

## Series description: Wilo-Sub TWU 4-...-GT



#### Design

Submersible-motor pump, multi-stage

### Application

- Geothermal applications
- 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

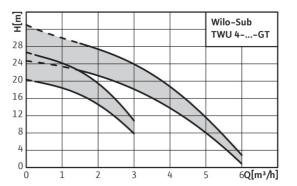
### Type key

e.g.	Wilo-Sub TWU 4-0203-C-QC-GT
TWU	Submersible pump
4	Diameter of the hydraulic unit in inches ["]
02	Nominal volume flow [m <sup>3</sup> /h]
03	Number of hydraulic stages
С	Series generation
QC	Quick Connect Cable
	for simple and fast
	extension for the motor cable
GT	for geothermal applications

- Special features/product advantages Parts that come in contact with fluids are corrosion-free
- Low-wearing due to floating impellers .
- Integrated non-return valve
- Simple and quick extension of the motor cable without dismantling the pump (for QC version)
- Vertical and horizontal installation possible

### **Technical data**

- Mains connection: 3~400 V, 50 Hz
- Immersed operating mode: S1
- Fluid temperature: 3-30°C



- Equipment/function Multi-stage submersible pump with radial or semi-axial impellers
- Hermetically cast motors
- Integrated non-return valve
- NEMA coupling
- Three-phase motor

#### Materials

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

#### Description/design

Submersible pump for vertical or horizontal installation. Hydraulics

Multi-stage submersible 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. Motor

Corrosion-free three-phase motor for direct starting. Sealed and hermetically cast motor with enamel-insulated winding, resinimpregnated, self-lubricating bearing, with water-glycol filling. Cooling

The motor is cooled by the fluid. The motor must always be operated in submerged state. The limit values for the maximum 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.

#### Configuration

- No suction mode is possible with these units!
- The unit must be fully immersed in water during operation.

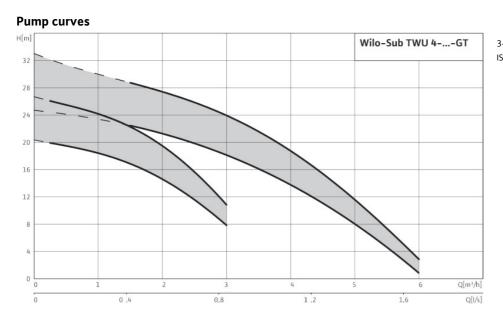
- Scope of deliveryHydraulics and motor ready assembled
- Connecting cable approved for potable water (cross-section 4 x 1.5 mm<sup>2</sup>)
- Installation and operating instructions

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- Minimum motor flow: 0.08 m/s
- Max. sand content: 50 g/m<sup>3</sup>
- Max. number of starts: 20/h
- Max. immersion depth: 200 m
- Protection class: IP 68
- Pressure connection: Rp 1¼

Options • Motor versions for special voltages 3~380 V, 60 Hz; 3~460 V, 60 Hz

# Duty chart: Wilo-Sub TWU 4-...-GT



3~400 V, 50 Hz, p = 1 kg/dm3, v = 1x10-6 m2/s, ISO 9906 Annex A



# Equipment/function: Wilo-Sub TWU 4-...-GT

Design   •     NEMA connection   •     Standardised connection   -     Integrated non-return valve   •     Without non-return valve   -     Stingle-phase AC motor   -     Three-phase motor   •     Direct activation   •     Star-delta activation   -     *C operation   •     Aotor with cast stator   •     Rewindable motor   -	
itandardised connection-ntegrated non-return valve-Vithout non-return valve-single-phase AC motor-Three-phase motor-Direct activation-Direct activation-C operation-Aotor with cast stator-	
ntegrated non-return valve   •     Vithout non-return valve   -     single-phase AC motor   -     Three-phase motor   •     Direct activation   •     ctar-delta activation   -     cC operation   •     Aotor with cast stator   •	
Vithout non-return valve –	
iingle-phase AC motor -   Three-phase motor •   Direct activation •   ctar-delta activation -   cC operation •   Motor with cast stator •	
hree-phase motor •   Direct activation •   bitar-delta activation -   C operation •   Motor with cast stator •	
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C operation • Notor with cast stator •	
And the state of t	
lewindable motor –	
Dil motor filling –	
Vater-glycol motor filling •	
Potable water motor filling –	
Hydraulics/motor preassembled •	
Application	
lorizontal installation •	
/ertical installation •	
Equipment/function	
Aotor temperature monitoring, PT100 –	
Aotor temperature monitoring, PTC –	
Capacitor box for 1~230 V •	
Dry-running protection system –	
ntegrated lightning protection –	
Accessories	
Bearing brackets for horizontal installation –	
Cooling jacket opt	tional
Jon-return valve	
Pressure shroud –	
Materials	
	inless steel
Pump housing (special version) –	
mpeller Plas	stic
mpeller (special version) –	
	inless steel
Aotor housing (special version) –	

• = available, = not available



# Product list: Wilo-Sub TWU 4-...-GT

Pump type	Mains connection	Max. volume flow	Max. delivery head	Optimum volume flow	Motor diameter	Pressure connection	Nominal motor power	Art no.
		Q <sub>max</sub> /m <sup>3</sup> /h	H <sub>max</sub> /m	Q <sub>opt</sub> /m <sup>3</sup> /h	ø / "		P <sub>2</sub> /kW	
TWU 4-0203-C-GT	3~400 V, 50 Hz	2	20	2	4	Rp 1¼	0.25	6060195
TWU 4-0203-C-QC-GT	3~400 V, 50 Hz	2	20	2	4	Rp 1¼	0.25	6060197
TWU 4-0204-C-GT	3~400 V, 50 Hz	2	25	2	4	Rp 1¼	0.25	6060196
TWU 4-0204-C-QC-GT	3~400 V, 50 Hz	2	25	2	4	Rp 1¼	0.25	6060194
TWU 4-0404-C-GT	3~400 V, 50 Hz	6	24	4	4	Rp 1¼	0.25	6065751
TWU 4-0404-C-QC-GT	3~400 V, 50 Hz	6	24	4	4	Rp 1¼	0.25	6065753
TWU 4-0405-C-GT	3~400 V, 50 Hz	6	33	4	4	Rp 1¼	0.37	6065752
TWU 4-0405-C-QC-GT	3~400 V, 50 Hz	6	33	4	4	Rp 1¼	0.37	6065754