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An / To : Kozloduy Nuclear Power Plant

z.H. / Att. : Mr. Georgi Kamenov

Von / From : Dietmar Glaninger

Date: 13.06.2023

Betr. / Ref. : **Your inquiry from 07.06.2023**
Our quotation no. P-HS-2023/118

We thank you for your inquiry and quote:

Pump Type XFP
according to the enclosed specification

Prices

DAP Kozloduy, Bulgaria incl. standard packing (acc. Incoterms 2020), excl. VAT.

Delivery time

App. 3 months from complete order or according to special agreement.

Payment

100% advanced payment when ordering, or according to special agreement

Validity

This quotation is valid for 2 months.

Other terms

This quote is made under the assumption that the Sulzer Pumps General Terms and Conditions of Supply, which are attached hereto or can be found on www.sulzer.com/terms, shall apply to the purchase order. At your request, we will send you a copy thereof. If relevant deviations have to be made, such as but not limited to the liability and warranty conditions, we reserve the right to adapt the price in order to reflect the risks resulting from such adaptations."



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Kunde : Kozloduy Nuclear Power Plant
Datum : 13.06.2023
Angebot Nr. : P-HS-2023/118

SULZER

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Prices containing following accessories for Submersible Pump XFP100G CB1

Pump incl. mechanical seal
Pump material cast iron
Motor 400V/50HZ
Standard-cable (20m length)
Pedestal, DIN, single guide rail version
Klixon thermal switch
DI-Module
Sulzer Standard Documentation
Pump performance curve is acc. ISO 9906, HI 11.6/14.6≤10kW

ATTENTION:

Pump for medium temperature up to max 40 °C.

Not in scope of supply:

Guiding rail
Rope or chain for lift and down

Position	Piece	Type	Material / Option	Price / pce EUR	Total price EUR
1	6	XFP100G- CB1	Cast Iron	9.468,00	56.808,00
			Option Pedestal	395,00	2.370,00

Looking forward to your order.

Best regards,

Sulzer Austria GmbH

Заличено на основание
ЗЗЛД

Ing. Gerald Jelinek DW 15

Заличено на основание
ЗЗЛД

Dietmar Glanninger



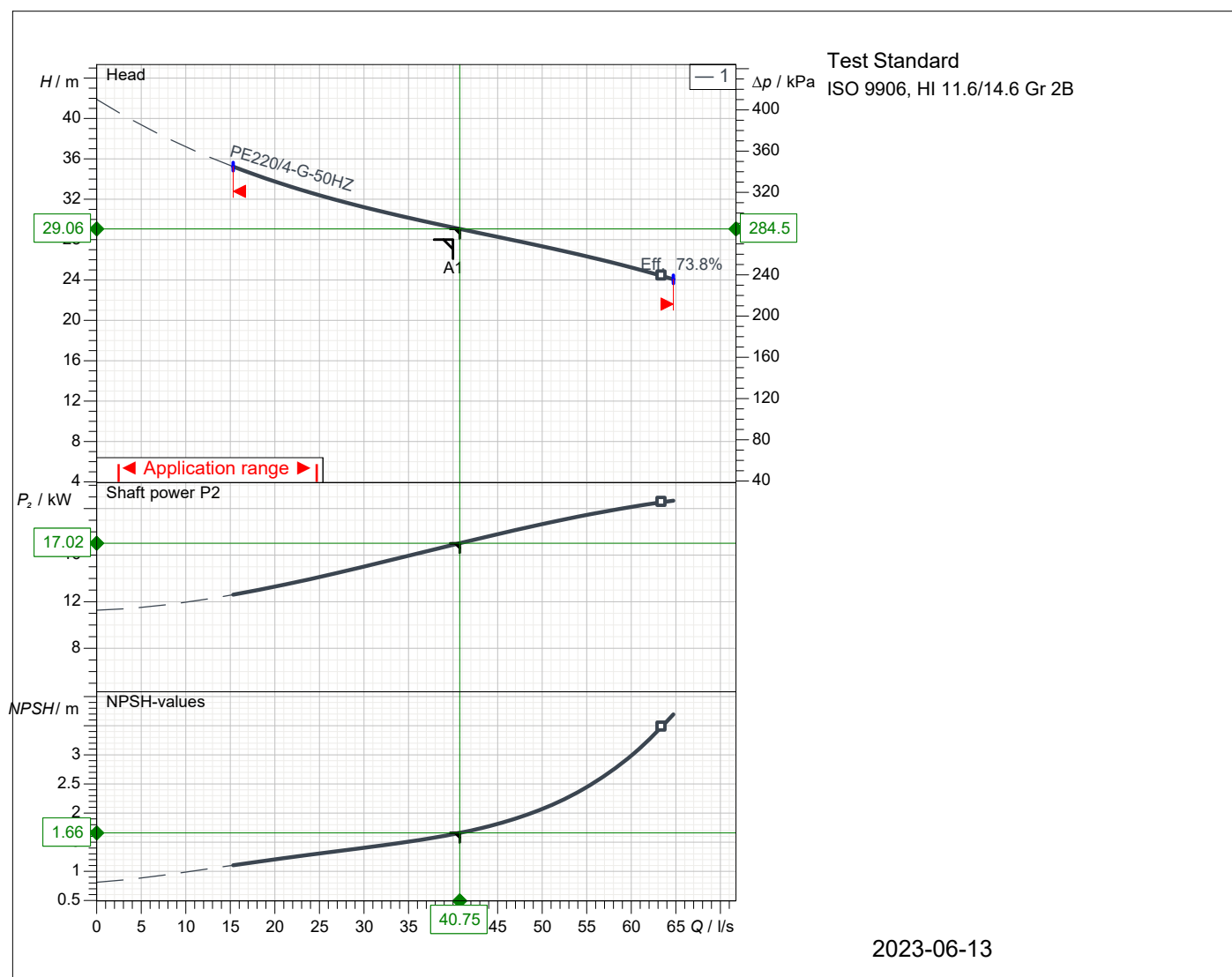
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Product description



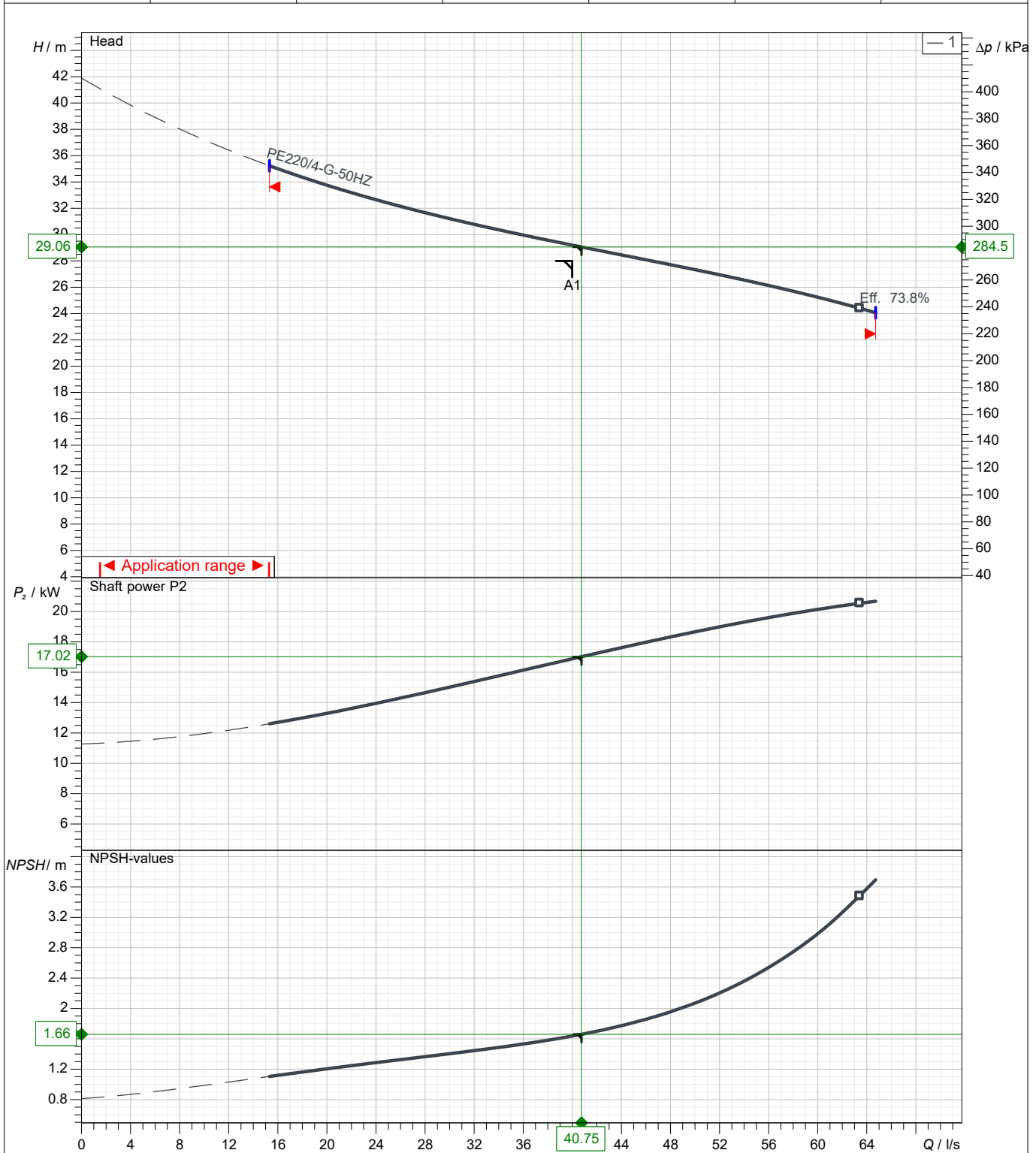
Pos.no	Description	Item no.	Qty.																								
1	XFP100G CB1 50HZ																										
1.1	Centrifugal pump: XFP100G-CB1 XFP PE1-3 Type: XFP100G-CB1 Submersible sewage pump type ABS XFP is designed for municipal and industrial wastewater equipped with Premium Efficiency (IE3 level) motor for: Main applications - Water and wastewater - Sewage containing solids and fibrous material - Sewage with sludge and high content of rags - Industrial raw water - Municipal combined sewage and storm water systems. Main design features - Premium efficiency IE3 motors in acc. with IEC60034-30 - Approval for ATEX (Ex II 2G k Ex db IIB T4 GB), FM and CSA as standard - Water pressure-tight encapsulated fully flood-proof motor - Motor insulation according to Class H (140°C temperature sensors) - Temperature rise according to NEMA Class A - Continuously rated motor suitable for wet and dry installation as standard for PE1 and PE2 in 50Hz. Optional for 60Hz - PE3 has the option of internal closed loop cooling system for dry installation - EMC version as option for PE1-3 - Condition monitoring of temperature and water ingress. - Solid passage min. 75 mm and greater for CB Plus - Hydraulics with open CB Plus type single and multi-vane (PE3) or vortex impellers suitable for handling of water, polluted water, sewage containing solids, faecal slurry and sludge 50Hz Capacity up to 750 m3/h Head, max. 74 m 60Hz Capacity up to 3500 US g.p.m. Head, max. 330ft Type: XFP100G-CB1 Technical data <table><tr><td>Delivery rate</td><td>: 40.75 l/s</td></tr><tr><td>Delivery head</td><td>: 29.06 m</td></tr><tr><td>Hydr. Efficiency</td><td>: 68.2 %</td></tr><tr><td>Total efficiency</td><td>: 63.45 %</td></tr><tr><td>Shaft power</td><td>: 17.02 kW</td></tr><tr><td>Speed</td><td>: 1473 1/min</td></tr><tr><td>Impeller type</td><td>: Contrablock Plus impeller, 1 vane</td></tr><tr><td>Motor output</td><td>: 22 kW</td></tr><tr><td>Voltage</td><td>: 400 V</td></tr><tr><td>Frequency</td><td>: 50 Hz</td></tr><tr><td>Suction outlet</td><td>: DN100 -</td></tr><tr><td>Discharge outlet</td><td>: DN100 -</td></tr></table>	Delivery rate	: 40.75 l/s	Delivery head	: 29.06 m	Hydr. Efficiency	: 68.2 %	Total efficiency	: 63.45 %	Shaft power	: 17.02 kW	Speed	: 1473 1/min	Impeller type	: Contrablock Plus impeller, 1 vane	Motor output	: 22 kW	Voltage	: 400 V	Frequency	: 50 Hz	Suction outlet	: DN100 -	Discharge outlet	: DN100 -		1
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XFP100G CB1 50HZ



Operating data specification		Power input		18.3 kW
Flow	40.75 l/s	Head		29.1 m
Efficiency	68.2 %	Shaft power		17 kW
NPSH	1.66 m	Fluid		Water
Temperature	20 °C	Nature of system		Single head pump
No. of pumps	1			
Pump data				
Type	XFP100G CB1 50HZ	Make		SULZER
Series	XFP PE1-PE3	Impeller		Contrablock Plus impeller, 1 vane
N° of vanes	1	Impeller size		315 mm
Free passage	100 mm	Suction flange		DN100
Discharge flange	DN100	Type of installation		Wet Well installation with pedestal (without cooling jacket)
Moment of inertia	0.136 kg m ²			
Motor data				
Rated voltage	400 V	Frequency		50 Hz
Rated power P2	22 kW	Nominal Speed		1460 1/min
Number of poles	4	Efficiency		93 %
Power factor	0.803	Rated current		42.5 A
Starting current	363 A	Rated torque		144 Nm
Starting torque	515 Nm	Degree of protection		IP 68
Insulation class	H	No. starts per hour		15

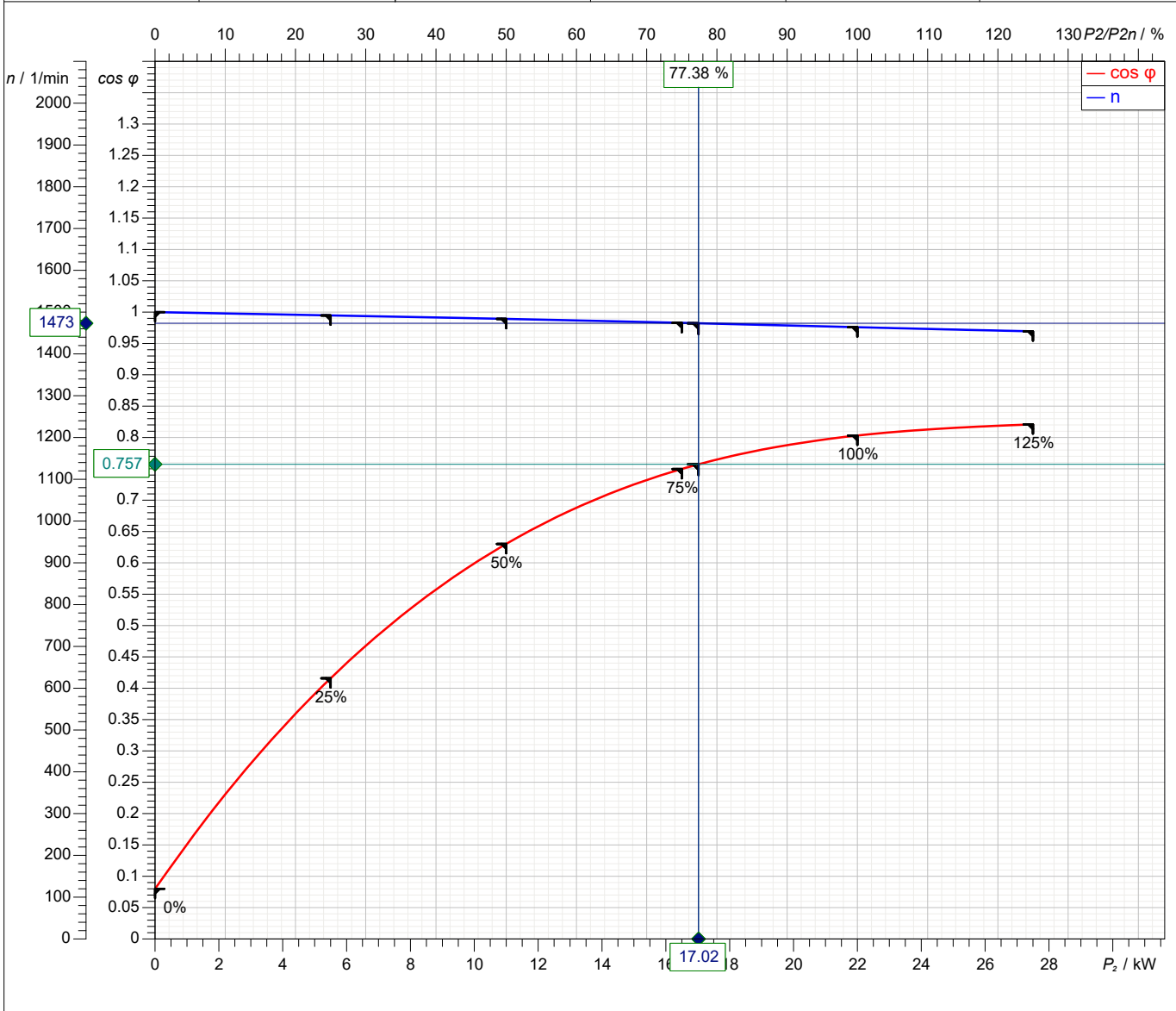
Curve number		Pump performance curves XFP100G CB1 50HZ				SULZER	
Reference curve XFP 100G 50HZ							
					Discharge DN100	Frequency 50 Hz	
Density 998.2 kg/m³	Viscosity 1 mm²/s	Test Standard ISO 9906, HI 11.6/14.6 Gr 2B			Rated speed 1473 1/min	Date 2023-06-13	
Flow 40.75 l/s	Head 29.1 m	Shaft power 17 kW	Power input 18.3 kW	Rated power P2 22 kW	Hyd. efficiency 68.2 %	NPSH 1.66 m	



Wet Well installation with pedestal (without cooling jacket)

Impeller size 315 mm	N° of vanes 1	Impeller Contrablock Plus impeller, 1 vane	Solid size 100 mm	Revision
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Rated power 22 kW	Service factor 1	Nominal Speed 1460 1/min	Number of poles 4	Rated voltage 400 V	Date 2023-06-13
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Symbol	No loac	25 %	50 %	75 %	100 %	125 %
P_2 / kW	0	5.5	11	16.5	22	27.5
P_1 / kW	1.033	6.402	11.96	17.74	23.65	29.84
I / A	18.64	22.22	27.39	34.15	42.51	52.46
$\cos \varphi$	0.08002	0.4159	0.6302	0.7498	0.8031	0.821
n / 1/min	1500	1492	1484	1474	1464	1454
s / %	0.001587	0.5254	1.083	1.717	2.408	3.065
M / Nm	0	35.2	70.79	106.9	143.5	180.6
η / %	0	85.9	91.98	93.01	93.01	92.16

Tolerance according to VDE 0530 T1 12.84 for rated power				
Starting current 363 A	Starting torque 515 Nm	Moment of inertia 0.244 kg m ²	No. starts per hour 15	

Gewicht: Beinhaltet Pumpe, Halterung (Fussstück) und Kabel (50 Hz = 10 m; 60 Hz = 15 m)	m) Guss-Allgemeintoleranzen nach DIN1680 – GTB16
Weight: includes pump, slider bracket and cable (50 Hz = 10 m; 60 Hz = 15 m)	n) General tolerances for castings in acc. to DIN1680–GTB16
Peso: include bomba, pezzo intermedio a cavo (50 Hz = 10 m; 60 Hz = 15 m)	m) Tolleranze generali delle fusioni secondo DIN1680–GTB16
Peso: Incluye bomba, soporte deslizante y cable (50 Hz = 10 m; 60 Hz = 15 m)	n) Tolerancias generales para la fundición seg. de DIN1680–GTB16
Poids : incluant la pompe, le coulisseau et le câble (50 Hz = 10 m; 60 Hz = 15 m)	m) Tolérance générale de la fonderie selon DIN1680–GTB16