

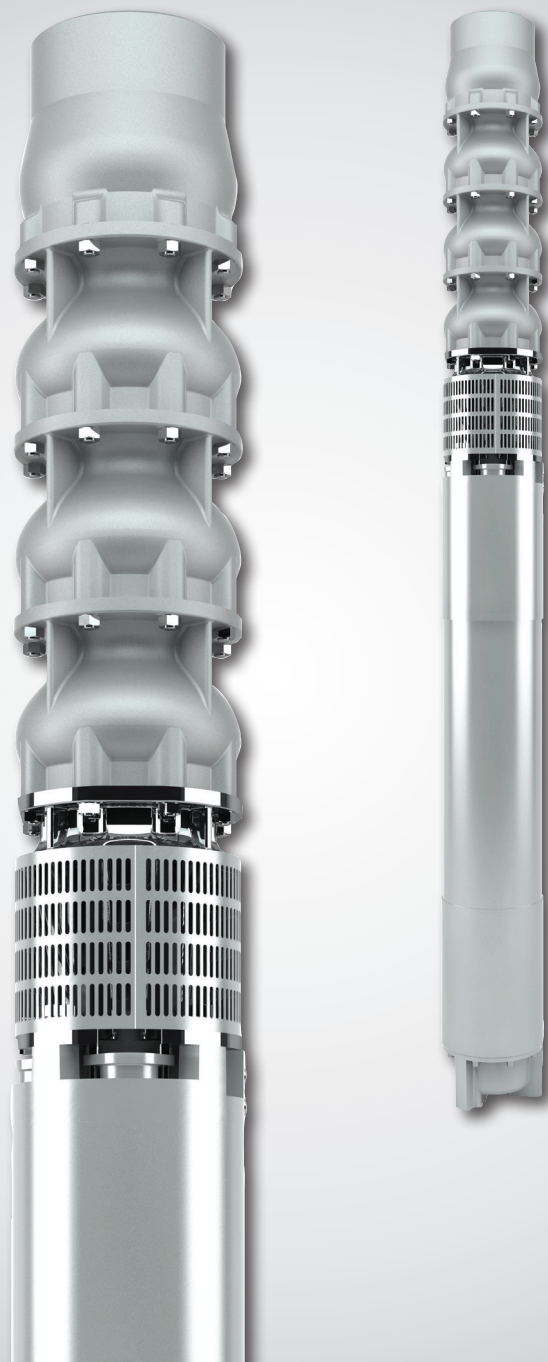
Pioneering for You

**wilo**<sup>®</sup>

*Submersible pump for Groundwater applications.*

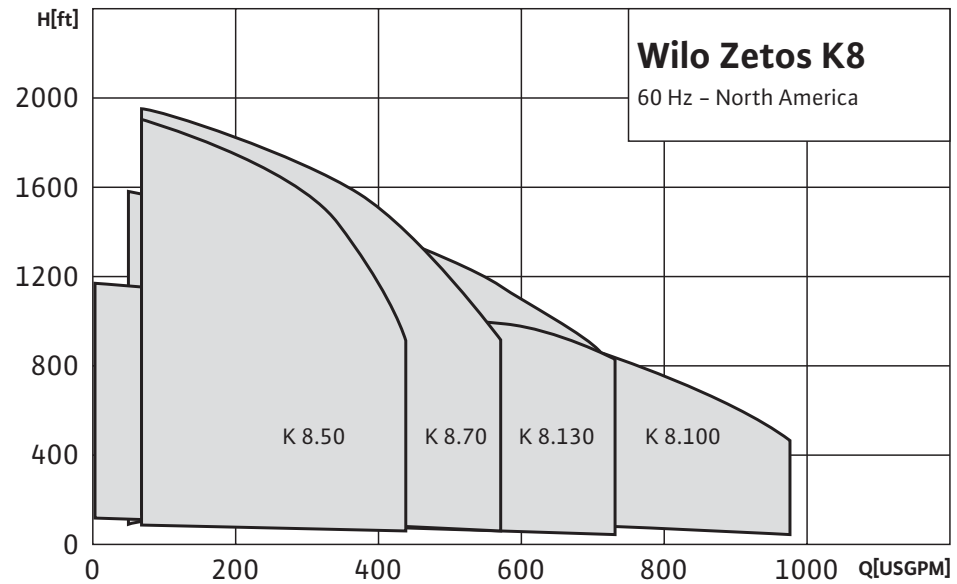
## **Wilo Zetos K8**

Multistage stainless steel cast submersible pump

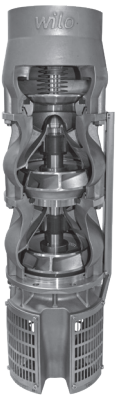


## Zetos K8

### New Borehole Series from Wilo



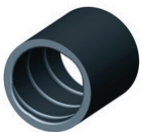
Using an innovative new manufacturing process – called **Precision Cast** has allowed Wilo to re-define hydraulic efficiency, while significantly reducing the machining (84%).



#### This allows for

- Quicker delivery times
- Reduced manufacturing costs
- Improved hydraulic efficiencies

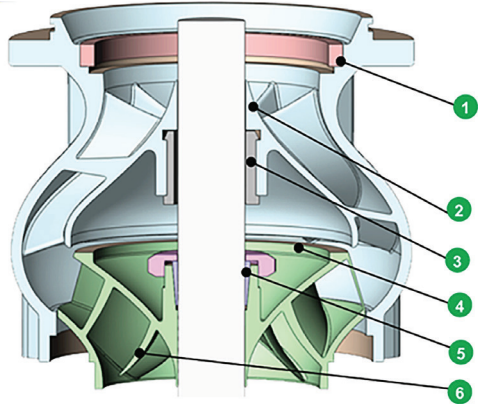
Coupled with the revised motor design, the Zetos K8 has delivered significant improvements in operating costs.



## Hydraulics

- Increased efficiencies up to 88% (84% Ave)
- Short Bearing Distances (Reduces bending/fatigue)
- 84% reduction in machining = Low Embedded Carbon
- Engineered Fixing of impellers to Shafts (Key/Splines)
- Encapsulated Bearings – impervious to Solids
- Vibration Bearing Mountings
- Internal Check Valve with Guide Sleeve to prevent sand blocking
- CT – Efficiency coating (optional)
- No Special Tools (Designed to be repaired)
- Double Bearings – with Spiral Grooves
- Shaft Protection Sleeves – Standard
- 20% oversized shaft
- Sand content up to 150 g/m<sup>3</sup>
- Reduced material waste
- Reduced embedded carbon
- Significant improvement in tolerance
- Engineered options to specific application – available
- Material Options – 316 standard, Duplex optional
- CERAM – Ceramic coating / wear part options

# Zetos K8 Features



No.	Feature	Function	Customer advantage
	Configurable		Universal application due to numerous hydraulic/mechanical designs
1	Wear ring made of EPDM, optionally made of stainless steel	Elastic deformation Reduced abrasion / corrosion	Increased service life
2	Additional bearing clearance	Avoids the ingress of solids into the bearing	Improved efficiency
3	Radial bearing with form closure	Avoids rotation of the bearing	Increased operation reliability
4	Defined casting for improved balance	Increased balancing resulting in smooth and reduced bearing load.	Increased operation reliability
5	Screwed clamp sleeve	Not self-locking	Simple assembly + disassembly
6	Thin wall thickness, smooth surfaces	Reduced weight and lower hydraulic losses	Reduced costs with high-quality material and high efficiency

A recent example from a raw water extraction in England:

	Original (2010)	Existing (2014)	Zetos (2016)
Unit Type	Competitor	NK87-10 / NU911	K8. 130-10 / NU801
Duty	600 GPM @ 540 ft.	645 GPM @ 540 ft.	645 GPM at 540 ft.
Power P2 (at Duty Point)	102kw	84kw	74kw
Material	Pressed 304SS	Cast Iron/Bronze (plus efficiency coating)	Cast 316 SS
2016 Price	\$42,220	\$46,387	\$31,233
* Annual Energy Consumption:	\$104,239	\$98,990	\$75,635



Rotor Shafts are dual material – the output shaft part is DUPLEX, and friction welded to a high density steel rotor shaft.

This assists with high magnetic conductivity and increase flux density – improving motor efficiency significantly – while reducing cost.



## Motors

- Dual Material Rotor Shaft
- Double Internal Shroud
- Temperature Equalisation (Direct Cooling)
- VFD Compatible
- Rewindable Motors
- Potable Water Filling
- Counter Thrust and Thrust Bearings (Positive & Negative loads)
- Nema Coupling
- Oversized shaft
- PE3 irradiated Winding option (72deg C Medium)
- High and Low Voltage from 230-2300v
- Cooled & Lubricated Bearings
- No Special Tools required (designed to be repaired)
- Standard Components (bearing/seals)
- Shroud Options (Flow & Pressure/Material)
- Horizontal & Vertical Mounting options

# coolact



13-12-001-0916

Pioneering for You

**WILO USA LLC**

888-945-6872  
[www.wilo-usa.com](http://www.wilo-usa.com)  
[groundwater@wilo-usa.com](mailto:groundwater@wilo-usa.com)