

HYDAC Micro Power Pack DC0

General Description

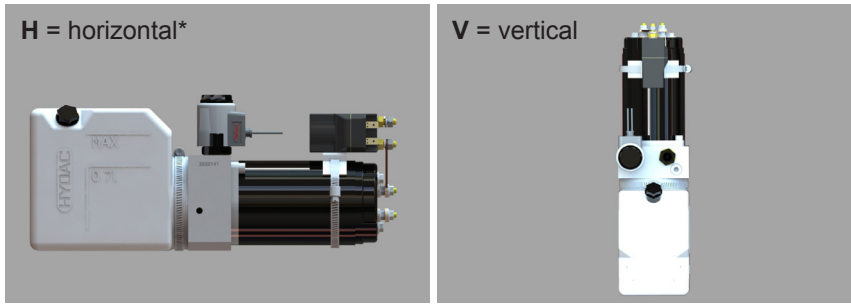
- Versatile range of 12 and 24 Volt Micro Power Units for a variety of applications
- Flows up to 3 l/min, pressures up to 200 bar
- Motors:
150 W, 500 W, 800 W DC
- Pump sizes:
0.25, 0.50, 0.75 cc/rev
- Tank sizes:
1.0 L
1.5 L

Technical data

- Flow rate: up to 3 l/min
- Continuous pressure: 160 bar
Peak pressure: up to 220 bar
- Short time duty: S2 = 2.5 min
- Intermittent duty: S3 = from 8 %
- Fluid: Hydraulic oil to DIN 51524 Part 1 and 2
- Oil temperature:
-15 °C to max. +80 °C
- Ambient temperature:
-15 °C to +40 °C
- Filtration:
Operating fluid to ISO 4406
Class 21/19/16 or cleaner



1. Mounting position of power unit



2. Filler orientation



Model code

Example **DC0 H M04 R - 0.5 - 200 - 0.5 - 24V - M23 - 200V+24DG**

Power unit: **0.5 - 200 - 0.5 - 24V**

Flange controls: **M23 - 200V+24DG**

Type of power unit

Mounting position, see point 1

H = horizontal*

V = vertical (filler orientation must be at top T)

Oil tank see point 3

M04 = length 150 mm

M05 = 1.5 l steel tank

others available on request including additional tank return connections

Filler orientation see point 2

L = left (Not available with vertical mounting position)

T = top

R = right (Not available with vertical mounting position)

Displacement volume of pump and maximum pressure, see point 4.

0.25 - 200 = 0.25 ccm and 200 bar

0.5 - 200 = 0.5 ccm and 200 bar

0.75 - 200 = 0.75 ccm and 200 bar

Motor: output and voltage, see point 4

0.15 - 12V = 0.15 kW 12 VDC

0.5 - 12V = 0.5 kW 12 VDC

0.8 - 12V = 0.8 kW 12 VDC

0.15 - 24V = 0.15 kW 24 VDC

0.5 - 24V = 0.5 kW 24 VDC

0.8 - 24V = 0.8 kW 24 VDC

Flange controls see point 5

3. Oil tank

Tank code	Filling volume/ draw-off volume (l)			Tank length [mm]
	Horizontal tank position R and L	Horizontal tank position T	Vertical tank position T	
M04	0.9 / 0.7	0.9 / 0.7	0.95 / 0.7	150
M05	- / -	1.5 / 1.15	0.95 / 0.65	180

* where mounted horizontally, support for plastic oil tanks must be provided by the customer - see dimensions

4. Motor-pump characteristics*

0.15 kW – 12 V

Pump displacement [ccm]	Pressure [bar]			
	50	100	150	200
0.25	0.48 l/min 9 A	0.43 l/min 14 A	0.39 l/min 20 A	0.36 l/min 28 A
0.50	0.86 l/min 14 A	0.75 l/min 28 A	0.60 l/min 39 A	
0.75	1.18 l/min 20 A	0.90 l/min 39 A	S2 = 2.5 min S3 = 10% (at nominal power)	

0.50 kW – 12 V

Pump displacement [ccm]	Pressure [bar]			
	50	100	150	200
0.25	0.73 l/min 15 A	0.71 l/min 23 A	0.68 l/min 30 A	0.65 l/min 40 A
0.50	1.41 l/min 23 A	1.31 l/min 40 A	1.19 l/min 54 A	1.09 l/min 70 A
0.75	2.04 l/min 30 A	1.78 l/min 54 A	S2 = 2.5 min S3 = 10% (at nominal power)	

0.80 kW – 12 V

Pump displacement [ccm]	Pressure [bar]			
	50	100	150	200
0.25	1.19 l/min 35 A	1.13 l/min 45 A	1.09 l/min 57 A	1.05 l/min 70 A
0.50	2.27 l/min 45 A	2.09 l/min 70 A	1.90 l/min 95 A	1.70 l/min 125 A
0.75	3.27 l/min 57 A	2.86 l/min 95 A	2.41 l/min 135 A	S2 = 2.5 min S3 = 8% (at nom. power)

5. Lift-lower control

Example **M 2 3 ZN - 200V + 24DG**

Flange version

- M** = imperial valve cavity (FC06-2)
- M1** = metric valve cavity (06020)

Pressure relief valve

- 2** = with relief valve

Check valve

- 3** = with check valve

Connection

- | | M Flange | M1 Flange |
|-----------|----------------|---------------|
| 0 | = Plastic plug | Plastic plug |
| Z | = WS06Z-01 | WSM06020Z-01 |
| ZN | = WS06Z-01M | WSM06020Z-01M |
| Y | = WS06Y-01 | WSM06020Y-01 |
| YN | = WS06Y-01M | WSM06020Y-01M |

Pressure relief valve

- pre-set (p_{max} 200 bar).
- xxxV = set pressure in bar, (200V = 200 bar)

Coil voltage and connection

- = (blank) if plastic plug is selected
- 12xx = 12 V DC
- 24xx = 24 V DC
- xxDG = DIN connector to EN 175301-803
- xxDL = 2 flying leads, 457 mm long, 0.75 mm²
- xxDN = Deutsch connector, 2-pole, axial
- Other connectors available upon request

0.50 kW – 24 V

Pump displacement [ccm]	Pressure [bar]			
	50	100	150	200
0.25	1.2 l/min 10 A	1.1 l/min 15 A	1.1 l/min 20 A	1.1 l/min 26 A
0.50	1.6 l/min 14 A	1.5 l/min 23 A	1.4 l/min 33 A	1.2 l/min 37 A
0.75	2.7 l/min	2.5 l/min	2.2 l/min	S2 = 2.5 min S3 = 10% (at nom. power)

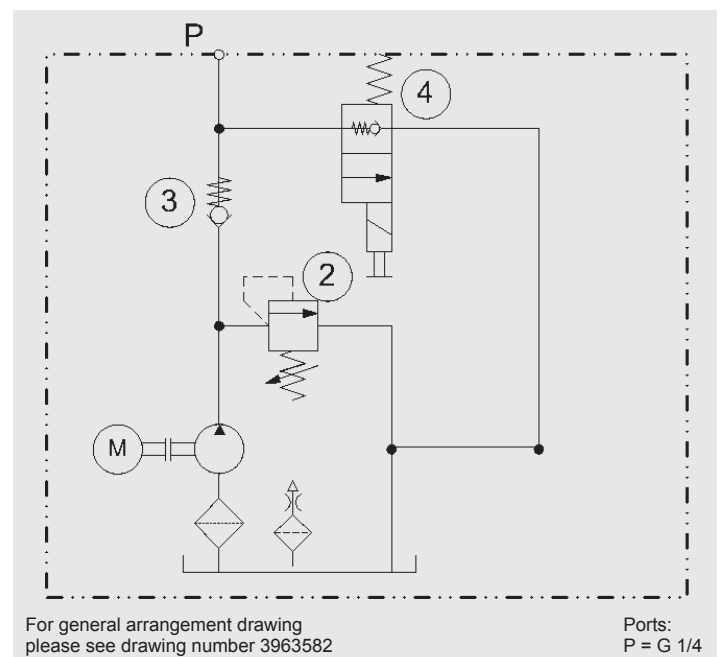
0.80 kW – 24 V

Pump displacement [ccm]	Pressure [bar]			
	50	100	150	200
0.25	1.5 l/min 12 A	1.4 l/min 20 A	1.2 l/min 25 A	1.1 l/min 24 A
0.50	1.7 l/min 18 A	1.9 l/min 28 A	1.7 l/min 40 A	1.5 l/min 48 A
0.75	3.6 l/min 32 A	3.1 l/min 42 A	2.8 l/min 53 A	2.5 l/min 73 A

S2 = 2.5 min
S3 = 8%
(at nominal power)

* Pump characteristics are indicative values for reference only, please contact HYDAC with your specific requirements and application details.

Q: [l/min]
I: [A]



For further technical information on valves see:

- | | |
|-------------------------|--------------------|
| WS06Z-01/M | Brochure no. 5.146 |
| WSM06020Z-01/M | Brochure no. 5.943 |
| WS06Y-01/M | Brochure no. 5.147 |
| WSM06020Y-01/M | Brochure no. 5.947 |
| Solenoid coils - FC06-2 | Brochure no. 5.155 |
| Solenoid coils - 06020 | Brochure no. 5.207 |

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

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