## BM

Binmu CO., Ltd.
GERMAN QUALITY
SINCE 2003


WE GROW WITH YOU

## CUSTOMERS \& SEGMENTS

OUR CUSTOMER

- Engineering owner
- Construction unit
-Production factory
- Design Institute
-Supervision unit

OUR FIELD

- Industrial plants
- Traffic facilities
- Infrastructure
-Commercial Buildings
-Chemistry and chemical engineering
-Energy


Art.No. 84112233


BM-21-82


Art.No. 38012104


Art.No. 38012109


BM-007



Art.No. 38012105


BM-004


Integrated pipeline support engineering system design service provider PRODUCT LIST


BM-019 B-3D


BMK-2006



Art.No. 80031227






## BM Channel steel products



## Single Rapidstrut Fixing Rails



## Features and Advantages

Novel axial stiffening rib design increases the flexural capacity of the C-channel steel
C-channel steel curling edge with sawtooth, effective shear resistance, anti-slip,impact resistance, and can be well connected with BM channel steel accessories
Auxiliary gauge length is eng

Quickly and efficiently combine with steel structures, concrete structures or other structures into various forms of support and hanger systems
Fast and convenient pipe fixing, perfect air pipe and bridge support and other process installation
■All special accessories and C-channel steel can be matched freely and used safely
■-channel steel includes two types: no hole and hole, with multiple choices
Material:Processing and production of cold-rolled galvanized sheet;
Manufactured according to DIN EN 10326
FGalvanized:Galvanized sheet, Single-sided zinc layer thickness $20 \mu \mathrm{~m}(275 \mathrm{~g} / \mathrm{m})$
Ppitch of holes: $50 \mathrm{~mm} 12.5 \times 28$ hole $/ 100 \mathrm{~mm} 13.5 \times 63$ hole

| PRODUCT NAME <br> (Single RapidStrut Fixing Rails) | PRODUCT <br> NUMBER | WALL THICKNESS | SECTION HEIGHT | WEIGHT | STANDARD LENGTH |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | mm | $\mathrm{kg} / \mathrm{m}$ | m |  |
| BM-21 | 84112232 | $2.0 / 2.5$ | 21 | $1.672 / 2.406$ | 6 |
| BM-41 | 84112233 | $2.0 / 2.5$ | 41 | $2.352 / 3.306$ | 6 |
| BM-52 | 84112236 | $2.5 / 2.75$ | 52 | $3.434 / 3.9$ | 6 |
| BM-62 | 84112237 | $2.5 / 2.75$ | 62 | $3.631 / 4.801$ | 6 |
| BM-72 | 84112242 | $2.5 / 2.75$ | 72 | $4.515 / 5.029$ | 6 |
| BM-82 | 84112243 | 2.75 | 82 | 5.336 | 6 |

BM Channel steel products

## BM Double RapidStrut Fixing Rails



## Features and Advantages

■Novel axial stiffening rib design increases the flexural capacity of the C-channel steel
■C-channel steel curling edge with sawtooth, effective shear resistance, anti-slip,impact resistance, and can be well connected with BM channel steel accessories
-Auxiliary gauge length is engraved on the surface of $C$-channel steel, which is convenient for on-site processing during installation.
■ar-shaped mounting holes on the back, easy to adjust and install
■Galvanized surface treatment, no need for post-maintenance
■ Nice appearance
Quickly and efficiently combine with steel structures, concrete structures or other structures into various forms of support and hanger systems
$\square$ Fast and convenient pipe fixing, perfect air pipe and bridge support and other process installation
■All special accessories and C-channel steel can be matched freely and used safely
■C-channel steel includes two types: no hole and hole, with multiple choices
■Material:Processing and production of cold-rolled galvanized sheet; Manufactured according to DIN EN 10326
■FGalvanized:Galvanized sheet, Single-sided zinc layer thickness $20 \mu \mathrm{~m}(275 \mathrm{~g} / \mathrm{m})$

| PRODUCT NAME <br> (Single RapidStrut Fixing Rails) | PRODUCT NUMBER | WALL THICKNESS | SECTION HEIGHT | WEIGHT | STANDARD LENGTH |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | mm | mm | $\mathrm{kg} / \mathrm{m}$ | m |
| BM-21D | 84212130 | 2.5 | 41 | 4.812 | 6 |
| BM-41D | 84212131 | $2.0 / 2.5$ | 82 | $4.704 / 6.612$ | 6 |
| BM-52D | 84212142 | $2.5 / 2.75$ | 124 | $6.868 / 7.8$ | 6 |
| BM-62D | 84212143 | $2.5 / 2.75$ | 144 | $7.262 / 9.602$ | 6 |

## BM Single RapidStrut Cantilever Arms



## Features and Advantages

The base $\mathrm{CO}_{2}$ welding is strong to ensure high load capacity; the oval hole design is convenient for adjustment during installation
-Different lengths meet actual working conditions
Novel axial stiffening rib design increases the bending resistance of the corbel
The edge of the corbel is serrated, which is effective in resisting shearing, anti-slip and impact resistance, and can be well connected with BM channel steel fittings

Auxiliary gauge length is engraved on the surface of the corbel, which is convenient for on-site processing during installation
-Strip-type mounting holes on the back, easy to adjust and install
Ideal multi - pipe corbel support structuret can be made into a beam to support air pipe, cable or bridge, etc Solid and reliable wall support
Material: Channel steel produced according to DIN EN 10326

Galvanized: Electrogalvanized,Fe/Zn13 $\mu \mathrm{m}$
Remark: When the length of the corbel is greater than 500 mm or when resisting the vibration load of the pipeline, it is recommended to add diagonal support.

| PRODUCT NAME <br> (BM Single RapidStrut Cantilever Ams) | PRODUCT <br> NUMBER | CANTLLEVER <br> SECTION | WALL LENGTH | WEIGHT | PACKAGING QUANTITY |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 58113130 |  | 300 | $\mathrm{~kg} / \mathrm{pcs}$ | pcs |
| BM-41/450 | 58113131 | BM-41 | 450 | 1.28 | 10 |
| BM-41/600 | 58113133 | BM-41 | 600 | 1.61 | 10 |
| BM-52/450 | 58113141 | BM-52 | 450 | 1.76 | 6 |
| BM-52/600 | 58113142 | BM-52 | 600 | 2.24 | 6 |
| BM-72/450 | 58113161 | BM-72 | 450 | 2.5 | 6 |
| BM-72/600 | 58113162 | BM-72 | 600 | 3.15 | 6 |

## BM Double RapidStrut Cantilever Arms



## Features and Advantages

The base $\mathrm{CO}_{2}$ welding is strong to ensure high load capacity; the oval hole design is convenient for adjustment during installation
■Different lengths meet actual working conditions
■Novel axial stiffening rib design increases the bending resistance of the corbel
The edge of the corbel is serrated, which is effective in resisting shearing, anti-slip and impact resistance, and can be well connected with BM channel steel fittings
Auxiliary gauge length is engraved on the surface of the corbel, which is convenient for on-site processing during installation
■Strip-type mounting holes on the back, easy to adjust and install
■Ideal multi - pipe corbel support structure
■It can be made into a beam to support air pipe, cable or bridge, etc Solid and reliable wall support

Material: Channel steel produced according to DIN EN 10326


Galvanized: Electrogalvanized,Fe/Zn13 $\mu \mathrm{m}$
Remark: When the length of the corbel is greater than 500 mm or when resisting the vibration load of the pipeline, it is recommended to add diagonal support.

| PRODUCT NAME <br> (BM Double RapidStrut Cantilever Arms) | PRODUCT <br> NUMBER | CANTILEVER <br> SECTION | WALL LENGTH | WEIGHT | PACKAGING QUANTITY |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 58113134 | BM-21D | 300 | 1.87 | 10 |
| BM-41D/450 | 58113135 | BM-21D | 450 | 2.53 | 10 |
| BM-41D/600 | 58113136 | BM-21D | 600 | 3.2 | 10 |
| BM-41D/1000 | 58113137 | BM-41D | 1000 | 4.95 | 6 |

## BM Single RapidStrut Cantilever Arms

## Features and Advantages



The square base is welded firmly to ensure high load capacity; The oval hole on the base ensures installation adjustment and avoids drilling error.
The edge of the corbel is serrated, which is effective in resisting shearing, anti-slip and impact resistance, and can be well connected with BM channel steel fittings
■It can be made into a beam to support air pipe, cable or bridge, etc
Material: Channel steel produced according to DIN EN 10326
■Bottom sheet: Manufactured according to DIN EN 10025 ■Galvanized: Electrogalvanized,Fe/Zn13 $\mu \mathrm{m}$

| PRODUCT NAME <br> (BM Single RapidStrut Cantilever Arms) | PRODUCT <br> NUMBER | CANTILEVER <br> SECTION | WALL LENGTH | WEIGHT | PACKAGING QUANTITY |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 58113172 |  | 600 | mm | $\mathrm{~kg} / \mathrm{pcs}$ |
| BM-41/1000/4 | 58113175 | BM-41 | 1000 | 3.71 | 10 |

## BM Rapil Prop

Features and Advantages

$\square \mathrm{CO}_{2}$ welding, suitable for $45^{\circ}$ support ■Used for wall and column cantilever support installation
When installing pipes on the corbel, especially thermal pipes, , it is necessary to resist axial stress by diagonal bracing to prevent the failure of the support system
■When installing diagonal braces, it is recommended to use anchor bolts and special channel steel accessories, and install them axially or diagonally according to the actual working conditions.

■Material: S235JR, Manufactured according to DIN EN 10025
■Material width: 40 mm / Material thickness: 4 mm
■Galvanized: Electrogalvanized,Fe/Zn13 $\mu \mathrm{m}$

| PRODUCT NAME <br> (BM Rapil Prop) | PRODUCT <br> NUMBER | a | $\mathrm{kg} / \mathrm{pCs}$ |
| :---: | :---: | :---: | :---: |
| BM-SXC | 58113200 | $45^{\circ}$ | pcs | BM Channel steel products

## Channel Physical Characteristics

| TECHNICAL | CHANNEL SECTIONS |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Definition of axes | $\underset{-2}{4}$ |  |  |  |  |  |  | BM-52-72D |  |
| Wall thickness $\quad \mathrm{t}$ [mm] | 2.0000 | 2.0000 | 2.5000 | 2.5000 | 2.7500 | 2.0000 | 2.0000 | 2.5/2.75 | 2.7500 |
| Sectional area A[mm2] | 166.2 | 246.7 | 356.9 | 414.3 | 506.8 | 332.4 | 493.4 | 86/7 | 1013.6 |
| Weight [kg/m] | 1.662 | 2.342 | 3.297 | 3.6 | 4.505 | 3.32 | 4.683 | 7.802 | 9.009 |
| Standard Length [m] | 3/6 | 3/6 | 3/6 | 3/6 | 3/6 | 3/6 | 3/6 | 3/6 | 3/6 |
| Mechanical behavior |  |  |  |  |  |  |  |  |  |
| Yield Strength $\quad\left[\mathrm{N} / \mathrm{mm}^{2}\right]$ | 235.0000 | 235.0000 | 235.0000 | 235.0000 | 235.0000 | 235.0000 | 235.0000 | 235.0000 | 235.0000 |
| Design value of tensile, compressive, flexural strength <br> [ $\mathrm{N} / \mathrm{mm}^{2}$ ] | 205.0000 | 205.0000 | 205.0000 | 205.0000 | 205.0000 | 205.0000 | 205.0000 | 205.0000 | 205.0000 |
| Design value of shear strength [ $\mathrm{N} / \mathrm{mm}^{2}$ ] | 120.0000 | 120.0000 | 120.0000 | 120.0000 | 120.0000 | 120.0000 | 120.0000 | 120.0000 | 120.0000 |
| Elastic Modulus [ $\left.\mathrm{N} / \mathrm{mm}^{2}\right]$ | $\begin{gathered} 210000 \\ .0000 \end{gathered}$ | $\begin{gathered} 210000 \\ .0000 \end{gathered}$ | $\begin{gathered} 210000 \\ .0000 \end{gathered}$ | $\begin{gathered} 210000 \\ .0000 \end{gathered}$ | $\begin{gathered} 210000 \\ .0000 \end{gathered}$ | $\begin{gathered} 210000 \\ .0000 \end{gathered}$ | $\begin{gathered} 210000 \\ .0000 \end{gathered}$ | $\begin{gathered} 210000 \\ .0000 \end{gathered}$ | $\begin{gathered} 210000 \\ .0000 \end{gathered}$ |
| Shear modulus [ $\left.\mathrm{N} / \mathrm{mm}^{2}\right]$ | $\begin{gathered} 810000 \\ .0000 \end{gathered}$ | $\begin{gathered} 810000 \\ .0000 \end{gathered}$ | $\begin{gathered} 810000 \\ .0000 \end{gathered}$ | $\begin{gathered} 810000 \\ .0000 \end{gathered}$ | $\begin{gathered} 810000 \\ .0000 \end{gathered}$ | $\begin{gathered} 810000 \\ .0000 \end{gathered}$ | $\begin{gathered} 810000 \\ .0000 \end{gathered}$ | $\begin{gathered} 810000 \\ .0000 \end{gathered}$ | $\begin{gathered} 810000 \\ .0000 \end{gathered}$ |
| Surface treatment |  |  |  |  |  |  |  |  |  |
| Passivated galvanized $275 \mathrm{~g} / \mathrm{m} 2<=20 \mathrm{micron}$ | $\bullet$ | $\bullet$ | - | - | - | - | - | $\bullet$ | - |
| Section data |  |  |  |  |  |  |  |  |  |
| Y axis |  |  |  |  |  |  |  |  |  |
| Distance from notc e1[mm] | 10.8425 | 21.0812 | 26.5721 | 31.5584 | 36.6436 | 20.6000 | 41.3000 | 62.0519 | 72.0000 |
| Distance from groove back e2[mm] | -9.7575 | -20.2188 | -25.4279 | -30.4416 | -35.3564 | -20.6000 | -41.3000 | -61.9481 | -72.0000 |
| Distance from shear axis $\mathrm{Zm}(\mathrm{A}$ of G$)$ <br> [mm] | -20.5000 | 40.0000 | -51.8000 | -61.7580 | -71.1000 | 0.0000 | 0.0000 | -20.4000 | 0.0000 |
| Moment of inertia $\quad \mathrm{ly}\left[\mathrm{cm}^{4}\right]$ | 0.9575 | 5.5808 | 11.8340 | 18.6580 | 29.6984 | 5.2646 | 32.3072 | 120.8188 | 188.2736 |
| Section modulus $\quad \mathrm{Wy}_{1}\left[\mathrm{~cm}^{3}\right]$ | 0.8831 | 2,6473 | 4.4535 | 5.9122 | 8.1047 | 2.5557 | 7.8226 | 19.4706 | 26.1491 |
| Opening downwards $\mathrm{Wy}_{2}\left[\mathrm{~cm}^{3}\right]$ | 0.9813 | 2.7602 | 4.6539 | 6.1291 | 8.3997 | 2.5557 | 7.8226 | 19.5032 | 26.1491 |
| Radius of gyration iy[cm] | 0.7378 | 1.4690 | 1.7941 | 2.1136 | 2.4003 | 1.2233 | 2.4992 | 3.6988 | 4.2734 |
| Allowable bending moment $\mathrm{My}[\mathrm{Nm}]$ | 172.2043 | 499.0101 | 868.4410 | 1133.6668 | 1527.7282 | 498.3527 | 1474.5547 | 3670.2079 | 4929.1073 |
| Z axis |  |  |  |  |  |  |  |  |  |
| Moment of inertia $\quad \mathrm{Iz}\left[\mathrm{cm}^{4}\right]$ | 4.6272 | 7.6806 | 11.1749 | 13.0593 | 15.9046 | 9.2544 | 15.3611 | 27.0795 | 31.8092 |
| Section modulus $\mathrm{Wz} 1\left[\mathrm{~cm}^{3}\right]$ | 2.31 | 3.81 | 5.54 | 6.48 | 7.89 | 4.59 | 7.62 | 13.43 | 15.76 |
| Resistance moment $\mathrm{Wz}\left[\mathrm{cm}^{3}\right]$ | 2.2964 | 3.8117 | 5.5458 | 6.4810 | 7.8931 | 4.5927 | 7.6234 | 13.4389 | 15.7862 |
| Revolving half-sum play $\mathrm{Iz}[\mathrm{cm}]$ | 1.6219 | 1.7233 | 1.7434 | 1.7683 | 1.7565 | 1.6219 | 1.7233 | 1.7511 | 1.7565 |

## BM Single RapidStrut Cantilever Arms

The bearing capacity value is calculated according to the allowable stress of channel steel, $\sigma z u l$
(According to the technical data of channel steel cross section),
deflectionL/200


Single span simply supported Mid-span concentrated load simply supported


Span,L(mm)


Span,L(mm)


| Maximum load, F(kN)/Deflection,f(mm) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPAN | BM-21 |  | BM-41 |  | BM-52 |  | BM-62 |  | BM-72 |  | BM-21D |  | BM-41D |  | BM-52-72D |  | BM-72D |  |
| $\mathrm{L}(\mathrm{mm})$ | $\begin{aligned} & \mathrm{F}(\mathrm{kN}) \\ & \text { max. } \end{aligned}$ | $\begin{aligned} & \mathrm{f}(\mathrm{~mm}) \\ & \mathrm{L} / 200 \end{aligned}$ | $F(k N)$ max. | $\begin{aligned} & \mathrm{f}(\mathrm{~mm}) \\ & \mathrm{L} / 200 \end{aligned}$ | $\begin{aligned} & \mathrm{F}(\mathrm{kN}) \\ & \max . \end{aligned}$ | $\begin{aligned} & \mathrm{f}(\mathrm{~mm}) \\ & \mathrm{L} / 200 \end{aligned}$ | $\begin{aligned} & \mathrm{F}(\mathrm{kN}) \\ & \max . \end{aligned}$ | $\begin{aligned} & \mathrm{f}(\mathrm{~mm}) \\ & \mathrm{L} / 200 \end{aligned}$ | F(kN) max. | $\begin{aligned} & \mathrm{f}(\mathrm{~mm}) \\ & \mathrm{L} / 200 \end{aligned}$ | $\begin{aligned} & \mathrm{F}(\mathrm{kN}) \\ & \max . \end{aligned}$ | $f(\mathrm{~mm})$ L/200 | F(kN) max. | $\begin{aligned} & \mathrm{f}(\mathrm{~mm}) \\ & \mathrm{L} / 200 \end{aligned}$ | F(kN) max. | $\begin{aligned} & \mathrm{f}(\mathrm{~mm}) \\ & \mathrm{L} / 200 \end{aligned}$ | F(kN) max. | $\begin{aligned} & \mathrm{f}(\mathrm{~mm}) \\ & \mathrm{L} / 200 \end{aligned}$ |
| 250 | 2.72 | 0.54 | 8.13 | 0.28 | 13.70 | 0.23 | 20.90 | 0.22 | 24.96 | 0.17 | 7.74 | 0.33 | 23.78 | 0.17 | 29.78 | 0.19 | 68.57 | 0.08 |
| 500 | 1.36 | 2.16 | 4.06 | 1.13 | 6.85 | 0.91 | 10.45 | 0.89 | 12.48 | 0.66 | 3.87 | 1.32 | 11.89 | 0.66 | 14.89 | 0.75 | 34.28 | 0.32 |
| 750 | 0.70 | 3.75 | 2.71 | 2.54 | 4.57 | 2.04 | 6.97 | 2.00 | 8.32 | 1.49 | 2.58 | 2.97 | 7.93 | 1.49 | 9.93 | 1.69 | 22.86 | 0.73 |
| 1000 | 0.39 | 5.00 | 2.03 | 4.53 | 3.42 | 3.63 | 5.22 | 3.56 | 6.24 | 2.65 | 1.66 | 5.00 | 5.94 | 2.65 | 7.44 | 3.01 | 17.14 | 1.29 |
| 1250 | 0.25 | 6.25 | 1.44 | 6.25 | 2.74 | 5.67 | 4.18 | 5.57 | 4.99 | 4.14 | 1.06 | 6.25 | 4.76 | 4.14 | 5.96 | 4.70 | 13.71 | 2.02 |
| 1500 | 0.18 | 7.50 | 1.00 | 7.50 | 2.10 | 7.50 | 2.96 | 7.50 | 4.16 | 5.94 | 0.74 | 7.50 | 3.96 | 5.96 | 4.96 | 6.77 | 11.43 | 2.91 |
| 1750 | 0.13 | 8.75 | 0.73 | 8.75 | 1.54 | 8.75 | 2.18 | 8.75 | 3.57 | 8.12 | 0.54 | 8.75 | 3.33 | 8.75 | 4.41 | 8.75 | 9.80 | 3.96 |
| 2000 | 0.10 | 10.00 | 0.56 | 10.00 | 1.18 | 10.00 | 1.67 | 10.00 | 2.94 | 10.00 | 0.42 | 10.00 | 2.55 | 10.00 | 3.37 | 10.00 | 8.57 | 5.17 |
| 2250 | 0.08 | 11.25 | 0.44 | 11.25 | 0.93 | 11.25 | 1.32 | 11.25 | 2.32 | 11.25 | 0.33 | 11.25 | 2.02 | 11.25 | 2.67 | 11.25 | 7.62 | 6.55 |
| 2500 | 0.06 | 12.50 | 0.36 | 12.50 | 0.76 | 12.50 | 1.07 | 12.50 | 1.88 | 12.50 | 0.27 | 12.50 | 1.63 | 12.50 | 2.16 | 12.50 | 6.86 | 8.08 |
| 2750 | 0.05 | 13.75 | 0.30 | 13.75 | 0.62 | 13.75 | 0.88 | 13.75 | 1.56 | 13.75 | 0.22 | 13.75 | 1.35 | 13.75 | 1.79 | 13.75 | 5.98 | 13.75 |
| 3000 | 0.04 | 15.00 | 0.25 | 15.00 | 0.52 | 15.00 | 0.74 | 15.00 | 1.31 | 15.00 | 0.18 | 15.00 | 1.13 | 15.00 | 1.50 | 15.00 | 5.02 | 15.00 |
| 3250 | 0.04 | 16.25 | 0.21 | 16.25 | 0.45 | 16.25 | 0.63 | 16.25 | 1.11 | 16.25 | 0.16 | 16.25 | 0.97 | 16.25 | 1.28 | 16.25 | 4.28 | 16.25 |
| 3500 | 0.03 | 17.50 | 0.18 | 17.50 | 0.39 | 17.50 | 0.54 | 17.50 | 0.96 | 17.50 | 0.14 | 17.50 | 0.83 | 17.50 | 1.10 | 17.50 | 3.69 | 17.50 |
| 3750 | 0.03 | 18.75 | 0.16 | 18.75 | 0.34 | 18.75 | 0.47 | 18.75 | 0.84 | 18.75 | 0.12 | 18.75 | 0.73 | 18.75 | 0.96 | 18.75 | 3.21 | 18.75 |
| 4000 | 0.02 | 20.00 | 0.14 | 20.00 | 0.30 | 20.00 | 0.42 | 20.00 | 0.74 | 20.00 | 0.10 | 20.00 | 0.64 | 20.00 | 0.84 | 20.00 | 2.82 | 20.00 | BM Channel steel products

## Corbel BearingCapacity Table

| CORBEL MODEL | $\mathrm{L}(\mathrm{mm})$ | Load type1: uniform distribution F1*4, L FIn [H] | Load type2: <br> Concentration | Load type3: | Load type4: | Load type5: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BM-21/30 | 300 | 894 | 894 | 335 | 447 | 298 |
| BM-21/450 | 350 | 397 | 477 | 149 | 223 | 144 |
| BM-41/300 | 300 | 2680 | 2680 | 1340 | 1340 | 893 |
| BM-41/450 | 450 | 1787 | 1787 | 868 | 893 | 596 |
| BM-41/600 | 600 | 1302 | 1340 | 488 | 670 | 447 |
| BM-41/1000 | 1000 | 469 | 563 | 176 | 264 | 170 |
| BM-52/450 | 450 | 3006 | 3006 | 1503 | 1503 | 1002 |
| BM-52/600 | 600 | 2254 | 2254 | 1035 | 1127 | 751 |
| BM-72/450 | 450 | 5470 | 5470 | 2735 | 2735 | 1823 |
| BM-72/600 | 600 | 4102 | 4102 | 2051 | 2051 | 1367 |
| BM-21D/300 | 300 | 2587 | 2587 | 1294 | 1294 | 862 |
| BM-21D/450 | 450 | 1725 | 1725 | 819 | 862 | 575 |
| BM-21D/600 | 600 | 1228 | 1293 | 461 | 647 | 431 |
| BM-41D/1000 | 1000 | 2376 | 2376 | 1018 | 1188 | 792 |

## Corbel load value table(corbels and braces)

| CORBEL MODEL | BRACE | $\mathrm{L}(\mathrm{mm})$ | Load type1: uniform distribution | Load type2: <br> Concentration | Load type3: | Load type4: | Load type5: |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BM-21/450 | BM-MKS | 450 | 4860 | 1270 | 468 | 2160 | 1917 |
| BM-41/450 | BM-MKS | 450 | 57541 | 3560 | 2475 | 2871 | 1917 |
| BM-41/600 | BM-MKS | 600 | 5118 | 2660 | 2556 | 2556 | 1701 |
| BM-41/1000 | BM-MKS | 1000 | 2020 | 3060 | 387 | 1530 | 1017 |
| BM-52/450 | BM-MKS | 450 | 5765 | 4970 | 2682 | 2880 | 1932 |
| BM-52/600 | BM-MKS | 600 | 5076 | 3630 | 2832 | 2534 | 1697 |
| BM-72/450 | BM-MKS | 450 | 5742 | 5740 | 2871 | 2871 | 1907 |
| BM-72/600 | BM-MKS | 600 | 5112 | 5110 | 2556 | 2556 | 1701 |
| BM-21D/450 | BM-MKS | 450 | 5742 | 3640 | 2529 | 2871 | 1908 |
| BM-21D/600 | BM-MKS | 600 | 5112 | 2730 | 2556 | 2556 | 1701 |
| BM-41D/1000 | BM-MKS | 1000 | 3040 | 3040 | 1754 | 1764 | 1008 |

## SHORT BRACE:BM-XC/LONG BRACE :BM-CXC

[^0]

| SK(mm) | BM-21 <br> $(\mathrm{kN})$ | $\mathrm{BM}-41$ <br> $(\mathrm{kN})$ | $\mathrm{BM}-52$ <br> $(\mathrm{kN})$ | $\mathrm{BM}-62$ | $\mathrm{BM}-72$ <br> $(\mathrm{kN})$ | $\mathrm{BM}-21 \mathrm{D}$ <br> $(\mathrm{kN})$ | $\mathrm{BM}-41 \mathrm{D}$ <br> $(\mathrm{kN})$ | $\mathrm{BM}-52-72 \mathrm{D}$ <br> $(\mathrm{kN})$ | $\mathrm{BM}-72 \mathrm{D}$ <br> $(\mathrm{kN})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 250 | 24.36 | 36.28 | 54.07 | 60.04 | 72.96 | 51.82 | 72.60 | 125.10 | 170.00 |
| 500 | 19.31 | 33.81 | 51.48 | 58.34 | 69.74 | 46.93 | 69.19 | 119.48 | 163.20 |
| 750 | 12.92 | 30.76 | 47.85 | 55.79 | 65.04 | 40.56 | 64.35 | 111.37 | 153.00 |
| 1000 | 8.13 | 26.93 | 43.44 | 48.33 | 59.39 | 32.67 | 58.51 | 101.58 | 134.87 |
| 1250 | 5.53 | 22.50 | 38.15 | 42.85 | 52.59 | 25.08 | 51.48 | 89.80 | 116.73 |
| 1500 | 3.97 | 18.22 | 32.40 | 27.24 | 45.08 | 19.15 | 43.82 | 76.86 | 97.47 |
| 1750 | 3.00 | 14.65 | 26.98 | 31.79 | 37.83 | 14.88 | 36.54 | 64.39 | 81.60 |
| 2000 |  | 11.87 | 22.36 | 26.52 | 31.52 | 11.80 | 30.32 | 53.58 | 66.87 |
| 2250 |  | 9.74 | 18.62 | 22.03 | 26.33 | 9.56 | 25.26 | 44.75 | 55.53 |
| 2500 |  | 8.11 | 15.65 | 18.85 | 22.19 | 7.89 | 21.24 | 37.68 | $47 / 60$ |
| 2750 |  | 6.84 | 13.29 | 16.20 | 18.87 | 6.62 | 18.06 | 32.05 | 39.67 |
| 3000 |  | 5.85 | 11.40 | 13.51 | 16.21 | 5.63 | 15.49 | 27.52 | 34.00 |
| 3250 |  | 5.05 | 9.88 | 11.50 | 14.06 |  | 13.42 | 23.86 | 28.33 |
| 3500 |  | 4.39 | 8.64 | 10.18 | 12.29 |  | 11.73 | 20.86 | 24.93 |
| 3750 |  |  | 7.61 | 9.10 | 10.84 |  | 10.34 | 18.39 | 22.67 |
| 4000 |  |  | 6.75 | 8.00 | 9.62 |  | 9.17 | 16.32 | 20.40 |

## End bearing the form of conversion factor(caluculated length)



## PIPE INSTALLATION SYSTEM



## Finished Bracket Series Products

Installation Instructions

- Cost-effective installation suitable for $90^{\circ}$ angle
- Double locks to double the load capacity


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-001 | 38012102 | Channel steel right angle connector | 6 |

Installation Instructions
Cost-effective installation suitable for $90^{\circ}$ angle

- Suitable for installation of light support system


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-002 | 38012101 | Channel steel right angle connector | 6 |

Installation Instructions

- Support suitable for heavy structures


BM-005B

- Welded side reinforcement plate to prevent channel steel from dislocation during installation


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :--- | :--- | :---: |
| BM-005A | 38012103 | Channel steel right angle connector | 4 |
| BM-005B | 38012103 | Channel steel right angle connector | 4 |

## Finished Bracket Series Products



Installation Instructions
-Suitable for any angle installation of channel steel 90 degree link


- Welded side reinforcement plate to prevent channel steel from dislocation during installation

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-006 | 38012104 | Channel steel right angle connector | 4 |



BM-004A


BM-004B

## Installation Instructions

- Widely used to support heavy pipes, ducts and bridges

- The side reinforcement plate can be designed to improve the bearing capacity of the support

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :--- | :--- | :---: |
| BM-004A | 38012105 | Channel steel four-hole support | 6 |
| BM-004B | 38012106 | Heavy Duty Corner Supports | 6 |

## Finished Bracket Series Products



## Installation Instructions

-45 ${ }^{\circ}$ brace for heavy support


- The side reinforcement plate design prevents the dislocation of the channel steel during installation and improves the bearing capacity at the same time

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| $\mathrm{BM}-007$ | 38012109 | Channel steel bottom $45^{\circ}$ connector | 4 |



## Installation Instructions



- Suitable for quick installation of channel steel T-shaped flat shape

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-008 | 80040105 | Channel steel one-dimensional connector | 6 |



## Installation Instructions

-Suitable for extended series connection of channel steel


- Open link or back hole connection can be selected according to site conditions

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM -009 | 38012110 | Channel steel horizontal splicing piece | 5 |



## Installation Instructions



- It is suitable for directly fixing channel steel on the building structure, with high stability
$\bullet$ Multi-directional fixed connection can be made according to working conditions

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :--- | :--- | :--- |
| BM-010-21 | 80050101 | Channel steel fastener | 5 |
| BM-010-41 | 80050102 | Channel steel fastener | 5 |
| BM-010-52 | 80050103 | Channel steel fastener | 5 |
| BM-010-62 | 80050104 | Channel steel fastener | 5 |
| BM-010-72 | 80050105 | Channel steel fastener | 5 |
| BM-010-82 | 80050106 | Channel steel fastener | 5 |
| BM-010-82S | 80050107 | Channel steel fastener | 5 |



BM-003A


BM-003B


BM-003C

## Installation Instructions

- Suitable for generating corbel structures on concrete and steel structures
- Fasteners can be used to fix on concrete walls, floors, etc.


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-003A | 80020102 | Light channel steel base | 5 |
| BM-003B | 80020101 | Heavy channel steel base | 6 |
| BM-003C | 80040103 | 21 type channel steel base | 4 |



## Installation Instructions

-Suitable for fixed installation of heavy booms and poles
-Can be connected with foundations such as concrete, steel structures, etc.


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :---: | :---: | :---: |
| BM-011A | 80020106 | Channel steel base21-72 | 6 |
| BM-011B | 80020107 | Four-hole channel steel base21-72 | 6 |

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Finished Bracket Series Products


## Installation Instructions



Between the two pieces is a gap active link

- Suitable for fixed installation when seismic anchor bolts are connected with rigid channel steel

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM -050 | 80030201 | Seismic heavy duty stay | 4 |



Installation Instructions


Between the two pieces is a gap active link

- Suitable for fixed installation when seismic anchor bolts are connected with rigid channel steel

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-051 | 80030204 | Seismic heavy duty stay | 6 |

## Finished Bracket Series Products



BM-012


BM-013

## Installation Instructions

- Suitable for fixed installation of heavy booms and poles
- Can be connected with foundations such as concrete, steel structures, etc.


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-012 | 80020104 | 41D Channel steel base | 6 |
| BM-013 | 80020105 | 41D Channel steel heavy base | 6 |

Installation Instructions


Cost-effective installation suitable for $45^{\circ}$ angle

- Double locks to double the load capacity

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-056 | 38012807 | Channel steel $45^{\circ}$ connector | 6 |

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## Finished Bracket Series Products



Installation Instructions
-Suitable for fixed installation of double channel steel

-Suitable for the production of secondary platform structures

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-3013 | 80030105 | Channel steel grille hanger | 6 |



## Installation Instructions

- Suitable for fixed installation of double channel steel
- It is suitable for the conversion connection between the screw and
 the channel steel under the grid structure

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM -3014 | 80030106 | Channel steel screw adapter | 6 |

## Finished Bracket Series Products



Plastic wing nut


Spring Nut

## Installation Instructions

- Fastening elements suitable for channel fastening
- After installation in place, the nut and the channel steel are accurately engaged

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :--- | :--- | :---: |
| BM015-8 | 70020101 | Plastic wing nut M8 | 8 |
| BM015-10 | 70020102 | Plastic wing nut M10 | 9 |
| BM015-12 | 70020103 | Plastic wing nut M12 | 9 |
| BM015-16 | 70020108 | Plastic wing nut M16 | 9 |
| BM015A-8 | 70020204 | Spring Nut M8 | 8 |
| BM015A-10 | 70020205 | Spring Nut M10 | 9 |
| BM015A-12 | 70020206 | Spring Nut M12 | 9 |
| BM015A-16 | 70020207 | Spring Nut M16 | 9 |



## Installation Instructions

Suitable for fast and efficient fixing of tube bundles to channels


- Rotate and install in place, simple and fast

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM016-10 | 70030106 | Channel steel buckle pad M10 | 8 |
| BM016-12 | 70030107 | Channel steel buckle pad M12 | 9 |



BM017



BM017K

Installation Instructions:BM017
$\bullet$ Suitable for hoisting of channel steel

- It can be used with the lock instead of the tube bundle buckle pad to install the tube bundle

BM017U $\leqslant$ Suitable for hoisting of channel steel $\bullet$ Prevent the expansion of channel steel
BMO17K Use with open anti-vibration hinges

- It can be used with the lock instead of the tube bundle buckle pad to install the tube bundle

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME <br> $(\mathrm{mm})$ |  |
| :--- | :---: | :--- | :---: |
| BM017-12 | 70030101 | Channel steel gusset plate M12 | 5 |
| BM017-16 | 70030102 | Channel steel gusset plate M16 | 5 |
| BM017-12U | 70030103 | U-shaped channel steel buckle plate M12 | 4 |
| BM017-16U | 70030104 | U-shaped channel steel buckle plate M16 | 4 |
| BM017-12K | 70030105 | Open U-shaped channel steel buckle plate M12 | 4 |
| BM017-16K | 70030106 | Open U-shaped channel steel buckle plate M16 | 4 |



## Installation Instructions

Optimizing the connection of channel steel in 2D/3D orientation
Quick connect to form multi-directional bracket joints

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :--- | :--- | :---: |
| Bm019 A-3D | 80040103 | 2D connector | 5 |
| Bm019 B-3D | 80040104 | 3D connector | 5 |

## Finished Bracket Series Products



Bm020 P type tube bundle


M-022 Thermoplastic U-type Card

## Installation Instructions

-Suitable for directly fixing pipes on the open surface of channel steel
-Suitable for installation in small spaces and dense pipelines

- The P-type card must be fully embedded in the channel steel flange to ensure the load
- Simple and fast installation, saving construction time

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :--- | :--- | :--- |
| BM-020 1/2 | 50030101 | P-type pipe clamp DN15 | 1.5 |
| BM-020 3/4 | 50030102 | P-type pipe clamp DN20 | 1.5 |
| BM-020 1 | 50030103 | P-type pipe clamp DN25 | 1.5 |
| BM-020 1-1/4 | 50030104 | P-type pipe clamp DN32 | 1.5 |
| BM-020 1-1/2 | 50030105 | P-type pipe clamp DN40 | 1.5 |
| BM-020 2 | 50030106 | P-type pipe clamp DN50 | 1.5 |
| BM-020 2-1/2 | 50030107 | P-type pipe clamp DN65 | 2.0 |
| BM-020 3 | 50030108 | P-type pipe clamp DN80 | 2.0 |
| BM-020 4 | 50030109 | P-type pipe clamp DN100 | 2.0 |
| BM-020 5 | 50030110 | P-type pipe clamp DN125 | 2.5 |
| BM-020 6 | 50030111 | P-type pipe clamp DN150 | 2.5 |
| BM-020 8 | 50030112 | P-type pipe clamp DN200 | 3.0 |
| BM-020 10 | 50030113 | P-type pipe clamp DN250 | 3.0 |



## Installation Instructions

- Suitable for the installation of the upper and lower flanges of I-beam and H-beam
- It is suitable for the installation of single-pipe flexible hoisting with DN65 and below specifications

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :---: | :---: | :---: |
| BM-025-10 | 80070002 | Tiger's mouth clip M10 | 8 |
| BM $-025-12$ | 80070003 | Tiger's mouth clip M12 | 8 |



## Installation Instructions

Suitable for the installation of the upper and lower flanges of I-beam and H-beam
$\rightarrow$ It is suitable for the installation of the last rooting of the I-beam structure

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :--- | :--- | :---: |
| BM $-026-21$ | 80070101 | Steel structure beam clamp21 | 6 |
| BM $-026-41$ | 80070102 | Steel structure beam clamp41 | 6 |
| BM $-026-82$ | 80070103 | Steel structure beam clamp82 | 6 |



## Installation Instructions

- Suitable for the installation of the upper flange of I-beam and H-beam
-Suitable for flexible anti-seismic and beam top screw inclined-pull installations

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-027 | 80070104 | Beam top steel beam clamp | 6 |



## Installation Instructions

Suitable for installation of pipelines between I-beam flanges

- Suitable for installation of $41 \times 41$ channel steel


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM -028 | 80070105 | Beam clamps between steel beams | 8 |

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## Installation Instructions

Suitable for installation of I-beam and H-beam columns
-Suitable for horizontal and vertical installation of large-scale pipelines on the column side

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM -029 | 80070106 | Universal steel beam clamp | 10 |



## Installation Instructions



- Suitable for the installation of the upper and lower flanges of I-beam and H-beam
- It is suitable for the installation of the last rooting of the I-beam structure

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-030 | 80070107 | T-shaped steel structure beam clamp | 8 |

## FIXING SOLUTIONS



## Installation Instructions



- Suitable for installation of I-beam lower flange
- It is suitable for rooting and installation of the secondary structure in the vertical direction of the I-beam

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-031 | 80070108 | Embedded beam clamps | 6 |



## Installation Instructions

Suitable for installation of I-beam and H -beam lower flange

- It is suitable for the installation of the secondary structure rooting in the parallel direction of the I-beam

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :---: | :---: | :---: |
| BM-032-41 | 80070109 | Wrapped Beam Clamps41 | 6 |
| BM-032-82 | 80070110 | Wrapped Beam Clamps72 | 6 |



Installation Instructions

- Suitable for bridge bracket installation

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-062 | 80030102 | Bridge connector A | 6 |



Installation Instructions

- Suitable for bridge bracket installation

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-063 | 80030104 | Bridge connector B | 6 |

## Installation Instructions

- Universal diagonal connection fixture
- Can be directly connected to channel steel or support arm, suitable for tie rods


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM -061 | 80030103 | Universal hinge | 5 |



## Installation Instructions

- Suitable for a wide range of anchor installations
$\rightarrow$ Make sure that the minimum burial depth meets the requirements
Select the corresponding drill bit for drilling and installation

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :---: | :---: | :---: |
| BM-G01-8 | 99881001 | Mechanical Anchor M8 | 8 |
| BM-G01-10 | 99881002 | Mechanical Anchor M10 | 10 |
| BM-G01-12 | 99881003 | Mechanical Anchor M12 | 12 |
| BM-G01-16 | 99881004 | Mechanical Anchor M16 | 16 |



## Installation Instructions

- Concrete fixing solution suitable for small margins and small spacing
- Suitable for working conditions with seismic requirements
- Be sure to use a knock socket for installation


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :---: | :---: | :---: | :---: |
| BM-G02-10 | 99881005 | Rear expanded bottom mechanical anchor M10 | 10 |
| BM-G02-12 | 99881006 | Rear expanded bottom mechanical anchor M12 | 12 |
| BM-G02-16 | 99881007 | Rear expanded bottom mechanical anchor M16 | 16 |

## FIXING SOLUTIONS



## FIXING SOLUTIONS



## Installation Instructions

- Suitable for a wide range of channel steel fixed installations
-Bolts of the right length and strength

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | LENGTH <br> $(\mathrm{m})$ |
| :---: | :---: | :---: | :---: |
| BM-G05-8(75m/package) | 90060101 | Full thread screw M8 | 3 |
| BM-G05-10(60m/package) | 90060102 | Full thread screw M10 | 3 |
| BM-G05-12(30m/package) | 90060103 | Full thread screw M12 | 3 |
| BM-G05-16(15m/package) | 90060104 | Full thread screw M16 | 3 |



## Installation Instructions

- Suitable for a wide range of channel steel fixed installations
-Cooperate with the screw for tightening
- Flange face enhances anti-skid performance

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | LENGTH <br> $(\mathrm{mm})$ |
| :--- | :--- | :--- | :---: |
| BM-G06-8 | 90050101 | Hexagon long nutM8 | 40 |
| BM-G06-10 | 90050102 | Hexagon long nutM10 | 50 |
| BM-G06-12 | 90050103 | Hexagon long nutM12 | 55 |
| BM-G06-16 | 90050104 | Hexagon long nut M16 | 55 |

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## FIXING SOLUTIONS

## Installation Instructions

- It is applicable to the end protection of 21-72 channel steel - Prevent oxidation and rust on the cut surface of channel steel
- Protect workers from scratches during installation
- Simple and fast installation, saving construction time

-Color: red, white, blue

| PRODUCT <br> Abbreviation | PRODUCT NUMBER | PRODUCT NAME | SPECIFICATION | Matching channel <br> steel | WEIGHT <br> $(\mathrm{g})$ |
| :---: | :--- | :---: | :---: | :---: | :---: |
| BM-019/21 | Channel steel end cap 21 | 90010401 | 21 | $41 \times 21$ | 3 |
| BM-019/41 | Channel steel end cap 41 | 90010402 | 41 | $41 \times 41$ | 6 |
| BM-019/52 | Channel steel end cap52 | 90010403 | 52 | $41 \times 52$ | 7 |
| BM-019/62 | Channel steel end cap 62 | 90010404 | 62 | $41 \times 62$ | 8 |
| BM-019/72 | Channel steel end cap 72 | 90010405 | 72 | $41 \times 72$ |  |
| BM-019/82 | Channel steel end cap 82 | 90010406 | 82 | $41 \times 82$ |  |



## Installation Instructions

- It is applicable to the end protection of 21-72 channel steel
- Prevent oxidation and rust on the cut surface of channel steel

- Protect workers from scratches during installation
- Simple and fast installation, saving construction time

| PRODUCT Abbreviation | PRODUCT NUMBER | Matching channel <br> steel | Packaging Quantity <br> $(\mathrm{m})$ |
| :--- | :---: | :---: | :---: |
| Channel steel rubber strip | 90010407 | 41 type | 100 |
| Channel steel PVC rigid cover plate | 90010408 | 41 type | 3 |

## SEISMIC BRACING SYSTEM



Example diagram of single-tube seismic resistance

Integrated pipeline engineering system design service provider
Seismics Bracing Systems

## BM seismic transfer parts BM

## Seismic Hinged Parts BMK-2005, 2006



BMK-2005
BMK-2006

## Features and Advantages

- Simple and fast installation, can adapt to various installation angles
-Seismic support for longitudinal and lateral
- Manufactured according to DIN EN 10025

-Galvanized: Electrogalvanized,Fe/Zn13 $\mu \mathrm{m}$

| PRODUCT <br> Abbreviation | SPECIFICATION | PRODUCT NUMBER | RECOMMENDED <br> FORCE VALUE | LOCKING TORQU | PACKAGING <br> (pCS) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BMK-2005 | M 12 | 60010101 | $4 K N$ | $50 \mathrm{~N} . \mathrm{m}$ | 30 |
| BMK-2006 | M 12 | 60010102 | $4 K N$ | $50 \mathrm{~N} . \mathrm{m}$ | 30 |

## Seismic Adapter BMK-2010

## Features and Advantages

- Simple and fast installation, can adapt to various installation angles
-Seismic support for longitudinal and lateral
- Manufactured according to DIN EN 10025


BMK-2010
-Galvanized: Electrogalvanized,Fe/Zn13 $\mu \mathrm{m}$

| PRODUCT <br> Abbreviation | SPECIFICATION | PRODUCT NUMBER | RECOMMENDED <br> FORCE VALUE | LOCKING TORQU | PACKAGING <br> (pCS) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BMK-2010 | M12 | 60010110 | $9 K N$ | $50 \mathrm{~N} . \mathrm{m}$ | 50 |



## Installation Instructions


-Suitable for fixed installation of anti-vibration screw reinforcement channel steel

- The quantity used is greater than or equal to 2

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :---: | :---: | :---: |
| BMK-2003 | 60010103 | Press-through antitvibra ion base type A | 10 |

## Installation Instructions

-Surface Treatment Electro Galvanized (EG) or Hot Dip Galvanized (HDG)

- There is no need to use a torque wrench to break the double-ended bolt until the bolt head falls off, which simplifies the installation and inspection of the seismic support
- Swivel-type fixed connection for longitudinal and lateral seismic bracing applications
- The innovative design makes installation easy, saving time and money


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :---: | :---: | :---: |
| BMK-2004 | 60010104 | Press-through anti-vibration base type B | 10 |



P type insulation tube bundle


Vermiculite Sliding Bracket


## Installation Instructions

- Suitable for installation of cooling water and thermal insulation pipelines

Refractory material reaches B2 flame retardant grade, density $300 \mathrm{~kg} / \mathrm{m} 3$

- Insulation Class A: 50mm

| PRODUCT Abbreviation | PRODUCT NUMBER | INSULATION THICKNESS <br> (mm) |
| :--- | :--- | :--- |
| BM023-1/2 | Ptype insulation pipe clamp DN15 | 30 |
| BM023-3/4 | Ptype insulation pipe clamp DN20 | 30 |
| BM023-1 | Ptype insulation pipe clamp DN25 | 30 |
| BM023-1-1/4 | Ptype insulation pipe clamp DN32 | 30 |
| BM023-1-1/2 | Ptype insulation pipe clamp DN40 | 30 |
| BM023-2 | Ptype insulation pipe clamp DN50 | 30 |
| BM023-2-1/2 | Ptype insulation pipe clamp DN65 | 30 |
| BM023-3 | Ptype insulation pipe clamp DN80 | 40 |
| BM023-4 | Ptype insulation pipe clamp | DN100 |

## Thermostat card



## Installation Instructions


-Suitable for installation of cooling water and thermal insulation pipelines

- Refractory material reaches B1 flame retardant grade, density $300 \mathrm{~kg} / \mathrm{m} 3$

| PRODUCT Abbreviation |  | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :--- | :---: |
| BM024-1/2 | ORODUcT NAME | 30 |
| BM024-3/4 | O type insulation pipe clamp DN20 | 30 |
| BM024-1 | O type insulation pipe clamp DN25 | 30 |
| BM024-1-1/4 | O type insulation pipe clamp DN32 | 30 |
| BM024-1-1/2 | O type insulation pipe clamp DN40 | 30 |
| BM024-2 | O type insulation pipe clamp DN50 | 30 |
| BM024-2-1/2 | O type insulation pipe clamp DN65 | 30 |
| BM024-3 | O type insulation pipe clamp DN80 | 40 |
| BM024-4 | O type insulation pipe clamp DN100 | 40 |
| BM024-5 | O type insulation pipe clamp DN125 | 40 |
| BM024-6 | O type insulation pipe clamp DN150 | 40 |
| BM024-8 | O type insulation pipe clamp DN200 | 50 |
| BM024-10 | O type insulation pipe clamp DN250 | 50 |

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## Seismics Bracing Systems



Installation Instructions


- Do not pull the pipe in the clamp
- Adjustable nuts at both ends realize one specification of pipe clamps, which can be applied to pipes of various specifications. The hoisting form is recommended.

| PRODUCT Abbreviation | PRODUCT NUMBER | PRODuct NAME | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :---: | :--- | :---: |
| BM021-1/2 | 50010101 | Standard Tube Bundle DN15 | 1.5 |
| BM021-3/4 | 50010102 | Standard Tube Bundle DN20 | 1.5 |
| BM021-1 | 50010103 | Standard Tube Bundle DN25 | 1.5 |
| BM021-1-1/4 | 50010104 | Standard Tube Bundle DN32 | 1.5 |
| BM021-1-1/2 | 50010105 | Standard Tube Bundle DN40 | 1.5 |
| BM021-2 | 50010106 | Standard Tube Bundle DN50 | 1.5 |
| BM021-2-1/2 | 50010108 | Standard Tube Bundle DN80 | 2.0 |
| BM021-3 | 50010109 | Standard Tube Bundle DN100 | 2.0 |
| BM021-4 | 50010110 | Standard Tube Bundle DN125 | 2.5 |
| BM021-5 | 50010111 | Standard Tube Bundle DN150 | 2.5 |
| BM021-6 | 50010112 | Standard Tube Bundle DN200 | 3.0 |
| BM021-8 | 50010113 | Standard Tube Bundle DN250 | 4.0 |
| BM021-10 |  |  | 2.0 |

## Seismics Bracing Systems

## Installation Instructions

- It is suitable for the design application when a single tube is used for seismic support
- The rooting point on the pipe clamp in the design of the seismic support should be at the connection between the boom and the pipe clamp


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | SPECIFICATION | THICKNESS <br> $(\mathrm{mm})$ |
| :--- | :---: | :--- | :---: | :---: |
| BM-K2012-2 1/2 | 60020101 | Anti-vibration U-shaped pipe clamp Dn65 | 40 | 5 |
| BM-K2012-3 | 60020102 | Anti-vibration U-shaped pipe clamp Dn80 | 40 | 5 |
| BM-K2012-4 | 60020103 | Anti-vibration U-shaped pipe clamp Dn100 | 40 | 5 |
| BM-K2012-5 | 60020104 | Anti-vibration U-shaped pipe clamp Dn125 | 40 | 5 |
| BM-K2012-6 | 60020105 | Anti-vibration U-shaped pipe clamp Dn150 | 40 | 5 |
| BM-K2012-8 | 60020106 | Anti-vibration U-shaped pipe clamp DN200 | 40 | 5 |

## Installation Instructions

- Use fisheye bolts to connect boom and pipe clamps

- It is suitable for the design and application of seismic support for high-temperature steam heavy-duty pipelines covered with thermal insulation materials of more than 100 mm , and the maximum applicable temperature is $370^{\circ} \mathrm{C}$.
- The rooting point on the pipe clamp in the design of the seismic support should be at the connection between the boom and the pipe clamp.

| PRODUCT <br> Abbreviation | PRODUCT <br> NUMBER | PRODUCT NAME | SPECIFICATION | BOLT <br> SPECIFICATIONS |
| :--- | :---: | :---: | :---: | :---: |
| BM-K2011-76 | 60030101 | Double-clamp anti-vibration pipe clamps DN65 | 40 | M12 $\times 45$ |
| BM-K2011-89 | 60030102 | Double-clamp anti-vibration pipe clamps DN80 | 40 | M12 $\times 45$ |
| BM-K2011-114 | 60030103 | Double-clamp anti-vibration pipe clamps DN100 | 40 | M12 $\times 45$ |
| BM-K2011-140 | 60030104 | Double-clamp anti-vibration pipe clamps DN125 | 40 | M12 $\times 45$ |
| BM-K2011-165 | 60030105 | Double-clamp anti-vibration pipe clamps DN150 | 40 | M12 $\times 45$ |
| BM-K2011-219 | 60030106 | Double-clamp anti-vibration pipe clamps DN200 | 40 | M12 $\times 45$ |
| BM-K2011-273 | 60030107 | Double-clamp anti-vibration pipe clamps DN250 | 40 | M12 $\times 45$ |
| BM-K2011-324 | 60030108 | Double-clamp anti-vibration pipe clamps DN300 | 50 | M12 $\times 45$ |
| BM-K2011-356 | 60030115 | Double-clamp anti-vibration pipe clamps DN350 | 50 | M12 $\times 45$ |

Integrated pipeline engineering system design service provider

## Seismics Bracing Systems

## Installation Instructions

- Suitable for the installation of heavy oil and other medium heavy-duty pipelines
- According to the requirements, you can choose whether to install the engineering plastic backing plate at the lower part of the pipeline
- Suitable for fixing pipes on steel structures and concrete


| PRODUCT Abbreviation | PRODUCT NUMBER | PRODUCT NAME | THICKNESS (mm) |
| :---: | :---: | :---: | :---: |
| BM022-1/2 | 60040101 | Ohm type pipe clamp 1/2 | 3 |
| BM022-3/4 | 60040102 | Ohm type pipe clamp 3/4 | 3 |
| BM022-1 | 60040103 | Ohm type pipe clamp 1 | 3 |
| BM022-1-1/4 | 60040104 | Ohm type pipe clamp 1-1/4 | 3 |
| BM022-1-1/2 | 60040105 | Ohm type pipe clamp 1-1/2 | 3 |
| BM022-2 | 60040106 | Ohm type pipe clamp 2 | 3 |
| BM022-3 | 60040107 | Ohm type pipe clamp 2-1/2 | 4.5 |
| BM022-3-1/2 | 60040108 | Ohm type pipe clamp 3 | 4.5 |
| BM022-4 | 60040109 | Ohm type pipe clamp 4 | 4.5 |
| BM022-5 | 60040110 | Ohm type pipe clamp 5 | 4.5 |
| BM022-6 | 60040111 | Ohm type pipe clamp 6 | 4.5 |
| BM022-8 | 60040112 | Ohm tvpe pipe clamp 8 | 4.5 |
| BM02 |  |  |  |
| BM022-12 | 60040114 | Ohm type pipe clamp12 | 6 |
| BM022-14 | 60040115 | Ohm type pipe clamp 14 | 6 |
| BM022-16 | 60040116 | Ohm type pipe clamp 16 | 6 |

## Installation Instructions

- The design of one-piece pipe damp makes the installation more convenient
- Reduce the number of pipe clamps, lower costs
- Adopt mixed gas shielded welding, high strength a nd good safety
- Minimum specification DN65


| PRODUCT NUMBER | PRODUCT NAME | SPECIFICATION |
| :--- | :--- | :---: |
| 60050101 | Integrated anti-vibration pipe clampDN65 | $40 \times 5$ |
| 60050102 | Integrated anti-vibration pipe clampDN80 | $40 \times 5$ |
| 60050103 | Integrated anti-vibration pipe clampDN80 | $40 \times 5$ |
| 60050104 | Integrated anti-vibration pipe clampDN100 | $40 \times 5$ |
| 60050105 | Integrated anti-vibration pipe clampDN125 | $40 \times 5$ |
| 60050106 | Integrated anti-vibration pipe clampDN150 | $40 \times 5$ |
| 60050107 | Integrated anti-vibration pipe clampDN200 | $40 \times 5$ |
| 60050108 | Integrated anti-vibration pipe clampDN250 | $40 \times 5$ |

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## CAST-IN SYSTEM



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## CASTIN SYSTEMS



| Custom arc channel |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Channel | BMT-53 | BMT-41 | SYT-38 | BMT-29 |
| mini Ri [m] | 0.5 | 0.5 | 0.5 | 0.5 |
| mini Ra[m] | 2.5 | 2 | 2.5 | 2.5 |
| Mini channel length min.L[m] | 1.5 | 1 | 0.5 | 0.5 |
| Max channel length min.L[m] | 5.8 | 5.8 | 5.8 | 5.8 |


| Embedded C-section steel <br> BMK-41 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Bearing capacity design value |  |  |
|  | Tensile design value $\mathrm{N}_{\mathrm{Rd}}$ | Shear design value $\mathrm{V}_{\mathrm{Rd}}$ | carbon steel $[\mathrm{kg} / \mathrm{m}]$ |
|  | 7.3 kN | 7.3 kN | 1.84 |

## Bend Spacing



Pre-Buried Channel Accessories

| T-Bolt |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Applicable channel steel | BM-53 |  |  |  | $\begin{aligned} & \text { BM-41 } \\ & \text { BM-38 } \\ & \text { SYBM } \end{aligned}$ |  |  | SY-29 |  |
| T-bolt model | SBP-18 |  |  |  | SBP-22 |  |  | SBP-14 |  |
| Bolt Specifications | M10 | M12 | M16 | M20 | M10 | M12 | M16 | M10 | M12 |
| Bolt length (mm) | w ì N̈ | w ín © O | $\begin{aligned} & w \\ & \text { ó } \\ & \tilde{\sim} \\ & \text { O} \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{1} \\ & \stackrel{1}{O} \\ & \stackrel{\circ}{8} \end{aligned}$ | $\begin{aligned} & \text { N} \\ & \text { N} \\ & \text { O} \end{aligned}$ | N | N ín O 0 | $\begin{aligned} & \tilde{N} \\ & \text { N} \\ & \tilde{O} \end{aligned}$ | N |

## Engineering Technology - Finished stent technology

## Design and Construction Instructions for Finished Support System

-Single water pipe rigid + flexible bracket (non-insulation + insulation)

- Single Cable Tray Rigid + Flexible Brackets
- Single duct rigid + flexible bracket (rectangular + circular)
- Bridge + water pipe comprehensive bracket rigid + flexible
- Air pipe + water pipe comprehensive bracket rigid + flexible
- Bridge + air pipe comprehensive bracket rigid + flexible
- Hydroelectric Wind comprehensive bracket Rigid + Flexible



# Engineering Technology - Seismic Support Technology 

Design and construction instructions for seismic support system


- Single water pipe anti-vibration bracket (axial + lateral + four directions)
- Single cable tray anti-vibration bracket (axial + lateral + four directions)
-Single circular duct anti-vibration bracket (axial + lateral + four directions)
A single rectangular duct anti-vibration bracket (axial + lateral + four directions)


## Engineering Technology - Scaffolding Rooting Technology



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## Comprehensive finished support and hanger



Rigid bracket installation method


## INSTALLATION CONDITIONS:

1, The bracket avoids rooting on the infill wall and the bottom of the concrete beam.
2. This type of support should be installed on load-bearing members with concrete strength grade $\geq$ C30
3. If the bracket is installed in a humid environment and outdoors, $t$ is recommended to use hot-dip galvanized products.
4, In order to ensure that the anchoring force value of the expansion anchor bolt meets the requirements, the anchor bolt must be driven into the specified depth.

## MATTERS NEEDING ATTENTION:

1. It is recommended to leave a safety margin of 50CM at the lower end of the support pole.

2, The bracket installation should be kept vertical without side bending and skew.

3, Channel steel blanking takes the scale line on the back as the cutting point, do not cut the back hole.

4, The screw joint and the place where the screw rod passes through the cross arm should be up and down and tighten the nut.
5. On-site installers should not place the pipeline directly on the support and drag it.

6, All bracket selection and bracket spacing are subject to the data provided by professional design units.

## DESIGN DESCRIPTION:

1. The vertical rod adopts screw rod, shock absorption and energy reduction

2, The vertical rod is reinforced with channel steel to improve rigidity

3, The diagonal brace connection uses hinged parts, which can effectively absorb shock
4. The seismic check shall calculate the bearing load of the relevant accessories according to the force transfer calculation.

Installation example diagram of single-pipe two-way seismic support and hanger


Installation example diagram of two-way anti-seismic support and hanger for air duct


Installation example diagram of two-way seismic support and hanger of bridge frame

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## Installation Legend of Finished Bracket Part Project

## BUSINESS PROJECT



## Installation Legend of Finished Bracket Part Project

## INDUSTRIAL PROJECT



## Authoritative test report

(1)Overall seismic support testing
(2) Fire performance testing
(3) 2 million times anti-fatigue testing
(4)Channel steel material testing
(5) Rear expansion anchor testing
(6)Physical property testing of channel steel
(7)Mechanical Properties Testing of Seismic Components
(8)Salt spray test of 480 h anticorrosion performance of products
(9)screw performance testing
(10)Pipe gallery bracket testing


## Part of The Project Performance Display

## ACHIEVEMENT presentation

## ※ Commercial and Residential

Huayi (Suzhou) Film and Television City Project Mianyang Wanda Plaza Nanjing Lishui Wanda Project
Changshu AEON Commercial Plaza
Chongqing Macalline
Country Garden - Quanzhou Peach Blossom Bay
China Resources - Wuxi Jiangnan House Project
Sunac - Wuxi Canal City Project
Hongdou Real Estate - Wuxi Tianyi Huafu Project
Gemdale Group-Ningbo Company Wetland E8 Project in Southeast Region

Midea-Yinzhou Shounan Project
China Merchants Real Estate—Ningbo Yongjingwan Project Rongsheng Real Estate Nanjing Flower City Project Rongsheng Real Estate Nanjing Capital Project Rongsheng Real Estate Yixing Lingxiu Capital

## ※Industrial

B.S. Rexroth (Changzhou) Co., Ltd. new plant

Suzhou Samsung Electronics Factory
Marquardt (Weihai, China) Automotive System Switch Project Vissmann (Pinghu) Water Heater New Plant
Changchun FAW Fusheng Hi-tech Phase III New Plant
Inspur Suzhou PCBA Plant Reconstruction Project
Mianyang BOE sixth generation AMOLED production line project Xiamen Tianma Microelectronics
Chengdu Panda Electronics
New 8-inch project of Haichen Semiconductor
Murata New Energy Plant厂
Hefei Visionox sixth-generation flexible production line project
Shenzhen Huaxing OptoeGuangzhou Zengcheng Foxconn Project Guangzhou Zengcheng Foxconn Project
Shanghai Baifan Pharmaceutical
Gree Electric (Chengdu) Industrial Park

## ※ Public construction

Suzhou Fifth Middle School is newly built
Suzhou Yuelanwan Primary School is newly built
Suzhou Dongxihu School
Suzhou Park No. 2 Middle School
Changshu High-tech Park Secondary School Zhongxian Youth Palace
Qian Xuesen No. 2 Primary School in Xi'an High-tech Zon

Fuzhou Software Vocational and Technical College Changshu Third Ring Road Primary School
Changshu Kaiwen Primary School
Sichuan University West China Tianfu Hospital hangshu North Hospital
Nanjing Youth Olympic Sports Park Project Athletics Hall game hall

Underground pipe gallery in Suzhou old town Luoyang South Second Ring Power Pipe Ditch

## ※Transportation and others

Wuhan Tianhe Airport Phase II Reconstruction and Expansion Project

Chengdu Tianfu International Airport Supporting Project

Beijing Subway Line 17 Depot
Beijing Mo Military Airport Hangar Project
Zhengzhou High Speed Railway East Station East Square

Changshu North High Speed Railway Station
Jiashan Equipment Manufacturing Logistics S ettlement Center

## BM

# 苏州宾姆金属科技有限公司 

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[^0]:    The above bearing capacity values are applicable to $\mathrm{C} 20 / 25$ concrete
    The weight of the corbel has been considered
    The provided bearing capacity value is applicable to the non-corner position of the structure (the bearing capacity value of the corner position needs to be calculated independently) The force of the fixed base material such as steel structure or concrete needs to be checked independently

