ROSTA Tensioner Devices

Maintenance-free tensioner systems for belt and chain drives Easy to install — available in 7 standard sizes — wide range of



Customer Benefits from using ROSTA





- Guarantees the lowest possible maintenance outlay
- Is tensioned "for life" (belts)
- Transmits a constant torque
- Gentle belt handling longer service life

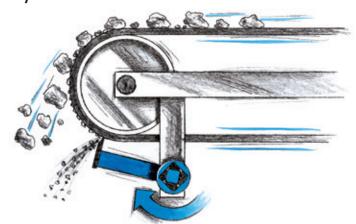




- Prevents the polygon effect in the slack side
- Increases the chain contact arc
- Excludes any jumping of the chain links
- Causes the slack side to run tautly and almost silently



- Offers continuous contact pressure
- Compensates for wear on the scrapers
- Effectively dampens vibrations in the belt band
- Guarantee for clean conveyor belts







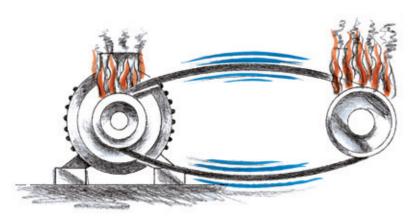
Tensioner Devices in Belt and Chain Drives





- Reduces wear on rollers and bearings
- Effectively dissipates vibrations
- 3-fold slack compensation with "Boomerang®"



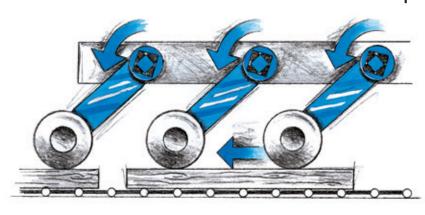




- Prevents excessive slippage and over-heating
- Offers constant torque transfer
- Guarantees longer belt lifetimes



- Offers an exactly defined contact pressure
- Accurately transports workpieces
- Maintenance-free and long lasting
- Is a cost-effective alternative to pressure cylinders







Selection table

	Ide	entification	Characteristics		Working temperature	Details	Illustration
ses	SE	Standard component	Steel parts ROSTA blue painted. Rubber quality Rubmix 10.	out of steel.	-40° to +80°C	Page 4.6	
Standard tensioner devices	SE-G	Oil resistant	Steel parts galvanized. Rubber quality Rubmix 20. Marked with yellow dot.	Housing and inner core made out of steel.	-30° to +90°C	Page 4.6	
Stando	SE-W	Heat resistant	Steel parts ROSTA blue painted. Rubber quality Rubmix 40. Marked with red dot. Tension force 40% less than SE.	Housing and	+80° to +120°C max.	Page 4.6	•
	SE-R	Reinforced lever arm	Arm and inner core especially welded for use on combustion engines and compressors. Steel parts ROSTA blue painted. Marked with white ring.	Rubmix 10.		Page 4.6	•
Additional tensioner devices	SE-I	Stainless steel	For the use in food- and pharmaceutic industries. Material: GX5CrNi19-10. Exception: SE-I 40 made out of X5CrNi18-10.	Housing and inner core made out of steel, inserts Rubmix 10	-40° to +80°C	Page 4.6	•
Additional ter	Front SE-F mounting- device		For installations on blind-hole frames (fixation from the front only). Steel parts ROSTA blue painted. Hex socket screw quality 12.9.	d inner core mad		Page 4.7	6
	SE-B	Boomerang®	For the tensioning of very long chain and belt drives (triple compensation). Steel parts ROSTA blue painted.	Housing an		Page 4.7	
hain drives		cet wheel set N	Allows accurate positioning of relevant chain track. Ball-bearings 2Z/C3, permanently lubricated.		-40° to +100°C	Page 4.8	9 30
Accessories chain dri		rider set P	For double sided use. Max. allowed chain speed 1.5 m/sec. Material: POM-H.		-40° to +100°C	Page 4.9	
Accessories belt drives	Tensio	ning roller R	Material: PA 6. Ball-bearings 2Z/C3, permanently lubricated.	-35° to +100°C	Page 4.10		

Further information to customized elements and installation examples as from page 4.12.





General technology

The ROSTA tensioners should be installed on a stiff, even and clean machine part by means of the central bolt. The frictional connection on flange is usually fully sufficient for final positioning. The positioning notch on flange can be used to assure the tensioner additionally on uneven and dirty surfaces by setting a roller-pin.

Tensioning force F

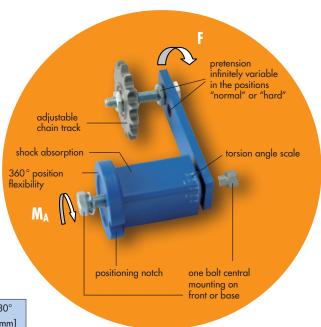
The tensioning force can be continuously adjusted. The max. pre-tensioning angle is +30° out of neutral position. Tensioning force table for types **SE/SE-G/SE-R/SE-F/SE-I** by using **hole-position "normal"** for sprocket-, rider- and roller fixation.

Size SE	Pre-tensi	on ∢ 10°	Pre-tension	on ∢ 20°	Pre-tension ∢ 30°			
Size SL	F [N]	s [mm]	F [N]	s [mm]	F [N]	s [mm]		
- 11	15	14	40	28	80	40		
15	25	17	65	34	135	50		
18	75	17	180	34	350	50		
27	150	22	380	44	800	65		
38	290	30	730	60	1500	87		
45	500	39	1300	78	2600	112		
50	750	43	2150	86	4200	125		

SE-I 40: same tensioning force like SE 38.

SE-W: 40% lower tensioning force than standard versions (Rubmix 40 inserts).

When fixing the sprockets, riders and rollers in arm-position "hard", tensioning force will increase on about 25%.



Tightening moment M_A for attachment screw

Table mentioning the tightening moment for the central screw (included in scope of delivery).

	Quality 8.8	Quality 12.9 only with SE-F
M6	10 Nm	17 Nm
M8	25 Nm	41 Nm
M10	49 Nm	83 Nm
M12	86 Nm	145 Nm
M16	210 Nm	355 Nm
M20	410 Nm	690 Nm
M24	750 Nm	

Mounting instructions

For further mounting instructions please consult the pages 4.9–4.11.

Z-configuration of sprockets or riders

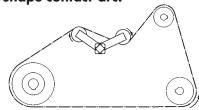
If there is the need to install sprockets, riders or rollers on the outer arm-side of the tensioner, then the distance "Z" should be as little as possible to avoid a misalignment in element parallelism. Furthermore the pre-tension force should not exceed 50% of the capacity = max. pre-tension angle of $\sim 20^\circ$.



Use of SE-B Boomerang® tensioners

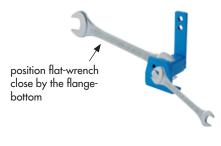
In very long chain and belt drives it was recommendable to install on the slack-side several tensioners, in order to compensate occurring elongation. The "Boomerang" with its bent double-arm equipped with two chain sprockets or a combination of grooved pulley and flat-roller (belt-drives) offers a triple-compensation of

offers a triple-compensation of chain and belt elongations, due to S-shape contact-arc.



Tensioner mounting

Tighten the flange screw slightly. Grip the housing with flat-wrench and set needful pre-tension by rotating the housing in the required direction. Tighten the central screw according the above mentioned tightening moment $M_{\rm A}$.

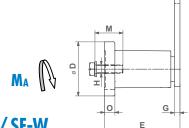


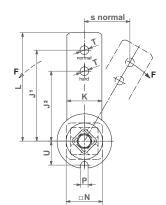




Tensioner Devices

Type SE/SE-G/SE-W
Type SE-R
Type SE-I





Standard Tensioner Devices Types SE / SE-G / SE-W

Туре	Art. No.	D	Е	G	Н	J¹	J ²	K	L	М	N	0	Р	T	U	Weight [kg]
SE 11	06 011 001	35	51 ⁺¹	5	M6	80	60	20	90	20	22	6	8	8.5	16.5	0.2
SE 11-G	06 013 201		-0.5													0.2
SE 15	06 011 002															
SE 15-G	06 013 202	45	64 +1	5	M8	100	80	25	112.5	25	30	8	8.5	10.5	20.8	0.4
SE 15-W	06 015 002															
SE 18	06 011 003															
SE 18-G	06 013 203	58	79 ^{+1.5} _{-0.5}	7	M10	100	80	30	115	30	35	10.5	8.5	10.5	25.3	0.6
SE 18-W	06 015 003															
SE 27	06 011 004															
SE 27-G	06 013 204	78	108 +2	8	M12	130	100	50	155	40	52	15	10.5	12.5	34.3	1.7
SE 27-W	06 015 004															
SE 38	06 011 005															
SE 38-G	06 013 205	95	140 +2	10	M16	175	140	60	205	40	66	15	12.5	20.5	42.0	3.6
SE 38-W	06 015 005		0.0													
SE 45	06 011 006															
SE 45-G	06 013 206	115	200 +3	12	M20	225	180	70	260	50	80	18	12.5	20.5	52.0	6.4
SE 45-W	06 015 006		·													
SE 50	06 011 007															
SE 50-G	06 013 207	130	210 +3	20	M24	250	200	80	290	60	87	20	17	20.5	57.5	9.0
SE 50-W	06 015 007		·													

SE-R Tensioning element with strengthened tensioning arm

Туре	Art. No.	D	E	G	Н	J¹	J ²	K	L	М	N	0	Р	Т	U	Weight [kg]
SE-R 15	06 011 702	45	64 +1 -0.5	5	M8	100	80	25	112.5	25	30	8	8.5	10.5	20.8	0.4
SE-R 18	06 011 703	58	79 ^{+1.5} _{-0.5}	7	M10	100	80	30	115	30	35	10.5	8.5	10.5	25.3	0.6

SE-1 Tensioning element made out of stainless steel, INOX

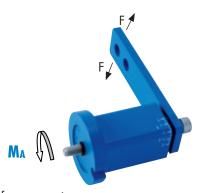
Туре	Art. No.	D	E	G	Н	J¹	J ²	K	L	М	Ν	0	Р	Т	U	Weight [kg]
SE-I 15	06 071 111	45	64 +1 -0.5	5	M8	100	80	25	112.5	25	30	8	8.5	10.5	20.8	0.4
SE-I 18	06 071 112	58	79 ^{+1.5} _{-0.5}	7	M10	100	80	30	115	30	35	10.5	8.5	10.5	25.3	0.7
SE-I 27	06 071 113	78	108 +2 -0.5	8	M12	130	100	50	155	40	52	15	10.5	12.5	34.3	2.1
SE-I 40	06 071 104	100	140 +2 -0.5	10	M16	175	140	70	205	40	70	15	12	20.5	41.5	3.8

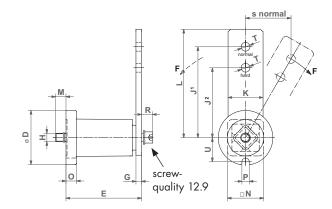
Further product and performance datas on pages 4.4–4.5.



Tensioner Devices

Type SE-F

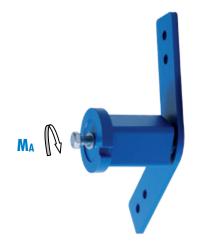


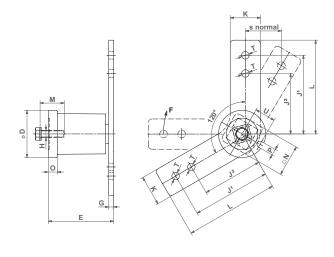


Tensioning element with front mounting

Туре	Art. No.	D	Е	G	Н	J¹	J ²	K	L	M ca.	N	0	Р	R	T	U	Weight [kg]
SE-F 15	06 061 002	45	64 +1 -0.5	5	M6	100	80	25	112.5	12	30	8	8.5	10	10.5	20.8	0.4
SE-F 18	06 061 003	58	79 ^{+1.5} _{-0.5}	7	M8	100	80	30	115	18	35	10.5	8.5	11	10.5	25.3	0.7
SE-F 27	06 061 004	78	108 +2 -0.5	8	M10	130	100	50	155	17	52	15	10.5	15	12.5	34.3	1.9
SE-F 38	06 061 005	95	140 +2 -0.5	10	M12	175	140	60	205	16	66	15	12.5	17	20.5	42.0	3.7
SE-F 45	06 061 006	115	200 +3	12	M16	225	180	70	260	32	80	18	12.5	24	20.5	52.0	6.9
SE-F 50	06 061 007	130	210 ⁺³	20	M20	250	200	80	290	23	87	20	17	27	20.5	57.5	10.1

Type SE-B Boomerang ®





Туре	Art. No.	D	Е	G	Н	J ¹	J ²	K	L	М	Ν	0	Р	T	U	Weight [kg]
SE-B 18	06 021 003	58	78 ^{+1.5} _{-0.5}	6	M10	100	80	30	115	30	35	10.5	8.5	10.5	25.3	0.8
SE-B 27	06 021 004	78	108 +2 -0.5	8	M12	130	100	50	155	40	52	15	10.5	12.5	34.3	2.1

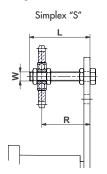
Further product and performance datas on pages 4.4–4.5.

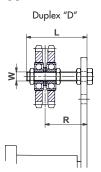


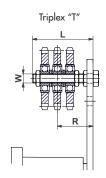


Accessories

Sprocket wheel set type N Sprocket wheel type N





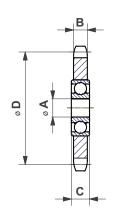


	_		
SMEAC	VOT MI	hoole	of tyme
Shing	Vel AA		et type

		"					-	A P. of		
Rol ANSI	lerchain DIN 8187	Туре	Art. No.	Number of teeth	W	L	Torque hex nut 0.5 d [Nm]	Adjusting range track R	Size SE	Weight [kg]
Simpl	ex "S"									
35	ISO 06 B-1	N3/8"-10 S	06 510 001	15	M10	55	20	22-43/23-43	15/18	0.15
40	ISO 08 B-1	N1/2"-10 S	06 510 002	15	M10	55	20	23-44	18	0.20
50	ISO 10 B-1	N5/8"-12 S	06 510 003	15	M12	80	35	27-65	27	0.35
60	ISO 12 B-1	N3/4"-12 S	06 510 004	15	M12	80	35	27-65	27	0.55
60	ISO 12 B-1	N3/4"-20 S	06 510 005	15	M20	100	172	40-80	38	0.85
80	ISO 16 B-1	N1"-20 S	06 510 006	13	M20	100	172	40-80	38	1.25
100	ISO 20 B-1	N1 1/4"-20 S	06 510 007	13	M20	100	172	40-80/48-80	45/50	2.00
120	ISO 24 B-1	N1 1/2"-20 S	06 510 008	11	M20	140	172	40-120/48-120	45/50	2.35
Duple	x "D"									
35	ISO 06 B-2	N3/8"-10 D	06 520 001	15	M10	55	20	27-39/28-39	15/18	2.00
40	ISO 08 B-2	N1/2"-10 D	06 520 002	15	M10	55	20	30-37	18	0.35
50	ISO 10 B-2	N5/8"-12 D	06 520 003	15	M12	80	35	36-57	27	0.60
60	ISO 12 B-2	N3/4"-12 D	06 520 004	15	M12	80	35	37-56	27	1.05
60	ISO 12 B-2	N3/4"-20 D	06 520 005	15	M20	120	172	50-90	38	1.35
80	ISO 16 B-2	N1"-20 D	06 520 006	13	M20	120	172	55-84	38	2.10
100	ISO 20 B-2	N1 1/4"-20 D	06 520 007	13	M20	140	172	60-102/68-102	45/50	3.60
120	ISO 24 B-2	N1 1/2"-20 D	06 520 008	11	M20	140	172	65-97/73-97	45/50	4.25
Triple	x "T"									
35	ISO 06 B-3	N3/8"-10 T	06 530 001	15	M10	70	20	33-48	18	0.25
40	ISO 08 B-3	N1/2"-12 T	06 530 002	15	M12	80	35	41-51	27	0.50
50	ISO 10 B-3	N5/8"-12 T	06 530 003	15	M12	80	35	43-50	27	0.95
50	ISO 10 B-3	N5/8"-20 T	06 530 004	15	M20	120	172	56-84	38	1.25
60	ISO 12 B-3	N3/4"-20 T	06 530 005	15	M20	120	172	59-80	38	1.50
80	ISO 16 B-3	N1"-20 T	06 530 006	13	M20	160	172	<i>7</i> 4–108	45	2.90
100	ISO 20 B-3	N1 1/4"-20 T	06 530 007	13	M20	160	172	78-105/86-105	45/50	5.20
120	ISO 24 B-3	N1 1/2"-20 T	06 530 008	11	M20	180	172	90-111/98-111	45 / 50	6.20

Sprocket wheel type N

Ro ANSI	ller chain DIN 8187	Туре	Art. No.	Number of teeth	А	В	С	D	Weight [kg]
35	ISO 06 B	N3/8"-10	06 500 001	15	10	5.3	9	45.81	0.06
40	ISO 08 B	N1/2"-10	06 500 002	15	10	7.2	9	61.08	0.15
40	ISO 08 B	N1/2"-12	06 500 003	15	12	7.2	12	61.08	0.15
50	ISO 10 B	N5/8"-12	06 500 004	15	12	9.1	12	76.36	0.27
50	ISO 10 B	N5/8"-20	06 500 005	15	20	9.1	15	76.36	0.29
60	ISO 12 B	N3/4"-12	06 500 006	15	12	11.1	12	91.63	0.47
60	ISO 12 B	N3/4"-20	06 500 007	15	20	11.1	15	91.63	0.47
80	ISO 16 B	N1"-20	06 500 008	13	20	16.1	15	106.14	0.88
100	ISO 20 B	N1 1/4"-20	06 500 009	13	20	18.5	15	132.67	1.60
120	ISO 24 B	N1 1/2"-20	06 500 010	11	20	24.1	15	135.23	1.93

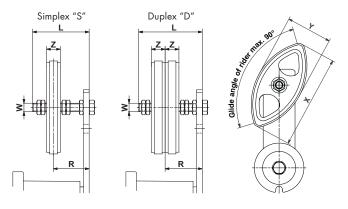




Chain Drives

Chain rider set type P Chain rider type P

For an ideal positioning of the chain rider/s on the threaded rod we do recommend to position them on each side by means of two nuts, secured against each other, with some play for swivelling into working position.



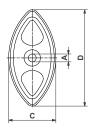
Chain rider set type P

Ro ANSI	oller chain DIN 8187	Туре	Art. No.	W	L	Х	Υ	Z	Torque hex nut 0.5 d [Nm]	Adjusting range track R	Size SE	Weight [kg]
Simple	ex "S"											
35	ISO 06 B-1	P3/8"- 8 S	06 550 001	M8	45	74	37	10.2	11	19-34	11	0.05
40	ISO 08 B-1	P1/2"-10 S	06 550 002	M10	55	96	48	13.9	20	23-41	15/18	0.10
50	ISO 10 B-1	P5/8"-10 S	06 550 003	M10	55	126	63	16.6	20	24-39	18	0.12
60	ISO 12 B-1	P3/4"-12 S	06 550 004	M12	80	148	72	19.5	35	30-61	27	0.18
Duple	x "D"											
35	ISO 06 B-2	P3/8"- 8 D	06 560 001	M8	45	74	37	10.2	11	25-30	11	0.07
40	ISO 08 B-2	P1/2"-10 D	06 560 002	M10	55	96	48	13.9	20	30-34	15/18	0.12
50	ISO 10 B-2	P5/8"-10 D	06 560 003	M10	70	126	63	16.6	20	34-46	18	0.17
60	ISO 12 B-2	P3/4"-12 D	06 560 004	M12	80	148	72	19.5	35	40-52	27	0.26

Chain rider type P

Ro ANSI	ller chain DIN 8187	Туре	Art. No.	A +0.2	В	С	D	Weight [kg]					
35	ISO 06 B	P3/8"	06 540 001	8	10.2	37	74	0.02					
40	ISO 08 B	P1/2"	06 540 002	10	13.9	48	96	0.03					
50	ISO 10 B	P5/8"	06 540 003	10	16.6	63	126	0.05					
60	ISO 12 B	P3/4"	06 540 004	12	19.5	72	148	0.07					



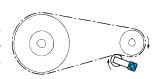


Mounting instructions for Chain Drives

See also complementary mounting instructions on page 4.5.

Standard positioning

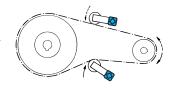
The ROSTA tensioning device should be placed on the slackside of the chain drive, close by the smaller sprocket wheel



in order to enlarge its contact-arc, therefore contact application from outer side of drive. In mounted position the tensioner-arm should stay close to parallel to the chain run, in drain direction. By extremely long chain drives it is recommendable to install several tensioners or the type "Boomerang®" in order to enlarge the slack compensation.

Reversible chain drive

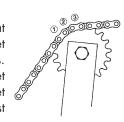
By reversible chain transmissions it is recommendable to install a tensioner on each side of the chain-strands. Due



to the alternate occurring of the slack, both tensioners should only be pre-tensioned up to max. 20°, in order to retain a reset-path of 10°, when strains are changing from slack span on working span in reversible applications.

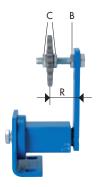
Sprocket teeth in mesh

By the initial tensioning of the chain at least three teeth of the tensioner sprocket wheel should be in mesh with the rollers. The min. distance between sprocket wheel of the tensioner to the next sprocket wheel in the chain drive should be at least four chain-pitches.



Adjustment of chain-track

The wheel of the sprocket wheel set is adjustable according to the position of the chain drive track. The wheel is positioned between two nuts on the threaded shaft. In changing the adjustment band "R", the track of the tensioner wheel can be set according to relevant strand course. After positioning of sprocket, re-tighten the two nuts on the side. The counter-nut "B" remains always tightened.

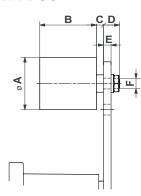






Accessories belt drives

Tensioning roller Type R



Туре	Art. No.	Max. speed [rpm]	Max. belt width	А	В	С	D	E max.	F	Torque hex nut [Nm]	Size SE	Weight [kg]
R 11	06 580 001	8000	30	30	35	2	14	5	M8	20	11	0.08
R 15/18	06 580 002	8000	40	40	45	6	16	7	M10	20	15/18	0.17
R 27	06 580 003	6000	55	60	60	8	17	8	M12	35	27	0.40
R 38	06 580 004	5000	85	80	90	8	25	10	M20	160	38	1.15
R 45	06 580 005	4500	130	90	135	10	27	12	M20	160	45	1. <i>7</i> 5

Instructions for belt drives

a) Selection of the adequate ROSTA Tensioner size

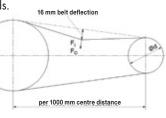
Selection table mentioning the most conventional V-belt types.

V-belt type	Width	Height	Diam. of smal-	Initial operation	Operational test-	Size SE* (without SE-W and SE-B)							
v-bell type	[mm]	[mm]	ler pulley [mm]	test-force F _I ** [N]	force F _O ** [N]	1 belt	2 belts	3 belts	4 belts	5 belts			
XPZ, SPZ	10	8	56–71	20	16	11	18	18	18	18			
			75–90	22	18	11	18	18	18	27			
			95–125	25	20	15	18	18	18	27			
			≥ 125	28	22	15	18	18	27	27			
XPA, SPA	13	10	80–100	28	22	15	18	18	27	27			
			106–140	38	30	15	18	27	27	27			
			150–200	45	36	18	18	27	27	27			
			≥ 200	50	40	18	18	27	27	38			
XPB, SPB	16	13	112–160	50	40	18	18	27	27	38			
			170-224	62	50	18	27	27	38	38			
			236-355	77	62	18	27	38	38	38			
			≥ 355	81	65	18	27	38	38	38			
XPC, SPC	22	18	224–250	87	70	18	27	38	38	38			
			265-355	115	92	27	38	38	45	45			
			≥ 375	144	115	27	38	38	45	45			
Z	10	6	56-100	5-	7.5	11	11	11	15	15			
Α	13	8	80–140	10-	-15	11	15	18	18	18			
В	17	10	125–200	20-	-30	15	18	18	27	27			
С	22	12	200-400	40-	-60	18	27	27	38	38			
D	32	19	355-600	70-	-105	18	27	38	38	45			

- * General basic selection criteria:
- F resulting tensioning force by a pre-tension angle of 20° (see table page 4.5)
- F₁ initial operation test-force according guidelines of the belt manufacturer
- z quantity of belts in drive
- 2 multiplier for the compensation of belt-slippage and/or of centrifugal force generated on belt strands.
- ** required test-force for belt deflection of 16 mm per 1000 mm of centre distance.

 The relevant deflection by shorter or longer centre distance has to be interpolated accordingly.

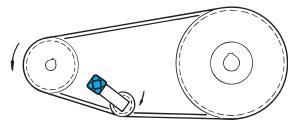




 $F = F_1 \cdot z \cdot 2$

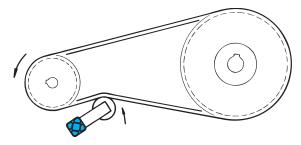
b) Modalities of tensioning

See also complementary mounting instructions on page 4.5.



Tensioning from "inside" of the belt drive with grooved pulley

- Installation in slack span of the belt drive, make sure that the belts are maintaining sufficient contact-arc on the driver- and driven-pulley.
- By extremely long centre distances between driver and driven pulley it is recommendable to use on the tensioner a deep-grooved pulley to avoid excessive slack beating.



Tensioning with flat roller on belt back

- The diameter of the flat tensioning roller should at least measure ²/₃ of the diameter of the smallest pulley in the drive.
- The width of the tensioning roller should be at least 20% wider than the overall width of the belt set.
- Installation on the belt back in the slack span, make sure that the belts are maintaining sufficient contact-arc on the driver and driven pulley.

c) Control procedure for checking belt tension

Proceed according to the mentioned guidelines on page 4.5 and 4.10-4.11.

There are several instruments for checking with the adequate test-force the right tension on your frictional V-belt drive. Don't make it with your thumb, you will make an estimation mistake and your belts will wear out prematurely!



Optikrik-tester from Optibelt



Spring scale tester from Gates



Infrared-frequency tester

Re-tension of belts: Generally, there is no re-tension maintenance service required, however we would recommend to check the test-force after some days of running-in with the required operational test-force (see table page 4.10).

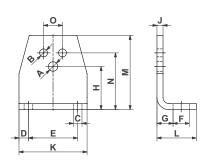




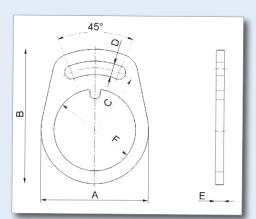
ROSTA Tensioner Devices and Accessories to meet individual customer requirements

Support bracket type WS

For the easy mounting of all standardized ROSTA Tensioners (except SE 50).

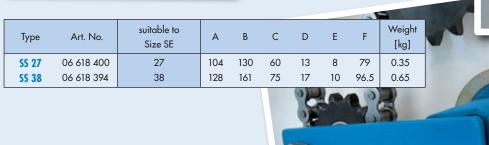


Туре	Art. No.	suitable to Size SE	А	В	С	D	E	F	G	Н	J	K	L	М	Ν	0	Weight [kg]
WS 11	06 590 001	11	6.5	5.5	7	7.5	30	13	11.5	27	4	45	30	46	35	10	0.08
WS 15	06 590 002	15	8.5	6.5	7	7.5	40	13	13.5	34	5	55	32	58	44	12	0.15
WS 18	06 590 003	18	10.5	8.5	9.5	10	50	15.5	16.5	43	6	70	38	74	55	20	0.28
WS 27	06 590 004	27	12.5	10.5	11.5	12.5	65	21.5	21	57	8	90	52	98	75	25	0.70
WS 38	06 590 005	38	16.5	12.5	14	15	80	24	21	66	8	110	55	116	85	35	0.90
WS 45	06 590 006	45	20.5	12.5	18	20	100	30	26	80	10	140	66	140	110	40	1.80



Safety Sockets SS 27 and SS 38

By uneven surfaces and/or by paint coatings, which are giving insufficient friction locking, the positioning and further re-tensioning can be made with these standardized Safety Sockets.

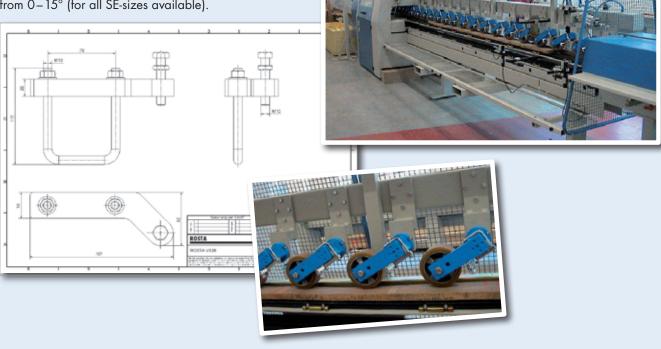


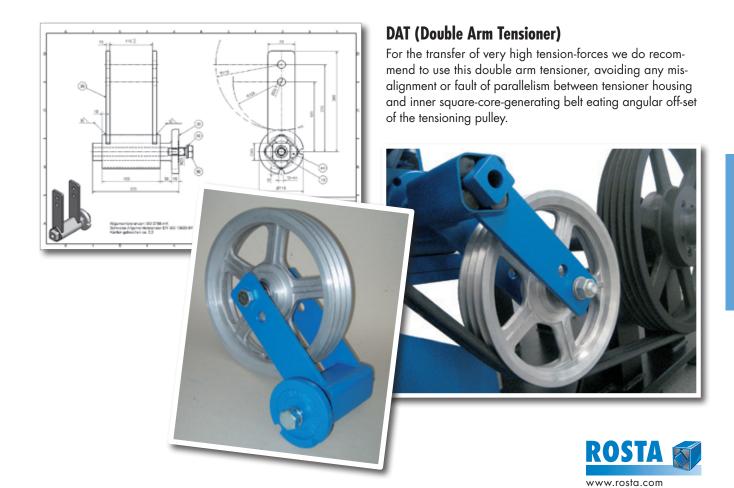






For the accurate definition of the required pre-tension and limitation of the roller travel we do recommend the use of our pre-tensioning clamp VS allowing angle adjustments from $0-15^{\circ}$ (for all SE-sizes available).

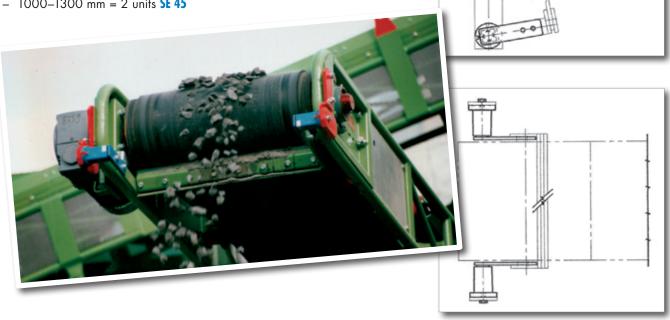


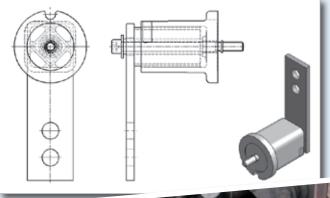


Elastic suspension of conveyor belt scrapers with tensioner devices SE

The ROSTA suspension is offering continuous and wear compensating cleaning pressure on conveyor belt scrapers to abrade small particle sizes. For belt widths:

- 400-600 mm = 2 units SE 18
- 600-800 mm = 2 units SE 27
- 800-1000 mm = 2 units SE 38
- 1000-1300 mm = 2 units SE 45







ROSTA Tensioner Devices type SE-F (W) 38 for the Bus Industries

Today, nearly all busses for passenger transport are equipped with an air-conditioning system.

The Diesel engine of the bus serves thereby as energy source of the cooling compressor. The piston- or rotation compressors are driven via V- or Poly-V-belts from the spur wheel of the main engine. This belt transmission requires a slippage-free power train to ensure the full capacity of the cooling compressors.

ROSTA designed for this specific application a heat resistant tensioner – powerful, compact with a long compensation travel.

Different versions available. Please do not hesitate to contact ROSTA directly.



www.rosta.com

Packaging units for Distribution and large-scale Consumers

Please select the protecting, stackable and discount-priced packaging units for the ROSTA standard tensioner devices type SE.

Quantity per box:

SE 11 = 30 pieces
SE 15 = 20 pieces
SE 18 = 15 pieces
SE 27 = 10 pieces

ROSTA belt and chain tensioners ... a success story!

In the year 1961, a foreman at ROSTA AG became annoyed about the tedious and ever recurring re-tensioning of the belt on a large ventilator. Without a moment's hesitation, he sawed an old ROSTA rubber suspension axle in two and fitted a tension roller onto the lever arm – the automatic belt tensioner was born. People at ROSTA AG were very happy about this "invention" by the foreman – but it took a full 2 years before the owner of the company had the idea of commercialising this application, and of offering standardized chain and belt tensioners worldwide.

These simple, maintenance-free and automatic re-tensioning ROSTA machine components very quickly became established in general machinery and system construction, and, thanks to good marketing, demand from all over the world increased rapidly. Even today, several hundred thousands of these **blue** tensioning elements are being manufactured at ROSTA AG and by two licensees every year.

Original ROSTA belt and chain tensioners – often copied but never matched!





Strained Applications!

A few examples:



