



wilo

Wilo-Borehole pumps product presentation

Wilo Pumps LTD.

General application

1. **PSS – Stainless steel pump**
2. **PSB, PS3 – Plastic impeller**
3. **Zetos K8 – Stainless steel pump**
4. **Xiro SPC, SPI – cast iron & stainless steel pump**

Solar Borehole solution

1. **Wilo Acton Opti –HS, QS**



Borehole Pumps Standard Solution

Segments

- Water Management
 - Standard Distribution Business
 - Clean Water Utility
- Industry
 - Industrial Equipment Management
 - General Industry

Application

- Raw water/water supply out of boreholes and cisterns in municipal/industrial applications
- Pumping of water for sprinkling and irrigation
- Lowering of ground water level
- Pressure boosting

Wilo PSS

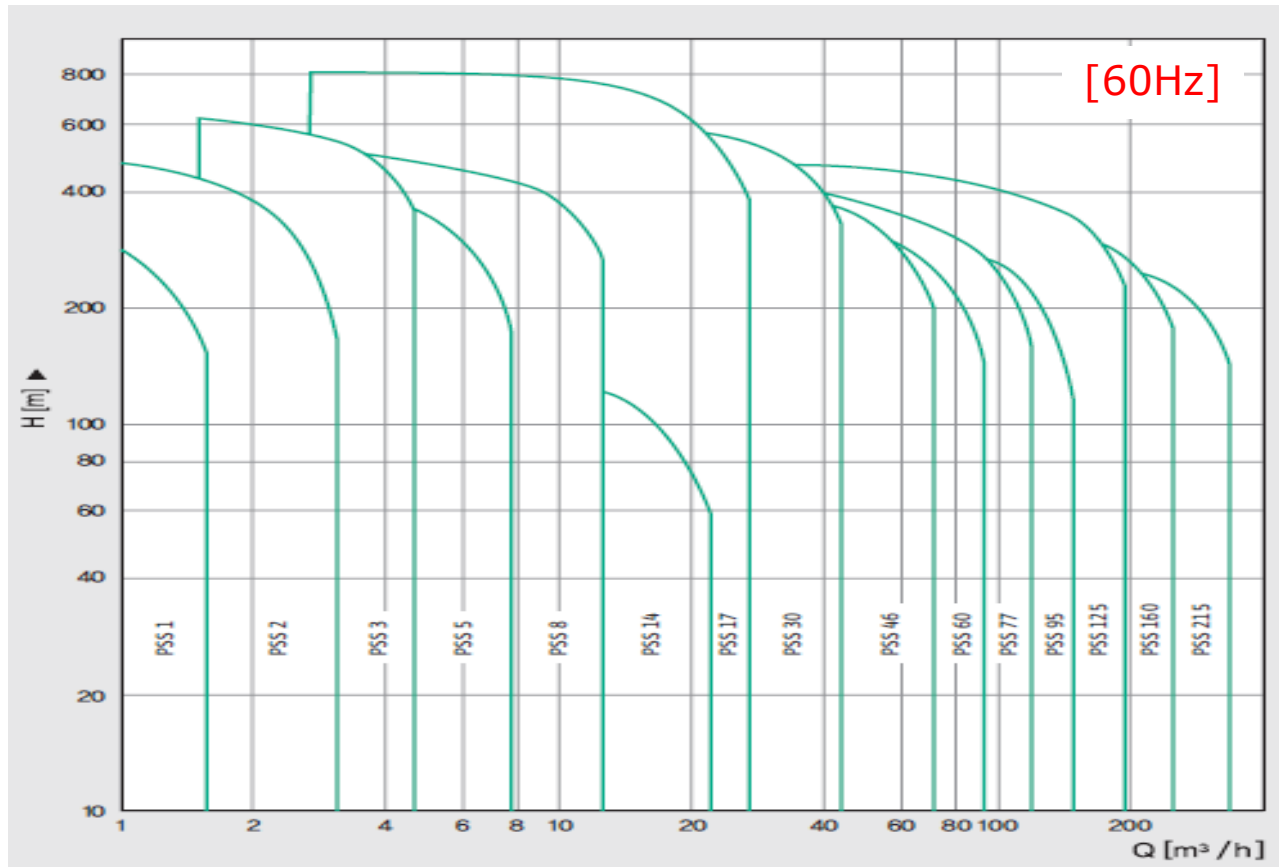
- Wilo PSS 4-8 Borehole Pumps Stainless Steel
- MF 4-12" Borehole Motors Canned Type or Rewindable Type
- MH 6-12" Borehole Motors Canned Type or Rewindable Type
- MS 4" Borehole Motors Canned Type / 6" Borehole Motor Oil filled type

Product advantages

- stainless steel material version
- Price competitiveness
- Wide operation chart (Flow and head)
- 50Hz and 60Hz solutions
- Variable motor options (Sumoto, Franklin, Hitach)



Submersible Pumps Family "Wilo-PSS "



[60hz]Flow :5~240m³/hr Head:800m [50hz]Flow :5~240m³/hr Head:480 m

Wilo PSB & PS3

- Wilo PSB 4, 6" Borehole Pumps Stainless Steel & Plastic impeller
- MS 4" Borehole Motors Canned Type / MH 6" Borehole Motors Canned Type
- Wilo PS3 Borehole Pumps Stainless Steel & Plastic impeller
- MS 3" Borehole Motors Oil filled type

Product advantages

- stainless steel Housing & Plastic Impeller
- Price competitiveness
- 50Hz and 60Hz solutions
- Variable model options (PSB-Q / M / H / G series)

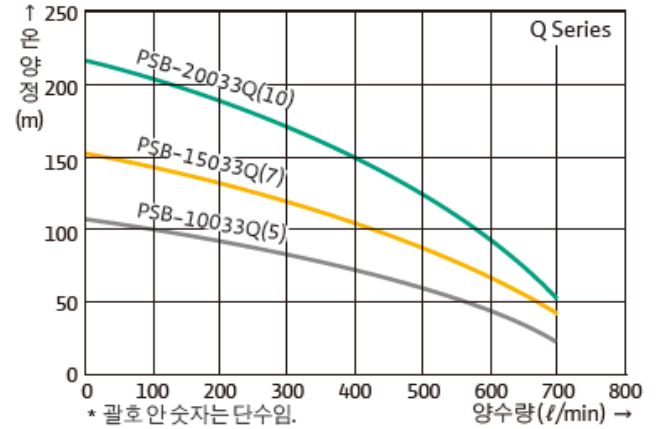
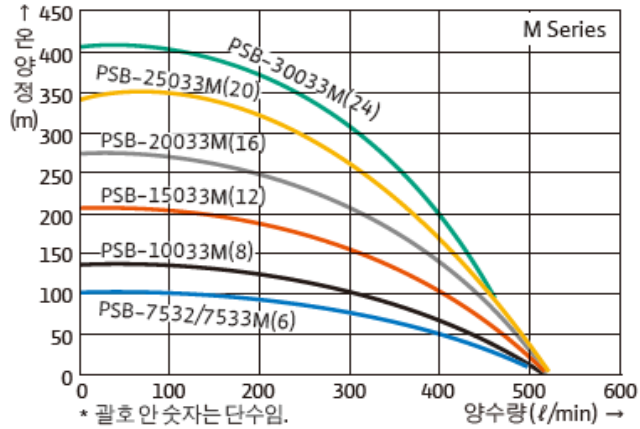
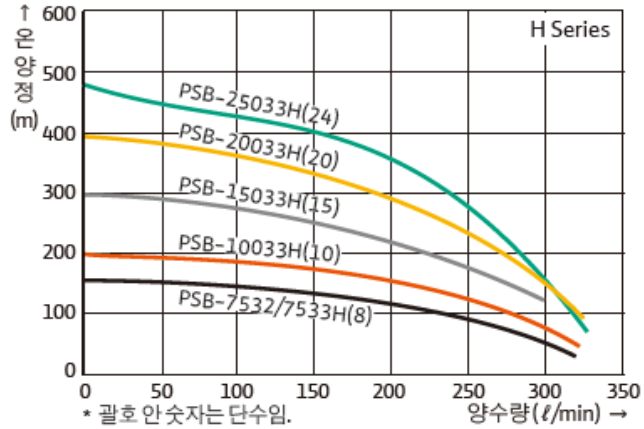


Submersible Pumps Family "Wilo-PSB & PS3 "



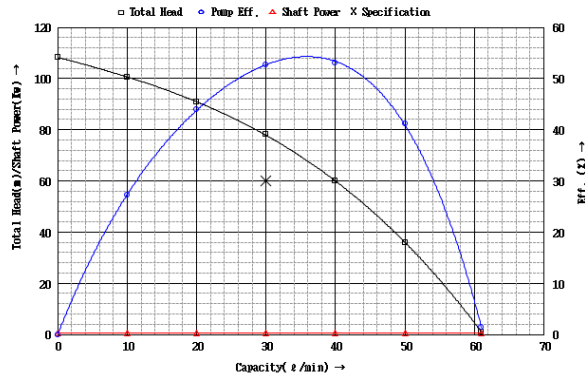
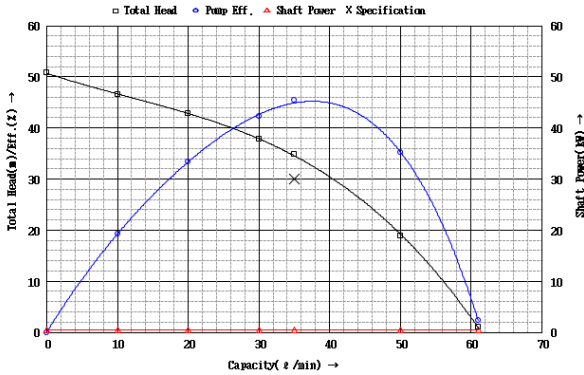
[60Hz]

PSB



[60hz]Flow : 15~650 l/min, Head max : 470m [50hz]Flow : 15~250 l/min, Head max : 190m

PS3



[60hz]Flow : 15~55 l/min Head max : 100m

Submersible Pumps Family "Wilo-PSS, PSB & PS3 "



Feature	PSS	PSB	PS3
Size	4, 6, 8, 10 inch	4, 6 inch	3 inch
Material housing	Stainless steel	Stainless steel	Stainless steel
Material impeller	Stainless steel	Plastic	Plastic
Design	Centrifugal impeller	Centrifugal impeller	Centrifugal impeller
Max. Flow	5 - 240 m ³ /h	39 m ³ /h	2.7 m ³ /h
Max head	800 m	480 m	100 m
Max. Water Temp.	40 °C Optional: 75 °C (40~75HP) 55°C (100~250HP)	35 °C	35 °C

Wilo Zetos K8

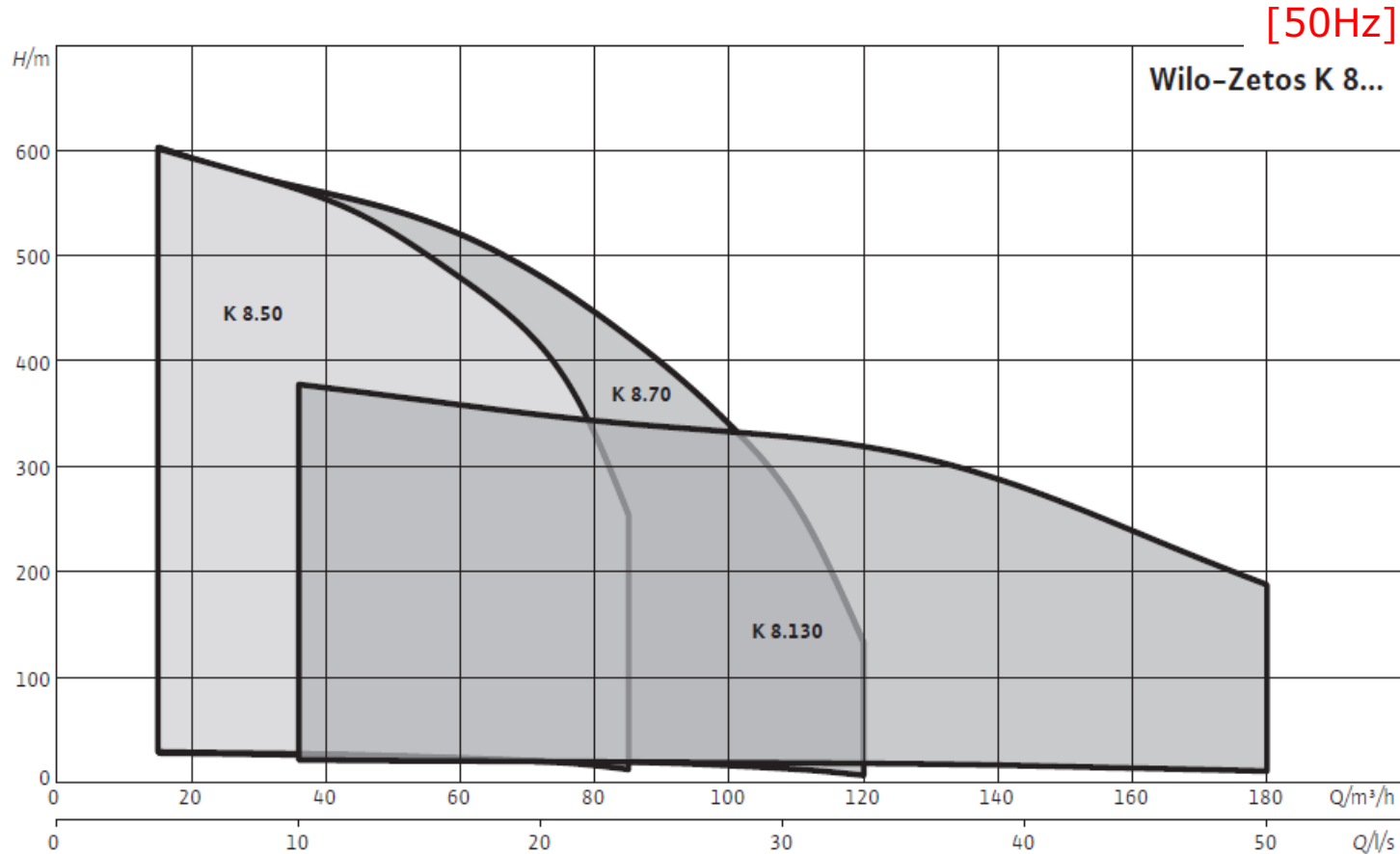
- Zetos K8 Borehole Pumps Stainless steel

Product advantages

- High efficiency
 - Operation-dependent hydraulic efficiencies of up to 84.5 %
- High wear resistance:
 - Max. sand content of 150 g/m³, optionally with ceramic CT-coating
- Suitable for pumping drinking water
 - Pumping drinking water with ACS approval



Submersible Pumps Family "Wilo-Zetos K8"



- Process water and water supply from boreholes and rainwater storage tanks in communal and industrial applications
- Pumping drinking water with ACS approval

Flow :20~200m³/hr Head:620m

Submersible Pumps Family "Wilo-Zetos K8"



Feature	Zetos K8
Size	8 inch
Material housing	Stainless steel
Material impeller	Stainless steel
Design	Radial / Semi axial impeller
Max. Flow	200 m³/h
Max head	620 m
Max. Water Temp.	70 °C

MOTOR Material options

Motor materials				
Type of motor	Motor shaft	Motor housing	Motor shroud	Screwed connection, motor
NU 501...	1.4305	EN-GJL	1.4301	A2
NU 611...	1.4301	1.4301	1.4306	A2
NU 701...	1.4305	EN-GJL	1.4301	A2
NU 801...	1.4021	EN-GJL	1.4301	A2
NU 811...	1.4301	EN-GJL	1.4306	A2

Motor materials				
Type of motor	Motor shaft (special version)	Motor housing (special version)	Motor shroud (special version)	Screwed connection, motor (special version)
NU 501...	1.4542	1.4408	1.4571	A4
NU 611...	1.4462	1.4571	1.4541	A4
NU 701...	1.4542	1.4401	1.4401	A4
NU 801...	1.4462	G-CuSn10	1.4571	A4
NU 811...	1.4462	1.4571	1.4541	A4

Wilo Xiro SPC and SPI

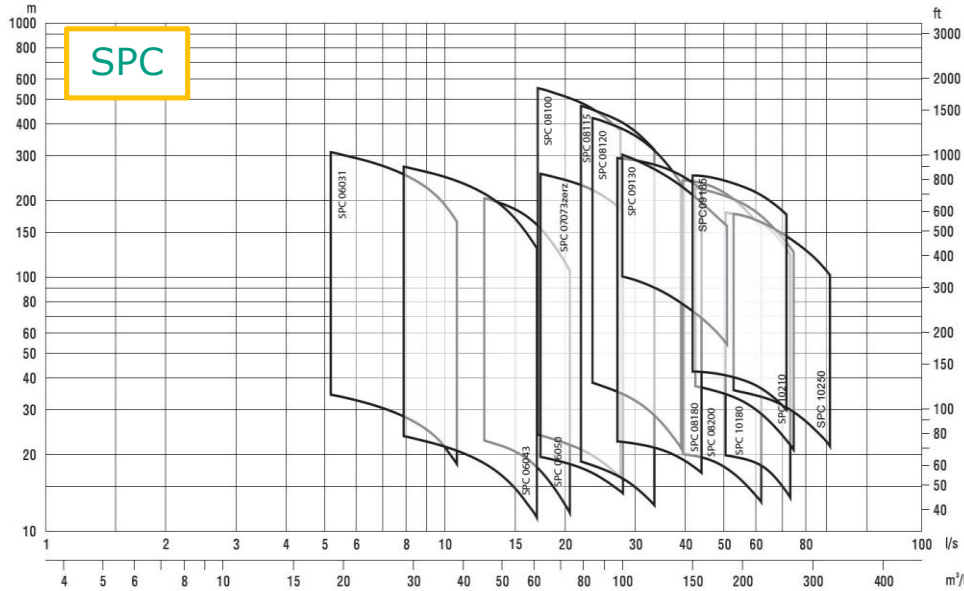
- Xiro SPC 6-10 Borehole Pumps Cast Iron
- Xiro SPI 6-10 Borehole Pumps Stainless Steel Sheet
- XC/XI 6-10 Borehole Motors water filled rewindable

Product advantages

- Cast iron and stainless steel sheet material version available
- Price competitiveness
- Water filled rewindable motors
- Wide operation chart (Flow and head)
- Potable water approval on demand

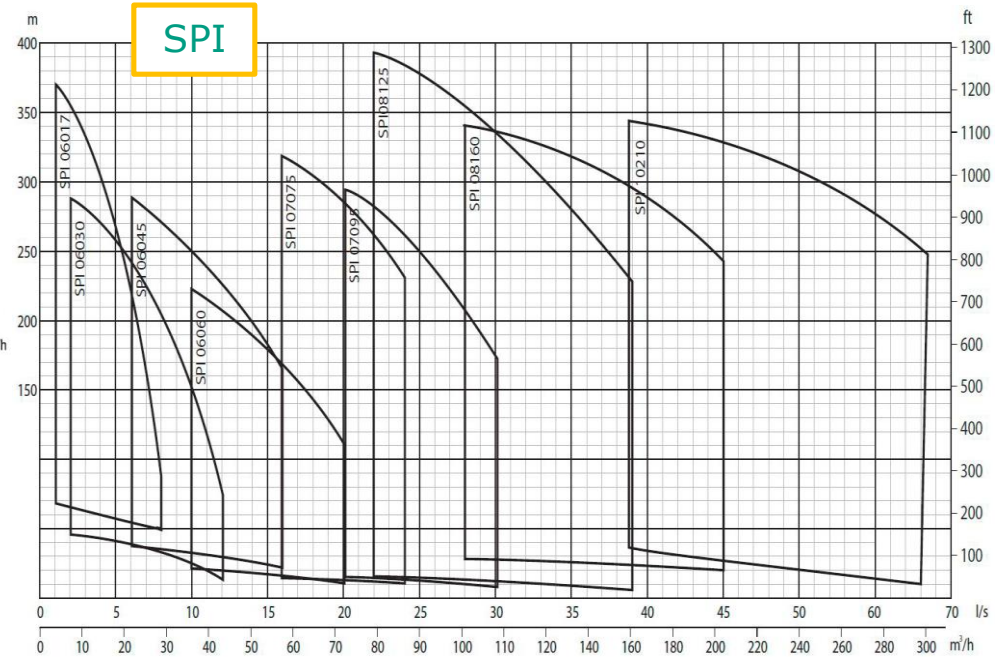


Submersible Pumps Family "Wilo-Xiro"



[50Hz]

Flow : 5~450m³/hr Head:600m



Flow : 5~280m³/hr Head:400m

Submersible Pumps Family "Wilo-Xiro"



Feature	Xiro-SPC	Xiro-SPI	X. – Motor
Size	6, 8, 10 inch	6, 8, 10 inch	6, 8, 10 inch
Material housing	Cast	Stainless steel	XC : Cast iron XI : Stainless steel
Material impeller	Bronze	Stainless steel	-
Design	Radial / Semi axial impeller	Radial / Semi axial impeller	Water filled, rewindable
Max. Flow	5 - 450 m ³ /h	5 - 280 m ³ /h	4-185 kW
Max head	600 m	400 m	
Max. Water Temp.	30 °C Optional: 50 °C	30 °C Optional: 50 °C	40 °C Optional: 50 °C

Product advantages

- AC permanent magnet motor with high efficiency
- Highly sophisticated dynamic Maximum Power Point Tracking (MPPT) function
- No external control panel needed / Fully autonomous operation
- Pump, motor and hydraulic components can be easily disassembled, power cables are removable
- High grade materials used; EN 1.4301/AISI 304, EPDM, hard-chromed helical rotor
- State-of-the-art design and encapsulated stator made of stainless steel AISI 304



The optional external control module offers following features:

- Monitor the electric parameters (current, power, voltage)
- Record and store all the alarms related to the working hours
- Connect a pressure or a flow sensor to control the pump performances
- Connect a pressure or float switch /Provide a digital alarm output for remote control
- Provide remote monitoring and control functions (2018)



Submersible Pumps Family "Wilo-Actun Opti QS"



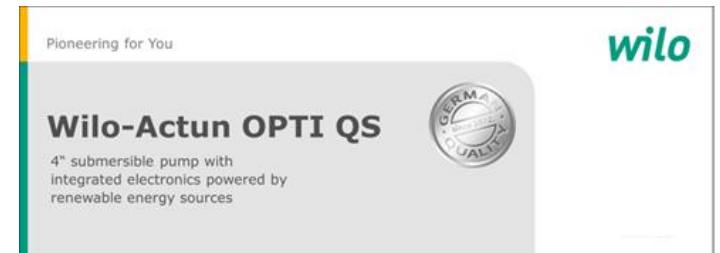
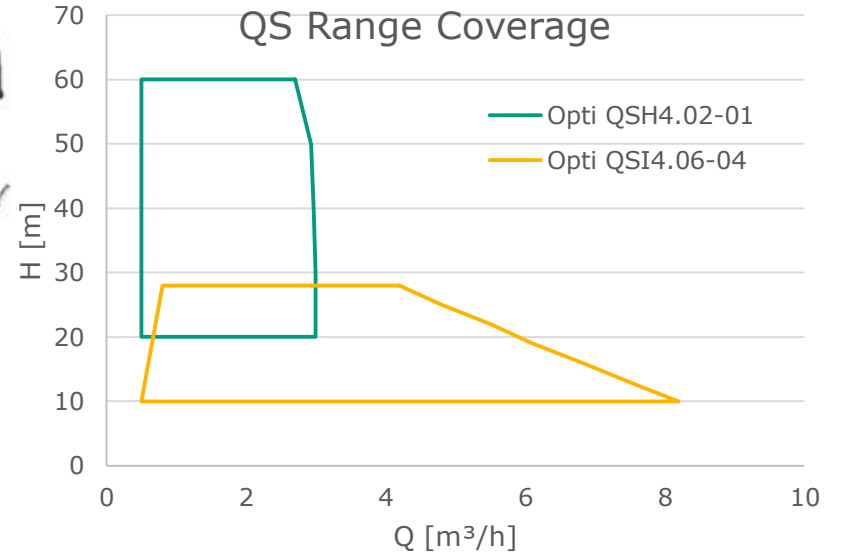
Application

Raw water intake:

- Drinking water supply from deep wells
- Gardening/Irrigation
- Livestock

Technical execution

- Premium solution with integrated inverter
- High efficient helical rotor or centrifugal pump
- High efficient AC permanent magnet motor
- Sophisticated dynamic MPPT algorithm for highest water output
- Integrated safety functions
- Connection for switches (float/pressure/etc.) via optional stop module



Wilo-Actun Opti HS (Hybrid Solar) & QS (Quick Solar)

Product range	Wilo Description	Wilo Article Number	Hydraulic Execution	Nominal Flow [m ³ /h]	Number of stages
OPTI HS	OPTI HSH4.02-02	6082887	Helical Rotor	2	2
	OPTI HSI4.05-04	6082892	Centrifugal	5	4
	OPTI HSI4.05-08	6082889	Centrifugal	5	8
	OPTI HSI4.08-03	6082890	Centrifugal	8	3
	OPTI HSI4.08-05	6082891	Centrifugal	8	5
OPTI QS	OPTI QSH4.02-01	6082886	Helical Rotor	2	1
	OPTI QSI4.06-04	6082885	Centrifugal	6	4

Differentiation Wilo-Actun OPTI QS - HS



Feature	Actun OPTI HS	Actun OPTI QS
Integrated inverter	✓	✓
Sophisticated dynamic MPPT algorithm	✓	✓
Integrated protection features	✓	✓
Integrated water level sensor	✓	✓
External control module	✓	(✓) stop module
AC power input possible	✓	
Signal cable input	✓	
Remote monitoring and operation	✓(2018)	
Operating Voltage	90-340 VDC / 90-265 VAC	70-190 VDC