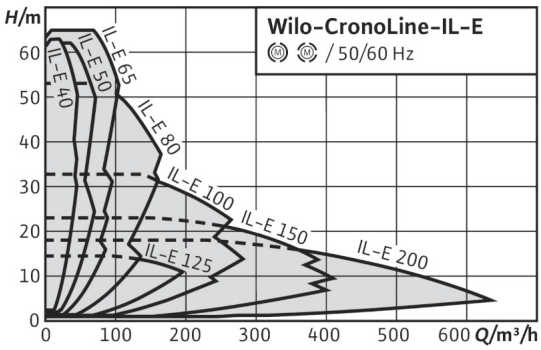
Series description: Wilo-CronoLine-IL-E



Design
Electronically controlled glanded double pump in in-line design with flange connection and automatic power adjustment

Application
For pumping heating water (in accordance with VDI 2035), water-glycol mixtures and cooling and cold water without abrasive substances in heating, cold water and cooling water systems

Type key

Example	**ILE 50/170-7,5/2R1**
ILE	In-line pump with electronic control
50	Nominal diameter DN of the pipe connection
170	Nominal impeller diameter
7,5	Nominal motor power P_2 in kW
2	Number of poles
R1	Version without pressure sensor

Special features/product advantages
- Motors with IE2 technology for higher efficiency fitted as standard
- Energy savings due to integrated electronic performance control
- Simple operation with red-button technology and display
- Integrated dual pump management
- Two configurable signal relays for run and fault signals
- Configurable fault response tailored to HVAC applications
- Access disable on the pump
- Integrated full motor protection (TRS) with trip electronics
- Functions and operation identical to Wilo-VeroLine-IP-E
- High corrosion protection thanks to cataphoretic coating
- Condensate drainage holes as standard

Technical data
- Permissible temperature range -20 °C to +140 °C
- Mains connection
  - 3~400 V ±10 %, 50 Hz
  - 3~380 V -5 % +10 %, 60 Hz
- Protection class IP 55
- Nominal diameter DN 40 to DN 200
- Max. operating pressure 16 bar

Description/design
Single-stage, low-pressure centrifugal pump in in-line design with
- Mechanical seal
- Flange connection
- Lantern
- Coupling
- Drive with integrated electronic speed control

Materials
- Pump housing and lantern: EN-GJL-250
- Impeller
  - Standard version: EN-GJL-200
  - Special version: G-CuSn 10
- Shaft: 1.4122
- Mechanical seal: AQEGG; other mechanical seals on request

Equipment/function
Operating modes
- Δp-c for constant differential pressure
- Δp-v for variable differential pressure
- PID control
- Manual control mode (n=constant)

Manual operation level
- Red button and display

Manual functions
- Differential pressure setpoint setting
- Speed setting (manual control mode)
- Operating mode setting
- Pump ON/OFF setting
- Configuration of all operating parameters
- Error acknowledgement

External control functions
- "Overriding Off" control input
- "External pump cycling" control input (effective only in double pump operation mode)
- Analogue input 0–10 V, 0–20 mA for manual control mode (DDC) and remote setpoint adjustment
- Analogue input 2–10 V, 4–20 mA for manual control mode (DDC) and remote setpoint adjustment
- Analogue input 0–10 V for actual value signal from pressure sensor
- Analogue input 2–10 V, 0–20 mA, 4–20 mA for actual value signal from pressure sensor

Signal and display functions
- Collective fault signal SSM
- Collective run signal SBM

Data exchange
- Infrared interface for wireless data exchange with IR-Module/IR-Stick
- Plug-in position for Wilo IF-Modules (Modbus, BACnet, CAN, PLR, LON)

Series description: Wilo-CronoLine-IL-E

for connection to building automation

Safety functions
- Full motor protection with integrated trip electronics
- Access disable

Dual pump management (double pump or 2 x single pump)
- Main/standby operation (automatic fault-actuated switchover)
- Pump cycling main/standby operation after 24 hours
- Parallel operation
- Parallel operation (efficiency-optimised peak-load activation and deactivation)

Scope of delivery
- Pump
- Installation and operating instructions

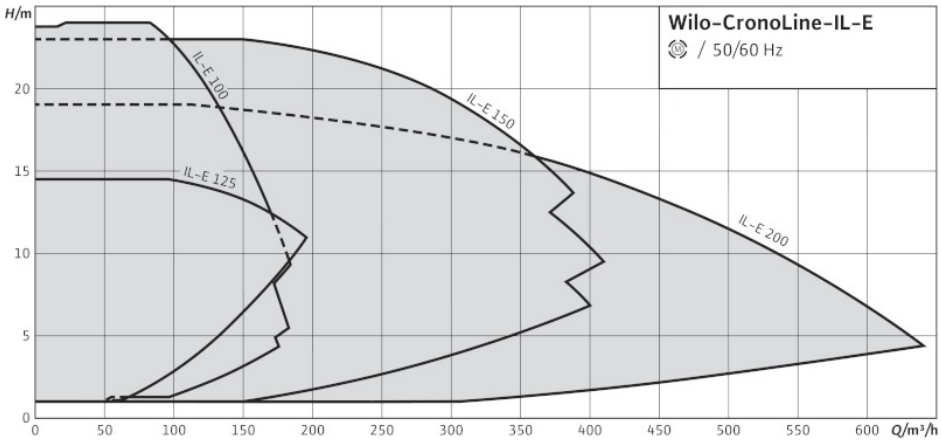
Options
- R1 version without differential pressure sensor
- L1 variant with red brass impeller (at additional charge)
- H1 variant with housing made of spheroidal cast iron (at additional charge)

Accessories
- Three mounting brackets with fixation material for installation on a base
- IR-Monitor, IR-Stick
- IF-Module PLR for connecting to PLR/interface converter
- IF-Module LON for connection to the LONWORKS network
- BACnet IF-Module
- Modbus IF-Module
- CAN IF-Module
- VR-HVAC control system
- Control system CCe-HVAC
- SC-HVAC control system

General notes – ErP (ecological design-) directive
- The benchmark for most efficient water pumps is MEI ≥ 0.70
- The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter.
- The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system.
- Information on benchmark efficiency is available at www.europump.org/efficiencycharts

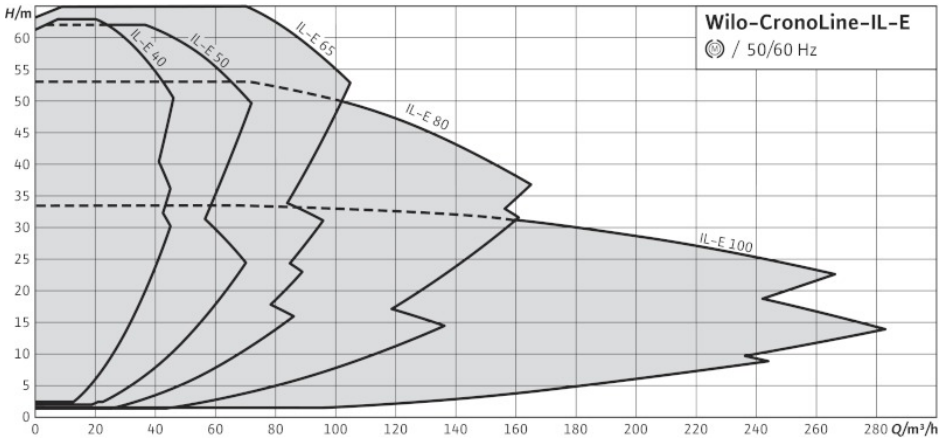
Duty chart: Wilo-CronoLine-IL-E

Wilo-CronoLine-IL-E (4-pole)



Duty chart: Wilo-CronoLine-IL-E

Wilo-CronoLine-IL-E (2-pole)



Technical data: Wilo-CronoLine-IL-E

Approved fluids (other fluids on request)		
Heating water (in accordance with VDI 2035)		•
Water-glycol mixtures (for 20-40 vol.% glycol and fluid temperature ≤ 40 °C)		•
Cooling and cold water		•
Heat transfer oil		Special version at additional charge
Permitted field of application		
Standard version for operating pressure	p_{max}	13 bar (up to +140 °C) bar 16 bar (up to +120 °C) bar
Special version for operating pressure	p_{max}	–
Temperature range at max. ambient temperature +40 °C		-20...+140 °C (depending on the fluid)
Max. ambient temperature		40 °C
Installation in closed buildings		•
Outdoor installation		–
Pipe connections		
Nominal connection diameters DN		40 - 200
Flanges (according to EN 1092-2)		PN 16
Materials		
Pump housing		EN-GJL-250
Lantern		EN-GJL-250
Impeller		EN-GJL-200
Impeller (special version)		G-CuSn10
Pump shaft		1.4122
Mechanical seal		AQEGG
Other mechanical seals		On request
Electrical connection		
Mains connection		3~440 V, 50/60 Hz 3~400 V, 50/60 Hz 3~380 V, 50/60 Hz
Speed range		380-1450 750-2900 rpm
Motor/electronics		
Motor technology		Asynchronous motor
Integrated full motor protection		•
Protection class		IP 55
Insulation class		F
Emitted interference		EN 61800-3
Interference resistance		EN 61800-3
Residual-current protection device (RCD)		•

Technical data: Wilo-CronoLine-IL-E

Installation options	
Pipe installation (≤ 15 kW motor power)	•
Support-bracket mounting	•