

## Tensioning Rollers and Tensioning Elements for Timing Belts

Tensioning rollers are used for tensioning on the outside of the belt (back of belt). The tensioning rollers can either be mounted rigidly or be combined with tensioning elements to make up an elastic belt tensioner.

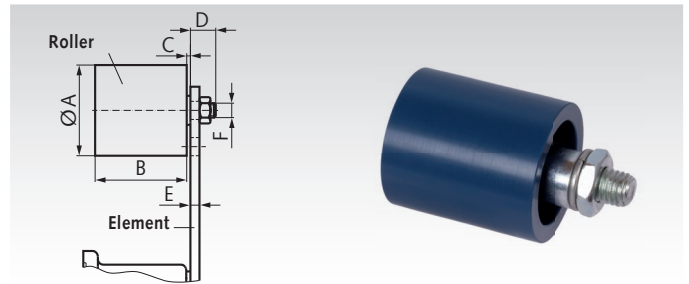
Note: tensioning rollers mounted on the outside of the closed span, shorten the service life of the belt due to alternate bending conditions. This means that when an outside tensioning roller is mounted a corrective factor of at least 1.2 has to be used when calculating the drive. If the belt is tensioned from the inside, a toothed pulley must be used (pulley with ball bearing only made to order).



### Tensioning Rollers

**Material:** Short roller made from high-grade industrial plastic. Mounted on a suitable tensioning element, the tensioning roller becomes a ready-to-mount belt tensioner or on its own it can be used as idler. It runs on two permanently lubricated 2-Z ball bearings.

Tensioning element has to be ordered separately.



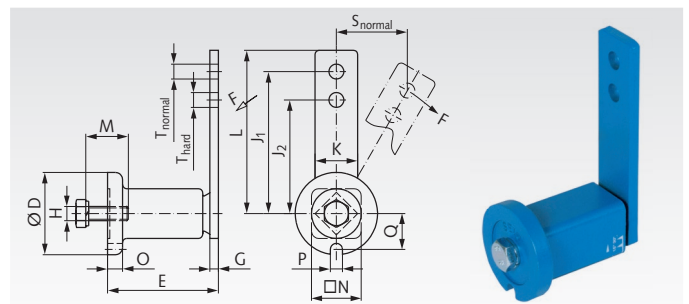
Product-No.	Diameter A mm	Product No. Tensioning Element matching	B mm	C mm	D mm	E max. mm	F mm	Weight kg
140 872 00	30	140 800 00	35	2	14	5	M8	0,08
140 874 00	40	140 801 00	45	6	16	7	M10	0,17
140 876 00	60	140 803 00	60	8	17	8	M12	0,40
140 878 00	80	140 804 00	90	8	25	10	M20	1,15

### Tensioning Elements

**Material:** Lever made from St52, housing up to  $\varnothing 78$  mm made from sintered steel, over  $\varnothing 78$  mm made from grey cast iron.

Tensioning elements are painted blue and are supplied with a zinc-plated screw and a spring washer.

These tensioning element can be used for tensioning all common kinds of chain and belt drives. The spring elements are based on highly-elastic natural rubber with a good shape memory and are designed for applications in temperatures from  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ . Can be used for both tensioning directions.



Product No.	Size	F max.		s max.		D	E	G	H	J <sub>1</sub>	J <sub>2</sub>	K	L	M	N	O	P	Q	T	M <sub>A</sub>	Weight
		normal N	hard N	normal mm	hard mm																
140 800 00	0	96	128	40	30	35	51 <sup>+1,0</sup> <sub>-0,5</sub>	5	M6	80	60	20	90	20	22	6	8	16,5	8,5	10	0,2
140 801 00	1	135	170	50	40	45	64 <sup>+1,0</sup> <sub>-0,5</sub>	5	M8	100	80	25	112,5	25	30	8	8,5	20,8	10,5	25	0,4
140 802 00	2	350	440	50	40	58	79 <sup>+1,5</sup> <sub>-0,5</sub>	7	M10	100	80	30	115	30	35	10,5	8,5	25,3	10,5	49	0,6
140 803 00	3	810	1050	65	50	78	108 <sup>+2</sup> <sub>-0,5</sub>	8	M12	130	100	50	155	40	52	15	10,5	34,3	12,5	86	1,7
140 804 00	4	1500	1875	87,5	70	95	140 <sup>+2</sup> <sub>-0,5</sub>	10	M16	175	140	60	205	40	66	15	12,5	42	20,5	210	3,55

Other tensioning element versions (stainless, zinc-plated etc.) see page 122.