



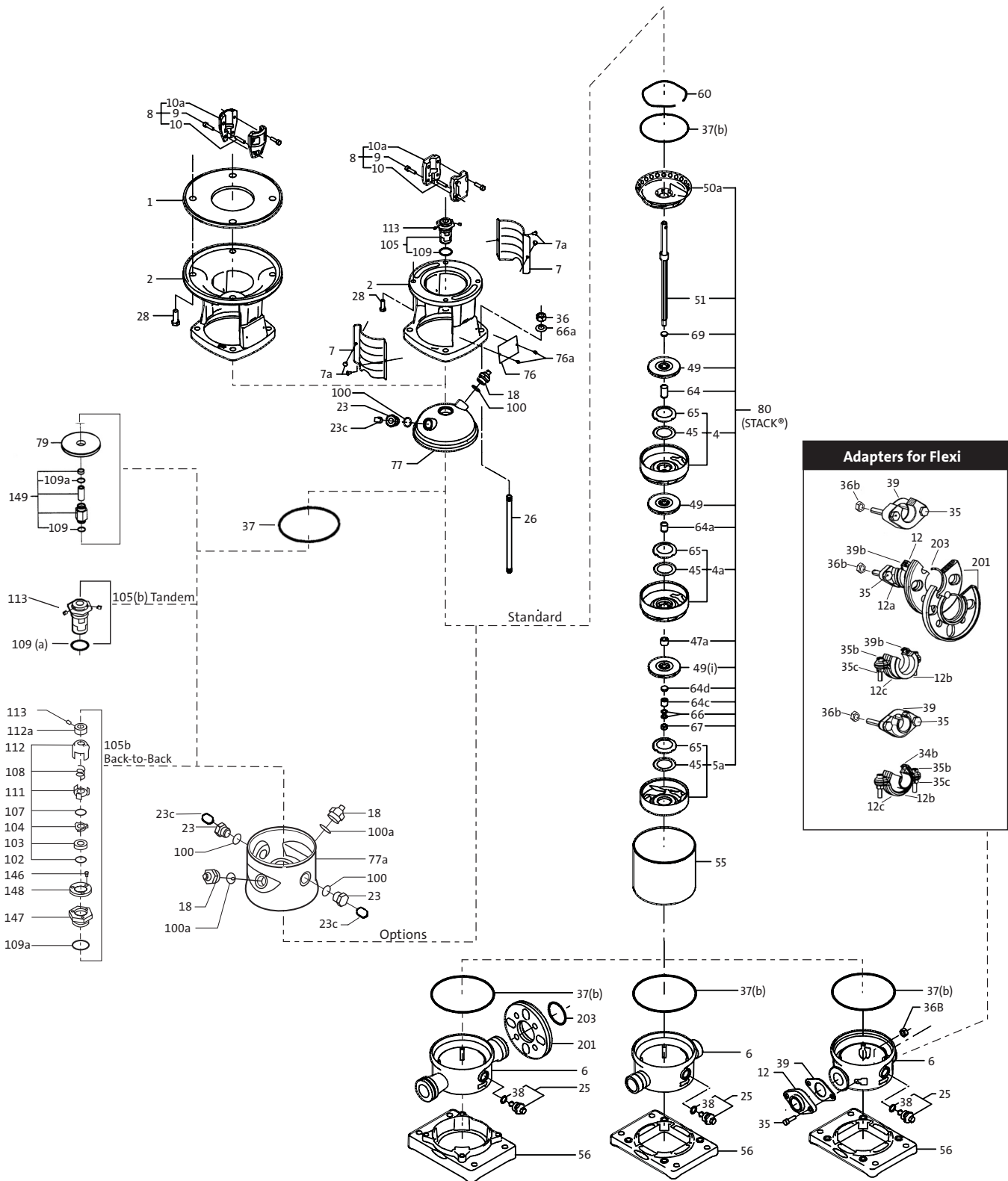
CRN5

Parts List & Kits

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Exploded View CRN5



Parts List

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	Material Number	Included in Kits?
1	Adapter for Motor Stool		18-24	1	For NEMA, 213/215TC, 7.5 - 10HP	96476208	NO
2	Motor Stool		2-8	1	NEMA, 56C, 1/3 - 2HP	96436510	NO
			9-16	1	NEMA, 182/184TC, 3 - 5HP	96436511	NO
			18-24	1	Add Pos. 1, NEMA, 213TC, 7.5 - 10HP	96436511	NO
			2-4	1	IEC, F85, MG 71, .37 - .55kW	96436506	NO
			5-8	1	IEC, F100, MG 80, .75 - 1.1kW	96436507	NO
			9-16	1	IEC, F115, MG 90, 1.5 - 2.2kW	96436508	NO
			18-29	1	IEC, F130, MG 100/112, 3.0 - 4.0 kW	96436509	NO
			32-36	1	IEC, F265, MG132, 5.5 - 7.5kW	96436514	NO
4	Chamber, Complete with Pos.45 & 65		2-36	^^^	PTFE Pos.45	96437519	NO
4a	Chamber Cpl. w/Pos.45 & 65 & Bearing		2-36	^^^^	Silicon Carbide Bearing, PTFE Pos.45	96437645	Yes
	Chamber Cpl. w/Pos.45 & 65 & Brg. (option)		2-36	^^^^	Graflon Bearing, PTFE Pos.45	96440619	Yes
5a	Chamber, Bottom Complete with Pos.45 & 65		2-36	1	PTFE Pos.45	96437738	NO
5a	Chmb. Btm. Cpl. w/Pos.45 & 65 (Low NPSH opt.)		2-36	2	PTFE Pos.45	96462144	NO
6	Base		2-17	1	Flexi-Clamp / Oval, Stainless (max 232 PSI)	96438394	NO
			2-36	1	For Flanges JIS, FGJ, ANSI, Stainless (Max 362 PSI)	96438328	NO
			2-36	1	Victualic (PJE) 1.25", Stainless (Max 362 PSI)	96436851	NO
7	Coupling Guard		2	2	IEC, F85-F100	96438136	NO
				2	NEMA-56C, IEC-F115,130, & 265	96438137	NO
				2	NEMA, 182-215TC	96438138	NO
7a	Screw for Coupling Guard		2-36	4	M4 x 8mm	96488481	NO
9	Allen Screw		2-8	4	M6 x 20mm, Delta Seal	00ID7899	Yes
			9-16	4	M8 x 25mm, Delta Seal	00ID7900	Yes
			18-24	4	M10 x 25mm, Delta Seal	00ID7901	Yes
10	Shaft Pin		2-36	1	ø5 x 26mm	310192	Yes
10a	Coupling Half		2-8	2	NEMA, 56C, 1/3 - 2HP. ø15.8 / ø12	410108	Yes
			9-16	2	NEMA, 182/184TC, 3-5HP. ø28.5/ø12	410109	Yes
			18-24	2	NEMA, 213TC, 7.5-10HP. ø34.9/ø12	96472175	Yes
			2-4	2	IEC, F85, MG71, .37-.55kW. ø14/ø12	410041	Yes
			5-8	2	IEC, F100, MG80,.75-1.1kW. ø19/ø12	410043	Yes
			9-16	2	IEC, F115, MG 90, 1.5-2.2kW. ø24/ø12	410045	Yes
			18-29	2	IEC, F130, MG100/112, 3-4 kW.ø28/ø12	410047	Yes
			32-36	2	IEC, F265, MG132, 5.5-7.5kW. ø38/ø12	410115	Yes
12	Oval Flange for Flexi Base		2-16	2	Stainless, 1.25" -11.5 NPT (max 232 PSI)	96468337	Yes
			2-16	2	Stainless, RP 1" BSP DIN (max 232 PSI)	96437814	NO
12a	Adapter Flg. for ANSI pos.201/Flexi Base (option)		2-16	2	Stainless, (max 232 PSI)	96437818	Yes
12b	Pipe Stub for Clamp/Flexi Base (option)		2-16	2	Stainless, Internal 1.25" -11.5 NPT (max 232 PSI)	410279	Yes
			2-16	2	Stainless, External 2" -11.5 NPT (max 232 PSI)	96468338	Yes
12c	Clamp for Flexi Base & pos.12b (option)		2-16	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		2	4	M12 x 151mm	96487020	NO
			3	4	M12 x 178mm	404104	NO
			4	4	M12 x 209mm	404135	NO
			5	4	M12 x 232mm	404107	NO
			6	4	M12 x 259mm	96459210	NO
			7	4	M12 x 286mm	404110	NO
			8	4	M12 x 313mm	96463414	NO
			9	4	M12 x 340mm	404113	NO
			10	4	M12 x 367mm	96459214	NO
			11	4	M12 x 394mm	96442056	NO
			12	4	M12 x 425mm	404147	NO
			13	4	M12 x 448mm	404119	NO
			14	4	M12 x 475mm	414143	NO
			15	4	M12 x 502mm	404122	NO
			16	4	M12 x 529mm	414145	NO
			18	4	M12 x 587mm	404156	NO
			20	4	M12 x 637mm	96461557	NO
			22	4	M12 x 691mm	96442122	NO
			24	4	M12 x 745mm	96442123	NO
			26	4	M12 x 799mm (50Hz.)	414155	NO
			29	4	M12 x 880mm (50Hz.)	96442124	NO
			32	4	M12 x 959mm (50Hz.)	96442125	NO
			36	4	M12 x 1066mm (50Hz.)	96442126	NO
26	Staybolt (Cool Top®, Back-to-Back & Tandem Seal option)		2	4	M12 x 259mm	96459210	NO
			3	4	M12 x 286mm	404110	NO
			4	4	M12 x 317mm	404141	NO

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Parts List & Kits CRN5

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)		5	4	M12 x 340mm	404113	NO		
			6	4	M12 x 367mm	96459214	NO		
			7	4	M12 x 394mm	96442056	NO		
			8	4	M12 x 425mm	404147	NO		
			9	4	M12 x 448mm	404119	NO		
			10	4	M12 x 475mm	414143	NO		
			11	4	M12 x 502mm	404122	NO		
			12	4	M12 x 529mm	414145	NO		
			13	4	M12 x 551mm	414146	NO		
			14	4	M12 x 587mm	404156	NO		
			15	4	M12 x 610mm	96458504	NO		
			16	4	M12 x 637mm	96461557	NO		
			18	4	M12 x 691mm	96442122	NO		
			20	4	M12 x 745mm	96442123	NO		
			22	4	M12 x 799mm	414155	NO		
			24	4	M12 x 853mm	96458507	NO		
			26	4	M12 x 907mm (50Hz.)	96458508	NO		
			29	4	M12 x 988mm (50Hz.)	96458509	NO		
			32	4	M12 x 1066mm (50Hz.)	96442126	NO		
			36	4	M12 x 1177mm (50Hz.)	96458510	NO		
		28	Motor Bolt		2-8	4	NEMA, 56C, 1/3 - 2HP. UNC 3/8" x 25mm	00ID1839	NO
					9-16	4	NEMA, 182/184TC, 3 - 5HP.UNC1/2" x 25mm	00ID1840	NO
					18-24	4	NEMA, 213TC, 7.5 -10HP. UNC 1/2" x 1.25"	91128631	NO
					2-4	4	IEC, F85, MG71, .37-.55kW. M6 x 20mm	00ID8022	NO
					5-8	4	IEC, F100, MG80,.75-1.1kW. M6 x 25mm	00ID8023	NO
					9-16	4	IEC, F115, MG 90, 1.5-2.2kW. M8 x 20mm	00ID8024	NO
	18-29			4	IEC, F130, MG100/112, 3-4 kW. M8 x 25mm	00ID8025	NO		
	32-36			4	IEC, F265, MG132, 5.5-7.5kW. M12 x 45mm	00ID7914	NO		
	35			4	M10 x70mm, 8.8, A4, DIN931	96447227	Yes		
	35a			4	M10 x 60mm, A4, DIN931	96447228	Yes		
35b	Screw for Clamp Pos.12c (Flexi option)	2-16	4	M8 x 40mm - A2, RR DIN933	00ID7188	Yes			
35c	Nut for Screw Pos.35b for Clamp Pos.12c (Flexi option)	2-16	4	M8, 3045S	00ID7187	Yes			
36	Staybolt Nut	3/2-36	4	19mm x M12, 316SS	00ID0876	NO			
36b	Nut for Screw Pos.35 Oval Flange (Flexi option)	2-16	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	◆◆	EPDM, ø16.3 x 2.4mm	00ID1288	Yes			
		3/2-36	◆◆	FKM, ø16.3 x 2.4mm	00ID2231	Yes			
	Drain Plug O-ring (option)	3/2-36	◆◆	FFKM, ø16.3 x 2.4mm	96428162	Yes			
	Drain Plug O-ring (option)	3/2-36	◆◆	FKM, ø16.3 x 2.4mm	96442869	Yes			
39	Gasket for Oval Flange	2-16	2	95 x 55 x ø35 x 2mm, KLINGERSIL C4430	400189	Yes			
39b	O-ring for Clamp,Thread stub-Union-& FGJ Flange (option)	2-16	2	EPDM, ø44.45 x 3.53mm	96407726	Yes			
	O-ring for Clamp,Thread stub-Union-& FGJ Flange (option)	2-16	2	FKM, ø44.45 x 3.53mm	96411713	Yes			
45	Neck Ring	3/2-36	# stgs	ø50.45 x ø35 x .7mm, PTFE	96436720	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 Grafalon Pos. 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 ø35.0 x 13.2mm (back-plate 1.0mm)	96437503	NO			
49i	Impeller (Low NPSH option)	3/2-36	1	ø98.0 x ø52.8 x 17.3mm (back-plate 1.0mm)	96462490	NO			
50a	Top Guide Vane	3-36	1		96457638	NO			
	Top Guide Vane Plate (option for destaging)	3/2	1		96478562	NO			
51	Shaft, Complete		2	1	ø12 x 160.5mm	96439607	NO		
			3	1	ø12 x 180.5mm	96440386	NO		
			4	1	ø12 x 214.5mm	96440388	NO		
			5	1	ø12 x 234.5mm	96440389	NO		
			6	1	ø12 x 268.5mm	96440391	NO		
			7	1	ø12 x 288.5mm	96440392	NO		
			8	1	ø12 x 322.5mm	96440394	NO		
			9	1	ø12 x 342.5mm	96440395	NO		
			10	1	ø12 x 376.5mm	96440396	NO		
			11	1	ø12 x 396.5mm	96440397	NO		
			12	1	ø12 x 430.5mm	96440399	NO		
			13	1	ø12 x 450.5mm	96440400	NO		
			14	1	ø12 x 484.5mm	96440401	NO		
			15	1	ø12 x 504.5mm	96440402	NO		
			16	1	ø12 x 538.5mm	96440404	NO		
			18	1	ø12 x 592.5mm	96440406	NO		
			20	1	ø12 x 646.5mm	96440408	NO		
			22	1	ø12 x 700.5mm	96440410	NO		
			24	1	ø12 x 754.5mm	96440411	NO		
			26	1	ø12 x 801.5mm (50Hz.)	96440412	NO		
			29	1	ø12 x 882.5mm (50Hz.)	96440413	NO		
			32	1	ø12 x 963.5mm (50Hz.)	96440414	NO		
			36	1	ø12 x 1071.5mm (50Hz.)	96440415	NO		
51	Shaft, Cpl. (Cool Top® Back-to-Back & Tandem Seal option)		2	1	ø12 x 265.5mm	96457560	NO		
			3	1	ø12 x 285.5mm	96457561	NO		
			4	1	ø12 x 319.5mm	96457563	NO		
			4	1	ø12 x 319.5mm	96457563	NO		

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51	Shaft, Cpl. (Cool Top® Back-to-Back & Tandem Seal option)		5	1	Ø12 x 339.5mm	96457564	NO		
			6	1	Ø12 x 373.5mm	96457566	NO		
			7	1	Ø12 x 393.5mm	96457567	NO		
			8	1	Ø12 x 427.5mm	96457569	NO		
			9	1	Ø12 x 447.5mm	96457570	NO		
			10	1	Ø12 x 481.5mm	96457571	NO		
			11	1	Ø12 x 501.5mm	96457572	NO		
			12	1	Ø12 x 535.5mm	96457574	NO		
			13	1	Ø12 x 555.5mm	96457575	NO		
			14	1	Ø12 x 589.5mm	96457576	NO		
			15	1	Ø12 x 609.5mm	96457577	NO		
			16	1	Ø12 x 643.5mm	96457579	NO		
			18	1	Ø12 x 697.5mm	96457581	NO		
			20	1	Ø12 x 751.5mm	96457583	NO		
			22	1	Ø12 x 805.5mm	96457585	NO		
			24	1	Ø12 x 859.5mm	96457586	NO		
			26	1	Ø12 x 906.5mm (50Hz.)	96457587	NO		
			29	1	Ø12 x 987.5mm (50Hz.)	96457588	NO		
			32	1	Ø12 x 1068.5mm (50Hz.)	96457589	NO		
			36	1	Ø12 x 1176.5mm (50Hz.)	96457590	NO		
		55	Outer Sleeve		2	1	Ø138 x 44.6mm	96439996	NO
					3	1	Ø138 x 71.6mm	96440028	NO
					4	1	Ø138 x 98.6mm	96440014	NO
					5	1	Ø138 x 125.6mm	96441530	NO
					6	1	Ø138 x 152.6mm	96440015	NO
					7	1	Ø138 x 179.6mm	96441533	NO
					8	1	Ø138 x 206.6mm	96440016	NO
					9	1	Ø138 x 233.6mm	96441536	NO
					10	1	Ø138 x 260.6mm	96440017	NO
					11	1	Ø138 x 287.6mm	96441537	NO
					12	1	Ø138 x 314.6mm	96440018	NO
					13	1	Ø138 x 341.6mm	96441540	NO
					14	1	Ø138 x 368.6mm	96440019	NO
					15	1	Ø138 x 395.6mm	96441541	NO
					16	1	Ø138 x 422.6mm	96440020	NO
					18	1	Ø138 x 476.6mm	96440021	NO
	20			1	Ø138 x 530.6mm	96440022	NO		
	22			1	Ø138 x 584.6mm	96440023	NO		
	24			1	Ø138 x 638.6mm	96439997	NO		
	26			1	Ø138 x 692.6mm (50Hz.)	96440024	NO		
	29			1	Ø138 x 773.6mm (50Hz.)	96440026	NO		
	32			1	Ø138 x 854.6mm (50Hz.)	96440027	NO		
	36			1	Ø138 x 962.6mm (50Hz.)	96439998	NO		
56	Base Plate (Low) for PJE / Flexi-clamp Pos.6				2-36	1	Cast Iron	96438133	NO
	B. P. (High) for Flexi-clamp w/ANSI/DIN/JIS Pos.6		2-36	1	Cast Iron	96438132	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 26.03mm	410143	NO		
64a	Spacing Pipe		3/2-36	^^^^	Ø15.85 x Ø12.85 x 13.0mm	96443611	Yes		
	Spacing Pipe (option for Grafon Pos. 4a)		3/2-36	^^^^	Use with TC Pos.47a, Ø15 x Ø12.7 x 15.0mm	410142	Yes		
64c	Clamp, Splined		3/2-36	1	Ø15 x Ø13.10 x Ø10.9 x 13mm	96439668	Yes		
64d	Spacing Pipe		2-36	^^^^^	Ø15 x Ø13.10 x Ø10.9 x 4.5mm	96440292	Yes		
64e	Spacing Pipe (Low NPSH option only)		2-36	2	Ø15 x Ø13.10 x Ø10.9 x 10.0mm	430022	NO		
64f	Spacing Pipe (Low NPSH option only)		2-36	1	Ø15 x Ø13.10 x Ø10.9 x 7.3mm	400233	NO		
64g	Spacing Pipe (de-staging option only)		2-36	1	Ø15 x Ø13.10 x Ø10.9 x 27.0mm	410062	NO		
65	Neck Ring Retainer		2-36	# stgs	Ø52.5 x Ø36.7 x 5.3mm	96436722	Yes		
66	Lock Washer Set for Shaft		2-36	1	Ø13.5 x Ø8.2 x 2.6mm	96417297	Yes		
66a	Washer for Staybolt		2-36	4	DIN 125A, Ø24 x Ø13 x 2.5mm, Delta Seal	96430377	NO		
67	Lock Nut for Shaft		2-36	1	13mm x M8	001D2061	Yes		
69	Spacing Pipe		2-36	⊖	Ø15.85 x 12.85 x 2.0mm	96440295	NO		
69a	Spacing Pipe (de-staging option only)		2/1	1	Ø15.85 x 12.85 x 18.0mm	400258	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	001D1288	Yes		
			3/2-36	■	FKM, Ø16.3 x 2.4mm	001D2231	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	001D2041	Yes		
			3/2-36	1	FKM, Ø17.86 x 2.62mm	001D2187	Yes		
			3/2-36	1	FFKM, Ø17.86 x 2.62mm	96440281	NO		
			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		

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104	Rotating Seal Ring for 105b Back-to-Back		3/2-36	1	TC, 12mm	980163	NO
	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
	Shaft Seal HUBF (option)		3/2-36	***	TC, Carbon with resin-impregnated, FXM	96481464	Yes
	Shaft Seal HUBG (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 OOUU		3/2-36	1	TC, TC, EPDM	985189	NO
	Shaft Seal/inboard for Back-to-Back OOUV		3/2-36	1	TC, TC, FKM	985190	NO
107	O-ring for Pos. 105b Back-to-Back		3/2-36	1	EPDM, ϕ 11.5 x 4.3mm	00ID2040	Yes
			3/2-36	1	FKM, ϕ 11.5 x 4.3mm	00ID2186	Yes
	O-ring for Pos. 105b Back-to-Back (option)		3/2-36	1	FFKM, ϕ 11.5 x 4.3mm	96440282	NO
	O-ring for Pos. 105b Back-to-Back (option)		3/2-36	1	FXM, ϕ 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, ϕ 21.3 x 3.0mm	00ID1798	Yes
			3/2-36	1	FKM, ϕ 21.2 x 3.0mm	00ID2339	Yes
109b	O-ring for Shaft Seal Pos. 105 (option)		3/2-36	1	FXM, ϕ 22 x 2.75mm	96458111	Yes
	O-ring for Shaft Seal Pos. 105 (option)		3/2-36	1	FFKM, ϕ 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, ϕ 36.0 x ϕ 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:

- ^^^ 2 to 7 stage= # of Stages less 2
- 8 to 12 stage= # of stages less 3
- 13 to 16 stage = # of stages less 4
- 18 to 22 stage = # of stages less 5
- 24 to 26 stage = # of stages less 6
- 29 to 32 stage = # of stages less 7
- 36 stage = # of stages less 8
- Exception to the above: Low NPSH model less 1 additional.
- ^^^^ 2 to 7 stage= use 1
- 8 to 12 stage= use 2
- 13 to 16 stage = use 3
- 18 to 22 stage = use 4
- 24 to 26 stage= use 5
- 29 to 32 stage= use 6
- 36 stage= use 7
- ^^^^^ 1 used only in pumps with the following amount of stages 2, 4, 6, 8, 10, 12, 14, 16, 20, 22, & 24.
- * 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 1. CR(I,N)5-2/1 replace with pos.69a
- # stgs- Use the number of stages in standard models, less one in de-staged 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

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

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Spare Part Kits CRN5

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.	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													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	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	1	1	1	1	1

INBOARD SHAFT SEAL & Gasket KIT, Back to Back OQQE INBOARD SHAFT SEAL & Gasket KIT, Back to Back OQQV (An HQQx 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, $\phi 137.5 \times 3.3\text{mm}$	96438743	3				
	Sleeve O-ring, FKM, $\phi 137.5 \times 3.3\text{mm}$	96438744		3			
38, 100(a)	Drain Plug O-ring, EPDM, $\phi 16.3 \times 2.4\text{mm}$	00ID1288	7				
	Drain Plug O-ring, FKM, $\phi 16.3 \times 2.4\text{mm}$	00ID2231		7			
102	O-ring, EPDM, $\phi 18 \times 2.5\text{mm}$	00ID2041	1				
	O-ring, FKM, $\phi 17.86 \times 2.62\text{mm}$	00ID2187		1			
103	Stationary Seal Ring, SiC, 12mm	980746	1				
104	Rotating Seal Ring, SiC, 12mm	980733	1	1			
107	O-ring, EPDM, $\phi 11.5 \times 4.3\text{mm}$	00ID2040	1				
	O-ring, FKM, $\phi 11.5 \times 4.3\text{mm}$	00ID2186		1			
108	Spring, 12mm	980195	1	1			
109a	O-ring, EPDM, $\phi 21.3 \times 3.0\text{mm}$	00ID1798	1				
	O-ring, FKM, $\phi 21.2 \times 3.0\text{mm}$	00ID2339		1			
111	Driver for pos.104	980192	1	1			
112	Driver for pos.111	980191	1	1			
112a	Driver for pos.112	400203	1	1			
113	Set Screw for pos.112a	00ID7392	2	2			
146	Allen Bolt for pos.147 & 148, 2.5mm x M3 x 5mm	96462639	3	3			

IEC COUPLING KIT		Kit No.	415060		Kit No.	415061		Kit No.	415062		Kit No.	415063		Kit No.	415065	
	$\phi 14/\phi 12$															
	$\phi 19/\phi 12$															
	$\phi 24/\phi 12$															
	$\phi 28/\phi 12$															
	$\phi 38/\phi 12$															
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	4										
	Allen Screw, M10 x 25mm, Delta Seal	00ID7901					4									
10	Shaft Pin, $\phi 5 \times 26\text{mm}$, Stainless	310192	1	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									

NEMA COUPLING KIT		Kit No.	415314		Kit No.	415315		Kit No.	96478700	
	$\phi 15.8/\phi 12$									
	$\phi 28.5/\phi 12$									
	$\phi 34.9/\phi 12$									
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								
10	Shaft Pin, $\phi 5 \times 26\text{mm}$, Stainless	310192	1	1	1					
10a	Coupling Half, 56C, 1/3 - 2HP. $\phi 15.8 / \phi 12$	410108	2							
	Coupling Half, 182/184TC, 3-5HP. $\phi 28.5/\phi 12$	410109		2						
	Coupling Half, 213TC, 7.5-10HP. $\phi 34.9/\phi 12$	96472175				2				

Spare Part Kits (continued)

FLEXI FLANGE KIT FOR SMALL CRI15, 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 ø35 x 2mm, KLINGERSIL C4430	400189	2	

FLEXI FLANGE KIT FOR SMALL CRI15, 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 ø35 x 2mm, KLINGERSIL C4430	400189	2	

FLEXI CLAMP FLANGE KIT FOR SMALL CRI15, 1, 3, & 5 1-1/4" Stainless Flange (Conversion max. allowable operating pressure 232)			EPDM	Kit No. 96480858		
			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		2	
35	Hex Head Bolt, M10 x 60mm, A4, DIN931	96447228	4		4	
36b	Nut, M10, 316SS w/Delta Seal	96438757	4		4	
39b	O-ring, EPDM, ø44.45 x 3.53mm	96407726	2			
	O-ring, FKM, ø44.45 x 3.53mm	96411713			2	
201	Flange, ANSI, DIN, JIS PN40/30K, Stainless	96439492	2		2	
203	Lock Ring, Stainless	96439718	2		2	

FLEXI CLAMP KIT FOR SMALL CRI15, 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		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, ø44.45 x 3.53mm	96407726	2			
	O-ring, FKM, ø44.45 x 3.53mm	96411713			2	

FLEXI CLAMP KIT FOR SMALL CRI15, 1, 3, & 5 1-1/4" Internal Threaded SS Pipe Stub (232 PSI Max.)			EPDM	Kit No. 96480856		
			FKM	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, ø44.45 x 3.53mm	96407726	2			
	O-ring, FKM, ø44.45 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		

FLEXI CLAMP KIT FOR SMALL CRI15, 1, 3, & 5 2" External Threaded SS Pipe Stub (232 PSI Max.)			EPDM	Kit No. 96480852		
			FKM	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	
35a	Nut for Pos. 35b, M8, 304SS	00ID7187	4		4	
39	O-ring, EPDM, ø44.45 x 3.53mm	96407726	2			
	O-ring, FKM, ø44.45 x 3.53mm	96411713			2	

Accessories

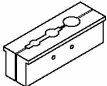
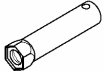
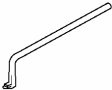

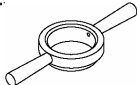
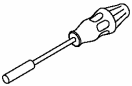
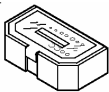

ANSI COMPANION FLANGES FOR SMALL CR 1-1/4" Threaded Stainless, 300 Lb. Class			Kit No. 91129013		
Pos. No.	Description	Material No.	Qty. Included in each Kit		
N/A	Nut, HEX 5/8"-11 UNC, 18-8SS	0ID00164	8		
N/A	Bolt, HEX 5/8" x 2-3/4", UNC 18-8SS	00ID7241	8		
N/A	Flange 1-1/4" Stainless, ANSI, DIN, JIS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

VICTAULIC TYPE COMPANION CONNECTIONS FOR SMALL CRI(N)			EPDM	Kit No. 4013010		
			FKM	Kit No. 0ID00118		
Pos. No.	Description	Material No.	Qty. Included in each Kit			
N/A	Victaulic Type Coupling, 1-1/4", EPDM	0ID17810	2			
N/A	Victaulic Type Coupling, 1-1/4", 77 FKM	0ID00112			2	
N/A	1-1/4" Stainless NPT Nipple	4000011	2		2	

Spare Part Kits • Special Tools **CRN5**

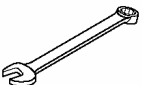
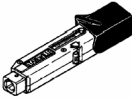
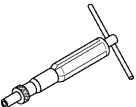




Special Tools

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	



L-CR-SM-033 | 05/04
PRINTED IN USA

Subject to alterations.

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