



Applications:

- ▶ power units for operating small and mid-sized hydraulic clamping systems
- ▶ suitable for both single-acting and double-acting cylinders

Description:

These power units are supplied as compact units ready for connection:

Complete with motor, pump, tank, connector block, pressure gauge, pressure switch, solenoid valves and, on request, electrical control systems, all packaged for upright positioning. Pump with three radial pistons, direction of rotation optional.

The power unit operates intermittently under automatic pressure control, i.e. when the set pressure is reached the motor is automatically switched off. If pressure drops 10% below the set value the pressure switch causes the motor to start again.

Additional pressure switches can be supplied to protect the machine. These switches are set so as to stop the machine if clamping pressure drops by more than 15%.

Special features:

- ↔ Compact, lightweight design
- ↔ Power unit supplied ready for installation
- ↔ Modular system enables individual schemes
- ↔ Valves closed in clamping position, preventing pressure loss in the event of power failure
- ↔ Plug-in type remote control pendant
- ↔ Optical oil level sighting
- ↔ Automatic switching off in the event of a lack of oil or increased oil temperature.



Technical data

	Series 5	Series 6
Hydraulic		
Pump displacement (l/min.)	2,5	0,82
Max. operating pressure (bar)	400	400
Total tank volume (l)	5,5	3,8
Useable tank volume (l)	3,2	1,8
Continuous duty (s)	30	30
Viscosity range (mm ² /s)	10- 500 to DIN 51519	
Max. noise level (dBA)	72	74
Type of valves	Seat valves, leak proof, max. 450 bar	
Max. valve flow (l/ min.)	8	8
Oil port	G 1/4	G 1/4
Hydraulic fluid	Hydraulic oil HLP 46 to DIN 51524	
Electrical		
Motor voltage	380- 420 V/ 50 Hz/ 3~	
Motor rating (kW)	1,1	0,37
Solenoid valve voltage	24 V DC	
Control voltage	24 V DC	
Protection	IP 54	
Motor speed (1/ min ⁻¹)	1450	2800
Direction of rotation optional	any	
Continuous duty (bei 20°C) (%)	40	40
Weight without oil (kg)	approx. 47	approx. 22

Series 6



For other sizes and special designs, please see page 11

Important information

Power units should be located away from the dirty area around machine tools and clear of operator's handling space. Make sure

- that oil ports, pressure switches, oil drain plug and oil filler plug are readily accessible, and that pressure gauges, oil sight glasses and indicator lights are clearly visible.

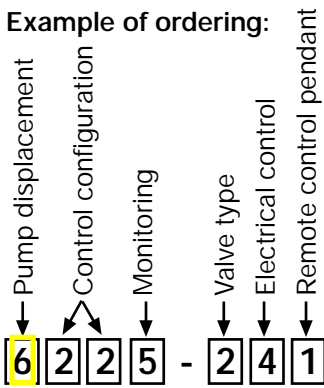
The power units conform to EC directives and bear the CE sign.

EMV Directive	EMV 89/336/EWG
"Machinery" Directive	ML 98/37/EG
Low-voltage Directive	NS 73/23/EWG

If other conditions apply please contact our technical sales department.



Example of ordering:



The order number for the power unit is obtained by selecting the index numbers for the required versions as shown in the tables below.

Pump displacement

- 6** Power unit with a displacement of 0.82 l/min. Max. operating pressure 400 bar

Control configuration

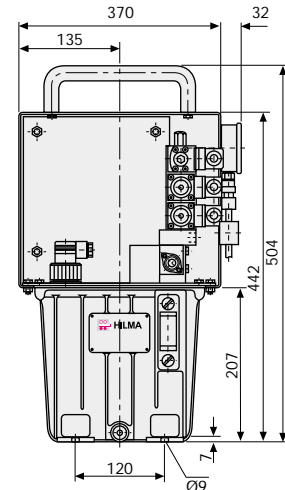
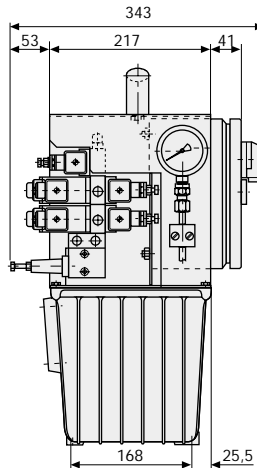
with pressure relief valve and pressure switch for pump control

- 21** without directional valve (basic unit), with P and R port (G 1/4)
- 22** 1 circuit for single-acting cylinders
- 23** 1 circuit for hydraulic roller bars
- 24** 2 circuits for single-acting cylinders
- 26** 2 circuits for double-acting cylinders

Pressure relief valve and pressure switch
Operating pressure infinitely variable between 100 and 400 bar

Monitoring system

- 0** without machine safety, without oil level and oil temperature monitoring
- 1** without machine safety, with oil level and oil temperature monitoring
- 4** with machine safety, without oil level and oil temperature monitoring
- 5** with machine safety, with oil level and oil temperature monitoring



Valve package

- 0** without directional seat valves
- 2** with directional seat valve, 24 V DC

Electrical controls

- 0** without electrical controls, without terminal box
- 1** without electrical controls, with terminal box
- 2** with electrical controls, without remote control pendant
- 4** with electrical controls, with remote control pendant

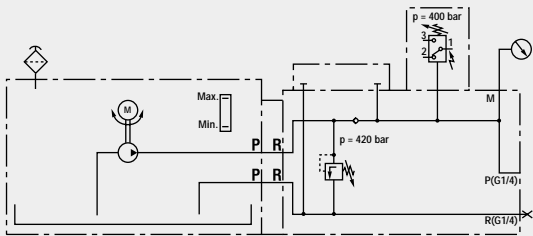
The power unit is supplied ready for connection including the necessary electrical and hydraulic equipment. The complete electrical system is installed in an enclosure. On request, the power unit is supplied without electrical control, with or without terminal box.

Remote control pendant

- 0** without remote control pendant
- 1** selector switch
- 2** selector switch with pilot lamp for operating pressure
- 5** foot switch

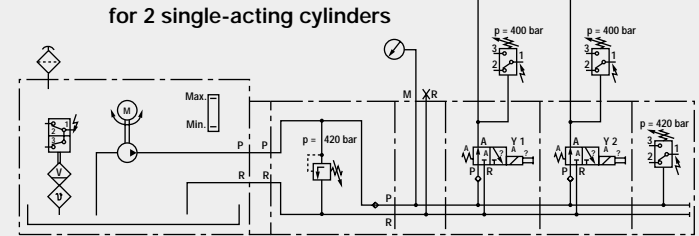
Hydraulic schematics

6210-020 without valve



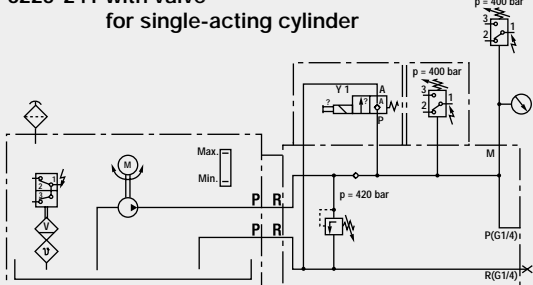
6245-241 with valves

for 2 single-acting cylinders



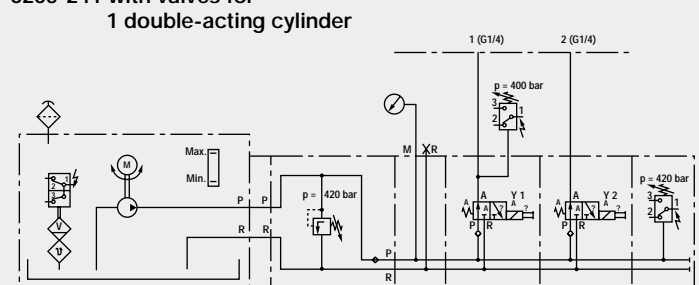
6225-241 with valve

for single-acting cylinder



6265-241 with valves for

1 double-acting cylinder



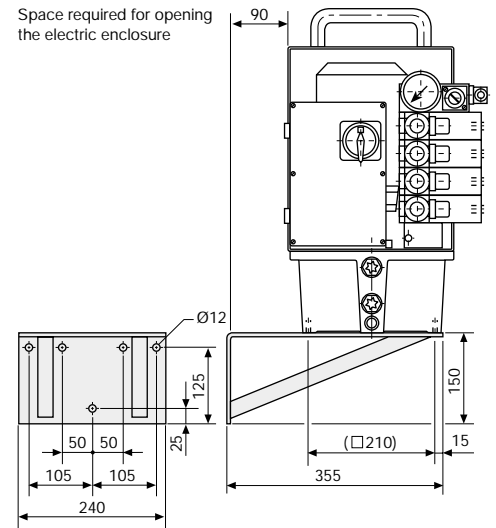


Wall bracket

For fastening the power unit on machine columns, supports, walls etc.

Part no. 5100-001 Series 5

Part no. 5.0330.0205 Series 6



Pedestal

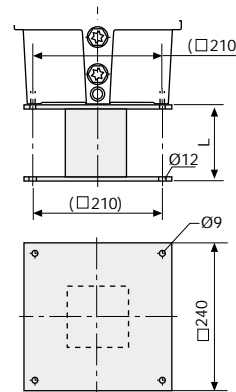
For fastening the power unit on the floor, on machine beds, on the press head etc. etc.

Part no. 5100-002 for L = 250 mm Series 5

Part no. 5100-003 for L = 1000 mm Series 5

Part no. 5.0330.0206 for L = 250 mm Series 6

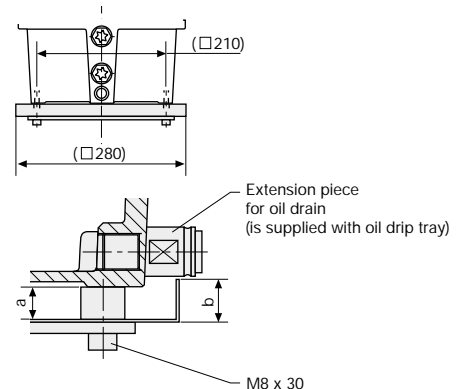
Part no. 5.0330.0207 for L = 1000 mm Series 6



Oil drip tray

Prevents oil around the power unit splashed during filling or escaped due to leakage.

a (mm)	15	72
b (mm)	20	80
Part no.	5100-004	5100-007



Mounting bars

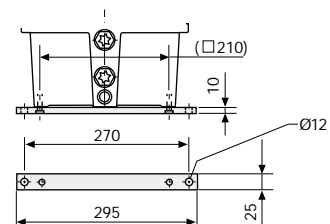
are fastened to the underside of the oil tank using screws. The brackets extending on the sides are used for fastening the power unit from above using screws M19.

Supply package:

2 mounting bars

4 pan head screws M6 x 16, DIN 7984

Part no. 5100-005



For other hydraulic accessories, please see product group 11



The service we offer you

In addition to the cost effectiveness of our products, our customers also benefit from our efficient service.

Our service includes

- preparation and installation of hydraulic systems to suit specific applications
- manufacture, installation and commissioning of complete hydraulic systems
- repair and maintenance of hydraulic cylinders, clamping elements and power units supplied
- trouble-shooting and repair on the customer's premises
- constant repair service and fast response on our premises

All over the world our service is ready to act and to guarantee immediate help.

Specially trained, experienced staff make sure that problems are solved rapidly and proficiently.

You can rely on it!

