

CA pump Series Mechanical Seals (standard - optional)					ST/CEA			
					Issue 1st: 18/02/2004		Rev.	
		Last issue: March09						
Dia (mm)	Type Roten Supplier ext.	Sliding faces, seals, spring and other components materials					Digit	DIN EN 12756 (ex DIN 24960)
		Rotary - Stationary	Elastomer OR	Spring	P/N			
16 X 30	ROTEN 3	CERAMIC-CARBON	NBR		002228263+002228861	STD	VBPGG	
	ROTEN 3	CERAMIC-CARBON	EPDM		002228261+002228870	B	VBEGG	
	ROTEN 3	CERAMIC-CARBON -> CA-V, CA_K	FPM		002228267+002228867	A	VBVGG	
	ROTEN 3	WIDIA - SILICON CARBIDE	EPDM		002231607	P	U3Q1EGG	
	ROTEN 3	SILICON CARBIDE - SILICON CARBID	EPDM		002231619	Z	Q1Q1EGG	
	ROTEN 3	CERAMIC - CARBON Z	EPDM		002231609	5	VCEGG	
	ROTEN 3	WIDIA.-SILICON CARBIDE	FPM	A316	002231608	N	U3Q1VGG	
	ROTEN 3	WIDIA - WIDIA	NBR		002228268+002228868	U	U3U3PGG	
	ROTEN 3	WIDIA - WIDIA	FPM		002228269+002228869	S	U3U3VGG	
	ROTEN 3	SILICON CARBIDE - SILICON CARBID	FPM		002231605	W	Q1Q1VGG	
ext. = stationary extension (short,long, special) with stop ring/key								
Materials. Ceramic Tungsten carbide = Widia NBR = Nitrile rubber Carbon Solid silicon carbide EPDM = Ethylene propylene acc. WRAS std Special carbon Z A316 = 316 SS FPM = Fluoroelastomer Metalized graphite								

CA pump Series : O-Rings description (std version - optional)		ST/CEA		
		Issue 1st: 01/02/96		
		Last issue: March 09	Rev. C	
<ul style="list-style-type: none"> - NBR = Nitrile - Fluoro carbon = like VITON - EPDM = Ethylene propylene - PTFE = Normal PTFE - FEP = Fluoro carbon coated normal PTFE 				
Series	OR Size USED ON PARTS	Material	Dim's	P/N
Std CA 70-200	dim. 1	NBR	12.42 x 1.78	002221062
	PLUGS	FPM	12.42 x 1.78	002221603
		EPDM	12.42 x 1.78	002221706
Std CA 70-120	dim. 2	NBR	41.28 x 3.53	002221217
	WEAR	FPM	41.28 x 3.53	002221624
	RING	EPDM	41.28 x 3.53	002221862
Std CA 200	dim. 3	NBR	49.21 x 3.53	002221223
	WEAR	FPM	49.21 x 3.53	002221619
	RING	EPDM	49.21 x 3.53	002221865
Std CA 70-200	dim. 4	NBR	183.7 x 3.53	002221278
	SUCTION	FPM	183.7 x 3.53	002221639
	FLANGE	EPDM	183.7 x 3.53	002221882

CEA/A -CEA/P pump Series Mechanical Seals (standard - optional)				ST/CEA				
				Issue 1st: 18/02/2004		Rev. A		
Last issue: Oct15								
Dia (mm)	Type	Sliding faces, seals, spring and other components materials						
	Roten Supplie ext.	Rotary - Stationary	Elastomer OR	Spring	P/N	Digit	DIN EN 12756 (ex DIN 24960)	
14 X 22	3 LS	CC	CERAMIC - CARBON	NBR	A304	002231470	STD	VBPGF
	3 LS	CC	CERAMIC - CARBON --> CEA /N	EPDM *		002231475	B	VBEGG
	3 LS-SR	CC	CERAMIC - CARBON Z	EPDM		002231476	5	VCEGG
	3 LS	CC	SILICON CARBIDE - CARBON Z	EPDM		002231479	6	Q1CEGG
	2 LSCA		WIDIA - SILICON CARBIDE	EPDM		002231482	Y	U3Q1EGG
	3 LS	CL	WIDIA - CARBON Z	EPDM		002231483	L	U3CEGG
	2 LS	CL	WIDIA - WIDIA	EPDM *	A316	002231484	T	U3U3EGG
	2 LS	CL	WIDIA - WIDIA	FPM		002231494	S	U3U3VGG
	4 LS	CL	WIDIA - WIDIA	PTFE		002231430	V	U3U3TGG
	3 LS	CC	CERAMIC - CARBON ---> CEA-V	FPM		002231485	A	VBVGG
	3 LSO	CC	SILICON CARBIDE: SiC - Si-SiC (lapped) --> CEA-	FPM		002231488	W	JQ1VGG
	3 LS	CC	CERAMIC - CARBON Z	FPM		002231489	S	VCVGG
	3 LS	CC	SILICON CARBIDE - CARBON+ANTIMONY	FPM		002231425	Y2	Q1AVGG
	3 LSO	CC	SILICON CARBIDE: SiC - Si-SiC (lapped)	EPDM		002231492	7	JQ1EGG
	2 LSCA	CC	WIDIA - SILICON CARBIDE	FPM		002231493	N	U3Q1VGG
2 LSCA	CC	WIDIA - SILICON CARBIDE	FFKM		002231419	X	U3Q1KGG	
14	2 LSCA	CL	WIDIA - CARBON Z w/extension long CL	FPM		002231499	U	U3CVGG

ext. = stationary extension (short,long, special) with stop ring/key

Materials.

Ceramic	Tungsten carbide = Widia	NBR = Nitrile rubber
Carbon	Solid silicon carbide	EPDM = Ethylene propylene
Special carbon Z	A304 = 304 SS	EPDM = Ethylene propylene acc. WRAS std *
Metalized graphite	A316 = 316 SS	FPM = Fluoroelastomer
		PTFE = Polytetrafluoroethylene
		FFKM = Perfluoroelastomer

CEA pump Series :				
O-Rings description				
(std version - optional)				
ST/ CEA				
Issue 1st: 01/02/96				
Last issue: Feb 09				Rev. F
<ul style="list-style-type: none"> - NBR = Nitrile - Fluoro carbon = like VITON - EPDM = Ethylene propylene - PTFE = Normal PTFE - FEP = Fluoro carbon coated normal PTFE 				
Series	OR Size	Material	Dim's	P/N
	USED ON PARTS			
Std CEA - CEAM 210-370	dim. 1	NBR	50.39 x 3.53	002221224
CEA - CEAM 210-370 A	WEAR	FPM	50.39 x 3.53	002221621
CEA - CEAM 210-370 B	RING	EPDM	50.39 x 3.53	002221863
CEA - CEAM 210-370 G		FEP - FPM	50.39 x 3.53	002223112
Std CEA - CEAM 70-80-120	dim. 2	NBR	40.86 x 3.53	002221215
CEA - CEAM 70-80-120 A	WEAR	FPM	40.86 x 3.53	002221613
CEA - CEAM 70-80-120 B	RING	EPDM	40.86 x 3.53	002221861
CEA - CEAM 70-80-120 G		FEP	40.86 x 3.53	002223101
Std CEA - CEAM	dim. 3	NBR	12.42 x 1.78	002221062
CEA - CEAM A	PLUGS	FPM	12.42 x 1.78	002221603
CEA - CEAM B		EPDM	12.42 x 1.78	002221706
CEA - CEAM D		PTFE	12.42 x 1.78	002222306
Std CEA - CEAM	dim. 4	NBR	171 x 3.53	002221275
CEA - CEAM A	SEAL	FPM	171 x 3.53	002221638
CEA - CEAM B	HOLDER	EPDM	171 x 3.53	002221774
CEA - CEAM D		FEP	171 X3,53	002223110

CA CEA CEF Impeller Dimensions					ST/CA CEA CEF			
					Issue 1st: 15/12/96			
					Last issue : October09		Rev.	
Pump Type	Power, Rated		Impeller (welded hub) P/N	Impeller, whole hub P/N	Dimensions (mm)			
	kW	HP	A304/A316	A304/A316	D2	b2	D1	Dm
CEA (M) 70/3 (/N)	0,37	0.5	150701690/1	150703140/1	132	1,8	41	7/16"-20 UNF
CEA (M) 70/5 (/N)	0,55	0.75	150701710/1	150703160/1	156	1,7	41	7/16"-20 UNF
CEA (M) 80/5 (/N)	0,75	1	150701720/1	150703170/1	156	2,2	41	7/16"-20 UNF
CEA (M) 120/1 (/N)	0,55	0.75	150701730/1	150703180/1	112	2,25	41	7/16"-20 UNF
CEA (M) 120/2 (/N)	0,55	0.75	150701740/1	150703190/1	122	2,25	41	7/16"-20 UNF
CEA (M) 120/3 (/N)	0,55	0.75	150701750/1	150703200/1	132	2,25	41	7/16"-20 UNF
CEA (M) 120/4 (/N)	0,9	1.2	150701770/1	150703210/1	145	2,25	41	7/16"-20 UNF
CEA (M) 120/5 (/N)	0,9	1.2	150701780/1	150703220/1	156	2,25	41	7/16"-20 UNF
CEA (M) 210/2 - 210/2N	0,75	1	150701831	150703251	120	4,9	49,7	7/16"-20 UNF
CEA (M) 210/3 - 210/3N	1,1	1.5	150701841	150703261	128,5	4,9	49,7	7/16"-20 UNF
CEA (M) 210/4 - 210/4N	1,5	2	150701851	150703271	139	4,9	49,7	7/16"-20 UNF
CEA (M) 210/5 - 210/5N	1,85	2.5	150701861	150703281	150	4,9	49,7	7/16"-20 UNF
CEA (M) 370/1 - 370/1N	1,1	1.5	150701891	150703311	115	9	49,7	7/16"-20 UNF
CEA (M) 370/2 - 370/2N	1,5	2	150701901	150703321	126	9	49,7	7/16"-20 UNF
CEA (M) 370/3 - 370/3N	1,85	2.5	150701911	150703331	134,5	9	49,7	7/16"-20 UNF
CEA 370/5 - 370/5N	3	4,0	150701913	150703351	148	9	49,7	7/16"-20 UNF
CA (M) 70/33 (/N)	0,75	1	150700750/1	150703050/1	132	1,8	41	14
CA (M) 70/34 (/N)	0,9	1.2	150700750/1	150703050/1	132	1,8	41	14
			150700760/1	150703060/1	145	1,8	41	14
CA (M) 70/45 (/N)	1,1	1.5	150700760/1	150703060/1	145	1,8	41	14
			150700770/1	150703070/1	156	1,8	41	14
CA (M) 120/33 (/N)	1,1	1.5	150700780/1	150703080/1	132	2,25	41	14
CA (M) 120/35 (/N)	1,5	2	150700780/1	150703080/1	132	2,25	41	14
			150700790/1	150703090/1	156	2,25	41	14
CA (M) 120/55 (/N)	1,85	2.5	150700790/1	150703090/1	156	2,25	41	14
CA (M) 200/33 (/N)	1,85	2.5	150700800/1	150703100/1	132	3,7	48,5	14
CA 200/35 (/N)	2,2	3	150700800/1	150703100/1	132	3,7	48,5	14
			150700810/1	150703110/1	156	3,7	48,5	14
CA 200/55 (/N)	3	4	150700810/1	150703110/1	156	3,7	48,5	14
CEF 70/3	0,5	0,7	150701690	150703140	132	1,8	41	7/16"-20 UNF
CEF 70/5	0,7	1	150701710	150703160	156	1,7	41	7/16"-20 UNF
CEF 80/5	0,9	1,2	150701720	150703170	156	2,2	41	7/16"-20 UNF
CEF 120/3	0,7	0,95	150701750	150703200	132	2,25	41	7/16"-20 UNF
CEF 120/5	1,1	1,5	150701780	150703220	156	2,25	41	7/16"-20 UNF
CEF 210/2	0,9	1,2	150701830	150703251	120	4,9	49,7	7/16"-20 UNF
CEF 210/3	1,1	1,5	150701841	150703261	128,5	4,9	49,7	7/16"-20 UNF
CEF 210/4	1,5	2	150701851	150703271	139	4,9	49,7	7/16"-20 UNF
CEF 210/5	1,8	2,5	150701861	150703281	150	4,9	49,7	7/16"-20 UNF
CEF 370/1	1,5	2	150701891	150703311	115	9	49,7	7/16"-20 UNF
CEF 370/2	1,8	2,5	150701901	150703321	126	9	49,7	7/16"-20 UNF
CEF 370/3	2,2	3	150701911	150703331	134,5	9	49,7	7/16"-20 UNF
NUT H4 (Height for mounting, mm)			167000210		-->			7/16"-20 UNF
NUT H6 (Height for mounting, mm)				167000230	-->			7/16"-20 UNF
D2 --> - Imp. OUTside Blade Dia. imp. whole hub ---> chiller project 2009 b2 --> - MINimum Blade Height (integral) D1 --> - Imp. EYE Dia. Dm --> - Hub INTernal Dia.								

CA CEA CEF 60Hz Impeller Dimensions					ST/CA CEA CEF			
					Issue 1st: 15/12/96			
					Last issue : March09		Rev.	
Pump Type	Power, Rated		Impeller inox (welded hub)	Impeller inox whole hub	Dimensions (mm)			
	kW	HP			D2	b2	D1	Dm
CEA (M) 706/4 (/N)	0,75	1	150701700/1	150703150/1	145	1,8	41	7/16"-20 UNF
CEA (M) 706/5 (/N)	1,1	1,5	150701710/1	150703160/1	156	1,7	41	7/16"-20 UNF
CEA (M) 1206/1 (/N)	0,55	0,7	150701731	150703181	112	2,25	41	7/16"-20 UNF
CEA (M) 1206/2 (/N)	0,75	1	150701741	150703191	122	2,25	41	7/16"-20 UNF
CEA (M) 1206/3 (/N)	0,75	1	150701750/1	150703200/1	132	2,25	41	7/16"-20 UNF
CEA (M) 1206/4 (/N)	1,5	2	150701771	150703211	145	2,25	41	7/16"-20 UNF
CEA (M) 1206/5 (/N)	1,85	2,5	150701780/1	150703220/1	156	2,25	41	7/16"-20 UNF
CEA (M) 2106/0 - 2106/0N	0,75	1	150701810/1	150703230/1	102,5	4,9	49,7	7/16"-20 UNF
CEA (M) 2106/1	1,1	1,5	150701820	150703240	112,3	4,9	49,7	7/16"-20 UNF
CEA (M) 2106/2 - 2106/2N	1,5	2	150701831	150703251	120	4,9	49,7	7/16"-20 UNF
CEA (M) 2106/3 - 2106/3N	1,85	2,5	150701841	150703261	128,5	4,9	49,7	7/16"-20 UNF
CEA (M) 2106/4 - 2106/4N	2,2	3	150701851	150703271	139	4,9	49,7	7/16"-20 UNF
CEA (M) 2106/5 - 2106/5N	2,2	3	150701861	150703281	150	4,9	49,7	7/16"-20 UNF
CEA (M) 3706/0	1,1	1,5	150701870	150703290	101	9	49,7	7/16"-20 UNF
CEA (M) 3706/A0	1,5	2	150701880	150703300	108	9	49,7	7/16"-20 UNF
CEA (M) 3706/1 - 3706/1N	1,85	2,5	150701891	150703311	115	9	49,7	7/16"-20 UNF
CEA (M) 3706/2 - 3706/2N	2,2	3	150701901	150703321	126	9	49,7	7/16"-20 UNF
CEA (M) 3706/3 - 3706/3N	3	4	150701911	150703331	134,5	9	49,7	7/16"-20 UNF
CA (M) 706/33 (/N)	0,75	1	150700750/1	150703050/1	132	1,8	41	14
CA (M) 706/34 (/N)	0,9	1,2	150700750/1	150703050/1	132	1,8	41	14
CA (M) 706/34 (/N) in polypropylene acc. WRAS std *			150700760/1	150703060/1	145	1,8	41	14
CA (M) 706/45 (/N)	1,1	1,5	150700760/1	150703060/1	145	1,8	41	14
			150700770/1	150703070/1	156	1,8	41	14
CA (M) 1206/33 (/N)	1,1	1,5	150700780/1	150703080/1	132	2,25	41	14
CA (M) 1206/35 (/N)	1,5	2	150700780/1	150703080/1	132	2,25	41	14
			150700790/1	150703090/1	156	2,25	41	14
CA (M) 1206/55 (/N)	1,85	2,5	150700790/1	150703090/1	156	2,25	41	14
CA (M) 2006/33 (/N)	1,85	2,5	150700800/1	150703100/1	132	3,7	48,5	14
CA 200/35 (/N)	2,2	3	150700800/1	150703100/1	132	3,7	48,5	14
			150700810/1	150703110/1	156	3,7	48,5	14
CA 2006/55 (/N)	3	4	150700810/1	150703110/1	156	3,7	48,5	14
CEF 706/4	0,75	1	150701700	150703150				7/16"-20 UNF
CEF 706/5	1,1	1,5	150701710	150703160	156	1,7	41	7/16"-20 UNF
CEF 1206/1	0,55	0,7	150701731	150703181	112	2,25	41	7/16"-20 UNF
CEF 1206/2	0,75	1	150701741	150703191	122	2,25	41	7/16"-20 UNF
CEF 1206/3	0,75	1	150701750	150703200	132	2,25	41	7/16"-20 UNF
CEF 1206/4	1,5	2	150701771	150703211	145	2,25	41	7/16"-20 UNF
CEF 1206/5	1,85	2,5	150701780	150703220	156	2,25	41	7/16"-20 UNF
CEF 2106/0	0,75	1	150701810	150703230	102,5	4,9	49,7	7/16"-20 UNF
CEF 2106/1	1,1	1,5	150701820	150703240	112,3	4,9	49,7	7/16"-20 UNF
CEF 2106/2	1,5	2	150701831	150703251	120	4,9	49,7	7/16"-20 UNF
CEF 2106/3	1,85	2,5	150701841	150703261	128,5	4,9	49,7	7/16"-20 UNF
CEF 2106/4	2,2	3	150701851	150703271	139	4,9	49,7	7/16"-20 UNF
CEF 2106/5	2,2	3	150701861	150703281	150	4,9	49,7	7/16"-20 UNF
CEF 3706/0	1,1	1,5	150701870	150703290	101	9	49,7	7/16"-20 UNF
CEF 3706/A0	1,5	2	150701880	150703300	108	9	49,7	7/16"-20 UNF
CEF 3706/1	1,85	2,5	150701891	150703311	115	9	49,7	7/16"-20 UNF
CEF 3706/2	2,2	3	150701901	150703321	126	9	49,7	7/16"-20 UNF
CEF 3706/3	3	4	150701911	150703331	134,5	9	49,7	7/16"-20 UNF
	D2	-->	- Imp. OUTside Blade Dia.	imp. whole hub	---> chiller project 2009			
	b2	-->	- MINimum Blade Height	(integral)				
	D1	-->	- Imp. EYE Dia.					
	Dm	-->	- Hub INTernal Dia.					

BG Impeller Dimensions					ST/BG			
					Issue 1st: 15/12/96			Rev.
Pump Type	Power, Rated		Impeller (welded hub) P/N A304/A316	Impeller, whole hub P/N A304/A316	Dimensions (mm)			
	kW	HP			D2	b2	D1	Dm
BG3	00:37	0.55	150701930	150703360	132	2,2	41	7/16"-20 UNF
BG5	0.55	0.75	150701980	150703370	145	2,2	41	7/16"-20 UNF
BG7	0,75	1	150701720	150703170	156	2,2	41	7/16"-20 UNF
BG9	0,9	1.2	150701780	150703220	156	2,25	41	7/16"-20 UNF
BG11	1.1	1.5	150701790	150703380	156	4	41	7/16"-20 UNF
NUT H4 (Height for mounting, mm)			167000210		-->			7/16"-20 UNF
NUT H6 (Height for mounting, mm)				167000230	-->			7/16"-20 UNF
D2 --> - Imp. OUTside Blade Dia. imp. whole hub ---> chiller project 2009 b2 --> - MINimum Blade Height (integral) D1 --> - Imp. EYE Dia. Dm --> - Hub INTernal Dia.								

xylem