

Series description: Wilo-Economy MHI



Similar to figure

Design

Non-self-priming multistage pump

Application

- Water supply and pressure boosting
- Industrial circulation systems
- Process water
- Closed cooling circuits
- Washing system
- Irrigation
- Water treatment

Type key

Example:

MHI

2

05

1

E

3

400

50

2

IE3

MHI 205-1/E/3-400-50-2-IE3

Multistage horizontal high-pressure centrifugal pump

Flow rate in m³/h

Number of impellers

Material

1 = 1.4301 (AISI 304)

2 = 1.4404 (AISI 316L)

Gasket type

E = EPDM

V = FKM (Viton)

1 = 1~ (alternating current)

3 = 3~ (three-phase current)

Connection voltage in V

Frequency in Hz

Number of poles

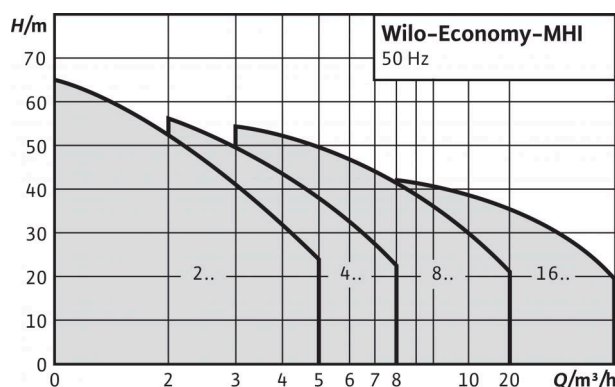
IE3 motor

Special features/product advantages

- IE3 IEC three-phase AC motor (≥ 0.75 kW)
- All parts that come in contact with the fluid are made of stainless steel 1.4301 (AISI 304) or 1.4404 (AISI 316L)
- Space-saving, compact design
- Drinking water approval (ACS, KTW, WRAS) for all components in contact with the fluid (EPDM version)

Technical data

- Mains connection 1~230 V (± 10 %), 50 Hz or optionally 220 V (± 10 %), 60 Hz
- Mains connection: 3~230 V (± 10 %), 50 Hz (Δ) or optionally 265 V (± 10 %), 60 Hz (Δ), 400 V (± 10 %), 50 Hz (Y) or optionally 460 V (± 10 %), 60 Hz (Y); identical motor: 3~220 V (± 10 %), 60 Hz (Δ), 380 V (± 10 %), 60 Hz (Y);
- Fluid temperature of -15 to +110 °C
- Max. operating pressure 10 bar
- Max. intake pressure of 6 bar
- Protection class 1~: IPX4; 3~: IP54
- Nominal diameters of pipe connections: Rp 1, Rp 1 ¼ or Rp 1 ½, depending on type



Pump curves in accordance with ISO 9906: 2012 3B

Equipment/function

- Stainless steel in monobloc design
- Threaded connection
- Single-phase or three-phase AC motor
- Single-phase AC motor equipped with built-in thermal motor protection (with automatic restart)

Materials

- Impellers, stage chambers and pump housing made of 1.4301/1.4404 stainless steel
- Shaft 1.43.01 or 1.4404 stainless steel
- Seal EPDM (EP 851) / FKM (Viton)
- Mechanical seal
- EPDM version: B-carbon/silicon carbide
- FKM version: Silicon carbide/B-carbon
- Bearing tungsten carbide/aluminium oxide
- Pump base aluminium

Scope of delivery

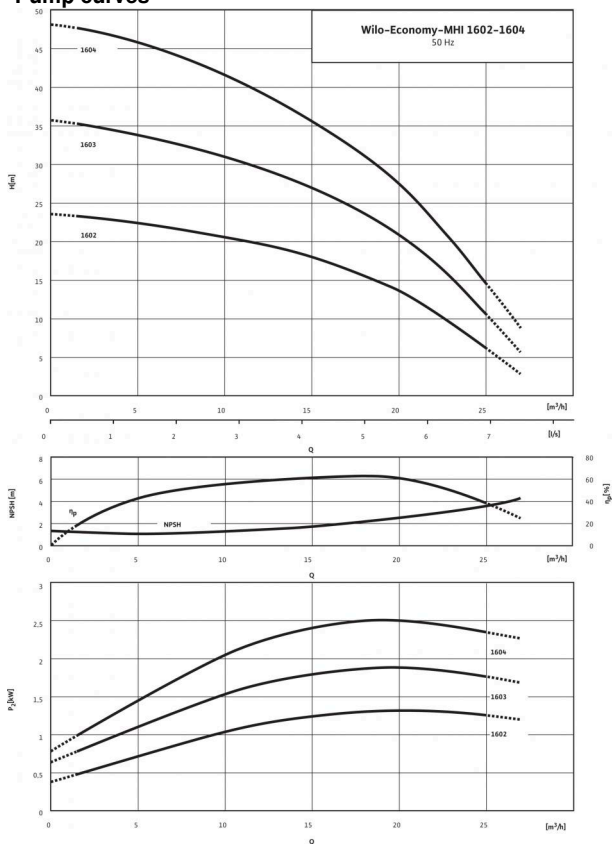
- Pump
- Installation and operating instructions

Product list: Wilo-Economy MHI

Type	Mains connection	Static seal	Gross weight <i>m</i>	Rated power P_2	Art no.
MHI 804	1~230 V, 50 Hz	EPDM	17.5 kg	1.5 kW	4024306
MHI 804	1~230 V, 50 Hz	FKM	17.5 kg	1.5 kW	4015700
MHI 804	3~400 V, 50 Hz	EPDM	20.6 kg	1.5 kW	4210747
MHI 804	3~400 V, 50 Hz	FKM	20.6 kg	1.5 kW	4210749
MHI 805	3~400 V, 50 Hz	EPDM	22.0 kg	2.2 kW	4210750
MHI 805	3~400 V, 50 Hz	FKM	22.0 kg	2.2 kW	4210752
MHI 1602	3~400 V, 50 Hz	EPDM	20.5 kg	1.5 kW	4210710
MHI 1603	3~400 V, 50 Hz	EPDM	22.9 kg	2.2 kW	4210713
MHI 1604	3~400 V, 50 Hz	EPDM	23.6 kg	2.2 kW	4210715

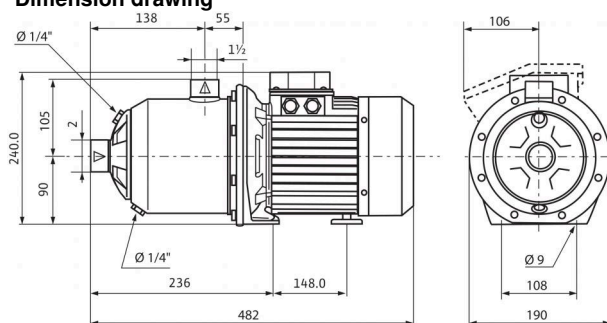
Data sheet: Economy MHI 1602 (3~400 V, EPDM)

Pump curves

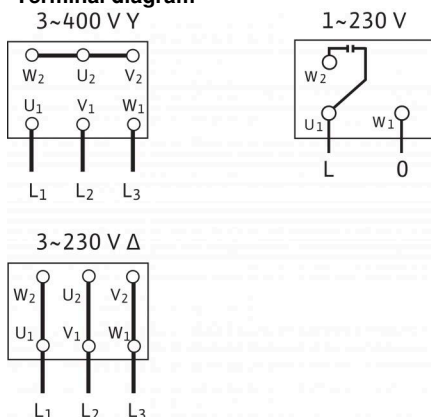


Pump curves in accordance with ISO 9906: 2012 3B

Dimension drawing



Terminal diagram



Power

Fluid temperature T	-15...+110 °C
Max. ambient temperature T	40 °C
Rated pressure	PN bar
Inlet pressure max. H	6 bar
Maximum operating pressure p_{max}	10 bar

Motor

Insulation class	F
Protection class	IP 54
Mains connection	3~400 V, 50 Hz
Rated power P_2	1.50 kW
Power consumption P_1	2.09 kW
Nominal current 3~230 V, 50 Hz I_N	6.4 A
Nominal current 3~400 V, 50 Hz I_N	3.7 A
Motor efficiency η_m 50%	83.0 %
Motor efficiency η_m 75%	84.2 %
Motor efficiency η_m 100%	84.2 %

Connections

Rated pressure level (on the pressure side) PN	PN 10
Rated pressure level (on the suction side) PN	PN 10

Materials

Impeller	1.4301 [AISI304]
Pump housing	1.4301 [AISI304]
Pump shaft	1.4301 [AISI304]
Static seal	EPDM
Mechanical seal	BQ1E3GG

Information for order placements

Make	Wilo
Type	MHI 1602
Art no.	4210710
Weight approx. m	19.0 kg

• = available, - = not available

Note on inlet pressure

The maximum inlet pressure is calculated by subtracting the maximum delivery head of the pump at $Q=0$ from the maximum operating pressure of the system.

Note on materials

1.4301 corresponds to AISI 304, 1.4404 corresponds to AISI 316L.