

## Data sheet



Customer pos. no.:  
Inquiry date: 0000-00-00  
Inquiry no.: murjani  
Quantity: 1,000

Number: 4002900589 - 498  
Line: 000100  
Date: 2016-11-07  
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### UPA 150C-16/13 DN 100 7,5 Submersible borehole pump

Version no.: 2

#### Operating data

Requested flow rate	14.00 m <sup>3</sup> /h	Actual flow rate	14.00 m <sup>3</sup> /h
Requested developed head	110.00 m	Dev. head without non-return valve	113.41 m
Pumped medium	Water Clean water Not containing chemical and mechanical substances which affect the materials	MEI (Minimum Efficiency Index)	≥ 0.70
Ambient air temperature	20.0 °C	Efficiency without non-return valve	74.4 %
Fluid temperature	20.0 °C	Power absorbed	5.80 kW
Fluid density	998 kg/m <sup>3</sup>	Max. power on curve	6.50 kW
		Min. allow. flow for continuous stable operation	6.76 m <sup>3</sup> /h
		Min. allow. flow for short term operation	1.69 m <sup>3</sup> /h
Fluid viscosity	1.00 mm <sup>2</sup> /s	Shutoff head	138.72 m
Dev. head with non-return valve	113.25 m	Max. allow. flow rate Design	21.26 m <sup>3</sup> /h Single system 1 x 100 %
Flow velocity around motor	0.2 m/s		

#### Design

Pump standard	Submersible bore hole pumps	Impeller diameter	87.0 mm
Design	Close-coupled	Min. fluid level above pump	0.50 m
Orientation	Vertical	Non return valve	With
Design according to standard	Drinking water acc. to ACS	Valve plate drilled	No
Connection standard	EN 1092-2	Suction hood	Without
discharge		Bearing pedestal	Without
Discharge nominal dia.	DN 50	Max. outside diameter	165.0 mm
Discharge nominal pressure	PN 40	Total length of unit	1830.5 mm
Wear ring	Casing/impeller wear ring		

#### Driver, accessories

Motor size	100	Drinking water filling	No
Designed for operation with frequency inverter	No	J2 Winding	No
Motor speed	2855 rpm	Cable extension	Connect extension cable in factory
Frequency	50 Hz	Short cable	F4
Rated voltage	400 V	Short cable cross section	1.50 mm <sup>2</sup>
Rated power P2	7.50 kW	Length of short cable	2.50 m
Available reserve	15.40 %	Extension cable	R4
Rated current	17.1 A	Extension cable cross section	2.50 mm <sup>2</sup>
Motor enclosure	IP68	Length of extension cable	58.00 m
Cos phi at 4/4 load	0.81	Extension cables designed for installation in open air, laid along a surface.	
Motor efficiency at 4/4 load	79.0 %	Shroud type	Without
Starting mode	Direct-on-line starting		
Type of current	Three phase (3~)		

#### Materials Pump C1 - Materials Driver C1

Suction casing (106)	Stainless steel 1.4408	Impeller wear ring (503)	CrNiMo steel 1.4404
Stage casing (108)	Stainless steel 1.4301	Bearing bush (545)	Nitrile rubber NBR
Pump shaft (211)	1.4460+AT+C+PL	Valve body (751)	Stainless steel 1.4408
Clockwise impeller (232)	Stainless steel 1.4301	Stator (81-59)	Stainless steel 1.4301
Bearing carrier (382.52)	Stainless steel 1.4301	Motor shaft (819)	Stainless steel 1.4305
Casing wear ring (502)	Nitrile rubber NBR	Motor cable (824)	CU-rubber

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Submersible borehole pump

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### Nameplates

Nameplates language      English

# Performance curve

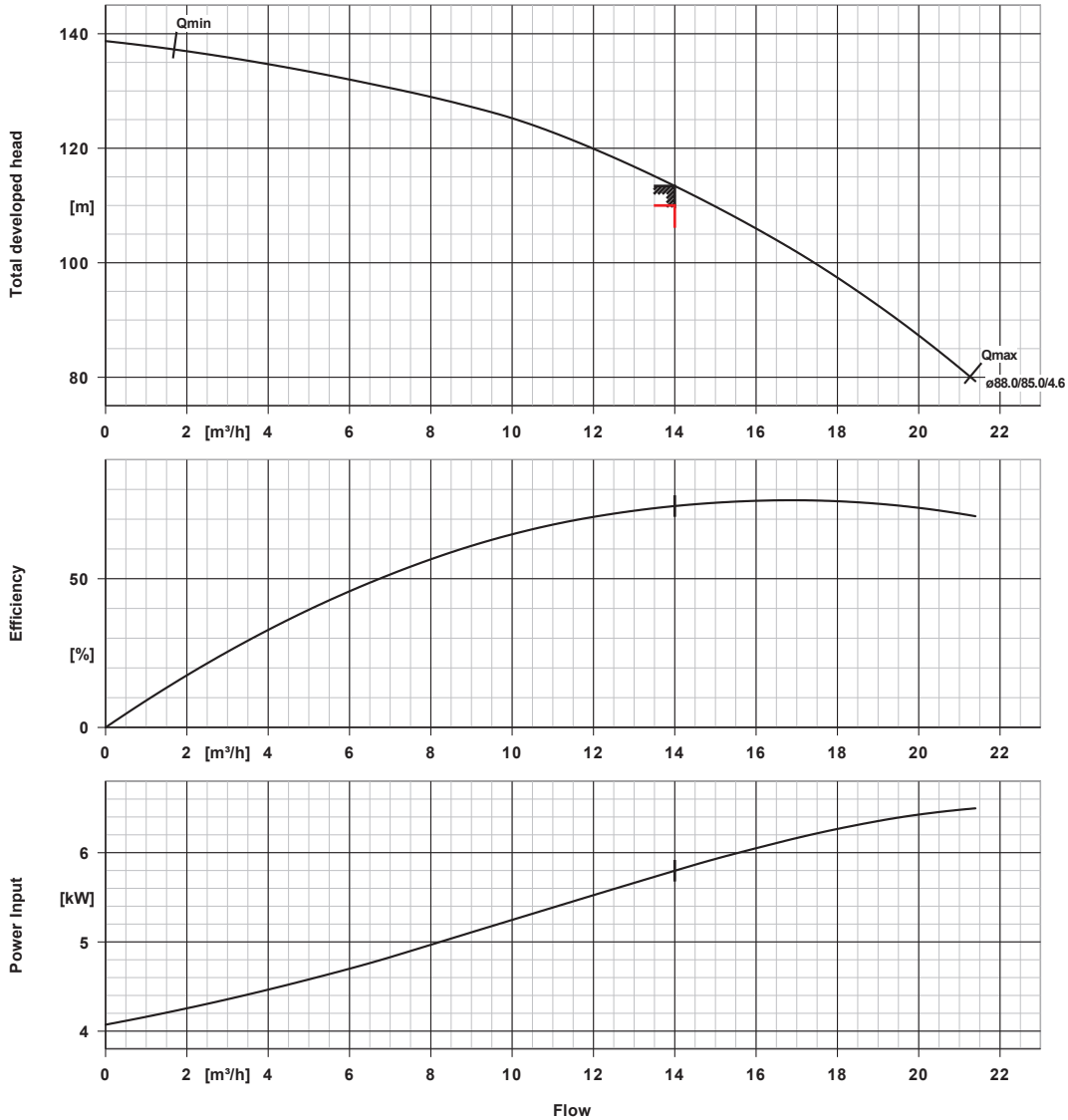


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### Curve data

Speed of rotation	2855 rpm	Dev. head without non-return valve	113.41 m
Fluid density	998 kg/m <sup>3</sup>	MEI (Minimum Efficiency Index)	≥ 0.70
Viscosity	1.00 mm <sup>2</sup> /s	Efficiency without non-return valve	74.4 %
Flow rate	14.00 m <sup>3</sup> /h	Power absorbed	5.80 kW
Requested flow rate	14.00 m <sup>3</sup> /h	Curve number	UPA150C1650
Requested developed head	110.00 m	Effective impeller diameter	87.0 mm

# Installation plan

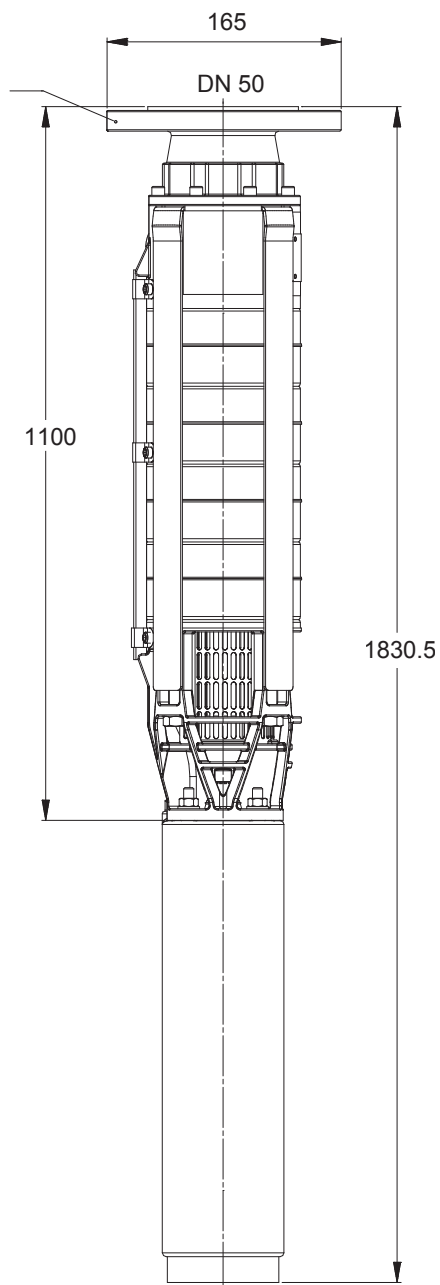


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*Drawing is not to scale*

*Dimensions in mm*

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### Motor

Motor manufacturer	KSB
Motor size	100
Motor power	7.50 kW
Number of poles	2
Speed of rotation	2855 rpm

### Connections

Discharge nominal size DN2	DN 50 / EN 1092-2
Rated pressure disch.	PN 40

Note: The dimensions shown reflect the actual stage number. The drawing is only symbolic.

### Weight net

shroud	0 kg
Pump	23 kg
Motor, cable	46 kg
Total	69 kg

**Connect pipes without stress or strain!**

**For auxiliary connections see separate drawing.**