



TORQUE LIMITERS

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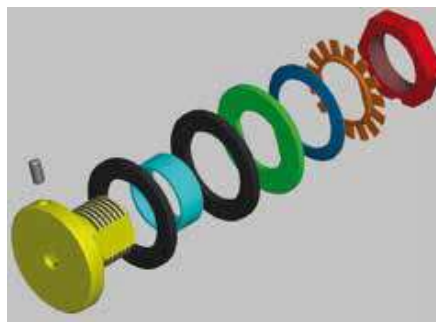
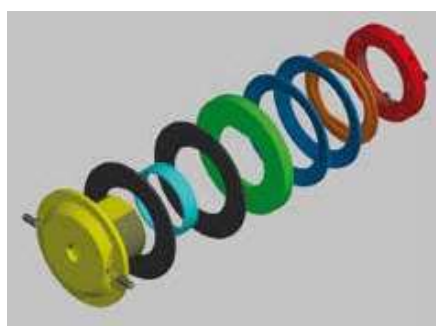
TORQUE LIMITERS
WITH CHAIN COUPLING LCG

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CHAIN COUPLING
WITH KC COVER

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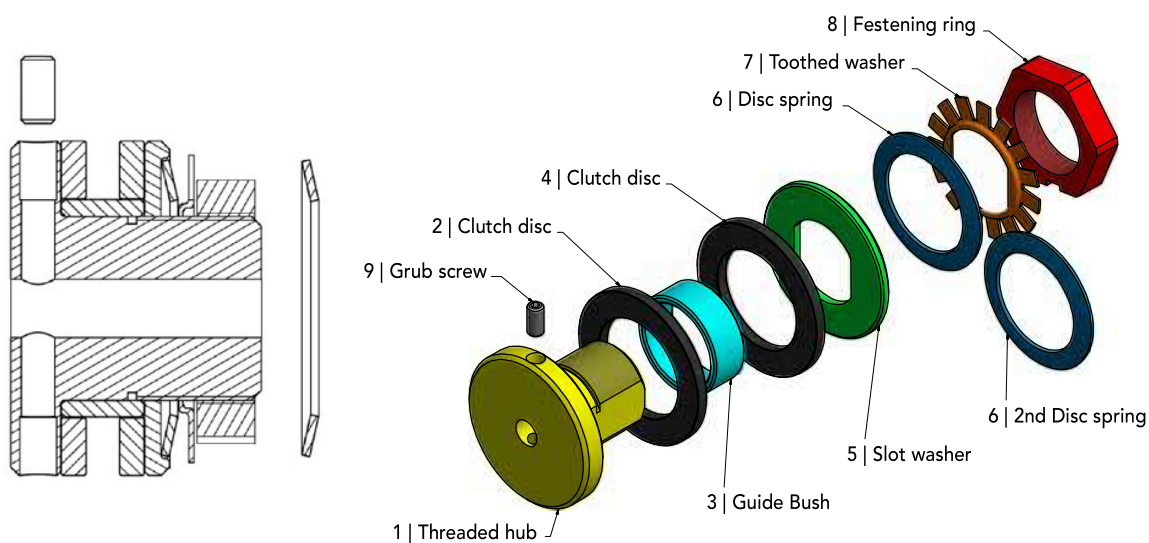
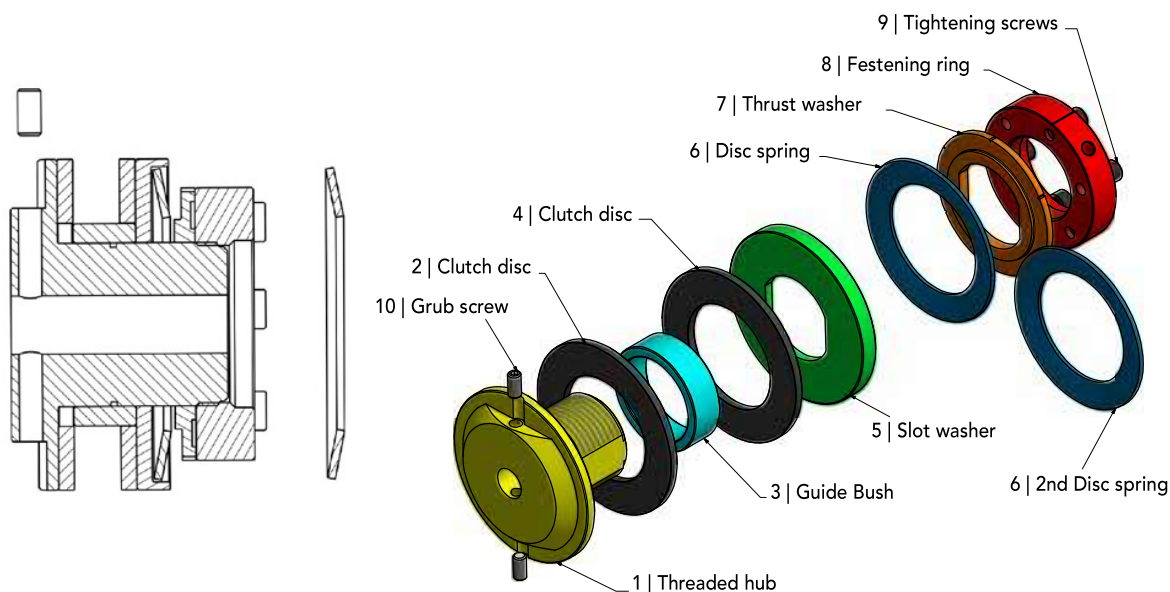
**LC 40 - 1****LC 85 - 2****LC 95 - 1****LC 170 - 2**



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:

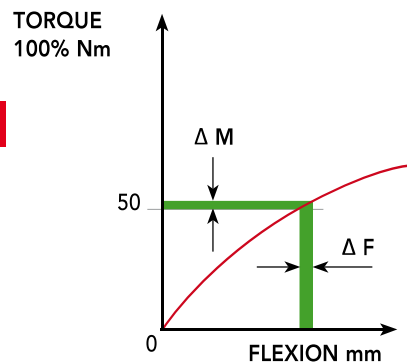
Power 4 kW e n = 1.550 g/1'

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

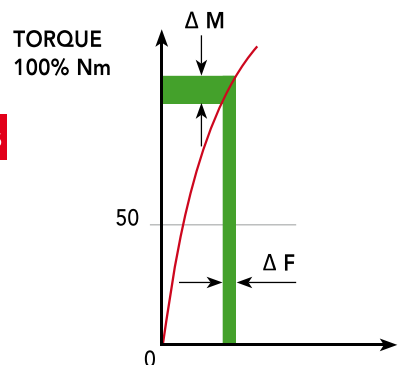
So we will choose a limiter with a torque equal to or higher than 24,64 Nm



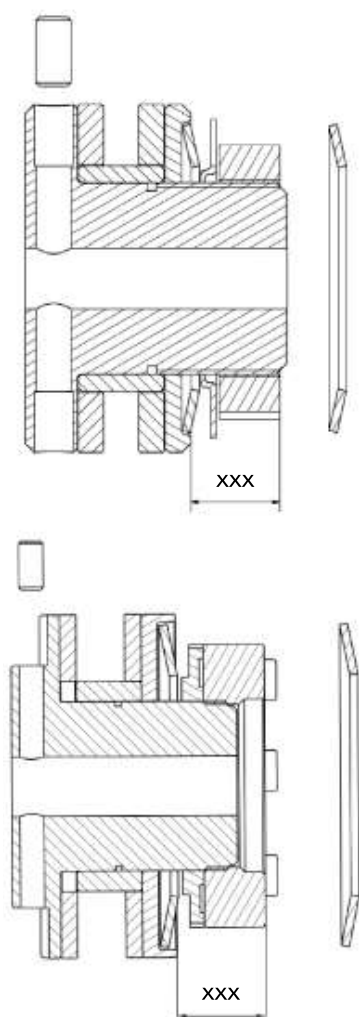
1 spring



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

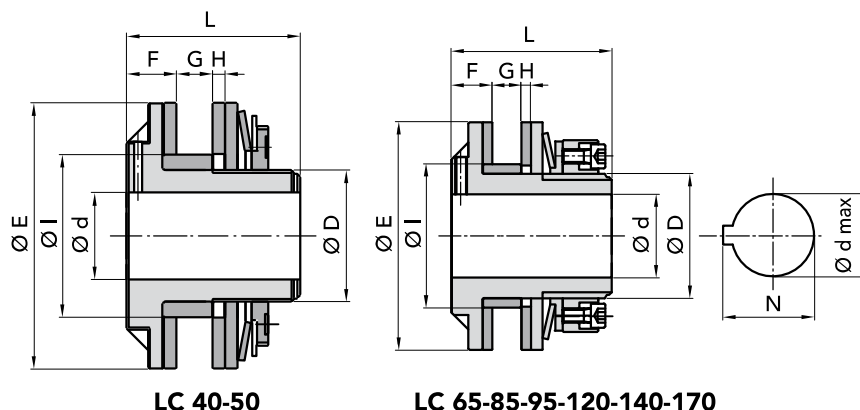
Manually tighten the nut until closing (xxx).

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

																example			
TYPE	Limiter part number	Dished plate spring part number	Disk Friction part number	Part number bushing									max. bore keyway DIN 6885/1 on request		Max torque N/m	N° of springs DIN2093	sprockets for chain (u) = 1,6 : 2		Weight Kg.
					ØE	Ølh8	Ød	F	G	H	ØD	L	Ød max	N			Ø pitch for roller	N° teeth	
LC 40	08040000	08040050	08040020	08040030	40	26	7	9	6	3	22	30	14	16,3	15 28	1 2	3/8" x 6,65 1/2" x 8,51	18-21 15	0,190 0,195
LC 50	08050000	08050050	08050020	08050030	50	35	7	10	6	3	32	35,5	20	22,8	30 55	1 2	3/8"x6,65 1/2" x 8,51	19-23 17	0,365 0,370
LC 65	08065000	08065050	08065020	08065030	65	45	10	16	9	4	36	53 55	22	24,8	70 120	1 2	3/8"x6,65 1/2"x8,51 5/8" x 10,16	27 21 19	0,750 0,800
LC 85	08085000	08085050	08085020	08085030	85	52	15	16	11	4	45	59 61	25	28,3	130 240	1 2	3/8" x 6,65 1/2" x 8,51 5/8" x 10,16 3/4" x 12,07	38 25 21 18	1,470 1,480
LC 95	08095000	08095050	08095020	08095030	95	60	15	17	11	4	52	67	35	38,3	190 340	1 2	1/2" x 8,51 5/8" x 10,16 3/4" x 12,07	30 25 19	2,160 2,170
LC 120	08120000	08120050	08120020	08120030	120	73	20	19	16	4	64	78	45	48,8	350 650	1 2	1/2" x 8,51 5/8" x 10,16 3/4" x 12,07 1" x 15,88	38 32 25 21	4,000 4,100
LC 140	08140000	08140050	08140020	08140030	140	90	20	22	17	4	85	86,5	60	64,4	650 1200	1 2	3/4" x 12,07 1" x 15,88	35 21	5,900 6,000
LC 170	08170000	08170050	08170020	08170030	170	100	28	25,5	18,5	4,5	90	94	65	69,4	1000 1800	1 2	3/4" x 12,07 1" x 15,88 1"1/4 x 19,05	35 25 22	9,200 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.

CAD drawings available on our site
www.chiaravalli.com

Quantity, availability and prices
on B2B Chiaravalli

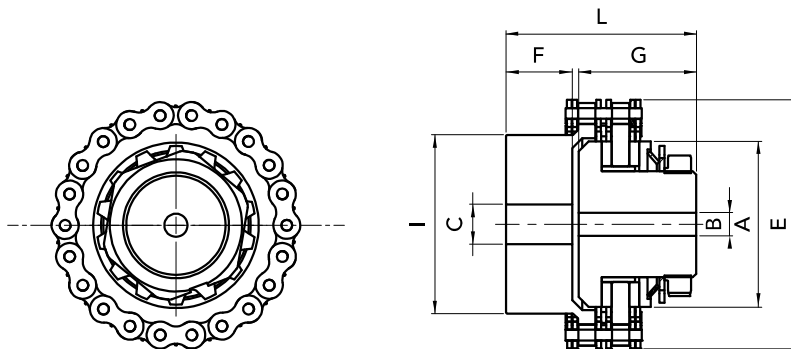




TORQUE LIMITERS WITH CHAIN COUPLING LCG

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- 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.



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 55	1 2	50	7	20	12	30	75,19	20	35	45	57	0,20	30°	3/8 X 7/32"	22	1,000 1,005
LCG 65	08065000	70 120	1 2	65	10	22	16	35	97,03	33	50	65	85	0,25	30°	1/2" X 5/16"	21	2,500 2,550
LCG 85	08085000	130 240	1 2	85	15	25	20	45	121,25	36	55	85	94	0,30	30°	5/8" X 3/8"	21	4,300 4,300
LCG 95	08095000	190 340	1 2	95	15	35	20	55	131,88	38	67	95	108	0,35	30°	3/4" X 7/16"	19	6,000 6,010
LCG 120	08120000	350 650	1 2	120	20	45	20	60	168,13	47	78	120	128	0,35	30°	3/4" X 7/16"	25	11,000 11,100
LCG 140	08140000	650 1200	1 2	140	20	60	30	65	191,51	54	86	130	145	0,40	30°	1" X 17 mm	21	18,000 18,100
LCG 170	08170000	1000 1800	1 2	170	28	65	30	75	223,74	84	95	130	184	0,50	30°	1" X 17 mm	25	27,000 27,200

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