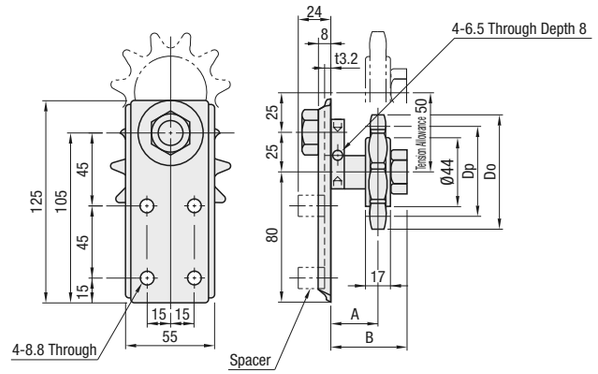
Chain Tensioners
Idler Set Type

Features: Tensioners for intermediate tensioning which allows tension to be adjusted just by rotating the shaft.

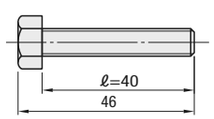
RoHS

THBS

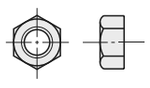


• **Spacer** (4 pcs.)

• **M8 Screw** (4 pcs.)



• **M8 Nut** (4 pcs.)

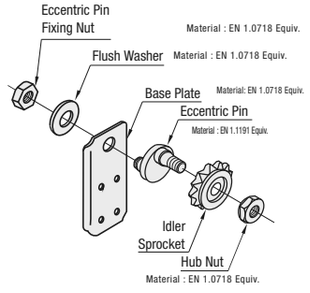


Type	Material	Surface Treatment
Idler Sprockets	EN 1.1181 Equiv. (Tooth Surface: Induction Hardened)	Black Oxide
Base Plate	EN 1.0718 Equiv.	
Spacer		

Part Number Type	No.	Applicable Roller Chain	Idler Sprockets Part No.	Number of Teeth	Do	Dp	A	B	Mass (kg)	Unit Price
THBS	35	JIS35	DRC35-18	18	60	54.85	26	47	0.89	
	40	JIS40	DRC40-15	15	67	61.08			0.92	
	50	JIS50	DRC50-13	13	74	66.34			0.96	
	60	JIS60	DRC60-11	11	76	67.62			1.00	
	80	JIS80	DRC80-9	9	85	74.26	30	51	1.11	

Ordering Example — Part Number: THBS35

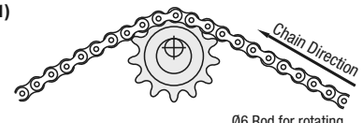
When adjusting tension at the non-drive side, see P1555.



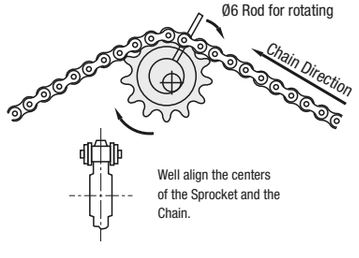
Tension Adjustment Method

By inserting a Ø6 rod in a hole of the eccentric pin and rotating, tension adjustment of max. 50mm can be obtained. Fix base plate so that idler and chain engage each other at a position of max. tension tolerance (Fig. 1), and tighten the eccentric pin nut in chain driving direction.

(Fig. 1)

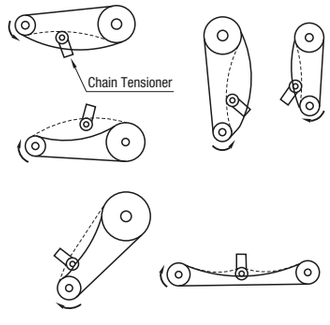


(Fig. 2)



Chain Tensioner Position

Install a chain tensioner on the loose side as shown in the figure below.



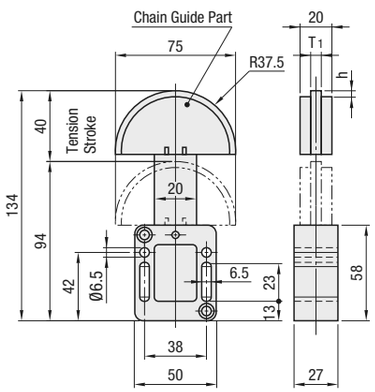
(Note) Do not use the Chain Tensioner under the conditions where it is located on the side of adjusting tensions, such as forward reverse rotary drive.

Chain Guide Tensioners

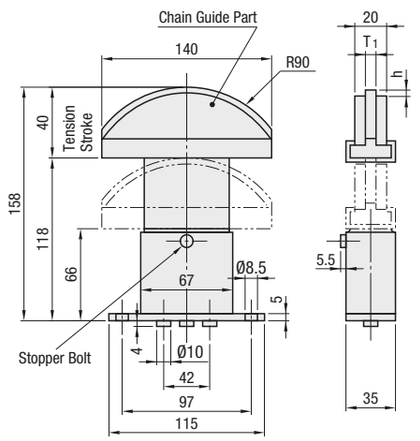
Features: Automatically adjusts tension in response to chain elongation and thus, reduces the time and trouble of doing maintenance for chain tension.

RoHS

TSBXA (Standard)



TSBXB (Tension Adjusting Type)



Operating Temperature: -10 ~ 60°C

Never remove the stopper screw.

Type	Material: Chain Guide	Material: Main Body
TSBXA	Ultra High-Molecular-Weight Polyethylene (Green)	Plastic
TSBXB		Steel

Part Number Type	No.	Load Type (Refer to Fig. 1)	T1	h	Applicable Chain	Unit Price
TSBXA (Standard)	35	L	4	2.6	CHE35	
	35	H				
	40	L	7	2.6	CHE40/CHE50	
	40	H				
	60	H	11	3.5	CHE60	
TSBXB (Tension Adjusting Type)	40	L	6.3	2.6	CHE40	
	40	H				
	50	L	8	2.6	CHE50	
	50	H				

Ordering Example — Part Number: TSBXA40H, TSBXB50L

Features

Ultra High-Molecular-Weight Polyethylene with excellent abrasion resistance is used for the guide part of the Chain Guide Tensioner. Force of built-in spring constantly maintains appropriate tension automatically, and enhances the performance and extends life without maintenance.

How to Install

Install by putting the guide onto the chain, firmly push until reaching a location where the tension stroke does not exceed 50% of that during empty load (40mm).
If necessary, adjust location by using shims or spacers.

Tension Adjusting Method (TSBXB)

For TSBXB, it is possible to adjust tension load in 3 stages by loosening the spring retention screw. During shipment, all 3 pieces of springs are not released. Loosen the center screw when required to release only one maintaining screw, loosen screws on both sides when 2 springs need to be released. Provide enough free space below the retention screw to allow access for tension adjustments after installation.
The springs can be returned to retained state by turning the retention screws while pressing the guide down.

* There is no spring retention screw in TSBXA.

Example

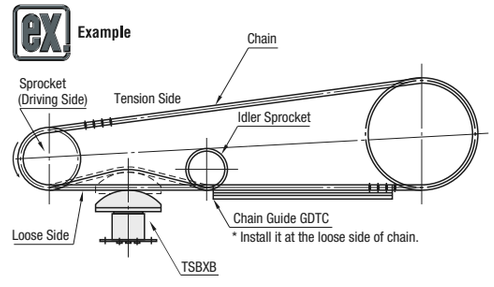


Table 1 : Load Type

Type	Loosening Retaining Screw Qty.	Tension Load (N) Load Type L min.	Load Type L max.	Load Type H min.	Load Type H max.
TSBXA	(Not provided)	37	64	64	137
TSBXB	1 pc.	37	64	64	137
	2 pcs.	75	127	127	274
	3 pcs.	112	191	191	412

• **Example of installation with Bracket (Bracket is not included.)**