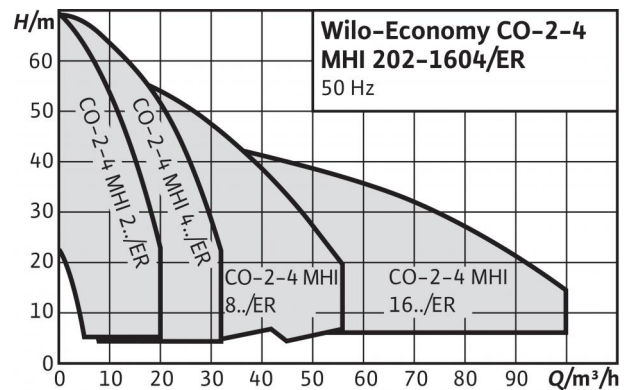


Series description: Wilo-Economy CO-MHI.../ER



Similar to figure

Design

Pressure boosting system with 2 to 4 parallel-switched, non-self-priming, horizontal high-pressure multistage centrifugal pumps made of stainless steel

Application

- For fully automatic water supply and pressure boosting in residential, commercial and public buildings, hotels, hospitals, department stores and for industrial systems
- Pumping of drinking water and process water, cooling water, fire water (apart from fire-extinguishing systems in accordance with DIN 14462 and with the approval of the local fire safety authorities) or other types of industrial water that do not attack the materials either chemically or mechanically and do not contain abrasive or long-fibre constituents.

Type key

Example:	Wilo-CO-2 MHI 405/ER
CO	Compact pressure boosting system
2	Number of pumps
MHI	Pump series
4	Rated volume flow of the single pump [m³/h]
05	Number of single-pump stages
ER	Control unit; ER = Economy controller

Special features/product advantages

- Compact system with outstanding price/performance ratio in compliance with the requirements of DIN 1988
- 2 - 4 horizontal MHI series full stainless steel high-pressure multistage centrifugal pumps switched in parallel
- Easily adjustable and operationally reliable thanks to integrated ER 2 to ER 4 switchgears

Technical data

Series description: Wilo-Economy CO-MHI.../ER

Technical data

- Mains connection 3~230 V $\pm 10\%$, 50 Hz (other versions on request)
 - Max. fluid temperature 50 °C (70 °C optional)
 - Max. ambient temperature of 40 °C
 - Operating pressure 10 bar
 - Inlet pressure 6 bar
 - Nominal connection diameter on the discharge side Rp 1¼ - DN 100
 - Nominal connection diameters on intake side Rp 1¼ - DN 100
 - Rated speed 2850 rpm
 - Protection class IP 41 / IP 54 optional
 - Fuse A, AC 3 on mains side according to motor power and EVU regulations
 - Approved fluids (other fluids on request):
 - Cooling water
 - Potable and process water
 - Fire water (wet line; for dry lines on request - comply with separate specifications of DIN 1988 (EN 806) and of fire-protection approved fluids)
- Note on fire-protection approved fluids: are generally waters which do not attack the materials used, neither chemically nor mechanically, and do not contain any abrasive or long-fibre constituents.

Equipment/function

- 2-4 pumps per system
- Components that come in contact with fluid are corrosion-resistant
- Galvanized base frame with height-adjustable vibration damper for insulation against structure-borne noise
- Pipework made of 1.4571 stainless steel
- Gear-operated shut-off ball cock/annular shut-off valve on every pump, on the suction and pressure side
- Non-return valve, pressure side
- Diaphragm pressure vessel 8 l, PN16, pressure side
- Pressure sensor, on the discharge side
- Optional pressure gauge (suction side)
- Pressure gauge (discharge side)
- Optional low-water cut-out switchgear

Description/design

- Base frame: galvanised and provided with height-adjustable vibration absorbers for comprehensive insulation against structure-borne noise; other versions on request
- Pipework: complete pipework made of stainless steel, suitable for the connection of all piping materials used in building services; pipework is dimensioned according to the overall hydraulic performance of the pressure boosting system
- Pumps: 2 to 4 parallel pumps from the series MHI 2, MHI 4, MHI 8 and MHI 16; all pump components in contact with fluid are made of stainless steel
- Valves: each pump is fitted on the suction and pressure side with a shut-off valve with DVGW approval mark and a pressure-side DVGW-approved non-return valve
- Diaphragm pressure vessel: 8 l/PN16 on the discharge side, with a butyl rubber diaphragm, completely safe in accordance with food safety laws; for testing and inspection purposes, with shut-off ball cock, with drain and throughflow fitting according to DIN 4807
- Pressure sensor: 4 to 20 mA, located on the discharge side for activating the central Economy Controller
- Pressure display: by means of \varnothing 63 mm pressure gauge on the discharge side
- Switchgear: System is standard-equipped with ER 2-4 Economy Controller

Materials

- Impellers: 1.4301/1.4404 stainless steel
- Stage chambers: 1.4301/1.4404 stainless steel
- Pump housing: 1.4301/1.4404 stainless steel
- Shaft: 1.4404 stainless steel
- Gasket: EPDM (EP 851)/FKM (Viton)
- Housing cover: 1.4301/1.4404
- Mechanical seal: B-carbon/tungsten carbide
- Pressure shroud: 1.4301/1.4404
- Bearing: Tungsten carbide
- Pump foot: Aluminium

Scope of delivery

- Factory-mounted, connection-ready pressure boosting system checked for functionality and impermeability
- Packaging
- Installation and operating instructions

Options

Other mains connections on request

Consulting guide

Inlet pressure

The maximum inlet pressure (see Technical data) is to be observed for the system configuration. The maximum inlet pressure is calculated from the maximum system operating pressure minus the maximum pump delivery head at $Q = 0$.

Only for fire protection systems

Version in accordance with DIN 1988 (EN 806), part 5+6

This does not apply to fire-extinguishing systems in accordance with DIN 14462. Please request these separately.

Series description: Wilo-Economy CO-MHI.../ER

Consulting guide

Always observe the specifications in DIN 1988 (EN 806) when using and operating the pressure boosting system.

Duty chart: Wilo-Economy CO-MHI.../ER

