

# COUPLED LIMITER DEVICE

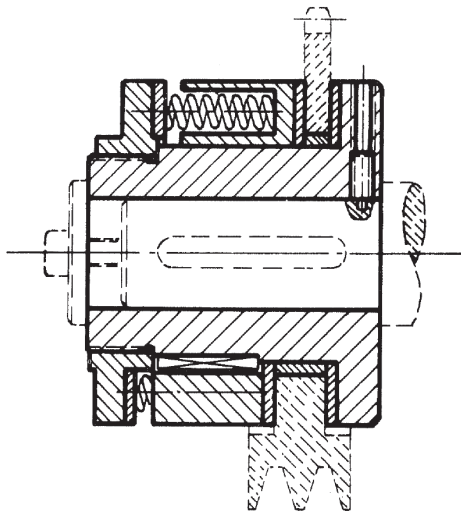


## EXAMPLES OF ASSEMBLY

**Example of structure 1 assembly to transmit movement between**

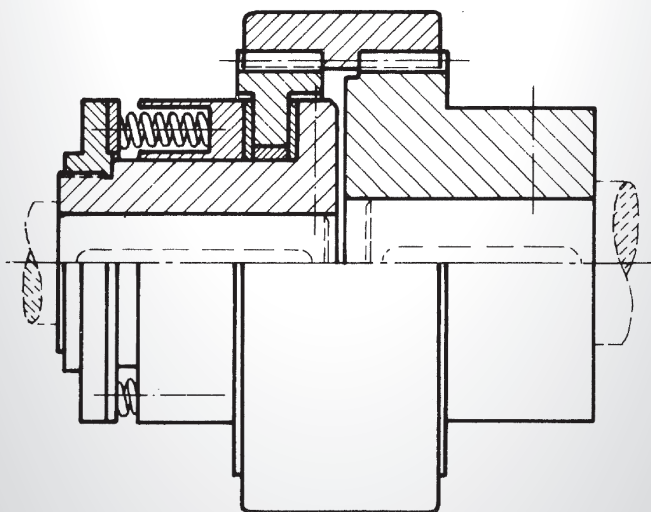
**Above:** adaptation to sprocket wheel

Figure 1



**Example of structure 2 assembly Adaptation between 2 aligned shafts with elastic coupling, thus making it possible to absorb minor errors in angular or linear alignment or a combination of both**

Figure 2



EXTREMELY SENSITIVE ADJUSTMENT  
Type LPC

## Description

The LPC torque limiters are mechanisms designed to absorb overloads on any type of machinery. They are mechanical "fuses".

When the torque setting is exceeded, the sprocket wheel, pulley, etc. and the friction discs slip out of place.

The structure with helicoidal springs provides it with a high level of sensitivity to regulation and enables it to withstand wear without a notable change in the torque setting.

It can be employed in other applications to ensure a constant load (seal bearings) or in simple spooling wheel pins as long as the heat generated has been determined. Low velocity mechanisms are often suitable for this type of economic solution.

**Structure 1** is recommended for transmitting movement between parallel shafts. **Structure 2** includes an elastic coupling and makes it possible to join aligned shafts with minor misalignments. The nature of the nylon rim increases its sensitivity to heat. Its possible use as a sliding device is often more limited.

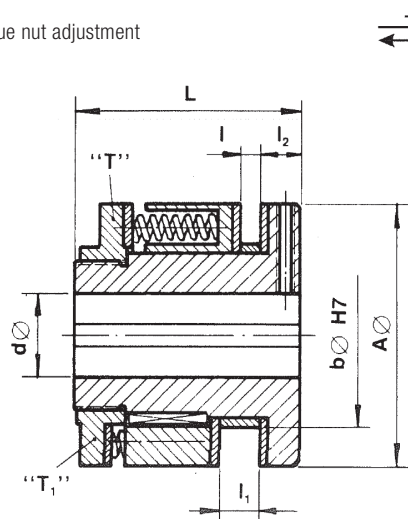
In separate machines or in cases in which continuous sliding may not be detected by the operator, it is recommendable to install an external velocity indicator which activates an alarm or acts directly on the mechanization. Other models of torque limiters are described in technical sheets number 4302 and number 4303.

# COUPLED LIMITER DEVICE EXTREMELY SENSITIVE ADJUSTMENT Type LPC

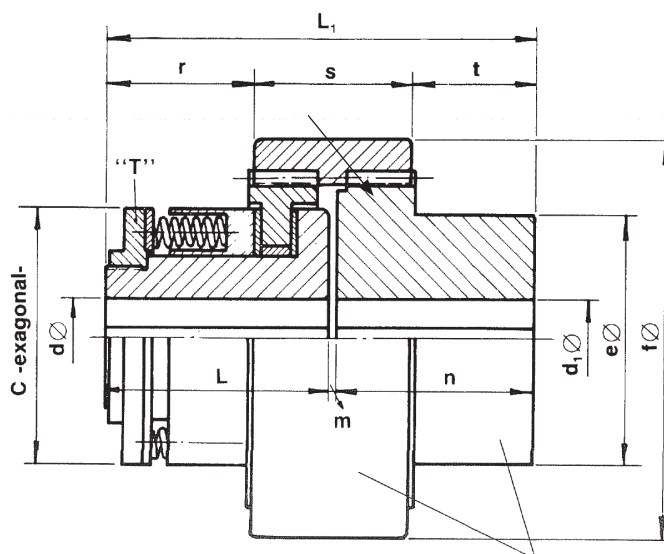


## Characteristics and measurements

T = Torque nut adjustment



Structure 1



Elastic coupling - Type NY

Structure 2

SIZE		12	25	50	100	200	400
Maximum torque	<b>Nm.</b>	12	25	50	100	200	400
Minimum torque	<b>Nm.</b>	1	2	5	12	25	50
Max. revolutions x min.	<b>n</b>	13000	10500	8500	6700	5350	3000
J = moment of rotation (Structure 1)	<b>kg cm<sup>2</sup></b>	0,4	1,2	4	12	40	100
Mass – Structure 1	<b>kg</b>	0,2	0,4	0,8	1,6	3,2	6
Mass – Structure 2	<b>kg</b>	0,6	1,10	2,30	4,25	10,5	15,5
	<b>A</b>	40	50	63	80	98	120
	<b>b</b>	28	36	44	55	70	90
between sides	<b>c</b>	36	46	55	70	80	6 a Ø10
max.	<b>d</b>	16	20	25	32	40	60
max.	<b>d<sub>1</sub></b>	22	28	34	42	60	80
	<b>e</b>	36	45	55	78	108	123
	<b>f</b>	60	75	95	120	155	170
	<b>L</b>	35,5	48	56	76	100	105
	<b>L<sub>1</sub></b>	71,5	90	109	145	207	220
	<b>l</b>	4,4	5,2	5,8	8,7	10	10
	<b>l<sub>1</sub></b>	7	8,7	10,5	15,3	15,3	15,3
	<b>l<sub>2</sub></b>	7,5	8	10	12	15	11
	<b>m</b>	1	2	3	4	7	5
	<b>n</b>	35	40	50	65	100	110
	<b>r</b>	18	31	34	54,5	75	78
	<b>s</b>	35	38	40	50	60	60
	<b>t</b>	18,5	21	35	40,5	72	82
Elastic coupling	<b>ny</b>	22	28	34	42	60	70



\*In all sizes, the limiter devices shall be supplied with "d" and "d<sub>1</sub>" contour heights o prebored.  
For pieces with width 1 assembly shall be performed in the "T" form.