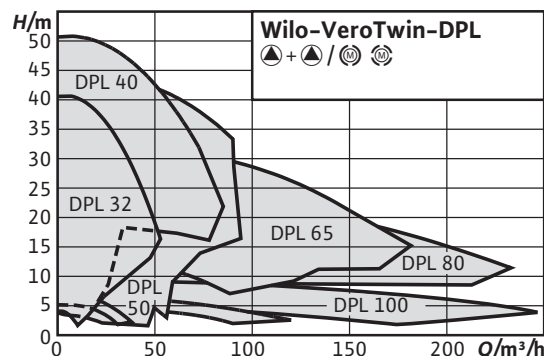


Series description: Wilo-VeroTwin-DPL



Design

Glanded double pump in in-line design with flange connection

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	DPL 40/1604/2
DPL	In-line double pump
40	Nominal diameter DN of the pipe connection
160	Nominal impeller diameter
4	Nominal motor power P_2 in kW
2	Number of poles

Special features/product advantages

- High-efficiency motors as standard; from 0.75 kW nominal motor power: motors with IE2 technology
- Reduction of space required and installation costs due to double pump design
- Main/standby mode or peak-load operation (by means of external auxiliary device)
- Standard condensate drainage holes in the motor housings and lanterns
- High corrosion protection thanks to cataphoretic coating
- Series version: Motor with one-piece shaft
- Version N: Standard motor B5 or V1 with stainless steel plug shaft
- Bidirectional mechanical seal with forced flushing
- Easy to install thanks to feet with threaded holes on the pump housing for all flange-end pumps

Technical data

- Permissible temperature range -20 °C to $+120\text{ °C}$
- Mains connection 3~400 V, 50 Hz (others on request)
- Protection class IP 55
- Nominal diameter DN 32 to DN 100
- Max. operating pressure 10 bar (special version: 16 bar)

Description/design

Single-stage, low-pressure double pump in in-line design with

- Switchover valve
- Mechanical seal
- Flange connection with pressure measuring connection $R\frac{1}{8}$
- Motor with one-piece shaft

Materials

- Pump housing and lantern: EN-GJL-250
- Impeller: PP fibreglass-reinforced /ENGJL200 (depending on pump type)
- Shaft: 1.4021
- Mechanical seal: AQ1EGG; other mechanical seals on request

Scope of delivery

- Pump
- Installation and operating instructions

Options

- H5 variant with PN16 housing (at additional charge)
- Motors with efficiency class IE3, other voltages and frequencies, as well as ATEX approval on request

Accessories

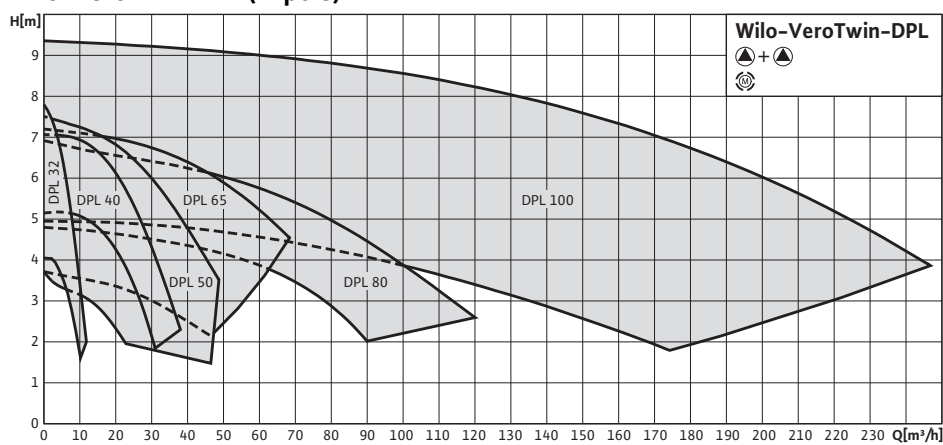
- Mounting brackets for installation on a base
- PTC thermistor sensor, PTC resistor tripping relay
- Special motors
- Special mechanical seals
- Control systems CC-HVAC, VR-HVAC and switchgear

General notes - ErP (ecological design-) directive

- The benchmark for most efficient water pumps is $MEI \geq 0.70$
- 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

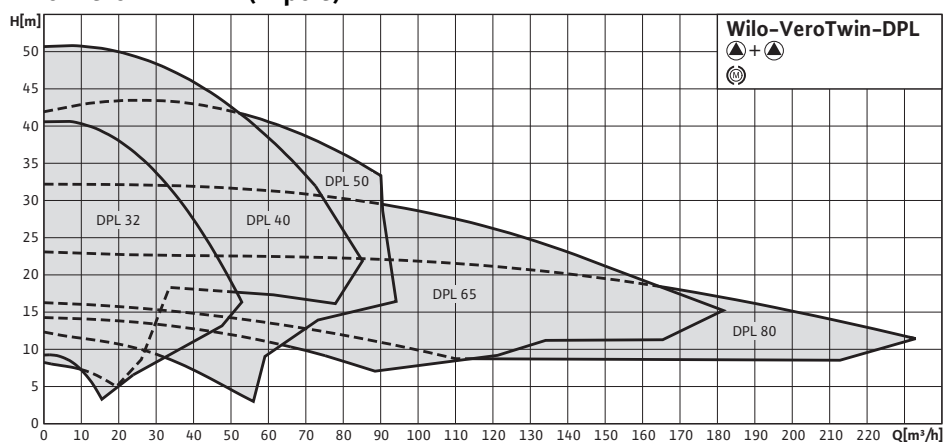
Duty chart: Wilo-VeroTwin-DPL

Wilo-VeroTwin-DPL (4-pole)



Duty chart: Wilo-VeroTwin-DPL

Wilo-VeroTwin-DPL (2-pole)



Technical data: Wilo-VeroTwin-DPL

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}	10 bar
Special version for operating pressure	p_{max}	16 bar
Temperature range at max. ambient temperature +40 °C		-10...+120 °C (depending on the fluid)
Max. ambient temperature		40 °C
Installation in closed buildings		•
Outdoor installation		Special version at additional charge

Pipe connections

Threaded connection		–
Nominal connection diameters DN		32 -100
Flanges (according to EN 1092-2)		PN 10 (PN 16 on request)
Flange with pressure-measurement connections		R $\frac{1}{8}$

Materials

Pump housing		EN-GJL-250
Lantern		EN-GJL-250
Impeller		PPO-GF30
Impeller (special version)		–
Pump shaft		1.4021
Mechanical seal		AQEGG
Other mechanical seals		On request

Electrical connection

Mains connection		3~400 V, 50 Hz
Nominal speed	n	1450/2900 rpm

Motor/electronics

Integrated full motor protection		Special version with PTC thermistor sensor (KLF) at additional charge
Protection class		IP 55
Insulation class		F
Speed control		Wilo control system
Motor winding up to 3 kW		230 V Δ /400 V Y, 50 Hz
Motor winding from 4 kW		400 V Δ /690 V Y, 50 Hz

Installation options

Technical data: Wilo-VeroTwin-DPL

Pipe installation (≤ 15 kW motor power)

•

Support-bracket mounting

•