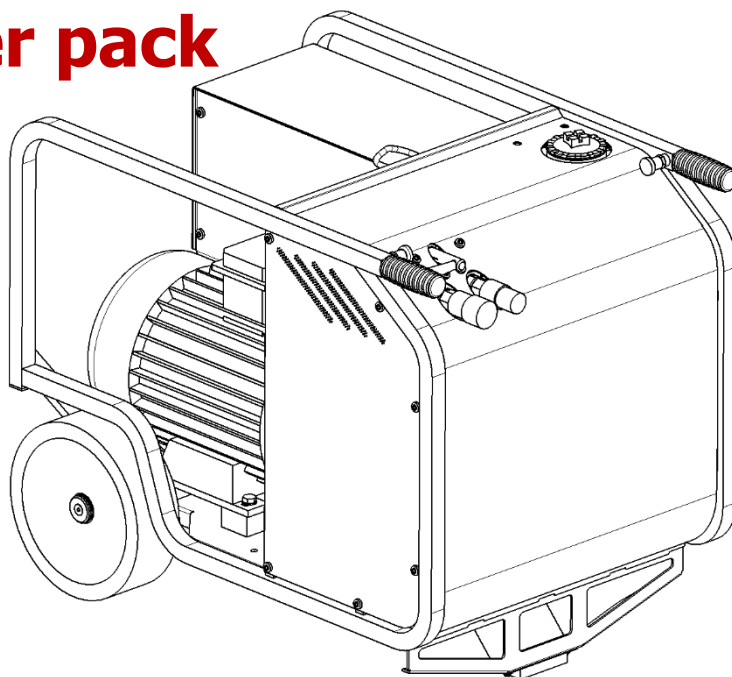


Operating Manual

HPP18E FLEX Hydraulic Power pack

From serial No. 12924

Revised
08.11.2018



Prior to Operation

We thank you for choosing a HYCON power pack.

Please note that the power pack is delivered without hydraulic oil. Therefore it must be filled with hydraulic oil prior to operation.

To ensure smooth operation and long-lasting performance of your new power pack, we recommend that you study this operating manual carefully and pay special attention to the

Safety and Service Precautions

We hope you will be satisfied with your new HYCON power pack.

Best regards
HYCON A/S

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Contents

Contents	1
Safety Precautions	2
Filling of Hydraulic Oil.....	3
Technical data	4
Electrical Circuit Diagram	5
Starting Instructions.....	6
Service, Maintenance and Hydraulic Settings	7
Oil Types.....	7
EC-Declaration of Conformity*	8
Warranty Terms.....	9



DANGER: The power pack must only be connected to an electrical power source with the correct fuse and fault current protection.
If this is not observed, there is a risk of major personal injury or, in extreme consequence, death due to electric shock.



IMPORTANT: All national laws and rules must be followed at any time



WARNING: The electrical motor is not approved by a US National Recognized Test Laboratory.



IMPORTANT: Read and follow this operating manual carefully to avoid personal injury and damage to the power pack.

Safety Precautions

1. Always use ear protection, though power pack has a low noise level.
2. Always connect hoses before starting.
3. Always keep electric box, cables and sockets clean.
4. Always turn of the motor and disconnect the power supply when the power pack not used and before performing any service.
5. Never start the motor without side covers and the safety guard.
6. Operation of the power pack without tool connected and with lever at "ON" may cause overheating of the system and damage to the power pack.
7. It is recommended to use a crane when lifting the power pack.
8. The pressure relief valve is set at 160 bar / 2320 psi from the HYCON plant. Never set it higher.
9. Always use original HYCON filters with by-pass. The use of filters without by-pass may blow the hydraulic hoses and the filter cover.

Filling of Hydraulic Oil

- To fill up with hydraulic oil, loosen the filter cover on top of the power pack.
- Remove the filter element (see photo), and fill up with oil. When oil is showing at the bottom of the filter unit, there is enough oil on the power pack.
- Insert the filter element again, mount the cover and the power pack is ready for use.



IMPORTANT: When connecting new extension hoses, it is necessary to fill up with extra 2 liters / 0.53 gallons of oil. Therefore always top up the power pack when connecting new extension hoses.

Technical data

The HYCON HPP18E FLEX open center power pack is an advanced hydraulic power source, which regulates the revolutions of the motor and thereby the oil flow supplied by means of a built in frequency converter.

The power pack covers four different flow outputs of 20, 30, 40 and 46 LPM / 5, 8, 10 and 12 GPM respectively at 120 bar / 1740 psi. This HYCON power pack is fully compatible with and sufficient for the common European and North American tools.

A pressure relief valve are used to avoid a too high pressure of the power pack. The very efficient air cooling protects the power pack against overheating.

		HPP18E FLEX
Oil Flow	LPM / GPM	20, 30, 40, 46 / 5, 8, 10, 12
Oil Flow EU	LPM / GPM	20, 30, 40 / 5, 8, 10
Working Pressure nominal	bar / psi	120 / 1740
Pressure relief valve	bar / psi	160 / 2320
Pump		14cc gear pump
Oil temperature	°C / °F	Max. 70 / 158
Tank capacity hydraulic oil	liters / gallons	Min. 8 / 2.1 Max. 11 / 2.9
Hydraulic system complete	liters / gallons	Max. 12 / 3.2
Filter system		25 micron with oil by-pass
Electrical Motor		11 kW, 3x400 V / 13.2 kW 3x480V
Motor rotation		CW, seen from rear end
Fuse min.	Amp.	See table below
Protection class		IP 55
Guaranteed sound power level L_{WA}	dB	98
Sound pressure level 1m L_{PA}	dB	86
Dimensions (LxWxH)	mm / inch	805x625x704 / 31.7x24.6x27.7
Dry weight	kg / lbs	135 / 300

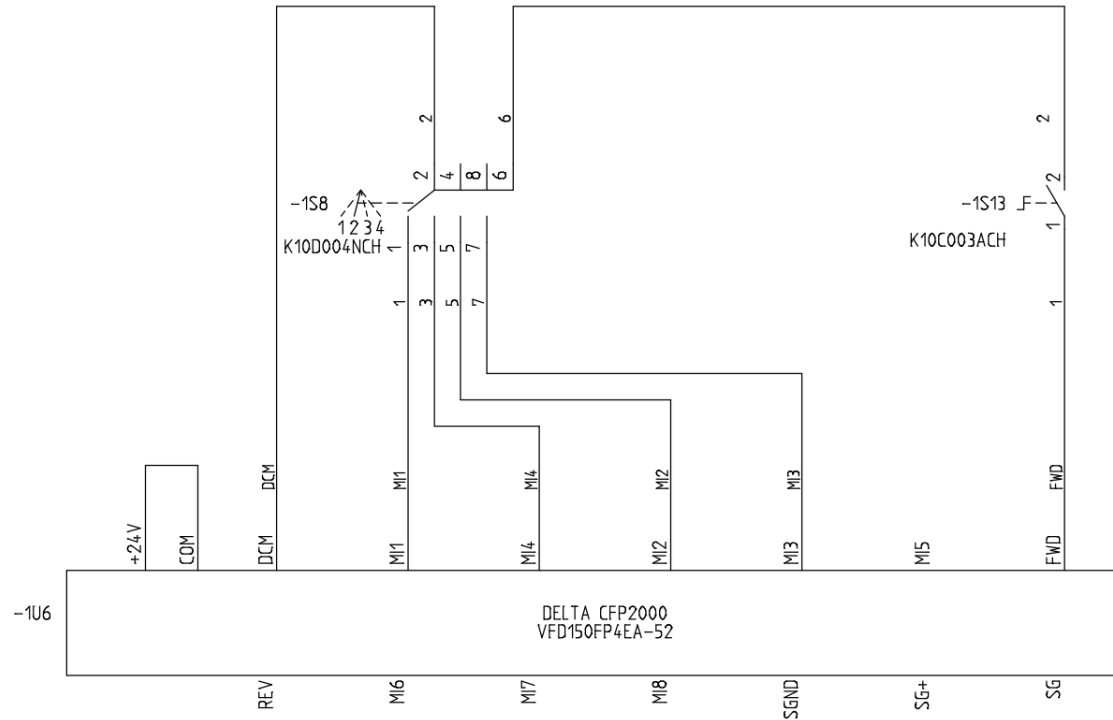
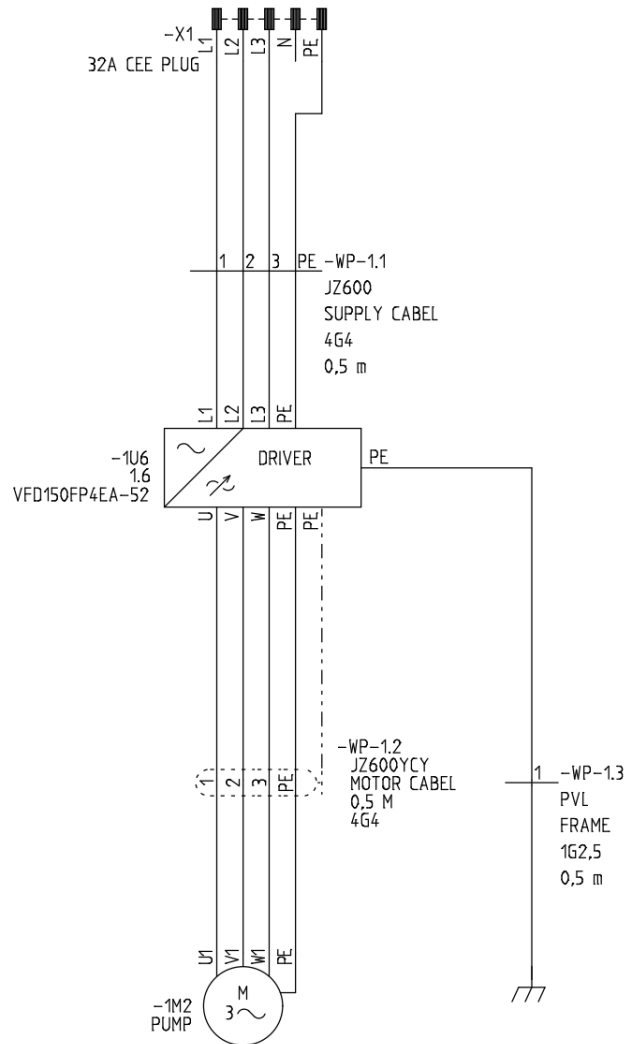


Important: Power packs with 46 LPM / 12 GPM option are not CE approved.

Maximum power consumption of the power pack is given at the respective flow options of the power pack at maximum pressure 160 bar / 2320 psi.

400V, 50Hz				
Flow	20 LPM / 5 GPM	30 LPM / 8 GPM	40 LPM / 10 GPM	46 LPM / 12 GPM
Current	10 A	15 A	20 A	24 A
480V, 60Hz				
Current	9 A	13 A	17 A	21 A

Electrical Circuit Diagram



H	S	B
1.2		



Starting Instructions



WARNING: Before start up, ensure all conditions under Safety precautions are full filled.

Please observe the starting instructions on the frequency converter box.

- Start:**
- Check hydraulic oil level at sight glass
 - Connect hoses and tool
 - Turn the "0 / 1" cam switch to "1"
 - Move the lever to "ON"

- Stop:**
- Move the lever to "OFF"
 - Turn the "0 / 1" cam switch to "0"

Oil Flow

Always set the oil flow correctly in accordance with the tool connected. Choose the oil flow on the four step cam switch:

- 1: 20 LPM / 5 GPM
- 2: 30 LPM / 8 GPM
- 3: 40 LPM / 10 GPM
- 4: 46 LPM / 12 GPM (N/A for CE approved power packs)



Service, Maintenance and Hydraulic Settings

Service/Maintenance	Daily	Weekly	Yearly
Hydraulic oil	Check		1 x replacement
Hydraulic oil filter			1 x replacement
Check hoses		(tighten if needed)	

Hydraulic Settings

Check the working pressure by means of test equipment. The test equipment must comprise a pressure gauge, a flow meter and a valve for adjustment of pressure.

The pressure relief valve is placed on the valve block on the right side.

1. Connect the test equipment, start the power pack and move the lever to "ON". Then close the valve on the test equipment - the pressure gauge must show 160 bar / 2320 psi.

Adjust the pressure relief valve by loosening the lock nut and turning the adjustment screw in or out. "In" increases the pressure, and "out" decreases the pressure. Retighten the lock nut after adjustment.

2. When the pressure relief valve has been adjusted correctly, the working pressure must be set at 100 bar / 1450 psi by means of the valve on the test equipment. At 100 bar / 1450 psi check that the oil flow is correct according to the technical data.



IMPORTANT: If correct pressure/oil flow cannot be achieved by following the instructions above, the power pack must be re-adjusted. If the pressure/oil flow then still incorrect, the pump might be defect and a replacement is necessary.

Oil Types

The HYCON power packs use standard hydraulic oil, i.e. all types of mineral oil and biodegradable oil, which comply with the following values:

Ambient temperature range	Below 10°C 50°F	10 ... 30°C 50 ... 86°F	Above 30°C 86°F
Recommended oil viscosity grade	VG 32	VG 46	VG 68

Recommended oil cleanliness	ISO 4406 /19/16 / NAS 1638 10		
Permitted viscosity	cSt	10 – 600	
Viscosity index	Minimum	100	
Oil temperature area	°C /°F	-20 to 70 / -4 to 158	

EC-Declaration of Conformity*



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We hereby declare that

HPP18E FLEX hydraulic power pack – from serial No. 12924
-with 11 kW electrical motor

is manufactured in conformity with the EC directives:

Machine Directive - 2006/42/EC
Noise Emission Directive - 2000/14/EC

Notified body 1585:

AkustikNet A/S
Frederikssundsvej 179 B
DK-2700 Brønshøj
Denmark

Guaranteed sound power level: L_{WA} 98 dB

HYCON A/S
Juelstrupparken 11
DK-9530 Støvring
Denmark

A handwritten signature in blue ink, appearing to read "Martin Møller".

Martin Møller
Managing Director

18.05.2018

**) Note that only the HPP18E FLEX EU model with maximum 40 LPM / 10 GPM is embraced by this conformity.*

Warranty Terms

We grant 12 months warranty from the first date of operation – however, not more than 18 months from the date of delivery.

The warranty applies to faults that can be related to construction and production errors.

Faults caused by incorrect operation, incorrect handling, lack of maintenance or the like will not be accepted as warranty.

The warranty covers the parts necessary for repair and the suggested average time needed for repair.

For further warranty details, please contact your local dealer.