



# ITT

# Lowara

CA pump Series Mechanical Seals ( standard - optional )		ST/CEA					
		Issue 1st: 18/02/2004					
		Last issue: March09				Rev.	
Dia (mm)	Type Roten Supplie ext.	Sliding faces, seals, spring and other components materials					
		Rotary - Stationary	Elastomer OR	Spring	P/N	Digit	DIN EN 12756 (ex DIN 24960)
16 X 30	ROTEN 3	<b>CERAMIC-CARBON</b>	<b>NBR</b>		002228263+002228861	<b>STD</b>	<b>VBPGG</b>
	ROTEN 3	CERAMIC-CARBON	EPDM		002228261+002228870	B	VBEGG
	ROTEN 3	CERAMIC-CARBON -> CA-V, CA_K	FPM		002228267+002228867	A	<b>VBVGG</b>
	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							
<b>Materials.</b> 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 like Viton-R Metalized graphite							



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



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Dia (mm)		Type	Sliding faces, seals, spring and other components materials					ST/CEA		
			Rotary - Stationary	Elastomer OR	Spring	P/N	Digit	DIN EN 12756 (ex DIN 24960)	Issue 1st: 18/02/2004	Last issue: March09
<b>14 X 22</b>		3 LS CC CC	<b>CERAMIC - CARBON</b>	<b>NBR</b>	A304	002231470	<b>STD</b>	VBPGF		
		3 LS CC CC	CERAMIC - CARBON --> CEA /N	EPDM *		002231475	B	<b>VBEGG</b>		
		3 LS CC CC	CERAMIC - CARBON Z	EPDM		002231476	5	VCEGG		
		3 LS CC CC	SILICON CARBIDE - CARBON Z	EPDM		002231479	6	Q1CEGG		
		2 LS CA	WIDIA - SILICON CARBIDE	EPDM		002231482	Y	U3Q1EGG		
		3 LS CL CL	WIDIA - CARBON Z	EPDM		002231483	L	U3CEGG		
		2 LS CL	WIDIA - WIDIA	EPDM *	A316	002231484	T	<b>U3U3EGG</b>		
		2 LS CL	WIDIA - WIDIA	FPM		002231494	S	U3U3VGG		
		4 LS CL	WIDIA - WIDIA	PTFE		002231430	V	U3U3TGG		
		3 LS CC CL	CERAMIC - CARBON ---> CEA-V	FPM		002231485	A	VBVGG		
		3 LWS	SILICON CARBIDE: SiC - Si-SiC (lapped) --> CEA	FPM		002231488	W	JQ1VGG		
		3 LS CC CC	CERAMIC - CARBON Z	FPM		002231489	S	VCVGG		
		3 LS CC CC	SILICON CARBIDE: SiC - Si-SiC (lapped)	EPDM		002231492	7	JQ1EGG		
		2 LS CA	WIDIA - SILICON CARBIDE	FPM		002231493	N	U3Q1VGG		
2 LS CA	WIDIA - SILICON CARBIDE	DPE		002231419	X	U3Q1KGG				
<b>14</b>	2 LS CA CL	WIDIA - CARBON Z w/extension long CL	FPM		002231499	U	U3CVGG			

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

**Materials.**

<b>Ceramic</b>	<b>Tungsten carbide = Widia</b>	<b>NBR = Nitrile rubber</b>
<b>Carbon</b>	<b>Solid silicon carbide</b>	<b>EPDM = Ethylene propylene</b>
<b>Special carbon Z</b>	<b>A304 = 304 SS</b>	<b>EPDM = Ethylene propylene acc. WRAS std *</b>
<b>Metalized graphite</b>	<b>A316 = 316 SS</b>	<b>FPM = Fluoroelastomer like Viton-R</b>
		<b>PTFE = Polytetrafluoroethylene</b>
		<b>like Teflon-R</b>
		<b>DPE = Perfluoroelastomer like Kalrez-R</b>



Series		ST/CEA			
		CEA pump Series : O-Rings description ( std version - optional )			
		Issue 1st: 01/02/96		Last issue: Feb 09    Rev. F	
<ul style="list-style-type: none"> <li>- NBR = Nitrile</li> <li>- Fluoro carbon = like VITON</li> <li>- EPDM = Ethylene propylene</li> <li>- PTFE = Normal PTFE</li> <li>- FEP = Fluoro carbon coated normal PTFE</li> </ul>					
Series		OR Size <small>USED ON PARTS</small>	Material	Dim's	P/N
<b>Std</b>	CEA - CEAM 210-370	<b>dim. 1</b>	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
<b>Std</b>	CEA - CEAM 70-80-120	<b>dim. 2</b>	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
<b>Std</b>	CEA - CEAM	<b>dim. 3</b>	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
<b>Std</b>	CEA - CEAM	<b>dim. 4</b>	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



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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 A304/A316	Impeller, whole hub P/N A304/A316	Dimensions ( mm )			
	kW	HP			D2	b2	D1	Dm
<b>CEA ( M ) 70/3 ( /N )</b>	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
<b>CA ( M ) 70/33 ( /N )</b>	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/	132	2,25	41	14
CA ( M ) 120/35 ( /N )	1,5	2	150700780/1	150703080/4	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
<b>CEF 70/3</b>	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.								



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CA CEA CEF 60Hz Impeller Dimensions					ST/CA CEA CEF			
					Issue 1st: 15/12/96		Last issue : March09	
Pump Type	Power, Rated		Impeller inox (welded hub)	Impeller inox whole hub	Dimensions ( mm )			
	kW	HP			D2	b2	D1	Dm
<b>CEA ( M ) 706/4 ( /N )</b>	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
<b>CA ( M ) 706/33 ( /N )</b>	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
			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	150703080/4	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
<b>CEF 706/4</b>	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.								



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BG - BGM					ST/BG			
Impeller Dimensions					Issue 1st: 15/12/96			
					Last issue : October09		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	0.37	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.					



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