



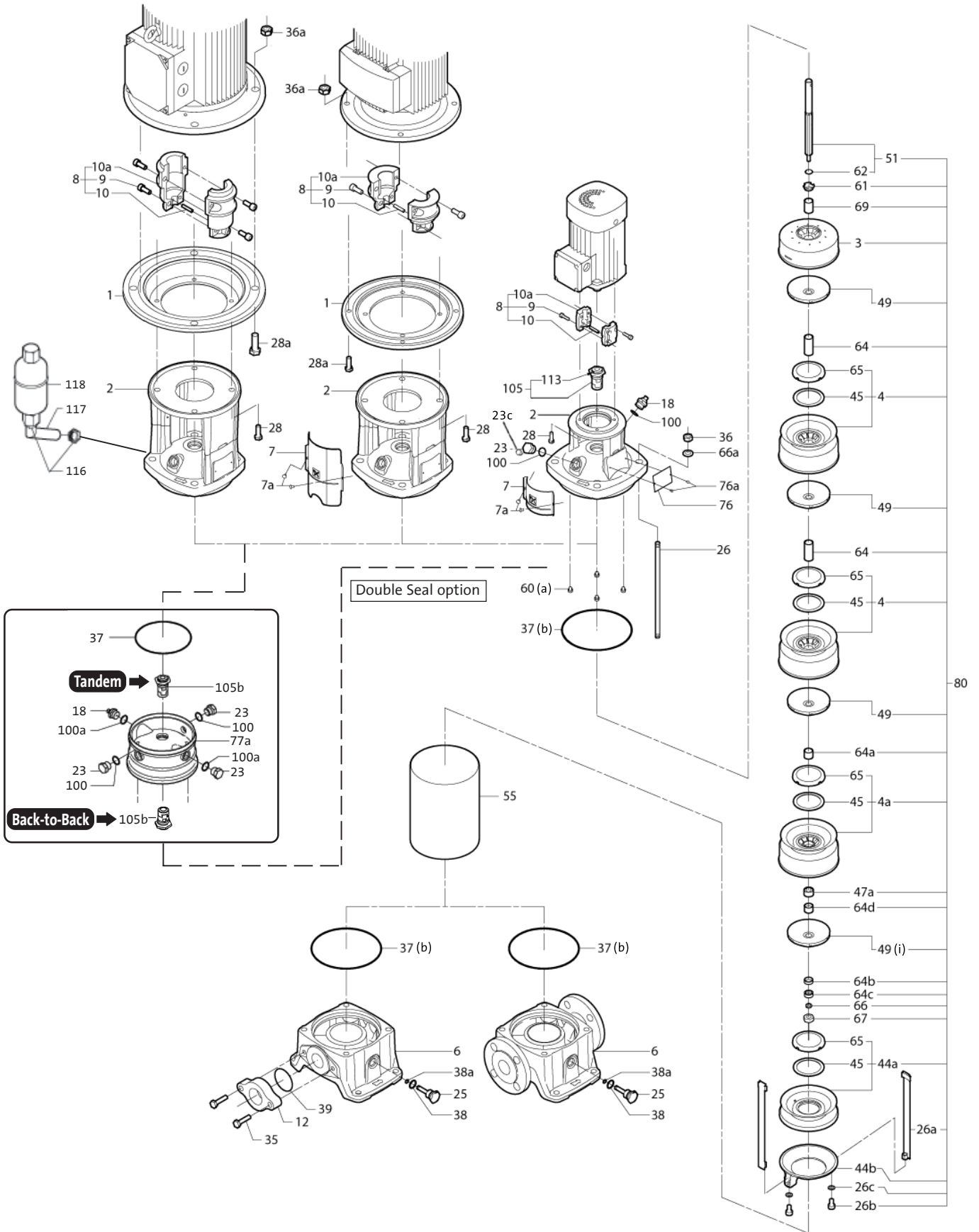
CR10

Parts List & Kits

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Exploded View CR10



Parts List & Kits CR10

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	B.O.M. Ref. No.	Material No.	Included in kits ?
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PARTS LIST

1	Adapter for Motor Stool		8-14 16-18/17 14-22	1 1 1 1	For NEMA, 213/215TC, 7.5 - 10HP For NEMA, F254TC, 15-20HP For IEC, F265, MG132, 5.5 - 7.5kW For IEC, F300, MG160, 8.0 - 18.5kW	96476208 96486329 96486323 96486326		No No No No
2	Motor Stool		2/1-2 3-7 3-7 8-14 8-14 16-18/17 2/1 2-3 4-6 7-12 14-22	1 1 1 1 1 1 1 1 1 1 1	NEMA, 56C, .75 - 2.0HP NEMA, 182TC, low, 3 - 5Hp NEMA, 182TC, high, 3 - 5Hp (option) Add Pos.1 for NEMA 213/215TC, 7.5-10 HP Add Pos.1 NEMA 213/215TC, 7.5-10HP, (high opt.) Add Pos. 1 for NEMA 254/256TC, 15-20 HP NEMA, 284/286TSC, 25 HP IEC, F85, MG 71, .37 - .55 kW IEC, F100, MG 80, .75 - 1.1 kW IEC, F115, MG 90, 1.5 - 2.2 kW IEC, F130, MG 100/112, 3.0 - 4.0 kW Add Pos. 1 for IEC, F265, MG132, 5.5 - 7.5 kW Add Pos. 1 for IEC, F300, MG160, 8.0 - 18.5 kW	96486287 96486305 96486311 96486305 96486311 96486311 96486293 96486263 96486269 96486275 96486281 96486305 96486311		No No No No No No No No No No No No
3	Chamber, Top, Complete with guide vane		2-17	*1	Slotted to accept Strap, pos. 26a	96487783		No
3a	Chamber N, Top, without guide vane		2/1&18/17	*1	Slotted to accept Strap, pos. 26a	96491220		No
3b	Chamber without guide vane		3-22	*1		420015		No
4	Chamber complete with Pos.45 & 65		2/1-22	^^^	PTFE Pos.45	96487846		No
4a	Chamber N Cpl. w/Pos.45 & 65 & Bearing		2/1-22	^^^^	Silicon Carbide Brg, PTFE Pos. 45	96487849		YES
	Chamber N Cpl. w/Pos.45 & 65 & Brg. (option)		2/1-22	^^^^	Graflon Bearing, PTFE Pos. 45	96492496		YES
	Chamber N Cpl. w/Pos.45 & 65 & Brg. (option)		2/1-22	^^^^	Bronze Bearing, PTFE Pos. 45	96492498		YES
4b	Chamber N Cpl. w/Pos.45 & 65, (low NPSH opt.)		3-22	1	PTFE Pos. 45	96505300		No
6	Base		2/1-6 2/1-22 2/1-22	1 1 1	Oval 2.5" (max 232 PSI) Oval 1.5" 50 Hz. (max 232 PSI) JIS, DIN 50, ANSI (max 362 PSI)	96481486 96481483 96481495		No No No
7	Coupling Guard		2/1-3 50Hz 2/1-2 3-14 3-22	2 2 2 2	IEC, F85-F100 NEMA-56C; IEC-F115,130 = 4 to 12 stage NEMA, 182-215TC (low); IEC F115 - 265 to 22 stg. NEMA, 182-215TC (high),254TC-286TSC, IEC F300	96491001 96491002 96490657 96490656		YES YES YES YES
7a	Screw for Coupling Guard		2/1-22	4	Screw comb. slot torx/straight slot 4 x 8mm	96488481		YES
9	Allen Screw		2/1-2 7-12 3-22	4 4 4	M6 x 20mm, Delta Seal M8 x 25mm, Delta Seal use w/pos.10a-480006&8 M10 x 25mm, Delta Seal	001D7899 001D7900 001D7901		YES YES YES
10	Shaft Pin		2/1-22	1	ø5 x 26mm	310192	95061337	YES
10a	Coupling Half (machined set)		2/1-2 3-7 3-7 8-14 8-14 16-18/17	1 1 1 1 1 1	NEMA, 56C, 1/3 - 2HP. ø15.9/ ø16mm NEMA, 182/184TC, 3-5HP ø28.6/ø16mm (std-low) NEMA, 182/184TC, 3-5HP ø28.6/ø16mm (opt-high) NEMA, 213TC, 7.5-10HP. ø34.9/ø16mm (std-low) NEMA, 213TC, 7.5-10HP ø34.9/ø16mm (opt-high)	96516777 96516774 96516009 96516775 96516770		YES YES YES YES YES
	Coupling Half		16-18/17	1	NEMA, 254TC, 15-20HP ø41.2/ø16mm (high)	96516771		YES
			2/1	2	NEMA, 284/286TSC, 25HP. ø41.2/ø16mm	96516771		YES
			2-3	2	IEC, F85, MG71, .37-.55kW. ø14/ø16mm	480002		YES
			2-3	2	IEC, F100, MG80,.75-1.1kW. ø19/ø16mm	480004		YES
			4-6	2	IEC, F115, MG 90, 1.5-2.2kW. ø24/ø16mm	480006		YES
			7-12	2	IEC, F130, MG100/112, 3-4 kW.ø28/ø16mm	480008		YES
	Coupling Half (machined set)		14-22	2	IEC, F265, MG132, 5.5-7.5kW. ø38/ø16mm	96516772		YES
				2	IEC, F300, MG160, 8.0-18.5kW. ø42/ø16mm	96516008		YES
12	Oval Flange		2/1-6 2/1-6	2 2	Painted CI, 2.5" -11.5 NPT (max 232 PSI) Painted CI, 2.0" Option, 11.5 NPT (max 232 PSI)	96493576 96493578		No No
	Oval Flange, 50 Hz. models		2/1-16 2/1-16	2 2	Painted CI, RP 1.5" BSP DIN (max 232 PSI) Painted CI, RP 2.0" Option, BSP DIN (max 232 PSI)	320054 320045		No No
18	Priming/Vent Plug		2/1-22	*	G 1/2A, NV24 with NV9 x M8 stem	405150	95061351	YES
23	Plug		2/1-22	**	G 1/2A, w/1/4" NPT threaded port, NV24	91120659		YES
	Plug (option)		2/1-22	**	G 1/2A, Solid no port, NV24	370025	95061733	YES
23c	Pipe Plug for Pos. 23 & 25 with hollow stem		2/1-22	**	1/4" NPT, SS SQHDD	001D7216		YES
25	Drain Plug without O-rings		2/1-22	1	G 1/2A, NV24 with solid stem	340375	95061431	YES
	Drain/Priming Plug Cpl. w/O-rings, opt. for gauge		2/1-22	1	G 1/2A, NV24 w/NV9 x M8 hollow stem, EPDM	96528436		No
			2/1-22	1	G 1/2A, NV24 w/NV9 x M8 hollow stem, FKM	96528437		No
			2/1-22	1	G 1/2A, NV24 w/NV9 x M8 hollow stem, FXM	96528439		No
			2/1-22	1	G 1/2A, NV24 w/NV9 x M8 hollow stem, FFKM	96528438		No
26	Staybolt		2/1-2 3 4 5 6 7 8 9 10 12 14 16 18/17 20 22	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	M16 x 133mm M16 x 163mm M16 x 193mm M16 x 223mm M16 x 253mm M16 x 283mm M16 x 313mm M16 x 343mm M16 x 373mm M16 x 433mm M16 x 493mm M16 x 553mm M16 x 613mm M16 x 673mm, 50 Hz. M16 x 733mm, 50 Hz.	96491885 96492720 96492721 96492723 96492724 96492725 96492727 96492728 96492729 96492731 96492733 96492735 96492737 96492738 96492740		No No No No No No No No No No No No No No No No

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

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Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	B.O.M. Ref. No.	Material No.	Included in kits ?
PARTS LIST								
26	Staybolt (Back-to-Back & Tandem Seal option)		2/1-2	4	M16 x 223mm	96492723		No
			3	4	M16 x 253mm	96492724		No
			4	4	M16 x 283mm	96492725		No
			5	4	M16 x 313mm	96492727		No
			6	4	M16 x 343mm	96492728		No
			7	4	M16 x 373mm	96492729		No
			8	4	M16 x 403mm	96512258		No
			9	4	M16 x 433mm	96492731		No
			10	4	M16 x 463mm	96512259		No
			12	4	M16 x 523mm	96492734		No
			14	4	M16 x 583mm	96512271		No
			16	4	M16 x 643mm	96512272		No
			18/17	4	M16 x 703mm	96492739		No
			20	4	M16 x 763mm, 50 Hz.	96512142		No
			22	4	M16 x 823mm, 50 Hz.	96512146		No
26a	Strap		2/1-2	2	L* = 78.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487758		No
			3	2	L* = 108.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487760		No
			4	2	L* = 138.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487761		No
			5	2	L* = 168.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487762		No
			6	2	L* = 198.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487764		No
			7	2	L* = 228.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487765		No
			8	2	L* = 258.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487766		No
			9	2	L* = 288.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487768		No
			10	2	L* = 318.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487769		No
			12	2	L* = 378.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487771		No
			14	2	L* = 438.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487773		No
			16	2	L* = 498.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487775		No
			18/17	2	L* = 558.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487777		No
			20: 50 Hz.	2	L* = 618.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487778		No
			22: 50 Hz.	2	L* = 678.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487781		No
26b	Bolt for Pos 26a		2/1-22	2	M8 x 25mm, 316 SS w/Delta Seal	96416603		No
26c	Washer for Pos 26b		2/1-22	2	A4, ϕ 16.0/ ϕ 8.4x1.6mm	00ID3284		No
28	Motor Bolt		2/1-2	4	NEMA, 56C, 1/3 - 2HP. UNC 3/8" x 25mm	00ID1839		No
			3-7	4	NEMA, 182/184TC, 3 - 5HP.UNC1/2" x 25mm	00ID1840		No
			8-14	4	NEMA, 213TC, 7.5 -10HP. JR 1/2" x 1.25" UNC	00ID0185		No
			16-18/17	4	NEMA, 254TC, 15HP. 1/2" x 2.5" UNC	96491112		No
			2/1	4	IEC, F85, MG71, .37-.55kW. M6 x 20mm	00ID8022		No
			2-3	4	IEC, F100, MG80,.75-1.1kW. M6 x 25mm	00ID8023		No
			4-6	4	IEC, F115, MG 90, 1.5-2.2kW. M8 x 20mm	00ID8024		No
			7-12	4	IEC, F130, MG100/112, 3-4 kW. M8 x 25mm	00ID8025		No
			14-22	4	IEC, F265, MG132, 5.5-7.5kW. M12 x 25mm	00ID7915		No
				4	IEC, F300, MG160, 8.0-18.5kW. M12 x 25mm	00ID7915		No
				4	IEC, F265, MG132, 5.5-7.5kW. M12 x 30mm	00ID7904		No
				4	IEC, F300, MG160, 8.0-18.5kW. M16 x 45mm	00ID7905		No
28a	Motor Bolt		14-22	4				No
35	Hexagon Head Screw for 2" Oval Flange		2/1-6	4	M16 x 55mm, Delta Seal	96433032		No
	Hexagon Head Screw for 1.5" Oval Flange, 50 Hz.		2/1/-16	4	M12 x 45mm, Delta Seal	00ID7914		No
36	Staybolt Nut		2/1-22	4	24mm x M16, Delta Seal	00ID7908		No
36a	Nut for motor bolt IEC MG 160 models			4	24mm x M16, Delta Seal	00ID7908		No
37	Sleeve O-ring		2/1-22	◆◆	EPDM, ϕ 170.7 x 3.3mm	96483101		YES
			2/1-22	◆◆	FKM, ϕ 170.7 x 3.3mm	96483102		YES
37b	Sleeve O-ring (option)		2/1-22	◆◆	FXM, ϕ 171.25 x 3.3mm	96483109		YES
	Sleeve O-ring (option)		2/1-22	◆◆	FFKM, ϕ 170.7 x 3.3mm	96483140		YES
38	Drain Plug O-ring		2/1-22	1	EPDM, ϕ 16.3 x 2.4mm	00ID1288		YES
			2/1-22	1	FKM, ϕ 16.3 x 2.4mm	00ID2231		YES
	Drain Plug O-ring (option)		2/1-22	1	FXM, ϕ 16.3 x 2.4mm	96442869		YES
	Drain Plug O-ring (option)		2/1-22	1	FFKM, ϕ 16.3 x 2.4mm	96428162		YES
38a	Drain Plug O-Ring		2/1-22	1	ϕ 5.3 x 2.4mm, EPDM	00ID2142		YES
			2/1-22	1	ϕ 5.3 x 2.4mm, FKM	00ID3945		YES
	Drain Plug O-Ring (option)		2/1-22	1	ϕ 5.3 x 2.4mm, FXM, black	96511292		YES
	Drain Plug O-Ring (option)		2/1-22	1	ϕ 5.3 x 2.4mm, FFKM	96511293		YES
39	O-ring for Oval Flange		2/1-6	2	ϕ 90 x 3mm, EPDM	96496200		YES
			2/1-6	2	ϕ 90 x 3mm, FKM	00ID2856		YES
			2/1-16	2	122mm x ϕ 60/ ϕ 44 x 2mm, Fiber Gasket	420039		YES
44a	Inlet upper with pos. 45 & 65		2/1-22	1		96489070		No
44c	Inlet upper N with pos.45 & 65 (low NPSH option)		2/1-22	1		96489039		No
44b	Inlet lower, machined		2/1-22	1		96496158		No
44d	Spacer ring N for low NPSH pos. 44c		2/1-22	1		96505491		No
45	Neck Ring		2/1-22	# imp.-	ϕ 59.5 x ϕ 44.08 x 1.2mm, PTFE-Acoflon 100	96487401		YES
	Neck Ring (low NPSH option)		2/1-22	1	ϕ 75.8 x ϕ 59.95 x 1.2mm, PTFE-Acoflon 100	96487400		YES
47a	Bearing Ring/Spacer		2/1-22	^^^^	SIC 150, ϕ 23.4 x ϕ 17.6 x ϕ 15.0 x 14mm	96482117		YES
	Brg. Ring/Spacer (option for Grafkon / Brz. 4a)		2/1-22	^^^^	TC, ϕ 21.9 x ϕ 17.6 x ϕ 15.0 x 14mm	330085	95061371	YES
49	Impeller		2/1-22	# stgs-	ϕ 92.9 x ϕ 44.0 x 13.6mm (back-plate 1.0mm)	96487817		No
49i	Impeller N (low NPSH option)		3-22	1	ϕ 104.8 x ϕ 59.85 x 25.4mm (back-plate 1.5mm)	96476527		No
51	Shaft, Complete		2/1-2	1	ϕ 16 x 179.0mm, 431 SS	96489224		No
			3	1	ϕ 16 x 209.0mm, 431 SS	96490794		No
			4	1	ϕ 16 x 239.0mm, 431 SS	96490796		No
			5	1	ϕ 16 x 269.0mm, 431 SS	96490870		No

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PARTS LIST

51	Shaft, Cpl. Continued		6	1	Ø16 x 299.0mm, 431 SS	96490872		No		
			7	1	Ø16 x 329.0mm, 431 SS	96490874		No		
			8	1	Ø16 x 359.0mm, 431 SS	96490878		No		
			9	1	Ø16 x 389.0mm, 431 SS	96490880		No		
			10	1	Ø16 x 419.0mm, 431 SS	96490882		No		
			12	1	Ø16 x 479.0mm, 431 SS	96490886		No		
			14	1	Ø16 x 539.0mm, 431 SS	96490890		No		
			16	1	Ø16 x 599.0mm, 431 SS	96490894		No		
			18/17	1	Ø16 x 659.0mm, 431 SS	96490896		No		
			20	1	Ø16 x 719.0mm, 431 SS, 50 Hz	96490898		No		
			22	1	Ø16 x 779.0mm, 431 SS, 50 Hz	96490913		No		
			Shaft, Cpl. (Back-to-Back & Tandem Seal option)		2/1-2	1	Ø16 x 269.0mm, 329 SS	96507534		No
					3	1	Ø16 x 299.0mm, 329 SS	96507538		No
					4	1	Ø16 x 329.0mm, 329 SS	96507539		No
					5	1	Ø16 x 359.0mm, 329 SS	96507571		No
					6	1	Ø16 x 389.0mm, 329 SS	96507572		No
					7	1	Ø16 x 419.0mm, 329 SS	96507573		No
					8	1	Ø16 x 449.0mm, 329 SS	96507575		No
					9	1	Ø16 x 479.0mm, 329 SS	96507576		No
					10	1	Ø16 x 509.0mm, 329 SS	96507577		No
					12	1	Ø16 x 569.0mm, 329 SS	96507579		No
					14	1	Ø16 x 629.0mm, 329 SS	96507581		No
			16	1	Ø16 x 689.0mm, 329 SS	96507583		No		
			18/17	1	Ø16 x 749.0mm, 329 SS	96507584		No		
			20	1	Ø16 x 809.0mm, 329 SS, 50 Hz	96507585		No		
			22	1	Ø16 x 869.0mm, 329 SS, 50 Hz	96507587		No		
55	Outer Sleeve		2/1-2	1	Ø171.1/ Ø170.7 x 74.0mm x 1.5mm, 304 SS	96485420		No		
			3	1	Ø171.1/ Ø170.7 x 104.0mm x 1.5mm, 304 SS	96489762		No		
			4	1	Ø171.1/ Ø170.7 x 134.0mm x 1.5mm, 304 SS	96489763		No		
			5	1	Ø171.1/ Ø170.7 x 164.0mm x 1.5mm, 304 SS	96489765		No		
			6	1	Ø171.1/ Ø170.7 x 194.0mm x 1.5mm, 304 SS	96489766		No		
			7	1	Ø171.1/ Ø170.7 x 224.0mm x 1.5mm, 304 SS	96489838		No		
			8	1	Ø171.1/ Ø170.7 x 254.0mm x 1.5mm, 304 SS	96489768		No		
			9	1	Ø171.1/ Ø170.7 x 284.0mm x 1.5mm, 304 SS	96489769		No		
			10	1	Ø171.1/ Ø170.7 x 314.0mm x 1.5mm, 304 SS	96489770		No		
			12	1	Ø171.1/ Ø170.7 x 374.0mm x 2.0mm, 316 SS	96489829		No		
			14	1	Ø171.1/ Ø170.7 x 434.0mm x 2.0mm, 316 SS	96489830		No		
			16	1	Ø171.1/ Ø170.7 x 494.0mm x 2.0mm, 316 SS	96489832		No		
			18/17	1	Ø171.1/ Ø170.7 x 554.0mm x 2.0mm, 316 SS	96489833		No		
			20	1	Ø171.1/ Ø170.7 x 614.0mm x 2.0mm, 316 SS, 50Hz	96489834		No		
	22	1	Ø171.1/ Ø170.7 x 674.0mm x 2.0mm, 316 SS, 50Hz	96489859		No				
60	Stack Compression Spring		2/1-22	4	Ø11.0 x Ø7.0 x 15.5mm, EPDM	96503070		YES		
			2/1-22	4	Ø11.0 x Ø7.0 x 15.5mm, FKM	96503072		YES		
60a	Stack Compression Spring (option)		2/1-22	4	Ø11.0 x Ø7.0 x 15.5mm, PTFE	96503071		YES		
61	Stop spacer		2/1-22	1	Ø29.0 x Ø18.4 x Ø15.0 x 9.5 x 2mm	330072	95061584	YES		
62	Stop ring		2/1-22	1	Ø16.6 x Ø15.0 x 1.6mm	330057		YES		
64	Spacing Pipe		2/1-22	^^^	Ø21.5 x Ø17.5 x 29.05mm	331404	95061499	No		
64a	Spacing Pipe		2/1&18/17	^^^^	Ø21.5 x Ø17.5 x 9.0mm	96495333		YES		
64b	Spacing Pipe (Low NPSH option only)		2/1&18/17	2	Ø21.5 x Ø17.5 x 10.05mm	331402	95061472	No		
64c	Clamp, Splined		2/1-22	1	Ø21.5 x Ø17.6 x Ø15.0 x 12.7mm	96496311		YES		
64d	Spacing Pipe		2/1-22	^^^^	Ø21.5 x Ø17.5 x 6.0mm	331412		No		
64e	Spacing Pipe (Low NPSH option only)		2/1-22	1	Ø21.5 x Ø17.5 x 38.0mm	331406	95061629	No		
64g	Spacing Pipe (de-staging 2 impellers option only)		3-22	1 per de-stg.	Ø21.5 x Ø17.5 x 30.0mm (use with 3b only)	331410		No		
65	Neck Ring Retainer N		2/1-22	# stgs-	Ø61.9 x Ø47.2 x 4.7mm	96487285		YES		
	Neck Ring Retainer N (Low NPSH option)		2/1-22	1	Ø78.8 x Ø61.5 x 6.7mm	330059		No		
66	Lock Washer Set for Shaft		2/1-22	1	Ø13.5 x Ø8.2 x 2.6mm	96417297		YES		
66a	Washer for Staybolt		2/1-22	4	DIN 125A, Ø30 x Ø17 x 2.5mm, Delta Seal	96430378		No		
67	Lock Nut for Shaft		2/1-22	1	13mm x M8	96496488		YES		
69	Spacing Pipe		2/1-22	⊖	Ø21.5 x Ø17.5 x 18.0mm	96491536		No		
69a	Spacing Pipe (de-staging 1 impeller option only)		2/1&18/17	1	Ø21.5 x Ø17.5 x 19.0mm (use with 3a only)	331409	95062143	No		
76	Nameplate		2/1-22	1	304SS, 60 x 45mm	96563333		No		
76a	Rivet for Nameplate		2/1-22	2	304SS, Ø3 x 5mm	96022882		No		
77a	Pump Head Cover for Tandem Seal		2/1-22	1	Cast Stainless	96505487		No		
	Pump Head Cover for Back-to-Back		2/1-22	1	Cast Stainless	96505488		No		
100	Priming/Vent Plug O-ring		2/1-22	■	EPDM, Ø16.3 x 2.4mm	00ID1288		YES		
			2/1-22	■	FKM, Ø16.3 x 2.4mm	00ID2231		YES		
100a	Priming/Vent Plug O-ring (option)		2/1-22	■	FFKM, Ø16.3 x 2.4mm	96428162		YES		
	Priming/Vent Plug O-ring (option)		2/1-22	■	FXM, Ø16.3 x 2.4mm	96442869		YES		
105(b)	Shaft Seal HQBE		2/1-22	***	SiC, Carbon with resin-impregnated, EPDM	96484076		YES		
	Shaft Seal HQBV		2/1-22	***	SiC, Carbon with resin-impregnated, FKM	96484077		YES		
	Shaft Seal HQQE		2/1-22	***	SiC, SiC, EPDM	96484071		YES		
	Shaft Seal HQQV		2/1-22	***	SiC, SiC, FKM	96484072		YES		
	Shaft Seal HQQF (option)		2/1-22	***	SiC, SiC, FXM	96484075		YES		
	Shaft Seal HQQK (option)		2/1-22	***	SiC, SiC, FFKM	96484074		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.

Parts List & Kits CR10

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 HUBE		2/1-22	***	TC, Carbon with resin-impregnated, EPDM	96483952		YES
	Shaft Seal HUBV		2/1-22	***	TC, Carbon with resin-impregnated, FKM	96483964		YES
	Shaft Seal HUBF (option)		2/1-22	***	TC, Carbon with resin-impregnated, FXM	96483966		YES
	Shaft Seal HUBK (option)		2/1-22	***	TC, Carbon with resin-impregnated, FFKM	96483965		YES
	Shaft Seal HUUE		2/1-22	***	TC, TC, EPDM	96483967		YES
	Shaft Seal HUUV		2/1-22	***	TC, TC, FKM	96483968		YES
	Shaft Seal HUUF (option)		2/1-22	***	TC, TC, FXM	96484070		YES
	Shaft Seal HUUK (option)		2/1-22	***	TC, TC, FFKM	96483969		YES
116	Counter Nut for Pipe 117		2/1-22	2	NV24, internal G1/2, 316SS	96506709		YES
117	Air Vent Pipe for 118		2/1-14	1	G1/2, 316SS, 56C-213TC .33-10HP; .37 to 7.5 kW	330272		YES
			16-18/17	1	G1/2, 254TC - 286TSC 15-25HP., 11.0 to 18.5kW	96521537		YES
118	Air Vent		2/1-22	1	Air vent type 1511-AV - 5/6430	96427483		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:

The first number is total number of stages.
The second number behind the slash (/) equals the number of impellers.

Example: a CR10-2/1 has 2 chambers and 1 impeller (de-staged by 1).

* 1 2 to 16 and 18 to 22 stage use position 3
2 /1 and 18/17 stage use position 3a
De-staging by two impellers use one 3a and one 3b

^^^ 2/1 and 2 stage use 0
3 to 8 stage = # of stages less 2
9 to 14 stage = # of stages less 3
16 to 22 stage = # of stages less 4
Exception to the above: low NPSH models
4/2 and 4/3 stage use 0
5/4 to 8/7 stage = # of stages less 4
9/8 to 16/15 stage = # of stages less 5
18/16 to 22/21 stage = # of stages less 6
De-staging by two impellers use 1 less than stated above

^^^^ 2/1 to 8 stage = use 1
9 to 14 stage = use 2
16 to 22 stage = use 3
Exception to the above: low NPSH models
16/15 stage = use 2
18 stage and up= use 3

* Standard use 1. Back-to-Back or Tandem pump version use 2

** Standard use 1. Back-to-Back or Tandem pump version use 2

*** Standard use 1. Back-to-Back or Tandem pump version use 2

⊖ Standard use 1. CR(I,N)10-2/1 and 10-18/17 replace with pos. 69a

stgs- Use the number of stages in standard models, less one in de-staged and low NPSH models.

imp.- 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.

L* Is a tip-to-tip length which includes the bends for slot engagement. Bottom tip to bend is 4.5mm shorter than the tip to tip value.

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
IEC	.....	International Electro-technical Commission (European standards)
M	.....	International standard thread size designation (thread diameter in mm)
mm	.....	Millimeter
MG	.....	Identifies Grundfos motor type/size
N	.....	Stamp code for 316 SS or similar
NBR	.....	Buna - N (also known as Nitrile) – an elastic substance similar to rubber
NEMA	.....	National Electrical Manufacturers Association
NPSH	.....	Net Positive Suction Head
PTFE	.....	Teflon
SIC	.....	Silicon Carbide
SS	.....	Stainless Steel
TC	.....	Tungsten Carbide
UNC	.....	Unified National Coarse – a standard for threads on bolts

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.

CR10 N10 SIC Bearing					
WEAR PARTS KIT 1-8					
Kit No. 96511889					
WEAR PARTS KIT 9-14					
Kit No. 96511922					
WEAR PARTS KIT 15-22					
Kit No. 96511925					
Pos. No.	Description	Material No.	Qty. Included in each Kit		
4a	Chamber N Cpl. w/ Pos.45 & 65 & SIC Bearing	96487849	1	2	3
26b	Bolt for strap, M8 x 25mm, 316 SS w/ Delta Seal	96416603	2	2	2
26c	Washer for strap, A4, ø16.0/ø8.4x1.6mm	00ID3284	2	2	2
45	Neck Ring, ø59.5 x ø44.08 x 1.2mm, PTFE-Acoflon 100	96487401	7	12	19
47a	Bearing Ring/ Spacer, SIC 150, ø23.4 x 14mm	96482117	1	2	3
61	Stop Spacer, ø29.0 x ø18.4 x ø17.6 x ø15.0 x 9.5 x 2mm	330072	1	1	1
62	Stop Ring, ø16.6 x ø15.0 x 1.6mm	330057	1	1	1
64a	Spacing Pipe, ø21.5 x ø17.5 x 9.0mm	96495333	1	2	3
64c	Clamp, Splined, ø21.5 x ø17.6 x ø15.0 x 12.7mm	96496311	1	1	1
64d	Spacing Pipe, ø21.5 x ø17.5 x 6.0mm	331412	1	2	3
65	Neck Ring Retainer, N, ø61.9 x ø47.2 x 4.7mm	96487285	7	12	19
66	Lock Washer Set of 2, ø13.5 x ø8.2 x 2.6mm	96417297	1	1	1
67	Lock Nut, 13mm x M8	96496488	1	1	1

STACK KITS (SIC) Pos.80	
Model	Material No.
CR10-2/1	96508403
CR10-2	96508404
CR10-3	96508405
CR10-4	96508406
CR10-5	96508407
CR10-6	96508408
CR10-7	96508409
CR10-8	96508410
CR10-9	96508411
CR10-10	96508412
CR10-12	96508413
CR10-14	96508414
CR10-16	96508415
CR10-18/17	96529403
*** CR10-18	96508416
*** CR10-20	96508417
*** CR10-22	96508418

***For 50 Hz operation only.

CR10 N10 Graflon Bearing					
WEAR PARTS KIT 1-8					
Kit No. 96511921					
WEAR PARTS KIT 9-14					
Kit No. 96511924					
WEAR PARTS KIT 15-22					
Kit No. 96511927					
Pos. No.	Description	Material No.	Qty. Included in each Kit		
4a	Chamber N Cpl. w/ Pos.45 & 65 & Graflon Bearing	96492496	1	2	3
26b	Bolt for strap, M8 x 25mm, 316 SS w/ Delta Seal	96416603	2	2	2
26c	Washer for strap, A4, ø16.0/ø8.4x1.6mm	00ID3284	2	2	2
45	Neck Ring, ø59.5 x ø44.08 x 1.2mm, PTFE-Acoflon 100	96487401	7	12	19
47a	Bearing Ring/ Spacer, TC 150, ø21.9 x 14mm	330085	1	2	3
61	Stop Spacer, ø29.0 x ø18.4 x ø17.6 x ø15.0 x 9.5 x 2mm	330072	1	1	1
62	Stop Ring, ø16.6 x ø15.0 x 1.6mm	330057	1	1	1
64a	Spacing Pipe, ø21.5 x ø17.5 x 9.0mm	96495333	1	2	3
64c	Clamp, Splined, ø21.5 x ø17.6 x ø15.0 x 12.7mm	96496311	1	1	1
64d	Spacing Pipe, ø21.5 x ø17.5 x 6.0mm	331412	1	2	3
65	Neck Ring Retainer, N, ø61.9 x ø47.2 x 4.7mm	96487285	7	12	19
66	Lock Washer Set of 2, ø13.5 x ø8.2 x 2.6mm	96417297	1	1	1
67	Lock Nut, 13mm x M8	96496488	1	1	1

CR10 J10 Bronze Bearing					
WEAR PARTS KIT 1-8					
Kit No. 96511920					
WEAR PARTS KIT 9-14					
Kit No. 96511923					
WEAR PARTS KIT 15-22					
Kit No. 96511926					
Pos. No.	Description	Material No.	Qty. Included in each Kit		
4a	Chamber N Cpl. w/ Pos.45 & 65 & Bronze Bearing	96492498	1	2	3
26b	Bolt for strap, M8 x 25mm, 316 SS w/ Delta Seal	96416603	2	2	2
26c	Washer for strap, A4, ø16.0/ø8.4x1.6mm	00ID3284	2	2	2
45	Neck Ring, ø59.5 x ø44.08 x 1.2mm, PTFE-Acoflon 100	96487401	7	12	19
47a	Bearing Ring/ Spacer, TC 150, ø21.9 x 14mm	330085	1	2	3
61	Stop Spacer, ø29.0 x ø18.4 x ø17.6 x ø15.0 x 9.5 x 2mm	330072	1	1	1
62	Stop Ring, ø16.6 x ø15.0 x 1.6mm	330057	1	1	1
64a	Spacing Pipe, ø21.5 x ø17.5 x 9.0mm	96495333	1	2	3
64c	Clamp, Splined, ø21.5 x ø17.6 x ø15.0 x 12.7mm	96496311	1	1	1
64d	Spacing Pipe, ø21.5 x ø17.5 x 6.0mm	331412	1	2	3
65	Neck Ring Retainer, N, ø61.9 x ø47.2 x 4.7mm	96487285	7	12	19
66	Lock Washer Set of 2, ø13.5 x ø8.2 x 2.6mm	96417297	1	1	1
67	Lock Nut, 13mm x M8	96496488	1	1	1

GASKET KIT (EPDM)								
Kit No. 96509609								
GASKET KIT (FKM)								
Kit No. 96509610								
GASKET KIT (FKM)								
Kit No. 96534871								
GASKET KIT (FFKM)								
Kit No. 96533374								
GASKET KIT (EPDM)-Double Seal option.								
Kit No. 96525433								
GASKET KIT (FKM)-Double Seal option.								
Kit No. 96525434								
GASKET KIT (FFKM/EPDM)-Double Seal option.								
Kit No. 96525435								
GASKET KIT (FFKM/FKM)-Double Seal option.								
Kit No. 96525436								
Pos. No.	Description	Material No.	Qty. Included in each Kit					
37	Sieve O-ring, EPDM (WRC NSF), ø170.7 x 3.3mm	96483101	2		3		1	
	Sieve O-ring, FKM, ø170.7 x 3.3mm	96483102		2		3		1
37b	Sieve O-ring, FKM, ø171.25 x 3.3mm	96483109		2				1
	Sieve O-ring, FFKM, ø170.7 x 3.3mm	96483140			2		2	
38, 100(a,b)	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		4
	Drain Plug O-ring, FKM, ø16.3 x 2.4mm	96442869			3			
	Drain Plug O-ring, FFKM, ø16.3 x 2.4mm	96428162			3		3	
38a	Drain Plug O-ring, EPDM, ø5.3 x 2.4mm	00ID2142	1		1			
	Drain Plug O-ring, FKM, ø5.3 x 2.4mm	00ID3945				1		
	Drain Plug O-ring, FKM, ø5.3 x 2.4mm	96511292		1				
	Drain Plug O-ring, FFKM, ø5.3 x 2.4mm	96511293			1		1	1
39	Flange O-ring, EPDM, ø90 x 3mm	96496200	2		2			
	Flange O-ring, FKM, ø90 x 3mm	00ID2856		2		2		
	Flange gasket, Fiber, 122mm x ø60 x ø44 x 2mm	420039	2	2	2	2	2	2
	Flange gasket, Fiber, ø102 x ø65 x 2mm	330035	2	2	2	2	2	2
	Flange gasket, Fiber, ø92 x ø49 x 2mm	00ID2582	2	2	2	2	2	2
60	Stack Compression Spring, EPDM, ø11.0xø7.0x15.5mm	96503070	4		4			
	Stack Compression Spring, FKM, ø11.0xø7.0x15.5mm	96503072		4		4		
	Stack Compression Spring, PTFE, ø11.0xø7.0x15.5mm	96503071			4	4	4	4

Spare Part Kits CR10

SPARE PART KITS (Continued)

HQxx SHAFT SEAL KIT, BALANCED CARTRIDGE (Maximum allowed working PSI is 435) (Tandem Seal option Pumps require 2 of each Seal Kit)		Kit No. 96511848	Kit No. 96511849	Kit No. 96511844	Kit No. 96511847	Kit No. 96511846	Kit No. 96511845
Pos. No.	Description	Material No.	Qty. Included in each Kit				
105	HQBE	96484076*	1				
	HQBV	96484077*		1			
	HQQE	96484071*			1		
	HQQF	96484075*				1	
	HQQK	96484074*					1
	HQQV	96484072*					1
N/A	Grinding Device Tool for Emery Cloth	370711	1	1	1	1	1
N/A	Emery Cloth	370712	1	1	1	1	1

* Seal material number includes the Adjusting fork 96483950.

HUxx SHAFT SEAL KIT, BALANCED CARTRIDGE (Maximum allowed working PSI is 435) (Tandem Seal option Pumps require 2 of each Seal Kit)		Kit No. 96511836	Kit No. 96511839	Kit No. 96511838	Kit No. 96511837	Kit No. 96511840	Kit No. 96511843	Kit No. 96511842	Kit No. 96511841
Pos. No.	Description	Material No.	Qty. Included in each Kit						
105	HUBE	96483952*	1						
	HUBF	96483966*		1					
	HUBK	96483965*			1				
	HUBV	96483964*				1			
	HUUE	96483967*					1		
	HUUF	96484070*						1	
	HUUK	96483969*							1
	HUUV	96483968*							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

* Seal material number includes the Adjusting fork 96483950.

IEC COUPLING KIT		Kit No. 96511315	Kit No. 96511317	Kit No. 96511319	Kit No. 96511350	Kit No. 96511351	Kit No. 96511352
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	4	
	Allen Screw, M10 x 25mm, Delta Seal	00ID7901					4
10	Shaft Pin, ø5 x 26mm, Stainless	310192	1	1	1	1	1
10a	Coupling Half, F85, MG71, 37-55kW, ø14/ø16	480002	2				
	Coupling Half, F100, MG80, 75-1.1kW, ø19/ø16	480004		2			
	Coupling Half, F115, MG90, 1.5-2.2kW, ø24/ø16	480006			2		
	Coupling Half, F130, MG100/112, 3.0-4.0 kW, ø28/ø16	480008				2	
	Coupling mach. set, F265, MG132, 5.5-7.5kW, ø38/ø16	96516772					1
	Coupling mach. set, F300 MG160, 11.0-18.5kW, ø42/ø16	96516008					1
N/A	Adjusting Fork	96483950	1	1	1	1	1

NEMA COUPLING KIT		Kit No. 96511353	Kit No. 96511354	Kit No. 96753660	Kit No. 96511355	Kit No. 96753661	Kit No. 96511356
Pos. No.	Description	Material No.	Qty. Included in each Kit				
9	Allen Screw, M6 x 20mm, Delta Seal	00ID7899	4				
	Allen Screw, M10 x 25mm, Delta Seal	00ID7901		4			4
10	Shaft Pin, ø5 x 26mm, Stainless	310192	1	1	1	1	1
10a	Coupling Half set, 56C, 1/3 - 2HP, ø15.8 / ø16	96516777	1				
	Cplg. Half set, 182/184TC, 3-5HP, std.-low, ø28.5/ø16	96516774		1			
	Cplg. Half set, 182/184TC, 3-5HP, opt.-high, ø28.5/ø16	96516009			1		
	Cplg. Half set, 213TC, 7.5-10HP, std.-low, ø34.9/ø16	96472175				1	
	Cplg. Half set, 213TC, 7.5-10HP, opt.-high, ø34.9/ø16	96516770					1
	Cplg. Half set, 254TC-284/286TSC, 15-25HP, ø41.2/ø16	96516771					1
N/A	Adjusting Fork	96483950	1	1	1	1	1

COUPLING GUARD KIT		Kit No. 96509611	Kit No. 96509612	Kit No. 96509613	Kit No. 96509614	
Pos. No.	Description	Material No.	Qty. Included in each Kit			
7	Coupling Guard, W=127mm x H=70mm	96491001	2			
	Coupling Guard, W=127mm x H=90.5mm	96491002		2		
	Coupling Guard, W=157mm x H=125mm	96490657			2	
	Coupling Guard, W=157mm x H=171mm	96490656				2
7a	Screw comb.slot torx/straight slot 4 x 8mm	96488481	4	4	4	4

SPARE PART KITS (Continued)

PLUG KIT		Kit No.	96511313	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
18	Priming/Vent Plug, G 1/2A, NV24 with NV9 x M8 stem	405150	1	
23	G 1/2A, w/ 1/4" NPT threaded port, NV24	91120659	1	
23c	1/4" NPT,SSQHHD	00ID7216	1	
25	Drain Plug-solid stem, without O-rings, G 1/2A, NV24	340375	1	
38	O-ring, EPDM, Ø16.3 x 2.4mm	00ID1288	1	
	O-ring, FKM, Ø16.3 x 2.4mm	00ID2231	1	
38a	Drain Plug O-ring, EPDM, ø5.3 x 2.4mm	00ID2142	1	
	Drain Plug O-ring, FKM, ø5.3 x 2.4mm	00ID3945	1	
100	O-ring, EPDM, Ø16.3 x 2.4mm	00ID1288	2	
	O-ring, FKM, Ø16.3 x 2.4mm	00ID2231	2	

Air Vent Kit		Kit No.	91136564	
56C to 213TC.33-10HP; .37 to 7.5 kW		Kit No.	91136565	
254TC to 286TSC15-25HP; 11.0 to 18.5kW		Kit No.	91136565	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
116	Counter Nut for Pipe 117, G1/2	96506709	2	2
117	Air Vent Pipe for 118, G1/2, 150x90	330272	1	
	Air Vent Pipe for 118, G1/2, 185x90	96521537		1
118	Air vent type 1511-AV - 5/6430	96427483	1	1

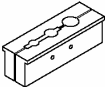
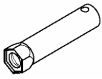

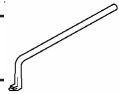
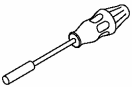
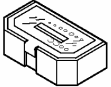


ACCESSORIES

ANSI COMPANION FLANGES FOR MEDIUM CR		Kit No.	335021	
2" Threaded Cast Iron, 250 Lb. Class		Kit No.	335021	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
N/A	Nut, HEX 5/8"-11 UNC, Grade 2	00ID1510	16	
N/A	Plain Bolt, 5/8" -11 x 3", Grade 2	00ID1921	16	
N/A	Flange, Cast Iron, 2" NPT	00ID2743	2	
N/A	Gasket - Flange, 2", 250#, Cut Ring	00ID2747	2	

Spare Part Kits • Special Tools **CR10**

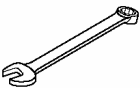
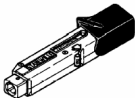
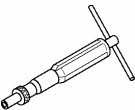




SPECIAL TOOLS

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.	
00SV2107	Tubular Box Spanner for Shaft Seal 41.0 mm Used to install and remove the shaft seal. Fits a 1/2" drive ratchet.	
00SV2101	Ring Insert Tool for Shaft Seal + Square 41 mm x 1/2" drive	
00SV0239	Puller for Neck Ring Used to remove the Neck Ring from Chamber.	
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"	
00SV2127	Bearing Removal Punch	

STANDARD TOOLS

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

Mat. No.	Description and Use	
00SV0083 00SV0055 00SV0054 00SV0122	Wrenches Used to tighten various nuts. NV 10 mm for M6 NV 13 mm for M8 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 00SV0401	Ratchet Spanner for all Adapters 9 mm x 12 mm, 1/2" 14 mm x 18 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 00SV0271 00SV0524	Ring Spanner NV 10 mm, 9 x 12, for M6 NV 13 mm, 9 x 12, for M8 NV 19 mm, 9 x 12, for M12 NV 24 mm, 14 x 18, for M16	
00SV2013 00SV0267	Socket Spanner NV 13 mm for M8, 1/2" drv. NV 19 mm for M12, 1/2" drv.	

BE > THINK > INNOVATE >

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



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