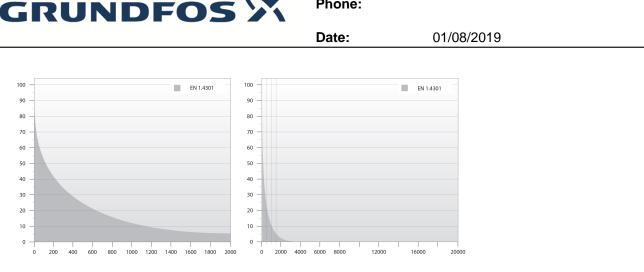
	GRUNDFOS X	C C P
		D
Qty.	Description	
1	SP 5A-38	

	Da	te:	01/08/2019
ty.	Description		
1	SP 5A-38		
	Note! Product picture may o	liffer from actual pro	duct
	Product No.: 05101K38		
	Submersible borehole pump, suitable for pumping clean was components are made in stainless steel, EN 1.4301 (AISI 3 carries drinking water approval.	ater. Can be insta 04), that ensures	lled vertically or horizontally. All steel high corrosive resistance. This pump
	The pump is fitted with a 4 kW MS4000 motor with sand sh bearings and a volume compensating diaphragm. The mot mechanical stability and high efficiency. Suitable for tempe	ield, mechanical s or is a canned typ ratures up to 40 °	shaft seal, water-lubricated journal e submersible motor offering good C.
	The motor is not fitted with a temperature sensor. If temper fitted.	ature monitoring i	s desired, a Pt1000 sensor can be
	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 a Minimum Efficiency Index, and therefore Grundfos is among	and already comp	lies with the requirements of the uss within submersible pumps.
		-	
	<b>Pump</b> All pump surfaces that are in contact with pumped liquids a and wear-resistant. The corrosion diagram below shows th temperature in Celsius (y-axis) and the concentration of ch	e capabilities of th	ne pump and motor in relation to the





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

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 a tungsten carbide/ceramic replaceable mechanical shaft seal. The material combination provides optimum sealing, resistance and long life. Together with the shaft seal housing, the sand shield forms a labyrinth seal, which during normal operating conditions prevents penetration of sand particles into the shaft seal.

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:	Water	
Maximum liquid temperature:	40 °C	
Max liquid t at 0.15 m/sec:	40 °C	
Selected liquid temperature:	20 °C	
Density at selected liquid tempe	erature:	998.2 kg/m³

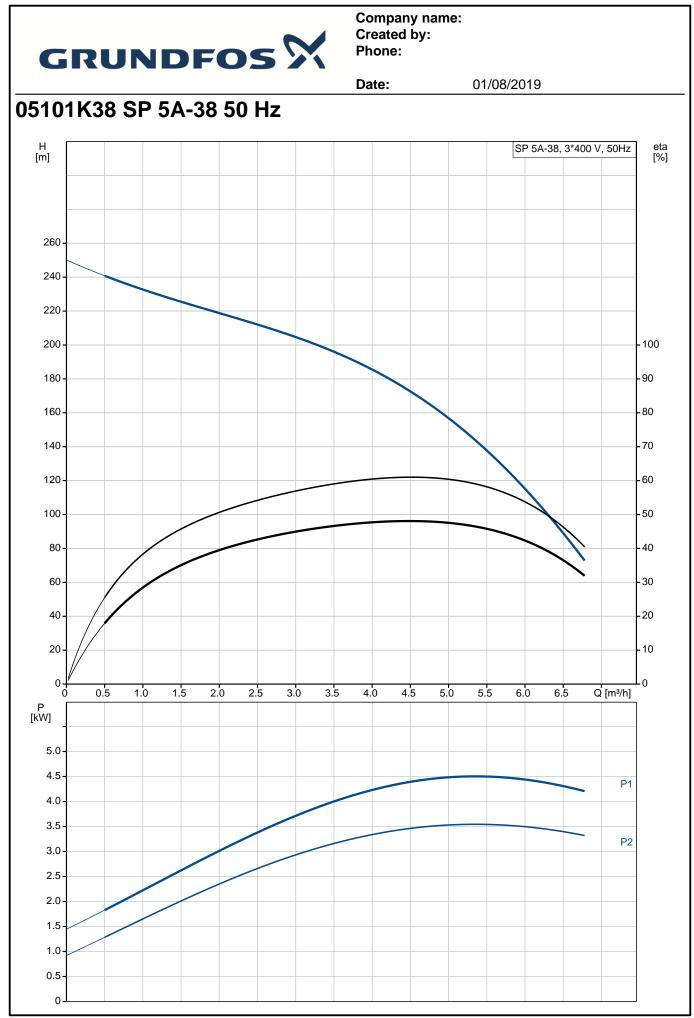
### **Technical:**

Pump speed on which pump dat	a are based: 2900 rpm
Rated flow:	5 m³/h
Rated head:	155 m
Shaft seal for motor:	HM/CER
Approvals on nameplate:	CE,EAC
Curve tolerance:	ISO9906:2012 3B
Motor version:	T40
Specification for shaft end:	CYLINDRICAL
Materials:	
Pump:	Stainless steel
	EN 1.4301
	AISI 304
Impeller:	Stainless steel

Motor:	EN 1.4301 AISI 304 Stainless steel DIN WNr. 1.4301 AISI 304
Installation:	
Pump outlet:	RP1 1/2
Motor diameter:	4 inch



Electrical data:Motor type:MS4000Rated power - P2:4 kWPower (P2) required by pump:4 kWMains frequency:50 HzRated voltage:3 x 380-400-415 VRated current:9.75-9.60-9.80 AStarting current:460-500-530 %Cos phi - power factor:0.85-0.80-0.77Rated speed:2850-2865-2875 rpmStart. method:direct-on-lineEnclosure class (IEC 34-5):IP68nsulation class (IEC 85):FBuilt-in temp. transmitter:noMotor No:79194510			Date:	01/08/2019
Motor type:MS4000Rated power - P2:4 kWPower (P2) required by pump:4 kWMains frequency:50 HzRated voltage:3 x 380-400-415 VRated voltage:9.75-9.60-9.80 AStarting current:460-500-530 %Cos phi - power factor:0.85-0.80-0.77Rated speed:2850-2865-2875 rpmStart. method:direct-on-lineEnclosure class (IEC 34-5):IP68Isulit-in temp. transmitter:noMotor No:79194510Others:Winimum efficiency index, MEI ≥:0.50517ErP status:EuP Standalone/Prod.Net weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB	Description			
Rated power - P2: 4 kW   Power (P2) required by pump: 4 kW   Mains frequency: 50 Hz   Rated voltage: 3 x 380-400-415 V   Rated current: 9.75-9.60-9.80 A   Starting current: 460-500-530 %   Cos phi - power factor: 0.85-0.80-0.77   Rated speed: 2850-2865-2875 rpm   Start. method: direct-on-line   Enclosure class (IEC 34-5): IP68   nsulation class (IEC 85): F   Built-in temp. transmitter: no   Motor No: 79194510   Others: EuP Standalone/Prod.   Start weight: 39.7 kg   Gross weight: 45.4 kg   Shipping volume: 66.8 m³   Danish VVS No.: 388315380   Swedish RSK No.: 5852807   Norwegian NRF no.: 9040879   Country of origin: GB				
Power (P2) required by pump: $4 \text{ kW}$ Mains frequency: $50 \text{ Hz}$ Rated voltage: $3 \times 380-400-415 \text{ V}$ Rated current: $9.75-9.60-9.80 \text{ A}$ Starting current: $460-500-530 \text{ \%}$ Cos phi - power factor: $0.85-0.80-0.77$ Rated speed: $2850-2865-2875 \text{ rpm}$ Start. method:direct-on-lineEnclosure class (IEC 34-5):IP68nsulation class (IEC 85):FBuilt-in temp. transmitter:noMotor No:79194510Others:Minimum efficiency index, MEI ≥:0.50ErP status:EuP Standalone/Prod.Net weight: $39.7 \text{ kg}$ Gross weight: $45.4 \text{ kg}$ Shipping volume: $66.8 \text{ m}^3$ Danish VVS No.: $38315380$ Swedish RSK No.: $5822807$ Norwegian NRF no.: $9040879$ Country of origin:GB				
Mains frequency:50 HzRated voltage: $3 \times 380-400-415 V$ Rated current: $9.75-9.60-9.80 A$ Starting current: $460-500-530 \%$ Cos phi - power factor: $0.85-0.80-0.77$ Rated speed: $2850-2865-2875 rpm$ Start. method:direct-on-lineEnclosure class (IEC 34-5):IP68nsulation class (IEC 85):FBuilt-in temp. transmitter:noMotor No:79194510Others:Winimum efficiency index, MEI $\hat{a}_{\infty}$ ¥:0.50ErP Status:EuP Standalone/Prod.Net weight: $39.7 kg$ Gross weight: $45.4 kg$ Shipping volume: $66.8 m^3$ Danish VVS No.: $388315380$ Swedish RSK No.: $5852807$ Norwegian NRF no.: $9040879$ Country of origin:GB				
Rated voltage: $3 \times 380-400-415 \vee$ Rated current: $9.75-9.60-9.80 \wedge$ Starting current: $460-500-530 \%$ Cos phi - power factor: $0.85-0.80-0.77$ Rated speed: $2850-2865-2875 \text{ rpm}$ Start. method:direct-on-lineEnclosure class (IEC 34-5):IP68nsulation class (IEC 85):FBuilt-in temp. transmitter:noMotor No:79194510Others:Vinimum efficiency index, MEI ≥: $0.50$ ErP status:EuP Standalone/Prod.Net weight: $39.7 \text{ kg}$ Sorse weight: $45.4 \text{ kg}$ Shipping volume: $66.8 \text{ m}^3$ Danish VVS No.: $38315380$ Swedish RSK No.: $5852807$ Norwegian NRF no.: $9040879$ Country of origin:GB				
Rated current: 9.75-9.60-9.80 A   Starting current: 460-500-530 %   Cos phi - power factor: 0.85-0.80-0.77   Rated speed: 2850-2865-2875 rpm   Start. method: direct-on-line   Enclosure class (IEC 34-5): IP68   nsulation class (IEC 85): F   Built-in temp. transmitter: no   Motor No: 79194510   Others:   Winimum efficiency index, MEI ≥: 0.50   ErP status: EuP Standalone/Prod.   Net weight: 39.7 kg   Gross weight: 45.4 kg   Shipping volume: 66.8 m³   Danish VVS No.: 388315380   Swedish RSK No.: 5852807   Norwegian NRF no.: 9040879   Country of origin: GB				
Starting current: $460-500-530$ %Cos phi - power factor: $0.85-0.80-0.77$ Rated speed: $2850-2865-2875$ rpmStart. method:direct-on-lineEnclosure class (IEC 34-5):IP68nsulation class (IEC 85):FBuilt-in temp. transmitter:noMotor No:79194510Others:Minimum efficiency index, MEI ≥: $0.50$ ErP status:EuP Standalone/Prod.Net weight: $39.7$ kgGross weight: $45.4$ kgShipping volume: $66.8$ m³Danish VVS No.: $388315380$ Swedish RSK No.: $5852807$ Norwegian NRF no.: $9040879$ Country of origin:GB		3 x 380-400-415 V		
Cos phi - power factor: $0.85 - 0.80 - 0.77$ Rated speed: $2850 - 2865 - 2875$ rpmStart. method:direct-on-lineEnclosure class (IEC 34-5):IP68nsulation class (IEC 85):FBuilt-in temp. transmitter:noMotor No:79194510Others:Minimum efficiency index, MEI $\hat{a}$ % ¥: $0.50$ ErP status:EuP Standalone/Prod.Net weight: $39.7$ kgGross weight: $45.4$ kgShipping volume: $66.8$ m³Danish VVS No.: $388315380$ Swedish RSK No.: $5852807$ Norwegian NRF no.: $9040879$ Country of origin:GB	Rated current:	9.75-9.60-9.80 A		
Rated speed:2850-2865-2875 rpmStart. method:direct-on-lineEnclosure class (IEC 34-5):IP68nsulation class (IEC 85):FBuilt-in temp. transmitter:noMotor No:79194510Others:UP Standalone/Prod.Vet weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB	Starting current:	460-500-530 %		
Start. method:direct-on-lineEnclosure class (IEC 34-5):IP68nsulation class (IEC 85):FBuilt-in temp. transmitter:noMotor No:79194510Others:Unimum efficiency index, MEI ≥: 0.50ErP status:EuP Standalone/Prod.Net weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB	Cos phi - power factor:	0.85-0.80-0.77		
Enclosure class (IEC 34-5): IP68 nsulation class (IEC 85): F Built-in temp. transmitter: no Motor No: 79194510 <b>Others:</b> Minimum efficiency index, MEI ≥: 0.50 ErP status: EuP Standalone/Prod. Net weight: 39.7 kg Gross weight: 45.4 kg Shipping volume: 66.8 m³ Danish VVS No.: 388315380 Swedish RSK No.: 5852807 Norwegian NRF no.: 9040879 Country of origin: GB	Rated speed:	2850-2865-2875 rpm		
nsulation class (IEC 85): F Built-in temp. transmitter: no Motor No: 79194510 Others: Minimum efficiency index, MEI ≥: 0.50 ErP status: EuP Standalone/Prod. Net weight: 39.7 kg Gross weight: 45.4 kg Shipping volume: 66.8 m³ Danish VVS No.: 388315380 Swedish RSK No.: 5852807 Norwegian NRF no.: 9040879 Country of origin: GB	Start. method:	direct-on-line		
Built-in temp. transmitter:noMotor No:79194510Others:Immune efficiency index, MEI ≥:0.50ErP status:EuP Standalone/Prod.Net weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB	Enclosure class (IEC 34-5):	IP68		
Motor No:79194510Others:Minimum efficiency index, MEI ≥: 0.50ErP status:EuP Standalone/Prod.Net weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB	Insulation class (IEC 85):	F		
Others:Minimum efficiency index, MEI ≥: 0.50ErP status:EuP Standalone/Prod.Net weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB	Built-in temp. transmitter:	no		
Minimum efficiency index, MEI ≥:0.50ErP status:EuP Standalone/Prod.Net weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB	Motor No:	79194510		
Minimum efficiency index, MEI ≥:0.50ErP status:EuP Standalone/Prod.Net weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB				
ErP status:EuP Standalone/Prod.Net weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB	Others:			
Net weight:39.7 kgGross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB				
Gross weight:45.4 kgShipping volume:66.8 m³Danish VVS No.:388315380Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB				
Shipping volume:   66.8 m³     Danish VVS No.:   388315380     Swedish RSK No.:   5852807     Norwegian NRF no.:   9040879     Country of origin:   GB				
Danish VVS No.:   388315380     Swedish RSK No.:   5852807     Norwegian NRF no.:   9040879     Country of origin:   GB				
Swedish RSK No.:5852807Norwegian NRF no.:9040879Country of origin:GB	Shipping volume:			
Norwegian NRF no.: 9040879 Country of origin: GB				
Country of origin: GB				
Custom tariff no.: 84137029				
	Custom tariff no.:	84137029		





		Date:	01/08/2019			
Description	Value	H [m]		SP 5A-38, 3*40	0 V, 50Hz eta [%]	
General information:						
Product name:	SP 5A-38					
Product No:	05101K38	260 -				
EAN number:	5708601059346	240 -				
Price:	3.127,00 GBP	220 -				
Fechnical:		200 -			- 100	
Pump speed on which pump data are		200-			- 100	
ased:	2900 rpm	180 -			- 90	
Rated flow:	5 m³/h	160 -			- 80	
Rated head:	155 m	140 -			- 70	
		_				
Stages:	38	120 -			- 60	
mpeller reduc.:	NONE	100 -			- 50	
Shaft seal for motor:	HM/CER	80 -			40	
Approvals on nameplate:	CE,EAC				N	
Curve tolerance:	ISO9906:2012 3B	60-			- 30	
Model:	A	40 -			- 20	
/alve:	YES	20 - //			- 10	
Motor version:	T40				0	
		0 0.5	1.5 2.5 3.5	4.5 5.5	Q [m³/h]	
Specification for shaft end:	CYLINDRICAL	P [kW]				
Materials:	<b>A</b>	[kW] 5-				
Pump:	Stainless steel	5-			P1	
	EN 1.4301	4 -				
	AISI 304					
mpeller:	Stainless steel	3-			P2	
•	EN 1.4301					
	AISI 304	2-				
Motor:	Stainless steel	-				
		1-				
	DIN WNr. 1.4301					
	AISI 304					
nstallation:		▶ 101				
Pump outlet:	RP1 1/2	RP1 1/	10			
Motor diameter:	4 inch	- KFT I/	2			
Liquid:		- +   ₩ + +				
Pumped liquid:	Water					
Maximum liquid temperature:	40 °C					
Max liquid t at 0.15 m/sec:	40 °C					
Selected liquid temperature:	20 °C					
Density at selected liquid temperature:	998.2 kg/m <sup>3</sup>					
Electrical data:		▁▕ <mark>╪╶┝</mark> ╞╎┥				
Motor type:	MS4000					
Applic. motor:	GRUNDFOS					
Rated power - P2:	4 kW	- <u>2</u> 22 → <u>95</u> -				
Power (P2) required by pump:	4 kW	-				
Aains frequency:	50 Hz	-				
Rated voltage:	3 x 380-400-415 V	L1 L2 L3 PE				
Rated current:	9.75-9.60-9.80 A	-				
Starting current:	460-500-530 %					
Cos phi - power factor:	0.85-0.80-0.77	ΦΦΦΪ				
Rated speed:	2850-2865-2875 rpm					
Start. method:	direct-on-line					
Enclosure class (IEC 34-5):	IP68	-				
nsulation class (IEC 85):	F	-				
		-				
Motor protec:	NONE	╴└─┬─┬─┤				
Thermal protec:	external	- U V W PE				
Built-in temp. transmitter:	no					
Motor No:	79194510					
Others:		_ /м \/				

Printed from Grundfos Product Centre [2019.03.001]



GRUNDFUS //					
		Date:	01/08/2019		
Description	Value				
ErP status:	EuP Standalone/Prod.	-			
Net weight:	39.7 kg				
Gross weight:	45.4 kg				
Shipping volume:	66.8 m³				
Danish VVS No.:	388315380				
Swedish RSK No.:	5852807				
Norwegian NRF no.:	9040879				
Country of origin:	GB				
Custom tariff no .:	84137029				

