

Company name: Created by:

Phone: Date: 16/02/2019 Qty. Description CR 5-26 A-FGJ-A-E-HQQE 1 Note! Product picture may differ from actual product Product No.: 96513391 Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. A cartridge shaft seal ensures high reliability. safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via combined DIN-ANSI-JIS flanges. The pump is fitted with a 3-phase, fan-cooled asynchronous motor. Further product details Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface. An integral part of the process is a pretreatment. The entire process consists of these elements: 1) Alkaline-based cleaning. 2) Zinc phosphating. 3) Cathodic electro-deposition. 4) Curing to a dry film thickness 18-22 my m. The colour code for the finished product is NCS 9000/RAL 9005. Pump A standard split coupling connects the pump and motor shaft. It is enclosed in the pump head/motor stool by means of two coupling guards. The pump head, pump head cover and flange for motor mounting is made in one piece. The pump head has a combined 1/2" priming plug and vent screw. $\bigcirc \bigcirc$ The pump is fitted with a balanced O-ring seal unit with a rigid torque-transmission system. This seal type is assembled in a cartridge unit which makes replacement safe and easy. Due to the balancing, this seal type is suitable for high-pressure applications. The cartridge construction also protects the pump shaft from possible wear from a dynamic O-ring between pump shaft and shaft seal. Primary seal: Rotating seal ring material: silicon carbide (SiC)

Stationary seat material: silicon carbide (SiC)



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Qty. | Description
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Date:

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This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles. Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.



The shaft seal is screwed into the pump head.

The chambers and impellers are made of stainless-steel sheet. The chambers are provided with a PTFE neck ring offering improved sealing and high efficiency. The impellers have smooth surfaces, and the shape of the blades ensure a high efficiency.

The base is made of cast iron. The flanges and base are cast in one piece. The outlet side of the base has a combined drain plug and bypass valve. The pump is secured to the foundation by four bolts through the base plate.



Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with tapped-hole flange (FT).

Motor-mounting designation in accordance with IEC 60034-7: IM B 14 (Code I) / IM 3601 (Code II). Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.

The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.

The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.

rpm

Technical data

Controls: Frequency converter:	NONE
Liquid: Pumped liquid: Liquid temperature range: Liquid temperature during operat Density:	Water -20 120 °C tion: 20 °C 998.2 kg/m³
Technical: Pump speed on which pump data Rated flow: Rated head:	a are based: 2917 5.8 m³/h 135.5 m



I	Description			
	Description	<u> </u>		
	Pump orientation:	Vertical		
	Shaft seal arrangement:	Single		
	Code for shaft seal:	HQQE		
	Approvals on nameplate:	CE, EAC,ACS		
	Curve tolerance:	ISO9906:2012 3B		
	Materials:			
	Base:	Cast iron		
		EN 1561 EN-GJL-20	0	
		ASTM A48-25B	-	
	Impeller:	Stainless steel		
		EN 1.4301		
		AISI 304		
	Bearing:	SIC		
	beamy.	510		
	Installation:			
	Maximum ambient temperature:			
	Maximum operating pressure:	25 bar		
	Max pressure at stated temp:	25 bar / 120 °C		
1		25 bar / -20 °C		
	Type of connection:	DIN / ANSI / JIS		
	Size of inlet connection:	DN 25/32		
		1 1/4 inch		
	Size of outlet connection:	DN 25/32		
		1 1/4 inch		
	Pressure rating for pipe connecti			
	Flange rating inlet:	250 lb		
	Flange size for motor:	FT130		
	Thange size for motor.	11150		
	Electrical data:			
	Motor standard:	IEC		
	Motor type:	112MC		
	IE Efficiency class:	IE3		
	Rated power - P2:	4 kW		
	Power (P2) required by pump:	4 kW		
	Mains frequency:	50 Hz		
	Rated voltage:	3 x 380-415D V		
	Rated current:	7.9 A		
	Starting current:	1000-1110 %		
	Cos phi - power factor:	0.87-0.87		
	Rated speed:	2920-2940 rpm		
	Efficiency:	IE3 88,1%		
	Motor efficiency at full load:	88.1 %		
	Motor efficiency at 3/4 load:	88.6 %		
	Motor efficiency at 1/2 load:	85.2 %		
	Number of poles:	2		
	Enclosure class (IEC 34-5):	55 Dust/Jetting		
	Insulation class (IEC 85):	F		
	Others:			
	Minimum efficiency index, MEI â	‰¥: 0.57		
	Net weight:	68.6 kg		
	Gross weight:	89.2 kg		
	Shipping volume:	0.257 m ³		
	Danish VVS No.:	385902026		
	Swedish RSK No.:			
1	Swedish Kok INU	5824864		





		Date:	16/0	2/2019		
Description	Value	H [m]		CR 5-26, 3*4	00 V, 50Hz	eta [%]
General information:		200 -				-
Product name:	CR 5-26 A-FGJ-A-E-HQQE	180 -				
Product No:	96513391	-				
EAN number:	5700396639437	160 -				
Technical:	*-	140 -				
Pump speed on which pump data are based:	2917 rpm	120 -				
Rated flow:	5.8 m³/h	—				
Rated head:	135.5 m	100 -				100
Head max:	177.4 m					o0
Stages:	26	80 -			3	80
Impellers:	26	60 -			-	60
Number of reduced-diameter impellers:	0					
Low NPSH:	Ν	40 -			- 4	40
Pump orientation:	Vertical					~~
Shaft seal arrangement:	Single	20-			-2	20
Code for shaft seal:	HQQE					0
Approvals on nameplate:	CE, EAC,ACS	o	1 2 3 4	5 6 7	Q [m³/h]	-
Curve tolerance:	ISO9906:2012 3B	P [kW]				NPS [m]
Pump version:	Α	4-			P1 2	20
Model:	Α					
Materials:		3-			P2	15
Base:	Cast iron					-
	EN 1561 EN-GJL-200	2-				10
	ASTM A48-25B					
Impeller:	Stainless steel	1-			<u> </u>	5
	EN 1.4301	_				
	AISI 304	0				0
Material code:	Α	1				
Code for rubber:	E		134			
Bearing:	SIC		220			
Installation:						
Maximum ambient temperature:	60 °C	372				
Maximum operating pressure:	25 bar	_	ſ			
Max pressure at stated temp:	25 bar / 120 °C	16				
	25 bar / -20 °C		<u>3 1/2</u> G 1/2			
Type of connection:	DIN / ANSI / JIS			× 24.5		
Size of inlet connection:	DN 25/32	<u>66 1</u>	X G 1/2			
	1 1/4 inch					
Size of outlet connection:	DN 25/32	75				
	1 1/4 inch		100	<u>35</u> 89		
Pressure rating for pipe connection:	PN 25		250	180 220		
Flange rating inlet:	250 lb					
Flange size for motor:	FT130					
Connect code:	FGJ		Y			
Liquid:						
Pumped liquid:	Water	Ю+т				
Liquid temperature range:	-20 120 °C					
Liquid temperature during operation:	20 °C		400-00-111			
Density:	998.2 kg/m³	TO AMPLIFIER	$[\underline{\phi}, \underline{\phi}, \phi$	IN SUPPLY N SUPPLY		
Electrical data:		RELAY				
Motor standard:	IEC		Δ	E 2		
Motor type:	112MC			LAY FOR MH		
E Efficiency class:	IE3	\$ ↓ ⁺	₿ ⁺⁷ ₿ ⁺⁷	Y PROTEL		
Rated power - P2:	4 kW	-		BRMALLY TO AMPL		
Power (P2) required by pump:	4 kW	69		TP211 TH INECTED RMISTOR		
Mains frequency:	50 Hz	TO AMPLIPIER RELAY		IEC CON THE		
Rated voltage:	3 x 380-415D V	-	ul 12 13 1			

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		Date:	16/02/2019	
Description	Value			
Rated current:	7.9 A			
Starting current:	1000-1110 %			
Cos phi - power factor:	0.87-0.87			
Rated speed:	2920-2940 rpm			
Efficiency:	IE3 88,1%			
Motor efficiency at full load:	88.1 %			
Motor efficiency at 3/4 load:	88.6 %			
Motor efficiency at 1/2 load:	85.2 %			
Number of poles:	2			
Enclosure class (IEC 34-5):	55 Dust/Jetting			
Insulation class (IEC 85):	F			
Motor protec:	PTC			
Motor No:	85U15413			
Controls:				
Frequency converter:	NONE			
Others:				
Minimum efficiency index, MEI ≥:	0.57			
Net weight:	68.6 kg			
Gross weight:	89.2 kg			
Shipping volume:	0.257 m ³			
Danish VVS No.:	385902026			
Swedish RSK No.:	5824864			











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16/02/2019

Spare parts CR 5-26, Product No. 96513391 Valid from 1.1.2011 (1152)

Pos	Description	Annotation	Classification Data	Part no.	Qty	
	Kit, coupling			00415063	1	pcs
9	Hex socket head cap screw		Designation: DIN 912			4
			Length (mm): 25			
			Thread: M8			
10a	Coupling half					2
10	Shaft pin		Diameter: 5			1
			Length (mm): 26			
	Kit, coupling guard			96505131	1	pcs
7.a	Combi Slot Torx screw					4
7	Coupling guard					2
	Kit, gaskets			96455090	1	pcs
37	O-ring					2
38	O-ring		Diameter: 16,3			1
	c 9		Material type: EPDM			•
			Thickness: 2,4			
38	O-ring		Diameter: 16,3			2
50	⊖-mig		Material type: EPDM			<u> </u>
			Thickness: 2,4			
100	O rin r					4
109	O-ring		Diameter: 22,00			1
			Material type: EPDM			
			Thickness: 2,75			
	Kit, plug			96505133	1	pcs
18	Air vent screw					1
	Spindle					
	Plug					
23b	Spindle					1
25	Plug					1
25	Plug					1
38	O-ring		Diameter: 16,3			1
			Material type: FKM			
			Thickness: 2,4			
38	O-ring		Diameter: 16,3			2
			Material type: FKM			
			Thickness: 2,4			
38	O-ring		Diameter: 16,3			1
			Material type: EPDM			
			Thickness: 2,4			
38	O-ring		Diameter: 16.3			2
00	~ ''''''''''''''''''''''''''''''''''''		Material type: EPDM			-
			Thickness: 2,4			
	Kit, shaft seal HQQE		1110K11000. 2,4	06/55000	1	nor
105			Motorial tyras UOOF	96455086	1	pcs
105	Shaft seal		Material type: HQQE	00455404	4	1
	Kit, wear parts		Material type: SIC	96455101	1	pcs
4a	Chamber w. bearing cpl.					5
	Chamber					
45	Neck ring					
65	Neck ring retainer					
45	Neck ring					21
47	Bearing ring, rotating					5
64c	Clamp, splined		Internal diameter: 8,5			1
			Outer diameter: 15			
64a	Spacing pipe		Length (mm): 13.00			5
65	Neck ring retainer		U ()			21



			Date:	16/02/2019	
Pos	Description	Annotation	Classification Data	Part no. Qt	y. Unit
66	Wedge lock washer		Thus a di MO		1
67	Lock nut		Thread: M8		1
441b	Gasket			05000740 4	2
	Motor			85903740 1	pcs
	Kit, bearing cpl.			96279802	1
111	Ball bearing		Designation: 62	206.2Z.C3.SYN	
153	Angular-contact bearing		-		
157	O-ring		Diameter: 62		
			Material type: NBR		
			Thickness: 3		
158	Waved washer				
	Kit, end shield			96279790	1
156a	End shield				
157	O-ring		Diameter: 62		
			Material type: NBR		
			Thickness: 3		
158	Waved washer				
159a	Seal ring				
	Kit, eyebolt			96279825	1
189	Eyebolt				
	Kit, fan			96279758	1
156	Fan				
159c	Seal ring				
159a	Seal ring				
	Kit, fan cover			96279756	1
151b	Label				
151	Fan cover				
152	Pan head thread forming screw				
	Kit, flange			96279779	1
156b	Flange				
159.c	-				
186	Drain plug				
100	Kit, shaft seal			96279763	1
159c	Seal ring			00210100	•
159a	Seal ring				
1000	Kit, staybolts			96279793	1
181	Pan head staybolt			30213133	•
101	Kit, terminal board			96279769	1
173a	Base			90279709	1
173a	Pan head thread forming screw		Decignotion: C		
173	Slot cheese head screw		-	OMBI TORX T25 OMBI TORX T25	
170	SIDE CHEESE HEAD SCIEW		Length (mm): 10		
			Thread: M5		
170	Terminal				
176					
176					
176	Wire clamp				
176	Terminal board				
177	Pan head screw			0007077	4
10.1	Kit, terminal box			96279772	1
164	Terminal box cover w/gasket				
166	Pan head thread forming screw				
2a	Pump head			98681106 1	pcs
4a	Bulk, Chamber w. bearing cpl. (24 pcs)			96547652 5	pcs
4a	Chamber w. bearing cpl.			98371274 5	pcs
4	Bulk, Chamber cpl. (24 pcs)			96547651 20	pcs
45	Bulk, Neck ring (24 pcs)			96547603	1
65	Bulk, Retainer (10 pcs)			97911446	1
4	Chamber cpl.			98371271 20	pcs



	Pos	Description	Annotation	Classification Data	Part no.	Qty.	Unit
+	5a	Chamber cpl.	, interaction	olucomoulon pala	98371269		pcs
	6	Base			96588146		pcs
	7.a	Bulk, Combi Slot Torx screw (1000 pcs)			96886324	4	pcs
	7	Bulk, Coupling guard (10 pcs)			96603690	2	pcs
	10	Bulk, Shaft pin (10 pcs)		Diameter: 5	96536473	1	pcs
				Length (mm): 26			•
+	18	Bulk, Air vent screw (5 pcs)		3 ()	96547461	1	pcs
+	18	Air vent screw			95061351	1	pcs
	25	Bulk, Plug (10 pcs)			96536013	1	pcs
-	25a	Drain plug w/bypass valve			96588242	1	pcs
	38	Bulk, O-ring (10 pcs)		Diameter: 16,3	99198	815 1	
				Material type: EPDM			
				Thickness: 2,4			
	38	Bulk, O-ring (50 pcs)		Diameter: 16,3	99412	727 1	
				Material type: EPDM			
				Thickness: 2,4			
	26	Staybolt		Length (mm): 724	98921497	4	pcs
				Thread: M12			
	28	Bulk, Hex head screw (4 pcs)		Length (mm): 25	99335941	4	pcs
				Thread: M8			
	36	Bulk, Nut (20 pcs)		Thread: M12	96620479	4	pcs
	37	Bulk, O-ring (24 pcs)			96547656	2	pcs
	38	Bulk, O-ring (10 pcs)		Diameter: 16,3	99198815	2	pcs
				Material type: EPDM			
				Thickness: 2,4			
	38	Bulk, O-ring (50 pcs)		Diameter: 16,3	99412727	2	pcs
				Material type: EPDM			
				Thickness: 2,4			
+	44a	Bulk, Guide vane cpl. (5 pcs)			96547658		pcs
+	44a	Guide vane cpl.			98681144		pcs
	47	Bulk, Bearing ring, rotating (10 pcs)			97905743		pcs
	47	Bearing ring, rotating			96547649		pcs
	49	Bulk, Impeller cpl. (10 pcs)			98394283		pcs
	49	Bulk, Impeller cpl. (24 pcs)			96547648		pcs
	49	Impeller cpl.			98394422		pcs
	51	Shaft, spline, cpl.			98368529		pcs
	55	Outer sleeve			98811264		pcs
	60	Formed wire spring			96547664		pcs
	64c	Bulk, Clamp, splined (5 pcs)		Internal diameter: 8,5	98496968	1	pcs
				Outer diameter: 15			
	64a	Bulk, Spacing pipe (24 pcs)		Length (mm): 13.00	96536452		pcs
	64a	Spacing pipe		Length (mm): 13.00	98520104		pcs
	64	Bulk, Spacing pipe (24 pcs)		Length (mm): 26.0	96536304		pcs
	66	Bulk, Wedge lock washer (10 pcs)		•••)	96536157		pcs
	67	Bulk, Lock nut (10 pcs)		Thread: M8	98277008		pcs
	67	Bulk, Lock nut (10 pcs)		Thread: M8	98275969		pcs
	69	Bulk, Spacing pipe (10 pcs)		Length (mm): 2.00	96536451		pcs
+	105	Bulk, Shaft seal (15 pcs)		Material type: HQQE	96983415	1	pcs