



**CR Series**

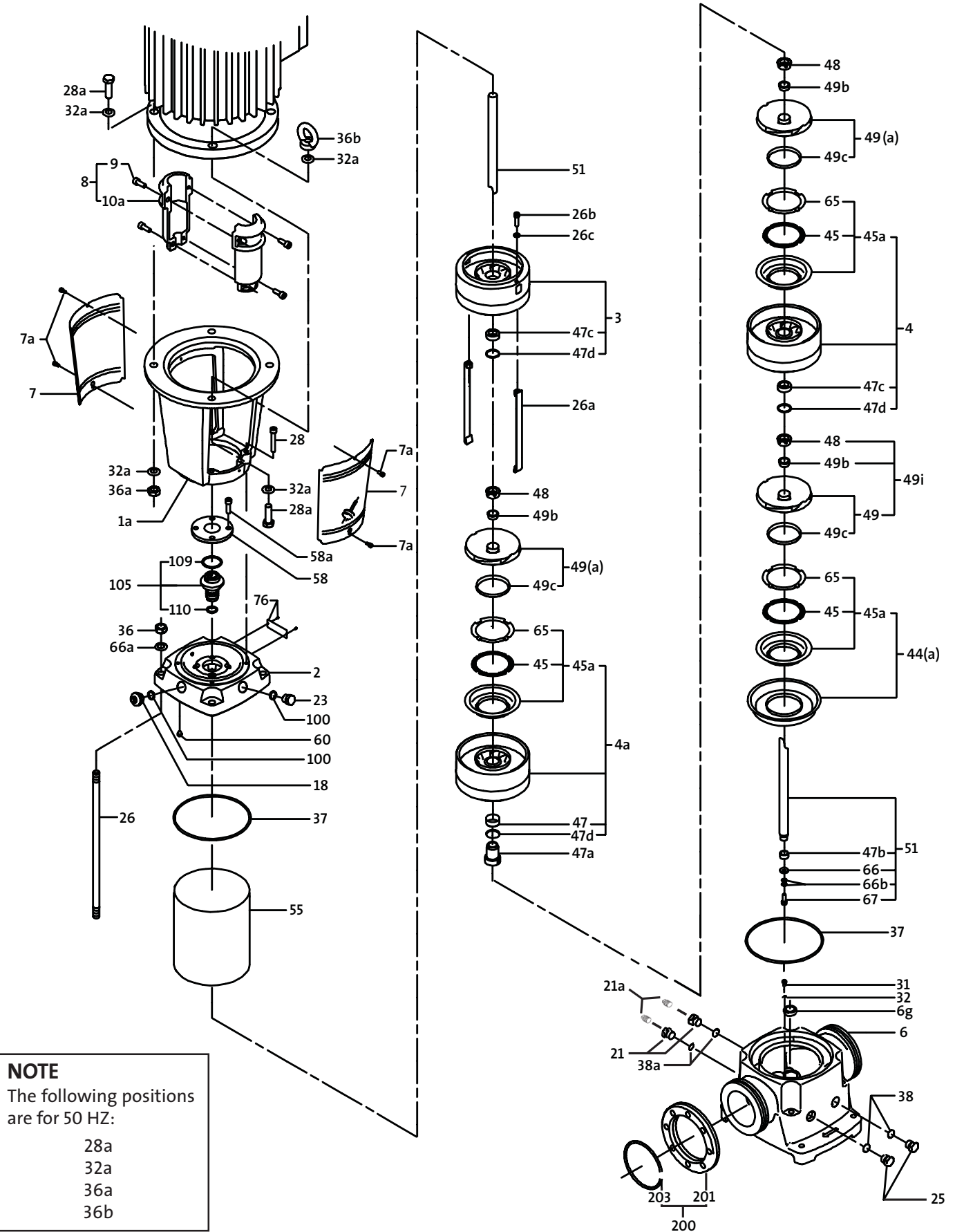
# CR45

## Parts List & Kits

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- Parts List
- Spare Part Kits
- Accessories
- Special Tools
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Parts List

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	Material No.	Included in Kits?
	Cool Top™ (option)****		1-1 to 7	1		350735	No
	Bearing Flange (option)		1-1 to 1	1	NEMA 182/184	350548	No
			1-1 to 1	1	NEMA 213/215	350549	No
			2-2 to 2	1	NEMA 254/256	370780	No
			3-2 to 5	1	NEMA 284/286	370781	No
			5-2 to 7-2	1	NEMA 324...365	370782	No
	IEC Bearing Flange		1-1 to 1	1	MG 100/112, F130	350546	No
			2-2 to 2	1	MG 132, F265	350547	No
			3-2 to 6	1	MG 160/180, F300	370777	No
			7-2 to 10	1	MG 200, F350	370778	No
1a	Motor Stool LARCR		1-1 to 1	1	MG 225, F400	370779	No
			1-1 to 1	1	182TC-215TC, 3-10 HP	370103	No
			2-2 to 2	1	254/256TC, 15 HP	370303	No
			3-2 to 5	1	284/286TSC, 20-40 HP	370104	No
			5-2 to 7-2	1	324/326/364TSC, 50-60 HP	370140	No
	IEC Motor Stool LARCR		1-1 to 1	1	1.5-2.2 kW	370076	No
			1-1 to 1	1	3.0-4.0 kW	370077	No
			2-2 to 2	1	5.5-7.5 kW	370078	No
			3-2 to 6	1	11.0-22.0 kW	370079	No
			7-2 to 10	1	30.0-37.0 kW	370080	No
				1	45.0 kW	370081	No
2	Pump Head		1-1 to 10	1	Cast Iron	370090	No
3	Top Chamber CPL.		1-1 to 10	1	Graflon® Sleeve Bushing	350072	No
	Top Chamber CPL. (option)		1-1 to 10	1	PTFE Sleeve Bushing	350585	No
4	Chamber CPL.		1-1 to 10	AAA	Graflon Sleeve Bushing	350434	No
	Chamber CPL. (option)		1-1 to 10	AAA	PTFE Sleeve Bushing	350584	No
4a	Chamber CPL. w/Bearing		1-1 to 10	AAAA	Bronze Bearing Ring	350435	No
	Chamber CPL. w/Bearing (option)		1-1 to 10	AAAA	Graflon Bearing Ring	350582	No
	Chamber CPL. w/Bearing (option)		1-1 to 10	AAAA	SIC Bearing Ring/PTFE Neck Ring	350594	No
6	Base		1-1 to 10	1	Cast Iron	350003	No
6g	Stationary Bottom Bearing Ring for Base		1-1 to 10	1	Tungsten Carbide	370130	YES
7	Coupling Guard			2	182-215TC, 3-10 HP/1.5-7.5 kW	370178	No
				2	254-365TS, 15-60 HP/11.0-45 kW	370173	No
7a	Screw for Coupling Guard		1-1 to 10	4	M5 x 10mm	96406306	No
8	Coupling CPL. w/Pos. 9		1-1 to 1	1	182/184TC, 3-5 HP	370724	YES
			2-2 to 5	1	213/215TC, 7 1/2-10 HP	370725	YES
			5-2 to 7-2	1	254-286TSC, 15-40 HP	370715	YES
				1	324-365TS, 50-60 HP	370716	YES
	IEC Coupling CPL. w/Pos. 9		1-1 to 1	1	1.5-2.2 kW	370703	YES
			1-1 to 1	1	3.0-4.0 kW	370704	YES
			2-2 to 2	1	5.5-7.5 kW	370710	YES
			3-2 to 5	1	11.0-18.5 kW	370035	YES
			6-2 to 6	1	22.0 kW	370036	YES
			7-2 to 10	1	30.0-37.0 kW	370037	YES
9	Allen Screw		1-1 to 10	4	M10 x 25mm	00ID7901	YES
18	Priming/ Vent Plug		1-1 to 10	1	G 1/2A	405150	No
21	Drain Plug		1-1 to 10	2	G 1/2A w/ 1/4" NPT	91120659	No
21a	Pipe Plug		1-1 to 10	2	1/4" NPT SS SQHD	00ID7216	No
23 & 25	Drain Plug		1-1 to 10	3	G 1/2A	370025	No
26	Staybolt		1-1 to 1	4	M16 x 250mm	370132	No
			2-2 to 2	4	M16 x 327mm	350179	No
			3-2 to 3	4	M16 x 407mm	350180	No
			4-2 to 4	4	M16 x 487mm	350181	No
			5-2 to 5	4	M16 x 566mm	290251	No
			6-2 to 6	4	M16 x 647mm	350183	No
			7- 2 to 7	4	M16 x 727mm	350184	No
			8-2 to 8	4	M16 x 807mm	350185	No
			9-2 to 9	4	M16 x 887mm	350186	No
			10-2 to 10	4	M16 x 967mm	350187	No

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.

\*20 HP, 575V motor has a 284 TSC; 40 HP, 575V motor has a 324 TSZ.

\*\*\*\*Retro-fitting a Cool Top™ to a standard CR(N)32/CR(N)45 requires three stage longer shafts, stay bolts, along with option\*\*\* components.

NOTE: Graflon® is a registered trademark of Morganite.

Parts List

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	Material No.	Included in Kits?
26a	Strap		1-1 to 1	2	M8 x 89mm	350158	No
			2-2 to 2	2	M8 x 169mm	350159	No
			3-2 to 3	2	M8 x 249mm	350160	No
			4-2 to 4	2	M8 x 329mm	350161	No
			5-2 to 5	2	M8 x 409mm	350162	No
			6-2 to 6	2	M8 x 489mm	350163	No
			7- 2 to 7	2	M8 x 569mm	290328	No
			8-2 to 8	2	M8 x 649mm	350165	No
			9-2 to 9	2	M8 x 729mm	350166	No
			10-2 to 10	2	M8 x 809mm	350167	No
26b	Allen Screw for Strap		1-1 to 10	2	M8 x 30mm	96406258	No
26c	Washer for Strap		1-1 to 10	2	Ø16 / Ø8.4 x 1.6mm	00ID3284	No
28	Allen Screw for Pump Head		1-1 to 10	4	M10 x 50mm	96406305	No
28a	Motor Bolt		1-1 to 5	4	1/2" x 13 UNC, 3-40 HP	96026055	No
			6-2 to 7-2	4	5/8" x 11UNC, 50-60 HP	96026056	No
	IEC Motor Bolt		1-1 to 1	4	M8 x 20mm, 1.5-4.0 kW	00ID8024	No
			2-2 to 2	4	M12 x 40mm, 5.5-7.5 kW	00ID7913	No
			3-2 to 10	4	M16 x 45mm, 11.0-45.0 kW	00ID7905	No
31	Allen Screw for Pos. 6g		1-1 to 10	1	M6 x 10mm	96406261	YES
32	Washer for Pos.31		1-1 to 10	1	Ø 12.5/Ø6.4 x 1.6mm	00ID3819	YES
32a	Washer for IEC Pos.28a & 36a (b)		1-1 to 2	8	Ø24/ Ø13 x 2.5mm	96430377	No
			3-2 to 10	8	Ø30/ Ø17 x 1.6mm	96430378	No
36	Staybolt Nut		1-1 to 10	4	Delta Seal, CS M16	00ID7908	No
36a	Nut for IEC Pos. 28a		1-1 to 2	2	M12, 3.0- 5.5-7.5 kW	00ID7917	No
			3-2 to 10	2	M16, 11.0-45.0 kW	00ID7908	No
36b	Eye Nut for IEC Pos. 28a		1-1 to 2	2	M12, 5.5-7.5 kW	96428759	No
			3-2 to 10	2	M16, 11.0-45.0 kW	96428760	No
37	Sleeve O-ring		1-1 to 10	2	EPDM, Ø216 x 4mm	96405981	YES
			1-1 to 10	2	FKM, Ø216 x 4mm	96405983	YES
	Sleeve O-ring (option)		1-1 to 10	2	FKM/PTFE, Ø216 x 4mm	96428156	No
	Sleeve O-ring (option***)		1-1 to 10	2	FXM, Ø216 x 4mm	96442841	No
38 & 38a	Drain Plug O-ring		1-1 to 10	4	EPDM, Ø16.3 x 2.4mm	00ID1288	YES
			1-1 to 10	4	FKM, Ø16.3 x 2.4mm	00ID2231	YES
	Drain Plug O-ring (option)		1-1 to 10	4	NBR, Ø16.3 x 2.4mm	00ID7035	No
	Drain Plug O-ring (option)		1-1 to 10	4	FFKM, Ø16.3 x 2.4mm	96428162	No
	Drain Plug O-ring (option***)		1-1 to 10	2	FXM, Ø16.3 x 2.4mm	96442869	No
44	Inlet Base Interface CPL.		1-1 to 10	1	ACOFLOX 215 Neck Ring	350436	No
	Inlet Base Interface CPL. (option)		1-1 to 10	1	PTFE, Neck Ring	350589	No
44a	Inlet Base Interface CPL. (Low NPSH option)		1-1 to 10	1	ACOFLOX 215 Neck Ring	350838	No
45	Neck Ring		1-1 to 10	# stg.	ACOFLOX 215	350090	YES
	Neck Ring, (option)		1-1 to 10	# stg.	PTFE, Neck Ring	350507	No
45a	Neck Ring CPL.		1-1 to 10	# stg.	ACOFLOX 215 Neck Ring	350092	No
45b	Neck Ring CPL. (low NPSH)		1-1 to 10	# stg.	ACOFLOX 215 Neck Ring	370245	No
47	Chamber Bearing Ring		1-1 to 10	AAAA	Bronze, 30mm	370023	YES
	Chamber Bearing Ring (option)		1-1 to 10	AAAA	Graflon, 30mm	370214	YES
	Chamber Bearing Ring (option)		1-1 to 10	AAAA	SIC, 30mm	370096	No
47a	Intermediate Bearing with Driver		1-1 to 10	AAAA	Tungsten Carbide	350083	YES
47b	Bottom Bearing for Shaft		1-1 to 10	1	Tungsten Carbide	370069	YES
47c	Chamber Sleeve Bushing		1-1 to 10	AAAAA	Graflon, Ø22mm	370024	YES
	Chamber Sleeve Bushing (option)		1-1 to 10	AAAAA	PTFE, Ø22mm	370094	No
47d & 47e	Lock Ring for Bearing Ring/Sleeve Bushing		1-1 to 10	AAAAA		370213	YES
48	Split Cone Nut		1-1 to 10	# stg.	M30, Delta Seal	370098	No
49	Impeller Full Dia. w/Pos. 49c		1 to 10	# stg.●●●●		350046	No
49a	Impeller Reduced Dia. w/Pos. 49c		1-1 to 10-1	●●●●		350238	No
49b	Split Cone		1-1 to 10	# stg.		370019	No
49c	Wear Ring for Impeller		1-1 to 10	# stg.		350050	YES
49i	Impeller Low NPSH w/Pos. 48, 49b,c		1-1 to 10	1		350840	No
51	Shaft CPL. (Includes Pos. 47b, 66, 66b, 67)		1-1 to 1	1	Ø22 x 327mm	350218	No
			2-2 to 2	1	Ø22 x 407mm	350219	No
			3-2 to 3	1	Ø22 x 487mm	350220	No
			4-2 to 4	1	Ø22 x 567mm	350221	No
			5-2 to 5	1	Ø22 x 647mm	350222	No
			6-2 to 6	1	Ø22 x 727mm	350223	No
			7- 2 to 7	1	Ø22 x 807mm	350224	No
			8-2 to 8	1	Ø22 x 887mm	350225	No
			9-2 to 9	1	Ø22 x 967mm	350226	No
			10-2 to 10	1	Ø22x1047mm	350227	No

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.

(option\*\*\*) These components are used in the lower / hot section of Cool Top™ equipped pumps.

Parts List

Pos. No.	Part Description	Model	Stages	No. Used	Comments/Dimensions	Material No.	Included in Kits?
55	Outer Sleeve		1-1 to 1	1	103.5mm	350093	No
			2-2 to 2	1	183.5mm	350094	No
			3-2 to 3	1	263.5mm	350095	No
			4-2 to 4	1	343.5mm	350096	No
			5-2 to 5	1	423.5mm	350299	No
			6-2 to 6	1	503.5mm	350098	No
			7- 2 to 7	1	583.5mm	350099	No
			8-2 to 8	1	663.5mm	350100	No
			9-2 to 9	1	743.5mm	350101	No
			10-2 to 10	1	823.5mm	350102	No
58	Seal Carrier		1-1 to 10	1		980927	No
58a	Allen Screw		1-1 to 10	4	M10 x 25mm	96406407	No
60	Stack Compression Spring		1-1 to 10	4	EPDM	370175	YES
			1-1 to 10	4	FKM	370209	YES
			1-1 to 10	4	PTFE	370796	No
65	Neck Ring Retainer		1-1 to 10	#stg		350012	YES
66	Washer for Shaft Bearing, pos. 47b		1-1 to 10	1		370212	YES
66a	Washer for Staybolt		1-1 to 10	4	Ø30/Ø17x3mm	96430378	No
66b	Lock Washer for Shaft Bearing		1-1 to 10	2		96417297	YES
67	Allen Screw for Shaft Bearing		1-1 to 10	1	M8 x 16mm	96406259	YES
76	Name Plate		1-1 to 10	1		981417	No
76a	Rivet for Name Plate		1-1 to 10	2	304ss, 3 x 5mm	96022882	No
100	Drain Plug O-ring		1-1 to 10	2	EPDM, Ø16.3 x 2.4mm	00ID1288	YES
			1-1 to 10	2	FKM, Ø16.3 x 2.4mm	00ID2231	YES
105	Drain Plug O-ring (option) Drain Plug O-ring (option) Drain Plug O-ring (option***) Shaft Seal EUHE Shaft Seal EUHV Shaft Seal EUBE Shaft Seal EUBV Shaft Seal EUUE Shaft Seal EUUV Shaft Seal HUBE Shaft Seal HUBV Shaft Seal HUUE Shaft Seal HUUV Shaft Seal HUUK (option) Shaft Seal HQQE (option) Shaft Seal HQQV (option) Shaft Seal HQQV (corrosives option) Shaft Seal HQQK (option) Shaft Seal EUUK (option) Shaft Seal EUUK Shaft Seal EUUP (option) Shaft Seal EUBP (option) Flush Housing & Shaft Seal QUBE (option) Shaft Seal EQQE (option) Shaft Seal EQQV (option) Shaft Seal KUHE (option) Shaft Seal KUHV (option) Shaft Seal KUBE (option) Shaft Seal KUBV (option) Shaft Seal KUUE (option) Shaft Seal KUUV (option)		1-1 to 10	2	NBR, Ø16.3 x 2.4mm	00ID7035	No
			1-1 to 10	2	FFKM, Ø16.3 x 2.4mm	96428162	No
			1-1 to 10	2	FXM, Ø16.3 x 2.4mm	96442869	No
			**	1	EPDM	985918	YES
			**	1	FKM	985919	YES
			**	1	EPDM	985920	YES
			**	1	FKM	985921	YES
			**	1	EPDM	985922	YES
			**	1	FKM	985923	YES
			****	1	EPDM	985927	YES
			****	1	FKM	985928	YES
			****	1	EPDM	985940	YES
			****	1	FKM	985941	YES
			****	1	FFKM	985952	No
			****	1	SIC/SIC, EPDM	985950	No
			****	1	SIC/SIC, FKM	985951	No
			****	1	SIC/SIC, Hasteloy Spring, FKM	96467223	No
			****	1	SIC/SIC, FFKM	985953	No
			**	1	FFKM	985932	No
			**	1	FFKM	985932	No
			**	1	NBR	985936	No
			**	1	NBR	985937	No
			**	1	EPDM	985939	No
			**	1	SIC/SIC, EPDM	985934	No
			**	1	SIC/SIC, FKM	985935	No
			1-1 to 10	1	EPDM	985942	YES
			1-1 to 10	1	FKM	985943	YES
			1-1 to 10	1	EPDM	985944	YES
1-1 to 10	1	FKM	985945	YES			
1-1 to 10	1	EPDM	985946	YES			
1-1 to 10	1	FKM	985947	YES			
1-1 to 10	1	EPDM, Ø44.45 x 3.53mm	96407726	YES			
1-1 to 10	1	FKM, Ø44.45 x 3.53mm	96411713	YES			
1-1 to 7	2	FXM, Ø44.45 x 3.53mm	96442849	No			
1-1 to 10	1	EPDM, Ø21.2 x 3.55mm	96407724	YES			
1-1 to 10	1	FKM, Ø21.2 x 3.55mm	96411711	YES			
201	Flange		2	2	ANSI B16.5 Class 150 - 3"	350085	No
			2	2	ANSI B16.5 Class 300 - 3"	350086	No
			2	2	ANSI B16.5 Class 150 - 4"	350028	No
			2	2	ANSI B16.5 Class 300 - 4"	350029	No
203	Lock Ring for Flange		1-1 to 10	2	Ø6/Ø121mm	350009	No

NOTES:

- \*\* 6 stage or less 60 Hz, 9 stage or less 50 Hz
- \*\*\*\* 7 stage and up 60 Hz, 10 stage and up 50 Hz
- For working pressure over 360 PSI with inlet pressure not exceeding recommended maximum. Seal maximum working PSI is 580.
- ^^^ 1 stage, 0 per pump
- ^^ 2 to 3 stage, 1 per pump
- ^^^ 4 to 7 stage, # of stages less 2
- ^^ 8 to 10 stage, # of stages less 3
- ^^^^ 1 to 2 stage, 0 per pump
- ^^^^ 3 to 7 stage, 1 per pump
- ^^^^ 8 to 10 stage, 2 per pump
- ^^^^ Same as ^^ plus 1
- In pump models with a - after the # of stages, the - # indicates the number of reduced impellers. Example: CR45-6-2 (has 4 full size impellers, 2 reduced size impellers)

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
- 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®
- UNC** ..... Unified National Coarse – a standard for threads on bolts

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.

(option\*\*\*) These components are used in the lower / hot section of Cool Top™ equipped pumps.

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.

BOTTOM BEARING KIT 1-10		Kit No. 96416580	
Pos. No.	Description	Material No.	Qty. Included in each Kit
6g	Stationary Bottom Bearing Ring for Base	370130	1
31	Allen Screw for Pos. 6g, M6 x 10mm	96406261	1
32	Washer for Pos. 31, 12.5/ 6.4 x 1.6	00ID3819	1
47b	Bottom Bearing for Shaft, Tungsten Carbide	370069	1
66	Washer for Shaft Bearing, Pos. 47b	370212	1
66b	Lock Washer for Shaft Bearing	96417297	1
67	Allen Screw for Shaft Bearing	96406259	1
D	Puller for Bottom Bearing, 6g	00SV0002	1
E	Allen Screw for Puller D, M8 x 50mm	00ID6595	1
H	Distance Tool for Shaft Seal	985924	1

BEARING KIT 3-7		Kit No. 96416577	
BEARING KIT 8-10		Kit No. 96416578	
Pos. No.	Description	Material No.	Qty. Included in each Kit
47a	Intermediate Bearing with Driver	350083	1
H	Distance Tool for Shaft Seal	985924	1

WEAR PARTS KIT 1-2		Kit No. 96416732	
WEAR PARTS KIT 3-7		Kit No. 96416733	
WEAR PARTS KIT 8-10		Kit No. 96416734	
Pos. No.	Description	Material No.	Qty. Included in each Kit
45	Neck Ring	350090	2
47	Chamber Bearing Ring, Bronze, 30mm	370023	1
47	Chamber Bearing Ring, Graflon, 30mm	370214	1
47c	Chamber Sleeve Bushing, Graflon, 22mm	370024	2
47d	Lock Ring for Bearing Ring/Sleeve Bushing	370213	2
49c	Wear Ring for Impeller	350050	2
65	Neck Ring Retainer	350012	2
H	Distance Tool for Shaft Seal	985924	1

GASKET KIT (EPDM)		Kit No. 96416599	
GASKET KIT (FKM)		Kit No. 96416600	
Pos. No.	Description	Material No.	Qty. Included in each Kit
37	Sleeve O-ring, 216x4	96405981	2
		96405983	2
38(a), 100	Drain Plug O-ring, 16.3 x 2.4	00ID1288	6
		00ID2231	6
60	Stack Compression Spring	370175	4
		370209	4
109	Large O-ring for Seal Pos.105, 44.45x3.53	96407726	1
		96411713	1
110	O-ring for Seal Pos.105 to Shaft, 21.2x3.55	96407724	1
		96411711	1
H	Distance Tool for Shaft Seal	985924	1

SHAFT SEAL KIT, CARTRIDGE WITH O-RING		Kit No. 96416582	
60 Hz = 1-6 stg. 50 Hz = 1-9 stg.		Kit No. 96416583	
		Kit No. 96416584	
		Kit No. 96416586	
		Kit No. 96416587	
SHAFT SEAL KIT, BALANCED CARTRIDGE		Kit No. 96417021	
60 Hz = 7 stg. 50 Hz = 10 stg.		Kit No. 96417022	
(Maximum allowed working PSI is 580)		Kit No. 96436727	
		Kit No. 96436728	
Pos. No.	Description	Material No.	Qty. Included in each Kit
105	EUHE	985918	1
	EUHV	985919	1
	EUBE	985920	1
	EUUE	985922	1
	EUUV	985923	1
	HUBE	985927	1
	HUBV	985928	1
	HUUE	985940	1
	HUUV	985941	1
H	Distance Tool for Shaft Seal	985924	1
N/A	Grinding Device Tool for Emery Cloth	370711	1
N/A	Emery Cloth	370712	1

SHAFT SEAL METAL BELLOWS		Kit No. 96494662	
Working pressure up to 430 PSI		Kit No. 96494663	
(for working pressure over 430 PSI, use Hxxx balanced seal as noted above)		Kit No. 96494664	
		Kit No. 96494665	
		Kit No. 96494666	
		Kit No. 96494667	
Pos. No.	Description	Material No.	Qty. Included in each Kit
105	KUHE	985942	1
	KUHV	985943	1
	KUBE	985944	1
	KUBV	985945	1
	KUUE	985946	1
	KUUV	985947	1
H	Distance Tool for Shaft Seal	985924	1
N/A	Grinding Device Tool for Emery Cloth	370711	1
N/A	Emery Cloth	370712	1

Spare Part Kits (continued)

Spare Part Kits (continued)

IEC COUPLING KIT		24/22 Kit No. 96416589	
		28/22 Kit No. 96416590	
		38/22 Kit No. 96416591	
		42/22 Kit No. 96416592	
		48/22 Kit No. 96416593	
		55/22 Kit No. 96416594	
Pos. No.	Description	Material No.	Qty. Included in each Kit
8	Coupling CPL. w/Pos. 9, 1.5-2.2 kW	370703	1
	Coupling CPL. w/Pos. 9, 3.0-4.0 kW	370704	1
	Coupling CPL. w/Pos. 9, 5.5-7.5 kW	370710	1
	Coupling CPL. w/Pos. 9, 11.0-18.5 kW	370035	1
	Coupling CPL. w/Pos. 9, 22 kW	370036	1
	Coupling CPL. w/Pos. 9, 30.0-37.0 kW	370037	1
H	Distance Tool for Shaft Seal	985924	1

NEMA COUPLING KIT		28.6/22 Kit No. 96417000	
		34.9/22 Kit No. 96417001	
		41.2/22 Kit No. 96417004	
		47.6/22 Kit No. 96417020	
Pos. No.	Description	Material No.	Qty. Included in each Kit
8	Coupling CPL. w/Pos. 9, 182/184TC, 3-5 HP	370724	1
	Coupling CPL. w/Pos. 9, 213/215TC, 7 1/2-10 HP	370725	1
	Coupling CPL. w/Pos. 9, 254-286TSC, 15-40 HP	370715	1
	Coupling CPL. w/Pos. 9, 324-365TS, 50-60 HP	370716	1
H	Distance Tool for Shaft Seal	985924	1

Accessories

ANSI COMPANION FLANGES FOR LARGE CR		Kit No. 569601	
3" Threaded Cast Iron, 125 Lb. Class, CR45-1-1 to CR45-4-2			
Pos. No.	Description	Material No.	Qty. Included in each Kit
N/A	Nut, HEX 5/8"-11 UNC, Grade 2	00ID1510	8
N/A	Plain Bolt, 5/8" x 3", Grade 2	00ID1921	8
N/A	Flange, Cast Iron 3"	00ID1925	2
N/A	Gasket Full Face Flange 3", 150#	560185	2

ANSI COMPANION FLANGES FOR LARGE CR		Kit No. 91121954	
3" Threaded Cast Iron, 300 Lb. Class, CR45-4-1 to CR45-7-2			
Pos. No.	Description	Material No.	Qty. Included in each Kit
N/A	HEX Screw 3/4" x 3 1/4", 10 UNC, 18-8 SS	0ID00144	16
N/A	Nut HEX, 3/4" - 10 UNC, 18-8 SS	0ID00154	16
N/A	Flange, 316 Stainless Steel, 3"	91121945	2
N/A	Gasket 3", 250#	91122339	2







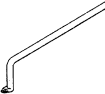



NOTE: Base Adapter Kits are also available.		Kit No. 370939	
(Adapts the bases of CR(N)60 to CR(N)45)			
Pos. No.	Description	Qty. Included in each Kit	
N/A	CR60 to CR45 Base Adapter Kit 220mm	1	

STACK KITS	
Model	Material Number
CR45-1-1	96416222
CR45-1	96416223
CR45-2-2	96416224
CR45-2-1	96416225
CR45-2	96416226
CR45-3-2	96416227
CR45-3-1	96416932
CR45-3	96416228
CR45-4-2	96416229
CR45-4-1	96416933
CR45-4	96416230
CR45-5-2	96416934
CR45-5-1	96416231
CR45-5	96416232
CR45-6-2	96416233
CR45-6	96416234
CR45-7-2	96416935
CR45-7	96416235
CR45-8-2	96416936
CR45-8	96416236
CR45-9-2	96416237
CR45-9	96416937
CR45-10-2	96416938
CR45-10	96416238

\*For 50 Hz operation only.  
NOTE: Stack Kits do not include seal, bottom bearing, or gasket kits, which must be ordered separately.

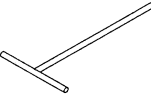

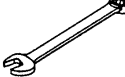

**SPECIAL TOOLS**

Tools not generally available from normal sources.

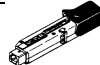



MATERIAL NO.	DESCRIPTION AND USE	
00SV0003	Holder with Pin for Dismantling and Assembly	
00SV0015	Punch for Pos. 6g, 47, 47c, 47d, 47e	
00SV0043 00SV0044 00SV0045 00SV0046	Holder for Wear Ring, Pos. 49c CR(N) 32 CR(N) 45 CR(N) 64 CR(N) 90	
00SV0002	Puller for Bottom Bearing, Pos. 6g	
00ID6595	Hexagon Socket Head Screw for Puller	
00SV0025 00SV0027 00SV0028 00SV0029	Punch for Fitting of Neck Ring/Retainer, Pos. 45a - 65 CR(N) 32 CR(N) 45 CR(N) 64 CR(N) 90	
00SV0239	Puller for Wear Ring, Pos. 49c	
985924	Forked Distance Piece for Shaft Seal	
00SV0004	Key for Split Cone Nut	
00SV0047	Pliers for Lock Ring	

**STANDARD TOOLS**

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

MATERIAL NO.	DESCRIPTION AND USE	
00SV0153 00SV0124 00SV0050 00SV0051	Tee Key for Puller, Pos.: 105-(113) 31 26b-67 9-58a	
00SV0055 00SV0054 00SV0096	Key for Hexagon Socket Head Screws, Pos.: 28-58a 28a 28a	
00SV0055 00SV0054 00SV0122 00SV0031	Ring/Open-End Spanner for Pos.: 28a 28a-36a 28a-36-36a 21-23-25	
00SV0031	Hook Spanner (adjustable)	

**TOOLS FOR TORQUES**

MATERIAL NO.	DESCRIPTION AND USE	
00SV0292 00SV0269	Torque Wrench	
00SV0091 00SV0267 00SV0092 00SV0092	Socket Spanner, Pos.: 28a 28a-36a 28a-36-36a 21-23-25	
00SV0296 00SV0297 00SV0298 00SV0094 00SV0093	Socket Driver for Hexagon Socket Head Screws, Pos.: 31 26b-67-E 9-28-58a 28a	
00SV0295	Ratchet Insert Tool for Socket Spanner, Pos.: S	
00SV0403	Tap for Key for Split Cone Nut	