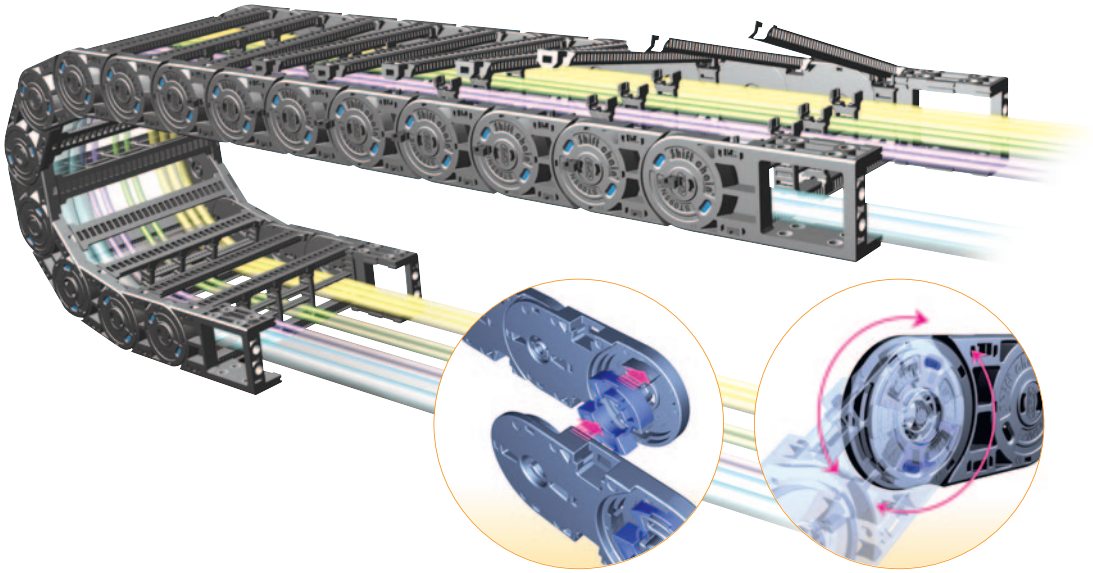
Feature & Strong point of Shift Chain

New concept adopted Cable Chain to adjust R value easily and freely



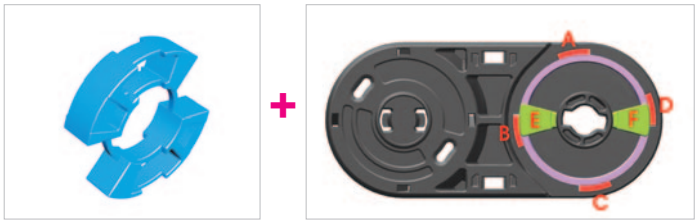
It helps to improve production capacity and to save cost with its convenient management of parts such as ‘Side Band’, ‘Frame’, ‘Frame pin’ and ‘BR’

Shift Chain can be applied to many different circumstances from small sized equipment to heavy equipment to protect cable and hose.

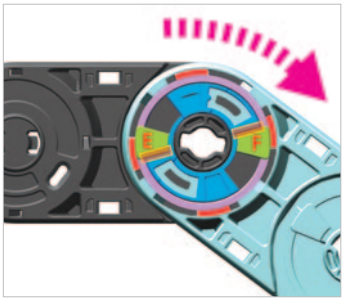
Unsupported Length Much Improved

Shift Chain performs outstanding Unsupported Length compared to previous CPS mini Chain. There are 6 supporting sections that make Shift Chain endure rigid linear status compared to CPS mini Chain that only has 2 supporting sections.

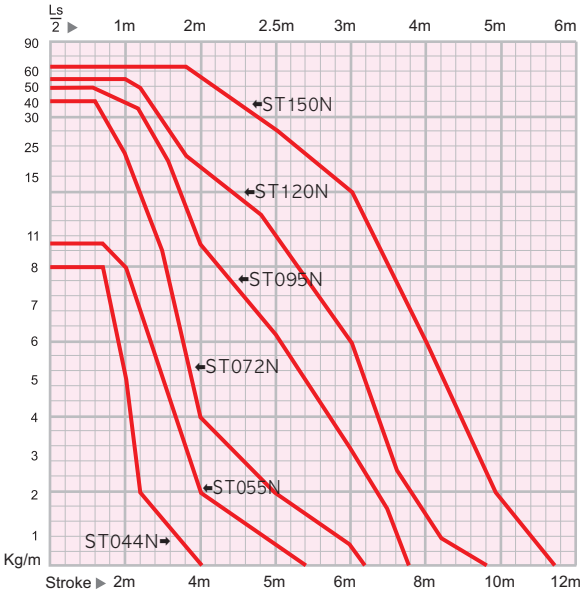
Feature & Strong point of Shift Chain



Supporting points when the side bands connected. (A,B,C,D,E,F)



Supporting points when the side bands bent. (E,F)

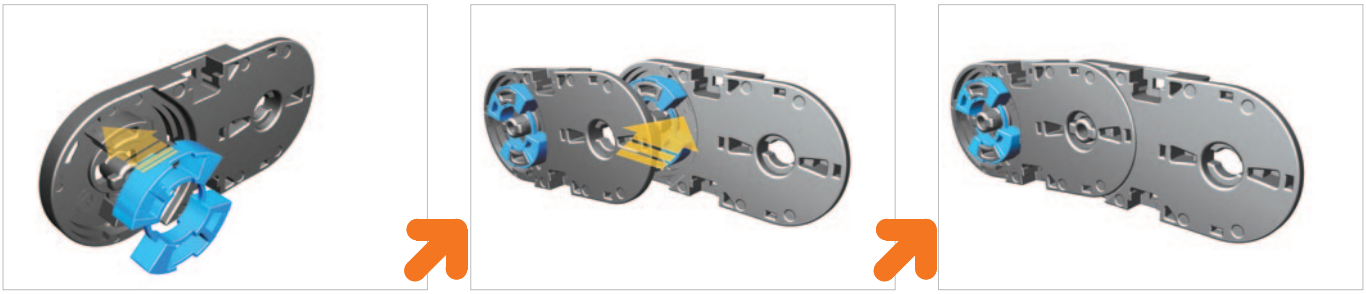


Shift chain Self- Supporting Length

R value is determined according to each different BR

Specially designed side band of the shift chain is determined according to each different br unit at the same model. This structure side band could offer only one side band inventory stock with different BR unit inventory stocks for various R value.

This is very cost effective product and could save inventory cost as well.



BR that has each different Bending Radius Value is composed with each different size of Shift Chain. Please refer to the Page38, 42.

Assemble BR to Side Band

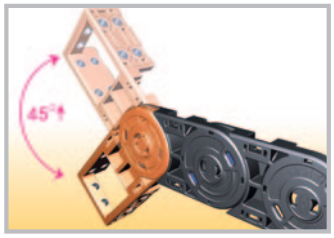
Connect Side Band to Side Band

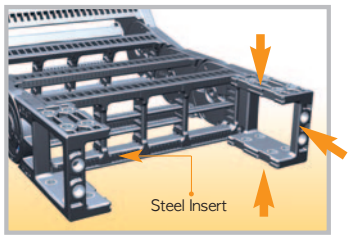
Radius value is decided by each different BR unit

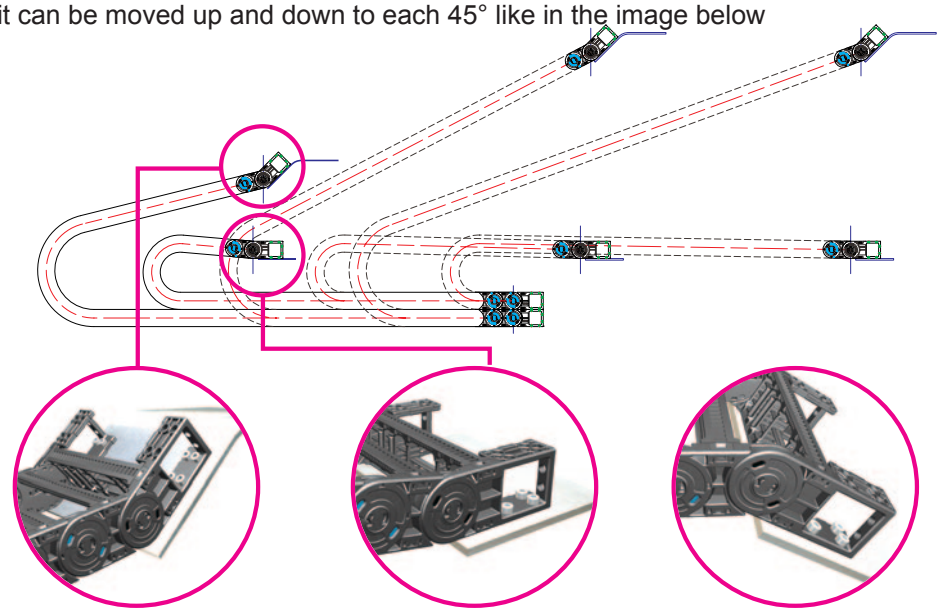
Feature & Strong point of Shift Chain

Adoption of FEB helps Cable Chain' Efficient Fixation

Shift Chain' bracket called FEB has 3 fixing section that makes Cable Chain fixed securely and conveniently to counterpart.
It also includes steel Insert and it can be moved up and down to each 45° like in the image below







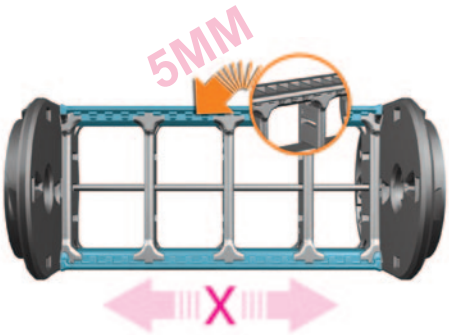
FEB mounted upwards

FEB mounted horizontally

FEB mounted downwards

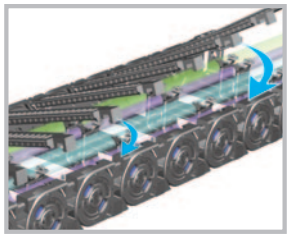
Special design of the flames to prevent the divider's floating

Frame with teeth every 5mm makes frame does not move to left and right side but placed firmly.

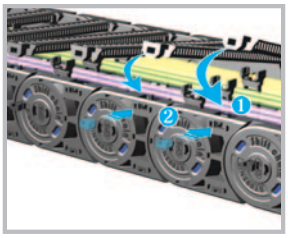


Feature of Hinge Type of Frame

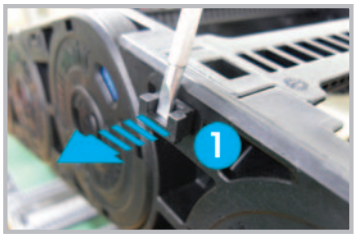
One side of Frame is pin type and the other side of Frame is hinge type that makes easy maintenance of assembly and disassembly.

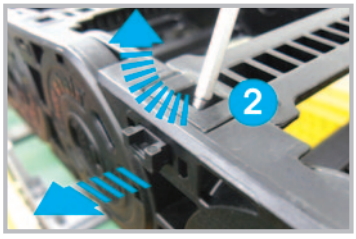


ST044N, 055N :
One side is Hinge and the other side is Hook



ST 072N, 095N, 120N, 150N :
One side is Hinge and the other side is Pin

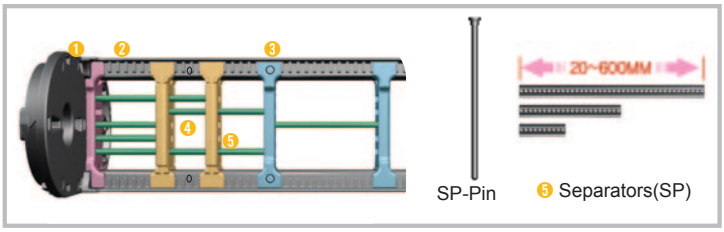




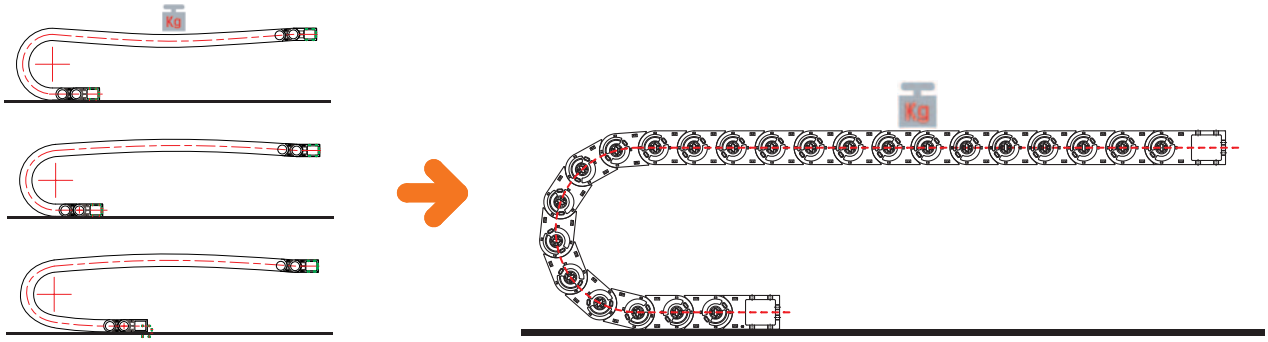
Feature & Strong point of Shift Chain

Secure Space by utilizing Divider and Separator

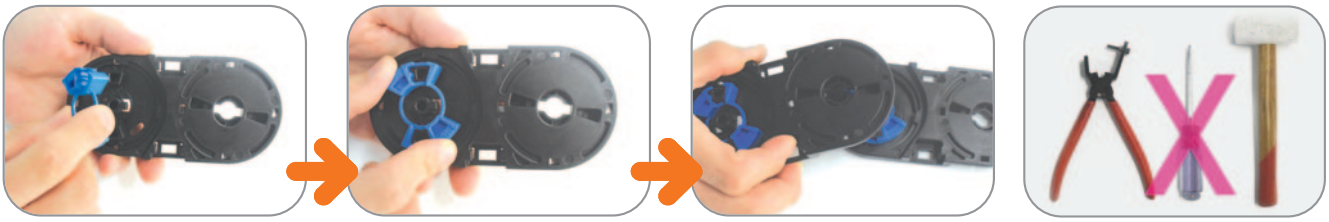
Divider and Separator makes secure protection of cable and hose.
DV-S : Used to fix a separator that is the same length as the frames
DV-M : Used to separate individual cables
DV-T : Used at center position to support frame longer than 125mm and up
DV-W : Used to hold the cables in place at both ends of the cable chain



Solid Linear State by adopting 'BR'



Easy Disassembly without tools



UV, EX, UV and RoHS Certification acquired

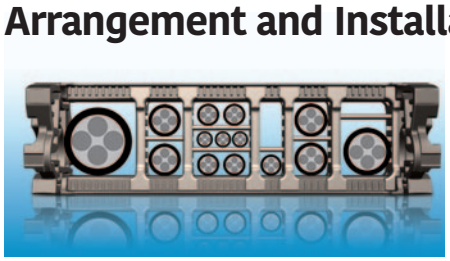
Shift Chain is made of High-Quality Engineering Plastic Material, which performs excellent durability and wear resistance, hence it reduces possibility of breakage by external damage, meanwhile performs stable cable protection in harsh circumstance.
As Cable Chain is verified its safeness against explosion possibility through ESD and ATEX qualification Test and it also can be installed at outside when UV retardant material applied. Shift Chain is Eco-Friendly products as it does not exceeds limited amount of 6 harmful substance such as Pb, Cd, Hg, Cr+6, PBB and PBDEs where European markets regulate strictly.

ESD EX UV RoHS

(Dimensions in mm) CPS CP SYSTEM CO.,LTD. www.cpsystem.co.kr

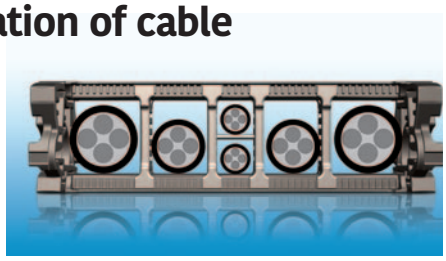
Installation Method of Cable Chain

Arrangement and Installation of cable

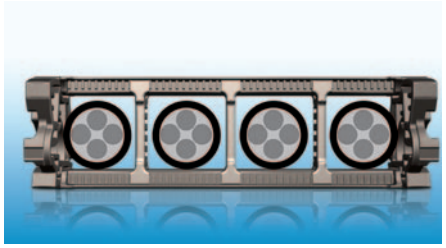


Available Space
Rounded Cable : 10% of space to be guaranteed based on Dia. of cable
Flat Cable : 10% of space to be guaranteed based on thickness of cable
Hose : 20% of space to be guaranteed based on Dia. of hose

10% of space should be secured between cables. When different dia. of cables are inserted, divider should be used. When there is 10% of space between cables, separator should be used.



Single layer arrangement of cables are a standard. Big sized cables are placed outside and small sized cables are placed at center. Do not overlap cables but separate them by using separator.



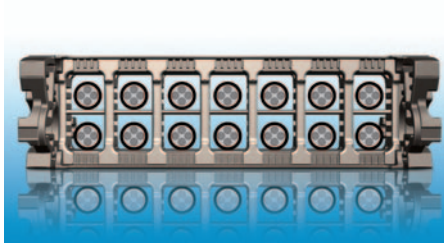
Cables should be placed straightly and arrange them to maintain balance of weight like in the image.

Bending Radius Value,"R"

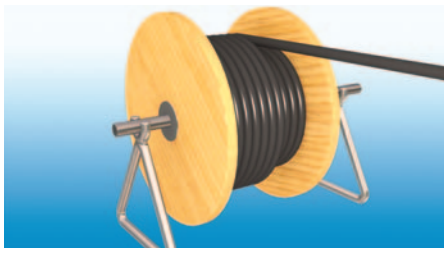
Minimum "R" Value of Cable :
Multiply 8 to 10 against the biggest cable
Minimum "R" Value of Hose :
Multiply 15 to 20 against the biggest hose

R value of Cable Chain should exceeds the R value of cable or hose.

Arrangement of Cable and Hose

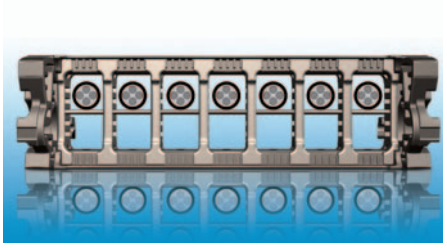


When sum of 2 cables are bigger than X1.2, Inner Height of Cable Chain, Divider does not to be installed. But when it does not exceed X1.2, Divider is recommended to be used.
In case of separator, when cable or hose' dia is lower than X0.5, separators is recommended to be used.



When cable is inserted inside of Cable Chain, its condition should be maintained straightly to prevent cable that to be entangled.

Arrangement of Cable and Hose



Cables should be placed the upper section when it designed one row arrangement