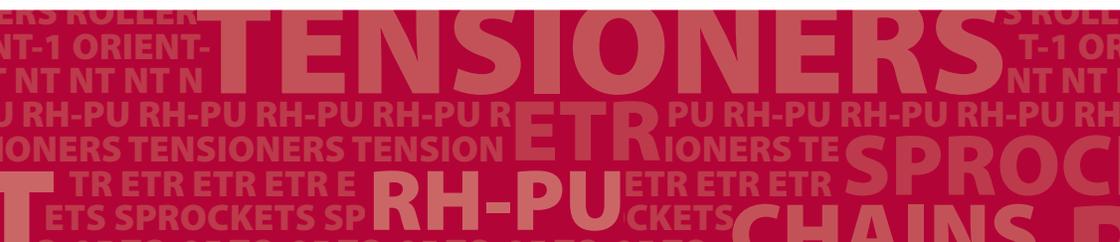
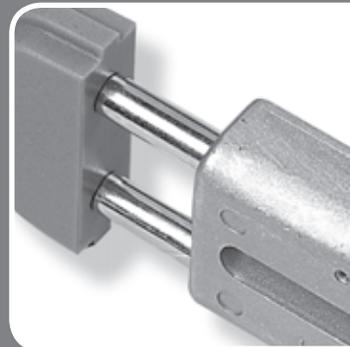
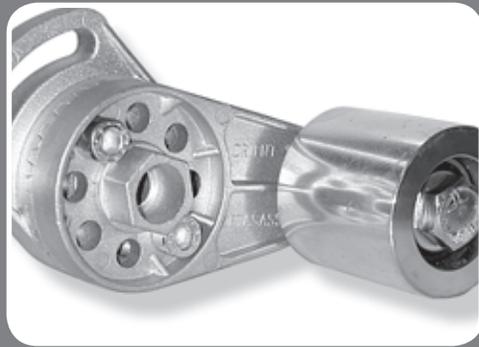




BELT & CHAIN TENSIONERS



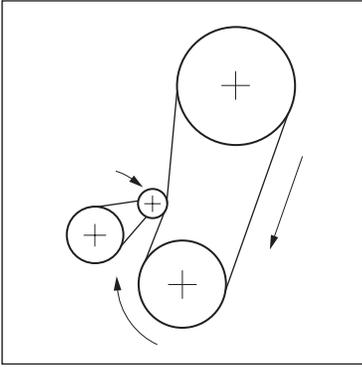


fig. 1 - **Correct**

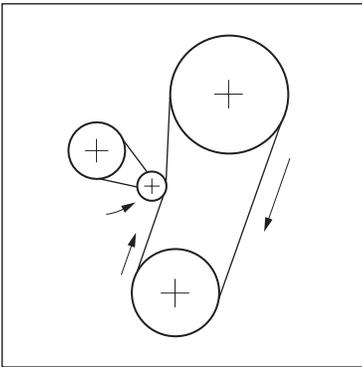


fig. 2 - **Incorrect**

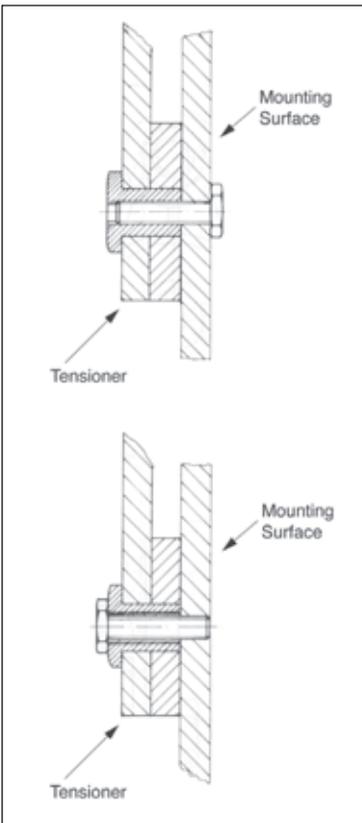


fig. 3 - **Mounting Surface Illustration**

Quality Transmission Components is the exclusive distributor of Zetasassi Belt and Chain Tensioners in the US, Canada and Mexico. These well-made tensioners will improve the operation of belt and chain drives by many hours by keeping the tension constant. This occurs because the tensioners create:

- 1) Automatic reduction in the belt or chain slack.
- 2) Reduction of noise and vibration.
- 3) Uniform and more efficient transmission of drive torque.
- 4) Decrease in sprocket, pulley, belt or chain wear.
- 5) Increased life of belts and chains.
- 6) Possibility to adjust the tension of the drive.

These units are easy to install and maintenance-free. The spring-loaded units, available in rotational and linear movement types, will automatically keep the tension constant, eliminating frequent manual adjustments which would interrupt the operation of the machinery.

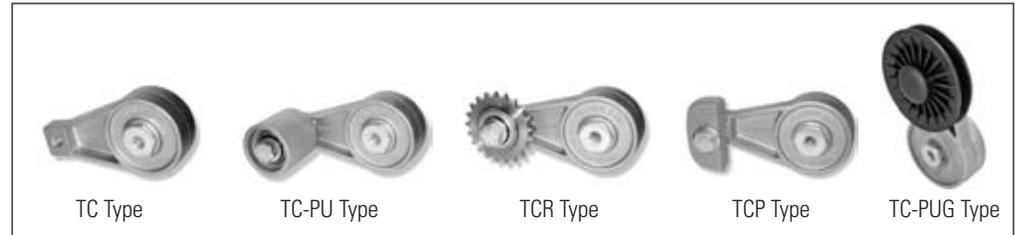
All tensioners should be installed on the slack side of belts and chains. For rotational movement units, please make sure to install the units, as shown in *fig. 1*.

It is also recommended, for both rotational and linear tensioners, that the tension force be applied from the outside of the belt or chain loop as to not reduce the wrap-around angles of the belt or chain over the pulleys or sprockets.

As shown in the pictorial index on page 6, several designs of tensioners are offered as arm only, arm with roller attached for belts, arm with sprocket attached for chains, arm with polyethylene sliding head for chains, or arm with V-belt pulley attached.

Further variations are offered, as well as replacement heads, as shown in the pictorial index on page 7.

Most chain tensioners are also offered with ASA or ISO single, double and triple chain heads. Availability of heads other than for single chain is given on each product page.



Type TC, TC-PU, TCR, TCP and TC-PUG (pages 3-5 thru 3-9)

- Levers in high-tensile light alloy (except the smallest size which is plastic).
- Idler rollers in zinc plated steel, aluminum or nylon.
- V-belt pulleys in nylon.
- Sprockets in steel or hardened steel.
- Pulleys, sprockets and rollers have double-seal permanently oiled ball bearings.
- Sliding head's orientation is adjustable, and it is made of low friction, wear-resistant polyethylene (dynamic friction coefficient of 0.06 on dry steel) with maximum operating temperature of 65°C (149°F).

These tensioners take up the chain or belt slack, and keep the tension constant without the operator making any adjustments over a range of approximately 45° (30° for the largest size).

- Can operate at temperatures above 100°C (212°F) (except TCP series).
- Uses special steel springs with an extreme high yield point and prestress, so as to maintain the pressure as constant as possible throughout the range.
- Can be assembled either from inside or outside of the machine (see *fig. 3*).



Type RH, RH-PU, RHR RHP and RH-PUG (pages 3-10 thru 3-14)

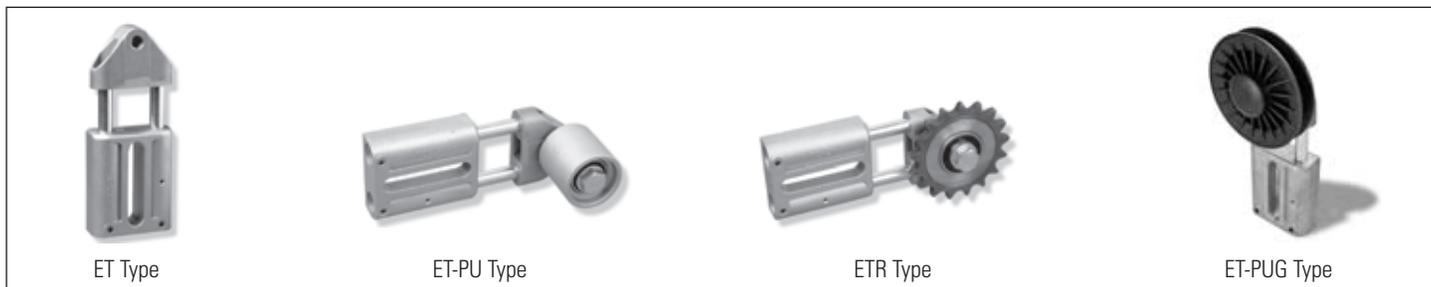
- Levers in high-tensile light alloy.
- Idler rollers in zinc plated steel, aluminum or nylon.
- V-belt pulleys in nylon.
- Sprockets in steel or hardened steel.
- Pulleys, sprockets and idler rollers have double-seal permanently oiled ball bearings.
- Sliding head's orientation is adjustable, and it is made of low-friction, wear-resistant polyethylene (dynamic friction coefficient of 0.06 on dry steel) with maximum operating temperature of 65°C (149°F).

These lightweight tensioners take up the chain or belt slack, and keep the tension constant without the operator making any adjustments over a range of approximately 30° of motion.

In a typical application, the following benefits were achieved*:

- 23% increase of chain life.
- 7% reduction of vibration.
- 12% reduction of noise.
- Reduction in chain slackening.
- Elimination of the need for maintenance.

* The actual values will vary depending on the operating environment, type of lubricant, the conditions of the machine and the performance capabilities of the drive.



The ET, ET-PU, ETR and ET-PUG consist of die-cast alloy bases and mounting heads on which rollers or sprockets are attached via spring-loaded steel sliding arms. These units are also available with an integral "End-of-stroke" sensing switch which is not retrofittable and must be ordered at the time of initial purchase. (The availability is detailed on each product page).

The ET series are especially suitable for high-temperature operations over 100°C (212°F), since they are 100% metal.



The Orient1 series tensioners are not spring-loaded. They have the feature of being able to swivel in any direction, both before and after installation. The teeth built into the two mating parts allow the arm to be positioned every 15° throughout the entire 360° revolution relative to the base. At each of these 15° positions, two of the eight holes in the arm align with the threaded holes in the base, so that the screws supplied with the unit can fasten the arm at the desired position. While these units lack the convenience of automatic tension adjustment, their simplicity and versatility in orienting and positioning offer an advantage in certain applications. Pages **3-19** thru **3-23**.



The TO-05 consists of a plastic base and sliding head, spring-loaded for chain drives only. It is also available with metal components such as AISI 304 stainless steel, for use in the food industry.

The TO and TOT consist of die-cast alloy bases and polyethylene heads, spring-loaded for chain drives only. See each product page for head shape availability.

The NT is the evolution of TO type and presents the following advantages, keeping the same operation:

- Closed bottom, which minimizes dust and fluid infiltration inside the tensioner.
- Plastic bushes, for a lower sliding friction, which also reduces dust and fluid infiltration.
- Lower cost.

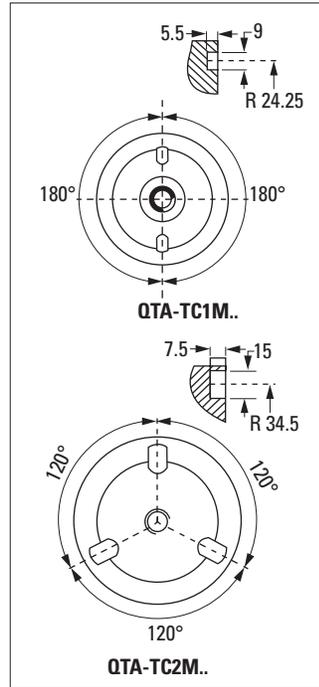
Pages **3-24** thru **3-24**.

Spring-Loaded • Automatically keeps the tension constant

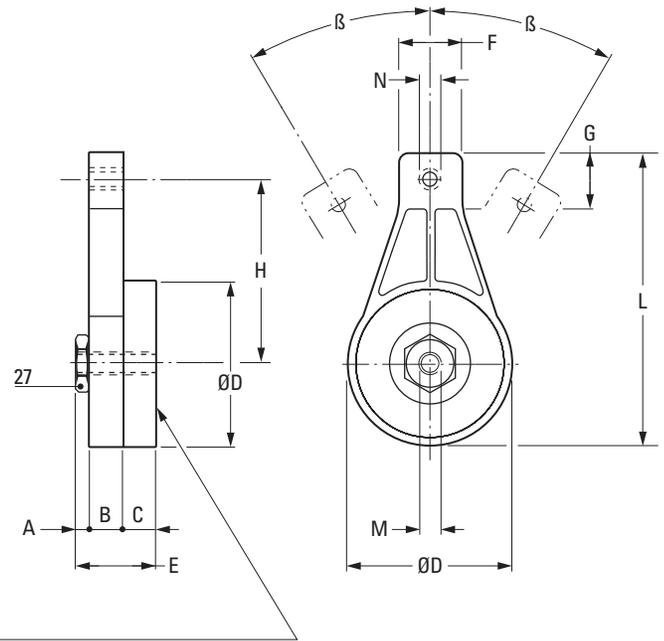


MATERIAL:

Arm –
 QTA-TC0... – Acetal
 QTA-TC1... & QTA-TC2... –
 High-Tensile Die-Cast Aluminum Alloy



ANTIROTATION HOLES



All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)		A	B	C	ØD	E	F	G	H	L	M	N	β
	Min	Max												
QTA-TC0M08*	80	160	5	15	15	63.3	36	23	23	75.5	118	M10	M8	45°
QTA-TC0M10*													M10	
QTA-TC0M12*													M12	
QTA-TC1M10	120	240	5	15.3	15.3	69.5	36	29.5	25	86.5	133.5	M10	M10	45°
QTA-TC1M12													M12	
QTA-TC1M16													M16	
QTA-TC2M10	240	380	7	18	18	89.5	43	34	30	100	159	M12	M10	30°
QTA-TC2M12													M12	
QTA-TC2M16													M16	
QTA-TC2M20													M20	

*Acetal arm.

NOTE: Select N dimension to match the mounting bolt of the selected head (see pages 3-30 thru 3-34).

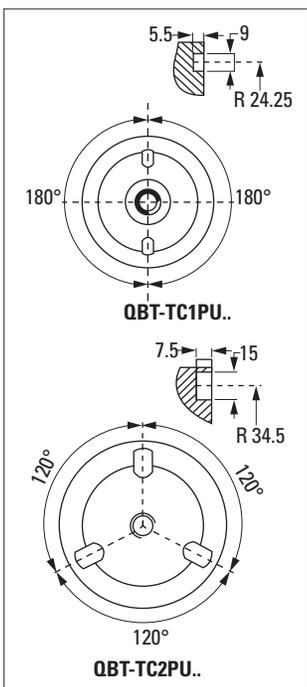


MATERIAL:

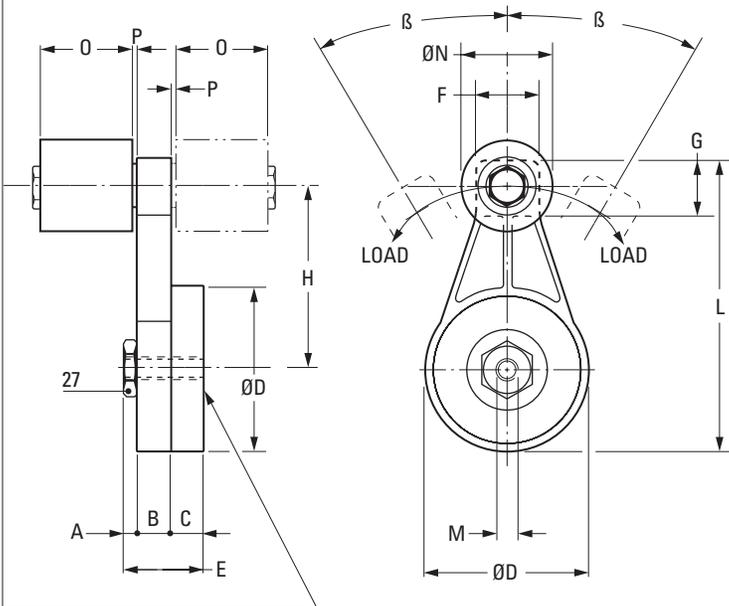
- Arm –
 QBT-TCOP... – Acetal
 QBT-TC1P... & QBT-TC2P... – High-Tensile Die-Cast Aluminum Alloy
 Roller – Material Code
A Aluminum
N Nylon
S Steel (Zinc Plated)

MAX. OPERATING TEMPERATURE:

- 100°C (212°F) – Aluminum and Steel Roller
 60°C (140°F) – Nylon Roller



ANTIROTATION HOLES



All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)		A	B	C	ØD	E	F	G	H	L	M	ØN	O	P	β
	Min	Max														
* QBT-TC0PU30X35 <input type="checkbox"/>																
*# QBT-TC0PU40X45N <input type="checkbox"/>	80	160	5	15	15	63.3	36	23	23	75.5	118	M10	40	45	6	45°
* QBT-TC0PU50X50 <input type="checkbox"/>																
# QBT-TC1PU40X45N <input type="checkbox"/>	120	240	5	15.3	15.3	69.5	36	29.5	25	86.5	133.5	M10	40	45	6	45°
QBT-TC1PU50X50 <input type="checkbox"/>																
QBT-TC2PU50X50 <input type="checkbox"/>	240	380	7	18	18	89.5	43	34	30	100	159	M12	50	50	2.5	30°
QBT-TC2PU60X60 <input type="checkbox"/>																

* Acetal arm.

Nylon roller only.

- NOTES:** 1. Orientation of roller is supplied as shown. End user can reposition if necessary.
 2. Fill in the box with desired roller material code to complete part number.

BELT & CHAIN TENSIONERS
 TC
 RH
 ET
 Orient-1
 NT
 TO
 TA
 GA
 TF
 Heads
 Sprockets



Sprocket with Ball Bearing – Spring-Loaded • Automatically keeps the tension constant

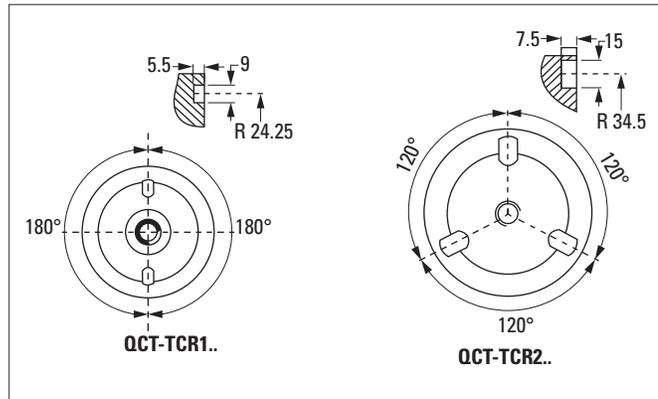
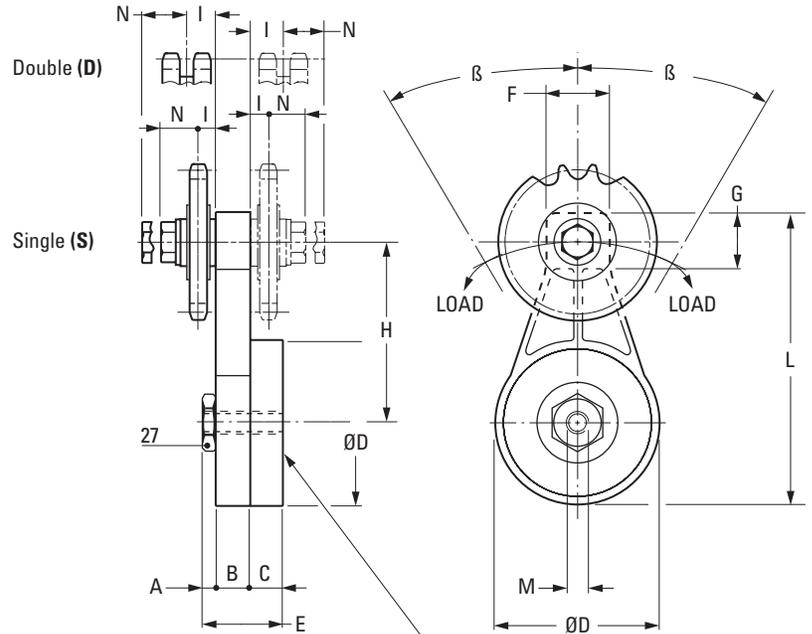


MATERIAL:

Arm –
 QCT-TCR0... – Acetal
 QCT-TCR1... & QCT-TCR2... –
 High-Tensile Die-Cast Aluminum Alloy
 Sprocket – Steel (Heat-Treated)

MAX. OPERATING TEMPERATURE:

100°C (212°F)



ANTIROTATION HOLES

All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)		Chain Pitch	Teeth	A	B	C	ØD	E	F	G	H	I	L	M	N	B
	Min	Max															
QCT-TCR003S*	80	160	3/8" x 7/32"	21	5	15	15	63.3	36	23	23	75.5	9.2	119	M10	19.7	45°
QCT-TCR103S	120	240	3/8" x 7/32"	21	5	15.3	15.3	69.5	36	29.5	25	86.5	9.2	133.5	M10	19.7	45°
QCT-TCR103D													11			18	
QCT-TCR104S	120	240	1/2" x 5/16"	16	5	15.3	15.3	69.5	36	29.5	25	86.5	9.2	133.5	M10	19.7	45°
QCT-TCR104D													12.5			16.5	
QCT-TCR105S	120	240	5/8" x 3/8"	17	5	15.3	15.3	69.5	36	29.5	25	86.5	9.2	133.5	M10	19.7	45°
QCT-TCR105D													15.2			17.7	
QCT-TCR205S	240	380	5/8" x 3/8"	17	7	18	18	89.5	43	34	30	100	9.2	159	M12	19.7	30°
QCT-TCR205D													15.2			17.7	
QCT-TCR206S	240	380	3/4" x 7/16"	15	7	18	18	89.5	43	34	30	100	9.2	159	M12	19.7	30°
QCT-TCR206D													17.6			19.2	
QCT-TCR208S	240	380	1" x 17 mm	12	7	18	18	89.5	43	34	30	100	8.9	159	M12	19.4	30°
QCT-TCR208D													26.6			34.6	

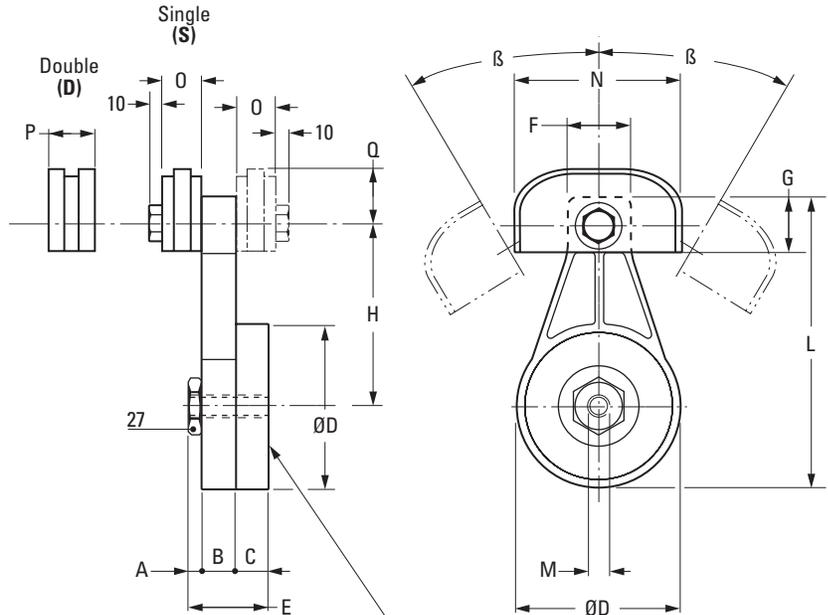
*Acetal arm.

NOTE: Orientation of sprocket is supplied as shown. End user can reposition if necessary.

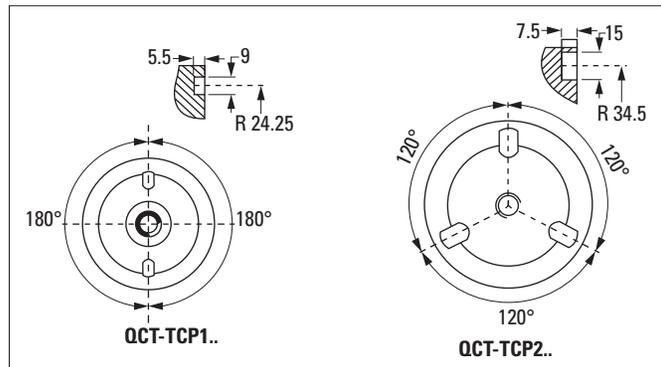
BELT & CHAIN TENSIONERS
 TC
 RH
 ET
 Orient-1
 NT
 TO
 TA
 GA
 TF
 Heads
 Sprockets



Low Friction Polyethylene Head – Spring-Loaded • Automatically keeps the tension constant



MATERIAL:
 Arm – High-Tensile Die-Cast Aluminum Alloy (See*)
 Head – Polyethylene (UHMW-PE)
MAX. OPERATING TEMPERATURE:
 65°C (149°F)



ANTIROTATION HOLES

All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	Load (N)		A	B	C	ØD	E	F	G	H	L	M	N	O	Q	P	β
		Min	Max															
QCT-TCP003S*#	3/8" x 7/32"	80	160	5	15	15	63.3	36	23	23	75.5	119	M10	70	20	23.5	20	45°
QCT-TCP103S QCT-TCP103D	3/8" x 7/32"	120	240	5	15.3	15.3	69.5	36	29.5	25	86.5	133.5	M10	70	20	23.5	20	45°
QCT-TCP104S QCT-TCP104D	1/2" x 5/16"	120	240	5	15.3	15.3	69.5	36	29.5	25	86.5	133.5	M10	70	20	23.5	20	45°
QCT-TCP105S QCT-TCP105D	5/8" x 3/8"	120	240	5	15.3	15.3	69.5	36	29.5	25	86.5	133.5	M10	90	22	29.5	25	45°
QCT-TCP205S QCT-TCP205D	5/8" x 3/8"	240	380	7	18	18	89.5	43	34	30	100	159	M12	90	22	29.5	25	30°
QCT-TCP206S QCT-TCP206D	3/4" x 7/16"	240	380	7	18	18	89.5	43	34	30	100	159	M12	90	22	29.5	30	30°
QCT-TCP208S#	1" x 17 mm	240	380	7	18	18	89.5	43	34	30	100	159	M12	110	25	34.5	—	30°

*Acetal arm.

He ad for double chain is not available.

NOTE: Orientation of head is supplied as shown. End user can reposition if necessary.

TC-PUG Type Tensioners

www.econobelt.com



MATERIAL:

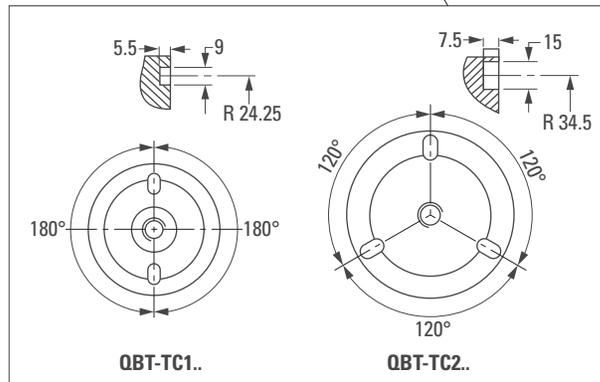
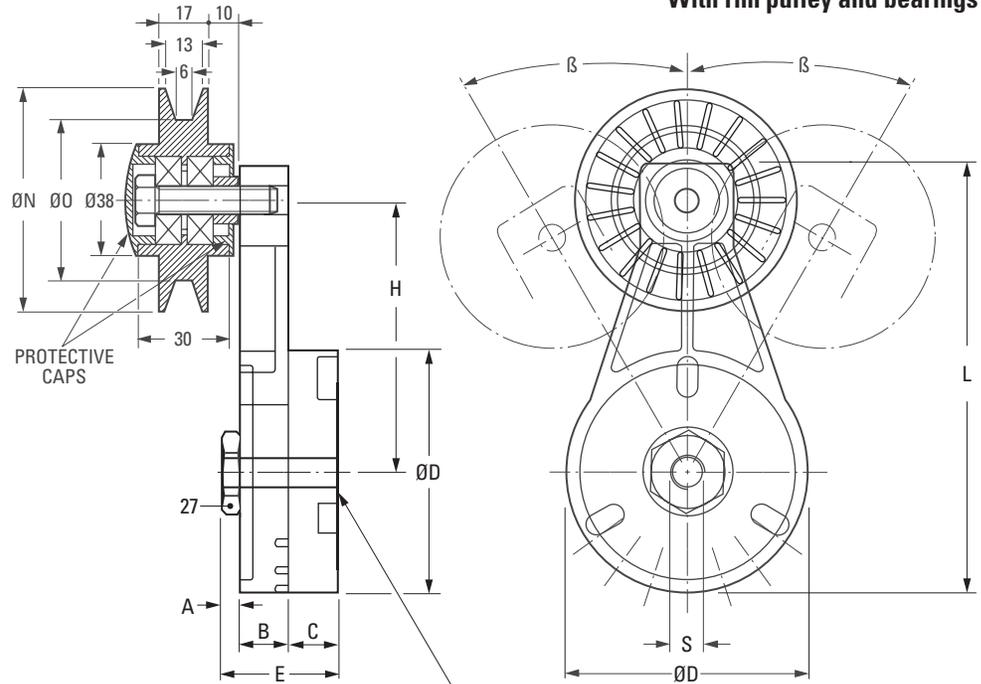
Arm – High-Tensile Die-Cast Aluminum Alloy

Pulley – Black, Polyamide-6

MAX. OPERATING TEMPERATURE:

100°C (212°F)

With rim pulley and bearings



ANTIROTATION HOLES

All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)		A	B	C	ØD	E	H	L	ØN	ØØ	S	β		
	Min	Max													
QBT-TC1PUG03	120	240	5	15.3	15.3	69.5	36	86.5	133.5	76.5	101.6	50	75	M10	45°
QBT-TC1PUG04															
QBT-TC2PUG03	240	380	7	18	18	89.5	43	100	159	76.5	101.6	50	75	M12	30°
QBT-TC2PUG04															
*QBT-TC5PUG03	80	160	5	15	15	63.3	36	75.5	118	76.5	101.6	50	75	M10	45°
*QBT-TC5PUG04															

*Plastic arm

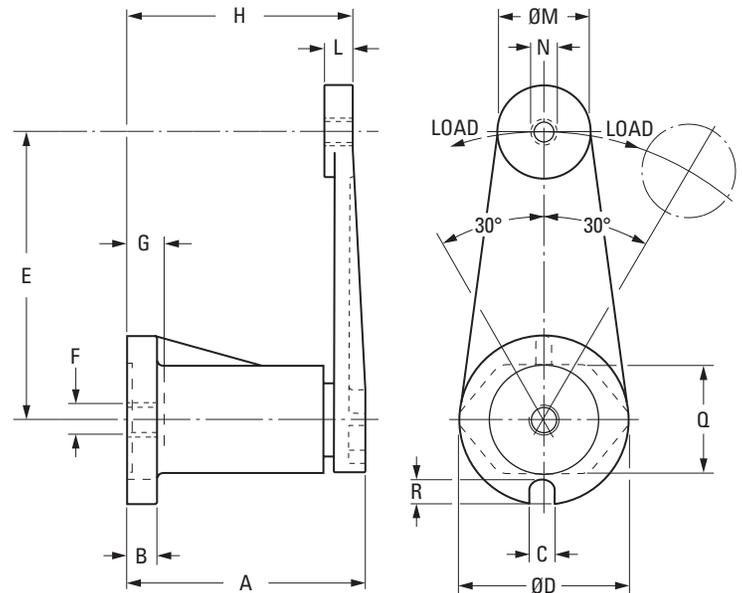
BELT & CHAIN TENSIONERS
TC
RH
ET
Orient-1
NT
TO
TA
GA
TF
Heads
Sprockets

Elastomer-Loaded • Automatically keeps the tension constant



MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy



All dimensions are in mm unless otherwise noted.

Catalog Number	Max Load (N)	A ±1	B	C	ØD	E	F	G	H ±1	L	ØM	N	Q	R
QTA-RH111M08 QTA-RH111M10 QTA-RH111M12	100	52.5	6	8	35	80	M6	8.5	47.5	8	22	M8 M10 M12	22	4
QTA-RH155M08 QTA-RH155M10 QTA-RH155M12	150	66	8	8.5	45	100	M8	10.5	61	8	28	M8 M10 M12	30	5
QTA-RH188M10 QTA-RH188M12	300	79	10	8.5	58	100	M10	13	75	10	32	M10 M12	37	7.5
QTA-RH277M10 QTA-RH277M12 QTA-RH277M16	900	110	15	10.5	78	130	M12	17	104	12	50	M10 M12 M16	53	9.5

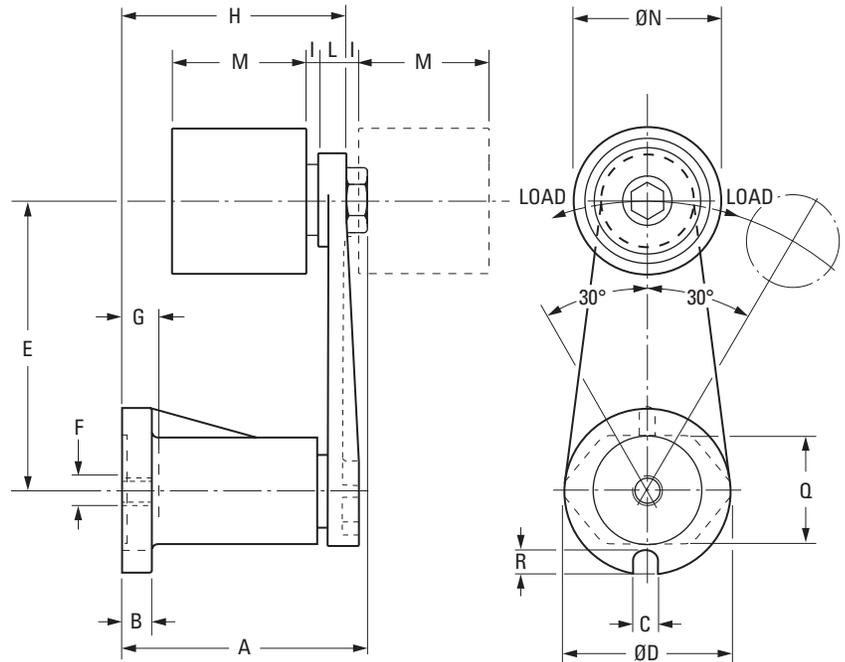
NOTE: Select N dimension to match the mounting bolt of the selected head (See pages 3-30, 3-31 & 3-34 for available heads).

BELT & CHAIN TENSIONERS
TC
RH
ET
Orient-1
NT
TO
TA
GA
TF
Heads
Sprockets

RH-PU Type Tensioners



Elastomer-Loaded • Automatically keeps the tension constant



MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy

Roller – Material Code

A Aluminum

N Nylon

S Steel (Zinc Plated)

MAX. OPERATING TEMPERATURE:

100°C (212°F) – Aluminum and Steel Rollers

60°C (140°F) – Nylon Roller

All dimensions are in mm unless otherwise noted.

Catalog Number	Max Load (N)	A ±1	B	C	ØD	E	F	G	H ±1	I	L	M	ØN	Q	R
QBT-RHU11130X35 <input type="checkbox"/>	100	52.5	6	8	35	80	M6	8.5	47.5	2	8	35	30	22	4
QBT-RHU15530X35 <input type="checkbox"/>	150	66	8	8.5	45	100	M8	10.5	61	2.5	8	35	30	30	5
QBT-RHU15550X50 <input type="checkbox"/>												50	50		
QBT-RHU18850X50 <input type="checkbox"/>	300	79	10	8.5	58	100	M10	13	75	2.5	10	50	50	37	7.5
QBT-RHU18860X60 <input type="checkbox"/>												60	60		
QBT-RHU27760X60 <input type="checkbox"/>	900	110	15	10.5	78	130	M12	17	104	2.5	12	60	60	53	9.5
QBT-RHU27780X90 <input type="checkbox"/>												90	80		

- NOTES:**
1. Orientation of roller is supplied as shown. End user can reposition if necessary.
 2. Fill in the box with desired roller material code to complete part number.

RHR Type Tensioners

www.econobelt.com



Sprocket with Ball Bearing – Elastomer-Loaded • Automatically keeps the tension constant

BELT & CHAIN TENSIONERS

TC

RH

ET

Orient-1

NT

TO

TA

GA

TF

Heads

Sprockets



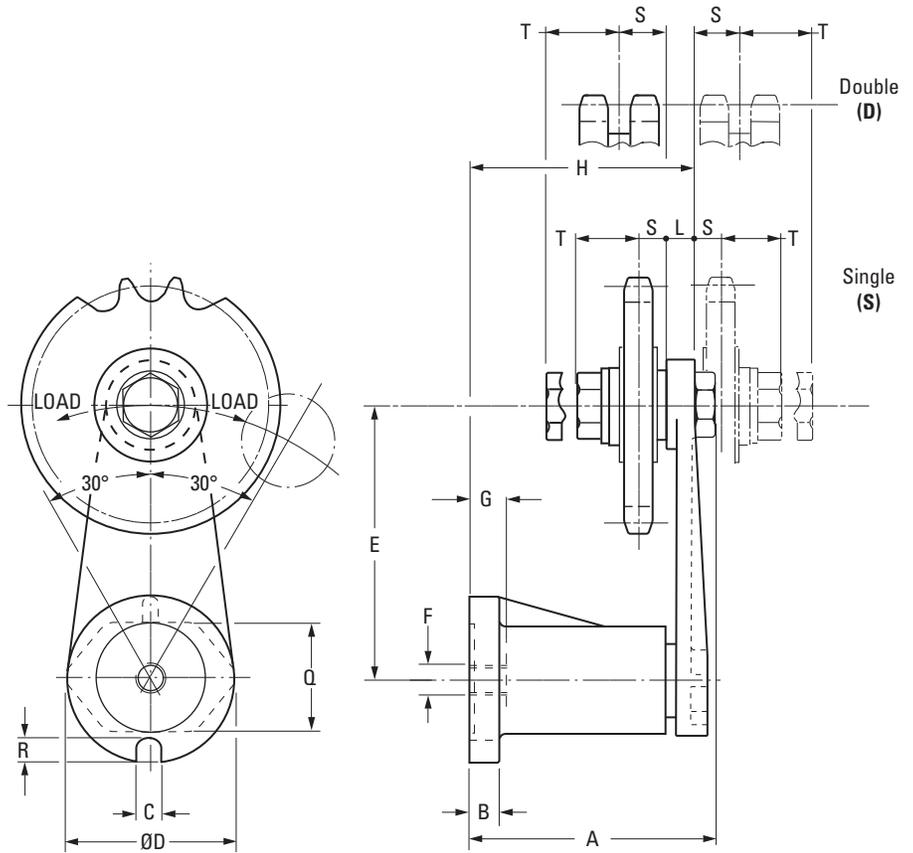
MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy

Sprocket – Steel (Heat-Treated)

MAX. OPERATING TEMPERATURE:

100°C (212°F)



All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	No. of Teeth	Max Load (N)	A ±1	B	C	ØD	E	F	G	H ±1	L	Q	R	S	T
QCT-RHR11103S	3/8" x 7/32"	21	100	52.5	6	8	35	80	M6	8.5	47.5	8	22	4	9.2	19.7
QCT-RHR11103D				11	18											
QCT-RHR15503S				150	66	8	8.5	45	100	M8	10.5	61	8	30	5	9.2
QCT-RHR15504S	1/2" x 5/16"	16	150	66	8	8.5	45	100	M8	10.5	61	8	30	5	9.2	19.7
QCT-RHR15504D				12.5	16.5											
QCT-RHR18804S				300	79	10	8.5	58	100	M10	13	75	10	37	7.5	9.2
QCT-RHR18804D	12.5	16.5														
QCT-RHR18805S	5/8" x 3/8"	17	300	79	10	8.5	58	100	M10	13	75	10	37	7.5	9.2	19.7
QCT-RHR18805D				15.2	17.7											
QCT-RHR27706S	3/4" x 7/16"	15	900	110	15	10.5	78	130	M12	17	104	12	53	9.5	9.2	19.7
QCT-RHR27706D				17.6	19.2											
QCT-RHR27708S	1" x 17 mm	12	900	110	15	10.5	78	130	M12	17	104	12	53	9.5	8.9	19.4
QCT-RHR27708D				26.6	34.6											

NOTE: Orientation of sprocket is supplied as shown. End user can reposition if necessary.

RHP Type Tensioners



Low Friction Polyethylene Head – Elastomer-Loaded • Automatically keeps the tension constant

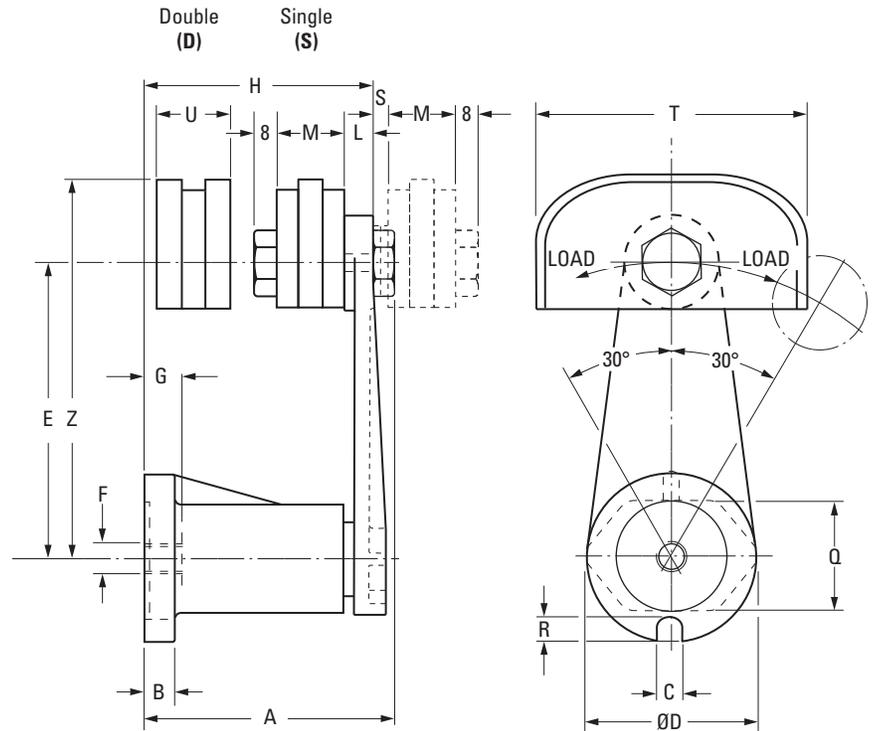


MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy
 Head – Polyethylene (UHMW-PE)

MAX. OPERATING TEMPERATURE:

65°C (149°F)



All dimensions are in mm unless otherwise noted.

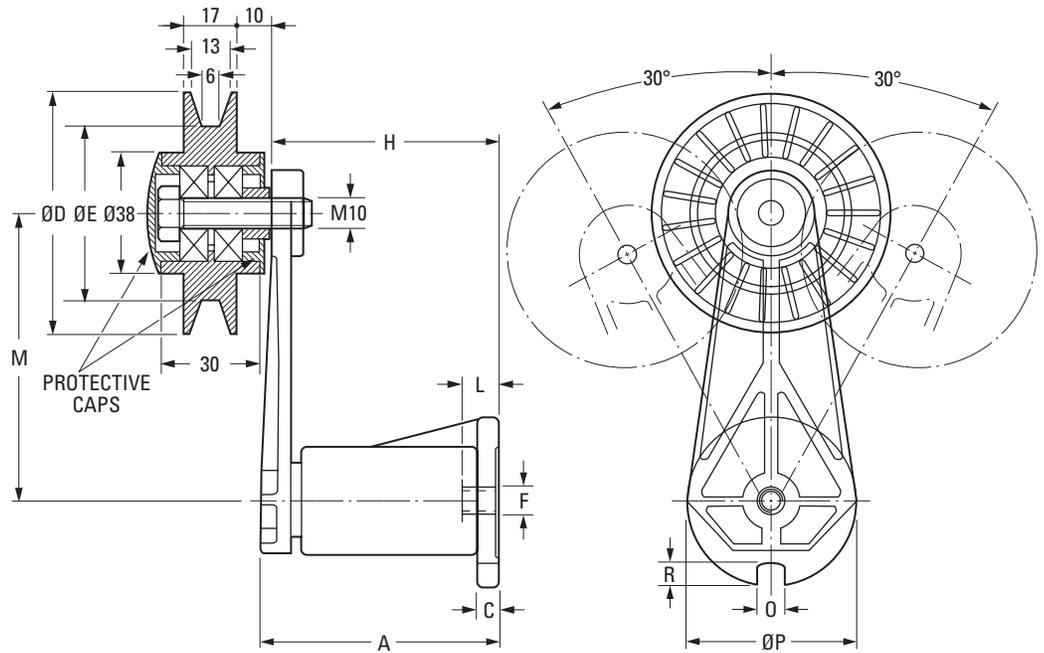
Catalog Number	Chain Pitch	Max Load (N)	A ±1	B	C	ØD	E	F	G	H ±1	L	M	Q	R	S	T	U	Z
QCT-RHP11103S QCT-RHP11103D	3/8" x 7/32"	100	52.5	6	8	35	80	M6	8.5	47.5	8	20	22	4	4	70	—	103.5
QCT-RHP15503S QCT-RHP15503D	3/8" x 7/32"	150	66	8	8.5	45	100	M8	10.5	61	8	20	30	5	4	70	—	123.5
QCT-RHP15504S QCT-RHP15504D	1/2" x 5/16"	150	66	8	8.5	45	100	M8	10.5	61	8	20	30	5	4	70	—	123.5
QCT-RHP18804S QCT-RHP18804D	1/2" x 5/16"	300	79	10	8.5	58	100	M10	13	75	10	20	37	7.5	4	70	—	123.5
QCT-RHP18805S QCT-RHP18805D	5/8" x 3/8"	300	79	10	8.5	58	100	M10	13	75	10	22	37	7.5	5	90	—	129.5
QCT-RHP27706S QCT-RHP27706D	3/4" x 7/16	900	110	15	10.5	78	130	M12	17	104	12	22	53	9.5	5	90	—	159.5
QCT-RHP27708S*	1" x 17 mm											25				110	—	164.5

*Head for double chain is not available.

NOTE: Orientation of head is supplied as shown. End user can reposition if necessary.

RH-PUG Type Tensioners

www.econobelt.com



MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy
 Pulley – Black, Polyamide-6

MAX. OPERATING TEMPERATURE:

100°C (212°F)

All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)	A ±1	C	ØD	ØE	F	H ±1	ØP	L	M	O	R
QBT-RH111PUG03	100	52.5	6	76.5	50	M6	47.5	35	8.5	80	8	4
QBT-RH111PUG04				101.6	75			45				
QBT-RH155PUG03	150	66	8	76.5	50	M8	61	58	10.5	100	8.5	5
QBT-RH155PUG04				101.6	75			78				
QBT-RH188PUG03	300	79	10	76.5	50	M10	75	35	13	100	8.5	7.5
QBT-RH188PUG04				101.6	75			45				
QBT-RH277PUG03	900	110	15	76.5	50	M12	104	58	17	130	10.5	9.5
QBT-RH277PUG04				101.6	75			78				

BELT & CHAIN TENSIONERS
 TC
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 ET
 Orient-1
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 TO
 TA
 GA
 TF
 Heads
 Sprockets

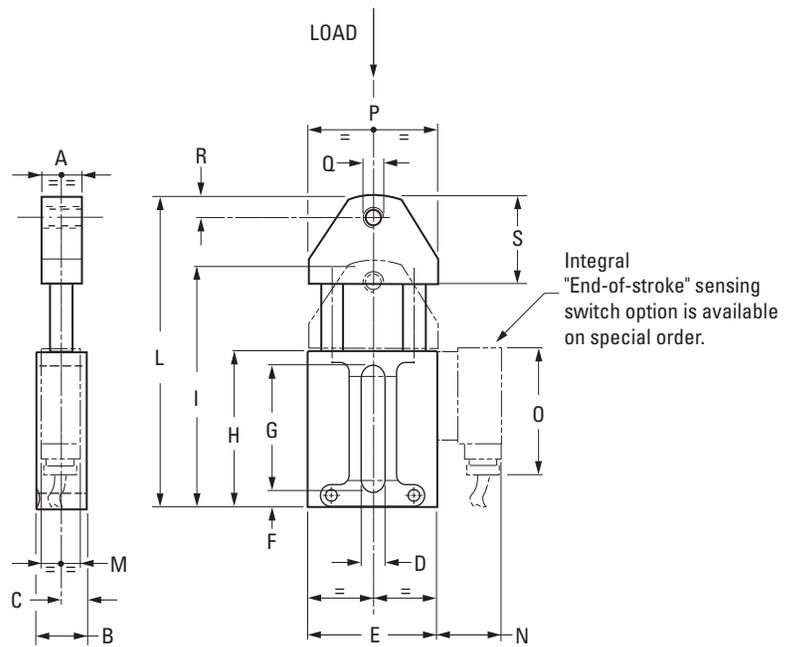


Spring-Loaded



MATERIAL:

Base – High-Tensile Die-Cast Aluminum Alloy
 Mounting Head – Die-Cast Aluminum Alloy
 Slide Arms – High Tensile Steel (Zinc Plated)



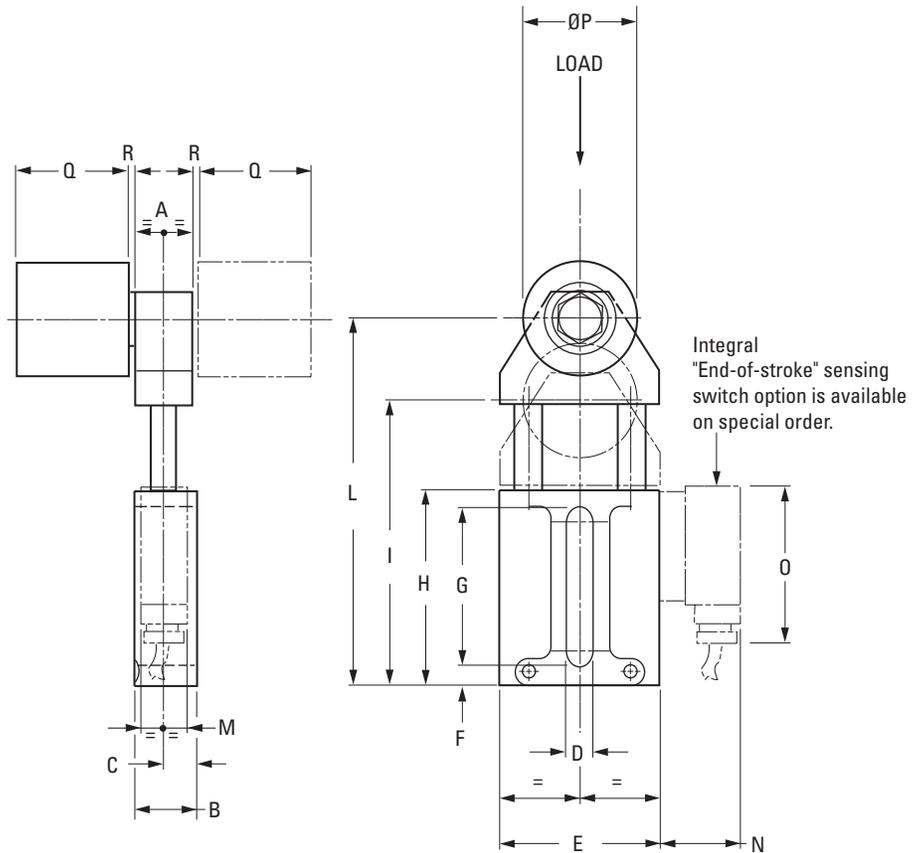
All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)		A	B	C	D	E	F	G	H	I	L	P	Q	R	S	M	N	O
	Min	Max																	
QTA-ET1M08 QTA-ET1M10 QTA-ET1M12	130	250	20	23	12.5	11	56.2	7	58	74	109	139.5	55	M8 M10 M12	10	35	-	-	-
QTA-ET2M12	180	420	25	28	15	12.5	70.5	7	72	87	140.5	176.5	70	M12	12	50	-	-	-
QTA-ET3M12 QTA-ET3M14	300	650	30	33	17.5	14.5	82	9	86	104	167	209.5	80	M12 M14	14	60	21	35	70

For Belts – Roller with Ball Bearing
ET-PU Type Tensioners

www.econobelt.com

Spring-Loaded • Automatically keeps the tension constant



MATERIAL:

Mounting Head – Die-Cast Aluminum
 Base – High-Tensile Die-Cast Aluminum Alloy
 Slide Arms – High-Tensile Steel (Zinc Plated)
 Roller – Material Code

- A** Aluminum
- N** Nylon
- S** Steel (Zinc Plated)

All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)		A	B	C	D	E	F	G	H	I	L	M	N	O	ØP	Q	R
	Min	Max																
QBT-ET1PU30X35 <input type="checkbox"/>	130	250	20	23	12.5	11	56.2	7	58	74	101.5	129.5	-	-	-	30	35	2.5
QBT-ET1PU40X45 <input type="checkbox"/>																		
QBT-ET1PU50X50 <input type="checkbox"/>																		
QBT-ET2PU50X50 <input type="checkbox"/>	180	420	25	28	15	12.5	70.5	7	70	87	128.5	164.5	-	-	-	50	50	2.5
QBT-ET3PU50X50 <input type="checkbox"/>	300	650	30	33	17.5	14.5	82	9	86	104	154	195.5	21	35	70	50	50	2.5
QBT-ET3PU60X60 <input type="checkbox"/>																		

- NOTES:** 1. Orientation of roller is supplied as shown. End user can reposition if necessary.
 2. Fill in the box with desired roller material code to complete part number.

BELT & CHAIN TENSIONERS
 TC
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 Heads
 Sprockets

ETR Type Tensioners

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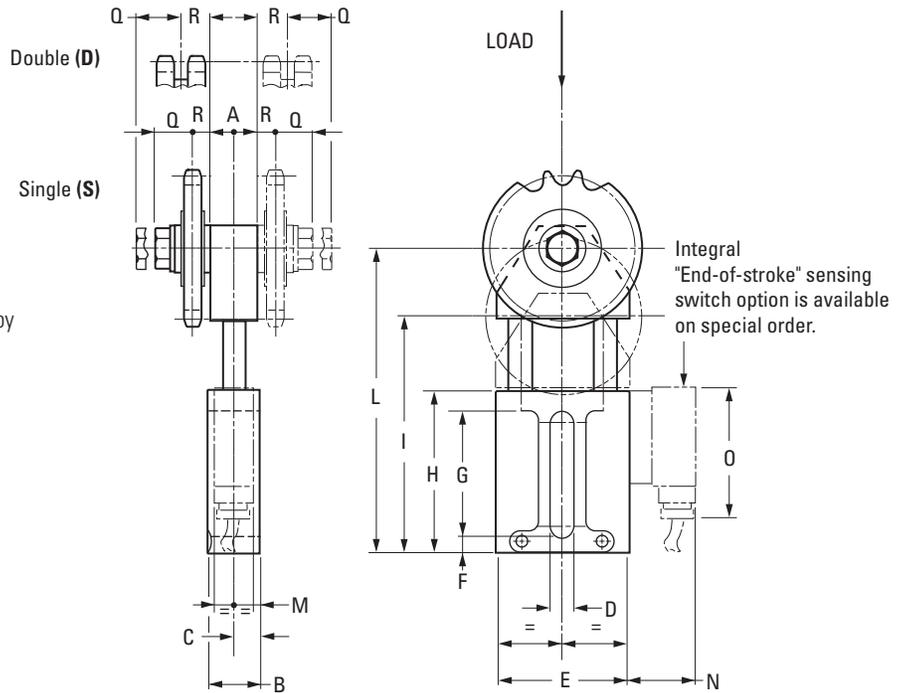


Sprockets with Ball Bearing – Spring-Loaded • Automatically keeps the tension constant



MATERIAL:

Base & Mounting Head – High-Tensile Die-Cast Aluminum Alloy
 Slide Arms – High-Tensile Steel (Zinc Plated)
 Sprocket – Steel (Heat-Treated)



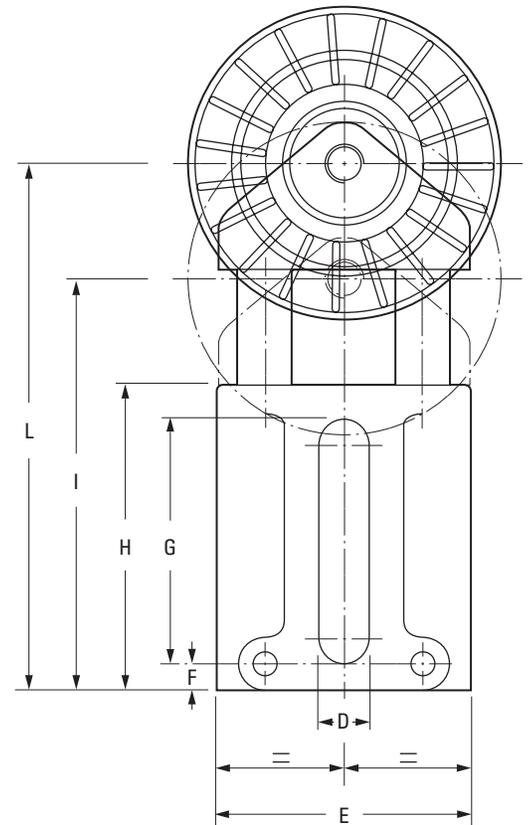
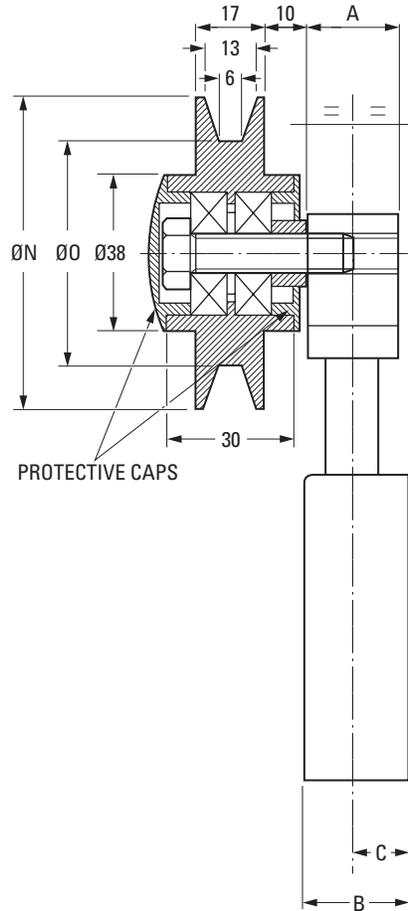
All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	Teeth	Load (N)		A	B	C	D	E	F	G	H	I	L	Q	R	M	N	O
			Min	Max															
QCT-ETR103S QCT-ETR103D	3/8" x 7/32"	21	130	250	20	23	12.5	11	56.2	7	58	74	101.5	129.5	19.7 18	9.2 11	-	-	-
QCT-ETR104S QCT-ETR104D	1/2" x 5/16"	16	130	250	20	23	12.5	11	56.2	7	58	74	101.5	129.5	19.7 16.5	9.2 12.5	-	-	-
QCT-ETR205S QCT-ETR205D	5/8" x 3/8"	17	180	420	25	28	15	12.5	70.5	7	72	87	128.5	164.5	19.7 17.7	9.2 15.2	-	-	-
QCT-ETR206S QCT-ETR206D	3/4" x 7/16"	15	180	420	25	28	15	12.5	70.5	7	72	87	128.5	164.5	19.7 19.2	9.2 17.6	-	-	-
QCT-ETR308S QCT-ETR308D	1" x 17 mm	12	300	650	30	33	17.5	14.5	82	9	86	104	154	195.5	19.4 34.6	8.9 26.6	21	35	70

NOTE: Orientation of roller is supplied as shown. End user can reposition if necessary.

ET-PUG Type Tensioners

www.econobelt.com



MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy

Pulley – Black, Polyamide-6

MAX. OPERATING TEMPERATURE:

100°C (212°F)

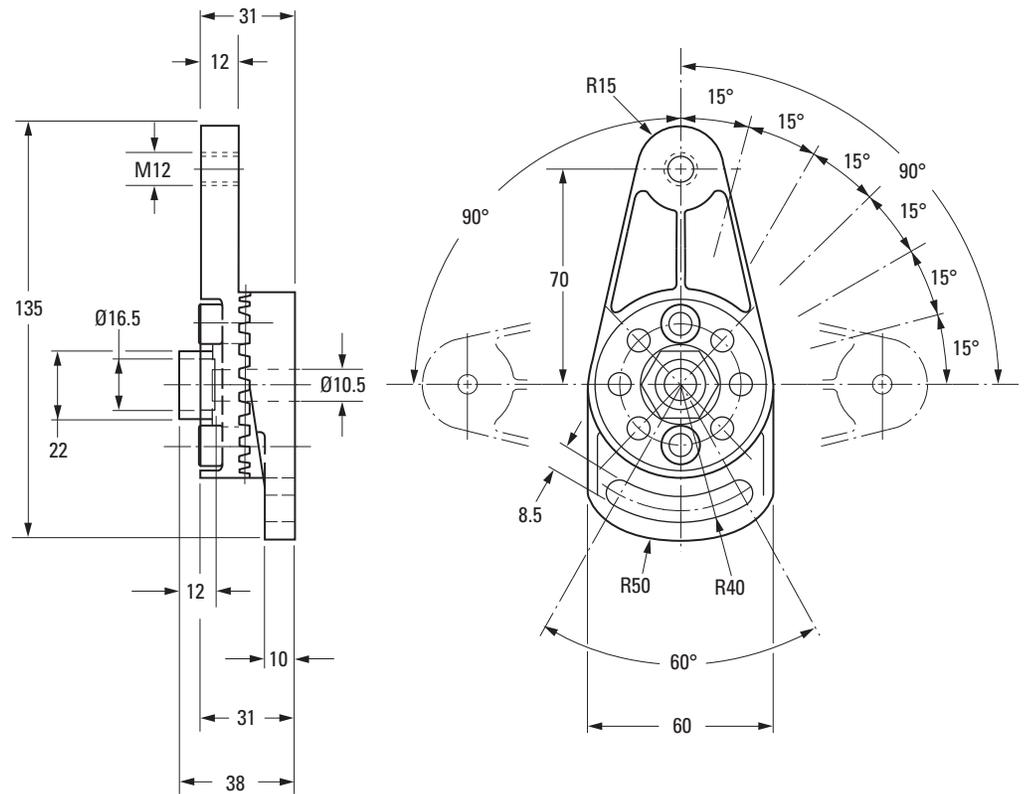
All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)		A	B	C	D	E	F	G	H	I	L	ØN	Ø0
	Min	Max												
QBT-ET1PUG03	130	250	20	23	12.5	11	56.2	7	58	74	101.5	129.5	76.5	50
QBT-ET1PUG04													101.6	75
QBT-ET2PUG03	180	420	25	28	15	12.5	70.5	7	72	87	128.5	164.5	76.5	50
QBT-ET2PUG04													101.6	75
QBT-ET3PUG03	300	650	30	33	17.5	14.5	82	9	86	104	154	195.5	76.5	50
QBT-ET3PUG04													101.6	75

BELT & CHAIN TENSIONERS
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 Heads
 Sprockets



MATERIAL:
Arm – High-Tensile Die-Cast Aluminum Alloy



All dimensions are in mm unless otherwise noted.

Catalog Number

QTA-OR1M12

Orient-1 PU Type Tensioners

Adjustable Angle • Not Spring-Loaded

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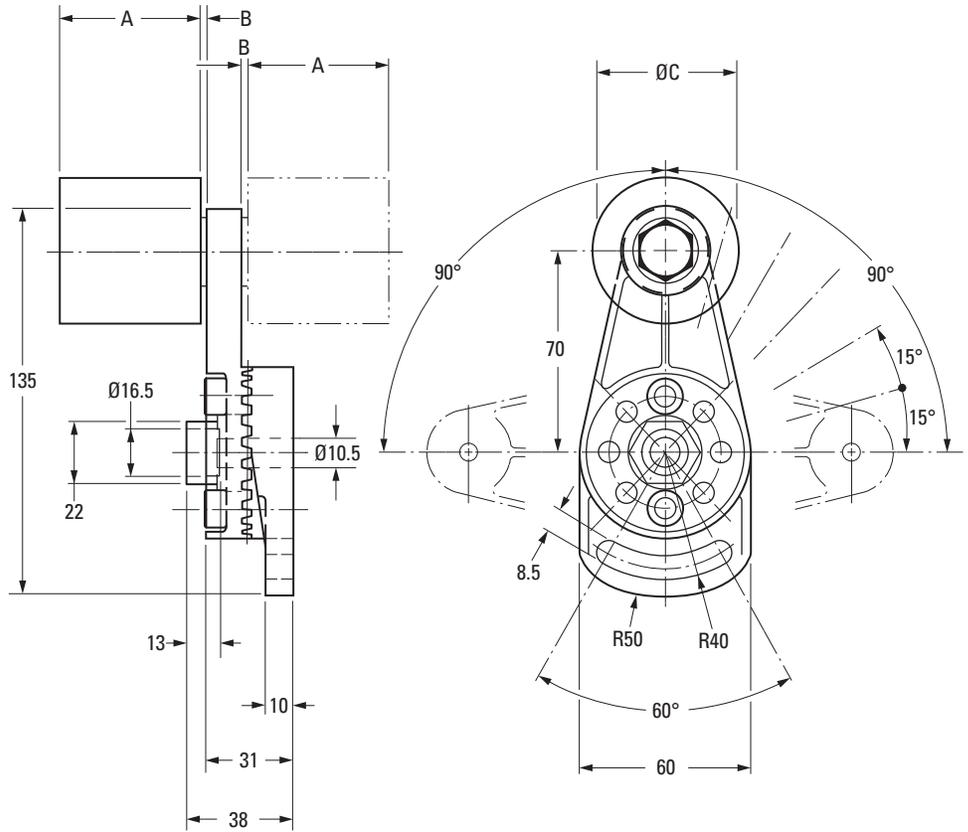
BELT & CHAIN TENSIONERS



MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy
 Roller – Material Code

- A** Aluminum
- S** Steel (Zinc Plated)
- N** Nylon



All dimensions are in mm unless otherwise noted.

Catalog Number	A	B	ØC
QBT-OR1PU30X35 <input type="checkbox"/>	35	2.5	30
QBT-OR1PU40X45N <input type="checkbox"/>	45	6.5	40
QBT-OR1PU50X50 <input type="checkbox"/>	50	2.5	50
QBT-OR1PU60X60 <input type="checkbox"/>	60	2.5	60
QBT-OR1PU80X90 <input type="checkbox"/>	90	2.5	80

- NOTES:** 1. Orientation of roller is supplied as shown. End user can reposition if necessary.
 2. Fill in the box with desired roller-material code to complete part number.

TC

RH

ET

Orient-1

NT

TO

TA

GA

TF

Heads

Sprockets

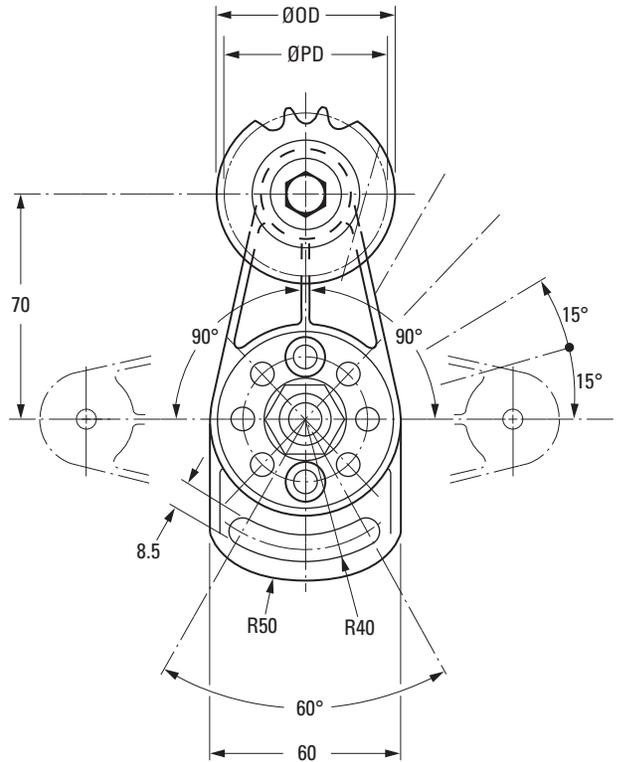
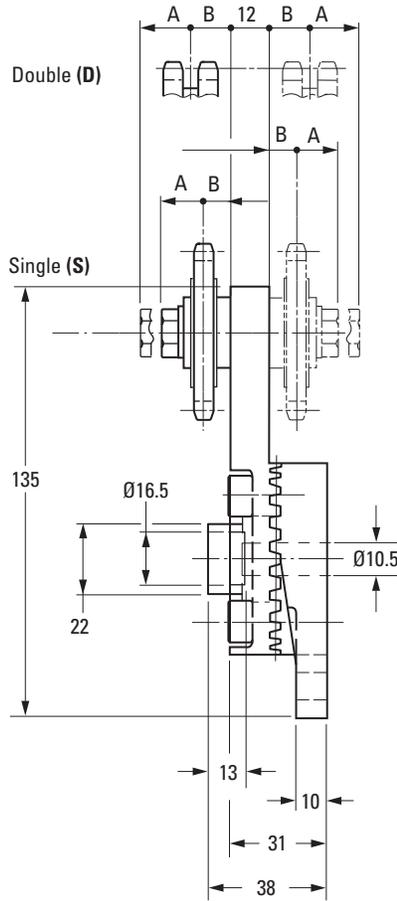
Orient-1 R Type Tensioners

Adjustable Angle • Not Spring-Loaded



MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy
Sprocket – Steel (Heat-Treated)



All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	No. of Teeth	A	B	Pitch Diameter ØPD	Outside Diameter ØOD
QCT-OR1R03S QCT-OR1R03D	3/8" x 7/32"	21	19.7 18	9.2 11	63.91	68
QCT-OR1R04S QCT-OR1R04D	1/2" x 5/16"	16	19.7 16.5	9.2 12.5	65.1	69.5
QCT-OR1R05S QCT-OR1R05D	5/8" x 3/8"	17	19.7 17.7	9.2 15.2	66.32	73

NOTE: Orientation of roller is supplied as shown. End user can reposition if necessary.

For 3/8" to 5/8" Pitch Roller Chains
Orient-1 P Type Tensioners

Adjustable Angle • Not Spring-Loaded

www.econobelt.com

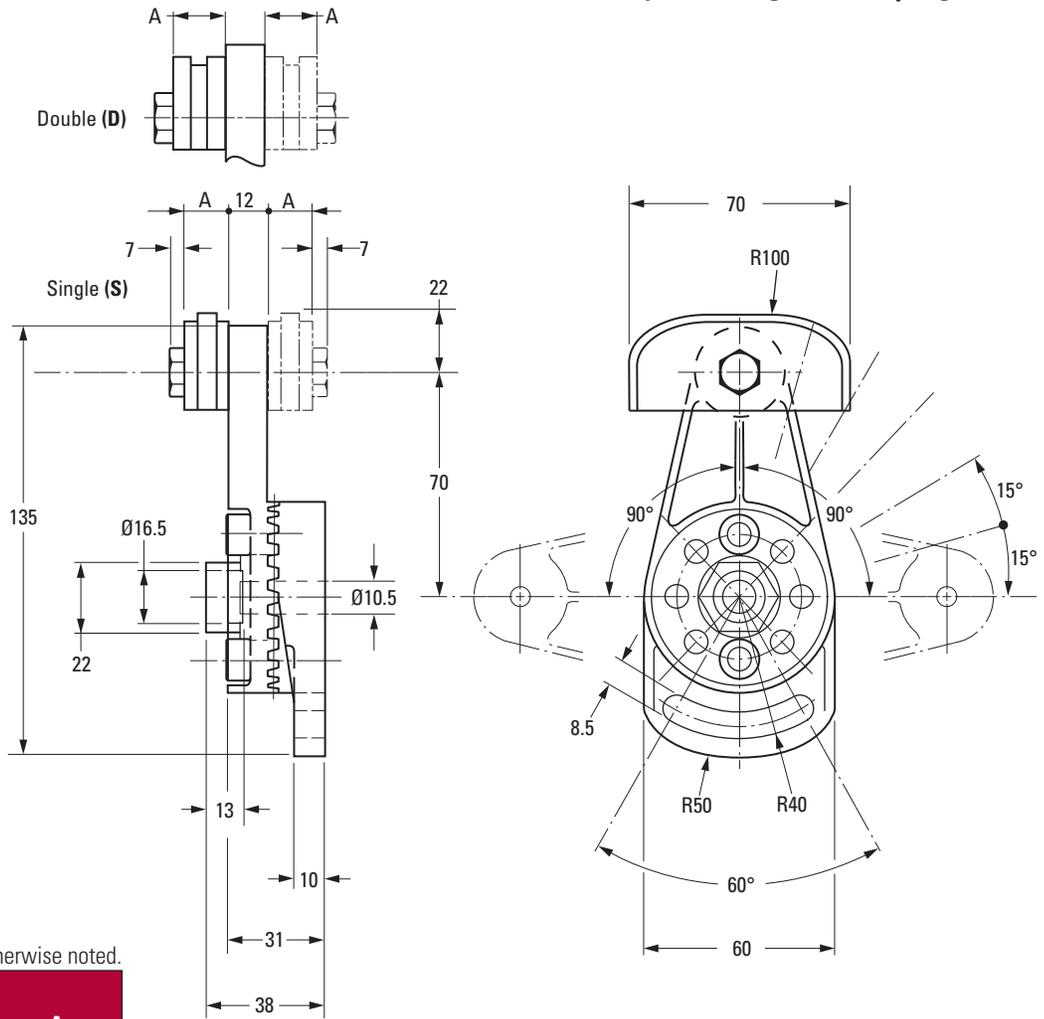


MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy
 Head – Polyethylene (UHMW-PE)

MAX. OPERATING TEMPERATURE:

65°C (149°F)



All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	A
QCT-OR1P03S QCT-OR1P03D	3/8" x 7/32"	20
QCT-OR1P04S QCT-OR1P04D	1/2" x 5/16"	20
QCT-OR1P05S QCT-OR1P05D	5/8" x 3/8"	20 25

NOTE: Orientation of roller is supplied as shown.
 End user can reposition if necessary.

BELT & CHAIN TENSIONERS
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Orient-1 PUG Type Tensioners

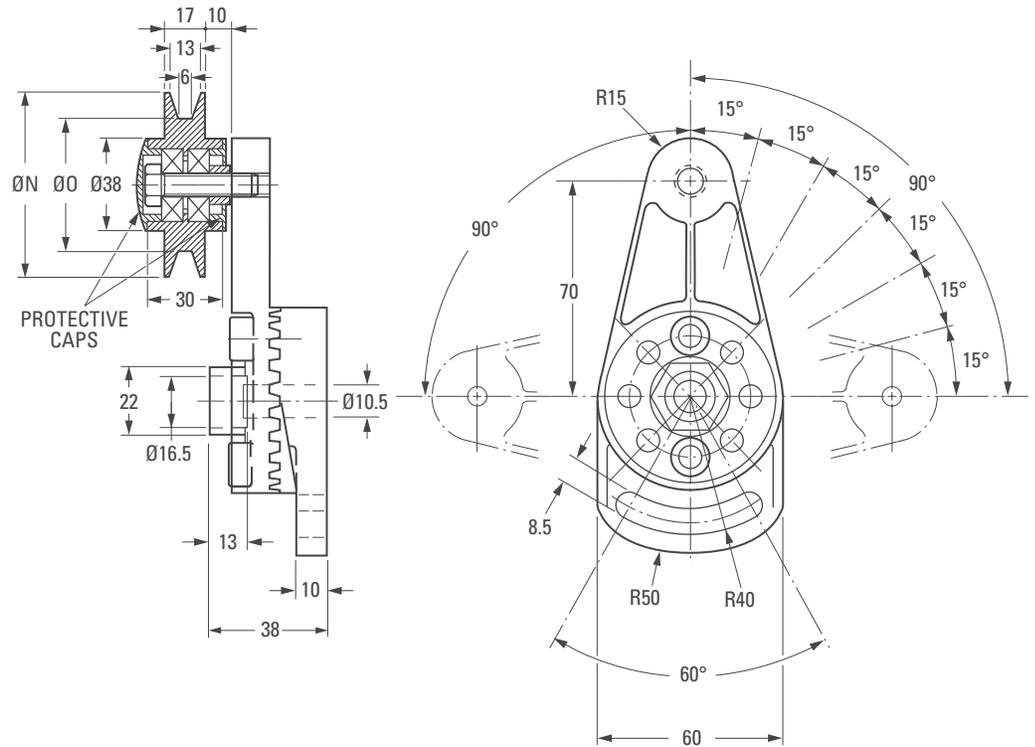
With rim pulley and bearings

www.econobelt.com



MATERIAL:

Arm – High-Tensile Die-Cast Aluminum Alloy
 Pulley – Black, Polyamide-6

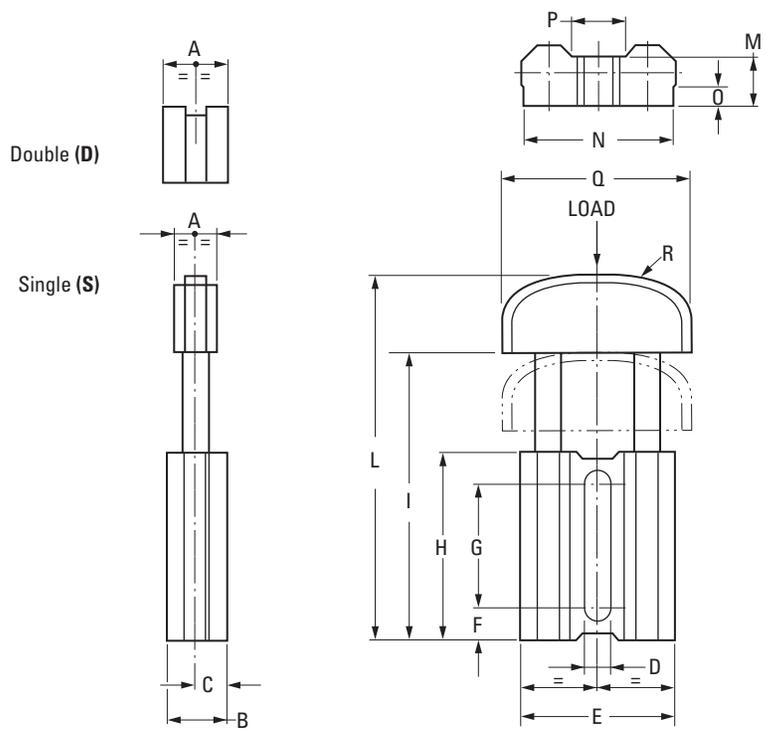


All dimensions are in mm unless otherwise noted.

Catalog Number	ØN	ØO
QBT-OR1PUG03	76.5	50
QBT-OR1PUG04	101.6	75



Low Friction Polyethylene Head–Spring-Loaded • Automatically keeps the tension constant



MATERIAL:

Head – Polyethylene (UHMW-PE)

Base – Die-Cast Aluminum

Slide Arms – Steel (Zinc Plated)

MAX. OPERATING TEMPERATURE:

65°C (149°F)

All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	Load (N)		A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R
		Min	Max																
QCT-NT103S QCT-NT103D	3/8" x 7/32"	130	250	20	23	12.5	11	56	12	50	74	110	138	21	56	8	22	70	100
QCT-NT104S QCT-NT104D	1/2" x 5/16"	130	250	20															
QCT-NT105S QCT-NT105D	5/8" x 3/8"	130	250	20 25	28	15	12.5	72	15	57	87	133	169	23	70	8	25	90	120
QCT-NT205S QCT-NT205D	5/8" x 3/8"	180	420	22 25															
QCT-NT206S QCT-NT206D	3/4" x 7/16"	180	420	22 30	28	15	12.5	72	15	57	87	133	169	23	70	8	25	90	120
QCT-NT208S QCT-NT208D*	1" x 17 mm	180	420	25 45															

*The polyethylene head for this size is a semicircular shape.

BELT & CHAIN TENSIONERS
 TC
 RH
 ET
 Orient-1
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 TO
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 Heads
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TO Type Tensioners

Automatically keeps the tension constant • Spring-Loaded

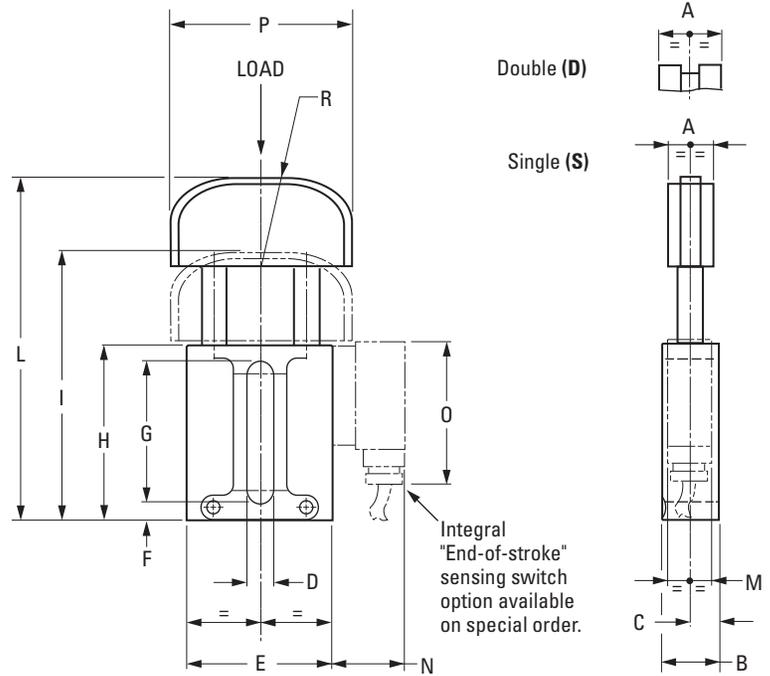


MATERIAL:

Head – Polyethylene (UHMW-PE)
 Base – High-Tensile Die-Cast Aluminum Alloy
 Slide Arms – High-Tensile Steel (Zinc Plated)

MAX. OPERATING TEMPERATURE:

65°C (149°F)



All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	Load (N)		A	B	C	D	E	F	G	H	I	L	M	N	O	P	R
		Min	Max															
QCT-T0103S * QCT-T0103D	3/8" x 7/32"	130	250	20	23	12.5	11	56.2	7	58	74	110	138	-	-	-	70	100
QCT-T0104S * QCT-T0104D	1/2" x 5/16"	130	250	20	23	12.5	11	56.2	7	58	74	110	138	-	-	-	70	100
QCT-T0105S * QCT-T0105D	5/8" x 3/8"	130	250	20 25	23	12.5	11	56.2	7	58	74	110	138	-	-	-	70	100
QCT-T0205S * QCT-T0205D	5/8" x 3/8"	180	420	22 25	28	15	12.5	70.5	9	72	87	133	169	-	-	-	90	120
QCT-T0206S * QCT-T0206D	3/4" x 7/16"	180	420	22 30	28	15	12.5	70.5	9	72	87	133	169	-	-	-	90	120
# QCT-T0308S	1" x 17 mm	300	650	25	33	17.5	14.5	82	9	86	104	160	202	21	35	70	110	140
# QCT-T0310S	1-1/4" x 3/4"	300	650	25	33	17.5	14.5	82	9	86	104	160	202	21	35	70	110	140
# QCT-T0312S	1-1/2" x 1"	300	650	25	33	17.5	14.5	82	9	86	104	160	202	21	35	70	110	140

*Head for triple chain is not available (see TOT Type)

Heads for double and triple chains are not available (see TOT Type)

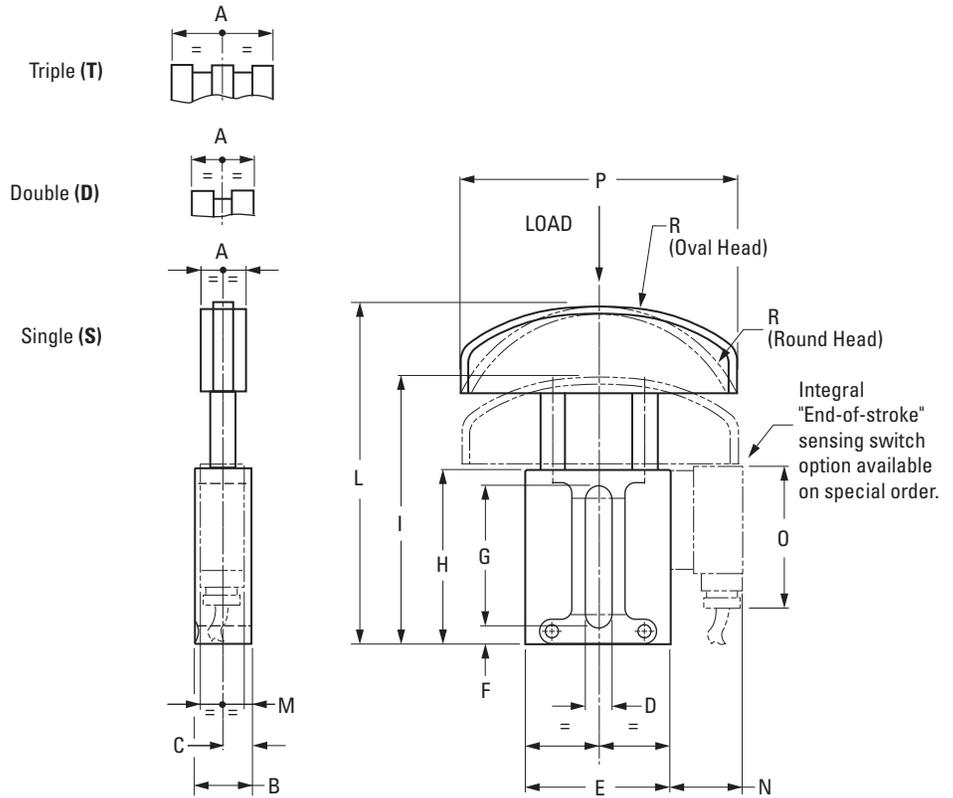


MATERIAL:

Head – Polyethylene (UHMW-PE)
 Base – High-Tensile Die-Cast Aluminum Alloy
 Slide Arms – High-Tensile Steel (Zinc Plated)

MAX. OPERATING TEMPERATURE:

65°C (149°F)



All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)		Chain Pitch	A	B	C	D	E	F	G	H	I	L	P	R	M	N	O
	Min	Max																
QCT-TA103S	130	250	3/8" x 7/32"	20	23	12.5	11	56.2	7	58	74	115	143	140	160	-	-	-
QCT-TA103D				20														
QCT-TA103T *				26														
QCT-TA104S	130	250	1/2" x 5/16"	20	23	12.5	11	56.2	7	58	74	115	143	140	160	-	-	-
QCT-TA104D				20														
QCT-TA104T *				34.5														
QCT-TA205S	180	420	5/8" x 3/8"	22	28	15	12.5	70.5	9	72	87	128	164	140	160	-	-	-
QCT-TA205D				25														
QCT-TA205T *				41.5														
QCT-TA206S	180	420	3/4" x 7/16"	22	28	15	12.5	70.5	9	72	87	128	164	140	160	-	-	-
QCT-TA206D				30														
QCT-TA206T *				49														
QCT-TA308S	300	650	1" x 17 mm	25	33	17.5	14.5	82	9	86	104	145	187	140	160	21	35	70
QCT-TA308D *				45														
QCT-TA308T *				78														
QCT-TA310S	300	650	1-1/4" x 3/4"	25	33	17.5	14.5	82	9	86	104	145	187	140	160	21	35	70
QCT-TA310D *				54														
QCT-TA310T *				90														
QCT-TA312S	300	650	1-1/2" x 1"	25	33	17.5	14.5	82	9	86	104	145	187	140	160	21	35	70
QCT-TA312D *				71														
QCT-TA312T *				119														
QCT-TA314S *	300	650	1-3/4" x 1-1/4"	29.5	33	17.5	14.5	82	9	86	104	145	187	140	90	21	35	70
QCT-TA316S *																		

*Round head only

BELT & CHAIN TENSIONERS
 TC
 RH
 ET
 Orient-1
 NT
 TO
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 GA
 TF
 Heads
 Sprockets

Spring-Loaded • Automatically Keeps The Tension Constant



MATERIAL:

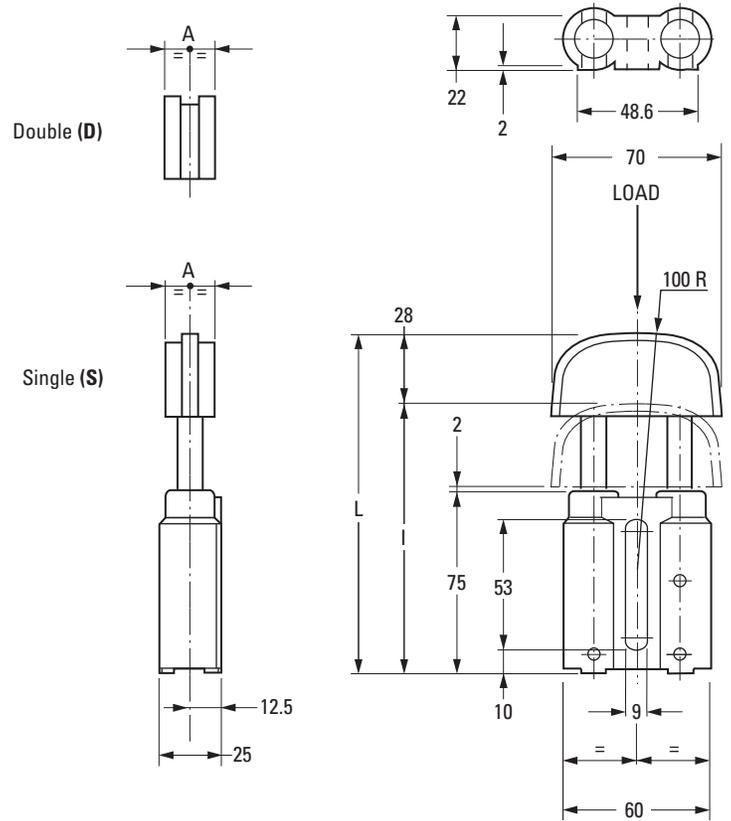
Head – See Table

Base – Acetal

Slide Arms – High-Tensile Steel (Zinc Plated)

MAX. OPERATING TEMPERATURE:

65°C (149°F)



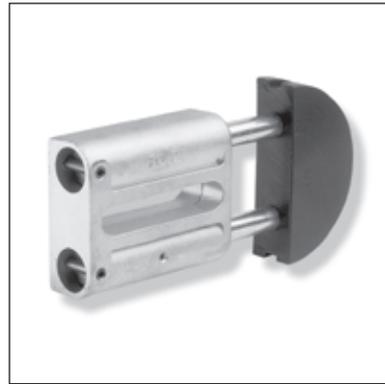
All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	Load (N)		A	I	L	Head Material
		Min	Max				
QCT-T05-DP003S*	3/8" x 7/32"	95	190	20	121	149	Acetal
QCT-T05-DP103S QCT-T05-DP103D	3/8" x 7/32"	95	190	20	111	139	Polyethylene (UHMW-PE)
QCT-T05-DP104S QCT-T05-DP104D	1/2" x 5/16"	95	190	20	111	139	
QCT-T05-DP105S QCT-T05-DP105D	5/8" x 3/8"	95	190	20 25	111	139	

*Head for double chain not available.

TOT Type Tensioners

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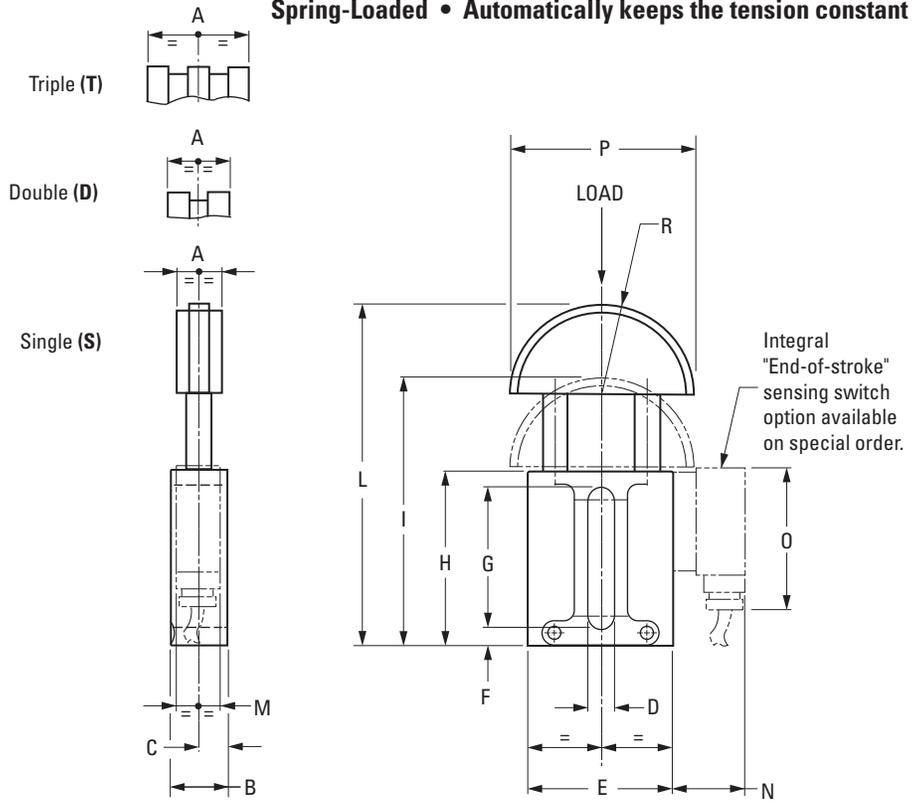
MATERIAL:

Head – Polyethylene (UHMW-PE)
 Base – High-Tensile Die-Cast Aluminum Alloy
 Slide Arms – High-Tensile Steel (Zinc Plated)

MAX. OPERATING TEMPERATURE:

65°C (149°F)

Spring-Loaded • Automatically keeps the tension constant



All dimensions are in mm unless otherwise noted.

Catalog Number	Load (N)		Chain Pitch	A	B	C	D	E	F	G	H	I	L	M	N	O	P	R
	Min	Max																
QCT-TOT103S	130	250	3/8" x 7/32"	20	23	12.5	11	56.2	7	58	74	110	138	-	-	-	70	35
QCT-TOT103D				20														
QCT-TOT103T				26														
QCT-TOT104S	130	250	1/2" x 5/16"	20	23	12.5	11	56.2	7	58	74	110	138	-	-	-	70	35
QCT-TOT104D				20														
QCT-TOT104T				34.5														
QCT-TOT105S	130	250	5/8" x 3/8"	20	23	12.5	11	56.2	7	58	74	110	138	-	-	-	70	35
QCT-TOT105D				25														
QCT-TOT105T				41.5														
QCT-TOT205S	180	420	5/8" x 3/8"	22	28	15	12.5	70.5	7	72	87	133	169	-	-	-	90	45
QCT-TOT205D				25														
QCT-TOT205T				41.5														
QCT-TOT206S	180	420	3/4" x 7/16"	22	28	15	12.5	70.5	7	72	87	133	169	-	-	-	90	45
QCT-TOT206D				30														
QCT-TOT206T				49														
QCT-TOT308S	300	650	1" x 17 mm	25	33	17.5	14.5	82	9	86	104	160	202	21	35	70	110	55
QCT-TOT308D				45														
QCT-TOT308T				78														
QCT-TOT310S	300	650	1-1/4" x 3/4"	25	33	17.5	14.5	82	9	86	104	160	202	21	35	70	110	55
QCT-TOT310D				54														
QCT-TOT310T				90														
QCT-TOT312S	300	650	1-1/2" x 1"	25	33	17.5	14.5	82	9	86	104	160	202	21	35	70	110	55
QCT-TOT312D				71														
QCT-TOT312T				119														
QCT-TOT314S	300	650	1-3/4" x 1-1/4"	29.5	33	17.5	14.5	82	9	86	104	160	202	21	35	70	110	55
QCT-TOT316S																		

BELT & CHAIN TENSIONERS
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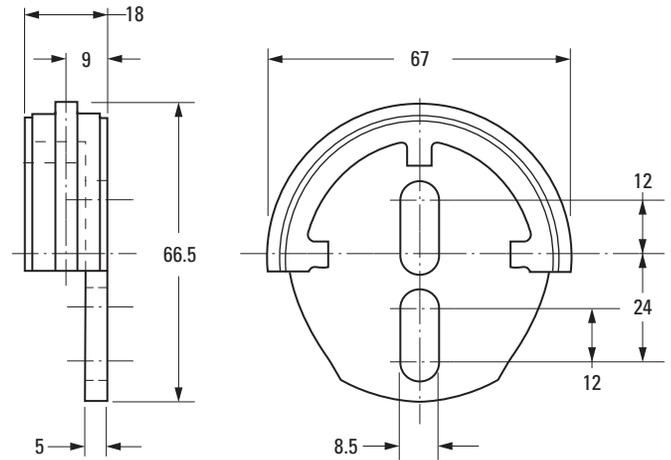
MATERIAL:

Body – Die-Cast Aluminum

Head – Low-Friction Special Wear-Resistant Polyethylene (UHMW-PE)
 (Dynamic Coefficient: 0.06 on Dry Steel)

MAX. OPERATING TEMPERATURE:

65°C (149°F)

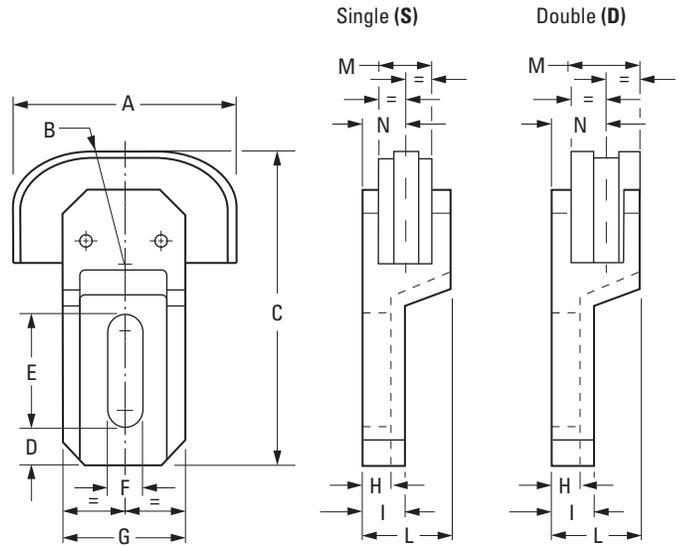


All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch
QCT-GA03	3/8" x 7/32"
QCT-GA04	1/2" x 5/16"
QCT-GA05	5/8" x 3/8"
QCT-GA06	3/4" x 7/16"

TF Type Tensioners

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MATERIAL:

Body – Die-Cast Aluminum
 Head – Low-Friction Special Wear-Resistant Polyethylene (UHMW-PE)
 (Dynamic Coefficient: 0.06 on Dry Steel)

MAX. OPERATING TEMPERATURE:

65°C (149°F)

All dimensions are in mm unless otherwise noted.

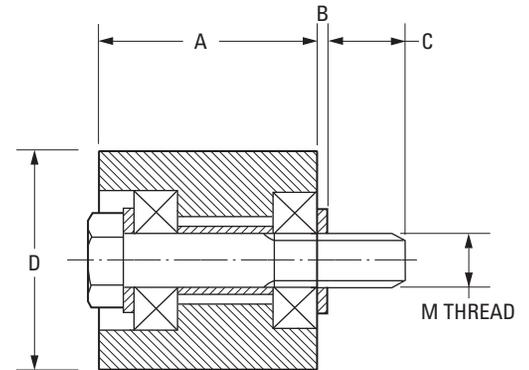
Catalog Number	Chain Pitch	A	B	C	D	E	F	G	H	I	L	M	N
QCT-TF103S QCT-TF103D	3/8" x 7/32"	70	35	140	10	73	11	40	10	15	30	20	15
QCT-TF104S QCT-TF104D	1/2" x 5/16"											20	15
QCT-TF205S QCT-TF205D	5/8" x 3/8"	90	45	164	12	86	13	50	12	18	35.5	22	18
QCT-TF206S QCT-TF206D	3/4" x 7/16"											25	19.5
QCT-TF206S QCT-TF206D	3/4" x 7/16"											22	18
QCT-TF308S QCT-TF308D*	1" x 17 mm	110	55	173	12	83	13	60	14	20	40	25	20
QCT-TF310S QCT-TF310D*	1-1/4" x 3/4"											46	30.5
QCT-TF312S QCT-TF312D*	1-1/2" x 1"											25	20
												46	30.5

*The polyethylene head for this size is a semicircular shape.

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With Ball Bearing Supports



MATERIAL:

Steel, Aluminum or Nylon

All dimensions are in mm unless otherwise noted.

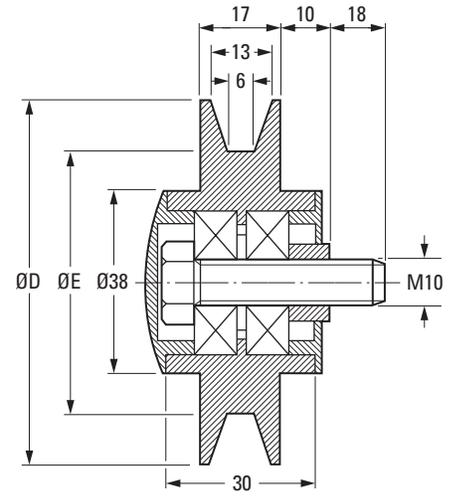
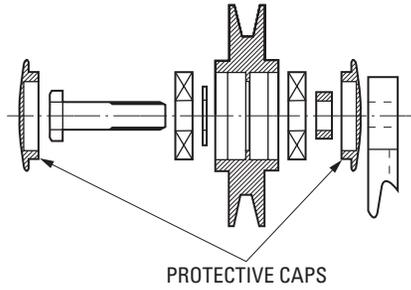
Catalog Number			A	B	C	D	M
Steel	Aluminum	Nylon					
QBT-H-PU3035C *	QBT-H-PU3035A *	QBT-H-PU3035N	35	2.5	13.5	30	M8
		QBT-H-PU4045N	45	2	16	40	M10
QBT-H-PU5050C	QBT-H-PU5050A	QBT-H-PU5050N	50	2.5	18	50	M12
QBT-H-PU6060C	QBT-H-PU6060A	QBT-H-PU6060N	60	2.5	18	60	M12
QBT-H-PU8090C	QBT-H-PU8090A	QBT-H-PU8090N	90	2.5	18	80	M12

*Not Available.

NOTE: Washers, nut and bolt supplied with rollers.

PUG Type Pulleys

Pulley with bearings

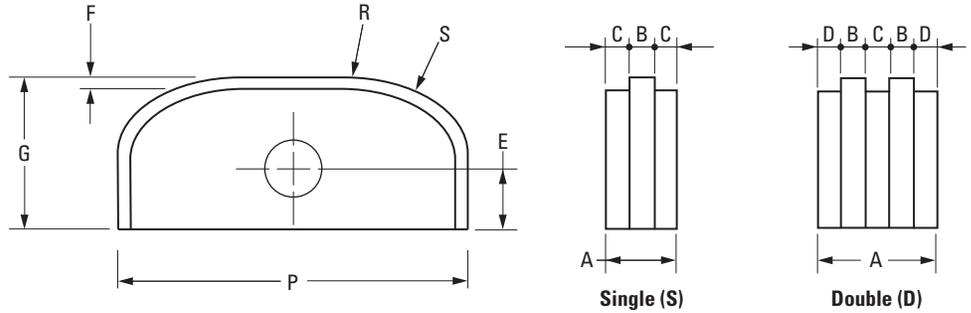


MATERIAL:
Black, Polyamide-6

MAX. OPERATING TEMPERATURE:
100°C (212°F)

All dimensions are in mm unless otherwise noted.

Catalog Number	ØD	ØE
QBT-H-PUG03	76.5	50
QBT-H-PUG04	101.6	75



MATERIAL:
Polyethylene (UHMW-PE)

All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	A	B	C	D	E	F	G	P	R	S
QCT-H-P03S QCT-H-P03D	3/8" x 7/32"	20	5	7.5 5.5	— 2.25	10	3	34	70	100	20
QCT-H-P04S QCT-H-P04D	1/2" x 5/16"	20	6.5 6.25	6.75 7.5	—	10	3.5	34	70	100	20
QCT-H-P05S QCT-H-P05D	5/8" x 3/8"	22 25	8.5	6.75 8	—	14.5	3.5	44	90	120	20
QCT-H-P06S QCT-H-P06D	3/4" x 7/16"	22	10	6	—	14.5	4	44	90	120	20
QCT-H-P08S QCT-H-P08D	1" X 17 mm	25	15	5	—	19	5	54	110	140	25

NOTE: Washers, nut and bolt supplied with tensioner head.

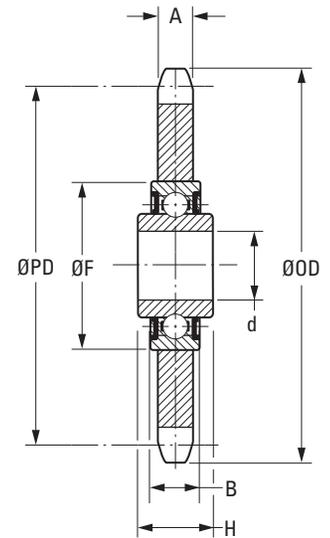
AC Type Idler Sprockets

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MATERIAL:

Steel



All dimensions are in mm unless otherwise noted.

Catalog Number	Pitch	No. of Teeth	Outside Diameter ØOD	Pitch Diameter ØPD	A	d	ØF	B	H
QCT-H-AC03	3/8" x 7/32"	21	68	63.9	5.3				
QCT-H-AC04	1/2" x 5/16"	16	69.5	65.1	7.2				
QCT-H-AC05	5/8" x 3/8"	17	93	86.39	9.1				
QCT-H-AC06	3/4" x 7/16"	15	99.8	91.63	11.1				
QCT-H-AC08	1" x 17 mm	12	109	98.14	16.2	16 ^{+0.26} _{+0.13}	40	12	18.3
						20 ^{+0.01}	47	14	17.7

NOTE: Washers, nut and bolt supplied with sprocket.

For 3/8" to 1" Pitch Roller Chains
PT Type Idler Sprockets

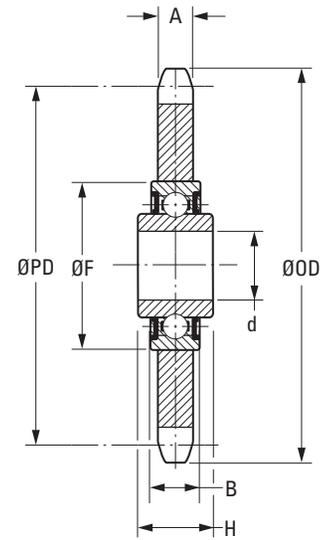
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With Hardened Teeth



MATERIAL:
 Steel, Hardened Teeth (HRC 50)



All dimensions are in mm unless otherwise noted.

Catalog Number	Pitch	No. of Teeth	Outside Diameter ØOD	Pitch Diameter ØPD	A	d	ØF	B	H
QCT-H-PT03	3/8" x 7/32"	21	68	63.9	5.3	16 ^{+0.26} _{+0.13}	40	12	18.3
QCT-H-PT04	1/2" x 5/16"	16	69.5	65.1	7.2				
QCT-H-PT05	5/8" x 3/8"	17	93	86.39	9.1				
QCT-H-PT06	3/4" x 7/16"	15	99.8	91.63	11.1				
QCT-H-PT08	1" x 17 mm	12	109	98.14	16.2	20 ^{+0.01}	47	14	17.7

NOTE: Washers, nut and bolt supplied with sprocket.

For 3/8" to 1" Pitch Roller Chains
R Type Idler Sprockets

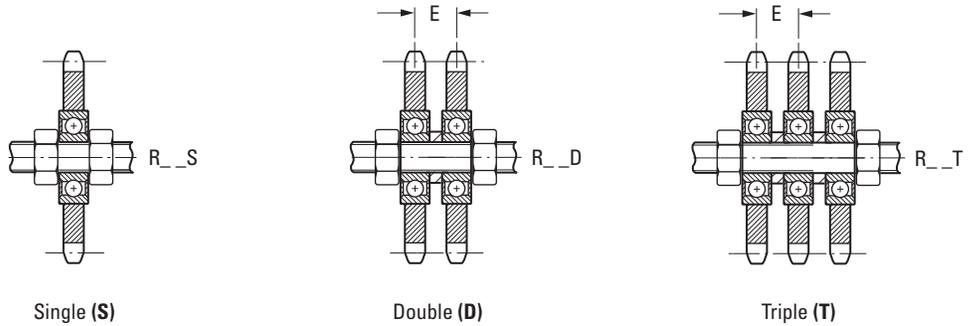
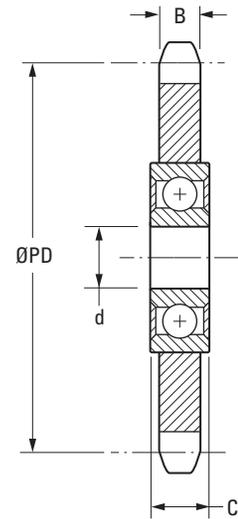
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With Ball Bearing Supports



MATERIAL:
Steel



All dimensions are in mm unless otherwise noted.

Catalog Number	Chain Pitch	No. of Teeth	d	B	C	Pitch Diameter ØPD	E	Weight (kg)
QCT-H-R03S	3/8" X 7/32"	15	10	5.2	9	45.81	-	0.06
QCT-H-R03D							10.2	0.12
QCT-H-R03T							10.2	0.18
QCT-H-R04S	1/2" X 5/16"	15	10	7	9	61.08	-	0.15
QCT-H-R04D							13.9	0.30
QCT-H-R04T							13.9	0.45
QCT-H-R05S	5/8" x 3/8"	15	12	9	12	76.36	-	0.27
QCT-H-R05D							16.5	0.54
QCT-H-R05T							16.5	0.81
QCT-H-R06S	3/4" x 7/16"	15	12	10.8	12	91.63	-	0.47
QCT-H-R06D							19.4	0.94
QCT-H-R06T							19.4	1.41
QCT-H-R08S	1" x 17 mm	13	20	15.8	15	106.14	-	0.88
QCT-H-R08D							31.8	1.76
QCT-H-R08T							31.8	2.64

NOTE: Washers, nut and bolt supplied with sprocket.

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