

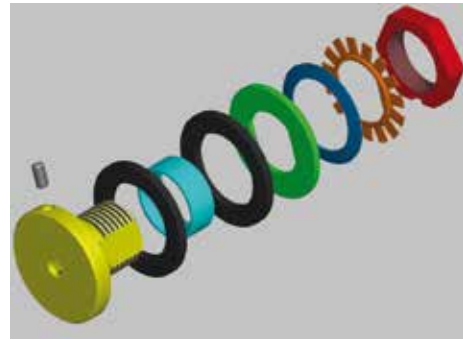


FRICITION TORQUE LIMITERS

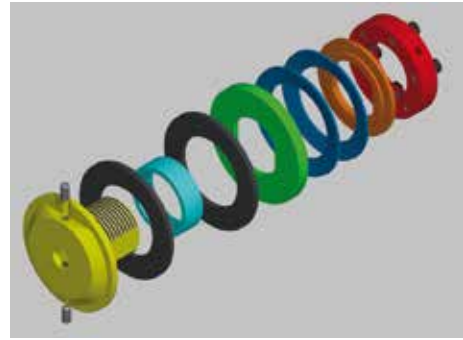




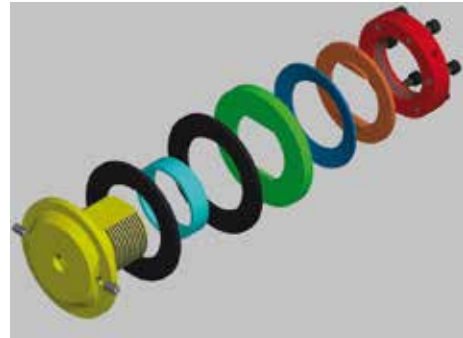
LC 40 - 1



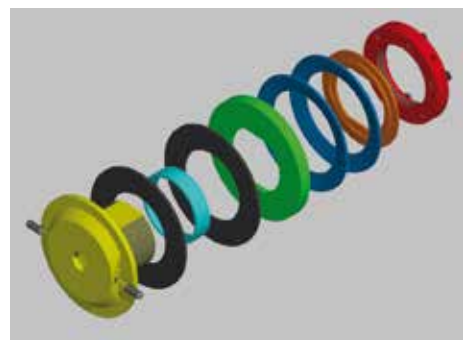
LC 85 - 2



LC 95 - 1



LC 170 - 2

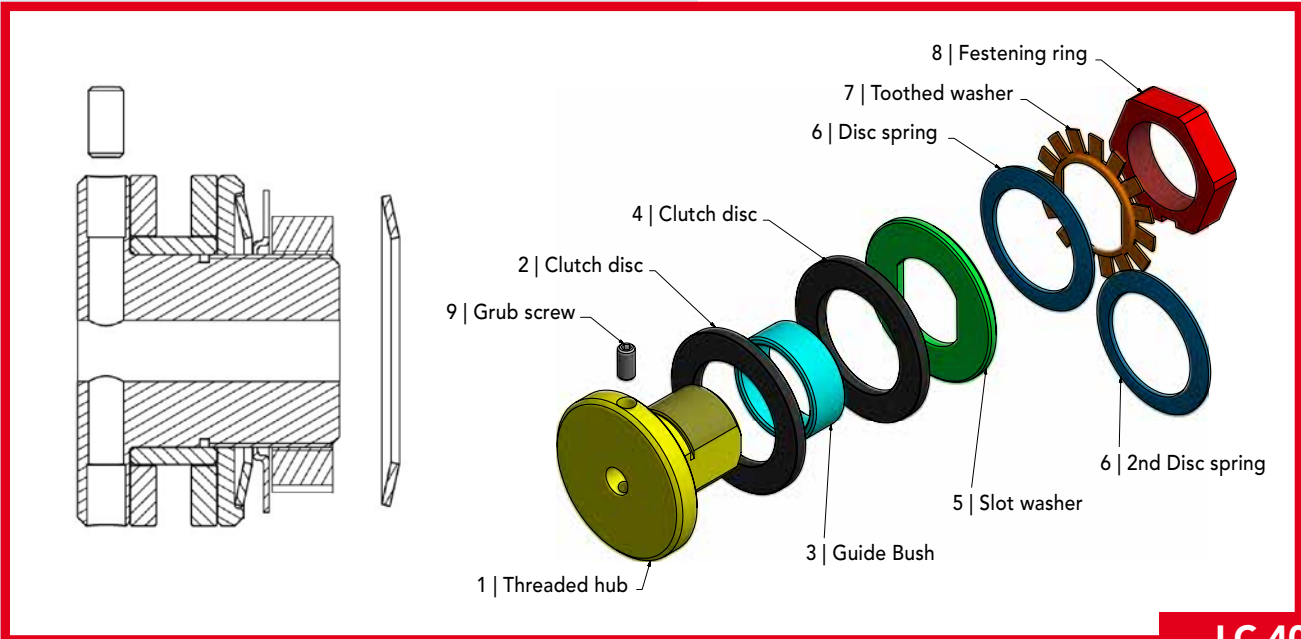




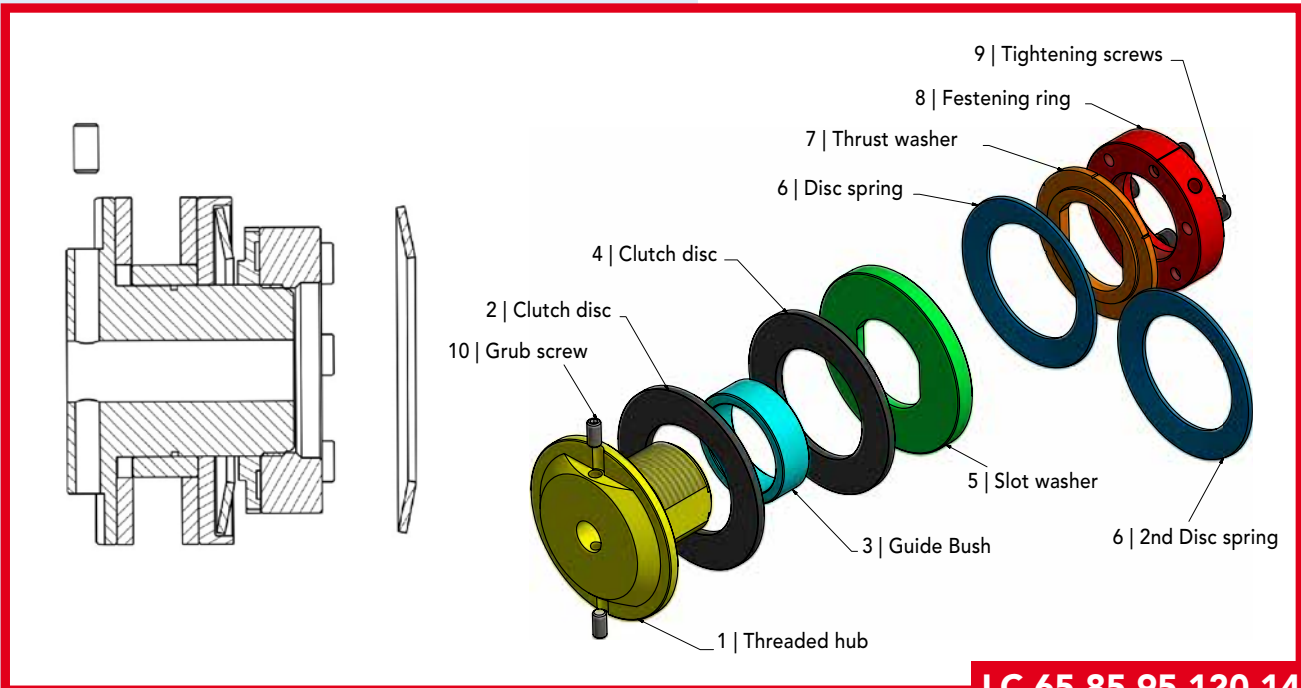
The torque limiter finds employment where an overloaded protection on mechanic transmission components is necessary (kinematics and machines).

The employment system easy and efficient, offers full operative reliability when the required torque exceeds the preloaded value and automatically restores the transmission when the overloaded ceases.

The transmission mechanical component, between pulleys, chain wheels and gears is within clutch that elements that tighten through the compression of the Bauer springs develops a friction force defined by the clamping of the sleeve.



LC 40-50



LC 65-85-95-120-140-170



CHOICE OF THE TORQUE LIMITER:

Tkw = Power in kW
 n = revolutions per minut
 Mt = torque (Nm)

The torque is given by the relation:

$$Mt = \frac{9550 \cdot Tkw}{n}$$

Example:

To use an electrical motor with the following features:

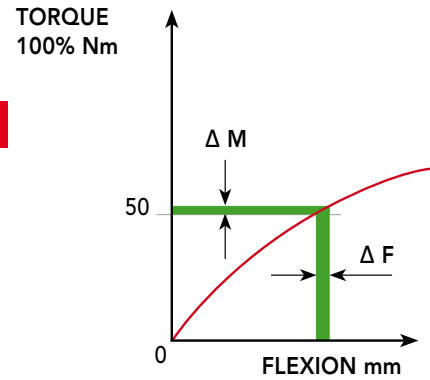
Power 4 kW e n = 1.550 g/1'

$$Mt = \frac{9550 \cdot 4}{1550} = 24.64 \text{ Nm}$$

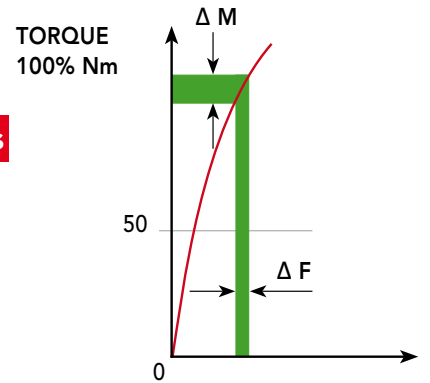
So we will choose a limiter with a torque equal to or higher than 24,64 Nm



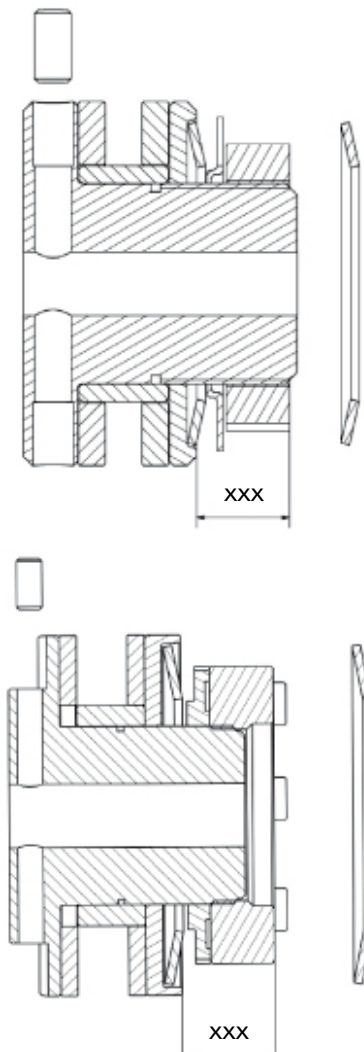
1 spring



2 springs



Scheme of the Belleville springs DIN 2093



TYPE	TORQUE N/m	SPRINGS	R mm
LC 40	15	1	0,59
	28	2	0,53
LC 50	32	1	0,72
	60	2	0,57
LC 65	70	1	0,65
	120	2	0,55
LC 85	130	1	1,65
	240	2	1,35
LC 95	190	1	1,15
	340	2	0,95
LC 120	350	1	2
	650	2	1,75
LC 140	650	1	2,1
	1200	2	1,85
LC 170	1000	1	2,3
	1800	2	1,95

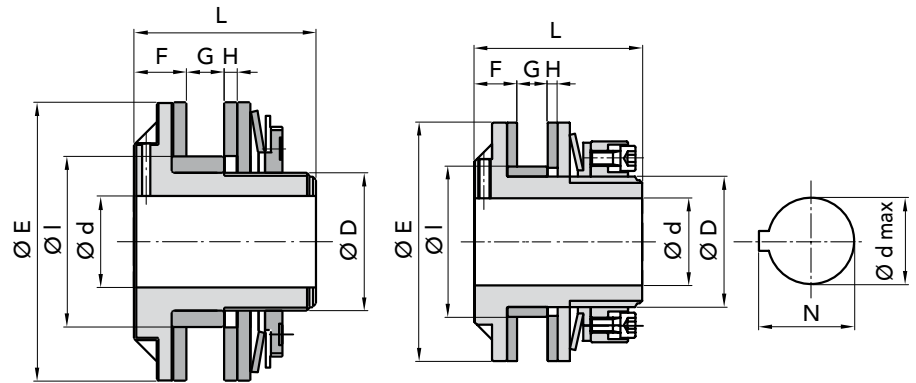
Manually tighten the nut until closing (xxx).

To get the maximum torque use the wrench to tighten further (xxx-R).

The ring nut is held in position by tightening screws.



The CHIARAVALLI limiter is assembled with a single spring.
The second spring is also present in the KIT.



LC 40-50

LC 65-85-95-120-140-170

TYPE	Limiter part number	Dished plate spring part number	Disk Friction part number	Part number bushing											example		Weight Kg.			
					max. bore keyway DIN 6885/1 on request	Max torque N/m	N° of springs	sprockets for chain (u) = 1,6 : 2	N	Ø pitch for roller	N° teeth									
					ØE	ØIh8	Ød	F	G	H	ØD	L	Ød max	N	DIN2093	Ø pitch for roller	N° teeth			
LC 40	08040000	08040050	08040020	08040030	40	26	7	9	6	3	22	30	14	16,3	15	1	3/8" x 6,65	18-21	0,190	
															28	2	1/2" x 8,51	15	0,195	
LC 50	08050000	08050050	08050020	08050030	50	35	7	10	6	3	32	35,5	20	22,8	30	1	3/8" x 6,65	19-23	0,365	
															55	2	1/2" x 8,51	17	0,370	
LC 65	08065000	08065050	08065020	08065030	65	45	10	16	9	4	36	53	22	24,8	70	1	3/8" x 6,65	27	0,750	
												55			2	1/2" x 8,51	21	0,800		
LC 85	08085000	08085050	08085020	08085030	85	52	15	16	11	4	45	59	25	28,3	130	1	3/8" x 6,65	38	1,470	
												61			2	1/2" x 8,51	25	1,480		
LC 95	08095000	08095050	08095020	08095030	95	60	15	17	11	4	52	67	35	38,3	190	1	1/2" x 8,51	30	2,160	
															340	2	5/8" x 10,16	25	2,170	
LC 120	08120000	08120050	08120020	08120030	120	73	20	19	16	4	64	78	45	48,8	350	1	1/2" x 8,51	38	4,000	
															650	2	5/8" x 10,16	32	4,100	
LC 140	08140000	08140050	08140020	08140030	140	90	20	22	17	4	85	86,5	60	64,4	650	1	3/4" x 12,07	35	5,900	
															1200	2	1" x 15,88	21	6,000	
LC 170	08170000	08170050	08170020	08170030	170	100	28	25,5	18,5	4,5	90	94	65	69,4	1000	1	3/4" x 12,07	35	9,200	
															1800	2	1" x 15,88	25	9,400	

Pay attention. You are strongly advised to use the torque limiters of the series LC Cleaning, checking carefully that products or oily liquids in general do not reach in any way the friction materials in order to not cause a sudden and inevitable performance degradation. Adjust the guide bush according to their needs. The clutch plates are constituted by a structure that is absolutely free of asbestos.



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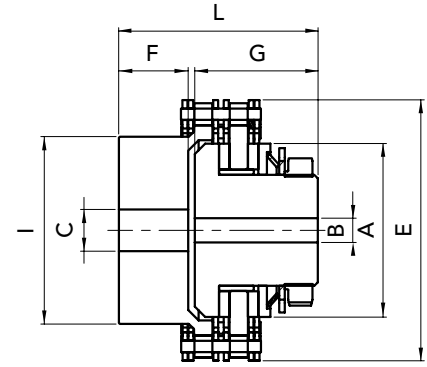
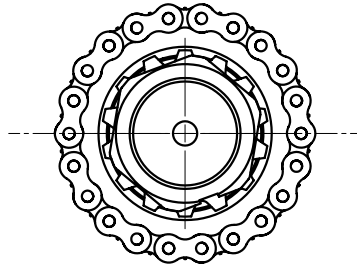
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TORQUE LIMITERS WITH CHAIN COUPLING LCG

51

- LC Torque limiter connected to the coaxial pinion hub through a double chain.
- Easy adjustment of desired torque through lock nut.
- The two friction elements dished clutch are burnished.



TORQUE LIMITERS WITH CHAIN COUPLING LCG

TYPE	PART NUMBER	max. torque	N° springs	A	B	B max	C	C max	E	F	G	I	L	DIS. mm	ang.	chain pitch	Z teeth	weight Kg
LCG 50	08050000	30	1	50	7	20	12	30	75,19	20	35	45	57	0,20	30°	3/8 X 7/32"	22	1,000
		55	2															1,005
LCG 65	08065000	70	1	65	10	22	16	35	97,03	33	50	65	85	0,25	30°	1/2" X 5/16"	21	2,500
		120	2															2,550
LCG 85	08085000	130	1	85	15	25	20	45	121,25	36	55	85	94	0,30	30°	5/8" X 3/8"	21	4,300
		240	2															4,300
LCG 95	08095000	190	1	95	15	35	20	55	131,88	38	67	95	108	0,35	30°	3/4" X 7/16"	19	6,000
		340	2															6,010
LCG 120	08120000	350	1	120	20	45	20	60	168,13	47	78	120	128	0,35	30°	3/4" X 7/16"	25	11,000
		650	2															11,100
LCG 140	08140000	650	1	140	20	60	30	65	191,51	54	86	130	145	0,40	30°	1" X 17 mm	21	18,000
		1200	2															18,100
LCG 170	08170000	1000	1	170	28	65	30	75	223,74	84	95	130	184	0,50	30°	1" X 17 mm	25	27,000
		1800	2															27,200

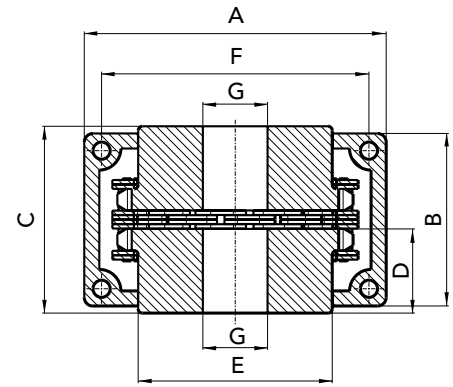
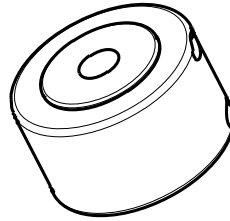


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- Suitable to connect two shafts in axis
- With hardened sprockets
- Provided with full cover, seals and O-ring for the protection from external contamination and also for an eventual lubrication of the coupling with grease.



TYPE	PART NUMBER	CHAIN PITCH	A	B	C	D	E	G	G Max	Nm	Weight Kg.
KC 3012	KC3012	ASA 35-2	69	63	65	29,5	27,2	12	16	150	0,50
KC 4012	KC4012	ASA 40-2	77	72	79,4	36	36	12	22	210	1,00
KC 4014	KC4014	ASA 40-2	84	75	79,4	36	45	12	28	300	1,40
KC 4016	KC4016	ASA 40-2	92	72	87,4	40	54,5	13,5	32	380	1,80
KC 5014	KC5014	ASA 50-2	101	85	99,7	45	56	14,5	35	550	2,50
KC 5016	KC5016	ASA 50-2	110	87	99,7	45	64	14,5	40	725	3,20
KC 5018	KC5018	ASA 50-2	122	85	99,7	45	73,5	16	45	925	4,00
KC 6018	KC6018	ASA 60-2	147	105	123,5	56	89,5	20	55	1750	7,20
KC 6020	KC6020	ASA 60-2	158	105	123,5	56	102,5	20	60	2050	9,50
KC 6022	KC6022	ASA 60-2	168	117	123,5	56	115	20	75	2400	11,3
KC 8018	KC8018	ASA 80-2	190	129	141,2	63	115	20	75	3800	14,7
KC 8020	KC8020	ASA 80-2	210	137	145,2	65	125	20	80	4700	18,2
KC 8022	KC8022	ASA 80-2	226	137	157,2	71	142	20	90	5500	23,3
KC 10020	KC10020	ASA 100-2	281	153	178,8	80	162	25	110	8700	36,0
KC 12018	KC12018	ASA 120-2	307	181	202,7	90	173	35	120	13250	49,0
KC 12022	KC12022	ASA 120-2	357	181	222,7	100	213	35	150	17800	77,0



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