

## Series description: Wilo-Drain TS 40-65

Wilo-Drain TS 40



Wilo-Drain TS 50-65



### Design

Submersible drainage pump

### Type key

Example:	<b>Wilo-Drain TS 50 H 111/11-A</b>
<b>TS</b>	Submersible pump for wastewater
<b>50</b>	Connection: 50 (= Rp 2); 65 (= Rp 2½)
<b>H</b>	Impeller shape: H = half-open impeller
<b>111</b>	Nominal diameter of the impeller in mm
<b>11</b>	Power $P_2$ in kW (=value/10 = 1.1 kW)
	Version:
<b>A</b>	A = with float switch and connecting cable with shockproof plug (1~230 V/50 Hz) or CEE plug (3~400 V/50 Hz) CEE = without float switch with CEE plug without = without float switch with bare cable end

### Additional type key:

Example:	<b>Wilo-Drain TS 40/10-A</b>
<b>TS</b>	Submersible pump for wastewater
<b>40</b>	Connection: 40 (Rp 1½)
<b>10</b>	Max. delivery head in m
	Version:
<b>A</b>	A = with float switch and connecting cable with shockproof plug (1~230 V/50 Hz) or CEE plug (3~400 V/50 Hz) CEE = without float switch with CEE plug without = without float switch with bare cable end

### Application

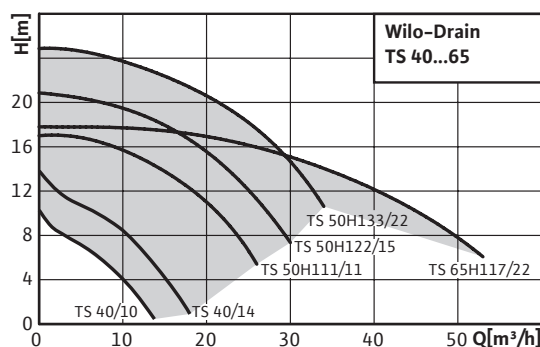
- For pumping wastewater with foreign matter of max.  $\varnothing$  10 mm for
  - Domestic and site drainage
  - Environmental and water treatment technology
  - Industrial and process engineering

### Special features/product advantages

- Inox and composites
- Detachable connection cable
- Wide performance range
- Internal capacitor (TS 40/1~)
- Internal self-switching thermal motor monitoring (TS 40 and TS 50/1~)

### Technical data

- Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz
- Protection class: IP 68
- Max. immersion depth: TS 40 = 5 m; TS 50/TS 65 = 10 m
- Fluid temperature: 3~35 °C
- Cable length: 10 m
- Free ball passage: 10 mm
- Pressure port: TS 40 = Rp 1, TS 50 = Rp 1¼, TS 65 = Rp 2½



### Equipment/function

- Ready-to-plug for 1~230 V and A and CEE model
- Thermal motor monitoring
- Explosion protection (TS 50/3~ and TS 65)
- Connection cable detachable
- Integrated non-return valve (TS 40)
- Hose connection (TS 40)

### Description/design

Submersible wastewater pump as submersible monobloc unit for stationary and portable wet well installation.

#### Hydraulics

The output on the pressure side is configured as a vertical threaded connection Rp 1½ (TS 40), Rp 2 (TS 50) or Rp 2½ (TS 65). Semi-open channel impellers with free ball passage of 10 mm are used as the impeller.

#### Motor

Dry motors as single-phase or three-phase AC motors with thermal motor monitoring. On models TS 40 and TS 50 (1~ only) this monitoring is built-in and self-switching. The waste heat is given off directly to the surrounding fluid via the housing components. As a result, these units must always be immersed for permanent or intermittent operation.

A sealing chamber protects the motor from fluid ingress. The filling fluid used is potentially biodegradable and environmentally safe.

The cable is detachable, oil-resistant and has bare cable ends. The cable lengths are available in length increments of 10 m. The A model is equipped with a float switch and a shock-proof plug (1~230 V/50 Hz) or a CEE plug (3~400 V/50 Hz). The CEE model does not have a float switch and is equipped with a CEE plug.

#### Sealing

Sealing on the fluid side is done using a bidirectional mechanical seal. On the TS 40, sealing on the motor side is likewise done using a bidirectional mechanical seal. On the TS 50 and TS 65, sealing on the motor side is with a rotary shaft seal.

### Materials

#### TS 40:

- Pump housing PPGF30
- Impeller PPGF30
- Shaft 1.4404
- Sealing on motor side: mechanical seal SiC/SiC
- Sealing on pump side: mechanical seal SiC/SiC
- Static seal: NBR
- Motor housing 1.4301

#### TS 50, 65:

- Pump housing: PUR
- Impeller: PP-GF30
- Shaft: 1.4404
- Sealing on motor side: NBR rotary shaft seal
- Sealing on pump side: mechanical seal SiC/SiC
- Static seal: NBR
- Motor housing 1.4301

### Scope of delivery

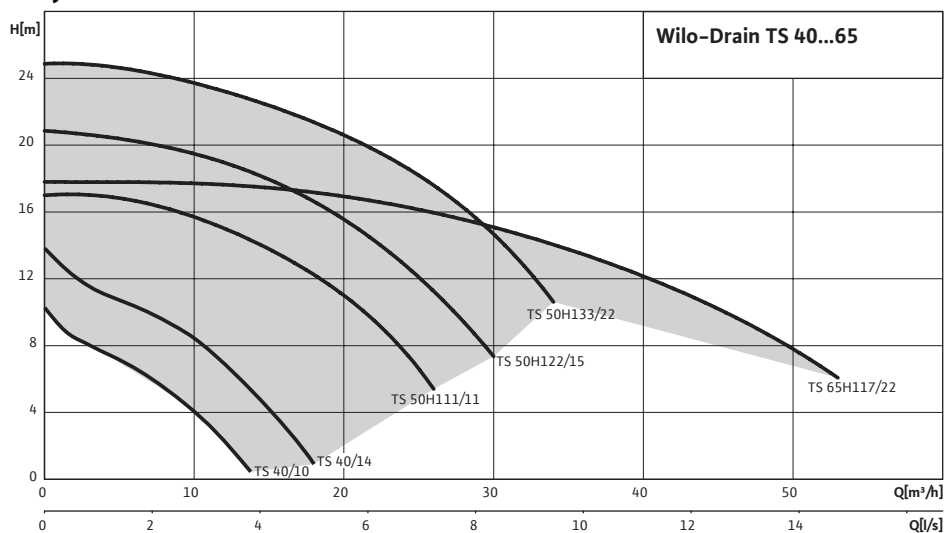
- Pump ready for connection with 10 m connection cable and bare cable end
- "A" model equipped with float switch and shock-proof plug (1~230 V/50 Hz) or CEE plug (3~400 V/50 Hz)
- "CEE" version equipped with CEE plug
- Hose connection (TS 40 only)

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- Installation and operating instructions

## Duty chart: Wilo-Drain TS 40-65

Duty chart



## Equipment/function: Wilo-Drain TS 40-65

### Design

Submersible	•
Non-self-priming	•
Open single-channel impeller	-
Vortex impeller	-
Open multi-channel impeller	•
Turbulator	-
Sealing chamber	•
Sealing for mechanical seal on motor side	•
Sealing for rotary shaft seal on motor side	-
Sealing for mechanical seal on fluid side	•
Sealing for rotary shaft seal on fluid side	-
Single-phase AC motor	•
Three-phase motor	•
Direct activation	•
Star-delta activation	-
FC operation	-
Dry motor	•
Motor with oil cooling	-
Sheath current cooling	-

### Application

Wet well installation, stationary	•
Wet well installation, portable	•
Dry well installation, portable	-
Dry well installation, stationary	-

### Equipment/function

Explosion protection	-
Hose connection	•
Float switch	•
Non-return valve	•
Capacitor box for 1~230 V	-
Connecting cable detachable	•
Ready-to-plug	•

• = available or approved, - = not available or not approved