of the load lifted
- Display: dual color (green/red), digit height 20 mm, with backlight, 5 digits
- Red display: during errors when tip or side loading (weight on one fork)
- Signal transfer: Bluetooth 4.0
- Controls: 4 function keys, on/off key
- Protection class: IP65
- Dimensions housing: 60 x 77 x 182 mm (excl bracket)

### POWER SUPPLY

- Each fork has its own rechargeable Li-ion 3.7 V / 5.2 Ah battery pack. Autonomy 75 hours continuous use. Charger station included.
- Indicator powered by 4 AA-batteries. Autonomy ca 50 hours continuous use. Power supply via truck battery optional (with data connection options reduced autonomy)
- Sleep function with automatic start-up for the fork transmitters, auto shut-off function for the indicator.
- The operator can customize the power setting of the indicator in the user menu.

## ICP-32 WEIGHING CARRIAGES



ICP32 – 2500 FEM 2

REF [167TA9698](#)

ICP32 – 5000 FEM 3

REF [167TA9699](#)

ICP32 – 7000 FEM 4

REF [167TA9700](#)

### **BENEFITS**

- Robust truck scale, for heavy-duty applications
- Total width of front plate available for weighing
- Cabled or wireless connection between indicator and iCP
- Also weighs in combination with rotators and clamps
- Optional: legal for trade version
- RAVAS WeightsApp for data capture on tablets and smartphones
- Top quality for industrial use

### **FUNCTIONS**

- Automatic and manual zero correction
- Gross/net weighing
- Totalling with sequence number
- ID-code entry (5 digits)
- Integrated level switch (cabled) or integrated level sensor (wireless)
- Internal clock for date and time
- RS232 port connection for printer
- Bluetooth 4.0 for RAVAS WeightsApp
- Wireless: sleep mode with automatic start-up
- Optional: with printer

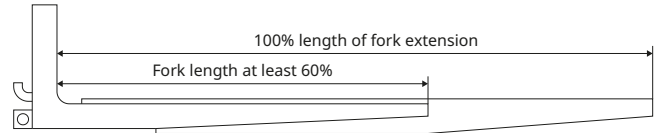
### **STANDARD SPECIFICATIONS**

- Capacity: 2500, 5000 or 7000 kg
- Graduation
  - 2 kg at 2500 kg capacity
  - 5 kg at 5000 kg capacity
  - 10 kg at 7000 kg capacity
- Max inaccuracy: 0.2% of the load lifted
- Overload protection: 200% on mechanical construction; according ISO 2330
- Protection class: IP65/NEMA 4
- Power supply: from truck battery, via regulator

### **CONNECTION BETWEEN PLATE AND INDICATOR**

- Wireless
- Standard: Bluetooth

## EXT - FORK EXTENSION - CLOSED



### TECHNICAL DATA

- Material thickness: 6 mm up to fork section 150 x 50 mm
- Material thickness: 8 mm starting from fork section 150 x 60 mm
- Supplied with locking pin

Fork section W1 x T1	REF length of fork extension								
mm	1200 mm	1400 mm	1500 mm	1600 mm	1800 mm	2000 mm	2200 mm	2400 mm	2500 mm
80 x 40	<a href="#">BE68072</a>	<a href="#">BE68098</a>	<a href="#">BE68124</a>	<a href="#">BE68150</a>	<a href="#">BE68176</a>	<a href="#">BE68202</a>	<a href="#">BE68228</a>	<a href="#">BE68254</a>	<a href="#">BE68280</a>
100 x 40	<a href="#">BE68074</a>	<a href="#">BE68100</a>	<a href="#">BE68126</a>	<a href="#">BE68152</a>	<a href="#">BE68178</a>	<a href="#">BE68204</a>	<a href="#">BE68230</a>	<a href="#">BE68256</a>	<a href="#">BE68282</a>
100 x 45	<a href="#">BE68078</a>	<a href="#">BE68104</a>	<a href="#">BE68130</a>	<a href="#">BE68156</a>	<a href="#">BE68182</a>	<a href="#">BE68208</a>	<a href="#">BE68234</a>	<a href="#">BE68260</a>	<a href="#">BE68286</a>
100 x 50	<a href="#">BE68076</a>	<a href="#">BE68102</a>	<a href="#">BE68128</a>	<a href="#">BE68154</a>	<a href="#">BE68180</a>	<a href="#">BE68206</a>	<a href="#">BE68232</a>	<a href="#">BE68258</a>	<a href="#">BE68284</a>
120 x 40	<a href="#">BG06500</a>	<a href="#">BG06504</a>	<a href="#">BG06508</a>	<a href="#">BG06512</a>	<a href="#">BG06516</a>	<a href="#">BG06520</a>	<a href="#">BG06524</a>	<a href="#">BG06528</a>	<a href="#">BG06532</a>
120 x 50	<a href="#">BE68080</a>	<a href="#">BE68106</a>	<a href="#">BE68132</a>	<a href="#">BE68158</a>	<a href="#">BE68184</a>	<a href="#">BE68210</a>	<a href="#">BE68236</a>	<a href="#">BE68262</a>	<a href="#">BE68288</a>
125 x 40	<a href="#">BE68082</a>	<a href="#">BE68108</a>	<a href="#">BE68134</a>	<a href="#">BE68160</a>	<a href="#">BE68186</a>	<a href="#">BE68212</a>	<a href="#">BE68238</a>	<a href="#">BE68264</a>	<a href="#">BE68290</a>
125 x 45	<a href="#">BE68084</a>	<a href="#">BE68110</a>	<a href="#">BE68136</a>	<a href="#">BE68162</a>	<a href="#">BE68188</a>	<a href="#">BE68214</a>	<a href="#">BE68240</a>	<a href="#">BE68266</a>	<a href="#">BE68292</a>
125 x 50	<a href="#">BG19716</a>	<a href="#">BG19718</a>	<a href="#">BG19720</a>	<a href="#">BG19722</a>	<a href="#">BF33930</a>	<a href="#">BG19724</a>	<a href="#">BG19726</a>	<a href="#">BG19728</a>	<a href="#">BG19730</a>
130 x 45	<a href="#">BE68086</a>	<a href="#">BE68112</a>	<a href="#">BE68138</a>	<a href="#">BE68164</a>	<a href="#">BE68190</a>	<a href="#">BE68216</a>	<a href="#">BE68242</a>	<a href="#">BE68268</a>	<a href="#">BE68294</a>
130 x 50	<a href="#">BE68088</a>	<a href="#">BE68114</a>	<a href="#">BE68140</a>	<a href="#">BE68166</a>	<a href="#">BE68192</a>	<a href="#">BE68218</a>	<a href="#">BE68244</a>	<a href="#">BE68270</a>	<a href="#">BE68296</a>
130 x 60	<a href="#">BE68090</a>	<a href="#">BE68116</a>	<a href="#">BE68142</a>	<a href="#">BE68168</a>	<a href="#">BE68194</a>	<a href="#">BE68220</a>	<a href="#">BE68246</a>	<a href="#">BE68272</a>	<a href="#">BE68298</a>
140 x 50	<a href="#">BE68092</a>	<a href="#">BE68118</a>	<a href="#">BE68144</a>	<a href="#">BE68170</a>	<a href="#">BE68196</a>	<a href="#">BE68222</a>	<a href="#">BE68248</a>	<a href="#">BE68274</a>	<a href="#">BE68300</a>
150 x 50	<a href="#">BE68094</a>	<a href="#">BE68120</a>	<a href="#">BE68146</a>	<a href="#">BE68172</a>	<a href="#">BE68198</a>	<a href="#">BE68224</a>	<a href="#">BE68250</a>	<a href="#">BE68276</a>	<a href="#">BE68302</a>
150 x 60	<a href="#">BE68096</a>	<a href="#">BE68122</a>	<a href="#">BE68148</a>	<a href="#">BE68174</a>	<a href="#">BE68200</a>	<a href="#">BE68226</a>	<a href="#">BE68252</a>	<a href="#">BE68278</a>	<a href="#">BE68304</a>
150 x 70	<a href="#">BG06502</a>	<a href="#">BG06506</a>	<a href="#">BG06510</a>	<a href="#">BG06514</a>	<a href="#">BG06518</a>	<a href="#">BG06522</a>	<a href="#">BG06526</a>	<a href="#">BG06530</a>	<a href="#">BG06534</a>
mm	1220 mm	1370 mm	1525 mm	1829 mm	1982 mm	2134 mm	2440 mm		
100 x 50	<a href="#">BH18336</a>	<a href="#">BH18338</a>	<a href="#">BH18340</a>	<a href="#">BH18342</a>	<a href="#">BH18344</a>	<a href="#">BG88958</a>	<a href="#">BH18346</a>		
130 x 50	<a href="#">BG88960</a>	<a href="#">BG88962</a>	<a href="#">BG88964</a>	<a href="#">BG88966</a>	<a href="#">BG88968</a>	<a href="#">BG88970</a>	<a href="#">BG88972</a>		
150 x 60	<a href="#">BH18348</a>	<a href="#">BH18350</a>	<a href="#">BH18352</a>	<a href="#">BG88976</a>	<a href="#">BG88978</a>	<a href="#">BG88980</a>	<a href="#">BH18354</a>		

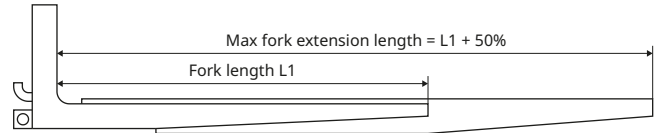
Fork extension length should not exceed original fork length by more than 60%

Conforms to ISO 13284

Made in Europe



## EXT - FORK EXTENSION - OPEN



### TECHNICAL DATA

- Material thickness: 8 mm
- Supplied with locking pin

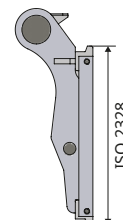
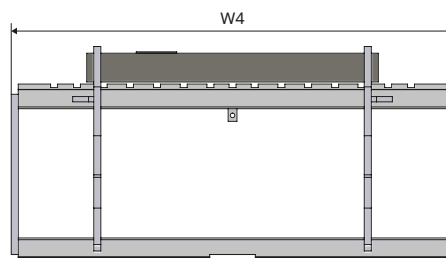
Fork section W1 x T1	REF length of fork extension								
mm	1200 mm	1400 mm	1500 mm	1600 mm	1800 mm	2000 mm	2200 mm	2400 mm	2500 mm
80 x 40	<a href="#">BF98760</a>	<a href="#">BF98788</a>	<a href="#">BF98816</a>	<a href="#">BF98844</a>	<a href="#">BF98872</a>	<a href="#">BF98900</a>	<a href="#">BG06550</a>	<a href="#">BG06574</a>	<a href="#">BG06598</a>
100 x 40	<a href="#">BF98762</a>	<a href="#">BF98790</a>	<a href="#">BF98818</a>	<a href="#">BF98846</a>	<a href="#">BF98874</a>	<a href="#">BF98902</a>	<a href="#">BG06552</a>	<a href="#">BG06576</a>	<a href="#">BG06600</a>
100 x 45	<a href="#">BF98764</a>	<a href="#">BF98792</a>	<a href="#">BF98820</a>	<a href="#">BF98848</a>	<a href="#">BF98876</a>	<a href="#">BF98904</a>	<a href="#">BG06554</a>	<a href="#">BG06578</a>	<a href="#">BG06602</a>
100 x 50	<a href="#">BF98766</a>	<a href="#">BF98794</a>	<a href="#">BF98822</a>	<a href="#">BF98850</a>	<a href="#">BF98878</a>	<a href="#">BF98906</a>	<a href="#">BG06556</a>	<a href="#">BG06580</a>	<a href="#">BG06604</a>
120 x 40	<a href="#">BG06536</a>	<a href="#">BG06538</a>	<a href="#">BG06540</a>	<a href="#">BG06542</a>	<a href="#">BG06544</a>	<a href="#">BG06546</a>	<a href="#">BG06548</a>	<a href="#">BG06572</a>	<a href="#">BG06596</a>
120 x 50	<a href="#">BF98768</a>	<a href="#">BF98796</a>	<a href="#">BF98824</a>	<a href="#">BF98852</a>	<a href="#">BF98880</a>	<a href="#">BF98908</a>	<a href="#">BG06558</a>	<a href="#">BG06582</a>	<a href="#">BG06606</a>
125 x 40	<a href="#">BF98770</a>	<a href="#">BF98798</a>	<a href="#">BF98826</a>	<a href="#">BF98854</a>	<a href="#">BF98882</a>	<a href="#">BF98910</a>	<a href="#">BG06560</a>	<a href="#">BG06584</a>	<a href="#">BG06608</a>
125 x 45	<a href="#">BF98772</a>	<a href="#">BF98800</a>	<a href="#">BF98828</a>	<a href="#">BF98856</a>	<a href="#">BF98884</a>	<a href="#">BF98912</a>	<a href="#">BG06620</a>	<a href="#">BG06622</a>	<a href="#">BG06624</a>
125 x 50	<a href="#">BF98774</a>	<a href="#">BF98802</a>	<a href="#">BF98830</a>	<a href="#">BF98858</a>	<a href="#">BF98886</a>	<a href="#">BF98914</a>	<a href="#">BG06562</a>	<a href="#">BG06586</a>	<a href="#">BG06610</a>
130 x 45	<a href="#">BF98776</a>	<a href="#">BF98804</a>	<a href="#">BF98832</a>	<a href="#">BF98860</a>	<a href="#">BF98888</a>	<a href="#">BF98916</a>	<a href="#">BG06564</a>	<a href="#">BG06588</a>	<a href="#">BG06612</a>
130 x 50	<a href="#">BF98778</a>	<a href="#">BF98806</a>	<a href="#">BF98834</a>	<a href="#">BF98862</a>	<a href="#">BF98890</a>	<a href="#">BF98918</a>	<a href="#">BG06566</a>	<a href="#">BG06590</a>	<a href="#">BG06614</a>
140 x 50	<a href="#">BF98782</a>	<a href="#">BF98810</a>	<a href="#">BF98838</a>	<a href="#">BF98866</a>	<a href="#">BF98894</a>	<a href="#">BF98922</a>	<a href="#">BG06568</a>	<a href="#">BG06592</a>	<a href="#">BG06616</a>
150 x 50	<a href="#">BF98784</a>	<a href="#">BF98812</a>	<a href="#">BF98840</a>	<a href="#">BF98868</a>	<a href="#">BF98896</a>	<a href="#">BF98924</a>	<a href="#">BG06570</a>	<a href="#">BG06594</a>	<a href="#">BG06618</a>

Fork extension length should not exceed original fork length by more than 50%

Conforms to ISO 13284

Made in Europe

## PFF - PALLET FORKS FRAME



### TECHNICAL DATA

Suitable for	ISO 2328	FEM 2				FEM 3		FEM 4		
	Capacity	1500 kg	2500 kg			5000 kg	8000 kg			
	Width W4	1200 mm	1200 mm	1500 mm	2000 mm	1200 mm	1500 mm	1500 mm	2000 mm	2400 mm
Claas	-	-	<a href="#">CC26714</a>	<a href="#">CC26716</a>	<a href="#">CC26718</a>	<a href="#">CC26720</a>	<a href="#">CC26722</a>	-	-	-
Dieci	-	<a href="#">CC26682</a>	<a href="#">CC26684</a>	<a href="#">CC26686</a>	<a href="#">CC26688</a>	<a href="#">CC26690</a>	<a href="#">CC26692</a>	<a href="#">CC26694</a>	<a href="#">CC26696</a>	<a href="#">CC26698</a>
GENIE	-	<a href="#">CC26700</a>	<a href="#">CC26702</a>	<a href="#">CC26704</a>	<a href="#">CC26706</a>	<a href="#">CC26708</a>	<a href="#">CC26710</a>	-	-	-
JCB Q-fit	-	<a href="#">CC26560</a>	<a href="#">CC26562</a>	<a href="#">CC26564</a>	<a href="#">CC26566</a>	<a href="#">CC26540</a>	<a href="#">CC26568</a>	<a href="#">CC26570</a>	<a href="#">CC26572</a>	<a href="#">CC26670</a>
Kramer 180-350	-	<a href="#">CC26712</a>	<a href="#">CC26592</a>	<a href="#">CC26594</a>	<a href="#">CC26596</a>	-	-	-	-	-
Kramer 380-580	-	-	<a href="#">CC26598</a>	<a href="#">CC26600</a>	<a href="#">CC26602</a>	<a href="#">CC26604</a>	<a href="#">CC26606</a>	-	-	-
MANITOU	-	<a href="#">CC26544</a>	<a href="#">CC26548</a>	<a href="#">CC26546</a>	<a href="#">CC26550</a>	<a href="#">CC26538</a>	<a href="#">CC26552</a>	<a href="#">CC26554</a>	<a href="#">CC26556</a>	<a href="#">CC26558</a>
MATBRO	-	<a href="#">CC26662</a>	<a href="#">CC26582</a>	<a href="#">CC26584</a>	<a href="#">CC26586</a>	<a href="#">CC26588</a>	<a href="#">CC26590</a>	<a href="#">CC26664</a>	<a href="#">CC26666</a>	<a href="#">CC26668</a>
MERLO ZM2	-	<a href="#">CC26660</a>	<a href="#">CC26574</a>	<a href="#">CC26576</a>	<a href="#">CC26578</a>	<a href="#">CC26542</a>	<a href="#">CC26580</a>	-	-	-
MERLO ZM3	-	-	-	-	-	<a href="#">CC26672</a>	<a href="#">CC26674</a>	<a href="#">CC26676</a>	<a href="#">CC26678</a>	<a href="#">CC26680</a>
Pin & Cone	-	-	<a href="#">CC26734</a>	<a href="#">CC26736</a>	<a href="#">CC26738</a>	<a href="#">CC26740</a>	<a href="#">CC26742</a>	-	-	-
Schaeffer	-	-	<a href="#">CC26620</a>	<a href="#">CC26622</a>	<a href="#">CC26624</a>	<a href="#">CC26626</a>	<a href="#">CC26628</a>	-	-	-
Weidemann	-	<a href="#">CC26608</a>	<a href="#">CC26610</a>	<a href="#">CC26612</a>	<a href="#">CC26614</a>	<a href="#">CC26616</a>	<a href="#">CC26618</a>	-	-	-

## ADAPTOR FRAMES



### TELEHANDLER VS TELEHANDLER

Machine side	Attachment side	Model
Manitou	JCB Q-Fit	<a href="#">CC55684</a>
Manitou	Merlo ZM2	<a href="#">CC55686</a>
Manitou	Merlo ZM3	<a href="#">CC55688</a>
Manitou	Dieci till 2500 kg	<a href="#">CC55690</a>
Manitou	Dieci 2800 kg till 4500 kg	<a href="#">CC55692</a>
Manitou	Kramer 380-580	<a href="#">CC55694</a>
JCB Q-Fit	Manitou	<a href="#">CC55698</a>
JCB Q-Fit	Merlo ZM2	<a href="#">CC55700</a>
JCB Q-Fit	Merlo ZM3	<a href="#">CC55702</a>
JCB Q-Fit	Dieci till 2500 kg	<a href="#">CC55704</a>
JCB Q-Fit	Dieci 2800-4500 kg	<a href="#">CC55706</a>
JCB Q-Fit	Kramer 380-580	<a href="#">CC55708</a>
Merlo ZM2	Manitou	<a href="#">CC55712</a>
Merlo ZM2	JCB Q-Fit	<a href="#">CC55714</a>
Merlo ZM2	Dieci till 2500 kg	<a href="#">CC55716</a>
Merlo ZM2	Dieci 2800-4500 kg	<a href="#">CC55718</a>

### TRACTOR VS TELEHANDLER

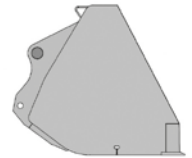
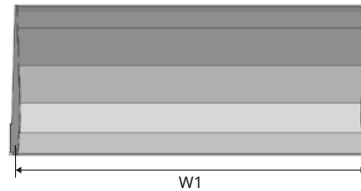
Machine side	Attachment side	Model
EURO	Manitou	<a href="#">CC55778</a>
EURO	JCB Q-Fit	<a href="#">CC55780</a>
EURO	Merlo ZM2	<a href="#">CC55782</a>

Machine side	Attachment side	Model
Merlo ZM2	Kramer 380-580	<a href="#">CC55720</a>
Merlo ZM3	Manitou	<a href="#">CC55724</a>
Merlo ZM3	JCB Q-Fit	<a href="#">CC55726</a>
Merlo ZM3	Kramer 380-580	<a href="#">CC55728</a>
Dieci till 2500Kg	Manitou	<a href="#">CC55730</a>
Dieci till 2500Kg	JCB Q-Fit	<a href="#">CC55732</a>
Dieci till 2500Kg	Merlo ZM2	<a href="#">CC55734</a>
Dieci till 4500Kg	Manitou	<a href="#">CC55736</a>
Dieci till 4500Kg	JCB Q-Fit	<a href="#">CC55738</a>
Dieci till 4500Kg	Merlo ZM2	<a href="#">CC55740</a>
Dieci till 4500Kg	Kramer 380-580	<a href="#">CC55742</a>
Kramer 380-580	Manitou	<a href="#">CC55744</a>
Kramer 380-580	JCB Q-Fit	<a href="#">CC55746</a>
Kramer 380-580	Merlo ZM2	<a href="#">CC55748</a>
Kramer 380-580	Merlo ZM3	<a href="#">CC55750</a>
Kramer 380-580	Dieci 2800-500 kg	<a href="#">CC55752</a>

### TELEHANDLER VS TRACTOR

Machine side	Attachment side	Model
Manitou	EURO	<a href="#">CC55696</a>
JCB Q-Fit	EURO	<a href="#">CC55710</a>
Merlo ZM2	EURO	<a href="#">CC55722</a>

## BU - LOADING BUCKETS

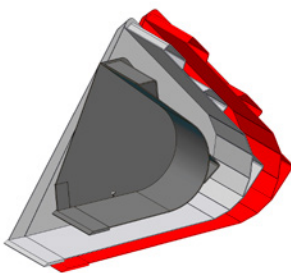


### TECHNICAL DATA

Bucket width W1 mm	Volume l	Capacity m <sup>3</sup>	Load capacity kg/m <sup>3</sup>	Suitable for Genie	Suitable for JCB Q-fit	Suitable for JLG*	Suitable for Manitou	Suitable for Merlo ZM2	Suitable for Merlo ZM3	Suitable for Dieci
<b>Medium load capacity buckets - recommended for machines with engine from 50-100 hp</b>										
1850	500	0.64	1600	<a href="#">CC16504</a>	<a href="#">CC16502</a>	<a href="#">CC16506</a>	<a href="#">CC16498</a>	<a href="#">CC16500</a>	-	<a href="#">CC28094</a>
1900	900	1.08	1600	<a href="#">CC16462</a>	<a href="#">CC16444</a>	<a href="#">CC16470</a>	<a href="#">CC16390</a>	<a href="#">CC16398</a>	<a href="#">CC16406</a>	<a href="#">CC28096</a>
2100	990	1.2	1600	<a href="#">CC16464</a>	<a href="#">CC16446</a>	<a href="#">CC16472</a>	<a href="#">CC16392</a>	<a href="#">CC16400</a>	<a href="#">CC16408</a>	<a href="#">CC28098</a>
2300	1090	1.33	1600	<a href="#">CC16466</a>	<a href="#">CC16448</a>	<a href="#">CC16474</a>	<a href="#">CC16394</a>	<a href="#">CC16402</a>	<a href="#">CC16410</a>	-
2450	1160	1.42	1600	<a href="#">CC16468</a>	<a href="#">CC16450</a>	<a href="#">CC16476</a>	<a href="#">CC16396</a>	<a href="#">CC16404</a>	<a href="#">CC16412</a>	<a href="#">CC28100</a>
1900	1930	2.33	950	<a href="#">CC16478</a>	<a href="#">CC16452</a>	<a href="#">CC16484</a>	<a href="#">CC16420</a>	<a href="#">CC16414</a>	<a href="#">CC16426</a>	<a href="#">CC28102</a>
2100	2140	2.6	950	<a href="#">CC16480</a>	<a href="#">CC16454</a>	<a href="#">CC16486</a>	<a href="#">CC16422</a>	<a href="#">CC16416</a>	<a href="#">CC16428</a>	<a href="#">CC28104</a>
2300	2350	2.88	950	<a href="#">CC16482</a>	<a href="#">CC16456</a>	<a href="#">CC16488</a>	<a href="#">CC16424</a>	<a href="#">CC16418</a>	<a href="#">CC16430</a>	<a href="#">CC28106</a>
2300	2580	3.14	900	<a href="#">CC16490</a>	<a href="#">CC16458</a>	<a href="#">CC16494</a>	<a href="#">CC16436</a>	<a href="#">CC16432</a>	<a href="#">CC16440</a>	<a href="#">CC28108</a>
2450	2750	3.36	900	<a href="#">CC16492</a>	<a href="#">CC16460</a>	<a href="#">CC16496</a>	<a href="#">CC16438</a>	<a href="#">CC16434</a>	<a href="#">CC16442</a>	<a href="#">CC28110</a>
<b>Heavy load capacity buckets - recommended for machines with engine from 100-200 hp</b>										
1900	900	1.08	2150	<a href="#">CC02710</a>	<a href="#">CC02728</a>	<a href="#">CC02746</a>	<a href="#">CC02764</a>	<a href="#">CC02782</a>	<a href="#">CC16564</a>	<a href="#">CC28112</a>
2100	990	1.2	2150	<a href="#">CC02712</a>	<a href="#">CC02730</a>	<a href="#">CC02748</a>	<a href="#">CC02766</a>	<a href="#">CC02784</a>	<a href="#">CC16566</a>	<a href="#">CC28114</a>
2300	1090	1.33	2150	<a href="#">CC02714</a>	<a href="#">CC02732</a>	<a href="#">CC02750</a>	<a href="#">CC02768</a>	<a href="#">CC02786</a>	<a href="#">CC02796</a>	<a href="#">CC28116</a>
2450	1160	1.42	2150	<a href="#">CC02716</a>	<a href="#">CC02734</a>	<a href="#">CC02752</a>	<a href="#">CC02770</a>	<a href="#">CC02788</a>	<a href="#">CC02798</a>	<a href="#">CC28118</a>
1900	1930	2.33	1150	<a href="#">CC02718</a>	<a href="#">CC02736</a>	<a href="#">CC02754</a>	<a href="#">CC02772</a>	<a href="#">CC02790</a>	<a href="#">CC16568</a>	<a href="#">CC28120</a>
2100	2140	2.6	1150	<a href="#">CC02720</a>	<a href="#">CC02738</a>	<a href="#">CC02756</a>	<a href="#">CC02774</a>	<a href="#">CC02792</a>	<a href="#">CC16570</a>	<a href="#">CC28122</a>
2300	2350	2.88	1150	<a href="#">CC02722</a>	<a href="#">CC02740</a>	<a href="#">CC02758</a>	<a href="#">CC02776</a>	<a href="#">CC02794</a>	<a href="#">CC02800</a>	<a href="#">CC28124</a>
2300	2580	3.14	1000	<a href="#">CC02724</a>	<a href="#">CC02742</a>	<a href="#">CC02760</a>	<a href="#">CC02806</a>	<a href="#">CC02778</a>	<a href="#">CC02802</a>	<a href="#">CC28126</a>
2450	2750	3.36	1000	<a href="#">CC02726</a>	<a href="#">CC02744</a>	<a href="#">CC02762</a>	<a href="#">CC02808</a>	<a href="#">CC02780</a>	<a href="#">CC02804</a>	<a href="#">CC28128</a>

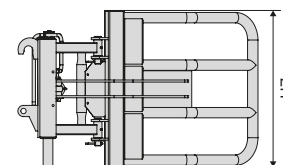
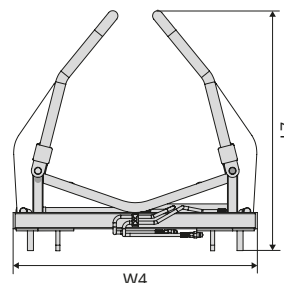
\* These buckets also fit on CAT and Deutz machines

### DIFFERENT MODELS AVAILABLE



- Bucket 2500 l volume  
General bucket
- Bucket 2000 l volume  
General bucket
- Bucket 900 l volume  
Digging bucket

## CH-RO - BALE GRIPPER - ROUND BALES



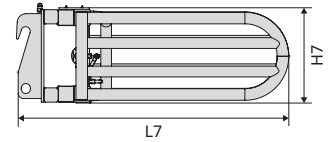
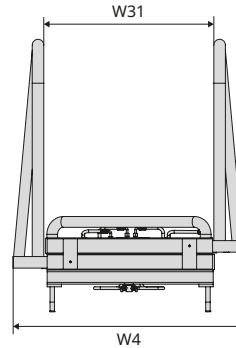
### TECHNICAL DATA

- D6 - Maximum diameter of the bales

Type of mounting bracket	Capacity kg/mm	W4 mm	H7 mm	D6 mm	L7 mm	Weight* kg	Model
<b>Range spans up to 1700 mm</b>							
Weidemann 660 mm	800	1200	770	1700	1180	190	<a href="#">CC36004</a>
Weidemann 845 mm	800	1200	770	1700	1180	190	<a href="#">CC36006</a>
Kramer 380-580	800	1200	770	1700	1180	190	<a href="#">CC35992</a>
Merlo ZM2	800	1200	770	1700	1180	190	<a href="#">CC35996</a>
Merlo ZM3	800	1200	770	1700	1180	190	<a href="#">CC35998</a>
Manitou	800	1200	770	1700	1180	190	<a href="#">CC35994</a>
JCB Q-fit	800	1200	770	1700	1180	190	<a href="#">CC35990</a>
Bobcat	800	1200	770	1700	1180	190	<a href="#">CC35978</a>
Claas Scorpion	800	1200	770	1700	1180	190	<a href="#">CC35980</a>
Dieci (2500 kg)	800	1200	770	1700	1180	190	<a href="#">CC35982</a>
Dieci (2800-4500 kg)	800	1200	770	1700	1180	190	<a href="#">CC35984</a>
New Holland	800	1200	770	1700	1180	190	<a href="#">CC36002</a>
<b>Range spans up to 2100 mm</b>							
Weidemann 660 mm	800	1366	808	2100	1360	207	<a href="#">CC36066</a>
Weidemann 845 mm	800	1366	808	2100	1360	207	<a href="#">CC36068</a>
Kramer 380-580	800	1366	808	2100	1360	207	<a href="#">CC36054</a>
Merlo ZM2	800	1366	808	2100	1360	207	<a href="#">CC36058</a>
Merlo ZM3	800	1366	808	2100	1360	207	<a href="#">CC36060</a>
Manitou	800	1366	808	2100	1360	207	<a href="#">CC36056</a>
JCB Q-fit	800	1366	808	2100	1360	207	<a href="#">CC36052</a>
Bobcat	800	1366	808	2100	1360	207	<a href="#">CC36040</a>
Claas Scorpion	800	1366	808	2100	1360	207	<a href="#">CC36042</a>
Dieci (2500 kg)	800	1366	808	2100	1360	207	<a href="#">CC36044</a>
Dieci (2800-4500 kg)	800	1366	808	2100	1360	207	<a href="#">CC36046</a>
New Holland	800	1366	808	2100	1360	207	<a href="#">CC36064</a>



## CH-SQ - BALE GRIPPER - SQUARE BALES



### TECHNICAL DATA

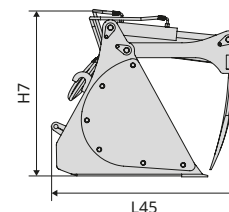
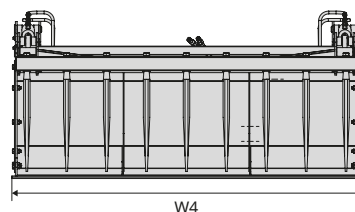
- D6 - Maximum diameter of the bales

Type of mounting bracket	Capacity kg/mm	W4 mm	W31 mm	H7 mm	L7 mm	Weight* kg	Model
Weidemann 660 mm	800	1300	2300	540	1510	256	<a href="#">CC36034</a>
Weidemann 845 mm	800	1300	2300	540	1510	256	<a href="#">CC36036</a>
Kramer 380-580	800	1300	2300	540	1510	256	<a href="#">CC36022</a>
Merlo ZM2	800	1300	2300	540	1510	256	<a href="#">CC36026</a>
Merlo ZM3	800	1300	2300	540	1510	256	<a href="#">CC36028</a>
Manitou	800	1300	2300	540	1510	256	<a href="#">CC36024</a>
JCB Q-fit	800	1300	2300	540	1510	256	<a href="#">CC35974</a>
Bobcat	800	1300	2300	540	1510	256	<a href="#">CC36010</a>
Claas Scorpion	800	1300	2300	540	1510	256	<a href="#">CC36012</a>
Dieci (2500 kg)	800	1300	2300	540	1510	256	<a href="#">CC36014</a>
Dieci (2800-4500 kg)	800	1300	2300	540	1510	256	<a href="#">CC36016</a>
New Holland	800	1300	2300	540	1510	256	<a href="#">CC36032</a>

\* Estimated depth value, may have a different value depending on the used hitch

\*\* Estimated weight value, may have a different value depending on the used hitch

## GBU - GRAB BUCKETS



### TECHNICAL DATA

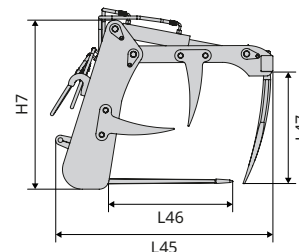
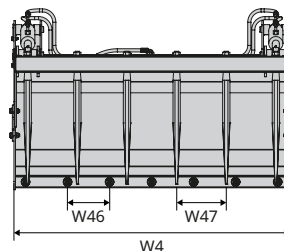
- H7: 940 mm
- L45\*: 1100 mm

Type of mounting bracket	W4 mm	Volume m <sup>3</sup>	Weight** kg	Model
<b>Number of top tines: 4</b>				
Weidemann 660 mm	1800	1	357	<a href="#">CC36170</a>
Weidemann 845 mm	1800	1	357	<a href="#">CC36172</a>
Kramer 380-580	1800	1	357	<a href="#">CC36160</a>
Merlo ZM2	1800	1	357	<a href="#">CC36164</a>
Merlo ZM3	1800	1	357	<a href="#">CC36166</a>
Manitou	1800	1	357	<a href="#">CC36162</a>
JCB Q-fit	1800	1	357	<a href="#">CC36158</a>
Bobcat	1800	1	357	<a href="#">CC36150</a>
Claas Scorpion	1800	1	357	<a href="#">CC36152</a>
Dieci (2500 kg)	1800	1	357	<a href="#">CC36154</a>
Dieci (2800-4500 kg)	1800	1	357	<a href="#">CC36156</a>
New Holland	1800	1	357	<a href="#">CC36168</a>
<b>Number of top tines: 5</b>				
Weidemann 660 mm	2000	1.1	386	<a href="#">CC36192</a>
Weidemann 845 mm	2000	1.1	386	<a href="#">CC36194</a>
Kramer 380-580	2000	1.1	386	<a href="#">CC36184</a>
Merlo ZM2	2000	1.1	386	<a href="#">CC36186</a>
Merlo ZM3	2000	1.1	386	<a href="#">CC36188</a>
Manitou	2000	1.1	386	<a href="#">CC35972</a>
JCB Q-fit	2000	1.1	386	<a href="#">CC36182</a>
Bobcat	2000	1.1	386	<a href="#">CC36174</a>
Claas Scorpion	2000	1.1	386	<a href="#">CC36176</a>
Dieci (2500 kg)	2000	1.1	386	<a href="#">CC36178</a>
Dieci (2800-4500 kg)	2000	1.1	386	<a href="#">CC36180</a>
New Holland	2000	1.1	386	<a href="#">CC36190</a>

Type of mounting bracket	W4 mm	Volume m <sup>3</sup>	Weight** kg	Model
<b>Number of top tines: 6</b>				
Weidemann 660 mm	2300	1.25	442	<a href="#">CC36216</a>
Weidemann 845 mm	2300	1.25	442	<a href="#">CC36218</a>
Kramer 380-580	2300	1.25	442	<a href="#">CC36206</a>
Merlo ZM2	2300	1.25	442	<a href="#">CC36210</a>
Merlo ZM3	2300	1.25	442	<a href="#">CC36212</a>
Manitou	2300	1.25	442	<a href="#">CC36208</a>
JCB Q-fit	2300	1.25	442	<a href="#">CC36204</a>
Bobcat	2300	1.25	442	<a href="#">CC36196</a>
Claas Scorpion	2300	1.25	442	<a href="#">CC36198</a>
Dieci (2500 kg)	2300	1.25	442	<a href="#">CC36200</a>
Dieci (2800-4500 kg)	2300	1.25	442	<a href="#">CC36202</a>
New Holland	2300	1.25	442	<a href="#">CC36214</a>
Weidemann 660 mm	2500	1.35	483	<a href="#">CC36240</a>
Weidemann 845 mm	2500	1.35	483	<a href="#">CC37524</a>
Kramer 380-580	2500	1.35	483	<a href="#">CC36230</a>
Merlo ZM2	2500	1.35	483	<a href="#">CC36234</a>
Merlo ZM3	2500	1.35	483	<a href="#">CC36236</a>
Manitou	2500	1.35	483	<a href="#">CC36232</a>
JCB Q-fit	2500	1.35	483	<a href="#">CC36228</a>
Bobcat	2500	1.35	483	<a href="#">CC36220</a>
Claas Scorpion	2500	1.35	483	<a href="#">CC36222</a>
Dieci (2500 kg)	2500	1.35	483	<a href="#">CC36224</a>
Dieci (2800 4500 kg)	2500	1.35	483	<a href="#">CC36226</a>
New Holland	2500	1.35	483	<a href="#">CC36238</a>

\* Estimated depth value, may have a different value depending on the used hitch  
 \*\* Estimated weight value, may have a different value depending on the used hitch

## MF - MANURE FORKS



### TECHNICAL DATA

Type of mounting bracket	W4	H7	L45*	Total number of tines	L53	L54	L47	Volume	Weight**	Model
	mm	mm	mm		mm	mm	mm	m <sup>3</sup>	kg	
Weidemann 660 mm	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36122</a>
Weidemann 845 mm	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36124</a>
Kramer 380-580	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36112</a>
Merlo ZM2	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36116</a>
Merlo ZM3	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36118</a>
Manitou	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36114</a>
JCB Q-fit	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36110</a>
Bobcat	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36102</a>
Claas Scorpion	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36104</a>
Dieci (2500 kg)	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36106</a>
Dieci (2800-4500 kg)	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36108</a>
New Holland	2000	950	1265	20	810	980	800	1.23	527	<a href="#">CC36120</a>
Weidemann 660 mm	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36146</a>
Weidemann 845 mm	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36148</a>
Kramer 380-580	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36136</a>
Merlo ZM2	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36140</a>
Merlo ZM3	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36142</a>
Manitou	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36138</a>
JCB Q-fit	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36134</a>
Bobcat	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36126</a>
Claas Scorpion	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36128</a>
Dieci (2500 kg)	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36130</a>
Dieci (2800-4500 kg)	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36132</a>
New Holland	2200	950	1265	22	810	980	800	1.35	580	<a href="#">CC36144</a>

\* Estimated depth value, may have a different value depending on the used hitch  
 \*\* Estimated weight value, may have a different value depending on the used hitch

## DISCOVER OUR RANGE OF TELEHANDLER ATTACHMENTS



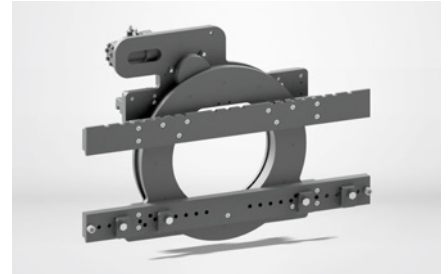
### FORK POSITIONERS

Sector



### MULTI-FORK POSITIONERS

Sector



### ROTATORS

Sector



### BOX ROTATORS

Sector



### SIDESHIFTERS

Sector



### FORK-MOUNTED DRUM CLAMPS AND ROTATORS

Sector



### ROLL CLAMPS

Sector



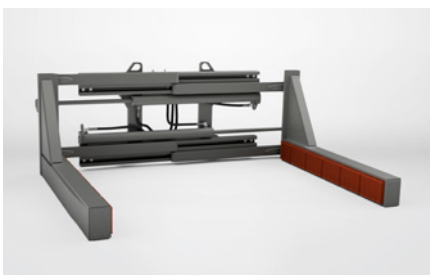
### BALE CLAMPS

Sector



### BALE GRIPPERS

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### CONCRETE BLOCK CLAMPS

Sector



### BOOMS

Sector



### SKIPS

Sector



## DISCOVER OUR RANGE OF TELEHANDLER ATTACHMENTS



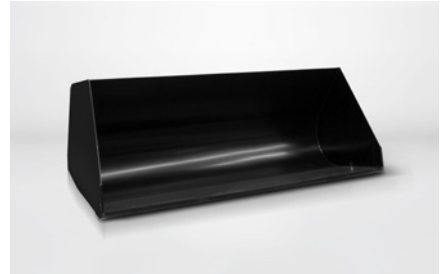
### SCOOPS

Sector



### SNOW PLOUGHS

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### LOADING BUCKETS

Sector



### CRANE JIBS

Sector



### FORK-MOUNTED HOOKS

Sector



### YARD SCRAPERS

Sector



### BIG BAG HANDLERS

Sector



### CARRIAGES

Sector



### BALE SPEARS & CARRIERS

Sector



### FORK & FORK EXTENSIONS

Sector



### HINGED CARRIAGES

Sector





## GROUND SUPPORT PLATES



### Characteristics:

- Carrying capacity up to 50 tonnes per plate
- Standard with 2 handles per plate (1 per short side)
- Made of 100% durable recycled synthetic material (UHMWPE)
- Standard with a smooth surface
- Technical sheet available on request
- Not suitable to span gaps or for machines with steel tracks

Length	Width	Thickness	Weight	REF
mm	mm	mm	kg	
2000	1000	15	30	<a href="#">134TA8181</a>
2000	1000	20	40	<a href="#">134TA8182</a>
3000	1000	15	45	<a href="#">134TA8185</a>
3000	1000	20	60	<a href="#">134TA8186</a>

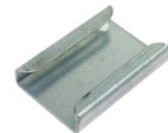
## STORAGE RACK FOR GROUND SUPPORT PLATES



- Available in 2 dimensions
- Convenient storage for multiple ground support plates
- For easy transport of your ground support plates (with forklift)

Length	Width	Stack height	REF
mm	mm	mm	
2000	1000	435	<a href="#">138TA8304</a>
3000	1000	435	<a href="#">138TA8303</a>

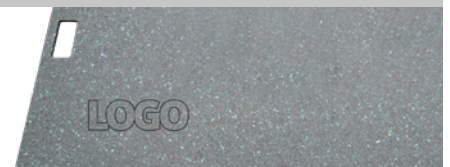
## CONNECTOR FOR GROUND SUPPORT PLATES



- Min/max height: 240/420 mm
- Load capacity: 14 tonnes
- Weight: 12 kg

REF [127TA2465](#)

## EXTRA OPTIONS



Engraving of company name or logo  
(from 50 pieces onwards)

## STABILIZER PLATES



Dimensions	Weight	Plate capacity	REF
mm	kg	kg	
400 x 400 x 40	6	10 000	<a href="#">107TA9631</a>
400 x 400 x 60	9	12 000	<a href="#">107TA9632</a>
500 x 500 x 40	10	15 000	<a href="#">107TA9633</a>
500 x 500 x 50	12	15 000	<a href="#">107TA9634</a>
500 x 500 x 60	14	20 000	<a href="#">107TA9635</a>
600 x 600 x 40	14	20 000	<a href="#">107TA9636</a>
600 x 600 x 60	21	25 000	<a href="#">107TA9637</a>
800 x 800 x 40	25	25 000	<a href="#">107TA9638</a>
800 x 800 x 50	32	30 000	<a href="#">107TA9639</a>
800 x 800 x 60	37	35 000	<a href="#">107TA9641</a>

## WAREHOUSE & WORKSHOP



TVH is your one-stop shop for all warehouse and workshop supplies and personal protective equipment (PPE). Even measuring equipment for installation, maintenance or service of industrial electronic components are available. No need to go shopping elsewhere, at TVH you can order your consumables and accessories in one go with your other parts. It's that easy!



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Do you need oils, greases, brake fluids or the invaluable assistance of AdBlue? TVH offers a wide range of all kinds of oils and chemicals. Find everything you need in our online shop.



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Looking for paint, painting tools or fillers? TVH offers high-quality one-component paint in all colours. In Waregem, we even have our own paint shop where we can paint machines as well as hydraulic and mechanical spare parts. Go to our online shop to see the wide range of paint applications we offer or contact us for more information.



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Quality and reliability are the best foundations for operating safely and efficiently. This is why our workshop and warehouse materials, industrial supplies and personal protection equipment (PPE) come from brands you know and trust. Take a look at our full range of clothing and personal protection equipment in our online shop.



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Discover the ultimate workshop tool collection designed to meet all your needs! Our comprehensive range includes hand tools, power tools, air compressors, and more from the most renowned brands in their field.

Experience the power and efficiency of our cutting-edge power tools, specifically engineered to tackle any project with ease. Our reliable welding machines and blowtorches ensure seamless joining and welding operations.

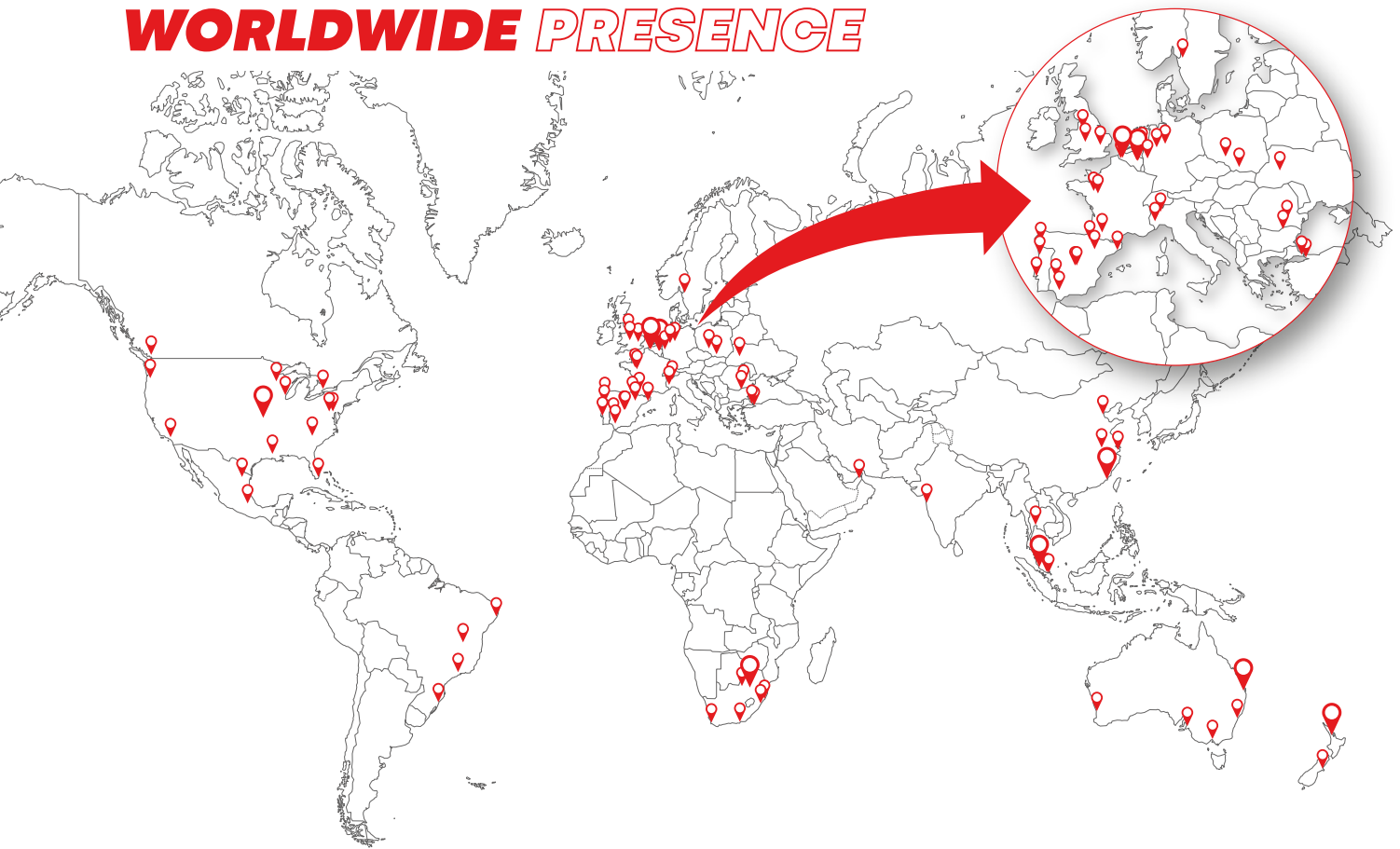
Additionally, we provide essential accessories and consumables to keep workshops running smoothly. From tapes, pens and markers, soldering wire and drill bits to bolts and cutting discs, we have literally everything that's needed to optimize work efficiency. Keep equipment in perfect condition with our parts cleaning and washer tables. Installation, maintenance or service of industrial electronic components to precision measurement and quality control: our measuring instruments keep business up and running.

A series of horizontal dotted lines for writing notes.

A series of horizontal dotted lines for writing notes.



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