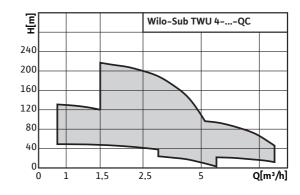


Series description: Wilo-Sub TWU 4-QC





Design

Submersible pump, multistage

Application

- For water supply from boreholes and rainwater storage tanks
- For domestic water supply, sprinkling and irrigation
- Pressure boosting
- Lowering the water level
- · For pumping water without long-fibre and abrasive constituents

Type key

e.g.	Wilo-Sub TWU 4-0203-C-QC	
TWU	Submersible pump	
4	Diameter of the hydraulic unit in inches ["]	
02	ominal volume flow [m³/h]	
03	Number of hydraulic stages	
С	Series generation	
QC	Quick Connect Cable	
	for simple and fast	
	extension for the motor cable	

- Special features/product advantages
 Parts that come in contact with fluids are corrosion-free
- · Low-wearing due to floating impellers
- Integrated non-return valve
- Quick and easy extension of motor cable, without dismantling the
- Vertical and horizontal installation possible

- Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz
- Immersed operating mode: S1
- Fluid temperature: 3-30 °C
- Minimum flow rate at motor: 0.08 m/s
- Max. sand content: 50 g/m³
- Max. number of starts: 20/h

Materials

- Hydraulic housing: 1.4301 stainless steel
- Impellers: Noryl
- Hydraulics shaft: 1.4104 stainless steel
- Motor housing: 1.4301 stainless steel
- Motor shaft: 1.4305 stainless steel

Description/design

Submersible-motor pump for vertical or horizontal installation. Hydraulics

Multistage submersible-motor pump with radial or semi-axial impellers in sectional construction. Integrated non-return valve. All parts in contact with the fluid are made of corrosion-free materials.

Corrosion-free single-phase or three-phase AC motor for direct starting. Sealed and hermetically cast motor, resin-impregnated, with enamelinsulated winding, self-lubricating bearing, with water-glycol filling.

The motor is cooled by the fluid. The motor must always be operated in submerged state. The limit values for the max. fluid temperature and the minimum flow rate must not be exceeded. Vertical installation is possible optionally with or without cooling jacket. Cooling jacket is required for horizontal installation.

General notes - ErP (ecological design-) directive

- Minimum Efficiency Index (MEI) ≥ 0

 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

ConfigurationNo suction mode is possible with these units!



Series description: Wilo-Sub TWU 4-QC

- Max. immersion depth: 200 m
- Protection class: IP 68
- Pressure connection: Rp 1¼ Rp 2

- **Equipment/function** Multistage submersible–motor pump with radial or semi–axial impellers
- Hermetically cast motors
- Integrated non-return valve
- NEMA coupling
- · Single-phase or three-phase motor
- · Integrated thermal motor protection for single-phase motor

• The unit must be fully immersed in water during operation.

- Scope of delivery

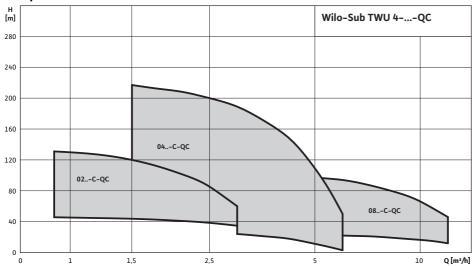
 Hydraulics + motor fully mounted
- 1.5 or 1.75 m connecting cable approved for potable water (cross-section: 4x1.5 mm²)
- Cable binders
- Retaining cable made of polypropylene
- 1x clamp for fixing the retaining cable to the unit
- Single-phase version including switchbox with capacitor, thermal motor protection and On/Off switch
- Installation and operating instructions

Motor versions for special voltages 1~230 V, 60 Hz; 3~380 V, 60 Hz



Duty chart: Wilo-Sub TWU 4-QC

Pump curves



 $1{\sim}230$ V or $3{\sim}400$ V, 50 Hz, p=1 kg/dm3, $v=1x10{-}6$ m2/s, ISO 9906 Annex A, $\eta=pump$ efficiency



Equipment/function: Wilo-Sub TWU 4-QC

NEMA connection - Standardied connection - Integrated non-eturn valve - Without non-return valve - Single-phase AC motor - Direct activation - Star-della activation - Kor Coperation - Motor with cast stator - Rewindable motor - Oil motor filling - Water-glycol motor filling - Potable water motor filling - Putydaulics/motor preassembled - Application - Vertical installation	Design			
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Without non-return valve - Single-phase AC motor - Three-phase motor - Direct activation - Star-delta activation - FC operation - Motor with cast stator - Rewindable motor - Oil motor filling - Water-glycol motor filling - Potable water motor filling - Potable water motor filling - Hydraulics/motor pressembled - Application - Horizontal installation 0 Vertical installation - Vertical installation - Vertical installation - Wotor temperature monitoring, PTL00 - Motor temperature monitoring, PTL0 - Supplement/function - Pury-running protection system - Integrated lightning protection - Rearing brackets for horizontal installation - Cooling jacket - Non-return valve -	Standardised connection	-		
Single-phase AC motor . Three-phase motor . Direct activation . Star-delta activation - FC operation . Motor with cast stator . Rewindable motor - Oil motor filling - Water-glycol motor filling . Potable water moto filling . Hydraulics/motor preassembled . Application . Horizontal installation . Vertical installation . Vertical installation . Vertical installation . Motor temperature monitoring. PTLO . Motor temperature monitoring. PTC . Capacitor box for 1-230 V . Dry-running protection system . Integrated lightning protection . Accessories . Bearing brackets for horizontal installation . Cooling jacket optional Non-return valve . Pressue shroud stainless steel Pump housing (special version) . <tr< td=""><td>Integrated non-return valve</td><td>•</td></tr<>	Integrated non-return valve	•		
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FC operation	Direct activation	•		
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Oil motor filling - Water-glycol motor filling - Potable water motor filling - Hydraulics/motor preassembled - Application - Horizontal installation • Vertical installation • Motor temperature monitoring, PT100 - Motor temperature monitoring, PTC - Capacitor box for 1-230 V • Dry-running protection system - Integrated lightning protection - Accessories - Bearing brackets for horizontal installation - Cooling jacket optional Non-return valve - Pressure shroud - Materials - Pump housing Stainless steel Pump housing (special version) - Impeller Plastic Motor housing Stainless steel	Motor with cast stator	•		
Water-glycol motor filling - Potable water motor filling - Hydraulics/motor preassembled - Application - Horizontal installation - Vertical installation - Vertical installation - Worth Capital installation - Motor temperature monitoring, PT100 - Motor temperature monitoring, PT10 - Capacitor box for 1~230 V - Dry-running protection system - Integrated lightning protection - Accessories - Bearing brackets for horizontal installation - Cooling jacket optional Non-return valve - Pressure shroud - Materials - Pump housing (special version) Stainless steel Impeller Plastic Impeller (special version) - Motor housing Stainless steel	Rewindable motor	-		
Potable water motor filling - Hydraulics/motor preassembled - Application - Horizontal installation - Vertical installation - Equipment/function - Motor temperature monitoring, PT100 - Motor temperature monitoring, PTC - Capacitor box for 1~230 V - Dry-running protection system - Integrated lightning protection - Accessories - Bearing brackets for horizontal installation - Cooling jacket optional Non-return valve - Pressure shroud percessories Materials - Pump housing Stainless steel Pump housing (special version) - Impeller Plastic Impeller (special version) - Motor housing Stainless steel	Oil motor filling	_		
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Vertical installation	Application			
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Motor temperature monitoring, PT100–Motor temperature monitoring, PTC–Capacitor box for 1~230 V•Dry-running protection system–Integrated lightning protection–Accessories–Bearing brackets for horizontal installation–Cooling jacketoptionalNon-return valve–Pressure shroud–Materials–Pump housingStainless steelPump housing (special version)–ImpellerPlasticImpeller (special version)–Motor housingStainless steel	Vertical installation	•		
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Dry-running protection system - Integrated lightning protection - Accessories Bearing brackets for horizontal installation - Cooling jacket optional Non-return valve - Pressure shroud - The surface of the surface o	Motor temperature monitoring, PTC	_		
Integrated lightning protection — Accessories Bearing brackets for horizontal installation — Cooling jacket optional Non-return valve — Pressure shroud — Materials Pump housing (special version) — Stainless steel Pumpler (special version) — Plastic Impeller (special version) — Stainless steel Motor housing Stainless steel	Capacitor box for 1~230 V	•		
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Pressure shroud – Materials Pump housing Stainless steel Pump housing (special version) – Impeller Plastic Impeller (special version) – Motor housing Stainless steel	Cooling jacket	optional		
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Pump housing (special version) Impeller Impeller (special version) Motor housing Plastic - Stainless steel	Materials			
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Impeller (special version) – Motor housing Stainless steel	Pump housing (special version)	-		
Motor housing Stainless steel	•	Plastic		
•	Impeller (special version)	-		
Motor housing (special version) –	Motor housing	Stainless steel		
	Motor housing (special version)	-		

^{• =} available, = not available