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Spare parts / Ordering spare parts

The correct order numbers for original spare parts can be obtained from the relevant spare parts list. Please ensure that you have the following data on your trolley to hand. This will enable the correct spare parts to be supplied without delay.

Trolley type:

Serial number:

Year of manufacture:

Load capacity:

Original spare parts for the trolleys can be acquired from the following addresses:

Manufacturer

PLANETA-Hebetechnik GmbH
Resser-Str. 17 / 44653 Herne (Germany)
Tel: +49-(0)-2325-9580-0
Info: info@planeta-hebetechnik.de
Website: www.planeta-hebetechnik.de

Resellers/Agent

0 General information

0.1 General safety instructions

0.1.1 Safety and hazard information

The following symbols and terms are used in this instruction manual for safety and hazard instructions:



WARNING !

Non-compliance, either in part or full, with operating instructions with this symbol can result in serious personal injury or fatal accidents. Warning information must be **strictly** adhered to.



ATTENTION !

Non-compliance, either in part or full, with operating instructions with this symbol can result in major damage to machinery, property or material. Information in the "Caution" category is to be **exactly** adhered to.



NOTE

Following the instructions marked with this symbol will lead to more effective and straightforward operation. "Note" directions make work easier.

0.2 General safety regulations and organisational measures

The instruction manual must always be available within the operating area of the trolley. The information on the trolley's type and data plate must be checked against tables 5-1 to 5-7, page 22 to 23 and the corresponding dimensioned drawing. The dimensioned drawing also shows the dimensions of the trolley. This ensures that this instruction manual can be clearly assigned to the trolley. The instruction manual must be strictly adhered to. Furthermore, supplementary to the instruction manual, the statutory regulations governing general accident prevention and environmental protection are to be enforced.

Operating and service personnel must have read and understood the instruction manual, in particular the safety instructions, before commencing work. Protective equipment must be made available for operating and service personnel and worn at all times. The operator or their representative is responsible for supervising operating personnel and ensuring they are aware of the hazards and safety implications of working with the trolley.

The manufacturer reserves the right to make technical changes to the product or changes to these instructions and assumes no liability for the completeness and up-to-dateness of these instructions. The original version of these instructions is in the German language. In case of doubt, the original German original version is exclusively valid as a reference document.

0.2.1 Warning markings / Legends / Warning plates

- CE signFigure 0-1
- Type plateFigure 0-2
- Data plate Figure 0-3
- Voltage..... Figure 0-4

Figure 0-1



Figure 0-2

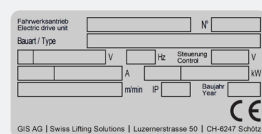


Figure 0-3

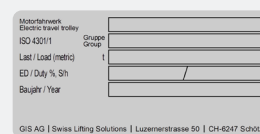


Figure 0-4



0.3 Particular safety instructions

Transport / Assembly:

- Trolleys, single parts and large components should be carefully fixed to suitable and technically acceptable hoists/load handling devices.

Connection:

- Connection work is only to be performed by personnel specifically designated and trained for the job.

Start-up / Operation:

- Before initial start-up, as well as daily start-up, carry out a visual check and the stipulated user-checks routine.
- Only operate the trolley if the protective and safety equipment provided is ready and working.
- Damage to the trolley and changes in its operational characteristics must be reported immediately to the responsible person.
- After use, or when in a non-operational mode, the trolley should be secured against unauthorised and unintentional use.
- Refrain from hazardous procedures.

See also operational parameters (Chapter 0.6).

Cleaning / Service / Repair / Maintenance / Refitting:

- Use working platforms provided for installation work at high level.
- Do not use machine parts for this purpose.
- Check electrical cables for damage or wear.
- Ensure any oils or other agents used are collected and disposed of safely and in an environmentally sound manner.
- Reassemble and check safety devices that have been disassembled for maintenance or repair of the hoist once service and repair work has been completed.
- Adhere to predefined testing and service intervals specified in the instruction manual.
- Follow the directions in the instruction manual regarding exchanging parts.
- Operating personnel should be informed before commencing special or repair work.
- Secure the repair working area.
- Prevent the trolley from being unexpectedly switched on during maintenance or repair work.
- Attach warning plates.
- Disconnect the power cable and ensure it cannot be switched on again by unauthorised personnel.
- Retighten screw connections that have been loosened for repair or maintenance work.
- Replace non-reusable fixing elements and sealings (e.g. self-locking nuts, washers, cotter pins, O-rings and seals).

Shut down / Storage:

- Clean and preserve (lubricate/grease) the trolley before long periods of inactivity or storage.

0.4 Instructions for hazard protection

Hazardous areas must be clearly marked by warning plates and cordoned off. It must be ensured that warnings regarding hazardous areas are given due attention.

Hazards can stem from:

- incorrect application
- not following safety directions properly
- not carrying out test and service work thoroughly

0.4.1 Hazards - Mechanical

**Physical injury:****Unconsciousness and injury through:**

- crushing, shearing, cutting and twisting
- drawing in, ramming, piercing and rubbing
- slipping, stumbling and falling

Causes:

- crushing, shearing and twisting
- parts rupturing or bursting

Safety options:

- keep floor, equipment and machinery clean
- eliminate leakages
- observe the required safety distance

The manufacturer will only guarantee the safety and lasting operation of the trolley when used for applications in accordance with valid standard values that fall within its classification.

Before the initial start-up, the user must estimate according to the parameters in Table 1-1, which of the four types of load is applicable to the use of the trolley during its whole life cycle. Table 1-2 shows standard values for the operating conditions of the classifications depending on the type of load and number of cycles.

Table 1-1 Load spectrums

Load type Q2 light $Q < 0.50$ $Q = 0.50$	Load type Q3 medium $0.50 < Q < 0.63$ $Q = 0.63$	Load type Q4 heavy $0.63 < Q < 0.80$ $Q = 0.80$	Load type Q5 very heavy $0.80 < Q < 1.00$ $Q = 1.00$
Full load only by way of an exception, however predominantly low loads	Often fully loaded, however continuously lightly loaded	Frequently fully loaded, continuous average loading	Regular full loading

Q = Load spectrum (type of load)

Table 1-2 Operating conditions

Classification per DIN EN 14492-2 (ISO 4301-1)	A3 (M3)	A4 (M4)	A5 (M5)	A6 (M6)
Load spectrum	Number of cycles per working day (travel classes Dt2 - Dt5, travelling speed 12 m/min)			
Q2 - light $Q < 0.50$	120	240	480	960
Q3 - medium $0.50 < Q < 0.63$	60	120	240	480
Q4 - heavy $0.63 < Q < 0.80$	30	60	120	240
Q5 - very heavy $0.80 < Q < 1.00$	15	30	60	120

Ascertaining the correct type of application for a trolley:

Either the number of cycles or expected type of load can be used as a basis for ascertaining the correct type of application for the trolleys.



Before initial start-up of the trolley, it is necessary to ascertain which of the load types in Table 1-1 applies to the operation of the trolley. Assignment to a load type or a load spectrum (Q) applies for the whole service life of the equipment and may not be altered for operational safety reasons.

Example 1: Calculate permissible operating time of the trolley

A trolley of the classification A4 is to be used for medium stress load tasks throughout its whole calculated service life. This corresponds to the type of load <Q4 heavy> (see Table 1-1). Corresponding to the values in Table 1-2, the trolley should not be used for more than 60 cycles per day.

Example 2: Calculate the permissible type of load

A trolley of the classification A5 is to be used for approximately 400 cycles per working day, throughout its whole service life. Thus, the trolley must be operated in accordance with the characteristics of the type of load <Q2 light> (see Table 1-1).



The protective conductor should not conduct any current during operation. With the installation of a motor protection breaker, the current of the motorised trolley and electric chain hoist must be observed in accordance with the type plate.

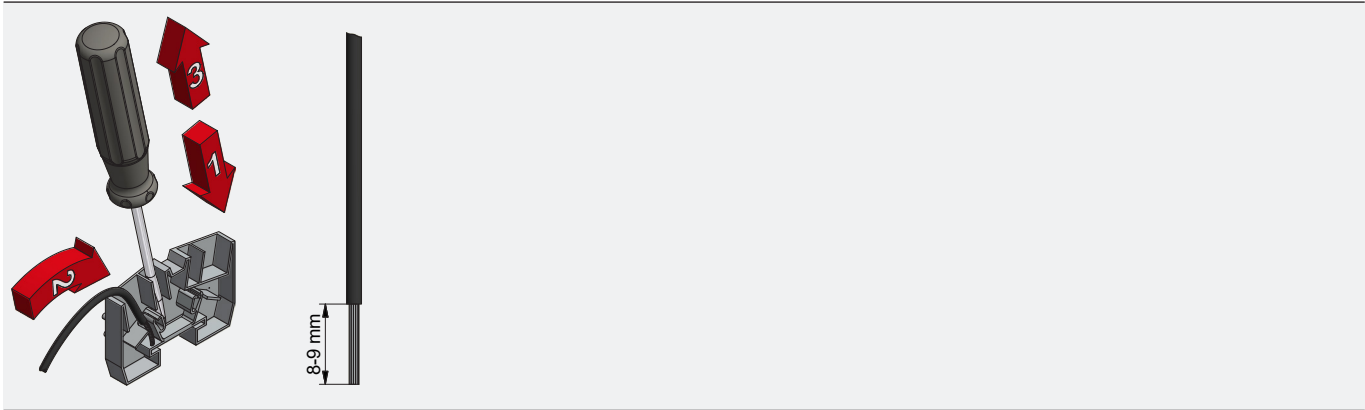


Checking direction of rotation: If the directions of movement do not match the button symbols of the control switch, the supply line wires L1 and L2 must be transposed.



Open the terminal used in accordance with Figure 2-15.

Figure 2-15



3 Care and maintenance

3.1 General guidelines for maintenance and repair

General guidelines for maintenance and repair



Maintenance and repair work on the trolley may only be carried out by qualified and trained personnel.



If the operator performs maintenance work on a trolley on their own, the type of maintenance performed together with the date carried out must be entered in the inspection pass.

Alterations, as well as modifications and additions to trolleys, which may affect safety, must be authorised by the manufacturer in advance. Structural alterations to trolleys not authorised by the manufacturer exempt the manufacturer from liability in the event of damage. Material warranty claims will only be recognised as valid if original manufacturer's spare parts are used exclusively. We explicitly advise that original parts and accessories not delivered by us are also not checked or approved by us.

General:

Care and maintenance tasks are preventive measures designed to preserve the full functionality of trolleys. Non-compliance with care and maintenance routines can result in limited use and damage to trolleys.

Care and maintenance should be carried out in accordance with the instruction manual at predefined time intervals (Table 3-1 and 3-2). During care and maintenance work, general accident prevention directions, special safety directions (Chapter 0.3) as well as hazard protection instructions (Chapter 0.4) should be followed.



Care and maintenance work should be performed only on trolleys with no loads. The main switch must be off.

Care work encompasses visual checks and cleaning routines. Maintenance work includes additional functional checks. During the functional checks, all fixing elements and cable clamps must be checked for tightness. Cables must be inspected for dirt, discolouration and arc spots.



Used operating materials (oil, grease, etc.) should be safely collected and disposed of in an environmentally friendly manner.

Care and maintenance intervals are defined as follows:

d (daily), 3 M (quarterly), 12 M (annually)

The predefined care and maintenance intervals should be reduced when the loading of the trolleys is exceptionally large or when frequently operated in adverse conditions (e.g. dust, heat, humidity, steam, etc.).

3.2 Care and maintenance

The trolleys are largely maintenance-free. Unusual noises during daily use must be reported to the competent authority immediately. A pending repair must be carried out immediately.

3.2.1 Care overview

Table 3-1 Care overview

Designation	t	3 M	12 M	Task	Remark
1. Trolley	x			Check for abnormal noise / sealing	
2. Electric power supply cable	x			Visual check	
3. Sealing		x		Visual check	
4. Strain relief control cable	x			Visual check	

3.2.2 Maintenance overview

Table 3-2 Maintenance overview

Designation	t	3 M	12 M	Task	Remark
1. Brake system	x		x	Function check with load	Chapter 3.2.3
2. Electrical equipment			x	Function check	
3. Support bolt			x x	Check for cracks Check screw torque	Chapter 3.2.5
4. Load wheels			x	Check for wear	Chapter 3.2.6
5. Drive, toothing			x	Visual inspection for wear	Chapter 3.2.4
6. Leaktightness			x	Check screw torques of the covers	Chapter 3.2.5

5.4 EC Declaration of incorporation

Declaration for the incorporation of an partly completed machinery in accordance with the EU directives 2006/42/EC, Annex II B, 2014/30/EU, Annex I and 2014/35/EU, Annex III



We,

GIS AG, Swiss Lifting Solutions, Luzernerstrasse 50, CH-6247 Schötz

hereby declare that the partly completed machinery

GIS trolley, series	3), 30)
with a load capacity of	250 kg to 6300 kg
serial number range	1000001 to 2000000

developed for the manual or electrical movement of loads and intended to be integrated in a machine, meets the essential requirements of the following EC directives, insofar as applicable to the scope of the delivery, in standard production form including load control, from the 2020 model year:

EC Machinery Directive	2006/42/EG
EC Directive on Electromagnetic Compatibility	2014/30/EU
EC Low Voltage Directive	2014/35/EU

We also declare that the technical documentation has been compiled in accordance with Annex VII, Part B of Directive 2006/42/EC. We undertake to submit the specific documents relating to the trolley to national authorities on receipt of a reasonable request. The information will be supplied by electronic means.

Harmonised standards applied:

DIN EN ISO 13849-1	Safety-related parts of control systems; Part 1: General principles for design
DIN EN 14492-2	Cranes, power driven winches and hoists; Part 2: Power driven hoists
DIN EN 60204-32	Electrical equipment of machines; Part 32: Requirements for hoisting machines

This declaration refers only to the trolley. Start-up is prohibited until it has been proven that the entire system into which the trolley is integrated corresponds with the above EC Directives.

Authorised to compile relevant technical documentation:
GIS AG, Luzernerstrasse 50, CH-6247 Schötz

Schötz, 06.05.2020

GIS AG

I. Muri
Director

E. Widmer
Sales Manager

The completion, installation and start-up as per instruction manual is documented in the inspection pass.

