

Mini power unit series H4

0.75 - 2.5 kW

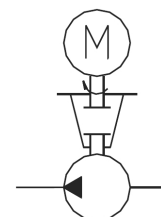
H400

H410

H440



1.5 - 11.7 L/min



Product characteristics

The mini power units H400, H410 and H440 with integrated control are designed for the industrial drive of single-acting actuators (lifting / lowering function). The high tightness of the 2/2-poppet valve saves power loss, the load is safely held in position

Characteristics:

- fast pressure build-up
- easy access to mounting and connection options
- extremely tight 2/2-poppet valve, optionally with position monitoring
- de-energized pressure holding by check valves
- manual pressure limit through emergency relief valve
- container for hydraulic fluid powder-coated (inside & outside)
- with or without manometer

H400

A throttle valve enables manually adjustable lowering speed.

H410

The 2-way proportional current control valve allows proportionally adjustable lifting and lowering speed.

H440

The mini power unit H440 is designed for modular valve assembly (linking) with HAWE NG04 valves. A variety of accessories is available, for example assembly modules for a clamping function or storage operation. The power unit is prepared for modular bodies or alternatively with tube connections P and T.

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Technical data

General

ambient temperature [°C]	mounting position	corrosion protection
-10 to +40	horizontal or vertical	motor: painted according RAL6000 or aluminum tank: powder-coated according RAL9018 bell housing: aluminum, bright

Hydraulic parameters

Hydraulic fluid: mineral oil according to DIN 51524, other media on request

type of pump	volume flow	hydraulic fluid temperature [°C]	viscosity [mm ² /s]	starting viscosity [mm ² /s]	filter	tank volume
external gear pump	1.5-11.7 L; see order information	-10 to +70	10-600	1600	90 µm	5-11 L

Electrical parameters

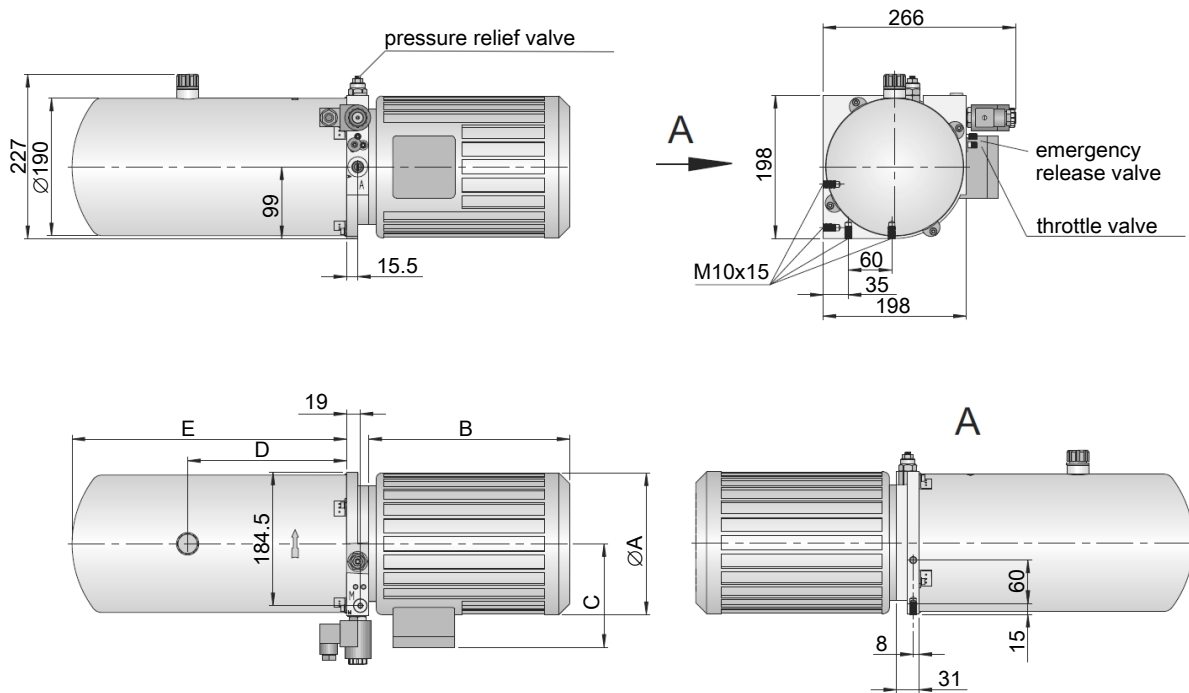
rated output [kW]	voltage range	duty cycle	nominal speed [min ⁻¹]	ingress protection class	insulation class	type
0.75-2.5	220-240 V / 380-420 V; 50 Hz 254-280 V / 440-480 V; 60 Hz	S3 – 20 %*	1400 min ⁻¹ / 2800 min ⁻¹	IP55 according DIN40050	F according IEC34-1	B14 without protective roof according IEC34-7

*Other duty types on request

Dimensions and connections

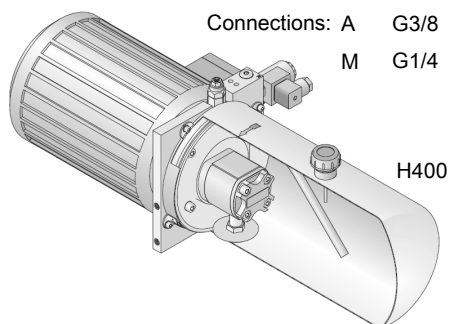
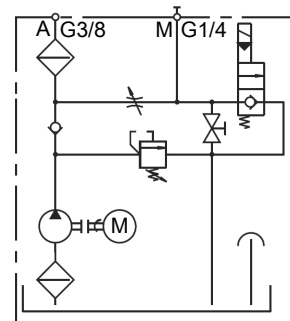
Dimensions are given in mm.

H400



tank						
	tank volume	effective volume	tank volume	effective volume	E	D
	vertical (position V)		horizontal (position H)			
05	4.7 L	4.0 L	5.5 L	4.5 L	260	120
08	7.7 L	7.0 L	8.5 L	7.5 L	380	220
11	-	-	10.5 L	9.5 L	460	380

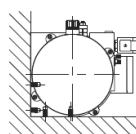
motor 230/400 V, 50 Hz			
power	A	B	C
0.75 kW	Ø170	215	128
1.10 kW	Ø176	244	148
1.50 kW (4 poles)	Ø177	273	146
1.50 kW (2 poles)	Ø160	229	128
2.20 kW	Ø176	269	148
2.50 kW	Ø185	255	129



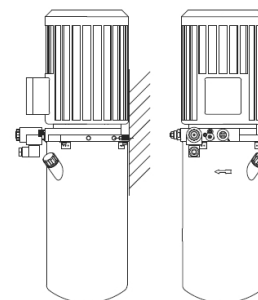
Connections: A G3/8
M G1/4

mounting position and fixation

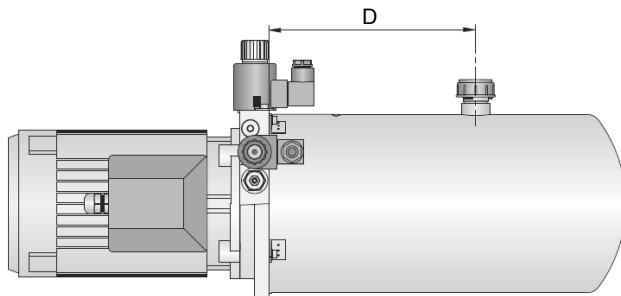
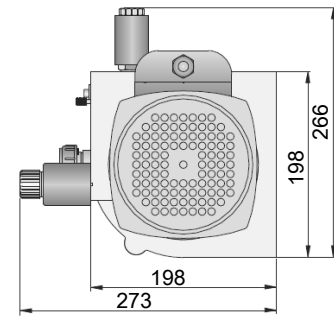
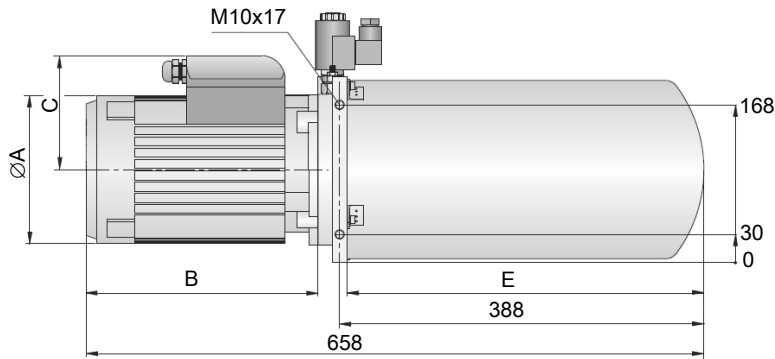
position H



position V

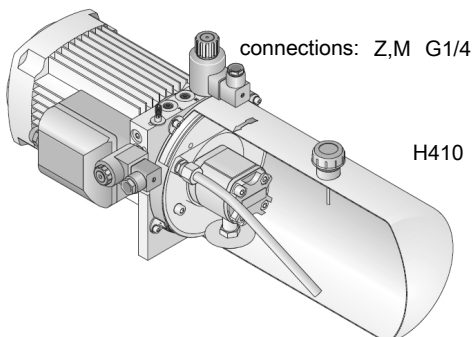
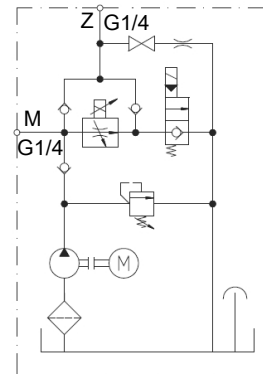


H410



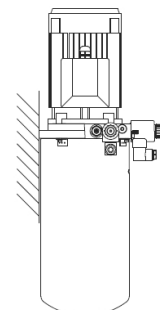
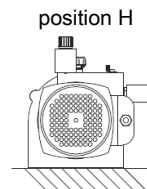
tank		tank volume	effective volume	tank volume	effective volume	E	D
		vertical (position V)		horizontal (position H)			
05	4.7 L	4.0 L	5.5 L	4.5 L	260	120	
08	7.7 L	7.0 L	8.5 L	7.5 L	380	220	
11	-	-	10.5 L	9.5 L	460	380	

motor 230/400 V, 50 Hz			
power	A	B	C
0.75 kW	∅170	215	128
1.10 kW	∅176	244	148
1.50 kW (4 poles)	∅177	273	146
1.50 kW (2 poles)	∅160	229	128
2.20 kW	∅176	269	148
2.50 kW	∅185	255	129

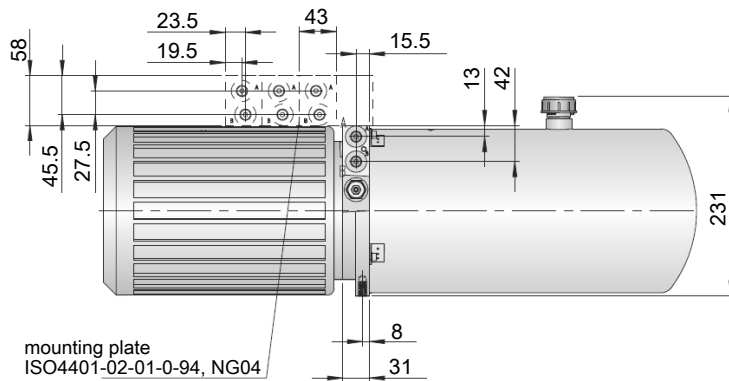


mounting position and fixation

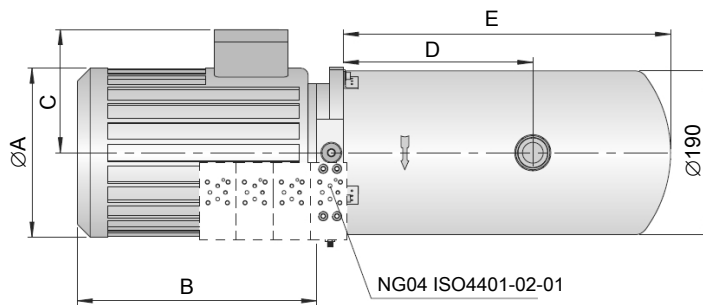
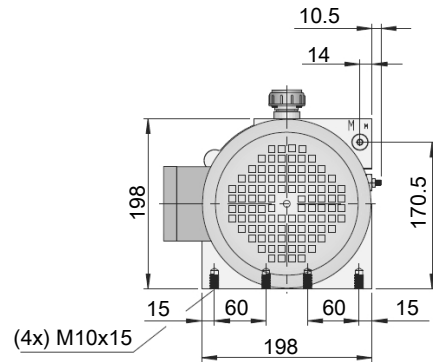
position V



H440

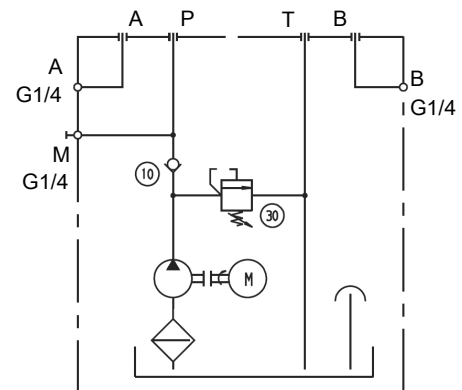


mounting plate
ISO4401-02-01-0-94, NG04

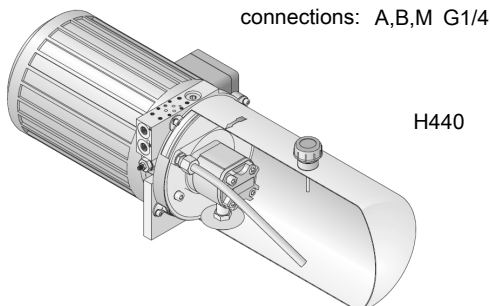


tank						
	tank volume	effective volume	tank volume	effective volume	E	D
	vertical (position V)		horizontal (position H)			
05	4.7 L	4.0 L	5.5 L	4.5 L	260	120
08	7.7 L	7.0 L	8.5 L	7.5 L	380	220
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2.20 kW	Ø176	269	148
2.50 kW	Ø185	255	129



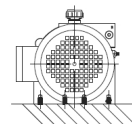
mounting position and fixation



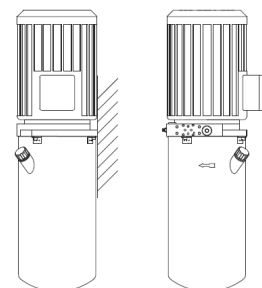
connections: A,B,M G1/4

H440

position H



position V



Order information

Type code

H400 & H410

order example

	H410	P	150	D	4	M	32	H	08	P
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type

H400D for manually adjustable lowering speed with throttle valve
H410P for proportionally adjustable lifting and lowering speed with 2-way-prop.-current control valve

motor power

075 0.75 kW (4 poles)
110 1.10 kW (4 poles)
150 1.50 kW (2-/4 poles)
220 2.20 kW (4 poles)
250 2.50 kW (2 poles)

motor speed

2 2 poles ($\approx 2800 \text{ min}^{-1}$)
4 4 poles ($\approx 1450 \text{ min}^{-1}$)

manometer

M with manometer
H without manometer

valve voltage*

P 24 V DC
W* 230 V 50/60 Hz
*H400 only

tank size

05 5 L
08 8 L
11* 11 L *horizontal only

mounting position

H horizontal
V vertical

pump size

pump	cm ³ /U	L/min		Pmax [bar]
		$\approx 1450 \text{ min}^{-1}$ 50 Hz	$\approx 2800 \text{ min}^{-1}$ 50 Hz	
11	1.1	1.5	3.1	230
13	1.3	1.8	3.6	230
16	1.6	2.2	4.5	230
21	2.1	2.9	5.9	230
26	2.6	3.6	7.3	230
32	3.2	4.5	9.0	210
37	3.7	5.2	10.4	210
42	4.2	5.9	11.8	210
48	4.8	6.7	-	190
58	5.8	8.1	-	190
79	7.9	11.1	-	160

When operating at 60 Hz, motor speed, oil flow, and power are increased by $\sim 20\%$.

H440

ordering example

H440	X	150	D	4	H	32	H	08
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valve assembly

X prepared for modular bodies
Z tube connection P and T

motor power

075 0.75 kW (4 poles)
110 1.10 kW (4 poles)
150 1.50 kW (2-/4 poles)
220 2.20 kW (4 poles)
250 2.50 kW (2 poles)

motor speed

2 2 poles (≈2800 min⁻¹)
4 4 poles (≈1450 min⁻¹)

manometer

M with manometer
H without manometer

tank size

05 5 L
08 8 L
11* 11 L *horizontal only

mounting position

H horizontal
V vertical

pump size

pump	cm ³ /U	L/min		Pmax [bar]
		≈1450 min ⁻¹ 50 Hz	≈2800 min ⁻¹ 50 Hz	
11	1.1	1.5	3.1	230
13	1.3	1.8	3.6	230
16	1.6	2.2	4.5	230
21	2.1	2.9	5.9	230
26	2.6	3.6	7.3	230
32	3.2	4.5	9.0	210
37	3.7	5.2	10.4	210
42	4.2	5.9	11.8	210
48	4.8	6.7	-	190
58	5.8	8.1	-	190
79	7.9	11.1	-	160

When operating at 60 Hz, motor speed, oil flow, and power are increased by ~20 %.

permissible maximum operating pressure p (bar) for operating mode S3-20 %

kW		1.1	1.3	1.6	2.1	2.6	3.2	3.7	4.2	4.8	5.8	7.9
		cm ³ /U										
0.75	(1400 min ⁻¹)	230	230	196	149	120	96	83	73	65	53	39
1.10	(1400 min ⁻¹)	230	230	230	230	200	160	138	122	107	89	65
1.50	(2800 min ⁻¹ , 1400 min ⁻¹)	230/230	230/230	230/230	178/230	145/230	117/210	102/203	89/178	-/157	-/130	-/95
2.20	(1400 min ⁻¹)	230	230	230	230	230	210	210	210	190	178	130
2.50	(2800 min ⁻¹)	230	230	230	230	210	171	148	130	--	--	--

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HEX6345D-en

Technical data and illustrations

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