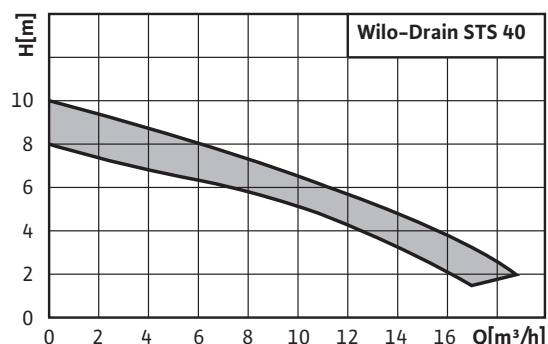


Series description: Wilo-Drain STS 40



Design

Submersible sewage pump

Application

Pumping of heavily contaminated fluids for:

- Domestic and site drainage
- Sewage disposal (pumping of sewage free of faeces) in accordance with DIN EN 12050-2)
- Water management
- Environmental and water treatment technology
- Industrial and process engineering

Type key

e.g.:	WiloDrain STS 40/10A
STS	Submersible pump
40	Nominal diameter [mm]
10	Max. delivery head [m]
A	With float switch

Special features/product advantages

- Detachable connection cable and float switch
- Attached float switch (A-model) enables easy operation
- Integrated pump base for easy installation
- Free ball passage: 40 mm
- Integrated thermal motor protection (1~/3~) and phase failure protection (3~)
- Impeller made of stainless steel

Technical data

- Mains connection: 1~230 V, 50 Hz or 3~400 V, 50 Hz
- Immersed operating mode: S1 or S3 25%
- Protection class: IP 68
- Insulation class: B
- Thermal winding monitoring
- Max. fluid temperature: 3 35 °C
- Cable length: 10 m
- Free ball passage: 40 mm

Equipment/function

- Ready-to-plug single-phase version
- A-model version including float switch
- Thermal motor monitoring

Description/design

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

Hydraulics

The outlet on the pressure side is designed as vertical threaded connection Rp 1½. Vortex impellers are used as the impeller shapes.

Motor

Dry motors give off their heat directly to the surrounding fluid via the housing components and can be used in immersed state 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 single-phase AC motors are equipped with shockproof plugs, and A-model versions with float switches. The three-phase AC motors are equipped with bare cable ends.

Sealing

Sealing on the fluid side is achieved by a bidirectional mechanical seal, while sealing on the motor side is achieved by a rotary shaft seal.

Materials

- Pump housing: EN-GJL-250
- Pedestal: grey cast iron
- Impeller: stainless steel 1.4301
- Shaft: stainless steel 1.4404
- Mechanical seal on pump side: carbon/ceramic
- Shaft seal on motor side: NBR
- Static gasket: NBR
- Motor housing: stainless steel 1.4301

Scope of delivery

- Pump ready for connection with 10 m connection cable
 - For 1~230 V with shock-proof plug
 - For 3~400 V with bare cable end
- A-model version with attached float switch
- Installation and operating instructions

Series description: Wilo-Drain STS 40

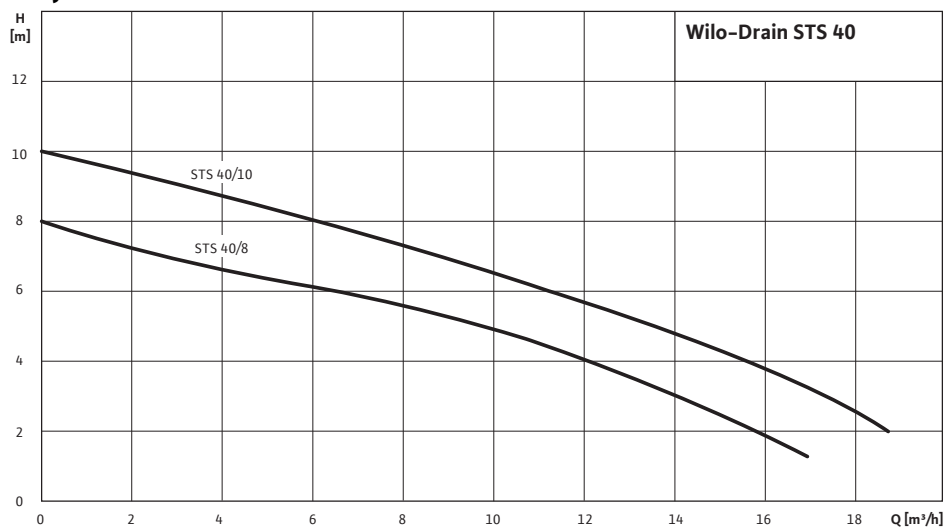
- Max. immersion depth: 5 m

Accessories

- Non-return valve and gate valve
- Various pressure outlets and hoses
- Switchgears and relays

Duty chart: Wilo-Drain STS 40

Duty chart



Equipment/function: Wilo-Drain STS 40

Design	
Submersible	•
Single-channel impeller	-
Vortex impeller	•
Multi-channel impeller	-
Open multi-channel impeller	-
Macerator	-
Turbulator	-
Sealing chamber	•
Leakage chamber	-
Sealing for mechanical seal on motor side	-
Sealing for rotary shaft seal on motor side	•
Sealing for mechanical seal on fluid side	•
Single-phase AC motor	•
Three-phase motor	•
Direct activation	•
Star-delta activation	-
FC operation	-
Dry motor	•
Motor with oil cooling	-
Dry motor with closed-circuit cooling	-
Application	
Wet well installation, stationary	-
Wet well installation, portable	•
Dry well installation, stationary	-
Dry well installation, portable	-
Equipment/function	
Motor leakage monitoring	-
Sealing chamber monitoring	-
Leakage chamber monitoring	-
Motor temperature monitoring, bimetal	•
Motor temperature monitoring, PTC	-
Explosion protection	-
Float switch	• Version A
Capacitor box for 1~230 V	• integrated
Ready-to-plug	• 1~
Materials	
Pump housing	Cast iron
Impeller	Cast iron
Motor housing	Stainless steel

• = available, - = not available; = optional