



VL

VITI LEGNO > SCREWS FOR WOOD
VIS BOIS > HOLZSCHRAUBEN



CE
UNI EN 14592



Rondella conica in acciaio per vite Ø 6 - Ø 8 - Ø 10 - Ø 12
Conic steel washer for screw Ø 6 - Ø 8 - Ø 10 - Ø 12



VLS **STEEL ZINC PLATED** **CE**
UNI EN 14592



Classe > Class 4.8

VL-TIR **STEEL ZINC PLATED**
UNI 704
DIN 571

VLTEX - VLTE-AP

Disponibili montate con BATZ INOX in secchi

Available assembled with BATZ INOX, bucketful packed



VLTE **STEEL ZINC PLATED** **CE**
UNI EN 14592



VLTEX **INOX A2** **CE**
UNI EN 14592



VLTE-AP **STEEL ZINC PLATED** **CE**
UNI EN 14592



RST

RR

TDP60

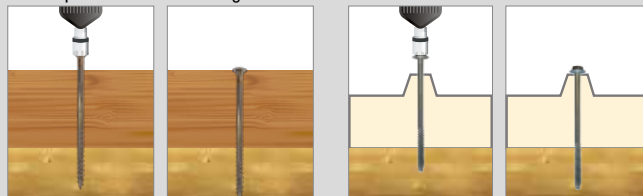


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Rondella isolamento per viti legno Ø 5 e 6 mm
Insulation washer for wood screws Ø 5 e 6 mm
Rondelle isolation pour vis à bois Ø 5 e 6 mm
Isolationsscheibe für Holzschrauben Ø 5 e 6 mm

PROCEDURA DI INSTALLAZIONE
INSTALLATION PROCEDURE
PROCÉDURE D'INSTALLATION
INSTALLATIONSVERFAHREN

Viti autopercoranti > Self drilling screws > Autoforeuse > Selb Bohrer



Legno > Wood > Bois > Holz

VLS / VLTE / VLTEX

VLTE-AP



PROCEDURA DI INSTALLAZIONE
INSTALLATION PROCEDURE
PROCÉDURE D'INSTALLATION
INSTALLATIONSVERFAHREN

Viti autopercoranti > Self drilling screws > Autoforeuse > Selb Bohrer

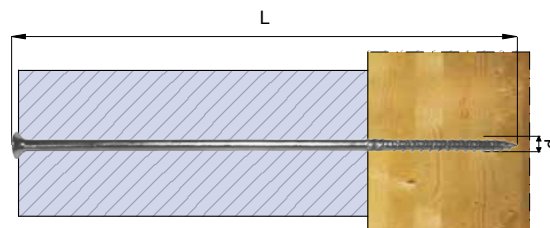




SCHEDA TECNICA TECHNICAL DATA SHEET FICHE TECHNIQUE TECHNISCHES DATENBLATT

Dati tecnici | Technical data | Données techniques | Technische Angaben

| | |
|----------|---|
| D | Codice > Code > Code > Nummer |
| | Articolo > Item > Type > Artikel |
| M | dxL [mm] Ø filett. x lunghezza > Thread Ø x length > Filet Ø x longueur > Gewinde Ø x Länge |
| | L [mm] Lunghezza totale > Total length > Longueur > Totallänge |
| E | Ø [mm] Diametro testa > Head diameter > Diamètre de la Tête > Kopfdurchmesser |
| | S _w [mm] Chiave > Key > Clef > Schlüsselweite |
| G | d ₀ [mm] Diametro foro > Hole diameter > Diamètre du trou > Bohrenennendurchmesser |
| | d _{com} [mm] Diametro esterno ancorante > Outside diameter of anchor Diamètre externe d'ancrage > Außendurchmesser des dübels |
| L | Ø _{int} [mm] Diametro interno > Inside diameter > Diamètre intérieur > Innendurchmesser |
| | L _s [mm] Lunghezza sottotesta > Underhead length > Longueur sous-tête > Länge (ohne Kopf) |
| J | Materiale > Material > Matériel > Material |



VLS




CE

UNI EN 14592




Passo legno
Wood thread

Testa svasata > Countersunk washer
Tête évasée > Senkkopf

| CODICE CODE | ARTICOLO ITEM | Ø FILETT. X LUNGH. THREAD Ø X LENGTH | TORX | LUNGHEZZA TOT. TOTAL LENGTH | DIAMETRO TESTA HEAD DIAMETER |  Nr. |
|-------------|----------------|--------------------------------------|------|-----------------------------|------------------------------|---|
| | VLS | dxL [mm] | - | L [mm] | Ø [mm] | |
| 696591 | VLS 5 x 40/22 | 5 x 22 | T 25 | 40 | 9,4 - 9,8 | 100 |
| 696592 | VLS 5 x 50/27 | 5 x 27 | T 25 | 50 | 9,4 - 9,8 | 100 |
| 696593 | VLS 5 x 60/32 | 5 x 32 | T 25 | 60 | 9,4 - 9,8 | 100 |
| 696595 | VLS 5 x 70/37 | 5 x 37 | T 25 | 70 | 9,4 - 9,8 | 100 |
| 696596 | VLS 5 x 80/47 | 5 x 47 | T 25 | 80 | 9,4 - 9,8 | 100 |
| 696597 | VLS 5 x 90/47 | 5 x 47 | T 25 | 90 | 9,4 - 9,8 | 100 |
| 696598 | VLS 5 x 100/59 | 5 x 59 | T 25 | 100 | 9,4 - 9,8 | 100 |
| 696599 | VLS 5 x 120/69 | 5 x 69 | T 25 | 120 | 9,4 - 9,8 | 100 |
| 696600 | VLS 6 x 60/30 | 6 x 30 | T 30 | 60 | 11,5 - 12,0 | 100 |
| 696601 | VLS 6 x 70/40 | 6 x 40 | T 30 | 70 | 11,5 - 12,0 | 100 |
| 696602 | VLS 6 x 80/40 | 6 x 40 | T 30 | 80 | 11,5 - 12,0 | 100 |
| 696680 | VLS 6 x 90/50 | 6 x 50 | T 30 | 90 | 11,5 - 12,0 | 100 |
| 696603 | VLS 6 x 100/50 | 6 x 50 | T 30 | 100 | 11,5 - 12,0 | 100 |
| 696604 | VLS 6 x 120/75 | 6 x 75 | T 30 | 120 | 11,5 - 12,0 | 100 |
| 696605 | VLS 6 x 140/75 | 6 x 75 | T 30 | 140 | 11,5 - 12,0 | 100 |
| 696606 | VLS 6 x 160/75 | 6 x 75 | T 30 | 160 | 11,5 - 12,0 | 100 |
| 696607 | VLS 6 x 180/75 | 6 x 75 | T 30 | 180 | 11,5 - 12,0 | 100 |
| 696608 | VLS 6 x 200/75 | 6 x 75 | T 30 | 200 | 11,5 - 12,0 | 100 |
| 696609 | VLS 6 x 220/75 | 6 x 75 | T 30 | 220 | 11,5 - 12,0 | 100 |
| 696610 | VLS 6 x 240/75 | 6 x 75 | T 30 | 240 | 11,5 - 12,0 | 100 |
| 696801 | VLS 8 x 80/50 | 8 x 50 | T 40 | 80 | 14,0 - 15,0 | 100 |



| CODICE CODE | ARTICOLO ITEM | Ø FILETT. X LUNGH. THREAD Ø X LENGTH | TORX | LUNGHEZZA TOT. TOTAL LENGTH | DIAMETRO TESTA HEAD DIAMETER |  |
|-------------|--|--------------------------------------|------|-----------------------------|------------------------------|---|
| | VLS | d x L [mm] | - | L [mm] | Ø [mm] | Nr. |
| 696802 | VLS 8 x 90/50 | 8 x 50 | T 40 | 90 | 14,0 - 15,0 | 100 |
| 696803 | VLS 8 x 100/50 | 8 x 50 | T 40 | 100 | 14,0 - 15,0 | 100 |
| 696804 | VLS 8 x 120/60 | 8 x 60 | T 40 | 120 | 14,0 - 15,0 | 50 |
| 696805 | VLS 8 x 140/60 | 8 x 60 | T 40 | 140 | 14,0 - 15,0 | 50 |
| 696806 | VLS 8 x 160/80 | 8 x 80 | T 40 | 160 | 14,0 - 15,0 | 50 |
| 696807 | VLS 8 x 180/80 | 8 x 80 | T 40 | 180 | 14,0 - 15,0 | 50 |
| 696808 | VLS 8 x 200/80 | 8 x 80 | T 40 | 200 | 14,0 - 15,0 | 50 |
| 696809 | VLS 8 x 220/80 | 8 x 80 | T 40 | 220 | 14,0 - 15,0 | 50 |
| 696810 | VLS 8 x 240/80 | 8 x 80 | T 40 | 240 | 14,0 - 15,0 | 50 |
| 696811 | VLS 8 x 260/80 | 8 x 80 | T 40 | 260 | 14,0 - 15,0 | 50 |
| 696812 | VLS 8 x 280/80 | 8 x 80 | T 40 | 280 | 14,0 - 15,0 | 50 |
| 696813 | VLS 8 x 300/80 | 8 x 80 | T 40 | 300 | 14,0 - 15,0 | 50 |
| 696814 | VLS 8 x 320/80 | 8 x 80 | T 40 | 320 | 14,0 - 15,0 | 50 |
| 696815 | VLS 8 x 340/80 | 8 x 80 | T 40 | 340 | 14,0 - 15,0 | 50 |
| 696816 | VLS 8 x 360/80 | 8 x 80 | T 40 | 360 | 14,0 - 15,0 | 50 |
| 696817 | VLS 8 x 380/80 | 8 x 80 | T 40 | 380 | 14,0 - 15,0 | 50 |
| 696818 | VLS 8 x 400/80 | 8 x 80 | T 40 | 400 | 14,0 - 15,0 | 50 |
| 696902 | VLS 10 x 100/50 | 10 x 50 | T 40 | 100 | 17,6 - 18,4 | 50 |
| 696903 | VLS 10 x 120/60 | 10 x 60 | T 40 | 120 | 17,6 - 18,4 | 50 |
| 696904 | VLS 10 x 140/60 | 10 x 60 | T 40 | 140 | 17,6 - 18,4 | 50 |
| 696905 | VLS 10 x 160/80 | 10 x 80 | T 40 | 160 | 17,6 - 18,4 | 50 |
| 696906 | VLS 10 x 180/80 | 10 x 80 | T 40 | 180 | 17,6 - 18,4 | 50 |
| 696907 | VLS 10 x 200/80 | 10 x 80 | T 40 | 200 | 17,6 - 18,4 | 50 |
| 696908 | VLS 10 x 220/80 | 10 x 80 | T 40 | 220 | 17,6 - 18,4 | 50 |
| 696909 | VLS 10 x 240/80 | 10 x 80 | T 40 | 240 | 17,6 - 18,4 | 50 |
| 696910 | VLS 10 x 260/80 | 10 x 80 | T 40 | 260 | 17,6 - 18,4 | 50 |
| 696911 | VLS 10 x 280/80 | 10 x 80 | T 40 | 280 | 17,6 - 18,4 | 50 |
| 696912 | VLS 10 x 300/80 | 10 x 80 | T 40 | 300 | 17,6 - 18,4 | 50 |
| 696913 | VLS 10 x 320/80 | 10 x 80 | T 40 | 320 | 17,6 - 18,4 | 50 |
| 696914 | VLS 10 x 340/80 | 10 x 80 | T 40 | 340 | 17,6 - 18,4 | 50 |
| 696915 | VLS 10 x 360/80 | 10 x 80 | T 40 | 360 | 17,6 - 18,4 | 50 |
| 696916 | VLS 10 x 380/80 | 10 x 80 | T 40 | 380 | 17,6 - 18,4 | 50 |
| 696917 | VLS 10 x 400/80 | 10 x 80 | T 40 | 400 | 17,6 - 18,4 | 50 |
| 696929 | Rondella in acciaio per vite > Steel washer for screw Ø 6 | | | | | 200 |
| 696930 | Rondella in acciaio per vite > Steel washer for screw Ø 8 | | | | | 200 |
| 696931 | Rondella in acciaio per vite > Steel washer for screw Ø 10 | | | | | 200 |
| 696938 | Rondella in acciaio per vite > Steel washer for screw Ø 12 | | | | | 200 |





SCHEDA TECNICA TECHNICAL DATA SHEET FICHE TECHNIQUE TECHNISCHES DATENBLATT

VL-TIR




Classe > Class 4.8

UNI 704 Passo > 0,6 mm
DIN 571 Pitch > 0,6 mm



Viti legno, testa esagonale > Screws for wood, exagonal head > Vis pour bois, Tête hexagonal > Schrauben für Holz, Sechseck Kopf


| CODICE CODE | ARTICOLO ITEM | CHIAVE KEY | Ø TESTA HEAD Ø | DIAM. FORO HOLE DIAM. | LUNGHEZZA TOTALE TOTAL LENGTH |  |
|-------------|---------------|------------|----------------|-----------------------|-------------------------------|---|
| | VL-TIR | S_w [mm] | Ø [mm] | d_o [mm] | L [mm] | Nr. |
| 970014 | VL TIR 6x80 | 10 | 10 | 4 | 80 | 100 |
| 970020 | VL TIR 8x50 | 13 | 13 | 5,5 | 50 | 100 |
| 970018 | VL TIR 8x60 | 13 | 13 | 5,5 | 60 | 100 |
| 970015 | VL TIR 8x70 | 13 | 13 | 5,5 | 70 | 100 |
| 970021 | VL TIR 8x80 | 13 | 13 | 5,5 | 80 | 100 |
| 970105 | VL TIR 8x100 | 13 | 13 | 5,5 | 100 | 100 |
| 970089 | VL TIR 10x60 | 17 | 17 | 7 | 60 | 100 |
| 970017 | VL TIR 10x70 | 17 | 17 | 7 | 70 | 100 |
| 970016 | VL TIR 10x80 | 17 | 17 | 7 | 80 | 100 |
| 970032 | VL TIR 10x100 | 17 | 17 | 7 | 100 | 100 |
| 970031 | VL TIR 10x120 | 17 | 17 | 7 | 120 | 50 |
| 970033 | VL TIR 10x150 | 17 | 17 | 7 | 150 | 50 |
| 970104 | VL TIR 12x140 | 19 | 19 | 9 | 140 | 50 |
| 970106 | VL TIR 16x160 | 24 | 24 | 11,5 | 160 | 50 |

Altre misure su richiesta > Other lengths on demand > Autres mesures sur demande > Andere Länge Nachforderung

RST




Rondelle sottotesta per > Washers for > Rondelle pour > Scheibe für VL

| CODICE CODE | ARTICOLO ITEM | MATERIALE MATERIAL | Ø INTERNO INSIDE Ø | Ø ESTERNO OUTSIDE Ø |  |
|-------------|---------------|--------------------|--------------------|---------------------|---|
| | RST | | d_{int} [mm] | d_{ext} [mm] | Nr. |
| 696023 | RST 6x13 PVC | PVC | 6 | 13 | 100 |

RR



Rondelle romboidali per > Washers for > Rondelle pour > Scheibe für VLTE

| CODICE CODE | ARTICOLO ITEM | MATERIALE MATERIAL | Ø INTERNO INSIDE Ø |  |
|-------------|----------------|--|--------------------|---|
| | RR | | d_{int} [mm] | Nr. |
| 696018 | RR - Z 27 x 27 | Acciaio zincato > Zinc steel > Acier zingué > Verzinkter Stahl | 6,7 - 6,9 | 100 |
| 696019 | RR - P 27 x 27 | Propilene > Propylene > Propylène > Propylen | 6,7 - 6,9 | 100 |
| 696020 | RR - Z 40 x 40 | Acciaio zincato > Zinc steel > Acier zingué > Verzinkter Stahl | 6,7 - 6,9 | 100 |
| 696021 | RR - Z 40 x 40 | Cartonfeltro > Felt paper > Carton-feutre > Filzpappe | 6,7 - 6,9 | 100 |



VLTE




Testa esagonale > Exagonal head
Tête hexagonale > Sechseck Kopf



UNI EN 14592



Passo legno
Wood thread

| CODICE CODE | ARTICOLO ITEM | Ø FILETT. X LUNGH. THREAD Ø X LENGHT | CHIAVE KEY | LUNGH. SOTTOTESTA UNDERHEAD LENGTH |  |
|-------------|---------------|--------------------------------------|------------|------------------------------------|---|
| | VLTE | dxL [mm] | [mm] | L _s [mm] | Nr. |
| 696024 | VLTE 6 x 40 | 6x24 | 10 | 40 | 100 |
| 696006 | VLTE 6 x 60 | 6x36 | 10 | 60 | 100 |
| 696007 | VLTE 6 x 70 | 6x42 | 10 | 70 | 100 |
| 696008 | VLTE 6 x 80 | 6x48 | 10 | 80 | 100 |
| 696009 | VLTE 6 x 90 | 6x54 | 10 | 90 | 100 |
| 696010 | VLTE 6 x 100 | 6x60 | 10 | 100 | 100 |
| 696011 | VLTE 6 x 110 | 6x66 | 10 | 110 | 100 |
| 696012 | VLTE 6 x 120 | 6x72 | 10 | 120 | 100 |
| 696013 | VLTE 6 x 130 | 6x78 | 10 | 130 | 100 |
| 696014 | VLTE 6 x 140 | 6x84 | 10 | 140 | 100 |
| 696015 | VLTE 6 x 150 | 6x90 | 10 | 150 | 100 |
| 696016 | VLTE 6 x 180 | 6x96 | 10 | 180 | 100 |
| 696017 | VLTE 6 x 200 | 6x96 | 10 | 200 | 100 |
| 696043 | VLTE 6 x 240 | 6x96 | 10 | 240 | 100 |

VLTEX




Testa esagonale > Exagonal head
Tête hexagonale > Sechseck Kopf



UNI EN 14592



Passo legno
Wood thread

| CODICE CODE | ARTICOLO ITEM | Ø FILETT. X LUNGH. THREAD Ø X LENGHT | CHIAVE KEY | LUNGH. SOTTOTESTA UNDERHEAD LENGTH |  |
|-------------|-----------------|--------------------------------------|------------|------------------------------------|---|
| | VLTEX | dxL [mm] | [mm] | L _s [mm] | Nr. |
| 695996 | VLTEX 6,3 x 40 | 6,3x30 | 8 | 40 | 100 |
| 696000 | VLTEX 6,3 x 60 | 6,3x50 | 8 | 60 | 100 |
| 696001 | VLTEX 6,3 x 70 | 6,3x50 | 8 | 70 | 100 |
| 696002 | VLTEX 6,3 x 80 | 6,3x50 | 8 | 80 | 100 |
| 695989 | VLTEX 6,3 x 90 | 6,3x50 | 8 | 90 | 100 |
| 695997 | VLTEX 6,3 x 100 | 6,3x50 | 8 | 100 | 100 |
| 695988 | VLTEX 6,3 x 110 | 6,3x50 | 8 | 110 | 100 |
| 696004 | VLTEX 6,3 x 120 | 6,3x50 | 8 | 120 | 100 |
| 696003 | VLTEX 6,3 x 130 | 6,3x50 | 8 | 130 | 100 |
| 696005 | VLTEX 6,3 x 140 | 6,3x70 | 8 | 140 | 100 |
| 695998 | VLTEX 6,3 x 160 | 6,3x70 | 8 | 160 | 100 |
| 695999 | VLTEX 6,3 x 180 | 6,3x50 | 8 | 180 | 100 |
| 695984 | VLTEX 6,3 x 200 | 6,3x80 | 8 | 200 | 100 |



SCHEDA TECNICA TECHNICAL DATA SHEET FICHE TECHNIQUE TECHNISCHES DATENBLATT


VLTE-AP

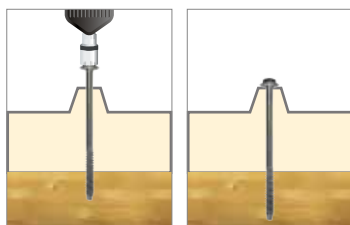



Testa esagonale passo legno
Exagonal head
Tete hexagonal
Sechseck Kopf



Punta ridotta autop perforante
Self drilling reduced point
Reduite pointe autoforeuse
Kleine Spitze Selbstdurchbohrend


| CODICE CODE | ARTICOLO ITEM | Ø FILETT. X LUNGH. THREAD Ø X LENGHT | CHIAVE KEY | LUNGH. SOTTOTESTA UNDERHEAD LENGTH |  |
|-------------|---------------|--------------------------------------|---------------------|------------------------------------|---|
| VLTE - AP | | dxL [mm] | S _w [mm] | L _s [mm] | Nr. |
| 695903 | VLTE-AP 6x32 | 6 x 32 | 8 | 32 | 100 |
| 695904 | VLTE-AP 6x40 | 6 x 40 | 8 | 40 | 100 |
| 695906 | VLTE-AP 6x60 | 6 x 55 | 8 | 60 | 100 |
| 695907 | VLTE-AP 6x70 | 6 x 60 | 8 | 70 | 100 |
| 695908 | VLTE-AP 6x80 | 6 x 60 | 8 | 80 | 100 |
| 695910 | VLTE-AP 6x100 | 6 x 60 | 8 | 100 | 100 |
| 695911 | VLTE-AP 6x110 | 6 x 60 | 8 | 110 | 100 |
| 695912 | VLTE-AP 6x120 | 6 x 60 | 8 | 120 | 100 |
| 695913 | VLTE-AP 6x130 | 6 x 60 | 8 | 130 | 100 |
| 695914 | VLTE-AP 6x140 | 6 x 60 | 8 | 140 | 100 |
| 695915 | VLTE-AP 6x150 | 6 x 60 | 8 | 150 | 100 |
| 695916 | VLTE-AP 6x160 | 6 x 60 | 8 | 160 | 100 |
| 695918 | VLTE-AP 6x180 | 6 x 60 | 8 | 180 | 100 |
| 695920 | VLTE-AP 6x200 | 6 x 60 | 8 | 200 | 100 |
| 695922 | VLTE-AP 6x220 | 6 x 60 | 8 | 220 | 100 |
| 695924 | VLTE-AP 6x240 | 6 x 60 | 8 | 240 | 100 |



| CODICE CODE | ARTICOLO ITEM |  |
|------------------|----------------------|---|
| VLTE - AP + BATZ | | Nr. |
| 695950 | VLTE-AP + BATZ 6x32 | 1000 |
| 695951 | VLTE-AP + BATZ 6x40 | 1000 |
| 695952 | VLTE-AP + BATZ 6x60 | 1000 |
| 695953 | VLTE-AP + BATZ 6x70 | 1000 |
| 695954 | VLTE-AP + BATZ 6x80 | 1000 |
| 695955 | VLTE-AP + BATZ 6x100 | 500 |
| 695956 | VLTE-AP + BATZ 6x110 | 500 |
| 695957 | VLTE-AP + BATZ 6x120 | 500 |
| 695958 | VLTE-AP + BATZ 6x130 | 500 |
| 695959 | VLTE-AP + BATZ 6x140 | 500 |
| 695960 | VLTE-AP + BATZ 6x150 | 500 |
| 695961 | VLTE-AP + BATZ 6x160 | 500 |
| 695962 | VLTE-AP + BATZ 6x180 | 500 |
| 695963 | VLTE-AP + BATZ 6x200 | 500 |
| 695964 | VLTE-AP + BATZ 6x220 | 500 |
| 695965 | VLTE-AP + BATZ 6x240 | 500 |



VLTEX - VLTE-AP
Disponibili montate con BATZ INOX in secchi
Available assembled with BATZ INOX,
bucketful packed

| CODICE CODE | ARTICOLO ITEM |  |
|--------------|------------------------|---|
| VLTEX + BATZ | | Nr. |
| 695980 | VLTEX + BATZ 6,3 x 40 | 1000 |
| 696081 | VLTEX + BATZ 6,3 x 60 | 1000 |
| 696083 | VLTEX + BATZ 6,3 x 70 | 1000 |
| 696085 | VLTEX + BATZ 6,3 x 80 | 1000 |
| 696090 | VLTEX + BATZ 6,3 x 90 | 500 |
| 695987 | VLTEX + BATZ 6,3 x 100 | 500 |
| 696091 | VLTEX + BATZ 6,3 x 120 | 500 |
| 696093 | VLTEX + BATZ 6,3 x 130 | 500 |
| 696094 | VLTEX + BATZ 6,3 x 140 | 500 |
| 695992 | VLTEX + BATZ 6,3 x 160 | 500 |
| 695995 | VLTEX + BATZ 6,3 x 180 | 500 |



Dati carico | Load data | Données de charge | Lastdaten



| | | |
|---------------|---------------|--|
| LEGEND | V_{Rk} [kN] | Acciaio (spesso) su legno > Steel (thick) on wood > Acier (épais) sur bois > Stahl (dick) auf Holz |
| | V_{Rk} [kN] | Acciaio (sottile) su legno > Steel (thin) on wood > Acier (mince) sur bois > Stahl (dunn) auf Holz |
| | V_{Rk} [kN] | Legno su legno > Wood on wood > Bois sur bois > Holz auf Holz |
| | N_{Rk} [kN] | Sfilamento > Pull-out > Extraire > Herausziehen |
| | N_{Rk} [kN] | Penetrazione testa > Head penetration > Pénétration de la tête > Durchdringung des Kopfes |

> 1kN = 100 Kg

I valori riportati sono i carichi caratteristici. Per ottenere i carichi di progetto è necessario applicare gli opportuni coefficienti di sicurezza.

Values reported are characteristic loads. Appropriate safety coefficients must be applied to obtain project loads.

Les valeurs indiquées sont des charges caractéristiques. Des coefficients de sécurité appropriés doivent être appliqués pour obtenir des charges de projet.

Die angegebenen Werte sind charakteristische Lasten. Um Projektlasten zu erhalten, müssen die benötigten Sicherheitskoeffizienten angewendet werden.

La resistenza è calcolata considerando tutta la parte filettata inserita in un unico elemento, e considerando un legno avente densità $\rho = 380\text{kg/m}^3$

The resistance is calculated considering all the threaded part inserted into a single element, and considering a wood having density $r = 380\text{kg/m}^3$

La résistance est calculée compte tenu de toute la partie filetée insérée dans un seul élément, et compte tenu d'un bois ayant une densité $r = 380\text{kg/m}^3$

Der Widerstand wird unter Berücksichtigung aller in einem einzigen Element eingefügten Gewindeteil berechnet und unter Berücksichtigung eines Holzes mit einer Dichte von $r = 380\text{kg/m}^3$

La parte filettata della vite deve essere affondata per un minimo pari a 6d

The threaded part of the screw must be inserted for a minimum of 6d

La partie filetée de la vis doit être enfoncée pendant au moins 6d

Der Gewindeteil der Schraube muss mindestens 6d versenkt werden



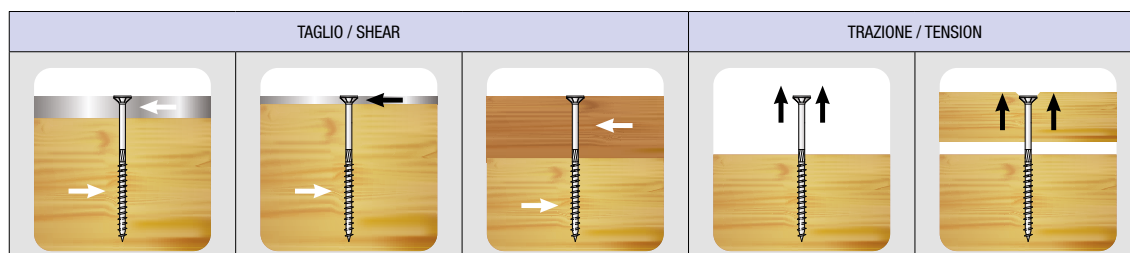
Testa svasata > Countersunk washer
Tête évasée > Senkkopf



| ARTICOLO ITEM | TAGLIO / SHEAR | | | TRAZIONE / TENSION | |
|-----------------------|--|--|--------------------------------|------------------------|--|
| | ACCIAIO (SPESSO) SU LEGNO THICK STEEL ON WOOD | ACCIAIO (SOTTILE) SU LEGNO THIN STEEL ON WOOD | LEGNO SU LEGNO WOOD ON WOOD | SFILAMENTO PULL OUT | PENETRAZIONE TESTA HEAD PENETRATION |
| VLS | V_{Rk} [kN] | V_{Rk} [kN] | V_{Rk} [kN] | N_{Rk} [kN] | N_{Rk} [kN] |
| VLS 5 x 40/22 | 1,48 | 1,16 | 0,75 | 1,16 | 1,82 |
| VLS 5 x 50/27 | 1,64 | 1,16 | 0,95 | 1,42 | 1,82 |
| VLS 5 x 60/32 | 1,64 | 1,16 | 0,97 | 1,69 | 1,82 |
| VLS 5 x 70/37 | 1,64 | 1,16 | 1,07 | 1,95 | 1,82 |
| VLS 5 x 80/47 | 1,64 | 1,16 | 1,07 | 2,47 | 1,82 |
| VLS 5 x 90/47 | 1,64 | 1,16 | 1,16 | 2,47 | 1,82 |
| VLS 5 x 100/59 | 1,64 | 1,16 | 1,16 | 3,11 | 1,82 |
| VLS 5 x 120/69 | 1,64 | 1,16 | 1,16 | 3,63 | 1,82 |
| VLS 6 x 60/30 | 1,90 | 1,39 | 1,02 | 2,21 | 2,19 |
| VLS 6 x 70/40 | 1,96 | 1,39 | 1,13 | 2,94 | 2,19 |
| VLS 6 x 80/40 | 1,96 | 1,39 | 1,34 | 2,94 | 2,19 |
| VLS 6 x 90/50 | 1,96 | 1,39 | 1,34 | 3,68 | 2,19 |
| VLS 6 x 100/50 | 1,96 | 1,39 | 1,39 | 3,68 | 2,19 |
| VLS 6 x 120/75 | 1,96 | 1,39 | 1,39 | 5,39 | 2,19 |
| VLS 6 x 140/75 | 1,96 | 1,39 | 1,39 | 5,39 | 2,19 |
| VLS 6 x 160/75 | 1,96 | 1,39 | 1,39 | 5,39 | 2,19 |



SCHEDA TECNICA
TECHNICAL DATA SHEET
FICHE TECHNIQUE
TECHNISCHES DATENBLATT



| ARTICOLO ITEM | TAGLIO / SHEAR | | | TRAZIONE / TENSION | |
|------------------|--|--|--------------------------------|------------------------|--|
| | ACCIAIO (SPESSE) SU LEGNO THICK STEEL ON WOOD | ACCIAIO (SOTTILE) SU LEGNO THIN STEEL ON WOOD | LEGNO SU LEGNO WOOD ON WOOD | SFILAMENTO PULL OUT | PENETRAZIONE TESTA HEAD PENETRATION |
| VLS | V_{Rk} [kN] | V_{Rk} [kN] | V_{Rk} [kN] | N_{Rk} [kN] | N_{Rk} [kN] |
| VLS 6 x 180/75 | 1,96 | 1,39 | 1,39 | 5,39 | 2,19 |
| VLS 6 x 200/75 | 1,96 | 1,39 | 1,39 | 5,39 | 2,19 |
| VLS 6 x 220/75 | 1,96 | 1,39 | 1,39 | 5,39 | 2,19 |
| VLS 6 x 240/75 | 1,96 | 1,39 | 1,39 | 5,39 | 2,19 |
| VLS 8 x 80/50 | 3,24 | 2,31 | 1,65 | 4,80 | 1,80 |
| VLS 8 x 90/50 | 3,27 | 2,31 | 1,86 | 4,80 | 1,80 |
| VLS 8 x 100/50 | 3,27 | 2,31 | 2,12 | 4,80 | 1,80 |
| VLS 8 x 120/60 | 3,27 | 2,31 | 1,86 | 5,76 | 1,80 |
| VLS 8 x 140/60 | 3,27 | 2,31 | 2,31 | 5,76 | 1,80 |
| VLS 8 x 160/80 | 3,27 | 2,31 | 2,31 | 5,76 | 1,80 |
| VLS 8 x 180/80 | 3,27 | 2,31 | 2,31 | 5,76 | 1,80 |
| VLS 8 x 200/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 220/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 240/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 260/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 280/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 300/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 320/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 340/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 360/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 380/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 8 x 400/80 | 3,27 | 2,31 | 2,31 | 7,70 | 1,80 |
| VLS 10 x 100/50 | 4,63 | 3,28 | 2,42 | 5,50 | 2,62 |
| VLS 10 x 120/60 | 4,63 | 3,28 | 2,42 | 6,60 | 2,62 |
| VLS 10 x 140/60 | 4,63 | 3,28 | 2,97 | 6,60 | 2,62 |
| VLS 10 x 160/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 180/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 200/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 220/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 240/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 260/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 280/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 300/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 320/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 340/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 360/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 380/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |
| VLS 10 x 400/80 | 4,63 | 3,28 | 3,28 | 8,80 | 2,62 |



VLTE



Testa esagonale > Hexagonal head
Tete hexagonal > Sechskantkopf

CE
UNI EN 14592

| ARTICOLO ITEM | TAGLIO / SHEAR | | | TRAZIONE / TENSION | |
|---------------------|--|--|--------------------------------|------------------------|--|
| | ACCIAIO (SPESSO) SU LEGNO THICK STEEL ON WOOD | ACCIAIO (SOTTILE) SU LEGNO THIN STEEL ON WOOD | LEGNO SU LEGNO WOOD ON WOOD | SFILAMENTO PULL OUT | PENETRAZIONE TESTA HEAD PENETRATION |
| VLTE | V_{Rk} [kN] | V_{Rk} [kN] | V_{Rk} [kN] | N_{Rk} [kN] | N_{Rk} [kN] |
| VLTE 6 x 40 | 1,63 | 1,27 | 0,32 | 1,93 | 2,57 |
| VLTE 6 x 60 | 1,76 | 1,24 | 1,01 | 2,78 | 2,57 |
| VLTE 6 x 70 | 1,76 | 1,24 | 1,10 | 3,20 | 2,57 |
| VLTE 6 x 80 | 1,76 | 1,24 | 1,20 | 3,61 | 2,57 |
| VLTE 6 x 90 | 1,76 | 1,24 | 1,24 | 4,00 | 2,57 |
| VLTE 6 x 100 | 1,76 | 1,24 | 1,26 | 4,40 | 2,57 |
| VLTE 6 x 110 | 1,76 | 1,24 | 1,26 | 4,80 | 2,57 |
| VLTE 6 x 120 | 1,76 | 1,24 | 1,26 | 5,20 | 2,57 |
| VLTE 6 x 130 | 1,76 | 1,24 | 1,26 | 5,58 | 2,57 |
| VLTE 6 x 140 | 1,76 | 1,24 | 1,26 | 5,97 | 2,57 |
| VLTE 6 x 150 | 1,76 | 1,24 | 1,26 | 6,35 | 2,57 |
| VLTE 6 x 180 | 1,76 | 1,24 | 1,26 | 6,73 | 2,57 |
| VLTE 6 x 200 | 1,76 | 1,24 | 1,26 | 6,73 | 2,57 |
| VLTE 6 x 240 | 1,76 | 1,24 | 1,26 | 6,73 | 2,57 |

VLTEX



Testa esagonale > Hexagonal head
Tete hexagonal > Sechskantkopf

CE
UNI EN 14592

| ARTICOLO ITEM | TAGLIO / SHEAR | | | TRAZIONE / TENSION | |
|----------------------|--|--|--------------------------------|------------------------|--|
| | ACCIAIO (SPESSO) SU LEGNO THICK STEEL ON WOOD | ACCIAIO (SOTTILE) SU LEGNO THIN STEEL ON WOOD | LEGNO SU LEGNO WOOD ON WOOD | SFILAMENTO PULL OUT | PENETRAZIONE TESTA HEAD PENETRATION |
| VLTEX | V_{Rk} [kN] | V_{Rk} [kN] | V_{Rk} [kN] | N_{Rk} [kN] | N_{Rk} [kN] |
| VLTEX 6 x 40 | 1,81 | 1,43 | 0,89 | 2,54 | 2,57 |
| VLTEX 6 x 60 | 2,14 | 1,51 | 0,89 | 4,03 | 2,57 |
| VLTEX 6 x 70 | 2,14 | 1,51 | 1,06 | 4,03 | 2,57 |
| VLTEX 6 x 80 | 2,14 | 1,51 | 1,25 | 4,03 | 2,57 |
| VLTEX 6 x 90 | 2,14 | 1,51 | 1,44 | 4,03 | 2,57 |
| VLTEX 6 x 100 | 2,14 | 1,51 | 1,44 | 4,03 | 2,57 |
| VLTEX 6 x 110 | 2,14 | 1,51 | 1,44 | 4,03 | 2,57 |



SCHEDA TECNICA TECHNICAL DATA SHEET FICHE TECHNIQUE TECHNISCHES DATENBLATT

NOTA. Dati tecnici, di installazione e di carico possono essere oggetto di revisione. Per una versione aggiornata consultare le schede tecniche sul sito www.bossong.com o contattare il nostro Ufficio Tecnico.

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NOTE. Données techniques, d'installation et de charge peuvent être objet de révision. Pour une version mise à jour, consulter les fiches techniques dans le site internet www.bossong.com ou contacter notre Bureau Technique.

ANMERKUNG. Technische Daten, Installationsangaben und Lastdaten können modifiziert werden. Für die aktualisierte Version sind die technischen Blätter auf der Webseite www.bossong.com nachzuschauen, oder unser Technisches Büro soll konsultiert werden.

| ARTICOLO ITEM | TAGLIO / SHEAR | | | TRAZIONE / TENSION | |
|----------------------|--|--|--------------------------------|------------------------|--|
| | ACCIAIO (SPESSO) SU LEGNO THICK STEEL ON WOOD | ACCIAIO (SOTTILE) SU LEGNO THIN STEEL ON WOOD | LEGNO SU LEGNO WOOD ON WOOD | SFILAMENTO PULL OUT | PENETRAZIONE TESTA HEAD PENETRATION |
| VLTEX | V_{rk} [kN] | V_{rk} [kN] | V_{rk} [kN] | N_{rk} [kN] | N_{rk} [kN] |
| VLTEX 6 x 120 | 2,14 | 1,51 | 1,44 | 4,03 | 2,57 |
| VLTEX 6 x 130 | 2,14 | 1,51 | 1,44 | 4,03 | 2,57 |
| VLTEX 6 x 140 | 2,14 | 1,51 | 1,44 | 5,45 | 2,57 |
| VLTEX 6 x 160 | 2,14 | 1,51 | 1,44 | 5,45 | 2,57 |
| VLTEX 6 x 180 | 2,14 | 1,51 | 1,44 | 4,03 | 2,57 |
| VLTEX 6 x 200 | 2,14 | 1,51 | 1,44 | 6,15 | 2,57 |

VLTE-AP



Punta ridotta autop perforante
Self drilling reduced point
Reduite pointe autoforeuse
Kleine Spitze, selbstdurchbohrend



UNI EN 14592

| ARTICOLO ITEM | TAGLIO / SHEAR | | | TRAZIONE / TENSION | |
|------------------------|--|--|---------------------------|------------------------|--|
| | ACCIAIO (SPESSO) SU LEGNO THICK STEEL ON WOOD | ACCIAIO (SOTTILE) SU LEGNO THIN STEEL ON WOOD | LEGNO SU LEGNO ON WOOD | SFILAMENTO PULL OUT | PENETRAZIONE TESTA HEAD PENETRATION |
| VLTE-AP | V_{rk} [kN] | V_{rk} [kN] | V_{rk} [kN] | N_{rk} [kN] | N_{rk} [kN] |
| VLTE-AP 6 x 32 | 1,61 | 0,95 | 0,95 | 1,59 | 2,57 |
| VLTE-AP 6 x 40 | 1,80 | 1,27 | 0,79 | 2,36 | 2,57 |
| VLTE-AP 6 x 60 | 2,30 | 1,74 | 0,98 | 3,06 | 2,57 |
| VLTE-AP 6 x 70 | 2,47 | 1,74 | 0,98 | 3,74 | 2,57 |
| VLTE-AP 6 x 80 | 2,47 | 1,74 | 1,03 | 4,08 | 2,57 |
| VLTE-AP 6 x 100 | 2,47 | 1,74 | 1,34 | 4,08 | 2,57 |
| VLTE-AP 6 x 110 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |
| VLTE-AP 6 x 120 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |
| VLTE-AP 6 x 130 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |
| VLTE-AP 6 x 140 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |
| VLTE-AP 6 x 150 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |
| VLTE-AP 6 x 160 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |
| VLTE-AP 6 x 180 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |
| VLTE-AP 6 x 200 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |
| VLTE-AP 6 x 220 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |
| VLTE-AP 6 x 240 | 2,47 | 1,74 | 1,38 | 4,08 | 2,57 |