



Operating manual

Barrel oil Dispenser PP n

Item-No.: 015 431 551, 015 431 581

Translation of the
original operating manual

Important!

The operating manual is always to be read before commissioning the equipment. No warranty claim will be granted for faults and damage to the equipment arising from insufficient knowledge of the operating manual.

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1 Safety instructions

The device is a state of the art piece of equipment and has been constructed according to recognised safety specifications. It is nevertheless possible that use of the device will present hazards to the operator or to third parties, or may damage the device or other property. It is therefore essential to act in accordance with these safety instructions, and in particular with those sections identified as warnings.

Warning notices and symbols

In the operating manual, the following signs are used for highlighting important information.



Special information for economical use of the equipment.



Special information or "dos and don'ts" for damage prevention.



Information or "dos and don'ts" for the prevention of damage to persons or equipment.

Appropriate use



The device may only be used if it is in perfect condition, and then only for its intended purpose, in compliance with all safety regulations, with an awareness of the potential risks, and according to the operating manual. Any faults that may impair the safety must be rectified immediately.



The device and its components are only to be used for handling the liquids listed and the purpose described. Using the machine for any other purpose would constitute inappropriate use. The manufacturer is not responsible for any loss arising as a result of this, the risk for this is borne only by the operating company.

Organisational measures



This operating manual should always be kept readily available at the site of operation! Each person concerned with the assembly, commissioning, maintenance and operation of the equipment must have read and understood the entire operating manual. It is essential that the type plate and the warning notices attached to the device are observed, and are maintained in a fully readable condition.

Qualified personnel



The operating, maintenance and assembly personnel must be appropriately qualified for their work. The areas of responsibility, competences and supervision of the personnel must be precisely regulated by the operating company. If the personnel do not have the required knowledge, they must be trained and instructed. The operating company must also ensure that the contents of the operating manual are properly understood by the personnel.

Waters protection



The device has been designed to handle water hazardous substances. The regulations on the operating place (e.g. Water Resources Act WHG, = ordinance on installations for handling of substances hazardous to water VAWS) must be adhered to.

Maintenance and Service



According to the regulations of the water resources law only authorized services may work on devices for flammable and/or water endangering substances. During such works, appropriate tools are to be used (avoid sparking). Before any kind of work on the device, all fuel lines are to be completely emptied and aerated.

Do not make any changes. Modifications or additions to the device which may affect the safety cannot be carried out without consent of the manufacturer. Exclusively genuine spare parts made by the manufacturer may be used.

Electric power



Work on the electrical equipment may only be carried out by a qualified electrician or by trained persons under the guidance and supervision of a qualified electrician according to electro-technical guidelines. Machine or system components, on which inspection, maintenance or repair work is to be carried out must be de-energised.

Hydraulics



Only persons with special knowledge and experience with hydraulic systems may carry out work on hydraulic parts and equipment. All lines, hoses and screw joints should regularly be checked for leaks and visible external damage. Any damage must be rectified immediately. Any oil spurting out can cause injuries and fire.

The relevant safety regulations for the product must be followed when handling oils, greases or other chemical substances!

Compressed air



Only persons with special knowledge and experience with pneumatic systems may carry out work on pneumatic parts and equipment. Prior to any inspection, maintenance or repair work, ensure that the equipment is not under pressure. All lines, hoses and screw joints should regularly be checked for leaks and external damage. Any damage must be rectified immediately.

2 Technical description

2.1 Appropriate use

The barrel oil dispenser is designed for use in industry, workshops, filling stations and similar sites. It can be used for delivery of lubricating oils or hydraulic fluids with self-lubricating properties.



The equipment may not be operated with flammable and explosive fluids with a burning point below 55°C (hazard classes AI, AII and B). Fluids with a burning point above 55°C (hazard class A III) may not be pumped if they have been heated above their burning point. The operation in areas with potentially explosive atmosphere is not permitted. In these cases there is danger of explosion.

2.2 Product description

The barrel oil dispenser is a portable, pneumatically operated device for the conveyance of lubricating oils and similar fluids.

It is used for conveyance directly from 220 L or 55 L original barrels.

The pump is a double-action piston pump driven by an air motor. The suction tube is mounted directly on the suction inlet of the pump. In operation it is installed in the oil barrel via the 2"-retainer. The required oil pressure is to be adjusted with the compressed air pressure regulator at the inlet of the air motor. Various dispensing accessories like hoses or nozzles are provided.

2.3 Product versions

The barrel oil dispenser is available with different suction tubes for commonly used barrels.

Item no.	015431551	for 220 L barrels
Item no.	015431581	for 55 L barrels

2.4 Technical data

Actuator	Axial piston air motor	Fluids	Lubricating oils and similar liquids
Pump type	Double-action, axial piston pump	Viscosity max.	5000 mm ² /s
Compressed air inlet pressure max.	10 bar	Strainer	630 µm
Compressed air consumption max.	300 l/min	Ambient temperature	0° C ... +40° C
Transmission ratio	4:1	Fluid temperature	0° C ... +55° C
Adjustment range air pressure regulator	0,5 ... 3 bar	Sound pressure level	73 dB (A)
Operating pressure max.	12 bar	Dimensions (HxWxD)	
		220 L barrel	1250x130x130 mm
		55 L barrel	950x130x130 mm
Delivery rate max.	20 l/min *	Weight	6,8 kg

* depending on viscosity and delivery

2.1 Accessories

The following items can be used as accessories depending on the application:

	Item No.
Dispensing hoses DN 16 G ½" male	
2.25 m long	029060422
3.15 m long	029060432
4.5 m long	029060442
Nozzles with hand flow meter	
For engine oil analog	027170852
For engine oil digital	027170211
For gearbox oil analog	027170832
For gear box oil analog	027170221

Further accessories for completing your oil delivery system you will find in our catalogue.


3 Comissioning

3.1 Place of operation

The barrel oil dispenser is designed for operation inside buildings. It is to be installed directly on the barrel to be discharged.

The conditions in the place of operation must meet the local legal regulations according to the handling of water endangering liquids.

3.2 Installation position

 The barrel oil dispenser may only be operated in an upright position (see Photo on the title page).

3.3 Temperature

Optimum delivery capacity is achieved at an ambient and fluid temperature of at least 18 °C. On no account should the temperature sink below 10 °C. The delivery capacity is limited in the case of high viscosity fluids.

3.4 Compressed air

The distance between the compressed air connection and the place of operation of the barrel oil dispenser should not be more than 1.5 meters.

Trouble-free, low maintenance operation of compressed air driven appliances is only ensured if the compressed air supplied is free of soiled or condensed water and oiled. If the air quality is insufficient, it is recommended to use a maintenance unit at the compressed air take-off point.

3.5 Installation


Insert the suction tube into the retainer of the barrel and fix it with the supporting ring. The dispensing hose (accessory) is to be screwed into the outlet of the pump. On the other side it is to be connected to the axial swivel of the nozzle (accessory). The connections have to be sealed pressure proof.

3.6 Conveyance pressure

The required conveyance pressure can be adjusted with the air pressure regulator installed at the air motor inlet. The pump is working with a transmission ratio of 4 : 1 (Oil conveyance pressure : air inlet pressure). The adjustment range of the air pressure regulator is **0.1 ... 3 bar**.

Accordingly the maximum delivery pressure is approx. 12 bar.



 The permitted operation pressure of the parts in the delivery system has to be observed.

3.7 Bleeding the system

Hold the nozzle in a suitable vessel and connect the air motor to the compressed air supply.



After connecting the air supply the oil delivery system will be under pressure.

Open the nozzle and allow the pump to deliver until oil without any air bubbles is dispensed.

4 Operation

Connect the barrel oil dispenser to the compressed air mains and open the ball valve at the air motor inlet. The pump switches on and off automatically when oil is drawn off by opening the nozzle.



Close the ball valve and disconnect the air hose before longer breaks in operation.

When the barrel is running empty, air is taken into the suction tube. Frequently check the fluid level in the barrel to avoid delivery of oil with air bubbles. Change the barrel in time.

After the intake of air bleeding the system might be necessary.

5 Maintenance

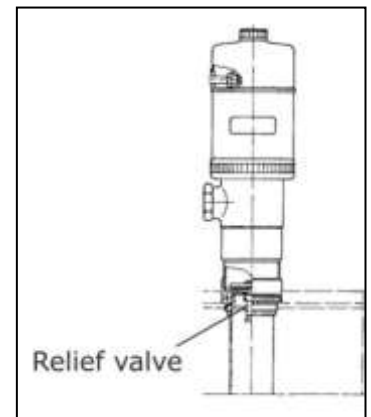
5.1 Safety equipment

The barrel oil dispenser is a device in sense of the pressure equipment directive 97/23/EC. Due to its low pressure holding volume it is designed, manufactured and tested according to article 3, paragraph 3 of this directive.



The operator has to take the necessary precautions to ensure risk-free operation.

In particular the function and correct setting of the safety equipment (air pressure regulator and relief valve) is to be assured.



5.2 Leak test

The device and the other components of the system have to be checked for leakage and damage regularly. If necessary the system has to be sealed or parts have to be renewed.

5.3 Strainer

The sieve insert at the suction tube is to be cleaned after changing the barrel several times. Renew a damaged sieve insert.

5.4 Cleaning

In the event of superficial fouling clean the device carefully with suitable materials, use no corrosive cleaning materials. Flush with diesel to clean the interior parts and pipes.

5.5 Repair of Air Motor



The air motor may only be repaired by the HornTecalemit service. This also applies for the exchange of parts.

Apart from this, wear parts and parts listed in the spare parts list can be exchanged by qualified personnel.

6 Error Display - What to do when ...?

... no oil is delivered although the nozzle is open?

- The connection to the compressed air system is interrupted
- The barrel is empty

... air bubbles are delivered with the oil although the barrel is not empty?

- There is a leak in the suction tube: Locate the leak and seal it appropriately

... the delivery capacity is too low?

- The delivery pressure is too low: Increase the adjusted inlet pressure on the air pressure regulator
- The strainer is blocked: clean it or replace it (see chapter maintenance)
- Viscous or very cold oils are difficult to suck in. This results in a lower delivery capacity and noise emission.

7 Disposal

The device is to be emptied completely and the liquids properly disposed of in case it is taken out of service.

The equipment is to be disposed of properly when taken permanently out of service:



- Return old metal for recycling.
- Return plastic parts for recycling.



The water legal regulations are to be followed.



Konformitätserklärung Declaration of Conformity

Hiermit erklären wir, dass die Bauart
We herewith declare that the construction type

Typ: <i>Type:</i>	Druckluftpumpe PPe / PPne Pneumatic pump PPe / PPne
Bezeichnung: <i>Designation:</i>	pneumatisches Ölförderaggregat pneumatical oil dispensing device
Artikel-Nr.: <i>Item No.:</i>	015431012, 015431501, 015431551, 015431581

in der von uns gelieferten Ausführung folgenden einschlägigen Bestimmungen entspricht:
in the form as delivered by us complies with the following applicable regulations:

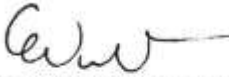
- Maschinenrichtlinie 2006/42/EG -
Machinery safety 2006/42/EC

Angewendete harmonisierte Normen:
Applied harmonised standards:

EN ISO 12100-1, -2

EG-Dokumentationsbevollmächtigter: <i>EC official agent for documentation:</i>	Jörg Mohr	Horn GmbH & Co. KG Munketoft 42 24937 Flensburg
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11.04.2013
Datum
Date


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