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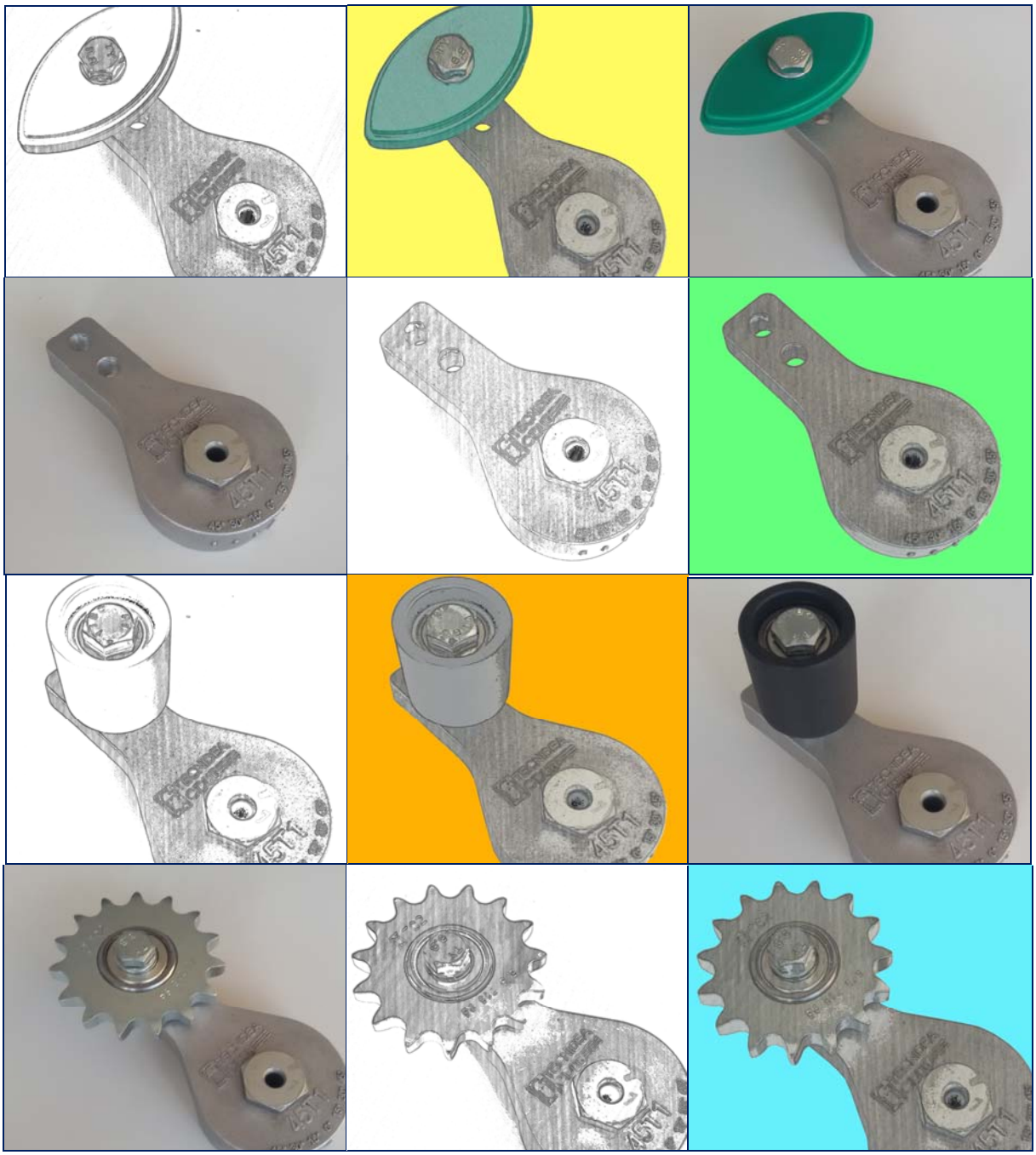
# 45T

C 2017

**BREVETTATO - PATENTED**



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TECNIDEA CIDUE S.r.l.

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001

# 45T "Brevettato – Patented"

ELEMENTO ELASTICO A ROTAZIONE A MOLLA "Brevettato" – TENDICATENA AUTOMATICO – TENDICINGHIA AUTOMATICO – GRUPPO DI PRESSIONE A ROTAZIONE

**Principali caratteristiche:** Struttura in alluminio pressofuso, Superfici liscie, Versatile, Poliedrico, Rotazione ±45°(±60°), Carico sviluppato proporzionale alla rotazione, Molle ingrassate, Innovativi sistemi di personalizzazione.

Gli articoli di Tecnidea Cidue 45T sono elementi elastici con funzionamento a rotazione. All'interno dei due gusci uniti tral loro da una boccola centrale in acciaio sono alloggiate delle molle. La forza di spinta si crea mettendo in rotazione tra loro i due gusci. L'angolo di rotazione di lavoro è ±45° e nella grandezza 45T 1 l'angolo di rotazione massima può arrivare a ±60°. L'installazione dell'elemento e l'azione di precarico avviene mediante chiave esagonale agendo sulla boccola. Il foro centrale filettato presente sulla boccola serve per il fissaggio dell'elemento elastico. La struttura in alluminio pressofuso con superfici liscie permette l'utilizzo in ambienti dove sia richiesta una particolare pulizia senza accumulo di sporco o polveri sui componenti meccanici. Il range di temperatura d'impiego è: -30°C/+130°C. Il principale settore d'impiego degli elementi elastici 45T è quello del tensionamento di catene e cinghie, pertanto nel catalogo sono riportati anche numerosi kit d'interfaccia: pattini in polietilene (tipo OVA, OVR, VR e VB), pignoni tendicatena (tipo NB, IB, KB e ZK), rulli in poliammide (tipo RP), rulli in acciaio (tipo RU), e pulegge per cinghie trapezoidali (tipo PQ). E' possibile inoltre, personalizzare l'elemento elastico 45T con degli accessori USO per aumentare i campi applicativi o la facilità d'impiego: piastrine anti slittamento (tipo R ed RA), sistemi di precarica (tipo PG, PF e PB), finecorsa elettrico (tipo E), un sistema per controllarne il movimento (tipo MC) e ingrassatore (tipo G). Le numerose proposte illustrate nel catalogo sono innovative e quindi meritevoli di copertura brevettuale consentendo inoltre di migliorare lo sviluppo tecnologico di questo settore anche ampliandone le soluzioni tecnico-applicative.

*ELASTIC ELEMENT WITH SPRING ROTATION "patented" – AUTOMATIC CHAIN-TIGHTENER – AUTOMATIC BELT-TIGHTENER – ROTATIONAL PRESSURE UNIT*

***Main features:*** *Structure made of die-cast aluminium, Smooth surfaces, Versatile, Polyhedral, Rotation ±45°(±60°), produced Load proportional to the rotation, Greased springs, Innovative customization systems.*

*The Tecnidea Cidue 45T articles are elastic elements with rotation working. Inside the two shells fixed to each other with a steel central bush are lodged some springs. The pushing force is created by rotating the two shells among them. The working rotation angle is ±45° and in the size 45T 1 the maximum rotation angle can reach the ±60°. The element installation e the preloading operation occur with an hexagonal wrench acting on the bush. The central threaded hole on the bush is to assembly of the elastic element. The die-cast aluminium structure with smooth surfaces allows the use in places where a particular cleanliness is required without the accumulation of dirt or powders on the mechanical components. The working temperature range is: -30°C/+130°C. The elastic elements 45t find their main utilization in the field of blet- and chain-stretching, therefore in the catalogue are also reported the many interface kits: polyethylene sliding block (type OVA, OVR, VR and VB), sprocket wheelseet (type NB, IB, KB and ZK), rollersets in polyamide (type RP), rollersets in steel (tipo RU), and pulleys for V-belts (type PQ). It is also possible to customize the elastic element 45T with some accessories USO to increase the application fields or the easy of use: anti-sliding plates (type R and RA), preloading systems (type PG, PF and PB), travel-end switch (type E), a system to control the movement (type MC) and greaser (type G). The many proposals showed in the catalogue are innovative and thus worthy of patent, allowing for better the technological development of this sector also extending the technical and application solutions.*

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## PRESENTAZIONE ARTICOLI / *PRODUCT RANGE*

| | | | |
|---|---|---|---|
| **45T** pag. 06 | **USO R** pag. 07 | **USO RA** pag. 08 | **USO PG** pag. 08 |
| **USO PF** pag. 09 | **USO PB** pag. 09 | **USO E** pag. 10 | **USO MC** pag. 11 |
| **USO G** pag. 11 | **45TOVA** pag. 13 | **45TOVR** pag. 15 | **45TVB** pag. 17 |
| **45TVR** pag. 19 | **45TKB** pag. 21 | **45TZK** pag. 23 | **45TNB** pag. 25 |
| **45TIB** pag. 26 | **45TRP** pag. 28 | **45TRU** pag. 29 | **45TPQ** pag. 31 |

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• Q Forza di spinta: L'elemento elastico 45T presenta una forza di spinta proporzionale all'angolo di rotazione. Tra i due gusci sono alloggiate delle molle che vengono messe in compressione tramite la rotazione relativa delle due parti.

• Q *Pushing force*: *The elastic element 45T shows a pushing force which is proportional to the rotation angle. Between the two shells are lodged some springs which are put under compression through the relative rotation of the two parts.*

Diagramma di carico per la grandezza **45T 1:**
*Loading diagram for the size **45T 1:***

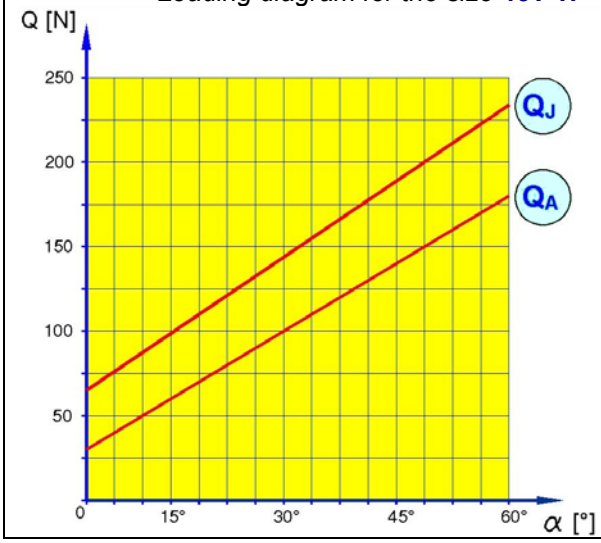
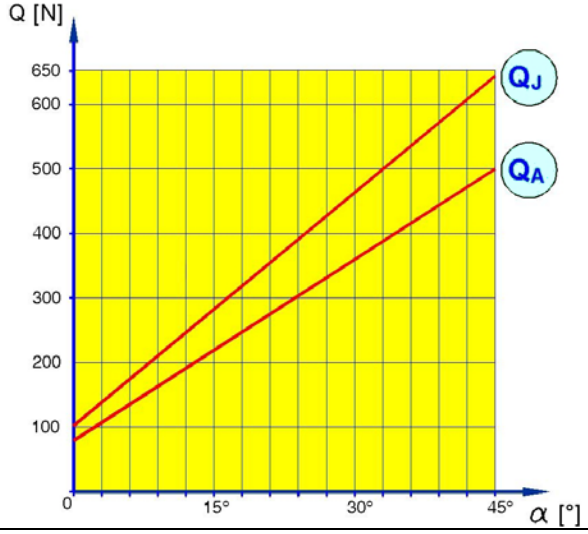
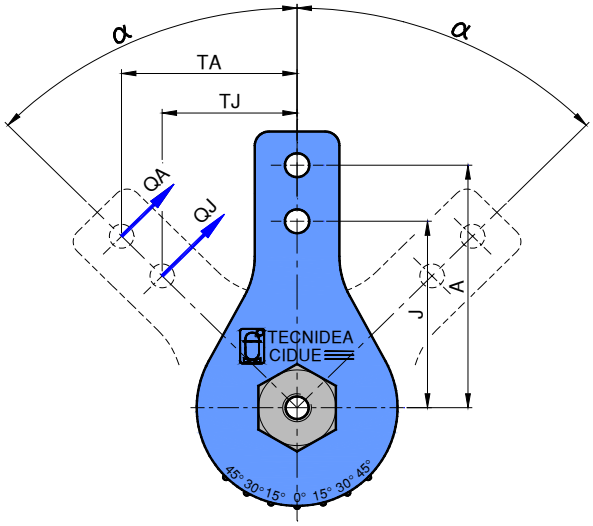



Diagramma di carico per la grandezza **45T 2:**
*Loading diagram for the size **45T 2:***




Legenda / *Key* :

| | | | |
|---|---|---|---|
| α | : | Angolo di rotazione / *Rotation angle* | [°] |
| A | : | Interasse A / *Interaxis A* | [mm] |
| J | : | Interasse J / *Interaxis J* | [mm] |
| $Q_A$ | : | Forza A / *Force A* | [N] |
| $Q_J$ | : | Forza J / *Force J* | [N] |
| $T_A$ | : | Corsa A / *Travel A1* | [mm] |
| $T_J$ | : | Corsa J / *Travel J* | [mm] |



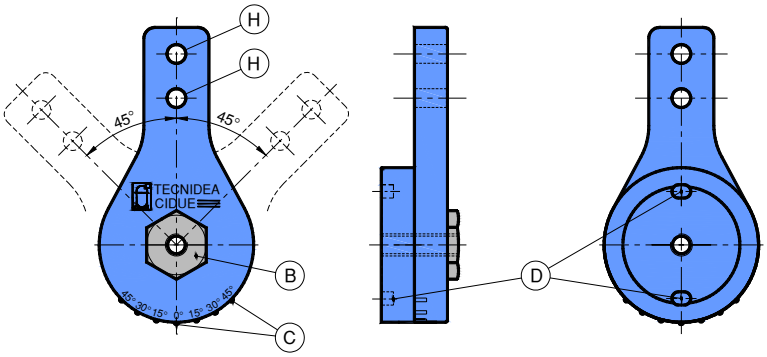

**45T 1**

| α | A | $T_A$ | $Q_A$ | J | $T_J$ | $Q_J$ |
|---|---|---|---|---|---|---|
| 15° | 86.5 | 22.4 | 50 | 66.5 | 17.2 | 65 |
| 30° | 86.5 | 43.2 | 100 | 66.5 | 33.2 | 142 |
| 45° | 86.5 | 61.2 | 140 | 66.5 | 47.0 | 185 |
| 60° | 86.5 | 74.9 | 180 | 66.5 | 57.6 | 234 |

**45T 2**

| α | A | $T_A$ | $Q_A$ | J | $T_J$ | $Q_J$ |
|---|---|---|---|---|---|---|
| 15° | 100 | 25.9 | 220 | 78 | 20.2 | 282 |
| 30° | 100 | 50.0 | 360 | 78 | 39.0 | 461 |
| 45° | 100 | 70.7 | 500 | 78 | 55.1 | 640 |

• Informazioni tecniche / *Technical information*:




H: Fori di posizionamento kit.
B: La boccola centrale può essere utilizzata per precaricare l'elemento elastico in fase di montaggio in entrambi i sensi di rotazione mediante una chiave inglese.
C: Sull'elemento elastico sono presenti delle tacche di riferimento angolare che permettono sia di visualizzare la rotazione in fase di precarica sia di controllare l'allungamento della catena (o della cinghia) durante il lavoro.
D: Nicchie di alloggiamento spine di reazione per evitare eventuali slittamenti.
*H: Kit positioning holes.*
*B: The central bush can be used to preload the elastic element during the installation in both directions through a spanner.*
*C: On the elastic element there are some angular reference notches which allow both to visualize the rotation during the preload phase and to check the elongation of the chain (or of the belt) during the work.*
*D: Slot niches reaction pins to avoid possible slippings.*

• Istruzioni di montaggio: / *Assembly Instruction:*

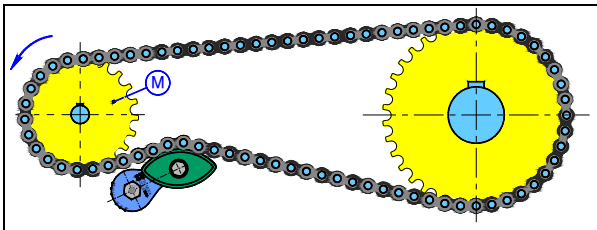



Fig. 1 Montaggio corretto con azionamento dall'esterno.
*Fig. 1 Correct assembly with activation from the outside.*
Ulteriori istruzioni a pag.12 / *Further instruction on pag.12*

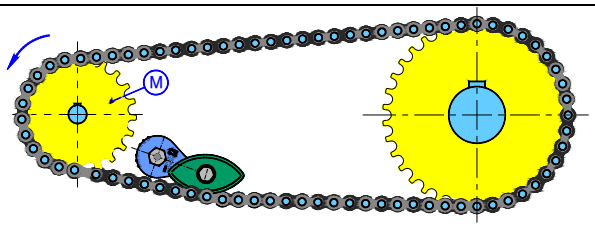
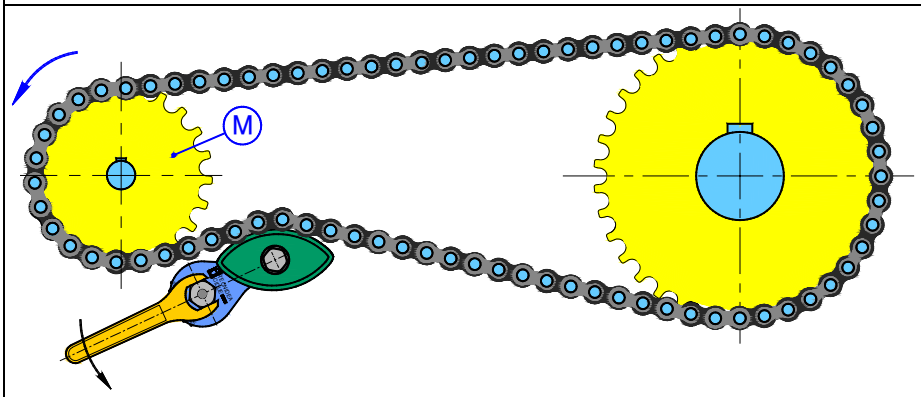
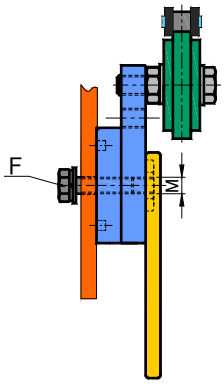



Fig. 2 Montaggio corretto con azionamento dall'interno.
*Fig. 2 Correct assembly with activation from the inside.*

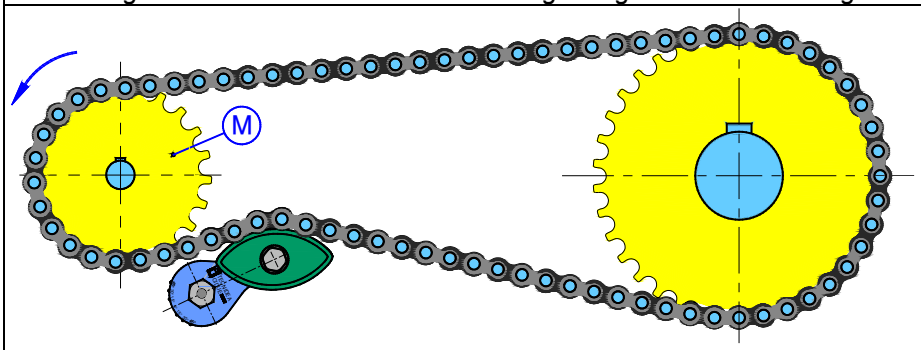
A) Montaggio su piastra passante: / *Assembly on passing plate*:

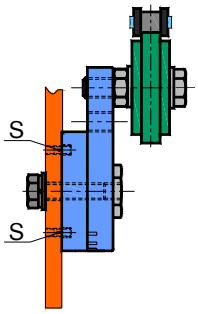
1) Con vite F di fissaggio lenta, il tenditore va posizionato sul tratto lento della trasmissione il più vicino possibile al pignone motore M. / *With slow fixing screw F, the tightener must be positioned on the slow section of the transmission, as closer as possible to the motor sprocket M.*



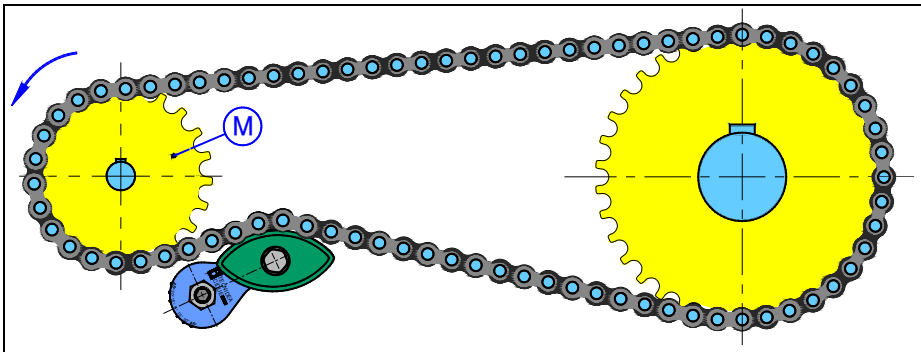

2) Mantenendo la vite di fissaggio F lenta, con l'aiuto di una chiave inglese caricare il tenditore fino all'angolo di rotazione desiderato. Successivamente stringere la vite di fissaggio F. / *Keeping the slow fixing screw F, with the help of a spanner load the tightener until the desired rotation angle. Tighten then the fixing screw F.*

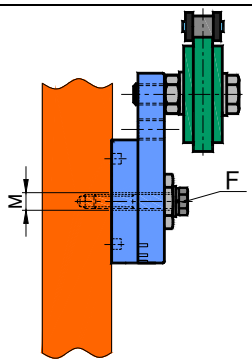



3) Dopo il fissaggio della vite M, Per evitare eventuali slittamenti, si può inserire una spina di reazione in una delle nicchie di alloggiamento S. / *After the fixing of the M screw, in order to avoid possible slippings, one reaction pin may be inserted in the S slot niches.*

B) Montaggio su piastra cieca: / *Assembly on blind plate:*



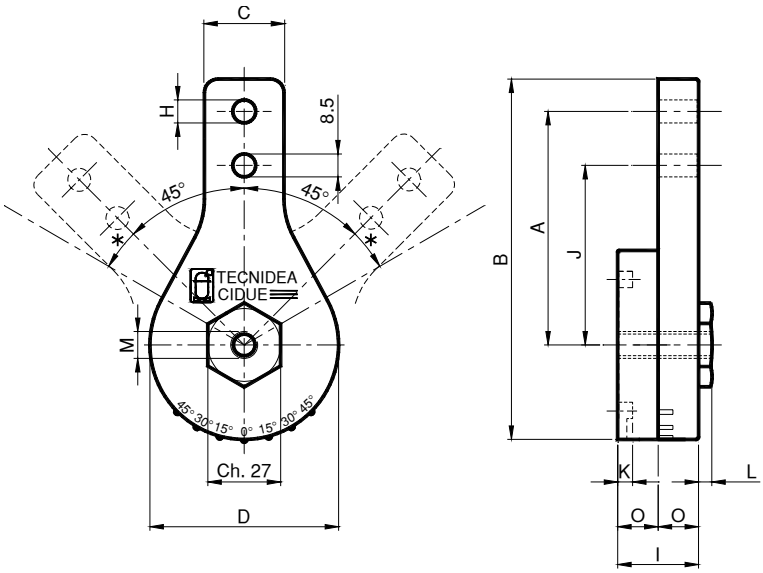




4) Per un montaggio frontale (ad esempio su piastre "cieche") si possono seguire le istruzioni 1 e 2, ma utilizzando una vite di fissaggio F con dimensione minore del foro filettato M della boccola centrale.
*For a central assembly (for example on "blind" plates) instructions 1 and 2 can be followed, but using a fixing screw F with a smaller size than the threaded hole M of the central bush.*

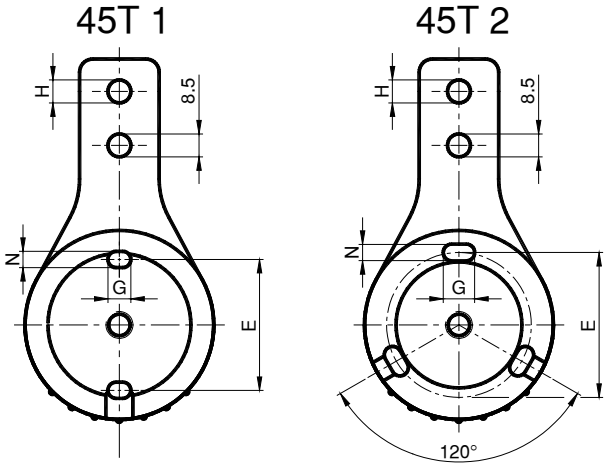
## Elementi elastici a rotazione - Tipo: **45T** / *Rotating elastic elements - Type:* ***45T***

**MATERIALI** Alluminio. Molle e boccola di scorrimento in acciaio.
**TRATTAMENTI** Particolari in alluminio sabbiati. Boccola zincata. Molle grezze ingrassate.
**IMPIEGO** Elemento elastico a rotazione generalmente utilizzato come tendicatena/tendicinghia o gruppo di pressione. Angolo di rotazione di lavoro: ±45°. I fori H consentono il posizionamento dei kit sui bracci A ed J a seconda del carico desiderato. Campo d'impiego: -30°C/+130°C.

***MATERIALS:*** *Cast aluminium. Springs and exagonal bush are made by steel.*
***TREATMENTS*** *Alluminium parts are sandblasted. Bush is zinc plated. Springs are in rough greased steel.*
***USE*** *Rotating elastic element normally used as chain/belt tensioner or down-holder/pressure unit. Working rotational angle: ±45. The holes H allow the positioning of the kits on the arms A and J depending on the desired load. Application range: -30°C /+130°C.*




Esecuzione / *Esecution*:




*= 45T 1: Angolo di rotazione max: ±60° / *45T 1: Maximum rotational angle:* ±60°

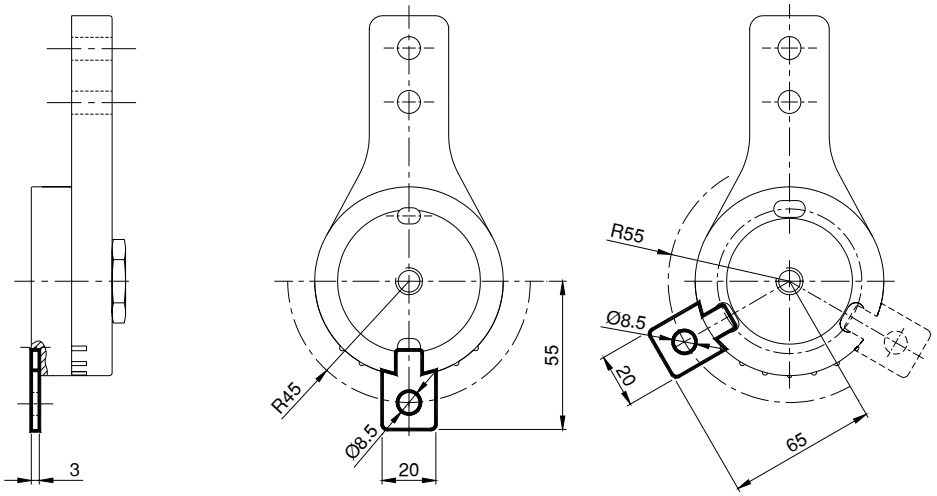
| Tipo *Type* | Cod. N° | A | B | C | D | E | G | H | I | J | K | L | M | N | O | Newton QA max | Newton QJ max | Peso *Weight* in Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **45T 1-8** | AS010900 | 86.5 | 133.5 | 29.5 | 70 | 48.5 | 8.5 | 8.5 | 30 | 66.5 | 5.5 | 5 | M10 | 6 | 15 | 180 | 234 | 0.35 |
| **45T 1-10** | AS010901 | 86.5 | 133.5 | 29.5 | 70 | 48.5 | 8.5 | 10.5 | 30 | 66.5 | 5.5 | 5 | M10 | 6 | 15 | 180 | 234 | 0.35 |
| **45T 1-M10** | AS010902 | 86.5 | 133.5 | 29.5 | 70 | 48.5 | 8.5 | M10 | 30 | 66.5 | 5.5 | 5 | M10 | 6 | 15 | 180 | 234 | 0.35 |
| **45T 1-12** | AS010903 | 86.5 | 133.5 | 29.5 | 70 | 48.5 | 8.5 | 12.5 | 30 | 66.5 | 5.5 | 5 | M10 | 6 | 15 | 180 | 234 | 0.35 |
| **45T 1-M12** | AS010904 | 86.5 | 133.5 | 29.5 | 70 | 48.5 | 8.5 | M12 | 30 | 66.5 | 5.5 | 5 | M10 | 6 | 15 | 180 | 234 | 0.35 |
| **45T 1-M16** | AS010907 | 86.5 | 133.5 | 29.5 | 70 | 48.5 | 8.5 | M16 | 30 | 66.5 | 5.5 | 5 | M10 | 6 | 15 | 180 | 234 | 0.35 |
| **45T 2-10** | AS010910 | 100 | 160 | 34 | 90 | 69 | 15 | 10.5 | 36 | 78 | 7.5 | 7 | M12 | 8 | 18 | 500 | 640 | 0.89 |
| **45T 2-M10** | AS010911 | 100 | 160 | 34 | 90 | 69 | 15 | M10 | 36 | 78 | 7.5 | 7 | M12 | 8 | 18 | 500 | 640 | 0.89 |
| **45T 2-12** | AS010912 | 100 | 160 | 34 | 90 | 69 | 15 | 12.5 | 36 | 78 | 7.5 | 7 | M12 | 8 | 18 | 500 | 640 | 0.89 |
| **45T 2-M12** | AS010913 | 100 | 160 | 34 | 90 | 69 | 15 | M12 | 36 | 78 | 7.5 | 7 | M12 | 8 | 18 | 500 | 640 | 0.89 |
| **45T 2-16** | AS010915 | 100 | 160 | 34 | 90 | 69 | 15 | 16.5 | 36 | 78 | 7.5 | 7 | M12 | 8 | 18 | 500 | 640 | 0.89 |
| **45T 2-M16** | AS010916 | 100 | 160 | 34 | 90 | 69 | 15 | M16 | 36 | 78 | 7.5 | 7 | M12 | 8 | 18 | 500 | 640 | 0.89 |
| **45T 2-20** | AS010919 | 100 | 160 | 34 | 90 | 69 | 15 | 20.5 | 36 | 78 | 7.5 | 7 | M12 | 8 | 18 | 500 | 640 | 0.89 |
| **45T 2-M20** | AS010920 | 100 | 160 | 34 | 90 | 69 | 15 | M20 | 36 | 78 | 7.5 | 7 | M12 | 8 | 18 | 500 | 640 | 0.89 |

Montaggio: il tenditore può essere fissato su entrambi i lati. Le istruzioni di montaggio sono illustrate a pag.5 .
*Installation: the tightener can be fixed on both sides. The assembly instructions are illustrated on page 5 .*

## Antirotazione – Tipo: USO **R** / *Antirotation – Type: USO **R***

Esecuzione / *Esecution*:

45T 1 45T 2



**MATERIALI** Acciaio.
**TRATTAMENTI** Zincatura elettrolitica.
**IMPIEGO** L'accessorio antirotazione USO **R** viene utilizzato per fissare l'elemento elastico ed evitare che possa slittare durante il funzionamento. L'accessorio si inserisce all'interno della cava già predisposta sulla base dell'elemento elastico.
Per ordine: Tipo USO **R1** Cod. n° AS011200
Tipo USO **R2** Cod. n° AS011201

***MATERIALS*** *Steel.*
***TREATMENTS*** *Electrolytic zinc plated.*
***DUTY*** *The USO R anti-rotation accessory is used to fix the elastic element and to prevent it from sliding during operation. The accessory fits into the already arranged space on the basis of the elastic element.*
*In order: Type USO **R1** Cod. n° AS011200*
*Type USO **R2** Cod. n° AS011201*

Esempio di ordinazione:

Tutti gli accessori o personalizzazioni tipo USO (riportati nel catalogo da pagina 7 a pagina 11) devono essere ordinati abbinati ad un elemento elastico 45T di pagina 6 o ad un elemento tendicatena/tendicinghia riportati nel catalogo da pagina 12 a pagina 31.

Esempio 1:

45T 1-M10 USO R1 (AS010902 + AS011200)

Ovvero un elemento elastico semplice con accessorio antislittamento.

Esempio 2:

45T1OVA3S USO G (AS010902 + AS010931 + AS011240)

Ovvero un elemento tendicatena con pattino ovale per catena 08-B1 e ingrassatore.

*Order example:*

*All the accessories or customizations type USO ( reported in the catalogue from page 7 to page 11) have to be ordered coupled with a 45T elastic element on page 6 or with a chain- or belt-tightener element reported in the catalogue from page 12 to page 25.*

*Example 1:*

*45T 1-M10 USO R1 (AS010902 + AS011200)*

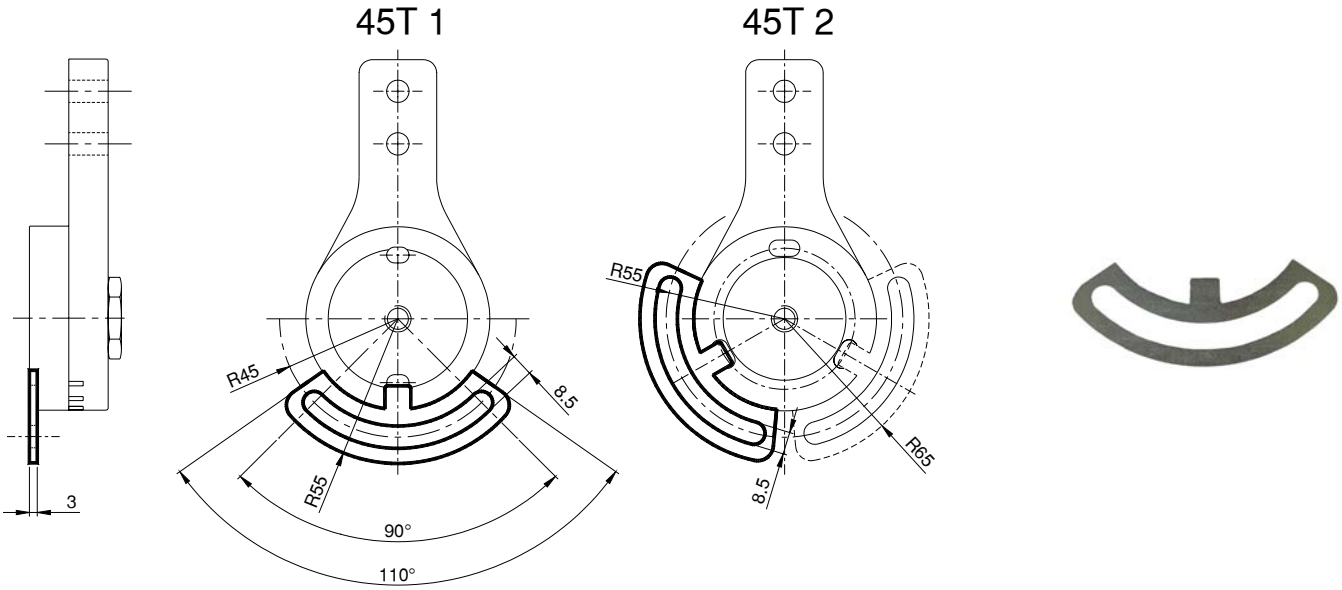
*Namely a simple elastic element with anti-sliding accessory.*
*Example 2:*

*45T1OVA3S USO G (AS010902 + AS010931 + AS011240)*

*Namely a chain tightener element with sliding block with oval form for chain with pitch 08-B1 and greaser.*

## Antirotazione con asola – Tipo: USO **RA** / *Antirotation with slot – Type: USO **RA***

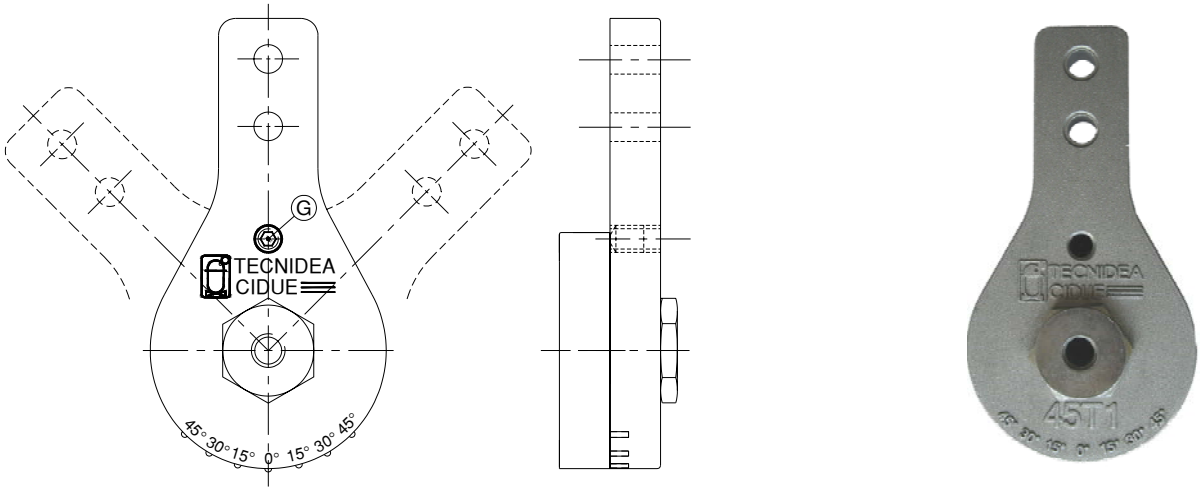
Esecuzione / *Esecution*:




**MATERIALI** Acciaio.
**TRATTAMENTI** Zincatura elettrolitica.
**IMPIEGO** L'accessorio antirotazione USO **RA** viene utilizzato per fissare l'elemento elastico ed evitare che possa slittare durante il funzionamento. L'accessorio si inserisce all'interno della cava già predisposta sulla base dell'elemento elastico. Il particolare disegno di questo accessorio permette un fissaggio lunga tutta l'asola.
Per ordine: Tipo USO **RA1** Cod. n° AS011205
Tipo USO **RA2** Cod. n° AS011206

***MATERIALS*** *Steel.*
***TREATMENTS*** *Electrolytic zinc plated.*
***DUTY*** *The USO **RA** anti-rotation accessory is used to fix the elastic element and to prevent it from sliding during operation. The accessory fits into the already arranged space on the basis of the elastic element. The particular drawing of this accessory allows a fixing along the whole slot.*
*In order: Type USO **RA1** Cod. n° AS011205*
*Type USO **RA2** Cod. n° AS011206*

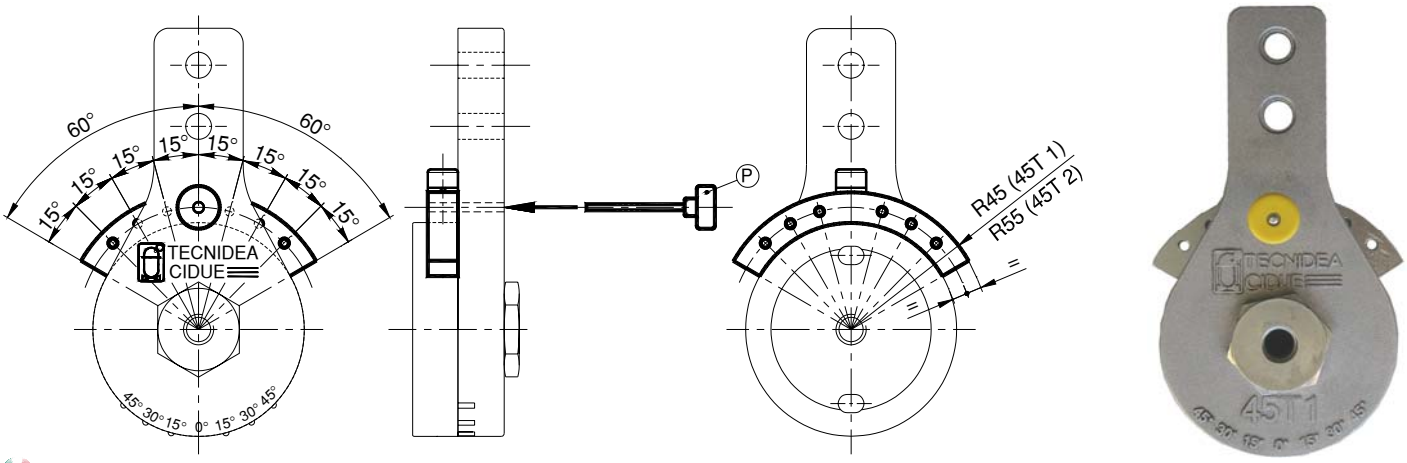
## Sistema di precarica con grano – Tipo: USO **PG** / *Preloading system with grub screw – Type: USO **PG***




**IMPIEGO** Il sistema di precarica USO **PG** permette agendo sul grano G di bloccare l'elemento elastico all'angolo di rotazione desiderato. Dopo l'installazione il grano G va allentato per poter far lavorare l'elemento elastico.
Per ordine: Tipo **USO PG1** Cod. n° AS011210
Tipo **USO PG2** Cod. n° AS011211

***DUTY*** *The USO **PG** preloading system allows, acting on the preloading screw, to block the elastic element to the rotation angle wanted. After the assembly, the G preloading screw has to be loosened in order to let the elastic element works. In order: Type USO **PG1** Cod. n° AS011210*
*Type USO **PG2** Cod. n° AS011211*

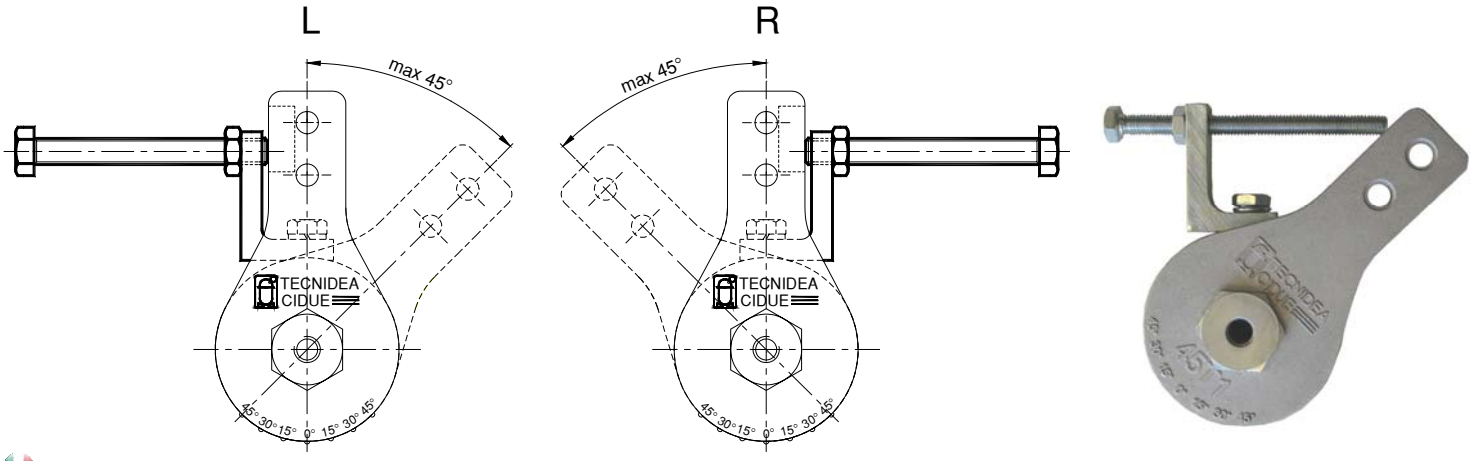
## Sistema di precarica con piolo – Tipo: USO **PF** / *Preloading system with pin – Type: USO **PF***




**MATERIALI** Acciaio.
**TRATTAMENTI** Zincatura elettrolitica.
**IMPIEGO** L'accessorio USO **PF** permette di precaricare l'elemento elastico mediante una spina P con settori multipli di 15° fino ad un massimo di 60°. Una volta che il tenditore è installato sulla trasmissione rimuovere la spina P.
Per ordine: Tipo USO **PF1** Cod. n° **AS011215**
Tipo USO **PF2** Cod. n° **AS011216**

***MATERIALS*** *Steel.*
***TREATMENTS*** *Electrolytic zinc plated.*
***DUTY*** The USO **PF** accessory allows to preload the elastic element through a P pin with multiple sectors of 15° up to a maximum of 60°. Once the tightener is installed on the transmission remove the P pin.
*In order: Type USO **PF1** Cod. n° **AS011215***
*Type USO **PF2** Cod. n° **AS011216***

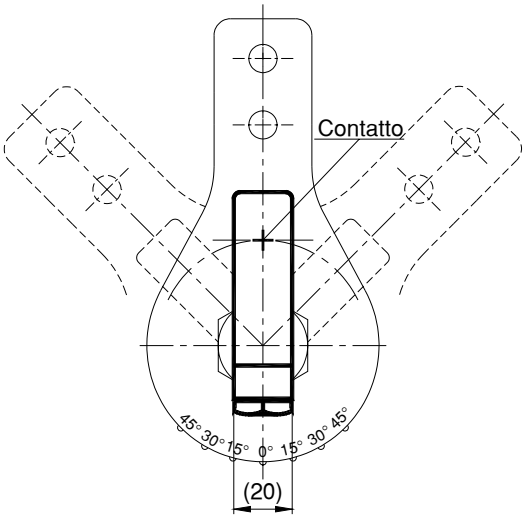
## Sistema di precarica con vite di reazione – USO **PB** / *Preloading system with reaction screw – USO **PB***

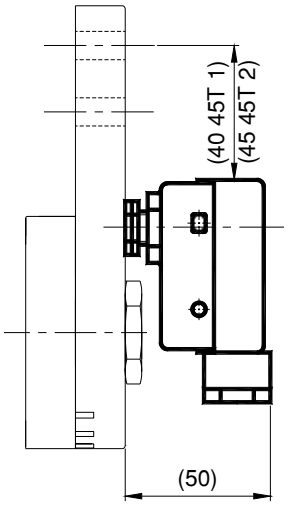



**MATERIALI** Acciaio.
**TRATTAMENTI** Zincatura elettrolitica.
**IMPIEGO** Il sistema di precarica USO **PB** permette di precaricare l'elemento elastico tramite un braccio di reazione esterno. Una volta installato sull'impianto la vite M deve essere rimossa. Questo accessorio, oltre alla funzione di precarica può essere utilizzato anche come blocco alla rotazione ad un angolo desiderato. La modalità costruttiva dell'accessorio può influire sull'ingombro nel posizionamento del kit. Vi suggeriamo di contattare il nostro ufficio tecnico per la determinazione del montaggio dell'elemento elastico con l'eventuale kit.
Per ordine: Tipo USO **PB1** Cod. n° **AS011220** (indicare esecuzione L o R)
Tipo USO **PB2** Cod. n° **AS011222** (indicare esecuzione L o R)

***MATERIALS*** *Steel*
***TREATMENTS*** *Electrolytic zinc plated.*
***DUTY*** *The preloading system USO **PB** allows to preload the elastic element through tramite an external reaction arm. Once installed on the system, the screw M must be removed. This accessory, in addition to its preloading function can be used also as block to the rotation wanted. The construction way of the accessory can influence the obstruction in the positioning of the kit. We suggest to contact our technical office for the determination of the assembly of the elastic element with the possible kit.*
*In order: Type USO **PB1** Cod. n° **AS011220** (indicate implementation L or R)*
*Type USO **PB2** Cod. n° **AS011222** (indicate implementation L or R)*

## Finecorsa elettrico – Tipo: USO **E** / *Travel-end switch – Type: USO **E***

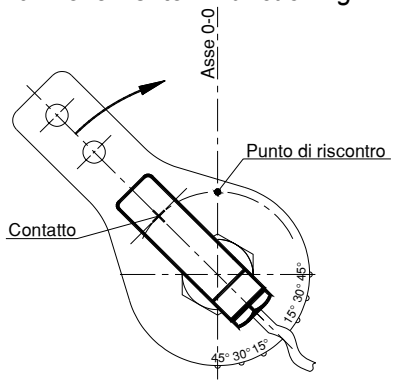


**IMPIEGO** Il finecorsa elettrico USO **E** consente di controllare e verificare il corretto funzionamento delle macchine, ma anche di ricevere o di dare dei segnali di comando per l'espletamento di funzioni meccaniche, inoltre è particolarmente utile quando si voglia garantire l'integrità della macchina e/o salvaguardare l'incolumità degli operatori.
Per ordine: Tipo USO **E1** Cod. n° **AS011230**
Tipo USO **E2** Cod. n° **AS011231**

***DUTY*** *The travel-end switch USO **E** allows to control and to check the correct functioning of the machines, but also to receive or to give control signals for the carrying out of the mechanical functions, moreover it is particularly useful when you want to grant the integrity of the machine and /or where the workers' safety must be protected.*
*In order: Type USO **E1** Cod. n° **AS011230***
*Type USO **E2** Cod. n° **AS011231***

Funzionamento: / *Functioning:*




Il contatto avviene quando il sensore ed il punto R di riscontro combaciano.
*The contact occurs when the sensor and the point R correspond.*

Posizioni di montaggio: / *Mounting positions*:

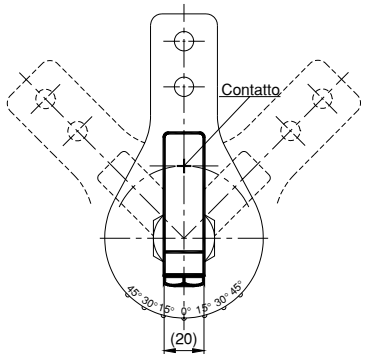



fig. 1: POS A

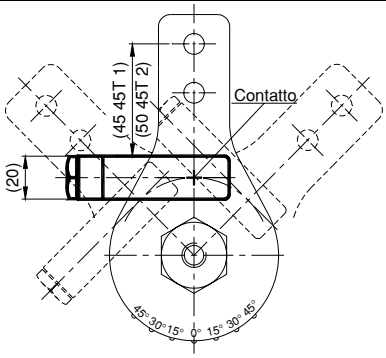



fig. 2: POS B

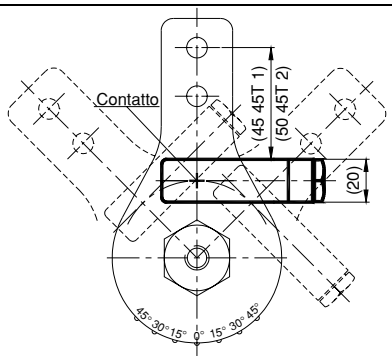



fig. 3: POS C

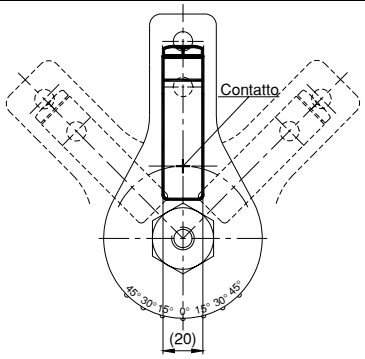



fig. 4: POS D

Schema elettrico: / *Electrical diagram:*

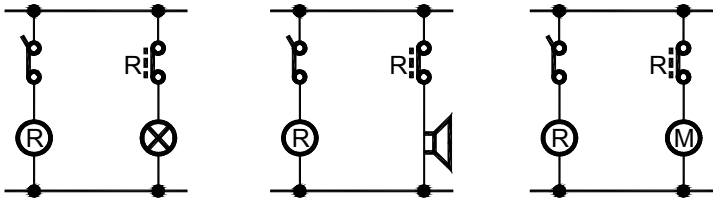
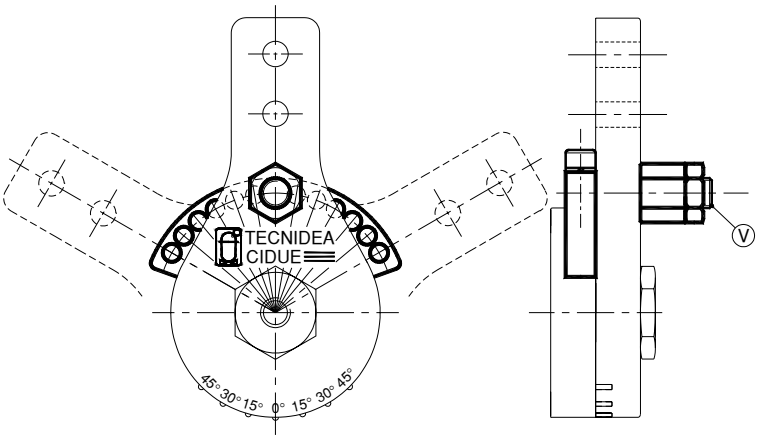



fig. 5

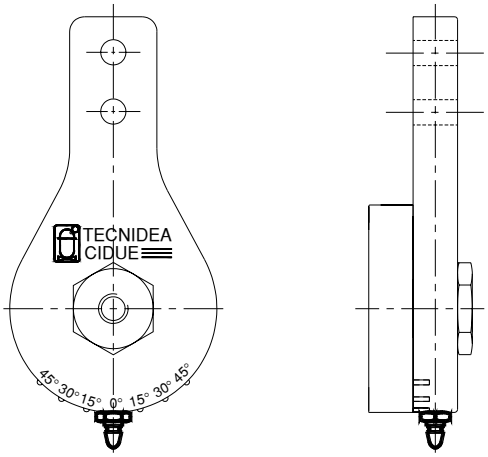
## Movimento controllato – Tipo: USO **MC** / *Controlled movement – Type: USO **MC***



**MATERIALI** Acciaio.
**TRATTAMENTI** Zincatura elettrolitica.
**IMPIEGO** L'accessorio USO **MC** permette di controllare il movimento dell'elemento elastico in maniera graduale. La rotazione è subordinata alla forza di ritenuta fra uno scatto e l'altro ogni 10°.
Per ordine: Tipo USO **MC1** Cod. n° **AS011235**
Tipo USO **MC2** Cod. n° **AS011236**

***MATERIALS** Steel*
***TREATMENTS** Electrolytic zinc plated.*
***DUTY** The accessory USO **MC** allows to control the movement of the elastic element gradually. The rotation is subject to the holding force between a release and another every 10°.*
*In Order: Type USO **MC1** Cod. n° **AS011235***
*Type USO **MC2** Cod. n° **AS011236***

## Ingrassatore – Tipo: USO **G** / *Greaser – Type: USO **G***

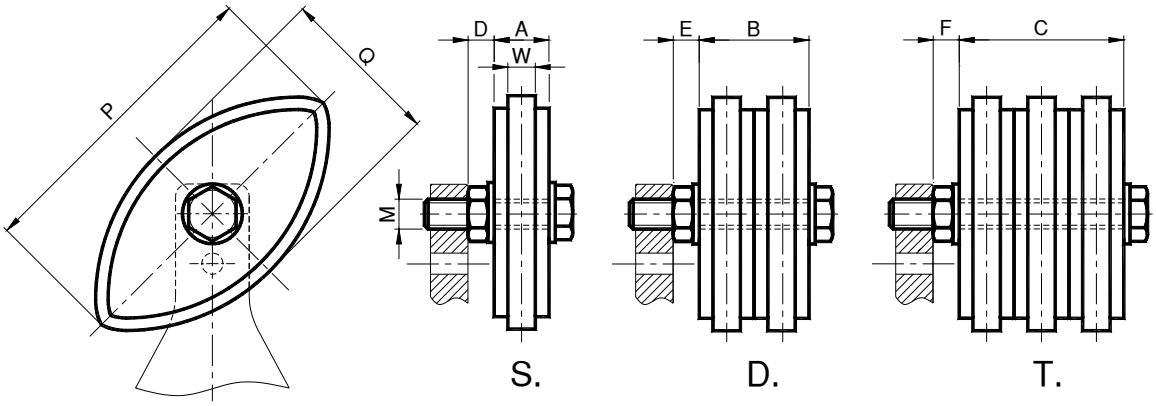


**MATERIALI** Acciaio.
**TRATTAMENTI** Zincatura elettrolitica.
**IMPIEGO** L'accessorio ingrassatore USO **G** consente di lubrificare le molle del tenditore.
Per ordine: Tipo USO **G1** Cod. n° **AS011240**
Tipo USO **G2** Cod. n° **AS011241**

***MATERIALS** Steel.*
***TREATMENTS** Electrolytic zinc plated.*
***DUTY** The greaser accessory USO **G** allows to grease the tightener springs.*

*In order: Type USO **G1** Cod. n° **AS011240***
*Type dfUSO **G2** Cod. n° **AS011241***

## Pattino in polietilene – Tipo: **OVA** / *Polyethylene sliding block – Type: **OVA***

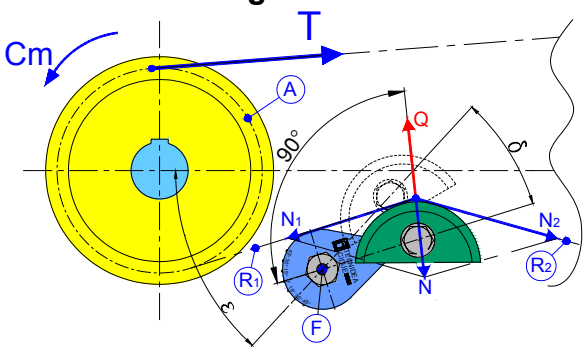


**MATERIALI** Pattino in polietilene ad alta densità molecolare. Viti in acciaio zincato.
**IMPIEGO** Profilo semicircolare adatto per medi e grandi interassi.
Velocità di lavoro ≤20 m/min.
Temperatura di lavoro del pattino ≤70°C.

***MATERIALS*** *Sliding block made of high molecular density polyethylene. Zinc plated bolts.*
***USE*** *Semi-circular profile suitable for medium and large interaxis.*
*Operating speed ≤20 m/min.*
*Operating sliding block temperature ≤70°C.*

| Tipo *Type* | S Cod. N° | D Cod. N° | T Cod. N° | Catena *Chain* | A | B | C | D | E | F | M | P | Q | W | Peso *Weight* in Kg | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | S. | D. | T. |
| **OVA 10-1** | AR071530 | AR071540 | | 3/8”x7/32” | 10.2 | 20.4 | | 6.5 | 6.5 | | M8 | 75 | 40 | 5 | 0.09 | 0.10 | |
| **OVA 20-1** | | | AR071550 | 3/8”x7/32” | | | 30.6 | | | 8 | M10 | 75 | 40 | 5 | | | 0.13 |
| **OVA 30-2** | AR071533 | AR071542 | AR071552 | 1/2"x5/16” | 13.9 | 27.8 | 41.7 | 8 | 8 | 8 | M10 | 96 | 50 | 7 | 0.10 | 0.10 | 0.14 |
| **OVA 30-3** | AR071535 | AR071544 | | 5/8”x 3/8” | 16.6 | 33.2 | | 8 | 8 | | M10 | 126 | 65 | 9 | 0.12 | 0.12 | |
| **OVA 40-3** | | | AR071556 | | | | 49.8 | | | 9.5 | M12 | 126 | 65 | 9 | | | 0.27 |
| **OVA 40-4** | AR071538 | AR071548 | AR071558 | 3/4"x7/16” | 19.5 | 39.0 | 58.5 | 9.5 | 9.5 | 9.5 | M12 | 148 | 74 | 12 | 0.15 | 0.25 | 0.28 |

## NEWS: Forze in gioco / *Forces at work*

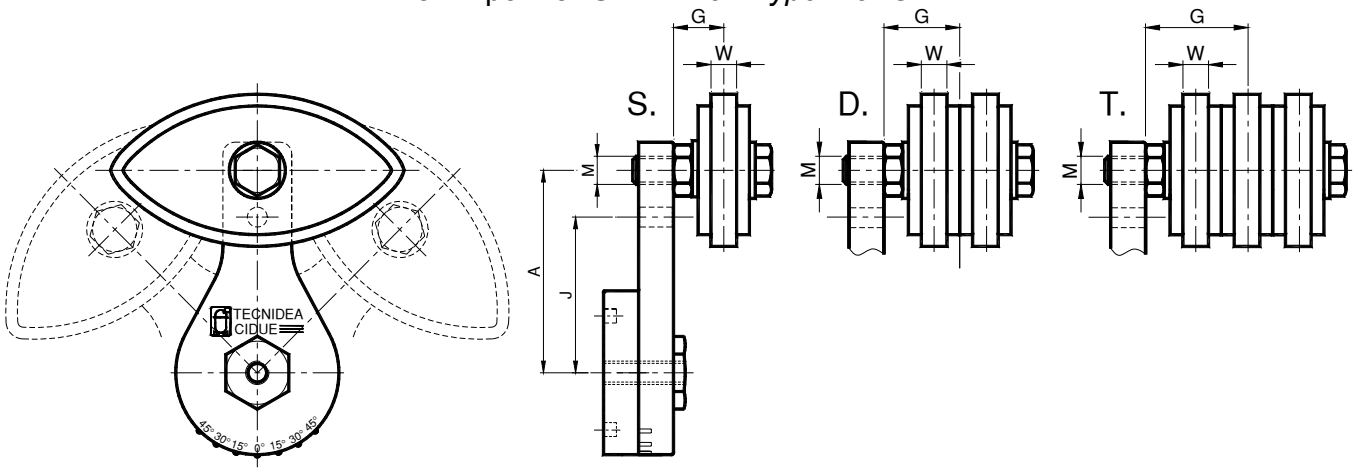



A = ruota dentata motrice / *driving toothed wheel*
T = tensione sul ramo teso / *tension on the tensed branch*
$C_m$ = coppia motrice / *motor torque*
$R_1$ = ramo della catena in entrata nel tenditore / *section of chain entering the tightener*
$R_2$ = ramo della catene in uscita dal tenditore / *section of chain leaving the tightener*
F = fulcro o punto di rotazione / *fulcrum or point of rotation*
Q = forza sprigionata del tenditore / *force released by the tightener*
N = forza di reazione della catena / *chain reaction force*
$N_1$ = componente di N sul ramo $R_1$ / *component of N on section $R_1$*
$N_2$ = componente di N sul ramo $R_2$ / *component of N on section $R_2$*
δ = angolo di lavoro del tenditore / *tightener positioning angle*
ε = angolo di posizionamento del tenditore / *tightener positioning angle*

Un tenditore sprigiona una forza Q perpendicolare al braccio di rotazione che per reazione è equilibrata dalla catena con la forza N che si ripartisce con le forze di trazione $N_1$ e $N_2$ sui rami in entrata e uscita dal tendicatena rispettivamente $R_1$ e $R_2$. Quando si posiziona un tendicatena a rotazione bisogna far attenzione che le forze Q e N siano il più possibile sulla medesima direttrice in modo che non si sviluppino delle componenti tangenziali che vadano a scaricarsi sul fulcro. Il posizionamento del tenditore, quindi, dipende dall’angolo δ, ovvero l’angolo di lavoro dell’elemento elastico, e dall’angolo ε, ovvero l’angolo di posizionamento rispetto alla trasmissione. Il progettista dovrà quindi trovare il giusto rapporto tra questi parametri in funzione della geometria della propria trasmissione.

*A tightener releases a force Q perpendicular to the rotation arm which by reaction is balanced by the chain with the force N which is distributed with the traction forces $N_1$ and $N_2$ on the sections entering and leaving the chain tightener, respectively $R_1$ and $R_2$. When positioning a chain tightener, you must ensure that the forces Q and N are as much as possible on the same line so that there is no formation of tangential components which would be discharged on the fulcrum. The positioning of the tightener therefore depends on the angle δ, that is the working angle of the elastic element, and on the angle ε, that is the positioning angle with respect to the transmission. So the designer must find the right ratio between these parameters according to the geometry of his transmission.*

## **45T** Tipo: **45TOVA** – ***45T** Type: **45TOVA***



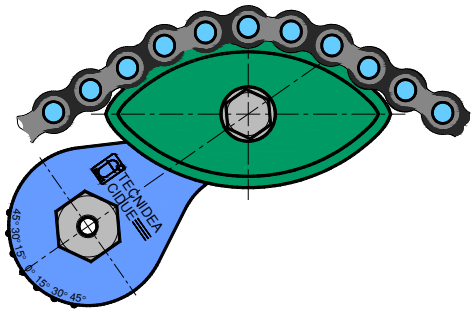

Il tenditore 45TOVA è composto dall'elemento 45T e dal kit per tendicatena OVA. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

*The tensioner 45TOVA is composed by the element 45T and the chaintensioner kit OVA. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

| **Catena *Chain* DIN 8187** | **45T + OVA** | **45T** | | **OVA** | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pag. 06 | | Pag. 12 | | **G** | **M** | **W** |
| 06-B1 | **45T1OVA1S** | 45T 1-8 | AS010900 | *OVA 10-1 S | AR071530 | 6.6 | M 8 | 5 |
| 08-B1 | **45T1OVA2S** | 45T 1-M10 | AS010902 | OVA 30-2 S | AR071533 | 14.9 | M10 | 7 |
| 10-B1 | **45T1OVA3S** | 45T 1-M10 | AS010902 | OVA 30-3 S | AR071535 | 16.3 | M10 | 9 |
| 10-B1 | **45T2OVA3S** | 45T 2-M10 | AS010911 | OVA 30-3 S | AR071535 | 16.3 | M10 | 9 |
| 12-B1 | **45T2OVA4S** | 45T 2-M12 | AS010913 | OVA 40-4 S | AR071538 | 19.2 | M12 | 11 |
| 06-B2 | **45T1OVA1D** | 45T 1-8 | AS010900 | *OVA 10-1 D | AR071540 | 11.7 | M 8 | 5 |
| 08-B2 | **45T1OVA2D** | 45T 1-M10 | AS010902 | OVA 30-2 D | AR071542 | 21.9 | M10 | 7 |
| 10-B2 | **45T1OVA3D** | 45T 1-M10 | AS010902 | OVA 30-3 D | AR071544 | 24.6 | M10 | 9 |
| 10-B2 | **45T2OVA3D** | 45T 2-M10 | AS010911 | OVA 30-3 D | AR071544 | 24.6 | M10 | 9 |
| 12-B2 | **45T2OVA4D** | 45T 2-M12 | AS010913 | OVA 40-4 D | AR071548 | 29.0 | M12 | 11 |
| 06-B3 | **45T1OVA1T** | 45T 1-M10 | AS010902 | OVA 20-1 T | AR071550 | 23.3 | M10 | 5 |
| 08-B3 | **45T1OVA2T** | 45T 1-M10 | AS010902 | OVA 30-2 T | AR071552 | 28.8 | M10 | 7 |
| 10-B3 | **45T1OVA3T** | 45T 1-M12 | AS010904 | OVA 40-3 T | AR071556 | 34.4 | M12 | 9 |
| 10-B3 | **45T2OVA3T** | 45T 2-M12 | AS010913 | OVA 40-3 T | AR071556 | 34.4 | M12 | 9 |
| 12-B3 | **45T2OVA4T** | 45T 2-M12 | AS010913 | OVA 40-4 T | AR071558 | 38.75 | M12 | 11 |

*OVA 10-1 S / OVA 10-1 D : il dado va montato dopo il braccio tenditore

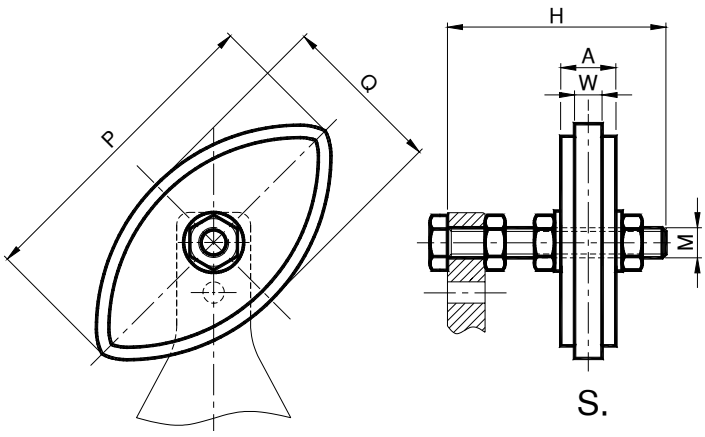
* *OVA 10-1 S / OVA 10-1 D : the nut must be assembled after the tensioner*




Il pattino OVA consente un'elevata durata di funzionamento in quanto oltre a consentire l'appoggio su più rulli della catena, quindi minor usura, permette di utilizzare un secondo profilo di scorrimento ruotando il pattino.

*The OVA sliding block allows an high functional durability as not only allows the support on several chain rollers, which means less wear, but also allows the use of a second sliding profile when rotating the sliding block.*

## Pattino in polietilene – Tipo: **OVR** / *Polyethylene sliding block – Type: **OVR***

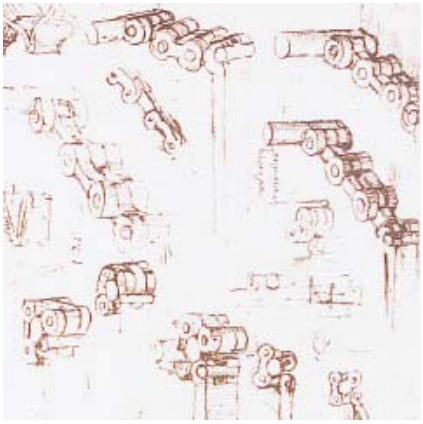


**MATERIALI** Pattino in polietilene ad alta densità molecolare. Viti in acciaio zincato.
**IMPIEGO** Profilo semicircolare adatto per medi e grandi interassi.
Velocità di lavoro ≤20 m/min.
Temperatura di lavoro del pattino ≤70°C.

***MATERIALS*** *Sliding block made of high molecular density polyethylene. Zinc plated bolts.*
***USE*** *Semi-circular profile suitable for medium and large interaxis.*
*Operating speed ≤20 m/min.*
*Operating sliding block temperature ≤70°C.*

| Tipo *Type* | S Cod. N° | Catena *Chain* | A | H | M | P | Q | W | Peso *Weight* in Kg |
|---|---|---|---|---|---|---|---|---|---|
| **OVR 10-1** | RE011030 | 3/8" x 7/32" | 10.2 | 45 | M8 | 75 | 40 | 5 | 0.09 |
| **OVR 30-2** | RE011032 | 1/2" x 5/16" | 13.9 | 55 | M10 | 96 | 50 | 7 | 0.10 |
| **OVR 30-3** | RE011034 | 5/8" x 3/8" | 16.6 | 55 | M10 | 126 | 65 | 9 | 0.12 |
| **OVR 40-4** | RE011038 | 3/4" x 7/16" | 19.5 | 80 | M12 | 148 | 74 | 11 | 0.20 |

## NEWS: Nozioni storiche sulle catene / *Roller chain historical mentions*

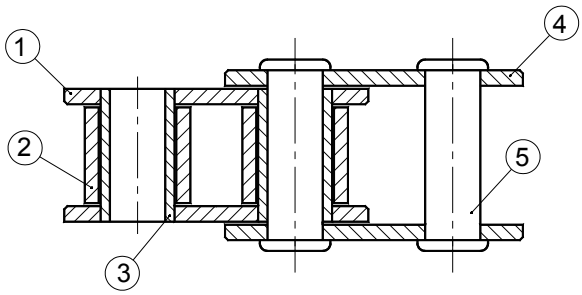


Il concetto di trasmissione a catena inizia ad essere sviluppato all'epoca di Leonardo Da Vinci (1453-1519).
Leonardo ne disegna le prime bozze nel contesto dei suoi studi sui cinematismi e meccanismi svolti tra il 1478 ed il 1518.
Queste bozze ed i relativi appunti fanno parte, oggi, del codice Atlantico, una raccolta di 12 volumi che contiene una parte degli studi del Da Vinci di matematica, geometria, astronomia, botanica, zoologia ed arti militari.
Il nome di codice Atlantico deriva dai fogli adoperati in questa raccolta che sono di grande formato, quali, per l'appunto, quelli degli Atlanti geografici.

*The concept of chain transmission starts to be developed at the time of Leonardo Da Vinci (1453-1519). Leonardo draws some drafts during his studies about kinematic motions and mechanisms between 1478 and 1518. These drafts and its related notes belong, today, to the Atlantic Code, a collection of 12 volumes that contains a part of Da Vinci's studies about math, geometry, astronomy, botany, zoology and military arts. The name "Atlantic Code" comes from papers used in that collection that have big dimensions like papers in the geographic Atlas.*

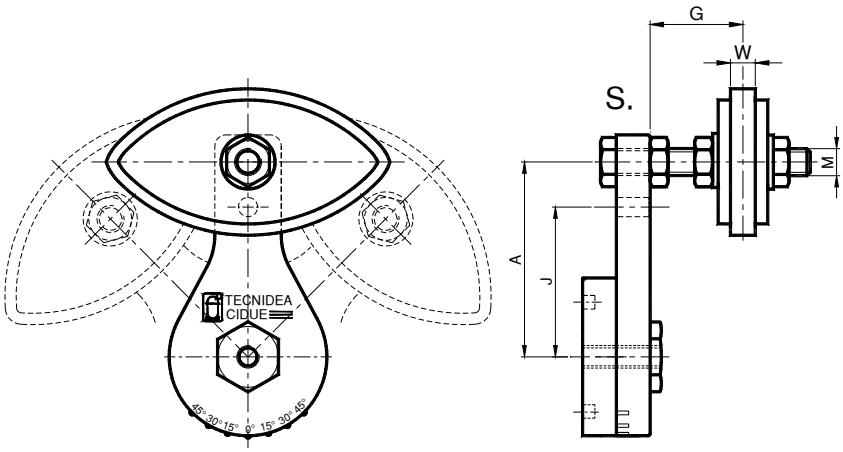
**Catena a rulli semplice**
E' la più diffusa tra le catene in acciaio grazie alle sue elevate caratteristiche di resistenza all'usura e alla fatica.
Lo schema e l'immagine che seguono evidenziano la struttura della catena a rulli:

***Simple roller chain***
*Thanks to its high resistance features against wear and fatigue, the simple roller chain is the most widespread between the steel chains. The following model and image highlighted the structure of roller chain:*




1= piastrine interne / *internal plates*
2= rullo / *roller*
3= bussola / *bush*
4= piastrina esterna /*external plates*
5= perno / *pin*

## **45T** Tipo: **45TOVR** – ***45T*** *Type:* ***45TOVR***

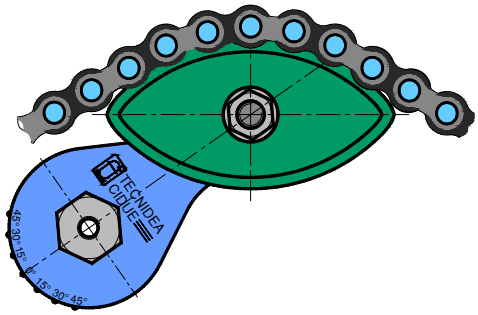



Il tenditore 45TOVR è composto dall'elemento 45T e dal kit per tendicatena OVR. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

*The tensioner 45TOVR is composed by the element 45T and the chaintensioner kit OVR. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

| **Catena *Chain* DIN 8187** | **45T + OVR** | **45T** | | **OVR** | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pag. 06 | | Pag. 14 | | **G** | **M** | **W** |
| 06-B1 | **45T1OVR1S** | 45T 1-8 | AS010900 | OVR 10-1 S | RE011030 | 5 | M8 | 5 |
| 08-B1 | **45T1OVR2S** | 45T 1-10 | AS010901 | OVR 30-2 S | RE011032 | 7 | M10 | 7 |
| 10-B1 | **45T1OVR3S** | 45T 1-10 | AS010901 | OVR 30-3 S | RE011034 | 9 | M10 | 9 |
| 10-B1 | **45T2OVR3S** | 45T 2-10 | AS010910 | *OVR 30-3 S | RE011034 | 9 | M10 | 9 |
| 12-B1 | **45T2OVR4S** | 45T 2-12 | AS010912 | OVR 40-4 S | RE011038 | 11 | M12 | 11 |

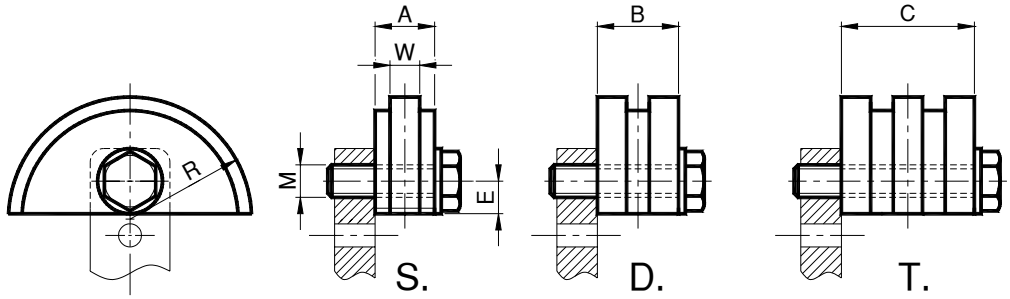
*45T2OVR3S: per il montaggio richiedere scheda istruzioni.
**45T2OVR3S: for the assembly require the instructions sheet.*




Il pattino OVR consente un'elevata durata di funzionamento in quanto oltre a consentire l'appoggio su più rulli della catena, quindi minor usura, permette di utilizzare un secondo profilo di scorrimento ruotando il pattino.

*The OVR sliding block allows an high functional durability as not only allows the support on several chain rollers, which means less wear, but also allows the use of a second sliding profile when rotating the sliding block.*

## Pattino in polietilene – Tipo: **VB** / *Polyethylene sliding block – Type: **VB***



**MATERIALI** Pattino in polietilene ad alta densità molecolare. Viti in acciaio zincato.
**IMPIEGO** Profilo semicircolare adatto per piccoli interassi e montaggi vicini al pignone.
Velocità di lavoro ≤20 m/min.
Temperatura di lavoro del pattino ≤70°C.

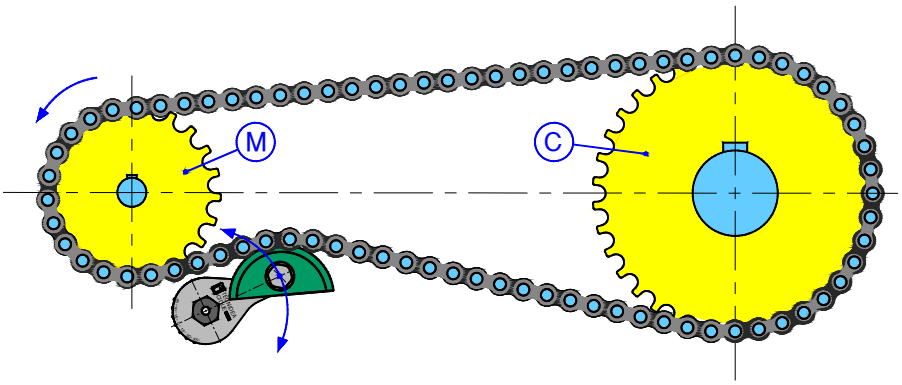
***MATERIALS*** *Sliding block made of high molecular density polyethylene. Zinc plated bolts.*
***USE*** *Semi-circular profile suitable for reduced interaxis and installation close to the pinion.*
*Operating speed ≤20 m/min.*
*Operating temperature ≤70°C.*

| Tipo *Type* | S Cod. N° | D Cod. N° | T Cod. N° | Catena *Chain* | A | B | C | E | M | R | W | Peso *Weight* in Kg | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | S. | D. | T. |
| **VB 10-0** | AR070640 | AR070665 | | 8mm | 10 | 12 | | 10 | M10 | 35 | 2.5 | 0.07 | 0.08 | |
| **VB 10-1** | AR070641 | AR070667 | | 3/8" x 7/32" | 10 | 18 | | 10 | M10 | 35 | 5 | 0.07 | 0.08 | |
| **VB 20-1** | | | AR070692 | 3/8" x 7/32" | | | 25 | 10 | M10 | 35 | 5 | | | 0.11 |
| **VB 30-2** | AR070643 | AR070669 | AR070694 | 1/2" x 5/16" | 14 | 20.5 | 34 | 10 | M10 | 35 | 7 | 0.08 | 0.09 | 0.12 |
| **VB 30-3** | AR070646 | AR070672 | | 5/8" x 3/8" | 16.5 | 25 | | 12 | M10 | 45 | 9 | 0.10 | 0.11 | |
| **VB 40-3** | | | AR070696 | 5/8" x 3/8" | | | 42 | 12 | M12 | 45 | 9 | | | 0.22 |
| **VB 40-4** | AR070649 | AR070675 | AR070698 | 3/4" x 7/16" | 17.5 | 30 | 49 | 12 | M12 | 45 | 11 | 0.13 | 0.15 | 0.23 |
| **VB 40-5** | AR070651 | AR070677 | | 1" x 17.02 | 18 | 47 | | 20 | M12 | 55 | 16 | 0.18 | 0.26 | 0.38 |
| **VB 50-6** | AR070653 | | | 1"1/4 x 3/4" | 20 | | | 20 | M16 | 55 | 18 | 0.32 | 0.50 | |
| **VB 50-7** | AR070655 | | | 1"1/2 x 1" | 24 | | | 20 | M16 | 55 | 24 | 0.33 | | |

Pattini per catene di diverso passo possono essere forniti su richiesta.

*Sliding blocks for chains of different pitches can be provided on request.*

Esempio di applicazione / *Application Example*

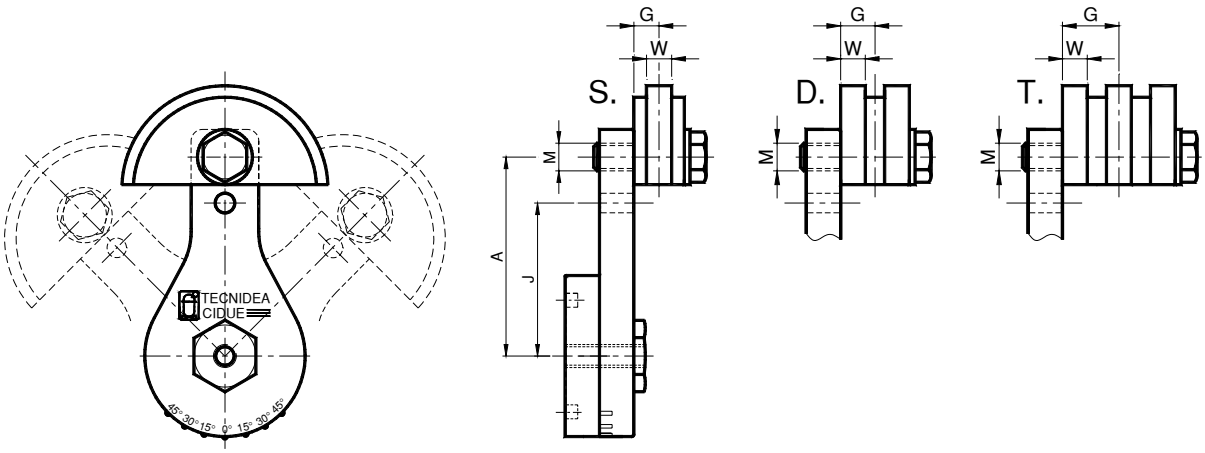



M: Ruota dentata motrice
*Driving toothed wheel*
C: Ruota dentata condotta
*Driven toothed wheel*

Il tenditore va montato sul ramo lento della trasmissione con montaggio il più vicino possible al pignone motore.

*The tensioner must be positioned on the loose section of the transmission near to the motor pinion.*

## **45T** Tipo: **45TVB** – ***45T*** *Type:* ***45TVB***




Il tenditore 45TVB è composto dall'elemento 45T e dal kit per tendicatena VB. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

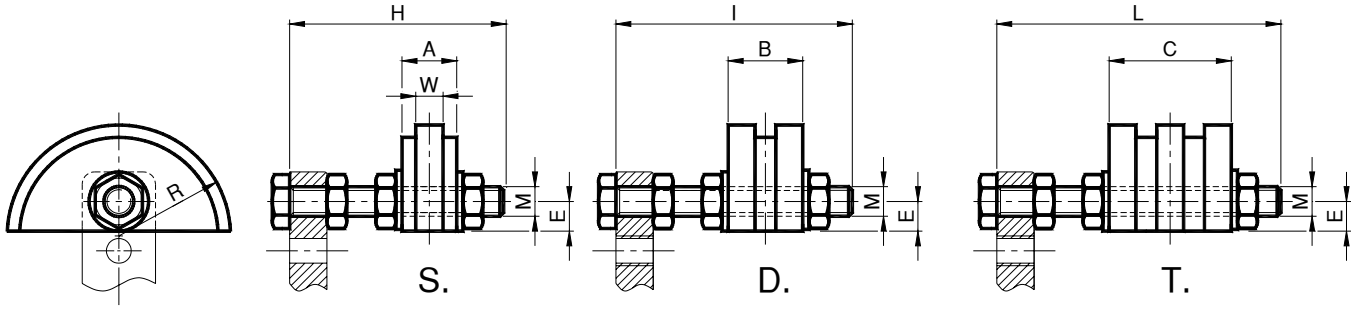
*The tensioner 45TVB is composed by the element 45T and the chaintensioner kit VB. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

| **Catena *Chain* DIN 8187** | **45T + VB** | **45T** | | **VB** | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Pag. 06 | | Pag. 16 | | | **G** | **M** | **W** |
| 05-B1 | **45T1VB0S** | 45T 1-M10 | AS010901 | VB 10-0 | S | AR070640 | 5.1 | M10 | 2.5 |
| 06-B1 | **45T1VB1S** | 45T 1-M10 | AS010901 | VB 10-1 | S | AR070641 | 5.1 | M10 | 5 |
| 08-B1 | **45T1VB2S** | 45T 1-M10 | AS010901 | VB 30-2 | S | AR070643 | 7.0 | M10 | 7 |
| 10-B1 | **45T1VB3S** | 45T 1-M10 | AS010901 | VB 30-3 | S | AR070646 | 8.3 | M10 | 9 |
| 10-B1 | **45T2VB3S** | 45T 2-M10 | AS010911 | VB 30-3 | S | AR070646 | 8.3 | M10 | 9 |
| 12-B1 | **45T2VB4S** | 45T 2-M12 | AS010913 | VB 40-4 | S | AR070649 | 8.8 | M12 | 11 |
| 16-B1 | **45T2VB5S** | 45T 2-M12 | AS010913 | VB 40-5 | S | AR070651 | 9.0 | M12 | 16 |
| 20-B1 | **45T2VB6S** | 45T 2-M16 | AS010916 | VB 50-6 | S | AR070653 | 10.0 | M16 | 18 |
| 24-B1 | **45T2VB7S** | 45T 2-M16 | AS010916 | VB 50-7 | S | AR070655 | 12.0 | M16 | 24 |
| 05-B2 | **45T1VB0D** | 45T 1-M10 | AS010902 | VB 10-0 | D | AR070665 | 6.0 | M10 | 2.5 |
| 06-B2 | **45T1VB1D** | 45T 1-M10 | AS010902 | VB 10-1 | D | AR070667 | 9.0 | M10 | 5 |
| 08-B2 | **45T1VB2D** | 45T 1-M10 | AS010902 | VB 30-2 | D | AR070669 | 10.2 | M10 | 7 |
| 10-B2 | **45T1VB3D** | 45T 1-M10 | AS010902 | VB 30-3 | D | AR070672 | 12.8 | M10 | 9 |
| 10-B2 | **45T2VB3D** | 45T 2-M10 | AS010911 | VB 30-3 | D | AR070672 | 12.8 | M10 | 9 |
| 12-B2 | **45T2VB4D** | 45T 2-M12 | AS010913 | VB 40-4 | D | AR070675 | 15.2 | M12 | 11 |
| 16-B2 | **45T2VB5D** | 45T 2-M12 | AS010913 | VB 40-5 | D | AR070677 | 23.8 | M12 | 16 |
| 06-B3 | **45T1VB1T** | 45T 1-M10 | AS010902 | VB 20-1 | T | AR070692 | 12.7 | M10 | 5 |
| 08-B3 | **45T1VB2T** | 45T 1-M10 | AS010902 | VB 30-2 | T | AR070694 | 17.4 | M10 | 7 |
| 10-B3 | **45T1VB3T** | 45T 1-M12 | AS010904 | VB 40-3 | T | AR070696 | 21.1 | M12 | 9 |
| 10-B3 | **45T2VB3T** | 45T 2-M12 | AS010913 | VB 40-3 | T | AR070696 | 21.1 | M12 | 9 |
| 12-B3 | **45T2VB4T** | 45T 2-M12 | AS010913 | VB 40-4 | T | AR070698 | 25.0 | M12 | 11 |

Pattini per catene di diverso passo possono essere forniti su richiesta.

*Sliding blocks for chains of different pitches can be provided on request.*

Pattino in polietilene – Tipo: **VR** / *Polyethylene sliding block – Type:* ***VR***




**MATERIALI** Pattino in polietilene ad alta densità molecolare. Viti in acciaio zincato.
**IMPIEGO** Profilo semicircolare adatto per piccoli interassi e montaggi vicini al pignone.
Velocità di lavoro ≤20 m/min.
Temperatura di lavoro del pattino ≤70°C.

***MATERIALS*** *Sliding block made of high molecular density polyethylene. Zinc plated bolts.*
***USE*** *Semi-circular profile suitable for reduced interaxis and installation close to the pinion.*
*Operating speed ≤20 m/min.*
*Operating temperature ≤70°C.*

| Tipo *Type* | S Cod. N° | D Cod. N° | T Cod. N° | Catena *Chain* | A | B | C | E | H | I | L | M | R | W | Peso *Weight* in Kg | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | S. | D. | T. |
| **VR10-0** | RE011110 | RE011150 | | 8mm | 10 | 12 | | 10 | 45 | 45 | | M8 | 35 | 2.5 | 0.07 | 0.08 | |
| **VR10-1** | RE011111 | *RE011152 | | 3/8” x7/32” | 10 | 18 | | 10 | 45 | 45 | | M8 | 35 | 5 | 0.07 | 0.08 | |
| **VR20-1** | | | RE011191 | 3/8” x7/32” | | | 25 | 10 | | | 60 | M10 | 35 | 5 | | | 0.11 |
| **VR30-2** | RE011114 | RE011156 | RE011194 | 1/2" x5/16” | 14 | 20.5 | 34 | 10 | 55 | 60 | 70 | M10 | 35 | 7 | 0.08 | 0.09 | 0.12 |
| **VR30-3** | RE011117 | RE011160 | | 5/8” x 3/8” | 16.5 | 25 | | 12 | 55 | 70 | | M10 | 45 | 9 | 0.10 | 0.11 | |
| **VR40-3** | | | RE011199 | 5/8” x 3/8” | | | 42 | 12 | | | 100 | M12 | 45 | 9 | | | 0.22 |
| **VR40-4** | RE011121 | RE011164 | RE011202 | 3/4" x7/16” | 17.5 | 30 | 49 | 12 | 80 | 80 | 100 | M12 | 45 | 11 | 0.13 | 0.15 | 0.23 |
| **VR40-5** | RE011124 | RE011167 | | 1” x17.02 | 18 | 47 | 79.5 | 20 | 80 | 90 | | M12 | 55 | 16 | 0.18 | 0.26 | |
| **VR50-6** | RE011128 | | | 1”1/4x 3/4" | 20 | 54 | 91 | 20 | 100 | | | M16 | 55 | 18 | 0.32 | | |
| **VR50-7** | RE011134 | | | 1”1/2x 1” | 24 | 72 | 120 | 20 | 100 | | | M16 | 55 | 24 | 0.33 | | |

* VR 10-1 D: fornito con due dadi
* *VR 10-1 D: supplied with two nuts*

Pattini per catene di diverso passo possono essere forniti su richiesta.

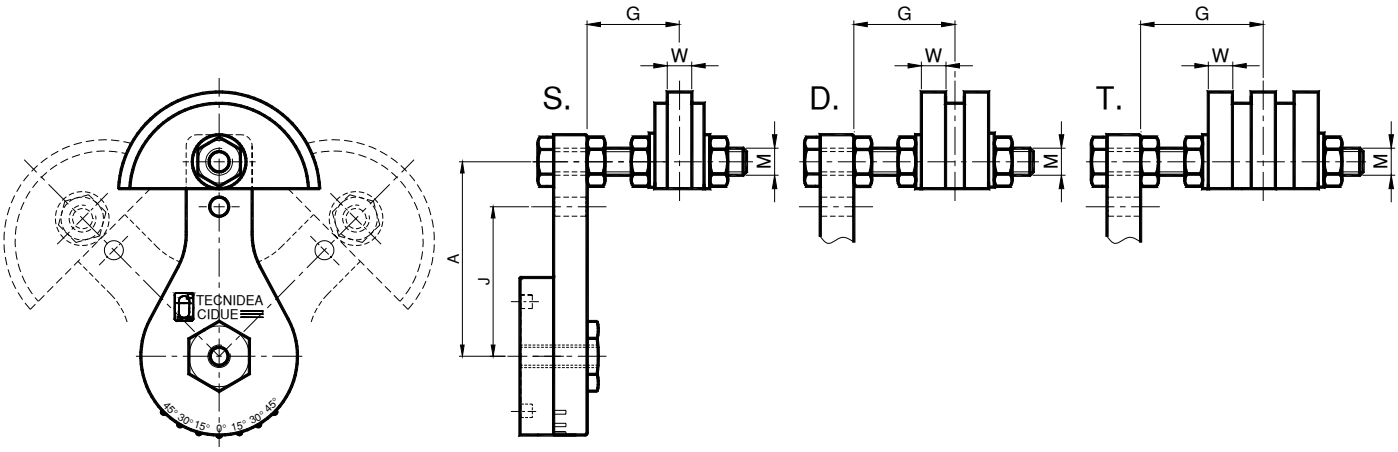
*Sliding blocks for chains of different pitches can be provided on request.*

## NEWS: Classificazione tenditori / *Tensioner classification*

Gli articoli tendicatena e tendicinghia possono essere così suddivisi:
*The chain tighteners and belt tighteners articles can be shared out as follows:*

| AUTOMATICI /AUTOMATIC | | MANUALI / MANUAL |
|---|---|---|
| ASSIALI / AXIAL | ROTATIONAL | MIX |
| TEN BLOC | ARCO | PTC |
| TEN JOY | CRESA | TEN BLOC only type TF |
| ARIA | CIAO | ASSO only type AH |
| OLIO | NIC | |
| ASSO | 45T | |
| BLU | | |

## **45T** Tipo: **45TVR** – ***45T*** *Type:* ***45TVR***




Il tenditore 45TVR è composto dall'elemento 45T e dal kit per tendicatena VR. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

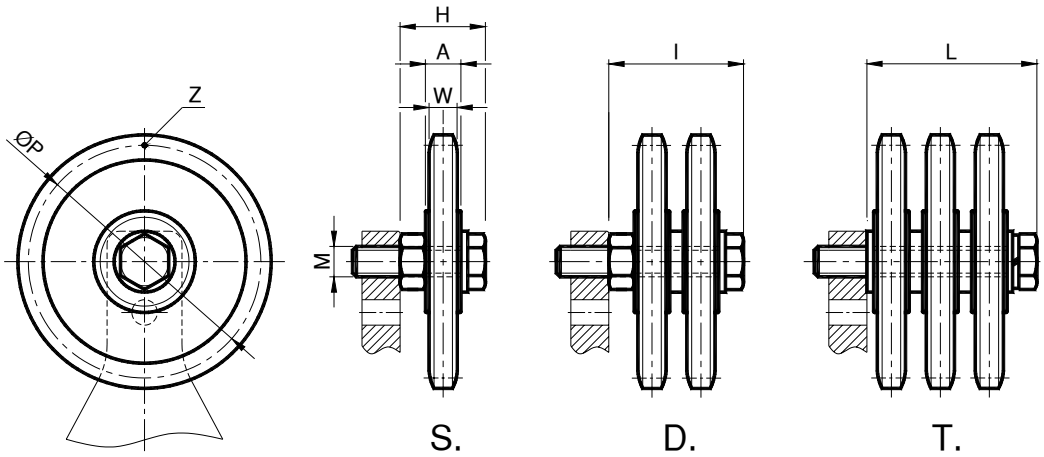
*The tensioner 45TVR is composed by the element 45T and the chaintensioner kit VR. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

| **Catena *Chain* DIN 8187** | **45T + VR** | **45T** | | **VR** | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pag. 06 | | Pag. 18 | | **T** | **M** | **W** |
| 05-B1 | **45T1VR0S** | 45T 1-8 | AS010900 | VR 10-0 S | RE011110 | 16.5-18.5 | M8 | 2.5 |
| 06-B1 | **45T1VR1S** | 45T 1-8 | AS010900 | VR 10-1 S | RE011111 | 16.5-18.5 | M8 | 5 |
| 08-B1 | **45T1VR2S** | 45T 1-10 | AS010901 | VR 30-2 S | RE011114 | 21.0-25.0 | M10 | 7 |
| 10-B1 | **45T1VR3S** | 45T 1-10 | AS010901 | VR 30-3 S | RE011117 | 22.3-23.7 | M10 | 9 |
| 10-B1 | **45T2VR3S** | 45T 2-10 | AS010910 | VR 30-3 S | RE011117 | 22.3 | M10 | 9 |
| 12-B1 | **45T2VR4S** | 45T 2-12 | AS010912 | VR 40-4 S | RE011121 | 25.2-43.7 | M12 | 11 |
| 16-B1 | **45T2VR5S** | 45T 2-12 | AS010912 | VR 40-5 S | RE011124 | 25.5-43.5 | M12 | 16 |
| 20-B1 | **45T2VR6S** | 45T 2-16 | AS010915 | VR 50-6 S | RE011128 | 31.0-60.0 | M16 | 18 |
| 24-B1 | **45T2VR7S** | 45T 2-16 | AS010915 | VR 50-7 S | RE011134 | 33.0-58.0 | M16 | 24 |
| 05-B2 | **45T1VR0D** | 45T 1-8 | AS010900 | VR 10-0 D | RE011150 | 17.5-19.2 | M8 | 2.5 |
| 06-B2 | **45T1VR1D** | 45T 1-8 | AS010900 | VR 10-1 D | RE011152 | 15.5 | M8 | 5 |
| 08-B2 | **45T1VR2D** | 45T 1-10 | AS010901 | VR 30-2 D | RE011156 | 24.2-26.2 | M10 | 7 |
| 10-B2 | **45T1VR3D** | 45T 1-10 | AS010901 | VR 30-3 D | RE011160 | 26.8-34.2 | M10 | 9 |
| 10-B2 | **45T2VR3D** | 45T 2-10 | AS010910 | VR 30-3 D | RE011160 | 26.8-31.2 | M10 | 9 |
| 12-B2 | **45T2VR4D** | 45T 2-12 | AS010912 | VR 40-4 D | RE011164 | 31.7-37.2 | M12 | 11 |
| 16-B2 | **45T2VR5D** | 45T 2-12 | AS010912 | VR 40-5 D | RE011167 | 40.0 | M12 | 16 |
| 06-B3 | **45T1VR1T** | 45T 1-10 | AS010901 | VR 20-1 T | RE011191 | 26.5 | M10 | 5 |
| 08-B3 | **45T1VR2T** | 45T 1-10 | AS010901 | VR 30-2 T | RE011194 | 31.0 | M10 | 7 |
| 10-B3 | **45T1VR3T** | 45T 1-12 | AS010903 | VR 40-3 T | RE011199 | 37.6-56.9 | M12 | 9 |
| 10-B3 | **45T2VR3T** | 45T 2-12 | AS010912 | VR 40-3 T | RE011199 | 37.6-53.9 | M12 | 9 |
| 12-B3 | **45T2VR4T** | 45T 2-12 | AS010914 | VR 40-4 T | RE011202 | 41.5-47.5 | M12 | 11 |

Pattini per catene di diverso passo possono essere forniti su richiesta.

*Sliding blocks for chains of different pitches can be provided on request.*

Pignone tendicatena (con cuscinetto) – Tipo: **KB** / *Sprocket wheel set (with ball bearing) – Type:* ***KB***



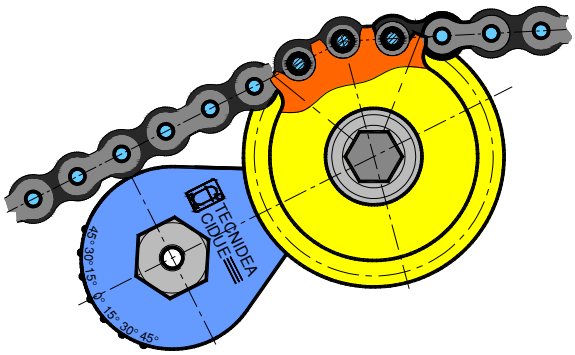
**MATERIALI** Corona, cuscinetto e vite in acciaio.
**TRATTAMENTI** Corona e vite in acciaio zincato.
**IMPIEGO** Il pignone è costituito da una corona in acciaio, montata su cuscinetti unificati.
Velocità di lavoro ≤60 m/min.
Temperatura di lavoro dell'ingranaggio ≤100°C.

***MATERIALS*** *Crown, bearing and screw are in steel.*
***TREATMENTS*** *The crown and the screw are made of zinc plated steel.*
***USE*** *The sprocket consists of a steel crown, installed on a unified bearing.*
*Operating speed ≤60 m/min.*
*Operating temperature ≤100°C.*

| Tipo *Type* | S Cod. N° | D Cod. N° | T Cod. N° | Catena *Chain* | A | H | I | L | M | ØP | W | Z | Peso *Weight* in Kg | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | S. | D. | T. |
| **KB 30-1** | AR071255 | AR071279 | AR071303 | 3/8" x 7/32" | 9 | 26 | 36 | 47 | M10 | 45.81 | 5.3 | 15 | 0.10 | 0.22 | 0.25 |
| **KB 30-2** | AR071258 | AR071282 | | 1/2" x 5/16" | 9 | 26 | 40 | | M10 | 61.09 | 7.2 | 15 | 0.19 | 0.36 | |
| **KB 40-2** | | | AR071305 | 1/2" x 5/16" | 12 | | | 58 | M12 | 61.09 | 7.2 | 15 | | | 0.50 |
| **KB 40-3** | AR071260 | AR071284 | AR071307 | 5/8" x 3/8" | 12 | 35 | 51 | 68 | M12 | 76.36 | 9.1 | 15 | 0.35 | 0.58 | 0.95 |
| **KB 40-4** | AR071262 | AR071286 | | 3/4" x 7/16" | 12 | 35 | 55 | | M12 | 91.63 | 11.1 | 15 | 0.55 | 0.98 | |
| **KB 50-4** | | | AR071310 | 3/4" x 7/16" | 15 | 43 | 63 | 82 | M20 | 91.63 | 11.1 | 15 | 0.70 | 1.24 | 1.55 |
| **KB 50-5** | AR071265 | AR071289 | | 1" x 17.02 | 15 | 47 | 79 | | M20 | 106.12 | 16.2 | 13 | 1.12 | 1.98 | |
| **KB 60-5** | | | AR071312 | 1" x 17.02 | 15 | | | 118 | M20 | 106.12 | 16.2 | 13 | | | 2.86 |
| **KB 60-6** | AR071267 | | | 1"1/4 x 3/4" | 15 | 58 | | | M20 | 132.65 | 18.5 | 13 | 2.22 | | |
| **KB 60-7** | AR071269 | | | 1"1/2 x 1" | 15 | 60 | | | M20 | 135.21 | 24.1 | 11 | 2.25 | | |

Ingranaggi per catene di diverso passo o con numero di denti diversi possono essere forniti su richiesta.

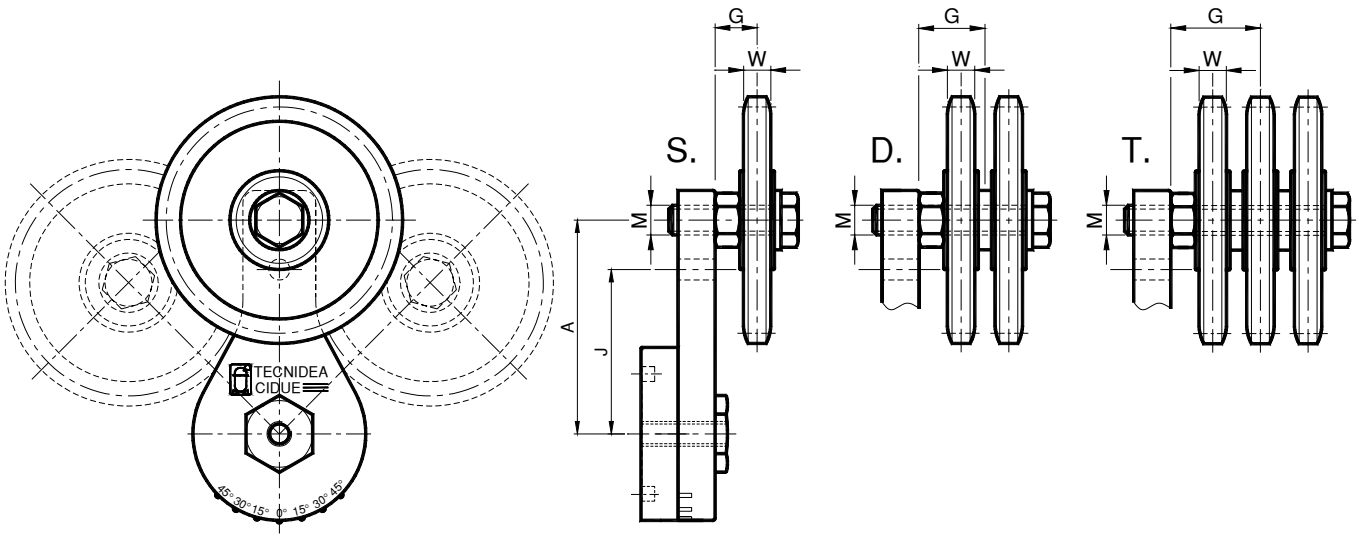
*Sprockets for chains of different pitches or with a different number of teeth can be provided on request.*




E' consigliabile avere sempre minimo tre rulli di catena a contatto con i denti.

*It is recommended to always have a minimum of three chain rollers in contact with the teeth.*

## **45T** Tipo: **45TKB** – ***45T*** *Type:* ***45TKB***




Il tenditore 45TKB è composto dall'elemento 45T e dal kit per tendicatena KB. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

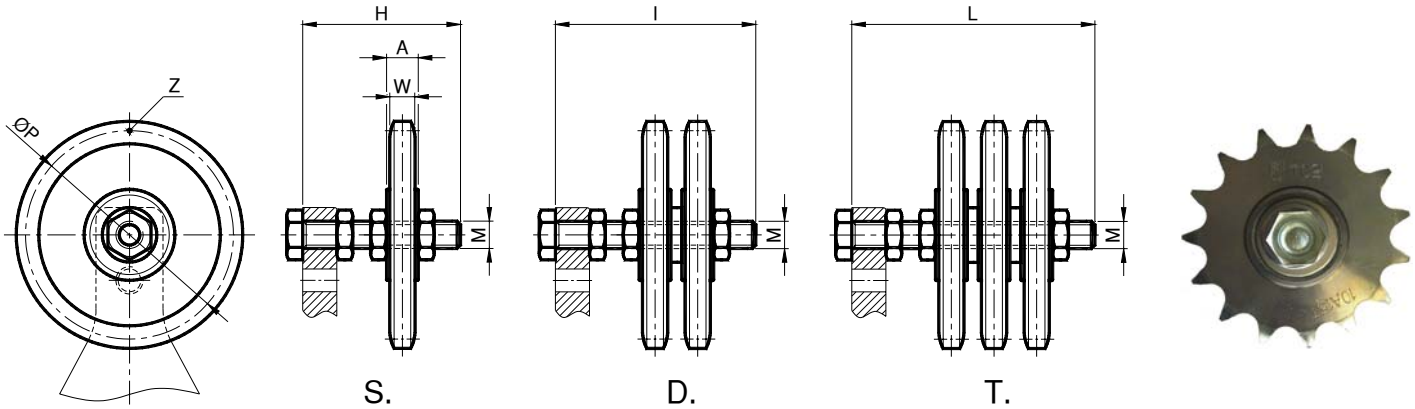
*The tensioner 45TKB is composed by the element 45T and the chaintensioner kit KB. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

| **Catena *Chain* DIN 8187** | **45T + KB** | **45T** | | **KB** | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pag. 06 | | Pag. 20 | | **G** | **M** | **W** |
| 06-B1 | **45T1KB1S** | 45T 1-M10 | AS010902 | KB 30-1 S | AR071255 | 12.5 | M10 | 5.3 |
| 08-B1 | **45T1KB2S** | 45T 1-M10 | AS010902 | KB 30-2 S | AR071258 | 12.5 | M10 | 7.2 |
| 10-B1 | **45T1KB3S** | 45T 1-M12 | AS010904 | KB 40-3 S | AR071260 | 18.0 | M12 | 9.1 |
| 10-B1 | **45T2KB3S** | 45T 2-M12 | AS010913 | KB 40-3 S | AR071260 | 18.0 | M12 | 9.1 |
| 12-B1 | **45T2KB4S** | 45T 2-M12 | AS010913 | KB 40-4 S | AR071262 | 18.5 | M12 | 11.1 |
| 16-B1 | **45T2KB5S** | 45T 2-M20 | AS010920 | KB 50-5 S | AR071265 | 22.5 | M20 | 16.2 |
| 20-B1 | **45T2KB6S** | 45T 2-M20 | AS010920 | KB 60-6 S | AR071267 | 33.5 | M20 | 18.5 |
| 24-B1 | **45T2KB7S** | 45T 2-M20 | AS010920 | KB 60-7 S | AR071269 | 33.5 | M20 | 24.1 |
| 06-B2 | **45T1KB1D** | 45T 1-M10 | AS010902 | KB 30-1 D | AR071279 | 19.0 | M10 | 5.3 |
| 08-B2 | **45T1KB2D** | 45T 1-M10 | AS010902 | KB 30-2 D | AR071282 | 19.4 | M10 | 7.2 |
| 10-B2 | **45T1KB3D** | 45T 1-M12 | AS010904 | KB 40-3 D | AR071284 | 26.5 | M12 | 9.1 |
| 10-B2 | **45T2KB3D** | 45T 2-M12 | AS010904 | KB 40-3 D | AR071284 | 26.5 | M12 | 9.1 |
| 12-B2 | **45T2KB4D** | 45T 2-M12 | AS010904 | KB 40-4 D | AR071286 | 28.2 | M12 | 11.1 |
| 16-B2 | **45T2KB5D** | 45T 2-M20 | AS010920 | KB 50-5 D | AR071289 | 38.5 | M20 | 16.2 |
| 06-B3 | **45T1KB1T** | 45T 1-M10 | AS010902 | KB 30-1 T | AR071303 | 21.5 | M10 | 5.3 |
| 08-B3 | **45T2KB2T** | 45T 2-M12 | AS010913 | KB 40-2 T | AR071305 | 30.5 | M12 | 7.2 |
| 10-B3 | **45T2KB3T** | 45T 2-M12 | AS010913 | KB 40-3 T | AR071307 | 35.0 | M12 | 9.1 |
| 12-B3 | **45T2KB4T** | 45T 2-M20 | AS010920 | KB 50-4 T | AR071310 | 31.5 | M20 | 11.1 |
| 16-B3 | **45T2KB5T** | 45T 2-M20 | AS010920 | KB 60-5 T | AR071312 | 62.5 | M20 | 16.2 |

Nel caso di impieghi con quota G diversa da quella indicata in tabella consigliamo di consultare il nostro ufficio tecnico. Ingranaggi per catene di diverso passo o con numero di denti diversi possono essere forniti su richiesta.

*In case of uses with a different A level than that indicated in the chart, we suggest to consult our technical office. Sprockets for chains of different pitches or with a different number of teeth can be provided on request.*

Pignone tendicatena (con cuscinetto) – Tipo: **ZK** / *Sprocket wheel set (with ball bearing) – Type:* ***ZK***




| Tipo *Type* | S Cod. N° | D Cod. N° | T Cod. N° | Catena *Chain* | A | H | I | L | M | ØP | W | Z | Peso *Weight* in Kg | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | S. | D. | T. |
| **ZK 30-1** | RE011691 | RE011728 | RE011764 | 3/8" x 7/32" | 9 | 55 | 60 | 70 | M10 | 45.81 | 5.3 | 15 | 0.13 | 0.23 | 0.26 |
| **ZK 30-2** | RE011694 | RE011731 | | 1/2" x 5/16" | 9 | 55 | 60 | | M10 | 61.09 | 7.2 | 15 | 0.21 | 0.37 | |
| **ZK 40-2** | | | RE011768 | 1/2" x 5/16" | 12 | | | 80 | M12 | 61.09 | 7.2 | 15 | | | 0.51 |
| **ZK 40-3** | RE011698 | *RE011735 | RE011771 | 5/8" x 3/8" | 12 | 80 | 80 | 80 | M12 | 76.36 | 9.1 | 15 | 0.38 | 0.60 | 0.96 |
| **ZK 40-4** | RE011701 | RE011738 | | 3/4" x 7/16" | 12 | 80 | 80 | | M12 | 91.63 | 11.1 | 15 | 0.56 | 1.00 | |
| **ZK 50-4** | | | RE011776 | 3/4" x 7/16" | 15 | | | 120 | M20 | 91.63 | 11.1 | 15 | | | 1.60 |
| **ZK 50-5** | RE011706 | RE011743 | | 1" x 17.02 | 15 | 100 | 120 | | M20 | 106.12 | 16.2 | 13 | 1.23 | 2.10 | |
| **ZK 60-5** | | | RE011780 | 1" x 17.02 | 15 | | | 160 | M20 | 106.12 | 16.2 | 13 | | | 2.92 |
| **ZK 60-6** | RE011710 | RE011747 | | 1"1/4 x 3/4" | 15 | 100 | 140 | | M20 | 132.65 | 18.5 | 13 | 2.28 | 3.60 | |
| **ZK 60-7** | RE011714 | RE011751 | | 1"1/2 x 1" | 15 | 140 | 140 | | M20 | 135.21 | 24.1 | 11 | 2.33 | 4.20 | |

* ZK 40-3 D: fornito con due dadi
* *ZK 40-3 D: supplied with two nuts*

## NEWS: Settori di applicazione / *Application Area*

Automation movement

Bottling

Packaging

Aviculture

Food

Textile

Steelworks Foundries

Agriculture

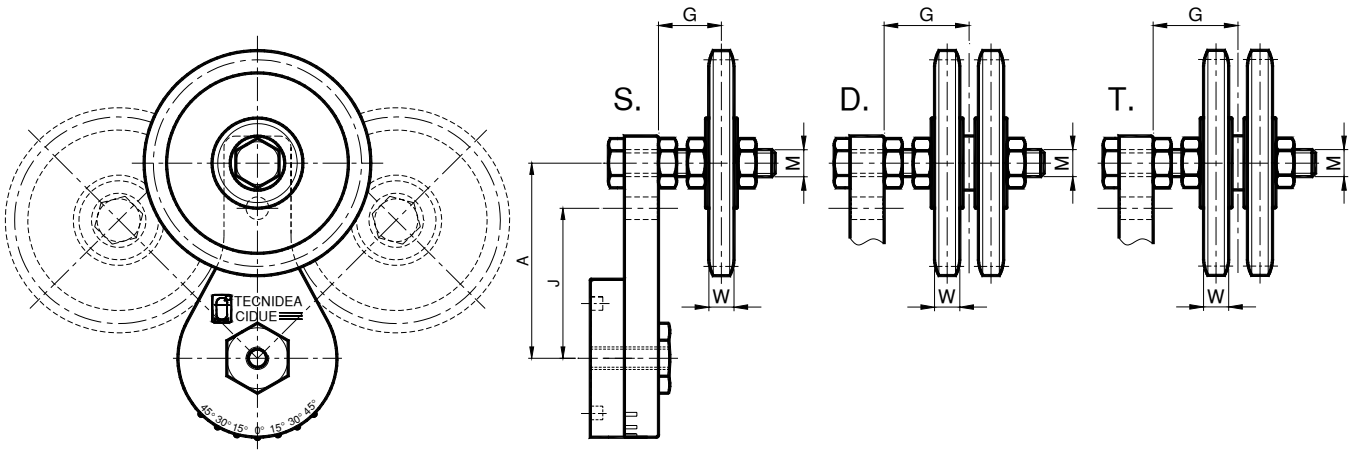
Pharmaceutical

Construction Trade

Recycling

Automotive

## **45T** Tipo: **45TZK** – ***45T*** *Type:* ***45TZK***




Il tenditore 45TZK è composto dall'elemento 45T e dal kit per tendicatena ZK. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

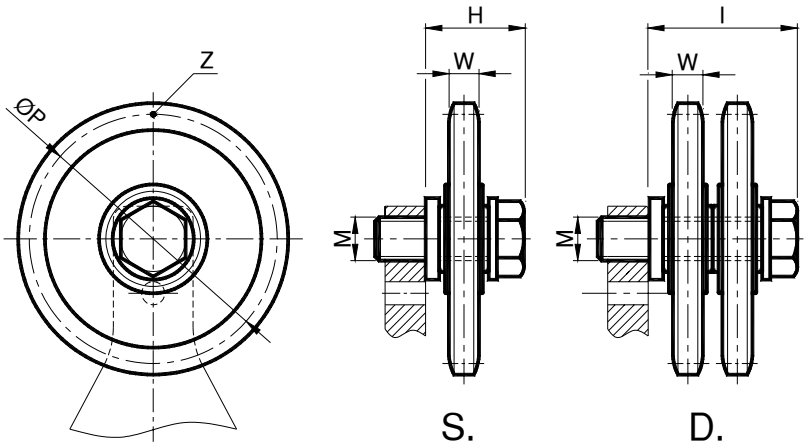
*The tensioner 45TZK is composed by the element 45T and the chaintensioner kit ZK. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

| **Catena *Chain* DIN 8187** | **45T + ZK** | **45T** | | **ZK** | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pag. 06 | | Pag. 22 | | **G** | **M** | **W** |
| 06-B1 | **45T1ZK1S** | 45T 1-10 | AS010901 | ZK 30-1 S | RE011691 | 16.5-29.5 | M10 | 5.3 |
| 08-B1 | **45T1ZK2S** | 45T 1-10 | AS010901 | ZK 30-2 S | RE011694 | 16.5-29.5 | M10 | 7.2 |
| 10-B1 | **45T1ZK3S** | 45T 1-12 | AS010903 | ZK 40-3 S | RE011698 | 20.0-52.0 | M12 | 9.1 |
| 10-B1 | **45T2ZK3S** | 45T 2-12 | AS010912 | ZK 40-3 S | RE011698 | 20.0-49.0 | M12 | 9.1 |
| 12-B1 | **45T2ZK4S** | 45T 2-12 | AS010912 | ZK 40-4 S | RE011701 | 20.0-49.0 | M12 | 11.1 |
| 16-B1 | **45T2ZK5S** | 45T 2-20 | AS010919 | ZK 50-5 S | RE011706 | 25.5-65.5 | M20 | 16.2 |
| 20-B1 | **45T2ZK6S** | 45T 2-20 | AS010919 | ZK 60-6 S | RE011710 | 25.5-65.5 | M20 | 18.5 |
| 24-B1 | **45T2ZK7S** | 45T 2-20 | AS010919 | ZK 60-7 S | RE011714 | 25.5-105.5 | M20 | 24.1 |
| 06-B2 | **45T1ZK1D** | 45T 1-10 | AS010901 | ZK 30-1 D | RE011728 | 22.0-29.0 | M10 | 5.3 |
| 08-B2 | **45T1ZK2D** | 45T 1-10 | AS010901 | ZK 30-2 D | RE011731 | 23.4-28.4 | M10 | 7.2 |
| 10-B2 | **45T1ZK3D** | 45T 1-12 | AS010903 | ZK 40-3 D | RE011735 | 28.5-43.5 | M12 | 9.1 |
| 10-B2 | **45T2ZK3D** | 45T 2-12 | AS010912 | ZK 40-3 D | RE011735 | 28.5-40.5 | M12 | 9.1 |
| 12-B2 | **45T2ZK4D** | 45T 2-12 | AS010912 | ZK 40-4 D | RE011738 | 29.7-39.2 | M12 | 11.1 |
| 16-B2 | **45T2ZK5D** | 45T 2-20 | AS010919 | ZK 50-5 D | RE011743 | 64.0-87.5 | M20 | 16.2 |
| 20-B2 | **45T2ZK6D** | 45T 2-20 | AS010919 | ZK 60-6 D | RE011747 | 43.7-88.7 | M20 | 18.5 |
| 24-B2 | **45T2ZK7D** | 45T 2-20 | AS010919 | ZK 60-7 D | RE011751 | 50.0-81.0 | M20 | 24.1 |
| 06-B3 | **45T1ZK1T** | 45T 1-10 | AS010901 | ZK 30-1 T | RE011764 | 25.5-35.5 | M10 | 5.3 |
| 08-B3 | **45T2ZK2T** | 45T 2-12 | AS010912 | ZK 40-2 T | RE011768 | 34.5 | M12 | 7.2 |
| 10-B3 | **45T2ZK3T** | 45T 2-12 | AS010912 | ZK 40-3 T | RE011771 | 30.0 | M12 | 9.1 |
| 12-B3 | **45T2ZK4T** | 45T 2-20 | AS010919 | ZK 50-4 T | RE011776 | 46.5-64.5 | M20 | 11.1 |
| 16-B3 | **45T2ZK5T** | 45T 2-20 | AS010919 | ZK 60-5 T | RE011780 | 57.5-93.5 | M20 | 16.2 |

Nel caso di impieghi con quota G diversa da quella indicata in tabella consigliamo di consultare il nostro ufficio tecnico. Ingranaggi per catene di diverso passo o con numero di denti diversi possono essere forniti su richiesta.

*In case of uses with a different G dimension than that indicated in the chart, we suggest to consult our technical office. Sprockets for chains with different pitches or with a different number of theet can be provided on demand.*

Pignone tendicatena (con cuscinetto nazionale) – Tipo: **NB** / *Sprocket wheel set (with national bearing) – Type:* ***NB***
Pignone tendicatena (con cuscinetto INA) – Tipo: **IB** / *Sprocket wheel set (with INA bearing) – Type:* ***IB***



**MATERIALI** Corona, cuscinetto e vite in acciaio.
**TRATTAMENTI** Corona e vite in acciaio zincato.
**IMPIEGO** Il pignone è costituito da una corona in acciaio, montata su cuscinetti nazionali con base maggiorata (tipo NB) o INA (tipo IB).
Velocità di lavoro ≤60 m/min.
Temperatura di lavoro dell'ingranaggio ≤100°C.

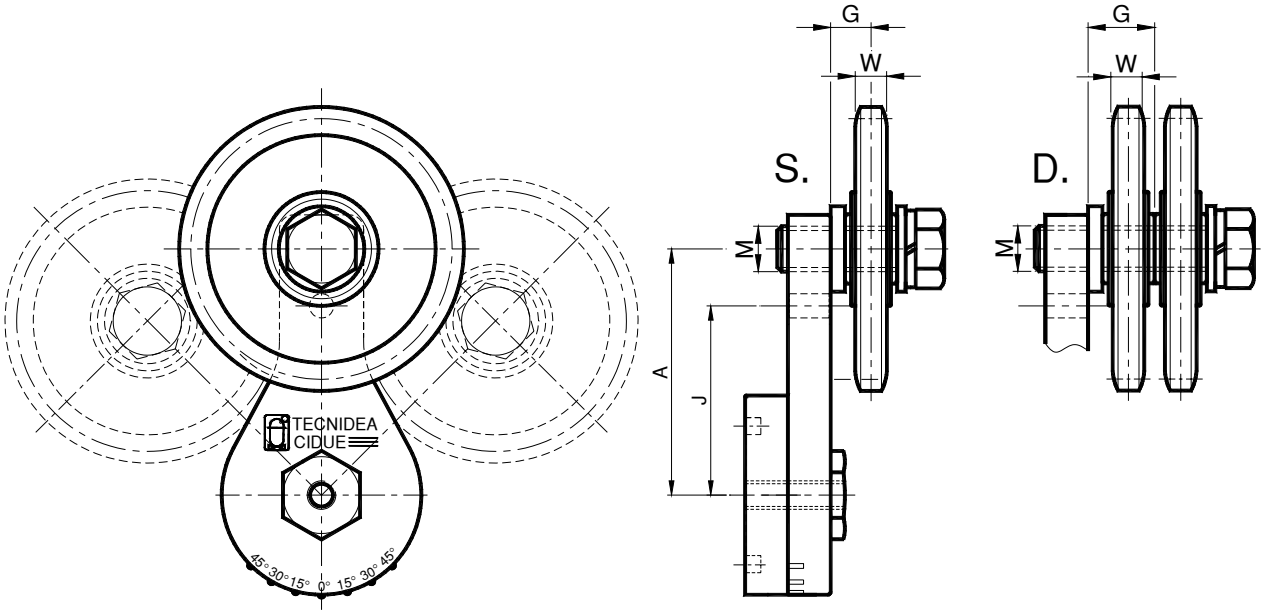
***MATERIALS*** *Crown, bearing and screw are in steel.*
***TREATMENTS*** *The crown and the screw are made of zinc plated steel.*
***USE*** *The sprocket consists of a steel crown, installed on national (type NB) or INA (type IB) enlarged bearings.*
*Operating speed ≤60 m/min.*
*Operating temperature ≤100°C.*

| NB: Pignone tendicatena (con cuscinetto nazionale) NB: Sprocket wheel set (with national bearing) | | | | IB: Pignone tendicatena (con cuscinetto INA) IB: Sprocket wheel set (with INA bearing) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Tipo *Type*** | **S Cod. N°** | **D Cod. N°** | **Catena *Chain*** | **Tipo *Type*** | **S Cod. N°** | **D Cod. N°** | **H** | **I** | **M** | **ØP** | **Z** | **W** | **Peso *Weight* in Kg** | |
| | | | | | | | | | | | | | **S.** | **D.** |
| **NB 20-1** | AR071099 | AR071126 | 3/8" x 7/32" | **IB 20-1** | AR071177 | AR071204 | 34 | 50 | M16 | 63.90 | 21 | 5.3 | 0.25 | 0.40 |
| **NB 30-2** | AR071102 | AR071129 | 1/2" x 5/16" | **IB 30-2** | AR071180 | AR071207 | 34 | 50 | M16 | 73.14 | 18 | 7.2 | 0.35 | 0.60 |
| **NB 40-3** | AR071105 | AR071132 | 5/8" x 3/8" | **IB 40-3** | AR071183 | AR071210 | 39 | 58 | M16 | 86.39 | 17 | 9.1 | 0.51 | 0.89 |
| **NB 40-4** | AR071108 | AR071134 | 3/4" x 7/16" | **IB 40-4** | AR071186 | AR071212 | 39 | 58 | M16 | 91.63 | 15 | 11.1 | 0.65 | 1.15 |
| **NB 50-5** | AR071112 | AR071138 | 1" x 17.02 | **IB 50-5** | AR071190 | AR071216 | 50 | 82 | M20 | 98.14 | 12 | 16.2 | 0.98 | 1.76 |
| **NB 60-6** | AR071114 | | 1"1/4 x 3/4" | **IB 60-6** | AR071192 | AR071218 | 58 | | M20 | 132.65 | 13 | 18.5 | 2.22 | |
| **NB 60-7** | AR071116 | | 1"1/2 x 1" | **IB 60-7** | AR071194 | AR071220 | 60 | | M20 | 135.21 | 11 | 24.1 | 2.25 | |

Ingranaggi per catene di diverso passo o con numero di denti diversi possono essere forniti su richiesta.

*Sprockets for chains of different pitches or with a different number of teeth can be provided on request.*

## **45T** Tipo: **45TNB** – ***45T*** *Type:* ***45TNB***




Il tenditore 45TNB è composto dall'elemento 45T e dal kit per tendicatena NB. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

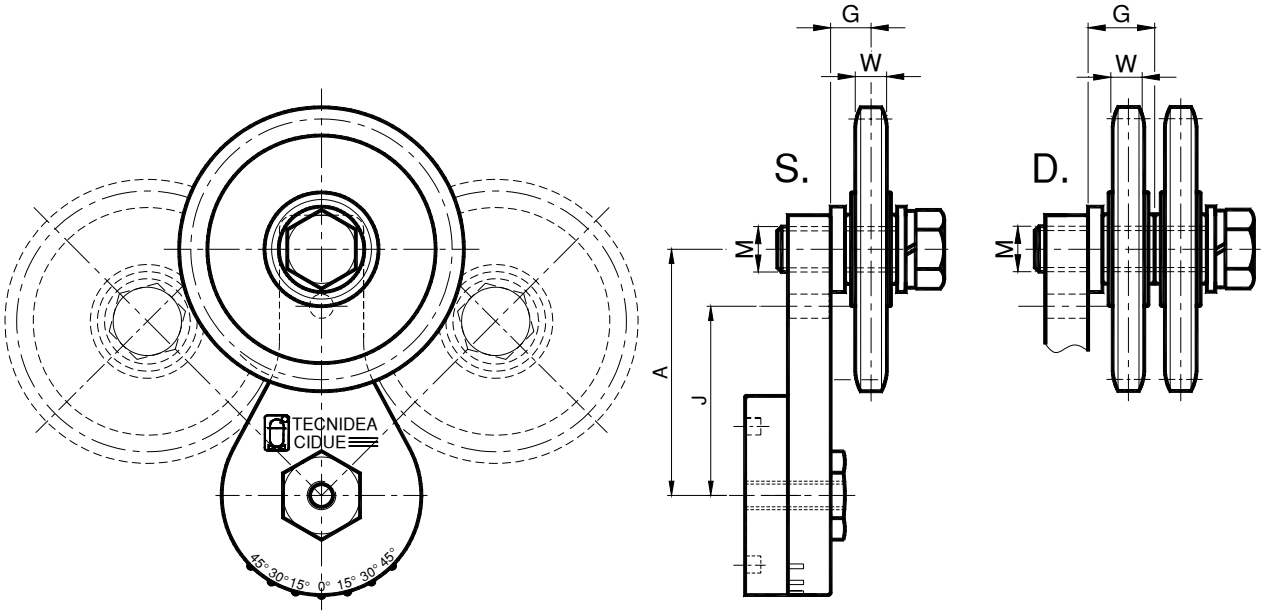
*The tensioner 45TNB is composed by the element 45T and the chaintensioner kit NB. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

| **Catena *Chain* DIN 8187** | **45T + NB** | **45T** | | **NB** | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pag. 06 | | Pag. 24 | | **G** | **M** | **W** |
| 06-B1 | **45T1NB1S** | 45T 1-M16 | AS010907 | NB 20-1 S | AR071099 | 12.1 | M16 | 5.3 |
| 08-B1 | **45T1NB2S** | 45T 1-M16 | AS010907 | NB 30-2 S | AR071102 | 12.1 | M16 | 7.2 |
| 10-B1 | **45T1NB3S** | 45T 1-M16 | AS010907 | NB 40-3 S | AR071104 | 12.1 | M16 | 9.1 |
| 10-B1 | **45T2NB3S** | 45T 2-M16 | AS010916 | NB 40-3 S | AR071104 | 12.1 | M16 | 9.1 |
| 12-B1 | **45T2NB4S** | 45T 2-M16 | AS010916 | NB 40-4 S | AR071108 | 17.1 | M16 | 11.1 |
| 16-B1 | **45T2NB5S** | 45T 2-M20 | AS010920 | NB 50-5 S | AR071112 | 24.8 | M20 | 16.2 |
| 20-B1 | **45T2NB6S** | 45T 2-M20 | AS010920 | NB 60-6 S | AR071114 | 33.5 | M20 | 18.5 |
| 24-B1 | **45T2NB7S** | 45T 2-M20 | AS010920 | NB 60-7 S | AR071116 | 33.5 | M20 | 24.1 |
| 06-B2 | **45T1NB1D** | 45T 1-M16 | AS010907 | NB 20-1 D | AR071126 | 18.3 | M16 | 5.3 |
| 08-B2 | **45T1NB2D** | 45T 1-M16 | AS010907 | NB 30-2 D | AR071129 | 18.3 | M16 | 7.2 |
| 10-B2 | **45T1NB3D** | 45T 1-M16 | AS010907 | NB 40-3 D | AR071132 | 26.3 | M16 | 9.1 |
| 10-B2 | **45T2NB3D** | 45T 2-M16 | AS010916 | NB 40-3 D | AR071132 | 26.3 | M16 | 9.1 |
| 12-B2 | **45T2NB4D** | 45T 2-M16 | AS010916 | NB 40-4 D | AR071134 | 26.3 | M16 | 11.1 |
| 16-B2 | **45T2NB5D** | 45T 2-M20 | AS010920 | NB 50-5 D | AR071138 | 40.7 | M20 | 16.2 |

Nel caso di impieghi con quota G diversa da quella indicata in tabella consigliamo di consultare il nostro ufficio tecnico. Ingranaggi per catene di diverso passo o con numero di denti diversi possono essere forniti su richiesta.

*In case of uses with a different G level than that indicated in the chart, we suggest to consult our technical office. Sprockets for chains of different pitches or with a different number of teeth can be provided on request.*

## **45T** Tipo: **45TIB** – ***45T*** *Type:* ***45TIB***




Il tenditore 45TIB è composto dall'elemento 45T e dal kit per tendicatena IB. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

*The tensioner 45TIB is composed by the element 45T and the chaintensioner kit IB. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

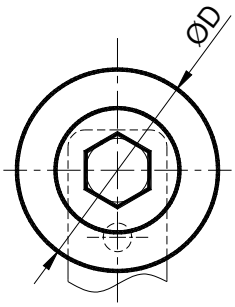
| **Catena *Chain* DIN 8187** | **45T + IB** | **45T** | | **IB** | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pag. 06 | | Pag. 24 | | **G** | **M** | **W** |
| 06-B1 | **45T1IB1S** | 45T 1-M16 | AS010907 | IB 20-1 S | AR071177 | 12.1 | M16 | 5.3 |
| 08-B1 | **45T1IB2S** | 45T 1-M16 | AS010907 | IB 30-2 S | AR071180 | 12.1 | M16 | 7.2 |
| 10-B1 | **45T1IB3S** | 45T 1-M16 | AS010907 | IB 40-3 S | AR071183 | 12.1 | M16 | 9.1 |
| 10-B1 | **45T2IB3S** | 45T 2-M16 | AS010916 | IB 40-3 S | AR071183 | 12.1 | M16 | 9.1 |
| 12-B1 | **45T2IB4S** | 45T 2-M16 | AS010916 | IB 40-4 S | AR071186 | 17.1 | M16 | 11.1 |
| 16-B1 | **45T2IB5S** | 45T 2-M20 | AS010920 | IB 50-5 S | AR071190 | 24.8 | M20 | 16.2 |
| 20-B1 | **45T2IB6S** | 45T 2-M20 | AS010920 | IB 60-6 S | AR071192 | 33.5 | M20 | 18.5 |
| 24-B1 | **45T2IB7S** | 45T 2-M20 | AS010920 | IB 60-7 S | AR071194 | 33.5 | M20 | 24.1 |
| 06-B2 | **45T1IB1D** | 45T 1-M16 | AS010907 | IB 20-1 D | AR071204 | 18.3 | M16 | 5.3 |
| 08-B2 | **45T1IB2D** | 45T 1-M16 | AS010907 | IB 30-2 D | AR071207 | 18.3 | M16 | 7.2 |
| 10-B2 | **45T1IB3D** | 45T 1-M16 | AS010907 | IB 40-3 D | AR071210 | 26.3 | M16 | 9.1 |
| 10-B2 | **45T2IB3D** | 45T 2-M16 | AS010916 | IB 40-3 D | AR071210 | 26.3 | M16 | 9.1 |
| 12-B2 | **45T2IB4D** | 45T 2-M16 | AS010916 | IB 40-4 D | AR071212 | 26.3 | M16 | 11.1 |
| 16-B2 | **45T2IB5D** | 45T 2-M20 | AS010920 | IB 50-5 D | AR071216 | 40.7 | M20 | 16.2 |

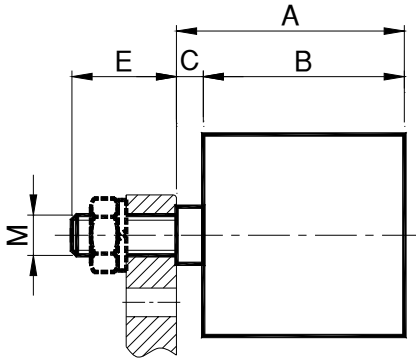
Nel caso di impieghi con quota G diversa da quella indicata in tabella consigliamo di consultare il nostro ufficio tecnico. Ingranaggi per catene di diverso passo o con numero di denti diversi possono essere forniti su richiesta.

*In case of uses with a different G level than that indicated in the chart, we suggest to consult our technical office. Sprockets for chains of different pitches or with a different number of teeth can be provided on request.*

Rullo in poliammide – Tipo: **RP** / *Rullo in acciaio zincato – Type:* ***RU***

RP



RU

**MATERIALI** Rullo in poliammide PA6+MoS nero, cuscinetti e distanziali in acciaio.
**TRATTAMENTI** Particolari metallici in acciaio zincato. Rullo tornito 1.6. Cuscinetti lubrificati.
**IMPIEGO** Rullo per tendicinghia.
Temperatura di lavoro ≤70°C.

***MATERIALS*** *Roller made of polyamide PA6+MoS black, bearings and spacers made of steel.*
***TREATMENTS*** *Metallic components made of zinc plated steel. The roller is turned 1.6. Greased bearings.*
***USE*** *Belt tensioning.*
*Operating temperature ≤70°C.*

**MATERIALI** Rullo, cuscinetti e distanziali in acciaio.

**TRATTAMENTI** Particolari metallici in acciaio zincato. Cuscinetti lubrificati.
**IMPIEGO** Rullo per tendicinghia.
Temperatura di lavoro ≤100°C.

***MATERIALS*** *Roller, bearings and spacers made of steel.*
***TREATMENTS*** *Metallic components made of galvanized steel.*
***USE*** *Belt tensioning.*
*Operating temperature ≤100°C.*

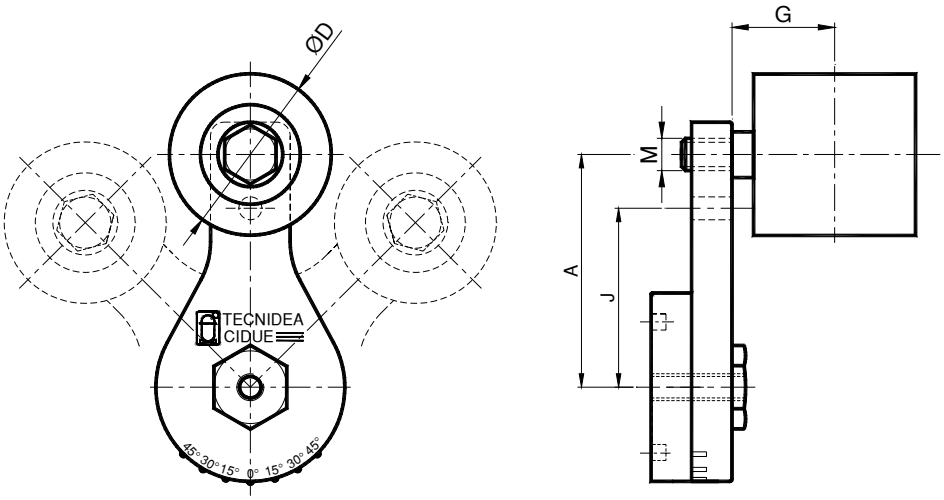
| **Tipo** *Type* | **Cod. N°** | **A** | **B** | **C** | **ØD** | **E** | **M** | **Peso** ***Weight*** **in Kg** |
|---|---|---|---|---|---|---|---|---|
| **RP 1T** | RE011091 | 38 | 35 | 3 | 30 | 33 | M 8 | 0.08 |
| **RP 2/3** | RE011092 | 51 | 45 | 6 | 40 | 16 | M10 | 0.18 |
| **RP 4** | RE011094 | 68 | 60 | 8 | 60 | 21 | M12 | 0.40 |
| **RP 5** | RE011096 | 99 | 90 | 9 | 80 | 28 | M20 | 1.20 |
| **RU 1T** | AR070871 | 38 | 35 | 3 | 30 | 33 | M 8 | 0.16 |
| **RU 2/3** | AR070872 | 51 | 45 | 6 | 40 | 16 | M10 | 0.37 |
| **RU 4** | AR070874 | 68 | 60 | 8 | 60 | 21 | M16 | 0.85 |
| **RU 5** | AR070876 | 99 | 90 | 9 | 80 | 28 | M20 | 2.09 |

| **Campo di lavoro** ***Working field*** | | | | **Campo di lavoro** ***Working field*** | | | |
|---|---|---|---|---|---|---|---|
| **Tipo** *Type* | **Ø Rullo** *Roller* | **Numero di giri max** *Max rpm* | **Cuscinetto** *Bearing* | **Tipo** *Type* | **Ø Rullo** *Roller* | **Numero di giri max** *Max rpm* | **Cuscinetto** *Bearing* |
| **RP 1T** | 30 | 8000 | 608 | **RU 1T** | 30 | 15000 | 608 |
| **RP 2/3** | 40 | 8000 | 6200 | **RU 2/3** | 40 | 12000 | 6200 |
| **RP 4** | 60 | 6000 | 6304 | **RU 4** | 60 | 9500 | 6304 |
| **RP 5** | 80 | 5000 | 6304 | **RU 5** | 80 | 6500 | 6306 |

Il numero di giri descritto in tabella è indicativo. L'applicazione va valutata in base al tipo d'impiego, il fattore di servizio e le condizioni di lavoro. Si consiglia di non superare l'angolo di avvolgimento consentito dalla cinghia.

*The rpm indicated in the chart is approximate. The application must be considered according to the type of use, the service factor and the working conditions. It is not recommended to exceed the winding corner allowed by the belt.*

**45 T** Tipo: **45TRP** – ***45 T*** *Type:* ***45TRP***
(con rullo in poliammide – *with roller in polyamid*)




Il tenditore 45TRP è composto dall'elemento 45T e dal kit per tendicinghia RP. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

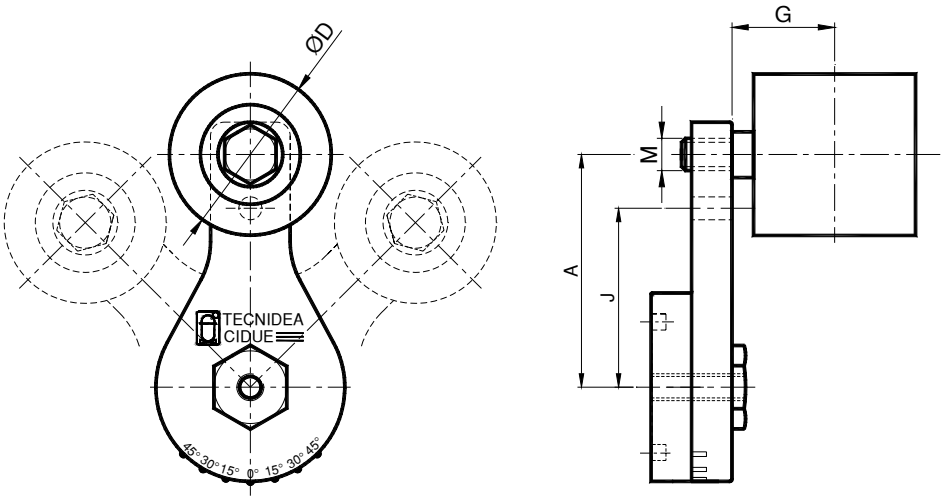
*The tensioner 45TRP is composed by the element 45T and the chaintensioner kit RP. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

| **Cinghia** ***Belt*** | **45T + RP** | **45T** | | **RP** | | | | |
|---|---|---|---|---|---|---|---|---|
| **Larghezza max** ***Max width*** | | Pag. 06 | | Pag. 27 | | **ØD** | **G** | **M** |
| 30 | **45T1RP1** | 45T 1-8 | AS010900 | RP 1T | RE011091 | 30 | 20.5 | M 8 |
| 40 | **45T1RP2/3** | 45T 1-M10 | AS010902 | RP 2/3 | RE011092 | 40 | 28.5 | M10 |
| 55 | **45T1RP4** | 45T 1-M12 | AS010904 | RP 4 | RE011094 | 60 | 38.0 | M12 |
| 55 | **45T2RP4** | 45T 2-M12 | AS010913 | RP 4 | RE011094 | 60 | 38.0 | M12 |
| 85 | **45T2RP5** | 45T 2-M20 | AS010920 | RP 5 | RE011096 | 80 | 54.0 | M20 |

Verificare il lato di contatto del rullo sulla cinghia, rispettare i valori di avvolgimento consentiti. Nel caso di cinghie trapezoidali i rulli piani vanno montati sul dorso della cinghia, facendo attenzione ad eventuali fenomeni di snervamento delle fibre.

*Verify the contact side of the roller on the belt, respect the allowed winding values. In case of trapezoidal belts, the plane rollers should be installed on the back of the belt, paying attention to possible events of fiber yielding.*

**45T** Tipo: **45TRU** – **45T** *Type:* ***45TRU***
(con rullo in acciaio – *with roller in steel*)




Il tenditore 45TRU è composto dall'elemento base 45T e dal kit per tendicinghia RU. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

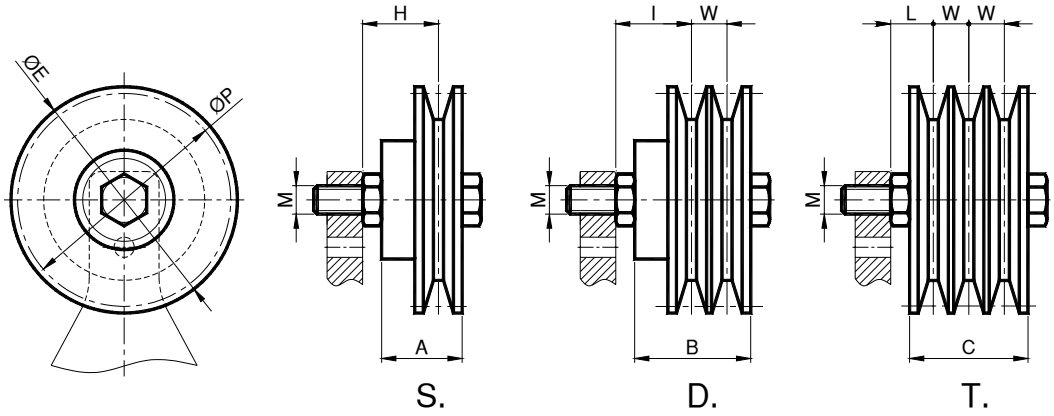
*The tensioner 45TRU is composed by the element 45T and the chaintensioner kit RU. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

| **Cinghia** ***Belt*** | **45T + RU** | **45T** | | **RU** | | | | |
|---|---|---|---|---|---|---|---|---|
| **Larghezza max** ***Max width*** | | Pag. 06 | | Pag. 27 | | **ØD** | **G** | **M** |
| 30 | **45T1RU1** | 45T 1-8 | AS010900 | RU 1T | AR070871 | 30 | 20.5 | M 8 |
| 40 | **45T1RU2/3** | 45T 1-M10 | AS010902 | RU 2/3 | AR070872 | 40 | 28.5 | M10 |
| 55 | **45T1RU4** | 45T 1-M16 | AS010907 | RU 4 | AR070874 | 60 | 38.0 | M16 |
| 55 | **45T2RU4** | 45T 2-M16 | AS010916 | RU 4 | AR070874 | 60 | 38.0 | M16 |
| 85 | **45T2RU5** | 45T 2-M20 | AS010920 | RU 5 | AR070876 | 80 | 54.0 | M20 |

Verificare il lato di contatto del rullo sulla cinghia, rispettare i valori di avvolgimento consentiti. Nel caso di cinghie trapezoidali i rulli piani vanno montati sul dorso della cinghia, facendo attenzione ad eventuali fenomeni di snervamento delle fibre.

*Verify the contact side of the roller on the belt, respect the allowed winding values. In case of trapezoidal belts, the plane rollers should be installed on the back of the belt, paying attention to possible events of fiber yielding.*

Puleggia trapezoidale in ghisa – Tipo: **PQ** (Z-A-B)
*V-Belt cast iron pulley – Type: **PQ** (Z-A-B)*

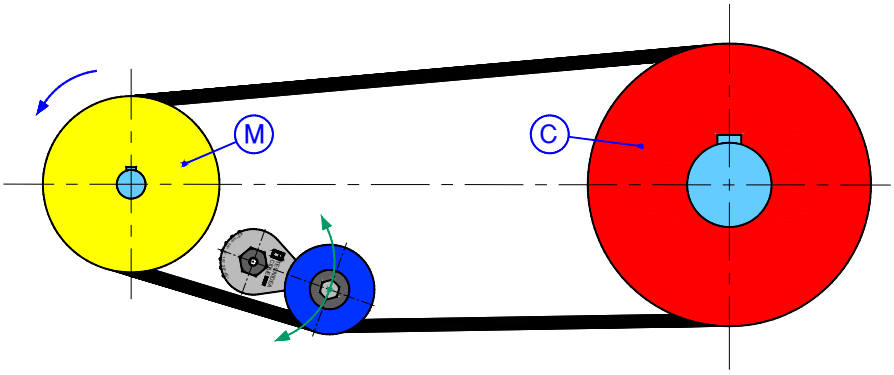


**MATERIALI** Puleggia in ghisa. Distanziali, cuscinetti e bulloneria in acciaio.
**TRATTAMENTI** Particolari metallici in acciaio zincato. Puleggia brunita o verniciata. Cuscinetti lubrificati.
**IMPIEGO** Puleggia per il tensionamento di cinghie trapezoidali.
Temperatura di lavoro della puleggia ≤100°C.

***MATERIALS*** *V-Belt pulley made of cast-iron. Spacers, bearings and bolts of made of steel.*
***TREATMENTS*** *Metallic components made of zinc plated steel. The pulley is burnished or painted. Greased bearings.*
***USE*** *Pulley for V-Belt, it is used for belt tensioning.*
*Operating temperature ≤100°C.*

| Tipo *Type* | S Cod. N° | D Cod. N° | T Cod. N° | Cinghia *Belt* | A | B | C | ØE | H | I | L | M | ØP | W | Peso *Weight* in Kg | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | S. | D. | T. |
| **PQ 30-Z** | AR071490 | AR071500 | AR071510 | Z | 24 | 35 | 40 | 67 | 24 | 23 | 16.5 | M10 | 63 | 12 | 0.40 | 0.70 | 1.10 |
| **PQ 40-A** | AR071492 | AR071502 | AR071512 | A | 34 | 45 | 50 | 95.6 | 33 | 28 | 19.5 | M12 | 90 | 15 | 1.10 | 1.10 | 1.80 |
| **PQ 40-B** | AR071494 | AR071504 | | B | 41 | 55 | | 132 | 38.5 | 32.5 | | M12 | 125 | 19 | 1.90 | 2.8 | |
| **PQ 50-B** | | | AR071514 | B | | | 63 | 132 | | | 26.5 | M20 | 125 | 19 | | | 3.50 |

Esempio di applicazione / *Application Example*

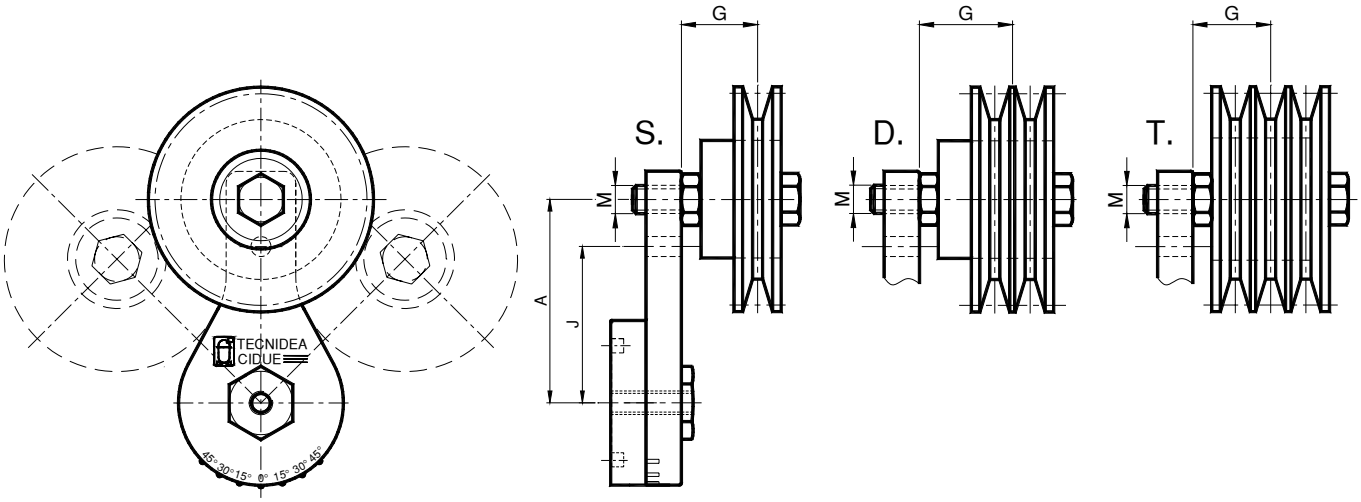



M: Puleggia motrice
*Driving pulley*
C: Puleggia condotta
*Driven pulley*

Il tendicinghia ove è possibile va sempre montato il più vicino possibile alla puleggia motrice con il verso in uscita come indicato in figura.

*The belt tightener, where possible, should always be installed as closer as possible to the driving pulley with the direction in the exit, as illustrated in the picture.*

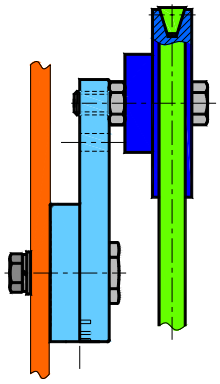
## **45T** Tipo: **45TPQ** – ***45T*** *Type:* ***45TPQ***




Il tenditore 45TPQ è composto dall'elemento base 45T e dal kit per tendicinghia PQ. I valori di carico sono riportati a pag 06. Specificare nell'ordine il montaggio del kit sul foro A o J. In mancanza di specifiche richieste sarà fornito posizionato sul foro A.

*The tensioner 45TPQ is composed by the element 45T and the chaintensioner kit PQ. The loading values are indicated at page 06. Specify in the order the assembly of the kit on the hole A or J. Failing specific requests, it will supplied you positioned on the hole A.*

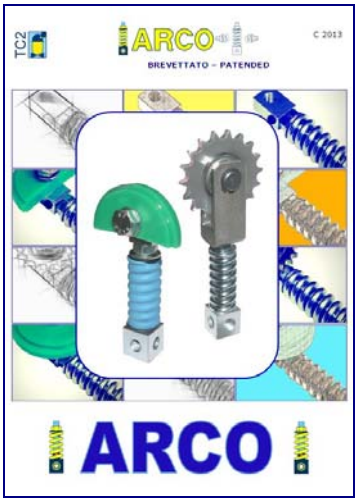
| **Cinghia** ***Belt*** | **45T + PQ** | **45T** | | **PQ** | | | |
|---|---|---|---|---|---|---|---|
| **Tipo** ***Type*** | | Pag. 06 | | Pag. 30 | | **G** | **M** |
| Z | **45T1PQZS** | 45T 1-M10 | AS010902 | PQ 30-Z S | AR071490 | 24.0 | M10 |
| A | **45T1PQAS** | 45T 1-M12 | AS010904 | PQ 40-A S | AR071492 | 33.0 | M12 |
| A | **45T2PQAS** | 45T 2-M12 | AS010913 | PQ 40-A S | AR071492 | 33.0 | M12 |
| B | **45T2PQBS** | 45T 2-M12 | AS010913 | PQ 40-B S | AR071494 | 38.5 | M12 |
| Z | **45T1PQZD** | 45T 1-M10 | AS010902 | PQ 30-Z D | AR071500 | 29.0 | M10 |
| A | **45T1PQAD** | 45T 1-M12 | AS010904 | PQ 40-A D | AR071502 | 35.7 | M12 |
| A | **45T2PQAD** | 45T 2-M12 | AS010913 | PQ 40-A D | AR071502 | 35.7 | M12 |
| B | **45T2PQBD** | 45T 2-M12 | AS010913 | PQ 40-B D | AR071504 | 42.0 | M12 |
| Z | **45T1PQZT** | 45T 1-M10 | AS010902 | PQ 30-Z T | AR071510 | 28.5 | M10 |
| A | **45T1PQAT** | 45T 1-M12 | AS010904 | PQ 40-A T | AR071512 | 34.5 | M12 |
| A | **45T2PQAT** | 45T 2-M12 | AS010913 | PQ 40-A T | AR071512 | 34.5 | M12 |
| B | **45T2PQBT** | 45T 2-M20 | AS010920 | PQ 50-B T | AR071514 | 45.5 | M20 |

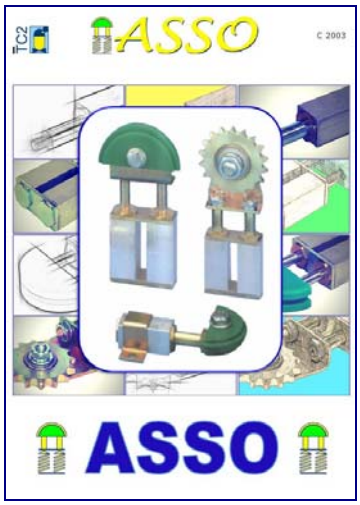


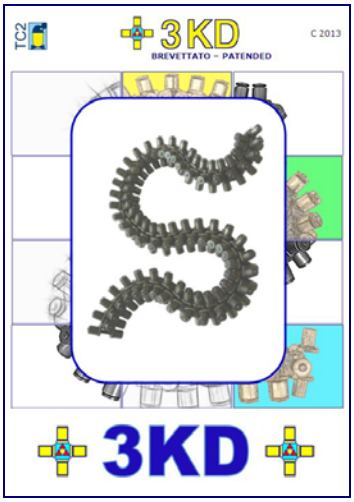
La cinghia deve avere la medesima forma e tipologia della puleggia, in modo che possano avere tra loro un accoppiamento perfetto.

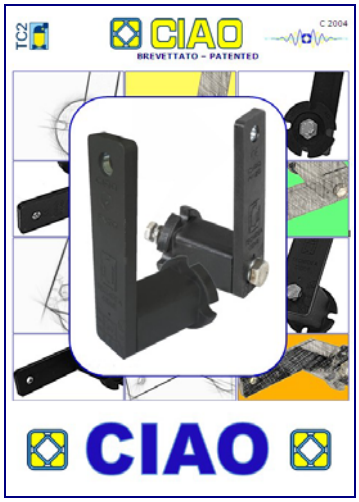
*The belt must have the same shape and type as the pulley, so that there can be a perfect coupling between them.*

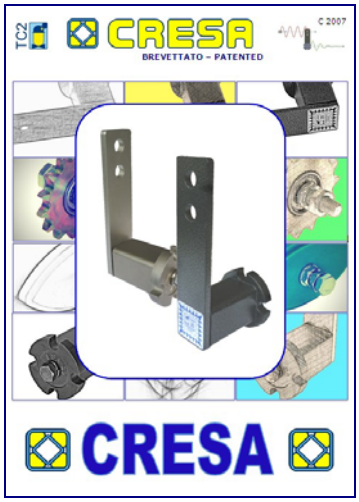
# Tecnidea Cidue products:

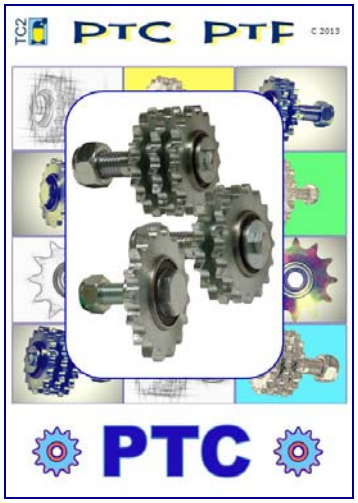








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