

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

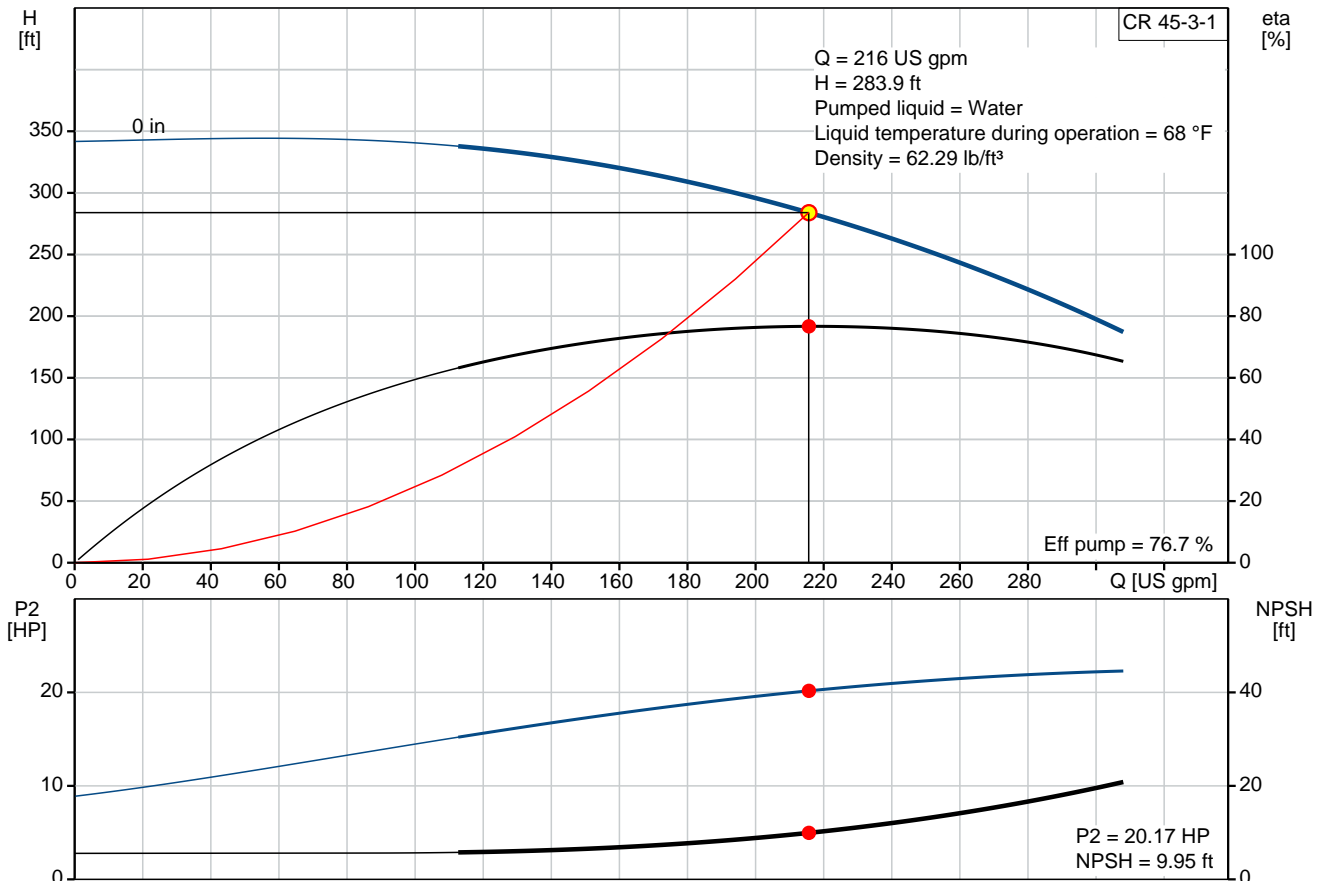


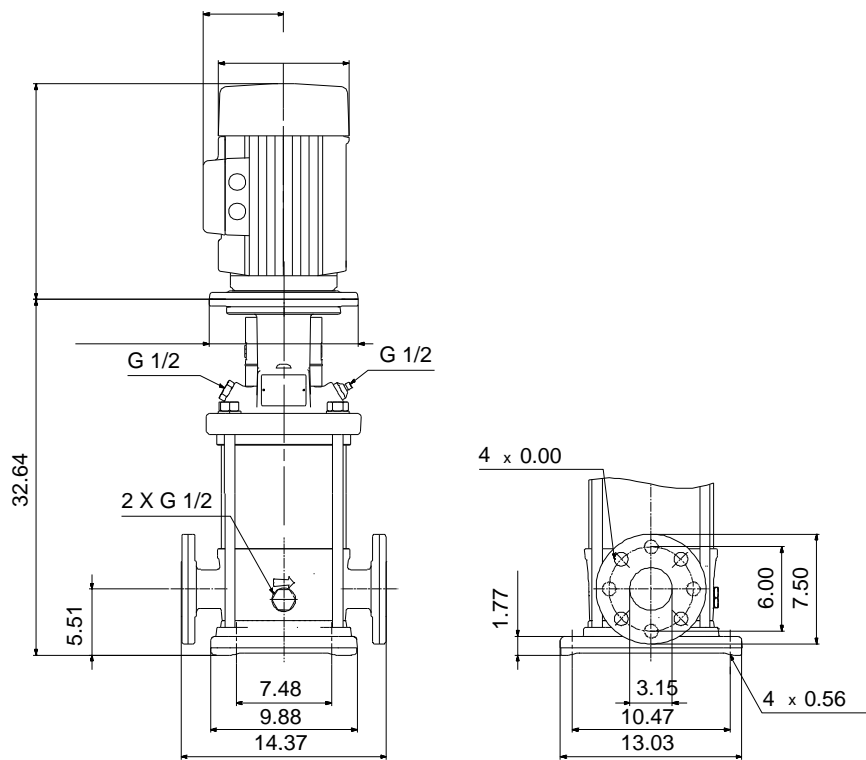
CR 45-3-1

Vertical, multistage centrifugal pump with suction and discharge ports on the same level. The pump head and base are in cast iron. All other wetted parts are in stainless steel (EN 1.4301) (AISI 304)

Product photo could vary from the actual product

Conditions of Service		Pump Data		Motor Data
Flow:	216 US gpm	Max pressure at stated temperature:	232 psi / 250 °F	Main frequency: 60 Hz
Head:	283.9 ft	Approvals:	NSF61	
Efficiency:	_____	Shaft seal:	HQQE	
Liquid:	Water	Product number:	96417833	
Temperature:	68 °F			
NPSH required:	9.95 ft			
Viscosity:	_____			
Specific Gravity:	1.000			





Materials:

Base:	Cast iron EN 1563 EN-GJS-500-7 ASTM A536 80-55-06
Impeller:	Stainless steel AISI 304 EN 1.4301
Material code:	A
Code for rubber:	E

Tender Text



Product photo could vary from the actual product

Product No.: [96417833](#)

CR 45-3-1 A-G-A-E-HQQE

Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation.

The pump has the following characteristics:

- Impellers and intermediate chambers are made of
- The shaft seal has assembly length according to DIN 24960.
- Power transmission is via cast iron split coupling.

Controls:

Frequency converter: NONE

Liquid:

Pumped liquid: Water
Liquid temperature during operation: 68 °F
Density: 62.29 lb/ft³

Technical:

Speed for pump data: 3521 rpm
Actual calculated flow: 216 US gpm
Resulting head of the pump: 283.9 ft
Pump orientation: Vertical
Shaft seal arrangement: Single
Code for shaft seal: HQQE
Approvals on nameplate: NSF61
Curve tolerance: ISO9906:2012 3B

Materials:

Base: Cast iron
EN 1563 EN-GJS-500-7
ASTM A536 80-55-06
Impeller: Stainless steel
EN 1.4301
AISI 304
Bearing material: SIC
Support bearing: Graflon

Installation:

Max pressure at stated temperature: 232 psi / 250 °F
232 psi / -22 °F
Type of connection: ANSI
Size of suction port: 3 inch



Company name:

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Size of outlet port: 3 inch
Pressure rating: PN 16
Flange size for motor: 284TC
Flange rating inlet: 150 lb

Electrical data:

Motor standard: NEMA
Power (P2) required by pump: 25 HP

Others:

Net weight: 160 lb
Gross weight: 178 lb
Shipping volume: 10.9 ft³



Company name:

Created by:

Phone:

Date:

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Position	Count	Description
		Flange size for motor: 284TC Flange rating inlet: 150 lb
		Electrical data: Motor standard: NEMA Power (P2) required by pump: 25 HP
		Others: Net weight: 160 lb Gross weight: 178 lb Shipping volume: 10.9 ft ³



Company name:

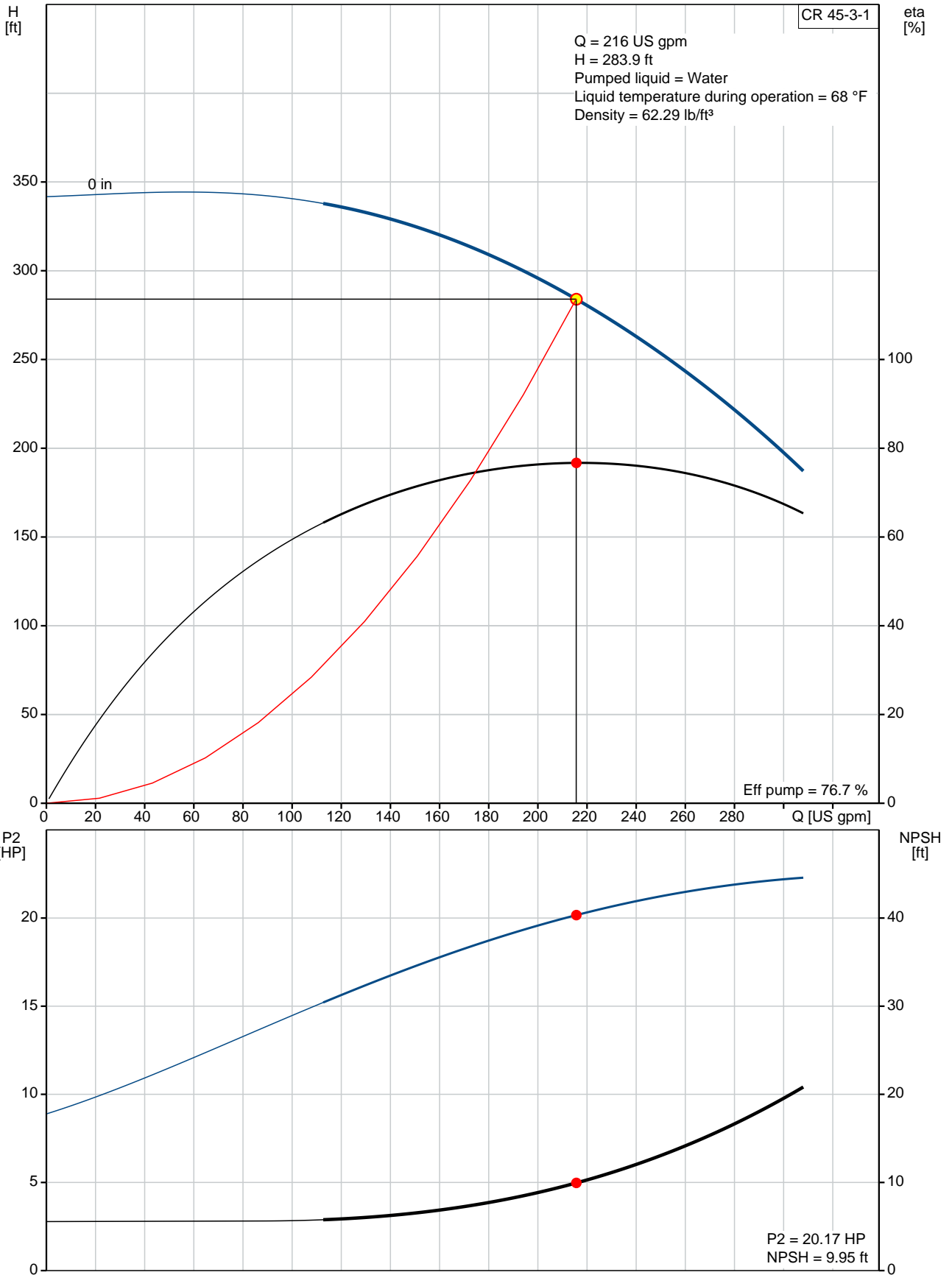
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Phone:

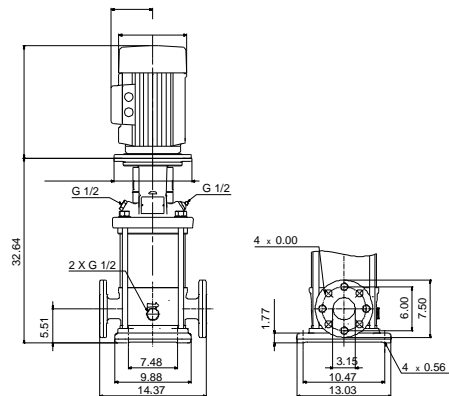
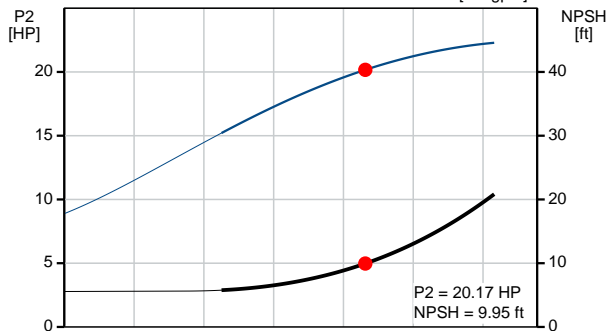
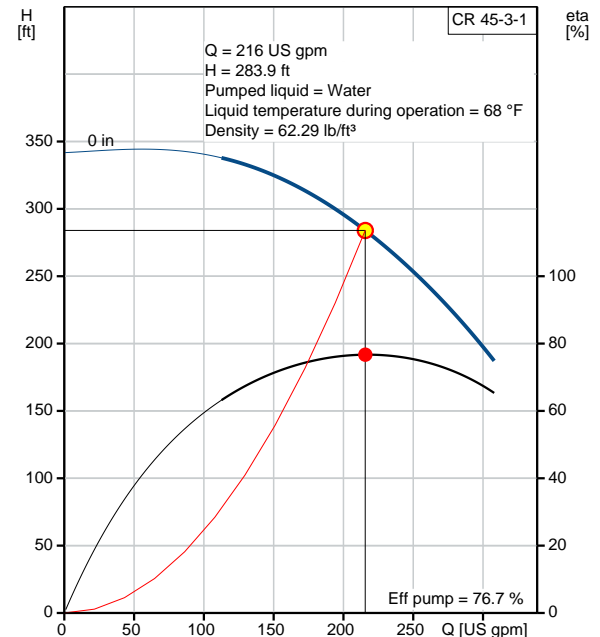
Date:

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96417833 CR 45-3-1 60 Hz



Description	Value
General information:	
Product name:	CR 45-3-1 A-G-A-E-HQQE
Product No.:	96417833
EAN:	5700390701789
Technical:	
Speed for pump data:	3521 rpm
Actual calculated flow:	216 US gpm
Resulting head of the pump:	283.9 ft
Stages:	3
Impellers:	3
Number of reduced-diameter impellers:	1
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	NSF61
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	B
Materials:	
Base:	Cast iron EN 1563 EN-GJS-500-7 ASTM A536 80-55-06
Impeller:	Stainless steel EN 1.4301 AISI 304
Material code:	A
Code for rubber:	E
Bearing material:	SIC
Support bearing:	Graflon
Installation:	
Max pressure at stated temperature:	232 psi / 250 °F 232 psi / -22 °F
Type of connection:	ANSI
Connect code:	G
Size of suction port:	3 inch
Size of outlet port:	3 inch
Pressure rating:	PN 16
Flange size for motor:	284TC
Flange rating inlet:	150 lb
Liquid:	
Pumped liquid:	Water
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft ³
Electrical data:	
Motor standard:	NEMA
Power (P2) required by pump:	25 HP
Controls:	
Frequency converter:	NONE
Others:	
Net weight:	160 lb





Company name:

Created by:

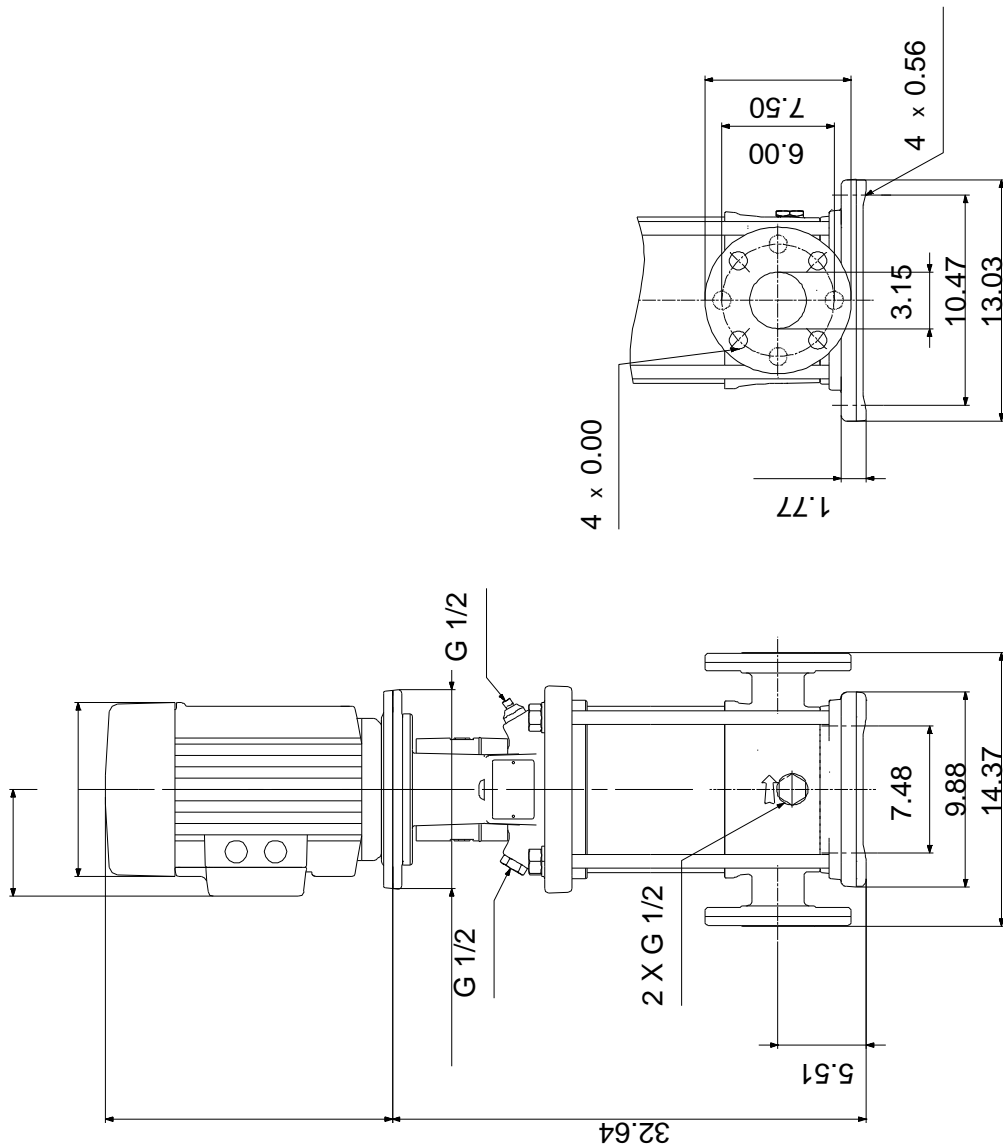
Phone:

Date:

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Description	Value
Gross weight:	178 lb
Shipping volume:	10.9 ft ³
Sales region:	Namreg

96417833 CR 45-3-1 60 Hz



Note! All units are in [mm] unless otherwise stated.
Disclaimer: This simplified dimensional drawing does not show all details.



Company name:

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Date:

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Order Data:

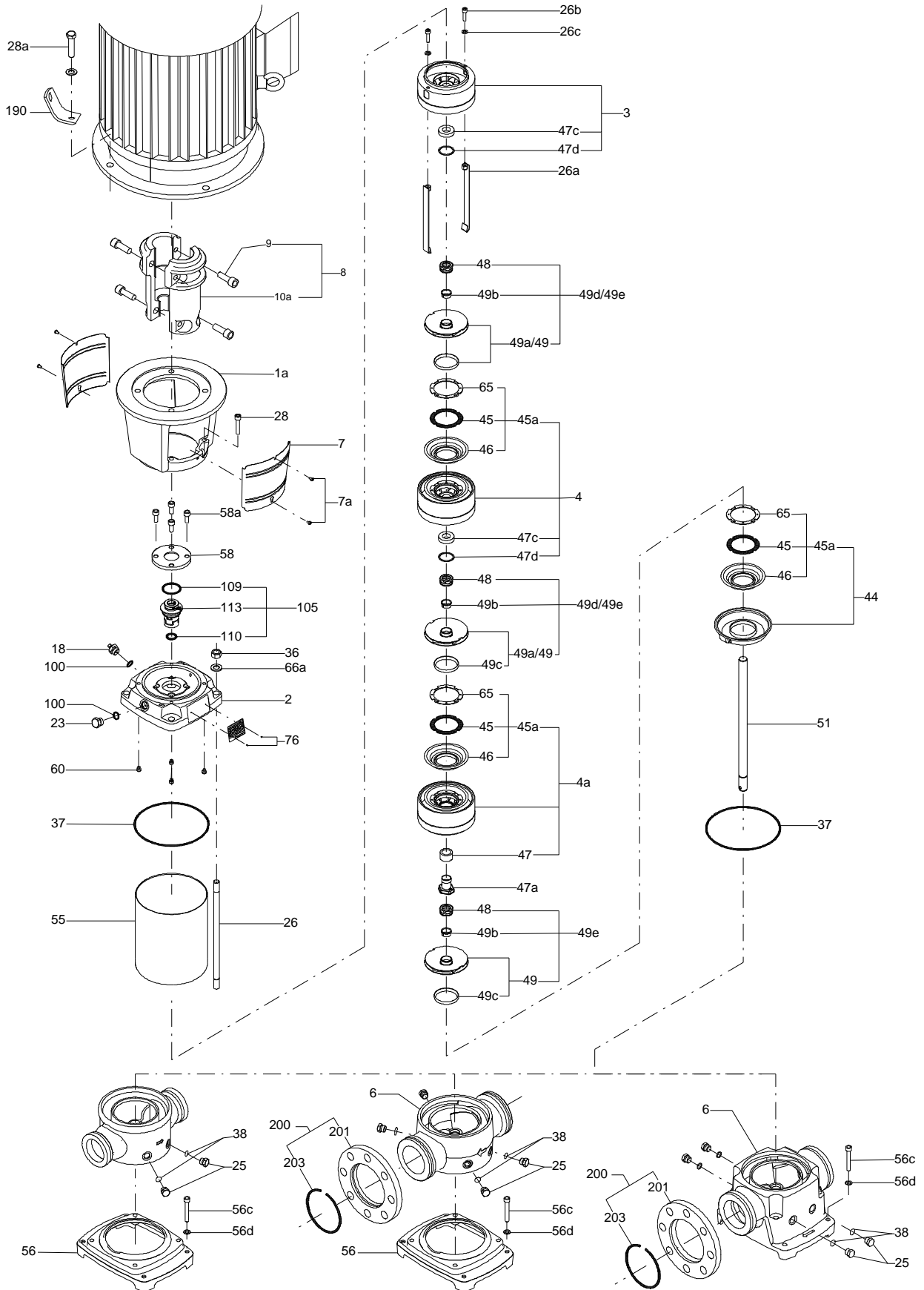
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Amount: 1

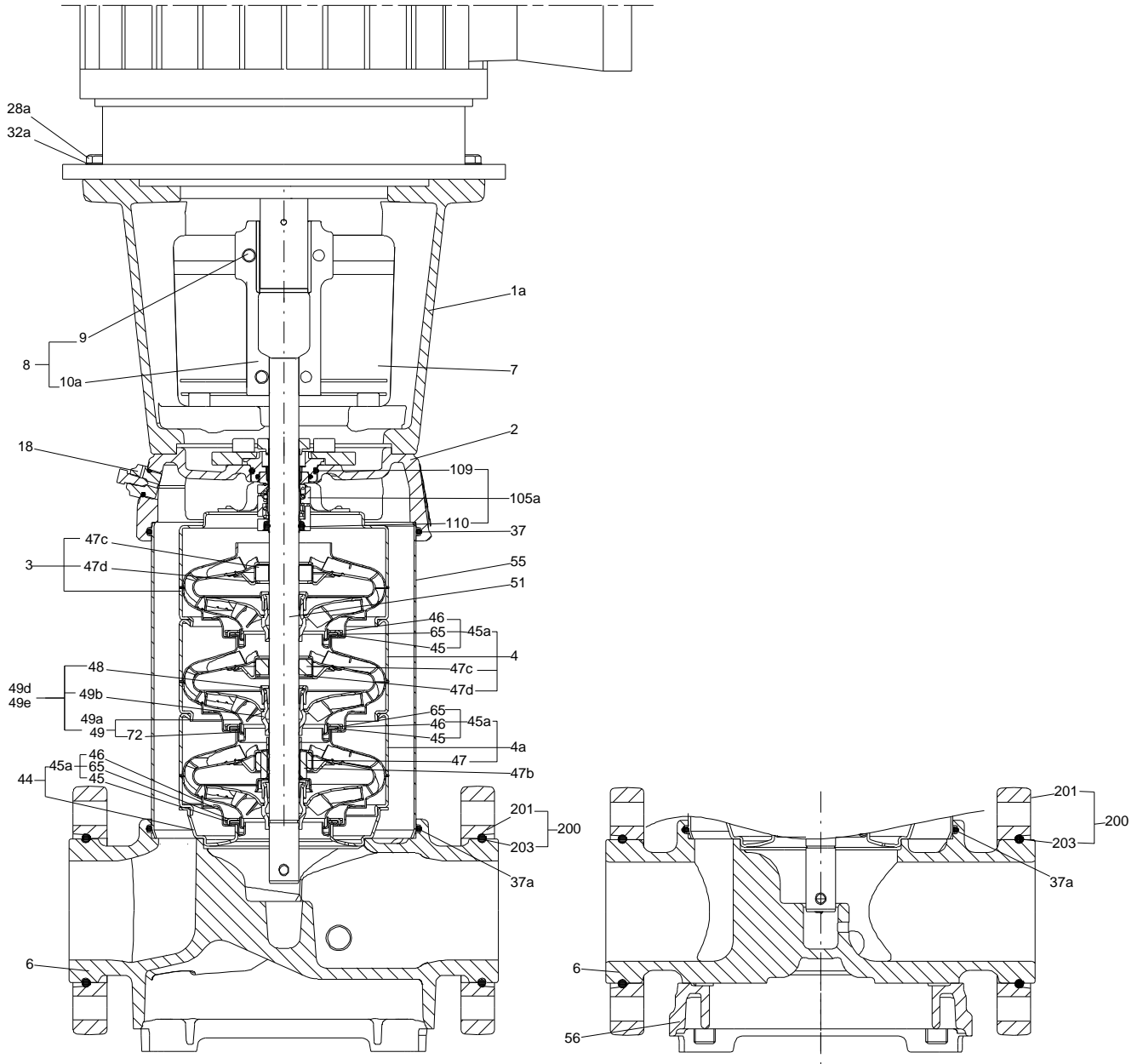
Product No.: 96417833

Total: Price on request

Exploded view (TM065558 LACR)



Sectional drawing (TM065571 LACR)



Parts list CR 45-3-1, Prod number 96417833

Valid from 3.3.2014 (1410)

Position	Description	Annotation	Classification data	Part No.	Count	Unit
	Hex head screw				1	pcs
	Washer				1	pcs
-	Flange cpl.				2	pcs
201	Flange				1	
203	Lock ring				1	
	Quick guide				1	pcs
	Shaft end				1	pcs
	Bar				1	pcs
	Spring lock washer				1	pcs
- 1	Basic unit				1	pcs
- 2a	Pump head cpl.				1	
	O-ring					
2a	Pump head					
9	Hex socket head cap screw		Designation: DIN 912			
			Length: 25			
			Thread: M10			
- 18	Air vent screw					
	Plug					
	Spindle					
23	Plug					
58	Cover					
60	Spring					
100	O-ring		Diameter: 16,3			
			Material type: EPDM			
			Thickness: 2,4			
- 6b	Base cpl.		Rubber type: EPDM		1	
	O-ring					
6	Base					
25	Plug					
32	Washer		Designation: DIN 125A			
			Inner diameter: 6,4			
			Outer diameter: 12,0			
			Thickness: 1,6			
38	O-ring		Diameter: 16,3			
			Material type: EPDM			
			Thickness: 2,4			
26	Staybolt		Length: 407		4	
			Thread: M16			
36	Hex nut		Thread: M16		4	
55	Outer sleeve		Outer diameter: 216,0		1	
			Length: 263,5			
66a	Washer		Designation: DIN 125 A		4	
			Inner diameter: 17			
			Outer diameter: 30			
			Thickness: 3			
- 80	Chamber stack				1	
- 3	Upper chamber cpl.					
	Chamber					
	Chamber					
	Guide vane					
	Cone					
	Guide cup					
	Guide cup					



Company name:

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Date:

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Position	Description	Annotation	Classification data	Part No.	Count	Unit
47c	Bush					
47d	Lock ring					
- 4	Intermediate chamber cpl.					
	Chamber					
	Chamber					
	Neck ring cpl.					
	Guide vane					
	Cone					
	Guide cup					
	Guide cup					
47c	Bush					
47d	Lock ring					
- 4a	Intermediate chamber cpl.					
	Chamber					
	Chamber					
	Neck ring cpl.					
	Guide vane					
	Cone					
	Guide cup					
	Guide cup					
47	Bearing					
26a	Strap cpl.					
26b	Hex socket head cap screw					
26c	Washer		Designation: DIN 125A			
			Inner diameter: 8,4			
			Outer diameter: 16			
			Thickness: 1,6			
- 44	Suction interconnector coupling					
	Neck ring					
	Suction interconnector					
45	Seal ring					
65	Top f/neck ring					
- 47a	Bearing cpl.					
	Disc spring					
	Bearing ring, rotating					
	Holder					
	Driver					
- 49d	Impeller cpl.					
48	Nut					
- 49	Impeller, reduced diameter					
	Impeller hub					
49c	Wear ring					
49b	Split cone					
- 49e	Impeller cpl.					
48	Nut					
- 49	Impeller					
	Impeller hub					
49c	Wear ring					
49b	Split cone					
51	Shaft					
- 1a	Motor stool cpl.				1	pcs
1a	Motor stool				1	
7	Coupling guard				2	
7a	Socket button head screw				4	
28	Hex socket head cap screw		Designation: DIN 912		4	
			Length: 50			
			Thread: M10			
28a	Hex socket head cap screw		Length: 13		4	
			Thread: 1/2"			



Company name:

Created by:

Phone:

Date: 2/20/2018

Position	Description	Annotation	Classification data	Part No.	Count	Unit
- 8	Coupling cpl.		Dimension: 22/41,2		1	pcs
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length: 25			
			Thread: M10			
10a	Coupling half				2	
36	Hex nut				2	pcs
- 105	Shaft seal		Material type: HQQE		1	pcs
	Adjusting fork				1	
109	O-ring				1	
110	O-ring		Diameter: 21,5		1	
			Material type: EPDM			
			Thickness: 4,25			