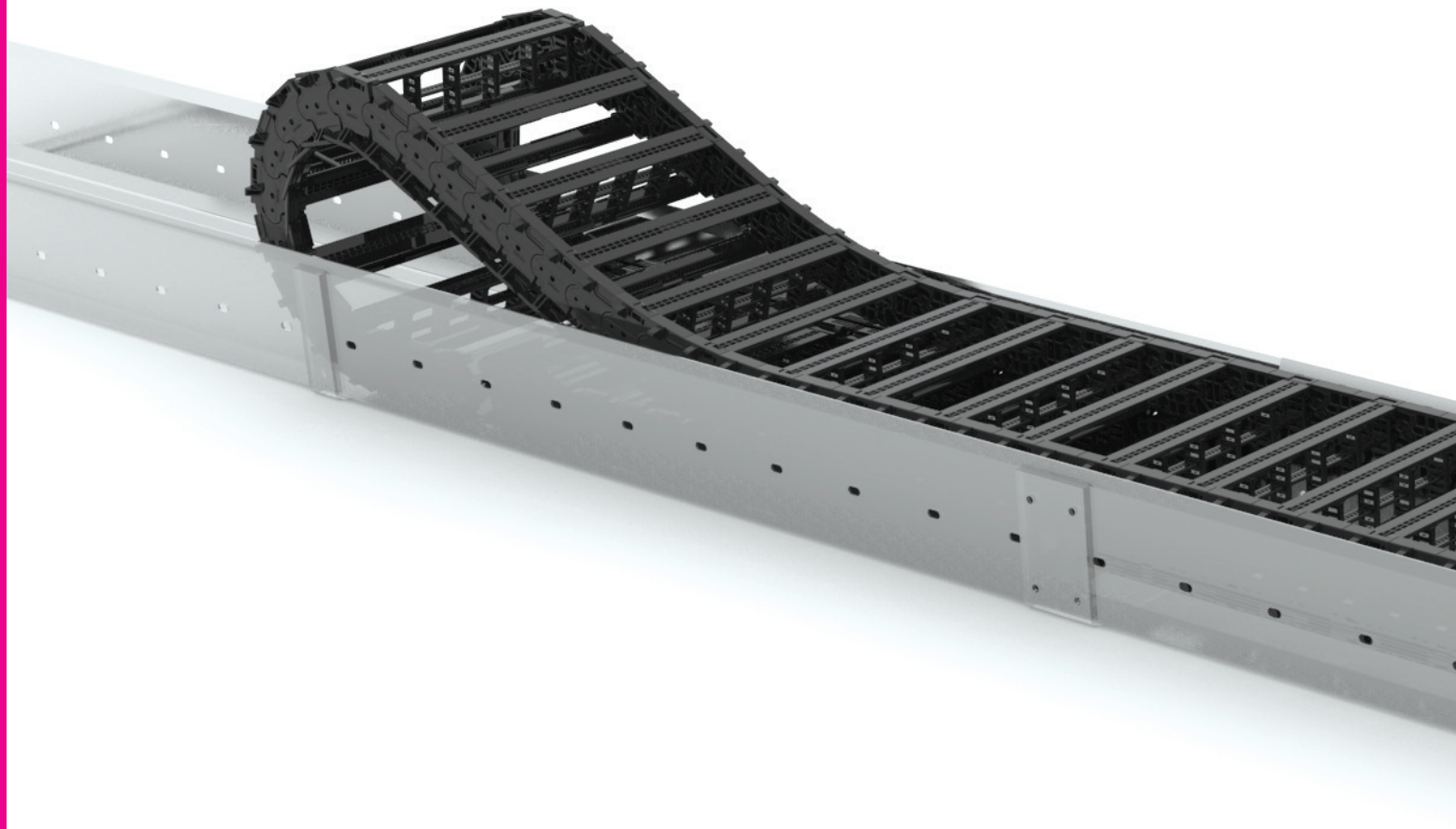
# Guide Channel System

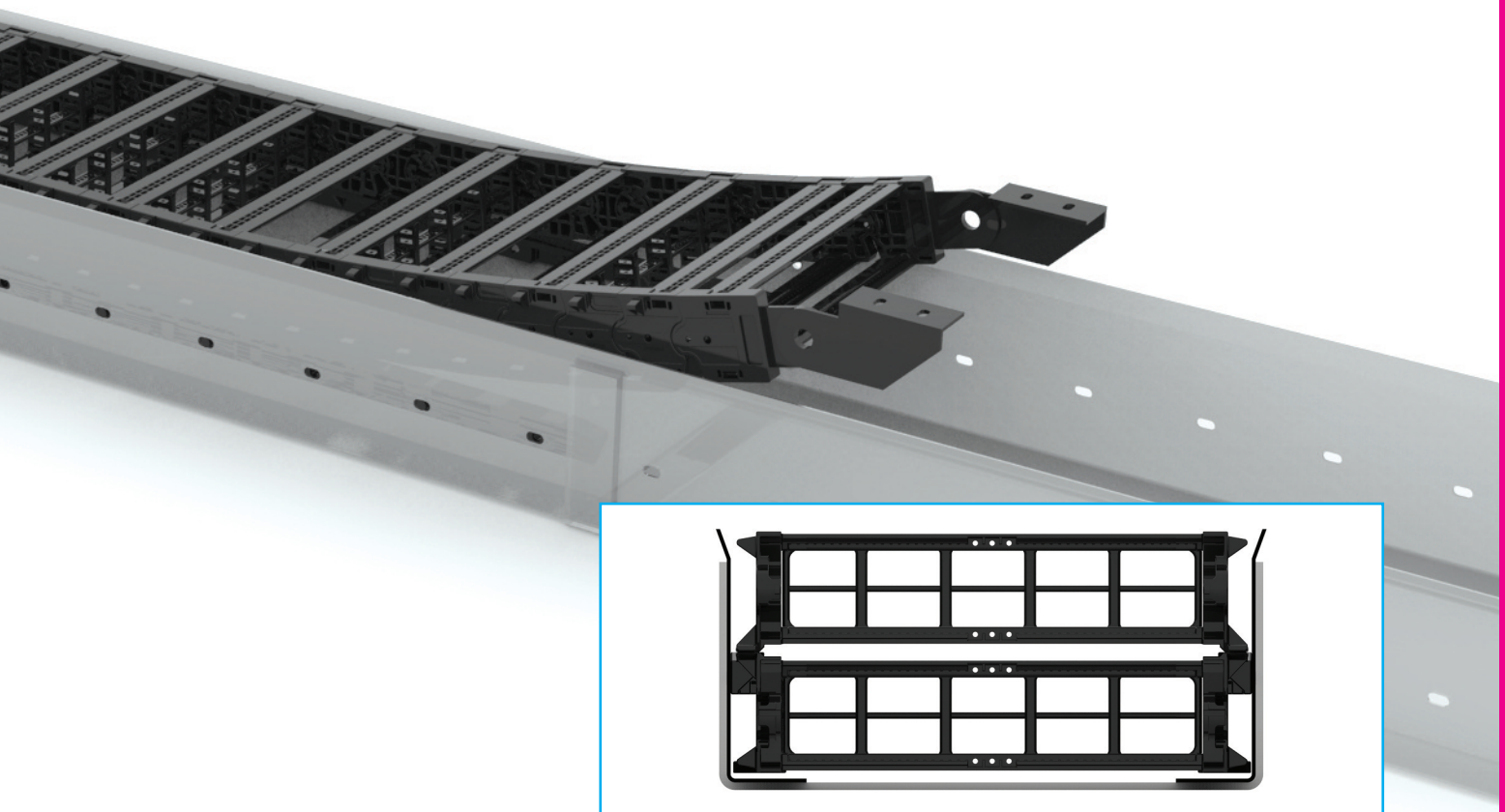


## General information

| Item | Value |
|---|---|
| Material | Steel or SUS |
| Standard-1 | Steel + Zn plating |
| Standard-2 | Steel + Zn plating + Powder coating |
| Color | Silver, Black, Ivory |

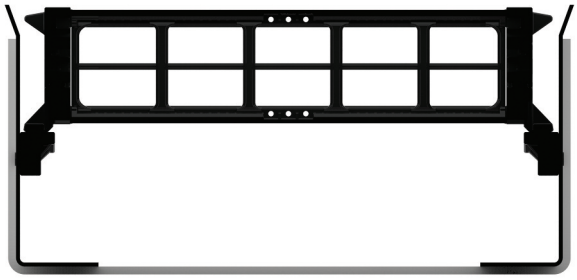
## Available Product list with Guide Channel

| Product Model | Product type |
|---|---|
| Shift Chain | ST044S<br>ST044ES, ST072ES, ST095ES, ST120ES<br>ST044RS, ST072RS, ST095RS, ST120RS, ST150RS<br>ST044ERS, ST072ERS, ST095ERS, ST120ERS |
| nsb Chain | nsb050S, nsb065S, nsb080S |





A-zone

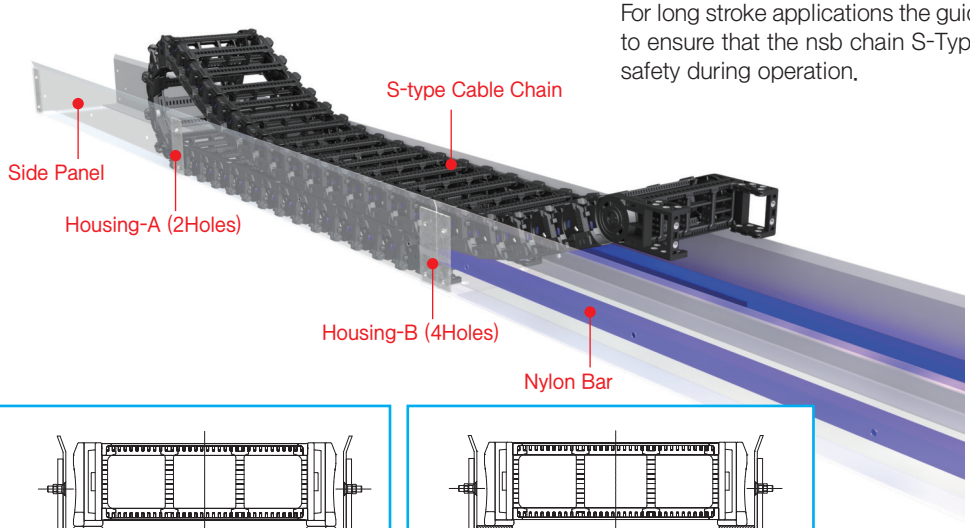


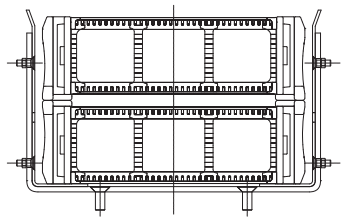
C-zone

# Guide Channel System

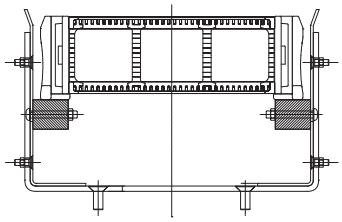
## Guide Channel

For long stroke applications the guide channel is applied to ensure that the nsb chain S-Type stays on track and safety during operation.



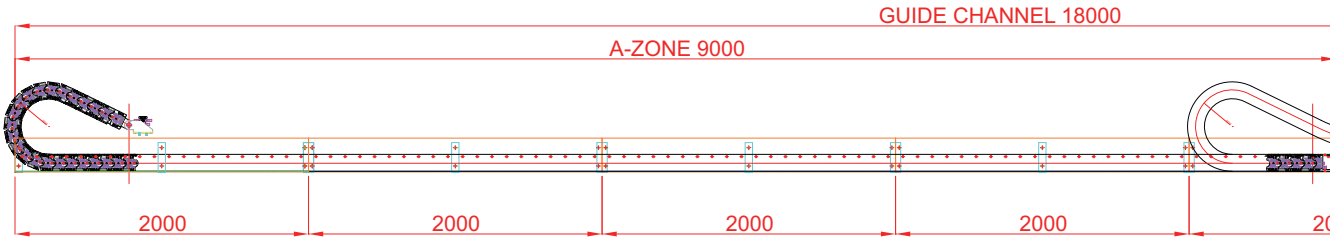



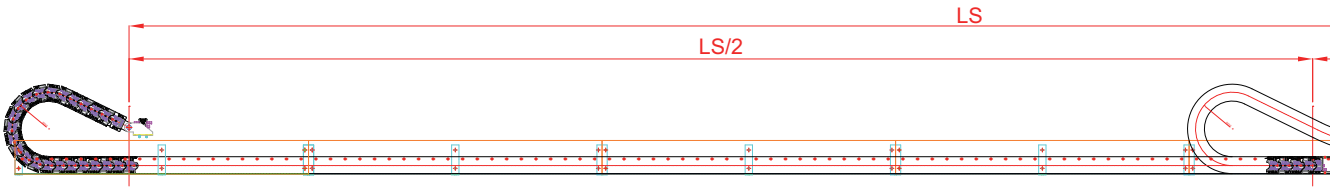
**A-zone**
Section of touching upper and below each other.



**C-zone**
Section of touching upper chain and only nylon bar.

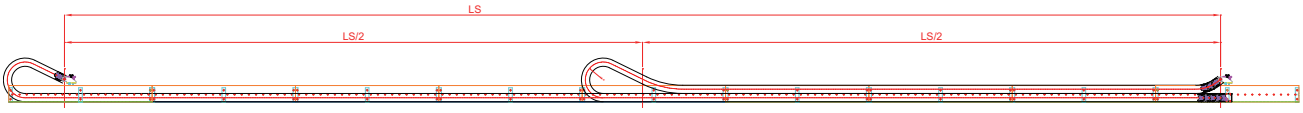
## Understanding of Guide channel drawing



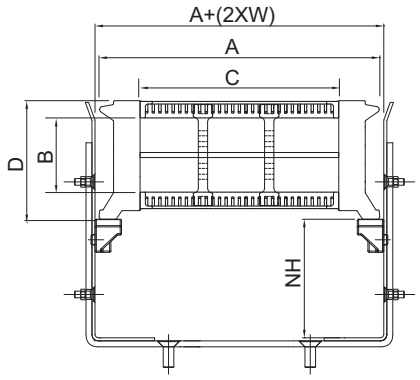



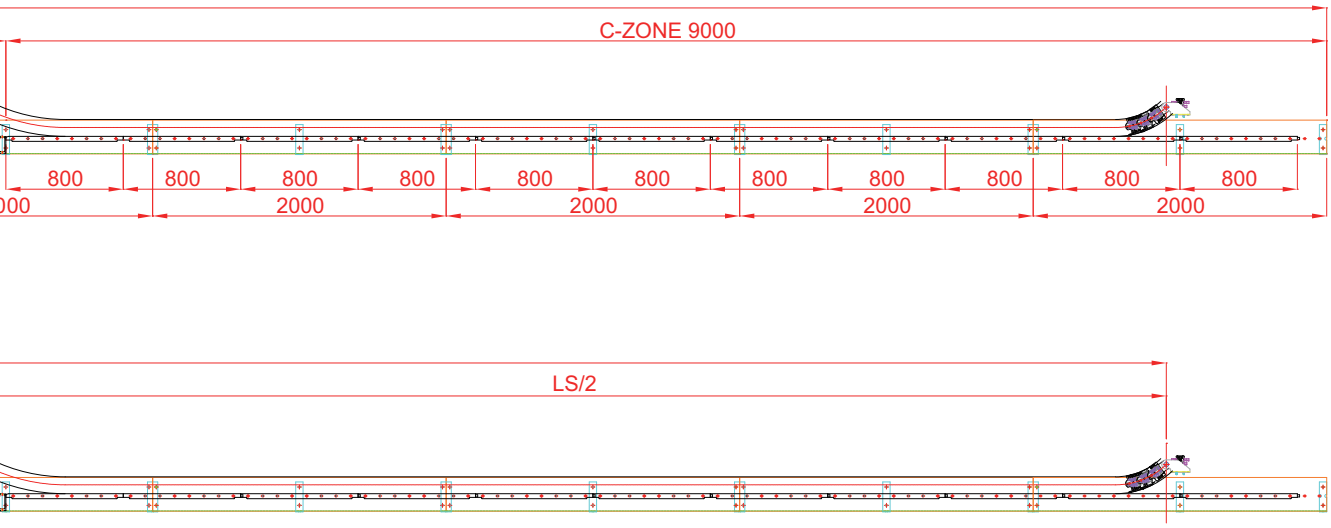

## Diverse application of guide channel

Single Chain application : Fixing bracket should be at the end of guide channel.



## Understanding of Guide channel drawing

| Section Drawing (C-Zone) | Dim | Contents |
|---|---|---|
|   | A | Outer width of cable chain |
| | B | Inner height of cable chain |
| | C | Inner width of cable chain(=Frame size) |
| | D | Outer height of cable chain |
| | W | Space between cabel chain and guide channel |
| | NH | Height between surface of nylon bar and guide channel. |



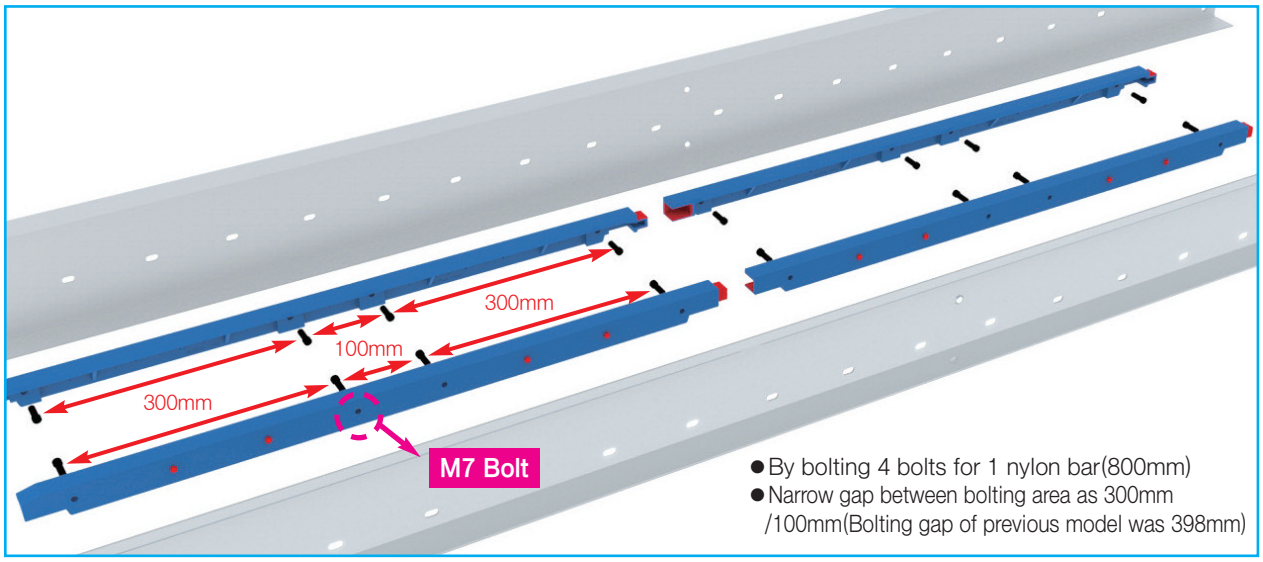
# Guide Channel System

## Nylon Bar

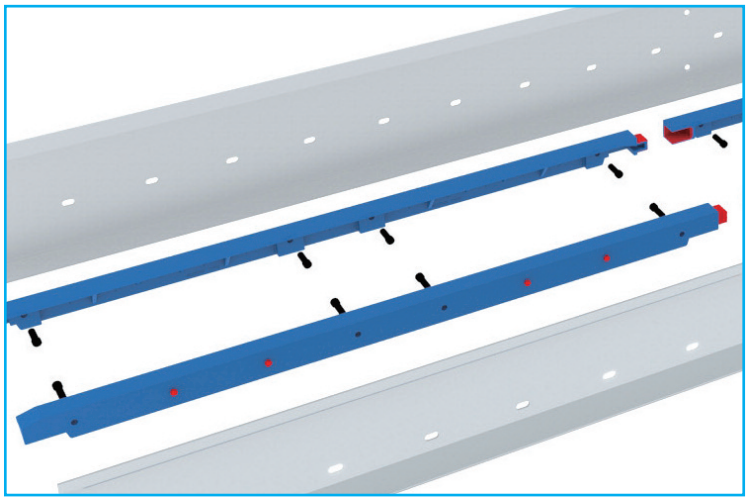
It is a supporting unit for cable chain, when cable chain comes to C-Zone, it has a role of supporting upper cable chain.

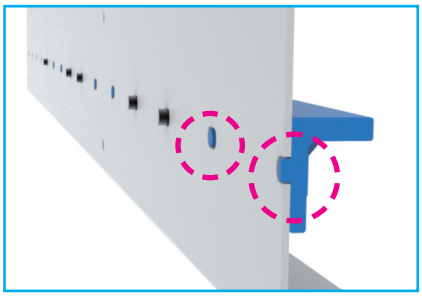
## Characteristic of nylon bar

### 1 *Secure and stable structure!*

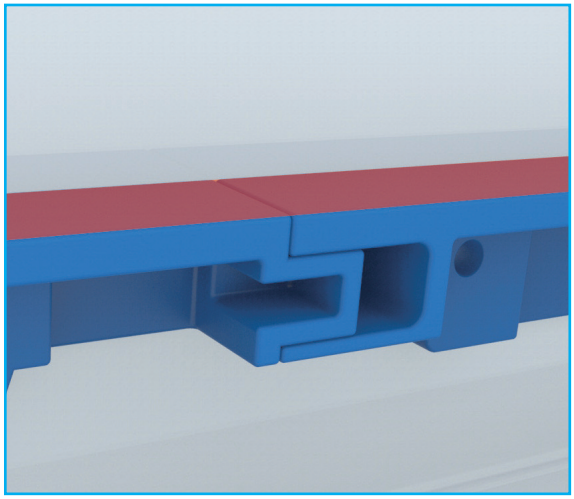



- By bolting 4 bolts for 1 nylon bar(800mm)
- Narrow gap between bolting area as 300mm /100mm(Bolting gap of previous model was 398mm)

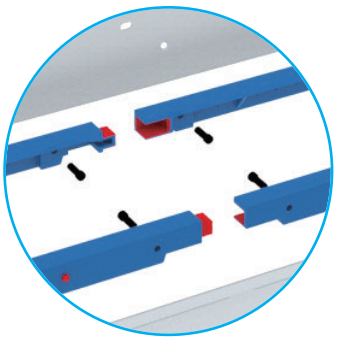




- By making 4 bumps per 1 nylon bar(800mm).
- It can avoid bolt loosening and guarantee long life span.



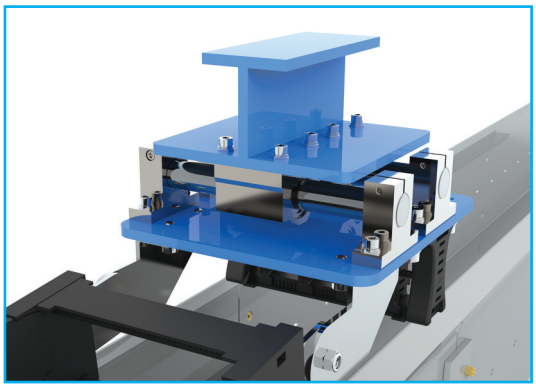
- As each nylon bar gets connected each other, it is more stable than previous one.
- Its design has been changed for being easy to assemble.
- Moreover, as there's no interval(gap), it can make smooth sliding as well.



## 2 Low dust!

- Same material with chain.
- It is low dust and anti-abrasively due to its raw material which is same with chain(Polyamide6+GF30%)
- By reducing narrow cross-section, abrasion part could be fixed regularly. It can make cable chain move smoothy and stably. It creats long life span compared to pervious model.

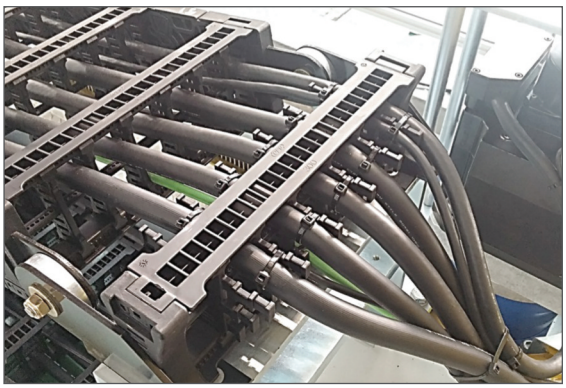
## >> Moving Bracket (Special moving arm)



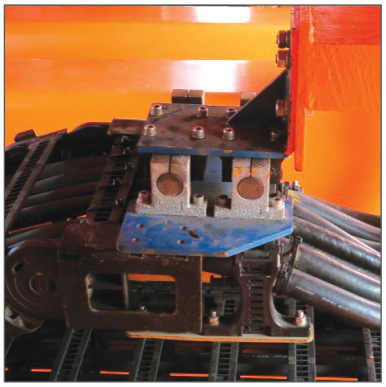
- There are several types of moving brackets and moving arm.
- For over 80meters crane and any kinds of strokes, special moving arm should be considerede to prevent breakage during operation. When you need special moving arm design, please contact to *overseas_info@cpsystem.kr*

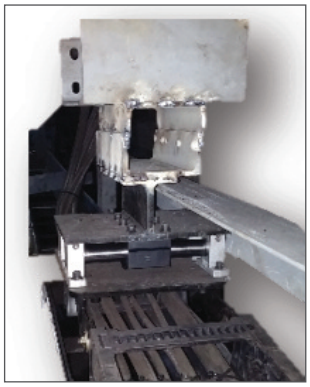
### Standard Moving bracket

### Standard Moving bracket with System tie wrap(STW)



### Special Moving arm



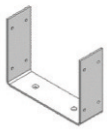


# Guide Channel System

## >> Assembly procedure of Guide Channel

### 1 A-1 Section

● Position guide channel and housing at correct area.



Housing (4 hole)



Housing (2 hole)

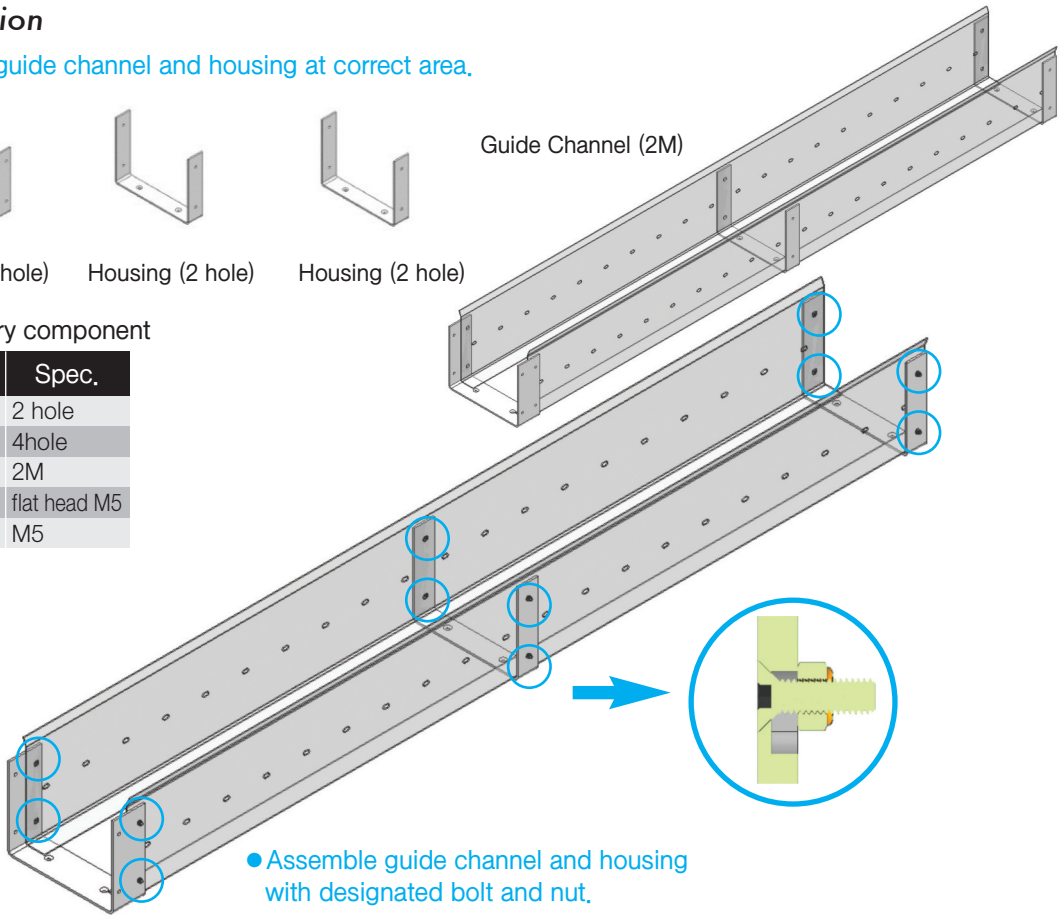


Housing (2 hole)

Guide Channel (2M)

▶necessary component

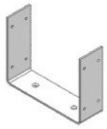
| Name | Spec. |
|---|---|
| Housing | 2 hole |
| Housing | 4hole |
| Guide Channel | 2M |
| Bolt | flat head M5 |
| Nut | M5 |



● Assemble guide channel and housing with designated bolt and nut.

### 2 A-2 and A-3 Section

● Position guide channel and housing at correct area.



Housing (4 hole)

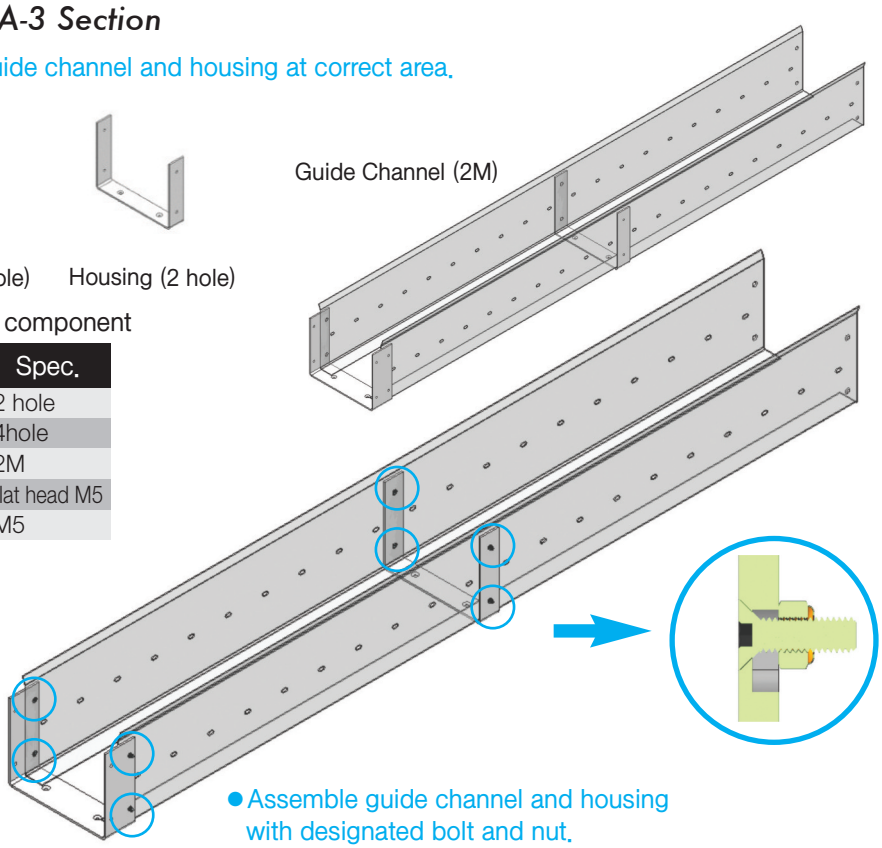


Housing (2 hole)

Guide Channel (2M)

▶necessary component

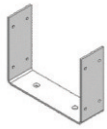
| Name | Spec. |
|---|---|
| Housing | 2 hole |
| Housing | 4hole |
| Guide Channel | 2M |
| Bolt | flat head M5 |
| Nut | M5 |



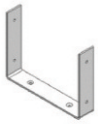
● Assemble guide channel and housing with designated bolt and nut.

## 3 B-1, B-2 Section

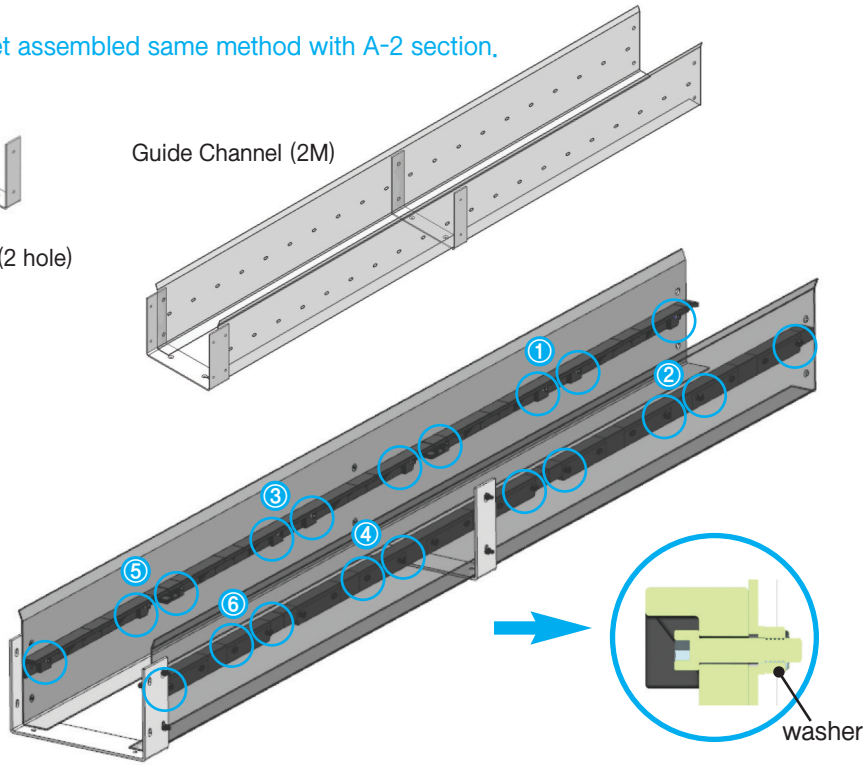
- Prepare guide channel 1 set assembled same method with A-2 section.



Housing (4 hole)



Housing (2 hole)



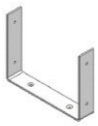

▶necessary component

| Name | Spec. |
|---|---|
| Housing | 2 hole |
| Housing | 4hole |
| Guide Channel | 2M |
| Bolt | Flat head M5 |
| Nut | M5 |
| Bolt | Hexagon M6 |
| Nut | M6 |
| Washer | Ø20XØ7X3T |
| Nylon bar | RH |
| Nylon bar | LH |
| Nylon bar | Normal type |

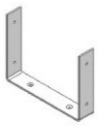
- Assemble nylon bar from ① to ⑥ but do not cut the extra 400mm of nylon bar from each ⑤ and ⑥. They will be assembled with B2 section's guide channel

## 4 B-3 Section

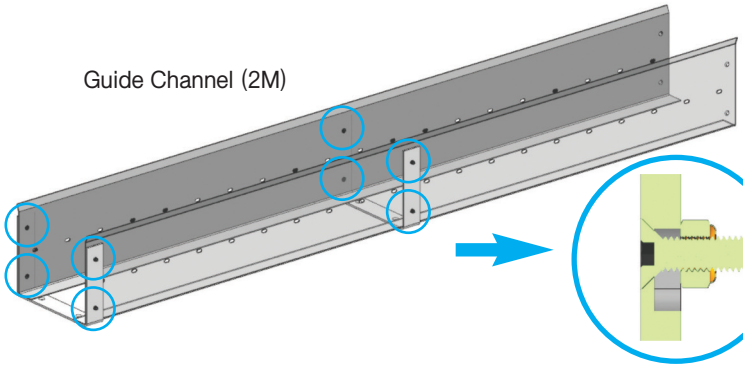
- Assemble guide channel and housing with designated bolt and nut.



Housing (2 hole)

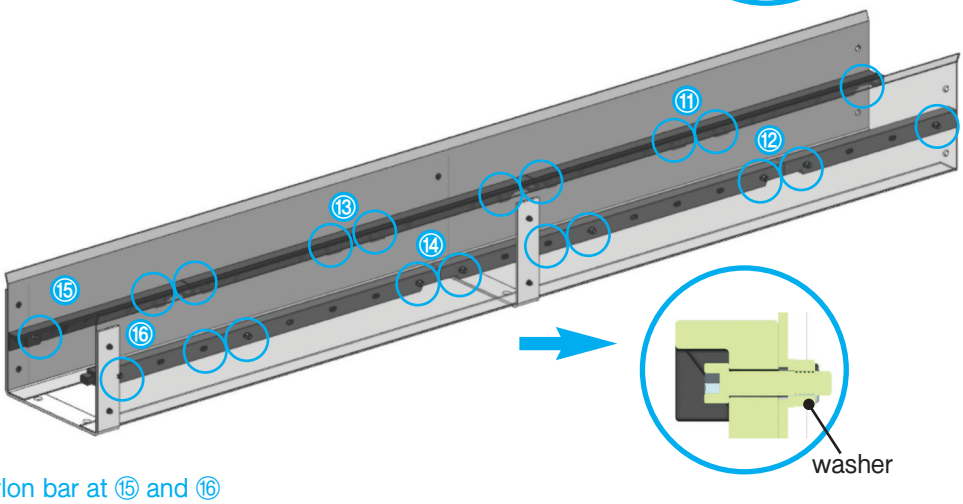


Housing (2 hole)




▶necessary component

| Name | Spec. |
|---|---|
| Housing | 2 hole |
| Guide Channel | 2M |
| Bolt | Flat head M5 |
| Nut | M5 |
| Bolt | Hexagon M6 |
| Nut | M6 |
| Washer | Ø20XØ7X3T |
| Nylon bar | Normal type |

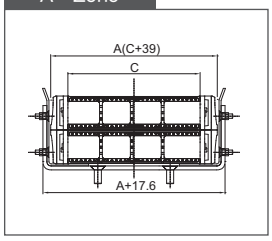



- Cut the extra 400mm of nylon bar at ⑮ and ⑯
- 12M Guide channel assembly sequence assembly from A-1 , A-2 , A-3 , B-1 , B-2 , and finally B-3.

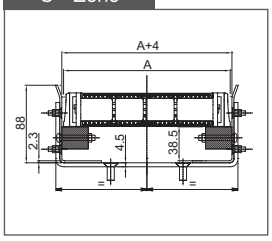
# ST044S, ES, RS, ERS

## Guide channel

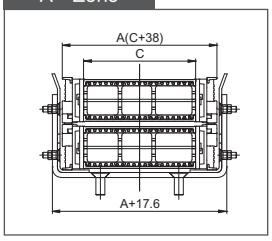
ST044S, ES
A - Zone



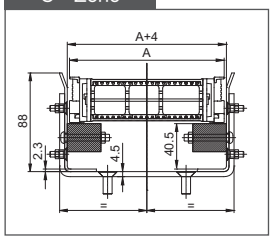

ST044S, ES
C - Zone



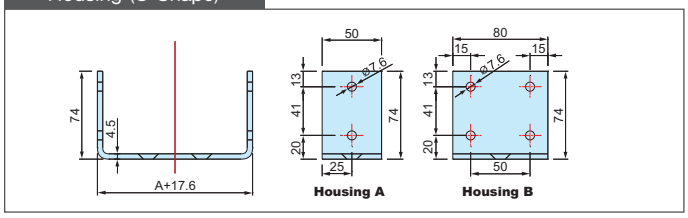

ST044RS, ERS
A - Zone



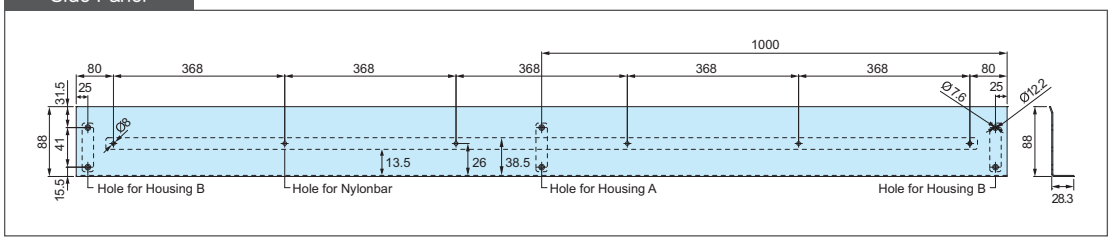

ST044RS, ERS
C - Zone




Housing (U-Shape)




Side Panel




(Dimensions in mm)

## Guide channel dimension

| ST044S | | ST044ES | | ST044RS | | ST044ERS | |
|---|---|---|---|---|---|---|---|
| C value | A value | C value | A value | C value | A value | C value | A value |
| 35 | 74 | 35 | 74 | 35 | 73 | 35 | 73 |
| 50 | 89 | 55 | 94 | 50 | 88 | 55 | 93 |
| 55 | 94 | 75 | 114 | 55 | 93 | 75 | 113 |
| 75 | 114 | 100 | 139 | 75 | 113 | 100 | 138 |
| 100 | 139 | | | 100 | 138 | | |
| 125 | 164 | | | 125 | 163 | | |
| 150 | 189 | | | 150 | 188 | | |
| 175 | 214 | | | 175 | 213 | | |
| 200 | 239 | | | 200 | 238 | | |

▶ C value : Frame width
▶ A value : Outer width of cable chain

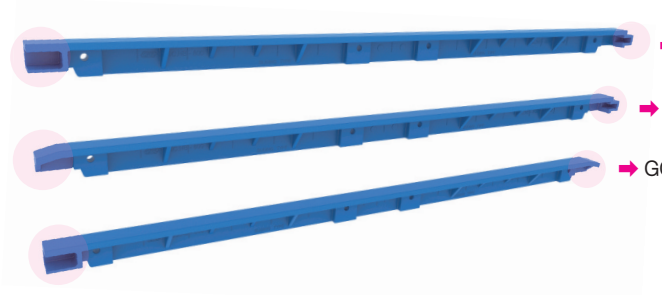
## Guide channel ordering

**ST-GCS 044S. 100 : 200M**

- Length(mm)
- Inside Width
- Chain Type
- Steel Guide Channel
- Shift Chain

## Nylon bar type

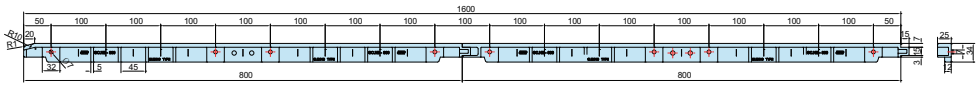
GC.NB-800



➡ GC.NB-800-Normal

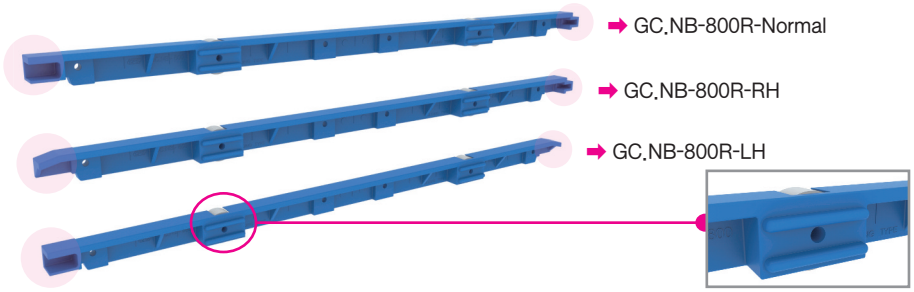
➡ GC.NB-800-RH

➡ GC.NB-800-LH



※ Bilateral symmetry for both RH, LH

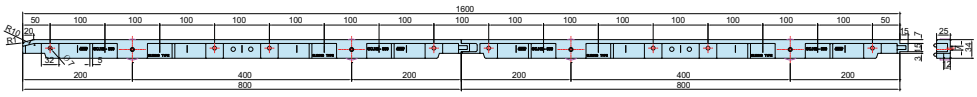
GC.NB-800R (Roller type)



➡ GC.NB-800R-Normal

➡ GC.NB-800R-RH

➡ GC.NB-800R-LH



※ Bilateral symmetry for both RH, LH

(Dimensions in mm)

## Nylon bar ordering

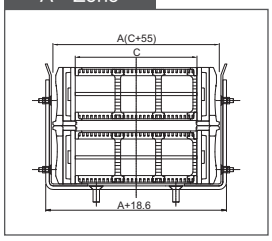
**GC.NB-800 R / N : 10ST**

- Q'ty(set)
- Nylon Bar Type -N : Normal -R : RH -L : LH
- Roller Type
- Length(mm) : Fixed
- Guide Channel Nylon Bar

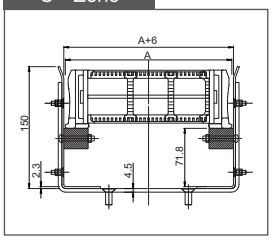
# ST072ES, RS, ERS

## Guide channel

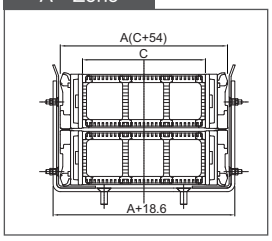
ST072ES
A - Zone



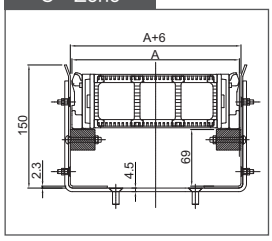

ST072ES
C - Zone



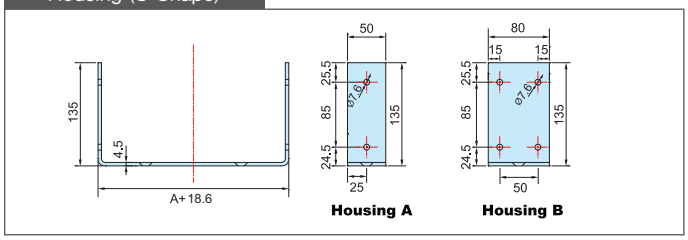

ST072RS, ERS
A - Zone



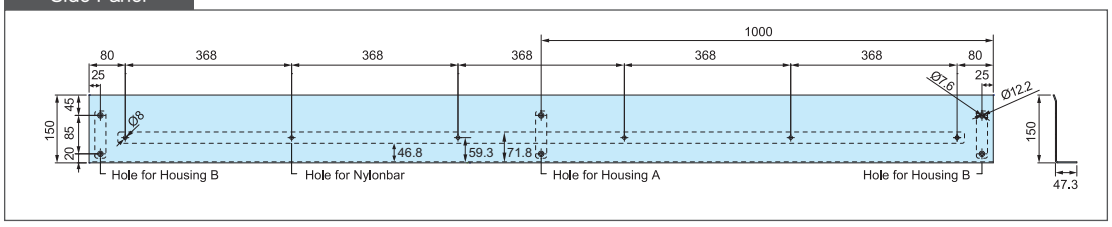

ST072RS, ERS
C - Zone




Housing (U-Shape)




Side Panel




(Dimensions in mm)

## Guide channel dimension

| ST072ES | | ST072RS | | ST072ERS | |
|---|---|---|---|---|---|
| C value | A value | C value | A value | C value | A value |
| 50 | 105 | 50 | 104 | 50 | 104 |
| 75 | 130 | 75 | 129 | 75 | 129 |
| 100 | 155 | 100 | 154 | 100 | 154 |
| 125 | 180 | 125 | 179 | 125 | 179 |
| 150 | 205 | 140 | 194 | 150 | 204 |
| | | 150 | 204 | | |
| | | 165 | 219 | | |
| | | 175 | 229 | | |
| | | 190 | 244 | | |
| | | 200 | 254 | | |
| | | 240 | 294 | | |
| | | 250 | 304 | | |
| | | 300 | 354 | | |

▶ C value : Frame width
▶ A value : Outer width of cable chain

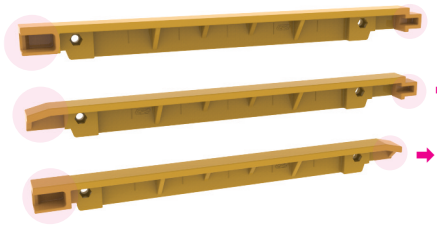
## Guide channel ordering

**ST-GCS 072ES. 150 : 200M**

- Length(mm)
- Inside Width
- Chain Type
- Steel Guide Channel
- Shift Chain

## Nylon bar type

### GC.NB-400

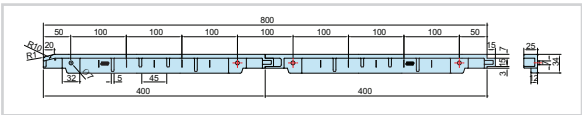


➡ GC.NB-400-Normal

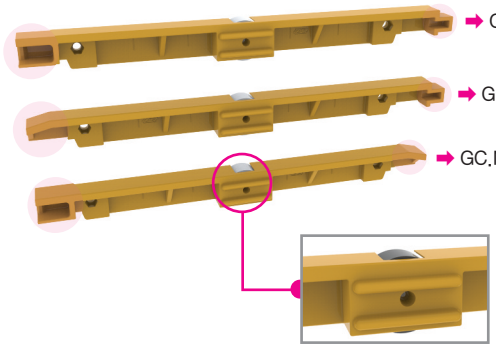
➡ GC.NB-400-RH

➡ GC.NB-400-LH

※ Bilateral symmetry for both RH, LH




### GC.NB-400R (Roller type)

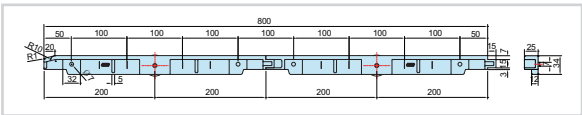


➡ GC.NB-400R-Normal

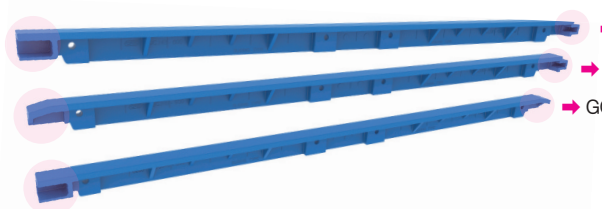
➡ GC.NB-400R-RH

➡ GC.NB-400R-LH

※ Bilateral symmetry for both RH, LH




### GC.NB-800

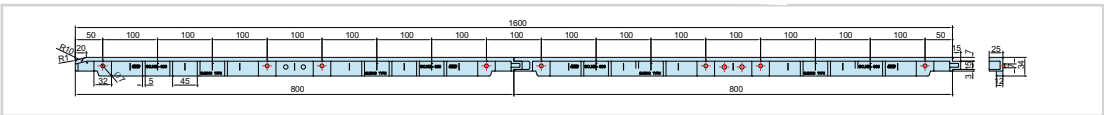


➡ GC.NB-800-Normal

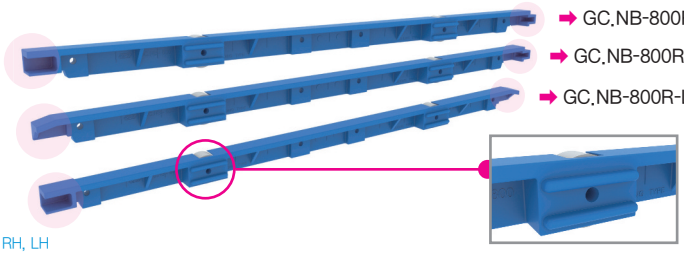
➡ GC.NB-800-RH

➡ GC.NB-800-LH

※ Bilateral symmetry for both RH, LH




### GC.NB-800R (Roller type)

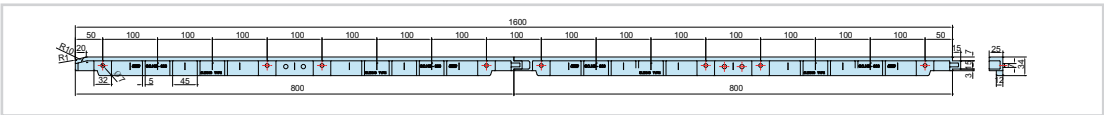


➡ GC.NB-800R-Normal

➡ GC.NB-800R-RH

➡ GC.NB-800R-LH

※ Bilateral symmetry for both RH, LH




(Dimensions in mm)

## Nylon bar ordering

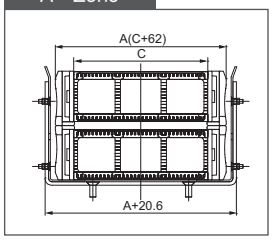
**GC.NB-800 R / N : 10ST**

- Q'ty(set)
- Nylon Bar Type -N : Normal -R : RH -L : LH
- Roller Type
- Length(mm) 400, 800
- Guide Channel Nylon Bar

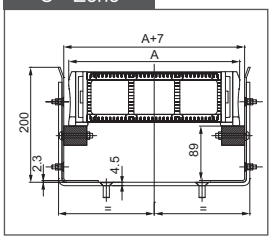
# ST095ES, RS, ERS

## Guide channel

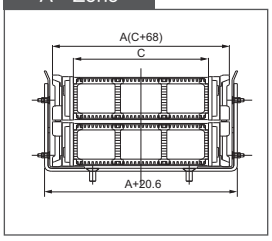
ST095ES
A - Zone



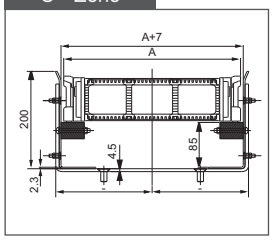

ST095ES
C - Zone



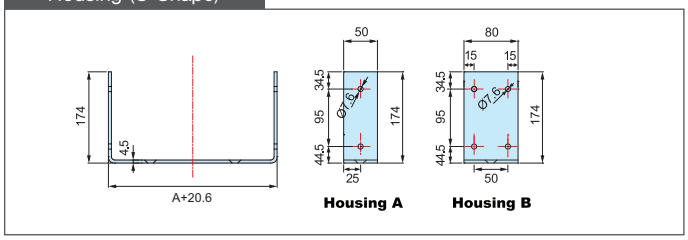

ST095RS, ERS
A - Zone



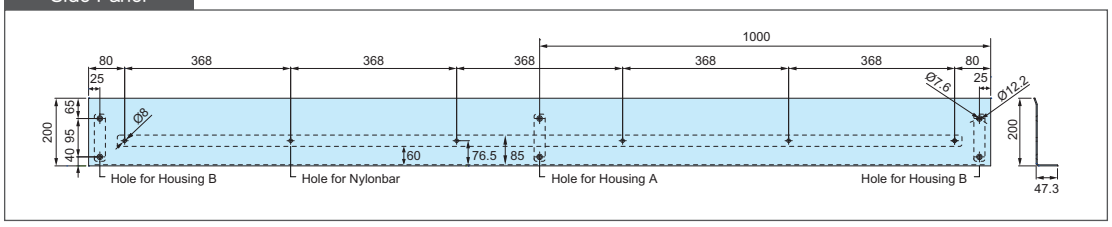

ST095RS, ERS
C - Zone




Housing (U-Shape)




Side Panel




(Dimensions in mm)

## Guide channel dimension

| ST095ES | | ST095RS | | ST095ERS | |
|---|---|---|---|---|---|
| C value | A value | C value | A value | C value | A value |
| 100 | 162 | 75 | 143 | 100 | 168 |
| 125 | 187 | 100 | 168 | 125 | 193 |
| 150 | 212 | 125 | 193 | 150 | 218 |
| 175 | 237 | 150 | 218 | 175 | 243 |
| 200 | 262 | 175 | 243 | 200 | 268 |
| | | 190 | 258 | | |
| | | 200 | 268 | | |
| | | 240 | 308 | | |
| | | 250 | 318 | | |
| | | 300 | 368 | | |
| | | 350 | 418 | | |
| | | 400 | 468 | | |

▶ C value : Frame width
▶ A value : Outer width of cable chain

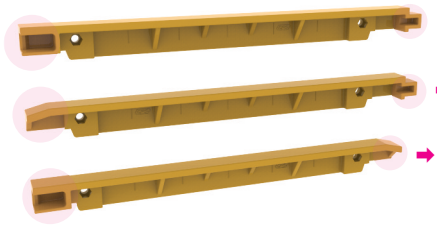
## Guide channel ordering

**ST-GCS 095ES. 175 : 200M**

- Length(mm)
- Inside Width
- Chain Type
- Steel Guide Channel
- Shift Chain

## Nylon bar type

### GC.NB-400

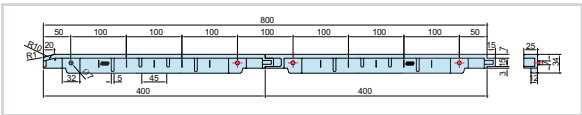


➡ GC.NB-400-Normal

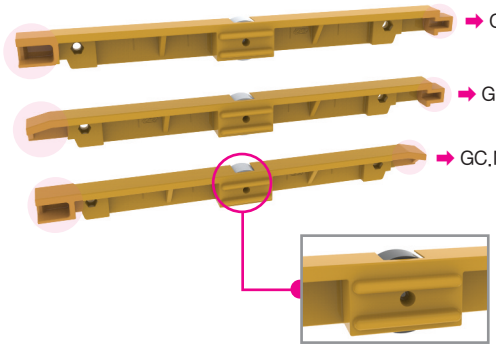
➡ GC.NB-400-RH

➡ GC.NB-400-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-400R (Roller type)

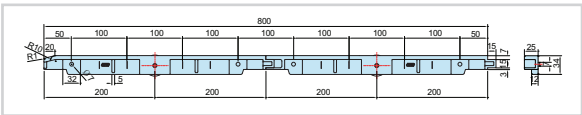


➡ GC.NB-400R-Normal

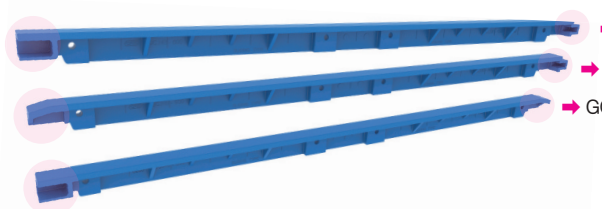
➡ GC.NB-400R-RH

➡ GC.NB-400R-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800

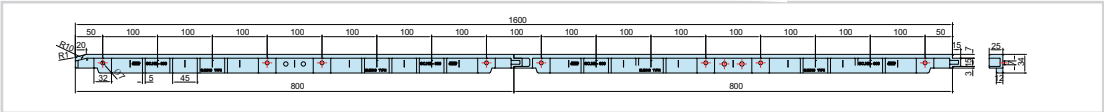


➡ GC.NB-800-Normal

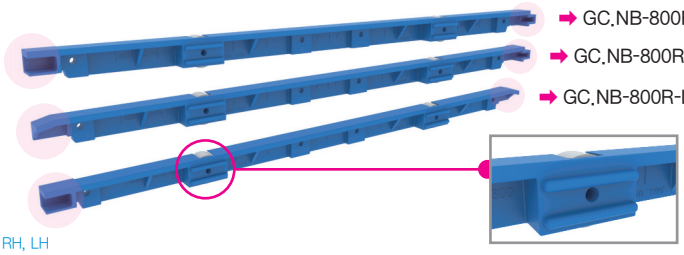
➡ GC.NB-800-RH

➡ GC.NB-800-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800R (Roller type)

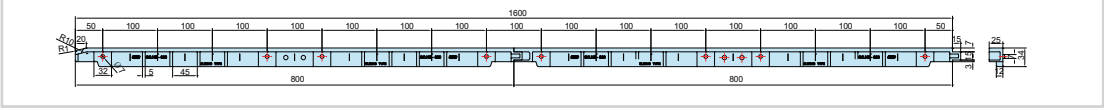


➡ GC.NB-800R-Normal

➡ GC.NB-800R-RH

➡ GC.NB-800R-LH

※ Bilateral symmetry for both RH, LH



(Dimensions in mm)

## Nylon bar ordering

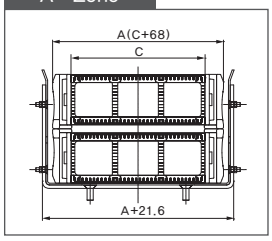
**GC.NB-800 R / N : 10ST**

- Q'ty(set)
- Nylon Bar Type -N : Normal -R : RH -L : LH
- Roller Type
- Length(mm) 400, 800
- Guide Channel Nylon Bar

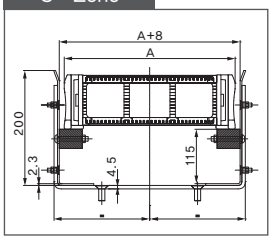
# ST120ES, RS, ERS

## Guide channel

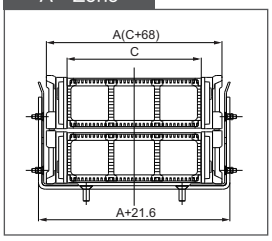
ST120ES
A - Zone



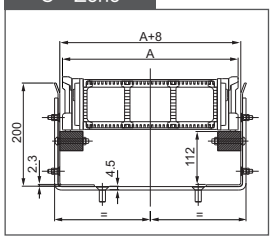

ST120ES
C - Zone



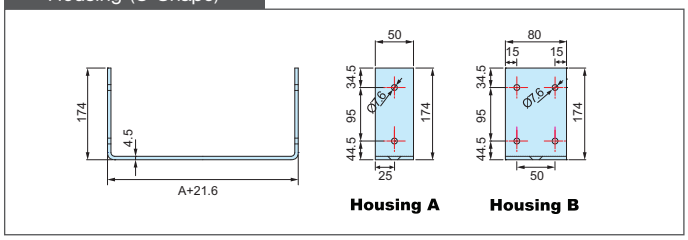

ST120RS, ERS
A - Zone



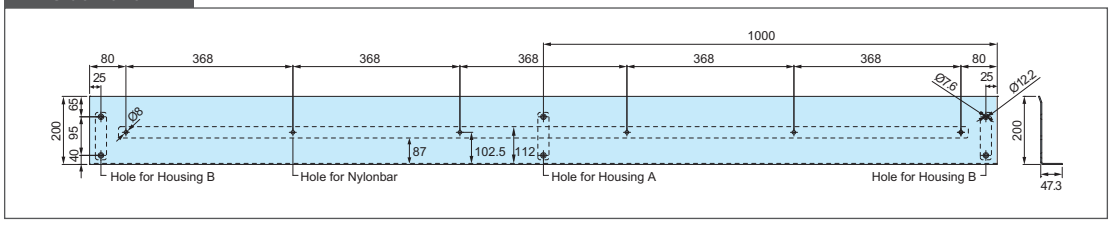

ST120RS, ERS
C - Zone




Housing (U-Shape)




Side Panel




(Dimensions in mm)

## Guide channel dimension

| ST120ES | | ST120RS | | ST120ERS | |
|---|---|---|---|---|---|
| C value | A value | C value | A value | C value | A value |
| 150 | 218 | 75 | 143 | 150 | 218 |
| 200 | 268 | 100 | 168 | 200 | 268 |
| 250 | 318 | 115 | 183 | 250 | 318 |
| 300 | 368 | 125 | 193 | 300 | 368 |
| | | 150 | 218 | | |
| | | 175 | 243 | | |
| | | 200 | 268 | | |
| | | 240 | 308 | | |
| | | 250 | 318 | | |
| | | 290 | 358 | | |
| | | 300 | 368 | | |
| | | 350 | 418 | | |
| | | 400 | 468 | | |
| | | 450 | 518 | | |
| | | 500 | 568 | | |
| | | 550 | 618 | | |
| | | 600 | 668 | | |

▶ C value : Frame width
▶ A value : Outer width of cable chain

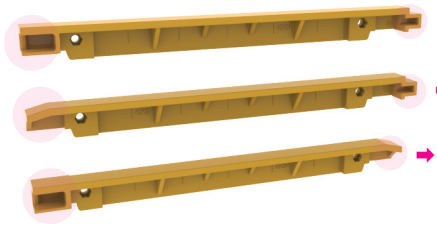
## Guide channel ordering

**ST-GCS 120ES. 175 : 200M**

- Length(mm)
- Inside Width
- Chain Type
- Steel Guide Channel
- Shift Chain

## Nylon bar type

### GC.NB-400

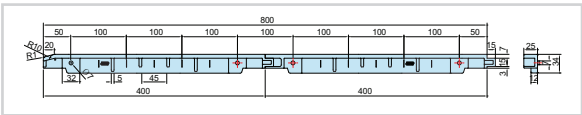


➡ GC.NB-400-Normal

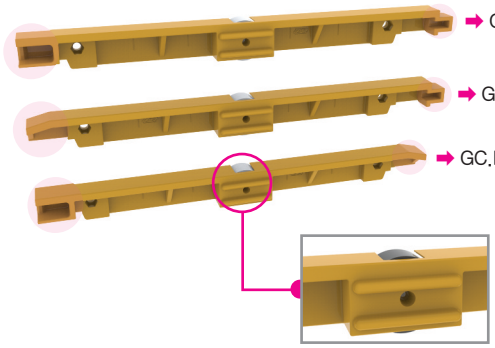
➡ GC.NB-400-RH

➡ GC.NB-400-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-400R (Roller type)

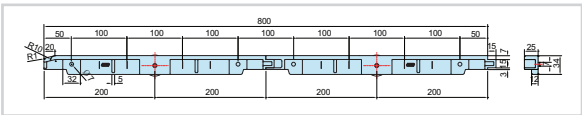


➡ GC.NB-400R-Normal

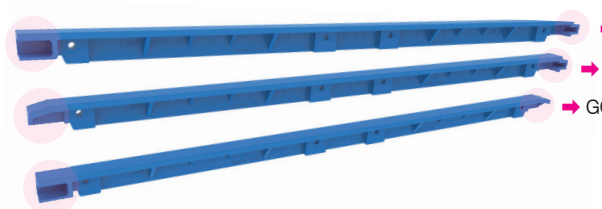
➡ GC.NB-400R-RH

➡ GC.NB-400R-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800

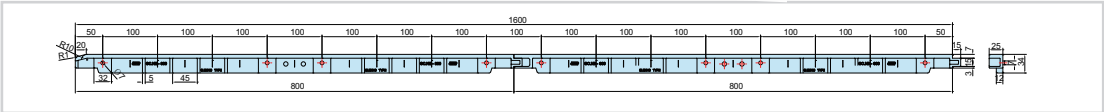


➡ GC.NB-800-Normal

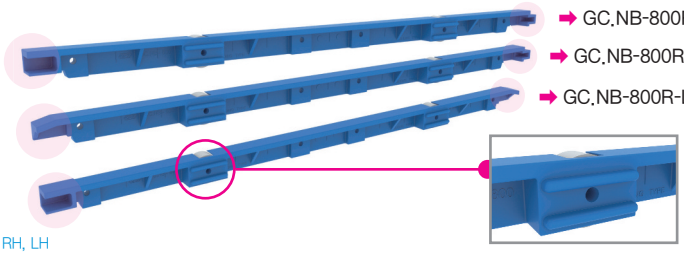
➡ GC.NB-800-RH

➡ GC.NB-800-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800R (Roller type)

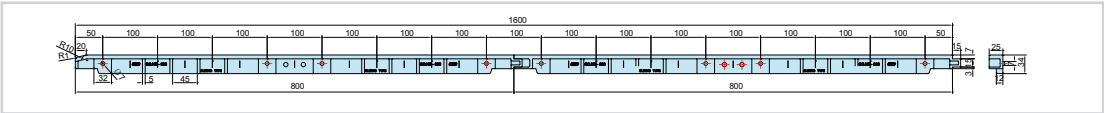


➡ GC.NB-800R-Normal

➡ GC.NB-800R-RH

➡ GC.NB-800R-LH

※ Bilateral symmetry for both RH, LH



(Dimensions in mm)

## Nylon bar ordering

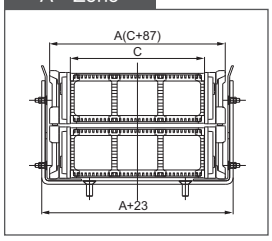
**GC.NB-800 R / N : 10ST**

- Q'ty(set)
- Nylon Bar Type -N : Normal -R : RH -L : LH
- Roller Type
- Length(mm) 400, 800
- Guide Channel Nylon Bar

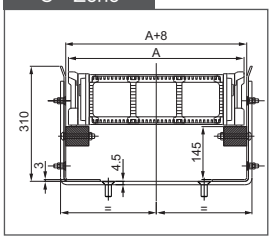
# ST150RS, ERS

## Guide channel

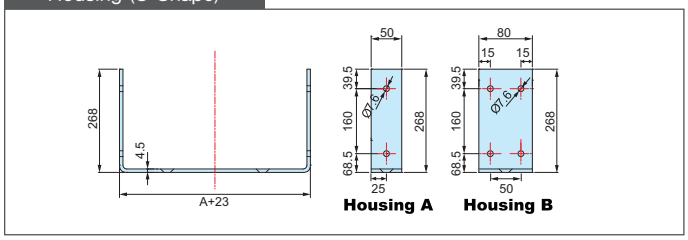
ST150RS, ERS
A - Zone



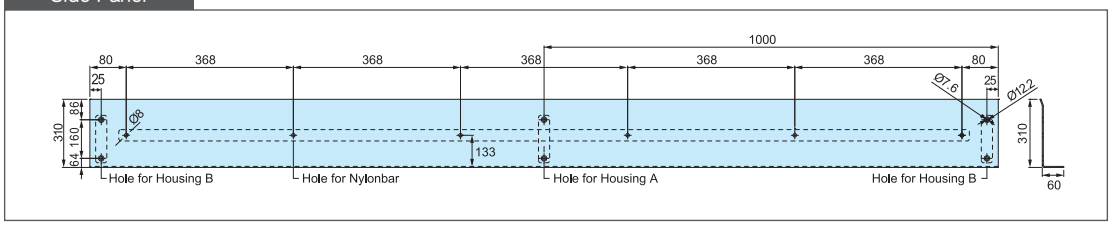

ST150RS, ERS
C - Zone




Housing (U-Shape)




Side Panel




(Dimensions in mm)

## Guide channel dimension

| ST150RS | | ST150ERS | |
|---|---|---|---|
| C value | A value | C value | A value |
| 75 | 162 | 200 | 287 |
| 100 | 187 | 250 | 337 |
| 115 | 202 | 300 | 387 |
| 125 | 212 | 350 | 437 |
| 150 | 237 | 400 | 487 |
| 175 | 262 | | |
| 200 | 287 | | |
| 240 | 327 | | |
| 250 | 337 | | |
| 290 | 377 | | |
| 300 | 387 | | |
| 350 | 437 | | |
| 400 | 487 | | |
| 450 | 537 | | |
| 500 | 587 | | |
| 550 | 637 | | |
| 600 | 687 | | |

▶ C value : Frame width
▶ A value : Outer width of cable chain

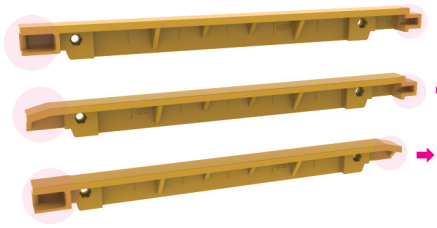
## Guide channel ordering

**ST-GCS 150RS. 200 : 200M**

- Length(mm)
- Inside Width
- Chain Type
- Steel Guide Channel
- Shift Chain

## Nylon bar type

### GC.NB-400

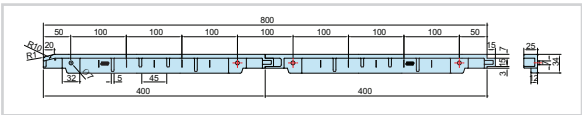


➡ GC.NB-400-Normal

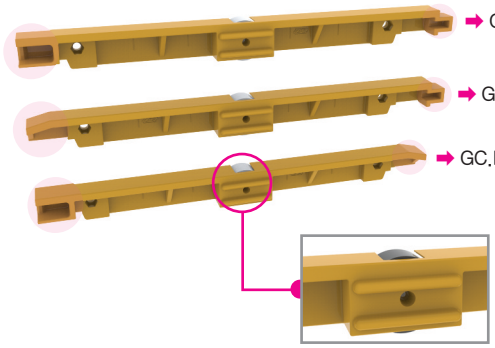
➡ GC.NB-400-RH

➡ GC.NB-400-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-400R (Roller type)

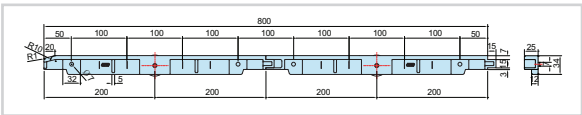


➡ GC.NB-400R-Normal

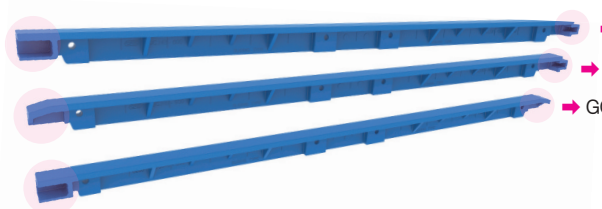
➡ GC.NB-400R-RH

➡ GC.NB-400R-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800

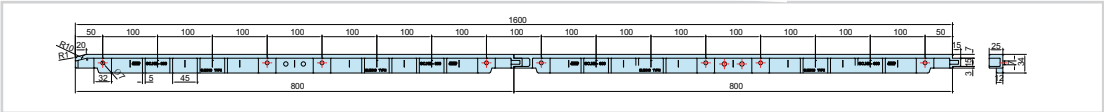


➡ GC.NB-800-Normal

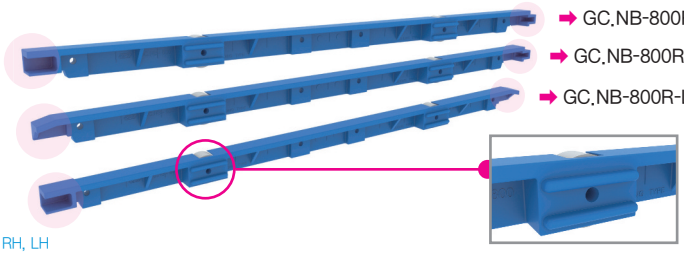
➡ GC.NB-800-RH

➡ GC.NB-800-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800R (Roller type)

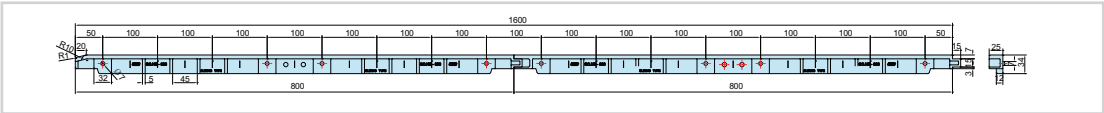


➡ GC.NB-800R-Normal

➡ GC.NB-800R-RH

➡ GC.NB-800R-LH

※ Bilateral symmetry for both RH, LH



(Dimensions in mm)

## Nylon bar ordering

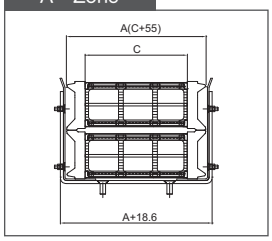
**GC.NB-800 R / N : 10ST**

- Q'ty(set)
- Nylon Bar Type -N : Normal -R : RH -L : LH
- Roller Type
- Length(mm) 400, 800
- Guide Channel Nylon Bar

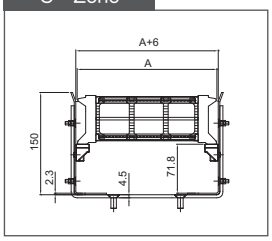
# nsb050S

## Guide channel

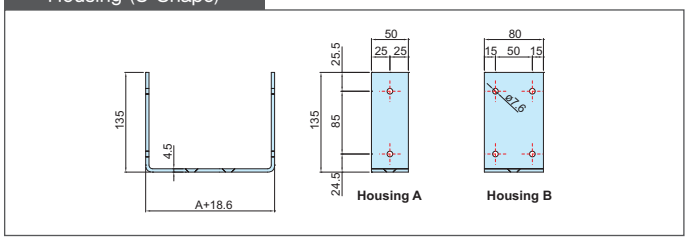
A - Zone



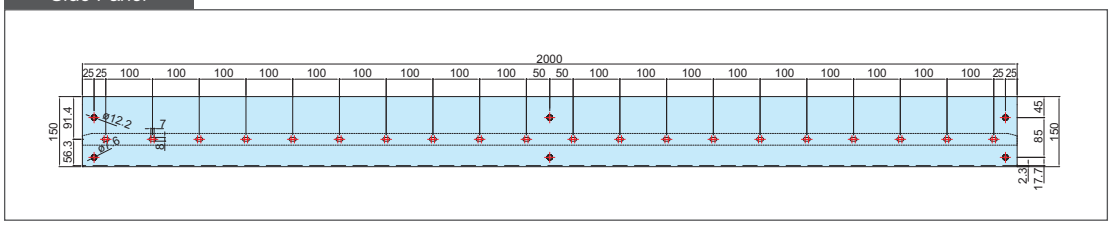

C - Zone




Housing (U-Shape)




Side Panel




(Dimensions in mm)

## Guide channel dimension

| nsb050S | |
|---|---|
| C value | A value |
| 50 | 104 |
| 75 | 129 |
| 100 | 154 |
| 125 | 179 |
| 140 | 194 |
| 150 | 204 |
| 165 | 219 |
| 175 | 229 |
| 190 | 244 |
| 200 | 254 |
| 240 | 294 |
| 250 | 304 |
| 300 | 354 |

▶ C value : Frame width
▶ A value : Outer width of cable chain

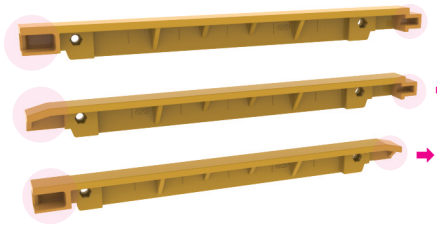
## Guide channel ordering

**nsb-GCS 050S. 100 : 200M**

- Length(mm)
- Inside Width
- Chain Type
- Steel Guide Channel
- sabin Chain

## Nylon bar type

### GC.NB-400

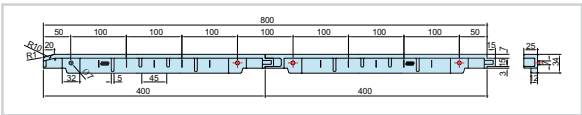


➡ GC.NB-400-Normal

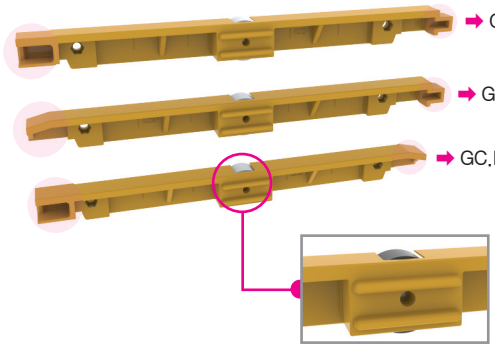
➡ GC.NB-400-RH

➡ GC.NB-400-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-400R (Roller type)

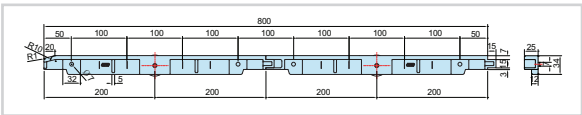


➡ GC.NB-400R-Normal

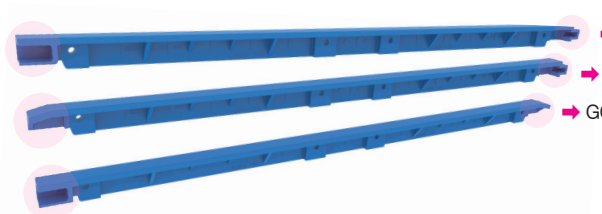
➡ GC.NB-400R-RH

➡ GC.NB-400R-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800

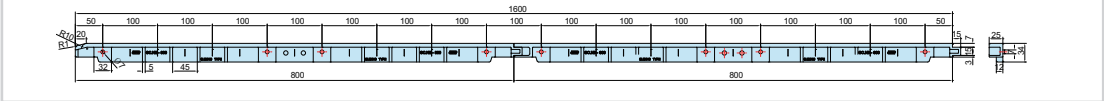


➡ GC.NB-800-Normal

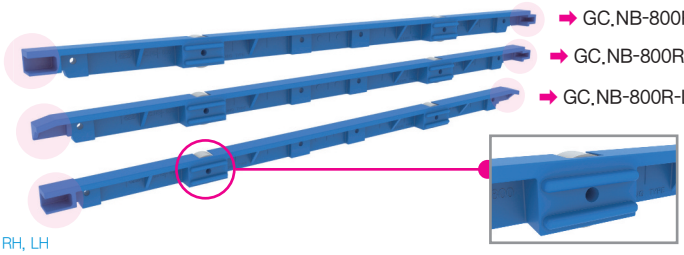
➡ GC.NB-800-RH

➡ GC.NB-800-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800R (Roller type)

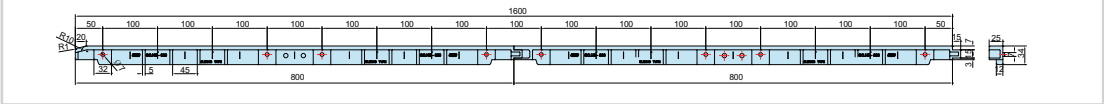


➡ GC.NB-800R-Normal

➡ GC.NB-800R-RH

➡ GC.NB-800R-LH

※ Bilateral symmetry for both RH, LH



(Dimensions in mm)

## Nylon bar ordering

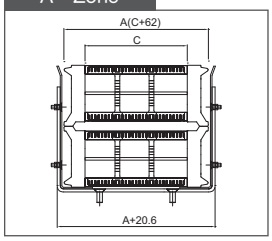
**GC.NB-800 R / N : 10ST**

- Q'ty(set)
- Nylon Bar Type -N : Normal -R : RH -L : LH
- Roller Type
- Length(mm) 400, 800
- Guide Channel Nylon Bar

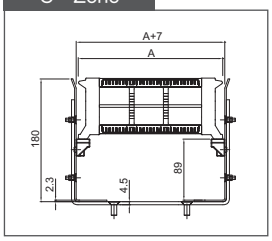
# nsb065S

## Guide channel

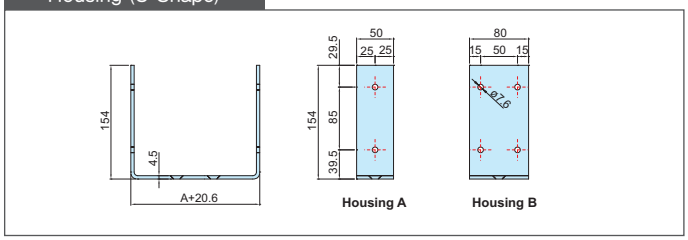
A - Zone



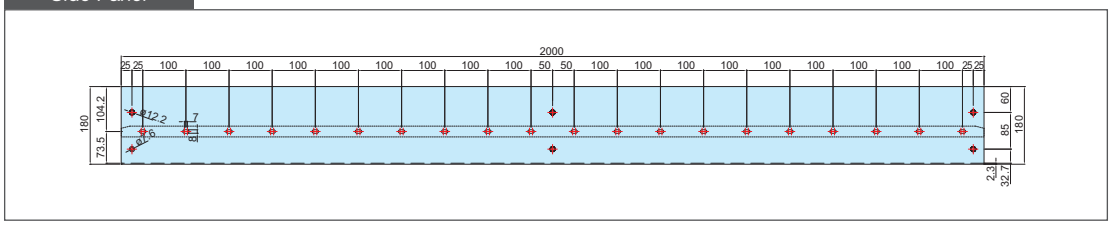

C - Zone




Housing (U-Shape)




Side Panel




(Dimensions in mm)

## Guide channel dimension

| nsb065S | |
|---|---|
| C value | A value |
| 75 | 137 |
| 100 | 162 |
| 125 | 187 |
| 150 | 212 |
| 175 | 237 |
| 190 | 252 |
| 200 | 262 |
| 230 | 292 |
| 240 | 302 |
| 250 | 312 |
| 300 | 362 |
| 350 | 412 |
| 400 | 462 |

▶ C value : Frame width
▶ A value : Outer width of cable chain

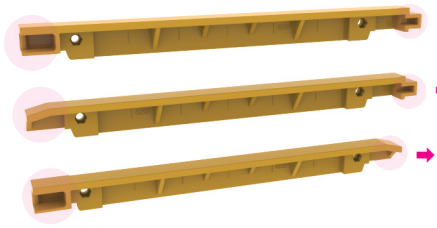
## Guide channel ordering

**nsb-GCS 065S. 100 : 200M**

- Length(mm)
- Inside Width
- Chain Type
- Steel Guide Channel
- sabin Chain

## Nylon bar type

### GC.NB-400

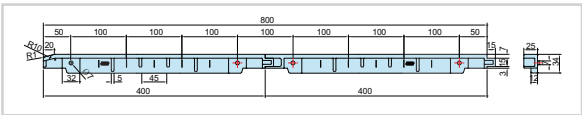


➡ GC.NB-400-Normal

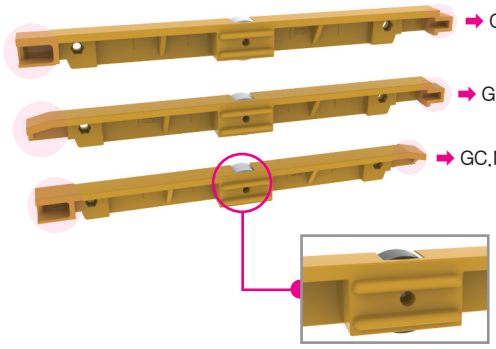
➡ GC.NB-400-RH

➡ GC.NB-400-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-400R (Roller type)

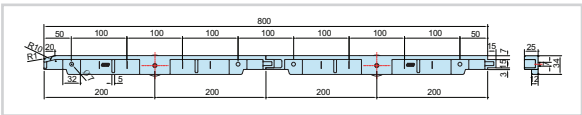


➡ GC.NB-400R-Normal

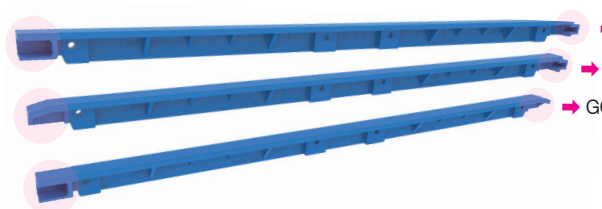
➡ GC.NB-400R-RH

➡ GC.NB-400R-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800

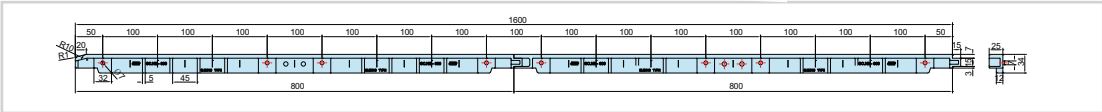


➡ GC.NB-800-Normal

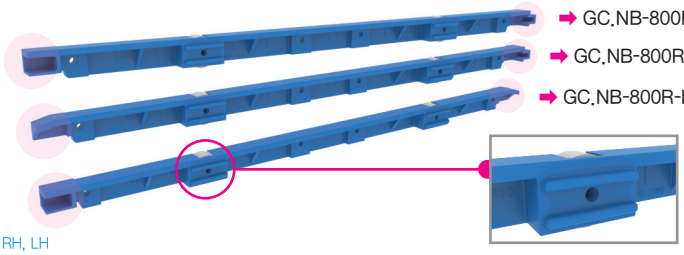
➡ GC.NB-800-RH

➡ GC.NB-800-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800R (Roller type)

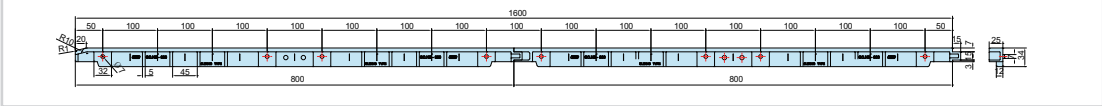


➡ GC.NB-800R-Normal

➡ GC.NB-800R-RH

➡ GC.NB-800R-LH

※ Bilateral symmetry for both RH, LH



(Dimensions in mm)

## Nylon bar ordering

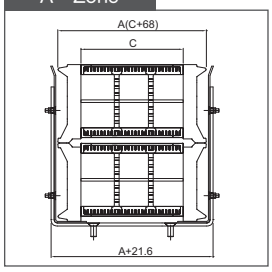
**GC.NB-800 R / N : 10ST**

- Q'ty(set)
- Nylon Bar Type -N : Normal -R : RH -L : LH
- Roller Type
- Length(mm) 400, 800
- Guide Channel Nylon Bar

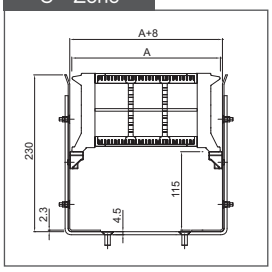
# nsb080S

## Guide channel

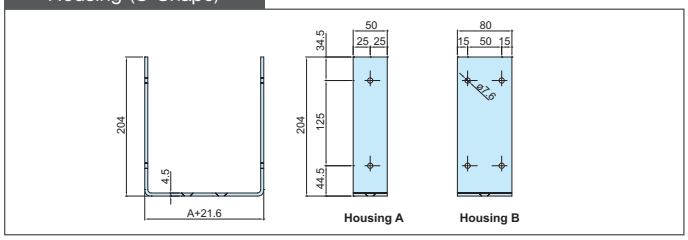
A - Zone



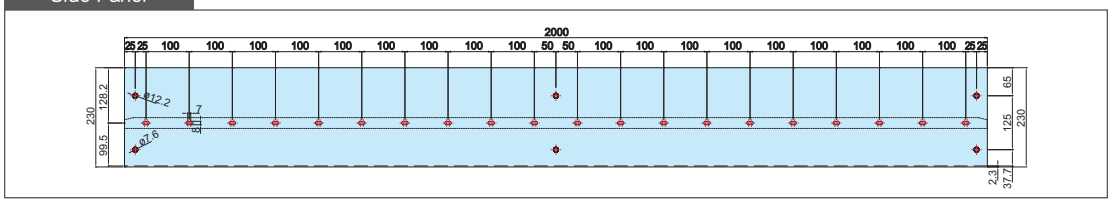

C - Zone




Housing (U-Shape)




Side Panel




(Dimensions in mm)

## Guide channel dimension

| nsb080S | |
|---|---|
| C value | A value |
| 75 | 143 |
| 100 | 168 |
| 115 | 183 |
| 125 | 193 |
| 150 | 218 |
| 175 | 243 |
| 200 | 268 |
| 240 | 308 |
| 250 | 318 |
| 290 | 358 |
| 300 | 368 |
| 350 | 418 |
| 400 | 468 |
| 450 | 518 |
| 500 | 568 |
| 550 | 618 |
| 600 | 668 |

▶ C value : Frame width
▶ A value : Outer width of cable chain

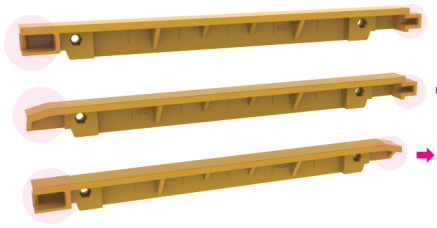
## Guide channel ordering

**nsb-GCS 080S. 100 : 200M**

- Length(mm)
- Inside Width
- Chain Type
- Steel Guide Channel
- sabin Chain

## Nylon bar type

### GC.NB-400

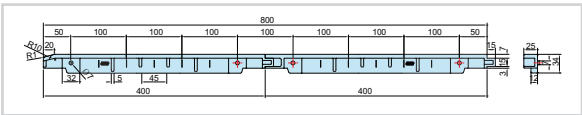


➡ GC.NB-400-Normal

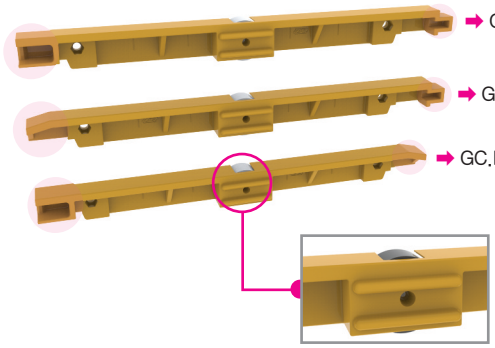
➡ GC.NB-400-RH

➡ GC.NB-400-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-400R (Roller type)

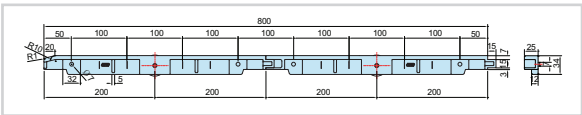


➡ GC.NB-400R-Normal

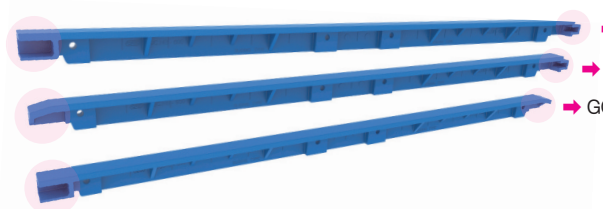
➡ GC.NB-400R-RH

➡ GC.NB-400R-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800

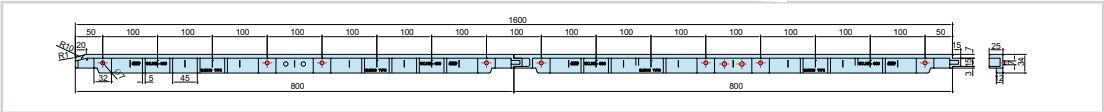


➡ GC.NB-800-Normal

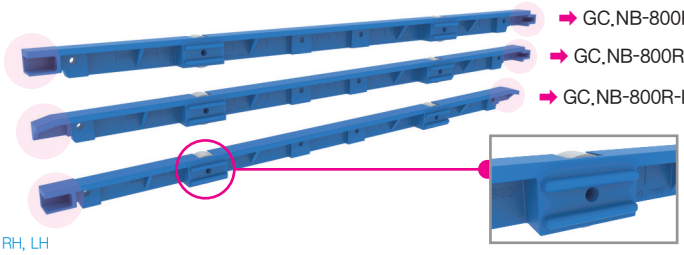
➡ GC.NB-800-RH

➡ GC.NB-800-LH

※ Bilateral symmetry for both RH, LH



### GC.NB-800R (Roller type)

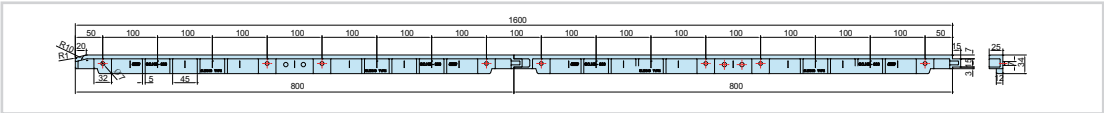


➡ GC.NB-800R-Normal

➡ GC.NB-800R-RH

➡ GC.NB-800R-LH

※ Bilateral symmetry for both RH, LH



(Dimensions in mm)

## Nylon bar ordering

**GC.NB-800 R / N : 10ST**

- Q'ty(set)
- Nylon Bar Type -N : Normal -R : RH -L : LH
- Roller Type
- Length(mm) 400, 800
- Guide Channel Nylon Bar