

Company name: Created by:

10/11/2020 Note! Product picture may differ from actual product Product No.: 15A019D2 Submersible borehole pump, suitable for pumping clean water. Can be installed vertically or horizontally. All steel components are made in stainless steel, EN 1.4301 (AISI 304), that ensures high corrosive resistance. This pump carries drinking water approval. The pump is fitted with a 2.2 kW MS402 motor with sand shield, lip seal, water-lubricated journal bearings and a volume compensating diaphragm. The motor is a canned type submersible motor offering good mechanical stability and high efficiency. Suitable for temperatures up to 40 °C. The motor is not fitted with a temperature sensor. If temperature monitoring is desired, a Pt1000 sensor can be fitted The motor is for direct-on-line starting (DOL). Further product details The pump is suitable for applications similar to the following: raw-water supply irrigation groundwater lowering pressure boosting fountain applications. The Grundfos SP pump is renowned for its high efficiency and already complies with the requirements of the Minimum Efficiency Index, and therefore Grundfos is amongst the best in class within submersible pumps. **EUP** READY Pump All pump surfaces that are in contact with pumped liquids are made in stainless steel which makes them corrosionand wear-resistant. The corrosion diagram below shows the capabilities of the pump and motor in relation to the temperature in Celsius (y-axis) and the concentration of chloride in ppm (x-axis). 100 EN 1.4301 EN 1.4301 90 80 80 70 70 60 60 50

> 20 10

> > ò

2000 4000 6000 8000

12000

16000

1000

800

1200 1400 1600 1800 2000

40 30 20

10

200 100 600



Date:

10/11/2020

Qty. Description

The elastomer parts in the pump are made of NBR (Nitrile-Butadiene Rubber) which ensures good wear resistance and long service intervals.

In case the pump is used for pumping water with high content of hydrocarbons or solvents, Grundfos offers FKM rubber parts (Fluorocarbon) which are oil and temperature-resistant up to 90 °C.

The pump is built with octagonal bearings with sand flush channels that minimise wear. As wear of the pump is inevitable, the pump design allows for easy replacement of all internal wear parts (bearings, impeller, wear rings and seal rings) to maintain high performance and a long lifetime.

The suction interconnector is fitted with a strainer to prevent large particles from entering the pump. The suction interconnector is designed to comply with NEMA standards for motor mounting/dimensions.

Motor

The stator is hermetically encapsulated in stainless steel and the windings are embedded in polymer compound. This results in high mechanical stability, optimum cooling and reduces the risk of short circuits in the windings.

The shaft seal is of the lip seal type characterised by low friction against the rotor shaft. The NBR elastomer offers good wear resistance, good elasticity and resistance to particles. The rubber material is approved for use in potable water.

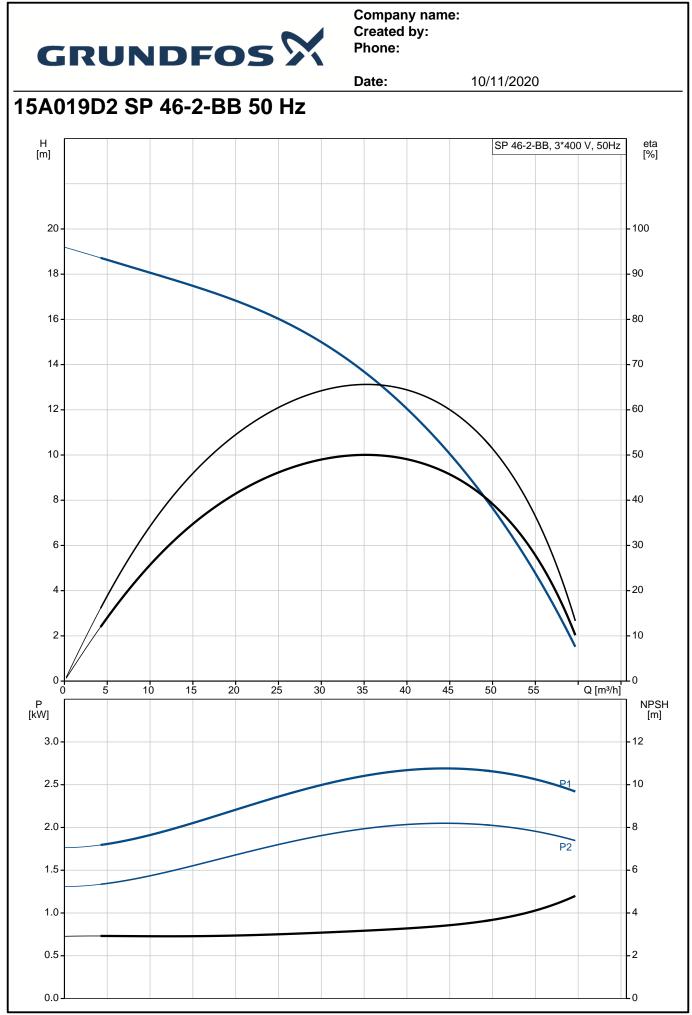
The motor can be fitted with a Pt100 or Pt1000 sensor that together with a control unit ensures that the maximum operating temperature conditions are not exceeded.

Liquid:

Pumped liquid: Maximum liquid temperature: Max liquid t at 0.15 m/sec: Selected liquid temperature: Density:	Water 40 °C 40 °C 20 °C 998.2 kg/m ³	
Technical: Pump speed on which pump dat Rated flow: Rated head: Shaft seal for motor: Approvals on nameplate: Curve tolerance: Motor version:	a are based: 2900 rpm 46 m³/h 10 m LIPSEAL CE,EAC ISO9906:2012 3B T40	
Materials: Pump:	Stainless steel EN 1.4301	
Impeller: Motor:	AISI AISI 304 Stainless steel EN 1.4301 AISI AISI 304 Stainless steel DIN WNr. 1.4301	
Installation: Pump outlet: Motor diameter:	AISI 304 RP4 4 inch	
Electrical data: Motor type: Rated power - P2: Power (P2) required by pump: Mains frequency: Rated voltage: Rated current: Starting current: Cos phi - power factor:	MS402 2.2 kW 2.2 kW 50 Hz 3 x 380-400-415 V 5.50-5.50-5.70 A 440-460-470 % 0.85-0.82-0.77	



	Date:	10/11/2020				
Description						
Rated speed:	2850-2860-2870 rpm					
Start. method:	direct-on-line					
Enclosure class (IEC 34-5):	IP68					
Insulation class (IEC 85):	В					
Built-in temp. transmitter:	no					
Motor No:	79192007					
Others:						
Minimum efficiency index, MEI ≥: 0.40						
ErP status:	EuP Standalone/Prod.					
Net weight:	22.4 kg					
Gross weight:	25 kg					
Shipping volume:	0.032 m ³					
Country of origin:	GB					
Custom tariff no.:	84137029					
	64137029					



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		Date:	10/11/2020
Description	Value	H [m]	SP 46-2-BB, 3*400 V, 50Hz eta [%]
General information:			
Product name:	SP 46-2-BB	20 -	- 100
Product No:	15A019D2		
EAN number:	5700393586536	18-	90
Price:	GBP 1820		
Fechnical:		16 -	80
Pump speed on which pump data are based:	2900 rpm	14 -	70
Rated flow:	46 m³/h	12 -	-60
Rated head:	10 m	-	
Stages:	2	10-	50
mpeller reduc.:	BB	8-	40
Shaft seal for motor:	LIPSEAL	- /	
		6-	30
Approvals on nameplate:	CE,EAC	//	′
Curve tolerance:	ISO9906:2012 3B	4	-20
Model:	B	2	10
/alve:	YES		
Motor version:	T40	- 0 <u>/ 10</u>) 20 30 40 50 Q [m³/h]
Materials:			0 20 30 40 50 Q [m³/n] NPS⊦
Pump:	Stainless steel	P [kW]	[m]
Pump:	EN 1.4301		
Pump:	AISI AISI 304	2.5 -	P1 10
mpeller:	Stainless steel	2.0 -	8
mpeller:	EN 1.4301	2.0	P2 °
mpeller:	AISI AISI 304	1.5	-6
Motor:	Stainless steel	1.0	-4
Motor:	DIN WNr. 1.4301	1.0	
Motor:	AISI 304	0.5 -	
Installation:	A101 304	0.0	
	RP4		0
Pump outlet:		146 GN	RP4
Motor diameter:	4 inch		
Liquid:			
Pumped liquid:	Water		
Maximum liquid temperature:	40 °C		
Max liquid t at 0.15 m/sec:	40 °C		
Selected liquid temperature:	20 °C	491	
Density:	998.2 kg/m ³		
Electrical data:			
Motor type:	MS402		
Applic. motor:	GRUNDFOS	<u>i</u> li.	
Rated power - P2:	2.2 kW		
Power (P2) required by pump:	2.2 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-400-415 V	95	
Rated current:	5.50-5.50-5.70 A		
Starting current:	440-460-470 %	L1 L2 L3 PE	
•		-	
Cos phi - power factor:	0.85-0.82-0.77	- ффі	
Rated speed:	2850-2860-2870 rpm	– ѰѰӋі	
Start. method:	direct-on-line		
Enclosure class (IEC 34-5):	IP68		
nsulation class (IEC 85):	В		
Motor protec:	NONE		
Thermal protec:	external		
Built-in temp. transmitter:	no		
Motor No:	79192007		
Others:			
Minimum efficiency index, MEI ≥:	0.40	_ /м \/́	
-	EuP Standalone/Prod.		
ErP status:		$\lambda \rightarrow \alpha /$	



		Date:	10/11/2020
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