



ELECTRIC ROTARY DRIVE

Electric rotary drive

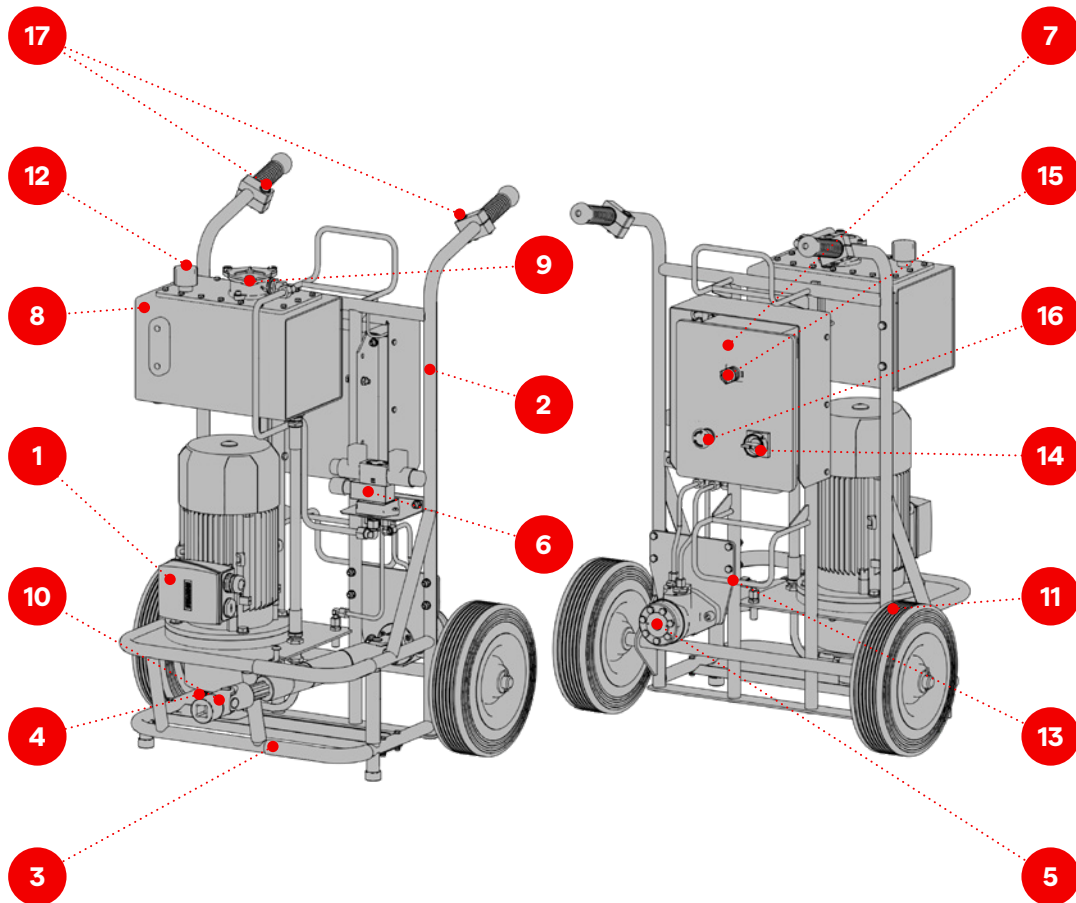
This operation manual contains all necessary information for correct and safe use of the rotary drive. Please study this manual carefully, and before using the machine ensure that you have understood all of its contents. GLENTOR s.r.o. reserves the right to make any changes to the specifications described in this manual at any time, even without prior notice and without bearing any liability whatsoever. The user catalogue for the Siemens 1LE1003 electric motor is an integral part hereof. Reproduction of any part of this manual without prior written consent is prohibited.

Technical details

Overall length	1000 mm
Overall Width	800 mm
Overall height	1067 mm
Maximum operating pressure	110 bar
Operating temperature for load factor duty S1	-20 °C to 25 °C
Operating temperature for load factor duty S3, z=40 %, Tc=10 min	25 °C to 45 °C
Hydraulic oil	ISO VG 46
Torque on the drive shaft	115 Nm
Articulated shaft revolutions	140 rpm
Hydraulic oil volume	10 dm³
Weight (without oil filling)	110 kg
The dimensions of the rotary drives can be adapted based on the customer's requirements.	

Rotary Drive Description

The rotary drive is used for handling railway carriage loading platforms. The following picture shows the essential parts of the rotary drive.



1	Three-phase low-voltage engine on short-throw	10	Drive shaft
2	Supporting frame	11	Full flexible wheels
3	Protective frame	12	Ventilation filter
4	Pump	13	Cable holder
5	Hydraulic motor	14	Main switch
6	Securing valve with controls	15	Direction of rotation switch
7	Cover for moisture with an engine switch	16	Emergency button
8	Oil tank	17	Start button of two-handed control
9	Oil filter		

Safety rules

1. Before using the machine, carefully read all the information contained in this manual, and familiarise yourself with all operating controls and proper use.
2. Pay increased attention when using the rotary drive. Incorrect or careless use of the machine can cause serious injury or death.
3. The machine operator shall be liable for accidents or the risks caused by other persons or their property.
4. When working with the rotary drive, never smoke, never eat and never drink.
5. The operator must not work under the influence of alcohol or drugs.
6. When using and handling of the rotary drive always wear fixed working shoes, work gloves, suitable hearing protection and long trousers.
7. Do not use during bad weather such as torrential rain, strong winds, deep freezes, thick fog or snow.
8. Never use the rotary drive on icy surfaces.
9. Use the rotary drive on a flat surface. When operating on an uneven surface, pay increased attention.
10. The surroundings of the rotary drive must be free of any obstacles which could hinder operation of it.
11. Always determine whether or not the operator is forced to enter hazardous zones.
12. Store hydraulic oil store in containers intended for such purpose. Always add oil before starting the electric motor. Never add oil while the electric motor is running or when it is hot. When adding hydraulic oil, pay increased attention to ensure that it is not spilt on the rotary drive and its surroundings. Any spilt oil must be wiped away and then liquidated in an environmentally friendly manner. If you have spilt oil on yourself or on shoes, change clothes (shoes) and wash the parts of your body on which the oil has spilt.
13. Under operation do not touch or approach parts that rotate. There is an increased hazard. Always fill with the required hydraulic oil. Avoid use of non-original replacement parts. Check the level of hydraulic oil. After two years of operation, change the hydraulic oil.
14. Never tilt the rotary drive more than 35° when working.
15. Check whether the air filter is properly in place.
16. When you first use the rotary drive and connect the plug into the outlet, the operator must check whether the electric motor has the correct rotation, which is indicated by an arrow on the cover of the electric motor. If the proper rotation is not respected, there is a risk of permanent, irreversible damage to the rotary drive! During inspection, it is possible to turn the electric motor for a maximum of about 5 seconds, and if the electric motor will not turn correctly, it will be necessary to have it corrected immediately. The same check needs to be performed after any other plug is connected.
17. Before each use, check whether the feeding cable is damaged. It is forbidden to use the rotary drive with a damaged feeding cable!

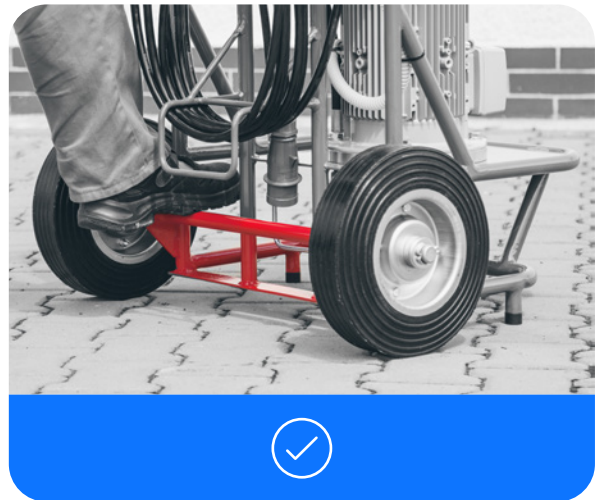
18. Only operate the rotary drive in daylight or with sufficient artificial lighting.
19. Take great care when moving the rotary drive and when turning it. If it collides with another object, always check whether the rotary drive has been damaged.
20. Keep the rotary drive clean and in operable condition, especially the filter elements of the rotary drive. Carry out the first replacement of the filtration pad after 100 hours of operation and every two years when the oil is changed.
21. Never use a damaged rotary drive. Protect the electric motor from moisture and penetration with water.
22. Ensure that all screws, nuts, bolts and other connecting parts are properly tightened. Each part of the rotary drive has its own importance, so do not modify and do not remove them.
23. Do not travel with the rotary drive when the electric motor is running.
24. Store the rotary drive in protected and dry premises. Before storing the rotary drive in enclosed areas, allow the rotary drive to cool sufficiently. Do not store the rotary drive near fire, sparks or heat sources.

Maintenance schedule

Regular service interval		→					
		During each use	After the first month or after the first 20	Every 3 months or after 50 hours of	Every 6 months or after 100 hours of	Every year or every 300 hours of	Every two years
Item	↓						
Hydraulic oil	Check of level	●					
	replacement						●
Tank air filter	replacement						●
Oil filter pad	replacement	After 100 hours of operation					●
Hydraulic line	check of tightness	●					
Hydraulic tank	cleaning	during changing of hydraulic oil					

Instructions for use

1. Before using, check the overall condition of the rotary drive and the oil fill level. The oil must completely fill the space with the oil indicator.
2. The rotary drive must be fully grasped by the handles with both hands, and one foot should be placed on the axis of the runner (not on the cable holder - there is a risk of breakage from the support frame), and it should be leaned towards the user so that the angle of tilting does not exceed 35°.
3. The rotary drive should be taken to the railway wagon, so that the head of the free end of the drive shaft is pointing to the axis of the exiting rod of the wagon. Place the rotary drive on the ground and make sure that it rests stably on its wheels and front stops from plastic.
4. Grip the drive shaft, push the shaft and install the head on the exiting rod of the wagon.
5. Make sure that the lever is in the neutral position and switch on the motor by turning the switch to position 1.
6. By moving the lever of the control forward or backward, you will activate or raise the freight platform of the railway wagon. Put the freight platform into the required position, place the lever into the neutral position and switch the motor off.
7. Remove the head of the drive shaft and move away from the railway wagon with the rotary drive.
8. The cover for moisture is equipped beside with a switch also with an emergency shut-off button, which the operator shall press to stop the rotary drive whenever it behaves improperly.



Hydraulic diagram

