

# Only properly tensioned chain and belt drives transfer the required torque free from vibration and slip!

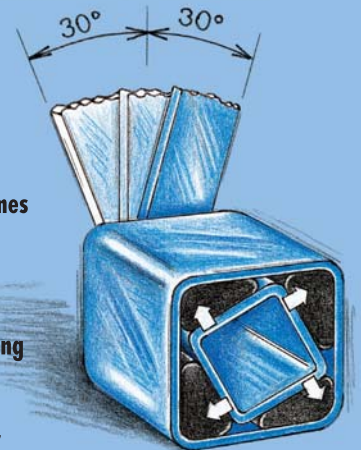
What is the effect of the automatic ROSTA tensioning element...

... in chain drives:

- 3 x longer service life of roller-chains
- the polygon effect vibrations will be dissipated
- the noise level of the chain drive will be greatly reduced
- the chain is tensioned "for life"
- expensive maintenance is no longer necessary
- less downtime due to premature failure

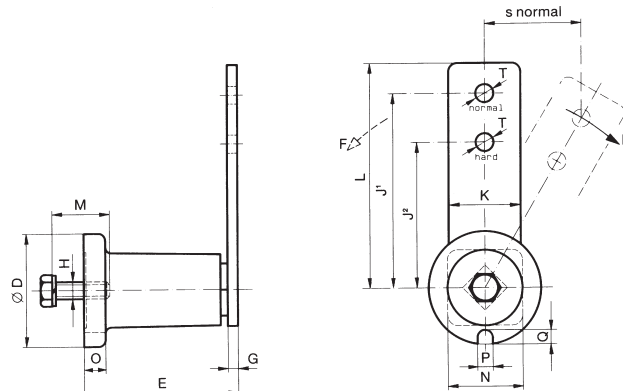
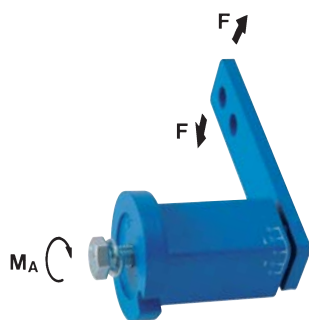
... in belt drives:

- the service life of belts is increased several times
- the torque transmission remains constant
- compensation of belt elongation
- no overheating of the belt as a result of slipping
- the belt is tensioned "for life"
- expensive maintenance is no longer necessary



# ROSTA TENSIONER DEVICE TYPE SE/SE-G/SE-W

## Standard-Mounting



## Technical Data

Art.-No.	Type	F max.* in N of position normal (J')	s max. in mm normal	Torque M <sub>A</sub> in Nm	Weight in kg
<b>Standard quality – surface painted</b>					
06011001	SE 11 (Standard)	80	40	10	0.20
06011002	SE 15 (Standard)	135	50	25	0.40
06011003	SE 18 (Standard)	350	50	49	0.60
06011004	SE 27 (Standard)	800	65	86	1.70
06011005	SE 38 (Standard)	1500	87.5	210	3.55
06011006	SE 45 (Standard)	2600	112.5	410	6.40
06011007	SE 50 (Standard)	4200	125	750	9.00
<b>Oil resistant – surface zinc-plated (with yellow mark)</b>					
06013201	SE 11-G	80	40	10	0.20
06013202	SE 15-G	135	50	25	0.40
06013203	SE 18-G	350	50	49	0.60
06013204	SE 27-G	800	65	86	1.70
06013205	SE 38-G	1500	87.5	210	3.55
06013206	SE 45-G	2600	112.5	410	6.40
06013207	SE 50-G	4200	125	750	9.00
<b>Heat resistant – surface painted (with red mark)</b>					
06015002	SE 15-W	81	50	25	0.40
06015003	SE 18-W	210	50	49	0.60
06015004	SE 27-W	480	65	86	1.70
06015005	SE 38-W	900	87.5	210	3.55
06015006	SE 45-W	1560	112.5	410	6.40
06015007	SE 50-W	2520	125	750	9.00

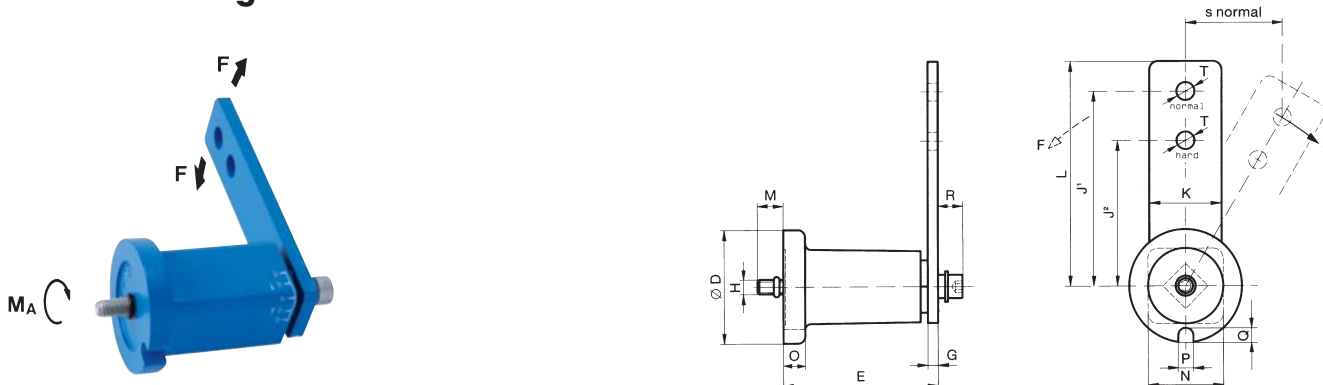
\* F max. in position "hard" approx. 25% higher

## Dimensions

Art.-No.	Type	D	E	G	H	J'	J''	K	L	M	N	O	P	Q	T
06011001	SE 11														
06013201	SE 11-G	35	51 <sup>+0.5</sup>	5	M6	80	60	20	90	20	22	6	8	5	8.5
06011002	SE 15														
06013202	SE 15-G	45	64 <sup>+0.5</sup>	5	M8	100	80	25	112.5	25	30	8	8.5	6	10.5
06015002	SE 15-W														
06011003	SE 18														
06013203	SE 18-G	58	79 <sup>+0.5</sup>	7	M10	100	80	30	115	30	35	10.5	8.5	8	10.5
06015003	SE 18-W														
06011004	SE 27														
06013204	SE 27-G	78	108 <sup>+0.5</sup>	8	M12	130	100	50	155	40	52	15	10.5	10	12.5
06015004	SE 27-W														
06011005	SE 38														
06013205	SE 38-G	95	140 <sup>+0.5</sup>	10	M16	175	140	60	205	40	66	15	12.5	12	20.5
06015005	SE 38-W														
06011006	SE 45														
06013206	SE 45-G	115	200 <sup>+0.5</sup>	12	M20	225	180	70	260	50	80	18	12.5	12	20.5
06015006	SE 45-W														
06011007	SE 50														
06013207	SE 50-G	130	210 <sup>+0.5</sup>	20	M24	250	200	80	290	60	87	20	17	17	20.5
06015007	SE 50-W														

# ROSTA TENSIONER DEVICE TYPE SE-F

## Front-Mounting



## Technical Data

Art.-No.	Type	F max.* in N of position normal (J <sup>1</sup> )	s max. in mm normal	Torque M <sub>A</sub> in Nm	Weight in kg
06061002	SE-F 15	135	50	17	0.40
06061003	SE-F 18	350	50	41	0.65
06061004	SE-F 27	800	65	83	1.85
06061005	SE-F 38	1500	87.5	145	3.70
06061006	SE-F 45	2600	112.5	355	6.90
06061007	SE-F 50	4200	125	690	10.10

\* F max. in position "hard" approx. 25% higher

## Dimensions

Art.-No.	Type	D	E	G	H	J <sup>1</sup>	J <sup>2</sup>	K	L	M	N	O	P	Q	R	T
06061002	SE-F 15	45	64 <sup>+1</sup> <sub>-0.5</sub>	5	M6	100	80	25	112.5	12.4	30	8	8.5	6	10	10.5
06061003	SE-F 18	58	79 <sup>+1</sup> <sub>-0.5</sub>	7	M8	100	80	30	115	17.9	35	10.5	8.5	8	11	10.5
06061004	SE-F 27	78	108 <sup>+2</sup> <sub>-0.5</sub>	8	M10	130	100	50	155	17.0	52	15	10.5	10	15	12.5
06061005	SE-F 38	95	140 <sup>+2</sup> <sub>-0.5</sub>	10	M12	175	140	60	205	15.5	66	15	12.5	12	17	20.5
06061006	SE-F 45	115	200 <sup>+3</sup> <sub>-1</sub>	12	M16	225	180	70	260	32.0	80	18	12.5	12	24	20.5
06061007	SE-F 50	130	210 <sup>+3</sup> <sub>-1</sub>	20	M20	250	200	80	290	23.0	87	20	17	17	27	20.5

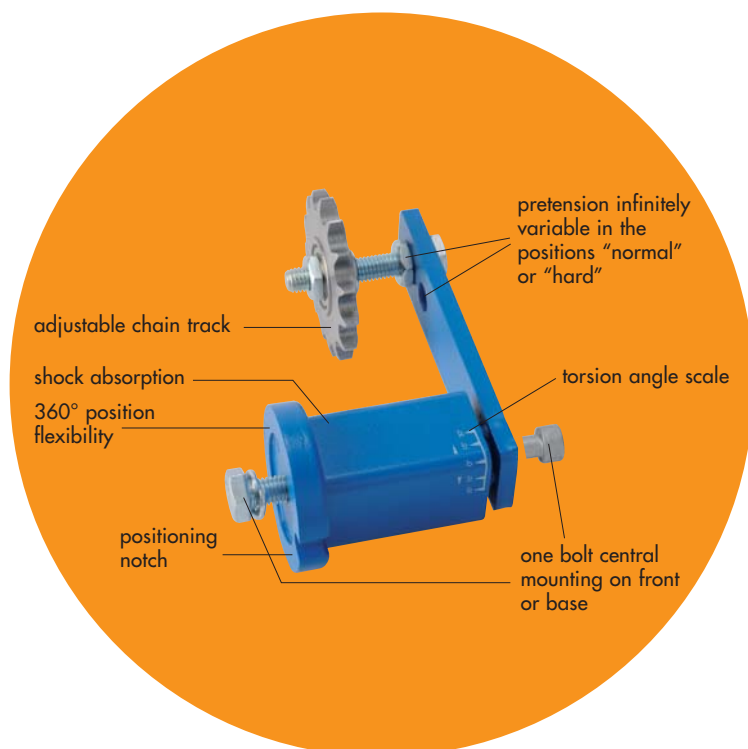
## The tension pressure F is infinitely variable

Type of element	pre-tension ↖ 10°		pre-tension ↖ 20°		pre-tension ↖ 30°		
	normal		normal		normal		
	F* in N	s in mm	F* in N	s in mm	F* in N	s in mm	
SE/SE-G	11	15	14	40	28	80	40
SE/SE-F/SE-G	15	25	17	65	34	135	50
SE-W	15	15	17	39	34	81	50
SE/SE-F/SE-G	18	75	17	180	34	350	50
SE-W	18	45	17	108	34	210	50
SE/SE-F/SE-G	27	150	22	380	44	800	65
SE-W	27	90	22	228	44	480	65
SE/SE-F/SE-G	38	290	30	730	60	1500	87
SE-W	38	174	30	438	60	900	87
SE/SE-F/SE-G	45	500	39	1300	78	2600	112
SE-W	45	300	39	780	78	1560	112
SE/SE-F/SE-G	50	750	43	2150	86	4200	125
SE-W	50	450	43	1290	86	2520	125

s = pre-tensioning gap

\* F in position "hard" approx. 25% higher

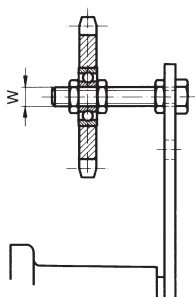
## Superior Technology



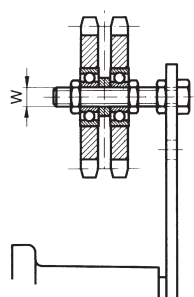
# ROSTA SPROCKET WHEEL SET TYPE N



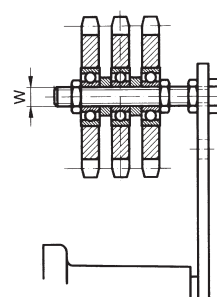
Simplex "S"



Duplex "D"



Triplex "T"

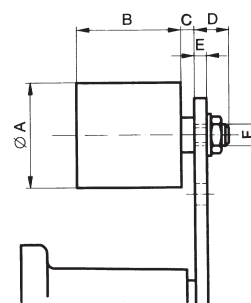


## Selection table

### Technical Data

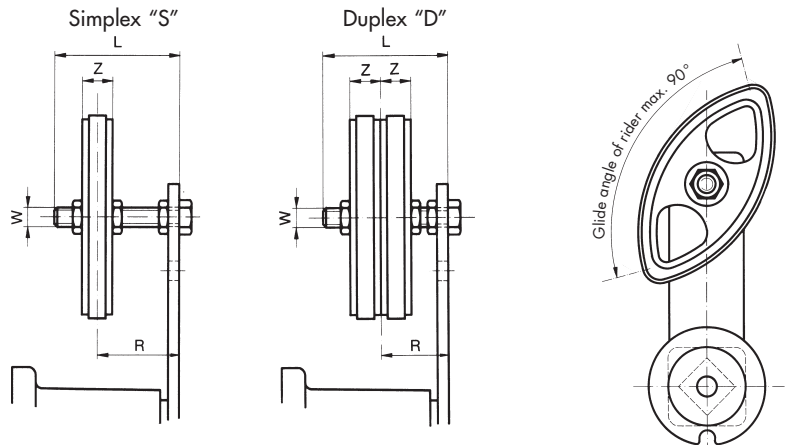
Art.-No.	Art.-No.	Art.-No.	Type	Roller chain DIN 8187	Number of teeth	W	Tensioner Device Type
<b>Simplex "S"</b>	<b>Duplex "D"</b>	<b>Triplex "T"</b>		<b>"S" "D" "T"</b>			
06 510001	06 520001	06 530001	N <sup>3/8</sup> "-10 S/D N <sup>3/8</sup> "-10 T	ISO 06 B- 1 / 2 ISO 06 B-	15 15	M10 M10	SE/SE-F 15 or 18 SE/SE-F 18
06 510002	06 520002	06 530002	N <sup>1/2</sup> "-10 S/D N <sup>1/2</sup> "-12 T	ISO 08 B- 1 / 2 ISO 08 B-	15 15	M10 M12	SE/SE-F 18 SE/SE-F 27
06 510003	06 520003	06 530003	N <sup>5/8</sup> "-12 S/D/T	ISO 10 B- 1 / 2 / 3	15	M12	SE/SE-F 27
06 510004	06 520004	06 530004	N <sup>3/4</sup> "-12 S/D N <sup>5/8</sup> "-20 T	ISO 12 B- 1 / 2 ISO 10 B-	15 15	M12 M20	SE/SE-F 27 SE/SE-F 38
06 510005	06 520005	06 530005	N <sup>3/4</sup> "-20 S/D/T	ISO 12 B- 1 / 2 / 3	15	M20	SE/SE-F 38
06 510006	06 520006	06 530006	N 1"-20 S/D N 1"-20 T	ISO 16 B- 1 / 2 ISO 16 B-	13 13	M20 M20	SE/SE-F 38 SE/SE-F 45
06 510007	06 520007	06 530007	N 1 <sup>1/4</sup> "-20 S/D/T	ISO 20 B- 1 / 2 / 3	13	M20	SE/SE-F 45 or 50
06 510008	06 520008	06 530008	N 1 <sup>1/2</sup> "-20 S/D/T	ISO 24 B- 1 / 2 / 3	11	M20	SE/SE-F 45 or 50

# ROSTA TENSIONING ROLLER TYPE R



Art.-No.	Type	Max. speed in min <sup>-1</sup>	A	B	C	D	E max.	F	Tensioner Device Type	Weight in kg
06 580001	R 11	8000	30	35	2	14	5	M8	SE11	0.08
06 580002	R 15/18	8000	40	45	6	16	7	M10	SE/SE-F 15 or 18	0.17
06 580003	R 27	6000	60	60	8	17	8	M12	SE/SE-F 27	0.40
06 580004	R 38	5000	80	90	8	25	10	M20	SE/SE-F 38	1.15
06 580005	R 45	4500	90	135	10	27	12	M20	SE/SE-F 45	1.75

# ROSTA CHAIN RIDER SET TYPE P

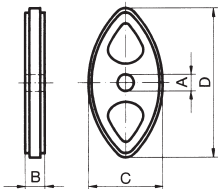


## Technical Data

Art.-No.	Art.-No.	Type	Roller chain DIN 8187		W	L	Z	Adjusting range track R		Tensioning element Type
			"S"	"D"				"S"	"D"	
<b>Simplex "S"</b>	<b>Duplex "D"</b>									
06 550 001	06 560 001	P <sup>3/8"</sup> - 8 S/D	ISO 06 B- 1 / 2		M8	45	10.2	19-34	25-30	SE 11
06 550 002	06 560 002	P <sup>1/2"</sup> -10 S/D	ISO 08 B- 1 / 2		M10	55	13.9	23-41	30-34	SE/SE-F 15
06 550 003	06 560 003	P <sup>5/8"</sup> -10 S/D	ISO 10 B- 1 / 2		M10	55/70	16.6	24-39	34-46	SE/SE-F 15 od. 18
06 550 004	06 560 004	P <sup>3/4"</sup> -12 S/D	ISO 12 B- 1 / 2		M12	80	19.5	30-61	40-52	SE/SE-F 27

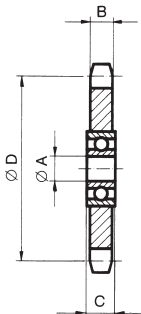
# ROSTA TENSIONING ELEMENT ACCESSORIES

## Chain Rider Type P



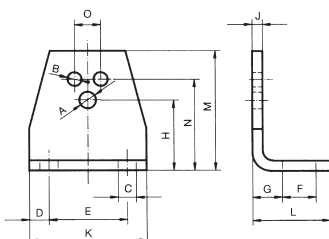
Art.-No.	Type	Roller chain DIN 8187	A <sup>+0.2</sup>	B	C	D	Weight in kg
06 540 001	P <sup>3/8"</sup>	ISO 06 B	8	10.2	37	74	0.02
06 540 002	P <sup>1/2"</sup>	ISO 08 B	10	13.9	48	96	0.03
06 540 003	P <sup>5/8"</sup>	ISO 10 B	10	16.6	63	126	0.05
06 540 004	P <sup>3/4"</sup>	ISO 12 B	12	19.5	72	148	0.07

## Sprocket Wheel Type N



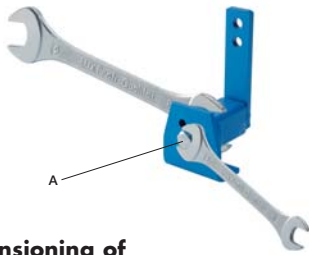
Art.-No.	Type	Roller chain DIN 8187	Number of teeth	A	B	C	D	Weight in kg
06 500 001	N <sup>3/8"</sup> -10	ISO 06 B	15	10	5.3	9	45.81	0.06
06 500 002	N <sup>1/2"</sup> -10	ISO 08 B	15	10	7.2	9	61.08	0.15
06 500 003	N <sup>1/2"</sup> -12	ISO 08 B	15	12	7.2	12	61.08	0.15
06 500 004	N <sup>5/8"</sup> -12	ISO 10 B	15	12	9.1	12	76.36	0.27
06 500 005	N <sup>5/8"</sup> -20	ISO 10 B	15	20	9.1	15	76.36	0.29
06 500 006	N <sup>3/4"</sup> -12	ISO 12 B	15	12	11.1	12	91.63	0.47
06 500 007	N <sup>3/4"</sup> -20	ISO 12 B	15	20	11.1	15	91.63	0.47
06 500 008	N <sup>1"</sup> -20	ISO 16 B	13	20	16.1	15	106.14	0.88
06 500 009	N <sup>1 1/4"</sup> -20	ISO 20 B	13	20	18.5	15	132.67	1.60
06 500 010	N <sup>1 1/2"</sup> -20	ISO 24 B	11	20	24.1	15	135.23	1.93

## Support Type WS



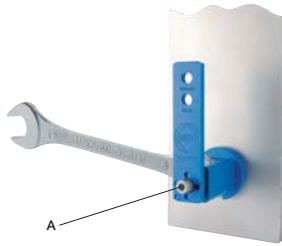
Art.-No.	Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O	Weight in kg
06 590 001	WS 11-15	6.5	5.5	7	7.5	30	13	11.5	27	4	45	30	46	35	10	0.08
06 590 002	WS 15-18	8.5	6.5	7	7.5	40	13	13.5	34	5	55	32	58	44	12	0.15
06 590 003	WS 18-27	10.5	8.5	9.5	10	50	15.5	16.5	43	6	70	38	74	55	20	0.28
06 590 004	WS 27-38	12.5	10.5	11.5	12.5	65	21.5	21	57	8	90	52	98	75	25	0.70
06 590 005	WS 38-45	16.5	12.5	14	15	80	24	21	66	8	110	55	116	85	35	0.90
06 590 006	WS 45-50	20.5	12.5	18	20	100	30	26	80	10	140	66	140	110	40	1.80

# ROSTA MOUNTING INSTRUCTIONS



## Tensioning of "SE, SE-G and SE-W"

Bolt "A" is slightly tightened, the tensioning housing held with a position and turned in the required wrench. The bolt "A" is then tightened applying to the suitable torque  $M_A$ .



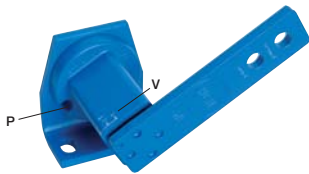
## Tensioning of "SE-F"

For applications on "blind" frame structures. The adjustment of the tension is made as described for type SE, but final fixation with hexagonal key front bolt.



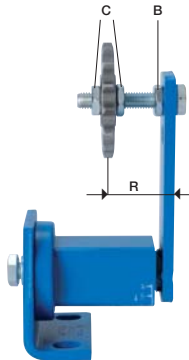
## Central Fixing

ROSTA tensioning elements are fitted centrally on a sufficiently strong, flat part of the machine. If a direct mounting is not possible, we recommend to use the support **type WS**.



## Positioning, Angle Torsion Scale

The angle torsion scale "V" on the tensioner housing always shows the pretensioning angle. The positioning notch "P" on the housing flange allows easy readjustment of the pretensioning level when a corresponding mark is set up on the support or the machine part.



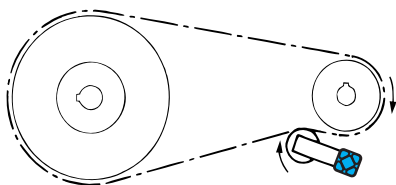
## Chain Track

The chain tension sprocket, as well as the chain rider, is held between 2 nuts "C". The chain track can be set exactly by adjusting within the range R. Locknut "B" is always tight.



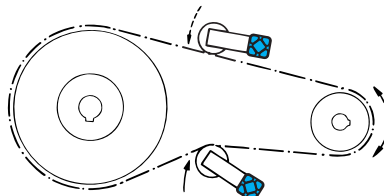
## "Z"-Arrangement

If chain tension sprockets/chain riders or tensioning rollers are mounted on the outside of the lever, the spacing "Z" should be as little as possible. The max. tension F must not then exceed 50% = approx. 20° of pretension.



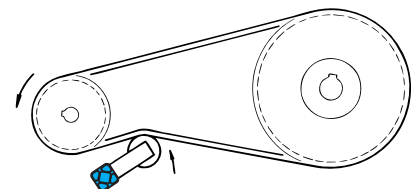
## Normal Positioning

The ROSTA tensioning elements are always positioned on the slack side of the chain. They should be fitted as close as possible to the small wheel and guide the chain from the outer side. **The ideal position of the tensioning arm is nearly parallel to the chain drive.**



## Reversible Chain Drives

The tensioning elements must be placed on both sides of the chain strand. Due to the reversible function there results a much higher pressure on the load side than on the slack side of the chain strand. We therefore advise to use oversized tensioning elements and a pretension angle of max 15°.



## V-belt Tensioner – Outer Roller

Please refer to the instructions of the belt manufacturer for further information on the belt structure when mounting our ROSTA belt tensioning elements with flat rollers on the back of the belt. Inner or outer tension rollers must be positioned as far away as possible from the next V-belt pulley the belt is guided to.



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