



# CRI1s

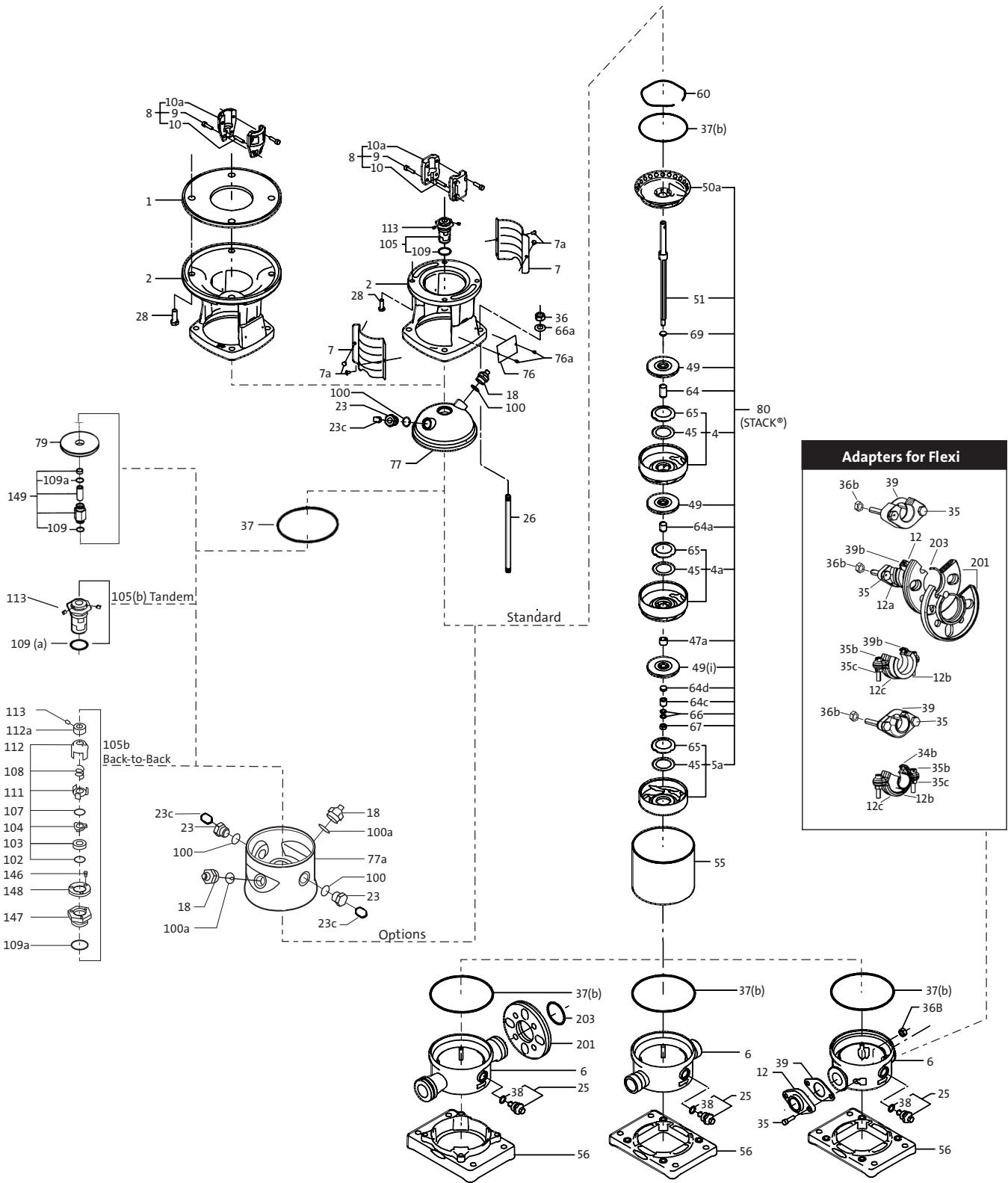
## Parts List & Kits

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Accessories  
Special Tools  
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# Exploded View CRI1s



## Parts List

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	Material Number	Included in Kits?
1	Adapter for Motor Stool				For NEMA, 213/215TC, 7.5 - 10HP	96476208	NO
2	Motor Stool		3/2-27	1	NEMA, 56C, 1/3 - 2HP	96436510	NO
					NEMA, 182/184TC, 3 - 5HP	96436511	NO
					Add Pos. 1, NEMA, 213TC, 7.5 - 10HP	96436511	NO
			3/2-19	1	IEC, F85, MG 71, .37 - .55kW	96436506	NO
			21-36	1	IEC, F100, MG 80, .75 - 1.1kW	96436507	NO
					IEC, F115, MG 90, 1.5 - 2.2kW	96436508	NO
					IEC, F130, MG 100/112, 3.0 - 4.0 kW	96436509	NO
					IEC, F265, MG132, 5.5 - 7.5kW	96436514	NO
4	Chamber, Complete with Pos.45 & 65		3/2-36	^^^	PTFE Pos.45	96439480	NO
4a	Chamber Cpl. w/Pos.45 & 65 & Bearing		3/2-36	^^^^	Silicon Carbide Bearing, PTFE Pos.45	96439475	Yes
	Chamber Cpl. w/Pos.45 & 65 & Brg. (option)		3/2-36	^^^^	Bronze Bearing, PTFE Pos.45	96440612	Yes
	Chamber Cpl. w/Pos.45 & 65 & Brg. (option)		3/2-36	^^^^	Graflon Bearing, PTFE Pos.45	96440615	Yes
5a	Chamber, Bottom Complete with Pos.45 & 65		3/2-36	1	PTFE Pos.45	96439484	NO
6	Base		3/2-17	1	Flexi -Clamp / Oval, Stainless (max 232 PSI)	96438394	NO
			3/2-36	1	For Flanges JIS, FGJ, ANSI, Stainless (Max 362 PSI)	96438328	NO
			3/2-36	1	Victualic (PIE) 1.25", Stainless (Max 362 PSI)	96436851	NO
7	Coupling Guard			2	IEC, F85-F100	96438136	NO
				2	NEMA-56C, IEC-F115,130, & 265	96438137	NO
					NEMA, 182-215TC	96438138	NO
7a	Screw for Coupling Guard		3/2-36	4	M4 x 8mm	96488481	NO
9	Allen Screw		3/2-27	4	M6 x 20mm, Delta Seal	00ID7899	Yes
				4	M8 x 25mm, Delta Seal	00ID7900	Yes
					M10 x 25mm, Delta Seal	00ID7901	Yes
10	Shaft Pin		3/2-36	1	ø5 x 26mm	310192	Yes
10a	Coupling Half		3/2-27	2	NEMA, 56C, 1/3 - 2HP. ø15.8 / ø12	410108	Yes
				2	NEMA, 182/184TC, 3-5HP. ø28.5/ø12	410109	Yes
					NEMA, 213TC, 7.5-10HP. ø34.9/ø12	96472175	Yes
			3/2-19	2	IEC, F85, MG71, .37-.55kW. ø14/ø12	410041	Yes
			21-36	2	IEC, F100, MG80,.75-1.1kW. ø19/ø12	410043	Yes
				2	IEC, F115, MG 90, 1.5-2.2kW. ø24/ø12	410045	Yes
					IEC, F130, MG100/112, 3-4 kW.ø28/ø12	410047	Yes
					IEC, F265, MG132, 5.5-7.5kW. ø38/ø12	410115	Yes
12	Oval Flange for Flexi Base		3/2-17	2	Painted CI, 1" -11.5 NPT (max 232 PSI)	96468333	Yes
			3/2-23	2	Painted CI, RP 1" BSP DIN (max 232 PSI)	400173	NO
	Oval Flange for Flexi Base (option)		3/2-17	2	Stainless, 1" -11.5 NPT (max 232 PSI)	96468336	Yes
			3/2-23	2	Stainless, RP 1" BSP DIN (max 232 PSI)	96437814	NO
12a	Adapter Flg. for ANSI pos.201/Flexi Base (option)		3/2-17	2	Stainless, (max 232 PSI)	96437818	Yes
12b	Pipe Stub for Clamp/Flexi Base (option)		3/2-17	2	Stainless, Internal 1" -11.5 NPT (max 232 PSI)	400182	Yes
			3/2-17	2	Stainless, Internal 1.25" -11.5 NPT (max 232 PSI)	410279	Yes
			3/2-17	2	Stainless, External 2" -11.5 NPT (max 232 PSI)	96468338	Yes
12c	Clamp for Flexi Base & pos.12b (option)		3/2-17	4	Stainless, (max 232 PSI)	00ID7194	Yes
18	Priming/Vent Plug		3/2-36	*	G 1/2A, NV24 with NV9 x M8 stem	405150	NO
23	Plug		3/2-36	**	G 1/2A, w/1/4"port, NV24	91120659	NO
	Plug (option)		3/2-36	**	G 1/2A, Solid no port, NV24	370025	NO
23c	Pipe Plug for Pos.23 & 25 with hollow stem		3/2-36	**	1/4" NPT,SS SQHD	00ID7216	NO
25	Drain/Priming Plug Cpl. with O-rings		3/2-36	1	G 1/2A, NV24 w/NV9 x M8 stem, EPDM	96440611	NO
			3/2-36	1	G 1/2A, NV24 w/NV9 x M8 stem, FKM	96446891	NO
	Drain/Priming Plug Cpl. with O-rings (option)		3/2-36	1	G 1/2A, NV24 w/NV9 x M8 stem, FXM	96460009	NO
			3/2-36	1	G 1/2A, NV24 w/NV9 x M8 stem, FFKM	96475474	NO
	Dr./Pr. Plug Cpl. for gauge, w/O-rings (option)		3/2-36	1	G 1/2A, NV24 w/NV9 x M8 hollow stem, EPDM	96527050	NO
			3/2-36	1	G 1/2A, NV24 w/NV9 x M8 hollow stem, FKM	96527051	NO
			3/2-36	1	G 1/2A, NV24 w/NV9 x M8 hollow stem, FXM	96549174	NO
			3/2-36	1	G 1/2A, NV24 w/NV9 x M8 hollow stem, FFKM	96527052	NO
26	Staybolt		3/2-3	4	M12 x 151mm	414004	NO
			4	4	M12 x 169mm	404007	NO
			5	4	M12 x 187mm	404008	NO
			6	4	M12 x 205mm	414006	NO
			7	4	M12 x 223mm	404010	NO
			8	4	M12 x 241mm	404011	NO
			9	4	M12 x 259mm	414008	NO
			10	4	M12 x 277mm	404013	NO
			11	4	M12 x 294mm	96442754	NO
			12	4	M12 x 313mm	414010	NO
			13	4	M12 x 330mm	96442760	NO
			15	4	M12 x 367mm	414012	NO
			17	4	M12 x 402mm	96442762	NO
			19	4	M12 x 439mm	404022	NO
			21	4	M12 x 475mm	414016	NO
			23	4	M12 x 511mm	404026	NO
			25	4	M12 x 546mm	96442765	NO
			27	4	M12 x 583mm	404030	NO
			30	4	M12 x 637mm (50Hz.)	414022	NO
			33	4	M12 x 691mm (50Hz.)	96442777	NO
			36	4	M12 x 745mm (50Hz.)	96442778	NO

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# Parts List & Kits **CRI1s**

## Parts List

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	Material Number	Included in Kits?			
26	Staybolt (Cool Top®, Back-to-Back & Tandem Seal option)		3/2-3	4	M12 x 265mm	96442753	NO			
			4	4	M12 x 286mm	414009	NO			
			5	4	M12 x 294mm	96442754	NO			
			6	4	M12 x 319mm	96442756	NO			
			7	4	M12 x 340mm	414011	NO			
			8	4	M12 x 349mm	404017	NO			
			9	4	M12 x 367mm	414012	NO			
			10	4	M12 x 385mm	404019	NO			
			11	4	M12 x 402mm	96442762	NO			
			12	4	M12 x 427mm	96442763	NO			
			13	4	M12 x 436mm	96458181	NO			
			15	4	M12 x 475mm	414016	NO			
			17	4	M12 x 511mm	404026	NO			
			19	4	M12 x 546mm	96442765	NO			
			21	4	M12 x 583mm	404030	NO			
			23	4	M12 x 618mm	96442767	NO			
			25	4	M12 x 655mm	96458442	NO			
			27	4	M12 x 691mm	96442777	NO			
			28	Motor Bolt		3/2-27	4	NEMA, 56C, 1/3 - 2HP. UNC 3/8" x 25mm	00ID1839	NO
							4	NEMA, 182/184TC, 3 - 5HP.UNC1/2" x 25mm	00ID1840	NO
4	NEMA, 213TC, 7.5 -10HP. UNC 1/2" x 1.25"	91128631					NO			
4	IEC, F85, MG71, .37-.55kW. M6 x 20mm	00ID8022					NO			
4	IEC, F100, MG80, .75-1.1kW. M6 x 25mm	00ID8023					NO			
4	IEC, F115, MG 90, 1.5-2.2kW. M8 x 20mm	00ID8024					NO			
4	IEC, F130, MG100/112, 3-4 kW. M8 x 25mm	00ID8025					NO			
4	IEC, F265, MG132, 5.5-7.5kW. M12 x 45mm	00ID7914					NO			
4	M10 x 70mm, 8.8, A4, DIN931	96447227					Yes			
4	M10 x 60mm, A4, DIN931	96447228					Yes			
35	Hexagon Head Screw for Oval "C" Flange (Flexi option)		3/2-17	4	M10 x 70mm, 8.8, A4, DIN931	96447227	Yes			
	Hexagon Head Screw for Oval "N" Flange (Flexi option)		3/2-17	4	M10 x 60mm, A4, DIN931	96447228	Yes			
35b	Screw for Clamp Pos.12c (Flexi option)		3/2-17	4	M8 x 40mm - A2, RR DIN933	00ID7188	Yes			
35c	Nut for Screw Pos.35b for Clamp Pos.12c (Flexi option)		3/2-17	4	M8, 304SS	00ID7187	Yes			
36	Staybolt Nut		3/2-36	4	19mm x M12, Delta Seal	00ID7917	NO			
36b	Nut for Screw Pos.35 Oval Flange (Flexi option)		3/2-17	4	M10, 316SS w/Delta Seal	96438757	Yes			
37	Sleeve O-ring		3/2-36	◆◆	EPDM, ø137.5 x 3.3mm	96438743	Yes			
			3/2-36	◆◆	FKM, ø137.5 x 3.3mm	96438744	Yes			
37b	Sleeve O-ring (option)		3/2-36	◆◆	FKM, ø137.5 x 3.3mm	96458109	Yes			
	Sleeve O-ring (option)		3/2-36	◆◆	FFKM, ø136.12 x 3.53mm	96466718	Yes			
38	Drain Plug O-ring		3/2-36	1	EPDM, ø16.3 x 2.4mm	00ID1288	Yes			
			3/2-36	1	FKM, ø16.3 x 2.4mm	00ID2231	Yes			
			3/2-36	1	FFKM, ø16.3 x 2.4mm	96428162	Yes			
	Drain Plug O-ring (option)		3/2-36	1	FKM, ø16.3 x 2.4mm	96442869	Yes			
	Drain Plug O-ring (option)		3/2-36	1	FKM, ø16.3 x 2.4mm	96442869	Yes			
39	Gasket for Oval Flange		3/2-17	2	95 x 55 x ø35 x 2mm, KLINGERSIL C4430	400189	Yes			
39b	O-ring for Clamp,Thread stub-Union-& FGJ Flange (option)		3/2-17	2	EPDM, ø44.45 x 3.53mm	96407726	Yes			
			3/2-17	2	FKM, ø44.45 x 3.53mm	96411713	Yes			
45	Neck Ring		3/2-36	# stgs	ø41.3 x ø30.6 x .75mm, PTFE	400003	Yes			
47a	Bearing Ring/Spacer		3/2-36	^^^^	SiC 150, ø17.37 x ø13.10 x ø10.9 x 13mm	96437488	Yes			
	Brg. Ring/Spacer (option for Grafion / Brz. 4a)		3/2-36	^^^^	TC, ø15.92 x ø13.10 x ø10.9 x 9.7mm	400041	Yes			
49	Impeller		3/2-36	# stgs	ø73.0 x ø30.6 x 9.0mm (back-plate .5mm)	96433134	NO			
50a	Top Guide Vane		3-36	1		96457637	NO			
			3/2	1		96478562	NO			
51	Shaft, Complete		3/2-3	1	ø12 x 160.5mm	96439607	NO			
			4	1	ø12 x 180.5mm	96440386	NO			
			5	1	ø12 x 196.5mm	96440387	NO			
			6	1	ø12 x 214.5mm	96440388	NO			
			7	1	ø12 x 234.5mm	96440389	NO			
			8	1	ø12 x 250.5mm	96440390	NO			
			9	1	ø12 x 268.5mm	96440391	NO			
			10	1	ø12 x 288.5mm	96440392	NO			
			11	1	ø12 x 304.5mm	96440393	NO			
			12	1	ø12 x 322.5mm	96440394	NO			
			13	1	ø12 x 342.5mm	96440395	NO			
			15	1	ø12 x 376.5mm	96440396	NO			
			17	1	ø12 x 412.5mm	96440398	NO			
			19	1	ø12 x 450.5mm	96440400	NO			
			21	1	ø12 x 484.5mm	96440401	NO			
			23	1	ø12 x 520.5mm	96440403	NO			
			25	1	ø12 x 556.5mm	96440405	NO			
			27	1	ø12 x 592.5mm	96440406	NO			
			30	1	ø12 x 646.5mm (50Hz.)	96440408	NO			
			33	1	ø12 x 700.5mm (50Hz.)	96440410	NO			
36	1	ø12 x 754.5mm (50Hz.)	96440411	NO						
51	Shaft, Cpl. (Cool Top®, Back-to-Back & Tandem Seal option)		3/2-3	1	ø12 x 265.5mm	96457560	NO			
			4	1	ø12 x 285.5mm	96457561	NO			

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## Parts List

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	Material Number	Included in Kits?
51	Shaft, Cpl. (Cool Top®, Back-to-Back & Tandem Seal option)		5	1	ø12 x 301.5mm	96457562	NO
			6	1	ø12 x 319.5mm	96457563	NO
			7	1	ø12 x 339.5mm	96457564	NO
			8	1	ø12 x 355.5mm	96457565	NO
			9	1	ø12 x 373.5mm	96457566	NO
			10	1	ø12 x 393.5mm	96457567	NO
			11	1	ø12 x 409.5mm	96457568	NO
			12	1	ø12 x 427.5mm	96457569	NO
			13	1	ø12 x 447.5mm	96457570	NO
			15	1	ø12 x 481.5mm	96457571	NO
			17	1	ø12 x 517.5mm	96457573	NO
			19	1	ø12 x 555.5mm	96457575	NO
			21	1	ø12 x 589.5mm	96457576	NO
			23	1	ø12 x 625.5mm	96457578	NO
			25	1	ø12 x 661.5mm	96457580	NO
			27	1	ø12 x 697.5mm	96457581	NO
			30	1	ø12 x 751.5mm (50Hz.)	96457583	NO
			33	1	ø12 x 805.5mm (50Hz.)	96457585	NO
			36	1	ø12 x 859.5mm (50Hz.)	96457586	NO
		55	Outer Sleeve		3/2-3	1	ø138 x 44.6mm
	4			1	ø138 x 62.6mm	96440010	NO
	5			1	ø138 x 80.6mm	96441510	NO
	6			1	ø138 x 98.6mm	96439999	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	96440006	NO
	30			1	ø138 x 530.6mm (50Hz.)	96440007	NO
	33			1	ø138 x 584.6mm (50Hz.)	96440008	NO
	36	1	ø138 x 638.6mm (50Hz.)	96439652	NO		
56	Base Plate (Low) for PJE / Flexi-clamp Pos.6		2-36	1	Cast Iron	96438133	NO
			2-36	1	Cast Iron	96438132	NO
			2-36	1	Cast Stainless	96437870	NO
			2-36	1	Cast Stainless	96437868	NO
	B. P. (High) for Flexi-clamp w/ANSI/DIN/JIS Pos.6		2-36	1	Cast Iron	96438133	NO
	Base Plate N (Low) for PJE / Flexi-clamp Pos.6		2-36	1	Cast Stainless	96437870	NO
	B. P. N (High) for Flexi-clamp w/ANSI/DIN/JIS Pos.6		2-36	1	Cast Stainless	96437868	NO
60	Stack Compression Spring		3/2-36	1	ø136 x 3.5mm	96439662	NO
64	Spacing Pipe		2-36	^^^	ø15.85 x ø12.85 x 17.52mm	400035	NO
64a	Spacing Pipe		3/2-36	^^^^	ø15.85 x ø12.85 x 4.5mm	96440292	Yes
			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 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	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
77	Pump Head Cover for Motor Stool Pos.2		3/2-36	1	Cast Stainless	96436340	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	■	Stainless	96456296	NO
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
100a	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	NO
	O-ring for Pos.105b Back-to-Back (option)		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	NO
			3/2-36	1	SiC, 12mm	980746	Yes
104	Rotating Seal Ring for 105b Back-to-Back		3/2-36	1	TC, 12mm	980163	NO
			3/2-36	1	SiC, 12mm	980733	Yes
105(b)	Shaft Seal HQBE		3/2-36	***	SiC, Carbon with resin-impregnated, EPDM	96441879	Yes
			3/2-36	***	SiC, Carbon with resin-impregnated, FKM	96441880	Yes
			3/2-36	***	SiC, Carbon with resin-impregnated, FFKM	96489537	Yes

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105(b)	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	
	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	NO	
Shaft Seal/inboard for Back-to-Back OUUV			3/2-36	1	TC, TC, FKM	985190	NO	
107	O-ring for Pos.105b Back-to-Back		3/2-36	1	EPDM, $\phi$ 11.5 x 4.3mm	00ID2040	Yes	
			3/2-36	1	FKM, $\phi$ 11.5 x 4.3mm	00ID2186	Yes	
	O-ring for Pos.105b Back-to-Back (option)		3/2-36	1	FFKM, $\phi$ 11.5 x 4.3mm	96440282	NO	
	O-ring for Pos.105b Back-to-Back (option)		3/2-36	1	FXM, $\phi$ 11.5 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, $\phi$ 21.3 x 3.0mm	00ID1798	Yes	
			3/2-36	1	FKM, $\phi$ 21.2 x 3.0mm	00ID2339	Yes	
109b	O-ring for Shaft Seal Pos.105 (option)		3/2-36	1	FXM, $\phi$ 22 x 2.75mm	96458111	Yes	
	O-ring for Shaft Seal Pos.105 (option)		3/2-36	1	FFKM, $\phi$ 23.47 x 2.62mm	96464384	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	Pipe for Air Vent (option)		3/2-36	1	R 1/2", 316 Stainless	330272	Yes	
118	Automatic Air Vent (option)		3/2-36	1	Type AE50S 1/2" BSP, Stainless	96498508	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	NO	
148	Seal Retainer Washer - Pos.105b Back-to-Back		3/2-36	1	316SS, $\phi$ 36.0 x $\phi$ 21.6 x 5.0mm	96457355	NO	
149	Connecting Pipe for Cool Top®		3/2-36	1	NV36, 316SS, FXM & EPDM	96460414	NO	
			3/2-36	1	NV36, 316SS, FXM & FKM	96460415	NO	
201	Flange		3/2-36	1	ANSI, DIN, JIS PN40/30K, Cast Iron	96439203	Yes	
			3/2-36	1	ANSI, DIN, JIS PN40/30K, Stainless	96439492	Yes	
203	Lock Ring for Flange		3/2-36	1	Stainless	96439718	Yes	

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

This column indicates which pump model uses the spare part. If blank, the part is used in all models.

### NOTES:

- ^^^ 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
- ^^^^ 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
- ◆◆ Standard use 2. Back-to-Back or Tandem pump version use 3
- Standard use 2. Back-to-Back or Tandem pump version use 6

### Key to Symbols

- KITS** ..... Recommended spare part
- $\phi$  ..... 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

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## Spare Part Kits

Since certain pump parts can be expected to exhibit wear at the same time as related pump parts, they have been grouped into the following kits for your convenience. The numbers indicate the quantity of the part within each kit. Please order these kits using the kit material number at the top of the columns.

CR(I, N)15, 1, & 3 SiC Bearing						
WEAR PARTS KIT 2-9		Kit No.	96455095			
WEAR PARTS KIT 10-19		Kit No.	96455092			
WEAR PARTS KIT 20-27		Kit No.	96455093			
WEAR PARTS KIT 28-36		Kit No.	96455094			
Pos. No.	Description	Material No.	Qty. Included in each Kit			
4a	Chamber N Cpl. w/Pos.45 & 65 & SiC Bearing	96439476	1	2	3	4
39	Gasket for Oval Flange, 95 x 55 x ø35 x 2mm	400189	2	2	2	2
45	Neck Ring, ø41.3 x ø30.6 x .75mm, PTFE	400003	8	17	24	32
47a	Bearing Ring/Spacer, SiC 150, 13mm	96437488	1	2	3	4
64a	Spacing Pipe, ø15.85 x ø12.85 x 4.5mm	96440292	1	2	3	4
64c	Clamp, Splined, ø15 x ø13.10 x ø10.9 x 13mm	96439668	1	1	1	1
65	Neck Ring Retainer, N, ø43.5 x ø34.0 x 3.6mm	96438746	8	17	24	32
66	Lock Washer Set of 2, ø13.5 x ø8.2 x 2.6mm	96417297	1	1	1	1
67	Lock Nut, 13mm x M8	00ID2061	1	1	1	1

CR(I, N)15, 1, & 3 Grafion Bearing						
WEAR PARTS KIT 2-9		Kit No.	96460140			
WEAR PARTS KIT 10-19		Kit No.	96455110			
WEAR PARTS KIT 20-27		Kit No.	96455111			
WEAR PARTS KIT 28-36		Kit No.	96455112			
Pos. No.	Description	Material No.	Qty. Included in each Kit			
4a	Chamber N Cpl. w/Pos.45 & 65 & Grafion Bearing	96440615	1	2	3	4
39	Gasket for Oval Flange, 95 x 55 x ø35 x 2mm	400189	2	2	2	2
45	Neck Ring, ø41.3 x ø30.6 x .75mm, PTFE	400003	8	17	24	32
47a	Bearing Ring/Spacer, TC, 9.7mm	400041	1	2	3	4
64a	Spacing Pipe, ø15.85 x ø12.85 x 7.8mm	400016	1	2	3	4
64c	Clamp, Splined, ø15 x ø13.10 x ø10.9 x 13mm	96439668	1	1	1	1
65	Neck Ring Retainer, N, ø43.5 x ø34.0 x 3.6mm	96438746	8	17	24	32
66	Lock Washer Set of 2, ø13.5 x ø8.2 x 2.6mm	96417297	1	1	1	1
67	Lock Nut, 13mm x M8	00ID2061	1	1	1	1

CR(I)15, 1, & 3 Bronze Bearing						
WEAR PARTS KIT 2-9		Kit No.	96455102			
WEAR PARTS KIT 10-19		Kit No.	96455104			
WEAR PARTS KIT 20-27		Kit No.	96455105			
WEAR PARTS KIT 28-36		Kit No.	96455106			
Pos. No.	Description	Material No.	Qty. Included in each Kit			
4a	Chamber Cpl. w/Pos.45 & 65 & Bronze Bearing	96440612	1	2	3	4
39	Gasket for Oval Flange, 95 x 55 x ø35 x 2mm	400189	2	2	2	2
45	Neck Ring, ø41.3 x ø30.6 x .75mm, PTFE	400003	8	17	24	32
47a	Bearing Ring/Spacer, TC, 9.7mm	400041	1	2	3	4
64a	Spacing Pipe, ø15.85 x ø12.85 x 7.8mm	400016	1	2	3	4
64c	Clamp, Splined, ø15 x ø13.10 x ø10.9 x 13mm	96439668	1	1	1	1
65	Neck Ring Retainer, N, ø43.5 x ø34.0 x 3.6mm	96438746	8	17	24	32
66	Lock Washer Set of 2, ø13.5 x ø8.2 x 2.6mm	96417297	1	1	1	1
67	Lock Nut, 13mm x M8	00ID2061	1	1	1	1

GASKET KIT (EPDM)							Kit No.	96455090	
GASKET KIT (FKM)							Kit No.	96455091	
GASKET KIT (FFKM)							Kit No.	96463944	
GASKET KIT (EPDM)-Double Seal option.							Kit No.	96533328	
GASKET KIT (FKM)-Double Seal option.							Kit No.	96533362	
GASKET KIT (FFKM)-Double Seal option.							Kit No.	96533363	
GASKET KIT (FKM, & EPDM)-Cool Top® option							Kit No.	96533364	
GASKET KIT (FKM, & EPDM)-Cool Top® option							Kit No.	96533329	
Pos. No.	Description	Material No.	Qty. Included in each Kit						
37	Sleeve O-ring, EPDM, ø137.5 x 3.3mm	96438743	2				3		1
	Sleeve O-ring, FKM, ø137.5 x 3.3mm	96438744		2				3	
37b	Sleeve O-ring, FKM, ø137.5 x 3.3mm	96458109			2				2
	Sleeve O-ring, FFKM, ø136.12 x 3.53mm	96466718				2			3
38, 100(a)	Drain Plug O-ring, EPDM, ø16.3 x 2.4mm	00ID1288	3				7		4
	Drain Plug O-ring, FKM, ø16.3 x 2.4mm	00ID2231		3				7	
38, 100a	Drain Plug O-ring, FKM, ø16.3 x 2.4mm	96442869			3				3
	Drain Plug O-ring, FFKM, ø16.3 x 2.4mm	96428162				3			7
109(a)	O-ring for Pos.105(b) & 149, EPDM, ø21.3 x 3.0mm	00ID1798	1				1		
	O-ring for Pos.105(b) & 149, FKM, ø21.2 x 3.0mm	00ID2339		1				1	
109b	O-ring for Pos.105(b) & 149, FKM, ø22.0 x 2.75mm	96458111			1				2
	O-ring for Pos.105(b) & 149, FFKM, ø23.47 x 2.62mm	96464384				1			2

STACK® KITS	
Model	Material No.
CR, CRI 15-3/2	96479046
CR, CRI 15-3	96479047
CR, CRI 15-4	96479048
CR, CRI 15-5	96479049
CR, CRI 15-6	96479060
CR, CRI 15-7	96479061
CR, CRI 15-8	96479062
CR, CRI 15-9	96479063
CR, CRI 15-10	96479064
CR, CRI 15-11	96479065
CR, CRI 15-12	96479066
CR, CRI 15-13	96479067
CR, CRI 15-15	96479068
CR, CRI 15-17	96479069
CR, CRI 15-19	96479070
CR, CRI 15-21	96479071
CR, CRI 15-23	96479072
CR, CRI 15-25	96479073
CR, CRI 15-27	96479074
*** CR, CRI 15-30	96479075
*** CR, CRI 15-33	96479076
*** CR, CRI 15-36	96479077

\*\*\*For 50 Hz operation only.

# Spare Part Kits CRI1s

## Spare Part Kits (continued)

STANDARD SHAFT SEAL KIT, BALANCED CARTRIDGE (Maximum allowed working PSI is 435) (Tandem Seal option Pumps require 2 of each Seal Kit)		Kit No. 96455088	Kit No. 96455089	Kit No. 96455086	Kit No. 96455087	Kit No. 96455082	Kit No. 96455083	Kit No. 96455084	Kit No. 96455085
Pos. No.	Description	Material No.	Qty. Included in each Kit						
105	HQBE	96441879	1						
	HQBV	96441880		1					
	HQQE	96441877			1				
	HQQV	96441878				1			
	HUBE	96441873					1		
	HUBV	96441874						1	
	HUUE	96441875							1
	HUUV	96441876							1
N/A	Grinding Device Tool for Emery Cloth	370711	1	1	1	1	1	1	1
N/A	Emery Cloth	370712	1	1	1	1	1	1	1

OPTIONAL SHAFT SEAL KIT, BALANCED CARTRIDGE (Maximum allowed working PSI is 435) (Tandem Seal option Pumps require 2 of each Seal Kit)		Kit No. 96491375	Kit No. 96533327	Kit No. 96533326	Kit No. 96533323	Kit No. 96533322	Kit No. 96533325	Kit No. 96533324
Pos. No.	Description	Material No.	Qty. Included in each Kit					
105	HQBK	96489537	1					
	HQQF	96472620		1				
	HQQK	96498109			1			
	HUBF	96481464				1		
	HUBK	96481463					1	
	HUUF	96475542						1
	HUUK	96498108						1
N/A	Grinding Device Tool for Emery Cloth	370711	1	1	1	1	1	1
N/A	Emery Cloth	370712	1	1	1	1	1	1

INBOARD SHAFT SEAL & Gasket KIT, Back-to-Back OQQE INBOARD SHAFT SEAL & Gasket KIT, Back-to-Back OQQV (An OQQx seal kit must also be used for a seal repair)		Kit No. 96533360	Kit No. 96533361
Pos. No.	Description	Material No.	Qty. Included in each Kit
37	Sleeve O-ring, EPDM, $\phi$ 137.5 x 3.3mm	96438743	3
	Sleeve O-ring, FKM, $\phi$ 137.5 x 3.3mm	96438744	3
38, 100(a)	Drain Plug O-ring, EPDM, $\phi$ 16.3 x 2.4mm	00ID1288	7
	Drain Plug O-ring, FKM, $\phi$ 16.3 x 2.4mm	00ID2231	7
102	O-ring, EPDM, $\phi$ 18 x 2.5mm	00ID2041	1
	O-ring, FKM, $\phi$ 17.86 x 2.62mm	00ID2187	1
103	Stationary Seal Ring, SiC, 12mm	980746	1
104	Rotating Seal Ring, SiC, 12mm	980733	1
107	O-ring, EPDM, $\phi$ 11.5 x 4.3mm	00ID2040	1
	O-ring, FKM, $\phi$ 11.5 x 4.3mm	00ID2186	1
108	Spring, 12mm	980195	1
109a	O-ring, EPDM, $\phi$ 21.3 x 3.0mm	00ID1798	1
	O-ring, FKM, $\phi$ 21.2 x 3.0mm	00ID2339	1
111	Driver for pos.104	980192	1
112	Driver for pos.111	980191	1
112a	Driver for pos.112	400203	1
113	Set Screw for pos.112a	00ID7392	2
146	Allen Bolt for pos.147 & 148, 2.5mm x M3 x 5mm	96462639	3

IEC COUPLING KIT		Kit No. 415060	Kit No. 415061	Kit No. 415062	Kit No. 415063	Kit No. 415065
Pos. No.	Description	Material No.	Qty. Included in each Kit			
9	Allen Screw, M6 x 20mm, Delta Seal	00ID7899	4			
	Allen Screw, M8 x 25mm, Delta Seal	00ID7900		4	4	
	Allen Screw, M10 x 25mm, Delta Seal	00ID7901				4
10	Shaft Pin, $\phi$ 5 x 26mm, Stainless	310192	1	1	1	1
10a	Coupling Half, F85, MG71, .37-.55kW. $\phi$ 14/ $\phi$ 12	410041	2			
	Coupling Half, F100, MG80, .75-1.1kW. $\phi$ 19/ $\phi$ 12	410043		2		
	Coupling Half, F115, MG 90, 1.5-2.2kW. $\phi$ 24/ $\phi$ 12	410045			2	
	Coupling Half, F130, MG100/112, 3-4 kW. $\phi$ 28/ $\phi$ 12	410047				2
	Coupling Half, F265, MG132, 5.5-7.5kW. $\phi$ 38/ $\phi$ 12	410115				2

**Spare Part Kits** (continued)

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

FLEXI FLANGE KIT FOR SMALL CRI1S, 1, & 3			
		1" Threaded Cast Iron ( 232 PSI Max.)	Kit No. 96468491
Pos. No.	Description	Material No.	Qty. Included in each Kit
12	Flange, Cast Iron, 1" - 11.5 NPT	96468333	2
35	Hex Head Bolt, M10 x 70mm, Delta Seal	96447227	4
36b	Nut, M10, 316SS w/Delta Seal	96438757	4
39	Gasket , 95 x 55 x ⌀35 x 2mm, KLINGERSIL C4430	400189	2

FLEXI FLANGE KIT FOR SMALL CRI1S, 1, & 3			
		1" Threaded Stainless ( 232 PSI Max.)	Kit No. 964680850
Pos. No.	Description	Material No.	Qty. Included in each Kit
12	Flange, Stainless, 1" - 11.5 NPT	96468336	2
35	Hex Head Bolt, M10 x 60mm, A4, DIN931	96447228	4
36b	Nut, M10, 316SS w/Delta Seal	96438757	4
39	Gasket , 95 x 55 x ⌀35 x 2mm, KLINGERSIL C4430	400189	2

FLEXI FLANGE KIT FOR SMALL CRI1S, 1, 3, & 5			
		1-1/4" Threaded Cast Iron ( 232 PSI Max.)	Kit No. 96470781
Pos. No.	Description	Material No.	Qty. Included in each Kit
12	Flange, Cast Iron, 1-1/4" - 11.5 NPT	96468335	2
35	Hex Head Bolt, M10 x 70mm, Delta Seal	96447227	4
36b	Nut, M10, 316SS w/Delta Seal	96438757	4
39	Gasket , 95 x 55 x ⌀35 x 2mm, KLINGERSIL C4430	400189	2

FLEXI FLANGE KIT FOR SMALL CRI1S, 1, 3, & 5			
		1-1/4" Threaded Stainless ( 232 PSI Max.)	Kit No. 96480851
Pos. No.	Description	Material No.	Qty. Included in each Kit
12	Flange, Stainless, 1" - 11.5 NPT	96468337	2
35	Hex Head Bolt, M10 x 60mm, A4, DIN931	96447228	4
36b	Nut, M10, 316SS w/Delta Seal	96438757	4
39	Gasket , 95 x 55 x ⌀35 x 2mm, KLINGERSIL C4430	400189	2

FLEXI CLAMP FLANGE KIT FOR SMALL CRI(N)1S, 1, 3, & 5			
		1-1/4" Stainless Flange	EPDM Kit No. 96480858
		(Conversion max. allowable operating pressure 232 )	FKM Kit No. 96480859
Pos. No.	Description	Material No.	Qty. Included in each Kit
12a	Adapter Flg. for ANSI pos.201/Flexi Base (232 PSI)	96437818	2
35	Hex Head Bolt, M10 x 60mm, A4, DIN931	96447228	4
36b	Nut, M10, 316SS w/Delta Seal	96438757	4
39b	O-ring, EPDM, ⌀44.45 x 3.53mm	96407726	2
	O-ring, FKM, ⌀44.45 x 3.53mm	96411713	2
201	Flange, ANSI, DIN, JIS PN40/30K, Stainless	96439492	2
203	Lock Ring, Stainless	96439718	2

FLEXI CLAMP KIT FOR SMALL CRI1S, 1, & 3			
		1" Internal Threaded SS Pipe Stub ( 232 PSI Max.)	EPDM Kit No. 96480854
			FKM Kit No. 96480855
Pos. No.	Description	Material No.	Qty. Included in each Kit
12b	Stainless, Internal 1" -11.5 NPT	400182	2
12c	Clamp for Flexi Base & pos.12b	00ID7194	4
35b	Screw for Pos. 12c, M8 x 40mm - A2, RR DIN933	00ID7188	4
35c	Nut for Pos. 35b, M8, 304SS	00ID7187	4
39b	O-ring, EPDM, ⌀44.45 x 3.53mm	96407726	2
	O-ring, FKM, ⌀44.45 x 3.53mm	96411713	2

# Spare Part Kits • Accessories **CRI1s**

## Spare Part Kits *(continued)*

FLEXI CLAMP KIT FOR SMALL CRI1S, 1, 3, & 5		EPDM FKM		Kit No. 96480856
1-1/4" Internal Threaded SS Pipe Stub ( 232 PSI Max.)		Kit No. 96480857		
Pos. No.	Description	Material No.	Qty. Included in each Kit	
12b	Stainless, Internal 1-1/4" -11.5 NPT	410279	2	2
12c	Clamp for Flexi Base & pos.12b	00ID7194	4	4
35b	Screw for Pos. 12c, M8 x 40mm - A2, RR DIN933	00ID7188	4	4
35c	Nut for Pos. 35b, M8, 304SS	00ID7187	4	4
39b	O-ring, EPDM, $\phi$ 44.45 x 3.53mm	96407726	2	
	O-ring, FKM, $\phi$ 44.45 x 3.53mm	96411713		2

FLEXI CLAMP KIT FOR SMALL CRI1S, 1, 3, & 5		EPDM FKM		Kit No. 96480852
2" External Threaded SS Pipe Stub ( 232 PSI Max.)		Kit No. 96480853		
Pos. No.	Description	Material No.	Qty. Included in each Kit	
12b	Stainless, Internal 2" -11.5 NPT	96468338	2	2
12c	Clamp for Flexi Base & pos.12b	00ID7194	4	4
35b	Screw for Pos. 12c, M8 x 40mm - A2, RR DIN933	00ID7188	4	4
35c	Nut for Pos. 35b, M8, 304SS	00ID7187	4	4
39b	O-ring, EPDM, $\phi$ 44.45 x 3.53mm	96407726	2	
	O-ring, FKM, $\phi$ 44.45 x 3.53mm	96411713		2

AIR VENT FOR SMALL CR		Kit No. 91128708	
Pos. No.	Description	Material No.	Qty. Included in each Kit
117	Pipe for Air Vent, R1/2" , 316SS	330272	1
118	Automatic Air Vent, Type AE50S 1/2" BSP, SS.	96498508	1

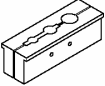
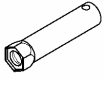
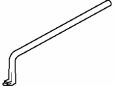

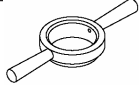
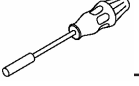
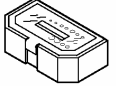

## Accessories

ANSI COMPANION FLANGES FOR SMALL CR		Kit No. 91122260	
1-1/4" Threaded Cast Iron, 250 Lb. Class		Kit No. 91122260	
Pos. No.	Description	Material No.	Qty. Included in each Kit
N/A	Nut, HEX 5/8"-11 UNC, Grade 2	00ID1510	8
N/A	Plain Bolt, 5/8" x 2-1/2", Grade 2	00ID1920	8
N/A	Flange 1-1/4", Cast Iron	00ID3650	2
N/A	Gasket Full Face Flange, 1-1/4", 300#, Cut Ring	400201	2

ANSI COMPANION FLANGES FOR SMALL CR		Kit No. 91129013	
1-1/4" Threaded Stainless, 300 Lb. Class		Kit No. 91129013	
Pos. No.	Description	Material No.	Qty. Included in each Kit
N/A	Nut, HEX 5/8"-11 UNC, 18-8SS	0ID00164	8
N/A	Bolt, HEX 5/8" x 2-3/4", UNC 18-8SS	00ID7241	8
N/A	Flange 1-1/4" Stainless, ANSI, DIN, JIS PN40/30K,	00ID7239	2
N/A	Gasket Full Face Flange, 1-1/4", 300#, Cut Ring	400201	2

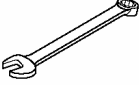
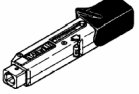
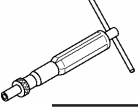




## Special Tools

Tools not generally available from normal sources.

Mat. No.	Description and Use	
00SV0040	<b>Shaft Holder for Dismantling/Assembly</b> Used to hold and protect the shaft during dismantling and assembly.	
00SV2007	<b>Tubular Box Spanner for Shaft Seal 36.1 mm</b> Used to install and remove the shaft seal. Fits a 1/2" drive ratchet.	
00SV0239	<b>Puller for Neck Ring</b> Used to remove the Neck Ring from Chamber.	
00SV2014	<b>Circlip Pliers for Flange Lock Ring</b> Used to remove the Lock Ring for the Flange.	
00SV2066	<b>Tool for Outer Sleeve</b> Used to press sleeve into base. (optional)	
00SV2011	<b>Bit Holder</b> Used with Bits Kit, 1/4"	
00SV2010	<b>Bits Kit</b> NV 5 mm for M6, 1/4" NV 6 mm for M8, 1/4" NV 8 mm for M10, 1/4"	
00SV2012	<b>Hexagon Socket Bit</b> 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	
	<b>Wrenches</b> Used to tighten various nuts.	
00SV0083	NV 10 mm for M6	
00SV0055	NV 13 mm for M8	
00SV0056	NV 17 mm for M10	
00SV0054	NV 19 mm for M12	
00SV0122	NV 24 mm for M16	
	<b>Torque Wrench</b> Used to torque various screws.	
00SV0292	4-20 Nm, 9 x 12	
00SV0269	20-100 Nm, 9 x 12	
00SV0400	40-200 Nm, 14x18	
	<b>Torque Screwdriver</b> Used to tighten various nuts.	
00SV0438	1-6 Nm, 1/4"	
	<b>Ratchet Spanner for all Adapters</b> 9 mm x 12 mm, 1/2"	
	<b>Socket Spanner with Inside Hex</b>	
00SV0296	NV 5 mm for M6, 1/2" x 1/2"	
00SV0297	NV 6 mm for M8, 1/2" x 1/2"	
00SV0298	NV 8 mm for M10, 1/2" x 1/2"	
	<b>Ring Spanner</b>	
00SV0310	NV 10 mm for M6	
00SV0294	NV 13 mm for M8	
00SV0270	NV 17 mm for M10	
00SV0271	NV 19 mm for M12	
00SV0524	NV 24 mm for M16	
	<b>Socket Spanner</b>	
00SV2013	NV 13 mm for M8, 9 x 12	



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Subject to alterations.

**GRUNDFOS Pumps Corporation**  
17100 W. 118th Terrace  
Olathe, Kansas 66062  
Phone: 913.227.3400  
Fax: 913.227.3500

**GRUNDFOS Canada, Inc.**  
2941 Brighton Road  
Oakville, Ontario L6H 6C9 Canada  
Phone: 905.829.9533  
Fax: 905.829.9512

**Bombas GRUNDFOS de Mexico S.A. de C.V.**  
Boulevard TLC No. 15  
Parque Industrial Stiva Aeropuerto  
Apodaca, N.L. Mexico 66600  
Phone: 52.81.8144.4000  
Fax: 52.81.8144.4010

[www.grundfos.com](http://www.grundfos.com)

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