

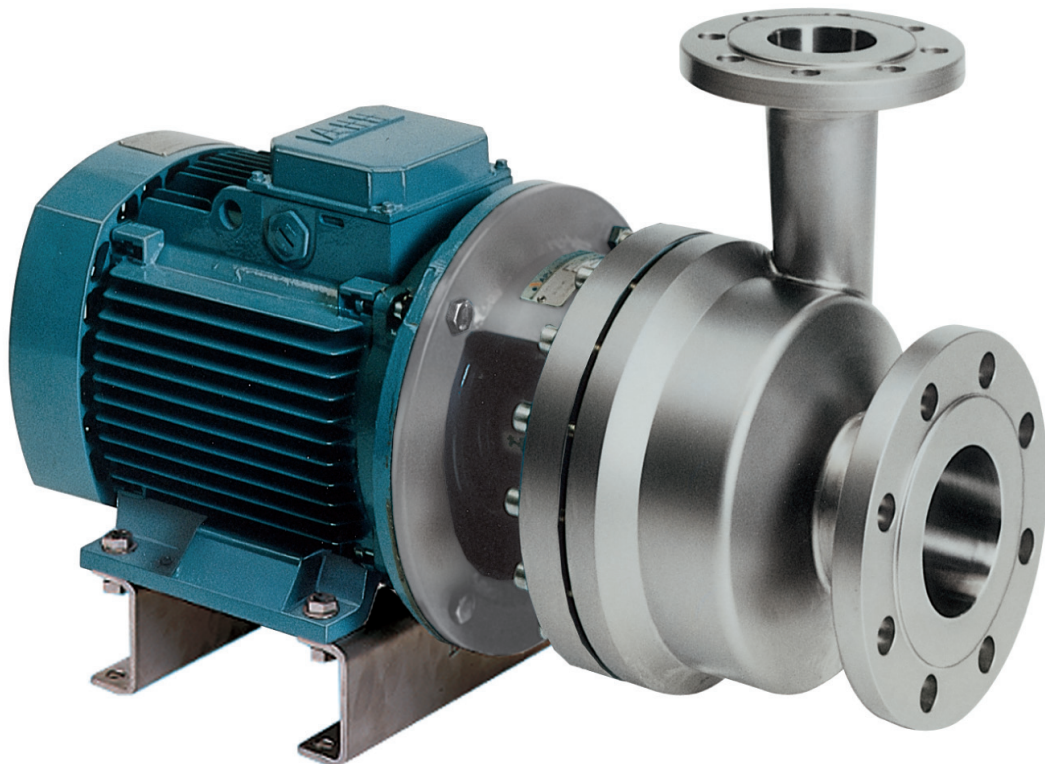
# WHP+

HIGH PRESSURE CENTRIFUGAL PUMP

FORM NO.: L381655GB

REVISION: 04/2015

READ AND UNDERSTAND THIS MANUAL PRIOR TO OPERATING OR SERVICING THIS PRODUCT.





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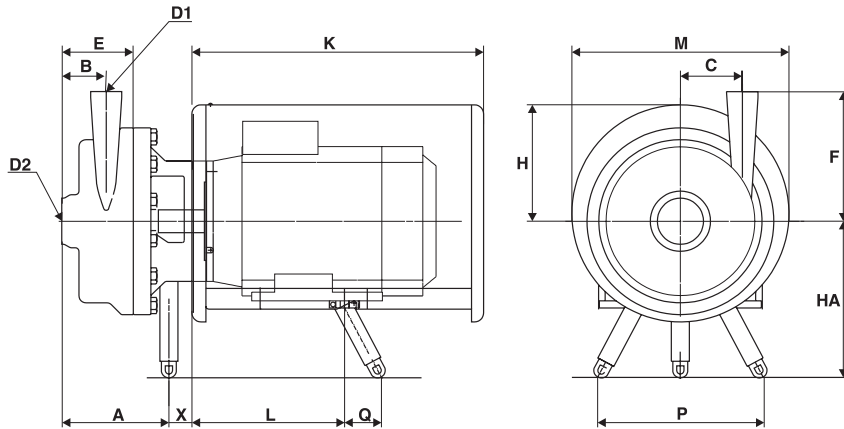
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## 1. Pump dimension

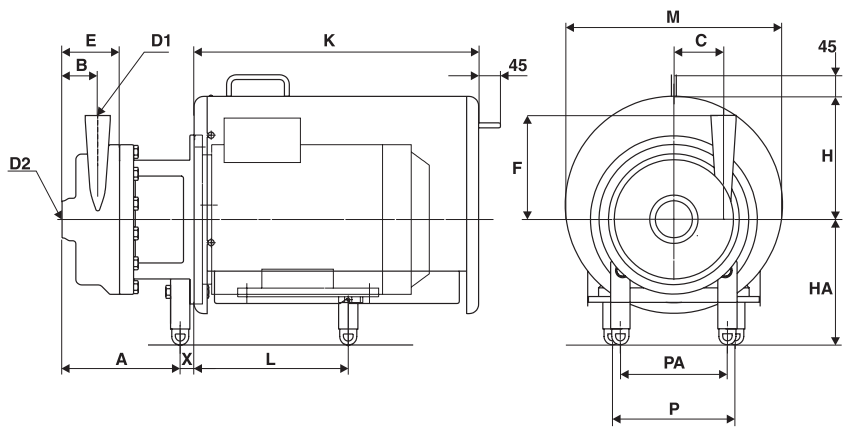
WHP+

### 1.1 Adjustable feet

TG.1  
Motor 132S-M



TG.2  
Motor 160M-200L



## 1. Pump dimension

**WHP+**

### 1.1 Adjustable feet

TG		WHP+30/80	WHP+55/60	WHP+60/110	
1	A	188	178	177	
2		248	232	231	
	B	78	74	68	
	C	70	99.5	106	
	E	141	119	118	
	F	215	220	290	
	D1	76	51	76	
	D2	102	76	102	
1	X	56	38	38	
2		43	43	43	
132M	1	260	260	260	
160	2	260	260	305	
180		HA		260	305
200				305	305

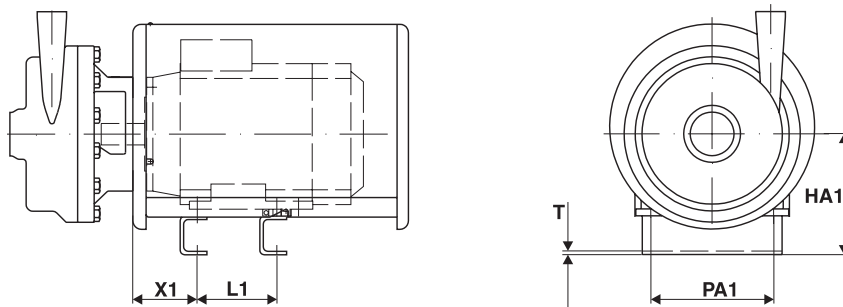
	Motor						
	Tg.1		Tg.2				
	132S	132M	160M	160L	180M	180L	200L
K	482	482	588	588	688	688	848
M	360	360	450	450	480	480	580
P	276	276	254	254	279	279	318
PA			222	222	222	222	222
Q	62	62					
H	193	193	255	255	277	277	372
L							
WHP+ 30/80							
WHP+ 55/60	252	290	318	362	362	400	463
WHP+ 60/110							

## 1. Pump dimension

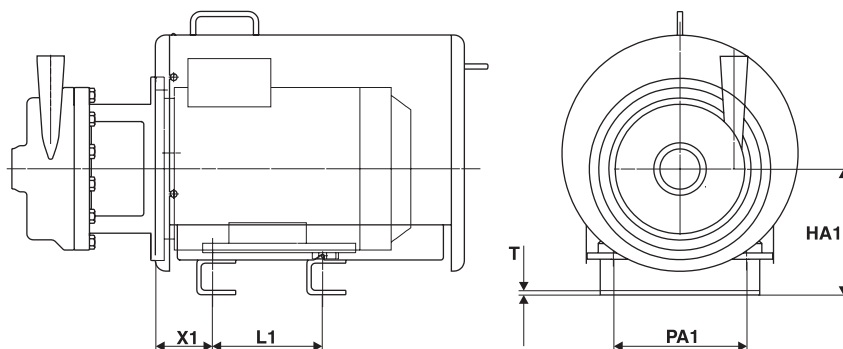
**WHP+**

### 1.2 Bracket type A

**TG.1**  
Motor 132S-M  
Type A



**TG.2**  
Motor 160M-200L  
Type A



**TG.1-2**  
With bracket type A  
Motor 132M - 200L

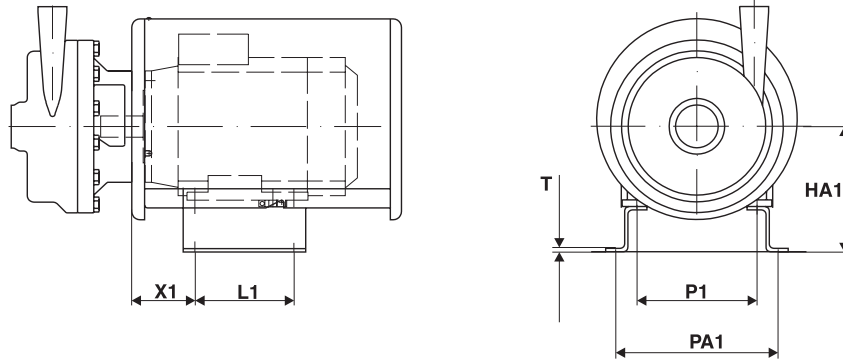
	Motor						
	132S	132M	160M	160L	180M	180L	200L
X1	112	112	108	108	121	121	158
L1	140	178	210	254	241	279	305
PA1	216	216	254	254	279	279	318
T	6	6	6	6	6	6	8
HA1	212	212	240	240	260	260	280

## 1. Pump dimension

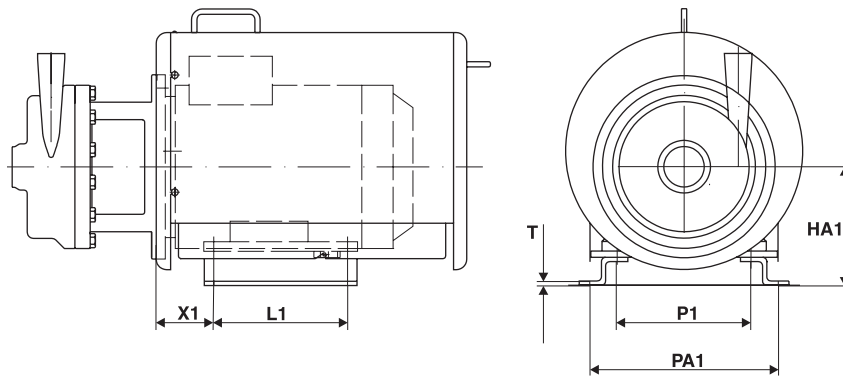
WHP+

### 1.2 Bracket type B

**TG.3**  
Motor 132S-M  
Type B



**TG.4**  
Motor 160M-200L  
Type B

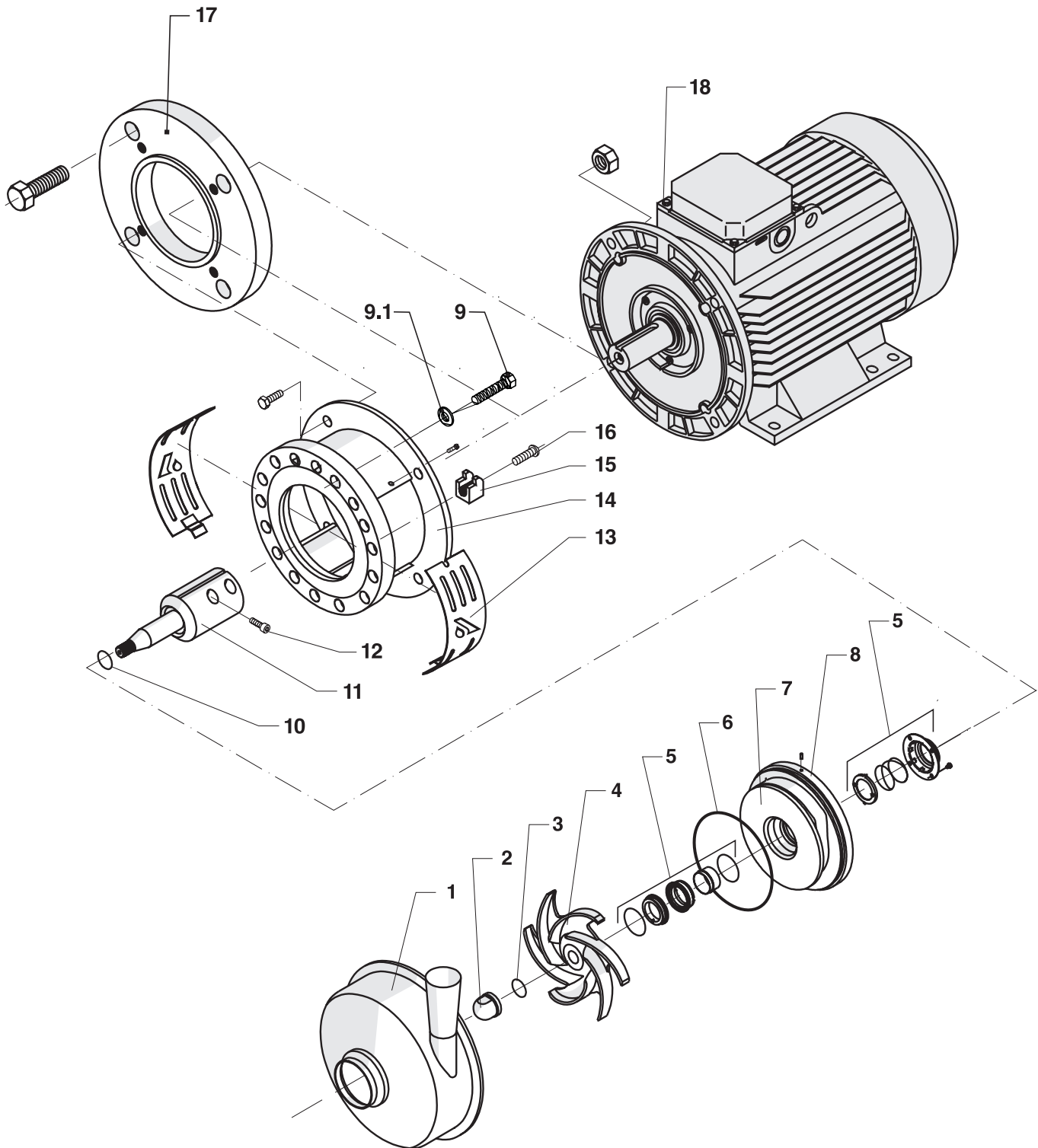


**TG.3-4**  
With bracket type B  
Motor 132M - 200L

	Motor						
	132S	132M	160M	160L	180M	180L	200L
X1	112	112	108	108	121	121	158
L1	140	178	210	254	241	279	305
P1	216	216	254	254	279	279	318
PA1	292	292	358	358	379	379	432
T	6	6	6	6	6	6	10
HA1	225	225	225	225	225	225	225

## 2. Pump complete

WHP+





## 2. Pump complete

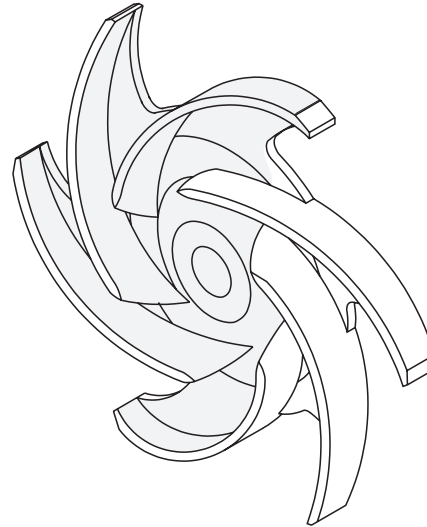
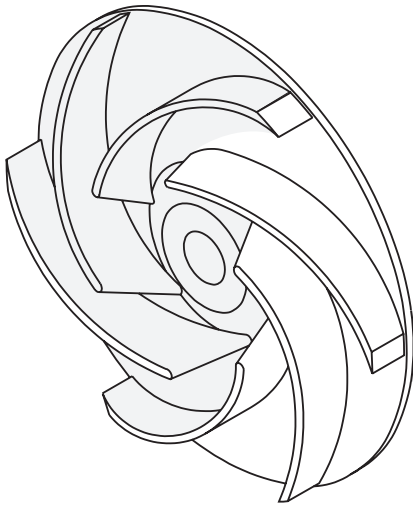
**WHP+**

Item	Qty	Description	Pump type		
			WHP+30/80	WHP+55/60	WHP+60/110
			Part no.		
1	1	Pump housing	L182738	L182734	L182739
2	1	Cap nut	L260058	L260059	L260059
3	1	O-ring EPDM FPM (Viton)	s/p40 s/p40	s/p40 s/p40	s/p40 s/p40
4	1	Impeller	s/p36	s/p36	s/p36
5	1	Shaft seal	s/p37	s/p37	s/p37
6	1	Oring EPDM FPM (Viton)	s/p40 s/p40	s/p40 s/p40	s/p40 s/p40
7	1	Back plate	L260934	L260900	L260962
8	1	Pin	L772493	L772493	L772493
9	6	Screw M16 x 50 kl.80		L771944	L771944
-	16	- M12 x 45 kl.80	L773075		
9.1	6	Spring-lock washer		L770779	L770779
10	1	O-ring EPDM FPM (Viton)	s/p40 s/p40	s/p40 s/p40	s/p40 s/p40
11	1	Shaft	s/p41	s/p41	s/p41
12	2	Screw	L771199	L771199	L771199
13	2	Shaft Guard	s/p42-43	s/p42-43	s/p42-43
14	1	Extension frame	s/p42-43	s/p42-43	s/p42-43
15	2	Bracket (Screw)	L268499	L268499	L268499
16	2	Screw	L701942	L701942	L701942
17	1	Washer	s/p42	s/p42	s/p42
18	1	Motor	s/p49	s/p49	s/p49
--	--	Frame	s/p44/45	s/p44/45	s/p44/45
--	--	Bracket	s/p46/47	s/p46/47	s/p46/47
--	--	Shroud	s/p48	s/p48	s/p48

s/pxx = see page

## 3. Impeller

**WHP+**



Impeller DIA	Pump type	
	WHP+30/80	
	Part No.	
Ø170	L253738	
Ø165	L267469	
Ø160	L267470	
Ø155	L267471	
Ø150	L267472	
Ø145	L267473	
Ø140	L267474	
Ø135	L267475	
Ø130	L267476	
Ø125	L267477	
Ø120	L267478	
Ø115	L267479	
Ø110	L267480	

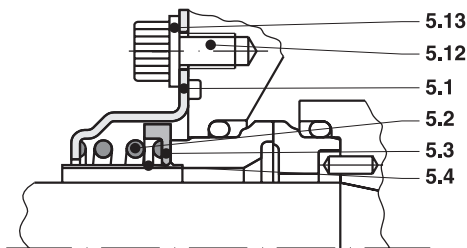
Impeller DIA	Pump type	
	WHP+55/60	WHP+60/110
	Part No.	
Ø230		L253745
Ø225		L267535
Ø220	L253744	L267536
Ø215	L267523	L267537
Ø210	L267524	L267538
Ø205	L267525	L267539
Ø200	L267526	L267540
Ø195	L267527	L267541
Ø190	L267528	L267542
Ø185	L267529	L267543
Ø180	L267530	L267544
Ø175	L267531	L267545
Ø170	L267532	L267546
Ø165	L267533	L267547
Ø160	L267534	L267548

## 4. Shaft seal

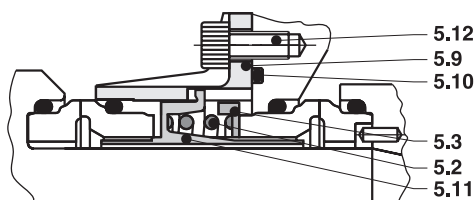
WHP+

### 4.1 Fixing Kit

A. Single Seal Ø25+Ø35



B. Double Seal Ø25+Ø35



Fixing kit				Shaft size	
				Ø25	Ø35
Seal type	Item	Description	Material	Part no.	
A	Single Seal	<b>Complete</b>		L772460	L772465
		5.1 5.2 5.3 5.4	Seal housing Spring Pressure ring Drain pipe	AISI 316 AISI 316 AISI 316 PTFE	(L773100)
B	Double seal	<b>Complete</b>		L194448	L194449
		5.2 5.3 5.9 5.11	Spring Pressure ring Seal housing Pressure ring Union elbow	AISI 316 AISI 316 AISI 316 AISI 316 -	
	5.10	O-ring	EPDM	L772470	L771362
	5.12	4 Screws M6x10	AISI 316	L770496	L770496

Rebuild from single to double seal: 1x Fixing kit double + 1x Face kit (see page 41) + 1x Item 5.10

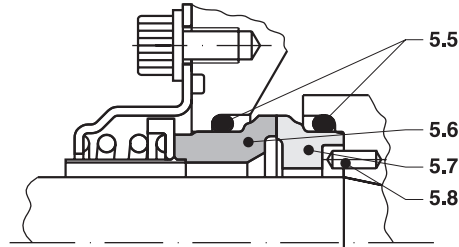
Rebuild from double to single seal: 1x Fixing kit single + 1x Item 5.13

## 4. Shaft seal

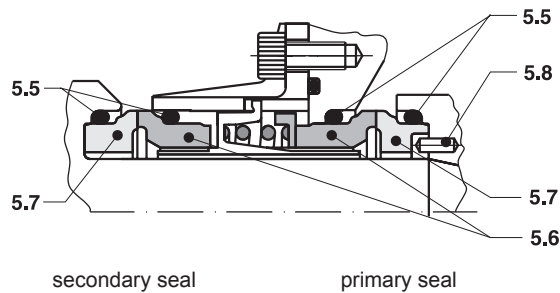
**WHP+**

### 4.2 Face Kit

**A. Single Seal Ø25+Ø35**



**B. Double Seal Ø25+Ø35**



Face kit	Item material				Shaft size	
	5.5 O-rings x2	5.6 Stationary seal	5.7 Rotary seal	5.8 Pin	Ø25	Ø35
Reaction Bonded SiC/Car EPDM	EPDM	Reaction Bonded SiC	Resin Bonded Carbon	AISI 316L	L773063	L773067
Reaction Bonded SiC/Car FPM	FPM	Reaction Bonded SiC	Resin Bonded Carbon	AISI 316L	L773064	L773067
Reaction Bonded SiC/SiC EPDM	EPDM	Reaction Bonded SiC	Reaction Bonded SiC	AISI 316L	L773065	L773068
Reaction Bonded SiC/SiC FPM	FPM	Reaction Bonded SiC	Reaction Bonded SiC	AISI 316L	L773066	L773069
Self Sintered SiC/Car EPDM	EPDM	Self Sintered SiC	Resin Bonded Carbon	AISI 316L	L783063	L783067
Self Sintered SiC/Car FPM	FPM	Self Sintered SiC	Resin Bonded Carbon	AISI 316L	L783064	L783067
Self Sintered SiC/SiC EPDM	EPDM	Self Sintered SiC	Self Sintered SiC	AISI 316L	L783065	L783068
Self Sintered SiC/SiC FPM	FPM	Self Sintered SiC	Self Sintered SiC	AISI 316L	L783066	L783069

Seal type B: All combinations of materials are available - SPX FT recommends to use SiC/Car as secondary seal

All seal rings marked as below:

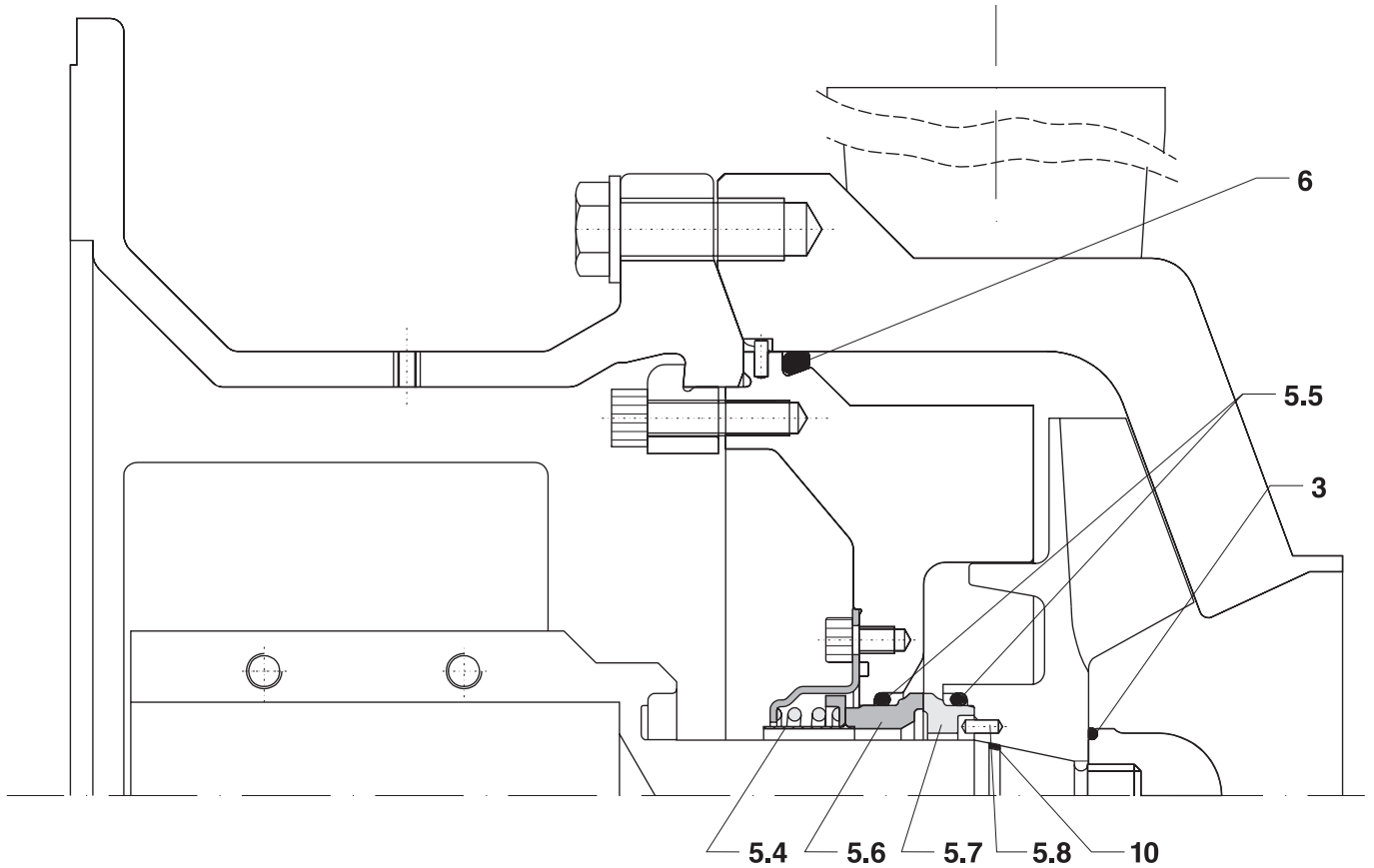
SSwwyyx - SS (Self Sintered SiC) - ww (week of production) - yy (year of production) - x (batch)

RBwwyyx - RB (Reaction Bonded SiC) - ww (week of production) - yy (year of production) - x (batch)

## 5. Complete seal kit

**WHP+**

### 5.1 Complete seal kit, single



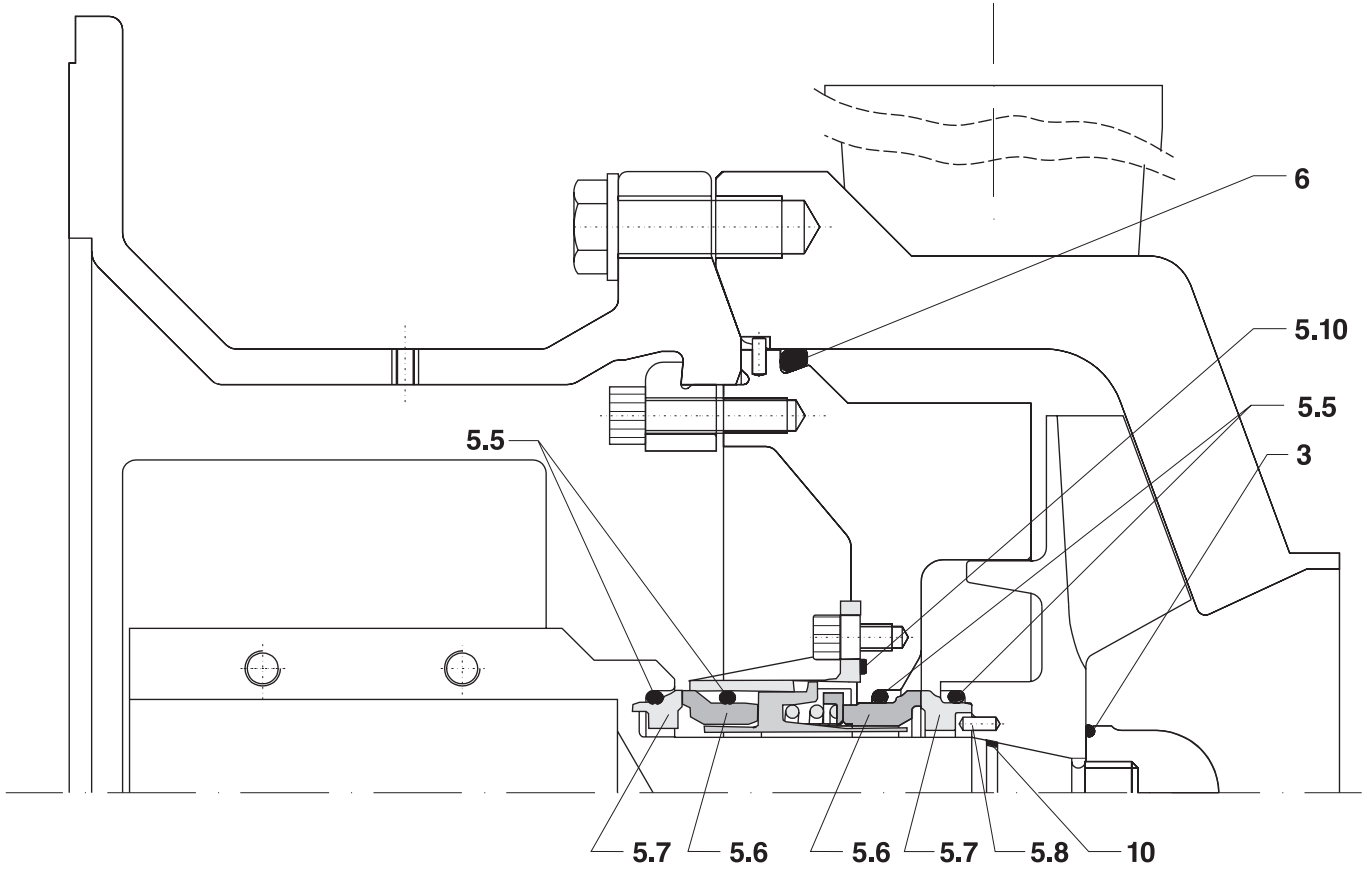
Reaction Bonded SiC		Pump type		
Item	Material	WHP+30/80	WHP+55/60	WHP+60/110
		Part No.		
3, 6, 10, 2x 5.5, 5.6, 5.7, 5.8, 5.10	SiC/SiC EPDM	L808840	L808841	L808842
	SiC/Car EPDM	L808843	L808844	L808845
	SiC/SiC FPM	L808846	L808847	L808848
	SiC/Car FPM	L808849	L808850	L808851

Self Sintered SiC		Pump type		
Item	Material	WHP+30/80	WHP+55/60	WHP+60/110
		Part No.		
3, 6, 10, 2x 5.5, 5.6, 5.7, 5.8, 5.10	SiC/SiC EPDM	L888840	L888841	L888842
	SiC/Car EPDM	L888843	L888844	L888845
	SiC/SiC FPM	L888846	L888847	L888848
	SiC/Car FPM	L888849	L888850	L888851

## 5. Complete seal kit

**WHP+**

### 5.2 Complete seal kit, double

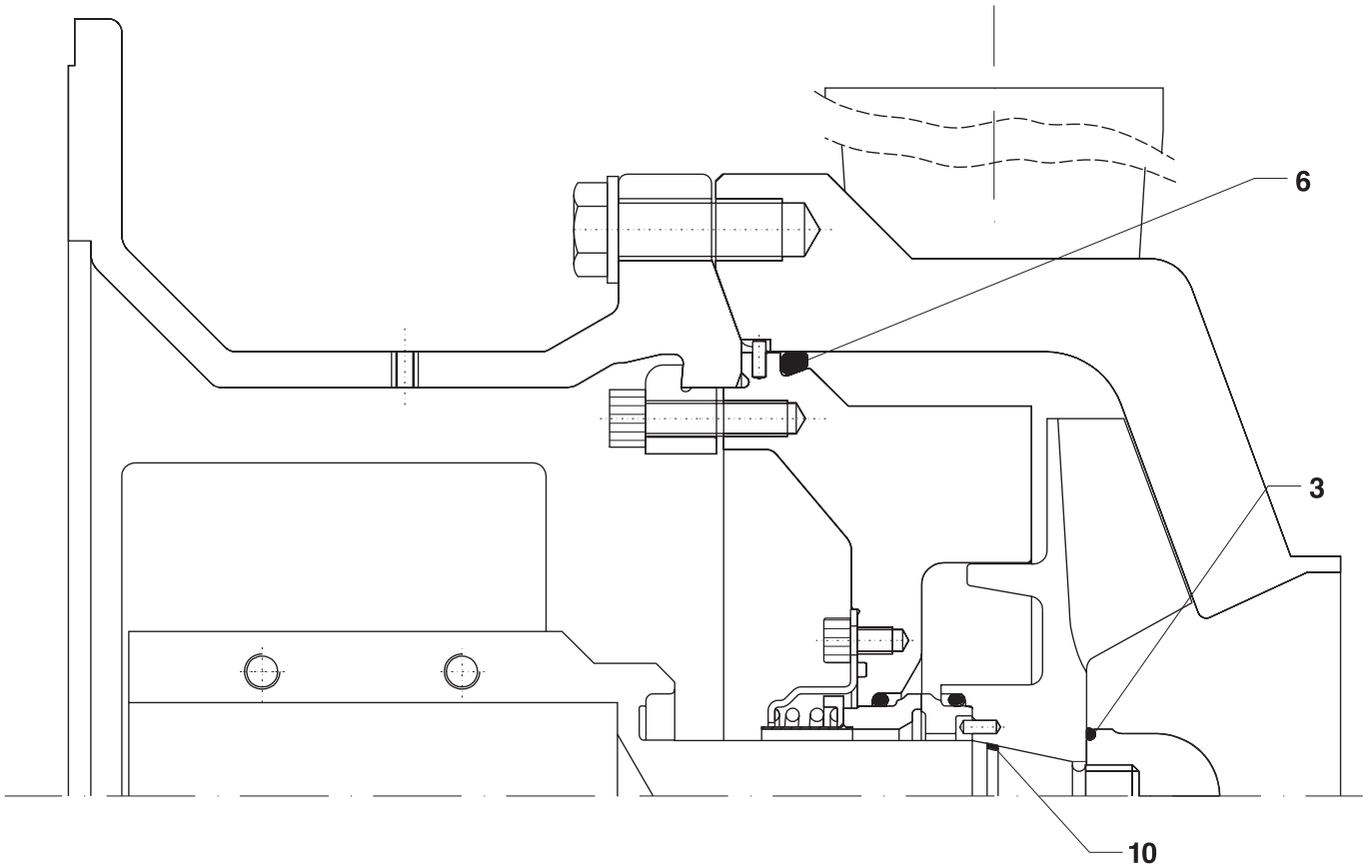


Reaction Bonded SiC		Pump type		
Item	Material	WHP+30/80	WHP+55/60	WHP+60/110
		Part No.		
3, 6, 10, 4x 5.5, 2x 5.6, 2x 5.7, 5.8, 5.10	SiC/SiC - SiC/Car EPDM	L808852	L808853	L808854
	SiC/Car - SiC/Car EPDM	L808855	L808856	L808857
	SiC/SiC - SiC/Car FPM	L808858	L808859	L808860
	SiC/Car - SiC/Car FPM	L808861	L808862	L808863

Self Sintered SiC		Pump type		
Item	Material	WHP+30/80	WHP+55/60	WHP+60/110
		Part No.		
3, 6, 10, 4x 5.5, 2x 5.6, 2x 5.7, 5.8, 5.10	SiC/SiC - SiC/Car EPDM	L888852	L888853	L888854
	SiC/Car - SiC/Car EPDM	L888855	L888856	L888857
	SiC/SiC - SiC/Car FPM	L888858	L888859	L888860
	SiC/Car - SiC/Car FPM	L888861	L888862	L888863

## 6. O-rings kit

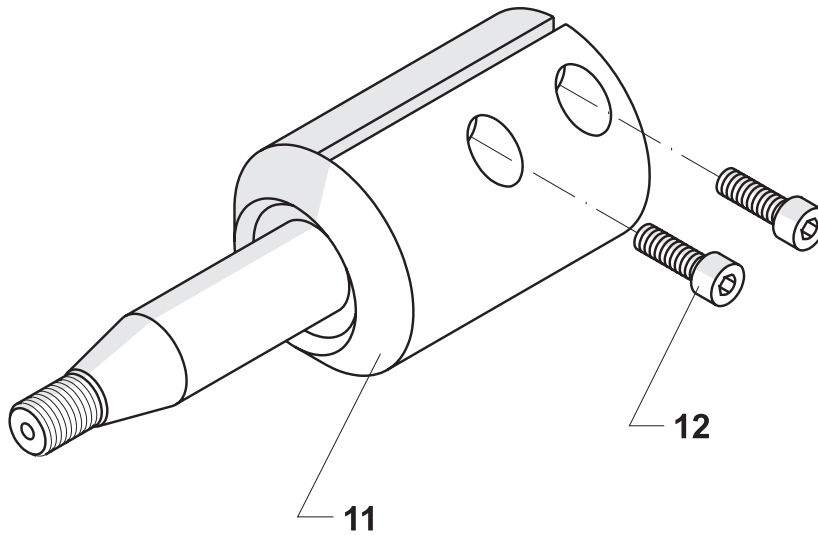
**WHP+**



Item	Material	Pump type		
		WHP+30/80	WHP+55/60	WHP+60/110
		Part No.		
3, 6, & 10	EPDM	L808762	L808765	L808769
3, 6, & 10	FPM(Viton)	L808776	L808779	L808783

## 7. Shaft

**WHP+**

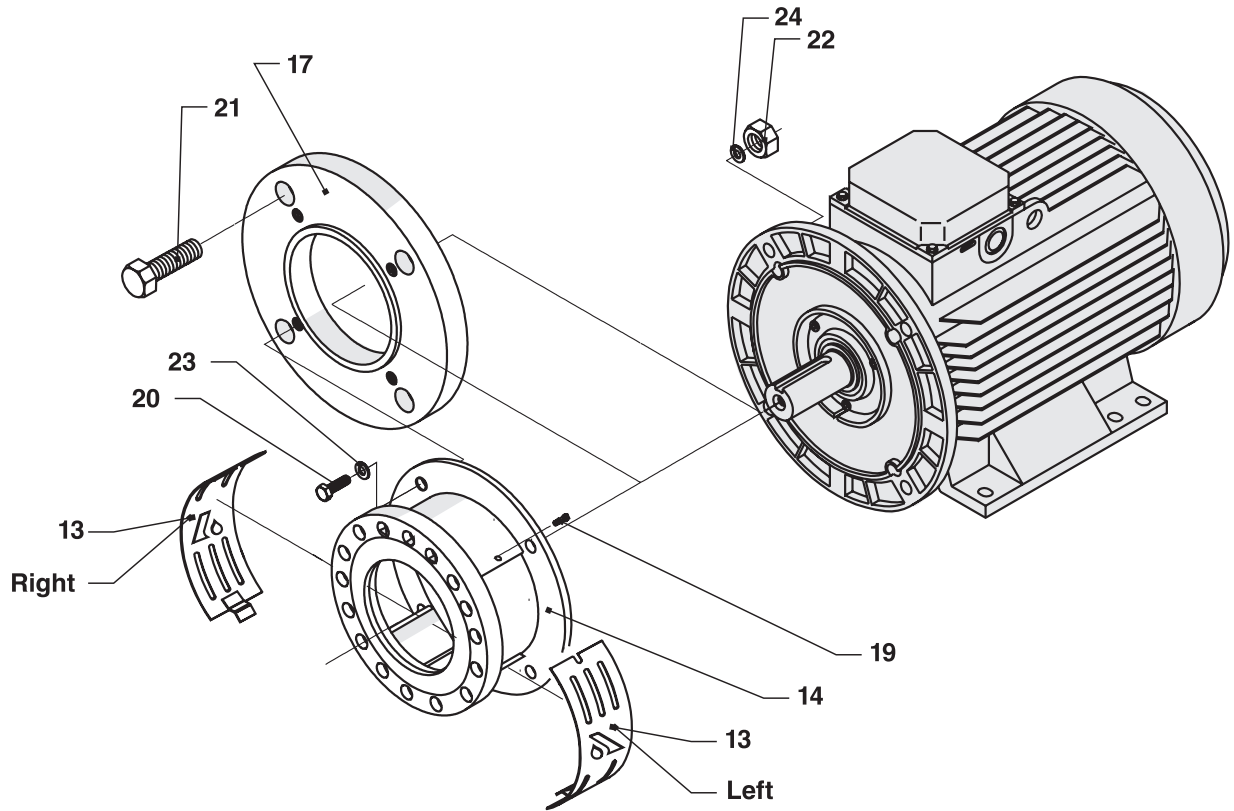


Pump type	Motor			
	132	160	180	200
	Shaft Ø25			
<b>WHP+30/80</b>	L261547	L261548		
	Shaft Ø35			
<b>WHP+55/60</b>	L261550	L261551	L261563	L261552
<b>WHP+60/110</b>	L261550	L261551	L261563	L261552
	Item 12			
<b>Stk./Qty</b>	2	2	2	2
<b>Skruer/Screw</b>	L771199	L771199	L771199	L701231



## 8. Extension frame and shaft guard

**WHP+**



**Item 14**  
Extension frame

Pump type	Motor			
	132*	160	180	200**
Part No.				
<b>WHP+30/80</b>	L182766	L182767		
<b>WHP+55/60</b>	L182737	L182735	L182735	L182735
<b>WHP+60/110</b>	L182737	L182735	L182735	L182735

**Item 17**  
Washer

*	L267665
**	L267666

## 8. Extension frame and shaft guard

**WHP+**

### Item 13 Shaft guard

Pump type	Qty.	Motor			
		132	160	180	200
		Part No.			
WHP+30/80	1 R	L188333			
	1 L	L188285			
	2 R/L		L188259		
WHP+55/60	1 R	L188339			
	1 L	L188597			
	2 R/L		L188644	L188644	L188644
WHP+60/110	1 R	L188339			
	1 L	L188597			
	2 R/L		L188644	L188644	L188644

R=Right L=Left

### Item 19 - 24 Screws, nuts and washers

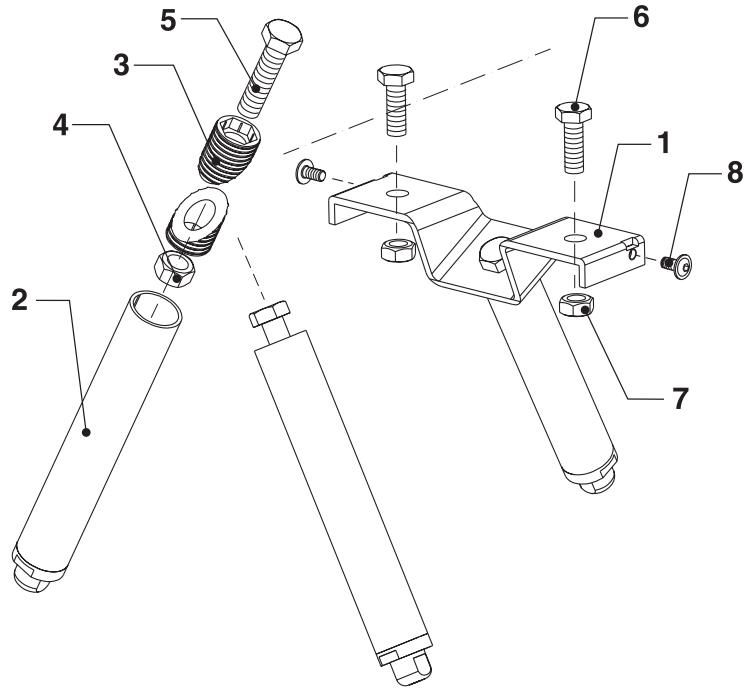
Description	Item	Qty	Motor			
			132	160	180	200
		Part No.				
Screw	19	2	L700420	L700420	L700420	L700420
Screw	20	4	L700234	*L771944	*L771944	*L772568
Screw	21	4	L701078			L772567
Nut	22	4		L701387	L701387	L701387
Washer	23	4		L771425		
Washer	24	4		L701254	L701254	L701254

\* 2 off screws for frame

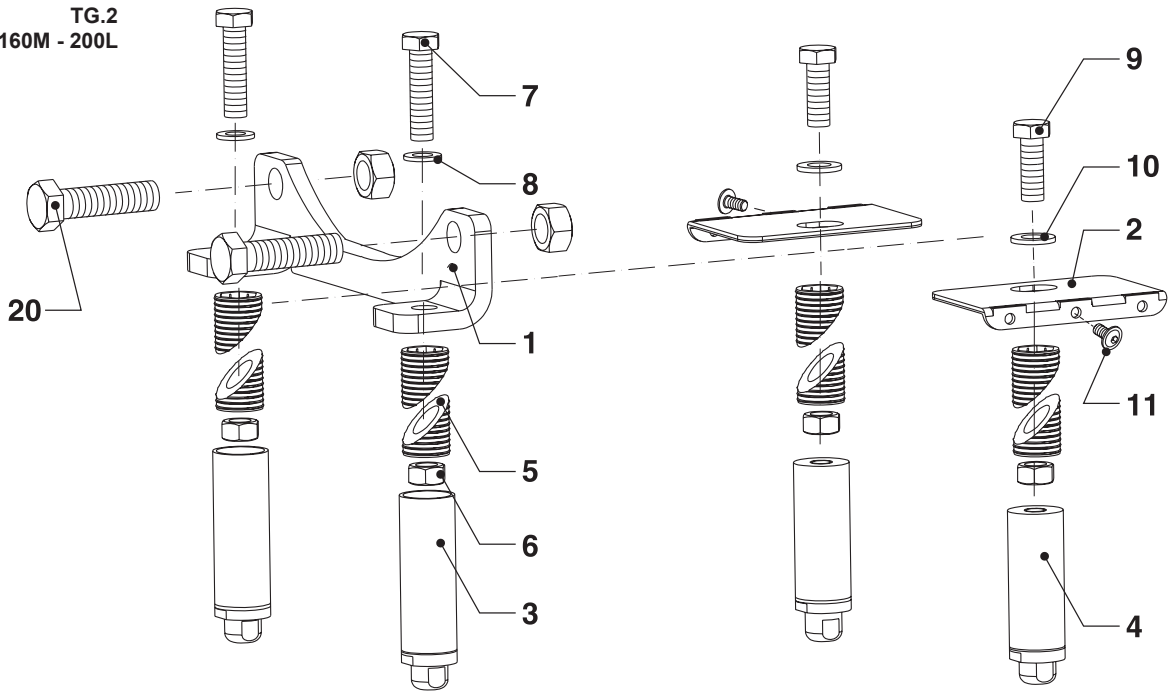
## 9. Adjustable Feet

WHP+

TG.1  
Motor 132S-M



TG.2  
Motor 160M - 200L



## 9. Adjustable Feet

**WHP+**

**TG.1**  
**Motor 132S-M**

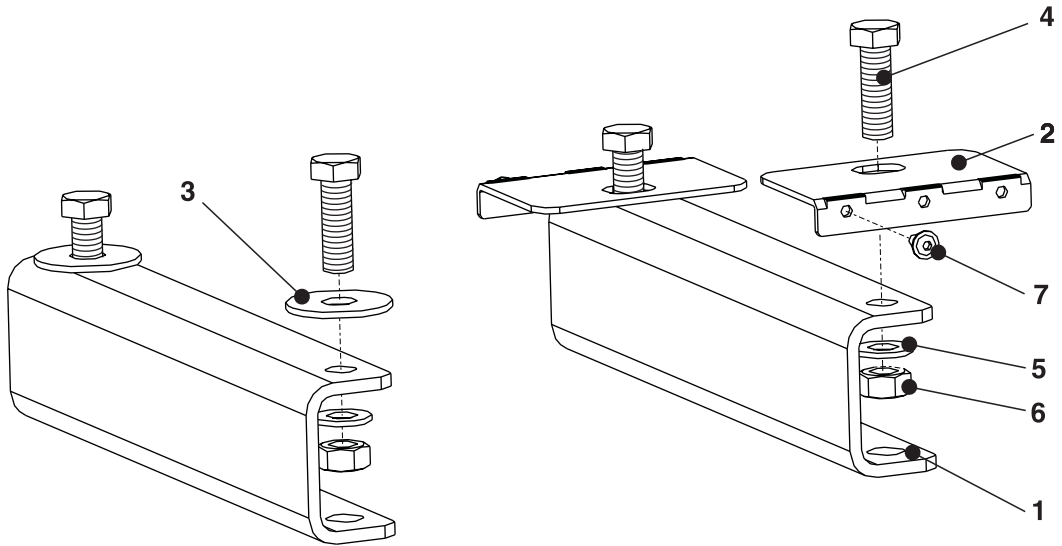
			Motor
			132
			Centre height
			260
Item	Qty	Description	Part No.
-	-	Complete - frame	L808805
1	1	Frame	L809058
2	2	Leg, complete	L809061
3	4	Split bushing	L282473
4	2	Nut	L700242
5	2	Screw	L701981
6	2	Screw	L700238
7	2	Nut	L700242
8	2	Screw, flange head	L700420

**TG.2**  
**Motor 160M - 200L**

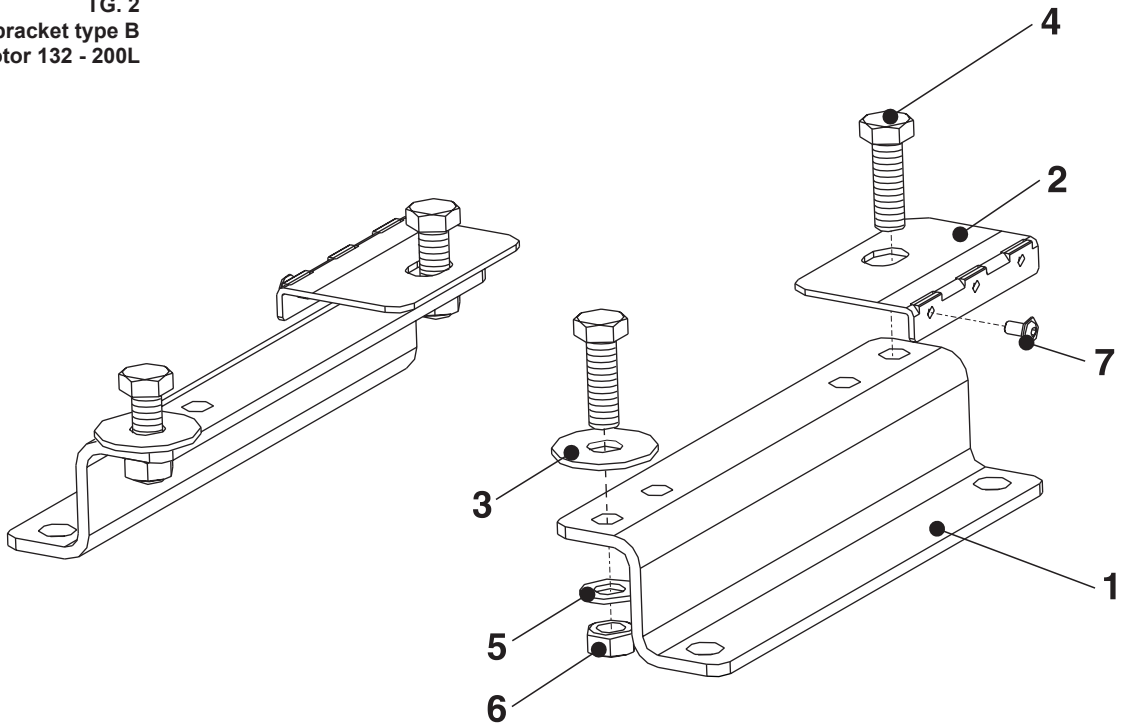
			Motor							
			160M - 160L			180M - 180L			200L	
			Centre height							
			260	305	350	260	305	350	305	350
Item	Qty	Description	Part No.							
-	-	Complete - frame	L808806	L808807	L808808	L808809	L808810	L808811	L808812	L808813
1	1	Leg	L279962	L279962	L279962	L279962	L279962	L279963	L279963	L279963
2	2	Angle plate	L282488	L282488	L282488	L282488	L282488	L282488	----	----
2	1	Angle plate, R	----	----	----	----	----	----	L808709	L808709
2	1	Angle plate, L	----	----	----	----	----	----	L808710	L808710
3	4	Leg, complete	L809063	L809051	L809061	----	----	----	L809065	L809066
3	2	Leg front, compl.	----	----	----	L809063	L809051	L809066	----	----
4	2	Leg back, compl.	----	----	----	L809062	L809060	L809049	----	----
5	8	Split bushing	----	L282473	L282473	----	L282473	L282473	L282473	L282473
6	4	Nut	----	L700242	L700242	----	L700242	L700242	L700242	L700242
7	2	Screw	L701265	L703141	L703141	L701265	L703141	L703141	L703141	L703141
8	2	Washer	L701475	L701475	L701475	L701475	L701475	L701475	L701475	L701475
9	2	Screw	L702996	L771697	L771697	L702996	L771697	L771697	L771698	L771698
10	2	Washer	L781058	L781058	L781058	L781058	L781058	L781058	L781058	L781058
11	2	Screw, fl. head	L700420	L700420	L700420	L700420	L700420	L700420	L700420	L700420
20	2	Screw	L701474	L701474	L701474	L701474	L701474	L701474	L701533	L701533

## 10. Bracket

**TG. 1**  
With bracket type A  
Motor 132 - 200L



**TG. 2**  
With bracket type B  
Motor 132 - 200L



## 10. Bracket

**WHP+**

**TG. 1**  
With bracket type A  
Motor 132 - 180

			Motor		
			132	160M-L	180M-L
			Centre height		
			212	240	260
Item	Qty	Description	Part No.		
-	1	Bracket, complete	L809087	L809088	L809089
1	2	Bracket	L279984	L279985	L279986
2	2	Angle plate	L282503	L282488	L282488
3	2	Washer	L781058	L781062	L781062
4	4	Bolt	L702996	L773643	L773643
5	4	Washer	L701475	L772450	L772450
6	4	Nut	L700242	L772449	L772449
7	2	Screw, fl. head	L700420	L700420	L700420

**TG. 1**  
With bracket type A  
Motor 200L

			Motor
			200L
			Centre height
			280
Item	Qty	Description	Part No.
-	1	Bracket, complete	L809091
1	2	Bracket	L267732
2	2	Fitting	L273820
4	4	Threaded rod	L268489
5	8	Washer	L772450
6	8	Nut	L772449
7	2	Screw, fl. head	L700420

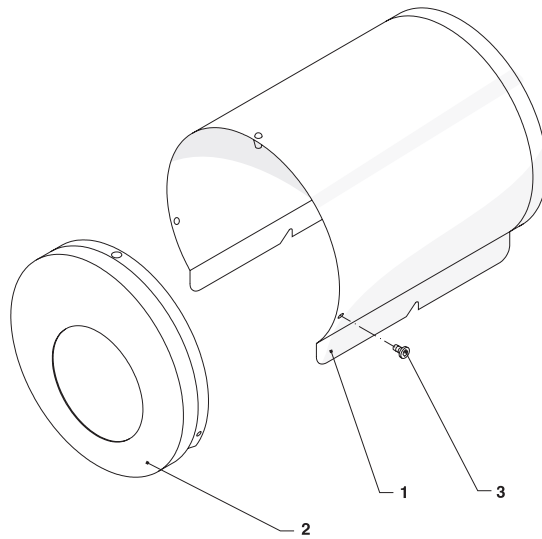
**TG.2**  
With bracket type B  
Motor 132 - 200L

			Motor			
			132	160M-L	180M-L	200L
			Centre height			
			225	225	225	225
Item	Qty	Description	Part No.			
-	1	Bracket, complete	L809101	L809102	L809103	L809104
1	2	Bracket	L279991	L279992	L279993	L182913
2	2	Angle plate	L282503	L282488	L282488	---
-	2	Fitting, rear L	---	---	---	L268487
3	2	Washer	L781058	L781062	L781062	L781062*
4	4	Bolt	L702996	L773643	L773643	L773868**
-	2	Bolt	---	---	---	L781066
5	4	Washer	L701475	L772450	L772450	L772450
6	4	Nut	L700242	L772449	L772449	L772449
7	2	Screw, fl. head	L700420	L700420	L700420	L700420

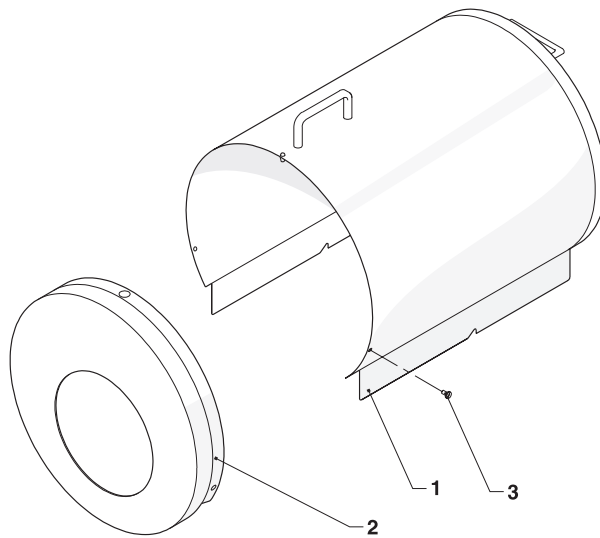
\* 4 off

\*\* 2 off

## 11. Collar and shroud



Motor			
132			
Item	Qty	Description	Part No.
1	1	Shroud	L188447
2	1	Collar	L194424
3	2	Screw	L773113

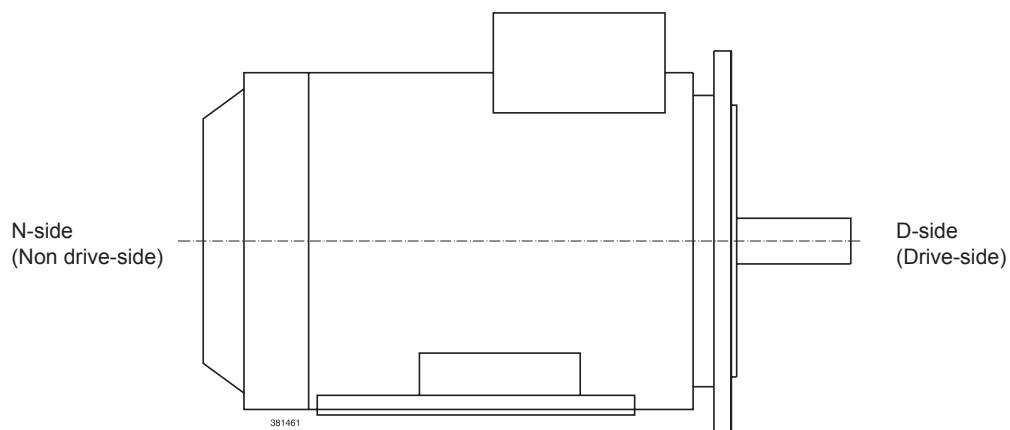


Motor					
160					
180					
200					
Item	Qty	Description	Part No.		
1	1	Shroud	L188448	L188449	L188451
2	1	Collar	L194425	L194426	L194476
3	4	Screw	L773113	L773113	L773113

The following motor types are used for the WHP+ pump series.  
These ABB motors have been designed especially for extensive axial forces in both directions.

Motor		
KW	Motor type	Part No..
5.5	M3AA 132 SB	L773126
7.5	M3AA 132 SC	L773127
11.0	M3AA 160 MLA	L772032
15.0	M3AA 160 MLB	L772033
18.5	M3AA 160 MLC	L772034
22.0	M3AA 180 MLA	L772049
30.0	M3AA 200 MLA	L772050
37.0	M3AA 200 MLB	L772051

Bearing size		
Motor type	D-side	N-side
M3AA 132 SB	3308/C3	6206/C3
M3AA 132 SC	3308/C3	6206/C3
M3AA 160 MLA	6309/C3	3309/C3
M3AA 160 MLB	6309/C3	3309/C3
M3AA 160 MLC	6309/C3	3309/C3
M3AA 180 MLA	6310/C3	3309/C3
M3AA 200 MLA	6312/C3	3312/C3
M3AA 200 MLB	6312/C3	3312/C3









WHP+

HIGH PRESSURE CENTRIFUGAL PUMP

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