



CR3-H

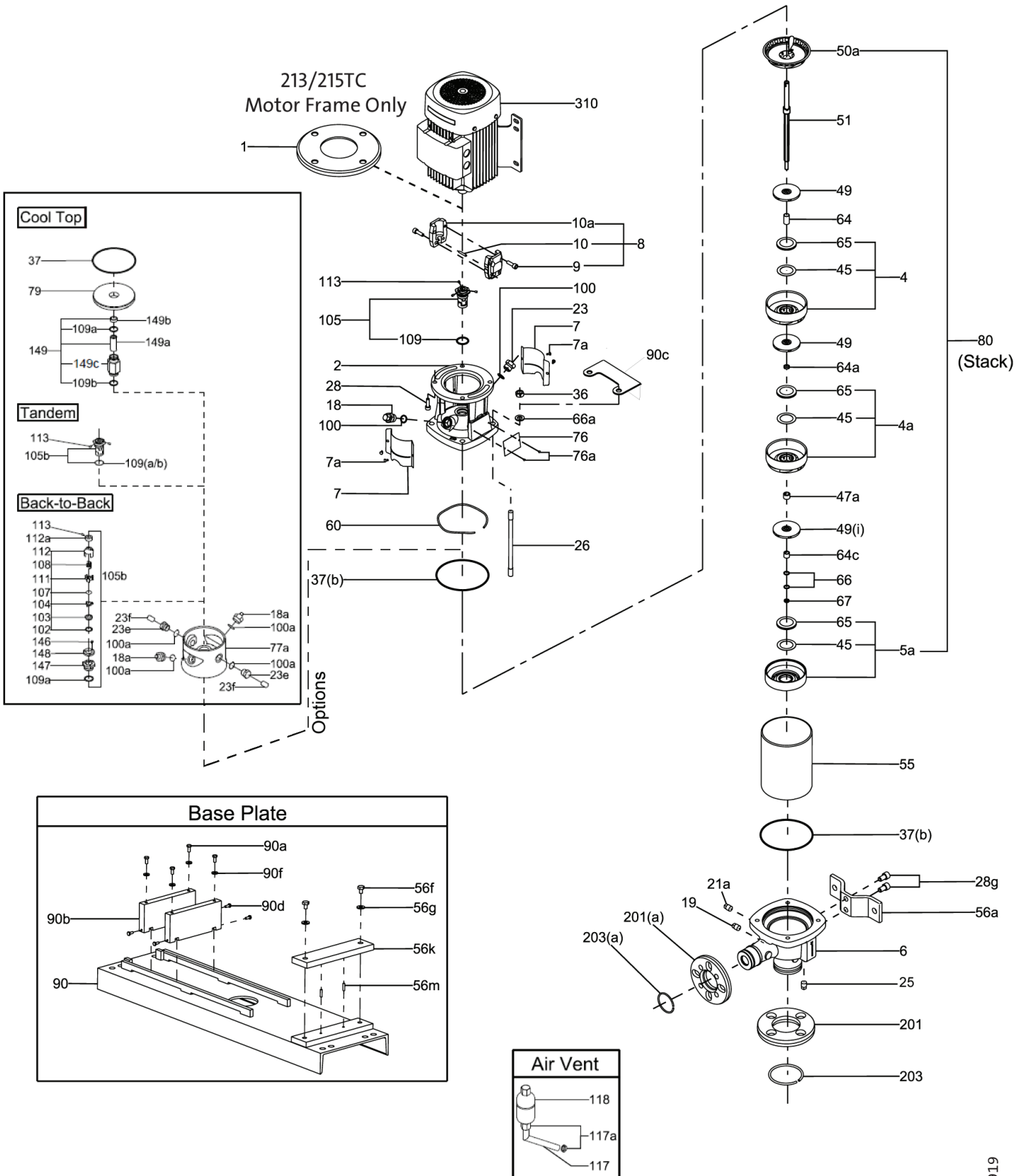
Parts List & Kits

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Exploded View CR3-H



TM047919

Parts List & Kits CR3-H

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	B.O.M. Ref. No.	Material No.	Included in kits ?		
PARTS LIST										
26	Staybolt (Cool Top®, Back-to-Back&Tandem Seal option) (Continued)		25	4	M12, ϕ 10,7 x 583mm	97525081		No		
			27	4	M12, ϕ 10,7 x 619mm, 4 pole & 50Hz.	96923539		No		
			29	4	M12, ϕ 10,7 x 655mm, 4 pole & 50Hz.	98284266		No		
			31	4	M12, ϕ 10,7 x 691mm, 4 pole & 50Hz.	98284268		No		
			33	4	M12, ϕ 10,7 x 727mm, 4 pole & 50Hz.	97525082		No		
			36	4	M12, ϕ 10,7 x 781mm, 4 pole & 50Hz.	97525084		No		
28	Motor Bolt		3/2-12	4	NEMA, 56C, 1/3 - 2 HP, UNC 3/8" x 25mm	00ID1839		No		
			13-25		NEMA, 182/184TC, 3 - 5HP, UNC1/2" x 25mm	00ID1840		No		
					NEMA, 213TC, 7.5 -10 HP, UNC 1/2" x 1.25"	91128631		No		
28g	Bolt for foot Pos. 56a		3/2-36	2	M12 x 1.75 x 20mm, Delta Tone/Seal	95922048		No		
36	Staybolt Nut		3/2-36	4	19mm x M12, Delta Tone/Seal	00ID7917		No		
37	Sleeve O-ring		3/2-36	◆◆	EPDM, ϕ 137.5 x 3.3mm	96438743		YES		
			3/2-36	◆◆	FKM, ϕ 137.5 x 3.3mm	96438744		YES		
37b	Sleeve O-ring (option)		3/2-36	◆◆	FXM, ϕ 137.5 x 3.3mm	96458109		YES		
			3/2-36	◆◆	FFKM, ϕ 136.12 x 3.53mm	96466718		YES		
			3/2-36	# stgs	ϕ 41.3 x ϕ 30.6 x .75mm, PTFE	400003		YES		
45	Neck Ring		3/2-36	◆◆◆◆	SiC 150, ϕ 17.37 x ϕ 13.10 x ϕ 10.9 x 13mm	96437488		YES		
47a	Bearing Ring/Spacer Brg. Ring/Spacer (option for Grafion / Brz. 4a)		3/2-36	◆◆◆◆	TC, ϕ 15.92 x ϕ 13.10 x ϕ 10.9 x 9.7mm	400041		YES		
			3/2-36	# stgs	ϕ 73.6 x ϕ 30.6 x 9.55mm (back-plate .5mm)	96433168	96547599	No		
49	Impeller		3/2-36	# stgs	96547599 has a qty of 24	96433168			No	
49i	Impeller (Low NPSH option)		3/2-36	1	ϕ 73.0 x ϕ 35.0 x 13.2mm (back-plate 1.0mm)	96437414		No		
50a	Top Guide Vane Top Guide Vane Plate (option for destaging)		3-36	1		96457637		No		
			3/2	1		96478562		No		
51	Shaft, Complete		3/2-3	1	ϕ 12 x 160.5mm	96439607	96588198	No		
			4	1	ϕ 12 x 180.5mm	96440386	96588199	No		
			5	1	ϕ 12 x 196.5mm	96440387	96588230	No		
			6	1	ϕ 12 x 214.5mm	96440388		No		
			7	1	ϕ 12 x 234.5mm	96440389	96588231	No		
			8	1	ϕ 12 x 250.5mm	96440390		No		
			9	1	ϕ 12 x 268.5mm	96440391		No		
			10	1	ϕ 12 x 288.5mm	96440392		No		
			11	1	ϕ 12 x 304.5mm	96440393		No		
			12	1	ϕ 12 x 322.5mm	96440394	96588233	No		
			13	1	ϕ 12 x 342.5mm	96440395	96588234	No		
			15	1	ϕ 12 x 376.5mm	96440396	96588235	No		
			17	1	ϕ 12 x 412.5mm	96440398		No		
			19	1	ϕ 12 x 450.5mm	96440400		No		
			21	1	ϕ 12 x 484.5mm	96440401	96588236	No		
			23	1	ϕ 12 x 520.5mm	96440403		No		
			25	1	ϕ 12 x 556.5mm	96440405	96588237	No		
			27	1	ϕ 12 x 592.5mm, 4 pole & 50 Hz.	96440406		No		
			29	1	ϕ 12 x 628.5mm, 4 pole & 50 Hz.	96440407		No		
			31	1	ϕ 12 x 664.5mm, 4 pole & 50 Hz.	96440409		No		
			33	1	ϕ 12 x 700.5mm, 4 pole & 50 Hz.	96440410		No		
			36	1	ϕ 12 x 754.5mm, 4 pole & 50 Hz.	96440411	96588238	No		
			Shaft, Cpl. (Cool Top®, Back-to-Back&Tandem Seal option)		3/2-3	1	ϕ 12 x 265.5mm	96457560		No
					4	1	ϕ 12 x 285.5mm	96457561		No
					5	1	ϕ 12 x 301.5mm	96457562		No
					6	1	ϕ 12 x 319.5mm	96457563		No
					7	1	ϕ 12 x 339.5mm	96457564		No
					8	1	ϕ 12 x 355.5mm	96457565		No
					9	1	ϕ 12 x 373.5mm	96457566		No
					10	1	ϕ 12 x 393.5mm	96457567		No
					11	1	ϕ 12 x 409.5mm	96457568		No
					12	1	ϕ 12 x 427.5mm	96457569		No
					13	1	ϕ 12 x 447.5mm	96457570		No
					15	1	ϕ 12 x 481.5mm	96457571		No
					17	1	ϕ 12 x 517.5mm	96457573		No
					19	1	ϕ 12 x 555.5mm	96457575		No
	21			1	ϕ 12 x 589.5mm	96457576		No		
	23			1	ϕ 12 x 625.5mm	96457578		No		
	25			1	ϕ 12 x 661.5mm	96457580		No		
	27			1	ϕ 12 x 697.5mm, 4 pole & 50 Hz.	96457581		No		
	29			1	ϕ 12 x 733.5mm, 4 pole & 50 Hz.	96457582		No		
	31			1	ϕ 12 x 769.5mm, 4 pole & 50 Hz.	96457584		No		
	33			1	ϕ 12 x 805.5mm, 4 pole & 50 Hz.	96457585		No		
	36	1	ϕ 12 x 859.5mm, 4 pole & 50 Hz.	96457586		No				
55	Outer Sleeve		3/2-3	1	ϕ 138 x 44.6mm	96437865		No		
			4	1	ϕ 138 x 62.6mm	96440010		No		
			5	1	ϕ 138 x 80.6mm	96441510		No		

Due to part changes over time, all position numbers (1-203) may not be used.

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Parts List & Kits CR3-H

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	B.O.M. Ref. No.	Material No.	Included in kits ?	
PARTS LIST									
55	Outer Sleeve <i>(continued)</i>		6	1	ø138 x 98.6mm	96439999	96588241	No	
			7	1	ø138 x 116.6mm	96441511		No	
			8	1	ø138 x 134.6mm	96441513		No	
			9	1	ø138 x 152.6mm	96440000		No	
			10	1	ø138 x 170.6mm	96441514		No	
			11	1	ø138 x 188.6mm	96441516		No	
			12	1	ø138 x 206.6mm	96440001		No	
			13	1	ø138 x 224.6mm	96441517		No	
			15	1	ø138 x 260.6mm	96440002		No	
			17	1	ø138 x 296.6mm	96441520		No	
			19	1	ø138 x 332.6mm	96441521		No	
			21	1	ø138 x 368.6mm	96440004		No	
			23	1	ø138 x 404.6mm	96441524		No	
			25	1	ø138 x 440.6mm	96441525		No	
			27	1	ø138 x 476.6mm, 4 pole & 50Hz.	96440006		No	
			29	1	ø138 x 512.6mm, 4 pole & 50Hz.	96441526		No	
			31	1	ø138 x 548.6mm, 4 pole & 50Hz.	96441527		No	
			33	1	ø138 x 584.6mm, 4 pole & 50Hz.	96440008		No	
			36	1	ø138 x 638.6mm, 4 pole & 50Hz.	96439652		No	
56a	Foot for Pos. 6		3/2-36	1	H=43mm, W=196mm, ø16mm hole CL 152mm, Cl.	95922025			No
56f	Bolt for base Pos. 90	56C/182TC	3/2-36	2	Hex Hd.1/2 -13 UNC x 1" SAE 5, Zinc plated				YES
56g	Washer for bolt Pos. 56f		3/2-36	2	1/2" SAE, Zinc plated				YES
60	Stack Compression Spring		3/2-36	1	ø136 x 3.5mm	96439662		96547664	No
64	Spacing Pipe		2-36	^^^	ø15.85 x ø12.85 x 17.52mm	400035		95061339	No
64a	Spacing Pipe		3/2-36	^^^^	ø15.85 x ø12.85 x 4.5mm	96440292			YES
	Spacing Pipe (option for Graflon / Brz. 4a)		3/2-36	^^^^	Use with TC Pos.47a, ø15 x ø12.7 x 7.8mm	400016		YES	
64c	Clamp, Splined		3/2-36	1	ø15 x ø13.10 x ø10.9 x 13mm	96439668		YES	
65	Neck Ring Retainer		3/2-36	# stgs	ø43.5 x ø34.0 x 3.6mm	96438746		YES	
66	Lock Washer Set for Shaft		3/2-36	1	ø13.5 x ø8.2 x 2.6mm	96417297		YES	
66a	Washer for Staybolt		3/2-36	4	DIN 125A, ø24 x ø13 x 2.5mm, Delta Tone/Seal	96430377		No	
67	Lock Nut for Shaft		3/2-36	1	13mm x M8	00ID2061		YES	
69	Spacing Pipe		3/2	1	ø15.85 x 12.85 x 18.0mm	400125	95061443	No	
76	Nameplate		3/2-36	1	304SS, 60 x 45mm	96439820		No	
76a	Rivet for Nameplate		3/2-36	2	304SS, ø3 x 5mm	96022882		No	
77a	Pump Head Cover for Back-to-Back, Tandem Seal		3/2-36	1	Cast Stainless	96456293		No	
77a	Pump Head Cover for Cool Top® (option)		3/2-36	1	Cast Stainless	96456294		No	
79	Disc / Plate for Cool Top®		3/2-36	1	Stainless	96456296		No	
90	Main Support Baseplate	GA	3/2-17	1	BP. Cpl.139, L=991mm x W=305mm x H=106.5mm	96956336		YES	
	Main Support Baseplate - Longer versions	GA	19-25	1	XLBP1 (139), L=1500mm x W=381mm x H=106.5mm	96956376		YES	
90a	Bolt for motor to slider Pos. 90b	56C	3/2-12	4	Hex Head 5/16 -18 UNC x .75" SAE 5, Zinc plated			YES	
		182TC	13-25	4	Hex Head 3/8 -16 UNC x .5" SAE 5, Zinc plated			YES	
90b	Motor support /slide rail	56C	3/2-12	2	BP139, L=204mm x H=45.5mm x W=25.4mm	96956339		YES	
		182TC	13-25	2	BP139, L=230mm x H=23.0mm x W=25.4mm	96956338		YES	
90c	Support Bracket for Pump Cartridge		3/2-36	1	304 SS, H=74mm CL of hole, GA	95131235		No	
90d	Bolt for motor slide rail Pos. 90b to base Pos. 90	56C	3/2-12	4	Hex Head 1/4 -20 UNC x 1" SAE 5, Zinc plated			YES	
		182TC	13-25	4	Hex Head 1/4 -20 UNC x 1.75" SAE 5, Zinc plated			YES	
90f	Washer for motor bolt Pos. 90a to slide rail Pos. 90b	56C	3/2-12	4	5/16" SAE, Zinc plated			YES	
		182TC	13-25	4	3/8" SAE, Zinc plated			YES	
100	Priming/Vent Plug O-ring		3/2-36	■	EPDM, ø16.3 x 2.4mm	00ID1288		YES	
			3/2-36	■	FKM, ø16.3 x 2.4mm	00ID2231		YES	
100(a)	Priming/Vent Plug O-ring (option)		3/2-36	■	FFKM, ø16.3 x 2.4mm	96428162		YES	
			3/2-36	■	FXM, ø16.3 x 2.4mm	96442869		YES	
102	O-ring for Pos. 105b Back-to-Back		3/2-36	1	EPDM, ø18 x 2.5mm	00ID2041		YES	
			3/2-36	1	FKM, ø17.86 x 2.62mm	00ID2187		YES	
	O-ring for Pos. 105b Back-to-Back (option)		3/2-36	1	FFKM, ø17.86 x 2.62mm	96440281		YES	
			3/2-36	1	FXM, ø17.86 x 2.62mm	96472584		No	
103	Stationary Seal Ring for 105b Back-to-Back		3/2-36	1	TC, 12mm	980190		YES	
	Stationary Seal Ring for 105b Back-to-Back (option)		3/2-36	1	SiC, 12mm	980746		YES	
104	Rotating Seal Ring for 105b Back-to-Back		3/2-36	1	TC, 12mm	980163		YES	
	Rotating Seal Ring for 105b Back-to-Back (option)		3/2-36	1	SiC, 12mm	980733		YES	
105(b)	Shaft Seal HQBE		3/2-36	***	SiC, Carbon with resin-impregnated, EPDM	96441879		YES	
	Shaft Seal HQBV		3/2-36	***	SiC, Carbon with resin-impregnated, FKM	96441880		YES	
	Shaft Seal HQBK (option)		3/2-36	***	SiC, Carbon with resin-impregnated, FFKM	96489537		YES	
	Shaft Seal HQQE		3/2-36	***	SiC, SiC, EPDM	96441877		YES	
	Shaft Seal HQQV		3/2-36	***	SiC, SiC, FKM	96441878		YES	
	Shaft Seal HQQF (option)		3/2-36	***	SiC, SiC, FXM	96472620		YES	
	Shaft Seal HQQK (option)		3/2-36	***	SiC, SiC, FFKM	96464381		YES	
	Shaft Seal HUBE		3/2-36	***	TC, Carbon with resin-impregnated, EPDM	96441873		YES	
	Shaft Seal HUBV		3/2-36	***	TC, Carbon with resin-impregnated, FKM	96441874		YES	

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Parts List & Kits CR3-H

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	B.O.M. Ref. No.	Material No.	Included in kits ?
PARTS LIST								
105(b)	Shaft Seal HUBF (option)		3/2-36	***	TC, Carbon with resin-impregnated, FXM	96481464		YES
	Shaft Seal HUBK (option)		3/2-36	***	TC, Carbon with resin-impregnated, FFKM	96481463		YES
	Shaft Seal HUUE		3/2-36	***	TC, TC, EPDM	96441875		YES
	Shaft Seal HUUV		3/2-36	***	TC, TC, FKM	96441876		YES
	Shaft Seal HUUF (option)		3/2-36	***	TC, TC, FXM	96475542		YES
	Shaft Seal HUUK (option)		3/2-36	***	TC, TC, FFKM	96467885		YES
105b	Shaft Seal/inboard for Back-to-Back OQQE		3/2-36	1	SiC, SiC, EPDM	985200		YES
	Shaft Seal/inboard for Back-to-Back OQQV		3/2-36	1	SiC, SiC, FKM	985760		YES
	Shaft Seal/inboard for Back-to-Back OUUE		3/2-36	1	TC, TC, EPDM	985189	405145	YES
	Shaft Seal/inboard for Back-to-Back OUUV		3/2-36	1	TC, TC, FKM	985190	405145	YES
107	O-ring for Pos. 105b Back-to-Back		3/2-36	1	EPDM, ø11.5 x 4.3mm	00ID2040		YES
			3/2-36	1	FKM, ø11.5 x 4.3mm	00ID2186		YES
	O-ring for Pos. 105b Back-to-Back (option)		3/2-36	1	FFKM, ø11.5 x 4.3mm	96440282		YES
			3/2-36	1	FKM, ø11.5 x 3.18mm	96472618		No
108	Spring for Pos. 105b Back-to-Back		3/2-36	1	12mm	980195		YES
109(a)	O-ring for Shaft Seal Pos. 105		3/2-36	1	EPDM, ø21.3 x 3.0mm	00ID1798		YES
			3/2-36	1	FKM, ø21.2 x 3.0mm	00ID2339		YES
109b	O-ring for Shaft Seal Pos. 105 (option)		3/2-36	1	FFKM, ø23.47 x 2.62mm	96464384		YES
			3/2-36	1	FKM, ø22 x 2.75mm	96458111		YES
111	Seal Driver (small) for Pos. 105b Back-to-Back		3/2-36	1		980192		YES
112	Seal Driver (large) for Pos. 105b Back-to-Back		3/2-36	1		980191		YES
112a	Seal Drv threaded for 112, Pos. 105b Back-to-Back		3/2-36	1		400203		YES
113	Set Screw for 112a, for Pos. 105b Back-to-Back		3/2-36	1	3mm x M5 x 6mm	00ID7392		YES
117	Air Vent Pipe for 118		3/2-36	1	G1/2, 316SS, 60 x 43mm	96525189		YES
117a	Counter Nut for Pipe 117		3/2-36	1	NV24, internal G1/2, 316SS	96506709		YES
118	Air Vent		3/2-36	1	Air vent type 1511-AV - 5/6430	96427483		YES
146	Allen Bolt for 147/148, for Pos. 105b Back-to-Back		3/2-36	1	2.5mm x M3 x 5mm	96462639		YES
147	Stationary Seal Retainer - Pos. 105b Back-to-Back		3/2-36	1	NV36, 316SS	96457354		YES
148	Seal Retainer Washer - Pos. 105b Back-to-Back		3/2-36	1	316SS, ø36.0 x ø26.0 x ø23.0 x ø21.6 x 5.0mm	96457355		YES
149	Connecting Pipe Complete for Cool Top®		3/2-36	1	NV36, 316SS, FXM & EPDM	96460414		YES
			3/2-36	1	NV36, 316SS, FXM & FKM	96460415		YES
149a	Retainer for bushing		3/2-36	1	316SS, ø22.0 x ø17.0 x 9mm	96457639		YES
149b	Bushing		3/2-36	1	Graflon®, ø21..2 x ø12.4 x 53mm	96456297		YES
149c	Connecting Pipe less 109a&b and 149a&b		3/2-36	1	NV36, 316SS	96456295		YES
201	Flange, Suction		3/2-15	1	1.5" 150#, 4 x 1/2"-13 UNC threaded flange, e-coat	96922828		No
			3/2-36	1	1.5" 300#, 4 x 3/4"-10 UNC threaded flange, e-coat	96956145		No
201a	Flange, Discharge		3/2-15	1	1" 150#, 4 x 1/2"-13 UNC threaded flange, e-coat	96922827		No
			3/2-36	1	1" 300#, 4 x 5/8"-11 UNC threaded flange, e-coat	96956144		No
203	Retaining ring for 201, 1.5" flange		3/2-36	1	Stainless, ø72.6 x 5	96475395		No
203a	Retaining ring for 201a, 1.0" flange		3/2-36	1	Stainless, ø53.6 x 3.2	96439718		No

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Notes:

The first number is total number of impellers. An exceptions to this format is the CR3-2H. **Example: a CR3-2H is actually a CR3-3/2H, it has 3 chambers and 2 impellers (de-staged by 1) - it uses a 3 stage shaft.**

- ^^^ 3/2 to 9 stage= # of Stages less 2
10 to 19 stage= # of stages less 3
21 to 27 stage = # of stages less 4
29 to 36 stage = # of stages less 5
Exception: When de-staging pump by 2 impellers, replace top chamber Pos. 4 with Pos. 5a
- ^^^ 3/2 to 9 stage= use 1
10 to 19 stage= use 2
21 to 27 stage = use 3
29 to 36 stage = use 4
- * Standard use 1. Back-to-Back or Tandem pump version use 3
- ** Standard use 1. Back-to-Back or Tandem pump version use 3
- *** 1 used in Hxxx (Standard), 2 used in Pxxx (Tandem) pump version

1 used in Hxxx (Standard) plus an Oxxx for back to Back pump version
- # stgs Use the number of stages in standard models, less 1 in a 2 stage and Low NPSH models
- ◆◆ Standard use 2. Back-to-Back or Tandem pump version use 3
- Standard use 2. Back-to-Back or Tandem pump version use 6
- 1* Standard use 1. When de-staging pump by 2 impellers, replace top chamber Pos. 4 with an additional Pos. 5a

Key to Symbols:

KITS	.....	Recommended spare part
∅	.....	Diameter
ANSI	.....	American National Standards Institute
CPL	.....	Complete Assembly – these parts consist of more than one component
EPDM	.....	Ethylene Propylene (also kNown as EPR and EPT) – an elastic substance similar to rubber
FFKM	.....	Kalrez Elastomer made by DuPont
FKM	.....	Fluoro Elastomer (generic for Viton)
FXM	.....	Fluoraz Elastomer made by Greene Tweed
M	.....	International standard thread size designation (thread diameter in mm)
mm	.....	Millimeter
MG	.....	Identifies Grundfos motor type/size
N	.....	Stainless
NBR	.....	Buna - N (also kNown as Nitrile) – an elastic substance similar to rubber
NEMA	.....	National Electrical Manufacturers Association
PTFE	.....	Teflon
SiC	.....	Silicon Carbide
TC	.....	Tungsten Carbide
UNC	.....	Unified National Coarse – a standard for threads on bolts

Cool Top® is a registered trademark of Grundfos Pumps

Spare Part Kits (continued)

OPTIONAL SHAFT SEAL KIT, BALANCED CARTRIDGE (Maximum allowed working PSI is 435) (Tandem Seal option Pumps require 2 of each Seal Kit)		Kit No.	96455082	Kit No.	96533323	Kit No.	96533322	Kit No.	96455083	Kit No.	96455084	Kit No.	96533325	Kit No.	96533324	Kit No.	96455085
Pos. No.	Description	Material No.	Qty. Included in each Kit														
105	HUBE	96441873	1														
	HUBF	96481464		1													
	HUBK	96481463			1												
	HUBV	96441874				1											
	HUUE	96441875					1										
	HUUF	96475542						1									
	HUUK	96498108							1								
	HUUV	96441876															1
N/A	Grinding Device Tool for Emery Cloth	370711	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
N/A	Emery Cloth	370712	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

INBOARD SHAFT SEAL & Gasket KIT, Back to Back OQQE		Kit No.	96533360														
INBOARD SHAFT SEAL & Gasket KIT, Back to Back OQQV		Kit No.	96533361														
INBOARD SHAFT SEAL & Gasket KIT, Back to Back OQQW		Kit No.	96989183														
INBOARD SHAFT SEAL & Gasket KIT, Back to Back OQQK		Kit No.	96536168														
INBOARD SHAFT SEAL & Gasket KIT, Back to Back OQUE/V		Kit No.	405145														
(An HQQx or HUUx seal kit must also be used for respectively to complete seal repairs)																	
Pos. No.	Description	Material No.	Qty. Included in each Kit														
37	Sleeve O-ring, EPDM, ϕ 137.5 x 3.3mm	96438743	3														
	Sleeve O-ring, FKM, ϕ 137.5 x 3.3mm	96438744		3													
38, 100(a)	Drain Plug O-ring, EPDM, ϕ 16.3 x 2.4mm	00ID1288	7														
	Drain Plug O-ring, FKM, ϕ 16.3 x 2.4mm	00ID2231		7													
102	O-ring, EPDM, ϕ 18 x 2.5mm	00ID2041	1													1	
	O-ring, FKM, ϕ 17.86 x 2.62mm	00ID2187		1	1											1	
103	O-ring, FFKM, ϕ 17.86 x 2.62mm	96440281						1									
	Stationary Seal Ring, SiC, 12mm	980746	1														
104	Stationary Seal Ring, TC, 12mm	980190															1
	Rotating Seal Ring, SiC, 12mm	980733	1	1	1	1	1										
107	Rotating Seal Ring, TC, 12mm	989163															1
	O-ring, EPDM, ϕ 11.5 x 4.3mm	00ID2040	1														1
108	O-ring, FKM, ϕ 11.5 x 4.3mm	00ID2186		1	1	1	1										1
	O-ring, FFKM, ϕ 11.5 x 4.3mm	96440282						1									
109a	Spring, 12mm	980195	1	1	1	1	1										1
	O-ring, EPDM, ϕ 21.3 x 3.0mm	00ID1798	1														
111	O-ring, FKM, ϕ 21.2 x 3.0mm	00ID2339		1	1												
	O-ring, FFKM, ϕ 23.47 x 2.62mm	96464384						1									
112	Driver for pos.104	980192	1	1	1	1	1										1
112a	Driver for pos.111	980191	1	1	1	1	1										1
112a	Driver for pos.112	400203	1	1	1	1	1										
113	Set Screw for pos.112a	00ID7392	2	2	2	2	2										
146	Allen Bolt for pos.147 & 148, 2.5mm x M3 x 5mm	96462639	3	3	3	3	3										
147	Stationary Seal Retainer - NV36, 316SS	96457354						1									
148	Seal Retainer Washer - 316SS, ϕ 36.0 x ϕ 21.6 x 5.0mm	96457355						1									
N/A	Grinding Device Tool for Emery Cloth	370711															1
N/A	Emery Cloth	370712															1

GASKET KIT (EPDM)		Kit No.	96455090														
GASKET KIT (FKM)		Kit No.	96455091														
GASKET KIT (FXM)		Kit No.	96463944														
GASKET KIT (FFKM)		Kit No.	96533328														
GASKET KIT (EPDM)-Double Seal option.		Kit No.	96533362														
GASKET KIT (FKM)-Double Seal option.		Kit No.	96533363														
GASKET KIT (FFKM)-Double Seal option.		Kit No.	96533364														
GASKET KIT (FXM, & EPDM)-Cool-Top option		Kit No.	96533329														
Pos. No.	Description	Material No.	Qty. Included in each Kit														
37	Sleeve O-ring, EPDM, ϕ 137.5 x 3.3mm	96438743	2														
	Sleeve O-ring, FKM, ϕ 137.5 x 3.3mm	96438744		2													
37b	Sleeve O-ring, FXM, ϕ 137.5 x 3.3mm	96458109			2												2
	Sleeve O-ring, FFKM, ϕ 136.12 x 3.53mm	96466718						2									
38, 100(a)	Drain Plug O-ring, EPDM, ϕ 16.3 x 2.4mm	00ID1288	3														4
	Drain Plug O-ring, FKM, ϕ 16.3 x 2.4mm	00ID2231		3													
38, 100a	Drain Plug O-ring, FXM, ϕ 16.3 x 2.4mm	96442869						3									3
	Drain Plug O-ring, FFKM, ϕ 16.3 x 2.4mm	96428162							3								
109(a)	O-ring for Pos.105(b) & 149, EPDM, ϕ 21.3 x 3.0mm	00ID1798	1													1	
	O-ring for Pos.105(b) & 149, FKM, ϕ 21.2 x 3.0mm	00ID2339														1	
109b	O-ring for Pos.105(b) & 149, FFKM, ϕ 22.0 x 2.75mm	96458111							1								2
	O-ring for Pos.105(b) & 149, FFKM, ϕ 23.47 x 2.62mm	96464384								1							2

NEMA COUPLING KIT		Kit No.	415314														
ϕ 15.8/ ϕ 12		Kit No.	97919247														
ϕ 22.225/ ϕ 12		Kit No.	415315														
ϕ 28.5/ ϕ 12		Kit No.	96478700														
ϕ 34.9/ ϕ 12		Kit No.	96478700														
Pos. No.	Description	Material No.	Qty. Included in each Kit														
9	Allen Screw, M6 x 20mm, Delta Seal	00ID7899	4	4													
	Allen Screw, M8 x 25mm, Delta Seal	00ID7900			4												
	Allen Screw, M10 x 25mm, Delta Seal	00ID7901															
10	Shaft Pin, ϕ 5 x 26mm, Stainless	310192	1	1	1	1											
	Coupling Half, 56C, 1/3 - 2HP. ϕ 15.8 / ϕ 12	410108	2														
10a	Coupling Half, 143/5TC, 1/3 - 3HP. ϕ 22.225 / ϕ 12	97851501			2												
	Coupling Half, 182/184TC, 3-5HP. ϕ 28.5/ ϕ 12	410109			2												
	Coupling Half, 213TC, 7.5-10HP. ϕ 34.9/ ϕ 12	96472175															2

Spare Part Kits • Accessories CR3-H

Spare Part Kits (continued)

COUPLING GUARD KIT				
NEMA 56C, 1/3-2HP		Kit No.	96505131	
NEMA 182-215TC, 3-10HP		Kit No.	96505132	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
7	Coupling Guard, W=127mm x H=90.5mm	96438137	2	
	Coupling Guard, W=157mm x H=171mm	96438138		2
7a	Screw comb.slot torx/straight slot 4 x 8mm	96488481	4	4

Air Vent Kit - Horizontal Units				
CR-H, CRN-H15 to 20		Kit No.	91136720	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
117	Air Vent Pipe, short for 118, G1/2, 60x43	96525189	1	
117a	Counter Nut for Pipe 117, G1/2	96506709	2	
118	Air vent type 1511-AV - 5/6430	96427483	1	

Connecting Pipe for Cool Top (EPDM, FKM & FXM)				
		Kit No.	96578704	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
109a	O-ring for Pos.105(b) &149, EPDM, Ø21.3 x 3.0mm	00ID1798	1	
	O-ring for Pos.105(b) &149, FKM, Ø21.2 x 3.0mm	00ID2339	1	
109b	O-ring for Pos.105(b) &149, FXM, Ø22.0 x 2.75mm	96458111	1	
149a	Retainer for bushing, 316SS, Ø22.0 x Ø17.0 x 9mm	96457639	1	
149b	Bushing, Graflon®, Ø21.2 x Ø12.4 x 53mm	96456297	1	
149c	Connecting pipe, NV36, 316SS	96456295	1	

Accessories

ANSI COMPANION FLANGES FOR CR-H, CRN-H15 to 20				
1-1/2" and 1" Threaded CI Black for GA 125 Lb. Class		Kit No.	97642565	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
N/A	Hex Head Cap Screw/Bolt 1/2"-13X 2" UNC ZP	97743748	8	
N/A	Flange ANSI #150 1.5" NPT. Cast Iron - Black	91123167	1	
N/A	Flange ANSI #150 1" NPT. Cast Iron - Black	96983489	1	
N/A	Gasket 1 1/2" Full Face 150 Lb. ANSI	91123168	1	
N/A	Gasket 1" Full Face 150 Lb. ANSI	97692916	1	

ANSI COMPANION FLANGES FOR CR-H, CRN-H15 to 20				
1-1/2" and 1" Threaded CI Black for GA 250 Lb. Class		Kit No.	96967594	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
N/A	Hex Head Cap Screw/Bolt 3/4"-10 X 2.5" UNC ZP	91137423	4	
N/A	Hex Head Cap Screw/Bolt 5/8"-11 X 2.25" UNC ZP	91130816	4	
N/A	Flange ANSI #300 1.5" NPT. Cast Iron - Black	96983494	1	
N/A	Flange ANSI #300 1" NPT. Cast Iron - Black	96983493	1	
N/A	Gasket 1 1/2" Full Face 300 Lb. ANSI	97694408	1	
N/A	Gasket 1" Full Face 300 Lb. ANSI	97694407	1	

ANSI COMPANION FLANGES FOR CR-H, CRN-H15 to 20				
1-1/2" and 1" Threaded Stainless, 150 Lb. Class		Kit No.	97698645	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
N/A	Hex Head Cap Screw/Bolt 1/2"-13X 2" 316SS	97743748	8	
N/A	Flange ANSI #150 1.5" NPT 316SS	96983498	1	
N/A	Flange ANSI #150 1" NPT 316SS	96983497	1	
N/A	Gasket 1 1/2" Full Face 150 Lb. ANSI	97694409	1	
N/A	Gasket 1" Full Face 150 Lb. ANSI	97692916	1	

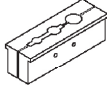
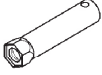
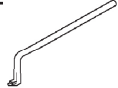

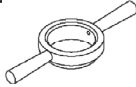

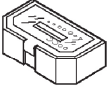

ANSI COMPANION FLANGES FOR CR-H, CRN-H15 to 20				
1-1/2" and 1" Threaded Stainless, 300 Lb. Class		Kit No.	97698646	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
N/A	Hex Head Cap Screw/Bolt 3/4"-10 X 2.5" 316SS	91143035	4	
N/A	Hex Head Cap Screw/Bolt 5/8"-11 X 2.25" 316SS	91143029	4	
N/A	Flange ANSI #300 1.5" NPT 316SS	96983496	1	
N/A	Flange ANSI #300 1" NPT 316SS	96983495	1	
N/A	Gasket 1 1/2" Full Face 300 Lb. ANSI	97694408	1	
N/A	Gasket 1" Full Face 300 Lb. ANSI	97694407	1	

Baseplate Kit					
139		56C for GA	Kit No.	97534517	
XLBP1		182TC for GA	Kit No.	97534518	
		56C for GA	Kit No.	97534573	
		182TC for GA	Kit No.	97534574	
Pos. No.	Description	Material No.	Qty. Included in each Kit		
90	Baseplate Cpl. 139, L=991" x W=305" x H=106.4768"	96956336	1	1	
	Baseplate Cpl. XLBP1, L=1500" x W=305" x H=106.4768"	96956376		1	1
N/A	Slider & fasteners for 56C (consists of slider & hardware)	96983855	1	1	
N/A	Slider & fastener for 182TC (consists of slider & hardware)	96983858		1	1
N/A	Hardware Kit -96983855/68/78(cont. pos.56f, g, 90a,d& f)**	97501470	1	1	
N/A	Hardware Kit -96983858 (cont. pos.56f & g, 90a, d & f)**	97501481		1	1
56f	Bolt, Hex Head 1/2"-13 UNC x 1" SAE 5, Zinc plated	N/A	2	2	2
56g	Washer, 1/2" SAE, Zinc plated	N/A	2	2	2
90a	Bolt, Hex Head 5/16 -18 UNC x .75" SAE 5, Zinc plated	N/A	4	4	4
	Bolt, Hex Head 3/8 -16 UNC x .5" SAE 5, Zinc plated	N/A		4	4
90b	Slider, GA/B/C 56C/139BP, L=204" x H=45.5" x W=25.4"	96956339	2	2	
	Slider, GA/B/C 182TC/139BP, L=230" x H=23" x W=25.4"	96956338		2	2
90d	Bolt, Hex Head 1/4 -20 UNC x 1" SAE 5, Zinc plated	N/A	4	4	4
	Bolt, Hex Head 1/4 -20 UNC x 1.75" SAE 5, Zinc plated	N/A		4	4
90f	Washer, 5/16" SAE, Zinc plated	N/A	4	4	4
	Washer, 3/8" SAE, Zinc plated	N/A		4	4

* Values in mm, Length (L) is +/- 2mm, Height (H) is +/- 1mm, Width (W). ** Hardware kits 97501470 and 81 are also available for sale.

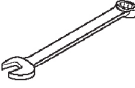

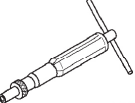




Special Tools

Tools not generally available from normal sources.

Mat. No.	Description and Use	
00SV0040	Shaft Holder for Dismantling/Assembly Used to hold and protect the shaft during dismantling and assembly.	
00SV2007	Tubular Box Spanner for Shaft Seal 36.1 mm Used to install and remove the shaft seal. Fits a 1/2" drive ratchet.	
00SV0239	Puller for Neck Ring Used to remove the Neck Ring from Chamber.	
00SV2014	Circlip Pliers for Flange Lock Ring Used to remove the Lock Ring for the Flange.	
00SV2066	Tool for Outer Sleeve Used to press sleeve into base. (optional)	
00SV2011	Bit Holder Used with Bits Kit, 1/4"	
00SV2010	Bits Kit NV 5 mm for M6, 1/4" NV 6 mm for M8, 1/4" NV 8 mm for M10, 1/4"	
00SV2012	Hexagon Socket Bit Used for Shaft Seal NV 2.5 mm for M5, 1/4"	

Standard Tools

In addition to being available from Grundfos, comparable tools can be purchased through normal sources.

Mat. No.	Description and Use	
00SV0083 00SV0055 00SV0056 00SV0054 00SV0122	Wrenches Used to tighten various nuts. NV 10 mm for M6 NV 13 mm for M8 NV 17 mm for M10 NV 19 mm for M12 NV 24 mm for M16	
00SV0292 00SV0269 00SV0400	Torque Wrench Used to torque various screws. 4-20 Nm, 9 x 12 20-100 Nm, 9 x 12 40-200 Nm, 14x18	
00SV0438	Torque Screwdriver Used to tighten various nuts. 1-6 Nm, 1/4"	
00SV0295	Ratchet Spanner for all Adapters 9 mm x 12 mm, 1/2"	
00SV0296 00SV0297 00SV0298	Socket Spanner with Inside Hex NV 5 mm for M6, 1/2" x 1/2" NV 6 mm for M8, 1/2" x 1/2" NV 8 mm for M10, 1/2" x 1/2"	
00SV0310 00SV0294 00SV0270 00SV0271 00SV0524	Ring Spanner NV 10 mm for M6 NV 13 mm for M8 NV 17 mm for M10 NV 19 mm for M12 NV 24 mm for M16	
00SV2013	Socket Spanner NV 13 mm for M8, 9 x 12	

be think innovate

Being responsible is our foundation
Thinking ahead makes it possible
Innovation is the essence



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