

## Submittal Data

PROJECT:	UNIT TAG:	 QUANTITY:	
	 TYPE OF SERVICE:		
REPRESENTATIVE:	SUBMITTED BY:	DATE:	
ENGINEER:	 APPROVED BY:	DATE:	
CONTRACTOR:	ORDER NO.:	 DATE:	

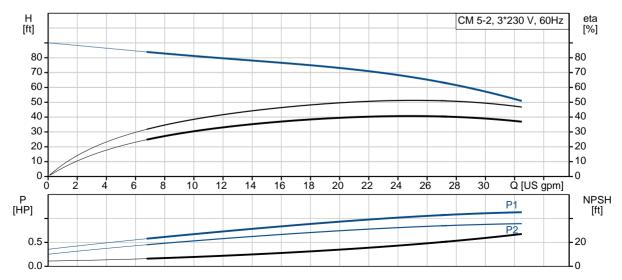
### CM 5-2 A-S-A-E-AQQE E-A-A-N



CM are reliable, quiet and compact horizontal end-suction pumps. The modular pump design makes it easy to make customised solutions. The CM pumps are available in cast iron and stainless steel

Product photo could vary from the actual product

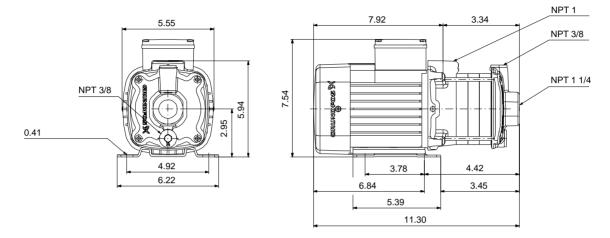
Conditions	of Service	Pump Data		Motor Dat	а
Flow:		Max pressure at stated temperature:	145 psi / 194 °F	Main frequency:	60 Hz
Head:		Liquid temperature range:	-4 194 °F	Enclosure class:	IP55
Efficiency:		Maximum ambient temperature:	131 °F		
Liquid:	Water	Shaft seal:	AQQE		
Temperature:	68 °F	Product number:	97568449		
NPSH required:	ft				
Viscosity:					
Specific Gravity:	1.000				

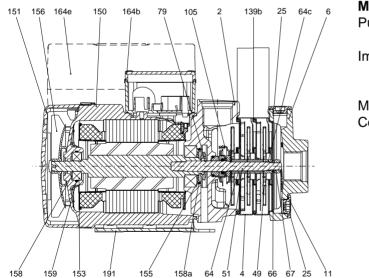


# Submittal Data



**GRUNDFOS** 





## Materials:

atorialor	
ump housing:	Cast iron
	ASTM A48-25A
mpeller:	Stainless steel
	AISI 304
	EN 1.4301
laterial code:	A
ode for rubber:	E

165x100



3/26/2020

Date: Count Description CM 5-2 A-S-A-E-AQQE E-A-A-N 1 Product photo could vary from the actual product Product No.: 97568449 Compact, reliable, horizontal, multistage, end-suction centrifugal pump with axial suction port and radial discharge port. The shaft, impellers and chambers are made of stainless steel. The inlet and discharge parts are made of cast iron. The mechanical shaft seal is a special designed, unbalanced O-ring seal. Pipework connection is via internal NPT pipe threads. The pump is fitted with a 3-phase, foot-mounted, fan-cooled asynchronous motor. Further product details Pump and motor are integrated in a compact and user-friendly design. The pump is fitted to a low base plate, making it ideal for installation in systems where compactness is important. The state-of-the-art design and materials of the shaft seal ensure high wear resistance, improved sticking and dry-running capabilities and long operating life. Servicing the pump requires no special service tools. Service parts are in stock for quick delivery and are available as kits, single parts or bulk. Service videos are available on www.youtube.com. Pump A combination of a stop ring and a Nord-lock® washer secures a tight and reliable fixation of the impeller spacing pipes to the splined pump shaft. It is possible to remove and fit the hydraulic parts from the pump side. The inlet part, chambers and discharge part are held together by four staybolts. The pump is fitted with an unbalanced O-ring seal with a rigid torgue-transmission system. It has a fixed seal driver ensuring a reliable rotation of all parts. The dynamic secondary seal is an O-ring. Primary seal: Rotating seal ring material: silicon carbide (SiC) Stationary seat material: silicon carbide (SiC) 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.



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Date:
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3/26/2020



The pump shaft is connected to the motor shaft through a left thread and tight fit. The shaft cannot be dismantled.

#### Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to EN 50347. Electrical tolerances comply with EN 60034.

An installation indicator is fitted to the motor fan cover. Based on the motor cooling air, it indicates the direction of rotation of the motor. The motor is fitted with a directional sticker.



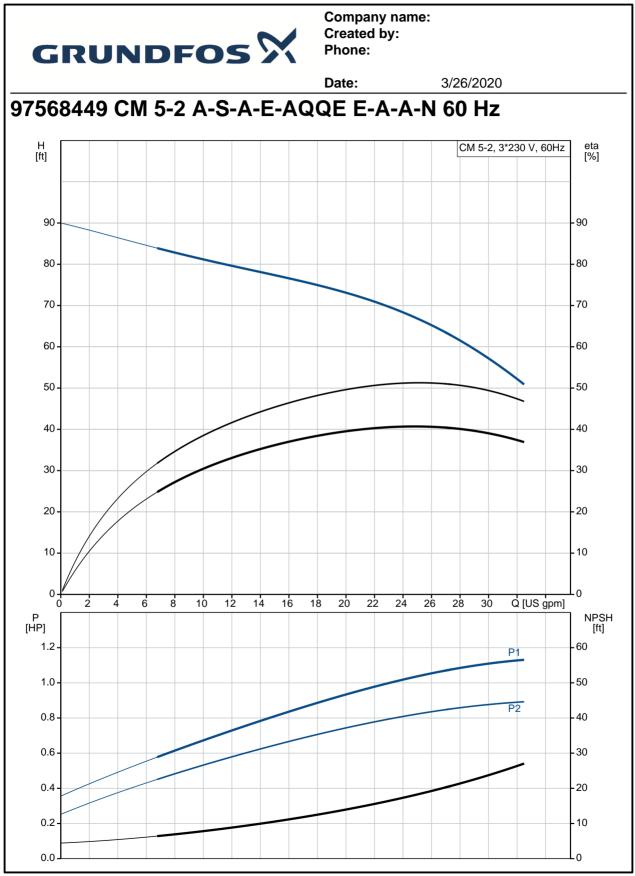
The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.

#### **Technical data**

Controls: Frequency converter:	NONE
<b>Liquid:</b> Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -4 194 °F 68 °F 62.29 lb/ft³
<b>Technical:</b> Pump speed on which pump d Rated flow: Rated head: Code for shaft seal: Curve tolerance:	ata are based: 3480 rpm 24.8 US gpm 70.08 ft AQQE ISO9906:2012 3B
<b>Materials:</b> Pump housing: Impeller:	Cast iron EN-GJL-200 ASTM A48-25A Stainless steel



			Date:	3/26/2020
Count	Description			
		EN 1.4301		
		AISI 304		
	Installation:			
	Range of ambient temperature:	-4 131 °F		
	Maximum operating pressure:	145.04 psi		
	Max pressure at stated tempera			
	Type of connection:	NPT(F)	••••	
	Size of suction port:	1 1/4 inch		
	Size of outlet port:	1 inch		
	Outlet position:	12		
	Electrical data:			
	Motor standard:	NEMA		
	Frame size:	71B		
	Rated power - P2: Main frequency:	0.992 HP 60 Hz		
	Suitable for 50/60 Hz:	N		
	Phase:	3		
	Rated voltage:	208-230YY/440-	-480Y V	
	Service factor:	1.00		
	Rated current:	3,4-3,6/1,7-1,8 A	4	
	Rated speed:	3220-3370 rpm		
	Enclosure class (IEC 34-5):	IP55		
	Insulation class (IEC 85):	F NONE		
	Built-in motor protection:	NONE		
	Others:	10		
	Terminal box position:	12		
	Minimum efficiency index, MEI â Net weight:	‰∓. 0.7 25.6 lb		
	Gross weight:	31.1 lb		
	Approvals:		AS,ACS,TR,EAC,C	CURUS
	Country of origin:	US	,,,,,	
	Custom tariff no.:	8413.70.2040		



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		Date:	3/26/2020
Description	Value	H [ft]	CM 5-2, 3*230 V, 60Hz [%]
General information:			
Product name:	CM 5-2 A-S-A-E-AQQE E-A-A-N	90 -	- 90
Product No.:	97568449	80 -	- 80
EAN:	5700318670104	70 -	-70
	5700318670104		
Technical:		60 -	- 60
Pump speed on which pump data are based:	3480 rpm	50 -	50
Rated flow:	24.8 US gpm	40 -	40
Rated head:	70.08 ft	30 -	30
Impellers:	2		
Code for shaft seal:	AQQE	20-	- 20
Curve tolerance:	ISO9906:2012 3B	10 - //	
Pump version:	A		
Model:	A	0 <del>  </del> 0 5	10 15 20 25 Q [US gpm]
Materials:		P [HP]	NPSH [ft]
Pump housing:	Cast iron		P1
·	EN-GJL-200	1.0 -	-40
	ASTM A48-25A		P2
Impeller:	Stainless steel		
	EN 1.4301	0.5 -	20
	AISI 304	_	
Material code:	A 61 504		
Code for rubber:	E	0.0	
Installation:	<b>L</b>		
Range of ambient temperature:	-4 131 °F		555 7.92 3.34 NPT 1 NPT 38
Maximum operating pressure:	145.04 psi	<u>NPT 3/8</u>	
Max pressure at stated temperature:	145 psi / 194 °F		
	145 psi / 194 °F		5.39
Type of connection:	NPT(F)		
Size of suction port:	1 1/4 inch		
Size of outlet port:	1 inch		
Outlet position:	12		
Connect code:	S		
Liquid:			
Pumped liquid:	Water	A 14	WARNING
Liquid temperature range:	-4 194 °F	MOTOR MUST BE GROUND	DED IN ACCORDANCE
Selected liquid temperature:	68 °F	WITH THE NATIONAL ELEC LOCAL CODES BY TRAINED PREVENT SERIOUS ELECT	D PERSONNEL TO
Density:	62.29 lb/ft <sup>3</sup>	TO SERVICE MOTOR, DISC SOURCE FROM MOTOR AN	20NNECT POWER ND ANY ACCESSORY TO TO COME TO A
Electrical data:		DEVICES AND ALLOW MOT COMPLETE STAND STILL LOW VOLTAGE	HIGH VOLTAGE
Motor standard:	NEMA	6 5 4	60H± 460V 50H± 400V 5€ € € 4 €
Frame size:	71B	99 89 79	9 e 8 7
Rated power - P2:	0.992 HP	3∳ 2∳ 1∳ L3 L2 L1	39 29 19       80 L3 L2 L1 88
Main frequency:	60 Hz	INTERCHAND WRED TO RE	a construction of the cons
Suitable for 50/60 Hz:	N	THE BROGEN PRICE SOCIO	TLENG - J
Phase:	3		
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		Date:	3/26/2020
Description	Value		
Rated voltage:	208-230YY/440-480Y V		
Service factor:	1.00		
Rated current:	3,4-3,6/1,7-1,8 A		
Rated speed:	3220-3370 rpm		
Enclosure class (IEC 34-5):	IP55		
Insulation class (IEC 85):	F		
Built-in motor protection:	NONE		
Controls:			
Frequency converter:	NONE		
Others:			
Terminal box position:	12		
Minimum efficiency index, MEI ≥:	0.7		
Net weight:	25.6 lb		
Gross weight:	31.1 lb		
Approvals:	CE,CULUS,WRAS,ACS,TR,E AC,CURUS		
Country of origin:	US		
Custom tariff no.:	8413.70.2040		

