nsb Chain - Sliding type



General information

Item	Value
Material	CPS-Amid(PA6+GF), RoHs
Speed	3㎧
Acceleration	10㎧
Temperature	-30℃ ~+130℃
Certificate	CE, ATEX

Calculation table

Item	Value
Length of Cable Chain	L = ½ X LS + LP
Bending Radius	
The biggest Cable inserted	Multiply 8~10 and the biggest cable
The biggest Hydraulic Hose inserted	Multiply 15~20 and the biggest hose

Dimension table

nsb Chain **S Type**	Pitch	Bending Radius (R)	Weight kg/m	Speed m/s	Temperature ℃	Size A	Size B	Size C	Size D	Frame style	Section - composition
nsb 050S	50	110, 135, 165, 185, 235, 285	2.38 2.44 2.51 2.61 2.67 2.71 2.76 2.80 2.97 3.09 3.32 3.38 3.63	3	-30 ~ +130	104 129 154 179 194 204 219 229 244 254 294 304 354	71.5	50 75 100 125 140 150 165 175 190 200 240 250 300	45		
nsb 065S	65	140, 190, 220, 270, 390	3.29 3.34 3.49 3.58 3.68 3.76 3.82 3.99 4.03 4.24 4.53 4.85	3	-30 ~ +130	137 162 187 212 237 252 262 302 312 362 412 462	89	75 100 125 150 175 190 200 240 250 300 350 400	56		
nsb 080S	80	180, 200, 250, 300, 350, 400, 500	4.27 4.36 4.43 4.47 4.57 4.67 4.85 5.03 5.07 5.33 5.40 5.71 6.09 6.28 6.45 7.08 7.20	3	-30 ~ +130	143 168 183 193 218 243 268 308 318 358 368 418 468 518 568 618 668	115	75 100 115 125 150 175 200 240 250 290 300 350 400 450 500 550 600	78		

(Dimensions in mm)

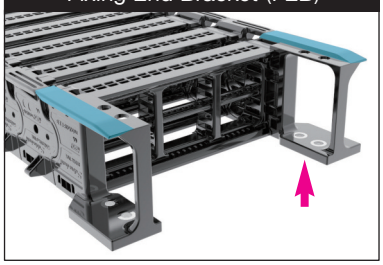
Ordering

nsb 050S. 175. R185 / B1 - 10000L : 10ST

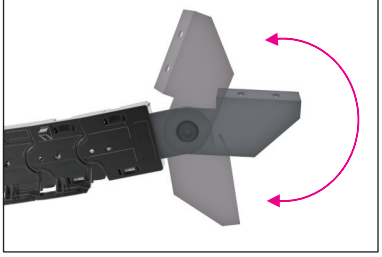
- Sabin Chain
- Sliding (S)
- Inside width
- Bending radius
- Bracket Type : B1,B2
  - FT : Tie Wrap
  - FST : System Tie Wrap
- Length(mm)
- Q'ty(set)

Bracket type

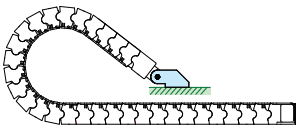
Fixing End Bracket (FEB)



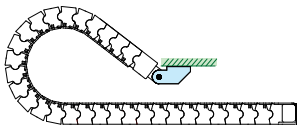
Moving End Bracket (M.EB)



The moving bracket is designed to move up and down according to movement of cable chain, or application requires. Fixing holes are formed widely for its convenience to be applied to other brand of cable chain. There are 2 tpye of bracket; B1,B2.



B1

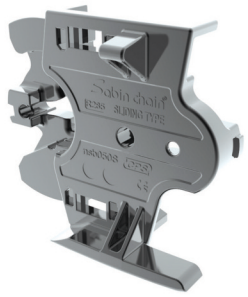


B2

nsb Chain - Sliding type

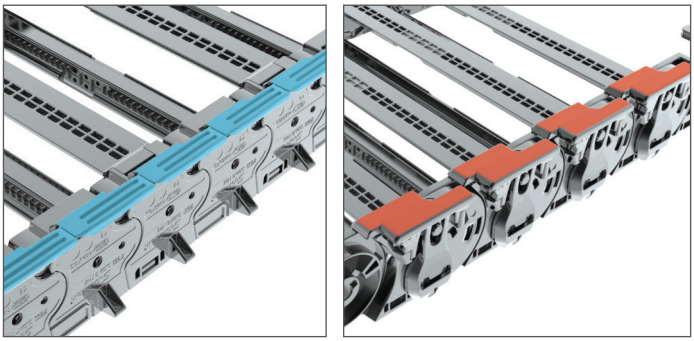
≫ Characteristics of nsb chain Sliding Type

1 *Minimized noise level!*



▶ nsb sliding chain is also Holding band structure.

〈Feature-1〉

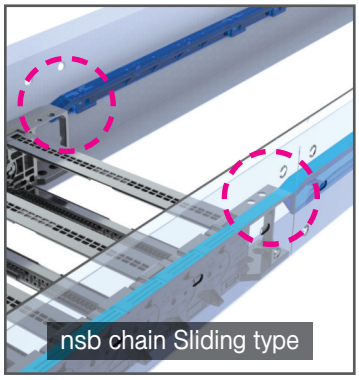


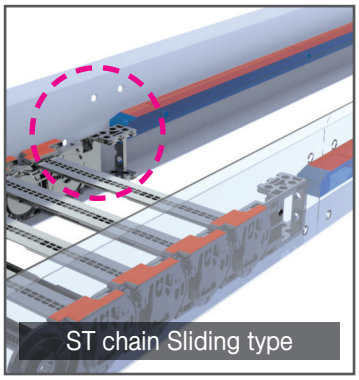
〈Feature-2〉

There are 3 factors for minimizing noise level of nsb sliding chain.

Firstly, it can minimize noise level than other sliding types including other brand due to Holding band inserted structure. You can refer "feature-1".

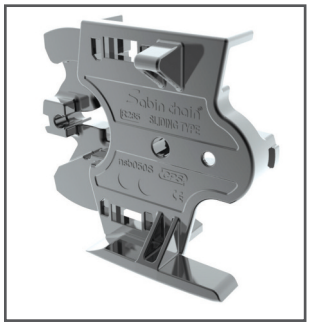
Secondly, by reducing interval between skid to skid of side band. If you refer "feature-2", you can find out that it's minimum gap between each side band which makes low noise when sliding part is moving on fixing part. If creates some interval, it makes noise.

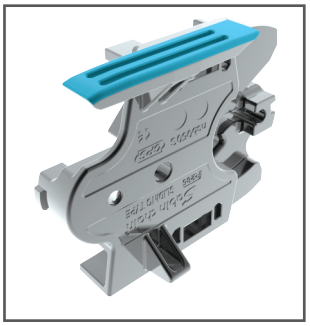


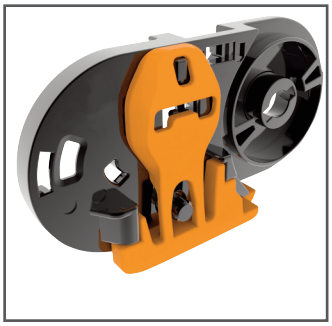


In third, by making it equal height between height of FEB and height of Nylon bar installed for chain movement.

2 *Easy to assemble and disassemble!*



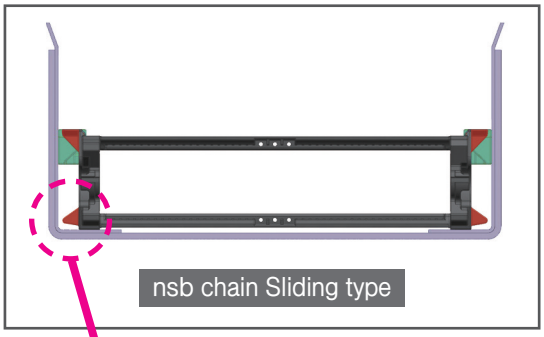


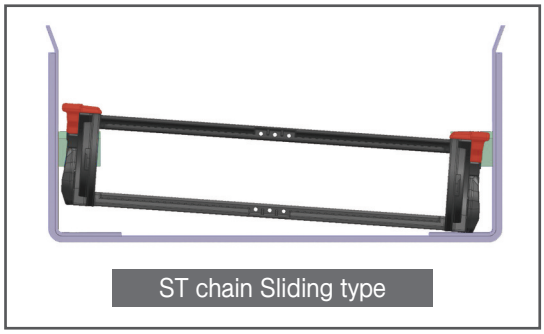


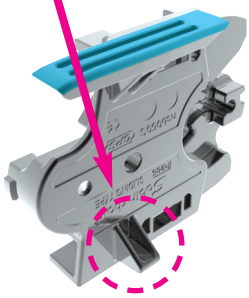
Easy to assemble and disassemble

By united skid and side band, it means that we designed it integral side band as sliding type, it is very easy to assemble and disassemble. Actually, on-site technicians and maintenance workers prefer nsb sliding type as it is easy to assemble and disassemble, they simply remove only frame-pin and frame without removing skid to get rid of frame-pin and frame. It makes them save time for assembling and disassembling work, which is the reason they prefer this model.

3 Stable operation and Suitable for high speed!



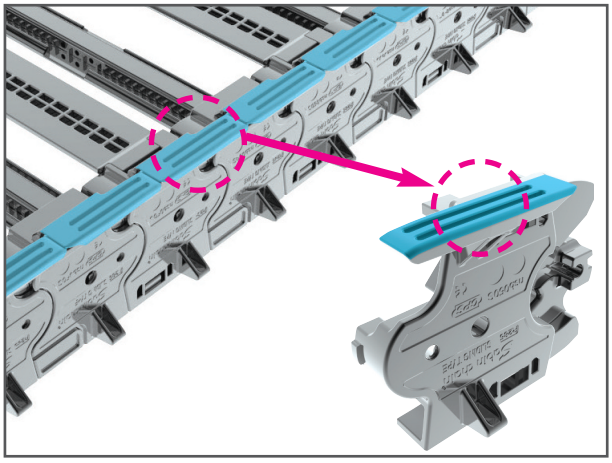




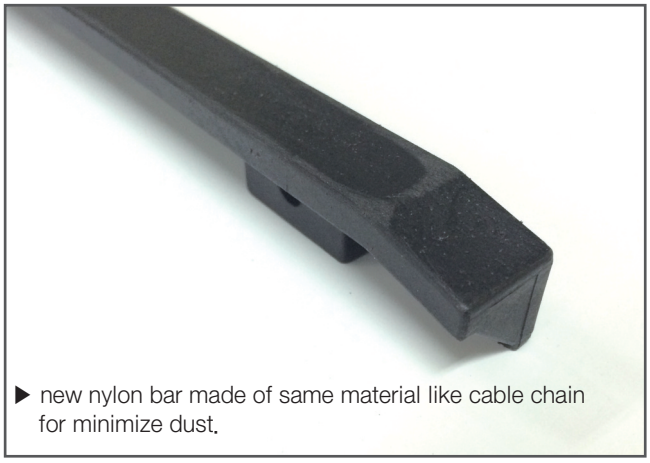
Stable operation and Suitable for high speed

Supporting fixture has been added to keep stable operation inside Guide channel.
This type is designed for gantry loader application which has fast movement with lower friction.
Moreover, our previous model, our Shift chain sliding type, have risk to be detached between side band and skid. Thus, detached skid would be inside guide channel or cable chain it means that it disturbs stable and smooth movement. But, nsb sliding type has been designed integral type sideband with skid, there's no risk for this issue.

4 Minimized Dust!



〈Feature-1〉



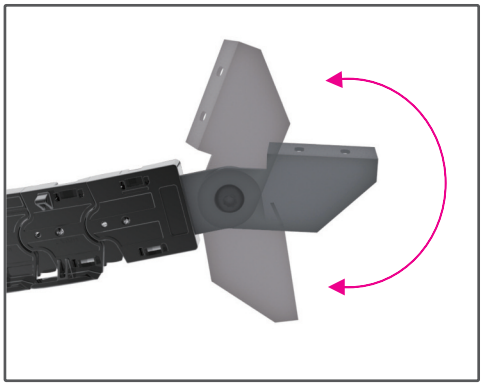
▶ new nylon bar made of same material like cable chain for minimize dust.

〈Feature-2〉

There are 2 factors for low dust of nsb sliding chain.

Firstly, by forming the groove on skid surface, it can minimize dust.
Secondly, by using nylon bar made of same material like cable chain, it minimizes dust.
(Cable chain reaches on nylon bar section after passing FEB section.)

5 Can be substituted for other Brand of Cable Chain!



Can be substituted for other Brand

The moving bracket is designed to move up and down according to movement of cabel chain. Or application requires. Fixing holes are form widely for its convenience to be applied to other brand of cable chain. There are 2 tpye of bracket; B1, B2.

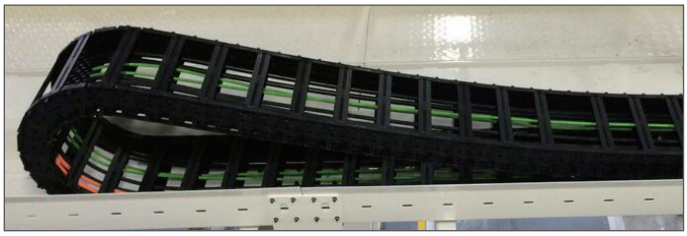
nsb Chain - Sliding type

≫ Application of nsb Chain Sliding type

▶ nsb 050S

Application:
Gantry Loader
Location:
Korea, China, USA and India









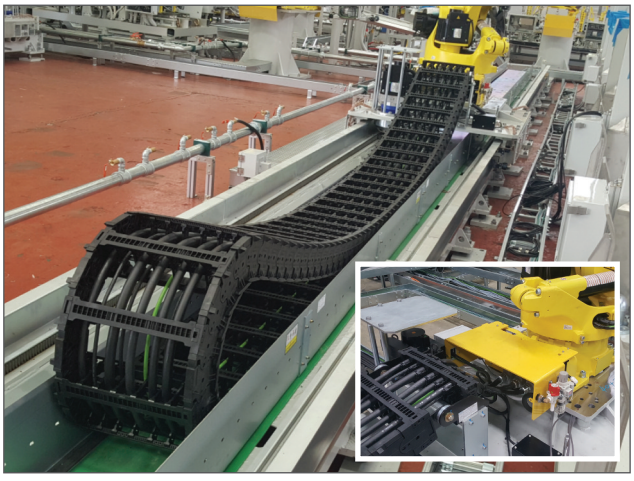


▶ nsb 065S

Application:
Crane(54m/Stroke)
Location:
Korea
Remark:
Section composition with dividers and sperators
System tie-wrap dividers(DV/W) at fixing end brackets

▶ nsb 080S

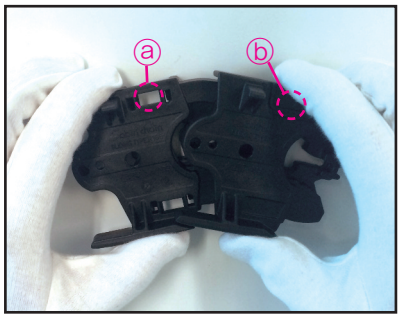
Application :
Robot carriage
Location :
Korea, China, Mexico, Brazil





Assembly procedure of nsb Chain Sliding type

The assembling process of S-Type of New Sabin Chain is like below and user must use rubber hammer with careful combination of Divider and Separator.



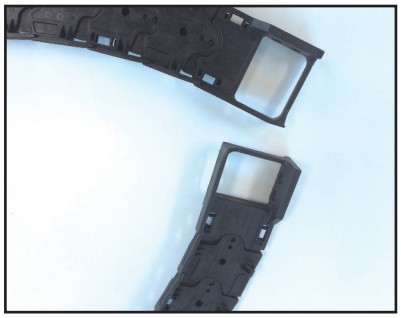
1

Classify LH and RH first, then assemble the Side band.
(Assemble from ⓐ to ⓑ according to priority)



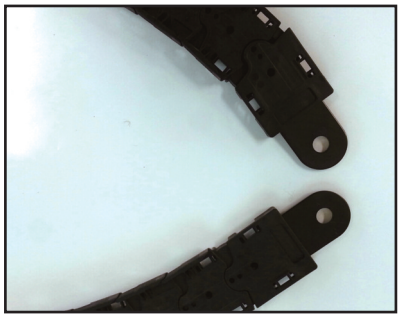
2

Connect the Side Band according to required length.



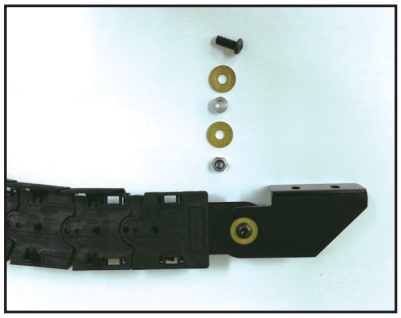
3

Install F.EB to the right and left direction.



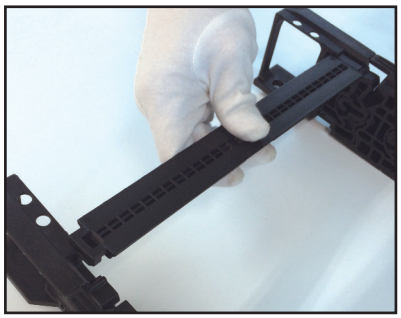
4

Install M.EB to the right and left direction.



5

Assemble the Steel Bracket on the M.EB by tightening bolt and nut.
(Bolt → flat washer → insert steel → flat washer → Nut)



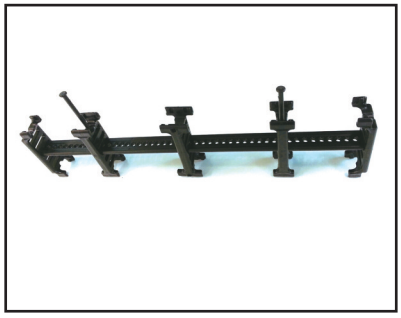
6

Assemble the left and right Side Band with specified frame.



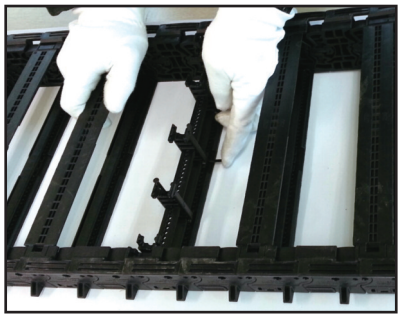
7

Frame of the opposite side also assemble in the same manner.



8

Assemble dividers and spearators considering inserted number of cables.



9

Fix the dividers on lower frame.
(Assemble divider every Four links)



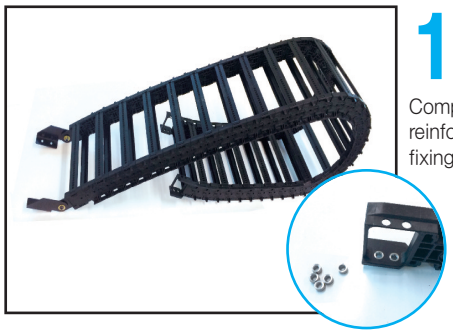
10

Combine the upper frame exactly on the groove of sideband and divider.



11

Fix the frame with side band by using the frame pin.



12

Complete by inserting the reinforce washer to fit in fixing hole of F.EB.

nsb Chain - Sliding type

≫ Part list of nsb Chain Sliding type

- Composition of Cable chain(Standard)
  = Side band(RH) + Frame + Side band(LH) + Bending radius Unit + Free end bracket
- M divider(normal divider) should be applied every second frames to make a section composition.

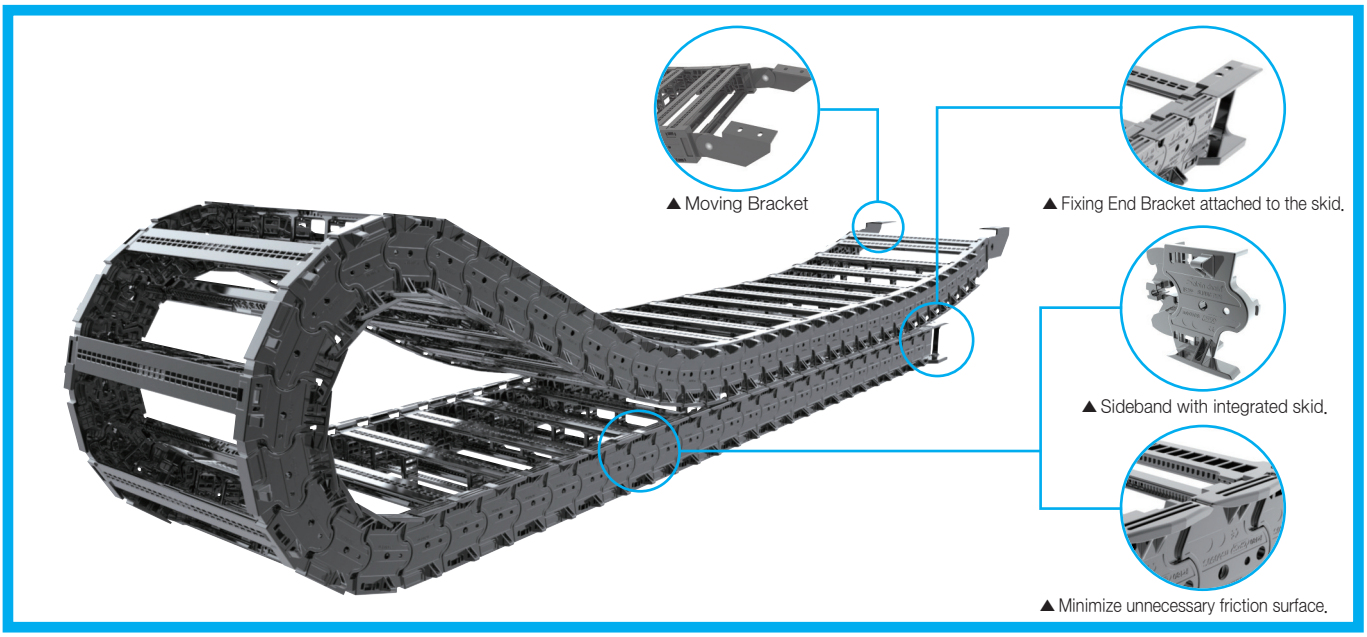
※ Please refer to below part list and description to understand composition of cable chain.

Model	Classification	Part number	Description
nsb050S	SIDE BAND	nsb-SB050S.R*(LH) nsb-SB050S.R*(RH)	Left side band of nsb050S Right side band of nsb050S
	FRAME PIN	S-FP/S1	Frame pin
	FRAME	sb-FR045.50 sb-FR045.75 sb-FR045.100 sb-FR045.125 sb-FR045.140 sb-FR045.150 sb-FR045.165 sb-FR045.175 sb-FR045.190 sb-FR045.200 sb-FR045.240 sb-FR045.250 sb-FR045.300	Frame, 50mm Frame, 75mm Frame, 100mm Frame, 125mm Frame, 140mm Frame, 150mm Frame, 165mm Frame, 175mm Frame, 190mm Frame, 200mm Frame, 240mm Frame, 250mm Frame, 300mm
	FREE END BRACKET	NSB-FEB050S /F NSB-FEB050S /M(SEB) nsb-FEB/WH050	Free end bracket of nsb050S, Fixing Steel end bracket of nsb050S, Moving Steel washer for end bracket
	DIVIDER	sb-DV045/M sb-DV045/S sb-DV045/T sb-DV045/TP	Normal divider To fix separstors at the both side section T divider T divider pin
	SEPARATOR	sb-SP/400.400 SP-PIN045	Separator, 400mm Separator pin to fix
	TIE WRAP	S-TW50 S-TW75 S-TW100 S-TW125 S-TW150	Tie wrap for end bracket to fix cables, 50mm Tie wrap for end bracket to fix cables, 75mm Tie wrap for end bracket to fix cables, 100mm Tie wrap for end bracket to fix cables, 125mm Tie wrap for end bracket to fix cables, 150mm
	SYSTEM TIE WRAP	sb-DV045/W S-TW.EB045	Divider for fixing cables at end bracket System tie wrap to arrange for cables right after moving bracket or fixing bracket

Model	Classification	Part number	Description
nsb065S	SIDE BAND	nsb-SB065S.R*(LH) nsb-SB065S.R*(RH)	Left side band of nsb050S Right side band of nsb050S
	FRAME PIN	S-FP/S1	Frame pin
	FRAME	sb-FR060.75 sb-FR060.100 sb-FR060.125 sb-FR060.150 sb-FR060.175 sb-FR060.190 sb-FR060.200 sb-FR060.230 sb-FR060.250 sb-FR060.300 sb-FR060.350 sb-FR060.400	Frame, 75mm Frame, 100mm Frame, 125mm Frame, 150mm Frame, 175mm Frame, 190mm Frame, 200mm Frame, 230mm Frame, 250mm Frame, 300mm Frame, 350mm Frame, 400mm
	FREE END BRACKET	NSB-FEB065S /F NSB-FEB065S /M(SEB) nsb-FEB/WH065	Free end bracket of nsb050S, Fixing Steel end bracket of nsb050S, Moving Steel washer for end bracket
	DIVIDER	sb-DV060/M sb-DV060/S sb-DV060/R sb-DV060/T sb-DV060/TP	Normal divider To fix separstors at the both side section Roller divider to reduce friction with cables T divider T divider pin
	SEPARATOR	sb-SP/400.400 SP-PIN060	Separator, 400mm Separator pin to fix
	TIE WRAP	S-TW50 S-TW75 S-TW100 S-TW125 S-TW150	Tie wrap for end bracket to fix cables, 50mm Tie wrap for end bracket to fix cables, 75mm Tie wrap for end bracket to fix cables, 100mm Tie wrap for end bracket to fix cables, 125mm Tie wrap for end bracket to fix cables, 150mm
	SYSTEM TIE WRAP	sb-DV060/W S-TW.EB060	Divider for fixing cables at end bracket System tie wrap to arrange for cables right after moving bracket or fixing bracket

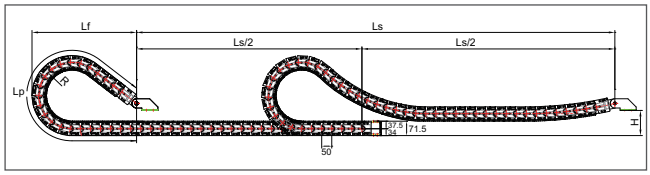
Model	Classification	Part number	Description
nsb080S	SIDE BAND	nsb-SB080S,R*(LH) nsb-SB080S,R*(RH)	Left side band of nsb080S Right side band of nsb080S
	FRAME PIN	S-FP/S2	Frame pin
	FRAME	sb-FR075/100,75 sb-FR075/100,100 sb-FR075/100,115 sb-FR075/100,125 sb-FR075/100,150 sb-FR075/100,175 sb-FR075/100,200 sb-FR075/100,240 sb-FR075/100,250 sb-FR075/100,290 sb-FR075/100,300 sb-FR075/100,350 sb-FR075/100,400 sb-FR075/100,450 sb-FR075/100,500 sb-FR075/100,550 sb-FR075/100,600	Frame, 75mm Frame, 100mm Frame, 115mm Frame, 125mm Frame, 150mm Frame, 175mm Frame, 200mm Frame, 240mm Frame, 250mm Frame, 290mm Frame, 300mm Frame, 350mm Frame, 400mm Frame, 450mm Frame, 500mm Frame, 550mm Frame, 600mm
	FREE END BRACKET	NSB-FEB080S /F NSB-FEB080S /M(SEB) nsb-FEB/WH080	Free end bracket of nsb080S, Fixing Steel end bracket of nsb080S, Moving Steel washer for end bracket
	DIVIDER	sb-DV075/M sb-DV075/S sb-DV075/R sb-DV075/T sb-DV075/TP	Normal divider To fix separstors at the both side section Roller divider to reduce friction with cables T divider T divider pin
	SEPARATOR	sb-SP/400,400 SP-PIN075	Separator, 400mm Separator pin to fix
	TIE WRAP	S-TW50 S-TW75 S-TW100 S-TW125 S-TW150	Tie wrap for end bracket to fix cables, 50mm Tie wrap for end bracket to fix cables, 75mm Tie wrap for end bracket to fix cables, 100mm Tie wrap for end bracket to fix cables, 125mm Tie wrap for end bracket to fix cables, 150mm
	SYSTEM TIE WRAP	sb-DV075/W S-TW,EB075	Divider for fixing cables at end bracket System tie wrap to arrange for cables right after moving bracket or fixing bracket

nsb 050S



Layout of the chain

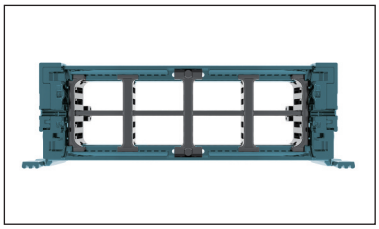
Ls: Stroke

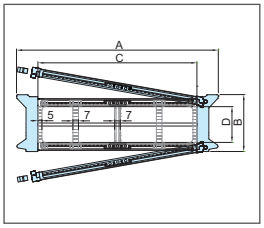


Bending Radius (R)	Lp Loop Length	Lf Loof Projection	H Moving Height
110	916	380	180
135	1,068	430	
165	1,255	490	
185	1,382	530	
235	1,703	630	
285	2,029	730	

(Dimensions in mm)

Chain cross section

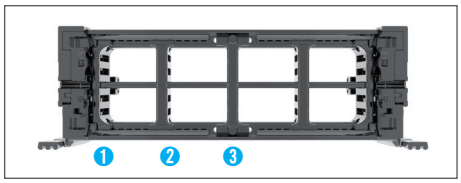




Chain Type	A Width(Outer)	B Height(Outer)	C Frame	D Height(Inner)	Weight kg/m
nsb 050S	104	71.5	50	45	2.38
	129		75		2.44
	154		100		2.51
	179		125		2.61
	194		140		2.67
	204		150		2.71
	219		165		2.76
	229		175		2.80
	244		190		2.97
	254		200		3.09
	294		240		3.32
	304		250		3.38
	354		300		3.63

(Dimensions in mm)

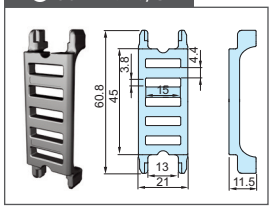
Dividers(DV)



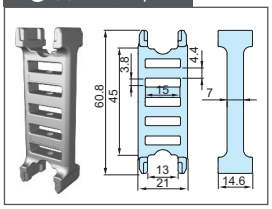


Assemble divider every second frame.
DV.T : Applied to Frame 200~300.
DV.M : Normal divider.
DV.W : Applicable to System Tie Wrap or FEB.

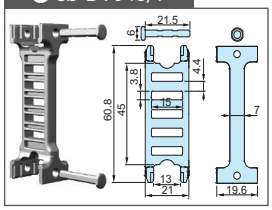
❶ sb-DV045/S



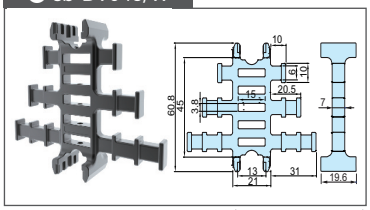
❷ sb-DV045/M



❸ sb-DV045/T

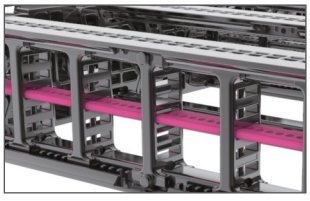


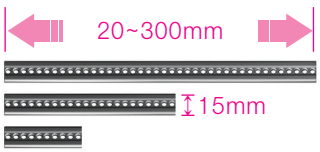
❹ sb-DV045/W



(Dimensions in mm)

Separators(SP)



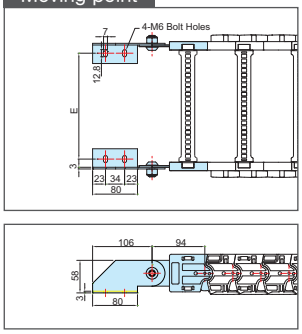


Chain Type	Ordering NO.
nsb 050S	sb-SP/400.400

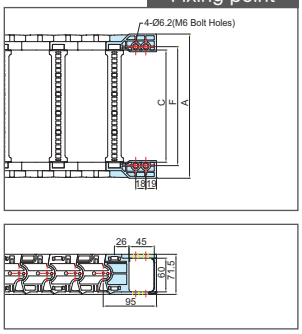
(Dimensions in mm)

Free end bracket

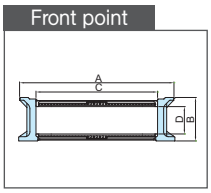
Moving point



Fixing point



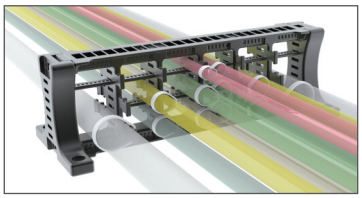
Front point



Chain Type	A Width(Outer)	B Height(Outer)	C Frame	D Height(Inner)	E M.EB Bolt hole width	F F.EB Bolt hole width
nsb 050S	104 129 154 179 194 204 219 229 244 254 294 304 354	71.5	50 75 100 125 140 150 165 175 190 200 240 250 300	45	38.7 63.7 88.7 113.7 128.7 138.7 153.7 163.7 178.7 188.7 228.7 238.7 288.7	62 87 112 137 152 162 177 187 202 212 252 262 312

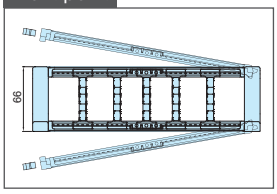
(Dimensions in mm)

System tie wrap (STW)

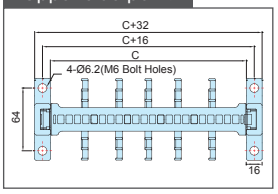


It is a unit to classify each cable for preventing entanglement of cables. It can either be installed to free end bracket or installed separately according its application environment.

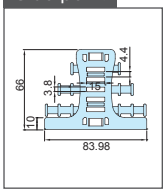
Front point



Upper side point



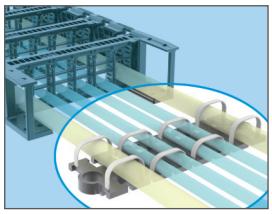
Side point

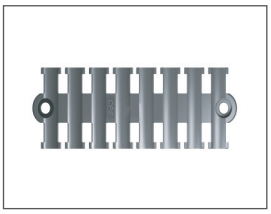


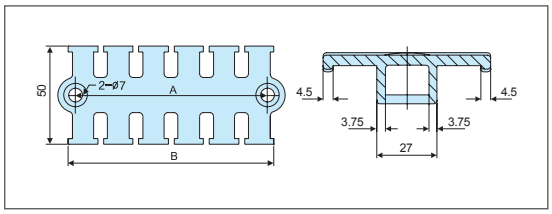
Chain Type	Ordering No.	C Frame	Hole Type
nsb 050S	S-TW.EB045.50 S-TW.EB045.75 S-TW.EB045.100 S-TW.EB045.125 S-TW.EB045.140 S-TW.EB045.150 S-TW.EB045.165 S-TW.EB045.175 S-TW.EB045.190 S-TW.EB045.200 S-TW.EB045.240 S-TW.EB045.250 S-TW.EB045.300	50 75 100 125 140 150 165 175 190 200 240 250 300	M6 Bolt Holes

(Dimensions in mm)

Tie wrap (TW)





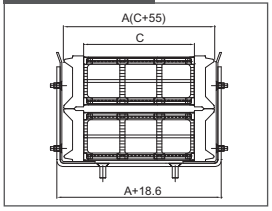


Chain Type	Ordering No.	A	B
nsb 050S	S-TW50	58	65
	S-TW75	75	82
	S-TW100	98	105
	S-TW125	122	129
	S-TW150	141	148

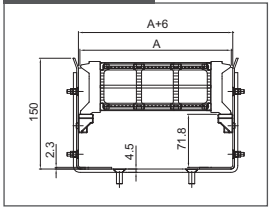
(Dimensions in mm)

Guide channel

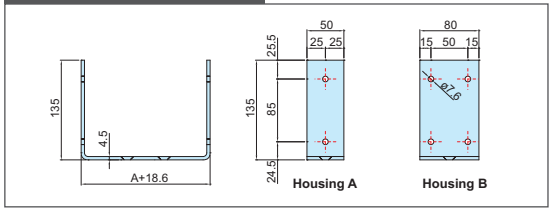
A - Zone



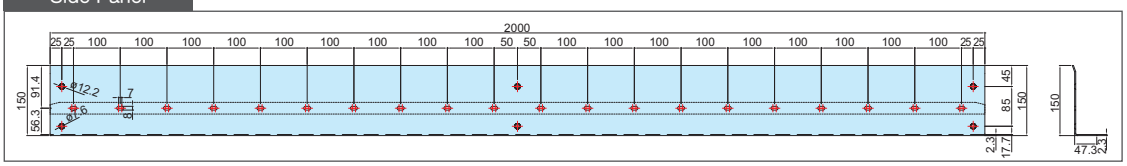
C - Zone



Housing (U-Shape)

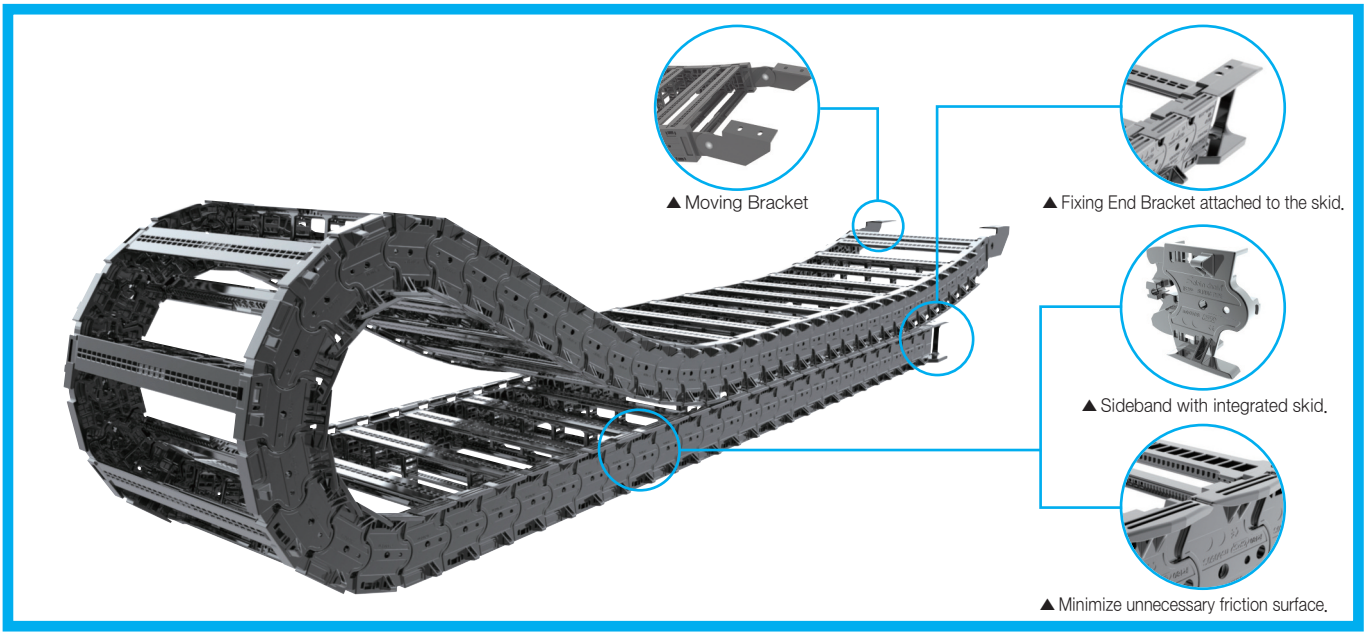


Side Panel



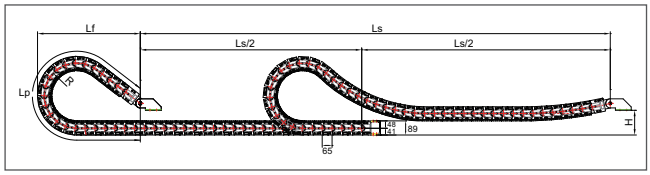
(Dimensions in mm)

nsb 065S



» Layout of the chain

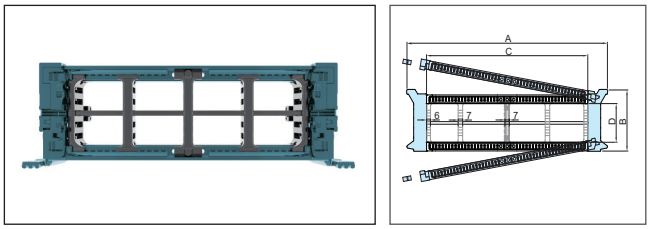
Ls: Stroke



Bending Radius (R)	Lp Loop Length	Lf Loof Projection	H Moving Height
140	1,225	615	210
190	1,543	715	
220	1,734	775	
270	2,052	875	
390	2,814	1,115	

(Dimensions in mm)

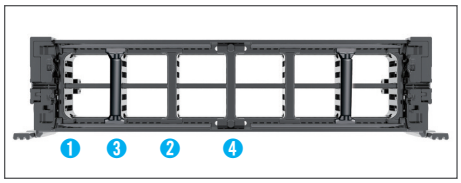
» Chain cross section



Chain Type	A Width(Outer)	B Height(Outer)	C Frame	D Height(Inner)	Weight kg/m
nsb 065S	137	89	75	56	3.29
	162		100		3.34
	187		125		3.49
	212		150		3.58
	237		175		3.68
	252		190		3.76
	262		200		3.82
	292		230		3.94
	302		240		3.99
	312		250		4.03
	362		300		4.24
	412		350		4.53
	462		400		4.85

(Dimensions in mm)

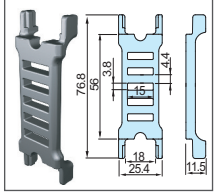
» Dividers(DV)



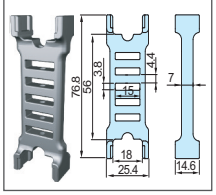


Assemble divider every second frame.
DV.T : Applied to Frame 250~400.
DV.M : Normal divider.
DV.W : Applicable to System Tie Wrap or FEB.

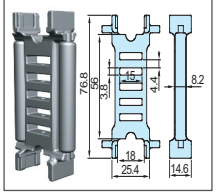
❶ sb-DV060/S



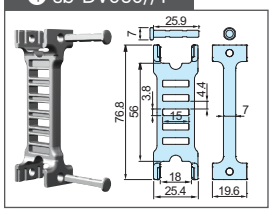
❷ sb-DV060/M



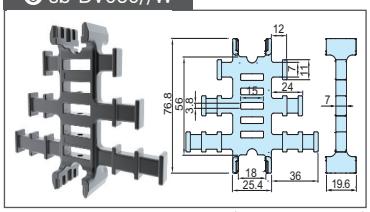
❸ sb-DV060/R



❹ sb-DV060//T

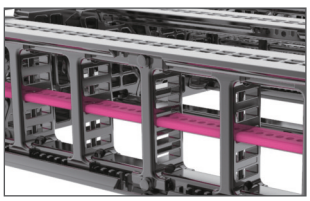


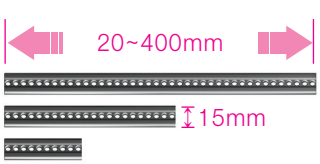
❺ sb-DV060//W



(Dimensions in mm)

» Separators(SP)



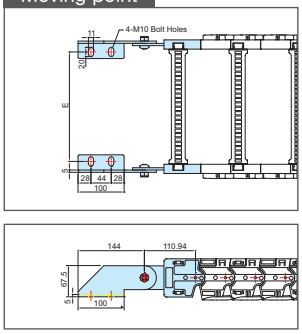


Chain Type	Ordering NO.
nsb 065S	sb-SP/400.400

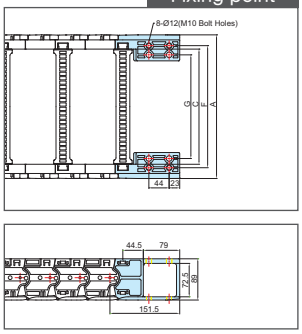
(Dimensions in mm)

Free end bracket

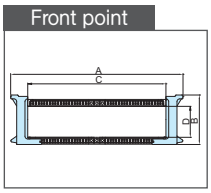
Moving point



Fixing point



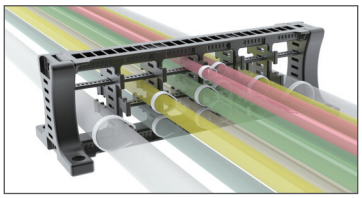
Front point



Chain Type	A Width(Outer)	B Height(Outer)	C Frame	D Height(Inner)	E M.EB Bolt hole width	F F.EB Bolt hole width	G F.EB Bolt width
nsb 065S	137	89	75	56	62.6	90	50
	162		100		87.6	115	75
	187		125		112.6	140	100
	212		150		137.6	165	125
	237		175		162.6	190	150
	252		190		177.6	205	165
	262		200		187.6	215	175
	292		230		217.6	245	205
	302		240		227.6	255	215
	312		250		237.6	265	225
	362		300		287.6	315	275
	412		350		337.6	365	325
	462		400		387.6	415	375

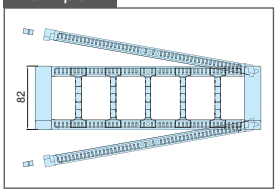
(Dimensions in mm)

System tie wrap (STW)

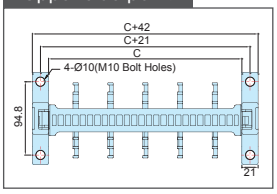


It is a unit to classify each cable for preventing entanglement of cables. It can either be installed to free end bracket or installed separately according its application environment.

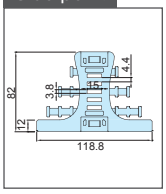
Front point



Upper side point



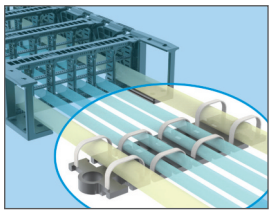
Side point

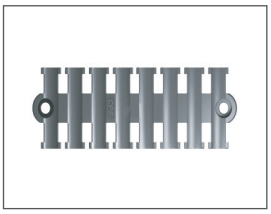


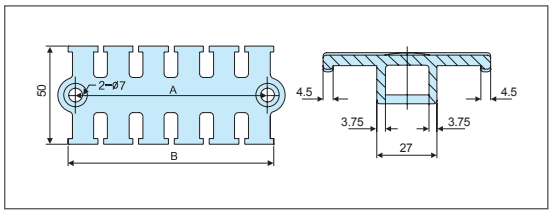
Chain Type	Ordering No.	C Frame	Hole Type
nsb 065S	S-TW.EB060.75	75	M10 Bolt Holes
	S-TW.EB060.100	100	
	S-TW.EB060.125	125	
	S-TW.EB060.150	150	
	S-TW.EB060.175	175	
	S-TW.EB060.190	190	
	S-TW.EB060.200	200	
	S-TW.EB060.230	230	
	S-TW.EB060.240	240	
	S-TW.EB060.250	250	
	S-TW.EB060.300	300	
	S-TW.EB060.350	350	
	S-TW.EB060.400	400	

(Dimensions in mm)

Tie wrap (TW)





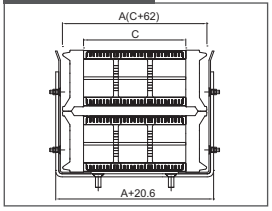


Chain Type	Ordering No.	A	B
nsb 065S	S-TW50	58	65
	S-TW75	75	82
	S-TW100	98	105
	S-TW125	122	129
	S-TW150	141	148

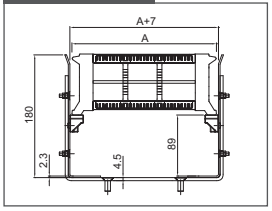
(Dimensions in mm)

Guide channel

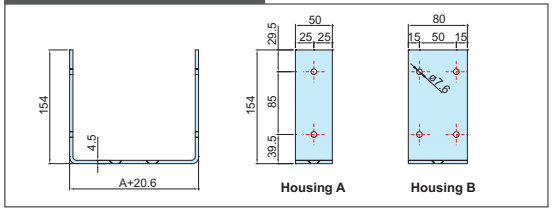
A - Zone



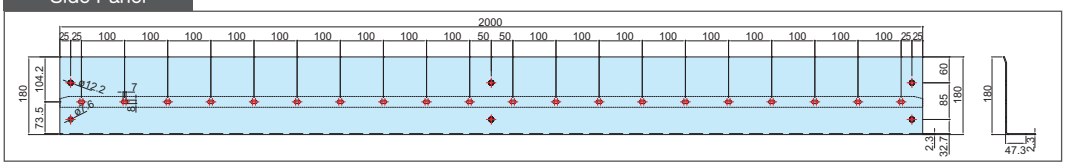
C - Zone



Housing (U-Shape)

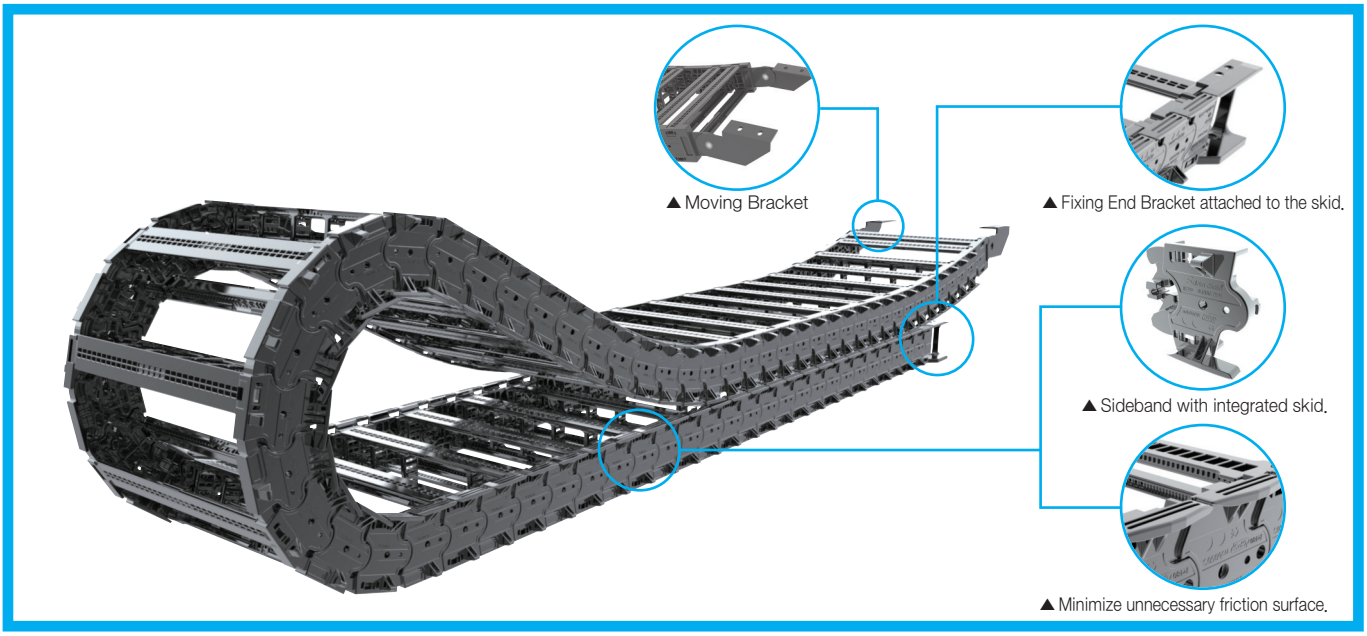


Side Panel



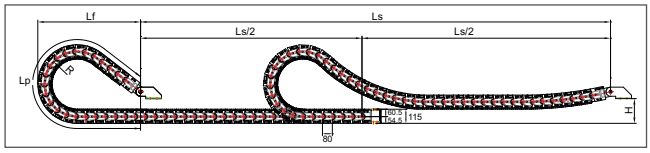
(Dimensions in mm)

nsb 080S



» Layout of the chain

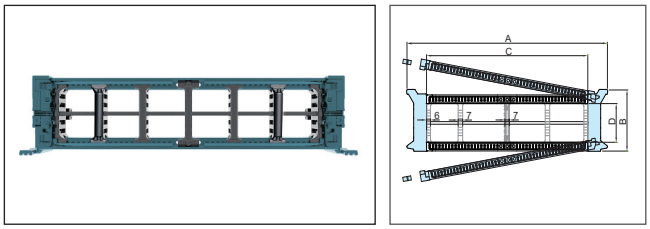
Ls: Stroke



Bending Radius (R)	Lp Loop Length	Lf Loof Projection	H Moving Height
180	1,490	690	260
200	1,617	730	
250	1,935	830	
300	2,253	930	
350	2,571	1,030	
400	2,889	1,130	
500	3,524	1,330	

(Dimensions in mm)

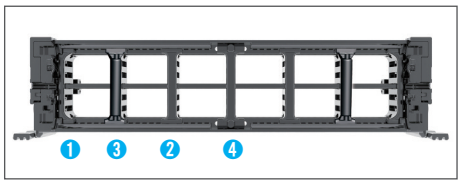
» Chain cross section

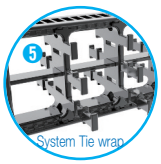


Chain Type	A Width(Outer)	B Height(Outer)	C Frame	D Height(Inner)	Weight kg/m
nsb 080S	143	115	75	78	4.27
	168		100		4.36
	183		115		4.43
	193		125		4.47
	218		150		4.57
	243		175		4.67
	268		200		4.85
	308		240		5.03
	318		250		5.07
	358		290		5.33
	368		300		5.40
	418		350		5.71
	468		400		6.09
	518		450		6.28
	568		500		6.45
	618		550		7.08
	668		600		7.20

(Dimensions in mm)

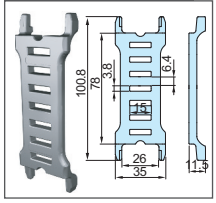
» Dividers(DV)



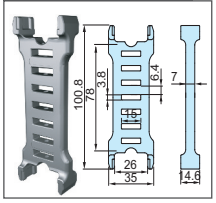


Assemble divider every second frame.
DV.T : Applied to Frame 300~600.
DV.M : Normal divider.
DV.W : Applicable to System Tie Wrap or FEB.

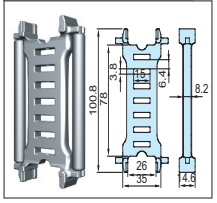
❶ sb-DV075/S



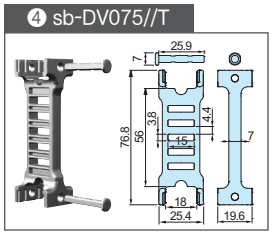
❷ sb-DV075/M



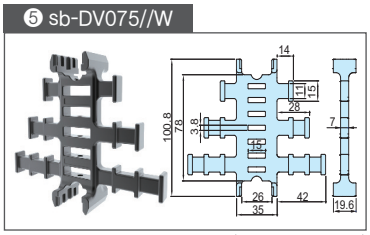
❸ sb-DV075/R



❹ sb-DV075//T

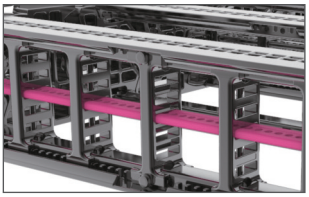


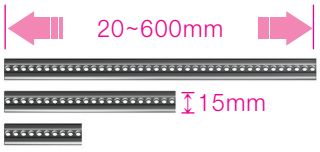
❺ sb-DV075//W



(Dimensions in mm)

» Separators(SP)



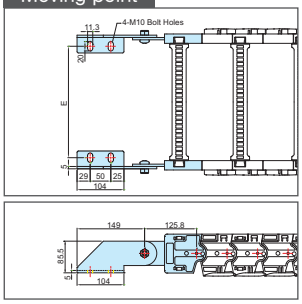


Chain Type	Ordering NO.
nsb 080S	sb-SP/600.600

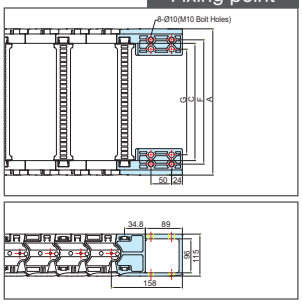
(Dimensions in mm)

Free end bracket

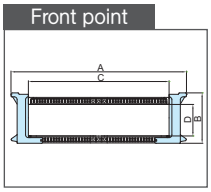
Moving point



Fixing point



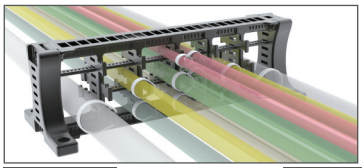
Front point



Chain Type	A Width(Outer)	B Height(Outer)	C Frame	D Height(Inner)	E M.EB Bolt hole width	F F.EB Bolt hole width	G F.EB Bolt width
nsb 080S	143	115	75	78	63	104	47
	168		100		88	129	72
	183		115		103	144	87
	193		125		113	154	97
	218		150		138	179	122
	243		175		163	204	147
	268		200		188	229	172
	308		240		228	269	212
	318		250		238	279	222
	358		290		278	319	262
	368		300		288	329	272
	418		350		338	379	322
	468		400		388	429	372
	518		450		438	479	422
	568		500		488	529	472
	618		550		538	579	522
	668		600		588	629	572

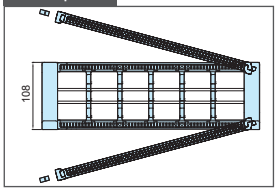
(Dimensions in mm)

System tie wrap (STW)

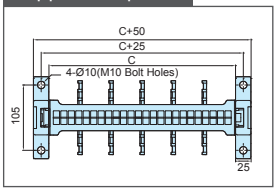


It is a unit to classify each cable for preventing entanglement of cables. It can either be installed to free end bracket or installed separately according its application environment.

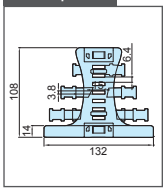
Front point



Upper side point



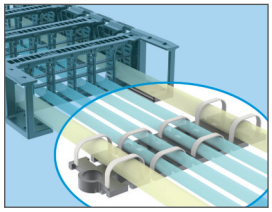
Side point

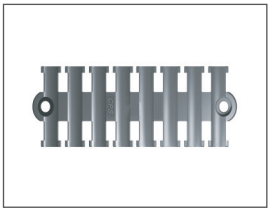


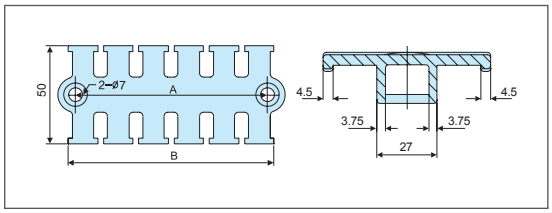
Chain Type	Ordering No.	C Frame	Hole Type
nsb 080S	S-TW.EB075.75	75	M10 Bolt Holes
	S-TW.EB075.100	100	
	S-TW.EB075.115	115	
	S-TW.EB075.125	125	
	S-TW.EB075.150	150	
	S-TW.EB075.175	175	
	S-TW.EB075.200	200	
	S-TW.EB075.240	240	
	S-TW.EB075.250	250	
	S-TW.EB075.290	290	
	S-TW.EB075.300	300	
	S-TW.EB075.350	350	
	S-TW.EB075.400	400	
	S-TW.EB075.450	450	
	S-TW.EB075.500	500	
	S-TW.EB075.550	550	
	S-TW.EB075.600	600	

(Dimensions in mm)

Tie wrap (TW)





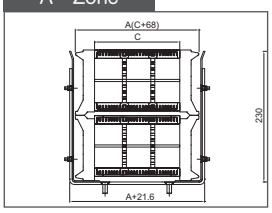


Chain Type	Ordering No.	A	B
nsb 080S	S-TW50	58	65
	S-TW75	75	82
	S-TW100	98	105
	S-TW125	122	129
	S-TW150	141	148

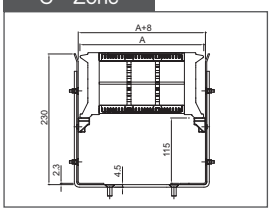
(Dimensions in mm)

Guide channel

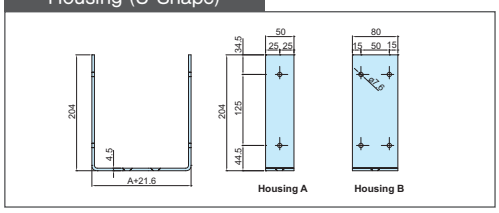
A - Zone



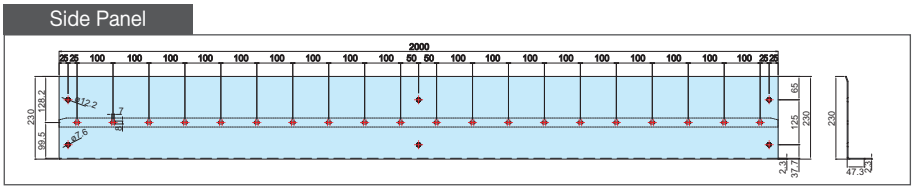
C - Zone



Housing (U-Shape)



Side Panel



(Dimensions in mm)