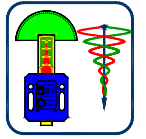
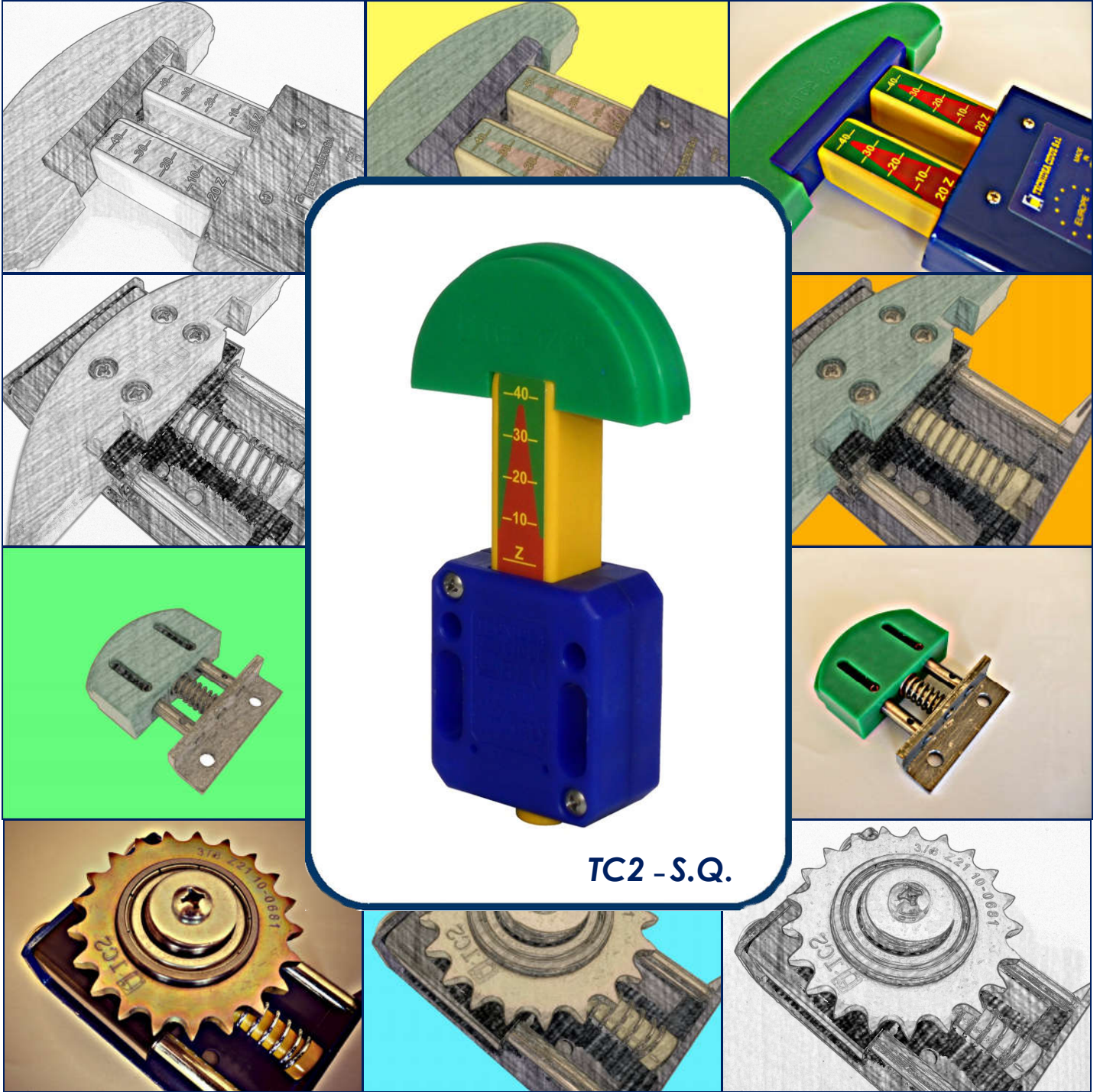


BLU



PATENTED TENSIONER UNITS



TC2 -S.Q.



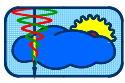
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I



TECNIDEA CIDUE S.r.l.







PRODUCTION RANGE: / PANORAMICA PRODOTTI:

			
BL pag. I-13	BD pag. I-30	VF pag. I-15	FR pag. I-18
			
FC pag. I-20	FN pag. I-22	FP pag. I-24	FU pag. I-24
			
FPX pag. I-26	FUX pag. I-26	FG pag. I-28	VG pag. I-31

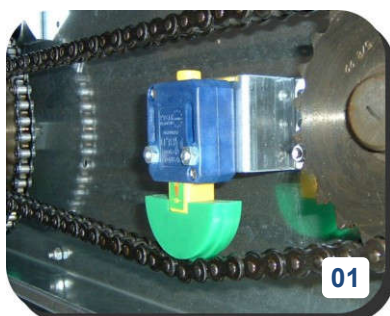
ACCESSORIES / ACCESSORI

	
TRAVEL END SWITCH pag. I-14 / I-52	MB pag. I-14

 At page I-14 and I-52 are illustrated different solutions to equip the elastic elements of this catalogue with a travel-end switch.

 A pagina I-14 e a pagina I-52 sono descritte diverse soluzioni per equipaggiare gli elementi elastici di questo catalogo con un fincorsa elettrico.

APPLICATION EXAMPLES / ESEMPI DI APPLICAZIONE



01

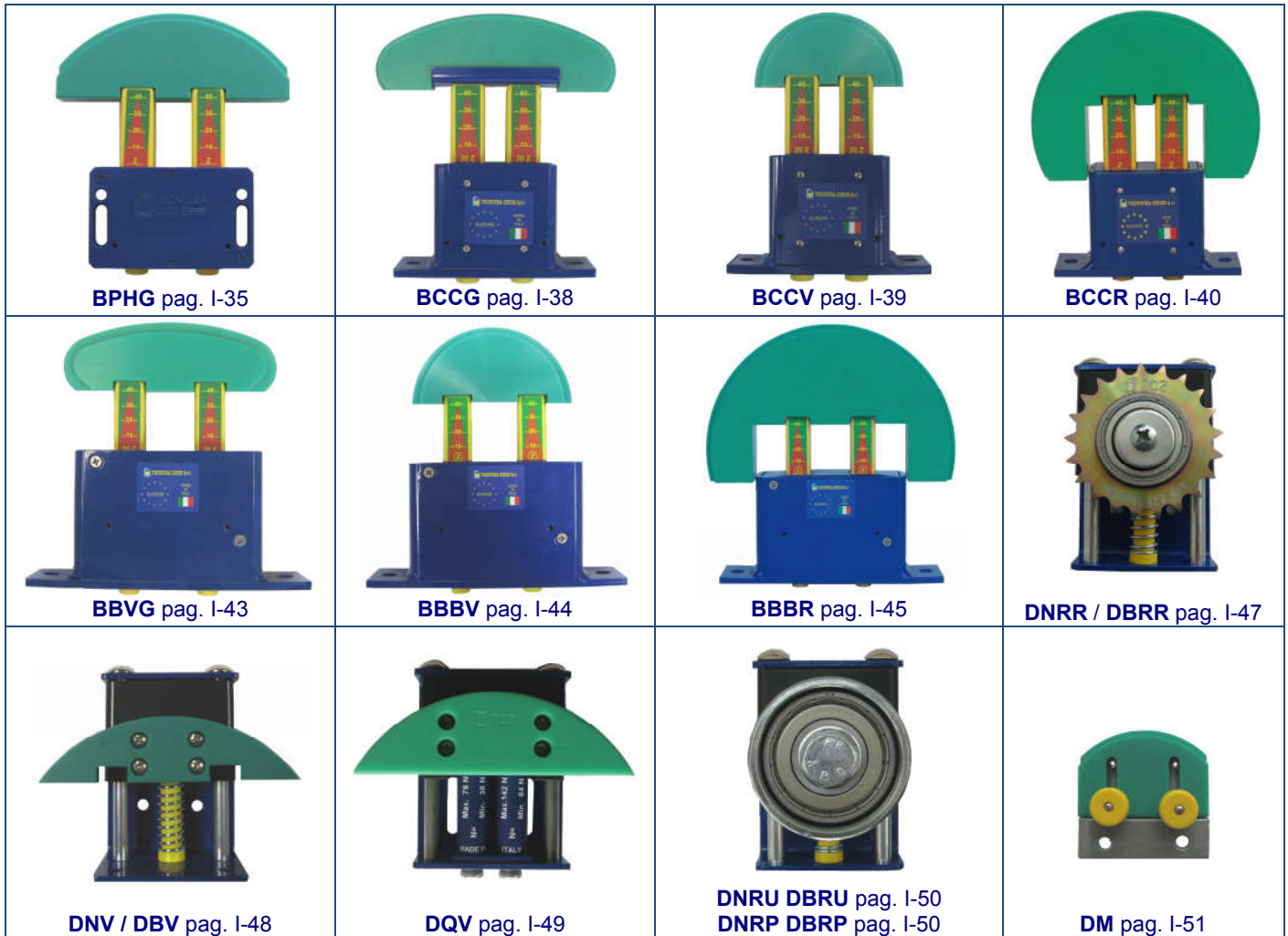


02



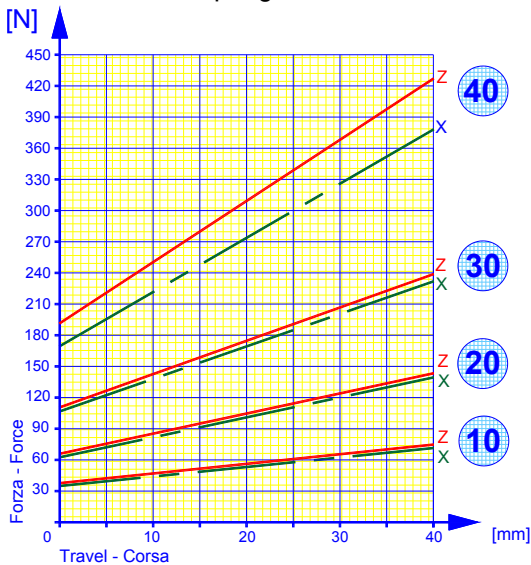
03

PRODUCTION RANGE: / PANORAMICA PRODOTTI:



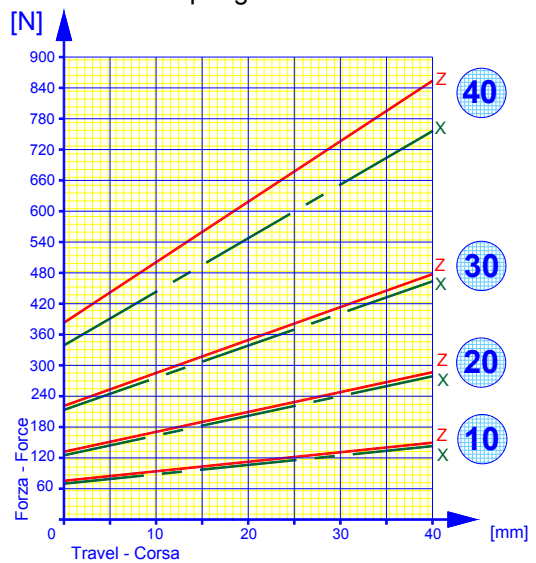
TECHNOLOGY: LOAD CHART / TECNOLOGIA: DIAGRAMMA DI CARICO

Elements with one spring / Elementi con una molla:



Size Taglia	Z	Zinc plated spring Molla zincata	X	Stainless steel spring Molla inox
10		36 – 79 N		35 – 77 N
20		64 – 142 N		63 – 139 N
30		108 – 239 N		105 – 233 N
40		194 – 430 N		171 – 380 N

Elements with two springs / Elementi con due molle:



Size Taglia	Z	Zinc plated spring Molla zincata	X	Stainless steel spring Molla inox
10		72 – 158 N		70 – 154 N
20		128 – 284 N		126 – 278 N
30		216 – 478 N		210 – 466 N
40		388 – 860 N		342 – 760 N

AXIAL TENSIONERS

Roller chain transmission consists of a driving gear “A” and one or more driven gears “B”. The motion from the driving gear to the driven gears occurs by means of a chain link. The development of the theoretical length “ L_t ” [mm] of a chain is given by the following formula:

$$L_t = n \cdot p$$

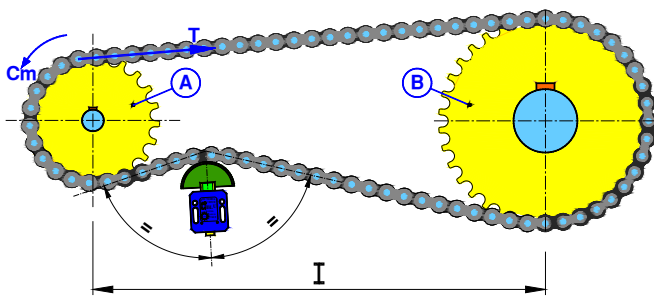


fig. 1

- A = driving gear
- D_{pA} = pitch diameter of the gear
- B = driven gear
- p = pitch of the chain in mm
- n = number of pitches
- Z_A = number of the teeth of the wheel A
- Z_B = number of the teeth of the wheel B
- C_m = torque in Nm
- M_t = torque to be transmitted in Nm
- T = tension on chain on the tensed branch in N
- I = distances between centres in mm

For chain transmissions it would be better that $Z_A + Z_B > 50$ and the number of teeth on each wheel is $Z_{A,B} < 125$. Chain has normally an even number of links, we recommend that you use gears with number of teeth exempt from reciprocal dividers. Should this not be possible, at least one pinion with an odd number of teeth should be applied, as this contributes to obtain a uniform wear of both pinions and chain.

Now, the real length of the chain can be measured:

$$L_r = \frac{2 \cdot I}{p} + \frac{Z_A + Z_B}{2} + \frac{p \cdot (Z_B - Z_A)^2}{4 \cdot \pi^2 \cdot I} + Y$$

Where Y is a number in mm to obtain the even number of links.

The torque “ C_m ” must be calculated in order to determine the roller chain tension, and this is the result of the torque to be transmitted “ M_t ” multiplied by a coefficient “ $f=1,2 \div 2,5$ ” which depends on the number of re-starts, on the motor power and the working conditions:

$$C_m = M_t \cdot f$$

The pull “T” of the chain on the tensed section can be calculated using the following formula:

$$T = \frac{2C_m}{D_{pA}} \cdot 1000$$

We recommend that you use a chain with a breakage load 5 to 8 times higher than T. On the driven section, the tension is almost zero because the only acting force is the one coming from the chain weight itself.

With this type of gear, the most usual inconvenience is a loosening of the chain which causes:

- a decrease in the winding angle, therefore the number of teeth acting on the driving gear;
- lack of a steady gearing relation;
- anomalous contact among the chain rollers and the pinion teeth;
- early wear of both the chains and the pinions;
- high level of noise;
- vibrations that will affect the whole machine structure;
- tooth jumping;
- exit of the chain by the transmission;
- breakage of the chain in the worst of the cases.

It would be a mistake however, trying to solve the problem of a loose chain, by tensing it too much when you install it for operation because in a very short time the above mentioned situations could be accentuated.

Inevitable is therefore the presence of an Automatic Tensioner that allows to recover the loosening of the chain and to absorb constantly the vibrations. The automatic tensioner must be positioned on the driven section at the exit of the motor pinion at a distance higher than four chain-pitches from the gear. Choosing the right tension value you must consider, beyond the above values, the weight and the type of chain used. If you wish to place correctly the BLU element inside your machine, make sure that the chain path geometry will be such that the angle δ obtained between the “incoming” chain to the tensioner and the tensioner axis is equal to the “outgoing” angle of the tensioner and the tensioner axis. This will allow the column to move free in the axial direction without causing excessive friction between the column and the the tensioner body where it slides.

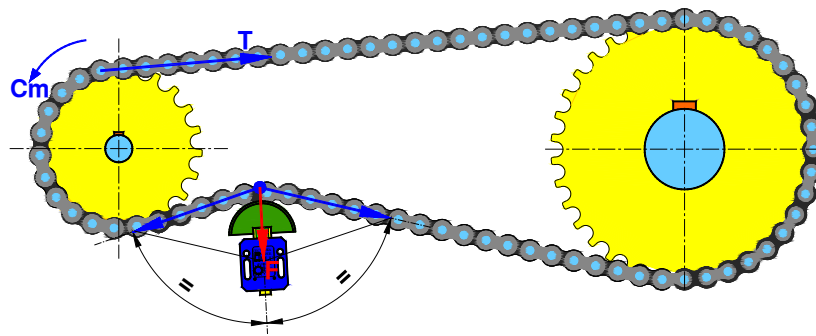


fig. 2 Correct assembly

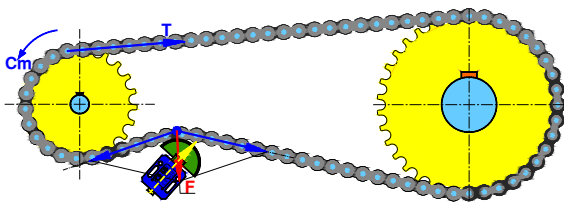


fig. 3 Wrong assembly

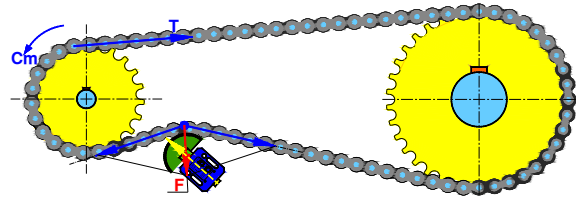


fig. 4 Wrong assembly

Flat or trapezoidal belts:

Belt drives mainly consist of a driving pulley and one or more driver pulleys. The belts are transmitting the motion from one gear to the other, and they are generally made in plastic materials, shaped in rectangular sections (flat belts) or trapezoidal sections (trapezoidal belts). For timing belts, see the section on roller chains.

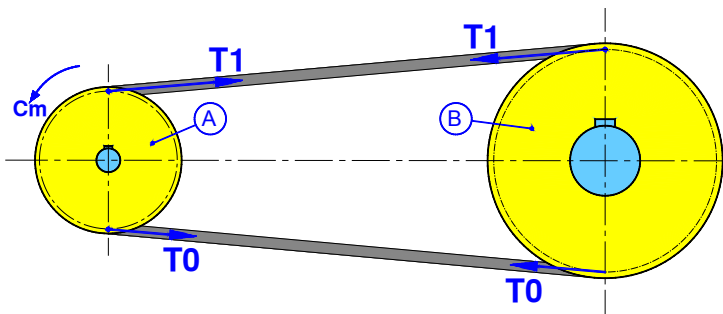


fig. 5

- A = driving pulley
- B = driven pulley
- D_p = pitch diameter of the driving pulley in mm
- T_1 = tension on the taut section in N
- T_0 = tension on the driver section in N
- C_m = maximum torque on the driving shaft in Nm
- α = angle of winding

Belt transmission does not ensure a perfect constancy of the transmission ratio due to inevitable errors of the development of the belt-length and, once started the kinematic motion, for the presence of micro-slidings between belt and pulley, that in particular dynamic conditions, most of all in start-up, can cause the sliding of all the belt on the driving pulley. Sliding depends on a number of factors:

- low winding of the angle α of the belt on the driving pulley;
- low friction coefficient between the contact surfaces of the belt and the pulley given the presence of oil or fat or because of lengthening;
- vibrations;
- low pre-tensioning of the belt.

In order to avoid micro-sliding, the use of an automatic tensioner is necessary and it helps to recover any lengthening as well as vibrations an "n" knot in a convenient position along the belt section and also to increase the winding angle α with a ringt positioning.

To select the correct tensioner the must be consider the pulling acting on the belts. For the calculation of the pulls of a belt drive you have to write the equation of balance at the rotation of the driving pulley (equation 1) together with the max allowed sliding condition (equation 2), because on the driving gear the winding angle α is usually lower. In general, α must be approximately π rad.

The system to be solved is the following:

$$\left\{ \begin{array}{l} (T_1 - T_0) \cdot \frac{D_p}{2} \cdot \frac{1}{1000} = C_m \text{ (equation 1)} \\ T_1 = T_0 e^{\eta \alpha} \text{ (equation 2)} \end{array} \right.$$

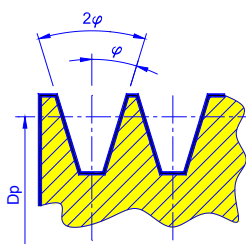


fig. 6

- e = Nepero's number, equal to 2,72
- η = friction coefficient between belt and pulley (in case of V-type belts, this coefficient has to be divided by $\sin(\varphi)$, where φ is the angle of the semiaperture of the rim of the pulley in rad). Figure 6
- M_t = torque to be transmitted at uniform rating in Nm
- C_m = maximum torque on the driving shaft in Nm
- f_s = duty factor from 2 to 5

“ C_m ” is the maximum value of the torque that can be reached during the start up, which is the hardest condition for sliding. This is obtained by multiplying the value of the torque to be driven “ M_t ” by a service factor “ f_s ” (2÷5) in speed-conditions, i.e. $C_m = f_s \cdot M_t$.

The automatic tensioner should be positioned in the driven section as close as possible to the driving pulley. The tension in the belt section where tensioner works is constant because the friction and contrasting forces on the belt tensioner are almost zero. The force developed by the BLU element should be at least necessary to re-balance the resulting value from the sum of the two components of the tension on the section where the tensioner is applied, along the tensioner axis itself. The BLU element will work correctly if – while fixing – the angles between the sliding axis of the column (i.e. the spring) and the belt “incoming” and “outgoing” from the tensioner are as equal as possible. Fig. 7 shows an example of a correct application: the BLU element has been positioned along the driven section. The transmission configuration forms an angle of the belt going out of the driving pulley of γ degrees versus the vertical position, while on the driven pulley of β degrees versus the vertical position. The BLU element works correctly when it is oriented in a way that the angle obtained

from the belt “incoming” and “outgoing” from the tensioner and its axis is even and equal to:
$$\delta = \frac{(180^\circ - \gamma - \beta)}{2}$$
.

This positioning geometry let the tensioner work correctly managing to balance axially the resultant of the forces acting on the belt so that no perpendicular force can develop along the BLU column.

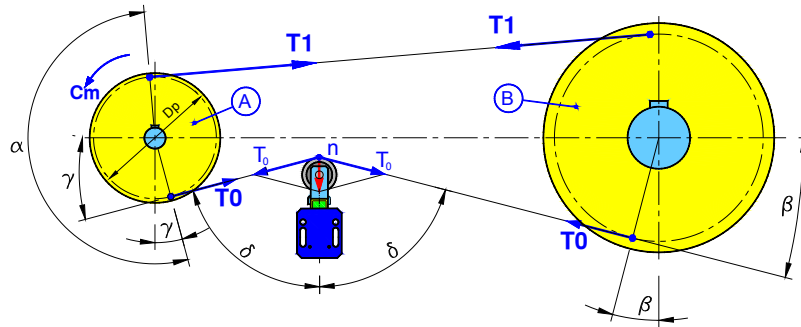
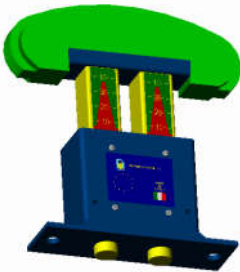


fig. 7

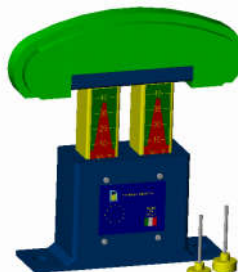
ASSEMBLY INSTRUCTIONS FOR ELEMENTS WITH BOX-STRUCTURE

Phase 1

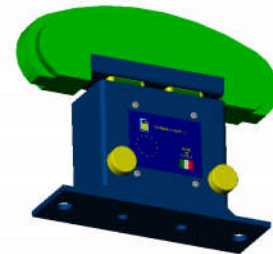


Extract the yellow preloading pins from the bottom of the body.

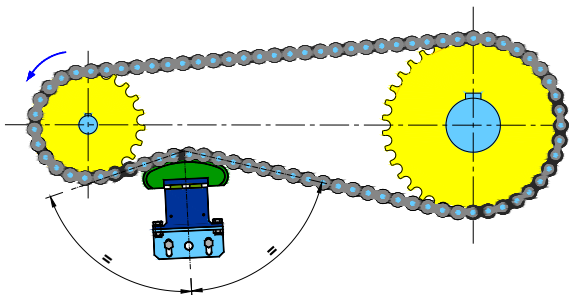
Phase 2



Compress the tensioner and insert preloading pins into the holes on the body.



Phase 3



Place the tensioner into the transmission on the slow section and near the driving pinion.

Remove preloading pins. During the assembly operation, moreover, pay attention to the positioning angles: the angle between the axis of the “incoming” chain to the tensioner and the axis of tensioner must be equal to the angle between the axis of the “outgoing” chain to the tensioner and the axis of tensioner.

During the maintenances, check the remaining travel of the tensioner through the graduated scale present on the columns of the tensioner:

20-40: Prevalence green color → ideal

10-20: Prevalence red color → acceptable

10- 0: Red → need to reset working conditions.



CALCULATION EXAMPLE

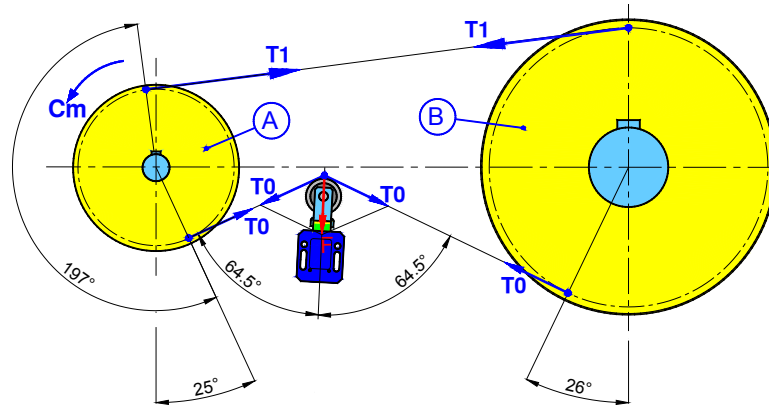


fig. 8

Motor features: $P=3$ Cv
 $n=940$ rpm

We convert the previous values into the unit of measure SI: $P=3 \times 735 = 2205$ W
 $\omega = 940 \times \pi / 30 = 98,4$ rad/s

$P = M_t \times \omega \rightarrow M_t = P / \omega = 22,4$ Nm

We suppose $f_s = 2,5$
 $C_m = 2,5 \times M_t = 56$ Nm

Pitch diameter of the driving pulley $D_p = 100$ mm

$$\begin{cases} (T_1 - T_0) \times 0,05 = 56 \rightarrow (T_1 - T_0) = 1120 & \text{(equation 1)} \\ T_1 = T_0 e^{n\alpha} & \text{(equation 2)} \end{cases}$$

- winding angle $\alpha = 197^\circ \times \pi / 180^\circ = 3,44$ rad
- friction coefficient between belt and pulley $= 0,2$
- V-type belt with angle of semiaperture $\varphi = 17^\circ \rightarrow \sin(\varphi) = 0,29$
- V-type belt $\rightarrow \mu' = 0,2 / \sin(\varphi) = 0,2 / 0,29 = 0,69$
- Nepero's number $e = 2,72$

$$\begin{cases} T_1 = T_0 e^{0,69 \times 3,44} = T_0 \times 10,74 & \text{(equation 2)} \\ (10,74 T_0 - T_0) = 1120 & \text{(equation 1)} \end{cases}$$

- $\rightarrow T_0 = 115$ N
- $\rightarrow T_1 = 1120 + 115 = 1235$ N
- $\rightarrow F = 2 \times 115 \times \cos(64,5^\circ) = 99$ N

Now we can choose the elastic element that will have to develop a thrust compatible to the force F and from the table kit choice we can choose the roller according to the type of the belt.

Sliding block, wheel, pinion, roller?

While choosing the correct tensioner, the usual question is which is the right KIT to be used in a specific application. Above all, the first parameter to be considered is the type of use of the BLU elemen. In general, sliding block, wheel and pinions are used with chains while rollers are used with belts. In chain drives at low speeds, the use of sliding block or wheel is preferred, with halfway speeds is recommended the use of sprockets, while at high speeds, to decrease the noise trouble, it is better to use sliding blocks respect to sprockets, using however springs with lower loads.

Concerning belts, the main parameters that should be taken into consideration are two: the width of the belt and its speed. The belt width must be approximately 10 mm lower the roller one, and the rotation speed that the belt imparts to the roller must be lower than 3000 r.p.m. For higher speeds we recommend you to contact us.

■ TENDITORI ASSIALI

Una trasmissione con catena a rulli è costituita da una ruota dentata motrice "A" ed una o più ruote condotte "B". Il trasferimento di moto dalla ruota motrice alle ruote condotte avviene mediante un anello di catena. Lo sviluppo della lunghezza teorica " L_t " [mm] di una catena è dato dalla seguente formula:

$$L_t = n \cdot p$$

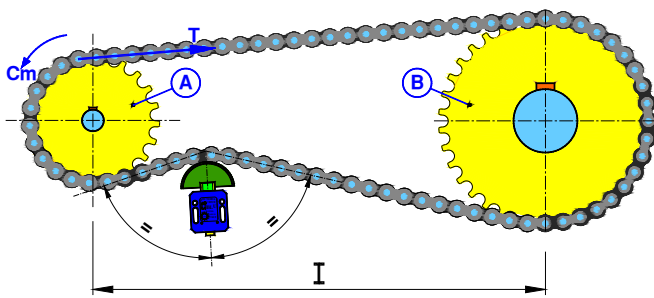


fig. 1

A = ruota dentata motrice

D_{pA} = diametro primitivo ruota dentata A in mm

B = ruota dentata condotta

p = passo della catena in mm

n = numero di passi

Z_A = numero di denti della ruota A

Z_B = numero di denti della ruota B

C_m = coppia motrice in Nm

M_t = coppia da trasmettere in Nm

T = tensione sulla catena sul ramo teso in N

I = interasse in mm

Per le trasmissioni a catena risulta opportuno che $Z_A + Z_B > 50$ e che il numero di denti su ogni ruota risulti $Z_{A,B} < 125$. Poiché normalmente la catena ha un numero pari di maglie consigliamo ruote dentate con numeri di denti privi di divisori reciproci (se questo non fosse possibile conviene adottare almeno un pignone con un numero di denti dispari) in quanto con tale accorgimento l'usura si distribuisce uniformemente sia sui pignoni che sulla catena.

A questo punto si può calcolare la lunghezza reale della catena:

$$L_r = \frac{2 \cdot I}{p} + \frac{Z_A + Z_B}{2} + \frac{p \cdot (Z_B - Z_A)^2}{4 \cdot \pi^2 \cdot I} + Y$$

Dove Y è un numero in mm per il raggiungimento del numero pari di maglie.

Per la determinazione della tensione della catena a rulli è necessario ricavare la coppia motrice " C_m ", che è data dalla coppia da trasmettere " M_t " moltiplicata per un coefficiente " $f=1,2-2,5$ ", dipendente dal numero di ripartenze, dalla potenza del motore e dalle condizioni di lavoro:

$$C_m = M_t \cdot f$$

Il tiro "T" della catena sul ramo teso sarà determinato secondo la formula:

$$T = \frac{2 C_m}{D_{pA}} \cdot 1000$$

Consigliamo quindi di scegliere una catena avente un carico di rottura da 5 a 8 volte superiore a T. Sul ramo condotto, invece, la tensione è circa nulla, infatti, l'unica forza agente è quella data dal peso proprio della catena.

L'inconveniente più frequente con questo tipo di trasmissione è l'allungamento della catena e comporta:

- diminuzione dell'angolo di avvolgimento, quindi del numero di denti in presa sulla ruota motrice;
- manca di costanza del rapporto di trasmissione;
- anomalo contatto fra i rulli della catena ed i denti del pignone;
- usura precoce delle catene e dei pignoni;
- alta rumorosità;
- vibrazioni, con propagazione delle stesse all'intera struttura della macchina;
- salto del dente;
- uscita della catena dalla trasmissione;
- nei casi estremi rottura della catena.

Errato sarebbe, però, cercare di risolvere il problema dell'allentamento della catena tendendola eccessivamente durante la fase di messa in opera della trasmissione, in quanto dopo poco tempo si rischierebbe di accentuare le situazioni sopra descritte.

Inevitabile risulta, quindi, la presenza di un Tendicatena Automatico che permetta di recuperare nel tempo gli allungamenti e di assorbire costantemente le vibrazioni. Il tendicatena automatico dovrà essere posizionato sul ramo condotto all'uscita del pignone motore ad una distanza superiore a quattro passi dalla corona dentata. Per la scelta del giusto valore di tensione si dovrà tener conto, oltre ai valori sopra esposti, del peso della catena e del tipo di catena utilizzata. Nelle tabella dei KIT sono indicati dei valori orientativi che vi possono aiutare nella selezione. Per un corretto posizionamento di BLU all'interno dell'impianto, si dovrà fare attenzione che la geometria della traiettoria che la catena assumerà, sia tale per cui l'angolo δ che si formerà tra la catena in "entrata" al tenditore e l'asse del tenditore sia uguale all'angolo in "uscita" dal tenditore e l'asse del tenditore. In questo modo, la colonna sarà libera di muoversi in direzione assiale senza provocare attriti eccessivi tra la colonna e la sede nel corpo nella quale scorre.

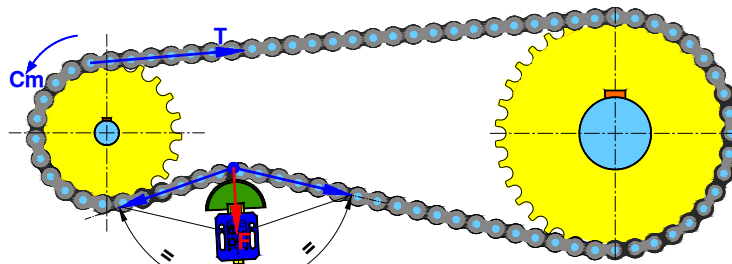


fig. 2 **Montaggio corretto**

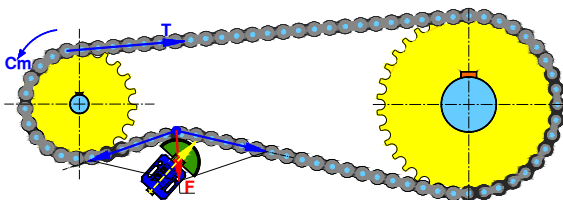


fig. 3 **Montaggio errato**

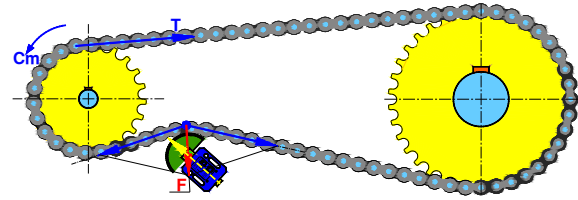


fig. 4 **Montaggio errato**

Cinghie piane o trapezoidali:

La trasmissione a cinghie è generalmente costituita da una puleggia motrice e una o più pulegge condotte. Il trasferimento di moto da una ruota all'altra avviene mediante delle cinghie, in genere realizzate in materiale plastico, che possono essere a sezione rettangolare (cinghie piane) o a sezione trapezoidale (cinghie trapezoidali). Per le cinghie dentate consultare la sezione relativa alle catene a rulli.

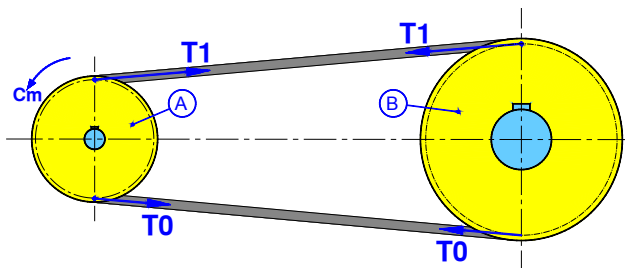


fig. 5

- A = puleggia motrice
- B = puleggia condotta
- D_p = diametro primitivo puleggia motrice in mm
- T_1 = tensione sul ramo teso in N
- T_0 = tensione sul ramo condotto in N
- C_m = momento massimo sull'albero motore in Nm
- α = angolo di avvolgimento

La trasmissione a cinghia non assicura una perfetta costanza del rapporto di trasmissione a causa di inevitabili errori dello sviluppo della lunghezza della cinghia e, una volta messo in opera il cinematismo, per la presenza di microslittamenti tra cinghia e puleggia, che in particolari condizioni dinamiche, soprattutto nelle ripartenze, possono provocare lo slittamento dell'intera cinghia sulle pulegge motrice. La presenza di slittamenti dipende da alcuni fattori:

- basso avvolgimento dell'angolo α della cinghia sulla puleggia motrice;
- basso coefficiente d'attrito tra le superfici di contatto della cinghia e della puleggia per la presenza di olio o grasso o a causa di allungamenti;
- vibrazioni;
- basso pretensionamento della cinghia.

Per eliminare i microslittamenti, quindi diventa necessario l'utilizzo di un tenditore automatico, poiché tale accorgimento consente di recuperare gli allungamenti e di assorbire le vibrazioni provocando un nodo "n" in un punto conveniente della traiettoria della cinghia, e di aumentare l'angolo di avvolgimento α mediante un opportuno posizionamento.

Per effettuare la scelta del tenditore è fondamentale conoscere, però, le tensioni di tiro agenti lungo la cinghia. Per il calcolo dei tiri di una trasmissione a cinghie è necessario scrivere l'equazione di equilibrio alla rotazione della puleggia motrice (equazione 1), insieme alla condizione limite allo slittamento (equazione 2), perché sulla ruota motrice in genere è minore l'angolo di avvolgimento α . Comunemente α deve essere circa π rad.

Il sistema da risolvere è quindi:

$$\begin{cases} (T_1 - T_0) \cdot \frac{D_p}{2} \cdot \frac{1}{1000} = C_m & \text{(equazione 1)} \\ T_1 = T_0 e^{\alpha} & \text{(equazione 2)} \end{cases}$$

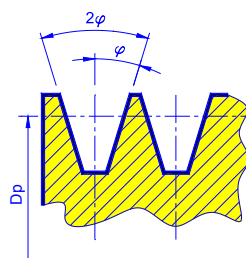


fig. 6

- e = numero di Nepero, costante pari a 2,72
- μ = coefficiente d'attrito tra cinghia e puleggia (nel caso di cinghie trapezoidali esso va diviso per $\sin(\varphi)$, dove φ è l'angolo di semiapertura della gola misurato in rad). fig. 6
- M_t = momento da trasmettere a regime in Nm
- C_m = momento massimo sull'albero motore in Nm
- f_s = fattore di servizio da 2 a 5

“ C_m ” è il valore massimo della coppia raggiungibile durante l'avviamento, ovvero nella condizione più gravosa per lo slittamento, e lo si ottiene moltiplicando per un fattore di servizio “ f_s ” (2÷5) il valore della coppia da trasmettere “ M_t ” in condizioni di regime, cioè $C_m = f_s \cdot M_t$.

Il tenditore automatico dovrà essere posizionato sul ramo condotto il più vicino possibile alla puleggia motrice. La tensione nel ramo della cinghia su cui il tenditore insiste è costante, in quanto le forze d'attrito e resistenti sul tendicinghia sono praticamente nulle. Il tenditore BLU dovrà quindi sviluppare una forza almeno necessaria ad equilibrare la risultante della somma delle due componenti della tensione del ramo su cui è applicato il tenditore, lungo l'asse del tenditore stesso. Per il corretto funzionamento del tenditore BLU è fondamentale che il suo posizionamento avvenga in modo tale che gli angoli che si formano tra l'asse di scorrimento della colonna, ovvero della molla, e la cinghia in “entrata” e in “uscita” dal tenditore siano il più possibili uguali. La fig. 7 mostra un esempio di giusta applicazione: BLU è stato posizionato lungo il ramo condotto. La configurazione della trasmissione è tale da formare un angolo della cinghia in uscita dalla puleggia motrice di γ gradi rispetto alla verticale, mentre su quella condotta di β gradi rispetto la verticale. Per un corretto funzionamento, il tenditore BLU è stato orientato in maniera tale che l'angolo che si crea tra la cinghia in “entrata” e in “uscita” dal tenditore e il suo asse siano uguali e pari a: $\delta = \frac{(180^\circ - \gamma - \beta)}{2}$.

Questa geometria di posizionamento permette, quindi, al tenditore di operare in un corretto modo, riuscendo ad equilibrare assialmente la risultante delle forze agenti sulla cinghia, in maniera tale che nessuna forza perpendicolare possa svilupparsi sulla colonna di BLU.

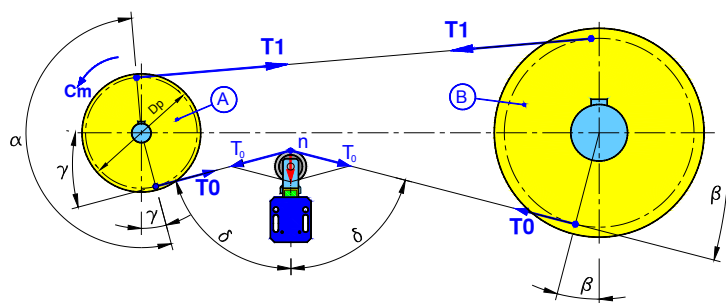
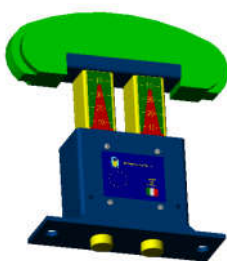


fig. 7

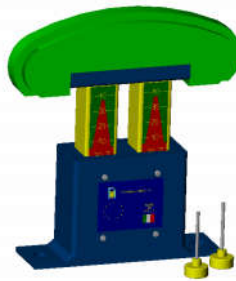
ISTRUZIONI DI MONTAGGIO PER ELEMENTI CON CORPO SCATOLARE

Fase 1

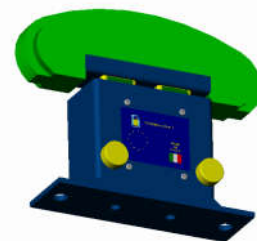


Estrarre i pioli di precarica di colore giallo dal fondo del corpo.

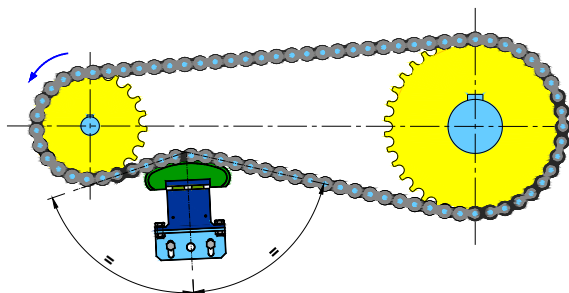
Fase 2



Comprimere il tenditore ed inserire i pioli di precarica nei fori presenti sul corpo.



Fase 3



Posizionare il tenditore nella trasmissione sul ramo lento e vicino al pignone motore.

Rimuovere i pioli di precarica. Durante l'operazione di montaggio, inoltre, bisogna prestare attenzione agli angoli di posizionamento: l'angolo tra l'asse della catena in “entrata” al tenditore e l'asse del tenditore deve essere uguale all'angolo tra l'asse della catena in “uscita” dal tenditore e l'asse del tenditore.

Durante le manutenzioni verificare la corsa rimanente del tenditore mediante la scala graduata presente sulle colonne del tenditore:

20-40: Prevalenza colore verde → ideale

10-20: Prevalenza colore rosso → accettabile

10- 0: Rosso → necessità di ripristino condizioni di lavoro.



ESEMPIO DI CALCOLO

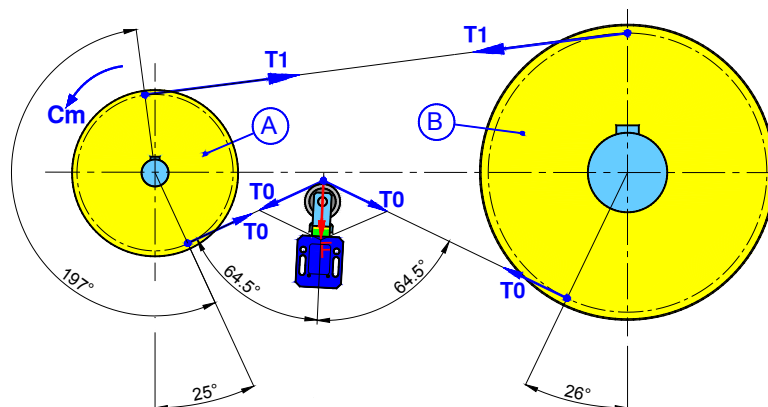


fig. 8

Caratteristiche motore: $P=3$ Cv
 $n=940$ giri/min

Trasformiamo i valori precedenti con le unità di misura del SI: $P=3 \times 735 = 2205$ W
 $\omega = 940 \times \pi / 30 = 98,4$ rad/s

$P = M_t \times \omega \rightarrow M_t = P / \omega = 22,4$ Nm

Si suppone $f_s = 2,5$

$C_m = 2,5 \times M_t = 56$ Nm

Diametro primitivo puleggia motrice $D_p = 100$ mm

$$\begin{cases} (T_1 - T_0) \times 0,05 = 56 \rightarrow (T_1 - T_0) = 1120 & \text{(equazione 1)} \\ T_1 = T_0 e^{\eta \alpha} & \text{(equazione 2)} \end{cases}$$

- o angolo di avvolgimento $\alpha = 197^\circ \times \pi / 180^\circ = 3,44$ rad
- o coefficiente d'attrito tra cinghia e puleggia $= 0,2$
- o cinghia trapezoidale con angolo di semiapertura $\varphi = 17^\circ \rightarrow \sin(\varphi) = 0,29$
- o cinghia trapezoidale $\rightarrow \mu' = 0,2 / \sin(\varphi) = 0,2 / 0,29 = 0,69$
- o numero di Nepero $e = 2,72$

$$\begin{cases} T_1 = T_0 e^{0,69 \times 3,44} = T_0 \times 10,74 & \text{(equazione 2)} \\ (10,74 T_0 - T_0) = 1120 & \text{(equazione 1)} \end{cases}$$

$\rightarrow T_0 = 115$ N

$\rightarrow T_1 = 1120 + 115 = 1235$ N

$\rightarrow F = 2 \times 115 \times \cos(64,5^\circ) = 99$ N

Ora si può scegliere l'elemento elastico che dovrà sviluppare una spinta compatibile con la forza F e dalla tabella di scelta KIT il rullo in base al Tipo di cinghia.

Pattino, rotella, pignone, rullo?

Nella scelta del giusto tenditore, spesso ci si confronta con il dilemma di quale sia il giusto KIT da utilizzare per la propria applicazione. Innanzitutto il primo parametro da considerare è per quale utilizzo sia adibito il tenditore BLU, infatti, pattini, rotelle e pignoni sono generalmente usati con le catene mentre i rulli con le cinghie. Con le trasmissioni a catena per basse velocità viene privilegiato l'uso dei pattini o delle rotelle, con velocità intermedie è consigliato l'uso dei pignoni, mentre a velocità elevate, per diminuire l'inquinamento acustico si preferisce l'utilizzo dei pattini rispetto al pignone, utilizzando però molle con carichi più bassi.

Nel caso di cinghie i parametri principali da osservare sono due: la larghezza della cinghia e la sua velocità. La larghezza della cinghia deve essere di circa 10mm inferiore a quella del rullo e la velocità di rotazione che la cinghia imprime al rullo deve essere inferiore a 3000 giri/min. Per velocità superiori vi consigliamo di consultarci.

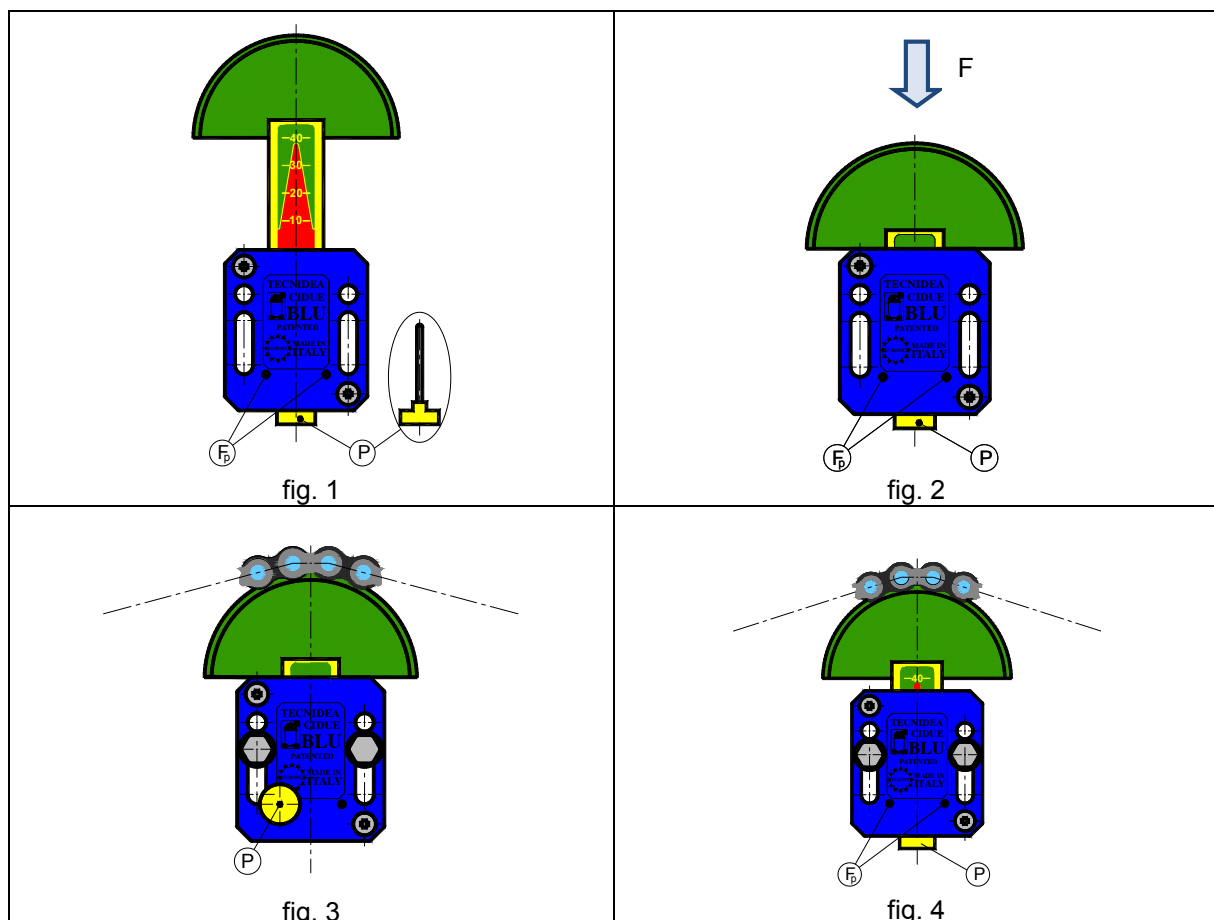
ASSEMBLY INSTRUCTIONS / ISTRUZIONI DI MONTAGGIO

UK In order to make BLU working in the best way on the chain or belt transmission, it is necessary that it is placed correctly on the system. Tensioner must be mounted on the slow section (not tensioned part) of the transmission and the nearest possible to the driving (pinions or pulleys). Here are some easy assembly steps to be followed in phase of BLU installation:

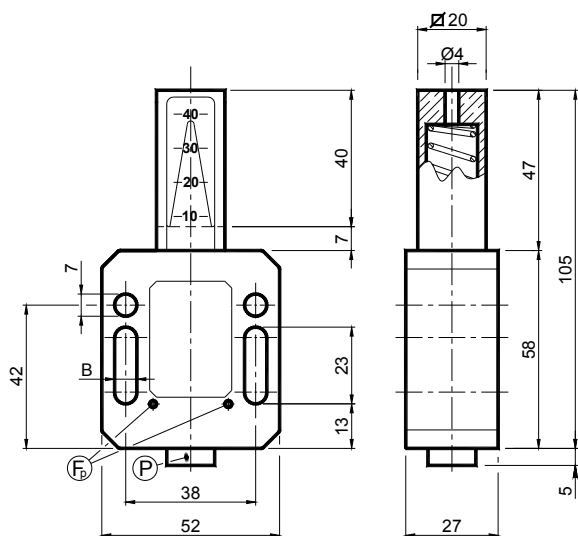
- 1) Take out the preloading pin \textcircled{P} from the bottom of the body (fig. 1);
- 2) Press on the column, so that, when compressing, the spring can enter completely inside the body;
- 3) With the column completely inside the body, fit the preloading pin \textcircled{P} in the hole $\textcircled{F_p}$ on the body (fig. 2);
- 4) Place BLU tensioner preloaded, on the system and through the use of two screws and the slot available on the body, push it towards the part to be tensioned (chain or belt). Tighten the screws and if necessary place two pins in the designated holes on the body. In this phase pay attention to the angle positioning which will be created between the tensioner axis and the element to be tensioned (fig. 3);
- 5) Take the preloading pin \textcircled{P} out from the hole $\textcircled{F_p}$ and place it in its initial location. Tensioner will automatically put the chain or belt under tension (fig. 4).

IT Affinché BLU possa operare ottimamente sulla trasmissione a catena o a cinghia è necessario che esso sia posizionato sull'impianto correttamente. Il tenditore va montato sul tratto lento (non in tensione) della trasmissione ed il più vicino possibile all'organo motore (pignoni o pulegge). Riportiamo delle semplici azioni di montaggio da eseguire in fase di messa in opera di BLU:

- 1) Estrarre dal fondo del corpo il piolo precarica \textcircled{P} (fig. 1);
- 2) Fare forza sulla colonna in maniera tale che comprimendo la molla essa possa entrare completamente all'interno del corpo;
- 3) Con la colonna interamente all'interno del corpo posizionare il piolo precarica \textcircled{P} nel foro $\textcircled{F_p}$ visibile sul corpo (fig. 2);
- 4) Posizionare il tenditore BLU, così precaricato, sull'impianto e mediante l'utilizzo di due viti e le asole presenti sul corpo spingerlo contro l'organo da mettere in tensione (catena o cinghia). Stringere le viti e se ritenuto necessario posizionare due spine negli appositi fori presenti sul corpo. In questa fase si dovrà fare attenzione all'angolo di posizionamento che si dovrà creare tra l'asse del tenditore e dell'elemento da mettere in tensione (fig. 3);
- 5) Estrarre il piolo precarica \textcircled{P} dal foro $\textcircled{F_p}$ e riposizionarlo nella sua sede iniziale. Il tenditore automaticamente porterà in tensione la catena o la cinghia (fig. 4).



Elastic elements - Type **BL-Z**: with galvanized steel spring – Type **BL-X**: with stainless steel spring
 Elementi elastici - Tipo **BL-Z**: con molla in acciaio zincato – Tipo **BL-X**: con molla in acciaio inox



UK MATERIALS The body and the column are made of plastic. Stainless steel screws.

TREATMENTS Spring inside can be in galvanized or stainless steel.

USE Maximum operating temperature are +80°C. The travel is 40 mm.

IT MATERIALI Corpo e colonna in plastica. Bulloneria in acciaio inox.

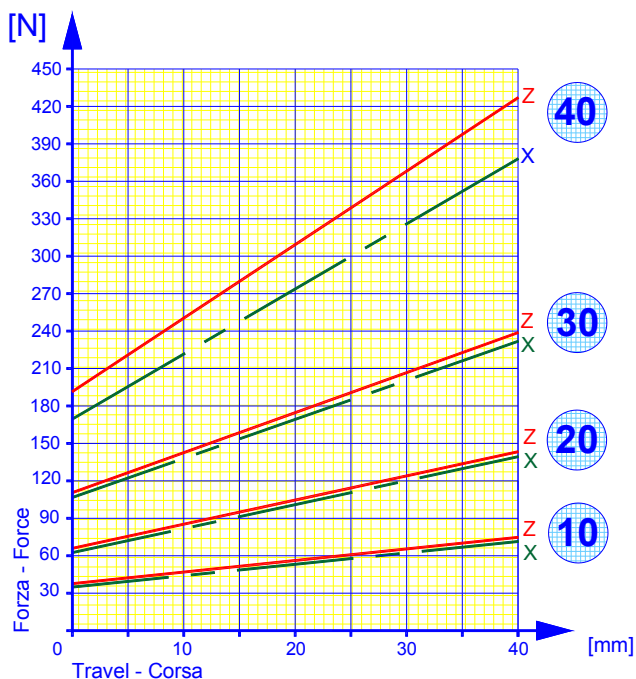
TRATTAMENTI La molla all'interno può essere in acciaio zincato oppure in acciaio inox.

IMPIEGO Temperatura massima di lavoro da +80°C. La corsa è di 40 mm.

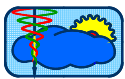
F_p = Preloading hole / Foro precarica

P = Preloading pin / Piolo per precarica

Load diagram / Diagramma di carico



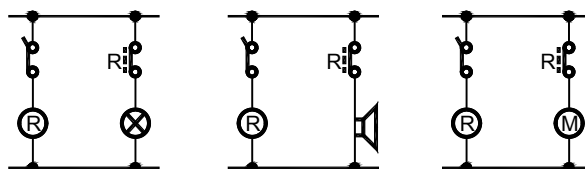
Z Galvanized steel spring Molla in acciaio zincato		Weight: 0,1 [kg] Peso: 0,1 [kg]		X Stainless steel spring Molla in acciaio inox		Weight: 0,1 [kg] Peso: 0,1 [kg]	
Type Tipo	Cod. N°	B	Newton	Type Tipo	Cod. N°	Newton	
BL 10-6 Z	BL010010	6,5	36 - 79	BL 10-6 X	BL010110	35 - 77	
BL 10-8 Z	BL010013	8,5	36 - 79	BL 10-8 X	BL010113	35 - 77	
BL 20-6 Z	BL010020	6,5	64 - 142	BL 20-6 X	BL010120	63 - 139	
BL 20-8 Z	BL010023	8,5	64 - 142	BL 20-8 X	BL010123	63 - 139	
BL 30-6 Z	BL010030	6,5	108 - 239	BL 30-6 X	BL010130	105 - 233	
BL 30-8 Z	BL010033	8,5	108 - 239	BL 30-8 X	BL010133	105 - 233	
BL 40-6 Z	BL010040	6,5	194 - 430	BL 40-6 X	BL010140	171 - 380	
BL 40-8 Z	BL010043	8,5	194 - 430	BL 40-8 X	BL010143	171 - 380	



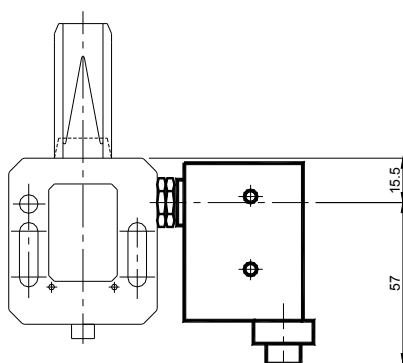
Travel-end switch – Type: E, I, V / Finecorsa elettrico – Tipo: E, I, V

The travel-end switch can be mounted on all BLU or BLUD elastic elements. The travel-end switch we use is with IP63 protection class, so it can be used also in humid environments. The travel-end switch is particularly useful when you want to control the correct working of the machine and/or protect the safety of the workers. Our clients can choose among three different solutions (E, I, V) which have to be specified in order phase.

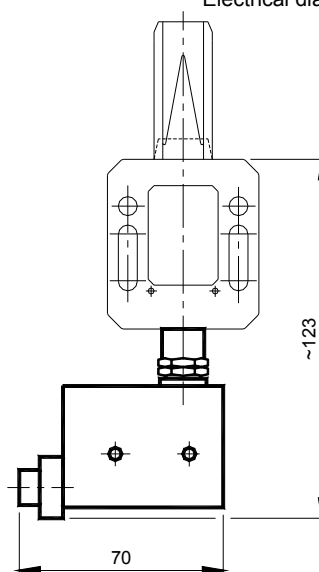
Il KIT finecorsa elettrico è applicabile su tutti gli elementi elastici BLU o BLUD. Il fine corsa elettrico da noi utilizzato è con classe di protezione IP63, in modo da poterlo utilizzare anche in ambienti umidi. Il fine corsa elettrico è particolarmente utile quando si voglia controllare il corretto funzionamento della macchina e/o salvaguardare l'incolumità degli operatori. I nostri clienti potranno scegliere tra tre differenti esecuzioni (E, I, V) da specificare in fase di ordinazione.



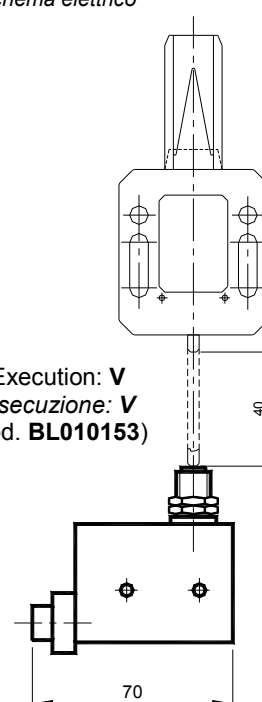
Electrical diagram / Schema elettrico



Execution: E / Esecuzione: E (cod. BL010150)

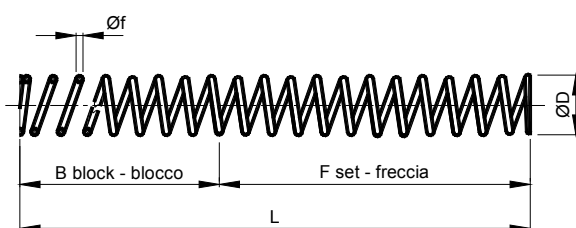


Execution: I / Esecuzione: I (cod. BL010156)



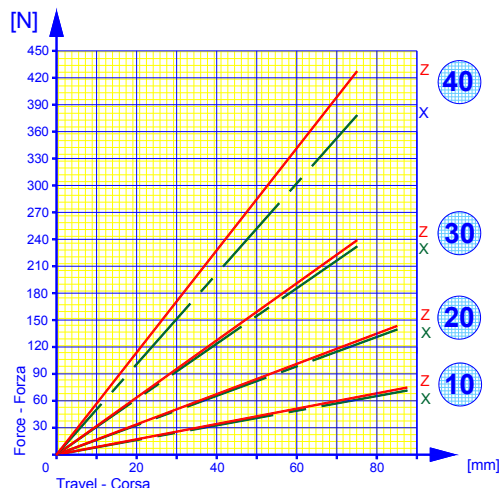
Execution: V / Esecuzione: V (cod. BL010153)

Springs – Type: MB / Molle – Tipo: MB



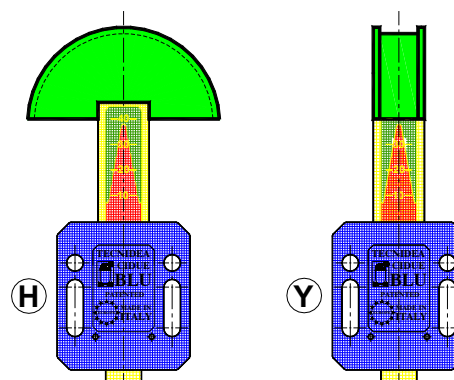
- Type MB Z : Galvanized steel Z
- Type MB X : Stainless steel X
- Tipo MB Z : Acciaio zincato Z
- Type MB X : Acciaio inox X

Type Tipo	Cod. N°	Øf	L	ØD	B	F	Newton	Weight Peso in [kg]
MB 10 Z	BL001034	1,4	118	14,0	29,4	88,6	0 - 79	0,01
MB 20 Z	BL001036	1,6	118	14,0	33,6	84,4	0 - 142	0,01
MB 30 Z	BL001038	1,8	118	14,5	37,8	80,2	0 - 239	0,02
MB 40 Z	BL001040	2,1	118	14,8	44,1	73,9	0 - 430	0,02
MB 10 X	BL001054	1,4	118	14,0	29,4	88,6	0 - 77	0,01
MB 20 X	BL001056	1,6	118	14,0	33,6	84,4	0 - 139	0,01
MB 30 X	BL001058	1,8	118	14,5	37,8	80,2	0 - 233	0,02
MB 40 X	BL001060	2,1	118	14,8	44,1	73,9	0 - 380	0,02



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

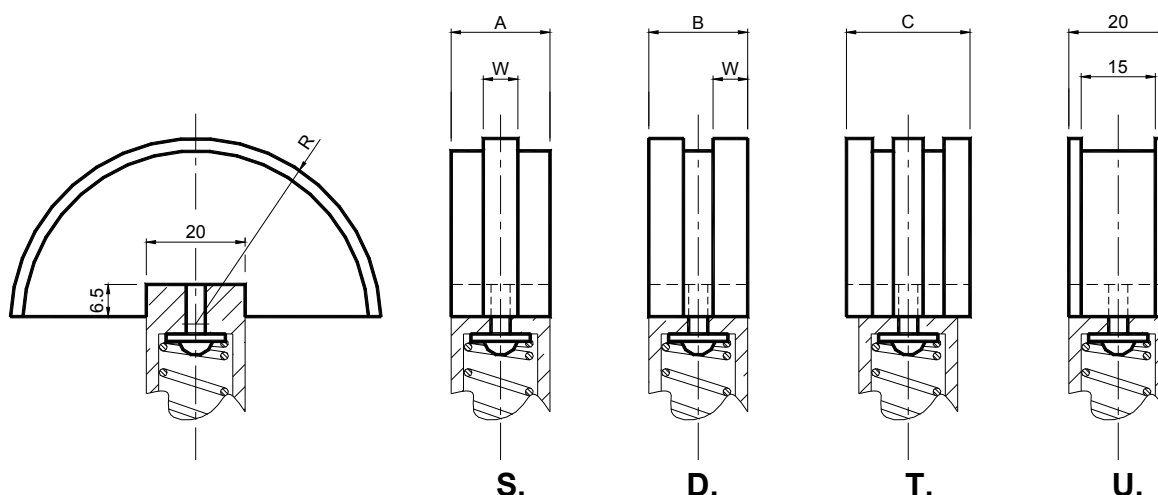
Assembly solutions / *Soluzioni di montaggio:*



KIT Positioning / *Orientamento KIT*

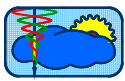
MATERIALS High molecular density polyethylene.
USE Semicircular profile indicated for small distances or for mountings near the pinion. Please specify the positioning (**H** or **Y**), otherwise it will be supplied with **H** execution.
 Operating speed ≤ 20 m/min.
 Operating temperature $\leq 70^\circ\text{C}$.

MATERIALI Polietilene ad alta densità molecolare.
IMPIEGO Profilo semicircolare indicato per piccoli interassi o per montaggi vicino al pignone. Specificare l'orientamento (**H** o **Y**), in mancanza sarà fornito con esecuzione **H**.
 Velocità di lavoro ≤ 20 m/min.
 Temperatura di lavoro $\leq 70^\circ\text{C}$.

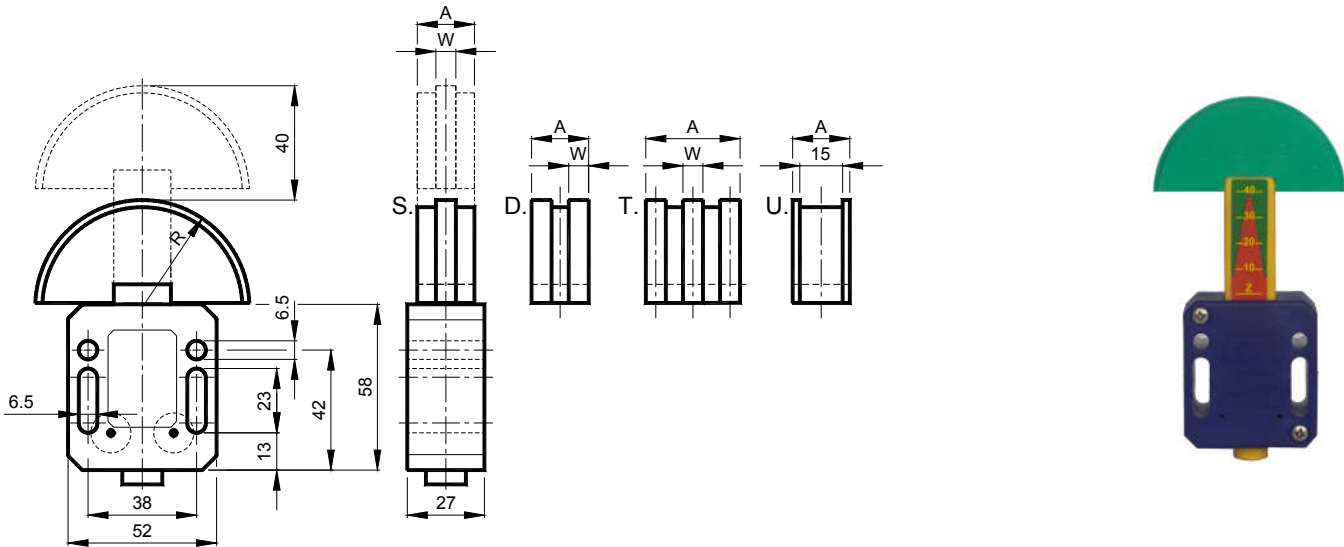


U Profile for chains with max width 15 mm / *Profilo U per catene con larghezze fino a 15 mm*

Type <i>Tipo</i>	S Cod. N°	D Cod. N°	T Cod. N°	U Cod. N°	Chain <i>Catena</i>	Size <i>Taglia</i>	R	A	B	C	W	Weight Peso in [kg]			
												S.	D.	T.	U.
VF 10-0	BL010174	BL010190		BL010170	05-B1	10	37,5	20	20		2,5	0,03	0,03		0,03
VF 10-1	BL010176	BL010192		BL010170	06-B1	10	37,5	20	20		5,0	0,03	0,03		0,03
VF 20-1	BL010176	BL010192	BL010212	BL010170	06-B1	20	37,5	20	20	25	5,0	0,03	0,03	0,04	0,03
VF 30-1			BL010212		06-B1	30	37,5			25	5,0			0,04	
VF 20-2	BL010178	BL010194			08-B1	20	37,5	20	20		7,0	0,03	0,04		
VF 30-2	BL010178	BL010194			08-B1	30	37,5	20	20		7,0	0,03	0,04		
VF 20-3	BL010180				10-B1	20	40,0	20			9,0	0,04			
VF 30-3	BL010180	BL010196			10-B1	30	40,0	20	25		9,0	0,04	0,08		
VF 40-3		BL010196			10-B1	40	40,0		25		9,0		0,08		
VF 30-4	BL010182				12-B1	30	40,0	20			11,0	0,05			
VF 40-4	BL010182				12-B1	40	40,0	20			11,0	0,05			



Type: **BL6ZVF – BL6XVF** / Tipo: **BL6ZVF – BL6XVF**

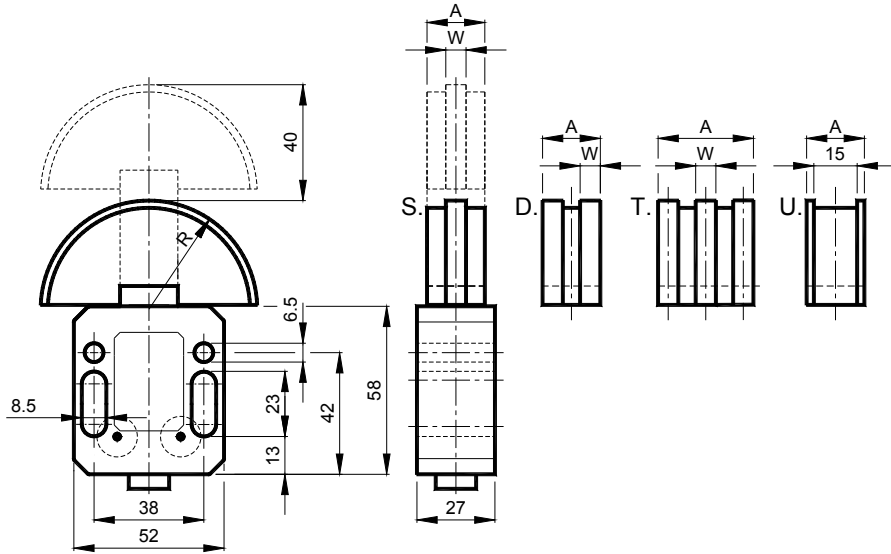


Tensioners are made by BL6 elastic element and VF head. Tensioners BL6VF are available with zinc plated springs and or with stainless steel springs; load values are indicated on pag I-13. The travel is 40 mm.

I tenditori sono composti dall'elemento elastico BL6 e la testa VF. I tenditori BL6VF sono disponibili con molle in acciaio zincato ed o con molle in acciaio inox; i valori di carico sono riportati a pag I-13. La corsa è di 40 mm.







Chain Catena DIN 8187 ISO Pitch		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox						
		BL6Z+VF	BL6Z	VF		BL6X			BL6X+VF			
					A	R	W					
05-B1	8mm	BL106ZVF0U	BL10-6Z	BL010010	VF U	BL010170	20	37,5	-	BL10-6X	BL010110	BL106XVF0U
05-B1	8mm	BL106ZVF0S	BL10-6Z	BL010010	VF0 S	BL010174	20	37,5	2,5	BL10-6X	BL010110	BL106XVF0S
06-B1	3/8"x7/32"	BL106ZVF1S	BL10-6Z	BL010010	VF1 S	BL010176	20	37,5	5,0	BL10-6X	BL010110	BL106XVF1S
06-B1	3/8"x7/32"	BL206ZVF1S	BL20-6Z	BL010020	VF1 S	BL010176	20	37,5	5,0	BL20-6X	BL010120	BL206XVF1S
08-B1	1/2"x5/16"	BL206ZVF2S	BL20-6Z	BL010020	VF2 S	BL010178	20	37,5	7,0	BL20-6X	BL010120	BL206XVF2S
08-B1	1/2"x5/16"	BL306ZVF2S	BL30-6Z	BL010030	VF2 S	BL010178	20	37,5	7,0	BL30-6X	BL010130	BL306XVF2S
10-B1	5/8"x3/8"	BL206ZVF3S	BL20-6Z	BL010020	VF3 S	BL010180	20	40,0	9,0	BL20-6X	BL010120	BL206XVF3S
10-B1	5/8"x3/8"	BL306ZVF3S	BL30-6Z	BL010030	VF3 S	BL010180	20	40,0	9,0	BL30-6X	BL010130	BL306XVF3S
12-B1	3/4"x7/16"	BL306ZVF4S	BL30-6Z	BL010030	VF4 S	BL010182	20	40,0	11,0	BL30-6X	BL010130	BL306XVF4S
12-B1	3/4"x7/16"	BL406ZVF4S	BL40-6Z	BL010040	VF4 S	BL010182	20	40,0	11,0	BL40-6X	BL010140	BL406XVF4S
05-B2	8mm	BL106ZVF0D	BL10-6Z	BL010010	VF0 D	BL010190	20	37,5	2,5	BL10-6X	BL010110	BL106XVF0D
06-B2	3/8"x7/32"	BL106ZVF1D	BL10-6Z	BL010010	VF1 D	BL010192	20	37,5	5,0	BL10-6X	BL010110	BL106XVF1D
06-B2	3/8"x7/32"	BL206ZVF1D	BL20-6Z	BL010020	VF1 D	BL010192	20	37,5	5,0	BL20-6X	BL010120	BL206XVF1D
08-B2	1/2"x5/16"	BL206ZVF2D	BL20-6Z	BL010020	VF2 D	BL010194	20	37,5	7,0	BL20-6X	BL010120	BL206XVF2D
08-B2	1/2"x5/16"	BL306ZVF2D	BL30-6Z	BL010030	VF2 D	BL010194	20	37,5	7,0	BL30-6X	BL010130	BL306XVF2D
10-B2	5/8"x3/8"	BL306ZVF3D	BL30-6Z	BL010030	VF3 D	BL010196	25	40,0	9,0	BL30-6X	BL010130	BL306XVF3D
10-B2	5/8"x3/8"	BL406ZVF3D	BL40-6Z	BL010040	VF3 D	BL010196	25	40,0	9,0	BL40-6X	BL010140	BL406XVF3D
06-B3	3/8"x7/32"	BL206ZVF1T	BL20-6Z	BL010020	VF1 T	BL010212	25	37,5	2,5	BL20-6X	BL010120	BL306XVF1T
06-B3	3/8"x7/32"	BL306ZVF1T	BL30-6Z	BL010030	VF1 T	BL010212	25	3,75	2,5	BL30-6X	BL010130	BL406XVF1T

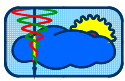
Type: **BL8ZVF – BL8XVF** / Tipo: **BL8ZVF – BL8XVF**



Tensioners are made by BL8 elastic element and VF head. Tensioners BL8VF are available with zinc plated springs and or with stainless steel springs; load values are indicated on pag. I-13. The travel is 40 mm.

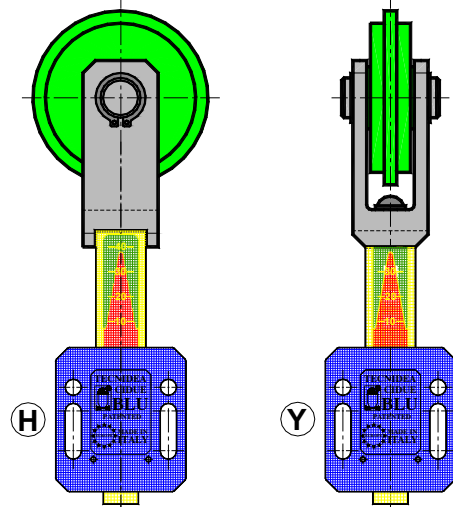
I tenditori sono composti dall'elemento elastico BL8 e la testa VF. I tenditori BL8VF sono disponibili con molle in acciaio zincato ed o con molle in acciaio inox; i valori di carico sono riportati a pag. I-13. La corsa è di 40 mm.

		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox						
Chain Catena DIN 8187 Pitch ISO		BL8Z+VF	BL8Z	VF			BL8X	BL8X+VF				
					A	R	W					
04-B1	6mm	BL108ZVFAU	BL10-8Z	BL010013	VFU	BL010170	20	37,5	-	BL10-8X	BL010113	BL108XVFAU
05-B1	8mm	BL108ZVF0U	BL10-8Z	BL010013	VFU	BL010170	20	37,5	-	BL10-8X	BL010113	BL108XVF0U
05-B1	8mm	BL108ZVF0S	BL10-8Z	BL010013	VF0 S	BL010174	20	37,5	2,5	BL10-8X	BL010113	BL108XVF0S
06-B1	3/8"x7/32"	BL108ZVF1S	BL10-8Z	BL010013	VF1 S	BL010176	20	37,5	5,0	BL10-8X	BL010113	BL108XVF1S
06-B1	3/8"x7/32"	BL208ZVF1S	BL20-8Z	BL010023	VF1 S	BL010176	20	37,5	5,0	BL20-8X	BL010123	BL208XVF1S
08-B1	1/2"x5/16"	BL208ZVF2S	BL20-8Z	BL010023	VF2 S	BL010178	20	37,5	7,0	BL20-8X	BL010123	BL208XVF2S
08-B1	1/2"x5/16"	BL308ZVF2S	BL30-8Z	BL010033	VF2 S	BL010178	20	37,5	7,0	BL30-8X	BL010133	BL308XVF2S
10-B1	5/8"x3/8"	BL208ZVF3S	BL20-8Z	BL010023	VF3 S	BL010180	20	40,0	9,0	BL20-8X	BL010123	BL208XVF3S
10-B1	5/8"x3/8"	BL308ZVF3S	BL30-8Z	BL010033	VF3 S	BL010180	20	40,0	9,0	BL30-8X	BL010133	BL308XVF3S
12-B1	3/4"x7/16"	BL308ZVF4S	BL30-8Z	BL010033	VF4 S	BL010182	20	40,0	11,0	BL30-8X	BL010133	BL308XVF4S
12-B1	3/4"x7/16"	BL408ZVF4S	BL40-8Z	BL010043	VF4 S	BL010182	20	40,0	11,0	BL40-8X	BL010143	BL408XVF4S
05-B2	8mm	BL108ZVF0D	BL10-8Z	BL010013	VF0 D	BL010190	20	37,5	2,5	BL10-8X	BL010113	BL108XVF0D
06-B2	3/8"x7/32"	BL108ZVF1D	BL10-8Z	BL010013	VF1 D	BL010192	20	37,5	5,0	BL10-8X	BL010113	BL108XVF1D
06-B2	3/8"x7/32"	BL208ZVF1D	BL20-8Z	BL010023	VF1 D	BL010192	20	37,5	5,0	BL20-8X	BL010123	BL208XVF1D
08-B2	1/2"x5/16"	BL208ZVF2D	BL20-8Z	BL010023	VF2 D	BL010194	20	37,5	7,0	BL20-8X	BL010123	BL208XVF2D
08-B2	1/2"x5/16"	BL308ZVF2D	BL30-8Z	BL010033	VF2 D	BL010194	20	37,5	7,0	BL30-8X	BL010133	BL308XVF2D
10-B2	5/8"x3/8"	BL308ZVF3D	BL30-8Z	BL010033	VF3 D	BL010196	25	40,0	9,0	BL30-8X	BL010133	BL308XVF3D
10-B2	5/8"x3/8"	BL408ZVF3D	BL40-8Z	BL010043	VF3 D	BL010196	25	40,0	9,0	BL40-8X	BL010143	BL408XVF3D
06-B3	3/8"x7/32"	BL208ZVF1T	BL20-8Z	BL010023	VF1 T	BL010212	25	37,5	2,5	BL20-8X	BL010123	BL308XVF1T
06-B3	3/8"x7/32"	BL308ZVF1T	BL30-8Z	BL010033	VF1 T	BL010212	25	37,5	2,5	BL30-8X	BL010133	BL408XVFTT



Polyethylene wheelset – Type: FR / Rotella in polietilene – Tipo: FR

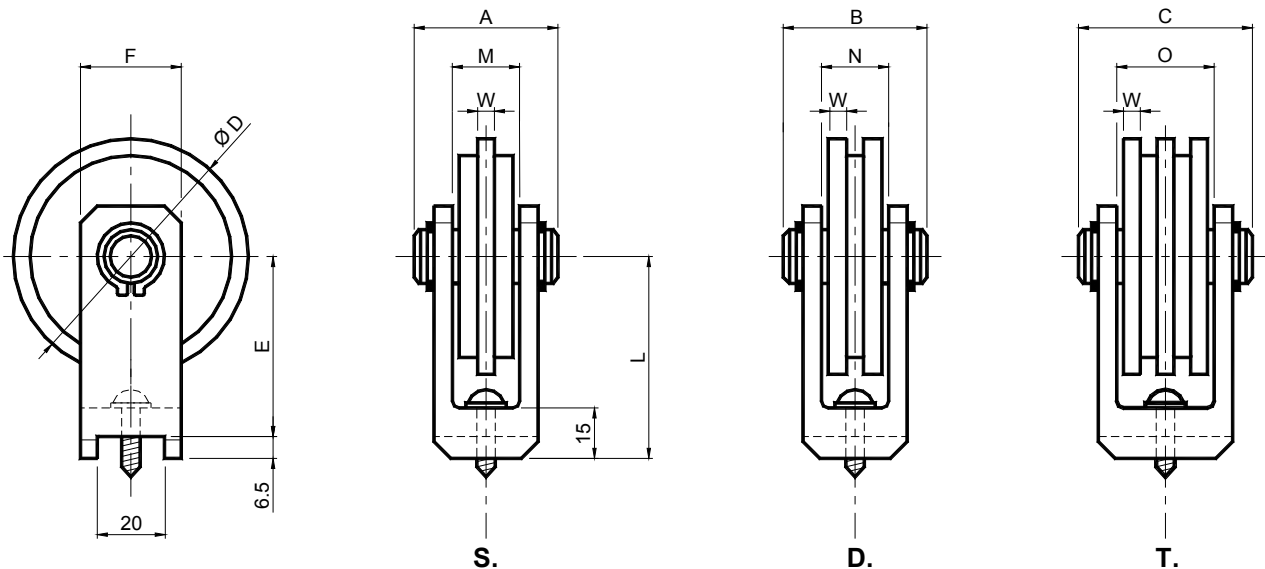
Assembly solutions / Soluzioni di montaggio:



KIT Positioning / Orientamento KIT

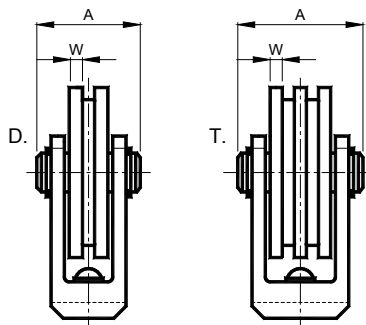
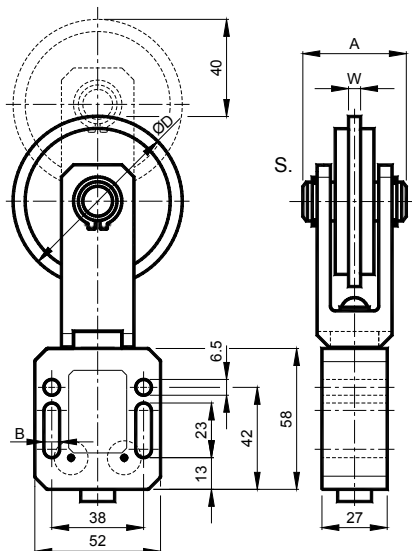
MATERIALS Fork is made of aluminium. High molecular density polyethylene. Pin is made of steel.
TREATMENTS Fork made of sandblasted aluminium. Pin made of galvanized steel.
USE Idle wheel on the pin. Please specify the positioning (H or Y), otherwise it will be supplied with H execution.
 Operating speed ≤ 30 m/min.
 Operating temperature ≤ 70°C.

MATERIALI Forcella in alluminio. Polietilene ad alta densità molecolare. Perno in acciaio.
TRATTAMENTI La forcella in alluminio è sabbiata. Perno zincato.
IMPIEGO Rotella folle sul perno. Specificare l'orientamento (H o Y), in mancanza sarà fornito con esecuzione H.
 Velocità di lavoro ≤ 30 m/min.
 Temperatura di lavoro ≤ 70°C.








Type Tipo	S Cod. N°	D Cod. N°	T Cod. N°	Chain Catena	Size - Taglia	A	B	C	ØD	E	F	M	N	O	L	W	Weight Peso in [kg]		
																	S.	D.	T.
FR 10-0	BL010230	BL010240		05-B1	10	40	40		70	53,5	30	19	19		60	2,5	0,19	0,20	
FR 10-1	BL010232	BL010242		06-B1	10	40	40		70	53,5	30	19	19		60	5,0	0,19	0,20	
FR 20-1	BL010232	BL010242		06-B1	20	40	40		70	53,5	30	19	19		60	5,0	0,19	0,20	
FR 30-1			BL010248	06-B1	30			60	70	53,5	30			37	60	5,0			0,24
FR 20-2	BL010234	BL010244		08-B1	20	40	60		70	53,5	30	19	37		60	7,0	0,20	0,29	
FR 30-2	BL010234	BL010244		08-B1	30	40	60		70	53,5	30	19	37		60	7,0	0,20	0,29	
FR 20-3	BL010236			10-B1	20	45			90	63,5	30	19			70	9,0	0,27		
FR 30-3	BL010236			10-B1	30	45			90	63,5	30	19			70	9,0	0,27		
FR 30-4	BL010238			12-B1	30	45			90	63,5	30	19			70	11,0	0,28		
FR 40-4	BL010238			12-B1	40	45			90	63,5	30	19			70	11,0	0,28		

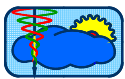
Type: **BL6ZFR – BL6XFR – BL8ZFR – BL8XFR** / Tipo: **BL6ZFR – BL6XFR – BL8ZFR – BL8XFR**



Tensioners are made by BL elastic element and FR wheelset. Tensioners BLFR are available with zinc plated springs or with stainless steel springs; load values are indicated on pag I-13. The travel is 40 mm.

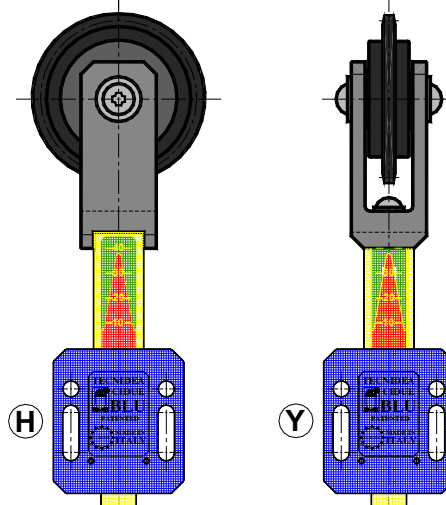
*I tenditori sono composti dall'elemento elastico BL e la testa con rotella FR.
I tenditori BLFR sono disponibili con molle in acciaio zincato o con molle in acciaio inox; i valori di carico sono riportati a pag I-13. La corsa è di 40 mm.*

Chain Catena DIN 8187 ISO Pitch		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox							
		BLZ+FR	BLZ	FR		BLX	BLX+FR						
					A	B	∅D	W					
05-B1	8mm	BL106ZFR0S	BL10-6Z	BL010010	FR0 S	BL010174	40	6,5	70	2,5	BL10-6X	BL010110	BL106XFR0S
06-B1	3/8"x7/32"	BL106ZFR1S	BL10-6Z	BL010010	FR1 S	BL010176	40	6,5	70	5,0	BL10-6X	BL010110	BL106XFR1S
06-B1	3/8"x7/32"	BL206ZFR1S	BL20-6Z	BL010020	FR1 S	BL010176	40	6,5	70	5,0	BL20-6X	BL010120	BL206XFR1S
08-B1	1/2"x5/16"	BL206ZFR2S	BL20-6Z	BL010020	FR2 S	BL010178	40	6,5	70	7,0	BL20-6X	BL010120	BL206XFR2S
08-B1	1/2"x5/16"	BL306ZFR2S	BL30-6Z	BL010030	FR2 S	BL010178	40	6,5	70	7,0	BL30-6X	BL010130	BL306XFR2S
10-B1	5/8"x3/8"	BL206ZFR3S	BL20-6Z	BL010020	FR3 S	BL010180	45	6,5	90	9,0	BL20-6X	BL010120	BL206XFR3S
10-B1	5/8"x3/8"	BL306ZFR3S	BL30-6Z	BL010030	FR3 S	BL010180	45	6,5	90	9,0	BL30-6X	BL010130	BL306XFR3S
12-B1	3/4"x7/16"	BL306ZFR4S	BL30-6Z	BL010030	FR4 S	BL010182	45	6,5	90	11,0	BL30-6X	BL010130	BL306XFR4S
12-B1	3/4"x7/16"	BL406ZFR4S	BL40-6Z	BL010040	FR4 S	BL010182	45	6,5	90	11,0	BL40-6X	BL010140	BL406XFR4S
05-B2	8mm	BL106ZFR0D	BL10-6Z	BL010010	FR0 D	BL010190	40	6,5	70	2,5	BL10-6X	BL010110	BL106XFR0D
06-B2	3/8"x7/32"	BL106ZFR1D	BL10-6Z	BL010010	FR1 D	BL010192	40	6,5	70	5,0	BL10-6X	BL010110	BL106XFR1D
06-B2	3/8"x7/32"	BL206ZFR1D	BL20-6Z	BL010020	FR1 D	BL010192	40	6,5	70	5,0	BL20-6X	BL010120	BL206XFR1D
08-B2	1/2"x5/16"	BL206ZFR2D	BL20-6Z	BL010020	FR2 D	BL010194	60	6,5	70	7,0	BL20-6X	BL010120	BL206XFR2D
08-B2	1/2"x5/16"	BL306ZFR2D	BL30-6Z	BL010030	FR2 D	BL010194	60	6,5	70	7,0	BL30-6X	BL010130	BL306XFR2D
06-B3	3/8"x7/32"	BL306ZFR1T	BL30-6Z	BL010030	FR1 T	BL010196	60	6,5	70	5,0	BL20-6X	BL010120	BL306XFR1T
05-B1	8mm	BL108ZFR0S	BL10-8Z	BL010013	FR0 S	BL010174	40	8,5	70	2,5	BL10-8X	BL010113	BL108XFR0S
06-B1	3/8"x7/32"	BL108ZFR1S	BL10-8Z	BL010013	FR1 S	BL010176	40	8,5	70	5,0	BL10-8X	BL010113	BL108XFR1S
06-B1	3/8"x7/32"	BL208ZFR1S	BL20-8Z	BL010023	FR1 S	BL010176	40	8,5	70	5,0	BL20-8X	BL010123	BL208XFR1S
08-B1	1/2"x5/16"	BL208ZFR2S	BL20-8Z	BL010023	FR2 S	BL010178	40	8,5	70	7,0	BL20-8X	BL010123	BL208XFR2S
08-B1	1/2"x5/16"	BL308ZFR2S	BL30-8Z	BL010033	FR2 S	BL010178	40	8,5	70	7,0	BL30-8X	BL010133	BL308XFR2S
10-B1	5/8"x3/8"	BL208ZFR3S	BL20-8Z	BL010023	FR3 S	BL010180	45	8,5	90	9,0	BL20-8X	BL010123	BL208XFR3S
10-B1	5/8"x3/8"	BL308ZFR3S	BL30-8Z	BL010033	FR3 S	BL010180	45	8,5	90	9,0	BL30-8X	BL010133	BL308XFR3S
12-B1	3/4"x7/16"	BL308ZFR4S	BL30-8Z	BL010033	FR4 S	BL010182	45	8,5	90	11,0	BL30-8X	BL010133	BL308XFR4S
12-B1	3/4"x7/16"	BL408ZFR4S	BL40-8Z	BL010043	FR4 S	BL010182	45	8,5	90	11,0	BL40-8X	BL010143	BL408XFR4S
05-B2	8mm	BL108ZFR0D	BL10-8Z	BL010013	FR0 D	BL010190	40	8,5	70	2,5	BL10-8X	BL010113	BL108XFR0D
06-B2	3/8"x7/32"	BL108ZFR1D	BL10-8Z	BL010013	FR1 D	BL010192	40	8,5	70	5,0	BL10-8X	BL010113	BL108XFR1D
06-B2	3/8"x7/32"	BL208ZFR1D	BL20-8Z	BL010023	FR1 D	BL010192	40	8,5	70	5,0	BL20-8X	BL010123	BL208XFR1D
08-B2	1/2"x5/16"	BL208ZFR2D	BL20-8Z	BL010023	FR2 D	BL010194	60	8,5	70	7,0	BL20-8X	BL010123	BL208XFR2D
08-B2	1/2"x5/16"	BL308ZFR2D	BL30-8Z	BL010033	FR2 D	BL010194	60	8,5	70	7,0	BL30-8X	BL010133	BL308XFR2D
06-B3	3/8"x7/32"	BL308ZFR1T	BL30-8Z	BL010033	FR1 T	BL010196	60	8,5	70	5,0	BL20-8X	BL010133	BL308XFR1T



Plastic idler sprocket wheelset with national bearing – Type: FC
Pignone tendicatena in plastica con cuscinetto nazionale – Tipo: FC

Assembly solutions / Soluzioni di montaggio:



KIT Positioning / Orientamento KIT

MATERIALS Fork is made of aluminium. Plastic crown installed on an enlarged bearings. Pin is made in plastic.

TREATMENTS Fork made of sandblasted aluminium. Stainless steel bolts.

USE Please specify the positioning (H or Y), otherwise it will be supplied with H execution.

Operating speed ≤ 60 m/min.

Operating temperature $\leq 70^{\circ}\text{C}$.

MATERIALI Forcella in alluminio. Corona in materiale plastico stampata sul cuscinetto a base maggiorata in acciaio. Perno in palstica.

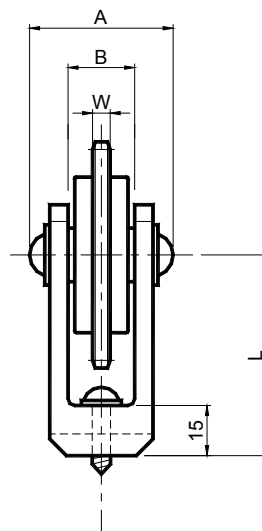
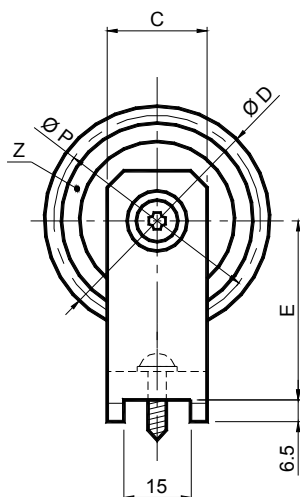
TRATTAMENTI La forcella in alluminio è sabbiata.

Bulloneria in acciaio inossidabile.

IMPIEGO Specificare l'orientamento (H o Y), in mancanza sarà fornito con esecuzione H.

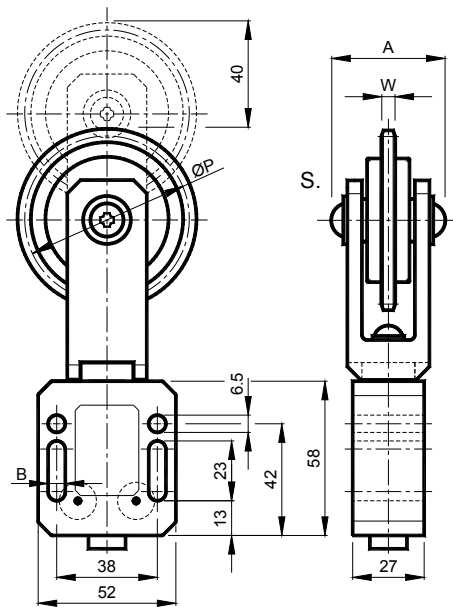
Velocità di lavoro ≤ 60 m/min.

Temperatura di lavoro $\leq 70^{\circ}\text{C}$.








Type Tipo	Cod. N°	Chain Catena	Size Taglia	Z	A	B	C	ØD	E	L	ØP	W	Weight Peso in [kg]
FC 10-1	BL010250	06-B1	10	21	42	19	30	68,0	53,5	60	63,90	5,3	0,10
FC 20-1	BL010250	06-B1	20	21	42	19	30	68,0	53,5	60	63,90	5,3	0,10
FC 20-2	BL010252	08-B1	20	18	42	19	30	77,8	53,5	60	73,14	7,2	0,18
FC 30-2	BL010252	08-B1	30	18	42	19	30	77,8	53,5	60	73,14	7,2	0,18
FC 20-3	BL010254	10-B1	20	17	47	19	30	93,0	63,5	70	86,39	9,1	0,30
FC 30-3	BL010254	10-B1	30	17	47	19	30	93,0	63,5	70	86,39	9,1	0,30

Type: **BL6ZFC – BL6XFC** / Tipo: **BL6ZFC – BL6XFC**

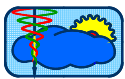


Tensioners are made by BL elastic element and FC sprocket. Tensioners BLFC are available with zinc plated springs or with stainless steel springs; load values are indicated on pag. I-13. The travel is 40 mm.

I tenditori sono composti dall'elemento elastico BL e la testa con ingranaggio FC. I tenditori BLFC sono disponibili con molle in acciaio zincato o con molle in acciaio inox; i valori di carico sono riportati a pag. I-13. La corsa è di 40 mm.

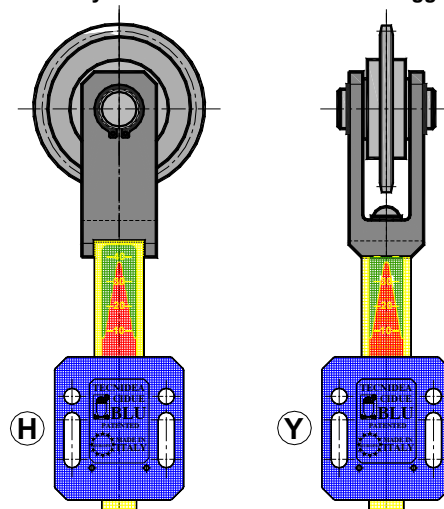
		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox							
		BLZ+FC	BLZ	FC				BLX	BLX+FC				
Chain Catena DIN 8187 ISO Pitch					A	B	ØP	W					
06-B1	3/8"x7/32"	BL106ZFC1S	BL10-6Z	BL010010	FC1 S	BL010176	42	6,5	63,90	5,3	BL10-6X	BL010110	BL106XFC1S
06-B1	3/8"x7/32"	BL206ZFC1S	BL20-6Z	BL010020	FC1 S	BL010176	42	6,5	63,90	5,3	BL20-6X	BL010120	BL206XFC1S
08-B1	1/2"x5/16"	BL206ZFC2S	BL20-6Z	BL010020	FC2 S	BL010178	42	6,5	73,14	7,2	BL20-6X	BL010120	BL206XFC2S
08-B1	1/2"x5/16"	BL306ZFC2S	BL30-6Z	BL010030	FC2 S	BL010178	42	6,5	73,14	7,2	BL30-6X	BL010130	BL306XFC2S
10-B1	5/8"x3/8"	BL206ZFC3S	BL20-6Z	BL010020	FC3 S	BL010180	47	6,5	86,39	9,1	BL20-6X	BL010120	BL206XFC3S
10-B1	5/8"x3/8"	BL306ZFC3S	BL30-6Z	BL010030	FC3 S	BL010180	47	6,5	86,39	9,1	BL30-6X	BL010130	BL306XFC3S
06-B1	3/8"x7/32"	BL108ZFC1S	BL10-8Z	BL010013	FC1 S	BL010176	42	8,5	63,90	5,3	BL10-8X	BL010113	BL108XFC1S
06-B1	3/8"x7/32"	BL208ZFC1S	BL20-8Z	BL010023	FC1 S	BL010176	42	8,5	63,90	5,3	BL20-8X	BL010123	BL208XFC1S
08-B1	1/2"x5/16"	BL208ZFC2S	BL20-8Z	BL010023	FC2 S	BL010178	42	8,5	73,14	7,2	BL20-8X	BL010123	BL208XFC2S
08-B1	1/2"x5/16"	BL308ZFC2S	BL30-8Z	BL010033	FC2 S	BL010178	42	8,5	73,14	7,2	BL30-8X	BL010133	BL308XFC2S
10-B1	5/8"x3/8"	BL208ZFC3S	BL20-8Z	BL010023	FC3 S	BL010180	47	8,5	86,39	9,1	BL20-8X	BL010123	BL208XFC3S
10-B1	5/8"x3/8"	BL308ZFC3S	BL30-8Z	BL010033	FC3 S	BL010180	47	8,5	86,39	9,1	BL30-8X	BL010133	BL308XFC3S

Type: **BL8ZFC – BL8XFC** / Tipo: **BL8ZFC – BL8XFC**



Idler sprocket wheelset with national bearing – Type: FN
Pignone tendicatena in acciaio zincato con cuscinetto nazionale – Tipo: FN

Assembly solutions / Soluzioni di montaggio:



KIT Positioning / Orientamento KIT

MATERIALS Fork is made of aluminium. Steel crown installed on an enlarged bearings. Pin is made of steel.
TREATMENTS Fork made of sandblasted aluminium.
Crown and pin are made of galvanized steel.
USE Please specify the positioning (H or Y), otherwise it will be supplied with H execution.
Operating speed <= 60 m/min.
Operating temperature <= 80°C.

MATERIALI Forcella in alluminio. Corona in acciaio montata sul cuscinetto a base maggiorata in acciaio. Perno in acciaio.
TRATTAMENTI La forcella in alluminio è sabbiata.
La corona e il perno sono zincati.
IMPIEGO Specificare l'orientamento (H o Y), in mancanza sarà fornito con esecuzione H.
Velocità di lavoro <= 60 m/min.
Temperatura di lavoro <= 80°C.

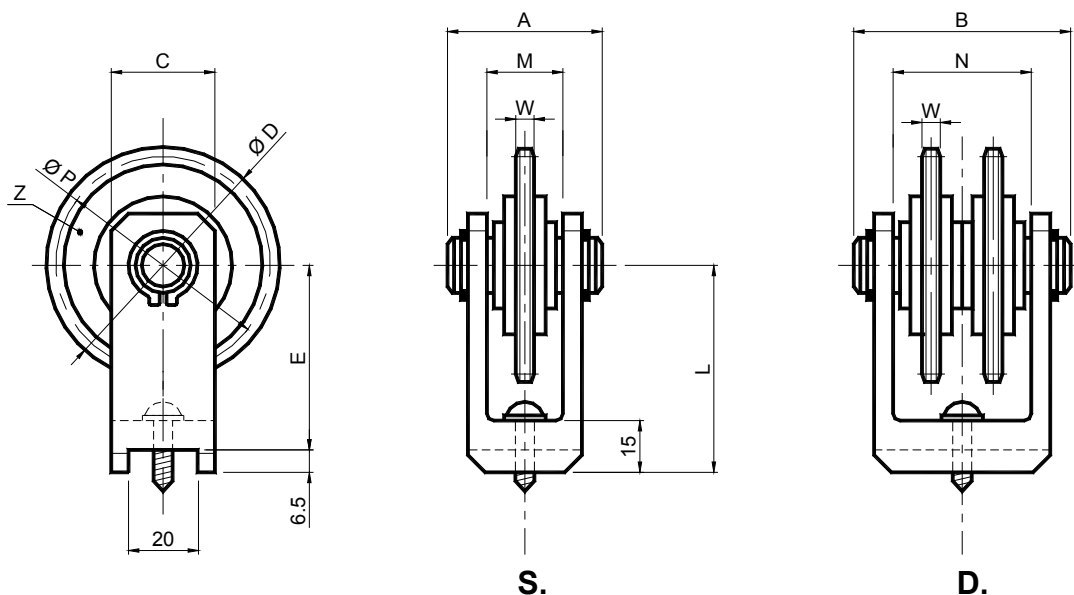
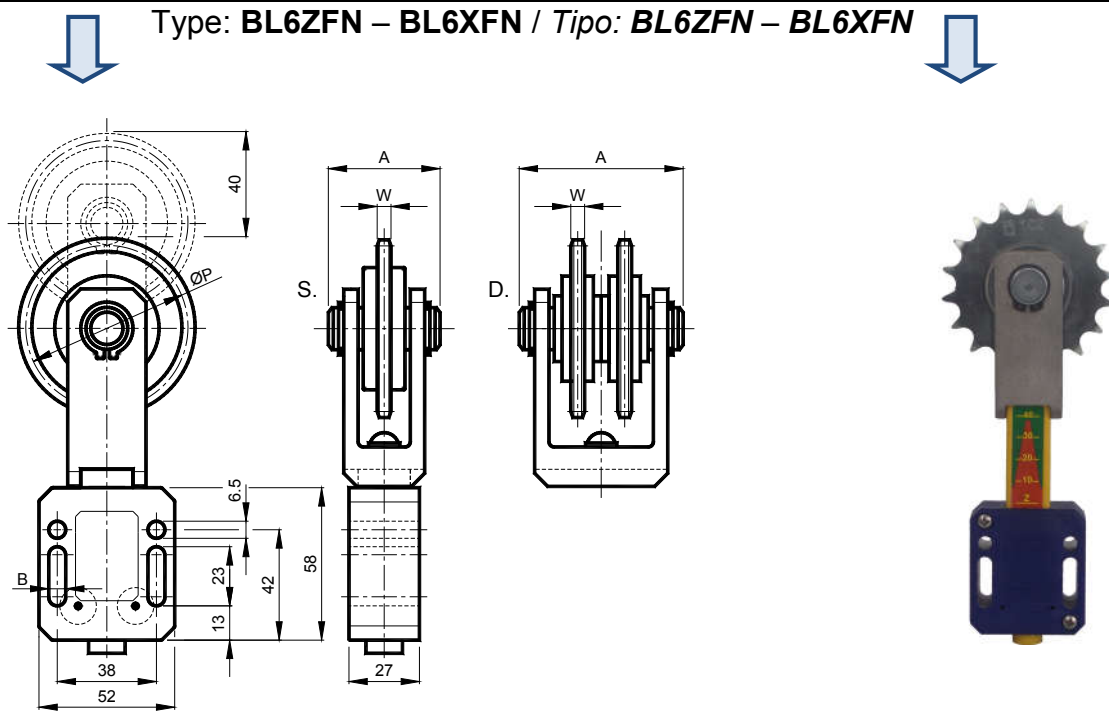
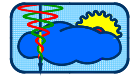


Table with columns: Type, S Cod. N°, D Cod. N°, Chain Catena, Size Taglia, Z, A, B, C, ØD, E, M, N, L, ØP, W, Weight Peso in [kg] (S, D).



Tensioners are made by BL elastic element and FN sprocket. Tensioners BLFN are available with zinc plated springs or with stainless steel springs; load values are indicated on pag. I-13. The travel is 40 mm.

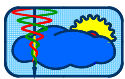
I tenditori sono composti dall'elemento elastico BL e la testa con ingranaggio FN. I tenditori BLFN sono disponibili con molle in acciaio zincato o con molle in acciaio inox; i valori di carico sono riportati a pag. I-13. La corsa è di 40 mm.

		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox							
Chain Catena DIN 8187 ISO Pitch		BLZ+FN	BLZ		FN				BLX		BLX+FN		
					A	B	ØP	W					
06-B1	3/8"x7/32"	BL206ZFN1S	BL20-6Z	BL010020	FN1 S	BL010260	42	6,5	63,90	5,3	BL20-6X	BL010120	BL206XFN1S
06-B1	3/8"x7/32"	BL306ZFN1S	BL30-6Z	BL010030	FN1 S	BL010260	42	6,5	63,90	5,3	BL30-6X	BL010130	BL306XFN1S
08-B1	1/2"x5/16"	BL306ZFN2S	BL30-6Z	BL010030	FN2 S	BL010262	42	6,5	73,14	7,2	BL30-6X	BL010130	BL306XFN2S
10-B1	5/8"x3/8"	BL306ZFN3S	BL30-6Z	BL010030	FN3 S	BL010264	47	6,5	86,39	9,1	BL30-6X	BL010130	BL306XFN3S
06-B2	3/8"x7/32"	BL306ZFN1D	BL30-6Z	BL010030	FN1 D	BL010266	42	6,5	63,90	5,3	BL30-6X	BL010130	BL306XFN1S
06-B1	3/8"x7/32"	BL208ZFN1S	BL20-8Z	BL010023	FN1 S	BL010260	42	8,5	63,90	5,3	BL20-8X	BL010123	BL208XFN1S
06-B1	3/8"x7/32"	BL308ZFN1S	BL30-8Z	BL010033	FN1 S	BL010260	42	8,5	63,90	5,3	BL30-8X	BL010133	BL308XFN1S
08-B1	1/2"x5/16"	BL308ZFN2S	BL30-8Z	BL010033	FN2 S	BL010262	42	8,5	73,14	7,2	BL30-8X	BL010133	BL308XFN2S
10-B1	5/8"x3/8"	BL308ZFN3S	BL30-8Z	BL010033	FN3 S	BL010264	47	8,5	86,39	9,1	BL30-8X	BL010133	BL308XFN3S
06-B2	3/8"x7/32"	BL308ZFN1D	BL30-8Z	BL010033	FN1 D	BL010266	42	8,5	63,90	5,3	BL30-8X	BL010133	BL308XFN1S



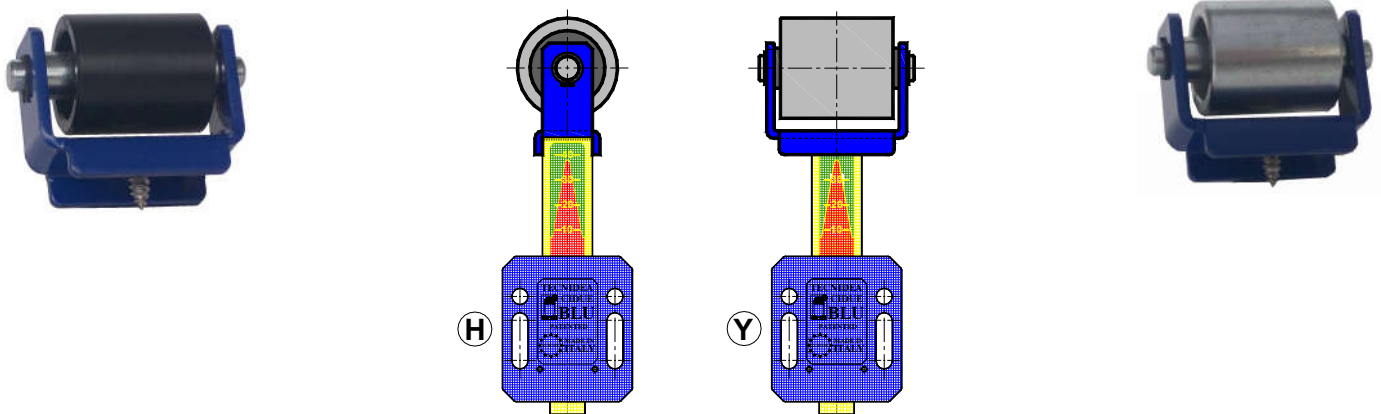
Type: **BL8ZFN – BL8XFN** / Tipo: **BL8ZFN – BL8XFN**





Polyamide roller – Type: FP / Galvanized steel roller – Type FU
Rullo in poliammide – Tipo: FP / Rullo in acciaio zincato – Tipo: FU

Assembly solutions / Soluzioni di montaggio:



KIT Positioning / Orientamento KIT

- MATERIALS FP: Fork, bearing, pin and spacers are made of steel. Rollerset is made in black polyamide.
FU: Fork, rollerset, bearing, pin and spacer are made of steel.
TREATMENTS Fork is painted. Other steel parts are made of galvanized steel.
USE Roller is with lubricated ZZ bearings. Please specify the positioning (H or Y), otherwise it will be supplied with H execution.
Operating temperature ≤ 80°C.
MATERIALI FP: Forcella, cuscinetti, perno e distanziali in acciaio. Rullo in poliammide nero.
FU: Forcella, rullo, cuscinetti, perno e distanziali in acciaio.
TRATTAMENTI La forcella è verniciata. Altri particolari metallici sono zincati.
IMPIEGO Rullo con cuscinetti ZZ lubrificati. Specificare l'orientamento (H o Y), in mancanza sarà fornito con esecuzione H.
Temperatura di lavoro ≤80°C.

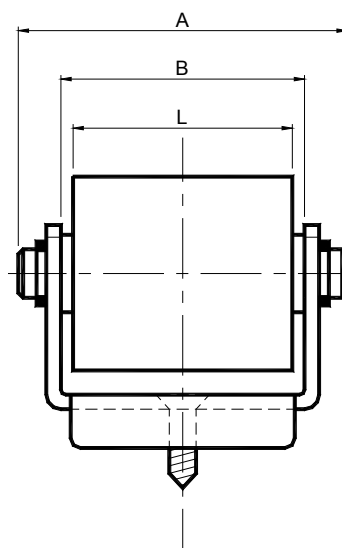
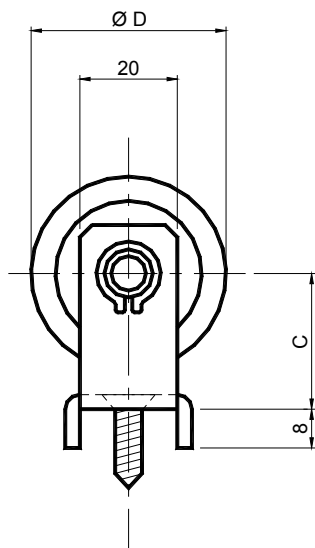
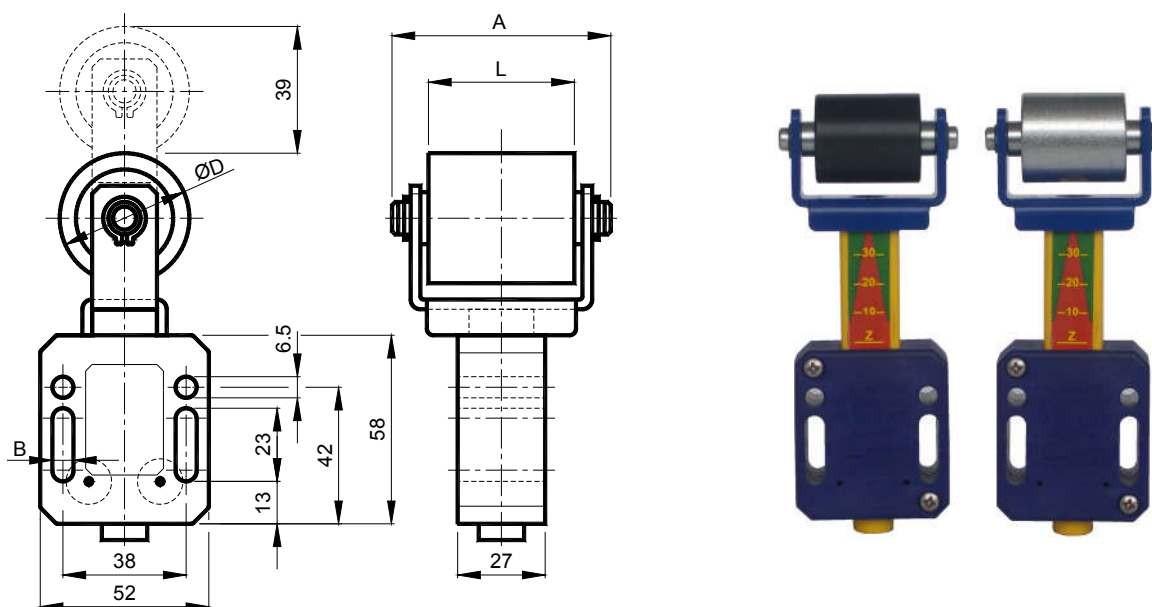


Table with 12 columns: Type Tipo, Cod. N°, Weight Peso in Kg, A, B, C, ØD, L, Size Taglia, Type Tipo, Cod. N°, Weight Peso in [kg]. Rows include FP 10-1, FP 20-1, FP 20-2/3, FP 30-2/3 and FU 10-1, FU 20-1, FU 20-2/3, FU 30-2/3.

Type / Tipo: **BL6ZFP – BL6XFP – BL6ZFU – BL6XFU**

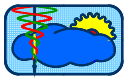


Tensioners are made by BL elastic element and FP plastic, FU steel roller. Tensioners BLFP or BLFU are available with zinc plated springs or with stainless steel springs; load values are indicated on pag. I-13. The travel is 39 mm.

I tenditori sono composti dall'elemento elastico BL e la testa con rullo in plastica FP, con rullo in acciaio FU. I tenditori BLFP o BLFU sono disponibili con molle in acciaio zincato o con molle in acciaio inox; i valori di carico sono riportati a pag. I-13. La corsa è 39mm.

Max belt width Max larghezza della cinghia	Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox							
	BLZ+FP BLZ+FU	BLZ		FP FU	←				BLX	→		
					A	B	ØD	L				
30	BL106ZFP1	BL10-6Z	BL010010	FP 1	BL010284	60	6,5	30	35	BL10-6X	BL010110	BL106XFP1
30	BL206ZFP1	BL20-6Z	BL010020	FP 1	BL010284	60	6,5	30	35	BL20-6X	BL010120	BL206XFP1
40	BL206ZFP23	BL20-6Z	BL010020	FP 2/3	BL010294	66	6,5	40	45	BL20-6X	BL010120	BL206XFP23
40	BL306ZFP23	BL30-6Z	BL010030	FP 2/3	BL010294	66	6,5	40	45	BL30-6X	BL010130	BL306XFP23
30	BL106ZFU1	BL10-6Z	BL010010	FU 1	BL010286	60	6,5	30	35	BL10-6X	BL010110	BL106XFU1
30	BL206ZFU1	BL20-6Z	BL010020	FU 1	BL010286	60	6,5	30	35	BL20-6X	BL010120	BL206XFU1
40	BL206ZFU23	BL20-6Z	BL010020	FU 2/3	BL010296	66	6,5	40	45	BL20-6X	BL010120	BL206XFU23
40	BL306ZFU23	BL30-6Z	BL010030	FU 2/3	BL010296	66	6,5	40	45	BL30-6X	BL010130	BL306XFU23
30	BL108ZFP1	BL10-8Z	BL010013	FP 1	BL010284	60	8,5	30	35	BL10-6X	BL010113	BL108XFP1
30	BL208ZFP1	BL20-8Z	BL010023	FP 1	BL010284	60	8,5	30	35	BL20-6X	BL010123	BL208XFP1
40	BL208ZFP23	BL20-8Z	BL010023	FP 2/3	BL010294	66	8,5	40	45	BL20-6X	BL010123	BL208XFP23
40	BL308ZFP23	BL30-8Z	BL010033	FP 2/3	BL010294	66	8,5	40	45	BL30-6X	BL010133	BL308XFP23
30	BL108ZFU1	BL10-8Z	BL010013	FU 1	BL010286	60	8,5	30	35	BL10-6X	BL010113	BL108XFU1
30	BL208ZFU1	BL20-8Z	BL010023	FU 1	BL010286	60	8,5	30	35	BL20-6X	BL010123	BL208XFU1
40	BL208ZFU23	BL20-8Z	BL010023	FU 2/3	BL010296	66	8,5	40	45	BL20-6X	BL010123	BL208XFU23
40	BL308ZFU23	BL30-8Z	BL010033	FU 2/3	BL010296	66	8,5	40	45	BL30-6X	BL010133	BL308XFU23

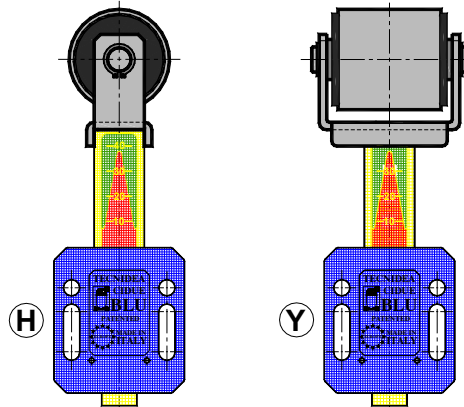
Type / Tipo: **BL8ZFP – BL8XFP – BL8ZFU – BL8XFU**



Polyamide roller with shield – Type: FPX / Stainless steel roller with shield – Type: FUX
Rullo in poliammide con schermi – Tipo: FPX / Rullo in acciaio inox con schermi – Tipo: FUX



Assembly solutions / Soluzioni di montaggio:



KIT Positioning / Orientamento KIT

MATERIALS FPX: Steel bearing, fork, pin, spacers and seeger are made of stainless steel. Roller and shield are made in black polyamide. FUX: Steel bearing, fork, roller, pin, spacers and seeger are made of stainless steel. Shield are made in black polyamide.

TREATMENTS Fork and other steel parts are made of stainless steel. USE Rollerset with greased ZZ bearings. Please specify the positioning (H or Y), otherwise it will be supplied with H execution. Operating temperature ≤ 80°C.

MATERIALI FPX: Cuscinetti acciaio, forcella, perno, distanziali ed anelli seeger in acciaio inox. Rullo e schermi in poliammide nero. FUX: Cuscinetti acciaio, forcella, rullo, perno, distanziali ed anelli seeger in acciaio inox. Schermi in poliammide nero.

TRATTAMENTI La forcella è sabbiata. IMPIEGO Rullo con cuscinetti ZZ lubrificati. Specificare l'orientamento (H o Y), in mancanza sarà fornito con esecuzione H. Temperatura di lavoro ≤ 80°C.

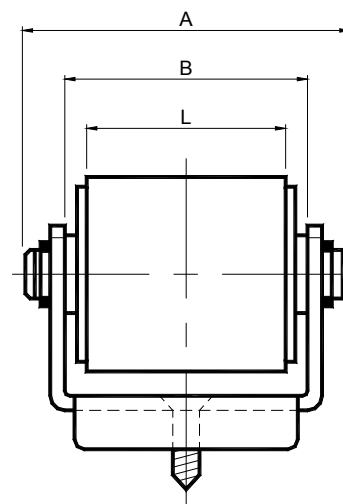
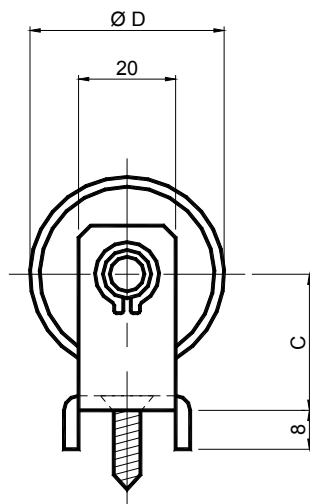
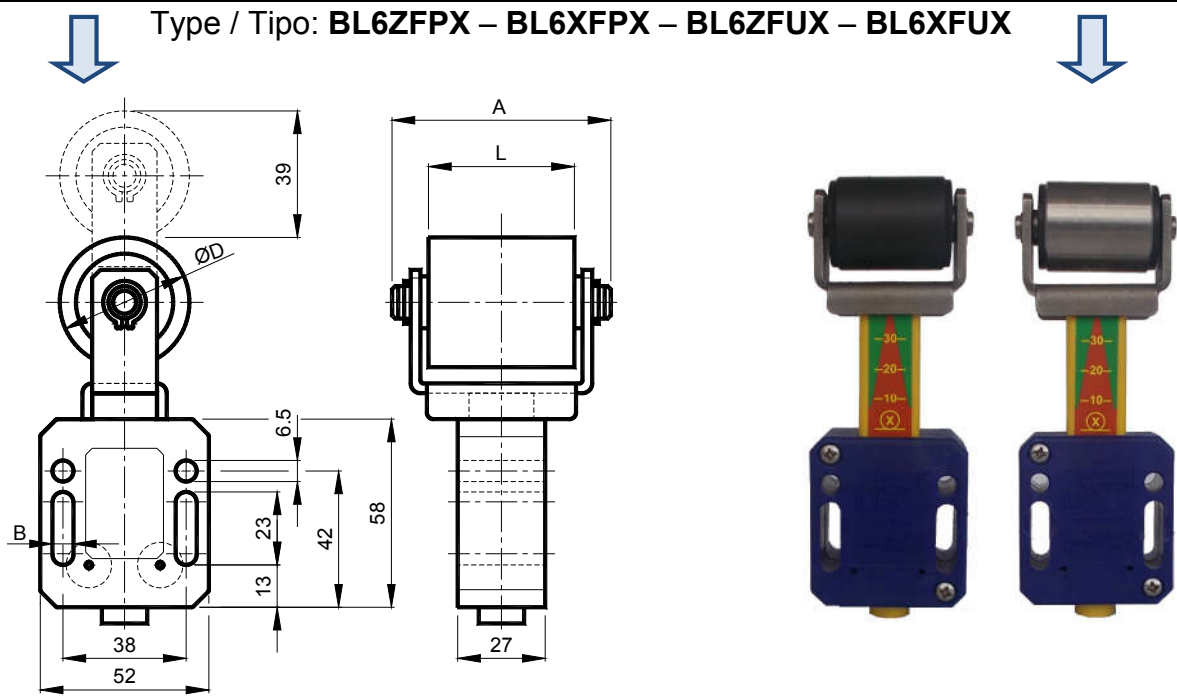


Table with 12 columns: Type, Cod. N°, Weight, A, B, C, ØD, L, Size Taglia, Type, Cod. N°, Weight. It lists specifications for FPX and FUX roller types in both polyamide and stainless steel.

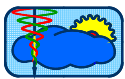


Tensioners are made by BL elastic element and the head with FPX plastic roller, FUX roller in steel with protective shields. Tensioners BLFPX or BLFUX are available with zinc plated springs and or with stainless steel springs; load values are indicated on pag I-13. The travel is 39 mm.

I tenditori sono composti dall'elemento elastico BL e la testa con rullo in plastica FPX, con rullo in acciaio inox FUX con schermi di protezione. I tenditori BLFPX o BLFUX sono disponibili con molle in acciaio o con molle in acciaio inox; i valori di carico sono riportati a pag I-13. La corsa è 39mm.

Max belt width Max larghezza della cinghia	Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox							
	BLZ+FPX BLZ+FUX	BLZ		← FPX FUX →				BLX		BLX+FPX BLX+FUX		
				A	B	∅D	L					
30	BL106ZFPX1	BL10-6Z	BL010010	FPX 1	BL010280	60	6,5	30	35	BL10-6X	BL010110	BL106XFPX1
30	BL206ZFPX1	BL20-6Z	BL010020	FPX 1	BL010280	60	6,5	30	35	BL20-6X	BL010120	BL206XFPX1
40	BL206ZFPX23	BL20-6Z	BL010020	FPX 2/3	BL010290	66	6,5	40	45	BL20-6X	BL010120	BL206XFPX23
40	BL306ZFPX23	BL30-6Z	BL010030	FPX 2/3	BL010290	66	6,5	40	45	BL30-6X	BL010130	BL306XFPX23
30	BL106ZFUX1	BL10-6Z	BL010010	FUX 1	BL010280	60	6,5	30	35	BL10-6X	BL010110	BL106XFUX1
30	BL206ZFUX1	BL20-6Z	BL010020	FUX 1	BL010280	60	6,5	30	35	BL20-6X	BL010120	BL206XFUX1
40	BL206ZFUX23	BL20-6Z	BL010020	FUX 2/3	BL010290	66	6,5	40	45	BL20-6X	BL010120	BL206XFUX23
40	BL306ZFUX23	BL30-6Z	BL010030	FUX 2/3	BL010290	66	6,5	40	45	BL30-6X	BL010130	BL306XFUX23
30	BL108ZFPX1	BL10-8Z	BL010013	FPX 1	BL010280	60	8,5	30	35	BL10-8X	BL010113	BL108XFPX1
30	BL208ZFPX1	BL20-8Z	BL010023	FPX 1	BL010280	60	8,5	30	35	BL20-8X	BL010123	BL208XFPX1
40	BL208ZFPX23	BL20-8Z	BL010023	FPX 2/3	BL010290	66	8,5	40	45	BL20-8X	BL010123	BL208XFPX23
40	BL308ZFPX23	BL30-8Z	BL010033	FPX 2/3	BL010290	66	8,5	40	45	BL30-8X	BL010133	BL308XFPX23
30	BL108ZFUX1	BL10-8Z	BL010013	FUX 1	BL010280	60	8,5	30	35	BL10-8X	BL010113	BL108XFUX1
30	BL208ZFUX1	BL20-8Z	BL010023	FUX 1	BL010280	60	8,5	30	35	BL20-8X	BL010123	BL208XFUX1
40	BL208ZFUX23	BL20-8Z	BL010023	FUX 2/3	BL010290	66	8,5	40	45	BL20-8X	BL010123	BL208XFUX23
40	BL308ZFUX23	BL30-8Z	BL010033	FUX 2/3	BL010290	66	8,5	40	45	BL30-8X	BL010133	BL308XFUX23

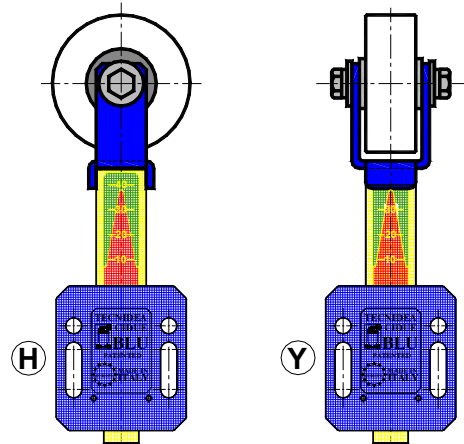
Type / Tipo: **BL8ZFPX – BL8XFPX – BL8ZFUX – BL8XFUX**



Roller for special applications – Type: FG / Rullo per applicazioni speciali – Tipo: FG

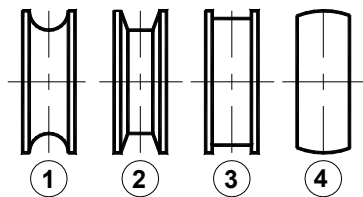


Assembly solutions / Soluzioni di montaggio:



KIT Positioning / Orientamento KIT

Special executions / Esecuzioni speciali:



MATERIALS FG: Fork, bearings, pin and spacers are made of steel. Roller is made in white polyamide.

TREATMENTS Fork is painted. Other parts are made of galvanized steel.

USE Roller with greased ZZ bearings. Please specify the positioning (H or Y), otherwise it will be supplied with H execution.

Executions with dimensions and profiles on request (1, 2, 3, 4).

Operating temperature ≤ 80°C.

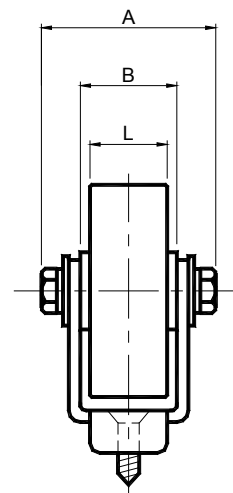
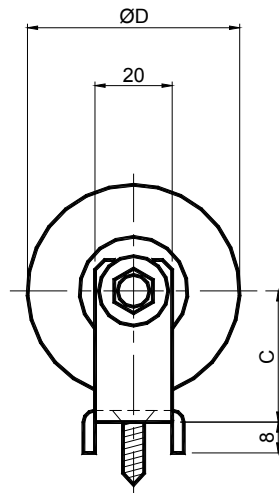
MATERIALI FG: Forcella, cuscinetti, perno e distanziali in acciaio. Rullo in poliammide bianco.

TRATTAMENTI La forcella è verniciata. I particolari metallici sono zincati.

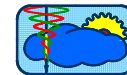
IMPIEGO Rullo con cuscinetti ZZ lubrificati. Specificare l'orientamento (H o Y), in mancanza sarà fornito con esecuzione H.

Esecuzioni con dimensioni e profili a richiesta (1,2,3,4).

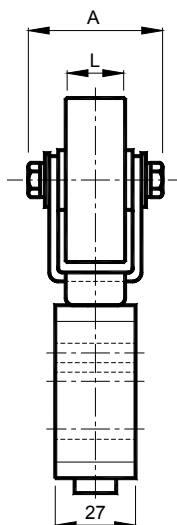
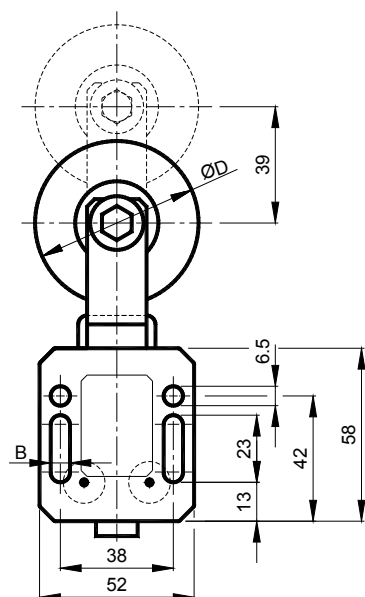
Temperatura di lavoro ≤ 80°C.



Polyamide roller Rullo in poliammide		Size Taglia	A	B	C	ØD	L	Weight Peso in [kg]
FG 10-A	BL010300	10	45	25	34	55	20	0,16
FG 20-A	BL010300	20	45	25	34	55	20	0,16
FG 20-B	BL010302	20	55	35	34	55	30	0,21
FG 30-B	BL010302	30	55	35	34	55	30	0,21
FG 30-C	BL010304	30	65	45	34	55	40	0,26



Type: **BL6ZFG – BL6XFG** / Tipo: **BL6ZFG – BL6XFG**



Tensioners are made by BL elastic element and the head with FG plastic roller. Tensioners BLFG are available with zinc plated or stainless steel springs; load values are indicated on pag I-13. The travel is 39 mm.

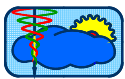
I tenditori sono composti dall'elemento elastico BL e la testa con rullo in plastica FG. I tenditori BLFG o BLFG sono disponibili con molle in acciaio zincato o con molle in acciaio inox; i valori di carico sono riportati a pag I-13. La corsa è 39mm.

Max belt width Max larghezza della cinghia	Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox							
	BLZ+FG	BLZ	← FG →		BLX	BLX+FG						
			A	B			ØD	L				
15	BL106ZFGA	BL10-6Z	BL010010	FG-A	BL010300	45	6,5	55	20	BL10-6X	BL010110	BL106XFGA
15	BL206ZFGA	BL20-6Z	BL010020	FG-A	BL010302	45	6,5	55	20	BL20-6X	BL010120	BL206XFGA
25	BL206ZFGB	BL20-6Z	BL010020	FG-B	BL010302	55	6,5	55	30	BL20-6X	BL010120	BL206XFGB
25	BL306ZFGB	BL30-6Z	BL010030	FG-B	BL010304	55	6,5	55	30	BL30-6X	BL010130	BL306XFGB
35	BL306ZFGC	BL30-6Z	BL010030	FG-C	BL010304	65	6,5	55	40	BL30-6X	BL010130	BL306XFGC
15	BL108ZFGA	BL10-8Z	BL010013	FG-A	BL010300	45	8,5	55	20	BL10-6X	BL010113	BL108XFGA
15	BL208ZFGA	BL20-8Z	BL010023	FG-A	BL010302	45	8,5	55	20	BL20-6X	BL010123	BL208XFGA
25	BL208ZFGB	BL20-8Z	BL010023	FG-B	BL010302	55	8,5	55	30	BL20-6X	BL010123	BL208XFGB
25	BL308ZFGB	BL30-8Z	BL010033	FG-B	BL010304	55	8,5	55	30	BL30-6X	BL010133	BL308XFGB
35	BL308ZFGC	BL30-8Z	BL010033	FG-C	BL010304	65	8,5	55	40	BL30-6X	BL010133	BL308XFGC

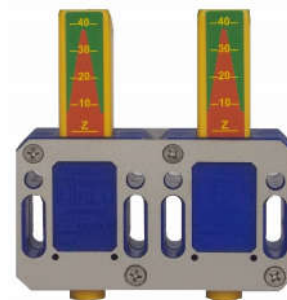
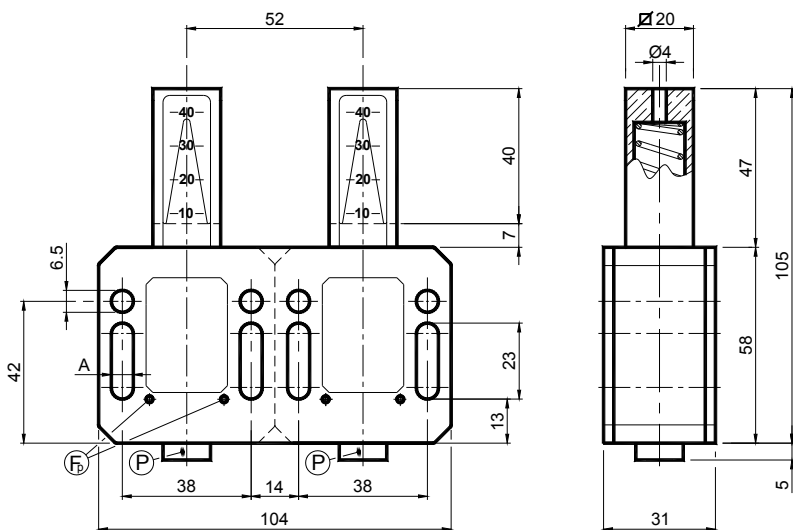


Type: **BL8ZFG – BL8XFG** / Tipo: **BL8ZFG – BL8XFG**





Elastic Elements – Type: **BD-Z**: with galvanized springs / Type: **BD-X**: with stainless steel springs
 Elementi elastici – Tipo: **BD-Z**: con molle in acciaio zincato / Tipo: **BD-X**: con molle in acciaio inox



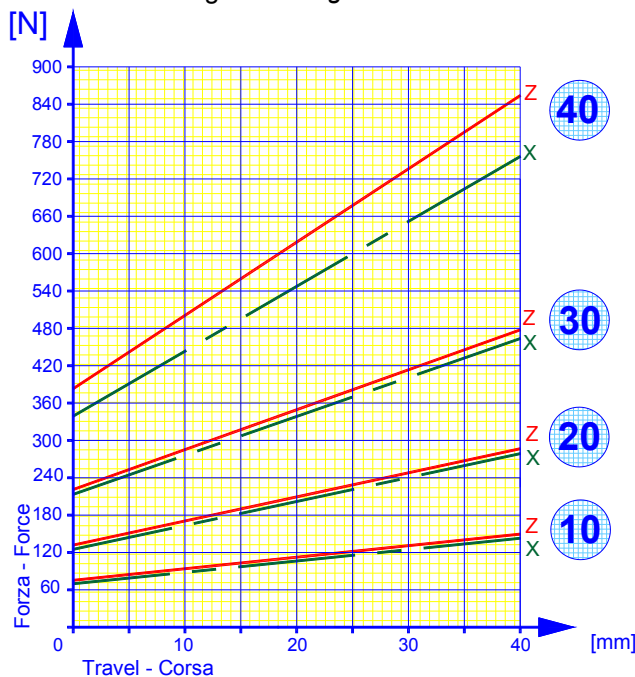
MATERIALS Body and column are made of plastic. Plates and screws in stainless steel.
TREATMENTS Spring can be in galvanized or stainless steel.
USE Maximum operating temperature +80°C. The travel is 40 mm.

MATERIALI Corpo e colonna in plastica. Piastre e bulloneria in acciaio inox.
TRATTAMENTI Le molle all'interno possono essere in acciaio zincato oppure in acciaio inox.
IMPIEGO Temperatura di lavoro massima +80°C. La corsa è 40mm.

(F_p) = Preloading hole / Foro precarica

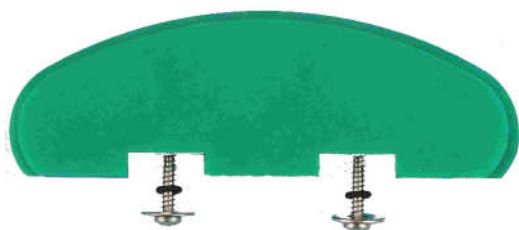
(P) = Preloading pin / Piolo per precarica

Load diagram / Diagramma di carico



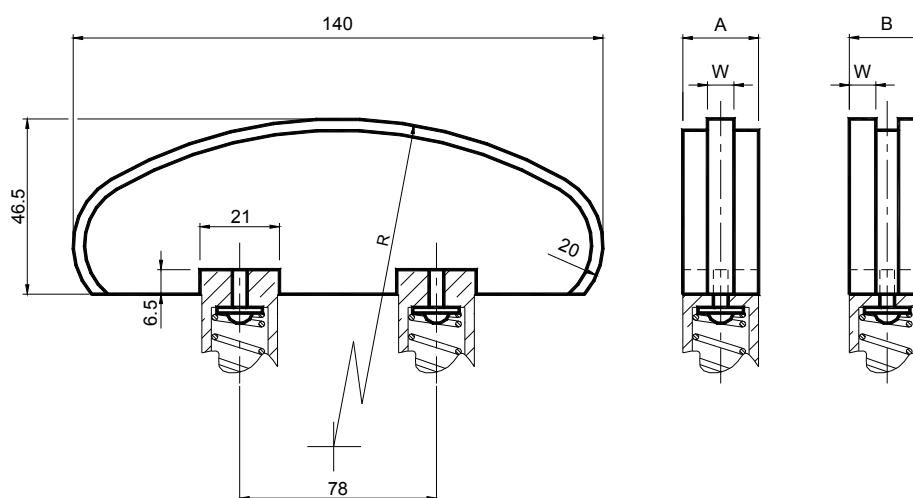
Z Galvanized steel springs Molle in acciaio zincato		Weight 0,36 [kg] Peso 0,36 [kg]		X Stainless steel springs Molle in acciaio inox		Weight 0,36 [kg] Peso 0,36 [kg]	
Type Tipo	Cod. N°	A	Newton	Type Tipo	Cod. N°	Newton	
BD 10-6 Z	BL010310	6,5	72-158	BD 10-6 X	BL010410	70-154	
BD 10-8 Z	BL010313	8,5	72-158	BD 10-8 X	BL010413	70-154	
BD 20-6 Z	BL010320	6,5	128-284	BD 20-6 X	BL010420	126-278	
BD 20-8 Z	BL010323	8,5	128-284	BD 20-8 X	BL010423	126-278	
BD 30-6 Z	BL010330	6,5	216-478	BD 30-6 X	BL010430	210-466	
BD 30-8 Z	BL010333	8,5	216-478	BD 30-8 X	BL010433	210-466	
BD 40-6 Z	BL010340	6,5	388-859	BD 30-6 X	BL010440	342-760	
BD 40-8 Z	BL010343	8,5	388-859	BD 40-8 X	BL010443	342-760	

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



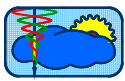
UK MATERIALS High molecular density polyethylene.
USE Semicircular profile suggested for large center distances.
Operating speed ≤ 20 m/min.
Operating temperature $\leq 70^{\circ}\text{C}$.

IT MATERIALI Polietilene ad alta densità molecolare
IMPIEGO Profilo semicircolare indicato per grandi interassi.
Velocità di lavoro ≤ 20 m/min.
Temperatura di lavoro $\leq 70^{\circ}\text{C}$.

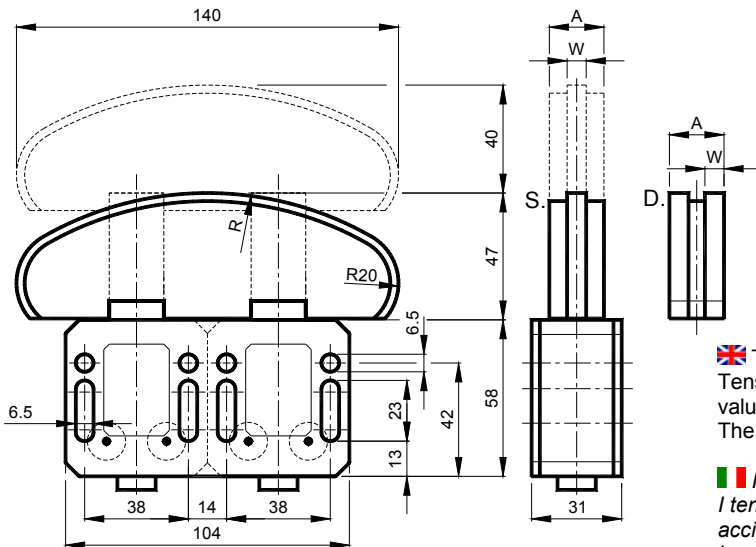


Type Tipo	S Cod. N°	D Cod. N°	Chain Catena	Size Taglia	R	A	B	W	Weight Peso in [kg]	
									S.	D.
VG 10-1	BL010502	BL010522	06-B1	10	120	20	20	5	0,08	0,08
VG 20-1	BL010502	BL010522	06-B1	20	120	20	20	5	0,08	0,08
VG 20-2	BL010504	BL010524	08-B1	20	120	20	20	7	0,08	0,08
VG 20-3	BL010506	BL010526	10-B1	20	140	20	25	9	0,10	0,12
VG 30-3	BL010506	BL010526	10-B1	30	140	20	25	9	0,10	0,12
VG 30-4	BL010508	BL010528	12-B1	30	140	20	30	11	0,12	0,25
VG 40-4	BL010508	BL010528	12-B1	40	140	20	30	11	0,12	0,25
VG 30-5	BL010510	BL010530	16-B1	30	160	25	48	16	0,20	0,50
VG 40-5	BL010510	BL010530	16-B1	40	160	25	48	16	0,20	0,50
VG 30-6	BL010512	BL010532	20-B1	30	160	25	55	18	0,20	1,30
VG 40-6	BL010512	BL010532	20-B1	40	160	25	55	18	0,20	1,30
VG 30-7	BL010514	BL010534	24-B1	30	160	30	70	24	0,35	1,40
VG 40-7	BL010514	BL010534	24-B1	40	160	30	70	24	0,35	1,40

Sliding block for triple chain are provided on request only / *Pattini per catena tripla si forniscono solo su richiesta*



Type: **BD6ZVG – BD6XVG** / Tipo: **BD6ZVG – BD6XVG**



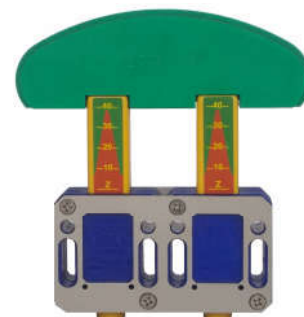
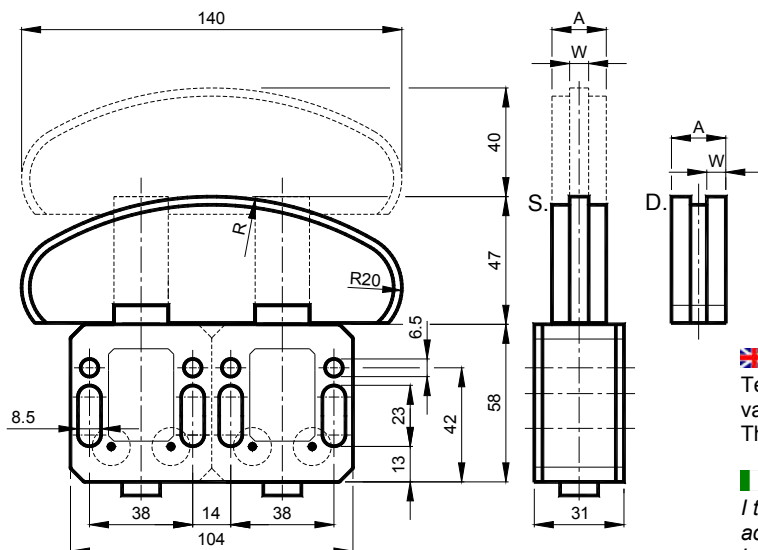
🇬🇧 Tensioners are made by BD6 elastic element and VG head. Tensioners BD6VG are available with galvanized or stainless steel springs; load values are indicated on pag. I-30. The travel is 40 mm.


🇮🇹 I tenditori sono composti dall'elemento elastico BD6 e la testa VG. I tenditori BD6VG sono disponibili con molle in acciaio zincato o con molle in acciaio inox; i valori di carico sono riportati a pag. I-30. La corsa è di 40 mm.


		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox					
Chain Catena DIN 8187 ISO Pitch		BD6Z+VG	BD6Z		← VG		→		BD6X		BD6X+VG
						A	W				
06-B1	3/8"x7/32"	BD106ZVG1S	BD 10-6 Z	BL010310	VG 1 S	BL010502	20	5	BD 10-6 X	BL010410	BD106XVG1S
06-B1	3/8"x7/32"	BD206ZVG1S	BD 20-6 Z	BL010320	VG 1 S	BL010502	20	5	BD 20-6 X	BL010420	BD206XVG1S
08-B1	1/2"x5/16"	BD106ZVG2S	BD 10-6 Z	BL010310	VG 2 S	BL010504	20	7	BD 10-6 X	BL010410	BD106XVG2S
08-B1	1/2"x5/16"	BD206ZVG2S	BD 20-6 Z	BL010320	VG 2 S	BL010504	20	7	BD 20-6 X	BL010420	BD206XVG2S
10-B1	5/8"x3/8"	BD206ZVG3S	BD 20-6 Z	BL010320	VG 3 S	BL010506	20	9	BD 20-6 X	BL010420	BD206XVG3S
10-B1	5/8"x3/8"	BD306ZVG3S	BD 30-6 Z	BL010330	VG 3 S	BL010506	20	9	BD 30-6 X	BL010430	BD306XVG3S
12-B1	3/4"x7/16"	BD206ZVG4S	BD 20-6 Z	BL010320	VG 4 S	BL010508	20	11	BD 20-6 X	BL010420	BD206XVG4S
12-B1	3/4"x7/16"	BD306ZVG4S	BD 30-6 Z	BL010330	VG 4 S	BL010508	20	11	BD 30-6 X	BL010430	BD306XVG4S
16-B1	1"x17.02mm	BD306ZVG5S	BD 30-6 Z	BL010330	VG 5 S	BL010510	25	16	BD 30-6 X	BL010430	BD306XVG5S
16-B1	1"x17.02mm	BD406ZVG5S	BD 40-6 Z	BL010340	VG 5 S	BL010510	25	16	BD 40-6 X	BL010440	BD406XVG5S
20-B1	1"1/4x3/4"	BD306ZVG6S	BD 30-6 Z	BL010330	VG 6 S	BL010512	25	18	BD 30-6 X	BL010430	BD306XVG6S
20-B1	1"1/4x3/4"	BD406ZVG6S	BD 40-6 Z	BL010340	VG 6 S	BL010512	25	18	BD 40-6 X	BL010440	BD406XVG6S
24-B1	1"1/2x1"	BD306ZVG7S	BD 30-6 Z	BL010330	VG 7 S	BL010514	30	24	BD 30-6 X	BL010430	BD306XVG7S
24-B1	1"1/2x1"	BD406ZVG7S	BD 40-6 Z	BL010340	VG 7 S	BL010514	30	24	BD 40-6 X	BL010440	BD406XVG7S
06-B2	3/8"x7/32"	BD106ZVG1D	BD 10-6 Z	BL010310	VG 1 D	BL010522	20	5	BD 10-6 X	BL010410	BD106XVG1D
06-B2	3/8"x7/32"	BD206ZVG1D	BD 20-6 Z	BL010320	VG 1 D	BL010522	20	5	BD 20-6 X	BL010420	BD206XVG1D
08-B2	1/2"x5/16"	BD206ZVG2D	BD 20-6 Z	BL010320	VG 2 D	BL010524	20	7	BD 20-6 X	BL010420	BD206XVG2D
10-B2	5/8"x3/8"	BD206ZVG3D	BD 20-6 Z	BL010320	VG 3 D	BL010526	25	9	BD 20-6 X	BL010420	BD206XVG3D
10-B2	5/8"x3/8"	BD306ZVG3D	BD 30-6 Z	BL010330	VG 3 D	BL010526	25	9	BD 30-6 X	BL010430	BD306XVG3D
12-B2	3/4"x7/16"	BD306ZVG4D	BD 30-6 Z	BL010330	VG 4 D	BL010528	30	11	BD 30-6 X	BL010430	BD306XVG4D
16-B2	1"x17.02mm	BD306ZVG5D	BD 30-6 Z	BL010330	VG 5 D	BL010530	48	16	BD 30-6 X	BL010430	BD306XVG5D
16-B2	1"x17.02mm	BD406ZVG5D	BD 40-6 Z	BL010340	VG 5 D	BL010530	48	16	BD 40-6 X	BL010440	BD406XVG5D
20-B2	1"1/4x3/4"	BD306ZVG6D	BD 30-6 Z	BL010330	VG 6 D	BL010532	55	18	BD 30-6 X	BL010430	BD306XVG6D
20-B2	1"1/4x3/4"	BD406ZVG6D	BD 40-6 Z	BL010340	VG 6 D	BL010532	55	18	BD 40-6 X	BL010440	BD406XVG6D
24-B2	1"1/2x1"	BD306ZVG7D	BD 30-6 Z	BL010330	VG 7 D	BL010534	70	24	BD 30-6 X	BL010430	BD306XVG7D
24-B2	1"1/2x1"	BD406ZVG7D	BD 40-6 Z	BL010340	VG 7 D	BL010534	70	24	BD 40-6 X	BL010440	BD406XVG7D


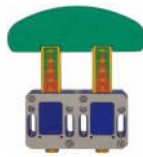
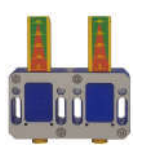


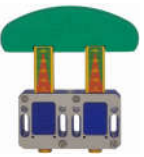
Tensioners for triple chain are provided on request only / I tenditori per catena tripla si forniscono solo su richiesta.

Type: **BD8ZVG – BD8XVG** / Tipo: **BD8ZVG – BD8XVG**

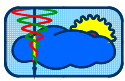


 Tensioners are made by BD8 elastic element and VG head. Tensioners BD8VG are available with galvanized or stainless steel springs; load values are indicated on pag. I-30. The travel is 40 mm.

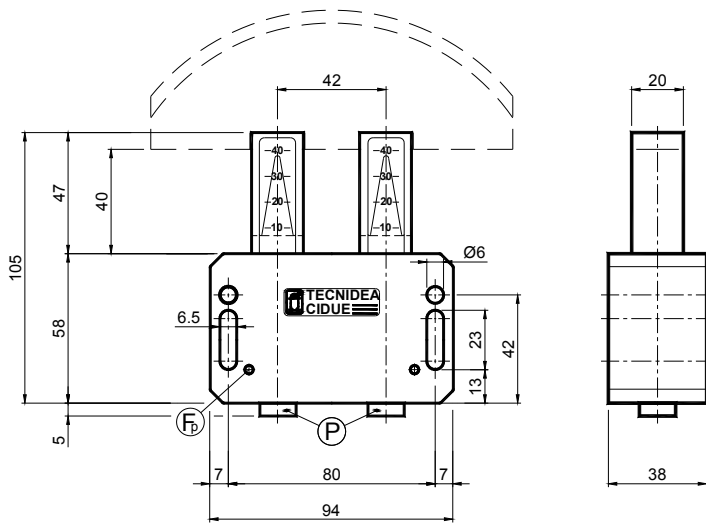
 I tenditori sono composti dall'elemento elastico BD8 e la testa VG. I tenditori BD8VG sono disponibili con molle in acciaio zincato o con molle in acciaio inox; i valori di carico sono riportati a pag. I-30. La corsa è di 40 mm.

Chain Catena DIN 8187 ISO Pitch		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox					
		BD8Z+VG	BD8Z	VG		BD8X		BD8X+VG			
				A	W						
06-B1	3/8"x7/32"	BD108ZVG1S	BD 10-8 Z	BL010313	VG 1 S	BL010502	20	5	BD 10-8 X	BL010413	BD106XVG1S
06-B1	3/8"x7/32"	BD208ZVG1S	BD 20-8 Z	BL010323	VG 1 S	BL010502	20	5	BD 20-8 X	BL010423	BD206XVG1S
08-B1	1/2"x5/16"	BD108ZVG2S	BD 10-8 Z	BL010313	VG 2 S	BL010504	20	7	BD 10-8 X	BL010413	BD106XVG2S
08-B1	1/2"x5/16"	BD208ZVG2S	BD 20-8 Z	BL010323	VG 2 S	BL010504	20	7	BD 20-8 X	BL010423	BD206XVG2S
10-B1	5/8"x3/8"	BD208ZVG3S	BD 20-8 Z	BL010323	VG 3 S	BL010506	20	9	BD 20-8 X	BL010423	BD206XVG3S
10-B1	5/8"x3/8"	BD308ZVG3S	BD 30-8 Z	BL010333	VG 3 S	BL010506	20	9	BD 30-8 X	BL010433	BD306XVG3S
12-B1	3/4"x7/16"	BD208ZVG4S	BD 20-8 Z	BL010323	VG 4 S	BL010508	20	11	BD 20-8 X	BL010423	BD206XVG4S
12-B1	3/4"x7/16"	BD308ZVG4S	BD 30-8 Z	BL010333	VG 4 S	BL010508	20	11	BD 30-8 X	BL010433	BD306XVG4S
16-B1	1"x17.02mm	BD308ZVG5S	BD 30-8 Z	BL010333	VG 5 S	BL010510	25	16	BD 30-8 X	BL010433	BD306XVG5S
16-B1	1"x17.02mm	BD408ZVG5S	BD 40-8 Z	BL010343	VG 5 S	BL010510	25	16	BD 40-8 X	BL010443	BD406XVG5S
20-B1	1"1/4x3/4"	BD308ZVG6S	BD 30-8 Z	BL010333	VG 6 S	BL010512	25	18	BD 30-8 X	BL010433	BD306XVG6S
20-B1	1"1/4x3/4"	BD408ZVG6S	BD 40-8 Z	BL010343	VG 6 S	BL010512	25	18	BD 40-8 X	BL010443	BD406XVG6S
24-B1	1"1/2x1"	BD308ZVG7S	BD 30-8 Z	BL010333	VG 7 S	BL010514	30	24	BD 30-8 X	BL010433	BD306XVG7S
24-B1	1"1/2x1"	BD408ZVG7S	BD 40-8 Z	BL010343	VG 7 S	BL010514	30	24	BD 40-8 X	BL010443	BD406XVG7S
06-B2	3/8"x7/32"	BD108ZVG1D	BD 10-8 Z	BL010313	VG 1 D	BL010522	20	5	BD 10-8 X	BL010413	BD106XVG1D
06-B2	3/8"x7/32"	BD208ZVG1D	BD 20-8 Z	BL010323	VG 1 D	BL010522	20	5	BD 20-8 X	BL010423	BD206XVG1D
08-B2	1/2"x5/16"	BD208ZVG2D	BD 20-8 Z	BL010323	VG 2 D	BL010524	20	7	BD 20-8 X	BL010423	BD206XVG2D
10-B2	5/8"x3/8"	BD208ZVG3D	BD 20-8 Z	BL010323	VG 3 D	BL010526	25	9	BD 20-8 X	BL010423	BD206XVG3D
10-B2	5/8"x3/8"	BD308ZVG3D	BD 30-8 Z	BL010333	VG 3 D	BL010526	25	9	BD 30-8 X	BL010433	BD306XVG3D
12-B2	3/4"x7/16"	BD308ZVG4D	BD 30-8 Z	BL010333	VG 4 D	BL010528	30	11	BD 30-8 X	BL010433	BD306XVG4D
16-B2	1"x17.02mm	BD308ZVG5D	BD 30-8 Z	BL010333	VG 5 D	BL010530	48	16	BD 30-8 X	BL010433	BD306XVG5D
16-B2	1"x17.02mm	BD408ZVG5D	BD 40-8 Z	BL010343	VG 5 D	BL010530	48	16	BD 40-8 X	BL010443	BD406XVG5D
20-B2	1"1/4x3/4"	BD308ZVG6D	BD 30-8 Z	BL010333	VG 6 D	BL010532	55	18	BD 30-8 X	BL010433	BD306XVG6D
20-B2	1"1/4x3/4"	BD408ZVG6D	BD 40-8 Z	BL010343	VG 6 D	BL010532	55	18	BD 40-8 X	BL010443	BD406XVG6D
24-B2	1"1/2x1"	BD308ZVG7D	BD 30-8 Z	BL010333	VG 7 D	BL010534	70	24	BD 30-8 X	BL010433	BD306XVG7D
24-B2	1"1/2x1"	BD408ZVG7D	BD 40-8 Z	BL010343	VG 7 D	BL010534	70	24	BD 40-8X	BL010443	BD406XVG7D

Tensioners for triple chain are provided on request only / I tenditori per catena tripla si forniscono solo su richiesta.



Elastic Elements – Type: **BP-Z**: with galvanized springs / Type: **BP-X**: with stainless steel springs
 Elementi Elastici – Tipo: **BP-Z**: con molle in acciaio zincato / Tipo: **BP-X**: con molle in acciaio inox



ⓕ_p = Preloading hole / Foro precarica

ⓐ = Preloading pin / Piolo per precarica

MATERIALS Plastic. The bolts and screws are made of stainless steel. Springs are galvanized (BP-Z) or stainless steel (BP-X).
USE Elastic element for chain-tensioner. All the articles are supplied with a preloading system. The maximum operating temperature is +80°C. The travel is 40 mm.

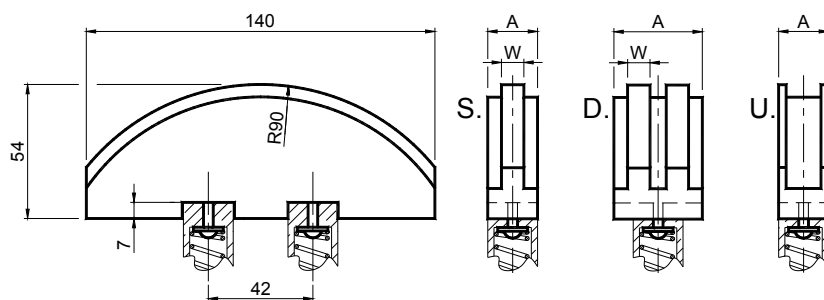
MATERIALI Plastica. Viteria in acciaio inox. Le molle sono in acciaio zincato (BP-Z) oppure in acciaio inox (BP-X).

IMPIEGO Elemento elastico per tendicatena. Tutti gli articoli vengono forniti con sistema di precarica. La temperatura massima di lavoro è +80°C. La corsa è di 40 mm.

Type Tipo	Cod. N°	Newton	Weight Peso in [kg]
BP 10 Z	BL010990	72 ÷ 158	0,24
BP 20 Z	BL010994	128 ÷ 284	0,24
BP 30 Z	BL010998	216 ÷ 478	0,24
BP 40 Z	BL011002	388 ÷ 860	0,24
BP 10 X	BL011010	70 ÷ 154	0,24
BP 20 X	BL011014	126 ÷ 278	0,24
BP 30 X	BL011018	210 ÷ 466	0,24
BP 40 X	BL011022	342 ÷ 760	0,24

KIT for chains / KIT per catene

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



Type Tipo	Cod. N°	Chain Catena	A	W	Weight Peso in [kg]
HG U	BL010899	≤06-B1	20		0,11
HG 2 S	BL010902	08-B1	20	7,0	0,11
HG 3 S	BL010903	10-B1	20	9,0	0,11
HG 4 S	BL010904	12-B1	20	11,0	0,11
HG 5 S	BL010905	16-B1	20	16,0	0,14
HG 0 D	BL010910	05-B2	20	2,5	0,11
HG 1 D	BL010911	06-B2	20	5,0	0,11
HG 2 D	BL010912	08-B2	20	7,0	0,11
HG 3 D	BL010913	10-B2	25	9,0	0,14
HG 4 D	BL010914	12-B2	30	11,0	0,16

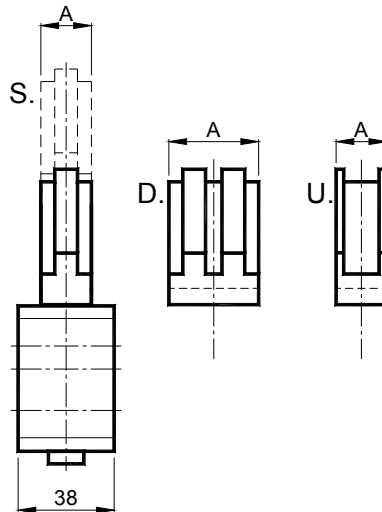
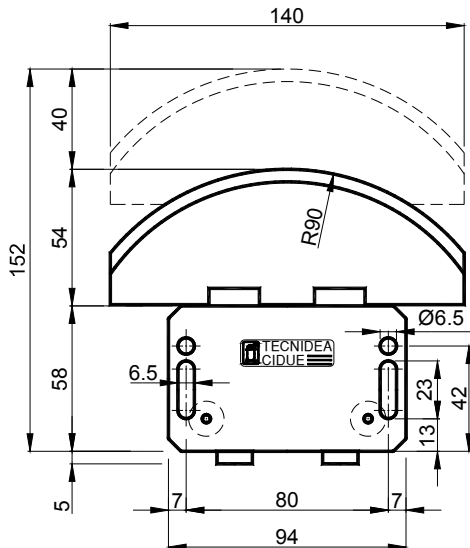
MATERIALS High molecular density polyethylene.

USE Semicircular profile suggested for medium/large center distances. Operating speed ≤ 20 m/min. Operating temperature ≤ 70°C.

MATERIALI Polietilene ad alta densità molecolare


IMPIEGO Profilo semicircolare indicato per medi/grandi interassi. Operating speed ≤ 20 m/min. Temperatura di lavoro ≤ 70°C.

Type: **BPZHG – BPXHG** / Tipo: **BPZHG – BPXHG**









 Tensioners are made by BP elastic element and HG head.

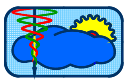
Tensioners BPZHG are available with galvanized springs and BPXHG types with stainless steel springs; load values are indicated on pag I-30. The travel is 40 mm.

 I tenditori sono composti dall'elemento elastico BP e la testa HG.

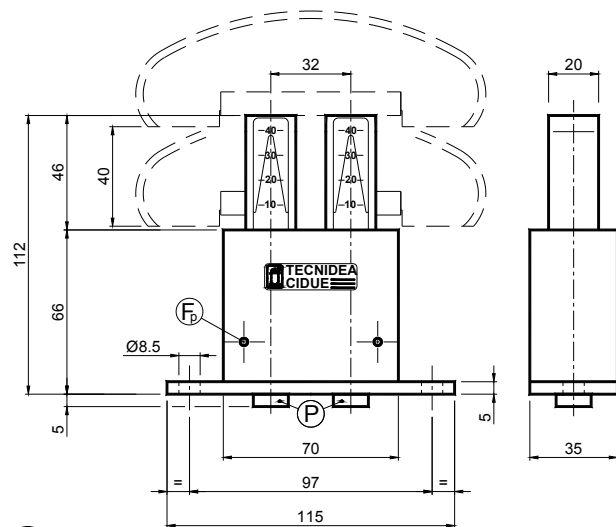
I tenditori BPZHG sono disponibili con molle in acciaio zincato ed i tipi BPXHG con molle in acciaio inox; i valori di carico sono riportati a pag I-30. La corsa è di 40 mm.

		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox				
		BPZ+HG	BPZ	HG		BPX	BPX+HG			
Chain Catena DIN 8187 ISO Pitch					A					
≤06-B1	≤3/8"x7/32"	BP10ZHG1U	BP 10 Z	BL010990	HG U	BL010899	20	BP 10 X	BL011010	BP10XHG1U
08-B1	1/2"x5/16"	BP10ZHG2S	BP 10 Z	BL010990	HG 2 S	BL010902	20	BP 10 X	BL011010	BP10XHG2S
08-B1	1/2"x5/16"	BP20ZHG2S	BP 20 Z	BL010994	HG 2 S	BL010902	20	BP 20 X	BL011014	BP20XHG2S
10-B1	5/8"x3/8"	BP10ZHG3S	BP 10 Z	BL010990	HG 3 S	BL010903	20	BP 10 X	BL011010	BP10XHG3S
10-B1	5/8"x3/8"	BP20ZHG3S	BP 20 Z	BL010994	HG 3 S	BL010903	20	BP 20 X	BL011014	BP20XHG3S
10-B1	5/8"x3/8"	BP30ZHG3S	BP 30 Z	BL010998	HG 3 S	BL010903	20	BP 30 X	BL011018	BP30XHG3S
12-B1	3/4"x7/16"	BP10ZHG4S	BP 10 Z	BL010990	HG 4 S	BL010904	20	BP 10 X	BL011010	BP20XHG4S
12-B1	3/4"x7/16"	BP20ZHG4S	BP 20 Z	BL010994	HG 4 S	BL010904	20	BP 20 X	BL011014	BP20XHG4S
12-B1	3/4"x7/16"	BP30ZHG4S	BP 30 Z	BL010998	HG 4 S	BL010904	20	BP 30 X	BL011018	BP30XHG4S
16-B1	1"x17.02mm	BP30ZHG5S	BP 30 Z	BL010998	HG 5 S	BL010905	20	BP 30 X	BL011018	BP30XHG5S
16-B1	1"x17.02mm	BP40ZHG5S	BP 40 Z	BL011002	HG 5 S	BL010905	20	BP 40 X	BL011022	BP40XHG5S
05-B2	8mm	BP10ZHG0D	BP 10 Z	BL010990	HG 0 D	BL010910	20	BP 10 X	BL011010	BP10XHG0D
06-B2	3/8"x7/32"	BP10ZHG1D	BP 10 Z	BL010990	HG 1 D	BL010911	20	BP 10 X	BL011010	BP10XHG1D
06-B2	3/8"x7/32"	BP20ZHG1D	BP 20 Z	BL010994	HG 1 D	BL010911	20	BP 20 X	BL011014	BP20XHG1D
08-B2	1/2"x5/16"	BP20ZHG2D	BP 20 Z	BL010994	HG 2 D	BL010912	20	BP 20 X	BL011014	BP20XHG2D
10-B2	5/8"x3/8"	BP20ZHG3D	BP 20 Z	BL010994	HG 3 D	BL010913	25	BP 20 X	BL011014	BP20XHG3D
10-B2	5/8"x3/8"	BP30ZHG3D	BP 30 Z	BL010998	HG 3 D	BL010913	25	BP 30 X	BL011018	BP30XHG3D
12-B2	3/4"x7/16"	BP20ZHG4D	BP 20 Z	BL010994	HG 4 D	BL010914	30	BP 20 X	BL011022	BP20XHG4D
12-B2	3/4"x7/16"	BP30ZHG4D	BP 30 Z	BL010998	HG 4 D	BL010914	30	BP 30 X	BL011018	BP30XHG4D

Tensioners for triple chain are provided on request only / I tenditori per catena tripla si forniscono solo su richiesta.



Elastic Elements – Type: **BC-Z**: with galvanized springs / Type: **BC-X**: with stainless steel springs
 Elementi Elastici – Tipo: **BC-Z**: con molle in acciaio zincato / Tipo: **BC-X**: con molle in acciaio inox



(F_p) = Preloading hole / Foro precarica

(P) = Preloading pin / Piolo per precarica

Type Tipo	Cod. N°	Newton	Weight Peso in [kg]
BC 10 Z	BL010600	72 ÷ 158	0.60
BC 20 Z	BL010602	128 ÷ 284	0.60
BC 30 Z	BL010604	216 ÷ 478	0.60
BC 40 Z	BL010606	388 ÷ 860	0.60
BC 10 X	BL010610	70 ÷ 154	0.60
BC 20 X	BL010612	126 ÷ 278	0.60
BC 30 X	BL010614	210 ÷ 466	0.60
BC 40 X	BL010616	342 ÷ 760	0.60

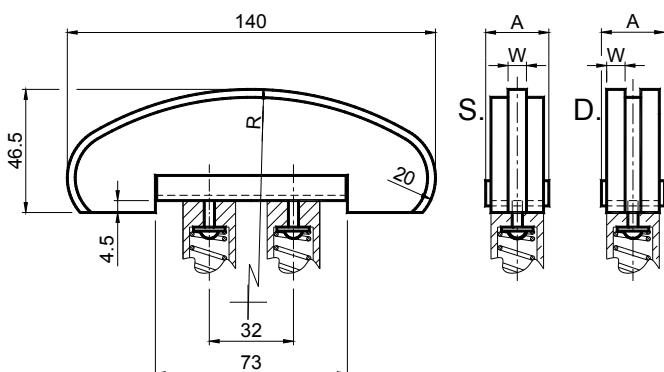


UK MATERIALS The external box is made of painted steel. The internal components are made of plastic material. Bolts are in stainless steel. The inner springs are galvanized (BC-Z) or in stainless steel (BC-X).
USE Elastic element for chain-tensioner. All the articles are supplied with a preloading system. The maximum operating temperature is +80°C. The travel is 40 mm.

IT MATERIALI Il corpo esterno è in acciaio verniciato. I componenti interni sono in materiale plastico. Viteria in acciaio inox. Le molle all'interno sono in acciaio zincato (BC-Z) oppure in acciaio inox (BC-X).
IMPIEGO Elemento elastico per tendicatena. Tutti gli articoli vengono forniti con sistema di precarica. La temperatura massima di lavoro è +80°C. La corsa è di 40 mm.

KIT for chains / KIT per catene

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



UK MATERIALS Sliding block made of high molecular density polyethylene. Stainless steel bolts. Steel profile.

USE Arc profile suggested for transmissions with medium/large distance between centers.

Operating speed ≤ 20 m/min.

Operating temperature of the sliding block ≤ 70°C.

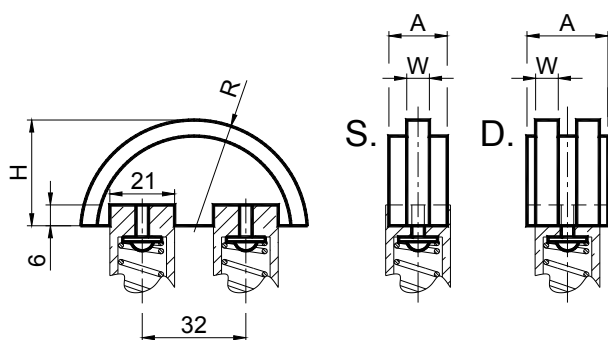
IT MATERIALI Pattino in polietilene ad alta densità molecolare. Bulloneria in acciaio inox. Profilo in acciaio.

IMPIEGO Profilo ad arco per trasmissioni con medio/lungo interasse. Velocità di lavoro ≤ 20 m/min.

Temperatura di lavoro del pattino ≤ 70°C.

Type Tipo	Cod. N°	Chain Catena	A	R	W	Weight Peso in [kg]
CG 1 S	BL010771	06-B1	24	120	5	0,14
CG 2 S	BL010772	08-B1	24	120	7	0,14
CG 3 S	BL010773	10-B1	24	140	9	0,11
CG 4 S	BL010774	12-B1	24	140	11	0,16
CG 5 S	BL010775	16-B1	29	160	16	0,18
CG 6 S	BL010776	20-B1	29	160	18	0,28
CG 1 D	BL010781	06-B2	24	120	5	0,14
CG 2 D	BL010782	08-B2	24	120	7	0,18
CG 3 D	BL010783	10-B2	29	140	9	0,18
CG 4 D	BL010784	12-B2	34	140	11	0,33
CG 5 D	BL010785	16-B2	52	160	16	0,56

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



Type Tipo	Cod. N°	Chain Catena	A	R	H	W	Weight Peso in [kg]
CV 1 S	BL010641	06-B1	18	35	33	5	0,03
CV 2 S	BL010642	08-B1	18	35	33	7	0,03
CV 3 S	BL010643	10-B1	18	45	43	9	0,05
CV 4 S	BL010644	12-B1	18	45	43	11	0,08
CV 1 D	BL010651	06-B2	18	35	33	5	0,03
CV 2 D	BL010652	08-B2	21	35	33	7	0,03
CV 3 D	BL010653	10-B2	25	45	43	9	0,08
CV 4 D	BL010654	12-B2	30	45	43	11	0,09

UK MATERIALS Sliding block made of high molecular density polyethylene.

Stainless steel bolts.

USE Semi-circular lowered profile suggested for transmission with small distance between centers.

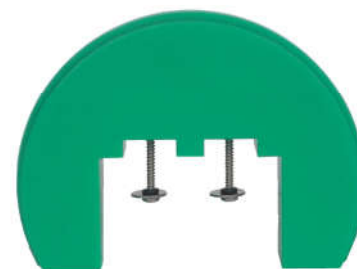
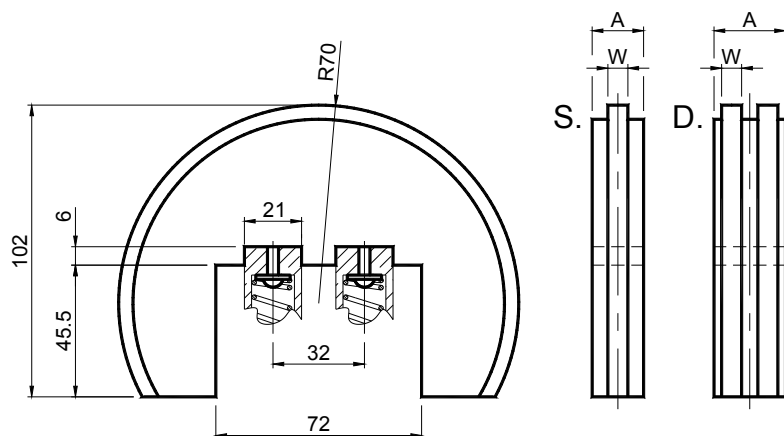
Operating speed ≤ 20 m/min.
Operating temperature $\leq 70^\circ\text{C}$.

IT MATERIALI Pattino in polietilene ad alta densità molecolare. Bulloneria in acciaio inox.

IMPIEGO Profilo semicircolare per trasmissioni con corto interasse.

Velocità di lavoro ≤ 20 m/min.
Temperatura di lavoro del pattino $\leq 70^\circ\text{C}$.

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



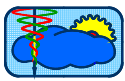
Type Tipo	Cod. N°	Chain Catena	A	W	Weight Peso in [kg]
CR 1 S	BL010711	06-B1	30	5	0,40
CR 2 S	BL010712	08-B1	30	7	0,41
CR 3 S	BL010713	10-B1	30	9	0,43
CR 4 S	BL010714	12-B1	30	11	0,44
CR 5 S	BL010715	16-B1	30	16	0,45
CR 1 D	BL010721	06-B2	30	5	0,41
CR 2 D	BL010722	08-B2	30	7	0,42
CR 3 D	BL010723	10-B2	30	9	0,44
CR 4 D	BL010724	12-B2	30	11	0,45

UK MATERIALS Sliding block made of high molecular density polyethylene. Stainless steel bolts.

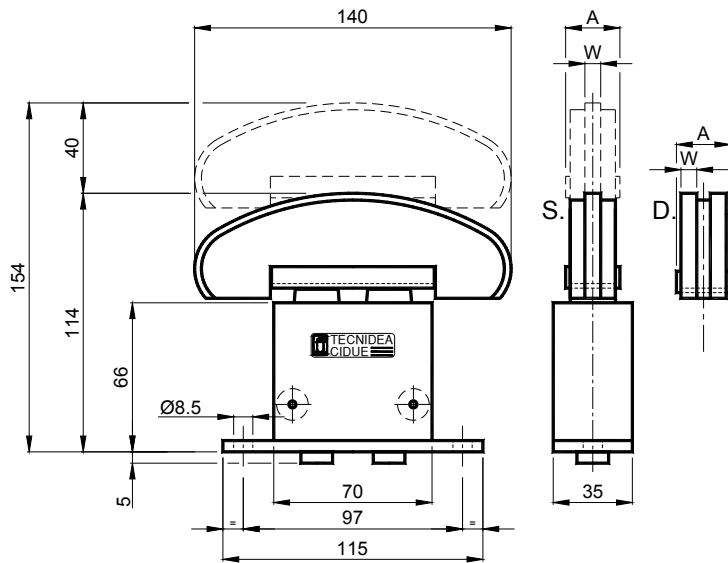
USE Round profile suitable for windings to 180° .
Operating speed ≤ 20 m/min. Operating temperature $\leq 70^\circ\text{C}$.

IT MATERIALI Pattino in polietilene ad alta densità molecolare. Bulloneria in acciaio inox.

IMPIEGO Profilo circolare per avvolgimenti a 180° .
Velocità di lavoro ≤ 20 m/min. Temperatura di lavoro del pattino $\leq 70^\circ\text{C}$.



Type: **BCZCG – BCXCG** / Tipo: **BCZCG – BCXCG**



Tensioners are made by BC elastic element and CG head.

Tensioners BCZCG are available with galvanized springs and BCXCG types with stainless steel springs; load values are indicated on pag I-30. The travel is 40 mm.

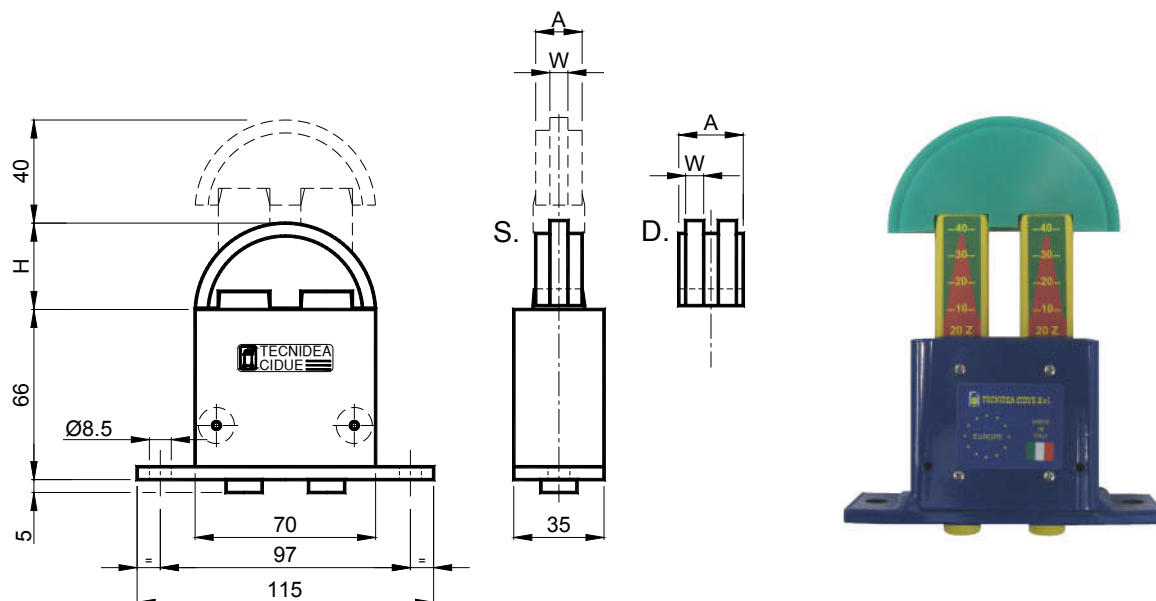
I tenditori sono composti dall'elemento elastico BC e la testa CG.

I tenditori BCZCG sono disponibili con molle in acciaio zincato ed i tipi BCXCG con molle in acciaio inox; i valori di carico sono riportati a pag I-30. La corsa è di 40 mm.

		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox					
Chain Catena DIN 8187 ISO Pitch		BCZ+CG	BCZ		CG		A	W	BCX		BCX+CG
06-B1	3/8"x7/32"	BC10ZCG1S	BC 10 Z	BL010600	CG 1 S	BL010771	24	5	BC 10 X	BL010610	BC10XCG1S
06-B1	3/8"x7/32"	BC20ZCG1S	BC 20 Z	BL010602	CG 1 S	BL010771	24	5	BC 20 X	BL010612	BC20XCG1S
08-B1	1/2"x5/16"	BC10ZCG2S	BC 10 Z	BL010600	CG 2 S	BL010772	24	7	BC 10 X	BL010610	BC10XCG2S
08-B1	1/2"x5/16"	BC20ZCG2S	BC 20 Z	BL010602	CG 2 S	BL010772	24	7	BC 20 X	BL010612	BC20XCG2S
10-B1	5/8"x3/8"	BC20ZCG3S	BC 20 Z	BL010602	CG 3 S	BL010773	24	9	BC 20 X	BL010612	BC20XCG3S
10-B1	5/8"x3/8"	BC30ZCG3S	BC 30 Z	BL010604	CG 3 S	BL010773	24	9	BC 30 X	BL010614	BC30XCG3S
12-B1	3/4"x7/16"	BC20ZCG4S	BC 20 Z	BL010602	CG 4 S	BL010774	24	11	BC 20 X	BL010612	BC20XCG4S
12-B1	3/4"x7/16"	BC30ZCG4S	BC 30 Z	BL010604	CG 4 S	BL010774	24	11	BC 30 X	BL010614	BC30XCG4S
16-B1	1"x17.02mm	BC30ZCG5S	BC 30 Z	BL010604	CG 5 S	BL010775	29	16	BC 30 X	BL010614	BC30XCG5S
16-B1	1"x17.02mm	BC40ZCG5S	BC 40 Z	BL010606	CG 5 S	BL010775	29	16	BC 40 X	BL010616	BC40XCG5S
20-B1	1 1/4"x3/4"	BC30ZCG6S	BC 30 Z	BL010604	CG 6 S	BL010776	29	18	BC 30 X	BL010614	BC30XCG6S
20-B1	1 1/4"x3/4"	BC40ZCG6S	BC 40 Z	BL010606	CG 6 S	BL010776	29	18	BC 40 X	BL010616	BC40XCG6S
06-B2	3/8"x7/32"	BC10ZCG1D	BC 10 Z	BL010600	CG 1 D	BL010781	24	5	BC 10 X	BL010610	BC10XCG1D
06-B2	3/8"x7/32"	BC20ZCG1D	BC 20 Z	BL010602	CG 1 D	BL010781	24	5	BC 20 X	BL010612	BC20XCG1D
08-B2	1/2"x5/16"	BC20ZCG2D	BC 20 Z	BL010602	CG 2 D	BL010782	24	7	BC 20 X	BL010612	BC20XCG2D
10-B2	5/8"x3/8"	BC20ZCG3D	BC 20 Z	BL010602	CG 3 D	BL010783	29	9	BC 20 X	BL010612	BC20XCG3D
10-B2	5/8"x3/8"	BC30ZCG3D	BC 30 Z	BL010604	CG 3 D	BL010783	29	9	BC 30 X	BL010614	BC30XCG3D
12-B2	3/4"x7/16"	BC30ZCG4D	BC 30 Z	BL010604	CG 4 D	BL010784	34	11	BC 30 X	BL010614	BC30XCG4D
16-B2	1"x17.02mm	BC30ZCG5D	BC 30 Z	BL010604	CG 5 D	BL010785	52	16	BC 30 X	BL010614	BC30XCG5D
16-B2	1"x17.02mm	BC40ZCG5D	BC 40 Z	BL010606	CG 5 D	BL010785	52	16	BC 40 X	BL010616	BC40XCG5D

Tensioners for triple chain are provided on request only / I tenditori per catena tripla si forniscono solo su richiesta.

Type: **BCZCV – BCXCV** / Tipo: **BCZCV – BCXCV**








 Tensioners are made by BC elastic element and CV head.

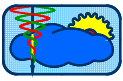
Tensioners BCZCV are available with zinc plated springs and BCXCV types with stainless steel springs; load values are indicated on pag I-30. The travel is 40 mm.

 I tenditori sono composti dall'elemento elastico BC e la testa CV.

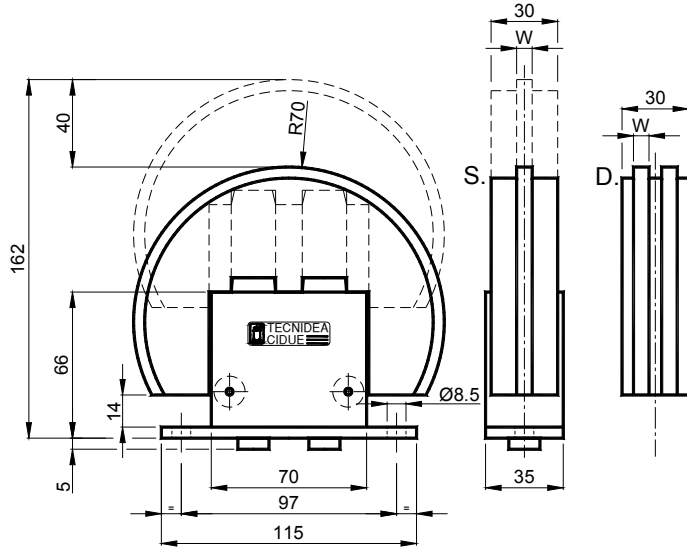
I tenditori BCZCV sono disponibili con molle in acciaio zincato ed i tipi BCXCV con molle in acciaio inox; i valori di carico sono riportati a pag I-30. La corsa è di 40 mm.

		Zinc plated springs / Con molle zincate				Stainless steel springs / Con molle inox						
Chain Catena DIN 8187 ISO Pitch		BCZ+CV	BCZ		CV			BCX		BCX+CV		
						A	H	W				
06-B1	3/8"x7/32"	BC10ZCV1S	BC 10 Z	BL010600	CV 1 S	BL010641	18	33	5	BC 10 X	BL010610	BC10XCV1S
06-B1	3/8"x7/32"	BC20ZCV1S	BC 20 Z	BL010602	CV 1 S	BL010641	18	33	5	BC 20 X	BL010612	BC20XCV1S
08-B1	1/2"x5/16"	BC10ZCV2S	BC 10 Z	BL010600	CV 2 S	BL010642	18	33	7	BC 10 X	BL010610	BC10XCV2S
08-B1	1/2"x5/16"	BC20ZCV2S	BC 20 Z	BL010602	CV 2 S	BL010642	18	33	7	BC 20 X	BL010612	BC20XCV2S
10-B1	5/8"x3/8"	BC20ZCV3S	BC 20 Z	BL010602	CV 3 S	BL010643	18	43	9	BC 20 X	BL010612	BC20XCV3S
10-B1	5/8"x3/8"	BC30ZCV3S	BC 30 Z	BL010604	CV 3 S	BL010643	18	43	9	BC 30 X	BL010614	BC30XCV3S
12-B1	3/4"x7/16"	BC20ZCV4S	BC 20 Z	BL010602	CV 4 S	BL010644	18	43	11	BC 20 X	BL010612	BC20XCV4S
12-B1	3/4"x7/16"	BC30ZCV4S	BC 30 Z	BL010604	CV 4 S	BL010644	18	43	11	BC 30 X	BL010614	BC30XCV4S
06-B2	3/8"x7/32"	BC10ZCV1D	BC 10 Z	BL010600	CV 1 D	BL010651	18	33	5	BC 10 X	BL010610	BC10XCV1D
06-B2	3/8"x7/32"	BC20ZCV1D	BC 20 Z	BL010602	CV 1 D	BL010651	18	33	5	BC 20 X	BL010612	BC20XCV1D
08-B2	1/2"x5/16"	BC20ZCV2D	BC 20 Z	BL010602	CV 2 D	BL010652	21	43	7	BC 20 X	BL010612	BC20XCV2D
10-B2	5/8"x3/8"	BC20ZCV3D	BC 20 Z	BL010602	CV 3 D	BL010653	25	43	9	BC 20 X	BL010612	BC20XCV3D
10-B2	5/8"x3/8"	BC30ZCV3D	BC 30 Z	BL010604	CV 3 D	BL010653	25	43	9	BC 30 X	BL010614	BC30XCV3D
12-B2	3/4"x7/16"	BC30ZCV4D	BC 30 Z	BL010604	CV 4 D	BL010654	30	33	11	BC 30 X	BL010614	BC30XCV4D

Tensioners for triple chain are provided on request only / I tenditori per catena tripla si forniscono solo su richiesta.



Type: **BCZCR – BCXCR** / Tipo: **BCZCR – BCXCR**



UK Tensioners are made by BC elastic element and CR head.

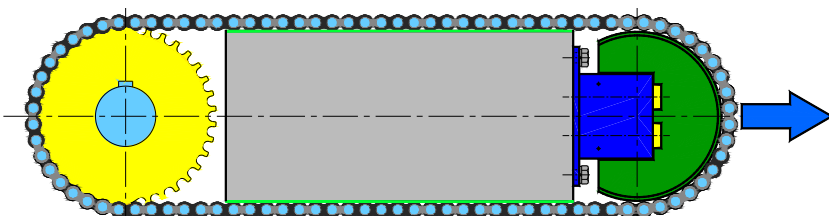
Tensioners BCZCR are available with galvanized springs and BCXCR types with stainless steel springs; load values are indicated on pag I-30. The travel is 40 mm.

IT I tenditori sono composti dall'elemento elastico BC e la testa CR.

I tenditori BCZCR sono disponibili con molle in acciaio zincato ed i tipi BCXCR con molle in acciaio inox; i valori di carico sono riportati a pag I-30. La corsa è di 40 mm.

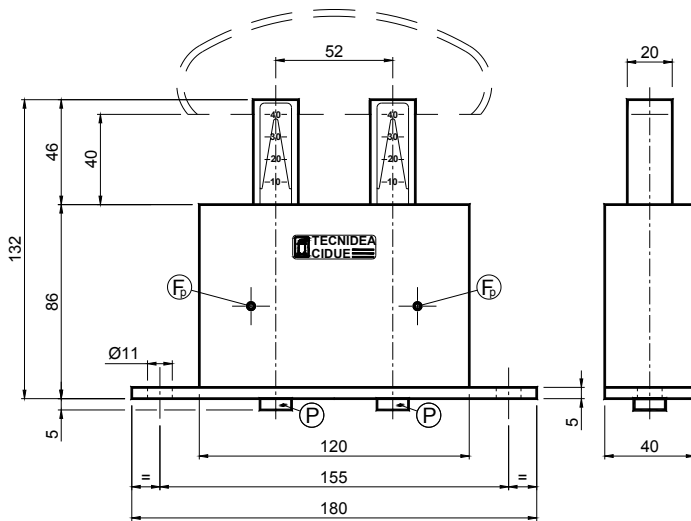
		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox				
		BCZ+CR	BCZ	CR		BCX	BCX+CR			
Chain Catena DIN 8187 ISO Pitch					W					
06-B1	3/8"x7/32"	BC10ZCR1S	BC 10 Z	BL010600	CR 1 S	BL010711	5	BC 10 X	BL010610	BC10XCR1S
06-B1	3/8"x7/32"	BC20ZCR1S	BC 20 Z	BL010602	CR 1 S	BL010711	5	BC 20 X	BL010612	BC20XCR1S
08-B1	1/2"x5/16"	BC10ZCR2S	BC 10 Z	BL010600	CR 2 S	BL010712	7	BC 10 X	BL010610	BC10XCR2S
08-B1	1/2"x5/16"	BC20ZCR2S	BC 20 Z	BL010602	CR 2 S	BL010712	7	BC 20 X	BL010612	BC20XCR2S
10-B1	5/8"x3/8"	BC20ZCR3S	BC 20 Z	BL010602	CR 3 S	BL010713	9	BC 20 X	BL010612	BC20XCR3S
10-B1	5/8"x3/8"	BC30ZCR3S	BC 30 Z	BL010604	CR 3 S	BL010713	9	BC 30 X	BL010614	BC30XCR3S
12-B1	3/4"x7/16"	BC20ZCR4S	BC 20 Z	BL010602	CR 4 S	BL010714	11	BC 20 X	BL010612	BC20XCR4S
12-B1	3/4"x7/16"	BC30ZCR4S	BC 30 Z	BL010604	CR 4 S	BL010714	11	BC 30 X	BL010614	BC30XCR4S
16-B1	1"x17.02mm	BC30ZCR5S	BC 30 Z	BL010604	CR 5 S	BL010715	16	BC 30 X	BL010614	BC30XCR5S
16-B1	1"x17.02mm	BC40ZCR5S	BC 40 Z	BL010606	CR 5 S	BL010715	16	BC 40 X	BL010616	BC40XCR5S
06-B2	3/8"x7/32"	BC10ZCR1D	BC 10 Z	BL010600	CR 1 D	BL010721	5	BC 10 X	BL010610	BC10XCR1D
06-B2	3/8"x7/32"	BC20ZCR1D	BC 20 Z	BL010602	CR 1 D	BL010721	5	BC 20 X	BL010612	BC20XCR1D
08-B2	1/2"x5/16"	BC20ZCR2D	BC 20 Z	BL010602	CR 2 D	BL010722	7	BC 20 X	BL010612	BC20XCR2D
10-B2	5/8"x3/8"	BC20ZCR3D	BC 20 Z	BL010602	CR 3 D	BL010722	9	BC 20 X	BL010612	BC20XCR3D
10-B2	5/8"x3/8"	BC30ZCR3D	BC 30 Z	BL010604	CR 3 D	BL010723	9	BC 30 X	BL010614	BC30XCR3D
12-B2	3/4"x7/16"	BC30ZCR4D	BC 30 Z	BL010604	CR 4 D	BL010724	11	BC 30 X	BL010614	BC30XCR4D

Tensioners for triple chain are provided on request only. / I tenditori per catena tripla si forniscono solo su richiesta.



Example of application
Esempio di applicazione

Elastic Elements – Type: **BB-Z** with galvanized steel springs / Type: **BB-X** with stainless steel springs
 Elementi elastici – Tipo: **BB-Z** con molle in acciaio zincato / Tipo: **BB-X** con molle in acciaio inox



(F_p) = Preloading hole / Foro precarica

(P) = Preloading pin / Piolo per precarica



MATERIALS The external box is made of painted steel. The internal components are made by plastic. The bolts are in stainless steel. The inner springs can be in galvanized (BB-Z) or in stainless steel (BB-X).

USE Elastic chain-tensioner. All the articles are supplied with a preloading system. The maximum operating temperature is +80°C. The travel is 40 mm.

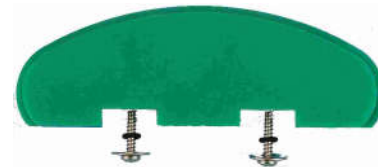
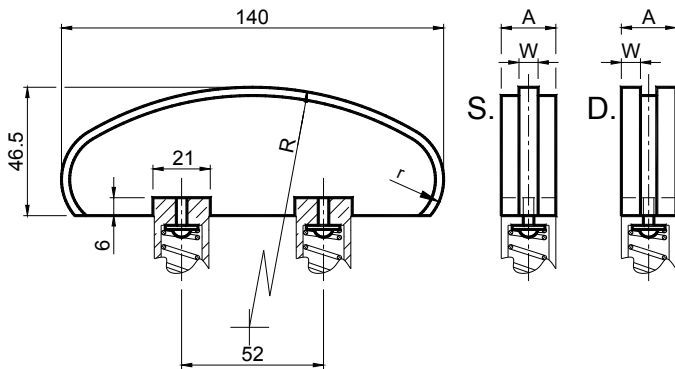
MATERIALI Il corpo esterno è in acciaio verniciato. I componenti interni sono in materiale plastico. Viteria in acciaio inox. Le molle all'interno sono in acciaio zincato (BB-Z) oppure in acciaio inox (BB-X).

IMPIEGO Elemento elastico per tendicatena. Tutti gli articoli vengono forniti con sistema di precarica. La temperatura massima di lavoro è +80°C. La corsa è di 40 mm.

Type Tipo	Cod. N°	Newton	Type Tipo	Cod. N°	Newton	Weight Peso in [kg]
BB 10 Z	BL010620	72 ÷ 158	BB 10 X	BL011630	70 ÷ 154	1,25
BB 20 Z	BL010622	128 ÷ 284	BB 20 X	BL011632	126 ÷ 278	1,25
BB 30 Z	BL010624	216 ÷ 478	BB 30 X	BL011634	210 ÷ 466	1,25
BB 40 Z	BL010626	388 ÷ 860	BB 40 X	BL011636	342 ÷ 760	1,25

KIT for chain / KIT per catena

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



MATERIALS High molecular density polyethylene.

USE Semi-circular lowered profile suggested for large distance between centres.

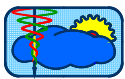
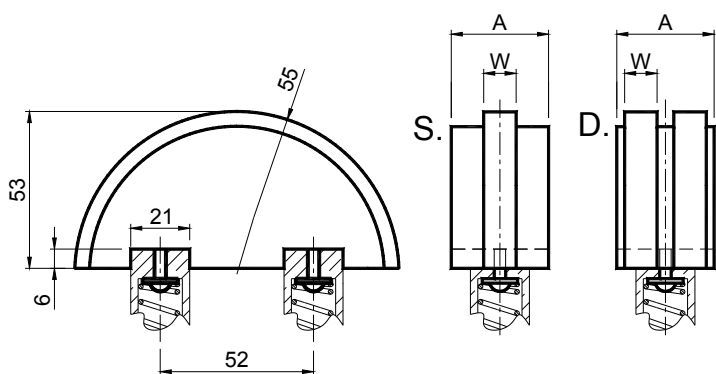
Operating speed ≤ 20 m/min.
 Operating temperature ≤ 70°C.

MATERIALI Polietilene ad alta densità molecolare

IMPIEGO Profilo semicircolare indicato per grandi interassi.

Operating speed ≤ 20 m/min.
 Temperatura di lavoro ≤ 70°C.

Type Tipo	Cod. N°	Chain Catena	A	R	W	Weight Peso in [kg]	Type Tipo	Cod. N°	Chain Catena	A	R	W	Weight Peso in [kg]
VG 1 S	BL010502	06-B1	20	120	5	0,07	VG 1 D	BL010522	06-B2	20	120	5	0,08
VG 2 S	BL010504	08-B1	20	120	7	0,08	VG 2 D	BL010524	08-B2	20	120	7	0,08
VG 3 S	BL010506	10-B1	20	140	9	0,10	VG 3 D	BL010526	10-B2	25	140	9	0,12
VG 4 S	BL010508	12-B1	20	140	11	0,12	VG 4 D	BL010528	12-B2	30	140	11	0,25
VG 5 S	BL010510	16-B1	25	160	16	0,20	VG 5 D	BL010530	16-B2	48	160	16	0,50
VG 6 S	BL010512	20-B1	25	160	18	0,20							
VG 7 S	BL010514	24-B1	30	160	24	0,35							
VG 6 D	BL010532	20-B2	55	160	18	1,30							
VG 7 D	BL010534	24-B2	70	160	24	1,40							

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

Tipo Type	Cod. N°	Chain Catena	A	W	Weight Peso in [kg]
BV 4 S	BL010684	12-B1	33	11	0,08
BV 5 S	BL010685	16-B1	33	16	0,08
BV 2 D	BL010692	08-B2	33	7	0,08
BV 3 D	BL010693	10-B2	33	9	0,09
BV 4 D	BL010694	12-B2	33	11	0,10

UK MATERIALS Sliding block made of high molecular density polyethylene.

Stainless steel bolts.

USE Semi-circular profile suggested for small distance between centres.

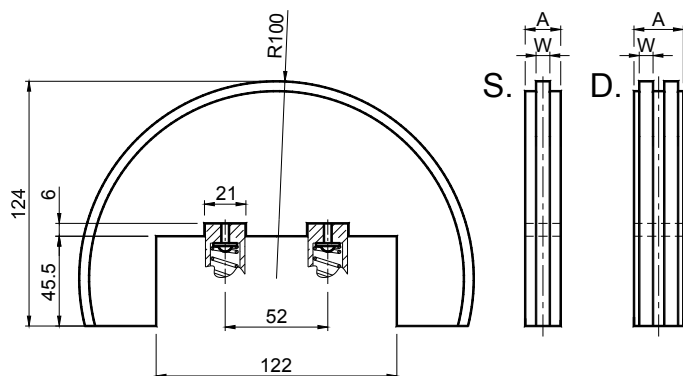
Operating speed ≤ 20 m/min. Operating temperature $\leq 70^\circ\text{C}$.

IT MATERIALI Pattino in polietilene ad alta densità molecolare.

Bulloneria in acciaio inox.

IMPIEGO Profilo semicircolare per trasmissioni con corto interasse.

Velocità di lavoro ≤ 20 m/min. Temperatura di lavoro del pattino $\leq 70^\circ\text{C}$.

Polyethylene sliding block – Type: BR / Pattino in polietilene – Tipo: BR

Tipo Type	Cod. N°	Chain Catena	A	W	Weight Peso in [kg]
BR 4 S	BL010744	12-B1	33	11	0.85
BR 5 S	BL010745	16-B1	33	16	0.86
BR 6 S	BL010746	20-B1	33	18	0.87
BR 2 D	BL010752	08-B2	33	7	0.85
BR 3 D	BL010753	10-B2	33	9	0.86
BR 4 D	BL010754	12-B2	33	11	0.88

UK MATERIALS Sliding block made of high molecular density polyethylene. Stainless steel bolts.

USE Round profile suggested for windings to 180° .

Operating speed ≤ 20 m/min. Operating temperature $\leq 70^\circ\text{C}$.

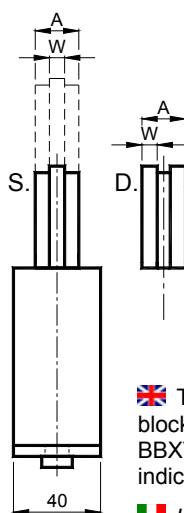
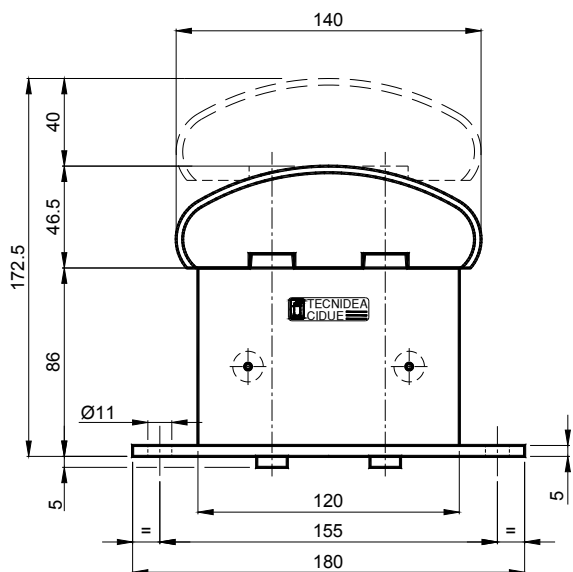
IT MATERIALI Pattino in polietilene ad alta densità molecolare.

Bulloneria in acciaio inox.

IMPIEGO Profilo circolare per avvolgimenti a 180° .







Velocità di lavoro ≤ 20 m/min. Temperatura di lavoro del pattino $\leq 70^\circ\text{C}$.

Type: **BBZVG – BBXVG** / Tipo: **BBZVG – BBXVG**

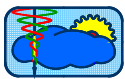


🇬🇧 Tensioners are made by BB elastic element and VG sliding block. Tensioners BBZVG are available with galvanized springs and BBXVG types with stainless steel springs; load values are indicated on page I-30. The travel is 40 mm.

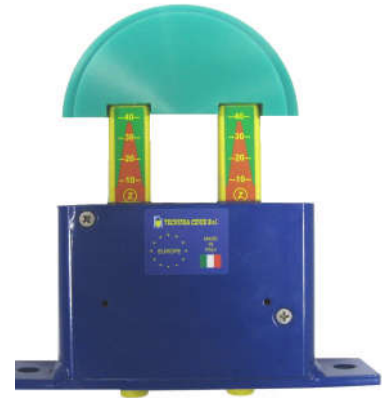
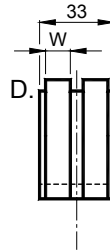
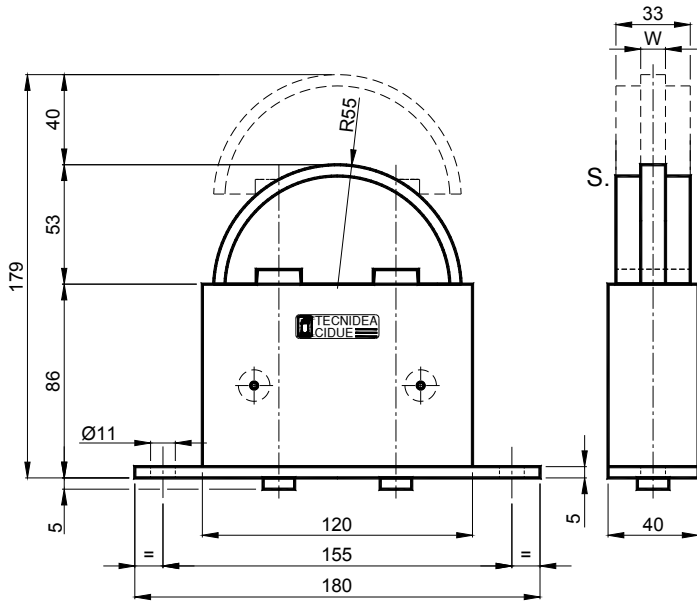
🇮🇹 I tenditori sono composti dall'elemento elastico BC e la testa VG. I tenditori BBZVG sono disponibili con molle in acciaio zincato ed i tipi BBXVG con molle in acciaio inox; i valori di carico sono riportati a pag I-30. La corsa è di 40 mm.

Chain Catena DIN 8187 ISO Pitch		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox					
		BBZ+VG	BBZ	VG		A		W		BBX	BBX+VG
											
06-B1	3/8"x7/32"	BB10ZVG1S	BB 10 Z	BL010620	VG 1 S	BL010502	20	5	BB 10 X	BL011630	BB10XVG1S
06-B1	3/8"x7/32"	BB20ZVG1S	BB 20 Z	BL010622	VG 1 S	BL010502	20	5	BB 20 X	BL011632	BB20XVG1S
08-B1	1/2"x5/16"	BB10ZVG2S	BB 10 Z	BL010620	VG 2 S	BL010504	20	7	BB 10 X	BL011630	BB10XVG2S
08-B1	1/2"x5/16"	BB20ZVG2S	BB 20 Z	BL010622	VG 2 S	BL010504	20	7	BB 20 X	BL011632	BB20XVG2S
10-B1	5/8"x3/8"	BB20ZVG3S	BB 20 Z	BL010622	VG 3 S	BL010506	20	9	BB 20 X	BL011632	BB20XVG3S
10-B1	5/8"x3/8"	BB30ZVG3S	BB 30 Z	BL010624	VG 3 S	BL010506	20	9	BB 30 X	BL011634	BB30XVG3S
12-B1	3/4"x7/16"	BB20ZVG4S	BB 20 Z	BL010622	VG 4 S	BL010508	20	11	BB 20 X	BL011632	BB20XVG4S
12-B1	3/4"x7/16"	BB30ZVG4S	BB 30 Z	BL010624	VG 4 S	BL010508	20	11	BB 30 X	BL011634	BB30XVG4S
16-B1	1"x17.02mm	BB30ZVG5S	BB 30 Z	BL010624	VG 5 S	BL010510	25	16	BB 30 X	BL011634	BB30XVG5S
16-B1	1"x17.02mm	BB40ZVG5S	BB 40 Z	BL010626	VG 5 S	BL010510	25	16	BB 40 X	BL011636	BB40XVG5S
20-B1	1"1/4x3/4"	BB30ZVG6S	BB 30 Z	BL010624	VG 6 S	BL010512	25	18	BB 30 X	BL011634	BB30XVG6S
20-B1	1"1/4x3/4"	BB40ZVG6S	BB 40 Z	BL010626	VG 6 S	BL010512	25	18	BB 40 X	BL011636	BB40XVG6S
24-B1	1"1/2x1"	BB30ZVG7S	BB 30 Z	BL010624	VG 7 S	BL010514	30	24	BB 30 X	BL011634	BB30XVG7S
24-B1	1"1/2x1"	BB40ZVG7S	BB 40 Z	BL010626	VG 7 S	BL010514	30	24	BB 40 X	BL011636	BB40XVG7S
06-B2	3/8"x7/32"	BB10ZVG1D	BB 10 Z	BL010620	VG 1 D	BL010522	20	5	BB 10 X	BL011630	BB10XVG1D
06-B2	3/8"x7/32"	BB20ZVG1D	BB 20 Z	BL010622	VG 1 D	BL010522	20	5	BB 20 X	BL011632	BB20XVG1D
08-B2	1/2"x5/16"	BB20ZVG2D	BB 20 Z	BL010622	VG 2 D	BL010524	20	7	BB 20 X	BL011632	BB20XVG2D
10-B2	5/8"x3/8"	BB20ZVG3D	BB 20 Z	BL010622	VG 3 D	BL010526	25	9	BB 20 X	BL011632	BB20XVG3D
10-B2	5/8"x3/8"	BB30ZVG3D	BB 30 Z	BL010624	VG 3 D	BL010526	25	9	BB 30 X	BL011634	BB30XVG3D
12-B2	3/4"x7/16"	BB30ZVG4D	BB 30 Z	BL010624	VG 4 D	BL010528	30	11	BB 30 X	BL011634	BB30XVG4D
16-B2	1"x17.02mm	BB30ZVG5D	BB 30 Z	BL010624	VG 5 D	BL010530	48	16	BB 30 X	BL011634	BB30XVG5D
16-B2	1"x17.02mm	BB40ZVG5D	BB 40 Z	BL010626	VG 5 D	BL010530	48	16	BB 40 X	BL011636	BB40XVG5D
20-B2	1"1/4x3/4"	BB30ZVG6D	BB 30 Z	BL010624	VG 6 D	BL010532	55	18	BB 30 X	BL011634	BB30XVG6D
20-B2	1"1/4x3/4"	BB40ZVG6D	BB 40 Z	BL010626	VG 6 D	BL010532	55	18	BB 40 X	BL011636	BB40XVG6D
24-B2	1"1/2x1"	BB30ZVG7D	BB 30 Z	BL010624	VG 7 D	BL010534	70	24	BB 30 X	BL011634	BB30XVG7D
24-B2	1"1/2x1"	BB40ZVG7D	BB 40 Z	BL010626	VG 7 D	BL010534	70	24	BB 40 X	BL011636	BB40XVG7D

Tensioners for triple chain are provided on request only. / I tenditori per catena tripla si forniscono solo su richiesta.



Type: **BBZBV – BBXBV** / Tipo: **BBZBV – BBXBV**



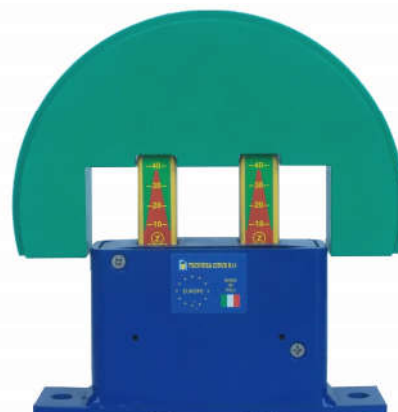
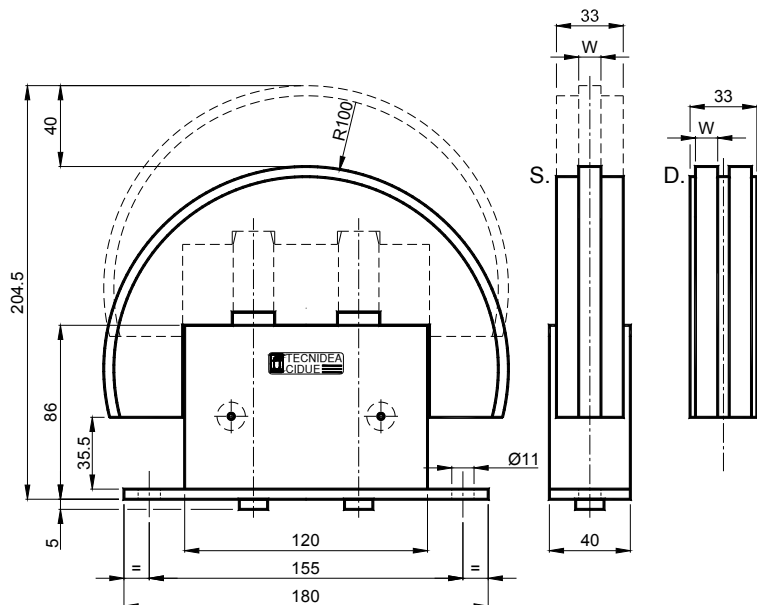
Tensioners are made by BB elastic element and BV sliding block.
 Tensioners BBZBV are available with galvanized springs and BBXBV types with stainless steel springs; load values are indicated on pag I-30.
 The travel is 40 mm.

I tenditori sono composti dall'elemento elastico BB e la testa BV.
 I tenditori BBZBV sono disponibili con molle in acciaio zincato ed i tipi BBXBV con molle in acciaio inox; i valori di carico sono riportati a pag I-30.
 La corsa è di 40 mm.

Chain Catena DIN 8187 ISO Pitch		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox				
		BBZ+BV	BBZ		BV		BBX		BBX+BV	
							W			
12-B1	3/4"x7/16"	BB20ZBV4S	BB 20 Z	BL010622	BV 4 S	BL010684	11	BB 20 X	BL011632	BB30XBV4S
12-B1	3/4"x7/16"	BB30ZBV4S	BB 30 Z	BL010624	BV 4 S	BL010684	11	BB 30 X	BL011634	BB30XBV4S
16-B1	1"x17.02mm	BB30ZBV5S	BB 30 Z	BL010624	BV 5 S	BL010685	16	BB 30 X	BL011634	BB30XBV5S
16-B1	1"x17.02mm	BB40ZBV5S	BB 40 Z	BL010626	BV 5 S	BL010685	16	BB 40 X	BL011636	BB40XBV5S
08-B2	1/2"x5/16"	BB20ZBV2D	BB 20 Z	BL010622	BV 2 D	BL010692	7	BB 20 X	BL011632	BB20XBV2D
10-B2	5/8"x3/8"	BB20ZBV3D	BB 20 Z	BL010622	BV 3 D	BL010693	9	BB 20 X	BL011632	BB20XBV3D
10-B2	5/8"x3/8"	BB30ZBV3D	BB 30 Z	BL010624	BV 3 D	BL010693	9	BB 30 X	BL011634	BB30XBV3D
12-B2	3/4"x7/16"	BB30ZBV4D	BB 30 Z	BL010624	BV 4 D	BL010694	11	BB 30 X	BL011634	BB30XBV4D

Tensioners for triple chain are provided on request only. // I tenditori per catena tripla si forniscono solo su richiesta.

Type **BBZBR – BBXBR** / Tipo **BBZBR – BBXBR**

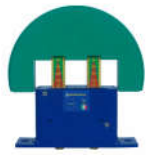







🇬🇧 Tensioners are made by BB elastic element and BR sliding block.

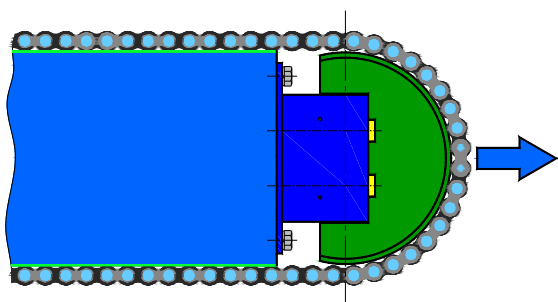
Tensioners BBZBR are available with galvanized springs and BBXBR types with stainless steel springs; load values are indicated on page I-30. Travel is 40mm.

🇮🇹 I tenditori sono composti dall'elemento elastico BB e la testa BR.

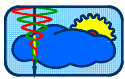
I tenditori BBZBR sono disponibili con molle in acciaio zincato ed i tipi BBXBR con molle in acciaio inox; i valori di carico sono riportati a pag I-30. La corsa è di 40mm.

		Zinc plated springs / Molle zincate				Stainless steel springs / Molle inox				
		BBZ+BR	BBZ	BR		BBX			BBX+BR	
Chain Catena DIN 8187 ISO Pitch					W					
										
12-B1	3/4"x7/16"	BB20ZBR4S	BB 20 Z	BL010622	BR 4 S	BL010744	11	BB 20 X	BL011632	BB20XBR4S
12-B1	3/4"x7/16"	BB30ZBR4S	BB 30 Z	BL010624	BR 4 S	BL010744	11	BB 30 X	BL011634	BB30XBR4S
16-B1	1"x17.02mm	BB30ZBR5S	BB 30 Z	BL010624	BR 5 S	BL010745	16	BB 30 X	BL011634	BB30XBR5S
16-B1	1"x17.02mm	BB40ZBR5S	BB 40 Z	BL010626	BR 5 S	BL010745	16	BB 40 X	BL011636	BB40XBR5S
20-B1	1"1/4x3/4"	BB30ZBR6S	BB 30 Z	BL010624	BR 6 S	BL010746	18	BB 30 X	BL011634	BB30XBR6S
20-B1	1"1/4x3/4"	BB40ZBR6S	BB 40 Z	BL010626	BR 6 S	BL010746	18	BB 40 X	BL011636	BB40XBR6S
08-B2	1/2"x5/16"	BB20ZBR2D	BB 20 Z	BL010622	BR 2 D	BL010752	7	BB 20 X	BL011632	BB20XBR2D
10-B2	5/8"x3/8"	BB20ZBR3D	BB 20 Z	BL010622	BR 3 D	BL010753	9	BB 20 X	BL011632	BB20XBR3D
10-B2	5/8"x3/8"	BB30ZBR3D	BB 30 Z	BL010624	BR 3 D	BL010753	9	BB 30 X	BL011634	BB30XBR3D
12-B2	3/4"x7/16"	BB30ZBR4D	BB 30 Z	BL010624	BR 4 D	BL010754	11	BB 30 X	BL011634	BB30XBR4D

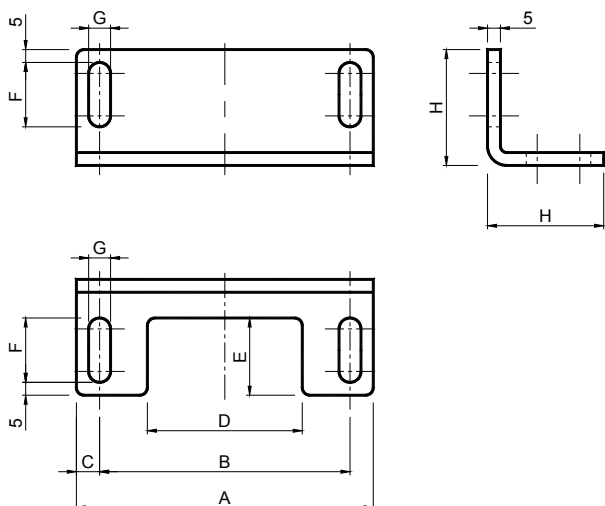
Tensioners for triple chain are provided on request only. / I tenditori per catena tripla si forniscono solo su richiesta.



Example of application
Esempio di applicazione



Clamp – Type: BS / Staffa – Tipo: BS



MATERIALS Galvanized steel.
USE Fixing for installation of the elastic elements BC and BB.

MATERIALI Acciaio zincato.
IMPIEGO Staffa di montaggio per elementi elastici BC e BB.

Type Tipo	Cod. N°	A	B	C	D	E	F	G	H	Weight Peso in [kg]
BS 1	BL011095	115	97	9,0	60	30	25	8,5	45	0,33
BS 2	BL011096	180	155	12,5	90	35	30	11,0	50	0,58

Installation examples / Esempi di fissaggio:

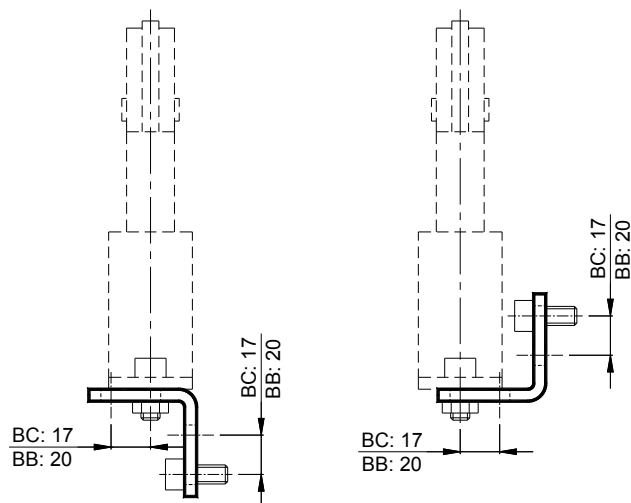
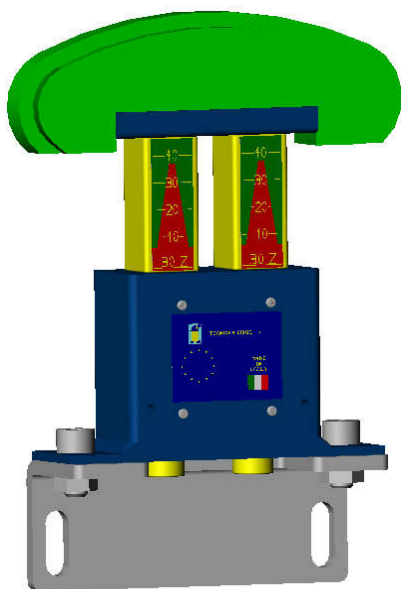
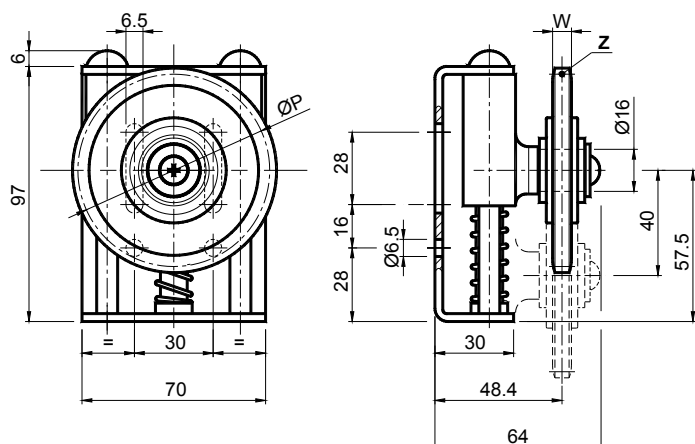


fig. 1: Type BLU BC assembled with BS 1 clamp
 Tipo BLU BC montato con staffa BS 1

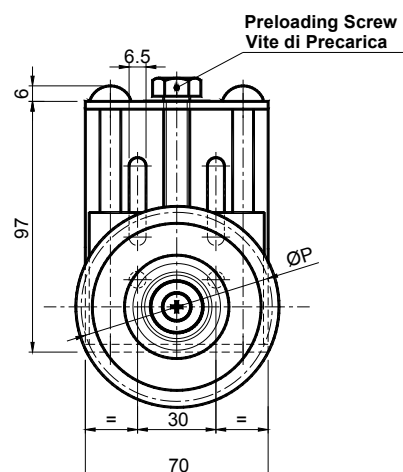
Configurations
 Configurazioni

Tensioner Devices - Type: **DNRR – DBRR** / *Elementi Tendicatena - Tipo: DNRR – DBRR*

DNRR



DBRR



Type Tipo	Cod. N°	Chain Catena DIN 8187 ISO Pitch		ØP	W	Z	Newton	Weight Peso in [kg]	Cod. N°	Type Tipo
DN20RR1S21	BL011100	06-B1	3/8"x7/32"	63,91	5,3	21	64 - 142	0,57	BL011130	DB20RR1S21
DN20RR2S14	BL011102	08-B1	1/2"x5/16"	57,07	7,2	14	64 - 142	0,55	BL011132	DB20RR2S14
DN20RR2S15	BL011104	08-B1	1/2"x5/16"	61,09	7,2	15	64 - 142	0,56	BL011134	DB20RR2S15
DN20RR2S16	BL011106	08-B1	1/2"x5/16"	65,10	7,2	16	64 - 142	0,58	BL011136	DB20RR2S16
DN20RR2S17	BL011108	08-B1	1/2"x5/16"	69,11	7,2	17	64 - 142	0,61	BL011138	DB20RR2S17
DN20RR2S18	BL011110	08-B1	1/2"x5/16"	73,14	7,2	18	64 - 142	0,63	BL011140	DB20RR2S18
DN20RR3S14	BL011112	10-B1	5/8"x3/8"	71,34	9,1	14	64 - 142	0,64	BL011142	DB20RR3S14
DN20RR3S15	BL011114	10-B1	5/8"x3/8"	76,36	9,1	15	64 - 142	0,68	BL011144	DB20RR3S15
DN20RR3S16	BL011116	10-B1	5/8"x3/8"	81,37	9,1	16	64 - 142	0,74	BL011146	DB20RR3S16
DN20RR3S17	BL011118	10-B1	5/8"x3/8"	86,39	9,1	17	64 - 142	0,76	BL011148	DB20RR3S17
DN20RR4S13	BL011120	12-B1	3/4"x7/16"	79,59	11,1	13	64 - 142	0,82	BL011150	DB20RR4S13
DN20RR4S14	BL011122	12-B1	3/4"x7/16"	85,61	11,1	14	64 - 142	0,84	BL011152	DB20RR4S14
DN20RR4S15	BL011124	12-B1	3/4"x7/16"	91,63	11,1	15	64 - 142	0,86	BL011154	DB20RR4S15



UK MATERIALS Bracket, pins, spring and bolts in steel. Crown in galvanized steel. Cursor and guide in polyamide.

TREATMENTS Painted bracket, spring and bolts with zinc plating treatment. Crown in galvanized steel installed on a national enlarged bearing.

USE Chain tensioner. The travel is 40 mm. Operating speed ≤ 60 m/min. Operating temperature ≤ 70°C.

IT MATERIALI Staffa, perni, molla e bulloneria in acciaio. Corona in acciaio zincato. Corsore e guida in poliammide.

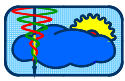
TRATTAMENTI Staffa verniciata, molla e bulloneria con trattamento di zincatura. Corona in acciaio zincato montata su cuscinetto nazionale a base maggiorata.

IMPIEGO Tendicatena. La corsa è di 40 mm.

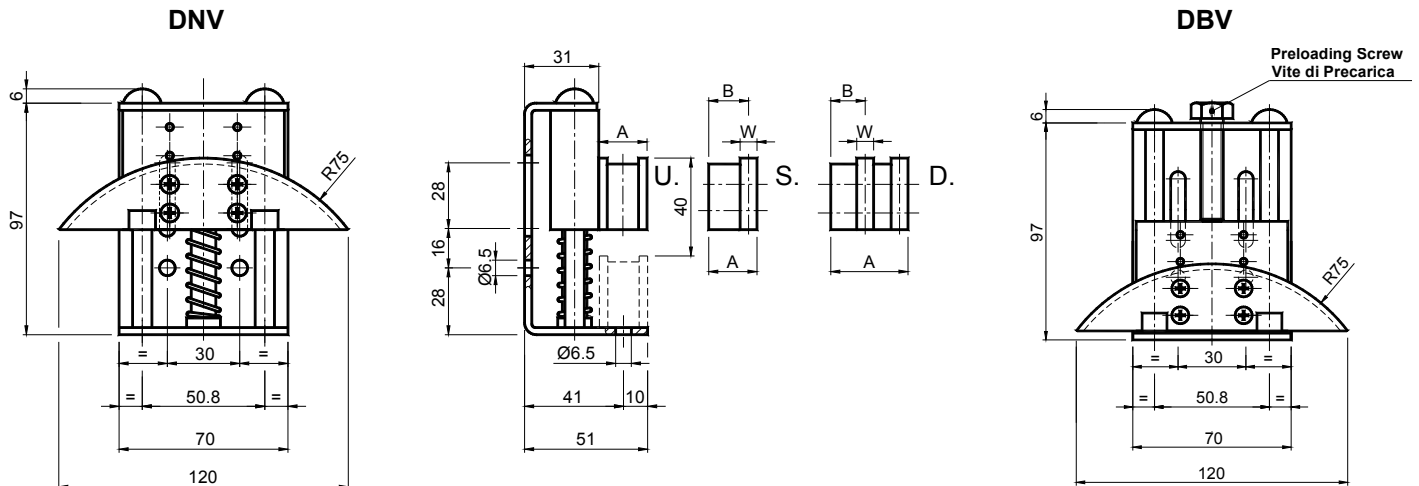
Velocità di lavoro ≤ 60 m/min.

Temperatura di lavoro ≤ 70°C





Tensioner Devices - Type: DNV – DBV / Elementi Tendicatena - Tipo: DNV – DBV



Type Tipo	Cod. N°	Chain Catena DIN 8187 ISO Pitch	ØP	W	Z	Newton	Weight Peso in [kg]	Cod. N°	Type Tipo	
DN10VUS	BL011180	≤06-B1	≤3/8"x7/32"	20		36 - 79	0,46	BL011220	DB10VUS	
DN20VUS	BL011181	≤06-B1	≤3/8"x7/32"	20		64 - 142	0,46	BL011221	DB20VUS	
DN10V2S	BL011184	08-B1	1/2"x5/16"	20	17,0	7	36 - 79	0,46	BL011224	DB10V2S
DN20V2S	BL011185	08-B1	1/2"x5/16"	20	17,0	7	64 - 142	0,46	BL011225	DB20V2S
DN10V3S	BL011186	10-B1	5/8"x3/8"	20	17,0	9	36 - 79	0,46	BL011226	DB10V3S
DN20V3S	BL011187	10-B1	5/8"x3/8"	20	17,0	9	64 - 142	0,46	BL011227	DB20V3S
DN10V4S	BL011188	12-B1	3/4"x7/16"	20	15,5	1	36 - 79	0,46	BL011228	DB10V4S
DN20V4S	BL011189	12-B1	3/4"x7/16"	20	15,5	1	64 - 142	0,46	BL011229	DB20V4S
DN10V1D	BL011194	06-B2	3/8"x7/32"	32	11,5	5	36 - 79	0,48	BL011234	DB10V1D
DN20V1D	BL011195	06-B2	3/8"x7/32"	32	11,5	5	64 - 142	0,48	BL011235	DB20V1D
DN10V2D	BL011196	08-B2	1/2"x5/16"	32	15,2	7	36 - 79	0,48	BL011236	DB10V2D
DN20V2D	BL011197	08-B2	1/2"x5/16"	32	15,2	7	64 - 142	0,48	BL011237	DB20V2D
DN10V3D	BL011198	10-B2	5/8"x3/8"	32	11,3	9	36 - 79	0,48	BL011238	DB10V3D
DN20V3D	BL011199	10-B2	5/8"x3/8"	32	11,3	9	64 - 142	0,48	BL011239	DB20V3D



UK MATERIALS Bracket, pins, spring and bolts in steel. Cursor and guide in polyamide. Sliding block with high molecular density polyethylene.

TREATMENTS: Painted bracket, spring and bolts with zinc plating treatment.

USE Chain tensioner. The travel is 40 mm.

Operating speed ≤ 60 m/min.

Operating temperature ≤ 70°C.



IT MATERIALI Staffa, perni, molla e bulloneria in acciaio. Corsore e guida in poliammide. Pattino in polietilene ad alta densità.

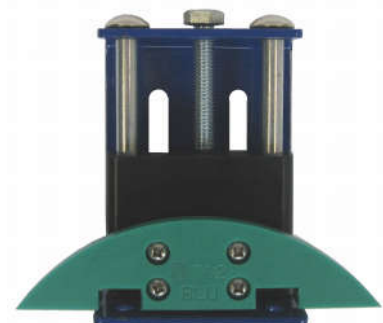
TRATTAMENTI Staffa verniciata, molla e bulloneria con trattamento di zincatura elettrolitica.

IMPIEGO Tendicatena.

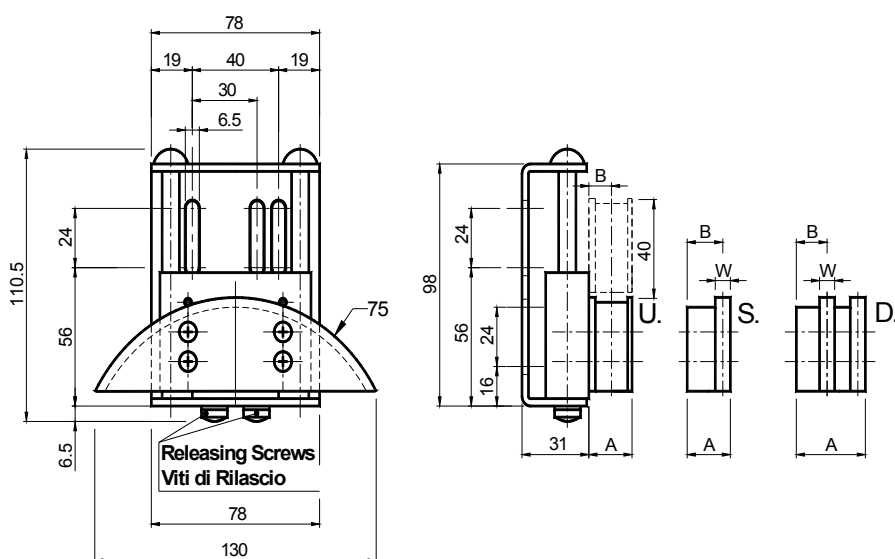
La corsa è di 40 mm.

Velocità di lavoro ≤ 60 m/min.

Temperatura di lavoro ≤ 70 °C.



Tensioner Devices -Type: **DQV** / *Elementi Tendicatena - Tipo: DQV*



UK MATERIALS Bracket, pins, spring and bolts in steel. Guide in polyamide. Sliding cursor and block with high molecular density polyethylene.

TREATMENTS: Painted bracket, spring and bolts with zinc plating treatment.

USE Chain tensioner. The travel is 40 mm.

Operating speed ≤ 60 m/min.

Operating temperature $\leq 70^\circ\text{C}$.

IT MATERIALI Staffa, perni, molla e bulloneria in acciaio. Guida in poliammide. Corsore e pattino in polietilene ad alta densità.

TRATTAMENTI Staffa verniciata, molla e bulloneria con trattamento di zincatura elettrolitica.

IMPIEGO Tendicatena. La corsa è di 40 mm.

Velocità di lavoro ≤ 60 m/min.

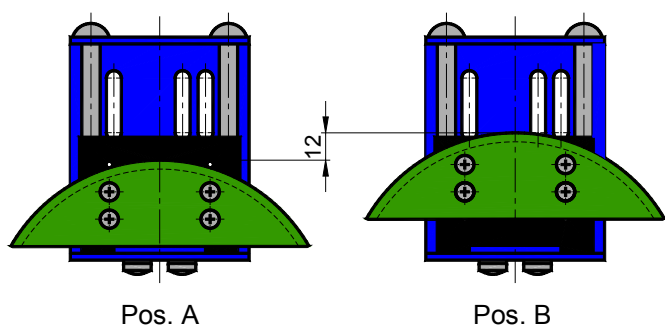
Temperatura di lavoro $\leq 70^\circ\text{C}$.

Chain Catena DIN 8187 ISO Pitch	Type Tipo	Cod. N°	A	B	W	Weight Peso in [kg]	
$\leq 06\text{-B1}$	$\leq 3/8" \times 7/32"$	DQ10VUS	BL011310	20	10,5	0,50	
$\leq 06\text{-B1}$	$\leq 3/8" \times 7/32"$	DQ15VUS	BL011340	20	10,5	0,50	
$\leq 06\text{-B1}$	$\leq 3/8" \times 7/32"$	DQ20VUS	BL011311	20	10,5	0,50	
08-B1	$1/2" \times 5/16"$	DQ10V2S	BL011314	20	16,5	7	0,50
08-B1	$1/2" \times 5/16"$	DQ15V2S	BL011342	20	16,5	7	0,50
08-B1	$1/2" \times 5/16"$	DQ20V2S	BL011315	20	16,5	7	0,50
10-B1	$5/8" \times 3/8"$	DQ10V3S	BL011316	20	15,7	9	0,50
10-B1	$5/8" \times 3/8"$	DQ15V3S	BL011343	20	15,7	9	0,50
10-B1	$5/8" \times 3/8"$	DQ20V3S	BL011317	20	15,7	9	0,50
12-B1	$3/4" \times 7/16"$	DQ10V4S	BL011318	20	14,8	11	0,50
12-B1	$3/4" \times 7/16"$	DQ15V4S	BL011344	20	14,8	11	0,50
12-B1	$3/4" \times 7/16"$	DQ20V4S	BL011319	20	14,8	11	0,50
06-B2	$3/8" \times 7/32"$	DQ10V1D	BL011324	20	7,5	5	0,50
06-B2	$3/8" \times 7/32"$	DQ15V1D	BL011350	20	7,5	5	0,50
06-B2	$3/8" \times 7/32"$	DQ20V1D	BL011325	20	7,5	5	0,50
08-B2	$1/2" \times 5/16"$	DQ10V2D	BL011326	32	15,3	7	0,70
08-B2	$1/2" \times 5/16"$	DQ15V2D	BL011351	32	15,3	7	0,70
08-B2	$1/2" \times 5/16"$	DQ20V2D	BL011327	32	15,3	7	0,70
10-B2	$5/8" \times 3/8"$	DQ10V3D	BL011328	32	11,3	9	0,70
10-B2	$5/8" \times 3/8"$	DQ15V3D	BL011352	32	11,3	9	0,70
10-B2	$5/8" \times 3/8"$	DQ20V3D	BL011329	32	11,3	9	0,70



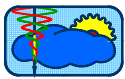
Force / Forza:

Size Taglia	1 MOLLA RILASCIATA 1 SPRING RELEASED	2 MOLLE RILASCIATE 2 SPRINGS RELEASED
10	36-79 N	72-158 N
15	36-79 N 64-142 N	100-221 N
20	64-142 N	128-284 N



UK The sliding block can be installed in two different positions. Without specific requests the tensioner will be supplied in A position. Anyway this position, can be changed by the customer.

IT Il pattino può essere installato in due diverse posizioni. In mancanza di specifiche richieste il tenditore sarà fornito in posizione A. Tale posizione, potrà essere comunque poi modificata dal cliente.



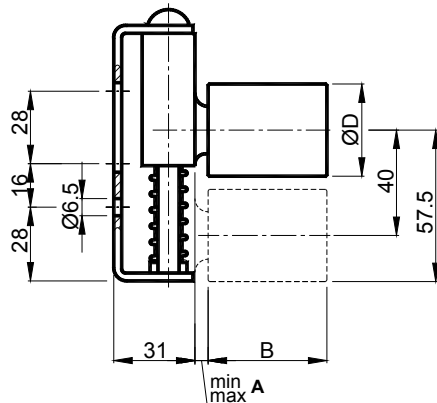
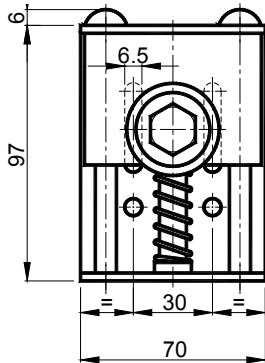
Tensioner Devices – Type: **DNRP – DNRU** / *Elementi Tendicinghia – Tipo: DNRP – DNRU*
 Tensioner Devices – Type: **DBRP – DBRU** / *Elementi Tendicinghia – Tipo: DBRP – DBRU*
 (RU: Steel roller / RP: Polyamide roller)
 (RU: Rullo in acciaio / RP: Rullo in poliammide)



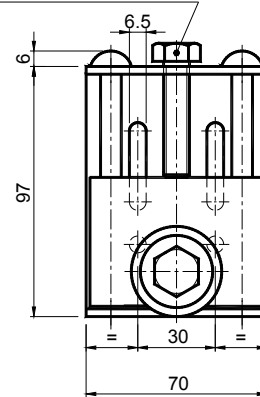
DNRP



DBRP



Preloading Screw
Vite di Prearica



Type Tipo	Cod. N°	min A	max A	B	ØD	Newton	Weight Peso in [kg]	Type Tipo	Cod. N°
DNRP 10-1	BL011260	2	7	35	30	36 - 79	0,35	DBRP 10-1	BL011280
DNRP 20-1	BL011261	2	7	35	30	64 - 142	0,35	DBRP 20-1	BL011281
DNRP 10-2/3	BL011262	2	7	45	40	36 - 79	0,45	DBRP 10-2/3	BL011282
DNRP 20-2/3	BL011263	2	7	45	40	64 - 142	0,45	DBRP 20-2/3	BL011283
DNRP 10-4	BL011264	2	7	60	60	36 - 79	0,65	DBRP 10-4	BL011284
DNRP 20-4	BL011265	2	7	60	60	64 - 142	0,65	DBRP 20-4	BL011285
DNRU 10-1	BL011270	2	7	35	30	36 - 79	0,45	DBRU 10-1	BL011290
DNRU 20-1	BL011271	2	7	35	30	64 - 142	0,45	DBRU 20-1	BL011291
DNRU 10-2/3	BL011272	2	7	45	40	36 - 79	0,65	DBRU 10-2/3	BL011292
DNRU 20-2/3	BL011273	2	7	45	40	64 - 142	0,65	DBRU 20-2/3	BL011293
DNRU 10-4	BL011274	2	7	60	60	36 - 79	1,10	DBRU 10-4	BL011294
DNRU 20-4	BL011275	2	7	60	60	64 - 142	1,10	DBRU 20-4	BL011295



DNRU



DBRU

UK MATERIALS Bracket, pins, spring and bolts in steel.

Cursor and guide in polyamide.

RP: Polyamide roller on lubricated bearings.

RU: Steel roller on lubricated bearings.

TREATMENTS Painted bracket, spring and bolts with zinc plated treatment.

USE Belt tensioner. The travel is 40 mm.

Operating temperature ≤ 70°C.

IT MATERIALI Staffa, perni, molla e bulloneria in acciaio.

Cursore e guida molla in poliammide.

RP: Rullo in poliammide su cuscinetti lubrificati.

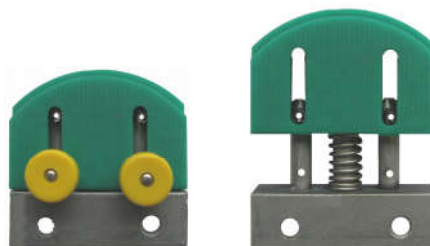
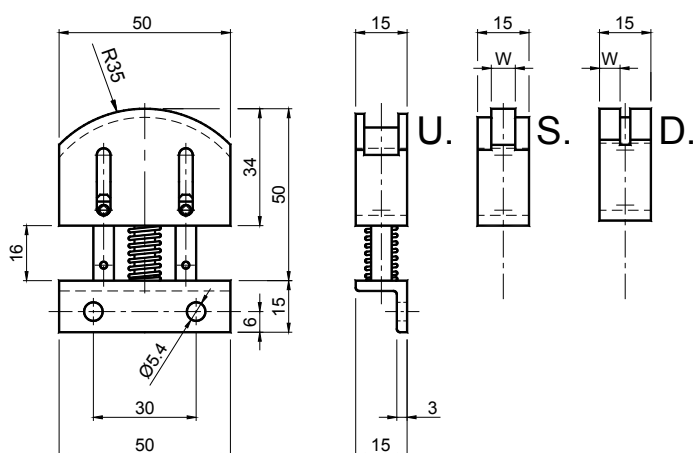
RU: Rullo in acciaio su cuscinetti lubrificati.

TRATTAMENTI Staffa verniciata, molla e bulloneria con trattamento di zincatura.

IMPIEGO Tendicinghia. La corsa è di 40 mm.

Temperatura di lavoro ≤ 70°C.

Tensioner Devices - Type: **DM** / *Elementi Tendicatena* - Tipo: **DM**

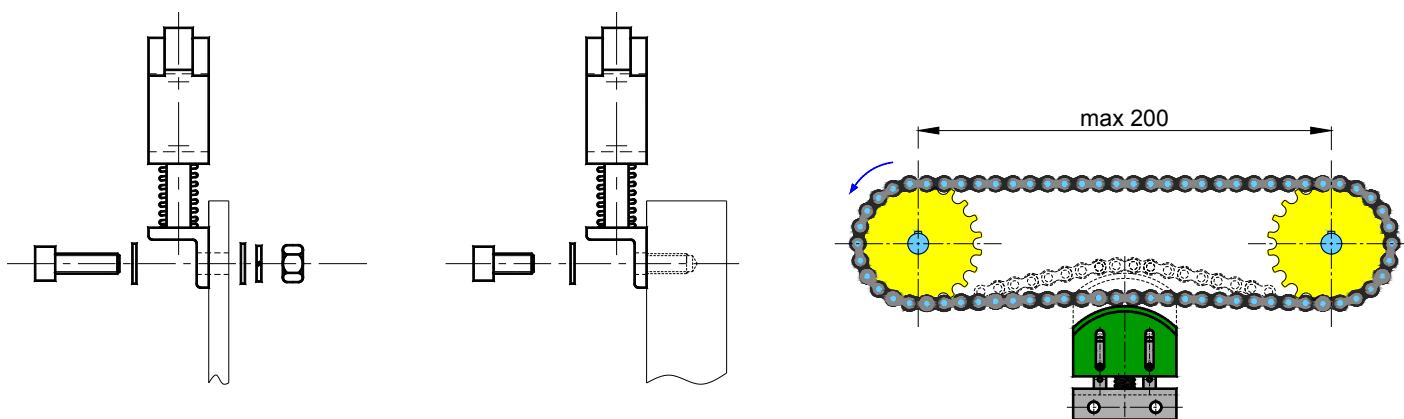


UK MATERIALS Bracket, pins, spring and bolts in steel. Sliding block with high molecular density polyethylene.
TREATMENTS All metal parts are provided with zinc plating treatment.
USE Mini Chain tensioner. The travel is 16 mm.
 Operating speed ≤ 20 m/min.
 Operating temperature ≤ 70 °C.

IT MATERIALI Staffa, perni, molla e bulloneria in acciaio. Pattino in polietilene ad alta densità molecolare.
TRATTAMENTI Tutti i particolari metallici sono forniti con trattamento di zincatura.
IMPIEGO Mini Tendicatena. La corsa è di 16 mm.
 Velocità di lavoro ≤ 20 m/min.
 Temperatura di lavoro ≤ 70 °C.

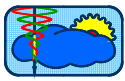
Chain Catena DIN 8187 ISO Pitch	Type Tipo	Cod. N°	W	Newton	Weight Peso in [kg]	
<06-B1	<3/8"x7/32"	DM05VUS	BL011360	39 - 71	0.08	
06-B1	3/8"x7/32"	DM05V1S	BL011362	5	39 - 71	0.08
08-B1	1/2"x5/16"	DM05V2S	BL011364	7	39 - 71	0.08
05-B2	8mm	DM05V0D	BL011366	2.5	39 - 71	0.08
06-B2	3/8"x7/32"	DM05V1D	BL011368	5	39 - 71	0.08

Examples of installation:
Esempi di montaggio:



1) Installation on through holes.
1) *Fissaggio su fori passanti.*

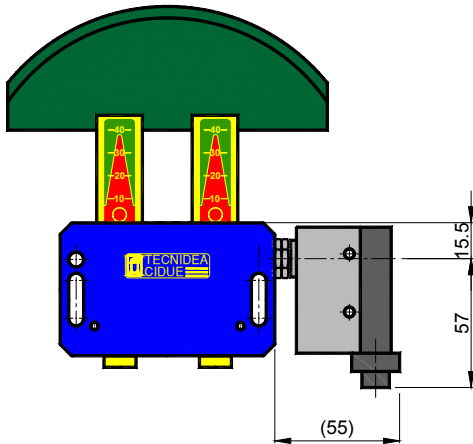
2) Installation on threaded holes.
2) *Fissaggio su fori ciechi.*



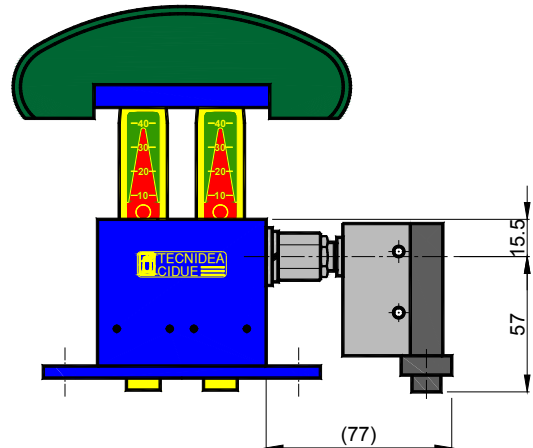
Travel-end switch / *Finecorsa elettrico*

The travel end switch can be mounted on most of elastic elements of this catalogue. The travel end switch is particularly useful when you want to control the correct working of the machine and/or protect the safety of the workers.

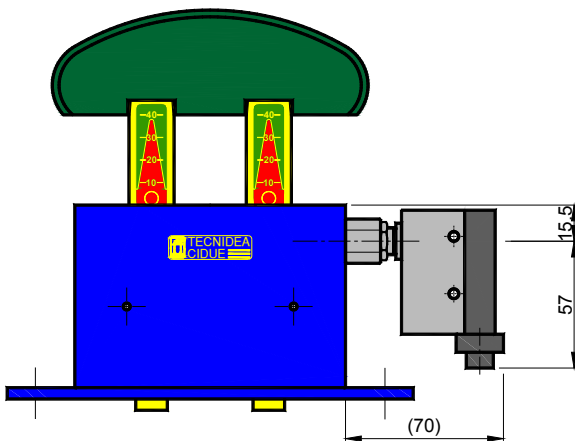
Il KIT finecorsa elettrico è applicabile su la maggior parte degli elementi elastici di questo catalogo. Il finecorsa elettrico è particolarmente utile quando si voglia controllare il corretto funzionamento della macchina e/o salvaguardare l'incolumità degli operatori.



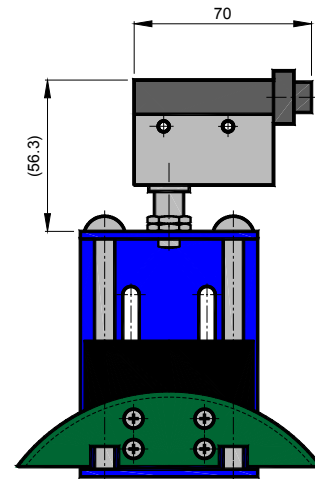
01 Type BP with travel end switch E
Tipo BP con finecorsa elettrico E



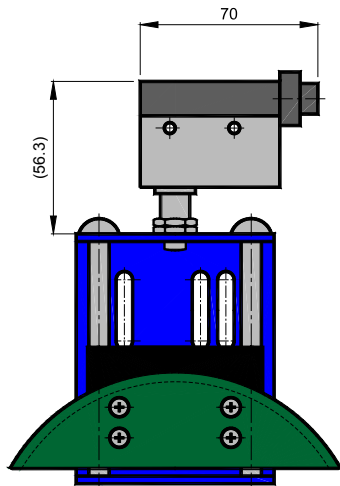
02 Type BC with travel end switch E
Tipo BC con finecorsa elettrico E



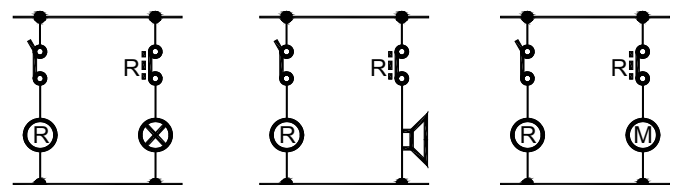
03 Type BB with travel end switch E
Tipo BB con finecorsa elettrico E



04 Type DN with travel end switch E
Tipo DN con finecorsa elettrico E



05 Type DQ with travel end switch E
Tipo DQ con finecorsa elettrico E



06 Electrical diagram / *Schema elettrico*

GENERAL TERMS OF SALE:

- 1 ORDERS** - Orders of standard and special materials must always be referred to TECNIDEA CIDUE S.r.l. offers. Orders are binding for clients. Once the manufacturing has started, any cancellations or reductions won't be accepted, excepting indemnity of manufacturing and material costs met up to cancellation, which will be in any case quantified by TECNIDEA CIDUE S.r.l..
- 2 PRICES** - Only the effective prices at order-date are valid. All prices have to be understood Ex-Factory, excluding packing. In case of possible increases of manufacturing costs, materials and so on, between the date of our order-confirmation and completing of order, TECNIDEA CIDUE S.r.l. can adapt the prices, also for pending orders, to the occurred increases.
- 3 DELIVERY TERMS** - Only the delivery time stated by TECNIDEA CIDUE S.r.l. are valid. However they are only approximate. In cases of difficulties in supply of raw materials, strikes, or circumstances beyond our control, delivery times are automatically deferred with no obligation on TECNIDEA CIDUE S.r.l. to indemnify the customer in any case. The customer must collect the ordered material when it gets ready.
- 4 DISPATCH** - The shipment of goods, including freight free deliveries, is went at the purchaser's own risk. If the quantity of the goods is inferior to the ordered ones, TECNIDEA CIDUE S.r.l. must be informed within eight (8) days from the receipt of the goods. If transport freight are charged, even if partially, by TECNIDEA CIDUE S.r.l., TECNIDEA CIDUE S.r.l. reserves the right to choose the less expensive means of conveyance.
- 5 PACKING** - Packing is charged at cost.
- 6 RETURNED GOODS** - TECNIDEA CIDUE S.r.l. doesn't accept previously unauthorised returned goods. Returned goods have to be free warehouse, packing and clearance included. The 15% of the value of the returned goods will be charged you to recover the storage and bookkeeping costs.
- 7 WARRANTY** - Messrs TECNIDEA CIDUE S.r.l. undertakes to repair or replace, freely, the pieces TECNIDEA CIDUE S.r.l. recognizes as faulty. Defective goods have to be returned to the base of too free warehouse, packing and clearance included. The warranty decays when pieces returned as faulty have been repaired or tampered with. Repairing of defective pieces made by the buyer will be recognized only if authorised by TECNIDEA CIDUE S.r.l. and after its approval of the estimate of expenditure. TECNIDEA CIDUE S.r.l. doesn't take the responsibility and doesn't recognize any indemnity for possible damages, which occurred during the use of its products, even if defective.
- 8 RESPONSABILITY** - TECNIDEA CIDUE S.r.l. doesn't take the responsibility and doesn't recognize any indemnity for possible damages, which would occur during the use of its products, even if defective. TECNIDEA CIDUE S.r.l. declines all responsibility for the execution of details on customer's drawing, that are subjected to possible patents.
- 9 PAYMENTS** - Only payments that have been effected according to agreed terms, will be considered valid. Once the payment terms have been expired, TECNIDEA CIDUE S.r.l. will calculate the default interests at 3% higher than the legal ones and TECNIDEA CIDUE S.r.l. has the right to demand the payment. In any case of delayed or no-payment TECNIDEA CIDUE S.r.l. reserves the right to interrupt the deliveries of the pending orders or to demand the payment in advance without any type of indemnity or compensation. The customer has to make the payment at the established date for the total amount of the invoice and without any deduction, even for claimed manufacturing or already owned materials.
- 10 PROPERTY** - the property of delivered goods always belongs to TECNIDEA CIDUE S.r.l. up to the time of the complete payment of the invoices.
- 11 PLACE OF JURISDICTION** - In the case of debate the Court of Verona have the exclusive jurisdiction for any commercial relations of TECNIDEA CIDUE S.r.l.

Customers are advised that all the data given may change. The company reserves the right to alter the nature of its product to suit new requirements and improve quality forewarning clients.

CONDIZIONI GENERALI DI VENDITA:

- 1 ORDINI** - Gli ordini per il materiale standard e speciale devono essere sempre riferiti alle offerte delle ditta TECNIDEA CIDUE S.r.l.. Le ordinazioni sono impegnative per il cliente. Una volta iniziata la lavorazione non si accettano annullamenti o riduzioni dell'ordine salvo il risarcimento da parte del cliente dei costi di materiale e di lavorazione sostenuti fino al momento della sospensione, che verrà comunque quantificato dalla ditta TECNIDEA CIDUE S.r.l..
- 2 PREZZI** - Si intendono quelli in vigore alla data dell'ordine. Tutti i prezzi sono per merce resa franco Verona, imballo escluso. Qualora nel corso della fornitura si verificassero aumenti nel materiale o negli altri costi di produzione è facoltà della ditta TECNIDEA CIDUE S.r.l. di adeguare i prezzi, anche per gli ordini in corso, agli aumenti verificatesi.
- 3 TERMINI DI CONSEGNA** - Sono da considerarsi validi solo i termini di consegna indicati dalla TECNIDEA CIDUE S.r.l.. Essi sono da considerarsi comunque solo indicativi. Nei casi di difficoltà nell'approvvigionamento dei materiali, di sciopero o comunque in tutti i casi di forza maggiore, i termini di consegna vengono automaticamente prorogati senza che la ditta TECNIDEA CIDUE S.r.l. sia tenuta a corrispondere indennizzi di sorta. Il cliente ha in ogni caso l'obbligo del ritiro del materiale ordinato all'approntamento.
- 4 SPEDIZIONI** - Le spedizioni si intendono a carico del committente ed eseguite a suo rischio e pericolo anche quelle franco di porto. I reclami per gli eventuali ammanchi devono presentarsi entro 8 gg. dal ricevimento della merce. Qualora venga pattuito che il costo del trasporto sia a carico, anche solo in parte, della ditta TECNIDEA CIDUE S.r.l., questa si riserva il diritto di scegliere il mezzo di spedizione più economico.
- 5 IMBALLO** - L'imballo è fatturato al prezzo di costo.
- 6 RESI** - Non si accettano ritorni di merce per qualsiasi causa se non preventivamente autorizzati e con imballi, eventuale sdoganamento e resa a totale carico dell'acquirente. A copertura degli oneri di magazzino e amministrativi sarà emessa nota di addebito in ragione del 15% del valore della merce resa.
- 7 GARANZIA** - La ditta TECNIDEA CIDUE S.r.l. si impegna a riparare o sostituire gratuitamente quei pezzi da essa riconosciuti difettosi. La merce contestata deve essere resa alla sede della ditta TECNIDEA CIDUE S.r.l., franco di ogni spesa. La garanzia decade qualora i pezzi resi come difettosi siano stati riparati o manomessi. Le riparazioni di pezzi difettosi eseguite dal committente saranno riconosciute solamente dietro autorizzazione della ditta TECNIDEA CIDUE S.r.l. e dopo approvazione di essa del preventivo di spesa. La ditta TECNIDEA CIDUE S.r.l. non assume responsabilità né riconosce indennizzi di sorta per danni che si verificassero durante l'impiego dei suoi prodotti anche se difettosi.
- 8 RESPONSABILITA'** - La ditta TECNIDEA CIDUE S.r.l. non assume responsabilità né riconosce indennizzi di sorta per danni che si verificassero durante l'impiego dei suoi prodotti anche se difettosi. La ditta TECNIDEA CIDUE S.r.l. declina ogni responsabilità nell'esecuzione di particolari su disegno del cliente sottostanti ad eventuali brevetti.
- 9 PAGAMENTI** - Saranno riconosciuti validi solo i pagamenti effettuati nei modi e nei termini pattuiti. Trascorso il termine di pagamento la ditta TECNIDEA CIDUE S.r.l. conteggerà gli interessi di mora al tasso del 3% superiore a quello legale, fermo il diritto di esigere il pagamento. In caso di ritardato o mancato pagamento da parte del committente la ditta TECNIDEA CIDUE S.r.l. si riserva il diritto di sospendere le consegne degli ordini in corso o di pretendere il pagamento anticipato senza riconoscere al committente indennizzi di sorta o risarcimenti. Qualsiasi contestazione dei materiali in corso di fabbricazione o già in possesso del committente non libera quest'ultimo dall'effettuare il pagamento alla scadenza stabilita e per l'intero ammontare della fattura e senza alcuna detrazione.
- 10 PROPRIETA'** - Tutta la merce spedita rimane sempre di proprietà della ditta TECNIDEA CIDUE S.r.l. fino al pagamento completo delle sue fatture.
- 11 FORO COMPETENTE** - Qualsiasi controversia inerente ai rapporti commerciali con la ditta TECNIDEA CIDUE S.r.l. sarà di competenza del Tribunale di Verona.

La Tecnidea Cidue Srl avvisa che tutti i dati inseriti non sono strettamente impegnativi e che comunque si riserva la facoltà di variarli, a seconda delle esigenze atte a migliorare la qualità del prodotto, senza alcun preavviso.

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