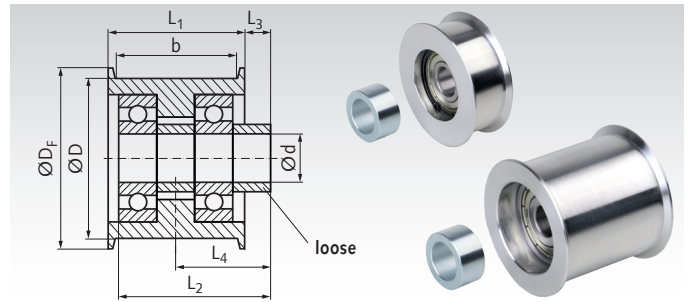


Tensioning Rollers / Idlers TS for Belt Drives

Material: Aluminium, one-piece, with turned flanges.
Distance bushes and ball bearings from steel.

Tensioning Rollers / Idlers are used on the outside of the belt (back of belt). 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 an idler. It runs on permanently lubricated 2Z ball bearings. One loose, zinc-plated distance bush is included in the delivery (in the drawing on the right side). Support, screw set and tensioning element have to be ordered separately.

Ordering Details: e.g.: Product No. 140 882 01, Tensioning Roller TS 20-8



Product No.	Type	D mm	b mm	d mm	D _F mm	L ₁ mm	L ₂ mm	L ₃ mm	L ₄ mm	Ball Bearing	Weight g	Product No. additional Bush	d _B x D _B x L _B mm	Weight g
140 882 01	TS 20-8	20	8	5	25	11	10	2	7,5	1 x 625-2Z	12	140 805 05	5x10x5	2,3
140 882 02	TS 20-13	20	13	5	25	16	20	4,5	12,5	2 x 625-2Z	22	140 805 05	5x10x5	2,3
140 883 01	TS 30-13	30	13	8	35	16	14	2,5	10,5	1 x 608-2Z	32	140 808 07	8x13x7	4,5
140 883 02	TS 30-19	30	19	8	35	22	28	6,5	17,5	2 x 608-2Z	58	140 808 07	8x13x7	4,5
140 883 03	TS 30-28	30	28	8	35	32	28	1,5	17,5	2 x 608-2Z	64	140 808 07	8x13x7	4,5
140 884 01	TS 40-14	40	14	10	45	17	18	5	13,5	1 x 6200-2Z	74	140 810 09	10x17x9	10,5
140 884 02	TS 40-23	40	23	10	45	27	36	9	22,5	2 x 6200-2Z	138	140 810 09	10x17x9	10,5
140 884 03	TS 40-28	40	28	10	45	32	36	6,5	22,5	2 x 6200-2Z	146	140 810 09	10x17x9	10,5
140 884 04	TS 40-38	40	38	10	45	42	36	1,5	22,5	2 x 6200-2Z	162	140 810 09	10x17x9	10,5
140 886 01	TS 60-19	60	19	12	68	23	24	6,5	18	1 x 6301-2Z	206	140 812 12	12x20x12	18,9
140 886 02	TS 60-31	60	31	12	68	36	48	12	30	2 x 6301-2Z	366	140 812 12	12x20x12	18,9
140 886 03	TS 60-38	60	38	12	68	43	48	8,5	30	2 x 6301-2Z	402	140 812 12	12x20x12	18,9
140 886 04	TS 60-54	60	54	12	68	60	60	6	36	2 x 6301-2Z	530	140 812 12	12x20x12	18,9
140 888 01	TS 80-28	80	28	20	90	33	30	6	22,5	1 x 6304-2Z	500	140 820 15	20x30x15	46,2
140 888 02	TS 80-40	80	40	20	90	45	60	15	37,5	2 x 6304-2Z	820	140 820 15	20x30x15	46,2
140 888 03	TS 80-54	80	54	20	90	60	60	7,5	37,5	2 x 6304-2Z	940	140 820 15	20x30x15	46,2
140 889 01	TS 120-28	120	28	20	130	34	39,5	5,5	22,5	1 x 6304-2Z	1110	140 820 15	20x30x15	46,2
140 889 02	TS 120-36	120	36	20	130	42	50	9	30,0	2 x 6304-2Z	1490	140 820 10	20x30x10	30,8
140 889 03	TS 120-44	120	44	20	130	50	60	12,5	37,5	2 x 6304-2Z	1740	140 820 15	20x30x15	46,2
140 889 04	TS 120-54	120	54	20	130	62	60	6,5	37,5	2 x 6304-2Z	2060	140 820 15	20x30x15	46,2

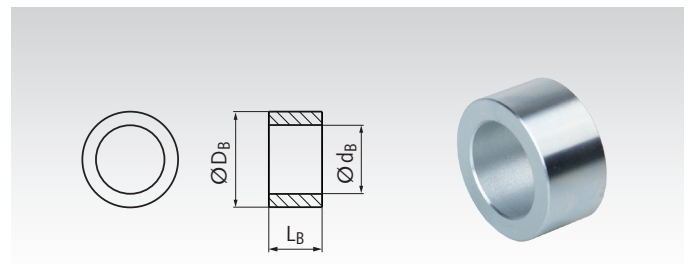
Distance Bushes for Tensioning Rollers / Idlers TS

Material: Steel, zinc-plated.

As spare part or as an additional distance bush for double-sided mounting.

Ordering Details: e.g.: Product No. 140 805 05, Distance Bush 5 x 10 x 5 mm

Product No.	d _B mm	D _B mm	L _B mm	Weight g
140 805 05	5	10	5	2,3
140 808 07	8	13	7	4,5
140 810 09	10	17	9	10,5
140 812 12	12	20	12	18,9
140 812 24	12	20	24	37,9
140 820 10	20	30	10	30,8
140 820 15	20	30	15	46,2

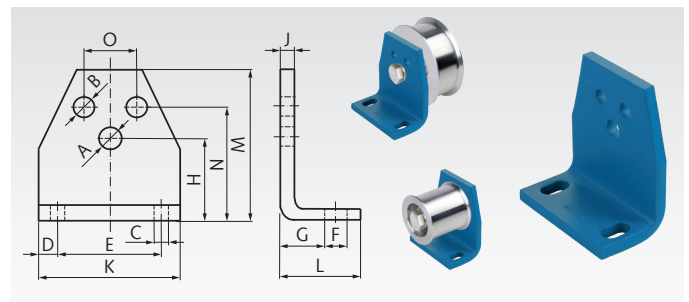


Supports for Idlers or Tensioning Elements

Material: Steel, blue painted.

This support enables an easy mounting of an idler wheel / tensioning roller or a tensioning element to the machine. The hole A is for fastening the tensioner with its central screw. The mounting can be done at the front side or back side of the support. For any other purposes, the both holes B can be used to fix other parts instead of a tensioner.

Ordering Details: e.g.: Product No. 140 800 01, Support Size 0



Product No.	Size	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm	N mm	O mm	Weight kg
140 800 01	0	6,5	5,5	7	7,5	30	13	11,5	27	4	45	30	46	35	10	0,08
140 801 01	1	8,5	6,5	7	7,5	40	13	13,5	34	5	55	32	58	44	12	0,15
140 802 01	2	10,5	8,5	9,5	10	50	15,5	16,5	43	6	70	38	74	55	20	0,30
140 803 01	3	12,5	10,5	11,5	12,5	65	21,5	21	57	8	90	52	98	75	25	0,66
140 804 01	4	16,5	12,5	14	15	80	24	21	66	8	110	55	116	85	35	0,94
140 804 02	4	20,5	12,5	14	15	80	24	21	66	8	110	55	116	85	35	0,94

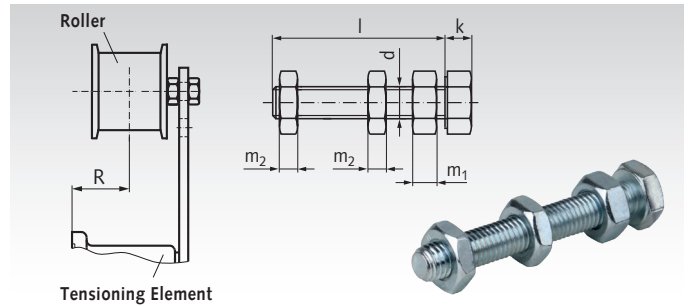
Screw Sets for Tensioning Rollers / Idlers TS

Material: Steel, zinc-plated. Screw strength 8.8, nuts strength class 8.

The set consists of one screw ISO 4017 / DIN 933, one normal nut DIN 934 and two thin nuts DIN 936.

For mounting a tensioning roller TS at a tensioning element, at a support or at a customer's mounting surface. The alignment can be adjusted (dimension R at our tensioning elements). Tensioning roller TS, screw set and tensioning element have to be ordered separately.

Ordering Details: e.g.: Product No. 140 905 035, Screw Set M5 x 35



For Tens. Roller	Product No. Screw set	for Prod. No. Tens. Roller	with Product No. Tens. Element	Size	d mm	l mm	k mm	m ₁ mm	m ₂ mm	R _{min} mm	R _{max} mm	Weight g
TS 20-8	140 905 035 ¹⁾	140 882 01	-	-	M5	35	3,5	4	4	-	-	8,0
TS 20-13	140 905 040 ¹⁾²⁾	140 882 02	-	-	M5	40	3,5	4	4	-	-	8,5
TS 30-13	140 908 045	140 883 01	140 800 00	0	M8	45	5,3	6,5	5	14,5	24,0	30
TS 30-19	140 908 045 ²⁾	140 883 02	140 800 00	0	M8	45	5,3	6,5	5	21,5 ²⁾	24,0 ²⁾	30
TS 30-28	140 908 045 ²⁾	140 883 03	140 800 00	0	M8	45	5,3	6,5	5	21,5 ²⁾	24,0 ²⁾	30
TS 40-14	140 910 055	140 884 01	140 801 00	1	M10	55	6,4	8	6	19,5	31,5	62
TS 40-23	140 910 070 ²⁾	140 884 02	140 802 00	2	M10	70	6,4	8	6	28,5	44,5 ²⁾	70
TS 40-28	140 910 070	140 884 03	140 802 00	2	M10	70	6,4	8	6	28,5	35,5	70
TS 40-38	140 910 070	140 884 04	140 802 00	2	M10	70	6,4	8	6	28,5	35,5	70
TS 60-19	140 912 070	140 886 01	140 802 12	2	M12	70	7,5	10	7	22,0	37,0	102
TS 60-31	140 912 090 ²⁾	140 886 02	140 803 00	3	M12	90	7,5	10	7	43,0	65,0 ²⁾	116
TS 60-38	140 912 090	140 886 03	140 803 00	3	M12	90	7,5	10	7	43,0	53,0	116
TS 60-54	140 912 090 ²⁾	140 886 04	140 803 00	3	M12	90	7,5	10	7	49,0	59,0 ²⁾	116
TS 80-28	140 920 100	140 888 01	140 804 00	4	M20	100	12,5	16	9	56,5	82,5	390
TS 80-40	140 920 120 ²⁾	140 888 02	140 804 00	4	M20	120	12,5	16	9	51,5	82,5 ²⁾	430
TS 80-54	140 920 120	140 888 03	140 804 00	4	M20	120	12,5	16	9	51,5	67,5	430
TS 120-28	140 920 100	140 889 01	140 804 00	4	M20	100	12,5	16	9	56,5	82,5	390
TS 120-36	140 920 120 ²⁾	140 889 02	140 804 00	4	M20	120	12,5	16	9	49,0	85,0 ²⁾	430
TS 120-44	140 920 120 ²⁾	140 889 03	140 804 00	4	M20	120	12,5	16	9	51,5	82,5 ²⁾	430
TS 120-54	140 920 120	140 889 04	140 804 00	4	M20	120	12,5	16	9	51,5	82,5	430

¹⁾ Screw M5 with 3 normal nuts DIN 934, for support size 0, product no. 14080001; adjusting range 9 mm.

²⁾ Mounting without the loose distance bush, which is included in the delivery of the tensioning roller set.

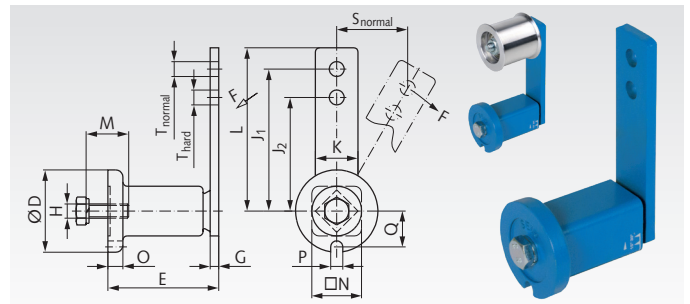
Tensioning Elements

Material: Lever made from St52, housing up to Ø 78 mm made from sintered steel, over Ø 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 belt and chain 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° to +80°C. Can be used for both tensioning directions.

Ordering Details: e.g.: Product No. 140 800 00, Tensioning Element Size 0



Product No.	Size	F max.		s max.		D mm	E mm	G mm	H mm	J ₁ mm	J ₂ mm	K mm	L mm	M mm	N mm	O mm	P mm	Q mm	T mm	M _A Nm	Weight kg
		normal N	hard N	normal mm	hard mm																
140 800 00	0	96	128	40	30	35	51 ^{+1,0} _{-0,5}	5	M6	80	60	20	90	20	22	6	8	16,5	8,5	10	0,18
140 801 00	1	135	170	50	40	45	64 ^{+1,0} _{-0,5}	5	M8	100	80	25	112,5	25	30	8	8,5	20,8	10,5	25	0,37
140 802 00	2	350	440	50	40	58	79 ^{+1,5} _{-0,5}	7	M10	100	80	30	115	30	35	10,5	8,5	25,3	10,5	49	0,66
140 802 12	2	350	440	50	40	58	79 ^{+1,5} _{-0,5}	7	M10	100	80	30	115	30	35	10,5	8,5	25,3	12,5	49	0,65
140 803 00	3	810	1050	65	50	78	108 ⁺² _{-0,5}	8	M12	130	100	50	155	40	52	15	10,5	34,3	12,5	86	1,81
140 804 00	4	1500	1875	87,5	70	95	140 ⁺² _{-0,5}	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.