



Automatic tensioners

JWIS[®] Automatic tensioners

Automatic chain tensioners compensate the chain elongation in the machines and conveyor systems and that way further the run time of the applied chain. iwis chain tensioners are made from high quality materials. Depending on the application various types are available.

Automatic tensioners



Iwis® RHR Type

with sprocket and bearing



Automatic tensioners

	chain pitch	Newton	A ± 1	B	C	D	E	F	G	H ± 1	L	Q	R	S	T	U	V	N°
Type RHR																		
RHR 111	3/8" x 7/32"	0÷100	58	6	8	35	80	M6	8,5	51	8	22	5	9,2	19,7	9,7	16,7	21
RHR 155	3/8" x 7/32"	0÷150	71	8	8,5	45	100	M8	10,5	64	8	30	6	9,2	19,7	9,7	16,7	21
RHR 155	1/2" x 5/16"	0÷150	71	8	8,5	45	100	M8	10,5	64	8	30	6	9,2	19,7	12,5	19,5	16
RHR 188	1/2" x 5/16"	0÷300	84	10,5	8,5	58	100	M10	13	78	10	37	8	9,2	19,7	12,5	19,5	16
RHR 188	5/8" x 3/8"	0÷300	85	10,5	8,5	58	100	M10	13	78	10	37	8	9,2	19,7	15,3	23,3	17
RHR 277	3/4" x 7/16"	0÷900	114	15	10,5	78	130	M12	17	107	12	53	10	9,2	19,7	17,7	25,7	15
RHR 277	1" x 17 mm	0÷900	114	15	10,5	78	130	M12	17	107	12	53	10	8,9	19,4	26,4	34,4	12

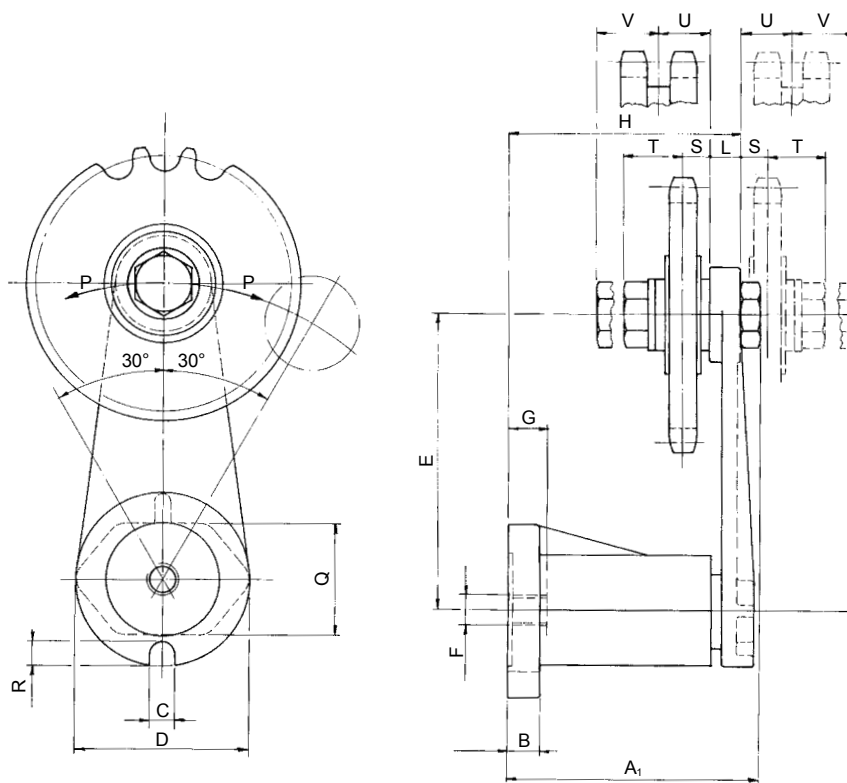
TYPE RHR

- Good damping effect, reducing noise and vibration
- Operating angle > 30° in both directions of rotation
- Simple screw mounting, internally or externally
- Operational temperature > 65°C
- Applies to reverse direction drives
- Interchangeable to similar systems

EXAMPLE OF ORDER

Tensioner for 1/2" pitch single chain
RHR 155 1/2" S. For single chain available from stock. For double chain on request

S = single chain **D** = double chain



Iwis® RHP Type

with low friction coefficient polythene head



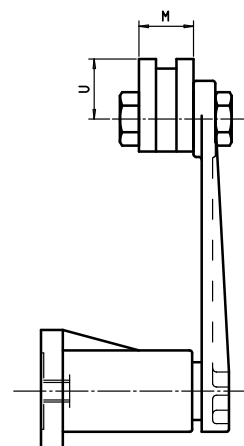
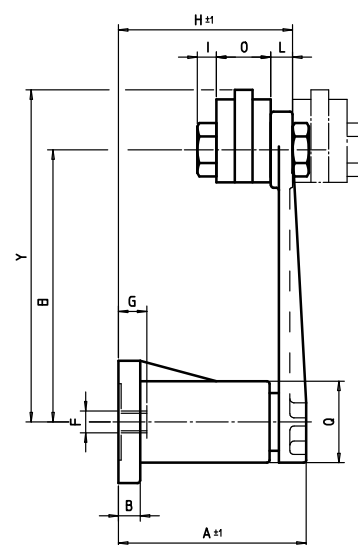
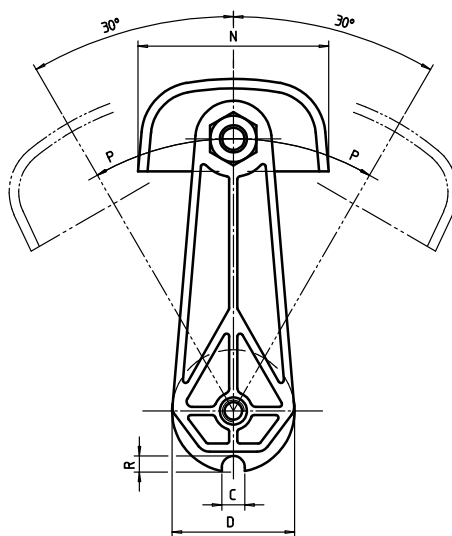
	chain pitch	Newton	A ₁ ± 1	B	C	D	E	F	G	H ± 1	I	L	M	N	O	Q	R	U	Y
Type RHP																			
RHP 111	3/8" x 7/32"	0 ÷ 100	57	6	8	35	80	M6	8,5	51	7	8	20	70	20	22	5	22	102
RHP 155	3/8" x 7/32"	0 ÷ 150	70	8	8,5	45	100	M8	10,5	64	7	8	20	70	20	30	6	22	122
RHP 155	1/2" x 5/16"	0 ÷ 150	70	8	8,5	45	100	M8	10,5	64	7	8	20	70	20	30	6	22	122
RHP 188	1/2" x 5/16"	0 ÷ 300	84	10,5	8,5	58	100	M10	13	78	7	10	20	70	22	37	8	29	122
RHP 188	5/8" x 3/8"	0 ÷ 300	85	10,5	8,5	58	100	M10	13	78	8	10	25	90	22	37	8	29	129
RHP 277	3/4" x 7/16"	0 ÷ 900	114	15	10,5	78	130	M12	17	107	8	12	30	90	22	53	10	29	159
RHP 277	1" x 17 mm	0 ÷ 900	114	15	10,5	78	130	M12	17	107	8	12	45	110	25	53	10	35	165

Automatic tensioners

EXAMPLE OF ORDER

Tensioner for 1/2" pitch single chain
RHP 155 1/2" S. For single chain available
from stock. For double chain on request.

S = single chain **D** = double chain



Iwis® TCR Type

with spocket and bearing



Automatic tensioners

	Newton		chain pitch	N°	A	B	C	CH	D	E	F	G	H	I	L	M	N	O	P	β
	min.	max.																		
Type TCR																				
*TCR-05 – 3/8"	80	160	3/8" x 7/32"	21	5	15	15	24	63	35	23	23	75,5	9,2	119	M10	19,7	-	-	45°
TCR-1 – 3/8"	100	210	3/8" x 7/32"	21	5	15,5	15,5	24	69	36	30	25	86,5	9,2	134	M10	19,7	18	11	45°
TCR-1 – 1/2"	100	210	1/2" x 5/16"	16	5	15,5	15,5	24	69	36	30	25	86,5	9,2	134	M10	19,7	16,5	12,5	45°
TCR-1 – 5/8"	120	240	5/8" x 3/8"	17	5	15,5	15,5	24	69	36	30	25	86,5	9,2	134	M10	19,7	21,8	15,3	45°
TCR-2 – 5/8"	200	350	5/8" x 3/8"	17	7	18	18	27	90	43	34	30	100	9,2	159	M12	19,7	21,8	15,3	30°
TCR-2 – 3/4"	200	350	3/4" x 7/16"	15	7	18	18	27	90	43	34	30	100	9,2	159	M12	19,7	19,4	17,7	30°
TCR-2 – 1"	240	380	1" x 17 mm	12	7	18	18	27	90	43	34	30	100	8,9	159	M12	19,4	23,9	26,4	30°
TCR-2 – 1 1/4"	240	380	1 1/4" x 3/4"	9	7	18	18	27	90	43	34	30	100	11,5	159	M12	19,4	-	-	30°
TCR-2 – 1 1/2"	240	380	1 1/2" x 1"	9	7	18	18	27	90	43	34	30	100	14	159	M12	19,4	-	-	30°

* Plastic version

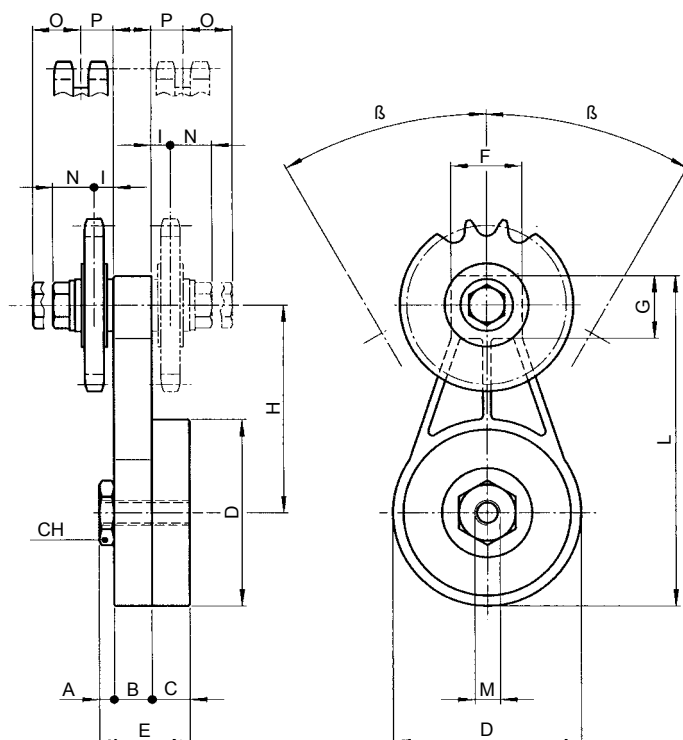
TYPE TC

- Linear force progression
- Operating angle > 45° in both directions of rotation
- Simple screw mounting, internally or externally
- Operational temperature to 100°C
- Applies to reverse direction drives
- Resistant against oil and solvents
- better fastening due to 2 (TCR-1) resp. 3 (TCR-2) grooves

EXAMPLE OF ORDER

Tensioner for 1/2" pitch single chain TCP 1 1/2" S. For single chain available from stock. For double chain on request.

S = single chain **D** = double chain



Iwis® TCP Type

with low friction coefficient polythene head



Typ TCP	Newton		chain pitch	A	B	C	CH	D	E	F	G	H	I	L	M	N	O	P	Q	β
	min.	max.																		
TCP-05 – 3/8"	80	160	3/8" x 7/32"	5	15	15	24	63	35	23	23	75,5	5,5	119	M10	70	20		22	45°
TCP-1 – 3/8"	100	210	3/8" x 7/32"	5	15,5	15,5	24	69	36	30	25	86,5	7	134	M10	70	20	20	22	45°
TCP-1 – 1/2"	100	210	1/2" x 5/16"	5	15,5	15,5	24	69	36	30	25	86,5	7	134	M10	70	20	20	22	45°
TCP-1 – 5/8"	120	240	5/8" x 3/8"	5	15,5	15,5	24	69	36	30	25	86,5	7	134	M10	90	22	25	29	45°
TCP-2 – 5/8"	200	350	5/8" x 3/8"	7	18	18	27	90	43	34	30	100	8	159	M12	90	22	25	29	30°
TCP-2 – 3/4"	200	350	3/4" x 7/16"	7	18	18	27	90	43	34	30	100	8	159	M12	90	22	30	29	30°
TCP-2 – 1"	240	380	1" x 17 mm	7	18	18	27	90	43	34	30	100	8	159	M12	110	25	45	35	30°

Automatic tensioners

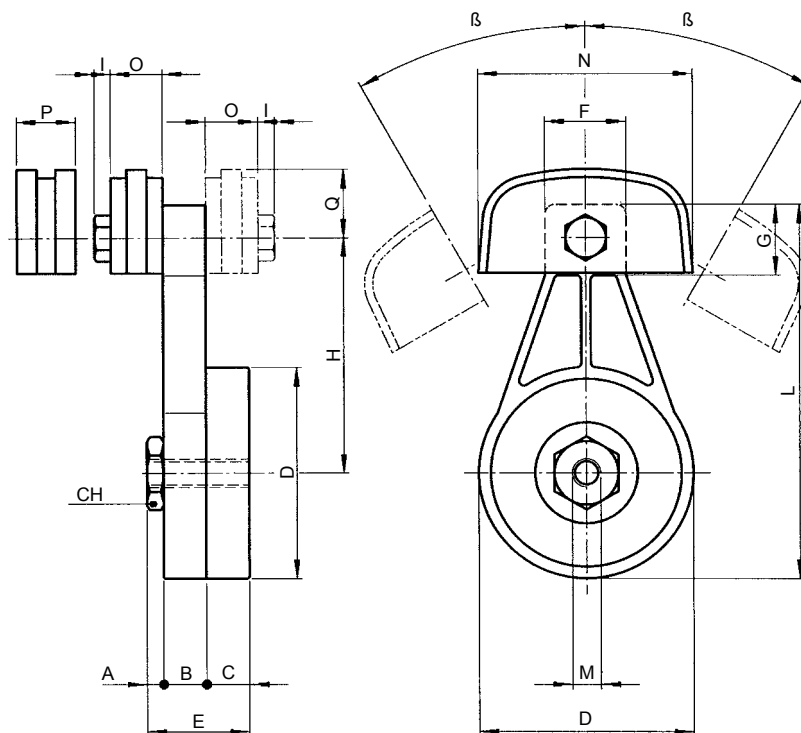
EXAMPLE OF ORDER

Tensioner for 1/2" pitch single chain
TCP 1 – 1/2" S. For single chain available
from stock. For double chain on request.

S = single chain **D** = double chain

NOTE

assembly instruction tensioner TC type
→ **Page 97**



Iwis® TO Series

Automatic chain tensioners



Automatic tensioners

	Newton		chain pitch	A1	A2	A3	B	C	D	E	F	G	H	I	L	M	N	O	P	R
	min.	max.																		
Type TO																				
TO-1 – 3/8"	130	250	3/8" x 7/32"	20	20	25	23	12,5	11	56,2	7	58	74	110	138	-	-	-	70	100
TO-1 – 1/2"	130	250	1/2" x 5/16"	20	20	25	23	12,5	11	56,2	7	58	74	110	138	-	-	-	70	100
TO-1 – 5/8"	130	250	5/8" x 3/8"	20	25	41,5	23	12,5	11	56,2	7	58	74	110	138	-	-	-	70	100
TO-2 – 5/8"	180	420	5/8" x 3/8"	22	25	41,5	28	15	12,5	70,5	9	70	87	133	169	-	-	-	90	120
TO-2 – 3/4"	180	420	3/4" x 7/16"	22	30	49	28	15	12,5	70,5	9	70	87	133	169	-	-	-	90	120
TO-3 – 1"	300	650	1" x 17 mm	25	45	78	33	17,5	14,5	82	9	86	104	160	202	21	35	70	110	140
TO-3 – 1 1/4"	300	650	1 1/4" x 3/4"	25	54	90	33	17,5	14,5	82	9	86	104	160	202	21	35	70	110	140
TO-3 – 1 1/2"	300	650	1 1/2" x 1"	25	71	119	33	17,5	14,5	82	9	86	104	160	202	21	35	70	110	140
TO-05 – 3/8"	95	190	3/8" x 7/32"	20	-	-	25	12,5	9	60	10	53	75	120	149	22	48	1,5	70	100
TO-05-DP1 – 3/8"	95	190	3/8" x 7/32"	20	20	-	25	12,5	9	60	10	53	75	111	139	22	48	1,5	70	100
TO-05-DP1 – 1/2"	95	190	1/2" x 5/16"	20	20	-	25	12,5	9	60	10	53	75	111	139	22	48	1,5	70	100
TO-05-DP1 – 5/8"	95	190	5/8" x 3/8"	20	25	-	25	12,5	9	60	10	53	75	111	139	22	48	1,5	70	100

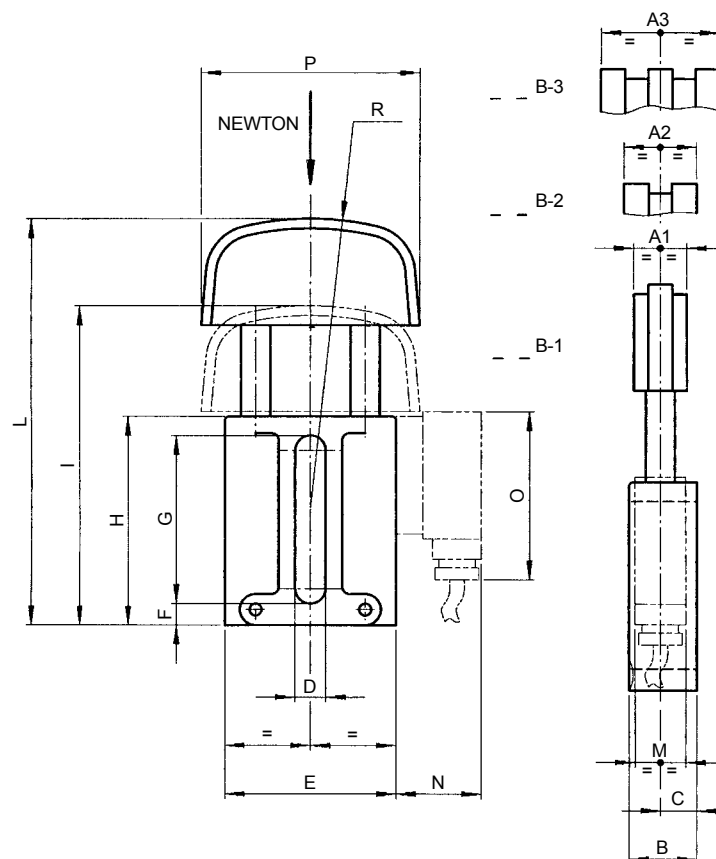
AUTOMATIC CHAIN TENSIONERS

The automatic tensioners take up the chain slackening and keep the tension constant, without any operator attending the adjustment. The TO-AT-ET tighteners are designed to last and are made of top quality materials. The maximum operating temperature is 65°C (100°C for the ET model only).

Available on request:

1. Studs and spring in stainless steel
AISI 304 for the Food industry
2. Special head shapes
3. Version TO-05 and TO-05 DP1 with basic body in plastic execution (DELRIN).
Slight type with lower tensioning force – available on request.

* Plastic version



Iwis® TA Series



	Newton		chain pitch	A1	A2	A3	B	C	D	E	F	G	H	I	L	M	N	O	P	R
	min.	max.																		
Type TA																				
TA-1 – 3/8"	130	250	3/8" x 7/32"	20	20	25	23	12,5	11	56,2	7	58	74	115	143				140	120
TA-1 – 1/2"	130	250	1/2" x 5/16"	20	20	35	23	12,5	11	56,2	7	58	74	115	143				140	120
TA-2 – 5/8"	180	420	5/8" x 3/8"	22	25	41,5	28	15	12,5	70,5	9	70	87	128	164				140	140
TA-2 – 3/4"	180	420	3/4" x 7/16"	22	30	49	28	15	12,5	70,5	9	70	87	128	164				140	140
TA-3 – 1"	300	650	1" x 17 mm	25	45	78	33	17,5	14,5	82	9	86	104	145	187	21	35	70	140	160
TA-3 – 1 1/4"	300	650	1 1/4" x 3/4"	25	54	90	33	17,5	14,5	82	9	86	104	145	187	21	35	70	140	160
TA-3 – 1 1/2"	300	650	1 1/2" x 1"	25	71	119	33	17,5	14,5	82	9	86	104	145	187	21	35	70	140	160
TA-3 – 1 3/4"	300	650	1 3/4" x 31 mm	29,5	-	-	33	17,5	14,5	82	9	86	104	145	187	21	35	70	140	160

Automatic tensioners

TA SERIES

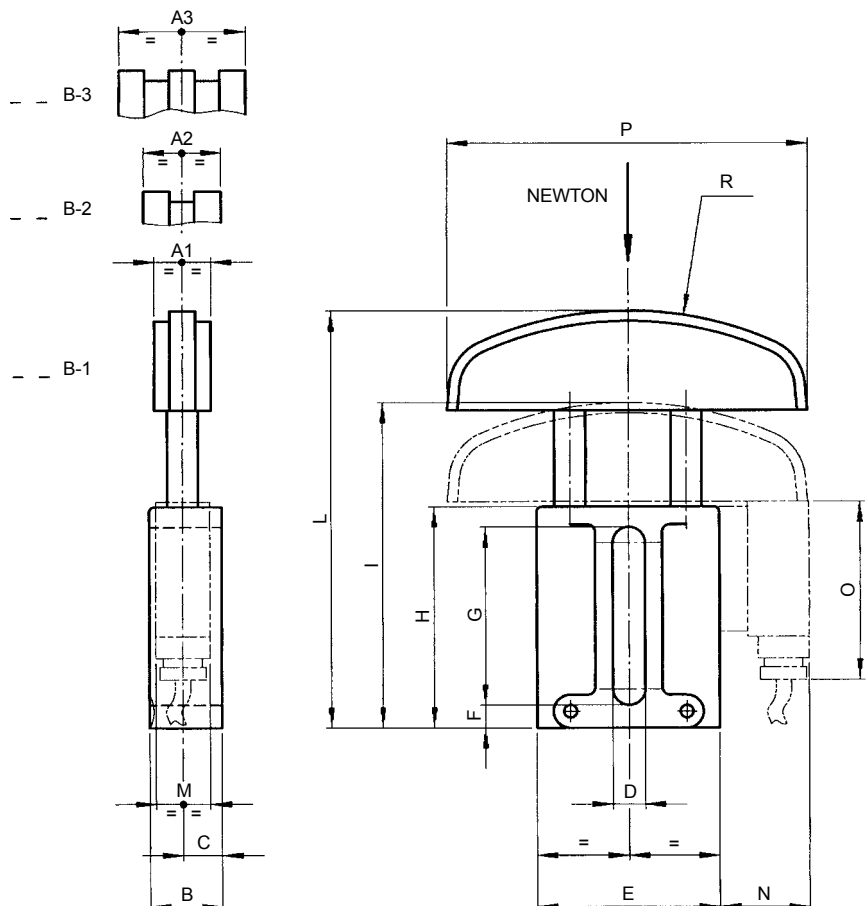
- Tensioning head made of low friction coefficient special wearproof plastic (dynamic friction coefficient 0.06 on dry steel)
- High tensile steel ground studs
- Self-lubricating bearings for axial slide

EXAMPLE OF ORDER

Tensioner for 1/2" pitch double chain
TA 1 – 1/2" D

S = single chain **D** = double chain
T = triple chain

N.B.: Our tensioners are supplied for chains complying to ISO standards.



Iwis® ETR Series

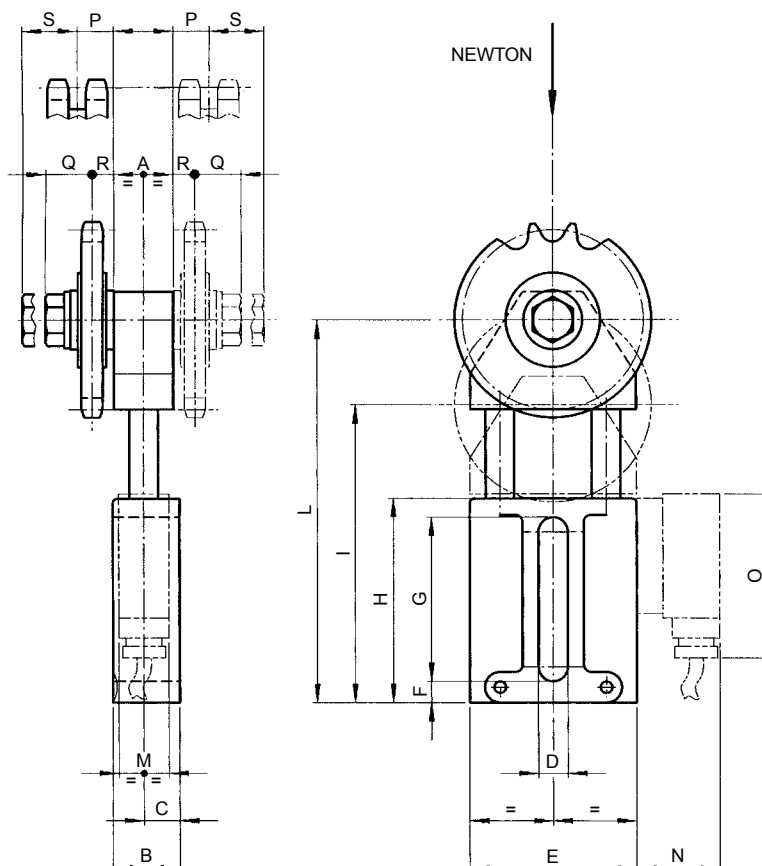
with sprocket and bearing



	Newton		chain pitch	Z	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S
	min.	max.																			
Type ETR																					
ETR1 – 3/8"	130	250	3/8" x 7/32"	21	20	23	12,5	11	56,2	7	58	74	99	127	-	-	-	11	19,7	9,2	18
ETR1 – 1/2"	130	250	1/2" x 5/16"	16	20	23	12,5	11	56,2	7	58	74	99	127	-	-	-	12,5	19,7	9,2	16,5
ETR2 – 5/8"	180	420	5/8" x 3/8"	17	25	28	15	12,5	70,5	9	70	87	127	163	-	-	-	15,3	19,7	9,2	21,8
ETR2 – 3/4"	180	420	3/4" x 7/16"	15	25	28	15	12,5	70,5	9	70	87	127	163	-	-	-	17,7	19,7	9,2	19,4
ETR3 – 1"	300	650	1" x 17 mm	12	30	33	17,5	14,5	82	9	86	104	151	193	21	35	70	26,4	19,4	8,9	26,4
ETR3 – 1 1/4"	300	650	1 1/4" x 3/4"	9	30	33	17,5	14,5	82	9	86	104	151	193	-	-	-	29,7	19,4	11,5	37,5

ETR SERIES

- Maintenance free
- Tensioning force changeable (option)
- Resistant against oil and solvents
- Simply mounting and adjustment
- Applies to reverse direction drives



Iwis® TF Series

Plastic tightening head



	chain pitch	A	B	C	D	E	F	G	H	I	L	N	R	A ₁	A ₂
Type TF															
TF 1	3/8"	69	20	138	10	73	10,5	40	100	15	30	15	15	20	20
TF 1	1/2"	69	20	138	10	73	10,5	40	100	15	30	15	15,25	20	20,5
TF 2	5/8"	89	20	164	12	85	12,5	50	120	18	36	18	19,5	22	25
TF 2	3/4"	89	20	164	12	85	12,5	50	120	18	36	18	21,75	22	29,5
TF 3	1"	109	25	173	13	82	12,5	60	140	20	40	20	30,5	25	46
TF 3	1 1/4"	109	25	173	13	82	12,5	60	140	20	40	20	-	25	-
TF 3	1 1/2"	109	25	173	13	82	12,5	60	140	20	40	20	-	25	-

Automatic tensioners

TF TYPE

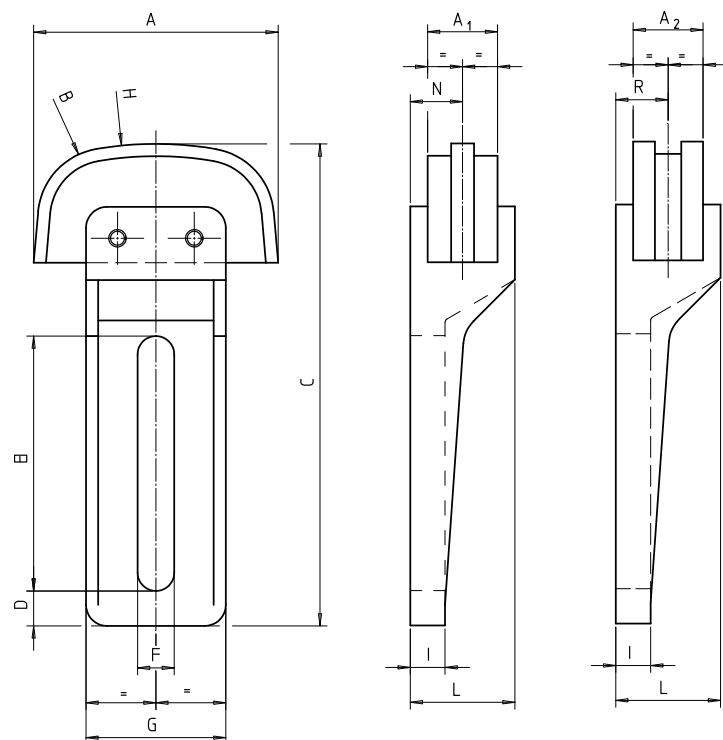
- Wear resistant tensioning head in low friction ($\mu = 0.06$) plastic
- Simple mounting and adjustment
- Operational temperature to 65°C

EXAMPLE OF ORDER

Tensioner for 1/2" pitch double chain
TF 1 – 1/2" D

S = single chain **D** = double chain
T = triple chain

Our tensioners are supplied for chains complying to ISO standards.



Iwis® Chain Tensioner AMS

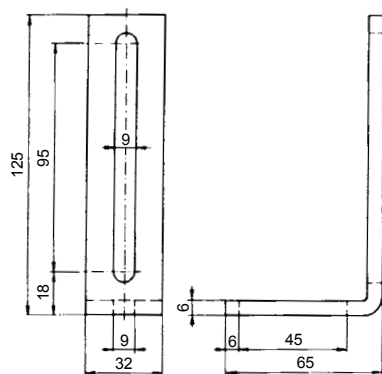


Automatic tensioners

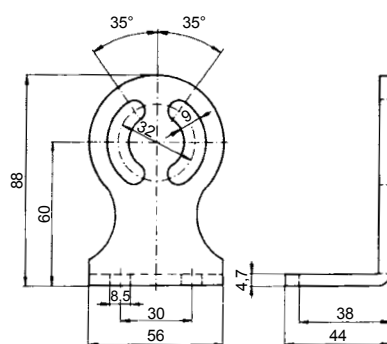
for Iwis chain	DIN ISO no.	Tensioning Unit No.	No. of teeth z	Tensioning force N	Tensioning path S mm	Adjusting range mm	Dimensions A mm	Dimensions B mm	Basic element No.	Support bracket No.	Tensioner complete with wheel
Type AMS											
G 67	06 B-1	10	21	0-100	0-25	60	47,6	39,4	AMS 11	01	AMS 116
G 67	06 B-1	10	21	0-100	0-25	60	47,6	39,4	AMS 12	02	AMS 126
L 85	08 B-1	10	18	0-100	0-25	60	47,6	39,4	AMS 11	01	AMS 118
L 85	08 B-1	10	18	0-100	0-25	60	47,6	39,4	AMS 12	02	AMS 128
M 106	10 B-1	10	17	0-100	0-25	60	47,6	39,4	AMS 11	01	AMS 1110
M 106	10 B-1	10	17	0-100	0-25	60	47,6	39,4	AMS 12	02	AMS 1210
M 127	12 B-1	20	15	0-300	0-45	40	52,0	40,0	AMS 23	03	AMS 2312
M 1611	16 B-1	20	12	0-300	0-45	40	52,65	41,3	AMS 23	03	AMS 2316

AMS TYPE

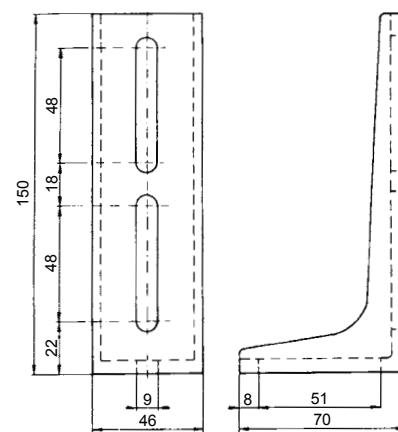
- Automatic retensioning
- Pawl and ratchet rebound safety mechanism
- Constant vibration damping
- Simple adjusting device
- Low in maintenance
- Resistant against oil and solvents



support bracket 01



support bracket 02



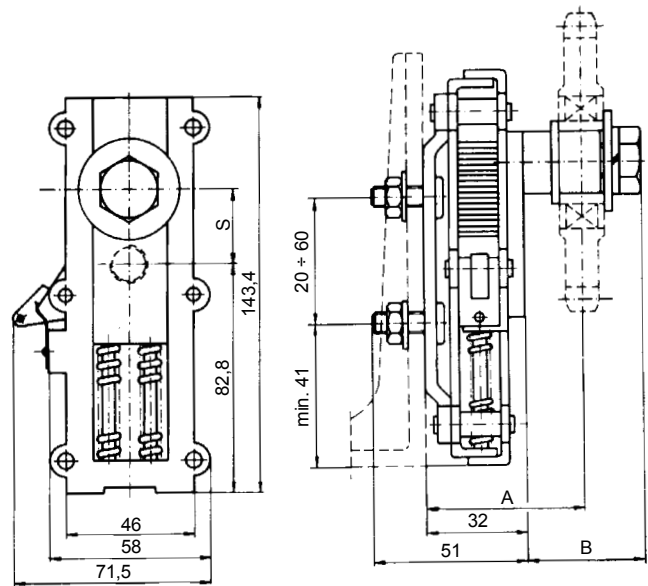
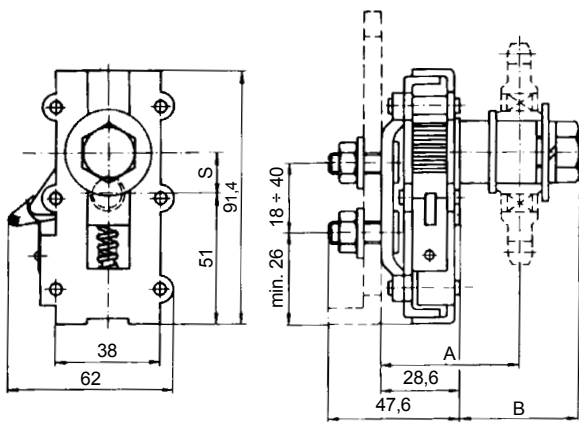
support bracket 03

Iwis® Chain Tensioner AMS



AMS 10

AMS 20



Automatic tensioners

Iwis® TC Type

Tensioner assembly TC Type



ALTERNATIVE A

ALTERNATIVE B

CORRECT ASSEMBLY

WRONG ASSEMBLY

