

Series description: Wilo-RainSystem AF Basic



Design

Ready-to-plug rainwater utilisation system

Application

Rainwater utilisation for saving potable water in conjunction with cisterns or tanks

Type key

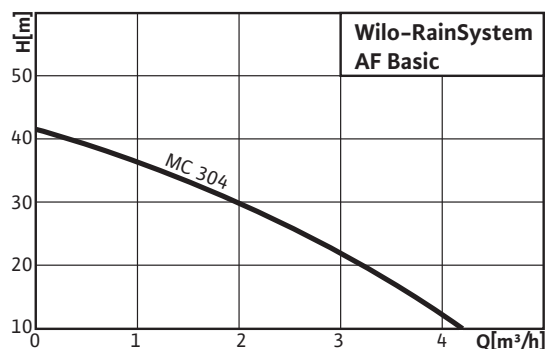
Example	Wilo-AF Basic MC 304 EM
AF	Automatic rainwater utilisation and potable water replenishment system (Aqua Feed)
MC	Self-priming, horizontal, multistage centrifugal pump of the series MultiCargo MC
3	Volume flow (m ³ /h) at optimum efficiency
04	Number of stages
EM	Single-phase motor 1~230 V, 50 Hz

Special features/product advantages

- Compact, ready-to-plug rainwater utilisation system
- Low-noise through multi-stage centrifugal pump
- In compliance with DIN 1989 and EN 1717
- High economic efficiency due to needs-based fresh water replenishment
- Flow and noise-optimised replenishment reservoir
- All parts that come in contact with the fluid are corrosion-free
- Optional connection of a back-up pump

Technical data

- Mains connection 1~230 V, 50 Hz
- Suction head max. 8 m
- Operating pressure max. 8 bar
- Protection class IP 42
- Connections:
 - Pressure pipe/pressure side Rp 1
 - Suction side R 1/ G 1
 - Potable water replenishment R ¾
 - Connection overflow DN 70



Equipment/function

- Connection-ready module with compact construction
- Electrical and hydraulic connections already in place, mounted on corrosion-protected base frame.
- Comprising:
 - Self-priming, corrosion-free, low-noise MultiCargo MC centrifugal pump
 - Pressure-side pipework R 1
 - Potable water replenishment reservoir (11 l) with float valve
 - 1.8 m connection cable and mains plug
 - Rain Control Basic RCB switchgear with control electronics as well as flow monitor / pressure controller
 - 3-way valve and float switch with 20 m cable for monitoring rainwater storage tank levels
 - Connection for overflow warning

Description/design

- Ready-to-plug single-pump water-supply unit as compact module for single-family houses
- Fully automatic supply of rainwater from an underground storage tank or rainwater storage
- 11-litre replenishment reservoir for optimised replenishment of potable water into the consumer network when rainwater storage tank is not full
- System fulfils the criteria outlined in DIN 1989 and EN 1717
- Automatic switchover to potable water replenishment, time-dependent water exchange in replenishment reservoir, integrated automatic shutdown in the event of dry running.
- System control RainControl Basic RCB with FluidControl

Materials

- Pump housing stainless steel 1.4301
- Impeller made of Noryl
- Shaft stainless steel 1.4028
- Mechanical seal made of ceramic/carbon
- Stage chambers made of Noryl

Scope of delivery

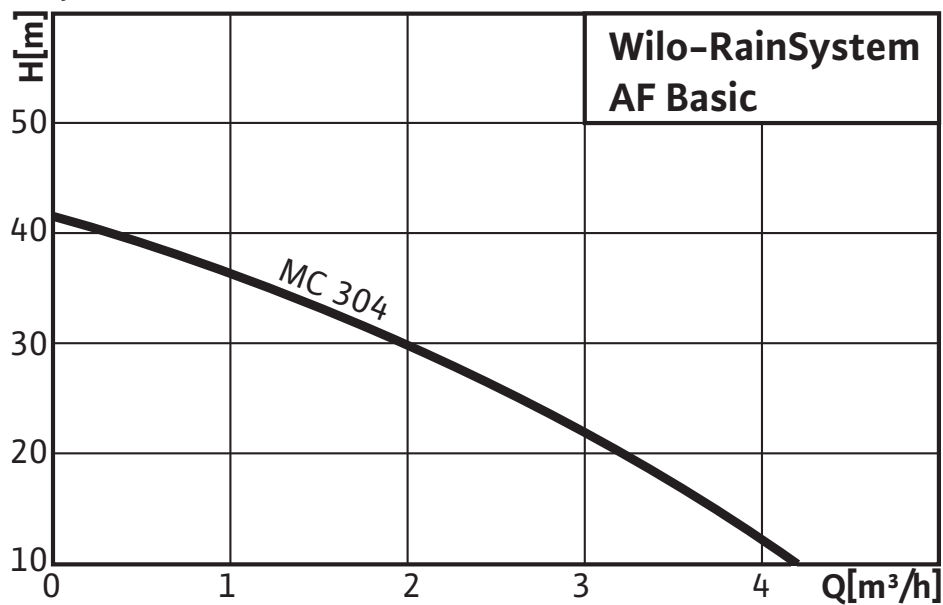
- Ready-to-connect rainwater utilisation system with fixation material, installation sketch, Installation and operating instructions and packaging

Options

- Overflow signalling device
- Cover made of EPP

Duty chart: Wilo-RainSystem AF Basic

Pump curves



Equipment/function: Wilo-RainSystem AF Basic

Design		
Compact rainwater utilisation system		•
Replenishment reservoir	V	11 l
Corrosion-free		•
Protection against low water level		•
UV-stabilized system tank		•
Diaphragm pressure vessel		–
Connection for backflow warning		•
Corrosion-free steel tubing framework		–
Ball valve on suction and pressure sides		–
Joint tubing on pressure side		–
Pressure gauge		•
Hydraulics		
Self-priming		•
Non-self-priming		–
Multistage centrifugal pump		•
Directly flanged motor		•
Motor data		
Mains connection		1~230 V, 50 Hz
Equipment/function		
Electronic control, RainControl Professional		–
Electronic system control, RainControl Hybrid		–
Menu-prompted operation and LCD display		–
Operation and fault signals		•
Wilo-Fluidcontrol (for automatic operation)		•
Pump cycling and test run function		–
Automatic fault-actuated switchover and peak-load cut-in		–
Automatic water exchange in the replenishment reservoir		•
Automatic prevention of lime deposits on the solenoid valve		–
Permanent display of rainwater storage tank level, system pressure, operating status via LCD		–
Accessories		
Operating hours counter		–
Individual run and fault signals		–
Extension modules		–
Overflow signalling device		•

• = available, – = not available

Technical data: Wilo-RainSystem AF Basic

Approved fluids (other fluids on request)

Pure water without settling sediment	•
Rainwater	•

Output

Q_{\max}	Q	5 m ³ /h
H_{\max}		42 m
Max. suction head	H	8.0 m
Nominal motor power	P_2	550 W
Start-up pressure		1.5 bar
Switch-off pressure		2.2 bar
Fluid temperature	T	+5...+35 °C
Max. ambient temperature	T	40 °C
Mains connection		1~230 V, 50 Hz
Replenishment reservoir	V	11 l
Gross weight	m	25.50 kg

Motor/electronics

Protection class	IP 42
Insulation class	F

Connections

Pressure pipe/pressure side	Rp 1
Inlet	R ¾
Connection overflow [DN]	70

Materials

Pump housing	1.4301
Impeller	Noryl
Pump shaft	1.4028
Mechanical seal	Carbon/ceramic
Stage chambers	Noryl

• = available, = not available

1) Potable water replenishment via float valve with free outlet in accordance with EN 1717

2) Potable water rep□

3) Rainwater storage pump connection: Connecting piece d.50 (inlet integrated with non-turbulent supply line on the tank side) with overflow siphon as anti-siphon trap and full passage in accordance with DIN 1986) Overall system protection class: