URBAN SYSTEMS

# SCHEDA TECNICA
# TECHNICAL DATA SHEET
# FICHE TECHNIQUE
# TECHNISCHES DATENBLATT



# FBR

ANCORANTE FILETTATO AD ESPANSIONE
THREADED INSIDE ANCHOR
CHEVILLE FEMELLE À EXPANSION
INNENGEWINDEANKER

TESTED & APPROVED BY BOSSING



**FBR** STEEL ZINC PLATED



**FBR-GA** STEEL ZINC PLATED



**FBR-RBD** STEEL ZINC PLATED



**FBR-GC** STEEL ZINC PLATED



**FBR-BF** STEEL ZINC PLATED



**FBR-AR** STEEL ZINC PLATED



**FBR-SV** STEEL ZINC PLATED



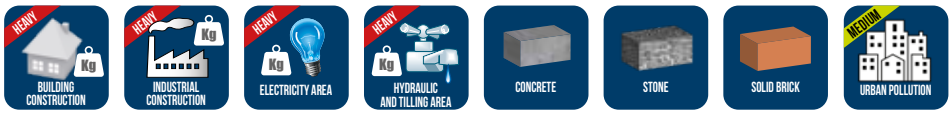
**FBR-B** STEEL ZINC PLATED



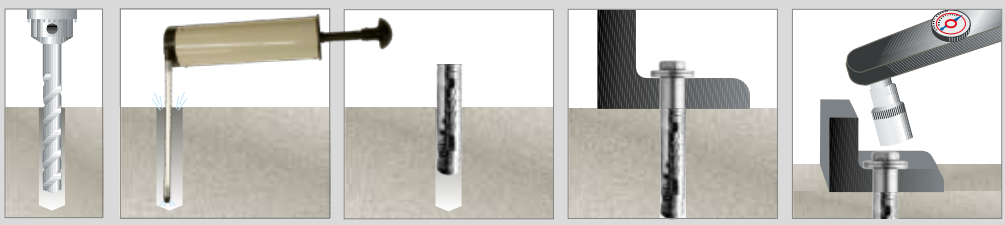
## GR-M12 FBR 12/18
## GR-M10 FBR 10/15

Ancorante per reti anticaduta
Steel anchor for antifalling nets
Goujon en acier pour filets antichute
Stahlanker für Sichereitsnetze

## Applicazioni | Applications | Applications | Anwendungen




PROCEDURA DI INSTALLAZIONE
INSTALLATION PROCEDURE
PROCÉDURE D'INSTALLATION
INSTALLATIONSVERFAHREN



## Dati tecnici | Technical data | Données techniques | Technische Angaben

| LEGEND | | |
|---|---|---|
| | d [mm] | Diametro filettatura > Thread diameter > Diamètre du filetage > Gewindedurchmesser |
| | $d_{nom}$ [mm] | Diametro esterno ancorante > Outside diameter of anchor > Diamètre esterne d'ancrage > Außendurchmesser des dübels |
| | L [mm] | Lunghezza totale ancorante > Total length of anchor > Longueur élément d'ancrage > Dübellänge |
| | $L_S$ [mm] | Lunghezza sottotesta > Underhead length > Longueur sous-tête > Unterkopf Länge |
| | L [mm] | Lunghezza centro occhiolo > Length from centre eye > Longueur du centre de piton > Aussen Lange |
| | dxL [mm x mm] | Filettatura diametro x lunghezza > Thread diameter x length > Diamètre du filetage x longueur > Gewinde x Dübellänge |
| | Ø [mm] | Diametro interno occhiolo > Eye diameter > Diamètre du piton > Innenauge |
| | Ø [mm] | Diametro gancio > Hook diameter > Diamètre du crochet > Haken |
| | $t_{fix}$ [mm] | Spessore fissabile (max) > Fixture thickness (max) > Épaisseur fixable (max) > Max. Anbauteildicke |

## FBR



STEEL ZINC PLATED

Con filettatura interna > Threaded inside
Avec filetage interne > Mit Innengewinde

| CODICE CODE | ARTICOLO ITEM | DIAM. FILETTATURA THREAD DIAM. | DIAM. ESTERNO ANCORANTE OUTSIDE DIAM. OF ANCHOR | LUNGHEZZA TOTALE ANCORANTE TOTAL LENGTH OF ANCHOR | |
|---|---|---|---|---|---|
| | FBR | d [mm] | $d_{nom}$ [mm] | L [mm] | Nr. |
| 811306 | FBR 6 | M6 | 10 | 45 | 100 |
| 811308 | FBR 8 | M8 | 12 | 50 | 100 |
| 811311 | FBR 10 | M10 | 15 | 60 | 100 |
| 811312 | FBR 12 | M12 | 18 | 74 | 50 |

## FBR-B



STEEL ZINC PLATED

Con bullone > With bolt 8.8
Avec boulon > Mit Bolzen 8.8

| CODICE CODE | ARTICOLO ITEM | DIAM. FILETTATURA THREAD DIAM. | DIAM. ESTERNO ANCORANTE OUTSIDE DIAM. OF ANCHOR | LUNGHEZZA SOTTOTESTA UNDERHEAD LENGTH | FILETTATURA DIAM. X LUNGH THREAD DIAM. X LENGTH | SPESSORE FISSABILE MAX FIXTURE THICKNESS | |
|---|---|---|---|---|---|---|---|
| | FBR-B | d [mm] | $d_{nom}$ [mm] | $L_S$ [mm] | dxL [mm x mm] | $t_{fix}$ [mm] | Nr. |
| 811326 | FBR-B 6 | M6 | 10 | 50 | M6 × 50 | 5 | 100 |
| 811328 | FBR-B 8 | M8 | 12 | 60 | M8 × 60 | 10 | 50 |
| 811331 | FBR-B 10 | M10 | 15 | 80 | M10 × 80 | 20 | 50 |
| 811352 | FBR-B 12/80 | M12 | 18 | 80 | M12 × 80 | 5 | 100 |
| 811332 | FBR-B 12/100 | M12 | 18 | 100 | M12 × 100 | 25 | 25 |

## FBR-RBD



STEEL ZINC PLATED

Con distanziale e doppia rondella > With spacer and double washer, bolt 8.8
Avec entretoise et double rondelle, boulon > Mit Distanzstück und Doppelscheibe, Bolzen 8.8

| | FBR-RBD | d [mm] | $d_{nom}$ [mm] | $L_s$ [mm] | dxL [mm x mm] | $t_{fix}$ [mm] | Nr. |
|---|---|---|---|---|---|---|---|
| 811345 | FBR-RBD 6/80 | M6 | 10 | 80 | M6 × 80 | 30 | 100 |
| 811347 | FBR-RBD 8/100 | M8 | 12 | 100 | M8 × 100 | 45 | 50 |
| 811330 | FBR-RBD 8/200 | M8 | 12 | 200 | M8 × 200 | 145 | 50 |
| 811350 | FBR-RBD 10/100 | M10 | 15 | 100 | M10 × 100 | 35 | 50 |
| 811354 | FBR-RBD 12/100 | M12 | 18 | 100 | M12 × 100 | 20 | 25 |
| 811356 | FBR-RBD 12/120 | M12 | 18 | 120 | M12 × 120 | 40 | 25 |
| 811358 | FBR-RBD 12/140 | M12 | 18 | 140 | M12 × 140 | 60 | 25 |

## FBR-BF



STEEL ZINC PLATED

Con dado e rondella, barra 6.8 > With nut and washer, stud 6.8
Avec ecrou et rondelle, barre 6.8 > Mit Mutter und Scheibe, Stange 6.8

| | FBR-BF | d [mm] | $d_{nom}$ [mm] | L [mm] | dxL [mm x mm] | $t_{fix}$ [mm] | Nr. |
|---|---|---|---|---|---|---|---|
| 811386 | FBR-BF 6 | M6 | 10 | 70 | M6 x 70 | 10 | 100 |
| 811388 | FBR-BF 8 | M8 | 12 | 85 | M8 x 85 | 15 | 50 |
| 811390 | FBR-BF 10 | M10 | 15 | 105 | M10 x 105 | 20 | 50 |
| 811392 | FBR-BF 12 | M12 | 18 | 130 | M12 x 130 | 25 | 25 |



## FBR-GC



STEEL ZINC PLATED

Con occhiolo > With eye 3.6
Avec piton > Mit Auge 3.6

| CODICE CODE | ARTICOLO ITEM | DIAM. FILETTATURA THREAD DIAM. | DIAM. ESTERNO ANCORANTE OUTSIDE DIAM. OF ANCHOR | LUNGHEZZA TOTALE ANCORANTE TOTAL LENGTH OF ANCHOR | FILETTATURA DIAM. X LUNGHEZZA THREAD DIAM. X LENGTH | SPESSORE FISSABILE MAX FIXTURE THICKNESS | |
|---|---|---|---|---|---|---|---|
| | FBR-GC | d [mm] | $d_{nom}$ [mm] | $L_S$ [mm] | Ø [mm] | Nr. | Nr. |
| 811366 | FBR-GC 6 | M6 | 10 | 45 | 10,0 | 100 | 100 |
| 811368 | FBR-GC 8 | M8 | 12 | 50 | 11,0 | 50 | 50 |
| 811370 | FBR-GC 10 | M10 | 15 | 60 | 14,5 | 50 | 50 |
| 811372 | FBR-GC 12 | M12 | 18 | 74 | 17,0 | 25 | 25 |

## FBR-GA



STEEL ZINC PLATED

Con gancio > With hook 3.6
Avec crochet > Mit Haken 3.6

| | FBR-GA | d [mm] | $d_{nom}$ [mm] | $L_S$ [mm] | Ø [mm] | Nr. |
|---|---|---|---|---|---|---|
| 811376 | FBR-GA 6 | M6 | 10 | 45 | 8,0 | 100 |
| 811378 | FBR-GA 8 | M8 | 12 | 50 | 10,0 | 50 |
| 811380 | FBR-GA 10 | M10 | 15 | 60 | 12,0 | 50 |
| 811382 | FBR-GA 12 | M12 | 18 | 74 | 16,0 | 25 |

## FBR-SV




STEEL ZINC PLATED

Vite in acciaio, testa svasata > Steel screw with flared head
Vis en acier à tête évasée > Senkkopf aus Weiß verzinktem Stahl

| | FBR-SV | d [mm] | $d_{nom}$ [mm] | $L_S$ [mm] | dxL [mm x mm] | $t_{fix}$ [mm] | Nr. |
|---|---|---|---|---|---|---|---|
| 811360 | FBR-SV 8-55 | M8 | 12 | 55 | M8 x 55 | 5 | 100 |
| 811361 | FBR-SV 8-75 | M8 | 12 | 75 | M8 x 75 | 25 | 50 |
| 811362 | FBR-SV 8-100 | M8 | 12 | 100 | M8 x 100 | 50 | 50 |
| 811363 | FBR-SV 8-120 | M8 | 12 | 120 | M8 x 120 | 70 | 50 |
| 811364 | FBR-SV 8-150 | M8 | 12 | 150 | M8 x 150 | 100 | 50 |

## FBR-AR



STEEL ZINC PLATED

Antisvitamento > No Screwing Anchor
Antidévissage > Anker mit Sollbruchstelle

| | FBR-AR | d [mm] | $d_{nom}$ [mm] | $L_S$ [mm] | dxL [mm x mm] | $t_{fix}$ [mm] | Nr. |
|---|---|---|---|---|---|---|---|
| 805135 | FBR-AR 8-80 | M8 | 12 | 80 | M8 x 80 | 30 | 50 |
| 805136 | FBR-AR 8-130 | M8 | 12 | 130 | M8 x 130 | 80 | 50 |

## GR-M12 FBR 12/18



STEEL ZINC PLATED

Ancorante per reti anticaduta > Steel anchor for antifalling nets
Goujon en acier pour filets antichute > Stahlanker für Sichereitsnetze

| CODICE CODE | ARTICOLO ITEM | DIAM. FILETTATURA THREAD DIAM. | DIAM. ESTERNO ANCORANTE OUTSIDE DIAM. OF ANCHOR | DIAMETRO GANCIO HOOK INSIDE Ø | |
|---|---|---|---|---|---|
| | GR-M12 FBR 12/18 | d [mm] | $d_{nom}$ [mm] | Ø [mm] | Nr. |
| 811501 | GR-M12 FBR 12/18 | M12 | 18 | 22 | 15 |

## GR-M10 FBR 10/15



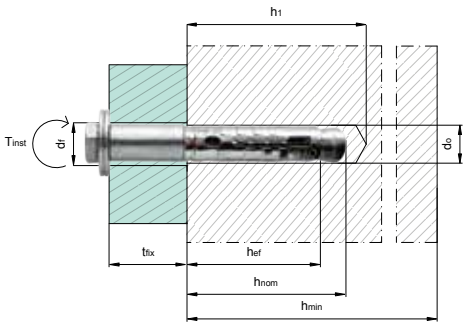
STEEL ZINC PLATED

Ancorante per reti anticaduta > Steel anchor for antifalling nets
Goujon en acier pour filets antichute > Stahlanker für Sichereitsnetze

| | GR-M10 FBR 10/15 | d [mm] | $d_{nom}$ [mm] | Ø [mm] | Nr. |
|---|---|---|---|---|---|
| 811502 | GR-M10 FBR 10/15 | M10 | 15 | 13 | 25 |

## Dati installazione | Installation data | Données de installatione | Installationsangaben

| LEGEND | | |
|---|---|---|
| | $h_{min}$ [mm] | Spessore minimo del supporto > Minimum thickness of base material<br>Épaisseur minimal du matière base > Mindesbauteildicke |
| | $d_0$ [mm] | Diametro foro > Hole diameter > Diamètre du trou > Bohrernenndurchmesser |
| | $h_1$ [mm] | Profondità del foro > Hole depth > Profondeur du trou > Bohrlochtiefe |
| | $h_{nom}$ [mm] | Profondità di inserimento > Embedment depth > Profondeur d'enfocé > Setztiefe |
| | $h_{ef}$ [mm] | Profondità effettiva ancoraggio > Effective anchorage depth<br>Profondeur efficace d'ancrage > Effektive Verankerungstiefe |
| | $S_{cr}$ [mm] | Interasse caratteristico > Characteristic spacing > Entraxe caracteristique > Charakteristische Achsabstand |
| | $C_{cr}$ [mm] | Distanza dal bordo caratteristica > Characteristic edge distance<br>Distance du bord caracteristique > Charakteristische Randabstand |
| | $S_{min}$ [mm] | Interasse minimo > Minimum allowable spacing > Entraxe minimale > Minimaler Achsabstand |
| | $C_{min}$ [mm] | Distanza minima dal bordo > Minimum allowable edge distance<br>Distance du bord minimale > Minimaler Randabstand |
| | $d_f$ [mm] | Diametro foro spessore fissabile > Diameter of clearence hole in the fixture<br>Diamètre du trou de épaisseur fixable > Durchgangsloch im Anbauteil |
| | $S_w$ [mm] | Chiave > Key > Clef > Schlüsselweite |
| | $T_{inst}$ [Nm] | Coppia di serraggio > Installation torque > Couple de serrage > Drehmoment beim Verankern |




## FBR



STEEL ZINC PLATED

Con filettatura interna > Threaded inside
Avec filetage interne > Mit Innengewinde

| CODICE CODE | ARTICOLO ITEM | SPESSORE MIN SUPPORTO MIN THICKNESS BASE MATERIAL | DIAM. FORO HOLE DIAM. | PROFONDITÀ DEL FORO HOLE DEPTH | PROFONDITÀ DI INSERIMENTO EMBEDMENT DEPTH | PROFONDITÀ EFFETTIVA ANCORAGGIO EFFECTIVE ANCHORAGE DEPTH | INTERASSE CARATTERISTICO CHARACTERISTIC SPACING | DISTANZA DAL BORDO CARATTERISTICA CHARACTERISTIC EDGE DISTANCE | INTERASSE MIN ALLOWABLE SPACING | DISTANZA MIN DAL BORDO MIN ALLOWABLE EDGE DISTANCE | DIAM. FORO SPESSORE FISSABILE DIAM. CLEARENCE HOLE IN THE FIXTURE | CHIAVE KEY | COPPIA DI SERRAGGIO INSTALLATION TORQUE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FBR | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | $S_{cr}$ [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
| **811306** | **FBR 6** | 100 | 10 | 55 | 45 | 40 | 135 | 67,5 | 60,0 | 60,0 | - | - | - |
| **811308** | **FBR 8** | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | - | - | - |
| **811311** | **FBR 10** | 100 | 15 | 85 | 60 | 50 | 180 | 90 | 75,0 | 75,0 | - | - | - |
| **811312** | **FBR 12** | 130 | 18 | 105 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | - | - | - |

## FBR-B



STEEL ZINC PLATED

Con bullone > With bolt 8.8
Avec boulon > Mit Bolzen 8.8

| | FBR-B | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | $S_{cr}$ [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **811326** | **FBR-B 6** | 100 | 10 | 55 | 45 | 40 | 135 | 67,5 | 60,0 | 60,0 | 7 | 10 | 10 |
| **811328** | **FBR-B 8** | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 9 | 13 | 25 |
| **811331** | **FBR-B 10** | 100 | 15 | 85 | 60 | 50 | 180 | 90 | 75,0 | 75,0 | 12 | 17 | 45 |
| **811352** | **FBR-B 12/80** | 130 | 18 | 105 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | 14 | 19 | 75 |
| **811332** | **FBR-B 12/100** | 130 | 18 | 105 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | 14 | 19 | 75 |

## FBR-RBD



STEEL ZINC PLATED

Con distanziale e doppia rondella > With spacer and double washer, bolt 8.8
Avec entretoise et double rondelle, boulon > Mit Distanzstück und Doppelscheibe, Bolzen 8.8

| | FBR-RBD | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | $S_{cr}$ [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **811345** | **FBR-RBD 6/80** | 100 | 10 | 55 | 45 | 40 | 135 | 67,5 | 60,0 | 60,0 | 12 | 10 | 10 |
| **811347** | **FBR-RBD 8/100** | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 14 | 13 | 25 |
| **811330** | **FBR-RBD 8/200** | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 14 | 13 | 25 |
| **811350** | **FBR-RBD 10/100** | 100 | 15 | 85 | 60 | 50 | 180 | 90 | 75,0 | 75,0 | 17 | 17 | 45 |
| **811354** | **FBR-RBD 12/100** | 130 | 18 | 105 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | 20 | 19 | 75 |
| **811356** | **FBR-RBD 12/120** | 130 | 18 | 105 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | 20 | 19 | 75 |
| **811358** | **FBR-RBD 12/140** | 130 | 18 | 105 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | 20 | 19 | 75 |



## FBR-BF



STEEL ZINC PLATED

Con dado e rondella, barra 6.8 > With nut and washer, stud 6.8
Avec ecrou et rondelle, barre 6.8 > Mit Mutter und Scheibe, Stange 6.8

| CODICE CODE | ARTICOLO ITEM | SPESSORE MIN SUPPORTO MIN THICKNESS BASE MATERIAL | DIAM. FORO HOLE DIAM. | PROFONDITÀ DEL FORO HOLE DEPTH | PROFONDITÀ DI INSERIMENTO EMBEDMENT DEPTH | PROFONDITÀ EFFETTIVA ANCORAGGIO EFFECTIVE ANCHORAGE DEPTH | INTERASSE CARATTERISTICO CHARACTERISTIC SPACING | DISTANZA DAL BORDO CARATTERISTICA CHARACTERISTIC EDGE DISTANCE | INTERASSE MIN ALLOWABLE SPACING | DISTANZA MIN DAL BORDO MIN ALLOWABLE EDGE DISTANCE | DIAM. FORO SPESSORE FISSABILE DIAM. CLEARENCE HOLE IN THE FIXTURE | CHIAVE KEY | COPPIA DI SERRAGGIO INSTALLATION TORQUE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FBR-BF | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | $S_{cr}$ [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
| 811386 | FBR-BF 6 | 100 | 10 | 60 | 45 | 40 | 135 | 67,5 | 60,0 | 60,0 | 7 | 10 | 6 |
| 811388 | FBR-BF 8 | 100 | 12 | 70 | 50 | 45 | 150 | 75,0 | 67,5 | 67,5 | 9 | 13 | 15 |
| 811390 | FBR-BF 10 | 100 | 15 | 90 | 60 | 50 | 180 | 90,0 | 75,0 | 75,0 | 12 | 17 | 30 |
| 811392 | FBR-BF 12 | 130 | 18 | 110 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | 14 | 19 | 50 |

## FBR-GC



STEEL ZINC PLATED

Con occhiolo > With eye 3.6
Avec piton > Mit Auge 3.6

| | FBR-GC | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | $S_{cr}$ [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 811366 | FBR-GC 6 | 100 | 10 | 55 | 45 | 40 | 135 | 67,5 | 60,0 | 60,0 | - | 10 | 4 |
| 811368 | FBR-GC 8 | 100 | 12 | 65 | 50 | 45 | 150 | 75,0 | 67,5 | 67,5 | - | 13 | 10 |
| 811370 | FBR-GC 10 | 100 | 15 | 85 | 60 | 50 | 180 | 90,0 | 75,0 | 75,0 | - | 17 | 19 |
| 811372 | FBR-GC 12 | 130 | 18 | 105 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | - | 19 | 34 |

## FBR-GA



STEEL ZINC PLATED

Con gancio > With hook 3.6
Avec crochet > Mit Haken 3.6

| | FBR-GA | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | $S_{cr}$ [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 811376 | FBR-GA 6 | 100 | 10 | 55 | 45 | 40 | 135 | 67,5 | 60,0 | 60,0 | - | 10 | 4 |
| 811378 | FBR-GA 8 | 100 | 12 | 65 | 50 | 45 | 150 | 75,0 | 67,5 | 67,5 | - | 13 | 10 |
| 811380 | FBR-GA 10 | 100 | 15 | 85 | 60 | 50 | 180 | 90,0 | 75,0 | 75,0 | - | 17 | 19 |
| 811382 | FBR-GA 12 | 130 | 18 | 105 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | - | 19 | 34 |

## FBR-SV




STEEL ZINC PLATED

Vite in acciaio, testa svasata > Steel screw with flared head
Vis en acier à tête évasée > Senkkopf aus Weiß verzinktem Stahl

| | FBR-SV | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | $S_{cr}$ [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 811360 | FBR-SV 8-55 | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 14 | - | 25 |
| 811361 | FBR-SV 8-75 | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 14 | - | 25 |
| 811362 | FBR-SV 8-100 | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 14 | - | 25 |
| 811363 | FBR-SV 8-120 | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 14 | - | 25 |
| 811364 | FBR-SV 8-150 | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 14 | - | 25 |

## FBR-AR



STEEL ZINC PLATED

Antisvitamento > No Screwing Anchor
Antidévissage > Anker mit Sollbruchstelle

| | FBR-AR | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | $S_{cr}$ [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 805135 | FBR-AR 8-80 | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 14 | - | 25 |
| 805136 | FBR-AR 8-130 | 100 | 12 | 65 | 50 | 45 | 150 | 75 | 67,5 | 67,5 | 14 | - | 25 |

## GR-M12 FBR 12/18

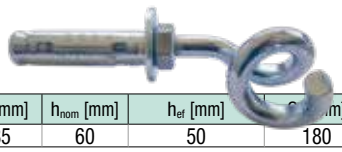


STEEL ZINC PLATED

Ancorante per reti anticaduta > Steel anchor for antifalling nets
Goujon en acier pour filets antichute > Stahlanker für Sichereitsnetze

| CODICE CODE | ARTICOLO ITEM | SPESSORE MIN SUPPORTO MIN THICKNESS BASE MATERIAL | DIAM. FORO HOLE DIAM. | PROFONDITÀ DEL FORO HOLE DEPTH | PROFONDITÀ DI INSERIMENTO EMBEDMENT DEPTH | PROFONDITÀ EFFETTIVA ANCORAGGIO EFFECTIVE ANCHORAGE DEPTH | INTERASSE CARATTERISTICO CHARACTERISTIC SPACING | DISTANZA DAL BORDO CARATTERISTICA CHARACTERISTIC EDGE DISTANCE | INTERASSE MIN ALLOWABLE SPACING | DISTANZA MIN DAL BORDO MIN ALLOWABLE EDGE DISTANCE | DIAM. FORO SPESSORE FISSABILE DIAM. CLEARENCE HOLE IN THE FIXTURE | CHIAVE KEY | COPPIA DI SERRAGGIO INSTALLATION TORQUE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GR-M12 FBR 12/18 | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | $S_{cr}$ [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
| 811501 | GR-M12 FBR 12/18 | 130 | 18 | 105 | 74 | 65 | 225 | 112,5 | 97,5 | 97,5 | - | 19 | 75 |

## GR-M10 FBR 10/15



STEEL ZINC PLATED

Ancorante per reti anticaduta > Steel anchor for antifalling nets
Goujon en acier pour filets antichute > Stahlanker für Sichereitsnetze

| | GR-M10 FBR 10/15 | $h_{min}$ [mm] | $d_0$ [mm] | $h_1$ [mm] | $h_{nom}$ [mm] | $h_{ef}$ [mm] | [illegible] [mm] | $C_{cr}$ [mm] | $S_{min}$ [mm] | $C_{min}$ [mm] | $d_f$ [mm] | $S_w$ [mm] | $T_{inst}$ [Nm] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 811502 | GR-M10 FBR 10/15 | 100 | 15 | 85 | 60 | 50 | 180 | 90 | 75,0 | 75,0 | - | 17 | 45 |



# SCHEDA TECNICA
# TECHNICAL DATA SHEET
# FICHE TECHNIQUE
# TECHNISCHES DATENBLATT

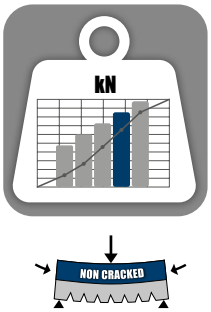
**NOTA.** Dati tecnici, di installazione e di carico possono essere oggetto di revisione. Per una versione aggiornata consultare le schede tecniche sul sito www.bossong.com o contattare il nostro Ufficio Tecnico.

**WARNING.** Installation and loads technical data can be modified by us. For update technical data sheet see www.bossong.com or be in contact with our Technical Office.

**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.

## Dati carico | Load data | Données de charge | Lastdaten




| LEGEND | | |
|---|---|---|
| | $N_{Rum}$ [kN] | Carico ultimo medio a trazione > Average ultimate tension load > Charge maximum moyenne de traction > Durchschnittliche Zuglast |
| | $V_{Rum}$ [kN] | Carico ultimo medio a taglio > Average ultimate shear load > Charge maximum moyenne de cisaillement > Durchschnittliche Querlast |
| | $N_{rec}$ [kN] | Carico ammissibile a trazione > Admissible tensile load > Charge admissible de traction > Zulässige Zuglast |
| | $V_{rec}$ [kN] | Carico ammissibile a taglio > Admissible shear load > Charge admissible de cisaillement > Zulässige Querlast |
| | $M_{rec}$ [Nm] | Momento flettente ammissibile > Admissible bending moment > Moment fléchissant conseillé > Empfohlene Biegemoment |

> Carichi validi per singolo ancorante senza influenza di interasse e distanza dal bordo e h ⩾ 2hef
> Loads for single anchor with no influence of spacing and edge distance and with h ⩾ 2hef
> Charges valables pour chaque ancrage sans influence d'interaxe et distance du bord et h ⩾ 2hef
> Passende Ringe für den einzelnen Veranker, ohne Achsenabstandseinfluss und des Randabstands und h ⩾ 2hef

> 1kN = 100 Kg

> Azione di taglio non diretta verso il bordo
> Shear directed away from the edge
> Action de cisaillement pas dirigée vers le bord
> Queraktion nicht an den Rand gerichtet

> Coefficiente di sicurezza globale incluso
> General safety factor included
> Coefficient de sécurité generale inclu
> Generelle Sicherheitskoeffizient inbegriffen

> Coefficiente lato carichi utilizzato = 1,4
> Load increasing safety coefficient used = 1,4
> Coefficient côté charge utilisé = 1,4
> Verwendeter Lasterhöhungssicherheitskoeffizient = 1,4

| ARTICOLO<br>ITEM | CLASSE CALCESTRUZZO<br>CONCRETE | CARICO ULTIMO MEDIO A TRAZIONE<br>AVERAGE ULTIMATE TENSION LOAD | CARICO ULTIMO MEDIO A TAGLIO<br>AVERAGE ULTIMATE SHEAR LOAD | CARICO AMMISSIBILE A TRAZIONE<br>ADMISSIBLE TENSILE LOAD | CARICO AMMISSIBILE A TAGLIO<br>ADMISSIBLE SHEAR LOAD |
|---|---|---|---|---|---|
| **FBR-B** | $f_{ck}/f_{ck,cube}$ [N/mm²] | $N_{Rum}$ [kN] | $V_{Rum}$ [kN] | $N_{rec}$ [kN] | $V_{rec}$ [kN] |
| **FBR-B 6** | C20/25 | 10,5 | 8,0 | 3,5 | 3,8 |
| **FBR-B 8** | C20/25 | 12,6 | 14,7 | 4,2 | 7,0 |
| **FBR-B 10** | C20/25 | 16,8 | 27,9 | 5,6 | 13,3 |
| **FBR-B 12** | C20/25 | 26,1 | 40,5 | 8,7 | 19,3 |
| **FBR-RBD** | $f_{ck}/f_{ck,cube}$ [N/mm²] | $N_{Rum}$ [kN] | $V_{Rum}$ [kN] | $N_{rec}$ [kN] | $V_{rec}$ [kN] |
| **FBR-RBD 6** | C20/25 | 10,5 | 8,0 | 3,5 | 3,8 |
| **FBR-RBD 8** | C20/25 | 12,6 | 14,7 | 4,2 | 7,0 |
| **FBR-RBD 10** | C20/25 | 16,8 | 27,9 | 5,6 | 13,3 |
| **FBR-RBD 12** | C20/25 | 26,1 | 40,5 | 8,7 | 19,3 |
| **FBR-GC** | $f_{ck}/f_{ck,cube}$ [N/mm²] | $N_{Rum}$ [kN] | $V_{Rum}$ [kN] | $N_{rec}$ [kN] | $V_{rec}$ [kN] |
| **FBR-GC 6** | C20/25 | 7,2 | 3,6 | 2,4 | 1,7 |
| **FBR-GC 8** | C20/25 | 12,0 | 6,5 | 4,0 | 3,1 |
| **FBR-GC 10** | C20/25 | 16,5 | 10,5 | 5,5 | 5,0 |
| **FBR-GC 12** | C20/25 | 24,0 | 15,1 | 8,0 | 7,2 |
| **FBR-GA** | $f_{ck}/f_{ck,cube}$ [N/mm²] | $N_{Rum}$ [kN] | $V_{Rum}$ [kN] | $N_{rec}$ [kN] | $V_{rec}$ [kN] |
| **FBR-GA 6** | C20/25 | 2,1 | Non idoneo per carichi di taglio<br>Not suitable for shear load<br>Pas adapte pour une charge de cisaillement<br>Nicht geeignet für Querlast | 0,7 | Non idoneo per carichi di taglio<br>Not suitable for shear load<br>Pas adapte pour une charge de cisaillement<br>Nicht geeignet für Querlast |
| **FBR-GA 8** | C20/25 | 5,4 | | 1,8 | |
| **FBR-GA 10** | C20/25 | 7,8 | | 2,6 | |
| **FBR-GA 12** | C20/25 | 10,5 | | 3,5 | |
| **FBR-BF** | $f_{ck}/f_{ck,cube}$ [N/mm²] | $N_{Rum}$ [kN] | $V_{Rum}$ [kN] | $N_{rec}$ [kN] | $V_{rec}$ [kN] |
| **FBR-BF 6** | C20/25 | 10,5 | 5,0 | 3,5 | 2,3 |
| **FBR-BF 8** | C20/25 | 12,6 | 11,4 | 4,2 | 5,4 |
| **FBR-BF 10** | C20/25 | 16,8 | 18,1 | 5,6 | 8,6 |
| **FBR-BF 12** | C20/25 | 26,1 | 26,3 | 8,7 | 12,5 |
| **FBR-SV** | $f_{ck}/f_{ck,cube}$ [N/mm²] | $N_{Rum}$ [kN] | $V_{Rum}$ [kN] | $N_{rec}$ [kN] | $V_{rec}$ [kN] |
| **FBR-SV 8** | C20/25 | 12,6 | 14,7 | 4,2 | 7,0 |
| **FBR-AR** | $f_{ck}/f_{ck,cube}$ [N/mm²] | $N_{Rum}$ [kN] | $V_{Rum}$ [kN] | $N_{rec}$ [kN] | $V_{rec}$ [kN] |
| **FBR-AR 8** | C20/25 | 12,6 | 14,7 | 4,2 | 7,0 |
| **GR** | $f_{ck}/f_{ck,cube}$ [N/mm²] | $N_{Rum}$ [kN] | $V_{Rum}$ [kN] | $N_{rec}$ [kN] | $V_{rec}$ [kN] |
| **GR 10** | C20/25 | 3,5 | Resistenza media dell'apertura del gancio di sicurezza su calcestruzzo classe C20/25<br>Average strength of the safety hook opening on concrete C20 / 25 class<br>Résistance moyenne de l'ouverture du crochet de sécurité sur la classe de béton C20 / 25<br>Durchschnittliche Stärke der Sicherheitshakenöffnung auf Beton C20 / 25 Klasse | | |
| **GR 12** | C20/25 | 6,0 | | | |


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