

Shift chain[®]

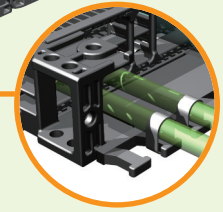
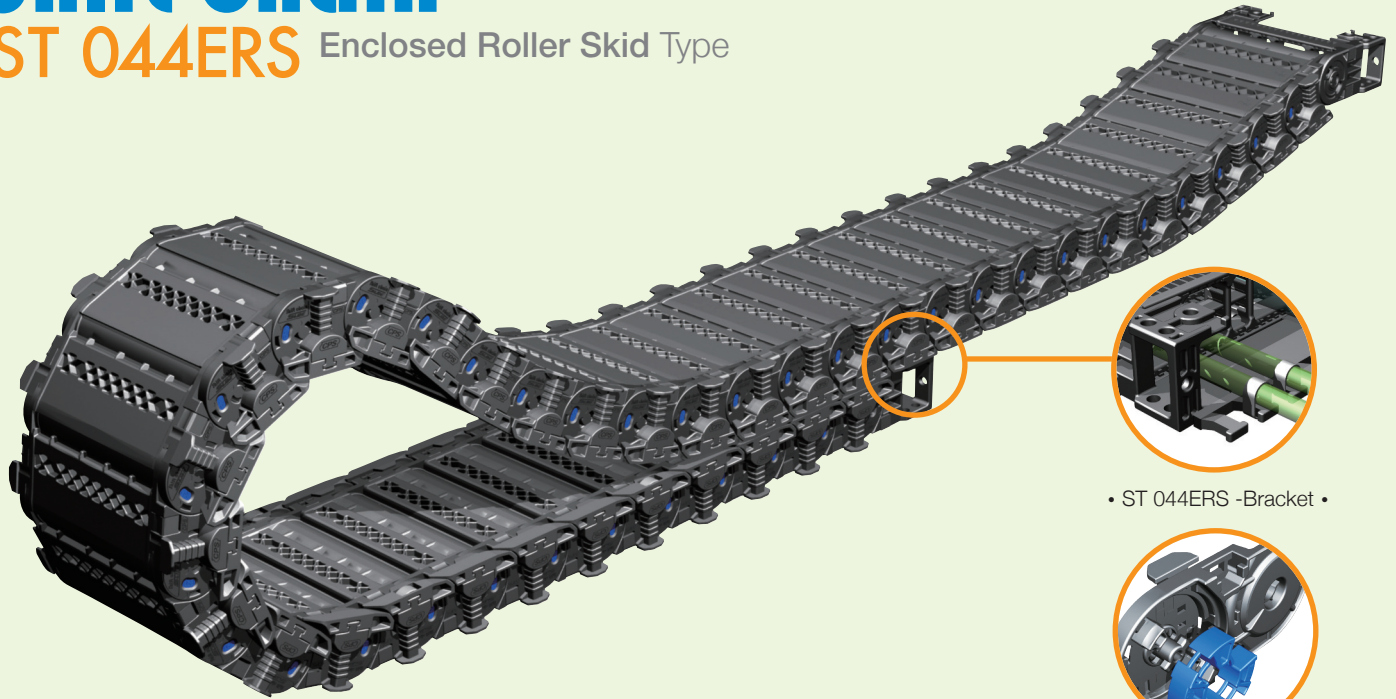
SLIDING-ERS TYPE : Enclosed Roller Skid

- ST044ERS - 174p
- ST072ERS - 179p
- ST095ERS - 184p
- ST120ERS - 189p
- ST150ERS - 194p

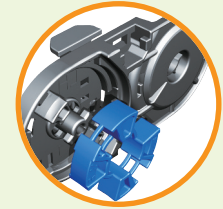


Shift chain®

ST 044ERS Enclosed Roller Skid Type



• ST 044ERS -Bracket •



• Bending Radius Unit •

MATERIAL

- **Chain material:**
CPS-amide with glass fiber reinforced UL94-HB
- **Low Noise & Low Mote**
- **Temperature :** -30°C ~ +130°C
- **Coefficient of Friction :**
0.02~0.07 μ
Regular Cable Chain : 0.3 ~ 0.4 μ

Applications

Facilities and equipments requiring a long travel distance as below; Gantry Robots, Robot Carriages, Automatic Welding Lines, Gantry Cranes, Gantry loader, etc.

Shift Chain ERS-Type can be found on car manufacturer's welding line, where excess material can damage your inserted cables.

Calculation of the chain length

$$\left[L = \frac{Ls}{2} + Lp \right]$$

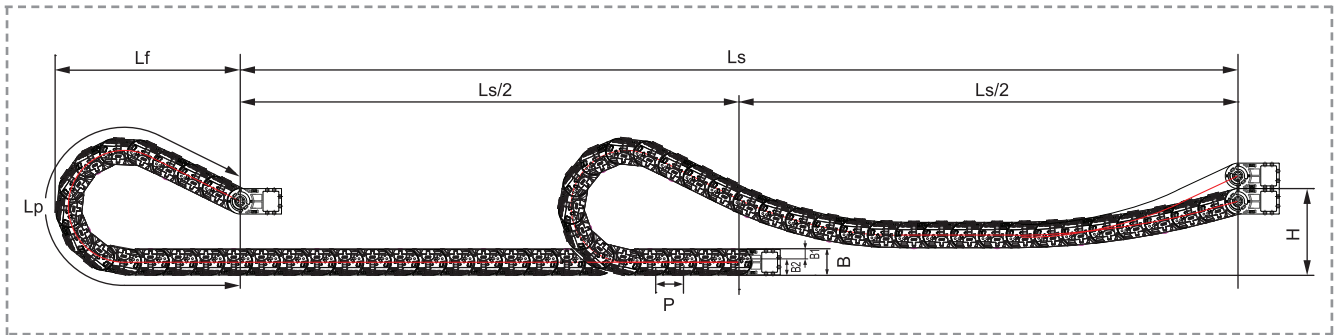
With a friction co-efficiency of 0.02 ~0.07 μ due to the patented roller skid design, the Shift Chain is quieter and faster than ever. Non friction also means no dust for those applications where a clean work environment is a priority.



Enclosed Roller Skid Type **ST 044ERS**

LAYOUT OF THE CHAIN

Ls: Stroke **Lp:** Loop Length **Lf:** Loop Projection



(Dimensions in mm)

Bending radius R	70	90	120	150
Lp	544	662	926	1,190
L f	249	289	393	497
H	130	130	130	130

ST 044ERS Type

Pitch P: 44mm

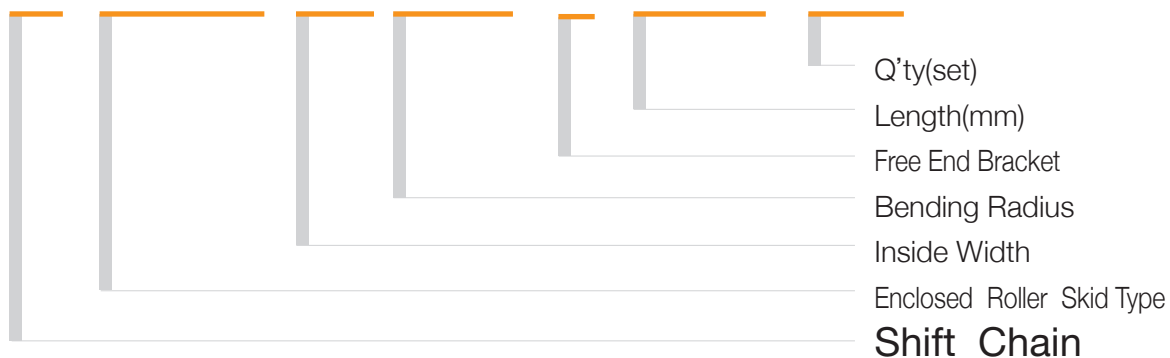
Height B: 40.5mm

B1: 20.5mm

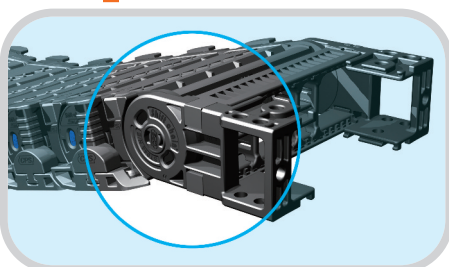
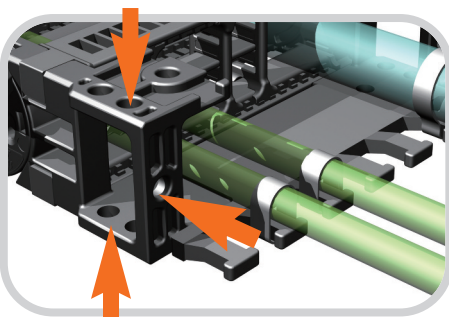
B2: 20mm

ORDERING

ST 044ERS.100.R120 / F-1500L:10ST



BRACKET TYPE



FEB (Free End Bracket)

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The End Bracket is designed to move up and down as the cable chain or application requires.

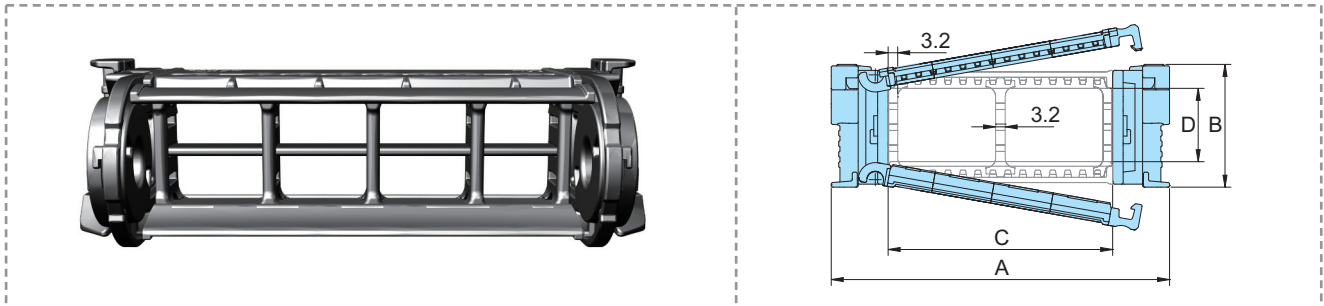
- ▶ BR should not be inserted in the joint of side band and Free End Bracket
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▶ Above products are patent registered item which can be protected by industrial property right.



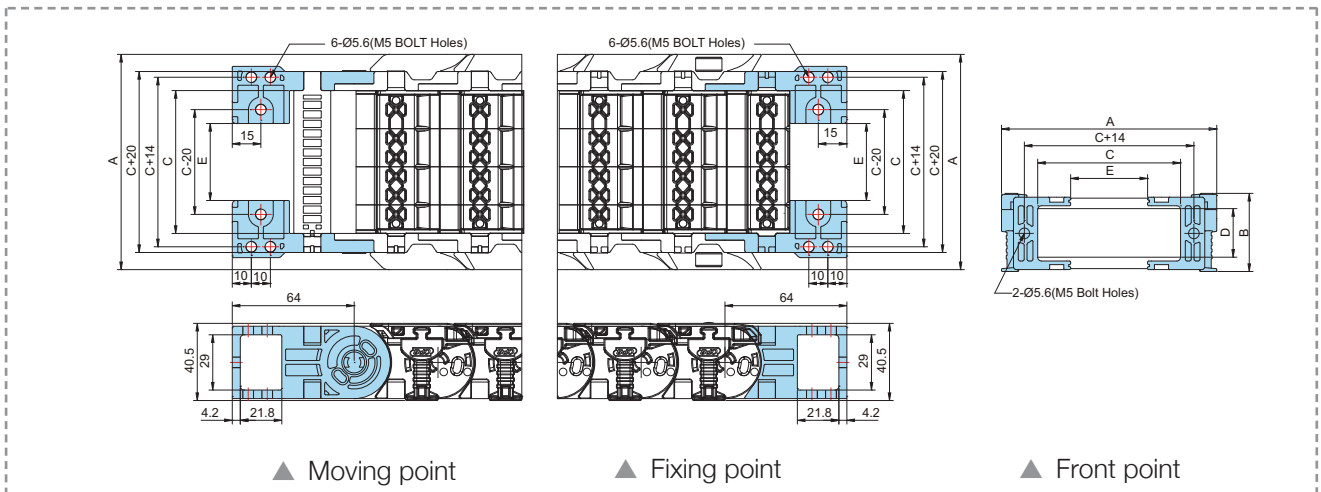
Enclosed Roller Skid Type **ST 044ERS**

CHAIN CROSS SECTION



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
ST 044ERS.035	73		35			1.07
ST 044ERS.055	93	40.5	55	24.5	70, 90, 120, 150	1.16
ST 044ERS.075	113		75			1.23
ST 044ERS.100	138		100			1.33

FREE END BRACKET



Chain Type	A	B	C	D	E	Hole Type
ST 044ERS.035	73		35		0.4	M5 Bolt Holes
ST 044ERS.055	93	40.5	55	24.5	20.4	
ST 044ERS.075	113		75		40.4	
ST 044ERS.100	138		100		65.4	

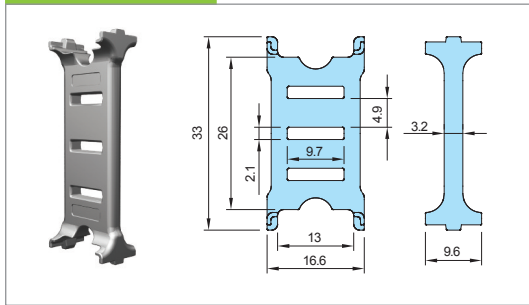


Enclosed Roller Skid Type **ST 044ERS**

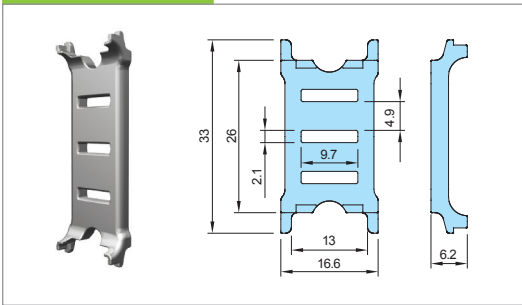
DIVIDERS & SEPARATORS

Dividers (Vertical) and Separators (Horizontal) divide the inner chamber of the cable chain to give each cable diameter its own center and keep the cables separated from each other. The use of a separator in some cases, can also reduce the width requirements as two or more levels can be made within the same chamber. To prevent twisting or damage to the cables, as a rule, there needs to be at least 10% space between the inserted cable and its enclosure.

ST 044ERS DV-M



ST 044ERS DV-S

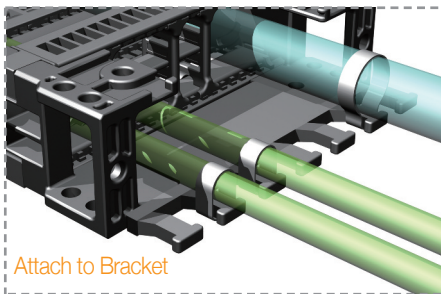


*Assemble divider every Two links.

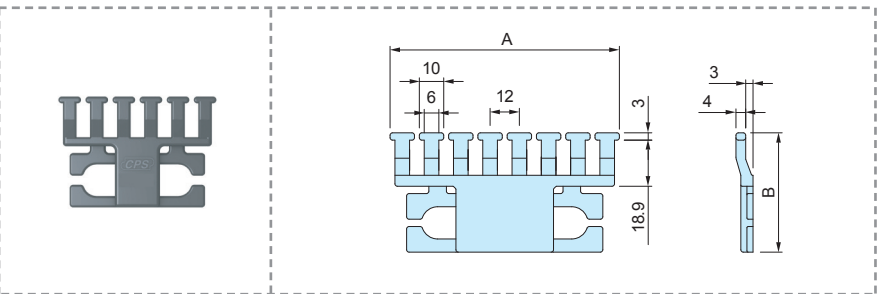
ST044ERS Separators (SP) (No. : S-SP/M)

Chain Type	Separators	SP035	SP050	SP055	SP075	SP100	SP125	SP150	SP175	SP200
ST 044ERS		○	○	○	○	○	○	○	○	○

TIE WRAP



Attach to Bracket



(Dimensions in mm)

Tie Wrap	035	055	075	100
A	46	70	94	118
B	35.4	48.9	48.9	48.9

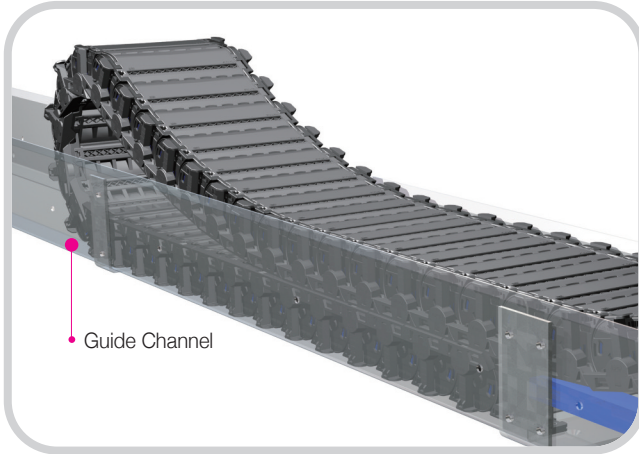
The Tie Wrap separated from the Shift Chain bracket, when installed properly, protects the inserted cables from becoming entangled and twisted during operation.

There are two types in the tie wrap; Attached & Unattached to the bracket.



Enclosed Roller Skid Type **ST 044ERS**

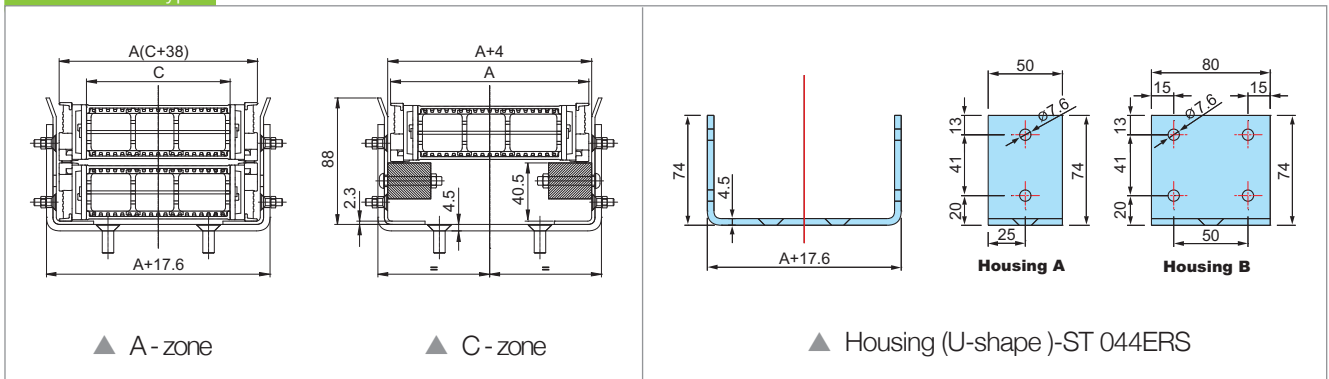
GUIDE CHANNEL



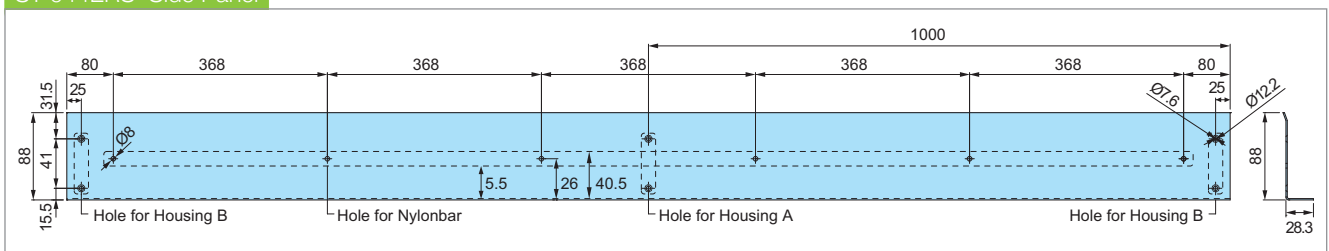
For long stroke applications the guide channel is applied to ensure that the Shift Chain Sliding Chain stays on track and to ensure safety during operation. With the application of a rubber pad on the channel floor, noise is reduced to a minimum. Guide Channels are made of Steel + Zn and can be customized with SUS material.

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ST 044ERS Type

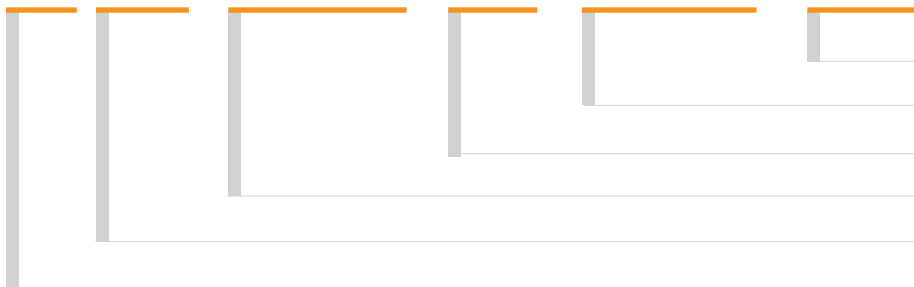


ST 044ERS Side Panel



ORDERING

ST-GCS 044ERS. 100 / A, B, C : 200M



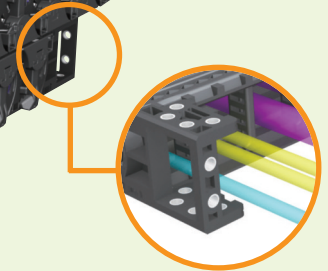
- Length(mm)
- Panel A, B, C-Zone
- Inside Width
- Chain Type
- Steel Guide Channel
- Shift Chain



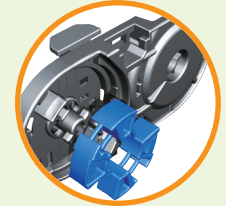
Min ●●●●● Max

Shift chain®

ST 072ERS Enclosed Roller Skid Type



• ST 072ERS - Bracket •



• Bending Radius Unit •

CPS CABLE CHAIN

SHIFT CHAIN

SABIN CHAIN

REVOLVING CHAIN

HELIX CHAIN

ROBO-KIT

CPSTEX

CPSTX

MATERIAL

- **Chain material:**
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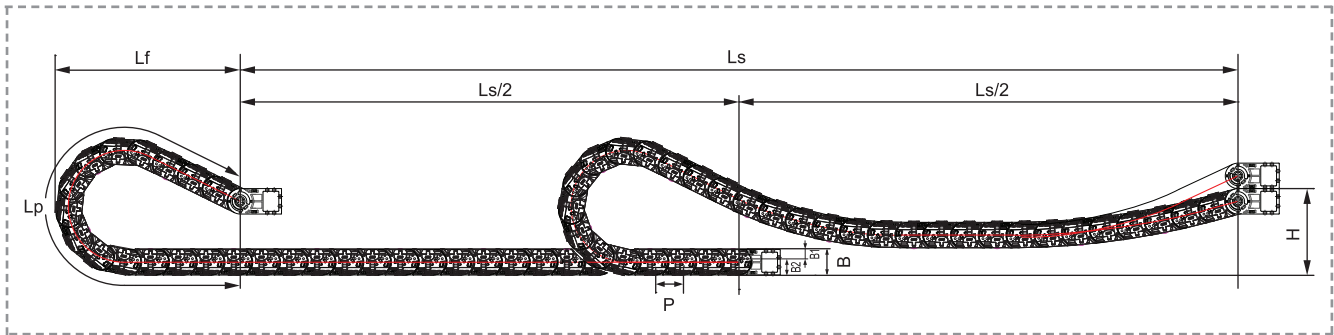
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Enclosed Roller Skid Type **ST 072ERS**

LAYOUT OF THE CHAIN

Ls: Stroke **Lp:** Loop Length **Lf:** Loop Projection



(Dimensions in mm)

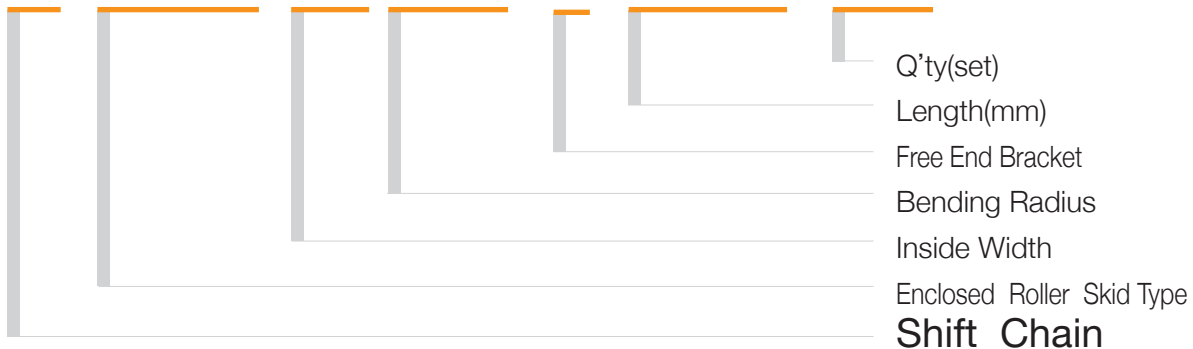
Bending radius R	120	145	200	250	300
Lp	917	1,063	1,400	1,840	2,280
L f	420	470	580	752	924
H	230	230	230	230	230

ST 072ERS Type

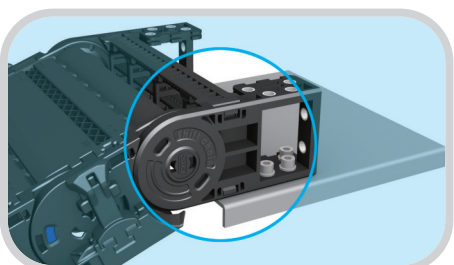
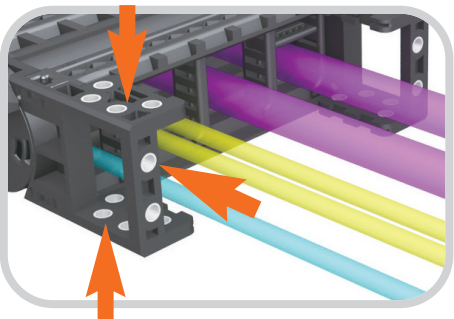
Pitch P: 72mm
Height B: 69mm
B1: 34.5mm
B2: 34.5mm

ORDERING

ST 072ERS.150.R200 / F-10000L:10ST



BRACKET TYPE (브라켓타입)



FEB (Free End Bracket)

FEB Fixes the cable chain to the machinery or moving application. CPS has improved mounting efficiency by unifying the existing Easy End Bracket and Normal End Bracket.

The End Bracket is designed to move up and down as the cable chain or application requires. To add strength, steel washers are inserted into the fixing holes of each Free End Bracket.

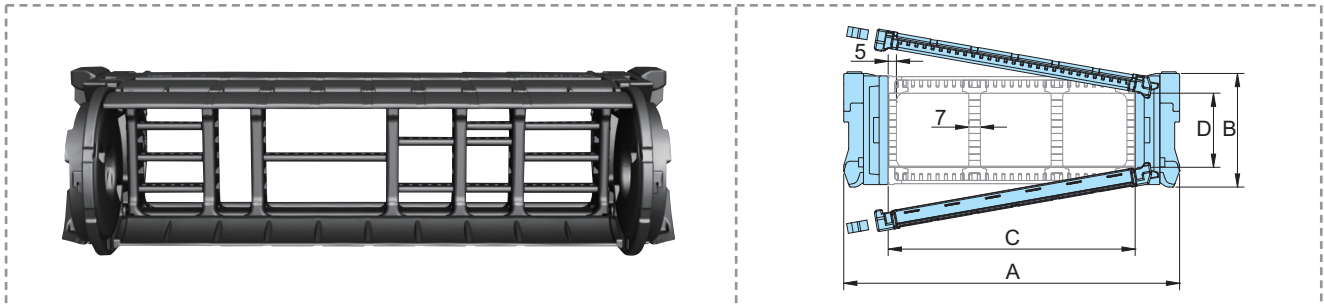
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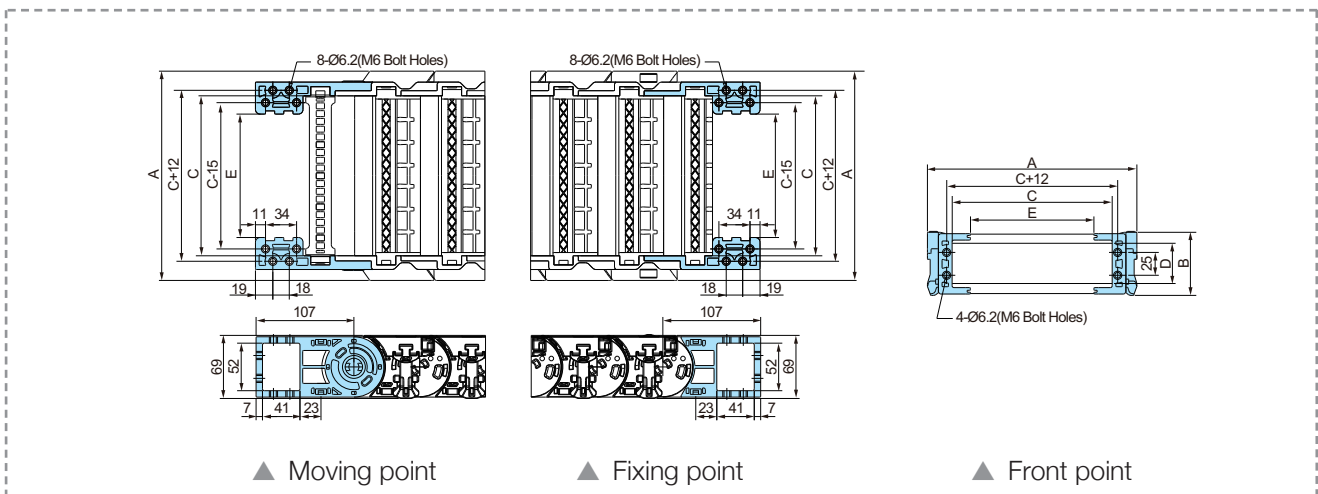
CHAIN CROSS SECTION



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
ST 072ERS.050	104		50		120,145, 200, 250, 300	2.53
ST 072ERS.075	129		75			2.65
ST 072ERS.100	154	69	100	44		2.77
ST 072ERS.125	179		125			2.89
ST 072ERS.150	204		150			3.01

▲ Application of special frame. (C:140,165,190,240)

FREE END BRACKET



▲ Moving point

▲ Fixing point

▲ Front point

Chain Type	A	B	C	D	E	Hole Type
ST 072ERS.050	104		50		10	M6 Bolt Holes
ST 072ERS.075	129		75		35	
ST 072ERS.100	154	69	100	44	60	
ST 072ERS.125	179		125		85	
ST 072ERS.150	204		150		110	

▲ Application of special frame. (C:140,165,190,240)

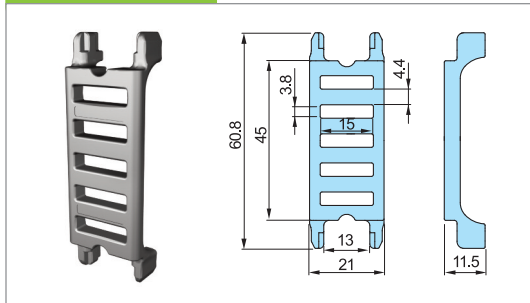


Enclosed Roller Skid Type **ST 072ERS**

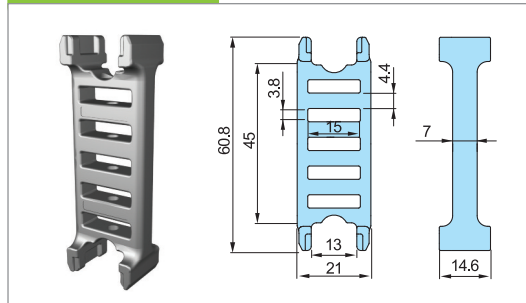
DIVIDERS

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ST 072SE DV-M

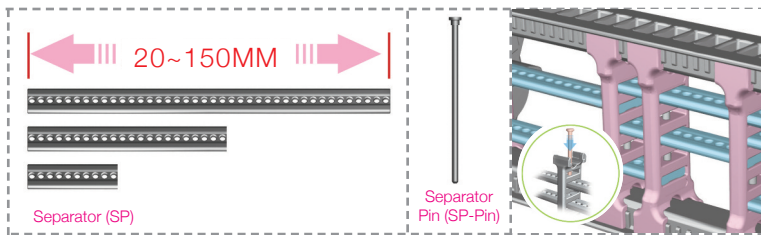


ST 072SE DV-S



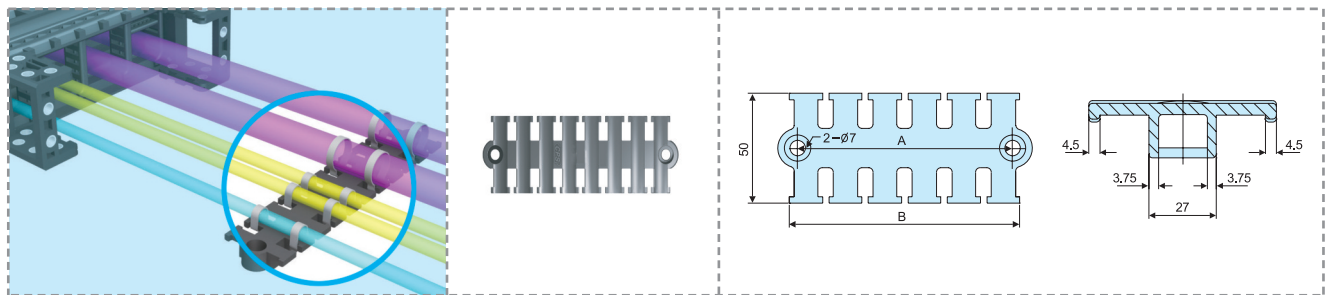
*Assemble divider every Two links.

SEPARATORS (SP)



Separator is available in length from 20mm to 150mm and can be cut every 5mm for use. The combined use of divider and separator with the pin creates the most effective cable pattern and keep insertion space for cables safely, so it protects the inserted cables.

TIE WRAP



(Dimensions in mm)

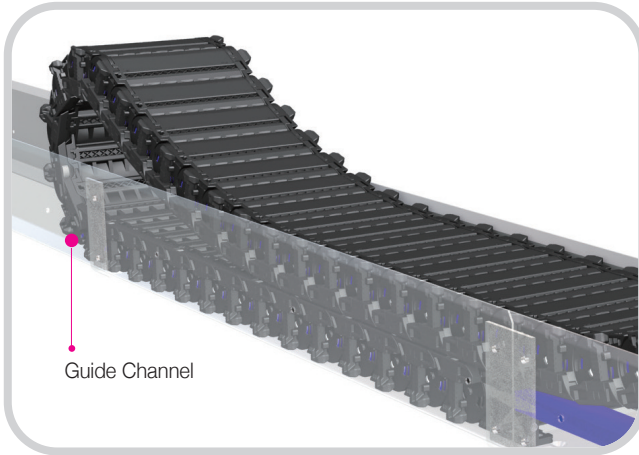
Tie Wrap	050	075	100	125	150
A	58	75	98	122	141
B	65	82	105	129	148

The Tie Wrap separated from the Shift Chain bracket, when installed properly, protects the inserted cables from becoming entangled and twisted during operation.



Enclosed Roller Skid Type **ST 072ERS**

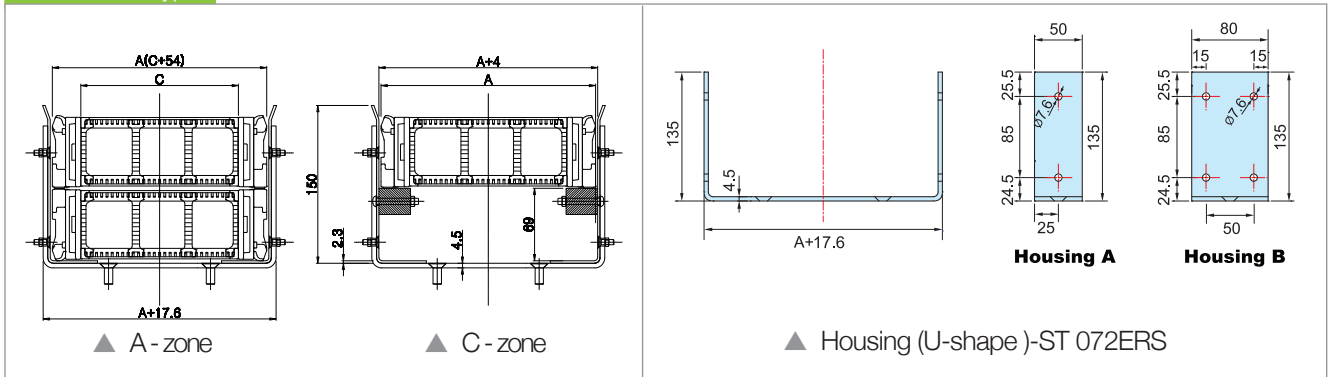
GUIDE CHANNEL



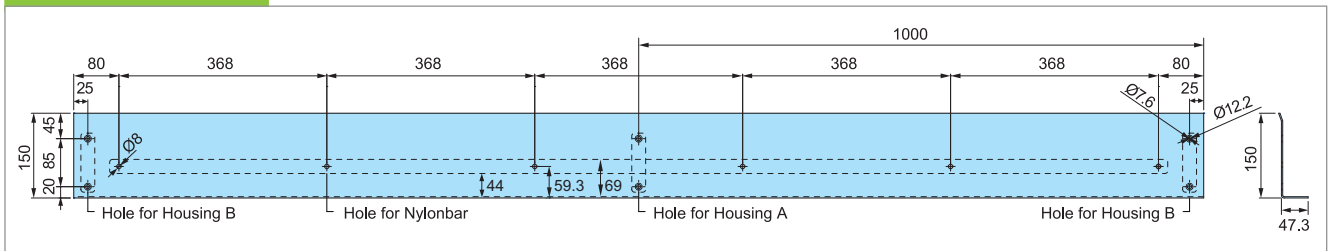
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ST 072ERS Type



ST 072ERS Side Panel



ORDERING

ST-GCS 072ERS. 150 / A, B, C : 200M

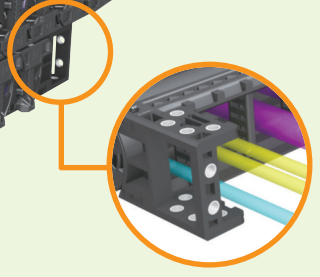


Length(mm)
 Panel A, B, C-Zone
 Inside Width
 Chain Type
 Steel Guide Channel
 Shift Chain

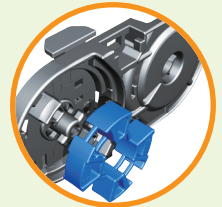


Min ●●●●●●●● Max

Shift chain[®] ST 095ERS Enclosed Roller Skid Type



• ST 095ERS - Bracket •



• Bending Radius Unit •

MATERIAL

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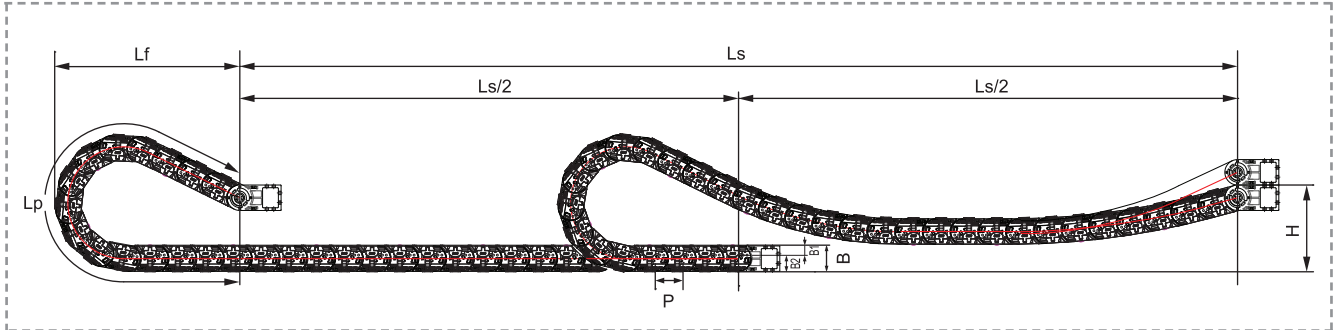
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Enclosed Roller Skid Type **ST 095ERS**

LAYOUT OF THE CHAIN

Ls: Stroke Lp: Loop Length Lf: Loop Projection



(Dimensions in mm)

Bending radius R	150	200	230	280	400
Lp	1,178	1,479	1,666	2,146	3,232
Lf	534	634	694	889	1,319
H	250	250	250	250	250

ST 095ERS Type

Pitch P: 95mm

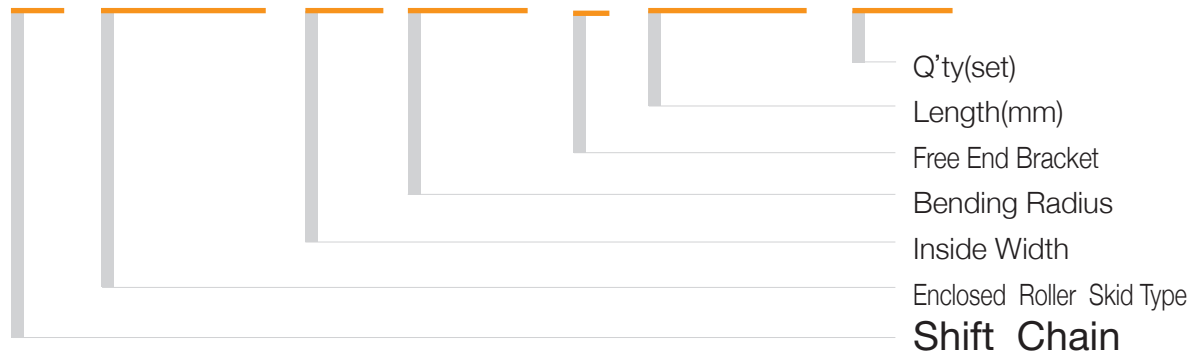
Height B: 85mm

B1: 42.7mm

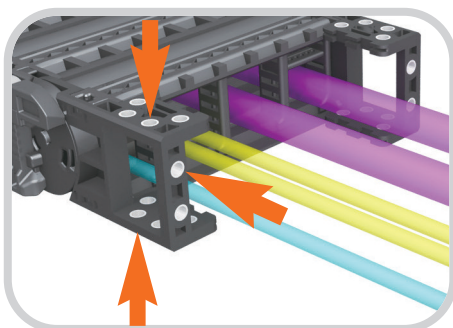
B2: 42.3mm

ORDERING (주문방법)

ST 095ERS. 200.R200 / F-10000L:10ST



BRACKET TYPE (브라켓타입)

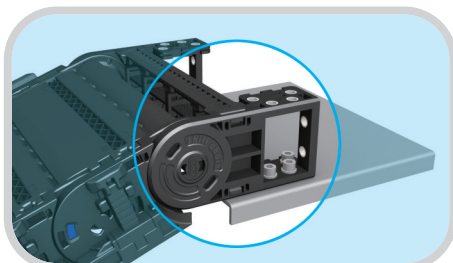


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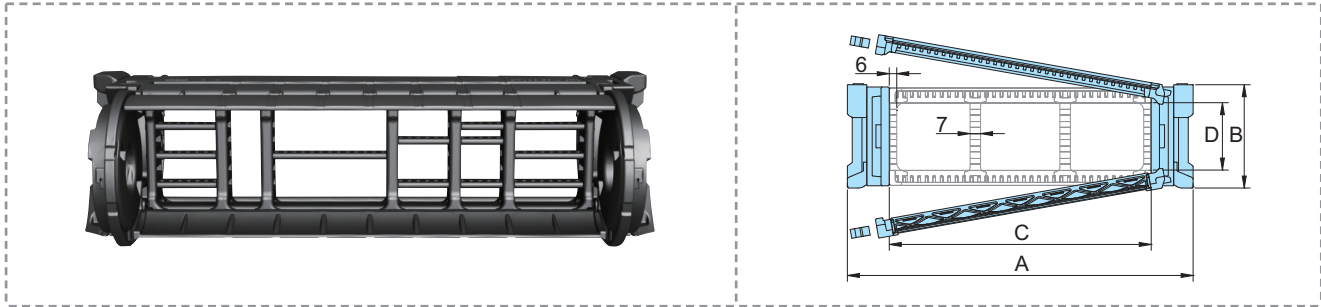


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Enclosed Roller Skid Type **ST 095ERS**

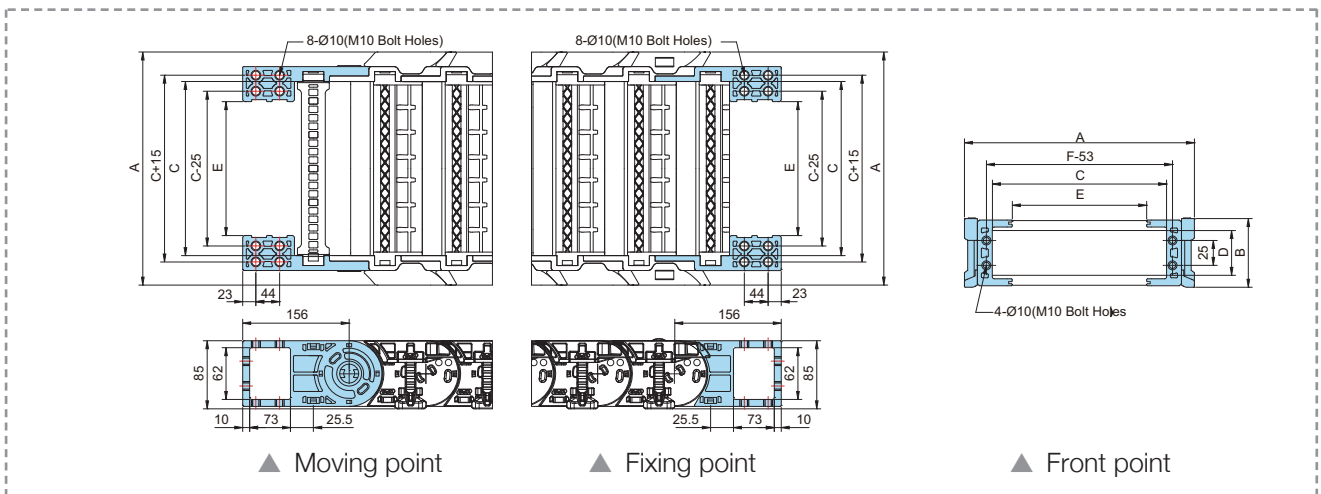
CHAIN CROSS SECTION



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
ST 095ERS.100	168		100			4.20
ST 095ERS.125	193		125			4.45
ST 095ERS.150	218	85	150	55	150, 200, 230, 280, 400	4.70
ST 095ERS.175	243		175			4.95
ST 095ERS.200	268		200			5.19

▲ Application of special frame. (C:190,240)

FREE END BRACKET



▲ Moving point

▲ Fixing point

▲ Front point

Chain Type	A	B	C	D	E	Hole Type
ST 095ERS.100	168		100		49	M10 Bolt Holes
ST 095ERS.125	193		125		74	
ST 095ERS.150	218	85	150	55	99	
ST 095ERS.175	243		175		124	
ST 095ERS.200	268		200		149	

▲ Application of special frame. (C:190,240)



Enclosed Roller Skid Type **ST 095ERS**

CPS CABLE CHAIN

SHIFT CHAIN

SABIN CHAIN

REVOLVING CHAIN

HELIX CHAIN

ROBO-KIT

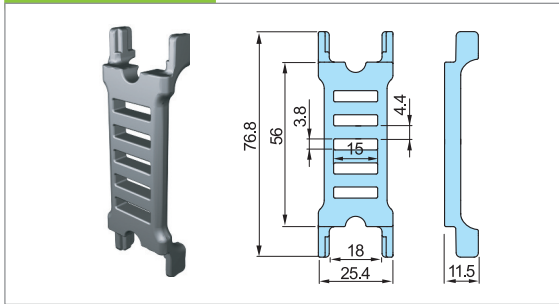
CPSTEX

CPSTIX

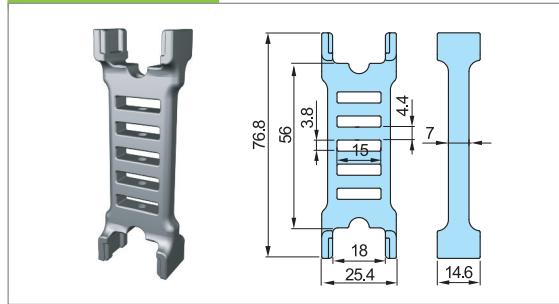
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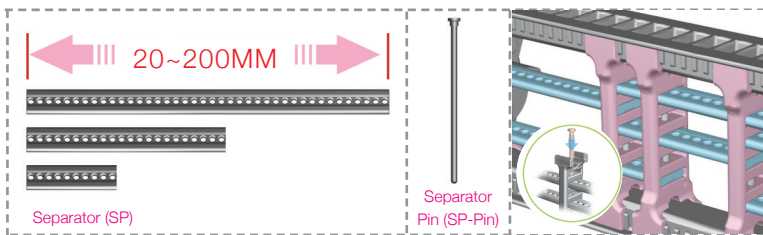


ST 095ERS DV-M



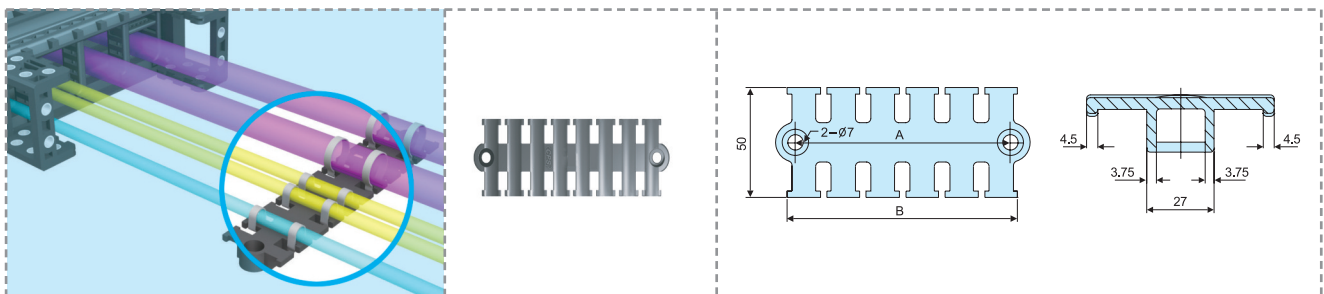
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TIE WRAP



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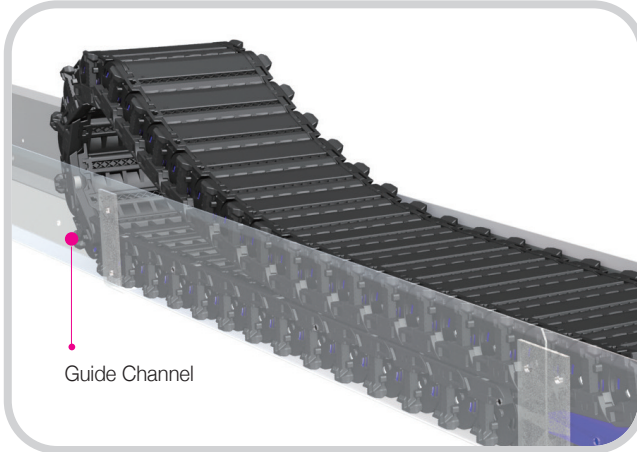
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The Tie Wrap separated from the Shift Chain bracket, when installed properly, protects the inserted cables from becoming entangled and twisted during operation



Enclosed Roller Skid Type **ST 095ERS**

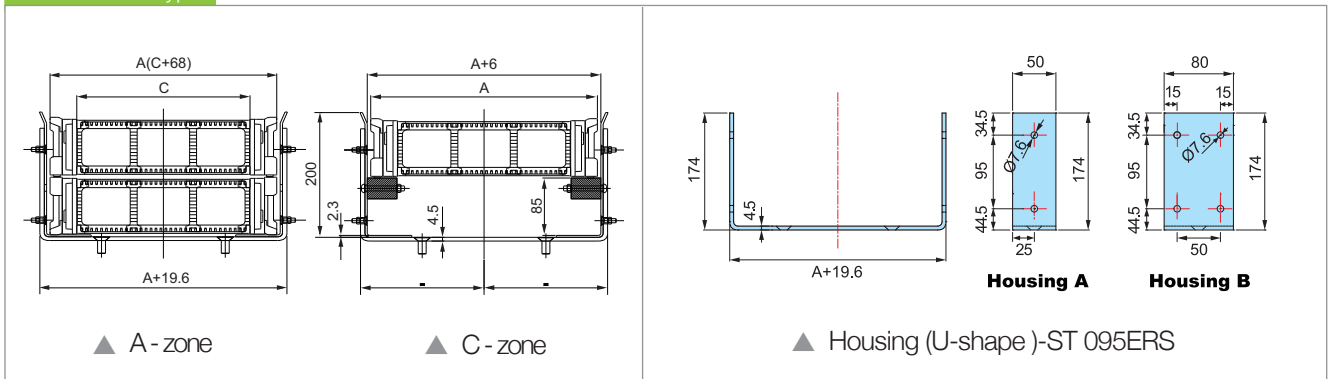
GUIDE CHANNEL



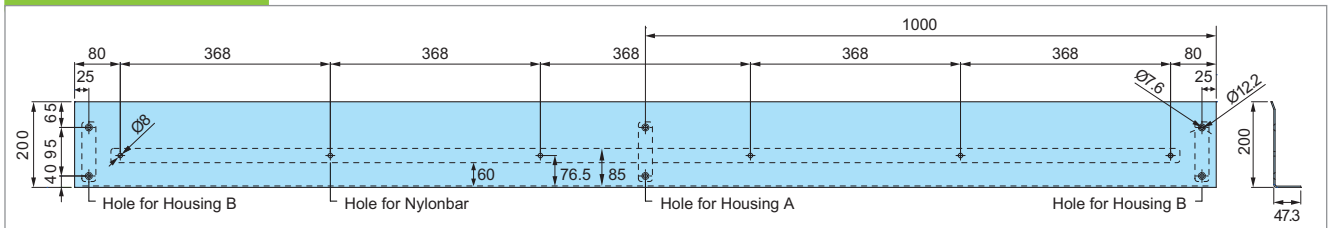
For long stroke applications the guide channel is applied to ensure that the Shift Chain Sliding Chain stays on track and to ensure safety during operation. With the application of a rubber pad on the channel floor, noise is reduced to a minimum. Guide Channels are made of Steel + Zn and can be customized with SUS material .

▶ Thickness can be changed by the product standards of material.

ST 095ERS Type

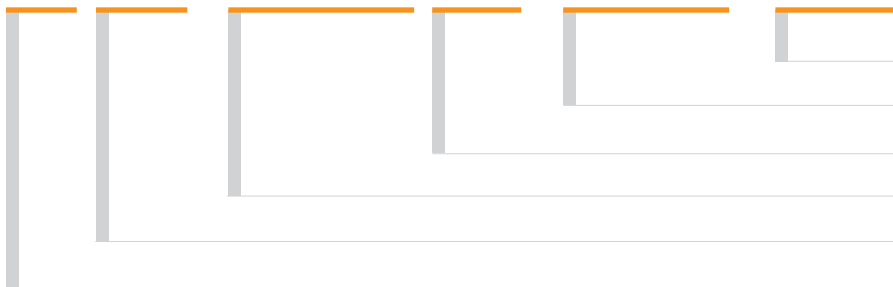


ST 095ERS Side Panel



ORDERING

ST-GCS 095ERS.175 / A, B, C : 200M

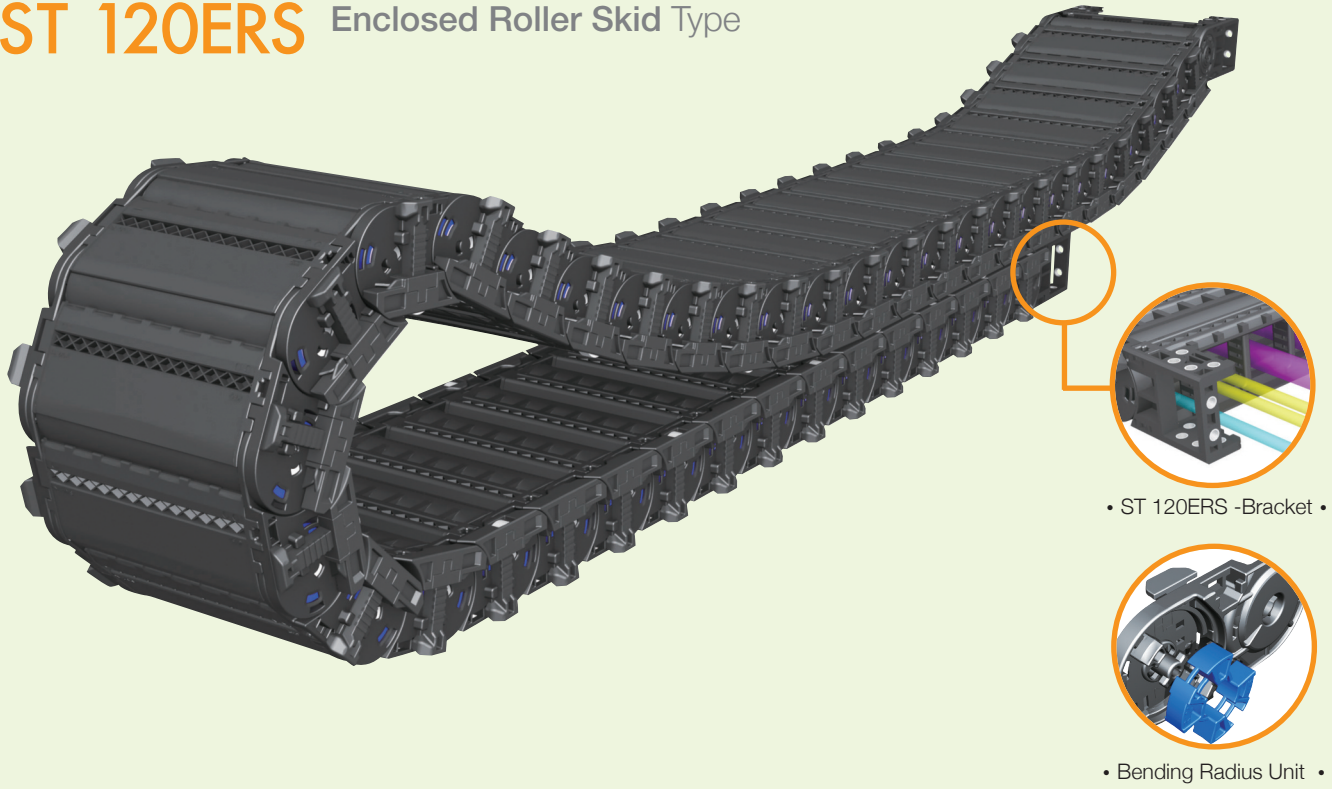


- Length(mm)
- Panel A, B, C-Zone
- Inside Width
- Chain Type
- Steel Guide Channel
- Shift Chain



Min ●●●●●●●● Max

Shift chain® ST 120ERS Enclosed Roller Skid Type



• ST 120ERS -Bracket •

• Bending Radius Unit •

MATERIAL

- **Chain material:**
CPS-amide with glass fiber reinforced UL94-HB
- **Low Noise & Low Mote**
- **Temperature :** -30°C ~ +130°C
- **Coefficient of Friction :**
0.02~0.07μ
Regular Cable Chain : 0.3 ~ 0.4μ

Applications

Facilities and equipments requiring a long travel distance as below; Gantry Robots, Robot Carriages, Automatic Welding Lines, Gantry Cranes, Gantry loader, etc.

Shift Chain ERS-Type can be found on car manufacturer's welding line, where excess material can damage your inserted cables.

Calculation of the chain length

$$\left[L = \frac{Ls}{2} + Lp \right]$$

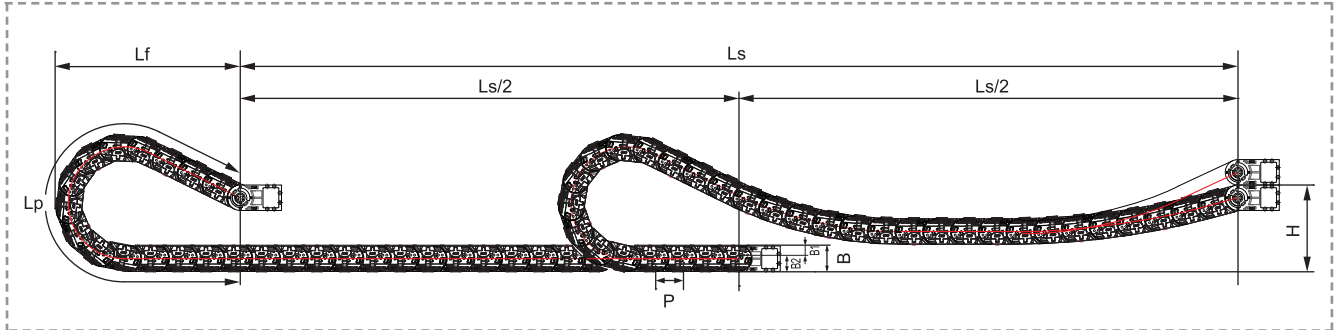
With a friction co-efficiency of 0.02 ~0.07 μ due to the patented roller skid design, the Shift Chain is quieter and faster than ever. Non friction also means no dust for those applications where a clean work environment is a priority.



Enclosed Roller Skid Type **ST 120ERS**

LAYOUT OF THE CHAIN

Ls: Stroke **Lp:** Loop Length **Lf:** Loop Projection



(Dimensions in mm)

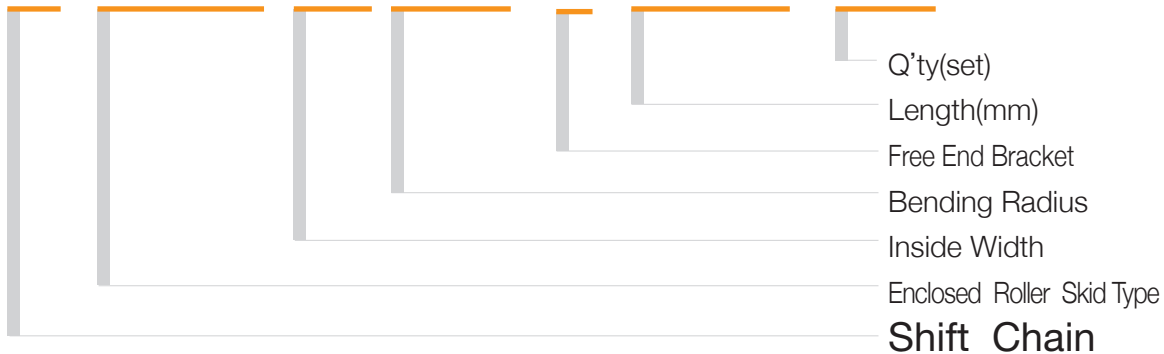
Bending radius R	200	250	300	350	400	500
Lp	1,559	1,864	2,178	2,701	3,225	4,062
Lf	694	794	894	1,114	1,334	1,654
H	300	300	300	300	300	300

ST 120ERS Type

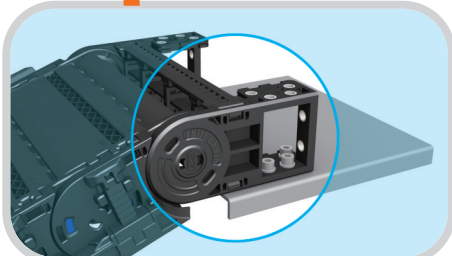
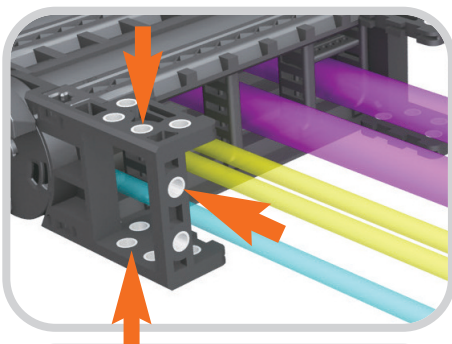
Pitch P: 120mm
Height B: 112mm
B1: 57mm
B2: 55mm

ORDERING

ST 120ERS.300.R200 / F-10000L:10ST



BRACKET TYPE



FEB (Free End Bracket)

FEB Fixes the cable chain to the machinery or moving application. CPS has improved mounting efficiency by unifying the existing Easy End Bracket and Normal End Bracket.

The End Bracket is designed to move up and down as the cable chain or application requires. To add strength, steel washers are inserted into the fixing holes of each Free End Bracket.

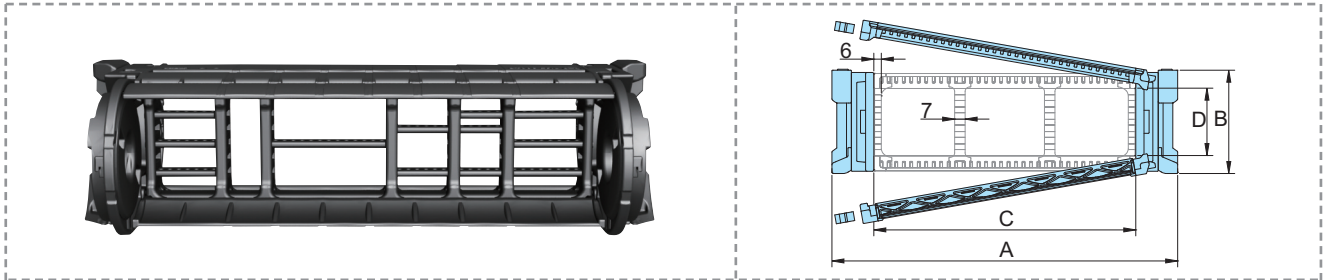
- ▶ BR should not be inserted in the joint of side band and Free End Bracket
- ▶ Normal Frame, not FRU/FRD, is inserted into Free End Bracket.

▶ Above products are patent registered item which can be protected by industrial property right.



Enclosed Roller Skid Type **ST 120ERS**

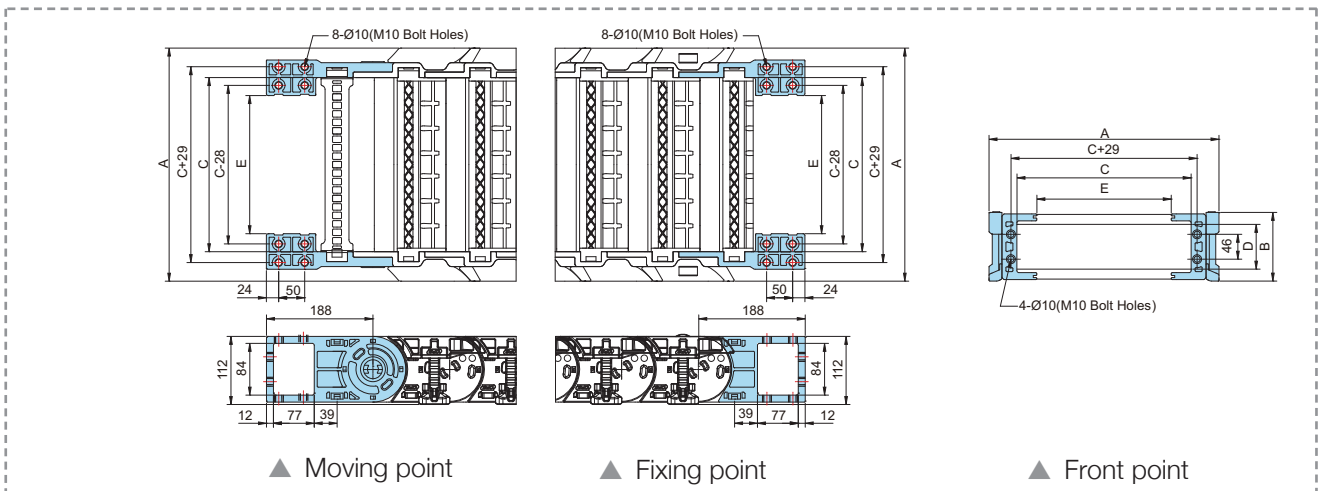
CHAIN CROSS SECTION



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
ST 120ERS.150	218		150			5.17
ST 120ERS.200	268	112	200	76	200, 250, 300,	5.48
ST 120ERS.250	318		250		350, 400, 500	5.78
ST 120ERS.300	368		300			6.09

▲ Application of special frame. (C:115,240,290)

FREE END BRACKET



▲ Moving point

▲ Fixing point

▲ Front point

Chain Type	A	B	C	D	E	Hole Type
ST 120ERS.150	218		150		90	M10 Bolt Holes
ST 120ERS.200	268	112	200	76	140	
ST 120ERS.250	318		250		190	
ST 120ERS.300	368		300		240	

▲ Application of special frame. (C:115,240,290)

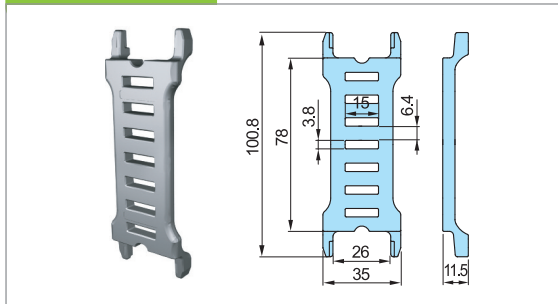


Enclosed Roller Skid Type **ST 120ERS**

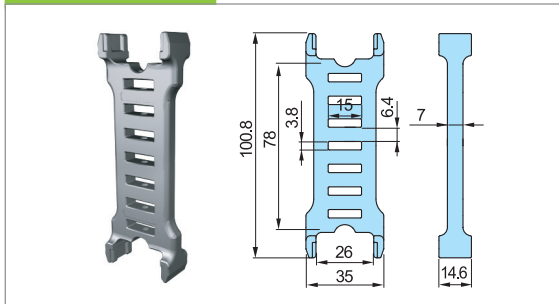
DIVIDERS

Dividers (Vertical) and Separators (Horizontal) divide the inner chamber of the cable chain to give each cable diameter its own center and keep the cables separated from each other. The use of separator in some cases, can also reduce the width requirements as two or more levels can be made within the same chamber. To prevent twisting or damage to the cables, as a rule, there needs to be at least 10% space between the inserted cable and its enclosure.

ST 120ERS DV-S

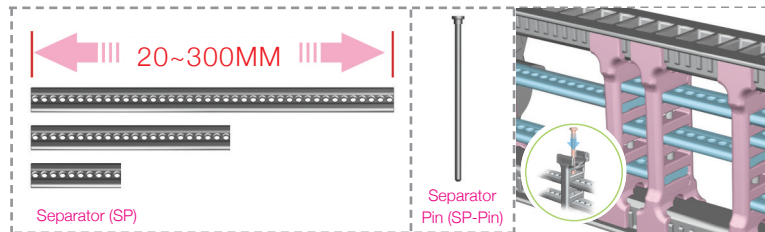


ST 120ERS DV-M



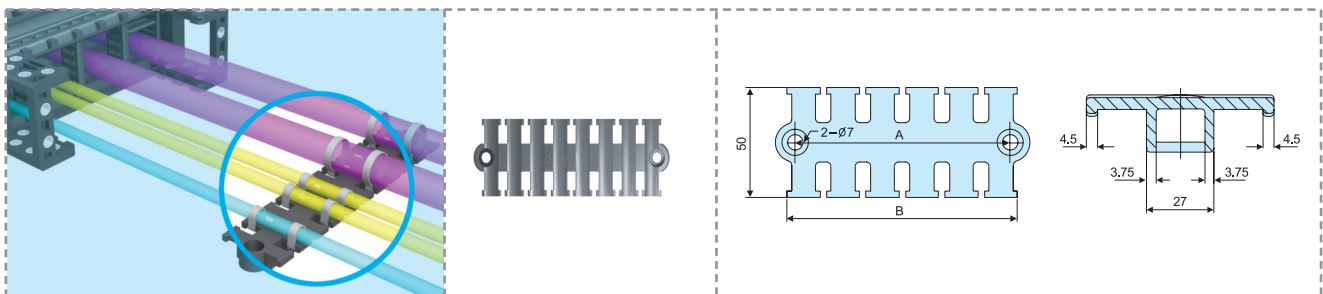
*Assemble divider every Two links.

SEPARATORS (SP)



Separator is available in length from 20mm to 300mm and can be cut every 5mm for use. The combined use of divider and separator with the pin creates the most effective cable pattern and keep insertion space for cables safely, so it protects the inserted cables.

TIE WRAP



(Dimensions in mm)

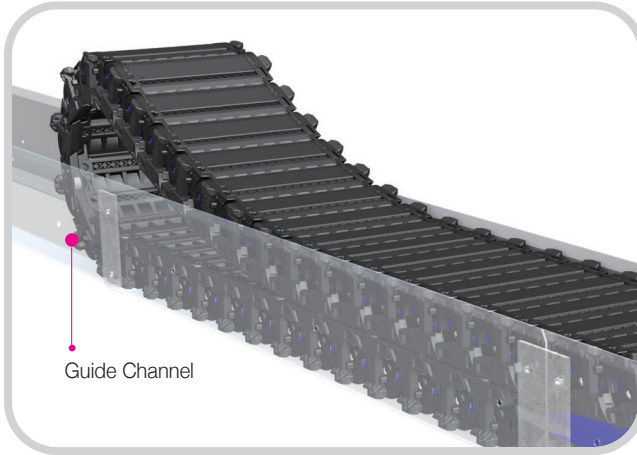
Tie Wrap	050	075	100	125	150
A	58	75	98	122	141
B	65	82	105	129	148

The Tie Wrap separated from the Shift Chain bracket, when installed properly, protects the inserted cables from becoming entangled and twisted during operation



Enclosed Roller Skid Type **ST 120ERS**

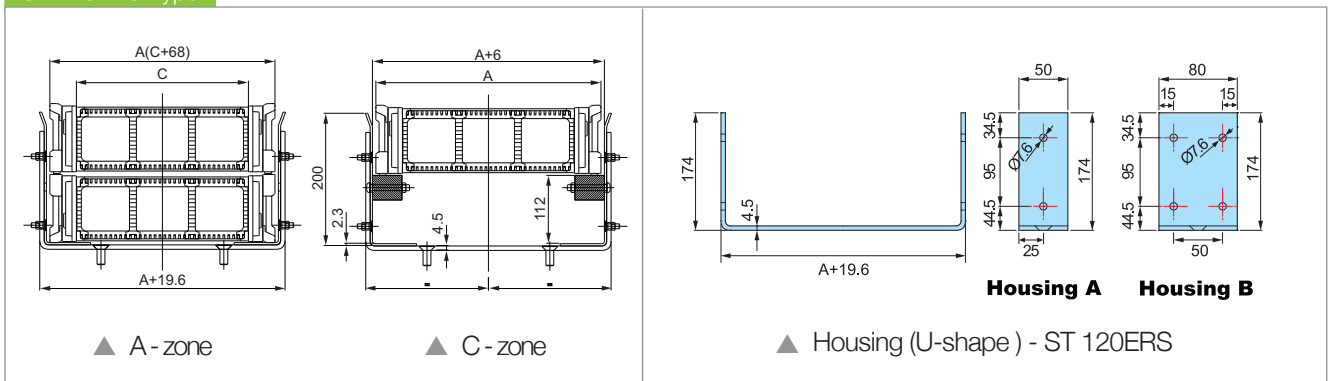
GUIDE CHANNEL



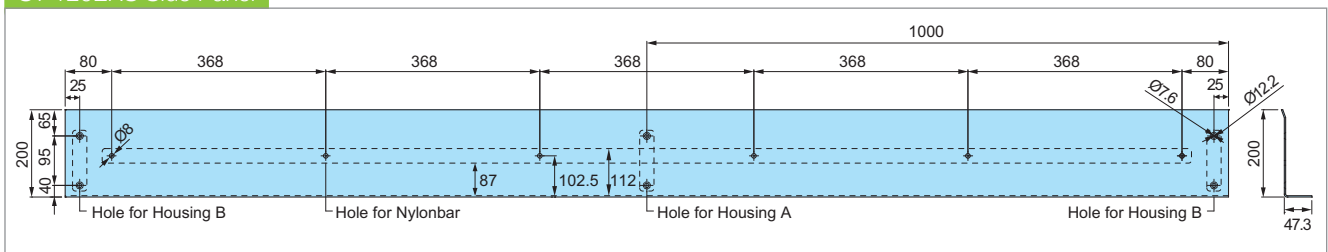
For long stroke applications the guide channel is applied to ensure that the Shift Chain Sliding Chain stays on track and to ensure safety during operation. With the application of a rubber pad on the channel floor, noise is reduced to a minimum. Guide Channels are made of Steel + Zn and can be customized with SUS material .

▶ Thickness can be changed by the product standards of material.

ST 120ERS Type

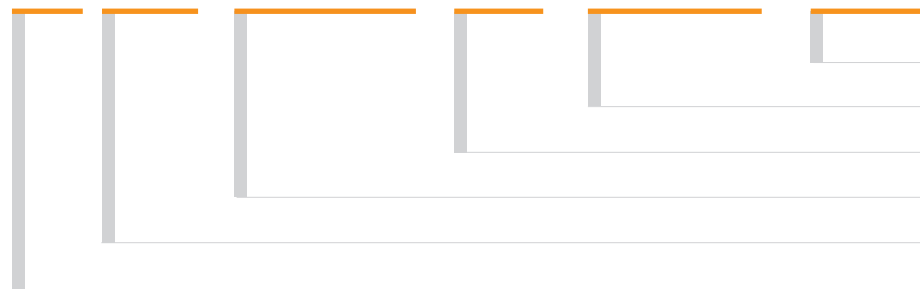


ST 120ERS Side Panel



ORDERING

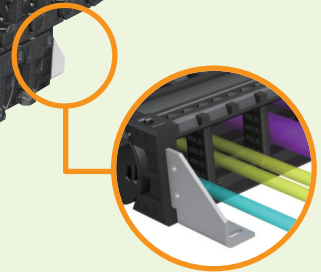
ST-GCS 120ERS. 150 / A, B, C : 200M



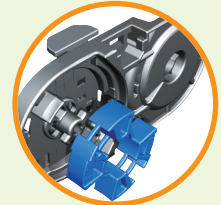
- Length(mm)
- Panel A, B, C-Zone
- Inside Width
- Chain Type
- Steel Guide Channel
- Shift Chain



Shift chain® ST 150ERS Enclosed Roller Skid Type



• ST 095ERS - Steel Bracket •



• Bending Radius Unit •

MATERIAL

- **Chain material:**
CPS-amide with glass fiber reinforced UL94-HB
- **Low Noise & Low Mote**
- **Temperature :** -30°C ~ +130°C
- **Coefficient of Friction :**
0.02~0.07 μ
Regular Cable Chain : 0.3 ~ 0.4 μ

Applications

Facilities and equipments requiring a long travel distance as below; Gantry Robots, Robot Carriages, Automatic Welding Lines, Gantry Cranes, Gantry loader, etc.

Shift Chain ERS-Type can be found on car manufacturer's welding line, where excess material can damage your inserted cables.

Calculation of the chain length

$$\left[L = \frac{Ls}{2} + Lp \right]$$

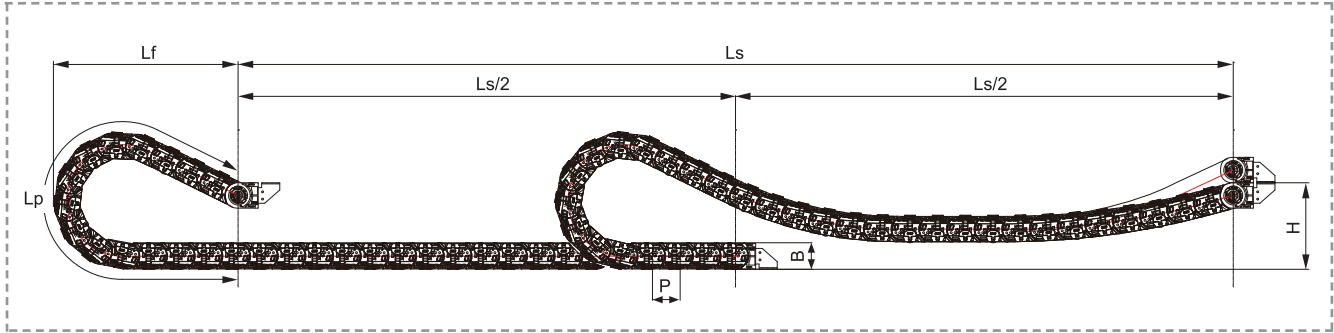
With a friction co-efficiency of 0.02 ~0.07 μ due to the patented roller skid design, the Shift Chain is quieter and faster than ever. Non friction also means no dust for those applications where a clean work environment is a priority.



Enclosed Roller Skid Type **ST 150ERS**

LAYOUT OF THE CHAIN

Ls: Stroke Lp: Loop Length Lf: Loop Projection



(Dimensions in mm)

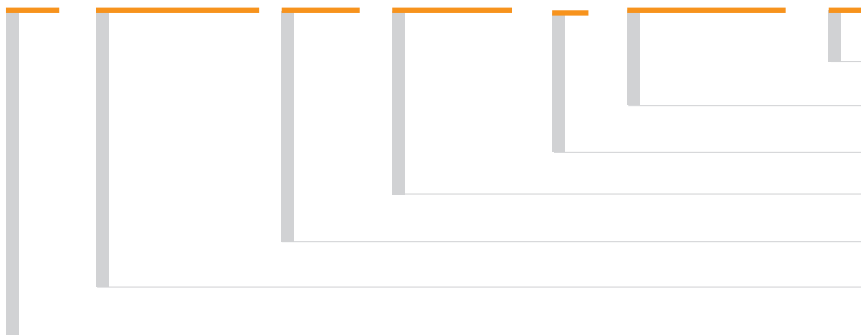
Bending radius R	305	405	505	605
Lp	2,272	3,161	4,050	4,940
Lf	985	1,335	1,685	2,035
H	400	400	400	400

ST 150ERS Type

Pitch P: 150mm
Height B: 145mm
B1: 72.6mm
B2: 72.4mm

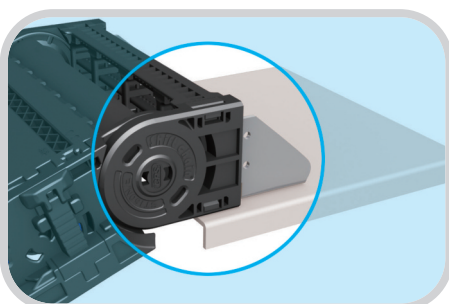
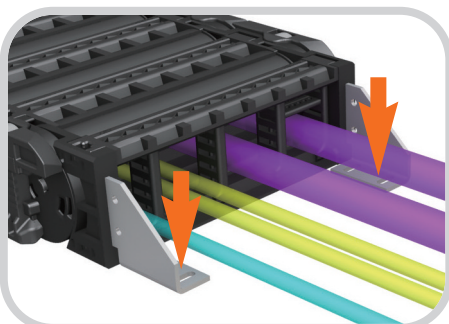
ORDERING

ST 150ERS.400.R305 / F-10000L:10ST



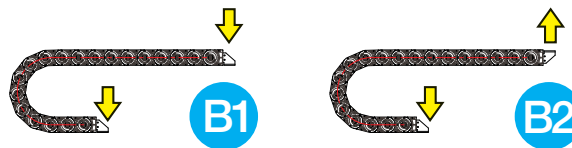
Q'ty(set)
Length(mm)
Free End Bracket
Bending Radius
Inside Width
Enclosed Roller Skid Type
Shift Chain

BRACKET TYPE



SEB (Steel End Bracket)

For ST150ERS, its end parts of cable chain being fixed are used with steel bracket, and it is possible to be installed B1, B2 types of brackets.



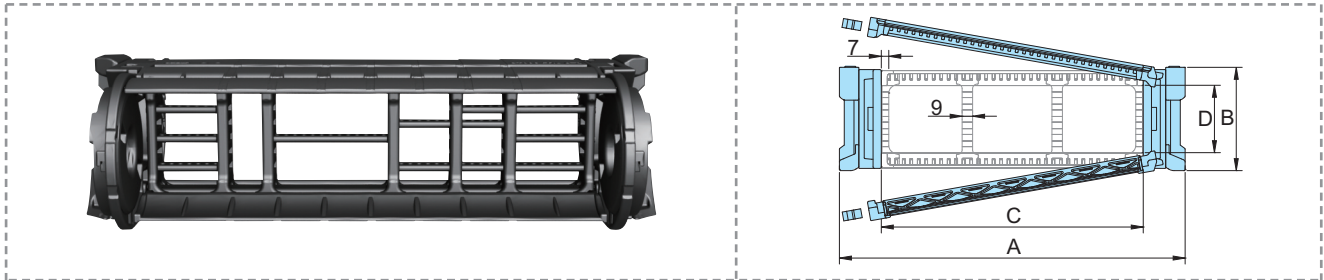
- ▶ In case of applying 'S-Type', BR should not be inserted into the side band which is in combination with SEB.
- ▶ Normal Frame, not FRU/FRD, is inserted into Free End Bracket.

▶ Above products are patent registered item which can be protected by industrial property right.



Enclosed Roller Skid Type **ST 150ERS**

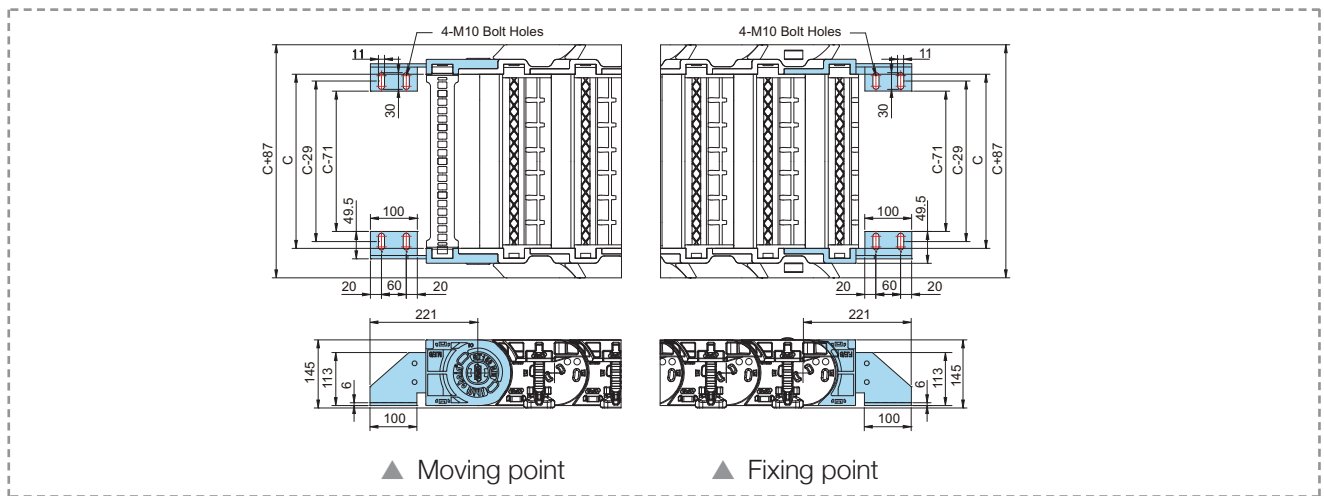
CHAIN CROSS SECTION



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
ST 150ERS.200	287		200			
ST 150ERS.250	337		250			
ST 150ERS.300	387	145	300	110	305, 405, 505, 605,	-
ST 150ERS.350	437		350			
ST 150ERS.400	487		400			

▲ Application of special frame. (C:115,240,290)

FREE END BRACKET



▲ Moving point

▲ Fixing point

Chain Type	B	C	D	Hole Type
ST 150ERS.200		200		
ST 150ERS.250		250		
ST 150ERS.300	145	300	110	M10 Bolt Holes
ST 150ERS.350		350		
ST 150ERS.400		400		

▲ Application of special frame. (C:115,240,290)

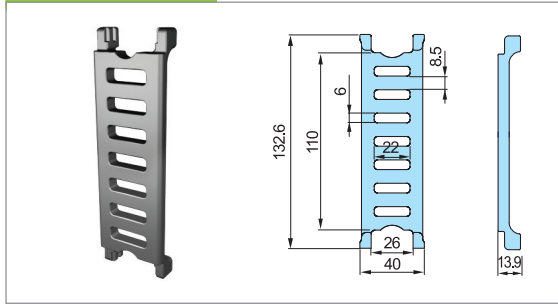


Enclosed Roller Skid Type **ST 150ERS**

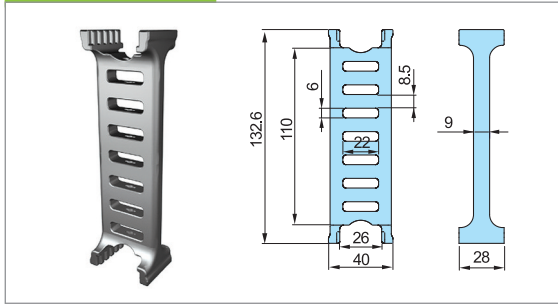
DIVIDERS

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ST 150ERS DV-S

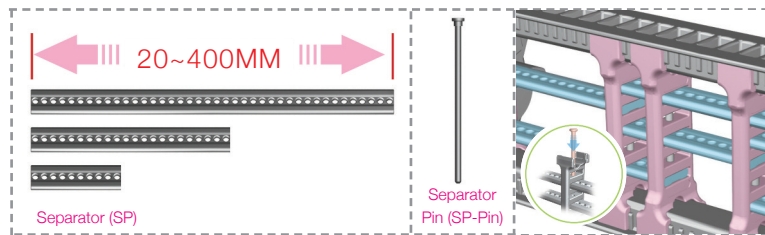


ST 150ERS DV-M



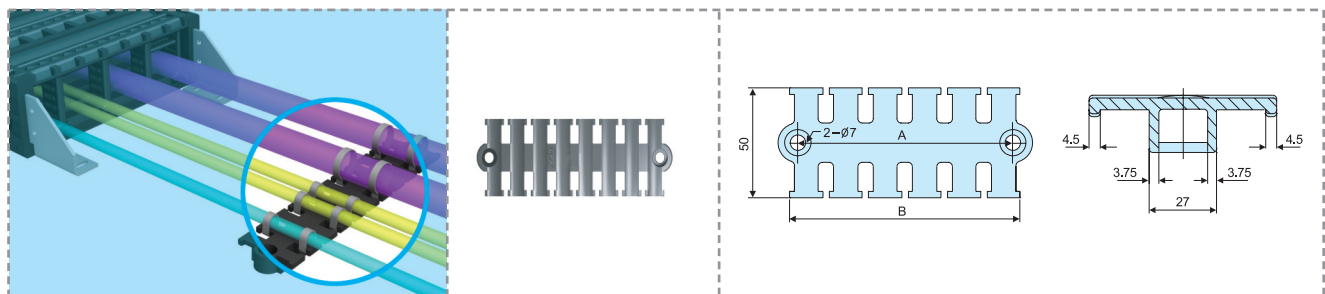
*Assemble divider every Two links.

SEPARATORS (SP)



Separator is available in length from 20mm to 400mm and can be cut every 5mm for use. The combined use of divider and separator with the pin creates the most effective cable pattern and keep insertion space for cables safely, so it protects the inserted cables.

TIE WRAP



(Dimensions in mm)

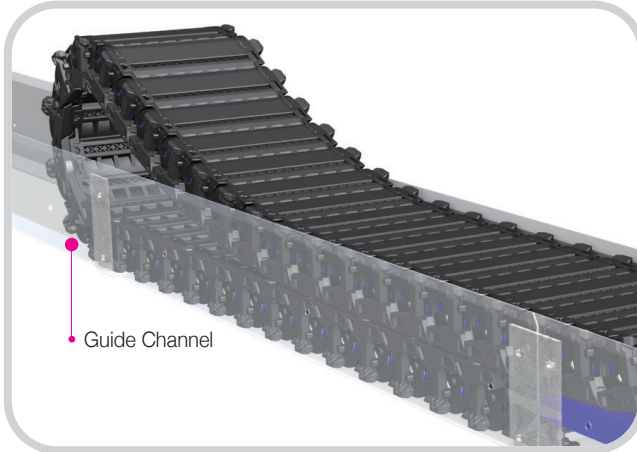
Tie Wrap	050	075	100	125	150
A	58	75	98	122	141
B	65	82	105	129	148

The Tie Wrap separated from the Shift Chain bracket, when installed properly, protects the inserted cables from becoming entangled and twisted during operation



Enclosed Roller Skid Type **ST 150ERS**

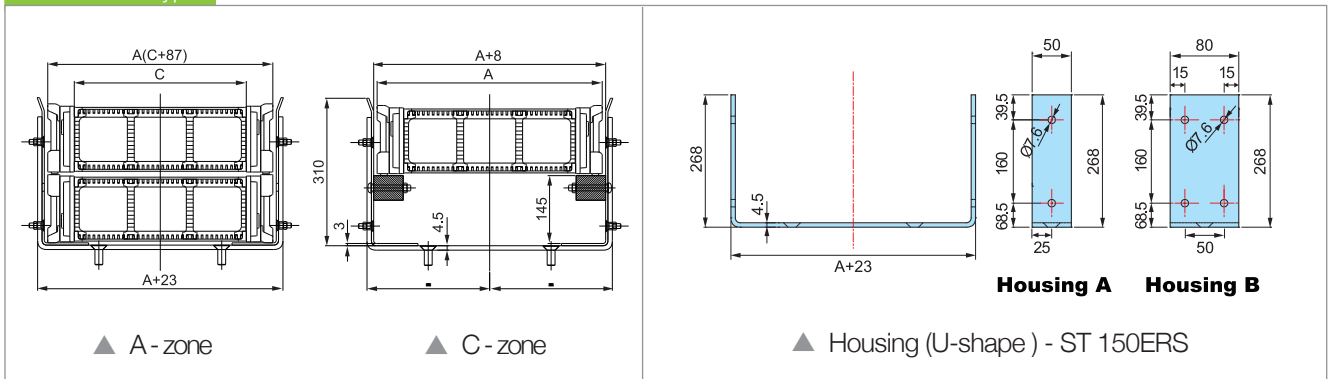
GUIDE CHANNEL



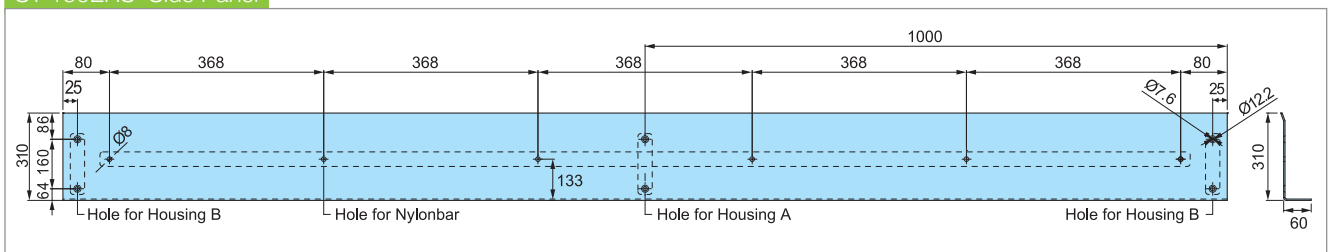
For long stroke applications the guide channel is applied to ensure that the Shift Chain Sliding Chain stays on track and to ensure safety during operation. With the application of a rubber pad on the channel floor, noise is reduced to a minimum. Guide Channels are made of Steel + Zn and can be customized with SUS material.

► Thickness can be changed by the product standards of material.

ST 150ERS Type

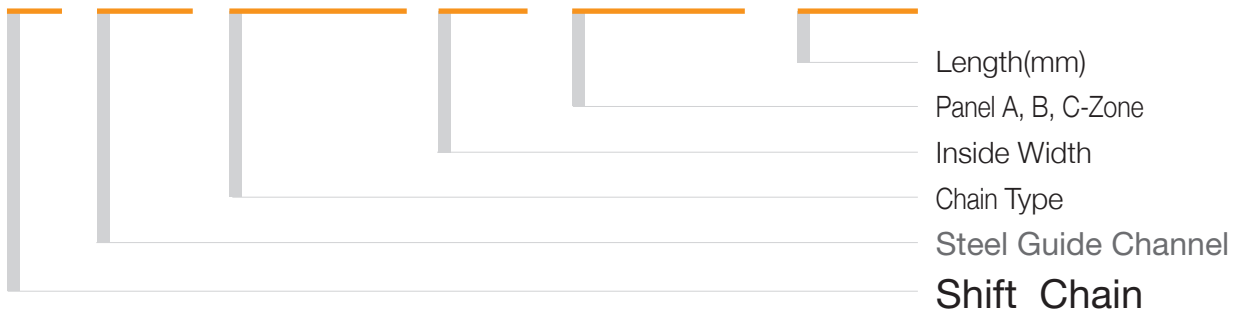


ST 150ERS Side Panel



ORDERING

ST-GCS 150ERS. 200 / A, B, C : 200M





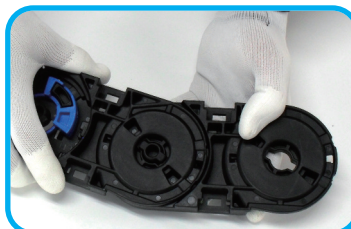
ASSEMBLY PROCEDURE / ENCLOSED ROLLER SKID Type

Assembly procedure of Shift chain ERS-type is as follows. The assembling process of shift Chain ERS-type is like below and you must use rubber hammer with careful combination of Divider and Separator. (Disassembly process for repair and replacement are in reverse order)



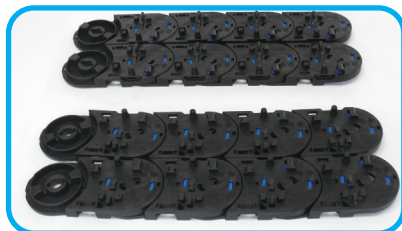
1.

Insert BR Unit into each Side Band
(Side Band is divided into right and left side according to the direction.)



2.

Continue to insert BR Unit into Side Band as you want to make it. Assemble Side Band which is inserted BR Unit as above.



3.

Continue to connect each Side Band as long as you want to make it.



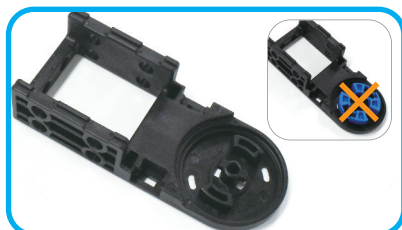
4.

Connect the Side Band as many as you need.



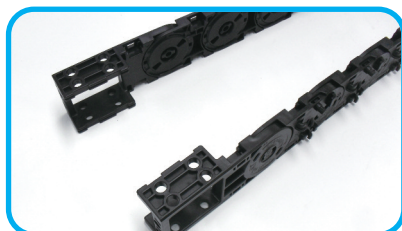
5.

Assemble the F.FEB according to the direction of right and left side.
(Do not insert the BR Unit to Side Band connected to F.FEB. Side of F.FEB is not enclosed.)



6.

Do not insert a BR to M.FEB. (M.FEB will be making a turn to up and down.)

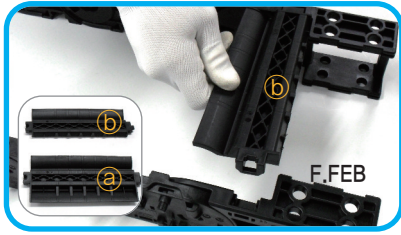


7.

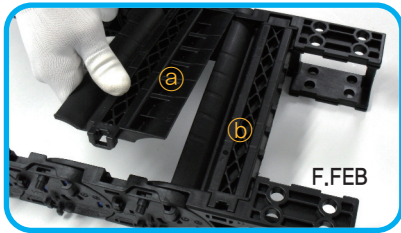
Assemble the M.FEB according to the direction of right and left side.
(Side of M.FEB is not enclosed.)



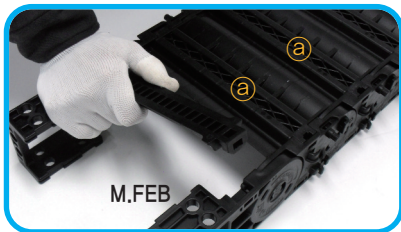
ASSEMBLY PROCEDURE / ENCLOSED ROLLER SKID Type



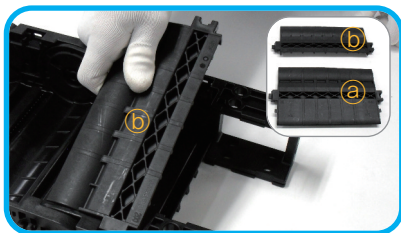
8. Insert one **(b)** Shaped-FRD into F.FEB. (**(a)**: Normal FRD **(b)**: Built-up only for F.FEB)
Find one **(b)** shaped-FRD and insert it with the hinge facing RH direction, as above.



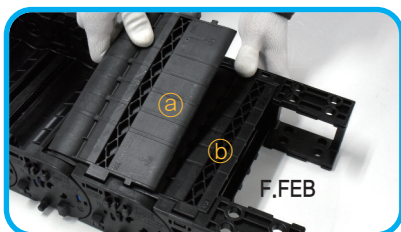
9. Continue to insert the FRD(**(a)**: Normal FRD)with the hinge facing RH direction.
(Assemble the from F.FEB to M.FEB in order.)



10. Insert the frame as many as you need and insert them one by one with the hinge facing RH direction, as above. (M.FEB is not turned to up and down when FRD assembling)



11. Insert the **(b)** shaped-FRD inserted to F.FEB and insert it with the hinge facing RH direction, as above. (**(a)**: Normal FRD **(b)**: Built-up only for F.FEB) Insert the divider with separator to divide the inside of chain.



12. Continue to insert the FRU(**(a)**: Normal FRU)with the hinge facing RH direction.
(Assemble the from F.FEB to M.FEB in order.)



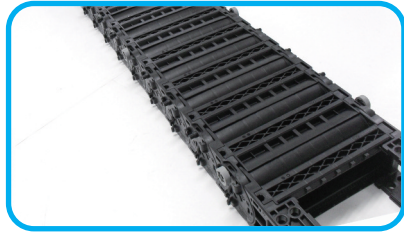
13. Insert **(a)** Normal FRU as many as you need and insert them one by one with the hinge facing RH direction, as above. Insert Frame-pin into the hole which is seen where the end of FRU and Side Band meet. (M.FEB is not turning to up and down when FRU assembling)



14. Insert Roller into mounted Side Band.



ASSEMBLY PROCEDURE / ENCLOSED ROLLER SKID Type



15.

Continue to insert Roller into Side Band.
Basically, you insert one roller per 4 Link



16.

Insert Roller Skid into Side Band where roller inserted in.
Skid is divided into Roller Skid (Skid with mount for roller) and normal Skid (Skid without mount)



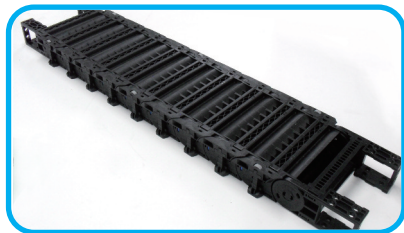
17.

Insert support into groove of side band until you hear the "click".
(Same support for both LH and RH)



18.

Insert a normal Skid into Side Band which is not inserted a roller.



19.

Insert Skid and Support into all Side Band links.
(Check that Skid is working up-and-down properly when you push the assembled Skids by hands.)



20.

Insert steel washers into M.FEB and F.FEB.