

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 cm³ to 31 cm³ /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:

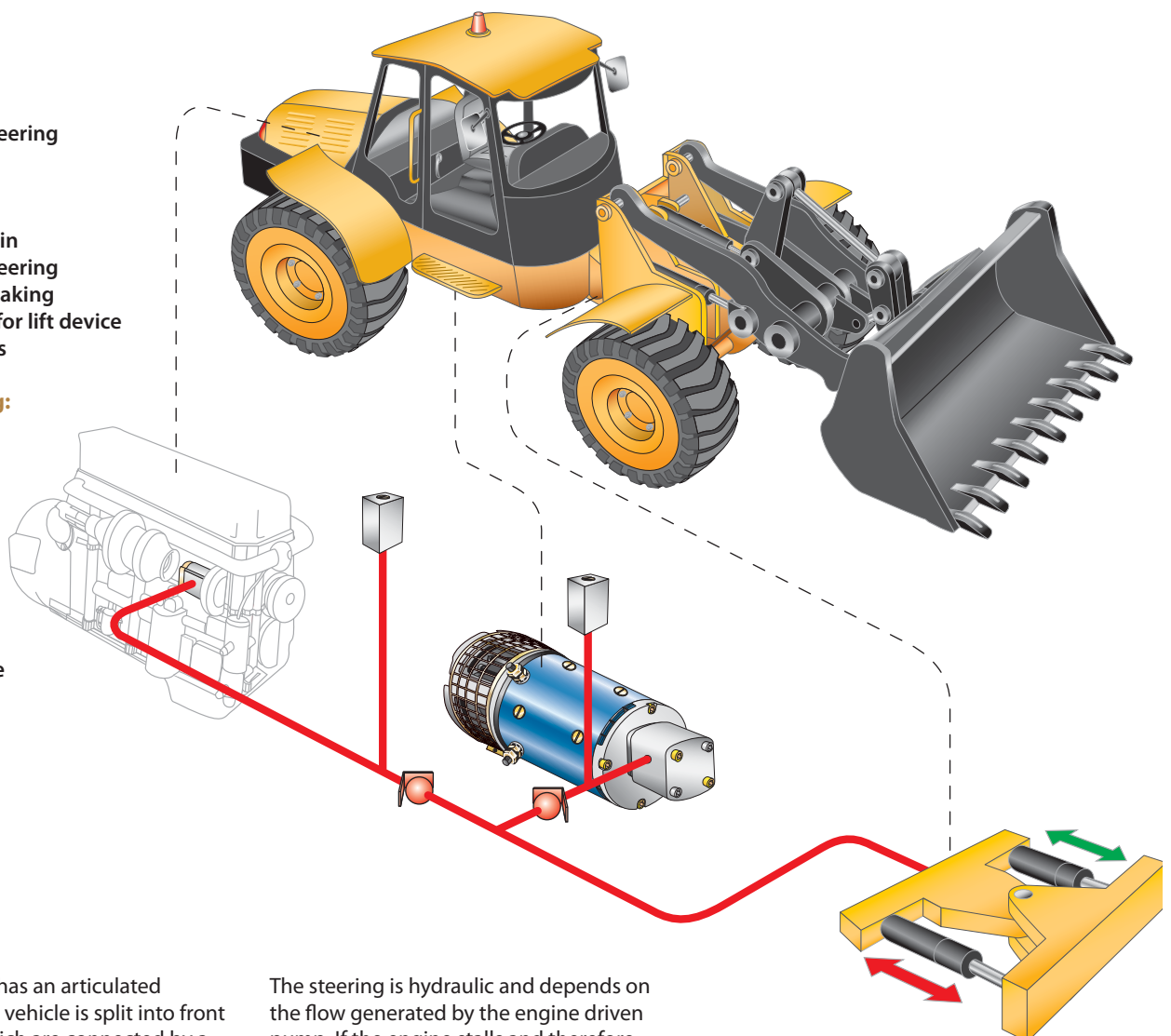
- Tilt of hood or cabin
- Supplementary steering
- Supplementary braking
- Support function for lift device
- Auxillary functions

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 manoeuvring.

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



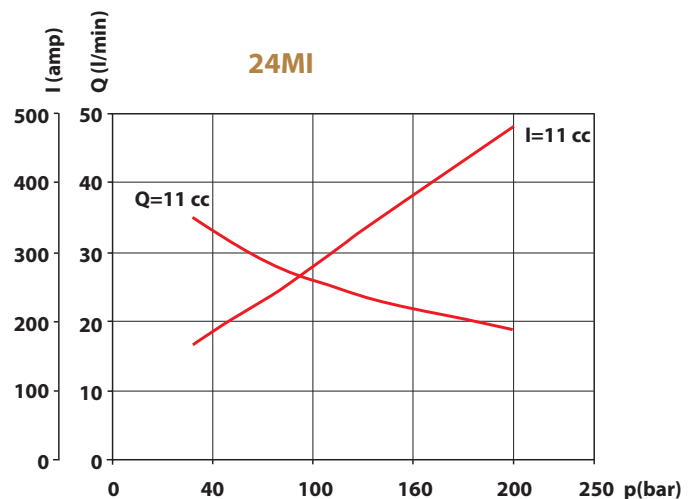
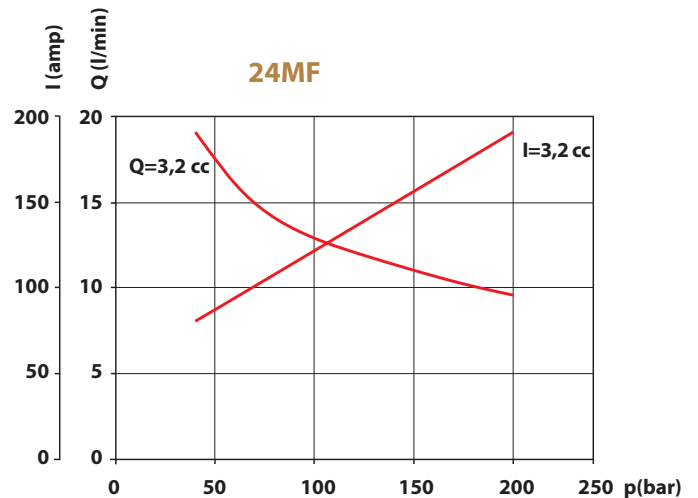
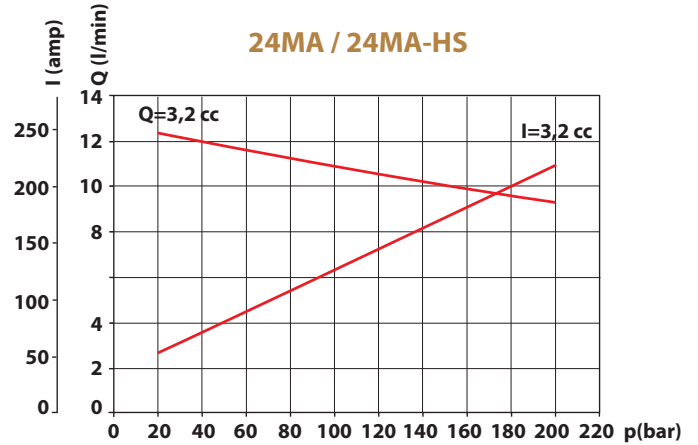
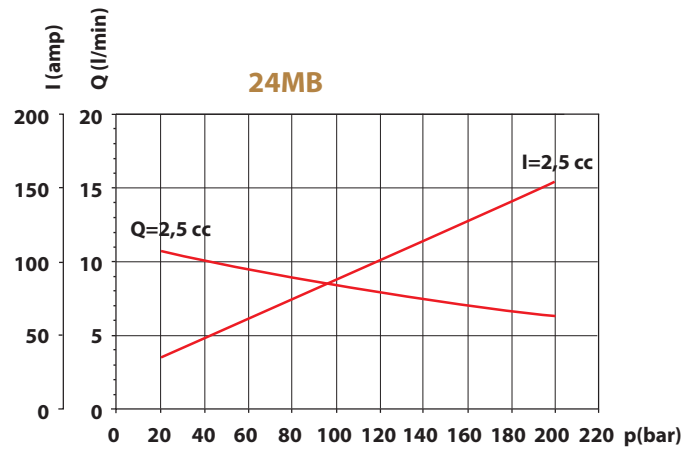
MA-HS



MF



MI



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

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