



CRN20-H

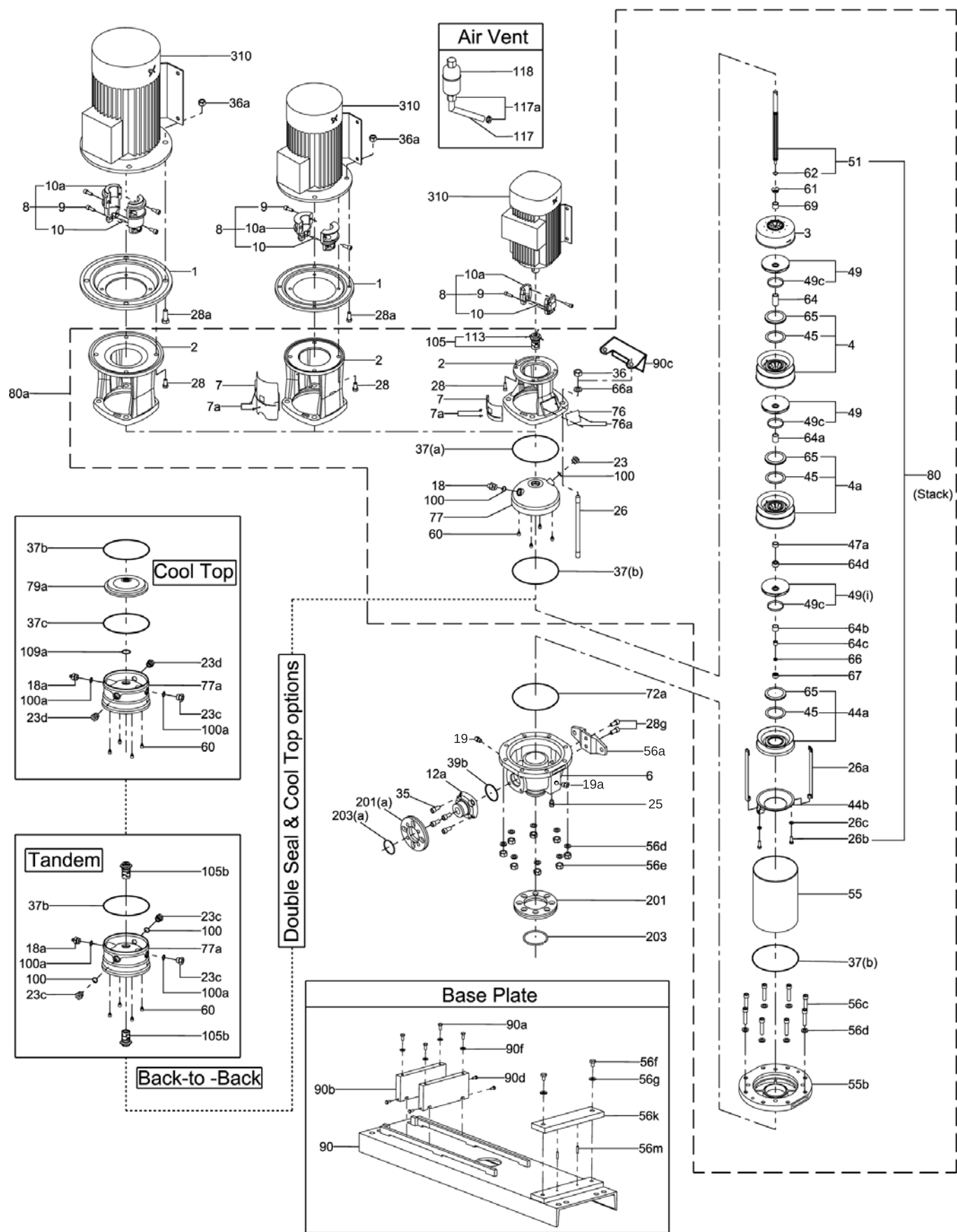
Parts List & Kits

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Exploded View CRN20-H



TM047923

Parts List & Kits CRN20-H

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		3-4 5-8	1 1	For NEMA, 213/215TC, 7.5 - 10HP For NEMA, F254TC, 15-20HP	96476208 96486329		No No
2	Motor Stool Cat. Cast Iron, without insert Pos. 77		2/1-3 3-4 5-8 10	1 1 1 1	NEMA, 56C, .75 - 2.0HP NEMA, 182TC, 3 - 5HP (High) Add Pos.1 NEMA 213/215TC, 7.5-10HP (High) Add Pos. 1 for NEMA 254/256TC, 15-20HP	96486290 96486314 96486314 96486314		No No No No
	Motor Stool Stainless without Pos. 77		2/1-3 3-4 5-8 10	1 1 1 1	NEMA, 284/286TSC, 25HP NEMA, 56C, .75 - 2.0HP NEMA, 182TC, 3 - 5HP (High) Add Pos.1 NEMA 213/215TC, 7.5-10HP (High)	96486296 96505862 96505860 96505860		No No No No
3	Chamber N, Top, Complete with guide vane		2-17	*1	Slotted to accept Strap, Pos. 26a	96487787		No
3a	Chamber N, Top, without guide vane		2/1	*1	Slotted to accept Strap, Pos. 26a	96491222		No
3b	Chamber N without guide vane		3-17	*1		330060	96547342	No
4	Chamber N complete w/guide vane & Pos. 45 & 65		3-17	^^^	PTFE Pos. 45	96475766		No
4a	Chamber N Cpl. w/Pos. 45 & 65 & Bearing		2/1-17	^^^^	Silicon Carbide Brg, PTFE Pos. 45	96747343		Yes
	Chamber N Cpl. w/Pos. 45 & 65 & Brg. (option)		2/1-17	^^^^	Graflon Bearing, PTFE Pos. 45	96492510		Yes
	Chamber N Cpl. w/Pos. 45 & 65 & Brg. (option)		2/1-17	^^^^	Bronze Bearing, PTFE Pos. 45	96492512		Yes
6	Volute, suction / discharge base		2/1-5 2/1-17	1 1	GA, 1.5" suction (OD=76mm), 4 hole dis. adapter G05/G22, 2" suction (OD=90mm) 4 hole dis.adapter	95922058 95922057		No No
	Volute, option larger suction & discharge		2/1-17	1	GB&C/G10/G50/G60, 3" suc. (OD=120), 6 hole dis. Adap.	95922062		No
7	Coupling Guard			2	NEMA-56C	96491002		YES
7a	Screw for Coupling Guard		2/1-17	2	NEMA, 182-215TC (High), 254TC-286TSC	96490656		YES
9	Allen Screw		2/1-17	4	Screw comb. slot torx/straight slot 4 x 8mm	96488481		YES
10	Shaft Pin		2/1-17	4	M6 x 20mm, Delta Tone/Seal	001D7899		YES
10a	Coupling Half (machined set)		2/1-17	1	M10 x 25mm, Delta Tone/Seal	001D7901	95061337	YES
				1	ø5 x 26mm	310192		YES
				1	NEMA, 56C, 1/3 - 2HP. ø15.9/ø16mm	96516777		YES
			2/1-2	1	NEMA, 182/184TC, 3-5HP. ø28.6/ø16mm (High)	96516009		YES
			3-4	1	NEMA, 213TC, 7.5-10HP. ø34.9/ø16mm (High)	96516770		YES
			5-8	1	NEMA, 254TC, 15-20HP. ø41.2/ø16mm (High)	96516771		YES
			10	1	NEMA, 284/286TSC, 25HP. ø41.2/ø16mm	96516771		YES
12a	Discharge Adapter		2/1-17 2/1-17 2/1-17	1 1 1	GA, 4 hole flange, OD=55mm, ID= 26mm (1.0"), L=60mm G05, 4 hole flange, OD=55mm, ID= 26mm (1.0"), L=111mm G22, 4 hole flange, OD=90mm, ID= 50mm (2"), L=85mm	95922070 95922072 95922097		No No No
	Discharge Adp. option larger suc./dis. & press		2/1-17 2/1-17 2/1-17 2/1-17 2/1-17 2/1-17 2/1-17 2/1-17 2/1-17 2/1-17	1 1 1 1 1 1 1 1 1 1	G8, 6 hole flange, OD=76mm, ID= 49mm (1.5"), L=55mm GC, 6 hole flange, OD=90mm, ID= 49mm (2"), L=55mm G50, 6 hole flange, OD=76mm, ID= 41mm (1.5"), L=106mm G10, 6 hole flange, OD=90mm, ID= 50mm (2"), L=110mm G60, 6 hole flange, OD=90mm, ID= 50mm (2"), L=132mm G20, 6 hole flange, OD=76mm, ID= 40mm (1.5"), L=156mm G30, 6 hole flange, OD=90mm, ID= 50mm (2"), L=182mm G70/33, 6 hole flg. OD=119.96mm, ID=80mm (3"), L=120mm	95922084 95922085 95922087 95922089 95922091 95922093 95922095 95922099		No No No No No No No No
18(a)	Priming/Vent Plug		2/1-17	*	G 1/2A, NV24 with NV9 x M8 stem	405150	95061351	YES
19	(Suction) Pressure tap plug		2/1-17	1	1/4" NPT, SS SQHD	001D7216		No
19a	(Discharge) Pressure tap plug		2/1-17	1	1/4" NPT, SS SQHD	001D7216		No
23, 23c	Plug		2/1-17	*	G 1/2A, NV24, solid	370025	95061733	No
23d	Plug, Vented for Pos. 77a Cool Top® option only		2/1-17	2	G 1/2A, NV24, Vented	96510323		No
25	Drain plug		2/1-17	1	1/4" NPT, SS SQHD	001D7216		No
26	Staybolt		2/1-2 3 4 5 6 7 8 9 10	4 4 4 4 4 4 4 4 4	M16 x 151mm M16 x 196mm M16 x 241mm M16 x 282mm M16 x 331mm M16 x 377mm M16 x 422mm M16 x 465mm M16 x 514mm	97683353 97683355 97683359 290231 97683363 97683365 290233 97683370 97683372		No No No No No No No No No
			12 14 17	4 4 4	M16 x 597mm, 4 pole & 50 Hz. M16 x 689mm, 4 pole & 50 Hz. M16 x 826mm, 4 pole & 50 Hz.	380245 380246 97683387		No No No
	Staybolt (Back-to-Back & Tandem Seal option)		2/1-2 3 4 5 6 7 8 9 10	4 4 4 4 4 4 4 4 4	M16 x 241mm M16 x 282mm M16 x 331mm M16 x 377mm M16 x 417mm M16 x 465mm M16 x 514mm M16 x 555mm M16 x 597mm	97683359 290231 97683363 97683365 380243 97683370 97683372 97683375 380245		No No No No No No No No No
			12 14 17	4 4 4	M16 x 689mm, 4 pole & 50 Hz. M16 x 781mm, 4 pole & 50 Hz. M16 x 912mm, 4 pole & 50 Hz.	380246 380247 290240		No No No
26a	Strap		2/1-2 3	2 2	L* = 93.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut L* = 138.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487759 96487761		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								
26a	Strap (continued)		4	2	L* = 183.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487763		No
			5	2	L* = 228.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487765		No
			6	2	L* = 273.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487767		No
			7	2	L* = 318.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487769		No
			8	2	L* = 363.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487770		No
			9	2	L* = 408.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487772		No
			10	2	L* = 453.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487774		No
			12: 4 pole	2	L* = 543.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487776		No
			14: 4 pole	2	L* = 633.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487780		No
			17: 4 pole	2	L* = 768.5mm x 20.3mm x 1.3mm, 316 SS, M8 nut	96487782		No
26b	Bolt for Pos. 26a		2/1-17	2	M8 x 25mm, 316 SS w/Delta Tone/Seal	96416603		No
26c	Washer for Pos. 26b		2/1-17	2	A4, ø16.0/ø8.4x1.6mm	00ID3284		No
28	Motor Bolt		2/1-2	4	NEMA, 56C, 1/3 - 2HP, UNC 3/8" x 25mm	00ID1839		No
			3-4	4	NEMA, 182/184TC, 3 - 5HP, UNC1/2" x 25mm	00ID1840		No
			5-8	4	NEMA, 213TC, 7.5 -10HP, JR 1/2" x 1.25" UNC	00ID0185		No
			10	4	NEMA, 254TC, 15-20HP, 1/2" x 2.5" UNC	96491112		No
			2/1-17	1	NEMA, 284TC, 25HP, UNC1/2" x 25mm	00ID1840		No
			2/1-17	1	M12 x 20mm, low hex head, 8.8 - S.S., Delta Tone/Seal	97679673		No
			2/1-17	1	M12 x 20mm, 8.8 - S.S., Delta Tone/Seal	97672732		No
			2/1-17	6	M12 x 20mm low hex head, 8.8 - S.S., Delta Tone/Seal	97679673		No
			2/1-17	4	M12 x 20mm Hex head, 8.8 - S.S., Delta Tone/Seal	97672732		No
			2/1-17	4	M12 x 20mm Hex head, 8.8 - S.S., Delta Tone/Seal	97672732		No
28g	Bolt for Foot 56a & Volute Pos. 6 (GA, GB, GC)		2/1-17	1	M12 x 20mm, low hex head, 8.8 - S.S., Delta Tone/Seal	97679673		No
	Bolt - Foot 56a & Volute Pos. 6 (G05, G10, G22, G50, G60)		2/1-17	1	M12 x 20mm, 8.8 - S.S., Delta Tone/Seal	97672732		No
35	Bolt for Discharge Adapter Pos. 12a (GB, GC)		2/1-17	6	M12 x 20mm low hex head, 8.8 - S.S., Delta Tone/Seal	97679673		No
	Bolt for Discharge Adapter Pos. 12a (GA, G05)		2/1-17	4	M12 x 20mm Hex head, 8.8 - S.S., Delta Tone/Seal	97672732		No
36	Staybolt Nut		2/1-17	4	24mm x M16, 316	96550566		No
37(a)	Sleeve O-ring		2/1-17	◆◆	EPDM, ø170.7 x 3.3mm	96483101		YES
			2/1-17	◆◆	FKM, ø170.7 x 3.3mm	96483102		YES
37b	Sleeve O-ring (option)		2/1-17	◆◆	FKM, ø171.25 x 3.3mm	96483109		YES
	Sleeve O-ring (option)		2/1-17	◆◆	FFKM, ø170.7 x 3.3mm	96483140		YES
37c	Disc plate O-ring (Cool Top option only)		2/1-17	1	EPDM, ø155.0 x 3.0mm	96509703		YES
			2/1-17	1	FKM, ø155.0 x 3.0mm	96480168		YES
39b	O-ring for Discharge Adapter flange Pos. 12a		2/1-17	1	EPDM, Parker 2-238 ø88.5 x 3.5mm	95922035		YES
			2/1-17	1	FKM, Parker 2-238 ø88.5 x 3.5mm	95922036		YES
			2/1-17	1	FKM, Parker 2-238 ø88.5 x 3.5mm	95952037		YES
			2/1-17	1	FFKM, Parker 2-238 ø88.5 x 3.5mm	95131207		YES
44a	Inlet upper with Pos. 45 & 65		2/1-17	1		96489039		No
44c	Inlet upper with Pos. 45 & 65 (Low NPSH option)		2-17	1		96491227		No
44b	Inlet lower, machined		2/1-17	1		96488000		No
45	Neck Ring		2/1-17	# imp.-	ø75.8 x ø59.95 x 1.5mm, PTFE-Acoflon 100	96487400		YES
	Neck Ring (low NPSH option)		2/1-17	1	ø88.0 x ø66.2 x 2.2mm, PTFE-Acoflon 215	290091		No
47a	Bearing Ring/Spacer		2/1-17	^^^^	SiC 150, ø23.4 x ø17.6 x ø15.0 x 14mm	96763100		YES
			2/1-17	^^^^	TC, ø21.9 x ø17.6 x ø15.0 x 14mm	330085	95061371	YES
49	Impeller		2/1-17	# stgs-	ø104.8 x ø59.85 x 25.4mm (back-plate 1.5mm)	96476527		No
49c	Wear Ring N for Impeller 49		2/1-17	# stgs-	ø59.85 x 7.4mm	330054		YES
49c	Wear Ring N for Low NPSH Impeller 49i		2/1-17	1	ø66.0 x 8.5mm	290049		No
49i	Impeller N (Low NPSH option)		2-17	1	ø118.8 x ø66.0 x 32.2mm	96521444		No
51	Shaft, Complete		2/1-2	1	ø16 x 209.0mm, 329 SS	96491611		No
			3	1	ø16 x 249.0mm, 329 SS	96491615		No
			4	1	ø16 x 299.0mm, 329 SS	96491619		No
			5	1	ø16 x 339.0mm, 329 SS	96491623		No
			6	1	ø16 x 389.0mm, 329 SS	96491627		No
			7	1	ø16 x 429.0mm, 329 SS	96491631		No
			8	1	ø16 x 479.0mm, 329 SS	96491633		No
			9	1	ø16 x 519.0mm, 329 SS	96491635		No
			10	1	ø16 x 564.0mm, 329 SS	96491639		No
			12	1	ø16 x 659.0mm, 329 SS, 4 pole & 50 Hz.	96491643		No
			14	1	ø16 x 744.0mm, 329 SS, 4 pole & 50 Hz.	96491647		No
			17	1	ø16 x 879.0mm, 329 SS, 4 pole & 50 Hz.	96491651		No
			2/1-2	1	ø16 x 299.0mm, 329 SS	96507538		No
			3	1	ø16 x 339.0mm, 329 SS	96507570		No
			4	1	ø16 x 389.0mm, 329 SS	96507572		No
			5	1	ø16 x 429.0mm, 329 SS	96507574		No
			6	1	ø16 x 479.0mm, 329 SS	96507576		No
			7	1	ø16 x 519.0mm, 329 SS	96507578		No
			8	1	ø16 x 569.0mm, 329 SS	96507579		No
			9	1	ø16 x 609.0mm, 329 SS	96507580		No
			10	1	ø16 x 654.0mm, 329 SS	96507582		No
			12	1	ø16 x 749.0mm, 329 SS, 4 pole & 50 Hz.	96507584		No
			12: 4 pole	1	ø16 x 777.0mm, 329 SS (Low NPSH option) 50Hz.	96551867		No
			14	1	ø16 x 834.0mm, 329 SS, 4 pole & 50 Hz.	96507586		No
			17	1	ø16 x 969.0mm, 329 SS, 4 pole & 50Hz.	96507588		No
			17: 4 pole	1	ø16 x 1014.0mm, 329 SS (Low NPSH option), 50 Hz.	96529710		No
55	Sleeve		2/1-2	1	ø171.1/ ø170.7 x 104.0mm x 2.0mm, 316 SS	96489819		No
			3	1	ø171.1/ ø170.7 x 149.0mm x 2.0mm, 316 SS	96489821		No
			4	1	ø171.1/ ø170.7 x 194.0mm x 2.0mm, 316 SS	96489823		No
			5	1	ø171.1/ ø170.7 x 239.0mm x 2.0mm, 316 SS	96489824		No
			6	1	ø171.1/ ø170.7 x 284.0mm x 2.0mm, 316 SS	96489826		No
			7	1	ø171.1/ ø170.7 x 329.0mm x 2.0mm, 316 SS	96489828		No
			8	1	ø171.1/ ø170.7 x 374.0mm x 2.0mm, 316 SS	96489829		No
								No

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PARTS LIST

55	Sleeve (continued)		9 10	1 1	Ø171.1/ Ø170.7 x 419.0mm x 2.0mm, 316 SS Ø171.1/ Ø170.7 x 464.0mm x 2.0mm, 316 SS	96489857 96489831		No No
			12: 4 pole	1	Ø171.1/ Ø170.7 x 554.0mm x 2.0mm, 316 SS, 50 Hz.	96489833		No
			14: 4 pole	1	Ø171.1/ Ø170.7 x 644.0mm x 2.0mm, 316SS, 50 Hz.	96489835		No
			17: 4 pole	1	Ø171.1/ Ø170.7 x 779.0mm x 2.0mm, 316SS, 50 Hz.	96489836		No
55b	Sleeve flange		2/1-17	1	CR-H, CRN-H10, 15, 20, 316 SS	95131164		No
56a	Foot (Cast Iron) for Pos. 6 (GA, GB, GC)		2/1-17	1	H= 21mm, W= 198mm, Ø16mm hole CL 142mm, CL	95922023		No
	Foot (Cast Iron) for Pos. 6 (G05, G10, G22, G50, G60)	254TC	2/1-17	1	H= 98mm, W= 300mm, Ø16mm hole CL 248mm, CL	95922024		No
	Foot (Cast Iron) for Pos. 6 (C1, G20, G30)		2/1-17	1	H= 142mm, W= 300mm, Ø16mm hole CL 248mm, CL	96834143		No
	Foot (Stainless) for Pos. 6 (GA, GB, GC)		2/1-17	1	H= 21mm, W= 198mm, Ø16mm hole CL 142mm, SS	95922074		No
	Foot (Stainless) for Pos. 6 (G05, G10, G22, G50, G60)		2/1-17	1	H= 98mm, W= 300mm, Ø16mm hole CL 248mm, SS	95922076		No
	Foot (Stainless) for Pos. 6 (C1, G20, G30)	254TC	2/1-17	1	H= 142mm, W= 300mm, Ø16mm hole CL 248mm, SS	97655729		No
56b(d)	Washer for bolt Pos. 56c		2/1-17	16	M12, 304 SS	00ID3103		No
56c	Bolt for sleeve flange Pos. 55b		2/1-17	8	M12x1.75 x60mm, 12.9 Alloy Steel, Delta Tone/Seal	97672735		No
56e	Nut for bolt Pos. 56c		2/1-17	8	M12, NV19, 8.8 Steel, Delta Tone/Seal	00ID7917		No
56f	Bolt for Pos. 90 (BP139 w/GA, BP245 G05/22)	182TC	2/1-2	2	Hex Hd.1/2 -13 UNC x 1" SAE 5, Zinc plated			YES
	Bolt for Pos. 90 (BP258 G05/22)	254/84TC	5-10	2	Hex Hd.1/2 -13 UNC x 1" SAE 5, Zinc plated			YES
	Bolt for Pos. 90 (BP148 w/GA,GB, BP252 G05/22)	213TC	3-4	2	Hex Head 1/2 -13 UNC x 1.25" SAE 5, Zinc plated			YES
	Bolt for Pos. 90 (XLBP4 w/GA,GB)	284TC	10	2	Hex Head 1/2 -13 UNC x 1.25" SAE 5, Zinc plated			YES
	Bolt for Pos. 90 (BP148 with GA/GB, Pos. 56k & m)	254TC	5-8	2	Hex Head 1/2 -13 UNC x 2.25" SAE 5, Zinc plated			YES
56g	Washer for bolt Pos. 56f		2/1-17	2	1/2" SAE, Zinc plated			YES
56k	Spacer for base Pos. 90	GA/GB	5-8	1	148BP 254T, L=200mm x H=25.4mm x W=78.2mm			YES
56m	Alignment pin	GA/GB	5-8	2	Slotted Spring Pin, Ø3/16" x 1" ASME, Zinc plated			YES
60	Stack Compression Spring		2/1-17	4	Ø11.0 x Ø7.0 x 15.5mm, EPDM	96503070		YES
			2/1-17	4	Ø11.0 x Ø7.0 x 15.5mm, FKM	96503072		YES
60a	Stack Compression Spring (option)		2/1-17	4	Ø11.0 x Ø7.0 x 15.5mm, PTFE	96503071		YES
61	Stop spacer		2/1-17	1	Ø22.0 x Ø17.8 x Ø15.11 x 11.8 x 6.8mm	96783511		YES
64	Spacing Pipe		3-17	^^^	Ø21.5 x Ø17.5 x 43.6mm	331407		No
64a	Spacing Pipe		2-17	^^^^	Ø21.5 x Ø17.5 x 17.0mm	331416		YES
64b	Spacing Pipe		2-17	^^^^	Ø21.5 x Ø17.5 x 5.0mm	331401		YES
64c	Clamp, Splined		2/1-17	1	Ø21.5 x Ø17.6 x Ø15.0 x 12.7mm	96496311		YES
64d	Spacing Pipe		2/1-17	^^^^^^	Ø21.5 x Ø17.5 x 12.6mm	96491535		YES
64e	Spacing Pipe (Low NPSH option only)		2-17	^ +	Ø21.5 x Ø17.5 x 8.0mm	331411		No
64f	Spacing Pipe (Low NPSH option only)		2/1	^ -	Ø21.5 x Ø17.5 x 18.0mm	96491536		No
64g	Spacing Pipe (de-staging 2 impellers option only)		3-17	1 per de-stg	Ø21.5 x Ø17.5 x 45.0mm (use with 3b only)	331408		No
65	Neck Ring Retainer		2/1-17	# stgs-1	Ø78.8 x Ø61.5 x 6.7mm	330059	96547341	YES
	Neck Ring Retainer (Low NPSH option)		2-17	1	Ø84.5 x Ø67.8 x 4.6mm	290059		YES
66	Lock Washer Set for Shaft		2/1-17	1	Ø13.5 x Ø8.2 x 2.6mm	96417297		YES
66a	Washer for Staybolt		2/1-17	4	DIN 125A, Ø30 x Ø17 x 2.5mm, 316 SS	00ID3104		No
67	Lock Nut for Shaft		2/1-17	1	13mm x M8	96496488		YES
69	Spacing Pipe		2-17	⊖	Ø27.5 x Ø17.5 x 27.5mm	96491537		No
69a	Spacing Pipe (de-staging option only)		2/1	1	Ø21.5 x Ø17.5 x 29.05mm (use with 3a only)	331404	95061499	No
72a	O-ring for Sleeve Flange Pos. 55b		2/1-17	1	EPDM, Ø215.5mm	95922038		YES
			2/1-17	1	FKM, Ø215.5mm	95922039		YES
			2/1-17	1	FFKM, Ø215.5mm	95131208		YES
			2/1-17	1	FKM, Ø215.5mm	95922040		YES
76	Nameplate		2/1-17	1	304SS, 60 x 45mm	96563333		No
76a	Rivet for Nameplate		2/1-17	2	304SS, Ø3 x 5mm	96022882		No
77	Pump Head Cover for motor stool Pos. 2		2/1-17	1	Cast Stainless	96490647		No
77a	Pump Head Cover for Tandem Seal & Cool Top®		2/1-17	1	Cast Stainless	96505487		No
	Pump Head Cover for Back-to-Back		2/1-17	1	Cast Stainless	96505488		No
79a	Disc / Plate complete w/79b & c for Cool Top		2/1-17	1	Cast Stainless	96511281		No
79b	Bushing for Disc / Plate 79a		2/1-17	1	Graffon	96505571		No
79c	Retaining Ring for 79b		2/1-17	1	Stainless	96510985		No
90	Main Support Baseplate	GA/GB	2/1-2	1	BP. Cpl.139, L=991mm x W=305mm x H=106.5mm	96956336		YES
		GA/GB	3-5	1	BP. Cpl.148, L=1219mm x W=381mm x H=107.9mm	96956346		YES
		G05/22	2/1-2	1	BP. Cpl.245, L=1143mm x W=305mm x H=106.5mm	96956341		YES
		G05/22	3-4	1	BP. Cpl.252, L=1320.8mm x W=381mm x H=107.9mm	96956356		YES
		G05/22	5-10	1	BP. Cpl.258, L=1473.2mm x W=457.2mm x H=119.1mm	96956360		YES
	Main Support Baseplate - Longer versions	GA/GB		1	XLBP1(139/245), L=1500mm x W=381mm x H=106.5mm	96956376		YES
		GA/GB	6-8	1	XLBP2(148/252), L=1777.8mm x W=381mm x H=107.9mm	96956377		YES
		G22	5-10	1	XLBP3(258/264), L=2406.4mm x W=457.2mm x H=119.1mm	96956379		YES
		GA/GB	10	1	XLBP4(153), L=2406.4mm x W=457.2mm x H=194mm	96957102		YES
90a	Bolt for motor to slider Pos. 90b	56C		4	Hex Head 5/16 -18 UNC x .75" SAE 5, Zinc plated			YES
		182TC	2/1-2	4	Hex Head 3/8 -16 UNC x .5" SAE 5, Zinc plated			YES
		213TC	3-4	4	Hex Head 3/8 -16 UNC x 5/8" SAE 5, Zinc plated for GA/GB			YES
		213TC	3-4	4	Hex Head 3/8 -16 UNC x 1" SAE 5, Zinc plated for G05/22			YES
		254-284	5-10	4	Hex Head 1/2 -13 UNC x 1.25" SAE 5, Z.P. for G05/22			YES
		254-284	5-10	4	Hex Head 1/2 -13 UNC x 1.5" SAE 5, Zinc plated for GA/GB			YES
90b	Motor support / slider	56C		2	GA,GB,GC, BP139, L=204mm x H=45.5mm x W=25.4mm	96956339		YES
		182TC	2/1-2	2	GA,GB,GC, BP139, L=230mm x H=23mm x W=25.4mm	96956338		YES
		213TC	3-4	2	GA,GB,GC, BP148, L=252mm x H=20mm x W=25.4mm	96956347		YES
		254TC	5-8	2	GA,GB,GC, BP148, L=299mm x H=20.3mm x W=25.4mm	96956348		YES
		284TC	10	2	GA,GB,GC, BP153, L=366mm x H=46mm x W=25.4mm	96956351		YES
		56C		2	G05, G22, BP245, L=204mm x H=125.5mm x W=25.4mm	96956343		YES

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

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Parts List & Kits CRN20-H

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	B.O.M. Ref. No.	Material No.	Included in kits ?
PARTS LIST								
90b	Motor support / slider (continued)	182TC	2/1-2	2	G05, G22, BP245, L=230mm x H=100mm x W=25.4mm	96956342		YES
		213TC	3-4	2	G05, G22, BP252, L=252mm x H=96.5mm x W=25.4mm	96956357		YES
		254TC	5-8	2	G05, G22, BP252, L=354mm x H=67mm x W=25.4mm	96956361		YES
		284TC	10	2	G05, G22, BP258, L=354mm x H=67mm x W=25.4mm	96956361		YES
90c	Support Bracket for Pump Cartridge		2/1-17	1	304 SS, H=59mm CL of hole, GA/GB/GC	95131178		No
			2/1-17	1	304 SS, H=136mm CL of hole, G05/G10/G22/G50/G60	95131180		No
			2/1-17	1	304 SS, H=180mm CL of hole, G20/G30	96834148		No
90d	Bolt for motor slider Pos. 90b to base Pos. 90	56C		4	Hex Head 1/4 -20 UNC x 1" SAE 5, Zinc plated			YES
		182/213	2/1-4	4	Hex Head 1/4 -20 UNC x 1.75" SAE 5, Z.P. for GA/GB			YES
		213-284	3-10	4	Hex Head 1/4 -20 UNC x 1.75" SAE 5, Z.P. for G05/22			YES
		284TC	10	4	Hex Head 1/4 -20 UNC x 2.25" SAE 5, Z.P. for GA/GB			YES
		254TC	5-10	4	Hex Head 1/4 -20 UNC x 2.5" SAE 5, Z.P. for GA/GB			YES
		182TC	2	4	Hex Head 1/4 -20 UNC x 2.5" SAE 5, Z.P. for G05/22			YES
90f	Washer for motor bolt Pos. 90a to slider Pos. 90b	56C		4	5/16" SAE, Zinc plated			YES
		182/213	2/1-2	4	3/8" SAE, Zinc plated			YES
		254-284	5-10	4	1/2" SAE, Zinc plated			YES
100	Priming/Vent Plug O-ring		2/1-17	■	EPDM, Ø16.3 x 2.4mm	00ID1288		YES
			2/1-17	■	FKM, Ø16.3 x 2.4mm	00ID2231		YES
100a	Priming/Vent Plug O-ring (option)		2/1-17	■	FFKM, Ø16.3 x 2.4mm	96428162	96587720	YES
	Priming/Vent Plug O-ring (option)		2/1-17	■	FKM, Ø16.3 x 2.4mm	96442869	96587721	YES
105(b)	Shaft Seal HQBE		2/1-17	***	SiC, Carbon with resin-impregnated, EPDM	96484076		YES
	Shaft Seal HQBV		2/1-17	***	SiC, Carbon with resin-impregnated, FKM	96484077		YES
	Shaft Seal HQQE		2/1-17	***	SiC, SiC, EPDM	96484071		YES
	Shaft Seal HQQV		2/1-17	***	SiC, SiC, FKM	96484072		YES
	Shaft Seal HQQF (option)		2/1-17	***	SiC, SiC, FKM	96484075		YES
	Shaft Seal HQQK (option)		2/1-17	***	SiC, SiC, FFKM	96484074		YES
	Shaft Seal HUBE		2/1-17	***	TC, Carbon with resin-impregnated, EPDM	96483952		YES
	Shaft Seal HUBV		2/1-17	***	TC, Carbon with resin-impregnated, FKM	96483964		YES
	Shaft Seal HUBF (option)		2/1-17	***	TC, Carbon with resin-impregnated, FKM	96483966		YES
	Shaft Seal HUBK (option)		2/1-17	***	TC, Carbon with resin-impregnated, FFKM	96483965		YES
	Shaft Seal HUUE		2/1-17	***	TC, TC, EPDM	96483967		YES
	Shaft Seal HUUV		2/1-17	***	TC, TC, FKM	96483968		YES
	Shaft Seal HUUF (option)		2/1-17	***	TC, TC, FKM	96484070		YES
	Shaft Seal HUUK (option)		2/1-17	***	TC, TC, FFKM	96483969		YES
109a	O-ring for Disk Plate 79a (Cool Top option only)		2/1-17	1	Ø27.2 x 2.75mm, EPDM	96483103		YES
			2/1-17	1	Ø27.2 x 2.75mm, FKM	96483104		YES
			2/1-17	1	Ø27.2 x 2.75mm, FKM	96483141		YES
117	Pipe for Air Vent 118		2/1-17	1	G1/2, 316SS	96525189		YES
117a	Counter Nut for Pipe 117		2/1-17	2	NV24, internal G1/2, 316SS	96506709		YES
118	Air Vent		2/1-17	1	Air vent type 1511-AV - 5/6430	96427483		YES
201	Flange, Suction, Cast Iron - 80-55-06(GGG50)		2/1-7	1	1.5" 150#, 4 x 1/2"-13 UNC threaded flange, e-coat	96922828		No
			2/1-7	1	2" 150#, 4 x 5/8"-11 UNC threaded flange, e-coat	96922829		No
			2/1-7	1	3" 150#, 8 x non thread flange, electrocoated	350085		No
			8-17	1	1.5" 300#, 4 x 3/4"-10 UNC threaded flange, e-coat	96956145		No
			8-17	1	2" 300#, 8 x 5/8"-11 UNC threaded flange, e-coat	96956146		No
			8-17	1	3" 300#, 8 x 3/4"-10 UNC threaded flange, Cast Iron, e-coat	96956147		No
			8-17	1	1.5" 150#, 4 x 1/2"-13 UNC threaded flange, SS	96956147		No
	Flange, Suction, Stainless Steel - CF8M (1.4408)	GI	2/1-7	1	1.5" 150#, 4 x 1/2"-13 UNC threaded flange, SS	96956147		No
		GI	2/1-7	1	2" 150#, 4 x 5/8"-11 UNC threaded flange, SS	97644306		No
		GI	2/1-7	1	3" 150#, 8 x non thread flange, SS	350022		No
		GI	8-17	1	1.5" 300#, 4 x 3/4"-10 UNC threaded flange, SS	97644307		No
		GI	8-17	1	2" 300#, 8 x 5/8"-11 UNC threaded flange, SS	97644310		No
		GI	8-17	1	3" 300#, 8 x 3/4"-10 UNC threaded flange, SS	97644313		No
		GI	8-17	1	1.5" 150#, 4 x 1/2"-13 UNC threaded flange, SS	97644302		No
201a	Flange, Discharge, Cast Iron - 80-55-06(GGG50)		2/1-7	1	1" 150#, 4 x 1/2"-13 UNC threaded flange, Cast Iron, e-coat	96922827		No
			2/1-7	1	1.5" 150#, 4 x 1/2"-13 UNC threaded flange, e-coat	96922828		No
			2/1-7	1	2" 150#, 4 x 5/8"-11 UNC threaded flange, Cast Iron, e-coat	96922829		No
			8-17	1	1" 300#, 4 x 5/8"-11 UNC threaded flange, Cast Iron, e-coat	96956144		No
			8-17	1	1.5" 300#, 4 x 3/4"-10 UNC threaded flange, Cast Iron, e-c	96956145		No
			8-17	1	2" 300#, 8 x 5/8"-11 UNC threaded flange, Cast Iron, e-coat	96956146		No
			8-17	1	3" 300#, 8 x 3/4"-10 UNC threaded flange, Cast Iron, e-coat	96956147		No
	Flange, Discharge, Stainless Steel-CF8M (1.4408)	GI	2/1-7	1	1" 150#, 4 x 1/2"-13 UNC threaded flange, SS	97644302		No
		GI	2/1-7	1	1.5" 150#, 4 x 1/2"-13 UNC threaded flange, SS	97644306		No
		GI	2/1-7	1	2" 150#, 4 x 5/8"-11 UNC threaded flange, SS	97644309		No
		GI	8-17	1	1" 300#, 4 x 5/8"-11 UNC threaded flange, SS	97644304		No
		GI	8-17	1	1.5" 300#, 4 x 3/4"-10 UNC threaded flange, SS	97644307		No
		GI	8-17	1	2" 300#, 8 x 5/8"-11 UNC threaded flange, SS	97644310		No
		GI	8-17	1	3" 300#, 8 x 3/4"-10 UNC threaded flange, SS	97644313		No
203	Retaining ring for 201, 1.5" flange		2/1-17	1	Ø72.6mm x 5mm	96475395	96547671	No
	Retaining ring for 201, 2.0" flange		2/1-17	1	Ø86.6mm x 5mm	96475396		No
	Retaining ring for 201, 3.0" flange		2/1-17	1	Ø121mm x 6mm	350009		No
203a	Retaining ring for 201a, 1.0" flange		2/1-17	1	Ø53.6mm x 3.2mm	96439718		No
	Retaining ring for 201a, 1.5" flange		2/1-17	1	Ø72.6mm x 5mm	96475395	96547671	No
	Retaining ring for 201a, 2.0" flange		2/1-17	1	Ø86.6mm x 5mm	96475396		No
	Retaining ring for 201a, 3.0" flange		2/1-17	1	Ø121mm x 6mm	350009		No

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

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NOTES:

The first number is total number of impellers.
An exceptions to this format is the CRN20-1.

Example: A CRN20-1 is actually a CR20-2/1. It has 2 chambers and 1 impeller (de-staged by 1) and it uses a 2 stage shaft.

* 1	2 to 17 stage use Pos. 3 2 /1 stage use Pos. 3 De-staging by two impellers use one 3a and one 3b
^^^	2/1 and 2 stage = use 0 3 to 6 stage = # of stages less 2 7 to 10 stage = # of stages less 3 12 to 17 stage = # of stages less 4 De-staging by two impellers use 1 less than stated above.
^^^^	2/1 to 6 stage = use 1 7 to 10 stage = use 2 12 to 17 stage = use 3
^^^^^	2/1-2, 4, 6, 8, and 12 stage= use 1 Exception to the above: Low NPSH models 2, 4, 6, 8 to 17 stage = use 1 3, 5 and 7 stage = use 2
^^^^^^	2/1 to 6 stage = use 1 7 to 10 stage = use 2 12 to 17 stage = use 3 Exception to the above: Low NPSH models 2 to 6 stage = use 0 7 to 10 stage = use 1 12 to 17 stage = use 2
^ +	NPSH Models only 3, 6, 8 & 17 stage = use 1 2, 4, 6, 10, 12 & 14 stage = use 2
^ -	NPSH Models only 3, 6, 8 & 17 stage = use 1
*	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)20-2/1 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, Cool Top use 1 EPDM or FKM and 2 FXM in lower hot section of pump.
■	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
Ø	.....	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 CRN20-H

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)20 SiC Bearing		Kit No. 96511824			
WEAR PARTS KIT 1-6		Kit No. 96511827			
WEAR PARTS KIT 7-10		Kit No. 96511830			
WEAR PARTS KIT 12-17		Kit No. 96511830			
Pos. No.	Description	Material No.	Qty. Included in each Kit		
4a	Chamber N Cpl. w/Pos.45 & 65 & SiC Bearing	96747343	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, ø75.8 x ø59.95 x 1.5mm, PTFE-Acoflon 100	96487400	5	8	14
47a	Bearing Ring/Spacer, SiC 150, ø23.4 x 14mm	96763100	1	2	3
49c	Wear Ring, N, ø59.85 x 7.4mm	330054	6	10	17
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 17.0mm	331416	1	2	3
64b	Clamp, Splined, ø21.5 x ø17.6 x ø15.0 x 5.0mm	331401	1	1	1
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 12.6mm	96491535	1	2	3
65	Neck Ring Retainer, N, ø78.8 x ø61.5 x 6.7mm	330059	5	8	14
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

CR(I, N)20 Graflon Bearing		Kit No. 96511826			
WEAR PARTS KIT 1-6		Kit No. 96511829			
WEAR PARTS KIT 7-10		Kit No. 96511832			
WEAR PARTS KIT 12-17		Kit No. 96511832			
Pos. No.	Description	Material No.	Qty. Included in each Kit		
4a	Chamber N Cpl. w/Pos.45 & 65 & Graflon Bearing	96492510	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, ø75.8 x ø59.95 x 1.5mm, PTFE-Acoflon 100	96487400	5	8	14
47a	Bearing Ring/Spacer, TC, ø21.9 x ø17.6 x ø15.0 x 14mm	330085	1	2	3
49c	Wear Ring, N, ø59.85 x 7.4mm	330054	6	10	17
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 17.0mm	331416	1	2	3
64b	Clamp, Splined, ø21.5 x ø17.6 x ø15.0 x 5.0mm	331401	1	1	1
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 12.6mm	96491535	1	2	3
65	Neck Ring Retainer, N, ø78.8 x ø61.5 x 6.7mm	330059	5	8	14
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

CR(I, N)20 Bronze Bearing		Kit No. 96511825			
WEAR PARTS KIT 1-6		Kit No. 96511828			
WEAR PARTS KIT 7-10		Kit No. 96511831			
WEAR PARTS KIT 12-17		Kit No. 96511831			
Pos. No.	Description	Material No.	Qty. Included in each Kit		
4a	Chamber N Cpl. w/Pos.45 & 65 & Bronze Bearing	96492512	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, ø75.8 x ø59.95 x 1.5mm, PTFE-Acoflon 100	96487400	5	8	14
47a	Bearing Ring/Spacer, TC, ø21.9 x ø17.6 x ø15.0 x 14mm	330085	1	2	3
49c	Wear Ring, N, ø59.85 x 7.4mm	330054	6	10	17
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 17.0mm	331416	1	2	3
64b	Clamp, Splined, ø21.5 x ø17.6 x ø15.0 x 5.0mm	331401	1	1	1
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 12.6mm	96491535	1	2	3
65	Neck Ring Retainer, N, ø78.8 x ø61.5 x 6.7mm	330059	5	8	14
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

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
N/A	Emery Cloth	370712	1	1	1

* Seal material number includes the Adjusting fork 96483950.

STACK KITS (SiC) Pos.80	
Model	Material No.
CRN20-2/1	96491784
CRN20-2	96491785
CRN20-3	96491786
CRN20-4	96491787
CRN20-5	96491788
CRN20-6	96491789
CRN20-7	96491790
CRN20-8	96491791
CRN20-10	96491792
*** CRN20-12	96491793
*** CRN20-14	96491794
*** CRN20-17	96491795

***For 4 pole & 50 Hz. operation only.

* Seal material number includes the Adjusting fork 96483950.

Spare Part Kits CRN20-H

SPARE PART KITS (Continued)

COUPLING GUARD KIT		Kit No.	96509612
NEMA 56C, 1/3-2HP		96509614	
NEMA 182-215TC (High) & 254TC-286TSC, 3-25HP		96509614	
Pos. No.	Description	Material No.	Qty. Included in each Kit
7	Coupling Guard, W=127mm x H=90.5mm	96491002	2
	Coupling Guard, W=157mm x H=171mm	96490656	2
7a	Screw comb.slot torx/straight slot 4 x 8mm	96488481	4

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

ACCESSORIES

ANSI COMPANION FLANGES FOR MEDIUM CR-H, CRN-H					
Kit No. 97698645		1.5" x 1" 316SS for GA 150#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Bolts	97743748	4	97743748	4
N/A	Flanges	96983498	1	96983497	1
N/A	Gasket	97694409	1	97692916	1
Kit No. 97698646		1.5" x 1" 316SS for GA 300#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Bolts	91143035	8	91143029	4
N/A	Flanges	96983496	1	96983495	1
N/A	Gasket	97694408	1	97694407	1
Kit No. 97698647		2" x 1" 316SS for G05 150#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Bolts	91143029	4	97743748	4
N/A	Flanges	96983499	1	96983497	1
N/A	Gasket	97692909	1	97692916	1
Kit No. 97698648		2" x 1" 316SS for G05 300#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Bolts	97743741	8	91143029	4
N/A	Flanges	00ID7240	1	96983495	1
N/A	Gasket	00ID2747	1	97694407	1
Kit No. 97698649		3" x 1.5" 316SS for GB, G50 and G20 150#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Nuts	91143011	4	none	0
N/A	Bolts	91143031	4	97743748	4
N/A	Flanges	91121944	1	96983498	1
N/A	Gasket	560185	1	97694409	1
Kit No. 97698650		3" x 1.5" 316SS for GB, G50 and G20 300#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Bolts	91143038	8	91143035	4
N/A	Flanges	91121945	1	96983496	1
N/A	Gasket	91122339	1	97694408	1
Kit No. 97698651		3" x 2" 316SS for GC, G10, G60 and G30 150#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Nuts	91143011	4	none	0
N/A	Bolts	91143031	4	91143029	4
N/A	Flanges	91121944	1	96983499	1
N/A	Gasket	560185	1	97692909	1
Kit No. 97698652		3" x 2" 316SS for GC, G10, G60 and G30 300#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Bolts	91143038	8	97743741	8
N/A	Flanges	91121945	1	00ID7240	1
N/A	Gasket	91122339	1	00ID2747	1
Kit No. 97743809		2" x 2" 316SS for G22 150#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Bolts	91143029	4	91143029	4
N/A	Flanges	96983499	1	96983499	1
N/A	Gasket	97692909	1	97692909	1
Kit No. 97743810		2" x 2" 316SS for G22 300#			
Pos. No.	Description	Material No.	Qty.	Material No.	Qty.
N/A	Bolts	97743741	8	97743741	8
N/A	Flanges	00ID7240	1	00ID7240	1
N/A	Gasket	00ID2747	1	00ID2747	1

ACCESSORIES (Continued)

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

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

Baseplate Kit		Kit No.		97534520		97534531		97573875		97534579	
148		213TC for GA/B/C		Kit No.		97534531		97573875		97534579	
XLBP2		254TC for GA/B/C		Kit No.		97534531		97573875		97534579	
213TC for GA/B/C		Kit No.		97534531		97573875		97534579		97534579	
213TC for GA/B/C		Kit No.		97534531		97573875		97534579		97534579	
254TC for GA/B/C		Kit No.		97534531		97573875		97534579		97534579	
Pos. No.	Description	Material No.	Qty. Included in each Kit								
90	Baseplate Cpl. 148, L=1219* x W=381* x H=107.9*	96956346	1	1							
	Baseplate Cpl. XLBP2, L=1777.8* x W=381* x H=107.9*	96956377			1					1	
N/A	Slider & fastners for 213TC(consists of slider & hardware)	96983859	1		1						
N/A	Slider & fastner 254TC (cont. of 56k , slider & hardware)	96983862		1						1	
N/A	Hardware Kit -96983859(consists of pos.56f, g, 90a,d& f)**	97501482	1				1				
N/A	Hardware Kit -96983862 (cont. pos.56f, g & m, 90a, d & f)**	97501483		1						1	
56f	Bolt, Hex Head 1/2 -13 UNC x 1.25" SAE 5, Zinc plated	N/A	2		2						
	Bolt, Hex Head 1/2 -13 UNC x 2.25" SAE 5, Zinc plated	N/A		2						2	
56g	Washer, 1/2" SAE, Zinc plated	N/A	2	2			2			2	
56k	Volute Spacer, 148 BP 254T, L=200* x H=25.4* x W=78.2	96956349		1						1	
56m	Slotted Spring Pin ø3/16" x 1" Zinc Plated	N/A		2						2	
90a	Bolt, Hex Head 3/8 -16 UNC x 5/8" SAE 5, Zinc plated	N/A	4				4				
	Bolt, Hex Head 1/2 -13 UNC x 1.5" SAE 5, Zinc plated	N/A		4						4	
90b	Slider, GA/B/C 213TC/148BP, L=252* x H=20* x W=25.4*	96956347	2		2			2			
	Slider, GA/B/C 254TC/148BP, L=299* x H=20.3* x W=38.1*	96956348		2						2	
90d	Bolt, Hex Head 1/4 -20 UNC x 1.75" SAE 5, Zinc plated	N/A	4				4				
	Bolt, Hex Head 1/4 -20 UNC x 2.5" SAE 5, Zinc plated	N/A		4						4	
90f	Washer, 3/8" SAE, Zinc plated	N/A	4				4				
	Washer, 1/2" SAE, Zinc plated	N/A		4				4			

* Values in mm, Length (L) is +/- 2mm, Height (H) is +/- 1mm, Width (W). ** Hardware kits 97501482 and 83 are also available for sale.

Baseplate Kit		Kit No.	
XLBP4	284TC for GA/B/C	97534594	
Pos. No.	Description	Material No.	Qty. Included in each Kit
90	Baseplate Cpl. XLBP4, L=2406.4* x W=457.2* x H=194*	96957102	1
N/A	Slider & fastners for 284TC(consists of slider & hardware)	96983863	1
N/A	Hardware Kit -96983871(cont. of pos.56f & g, 90a,d & f)**	97501484	1
56f	Bolt, Hex Head 1/2 -13 UNC x 1.25" SAE 5, Zinc plated	N/A	2
56g	Washer, 1/2" SAE, Zinc plated	N/A	2
90a	Bolt, Hex Head 1/2 -13 UNC x 1.5" SAE 5, Zinc plated	N/A	4
90b	Slider, GA/B/C, 284TC/153BP, L=366* x H=46* x W=25.4*	96956351	2
90d	Bolt, Hex Head 1/4 -20 UNC x 2.25" SAE 5, Zinc plated	N/A	4
90f	Washer, 1/2" SAE, Zinc plated	N/A	4

* Values in mm, Length (L) is +/- 2mm, Height (H) is +/- 1mm, Width (W). ** Hardware kit 97501484 is also available for sale.

Spare Part Kits CRN20-H

ACCESSORIES (Continued)

Baseplate Kit		Kit No.				
245	56C for G05/10/50/60/70/22/33/44	Kit No.	97534535			
	182TC for G05/10/50/60/70/22/33/44	Kit No.	97534536			
XLBP1	56C for G05/10/50/60/70/22/33/44	Kit No.	97534575			
	182TC for G05/10/50/60/70/22/33/44	Kit No.		97534576		
Pos. No.	Description	Material No.	Qty. Included in each Kit			
90	Baseplate Cpl. 245, L=1143* x W=305* x H=106.4768*	96956341	1	1		
	Baseplate Cpl. XLBP1, L=1500* x W=305* x H=106.4768*	96956376			1	1
N/A	Slider & fastners for 56C (consists of slider & hardware)	96983868	1		1	
N/A	Slider & fastner for 182TC (consists of slider & hardware)	96983869		1		1
N/A	Hardware Kit -96983855/68/78 (cont. pos.56f, g, 90a,d& f)**	97501470	1		1	
N/A	Hardware Kit -96983869/79 (cont. pos.56f & g, 90a, d & f)**	97501488		1		1
56f	Bolt, Hex Head 1/2 -13 UNC x 1" SAE 5, Zinc plated	N/A	2	2	2	2
56g	Washer, 1/2" SAE, Zinc plated	N/A	2	2	2	2
90a	Bolt, Hex Head 5/16 -18 UNC x .75" SAE 5, Zinc plated	N/A	4	4	4	4
90b	Slider, G05/22 - 56C/245BP, L=204* x H=125.5* x W=25.4*	96956343	2		2	
	Slider, G05/22 - 182T/245 BP, L=230* x H=100* x W=25.4*	96956342		2		2
90d	Bolt, Hex Head 1/4 -20 UNC x 1" SAE 5, Zinc plated	N/A	4		4	
	Bolt, Hex Head 1/4 -20 UNC x 2.5" SAE 5, Zinc plated	N/A		4		4
90f	Washer, 5/16" SAE, Zinc plated	N/A	4	4		4

* Values in mm, Length (L) is +/- 2mm, Height (H) is +/- 1mm, Width (W). ** Hardware kits 97501470 and 88 are also available for sale.

Baseplate Kit			
252	213TC for G05/10/50/60/70/22/33/44	Kit No.	97534539
XLBP2	213TC for G05/10/50/60/70/22/33/44	Kit No.	97573873
Pos. No.	Description	Material No.	Qty. Included in each Kit
90	Baseplate Cpl. 252, L=1321" x W=381" x H=107.9"	96956356	1
	Baseplate Cpl. XLBP2, L=1777.8" x W=381" x H=107.9"	96956377	1
N/A	Slider & fastners for 213TC(consists of slider & hardware)	96983870	1
N/A	Hardware Kit -96983870/80(cont. of pos.56f, g, 90a,d & f)**	97501489	1
56f	Bolt, Hex Head 1/2 -13 UNC x 1.25" SAE 5, Zinc plated	N/A	2
56g	Washer, 1/2" SAE, Zinc plated	N/A	2
90a	Bolt, Hex Head 3/8 -16 UNC x 1" SAE 5, Zinc plated	N/A	4
90b	Slider, G05/22, 213TC/252BP,L=252"x H=96.5"x W=25.4"	96956357	2
90d	Bolt, Hex Head 1/4 -20 UNC x 1.75" SAE 5, Zinc plated	N/A	4
90f	Washer. 3/8" SAE, Zinc plated	N/A	4

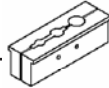
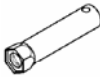
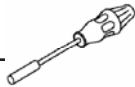
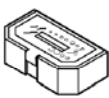
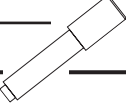
* Values in mm, Length (L) is +/- 2mm, Height (H) is +/- 1mm, Width (W). ** Hardware kit 97501489 is also available for sale.

Baseplate Kit				
258	254-286TC for G05/10/50/60/70/22/33/44	Kit No.	97534543	
XLBP3	254-286TC for G05/10/50/60/70/22/33/44	Kit No.	97573876	
Pos. No.	Description	Material No.	Qty. Included in each Kit	
90	Baseplate Cpl. 258, L=1473.2* x W=457.2* x H=119.1*	96956360	1	
	Baseplate Cpl. XLBP3, L=2406.4* x W=457.2* x H=119.1*	96956379		1
N/A	Slider & fastners for 254TC(consists of slider & hardware)	96983871	1	1
N/A	Hardware Kit -96983871(cont. of pos.56f & g, 90a,d & f)**	97501493	1	1
56f	Bolt, Hex Head 1/2 -13 UNC x 1" SAE 5, Zinc plated	N/A	2	2
56g	Washer, 1/2" SAE, Zinc plated	N/A	2	2
90a	Bolt, Hex Head 1/2 -13 UNC x 1.25" SAE 5, Zinc plated	N/A	4	4
90b	Slider, G05/22, 254TC/258BP, L=354* x H=67* x W=25.4*	96956361	2	2
90d	Bolt, Hex Head 1/4 -20 UNC x 1.75" SAE 5, Zinc plated	N/A	4	4
90f	Washer, 1/2" SAE, Zinc plated	N/A	4	4

* Values in mm, Length (L) is +/- 2mm, Height (H) is +/- 1mm, Width (W). ** Hardware kit 97501493 is also available for sale.

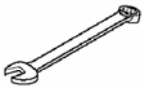
SPECIAL TOOLS

Tools not generally available from normal sources.

Mat. No.	Description and Use	
005V0040	Shaft Holder for Dismantling/Assembly Used to hold and protect the shaft during dismantling and assembly.	
005V2107	Tubular Box Spanner for Shaft Seal 41.0 mm Used to install and remove the shaft seal. Fits a 1/2" drive ratchet.	
005V2101	Ring Insert Tool for Shaft Seal + Square 41 mm x 1/2" drive	
005V0239	Puller for Neck Ring Used to remove the Neck Ring from Chamber.	
005V2011	Bit Holder Used with Bits Kit, 1/4"	
005V2010	Bits Kit NV 5 mm for M6, 1/4" NV 6 mm for M8, 1/4" NV 8 mm for M10, 1/4"	
005V2012	Hexagon Socket Bit Used for Shaft Seal NV 2.5 mm for M5, 1/4"	
005V2127	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	
005V0083 005V0055 005V0054 005V0122	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	
005V0292 005V0269 005V0400	Torque Wrench Used to torque various screws. 4-20 Nm, 9 x 12 20-100 Nm, 9 x 12 40-200 Nm, 14x18	
005V0438	Torque Screwdriver Used to tighten various nuts. 1-6 Nm, 1/4"	
005V0295 005V0401	Ratchet Spanner for all Adapters 9 mm x 12 mm, 1/2" 14 mm x 18 mm, 1/2"	
005V0296 005V0297 005V0298	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"	
005V0310 005V0294 005V0271 005V0524	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	
005V2013 005V0267	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



L-CR-SM-055 11/11 US

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Subject to alterations.

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