

## DC PUMP/MOTOR UNITS



## Concentric DC Pump/Motor Units

The Pump/Motor units consists of a 12/24/48V DC motor in the range of 1,5 kW to 4,5 kW and a W series gear pump with displacement 0,8 cm<sup>3</sup> to 31 cm<sup>3</sup> /rev. Additionally the units can be equipped with integrated valves and starter solenoids. Concentric Pump/Motor units in difference to He Power packs is not selfcontained and is in many cases integrated into an existing system for auxillary functions, safety fucntions or support funtions. In other applications the Pump/motor unit is the power source in the system for lift, move, propell etc.

### Typical applications are

#### Truck:

- Small cranes
- Double load deck
- Supplementary steering
- Support legs

#### Construction:

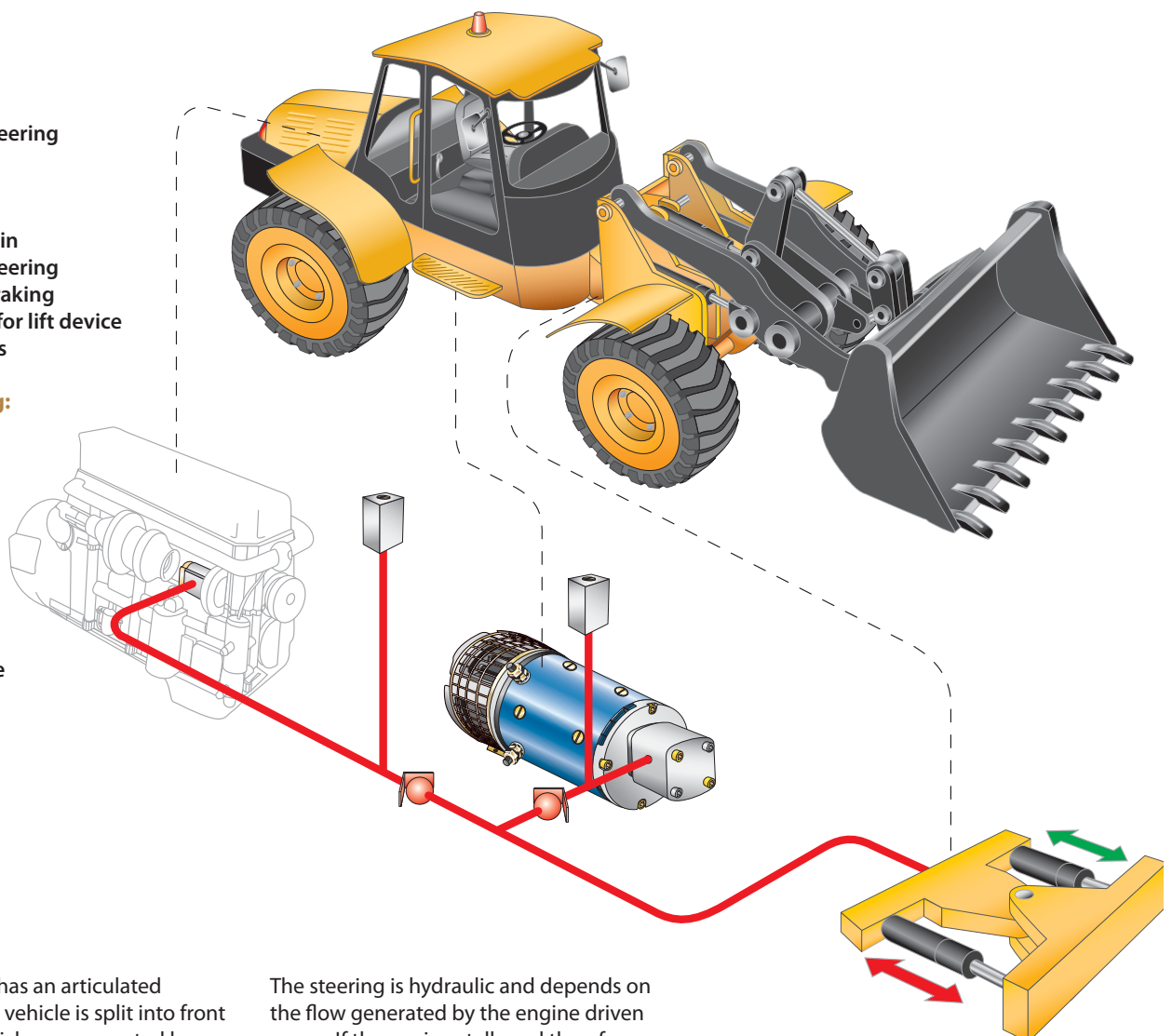
- Tilt of hood or cabin
- Supplementary steering
- Supplementary braking
- Support function for lift device
- Auxillary functions

#### Material Handling:

- Steer
- Lift
- Brake
- Tilt

#### Aerial Lift:

- Propel
- Steer
- Lift
- Nivellation of cage



The Wheel Loader has an articulated steering where the vehicle is split into front and rear halves which are connected by a vertical hinge. The front and rear halves are connected with two hydraulic cylinders that change the angle between the front and rear end of the vehicle.

The steering is hydraulic and depends on the flow generated by the engine driven pump. If the engine stalls and therefore cannot supply flow for the steering a presureswitch activates the pump/motor unit to supply flow for the steering and by this enable a continously safe manouvering.

## Available motors and pumps:

12MB	12V DC dia 112 mm	0,8-5,7 cc pump
24MB	24V DC dia 112 mm	0,8-5,7 cc pump
24MA	24V DC dia 128 mm	0,8-5,7 cc pump
24MA-HS	24V DC dia 133 mm (fan)	0,8-5,7 cc pump
24MF	24V DC dia 134 mm (fan)	0,8-5,7 cc pump
24MI	24V DC dia 131 mm	5,0-31,0 cc pump

## Options:

- DC motors IP67
- Integrated valving:
  - Pressure relief valve
  - Unloading valve
  - Priority load sense valve
- Starter solenoids
- Starter solenoids IP67
- Pumps are also available in Q(quiet) versions

In this leaflet the diagrams only shows examples of flow and pressure curves.

In most cases other pump displacements are available as well as other motor and valve configurations.

**MB**



**MA**



**MA-HS**



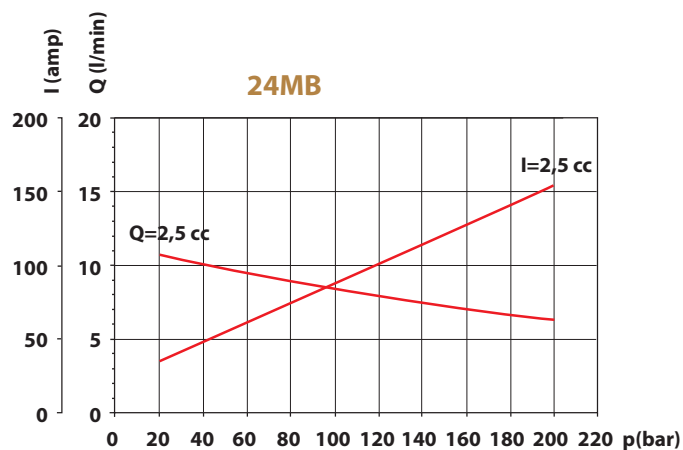
**MF**



**MI**

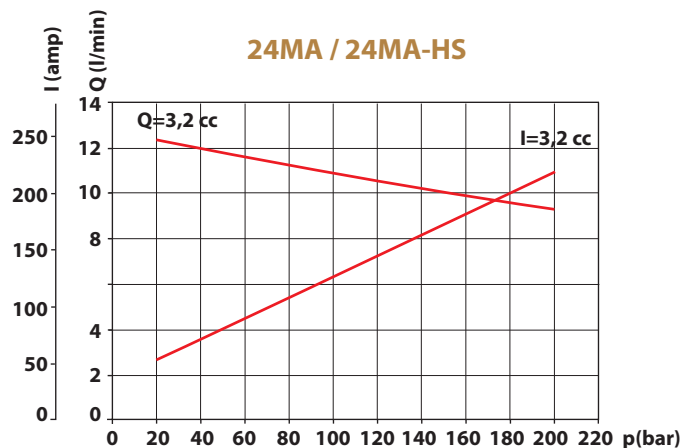


**24MB**



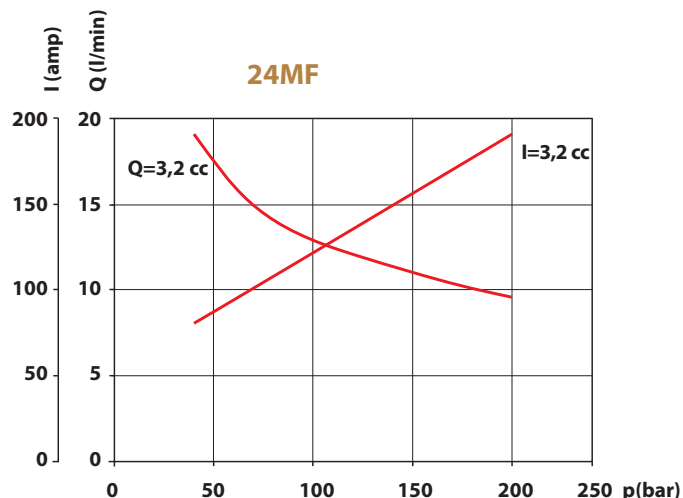
In this leaflet the diagrams only shows examples of flow and pressure curves.

**24MA / 24MA-HS**



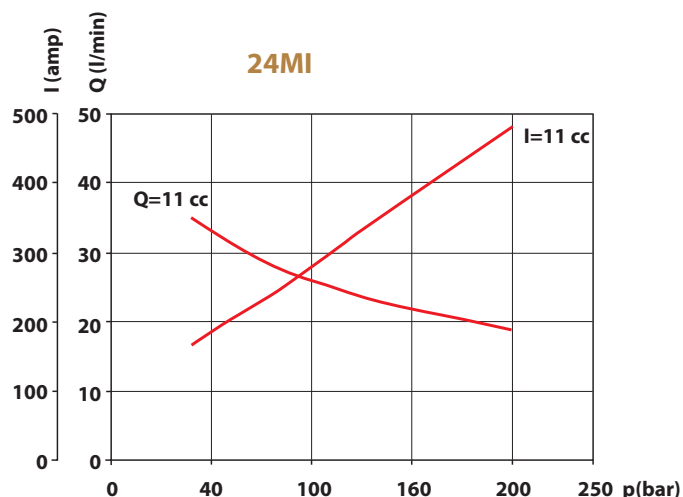
In this leaflet the diagrams only shows examples of flow and pressure curves.

**24MF**



In this leaflet the diagrams only shows examples of flow and pressure curves.

**24MI**



In this leaflet the diagrams only shows examples of flow and pressure curves.

## PRODUCT RANGE

### HE Powerpacks

12/24/48 VDC 0.3 – 4.5 kW and  
0.75 – 3 kW AC modular power packs

### HE Box Powerpacks

12/24/48 VDC modular powerpacks  
in weatherproof boxes

### Pressure Switches

5 - 350 bar, connecting/disconnecting

### W100 Hydraulic pumps

0,5 - 2,0 cc 227 bar

### W300 Hydraulic pumps

0,8 – 5,7 cc 230 bar

### W600 Hydraulic pumps / motors

3 – 12 cc 276 bar

### W900 Hydraulic pumps / motors

5 – 31 cc/section 276 bar

### Calma The new quiet pumps

6,2 - 23,7 cc/section 250 bar

### WQ900 The quiet pumps

5 - 23 cc/section 230 bar

### WP900X Hydraulic pumps

16 - 31 cc/section 276 bar

### W1500 Hydraulic pumps / motors

19 - 50 cc/section 276 bar

### F12 FERRA Heavy duty pumps

16 - 41 cc/section 276 bar

### F15 FERRA Heavy duty pumps

19 - 50 cc/section 276 bar

### F20/F30 (LS) Hydraulic pumps / motors

23 – 161 cc/section 276 bar

### GPA Internal Gear pumps

1,7 – 63 cc/section 100 bar

### GC Hydraulic pumps / motors

1,06 – 11,65 cc/section 276 bar

### D Hydraulic pumps

3,8 – 22,9 cc/section 207 bar

### H Hydraulic pumps

9,8 – 39,4 cc/section 207 bar

### II-Stage Hydraulic pumps

4,2 – 22,8 cc/section 276 bar

### Rotary Flow Dividers

3,8 – 13,3 cc/section 300 bar

### Transmission pumps

[www.concentricAB.com](http://www.concentricAB.com)



#### Concentric Rockford Corp.

2222 15th Street  
ROCKFORD, IL 61104  
USA

Tel: +1-815 398 4400

Fax: +1-815 398 5977

E-mail: [info.hydraulics.us@concentricAB.com](mailto:info.hydraulics.us@concentricAB.com)

#### Concentric Hof GmbH

Postfach 1507  
D-95014 HOF  
Germany

Tel: +49-9281 895-0

Fax: +49-9281 87133

E-mail: [info.hydraulics.eu@concentricAB.com](mailto:info.hydraulics.eu@concentricAB.com)

#### Concentric Skanes AB

Box 95  
SE-280 40 SK. FAGERHULT  
Sweden

Tel: +46-433 32400

Fax: +46-433 30546

E-mail: [info.hydraulics.eu@concentricAB.com](mailto:info.hydraulics.eu@concentricAB.com)

#### Concentric Suzhou Co. Ltd.

47 Dongjing Industrial Park  
9 Dong Fu Lu  
SIP, Suzhou  
Jiangsu

China 215123

Tel +86 512 8717 5100

Fax +86 512 8717 5101

[info.chsh@concentricAB.com](mailto:info.chsh@concentricAB.com)



Concentric is an innovator in flow control and fluid power, supplying proprietary systems and components for trucks, buses and industrial vehicles, worldwide. With 1,156 employees and yearly sales exceeding 1,977 million Swedish Kronor, Concentric AB is listed on the Stockholm Stock Exchange ([www.concentricAB.com](http://www.concentricAB.com)).

Concentric will not accept responsibility for any catalog errors and reserves the right to modify its products without prior notice. This also applies to products already ordered, provided that such modifications can be made without affecting technical specifications. All trademarks in this material are properties of their respective owners.