



Flygt 3068

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1 Introduction

Purpose of this manual

The purpose of this manual is to provide necessary information on spare parts and accessories order.

Disclaimer

Always use genuine Flygt parts. The use of other spare parts or accessories can invalidate any claims for warranty or compensation. Xylem does not take any responsibility for damages that are caused by the use of non-original parts. For more information, contact your local sales and service representative.

Data for ordering spare parts

The following information is needed for spare part orders:

- Serial number of the product
- Part number
- Quantity of bulk material, see * in tables

1.1 Specially approved products

Qualification of personnel

Only Xylem or Xylem-authorized service personnel may undertake repair work on specially approved products.

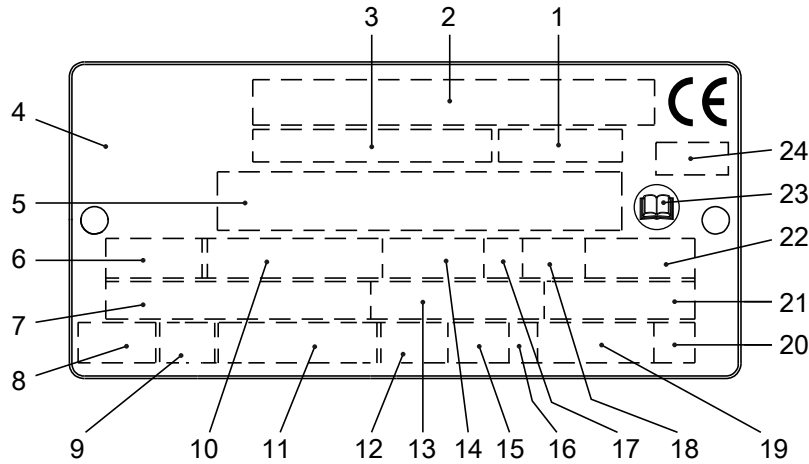
Dimensional accuracy inspection

Spare parts marked with (Ex) after the part number are subject to dimensional accuracy inspection when used in specially approved products.

2 Product Description

2.1 The data plate

The data plate is a metal label that is located on the main body of the products. The data plate lists key product specifications. Specially approved products also have an approval plate.



WIS006257A

1. Curve code or Propeller code
2. Serial number
3. Product number
4. Country of origin
5. Additional information
6. Phase; type of current; frequency
7. Rated voltage
8. Thermal protection
9. Thermal class
10. Rated shaft power
11. International standard
12. Degree of protection
13. Rated current
14. Rated speed
15. Maximum submergence
16. Direction of rotation: L=left, R=right
17. Duty class
18. Duty factor
19. Product weight
20. Locked rotor code letter
21. Power factor
22. Maximum ambient temperature
23. Read installation manual
24. Notified body, only for EN-approved Ex products

Figure 1: The data plate

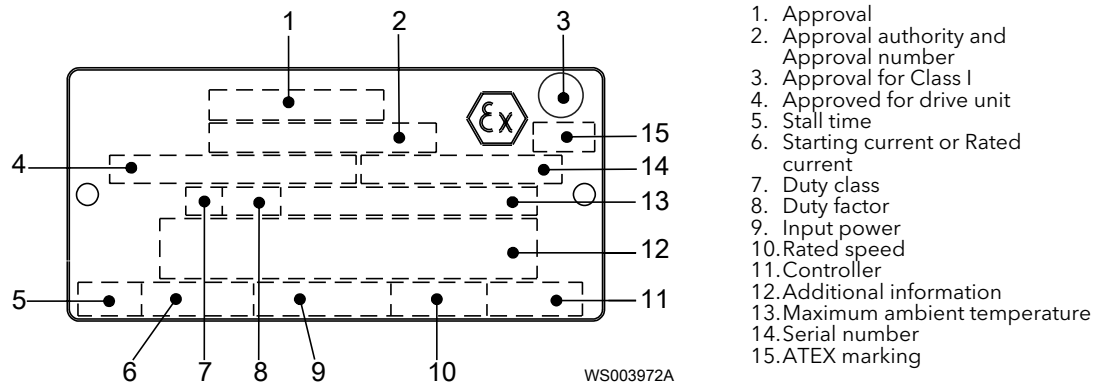
2.2 Approvals

Product approvals for hazardous locations

Pump	Approval
<ul style="list-style-type: none"> • 3068.090 • 3068.590 • 3068.890 	European Norm (EN) <ul style="list-style-type: none"> • ATEX Directive • EN 60079-0:2009, EN 60079-1:2007, EN 13463-1:2009, EN 13463-5:2011 • Ex I M2 Ex d I (3068.090) • Ex II 2 G c Ex d IIB T4 Gb
	EN approval for cable entry: <ul style="list-style-type: none"> • Certificate number: INERIS 02ATEX9008 U • Ex II 2 G Ex d IIC Gb or I M2 Ex d I Mb
	IEC <ul style="list-style-type: none"> • IECEx scheme • IEC 60079-0, IEC 60079-1 • Ex d IIB T4
	FM (FM Approvals) <ul style="list-style-type: none"> • Explosion proof for use in Class I, Div. 1, Group C and D • Dust ignition proof for use in Class II, Div. 1, Group E, F and G • Suitable for use in Class III, Div. 1, Hazardous Locations
	CSA Ex <ul style="list-style-type: none"> • Explosion proof for use in Class I, Div. 1, Group C and D

EN approval plate

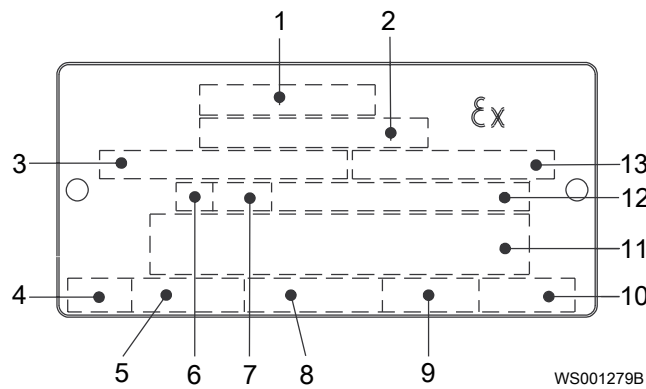
This illustration describes the EN approval plate and the information that is contained in its fields.



IEC approval plate

This illustration describes the IEC approval plate and the information that is contained in its fields.

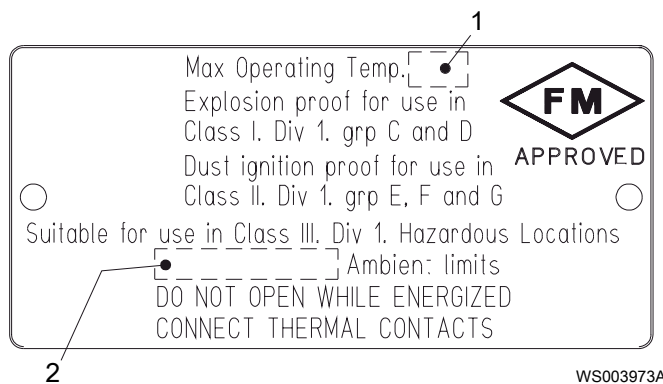
International Norm; not for EU member countries.



1. Approval
2. Approval authority and Approval number
3. Approved for drive unit
4. Stall time
5. Starting current or Rated current
6. Duty class
7. Duty factor
8. Input power
9. Rated speed
10. Controller
11. Additional information
12. Maximum ambient temperature
13. Serial number

FM approval plate

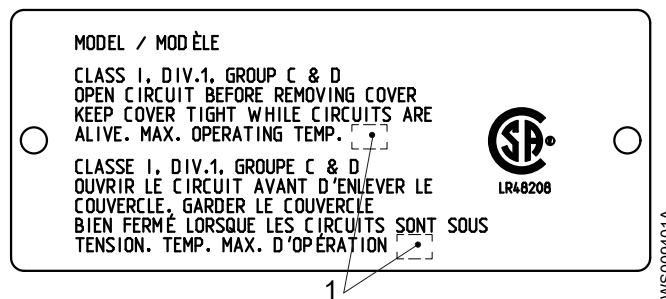
This illustration describes the FM approval plate and the information that is contained in its fields.



1. Temperature class
2. Maximum ambient temperature

CSA approval plate

This illustration describes the CSA approval plate and the information that is contained in its fields.



1. Temperature class

2.3 Product denomination

Reading instruction

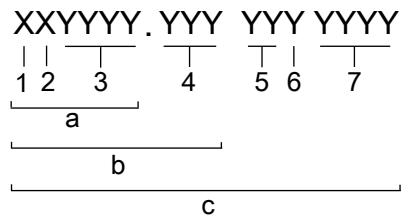
In this section, code characters are illustrated accordingly:

X = letter

Y = digit

The different types of codes are marked up with a, b and c. Code parameters are marked up with numbers.

Codes and parameters



WS006265B

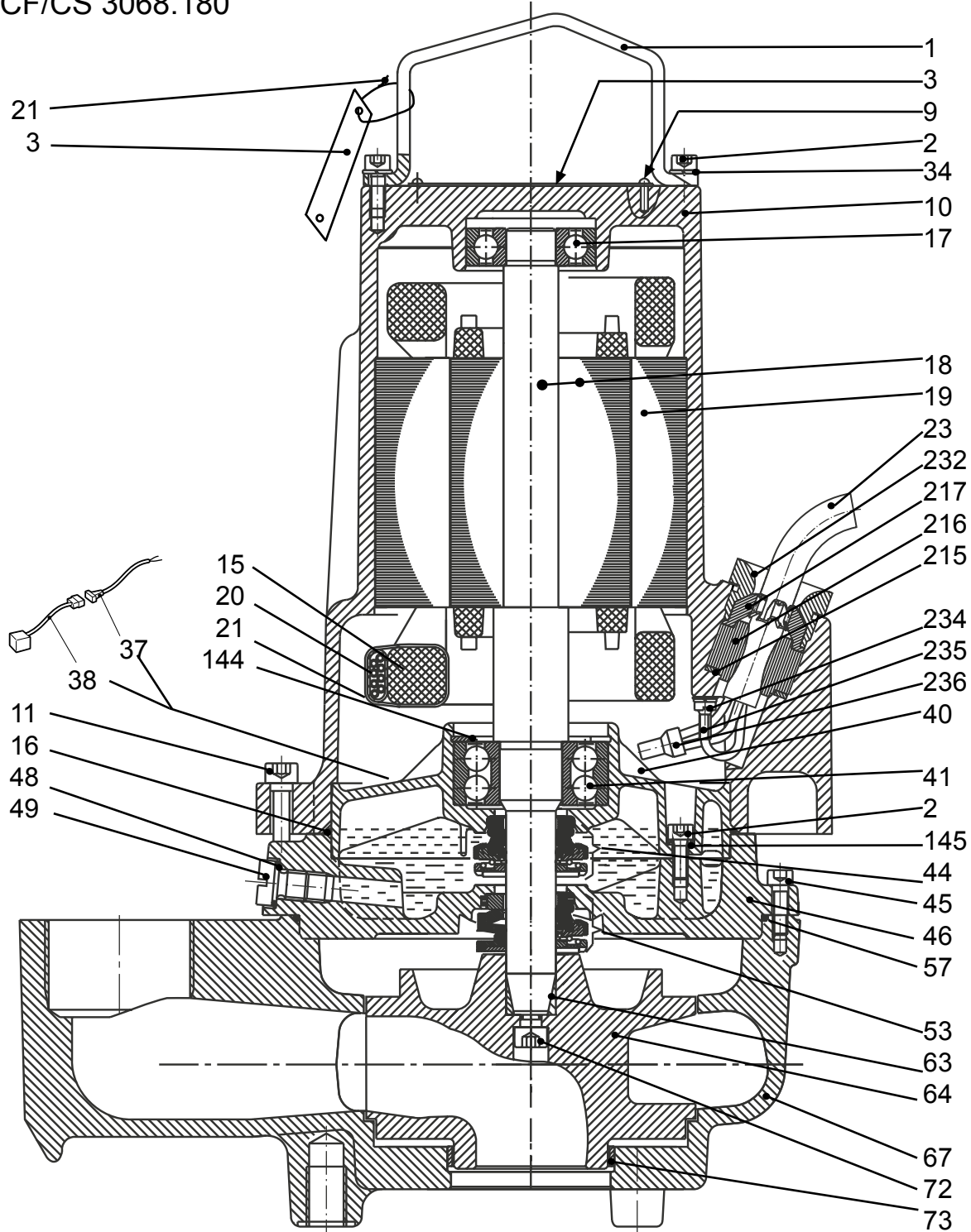
Type of Callout	Number	Indication
Type of code	a	Sales denomination
	b	Product code
	c	Serial number
Parameter	1	Hydraulic end
	2	Type of installation
	3	Sales code
	4	Version
	5	Production year
	6	Production cycle
	7	Running number

3 Drive and Hydraulic Units

3.1 CF

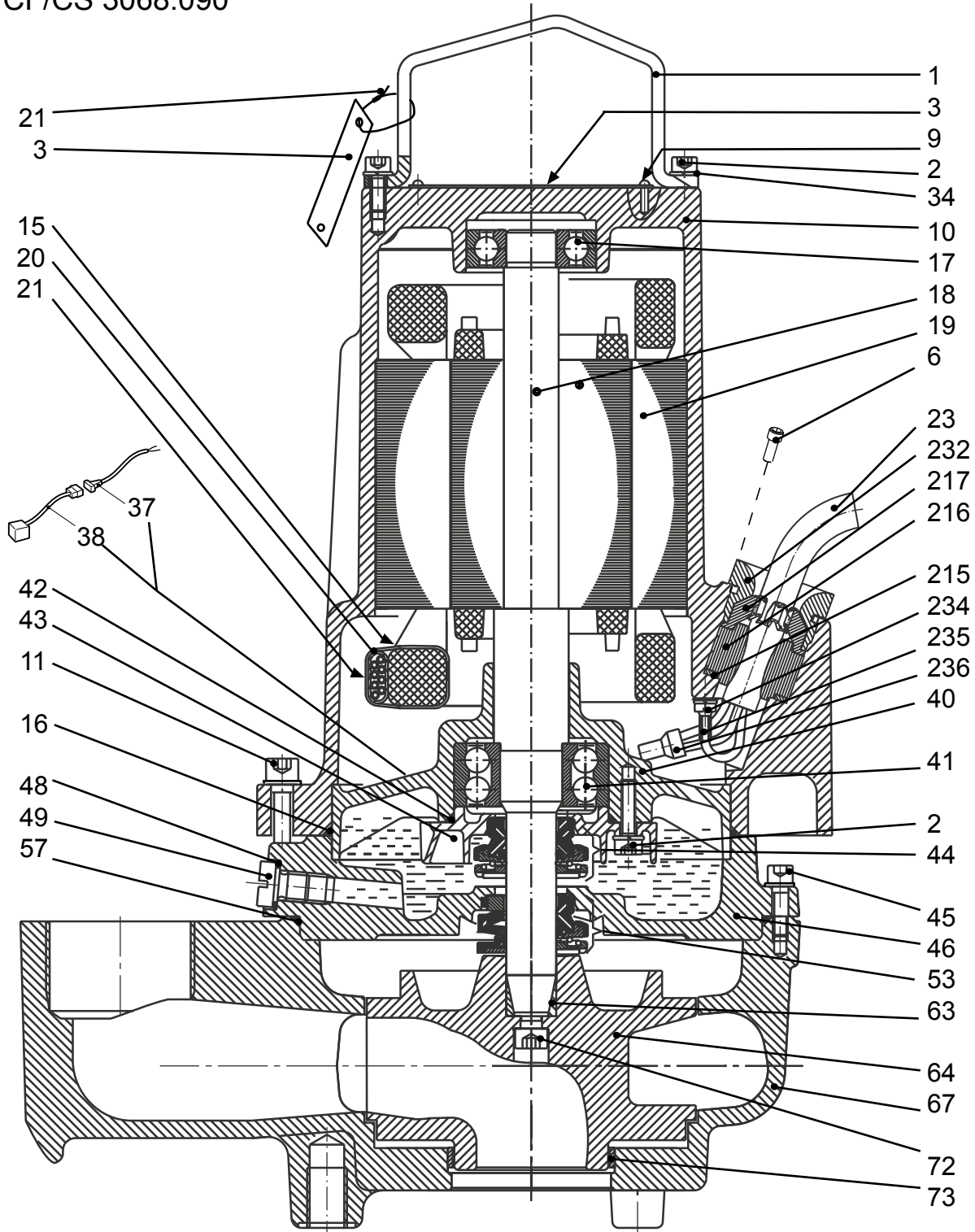
Curve: 251, 253, 255, 256, 257

CF/CS 3068.180



Curve: 251, 253, 255, 256

CF/CS 3068.090

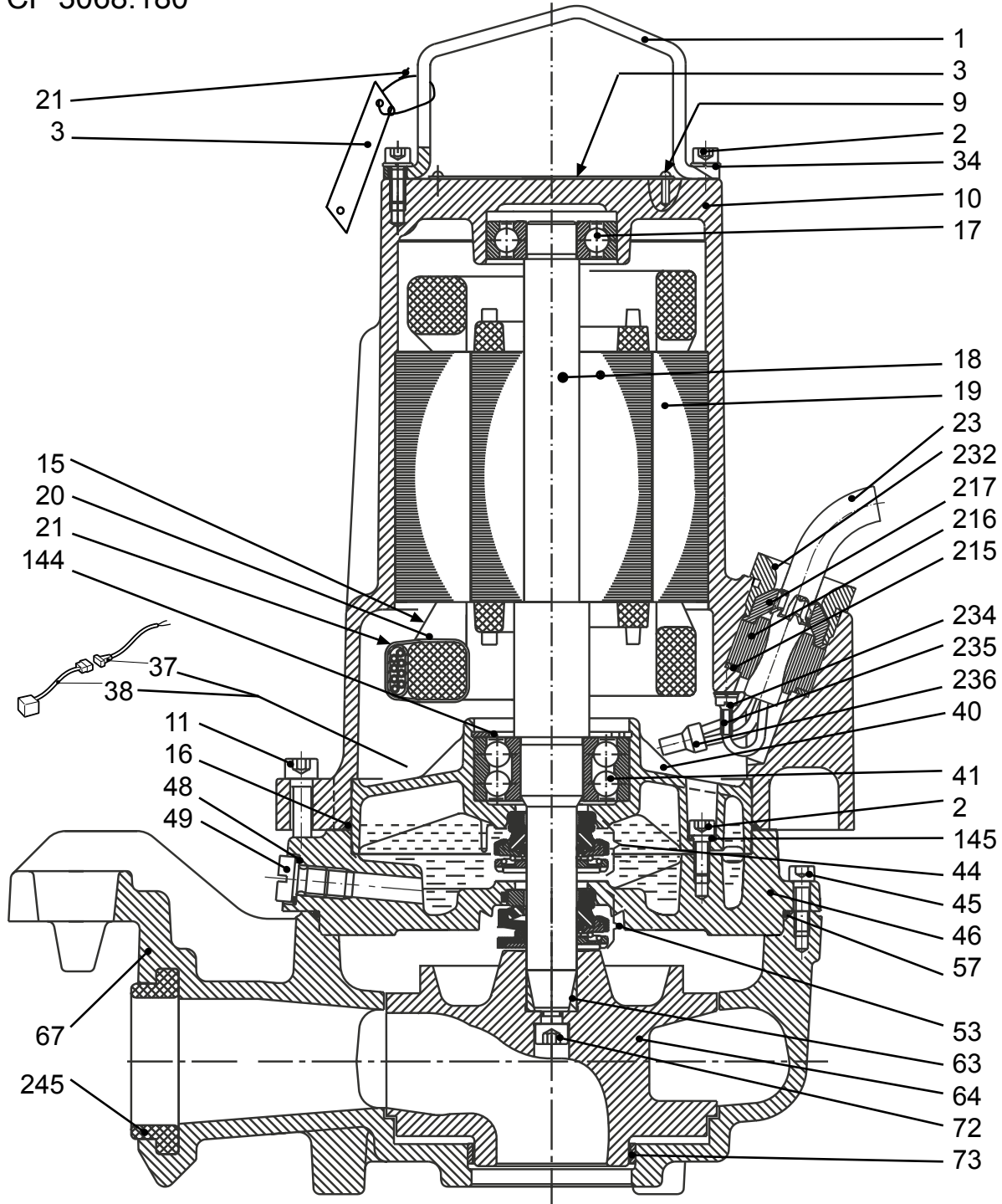


30856C

3.2 CP

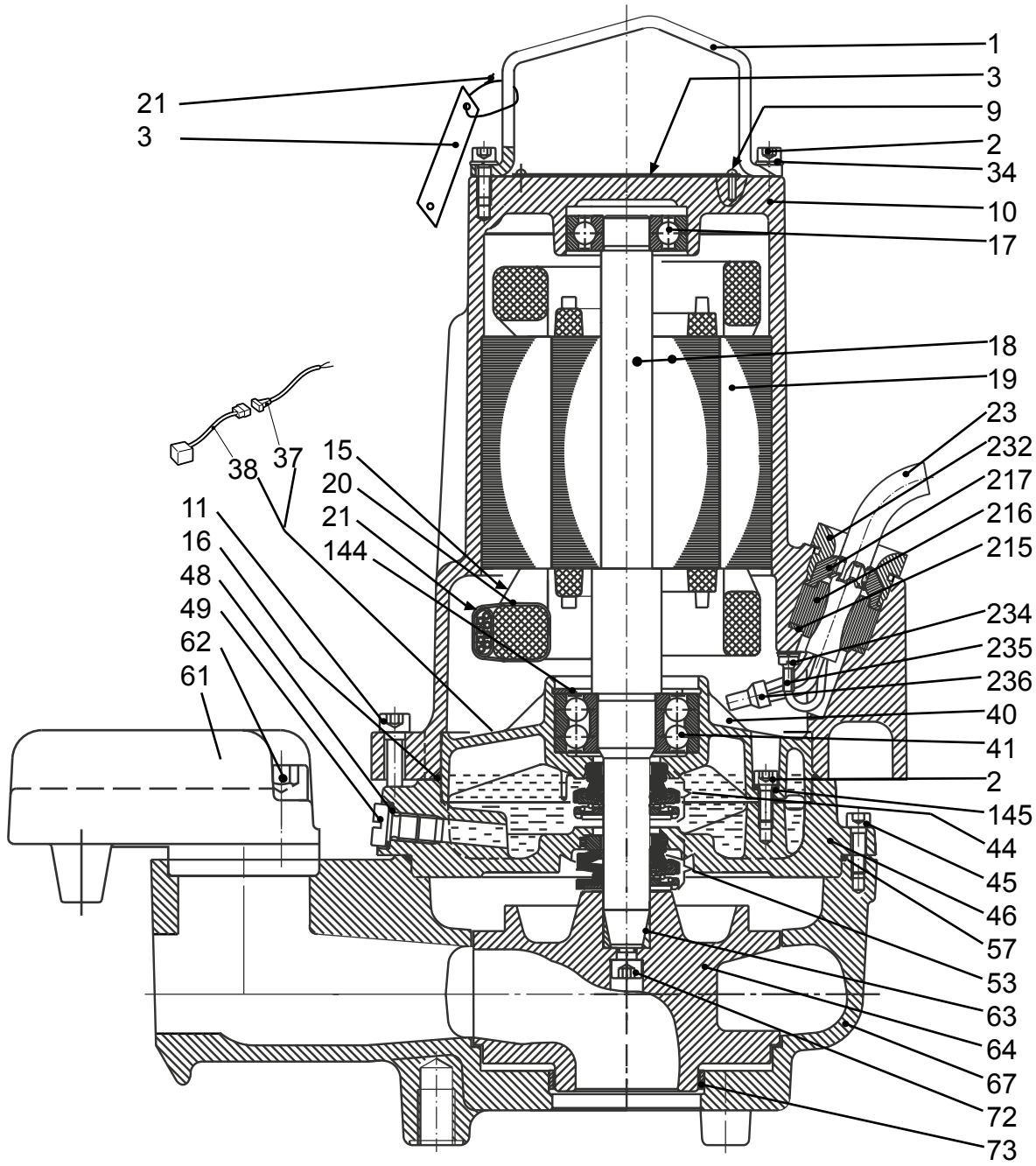
Curve: 251, 253, 255, 256, 257

CP 3068.180



30824C

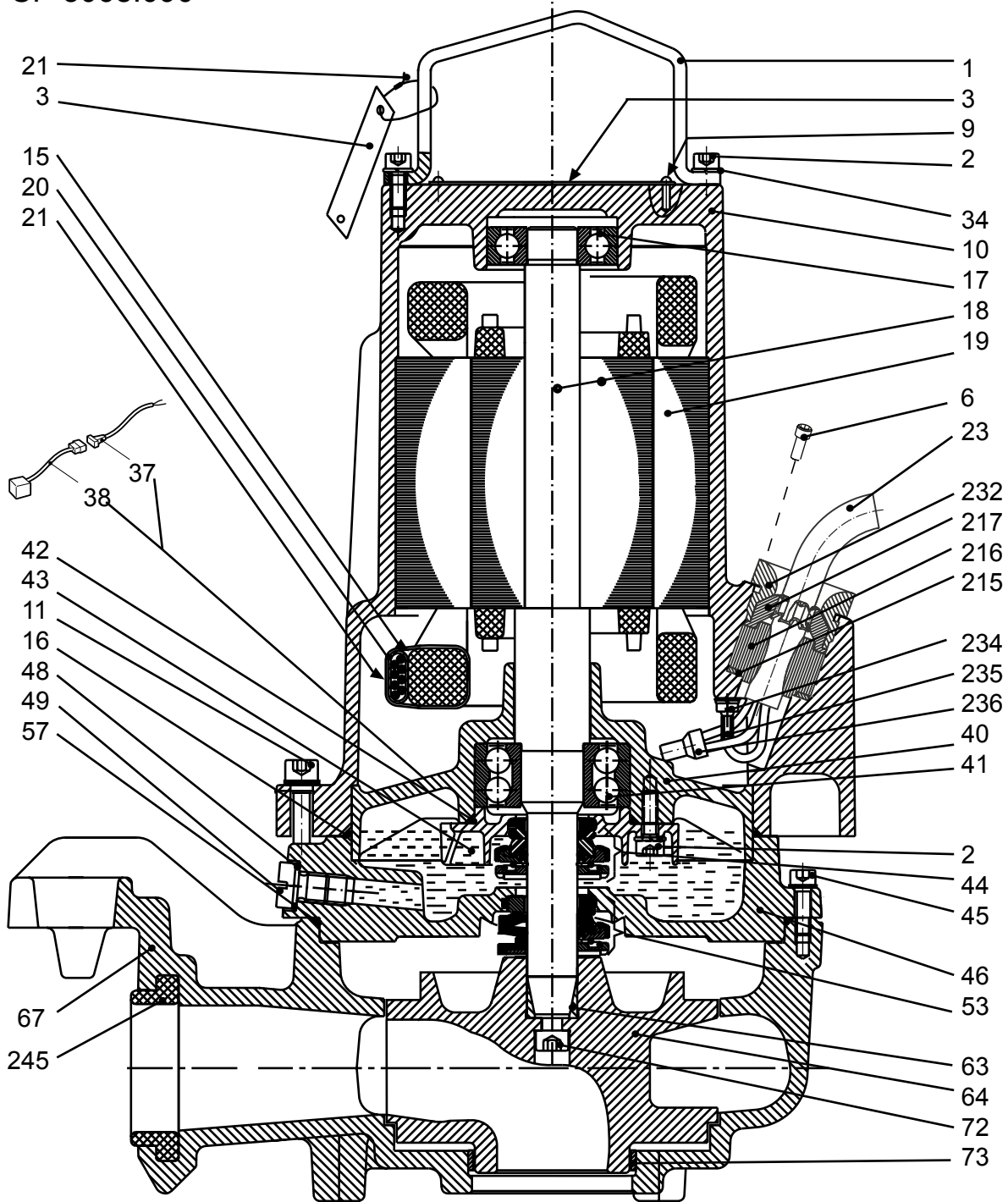
CP 3068.180



31382B

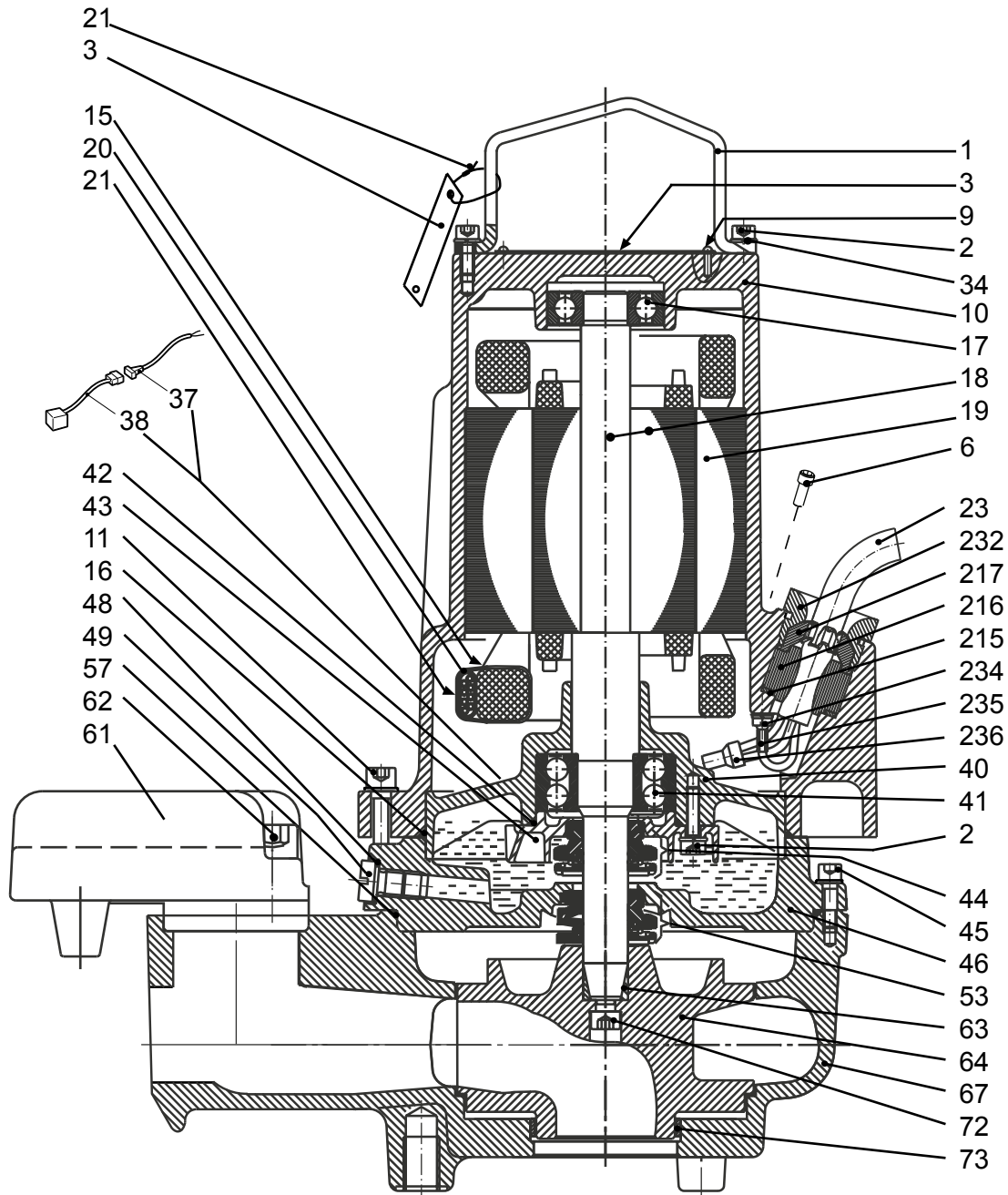
Curve: 251, 253, 255, 256

CP 3068.090



30857C

CP 3068.090

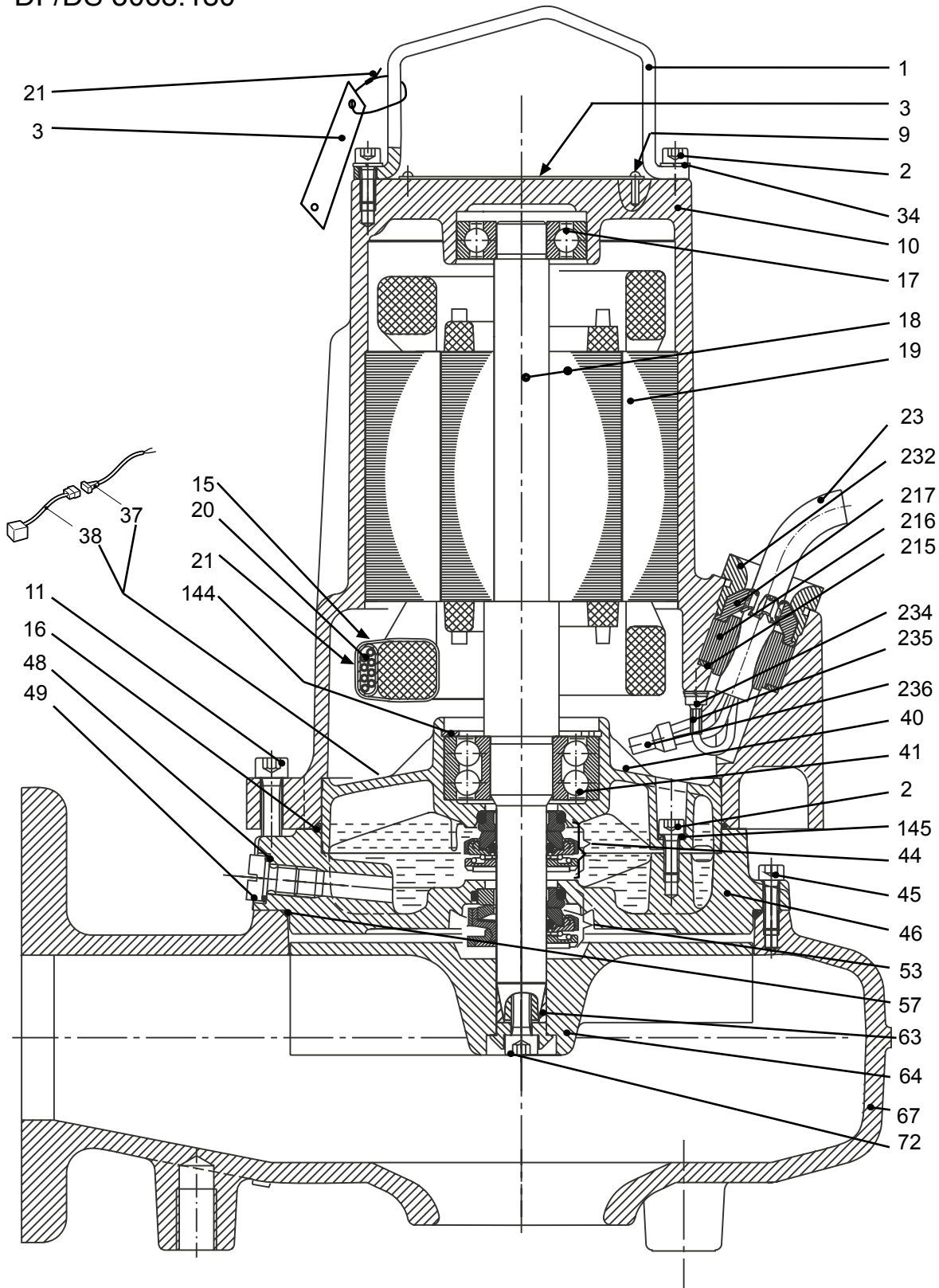


31381B

3.3 DF

MT, curve: 470, 471, 472, 473, 474, 475. HT, curve: 210, 214, 220

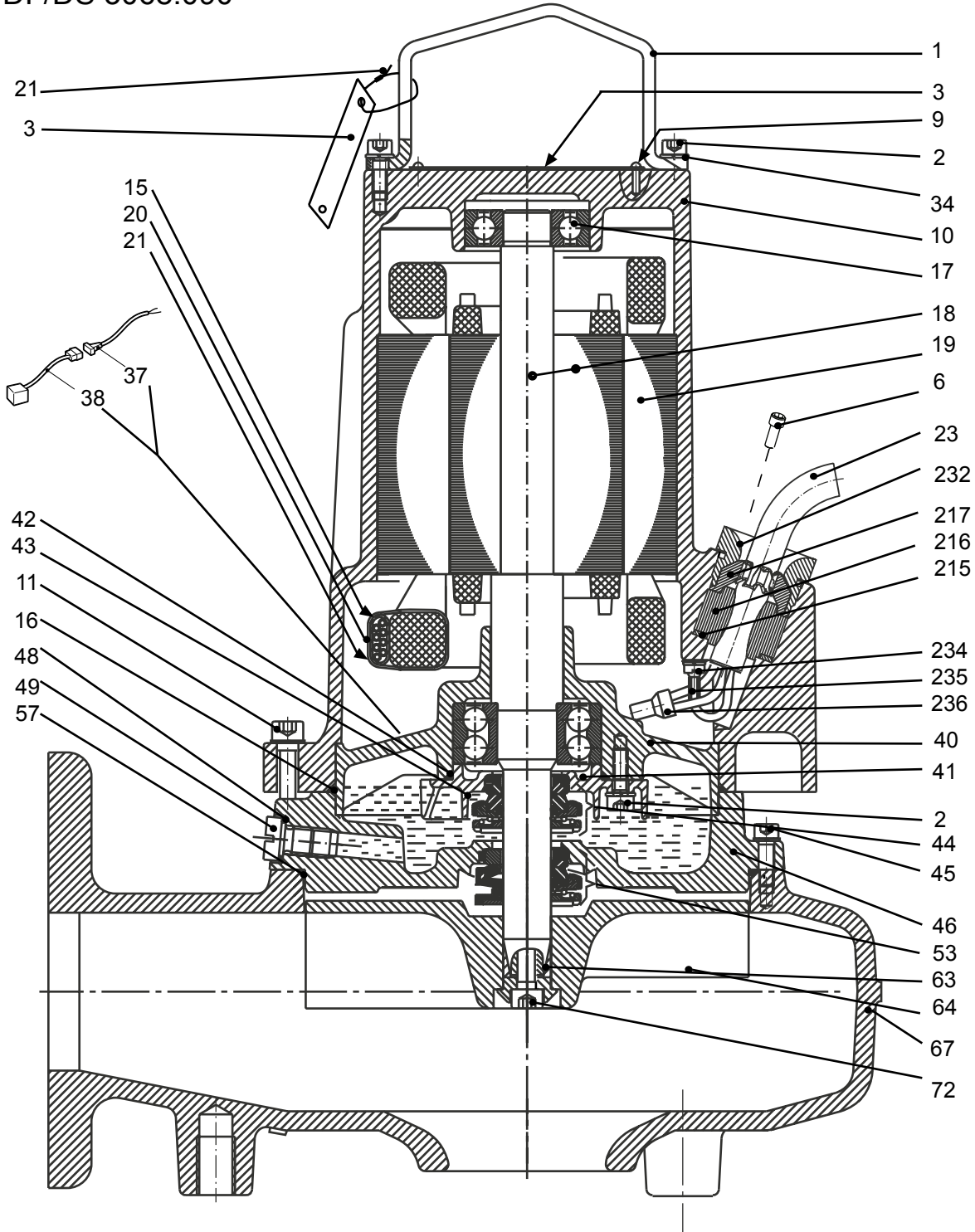
DF/DS 3068.180



30804C

MT, curve: 470, 471, 472, 473, 474, 475. HT, curve: 210, 214, 220

DF/DS 3068.090

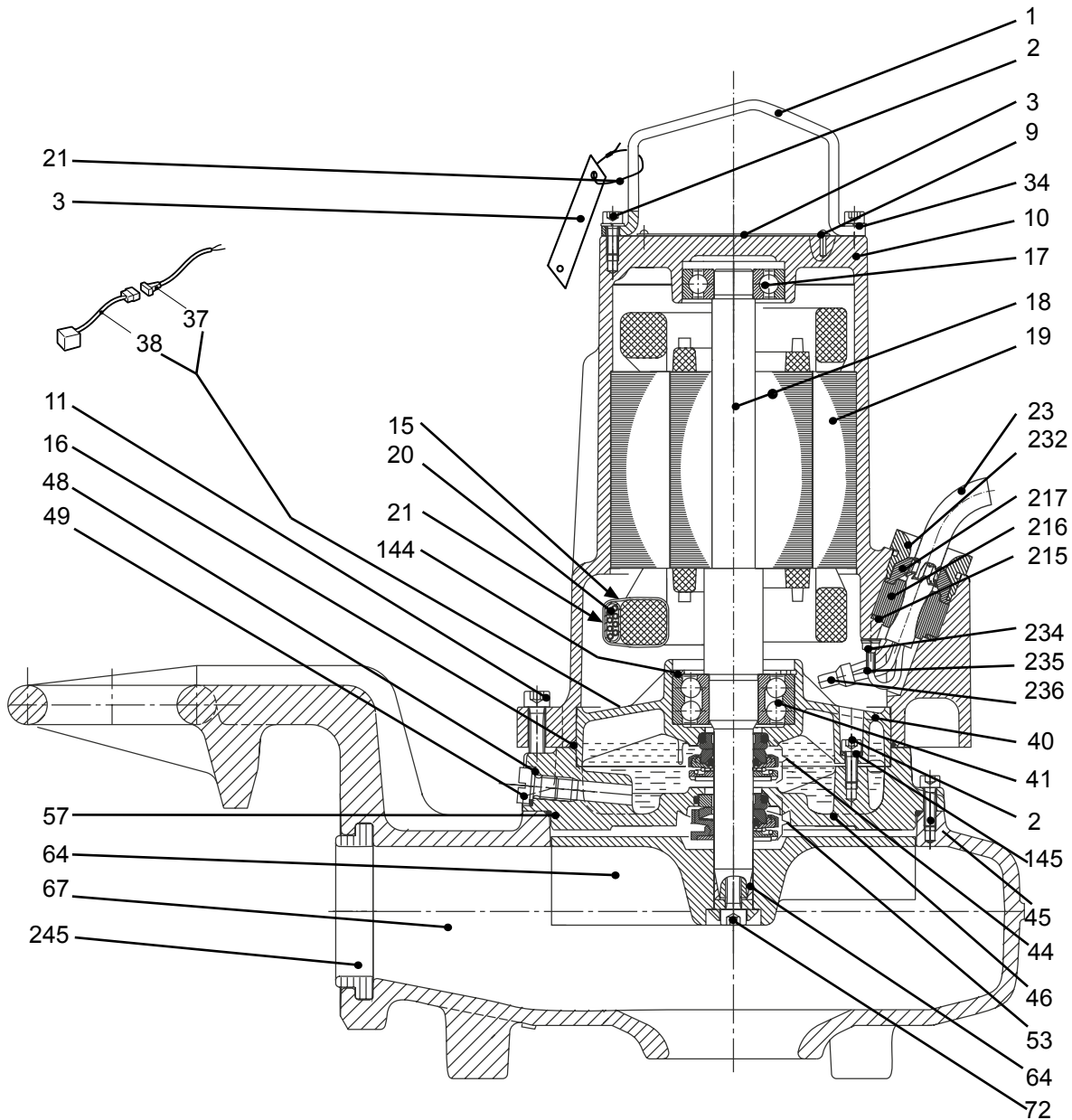


30858C

3.4 DP

MT, curve: 470, 471, 472, 473, 474, 475. HT, curve: 210, 214, 220

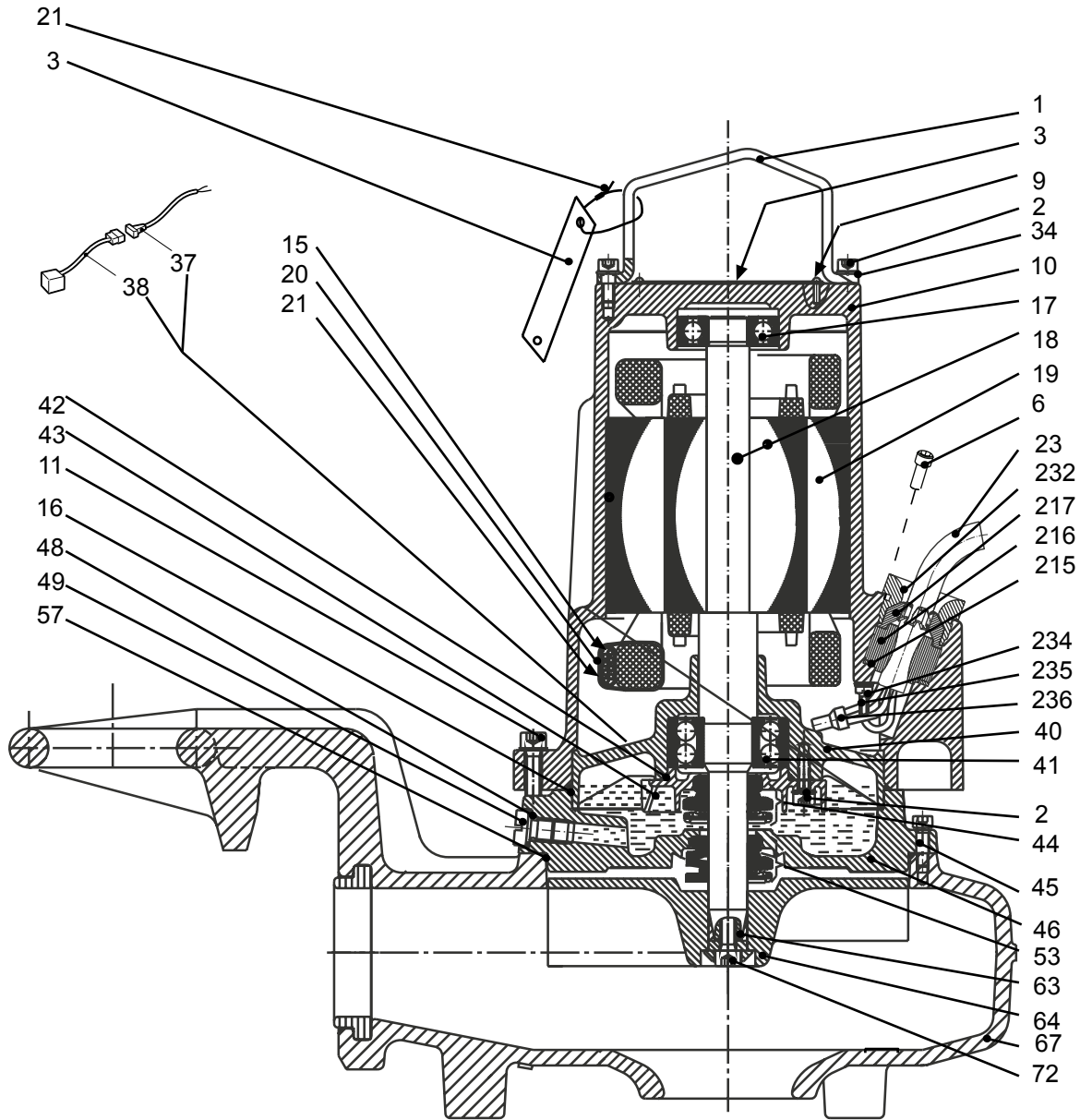
DP 3068.180



30803C

MT, curve: 470, 471, 472, 473, 474, 475. HT, curve: 210, 214, 220

DP 3068.090

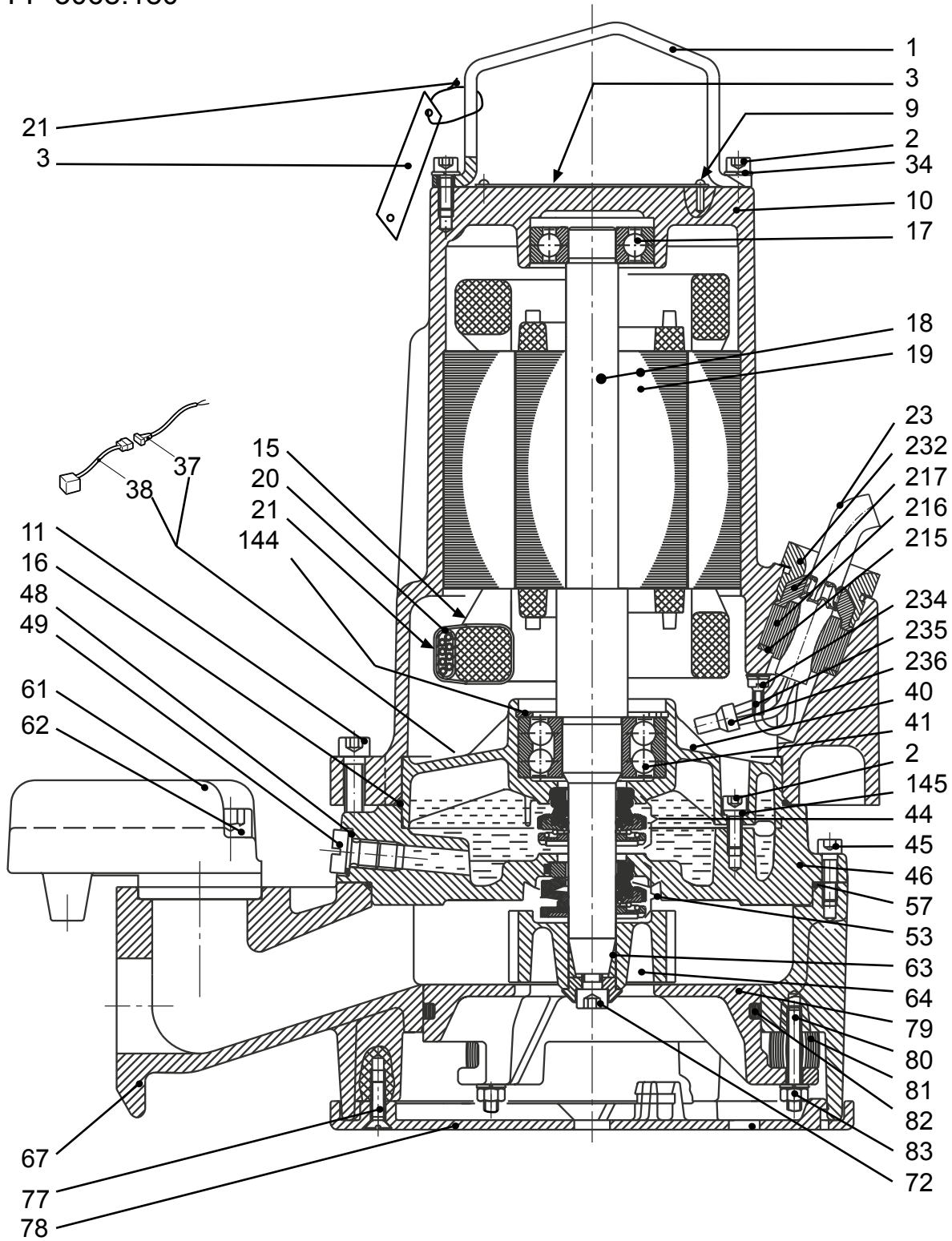


30859C

3.5 FP

Curve: 290, 291

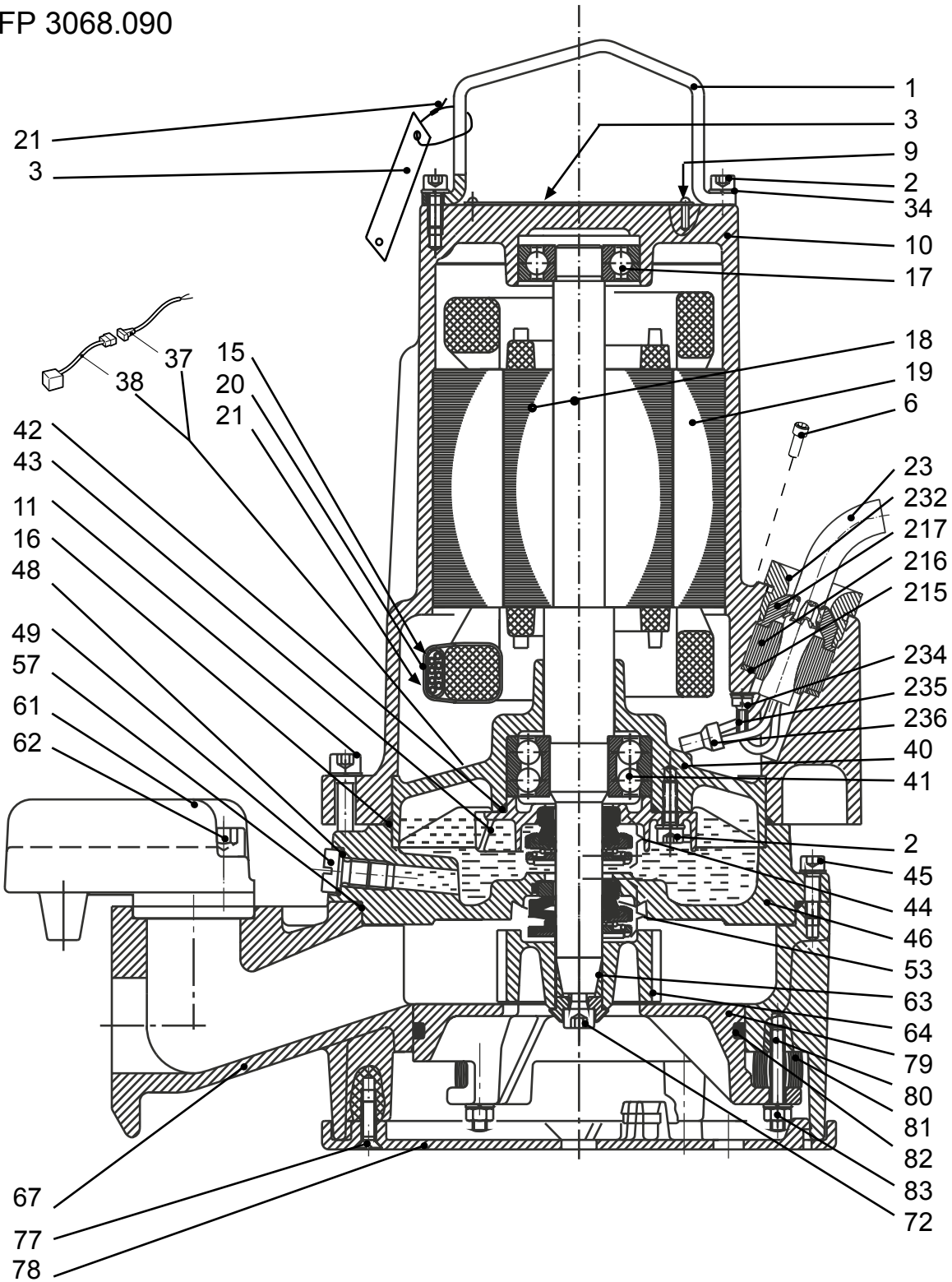
FP 3068.180



30853C

Curve: 290, 291

FP 3068.090

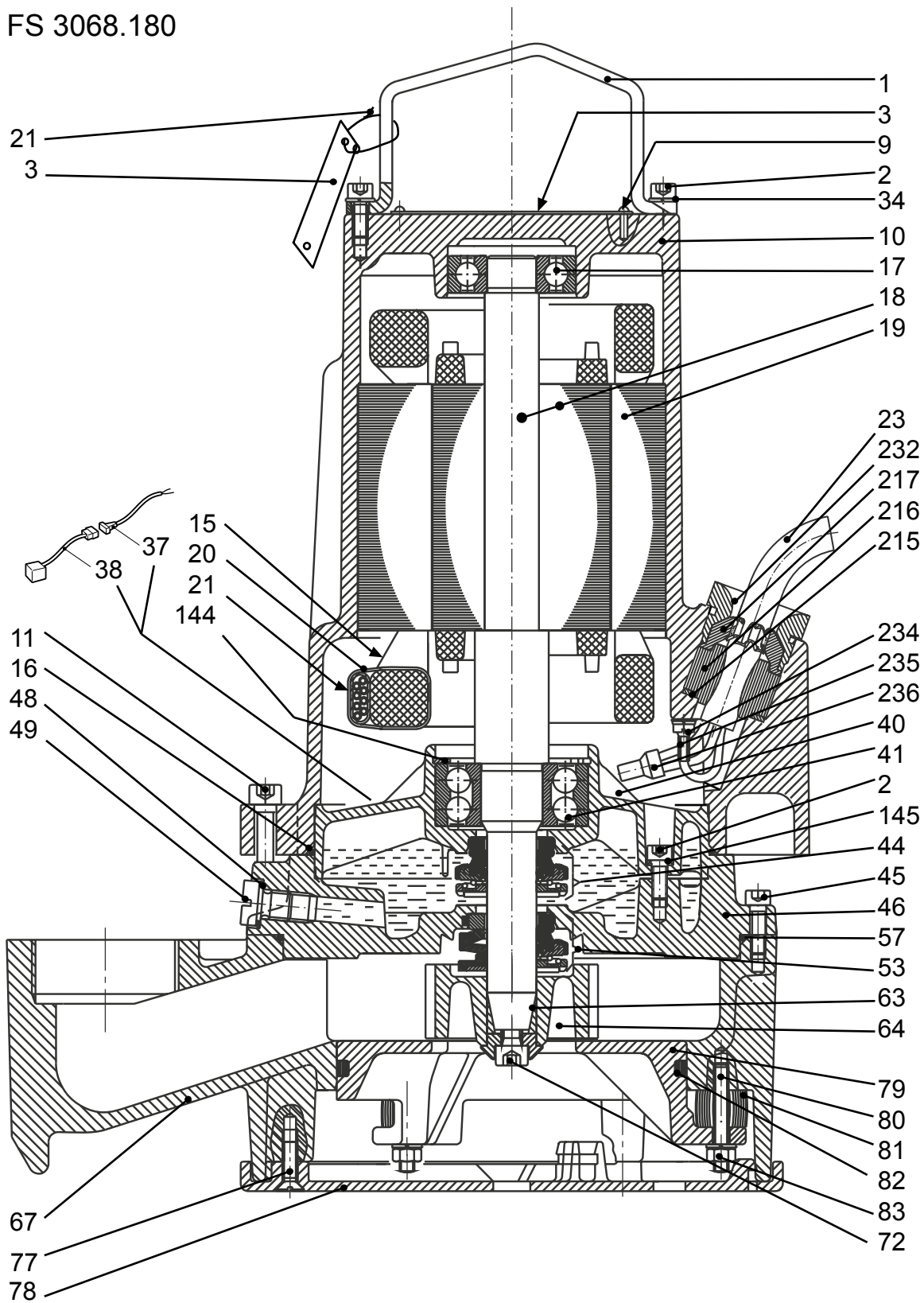


30861C

3.6 FS

Curve: 290, 291

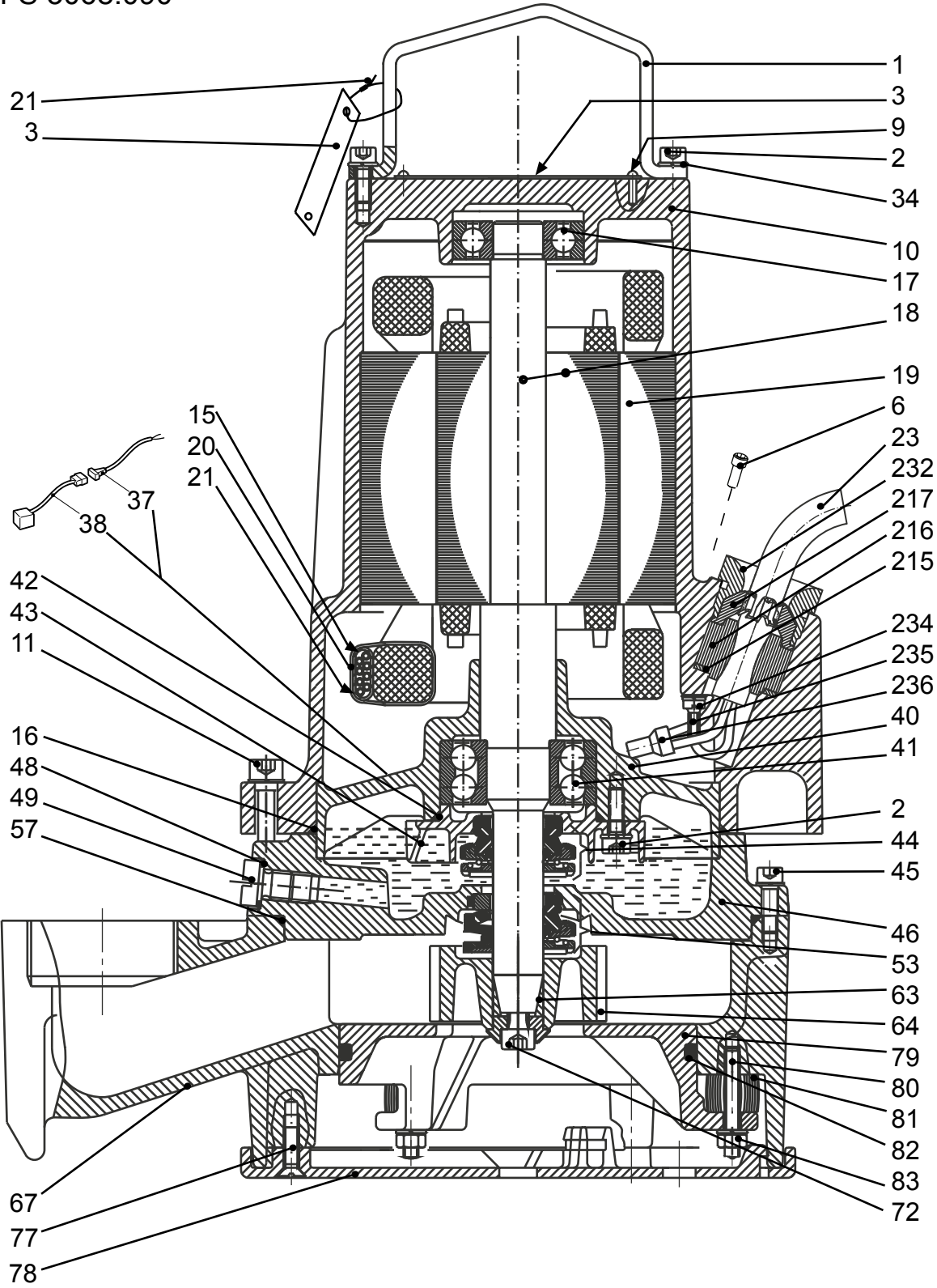
FS 3068.180



30852C

Curve: 291, 291

FS 3068.090

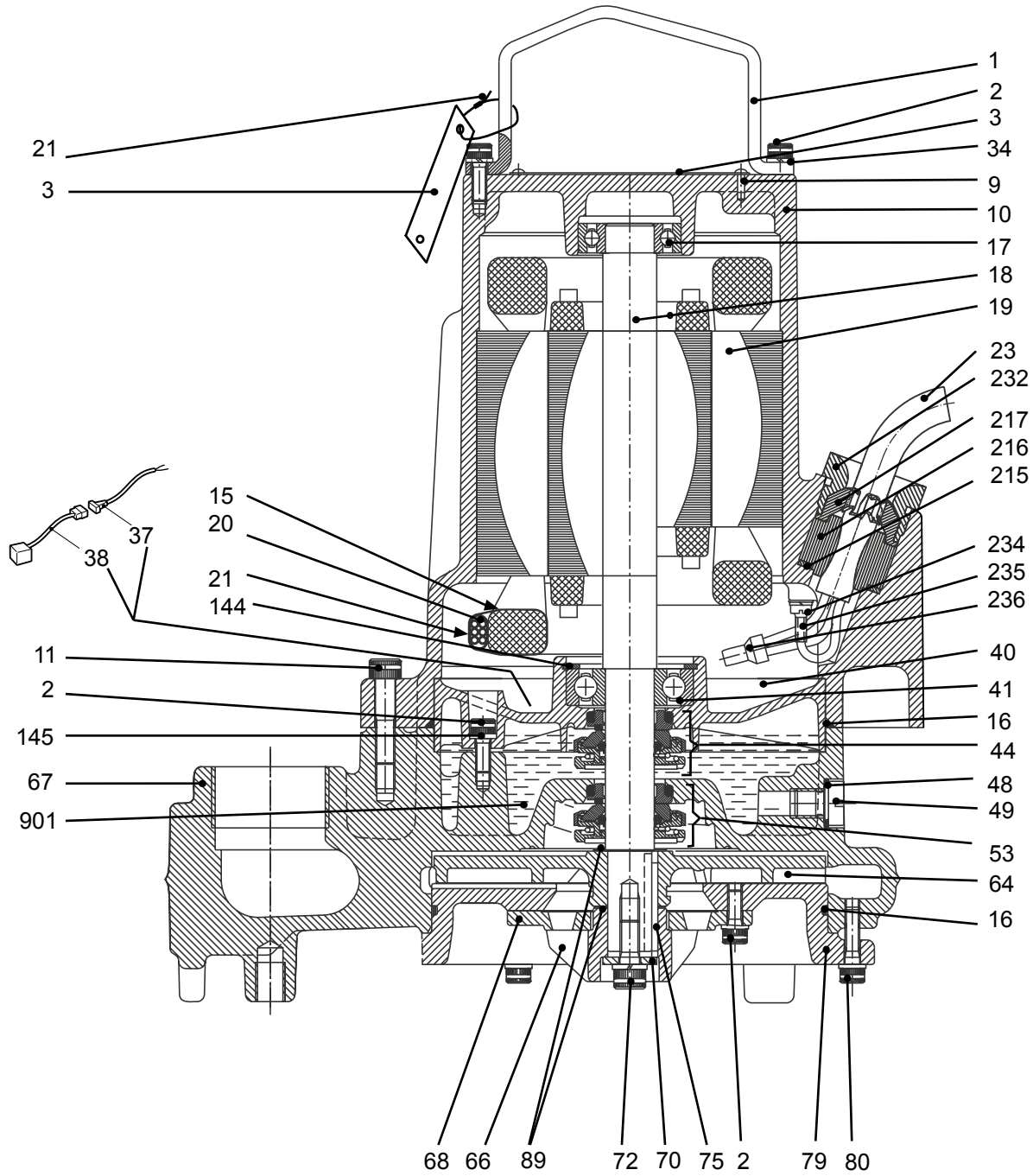


30860C

3.7 MF

Curve: 210, 212, 214, 216, 218

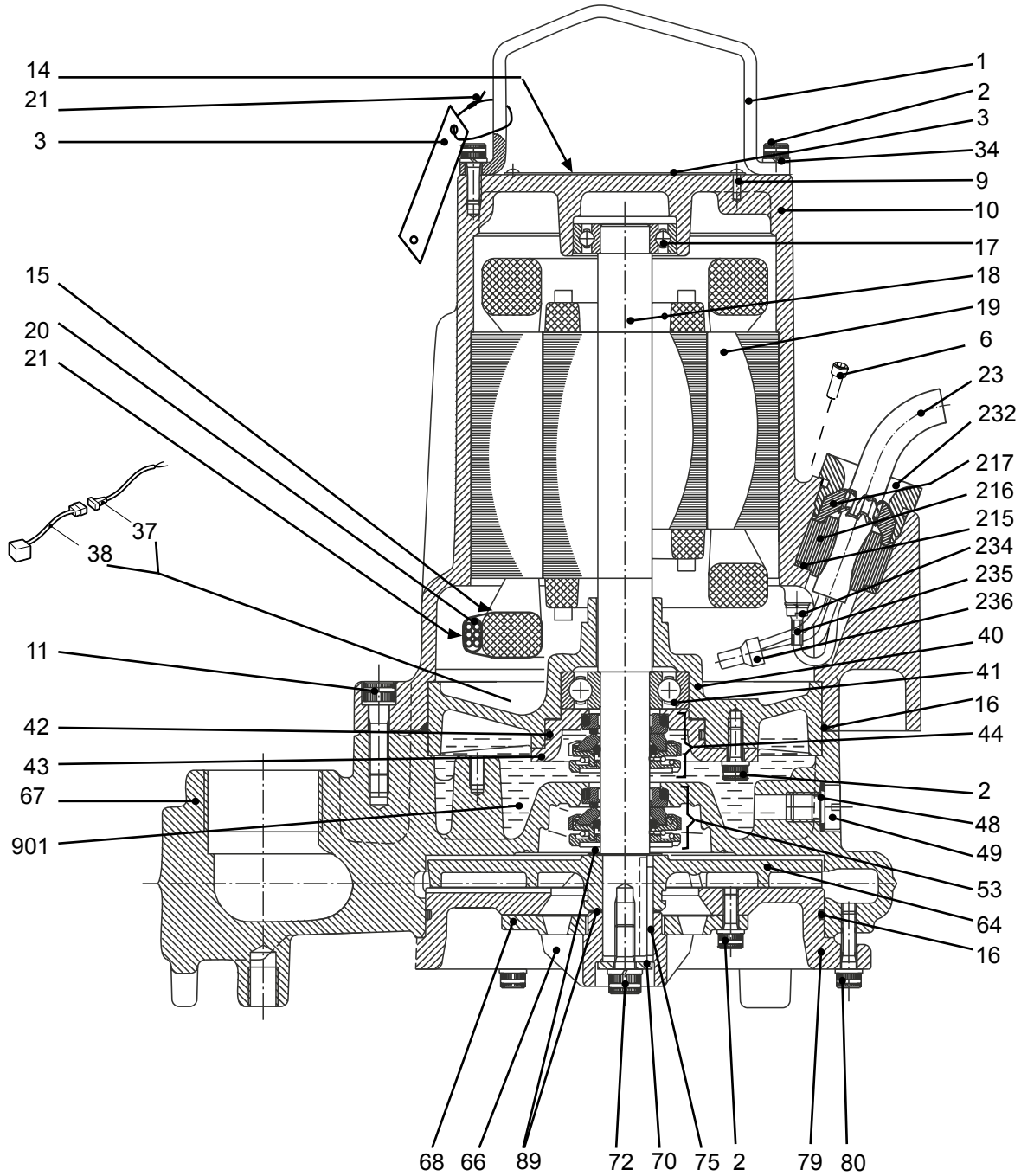
MF 3068.170



30647D

Curve: 210, 212, 214, 216, 218

MF 3068.890

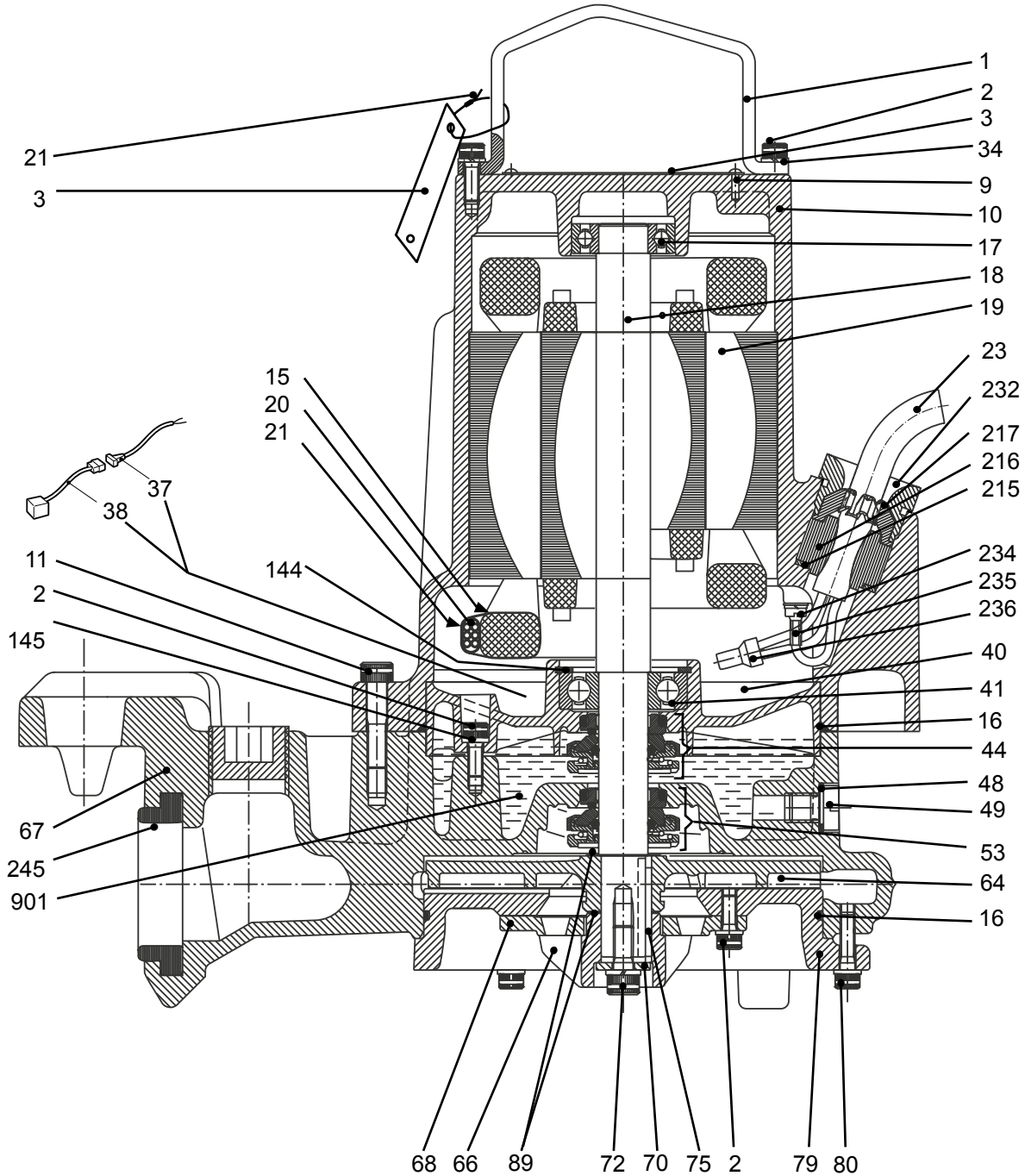


30649D

3.8 MP

Curve: 210, 212, 214, 216, 218

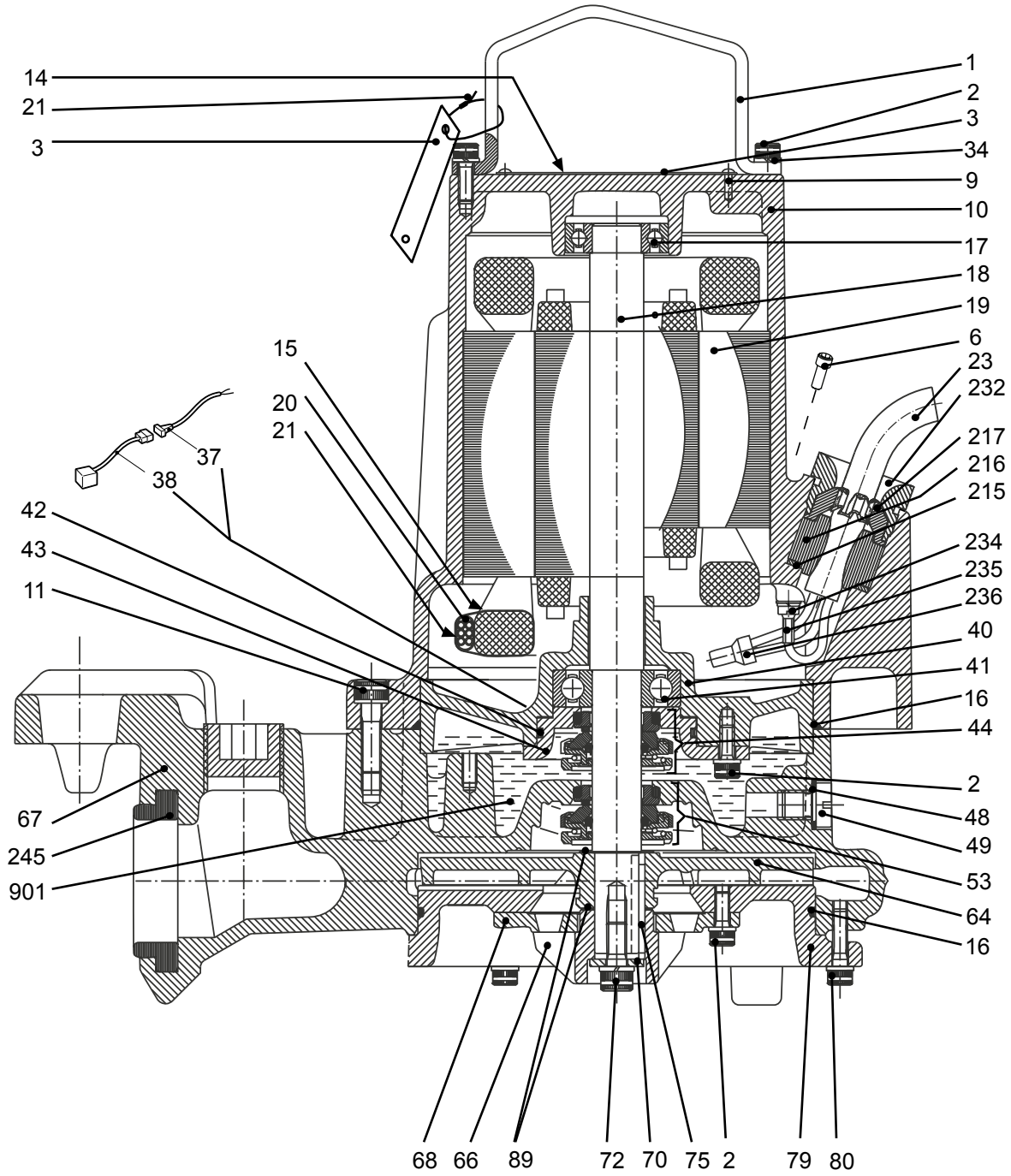
MP 3068.170



30646D

Curve: 210, 212, 214, 216, 218

MP 3068.890



30648D

3.9 3068.090/170/180/890, drive unit

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
1	555 61 01		Lifting handle V2A	1	1	1	1
2	82 00 13		Hex.socket hd screw M6X16-A2-70	5	8	5	8
3	630 68 00		Data plate USE 6306801 AS SPARE PART	2	2	2	2
5	718 05 00		Sticker CUT HAZARD		1		1
5	543 42 00		Instruction plate CANADA		1	1	
5	594 43 00		Instruction plate		2	2	
5	604 32 01		Sticker		1	1	
5	761 78 00		Name plate		1	1	
6	83 02 73		Hex.socket hd screw M6X12-A4-70	1			1
9	82 20 88		Drive screw 4X5-A2/A4	4	4	4	4
9	82 20 88		Drive screw 4X5-A2/A4		2	2	
9	82 20 88		Drive screw 4X5-A2/A4				2
10	722 53 01	(Ex)	Stator housing	1			
10	722 51 03		Stator housing		1		
10	722 51 04		Stator housing AUTOMATIC LEVEL CONTROL		1		
10	722 53 00		Stator housing			1	
10	722 51 05	(Ex)	Stator housing				1
11	83 04 45		Hex.socket hd screw M8X35-A4-80	3	3	3	3
12,2	83 42 62		Closed-end splice 0.33-0.82(AWG 22-18) L=18	2	2	2	2
13	630 76 00		Plate HOT WATER PRODUCT		1	1	
14	630 69 00		Certificate plate EN	2			2
14	630 69 01	(Ex)	Certificate plate IECEX	2			2
14	630 70 00		Certificate plate FM	2			2
14	801 03 00		Name plate	1			1
15	427 13 00		Marking tape	1	1	1	1
15	772 17 00		Connection plate	1	1	1	1
16	82 78 26		O-ring 156X3 NBR	1		1	2
16	82 78 26		O-ring 156X3 NBR		2		
17	83 33 13		Ball bearing 20X52X15 MM	1		1	
17	83 33 07		Ball bearing 6004-2Z		1		1
18	645 59 00	(Ex)	Shaft unit 2-POL 3-PHASE 80 MM	13-08-2B	1		1
18	645 59 01		Shaft unit 2-POL 1-PHASE 100 MM	13-10-2B	1		1
18	645 59 02		Shaft unit 3-PHASE 2-POL 100 MM	13-10-2B	1		1
18	645 79 00		Shaft unit 4-POL 3-PHASE 80 MM	13-08-4B	1		1
18	645 79 01	(Ex)	Shaft unit 4-POL 3-PHASE 100 MM	13-10-4B	1		1
18	638 90 00	(Ex)	Shaft unit	13-08-2B		1	
18	638 90 01		Shaft unit 1-PH 2-PO 100 MM MOTOR	13-10-2B		1	
18	638 90 02	(Ex)	Shaft unit 3-PH 2-PO 100 MM MOTOR	13-10-2B		1	

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
19	638 93 01		Stator 13-08-2b 3-phase 50 Hz 2-poles 380V-400V Y 220V-230V D P2=1,70kW 3-phase 60 Hz 2-poles 460V-480V Y P2=2kW/2,70hp	1	1	1	1
19	638 93 14		Stator 13-08-2b 3-phase 50Hz 2-poles 380V-400V Y P2=1,7kW 3-phase 60Hz 2-poles 440V-480V Y P2=2kW/2,7hp	1	1	1	1
19	638 93 03		Stator 13-08-2b 3-phase 50 Hz 2-poles 415V-440V Y P2=1,70kW	1	1	1	1
19	638 93 04		Stator 13-08-2b 3-phase 50 Hz 2-poles 500V-550V Y P2=1,70kW 3-phase 60 Hz 2-poles 575V-600V Y P2=2kW/2,70hp 3-phase 60Hz 2-poles 575V-600V Y P2=1,5kW/2hp	1	1	1	1
19	638 93 05		Stator 13-08-2b 3-phase 50 Hz 2-poles 690V Y 400V D P2=1,70kW	1	1	1	1
19	638 93 06		Stator 13-08-2b 3-phase 60 Hz 2-poles 460V YSER 230V Y// P2=2kW/2,70hp 3-phase 60Hz 2-poles 460V YSER 230V Y// P2=1,5kW/2hp	1	1	1	1
19	638 93 07		Stator 13-08-2b Stator 3-phase 50 Hz 2-poles 190V-200V Y P2=1,70kW 3-phase 60 Hz 2-poles 200V-220V Y P2=2kW/2,70hp 3-phase 60Hz 2-poles 200V-220V Y P2=1,5kW/2hp	1	1	1	1
19	638 93 08		Stator 13-08-2b 3-phase 60 Hz 2-poles 380V Y 220V D P2=2kW/2,70hp	1	1	1	1
19	638 96 03		Stator 13-10-2b 1-phase 60 Hz 2-poles 230V-240V P2=1,40kW/1,90hp 1-phase 60 Hz 2-poles 230V-240V P1=1,80KW 1-phase 60 Hz 2-poles 230V-240V P2=1,70kW/2,30hp	1	1	1	1
19	638 95 01		Stator 13-10-2b 3-phase 50 Hz 2-poles 380V-400V Y 220V-230V D P2=2,40kW 3-phase 60 Hz 2-poles 460V-480V Y P1=2,80KW 3-phase 50 Hz 2-poles 380V-400V Y 220V-230V D P1=2,40KW 3-phase 60 Hz 2-poles 460V-480V Y P2=2,80kW/3,80hp	1	1	1	1
19	638 95 18		Stator 13-10-2b 3-phase 50 Hz 2-poles 380V-415V Y P2=2,40kW 3-phase 60 Hz 2-poles 440V-480V Y P1=1,90KW 3-phase 50 Hz 2-poles 380V-415V Y Max P1=2KW 3-phase 60 Hz 2-poles 440V-480V Y P2=2,80kW/3,80hp	1	1	1	1

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
19	638 95 03		Stator 13-10-2b 3-phase 50 Hz 2-poles 415V-440V Y P2=2,40kW 3-phase 50 Hz 2-poles 415V-440V Y P1=2,40KW	1	1	1	1
19	638 95 04		Stator 13-10-2b 3-phase 50 Hz 2-poles 500V-550V Y P2=2,40kW 3-phase 60 Hz 2-poles 575V-600V Y P1=2,80KW 3-phase 50 Hz 2-poles 500V-550V Y P1=2,40KW 3-phase 60 Hz 2-poles 575V-600V Y P2=2,80kW/3,80hp	1	1	1	1
19	638 95 05		Stator 13-10-2b 3-phase 50 Hz 2-poles 690V Y 400V D P2=2,40kW 3-phase 50 Hz 2-poles 690V Y 400V D P1=2,40KW	1	1	1	1
19	638 95 06		Stator 13-10-2b 3-phase 60 Hz 2-poles 460V YSER 230V Y// P1=2,80KW 3-phase 60 Hz 2-poles 460V YSER 230V Y// P2=2,80kW/3,80hp	1	1	1	1
19	638 95 07		Stator 13-10-2b 3-phase 50 Hz 2-poles 190V-200V Y P2=2,40kW 3-phase 60 Hz 2-poles 200V-220V Y Max P1=2,90KW 3-phase 50 Hz 2-poles 190V-200V Y P1=2,40KW 3-phase 60 Hz 2-poles 200V-220V Y P2=2,80kW/3,80hp	1	1	1	1
19	638 95 08		Stator 13-10-2b 3-phase 60 Hz 2-poles 380V Y 220V D P1=2,80KW 3-phase 60 Hz 2-poles 380V Y 220V D P2=2,80kW/3,80hp	1	1	1	1
19	638 95 11		Stator 13-10-2b 3-phase 60 Hz 2-poles 208V Y P1=2,80KW 3-phase 60 Hz 2-poles 208V Y P2=2,80kW/3,80hp	1	1	1	1
19	657 86 15		Stator 13-08-4b 3-phase 50 Hz 4-poles 400V-415V Y P2=1,50kW 3-phase 60 Hz 4-poles 460V-480V Y P2=1,80kW/2,40hp	1		1	
19	657 86 01		Stator 13-08-4b 3-phase 50 Hz 4-poles 400V-415V Y 230V D P2=1,50kW Max ambient temp=40 DC Thermal contact 125 DC 3-phase 60 Hz 4-poles 460V-480V Y P2=1,80kW/2,40hp	1		1	
19	657 86 02		Stator 13-08-4b 3-phase 50 Hz 4-poles 440V Y P2=1,50kW	1		1	
19	657 86 03		Stator 13-08-4b 3-phase 50 Hz 4-poles 500V Y P2=1,50kW 3-phase 60 Hz 4-poles 575V-600V Y P2=1,80kW/2,40hp	1		1	

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
19	657 86 04		Stator 13-08-4b 3-phase 50 Hz 4-poles 690V Y 400V D P2=1,50kW	1		1	
19	657 86 05		Stator 13-08-4b 3-phase 50 Hz 4-poles 200V Y P2=1,50kW	1		1	
19	657 86 06		Stator 13-08-4b 3-phase 60 Hz 4-poles 220V-230V D 380V Y P2=1,80kW/2,40hp	1		1	
19	657 86 07		Stator 13-08-4b 3-phase 60 Hz 4-poles 200V-208V Y P2=1,80kW/2,40hp	1		1	
19	657 86 08		Stator 13-08-4b 3-phase 60 Hz 4-poles 400V Y P2=1,80kW/2,40hp	1		1	
19	657 86 09		Stator 13-08-4b 3-phase 50 Hz 4-poles 380V Y 220V D P2=1,50kW	1		1	
19	657 86 10		Stator 13-08-4b 3-phase 50 Hz 4-poles 550V Y P2=1,50kW	1		1	
19	657 86 12		Stator 13-08-4b 3-phase 60 Hz 4-poles 460V YSER 230V Y// P2=1,30kW/1,70hp	1		1	
19	656 12 03		Stator 13-10-4b 1phs 3-phase 60 Hz 4-poles 460V YSER 230V-240V Y// P2=1,80kW/2,40hp	1		1	
19	656 12 03		Stator 13-10-4b 1phs 1-phase 60 Hz 4-poles 230V-240V P2=1,50kW/2hp	1		1	
19	656 13 01		Stator 13-10-4b 1-phase 60 Hz 4-poles 230V-240V P2=0,97kW/1,30hp	1		1	
19	656 13 01		Stator 13-10-4b 3-phase 50 Hz 4-poles 400V-415V Y 230V D P2=2kW	1		1	
19	656 13 01		Stator 13-10-4b 3-phase 60 Hz 4-poles 440V-480V Y P1=2,50KW	1		1	
19	656 13 01		Stator 13-10-4b 3-phase 50 Hz 4-poles 400V-415V Y Max P1=2,30KW	1		1	
19	656 13 01		Stator 13-10-4b 3-phase 60 Hz 4-poles 440V-480V Y P2=2,40kW/3,20hp	1		1	
19	656 13 02		Stator 13-10-4b 3-phase 50 Hz 4-poles 440V Y P2=2kW	1		1	
19	656 13 02		Stator 13-10-4b 3-phase 50 Hz 4-poles 440V Y P1=2,20KW	1		1	
19	656 13 03		Stator 13-10-4b 3-phase 50 Hz 4-poles 500V Y P2=2kW	1		1	
19	656 13 03		Stator 13-10-4b 3-phase 60 Hz 4-poles 575V-600V Y P1=2,50KW	1		1	
19	656 13 03		Stator 13-10-4b 3-phase 50 Hz 4-poles 500V Y P1=2,20KW	1		1	
19	656 13 03		Stator 13-10-4b 3-phase 60 Hz 4-poles 575V-600V Y P2=2,40kW/3,20hp	1		1	
19	656 13 04		Stator 13-10-4b 3-phase 50 Hz 4-poles 690V Y 400V D P2=2kW	1		1	
19	656 13 04		Stator 13-10-4b 3-phase 50 Hz 4-poles 690V Y 400V D P1=2,20KW	1		1	
19	656 13 05		Stator 13-10-4b 3-phase 50 Hz 4-poles 200V Y P2=2kW	1		1	
19	656 13 05		Stator 13-10-4b 3-phase 50 Hz 4-poles 200V Y P1=2,20KW	1		1	

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
19	656 13 06		Stator 13-10-4b 3-phase 60 Hz 4-poles 220V-230V D Max P1=2,60KW 3-phase 60 Hz 4-poles 220V-230V D 380V Y P2=2,40kW/3,20hp	1		1	
19	656 13 07		Stator 13-10-4b 3-phase 60 Hz 4-poles 200V-208V Y P1=2,50KW 3-phase 60 Hz 4-poles 200V-208V Y P2=2,40kW/3,20hp	1		1	
19	656 13 08		Stator 13-10-4b 3-phase 60 Hz 4-poles 400V Y P1=2,50KW 3-phase 60 Hz 4-poles 400V Y P2=2,40kW/3,20hp	1		1	
19	656 13 09		Stator 13-10-4b 3-phase 50 Hz 4-poles 380V Y 220V D P2=2kW 3-phase 50 Hz 4-poles 380V Y 220V D P1=2,30KW	1		1	
19	656 13 10		Stator 13-10-4b 3-phase 50 Hz 4-poles 550V Y P2=2kW 3-phase 50 Hz 4-poles 550V Y P1=2,20KW	1		1	
19	656 13 13		Stator 13-10-4b 3-phase 60 Hz 4-poles 230V-240V Y// 460V YSER P1=2,50KW 3-phase 60 Hz 4-poles 230V-240V Y// 460V YSER P2=2,40kW/3,20hp	1		1	
19	638 96 01		Stator 13-10-2b 1-phase 50 Hz 2-poles 220V-240V P2=1,50kW		1	1	1
19	638 96 03		Stator 13-10-2b 1-phase 60 Hz 2-poles 230V-240V P2=1,40kW/1,90hp 1-phase 60 Hz 2-poles 230V-240V P1=1,80KW 1-phase 60 Hz 2-poles 230V-240V P2=1,70kW/2,30hp		1		1
19	638 96 03		Stator 13-10-2b 1-phase 60 Hz 2-poles 230V-240V P2=1,40kW/1,90hp 1-phase 60 Hz 2-poles 230V-240V P1=1,80KW 1-phase 60 Hz 2-poles 230V-240V P2=1,70kW/2,30hp			1	
19	656 12 01		Stator 13-10-4b 1phs 1-phase 50 Hz 4-poles 220V-240V P2=1,30kW				1
21	83 45 59		Cable tie 200X2.4 PA 6/6 -55+105	3	3	3	3
23	94 20 61		Motor cable subcab 4G1,5+2X1,5	*	*	*	*
23	94 20 82		Motor cable subcab 7G2,5+2X1,5	*	*	*	*
23	94 19 89		Motor cable subcab S3X1,5+3X1,5/3+S(2X0,5)	*	*	*	*
23	94 20 59		Motor cable subcab 4G2,5+2X1,5	*	*	*	*
23	94 19 90		Motor cable subcab S3X2,5+3X2,5/3+S(4X0,5)	*	*	*	*
23	788 77 00		Motor cable unit SUBCAB 4G1,5+2x1,5		1		
23	94 20 41		Motor cable subcab 4G1,5		*	*	
23	94 20 42		Motor cable subcab 4G2,5		*	*	

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
23	94 19 75		Motor cable silicone 4G2,5		*	*	
	24,8 83 42 65		Terminal block				4
	24,8 83 42 67		Terminal block				1
37	504 78 07		Cable unit	1	1	1	1
37	504 78 07		Cable unit	1			1
38	518 89 02		Leakage sensor (FLS)	1	1	1	1
38	518 89 02		Leakage sensor (FLS)	1			1
40	645 58 00	(Ex)	Bearing holder GG-20	1			
40	539 83 00		Bearing holder GD-AL		1		
40	645 57 00		Bearing holder GG-20			1	
40	516 79 01	(Ex)	Bearing holder GG-20				1
41	83 30 15		Ball bearing 25X62X25.4	1		1	
41	83 33 13		Ball bearing 20X52X15 MM		1		1
42	82 80 90		O-ring 59.5X3 FPM	1			1
43	594 93 00		Bearing cover	1			
43	516 81 00		Bearing cover				1
44	720 45 07		Mechanical seal AL2O3/CARBON	1			
44	720 45 00		Mechanical seal WCCR/WCCR	1		1	
44	720 45 07		Mechanical seal AL2O3/CARBON		1		1
44	720 45 07		Mechanical seal AL2O3/CARBON				1
45	82 00 15		Hex.socket hd screw M6X20-A2-70	3		3	
46	539 94 05		Oil housing bottom FOR STANDARD SEAL	1		1	
46	539 94 06		Oil housing bottom FOR SLURRY SEAL	1		1	
48	82 79 12		O-ring 13.3X2.4 FPM	1	1	1	1
49	303 44 03		Hex.socket hd screw	1	1	1	1
53	720 45 01		Mechanical seal WCCR/AL2O3	1	1		1
53	720 45 00		Mechanical seal WCCR/WCCR	1		1	
53	720 45 05		Mechanical seal RSIC/RSIC	1		1	
53	720 45 02		Mechanical seal WCCR/WCCR	1		1	
53	720 45 00		Mechanical seal WCCR/WCCR		1	1	1
53	720 45 01		Mechanical seal WCCR/AL2O3				1
57	82 78 41		O-ring 183.5X3 NBR	1		1	
62	83 04 53		Hex.socket hd screw M12X45-A4-80				2
63	397 88 00		Sleeve				1
136	220 25 02		Gland screw		1		
137	82 35 76		Plain washer 10-A4-170HV		2		
138	275 80 02		Ring		1		
139	84 32 31		Level switch		1		
140	84 60 48		Clip DIAM.16		1		
141	82 23 29		Hexagon nut M4-A4-70		1		
142	83 93 97		Protective cap		1		
143	81 73 41		Slotted head screw M4X10-A4-70		1		
144	82 62 07		Retaining ring SGH 52		1		

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
144	82 62 12		Retaining ring SGH 62			1	
145	82 50 60		Sealing washer DUBO NR 301		3	3	
169	667 40 00		Sticker	2	1	2	1
215	82 40 61		Plain washer (10)-22 MM	1	1	1	1
216	84 17 92		Seal sleeve (14)-16 MM	1	1	1	1
216	84 37 98		Seal sleeve (16)-18 MM	1	1	1	1
216	84 17 94		Seal sleeve (18)-20 MM	1	1	1	1
216	84 17 95		Seal sleeve (20)-22 MM	1	1	1	1
216	84 17 90		Seal sleeve (10)-12 MM		1	1	
216	84 15 86		Seal sleeve (10)-12 MM		1	1	
216	84 17 91		Seal sleeve (12)-14 MM		1	1	
217	678 58 16		Cable clip (14)-16 MM	1	1	1	1
217	678 58 18		Cable clip (16)-18 MM	1	1	1	1
217	678 58 20		Cable clip (18)-20 MM	1	1	1	1
217	678 58 22		Cable clip (20)-22 MM	1	1	1	1
217	678 58 12		Cable clip (10)-12 MM		1	1	
217	678 58 14		Cable clip (12)-14 MM		1	1	
231	94 03 33		Shrink hose ID=3.2 MM	*	*	*	*
231	94 03 30		Shrink hose ID=12 MM	*	*	*	*
232	397 81 00		Gland screw FOR CABLE ENTRY	1	1	1	1
234	82 17 61		Cutting screw TAPTITE-M6X12	1	1	1	1
235	83 43 58		Cable lug INSUL.UL/CSA 1.04-2.6 MM2	1	1	1	1
235	83 43 62		Cable lug UL/CSA 0.5-1.65 MM2	1	1	1	1
236	83 42 67		Terminal block	1	1	1	6
236	83 42 65		Terminal block	5	5	5	5
236	83 42 67		Terminal block	1	1	1	1
236	83 44 23		Closed-end splice 4.0-9.0 (AWG 8) L=28	2	2	2	2
236	83 44 24		Closed-end splice 3-6(AWG 12-10) L=18	5	5	5	5
236	83 42 65		Terminal block	4	4	4	4
236	83 42 67		Terminal block	4	4	4	4
236	83 42 65		Terminal block	5		5	
236	83 42 67		Terminal block	1		1	
236	83 44 23		Closed-end splice 4.0-9.0 (AWG 8) L=28	2		2	
236	83 44 24		Closed-end splice 3-6(AWG 12-10) L=18	5		5	
236	83 42 65		Terminal block	4		4	
236	83 42 67		Terminal block	4		4	
236	83 42 67		Terminal block	1		6	
236	83 42 65		Terminal block		5		
236	83 42 67		Terminal block		1	1	

3.10 3068.090/170/180/890, hydraulic unit

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
62	83 04 53		Hex.socket hd screw M12X45-A4-80	2			
63	397 88 00		Sleeve	1			
64	645 84 00		Impeller 210 HT 50Hz 3-phase	1		1	
64	645 84 02		Impeller 214 HT 50Hz 3-phase	1		1	
64	645 84 05		Impeller 220 HT 50Hz 3-phase 220HT 50Hz 1-phase	1		1	
64	658 15 00		Impeller 251 HT 50Hz 3-phase	1		1	
64	658 15 01		Impeller 253 HT 50Hz 3-phase 253 HT 50Hz 1-phase 253 HT 60Hz 3-phase	1		1	
64	658 15 02		Impeller 255 HT 50Hz 3-phase 255 HT 50Hz 1-phase 255 HT 60Hz 3-phase 255 HT 60Hz 1-phase	1		1	
64	658 15 04		Impeller 256 HT 60Hz 3-phase	1		1	
64	658 15 03		Impeller 257 HT 60Hz 1-phase	1		1	
64	645 78 00		Impeller 470MT 50Hz 3-phase	1		1	
64	645 78 01		Impeller 471 MT 50Hz 3-phase 471 MT 60Hz 3-phase	1		1	
64	645 78 02		Impeller 472 MT 50Hz 3-phase 472 MT 50Hz 1-phase 472 MT 60Hz 3-phase 472 MT 60Hz 3-phase	1		1	
64	645 78 03		Impeller 473 MT 50Hz 3-phase 473 MT 50Hz 1-phase 473 MT 60Hz 3-phase 473 MT 60Hz 1-phase	1		1	
64	645 78 04		Impeller 474 MT 50Hz 3-phase	1		1	
64	645 78 05		Impeller 475 MT 60Hz 3-phase	1		1	
64	516 25 00		Impeller 290 LT 50Hz 3-phase 290 LT 50Hz 1-phase 290 LT 60Hz 3-phase 290 LT 60Hz 1-phase	1		1	
64	516 25 01		Impeller 291 LT 50Hz 3-phase 291 LT 50Hz 1-phase 291 LT 60Hz 3-phase 291 LT 60Hz 1-phase	1		1	
64	638 84 00		Impeller 210 HT 50Hz 3-phase		1		1
64	638 84 01		Impeller 212HT 50Hz 3-phase 212 HT 50Hz 3-phase		1		1
64	638 84 02		Impeller 214 HT 50Hz 3-phase 214 HT 50Hz 1-phase 214 HT 60Hz 3-phase 214 HT 60Hz 1-phase		1		1

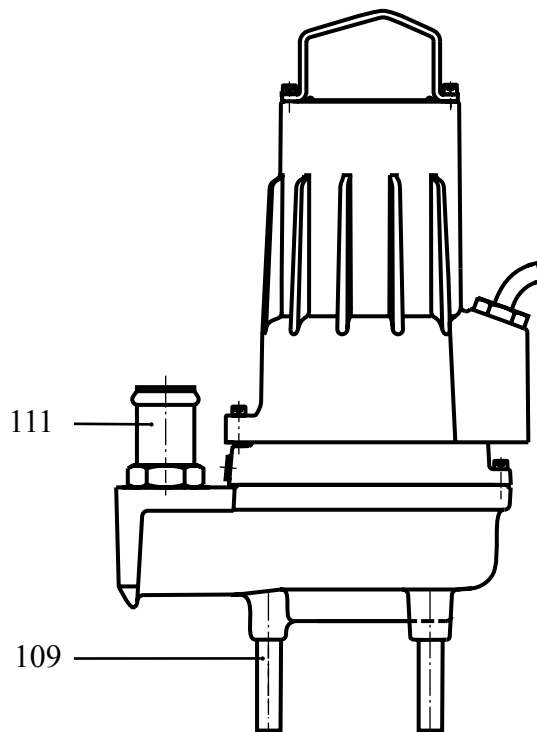
Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
64	638 84 03		Impeller 216 HT 50Hz 3-phase		1		1
64	638 84 04		Impeller 216 HT 60Hz 3-phase 218 HT 50Hz 1-phase 218 HT 60Hz 3-phase 218 HT 60Hz 1-phase		1		1
64	555 01 01		Impeller 481MT 60Hz 3-phase			1	
64	511 08 05		Impeller 483 MT 60Hz 3-phase			1	
64	511 08 06		Impeller 484 MT 60Hz 3-phase 484 MT 60Hz 1-phase			1	
66	638 81 00		Cutting wheel		1		1
67	509 63 05		Pump housing HT C DN 50 ISO G2 Grey cast iron Installation: F S Undrilled	1		1	
67	555 98 01		Pump housing HT C DN 50 Sliding bracket Grey cast iron Installation: P Undrilled	1		1	
67	509 63 06		Pump housing HT C DN 50 Sliding bracket Grey cast iron Installation: P Undrilled	1		1	
67	511 12 01		Pump housing MT HT D DN 55 Grey cast iron Drilled acc. to: ANSI B16.1-89; tab.5 EN 1092-2 tab. 9 Installation: P F S	1		1	
67	516 20 00		Pump housing HT MT D DN 55 Sliding bracket Grey cast iron Installation: P Undrilled	1		1	
67	511 12 02		Pump housing MT HT D DN 65 Grey cast iron Drilled acc. to: ANSI B16.1-89; tab.5 EN 1092-2 tab. 9 Installation: F S P	1		1	
67	516 20 01		Pump housing HT MT D DN 65 Sliding bracket Grey cast iron Installation: P Undrilled	1		1	
67	645 87 00		Pump housing MT D DN 80 Grey cast iron Drilled acc. to: ANSI B16.1-89; tab.5 Installation: P F S	1		1	
67	516 14 00		Pump housing LT F DN 40 ISO G 1 1/2 Strainer bottom Grey cast iron Installation: S Undrilled	1		1	
67	516 14 02		Pump housing LT F DN 40 Sliding bracket and strainer bottom Grey cast iron Installation: P Undrilled	1		1	
67	638 87 00		Pump housing HT M DN 40 Grey cast iron Outlet :Horizontal Installation: P Undrilled		1		1
67	638 87 01		Pump housing HT M DN 40 Installation: P Undrilled		1		1
67	638 85 02		Pump housing HT M DN 40 Grey cast iron Outlet :Horizontal Installation: P Undrilled		1		1
67	638 85 02		Pump housing HT M DN 40 ISO G 1 1/2 Grey cast iron Installation: P X Undrilled		1		1
67	638 85 00		Pump housing HT M DN 40 ISO G 1 1/2 Grey cast iron Installation: F H Undrilled		1		1
67	638 85 00		Pump housing HT M DN 40 ISO G 1 1/2 Grey cast iron Installation: F H Undrilled		1		1

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
67	638 85 01		Pump housing HT M DN 40 1 1/2-11 1/2 NPT Grey cast iron Installation: F H Undrilled		1		1
68	638 82 00		Cutting ring 1.4535 HARDENED TO 58HRC		1		1
70	517 53 00		Plain washer		1		1
72	83 02 99		Hex.socket hd screw M8X20-A4-70	1	1	1	1
73	398 92 01		Wear ring A=63;B=67;C=8	1		1	
75	83 48 42		Parallel key 5X5X35-A4-220HB		1		1
77	81 93 93		Slotted head screw M6X20-A4-70 LT	3		3	
77	81 49 02		Hexagon head screw M12X20-A4-70	3		3	
78	516 24 00		Strainer bottom POLYETHYL. PEHD	1		1	
78	398 94 02		Strainer bottom FOR CS 3068 EXTRA HOLES	1		1	
79	516 15 00		Suction cover	1		1	
79	638 83 00		Suction cover		1		1
80	84 45 45		Stud LT	3		3	
80	82 00 17		Hex.socket hd screw M6X25-A2-70		3		3
81	516 30 00		Seal sleeve	3		3	
82	82 74 18		O-ring 129.3X5.7 NBR	1		1	
83	82 23 31		Hexagon nut M6-A4-70	3		3	
89	312 88 00		Washer 0.3 MM		5		5
89	312 88 01		Washer		5		5
245	555 59 00		Seal ring PERBUNAN HT C	1		1	
245	493 72 00		Seal ring HT MT D	1		1	
245	555 59 01		Seal ring PERBUNAN, GREY HT		1		1

4 Installation Components

4.1 CF

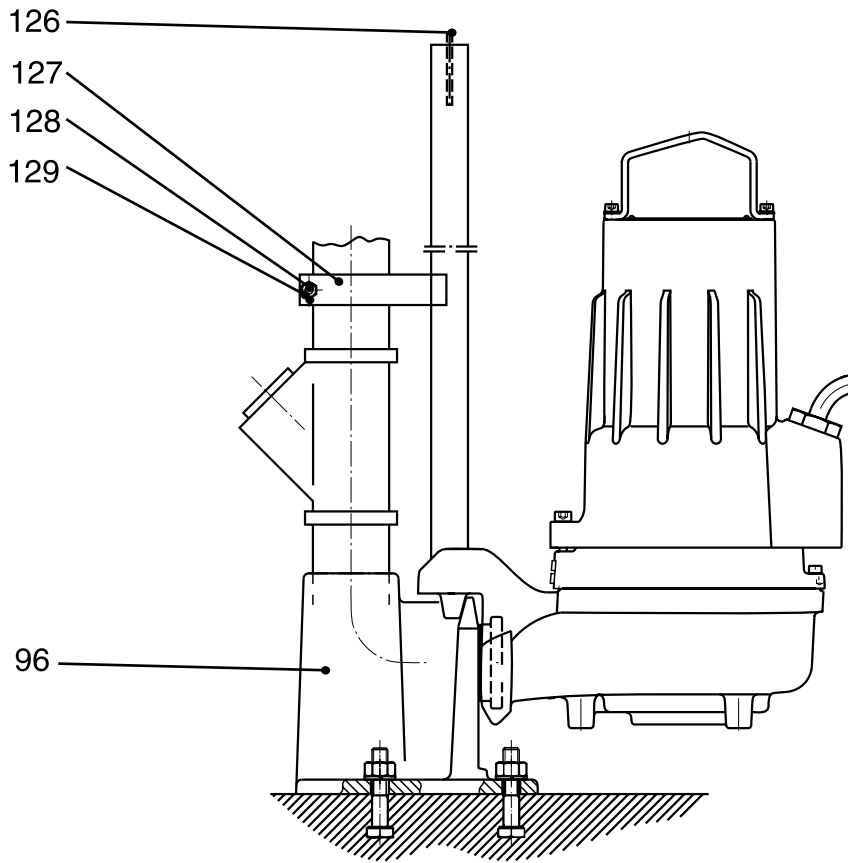
CF 3068.090/180



30827

4.2 CP

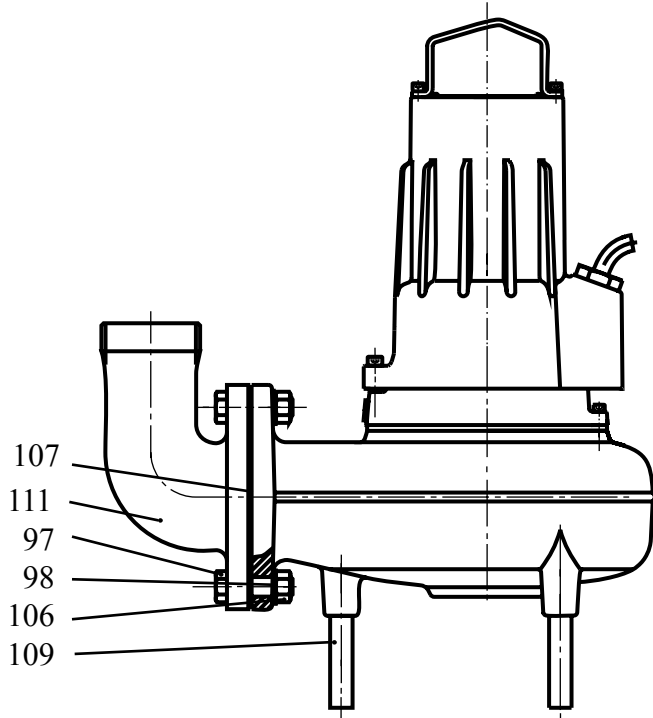
CP 3068.090 / 180



30833

4.3 DF

DF 3068.180

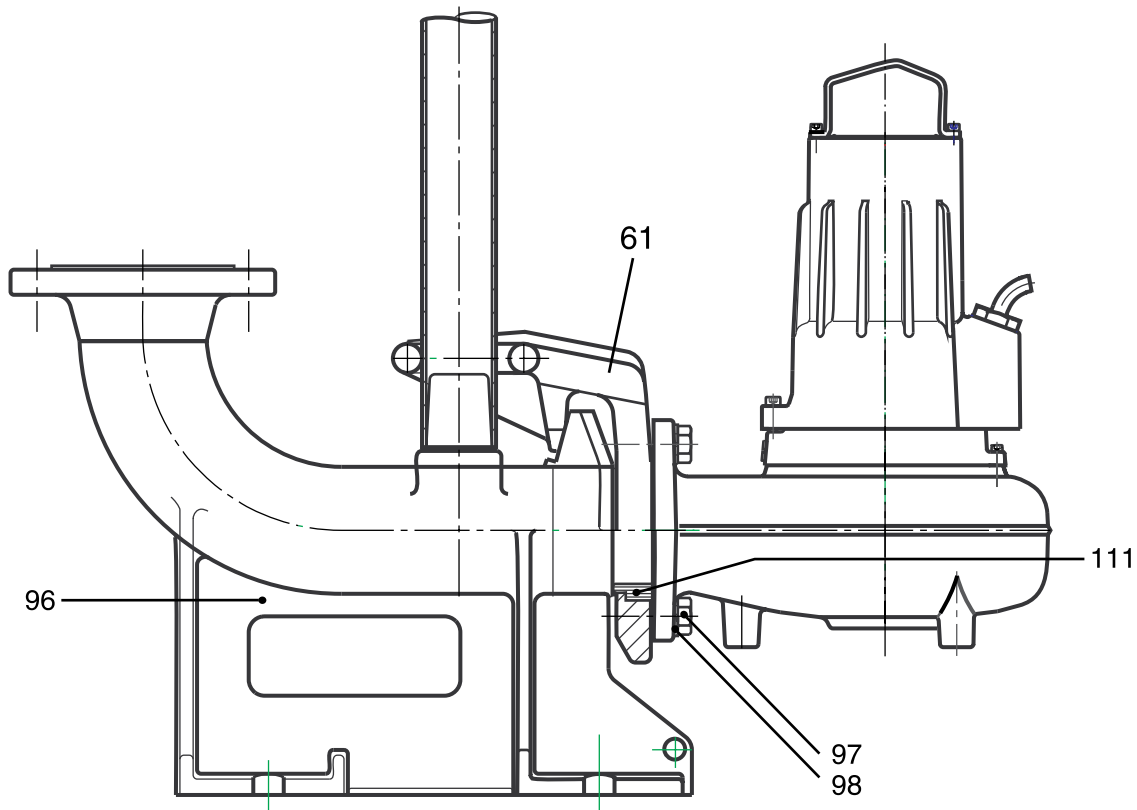


30818

4.4 DP

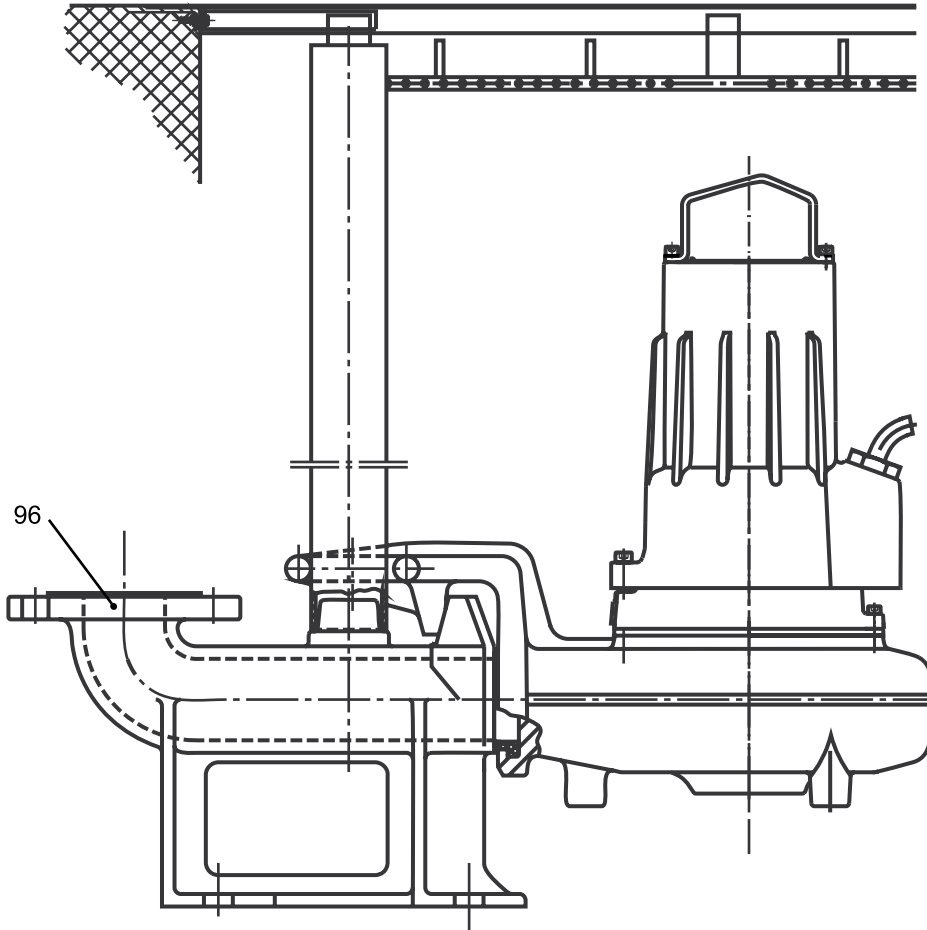
80 mm

DP 3068.180



30816

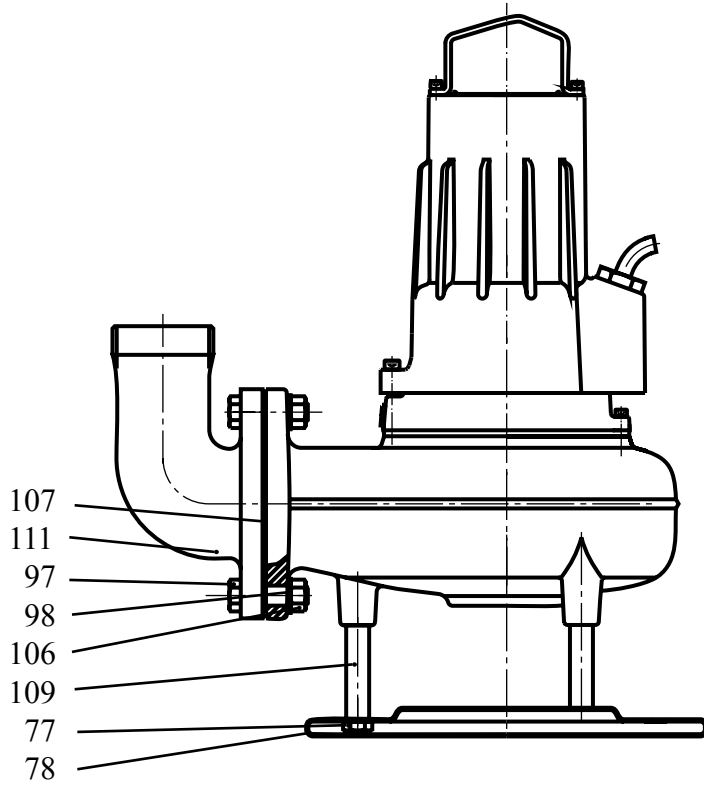
65 mm
 DP 3068.180, 65mm



30815

4.5 DS

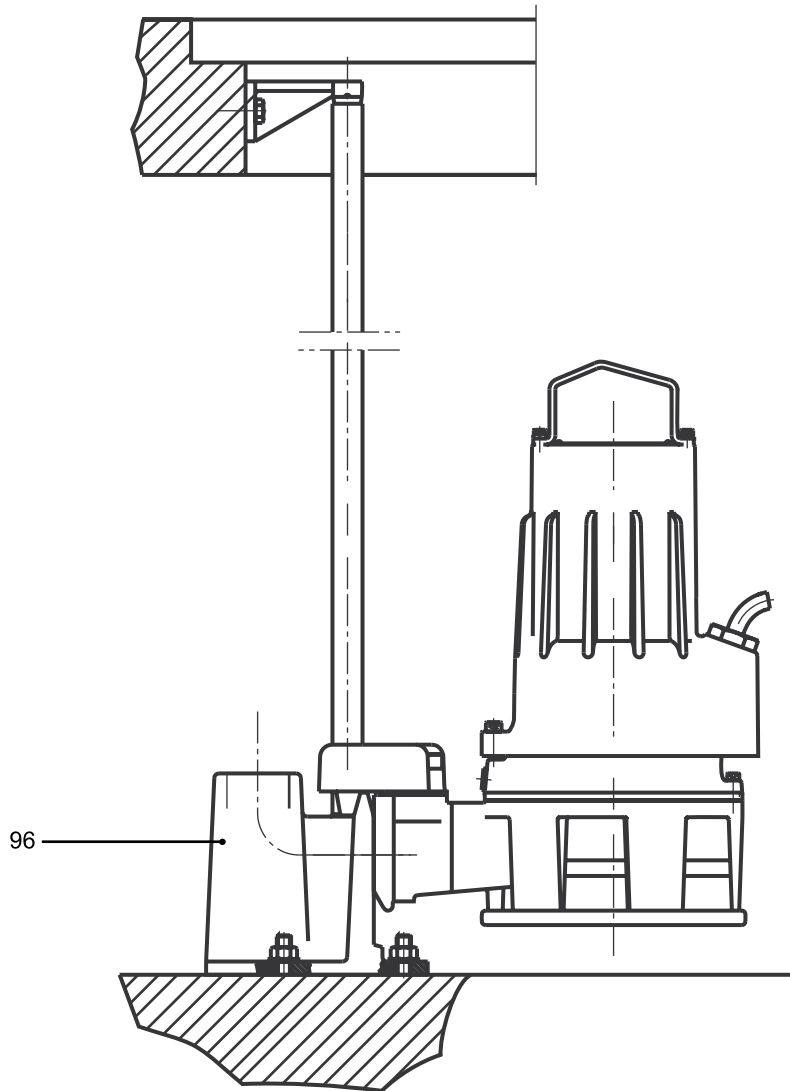
DS 3068.180



30819

4.6 FP

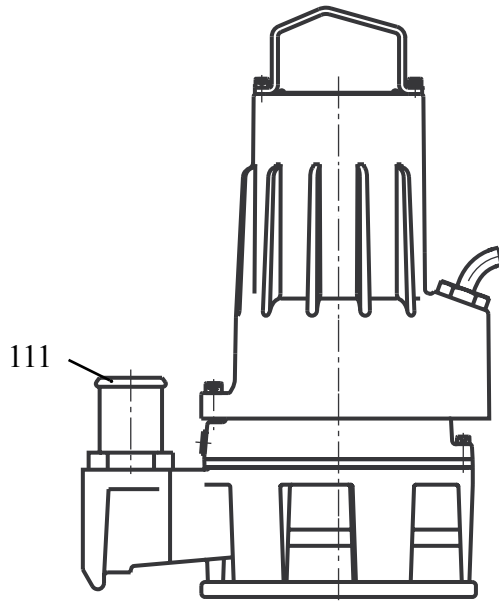
FP 3068.090/180



30854

4.7 FS

FS 3068.090/180

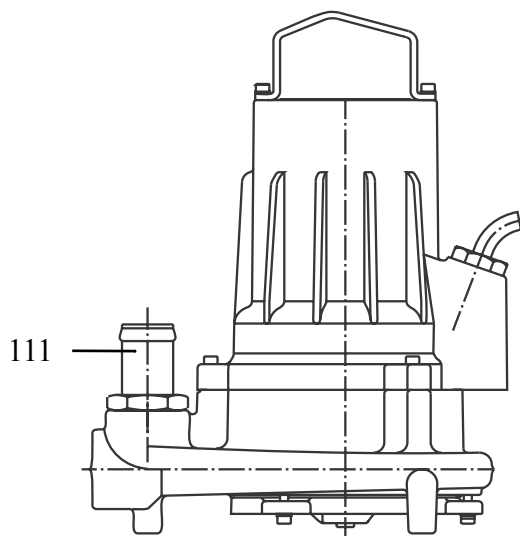


30855

4.8 MF

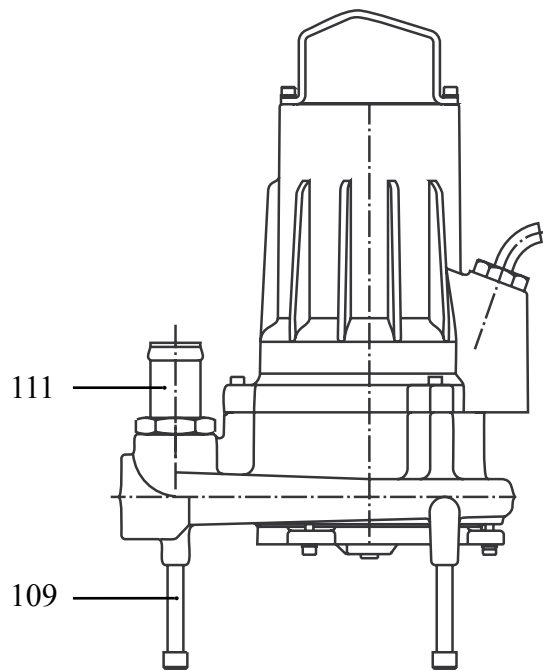
Alternative 1

MF 3068



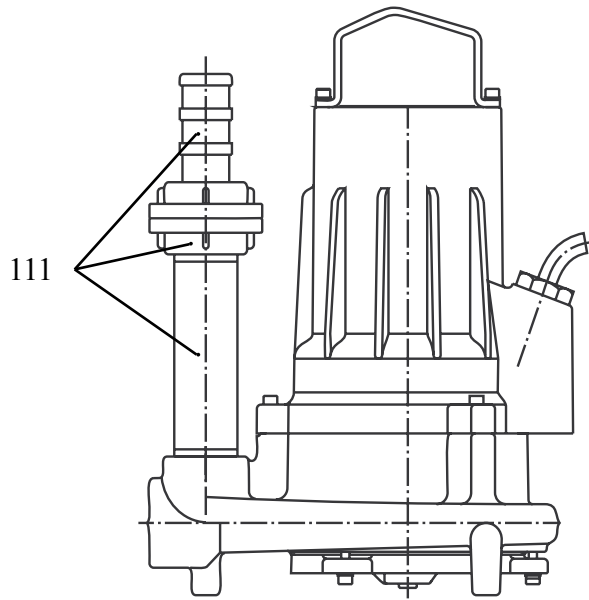
30652

Alternative 2
MF 3068



30651

Alternative 3
MF 3068

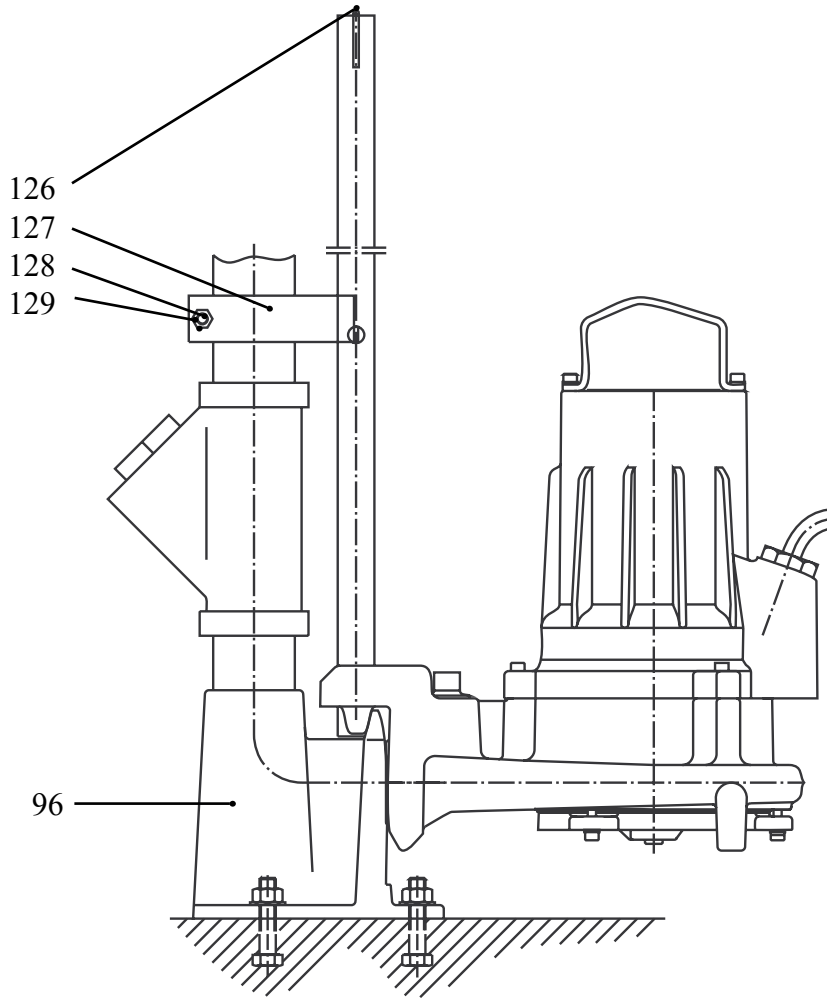


30653

4.9 MP

Alternative 1

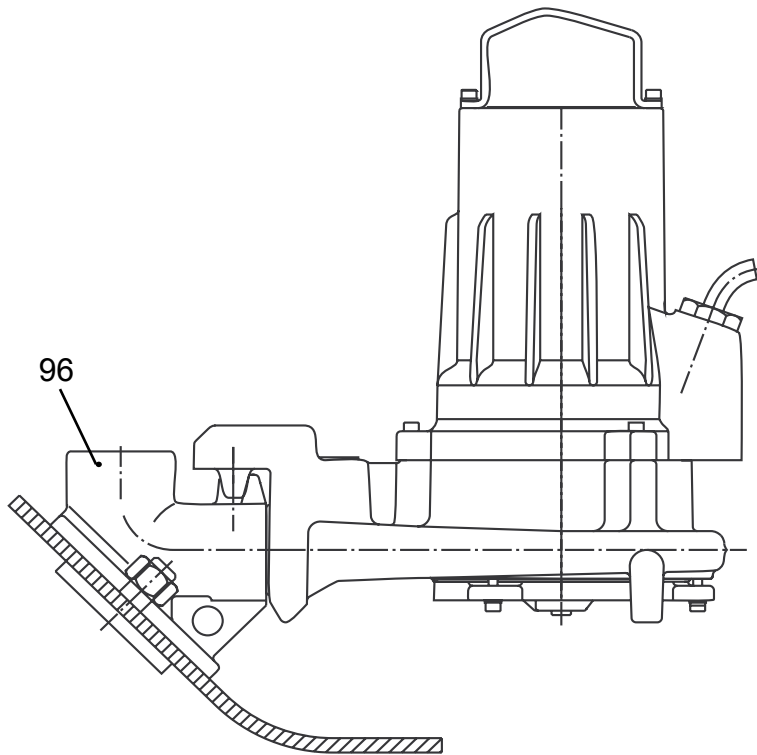
MP 3068



30654

Alternative 2

MP 3068



30655

4.10 3068.090/170/180/890

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
61	464 06 00		Sliding bracket FP "LT"; BP "HT"; DP "LT"	1		1	
61	511 09 00		Sliding bracket DP "MT/HT"	1		1	
61	521 46 00		Sliding bracket DP "MT"	1		1	
96	555 48 00		Discharge con.stat. IN/OUT 50/R3"	1		1	
			Nipple and flange Hydraulic: C Thread : ISO-G3A Inner DN 50 Ordered separately				
			HT Hydraulic: C Thread : ISO G3 Inner DN 50 Ordered separately				
96	555 48 01		Discharge connection NPT 3-8	1		1	
			HT Hydraulic: C Thread : 3-8 NPT Inner DN 50 Ordered separately				
96	486 55 01		Discharge connection IN/OUT 50/50 MM	1		1	
			Hydraulic: C F Thread : NPT 2-11 1/2 Inner DN 50 Ordered separately				
96	486 55 00		Discharge connection IN/OUT 50/50 MM	1		1	
			Hydraulic: C F Thread : ISO G2 Inner DN 50 Ordered separately				
96	493 17 00		Discharge connection UNDRILLED	1		1	
			Hydraulic: D DN 65 Ordered separately				
96	493 17 06		Discharge connection IN/OUT 65/65 MM	1		1	
			Hydraulic: D DN 65 Ordered separately				
96	619 97 10		Discharge con.stat. RIGHT DIAMETER 65	1		1	
			Top 100 TOP 150 DN 65 Ordered separately				
96	619 98 10		Discharge con.stat. LEFT DIAMETER 65	1		1	
			Top 100 TOP 150 DN 65 Ordered separately				
96	619 96 00		Discharge con.stat. DIAMETER 65	1		1	
			TOP 65 MT DN 65 Ordered separately				
96	619 95 00		Discharge con.stat. IN/OUT 50/50 MM	1	1	1	1
			TOP 50 TOP 65 Thread : ISO G2 Inner DN 50 Ordered separately				
96	619 95 01		Discharge con.stat. IN/OUT 50/50 MM	1	1	1	1
			TOP 50 TOP 65 Thread : NPT 2-11 1/2 Inner DN 50 Ordered separately				
96	444 68 00		Discharge con.stat. IN/OUT 80/80 MM	1		1	
			MT Hydraulic: D DN 80 Ordered separately				
96	444 68 01		Discharge con.stat. IN/OUT 80/80 MM	1		1	
			MT Hydraulic: D DN 80 Ordered separately				
96	444 68 05		Discharge con.stat. IN/OUT 80/80 MM	1		1	
			MT Hydraulic: D DN 80 Ordered separately				
96	444 68 07		Discharge con.stat. IN/OUT 80/80 MM	1		1	
			MT Hydraulic: D DN 80 Ordered separately				
96	486 55 01		Discharge connection IN/OUT 50/50 MM		1		1
			Hydraulic: C F Thread : NPT 2-11 1/2 Inner DN 50 Ordered separately				
96	486 55 00		Discharge connection IN/OUT 50/50 MM		1		1
			Hydraulic: C F Thread : ISO G2 Inner DN 50 Ordered separately				
96	461 16 00		Discharge connection				1
97	81 41 81		Hexagon head screw M16X40-A4-70	4		4	
			MT				
97	81 49 35		Hexagon head screw M16X60-A4-70	4		4	
98	82 35 78		Plain washer 16-A4-A-170	4		4	
101	613 68 00		Guide bracket unit GALVANIZED 2"	1		1	
			Optional				

Pos. No	Part. No	Type	Denomination	Qty/Version				
				090	170	180	890	
101	669 77 00		Guide bracket unit SS	Optional	1	1	1	1
106	82 23 37		Hexagon nut M16-A4-70		4		4	
107	536 88 00		Gasket		1		1	
109	398 95 00		Stud		3		3	
109	534 48 01		Foot		1		1	
109	81 49 02		Hexagon head screw M12X20-A4-70		3		3	
109	82 48 65		Spring washer DIN 128-A-12-A2		3		3	
109	82 00 79		Hex.socket hd screw M12X80-A2-70			3		3
109	82 42 62		Plain washer (14)-16MM			3		3
109	534 46 00		Sleeve NBR			3		3
109	534 47 00		Sleeve SS			3		3
109	658 18 00		Hex.socket hd screw M12X75			3		3
111	84 90 33		Elbow pipe MALLEABLE CAST IRON	HT C	1		1	
111	464 06 01		Sliding bracket	HT C DN 50 Sliding bracket Grey cast iron Installation: P Undrilled	1		1	
111	83 05 60		Nipple pipe CONN. 80 GALV	Discharge connection Installation P Nipple and flange Hydraulic: C Thread : ISO-G3A Inner DN 50 Ordered separately	1		1	
111	83 15 35		Flange DN 80	Optional Discharge connection Installation P Nipple and flange Hydraulic: C Thread : ISO-G3A Inner DN 50 Ordered separately	1		1	
111	515 74 02		Discharge connection	Optional Manure LT Hydraulic: F DN 50	1		1	
111	83 92 70		Coupling		1		1	
111	526 20 00		Seal ring	MT Hydraulic: D	1		1	
111	310 03 01		Discharge connection	Installation F Rubber feet Hydraulic: D DN 75 Undrilled	1		1	
111	385 52 04		Discharge connection ISO G3	Installation F Hydraulic: D DN 75 Undrilled Installation S Strainer bottom Hydraulic: D DN 75 Undrilled Strainer bottom Hydraulic: D Thread : ISO-G3A Outer DN 75 Undrilled Installation F Hydraulic: D Thread : ISO-G3A Outer DN 75 Undrilled Installation F Rubber feet Hydraulic: D Thread : ISO-G3A Outer DN 75 Undrilled	1		1	

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
111	385 52 03		Discharge connection 3-8 NPSM Installation F Hydraulic: D Thread : 3-8 NPSM Outer DN 75 Strainer bottom Hydraulic: D Thread : 3-8 NPSM Outer DN 75 Undrilled Installation F Rubber feet Hydraulic: D Thread : 3-8 NPSM Outer DN 75 Undrilled	1		1	
111	83 92 71		Coupling POLYPROPYLENE PP R 2	1		1	
111	83 05 09		Nipple pipe CONN. 50, L=180 MM	1		1	
111	83 18 24		Coupling part	1		1	
111	83 19 31		Coupling part	1		1	
111	83 14 45		T-pipe 40X40X25		1		1
111	84 90 33		Elbow pipe MALLEABLE CAST IRON HT C		1		1
111	83 92 70		Coupling		1		1
111	83 05 06		Nipple pipe CONN. 40 L=180 MM Optional		1		1
111	83 18 25		Coupling part Quick coupling: Storz		1		1
111	83 18 40		Coupling part DN 52 INNER THREAD 1 1/2" Optional Quick coupling: Storz		1		1
121	83 04 53		Hex.socket hd screw M12X45-A4-80	2		2	
124	82 71 79		Plug DN 25 HT M	1		1	
124	83 11 58		Hexagon nipple DN 50 (2") HT C	1		1	
124	83 14 50		T-pipe 50X25X50 HT C	1		1	
124	82 71 79		Plug DN 25 HT M		1		1
124	83 11 57		Hexagon nipple DN 40 (1 1/2") HT M		1		1
126	495 27 00		Clip	1	1	1	1
127	495 26 00		Clip	1	1	1	1
128	81 55 59		Hexagon head screw M8X65-A4-70	1	1	1	1
129	82 23 32		Hexagon nut M8-A4-70	1	1	1	1
131	516 86 00		Conversion unit	1		1	
134	554 30 02		Starter 3-phase 50/60Hz 380V - 415V Current range 2,5 - 4A Thermo contact supervision Phase sequence indicator Supply connection CEE 5- PLUG 16A Not CSA approved	1	1	1	
134	554 30 03		Starter 3-phase 50/60Hz 380V - 415V Current range 4 - 6,3A Thermo contact supervision Supply connection CEE 5-PLUG 16A	1	1	1	
134	554 30 12		Starter 3-phase 50/60 Hz 380V - 415 V Current range: 2,50 - 4 A Thermal contact supervision Supply connection CEE 5-PLUG 32A		1	1	
134	554 30 13		Starter 3-phase 50/60 Hz 380V - 415 V Current range: 4 - 6,30 A Thermal contact supervision Supply connection CEE 5-PLUG 32A		1	1	
134	554 22 13		Starter 1.5 KW 230 V/50 HZ		1	1	

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
134	554 23 33		Starter 1.3 KW 230 V/60 HZ		1	1	
134	554 23 39		Starter 156, 1.3 KW 230/50 HZ			1	
134	554 23 38		Starter 156, 1.5 KW 230/60 HZ			1	

5 Service Parts

5.1 3068.090/170/180/890

Pos. No	Part. No	Type	Denomination	Qty/Version			
				090	170	180	890
800	83 10 34		O-ring kits 3068.170		1		
800	80 33 20		O-ring kits 3068.180/250			1	
800	83 10 35		O-ring kits 3068.890				1
900	601 89 56		Basic repair kit	1		1	
900	601 89 58		Basic repair kit	1			
900	784 12 00		Basic repair kit	1		1	
900	601 89 51		Basic repair kit 3068.170		1		
900	601 89 54		Basic repair kit 3068.180			1	
901	90 17 52		Oil ISO VG 32	*	*	*	*