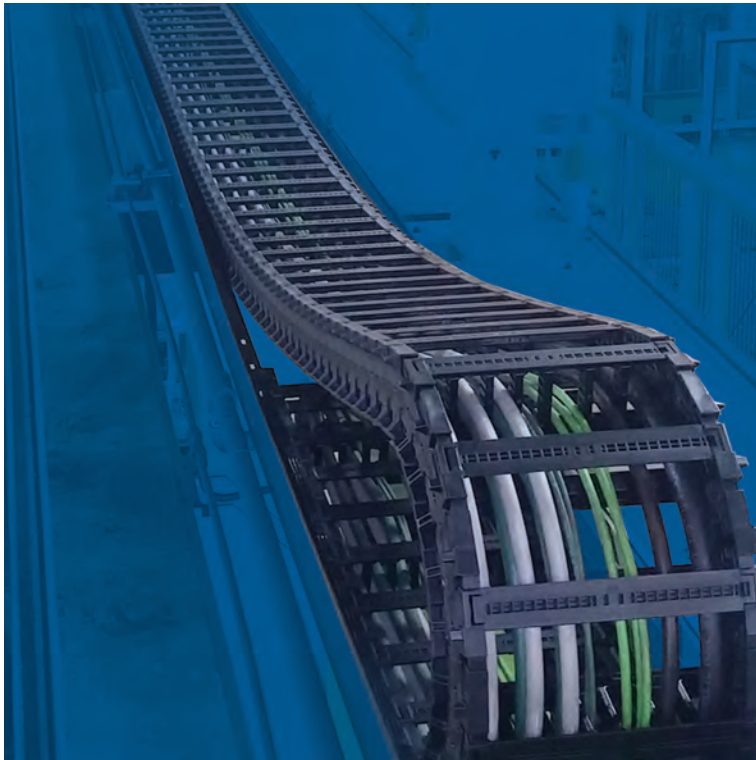


nsb Chain-Sliding Type



nsb050S

200

nsb065S

202

nsb080S

204

General Information

Material	: CPS-Amide (PA6+G.F)
Speed	: 6%
Acceleration	: 15%
Temperature	: -30°C ~ +130°C
Certificate	: CE, ATEX(Ex), RoHs2

Value of Speed/Acceleration is subject to change according to cable's amount and travel length.

Calculation Table

Length of Cable Chain

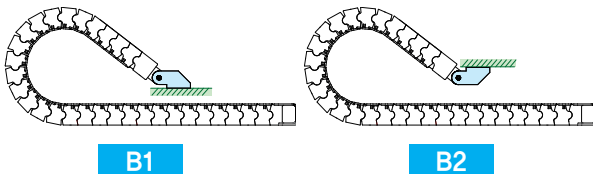
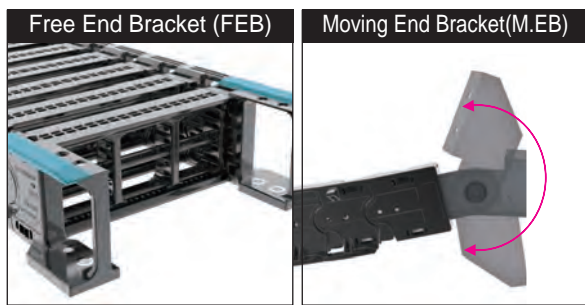
: $L = \frac{1}{2} \times L_s + L_p$

Bending Radius

: Multiply 8~10 of the biggest cable

: Multiply 15~20 of the biggest hose

Bracket Type



Dimension Table

nsb Chain-Sliding Type	Pitch	Bending Radius (R)	Weight kg/m	Speed m/s	Temperature °C	Size				Frame Type	Section-Composition
						A	B	C	D		
nsb050S	50	110, 135, 165, 185, 235, 285	2.38	6	-30 ~ +130	104	50	71.5	45		
			2.44			129	75				
			2.51			154	100				
			2.61			179	125				
			2.67			194	140				
			2.71			204	150				
			2.76			219	165				
			2.80			229	175				
			2.97			244	190				
			3.09			254	200				
			3.32			294	240				
			3.38			304	250				
			3.63			354	300				
nsb065S	65	140, 190, 220, 270, 390	3.29	10	-30 ~ +130	137	75	89	56		
			3.34			162	100				
			3.49			187	125				
			3.58			212	150				
			3.68			237	175				
			3.76			252	190				
			3.82			262	200				
			3.99			302	240				
			4.03			312	250				
			4.24			362	300				
			4.53			412	350				
			4.85			462	400				
			nsb080S			80	180, 200, 250, 300, 350, 400, 500				
4.36	168	100									
4.43	183	115									
4.47	193	125									
4.57	218	150									
4.67	243	175									
4.85	268	200									
5.03	308	240									
5.07	318	250									
5.33	358	290									
5.40	368	300									
5.71	418	350									
6.09	468	400									
6.28	518	450									
6.45	568	500									
7.08	618	550									
7.20	668	600									

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 type of bracket; B1, B2.

Ordering

nsb 050S. 175. R185 / B1 10000L : (DV:2)

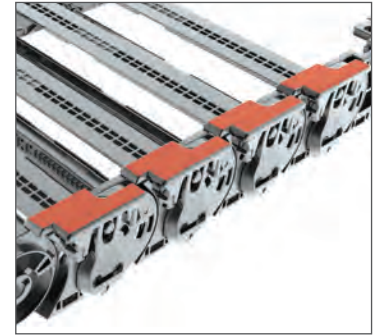
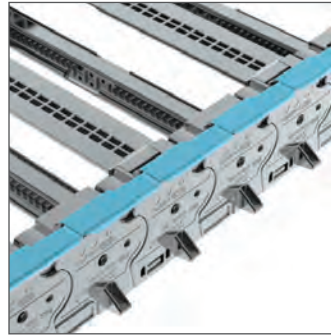
nsb	050S.	175.	R185	/	B1	10000L	:	(DV:2)
								Quantity of Divider(Link)
								Length(mm)
								Bracket Type : B1, B2
								FT-Tie Wrap
								FST-System Tie Wrap
								Bending radius
								Inside width
								nsb Chain-Sliding type (S)
								Sabin Chain

Minimized noise level

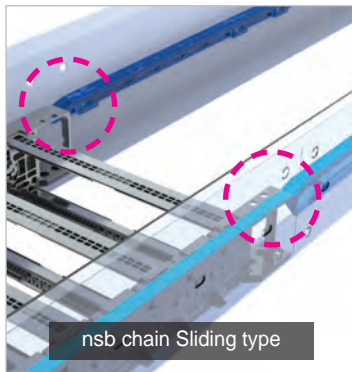


nsb sliding chain is also Holding band structure

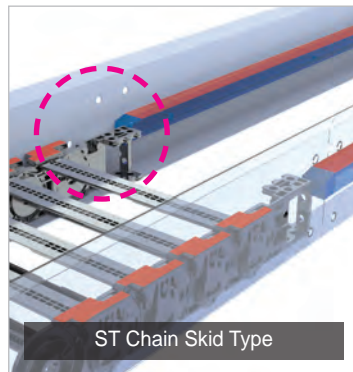
Feature-1



Feature-2



nsb chain Sliding type



ST Chain Skid Type

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.

Easy to assemble and disassemble

Skid and Side Band Integral Type which helps to reduce Assembly & Disassembly time. Specialized for High Speed Operation!



ST-S Type
SB에 SKID를 조립하는 구조



nsb-S Type
SB와 SKID의 일체형



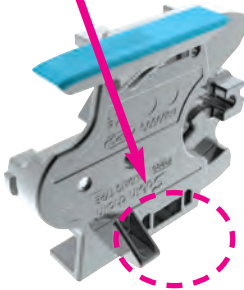
Stable operation and Suitable for high speed



nsb chain Sliding type

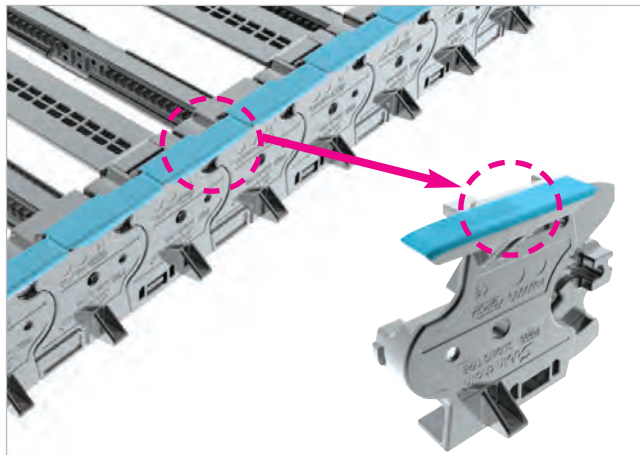


ST Chain Skid Type



- Supporting Unit is applied to make a stable balance in cable chain's operation
- Specialized Cable chain for High Speed Operation(ex. Generally applied at Gantry Loader)

Minimized Dust



Feature-1



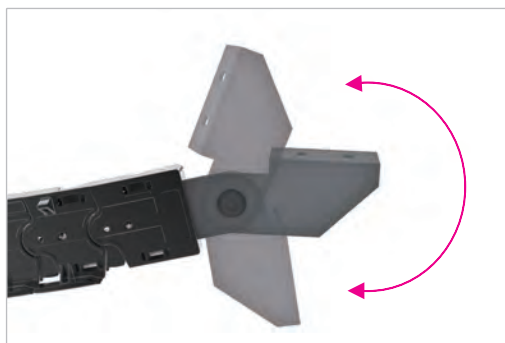
new nylon bar made of same material like cable chain for minimize dust.

Feature-2

Minimize Dust!

Adopt same material of Cable chain to Nylon bar to minimize coefficient of friction

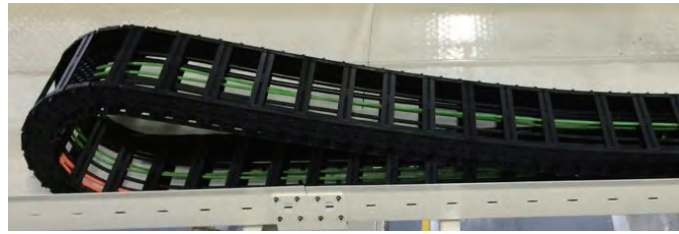
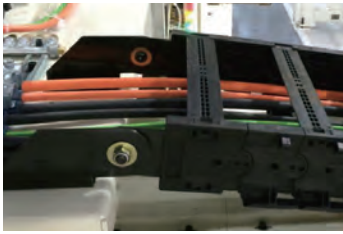
Can be substituted for other Brand of Cable Chain



Can be substituted for other Brand

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

Application of nsb Chain Sliding type



nsb050S

Application : Gantry Loader

Location : Korea, China,
USA and India



nsb065S

Application : Crane(54m/Stroke)

Location : Korea

Remark:

Section composition with dividers and spacers

System tie-wrap dividers(DV/W) at fixing end brackets

nsb080S

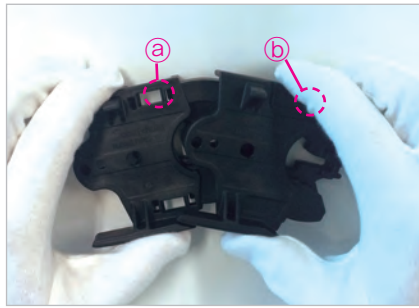
Application : Robot carriage

Location : Korea, China,
Mexico, Brazil

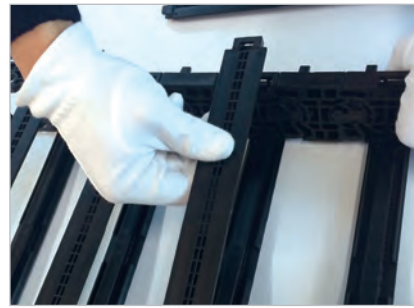


Assembly procedure of nsb Chain Sliding type

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 a to b according to priority)



7
Frame of the opposite side also assemble in the same manner.



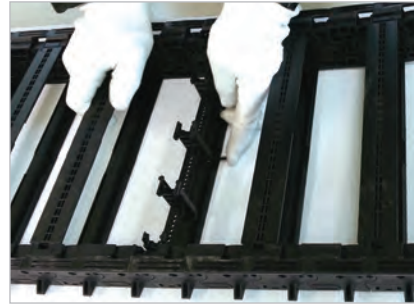
2
Connect the Side Band according to required length.



8
Assemble dividers and separators considering inserted number of cables.



3
Install F.EB to the right and left direction.



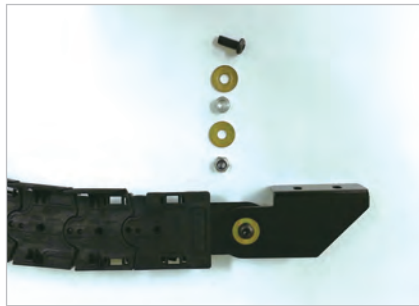
9
Fix the dividers on lower frame.
(Assemble divider every Four links)



4
Install M.EB to the right and left direction.



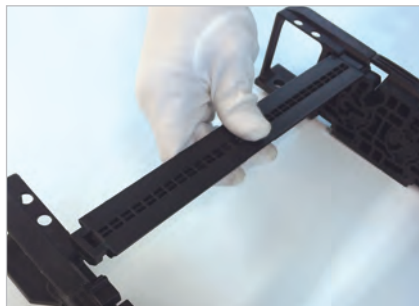
10
Combine the upper frame exactly on the groove of sideband and divider.



5
Assemble the Steel Bracket on the M.EB by tightening bolt and nut.
(Bolt → flat washer → insert steel → flat washer → Nut)



11
Fix the frame with side band by using the frame pin.



6
Assemble the left and right Side Band with specified frame.



12
Complete by inserting the reinforce washer to fit in fixing hole of F.EB.

Composition of nsb Chain Sliding Type

= Side Band (RH/LH) + Frame (Upper/Lower) + Holding Pin + Free End Bracket

M divider(normal divider) should be applied every second frames to make a section composition.

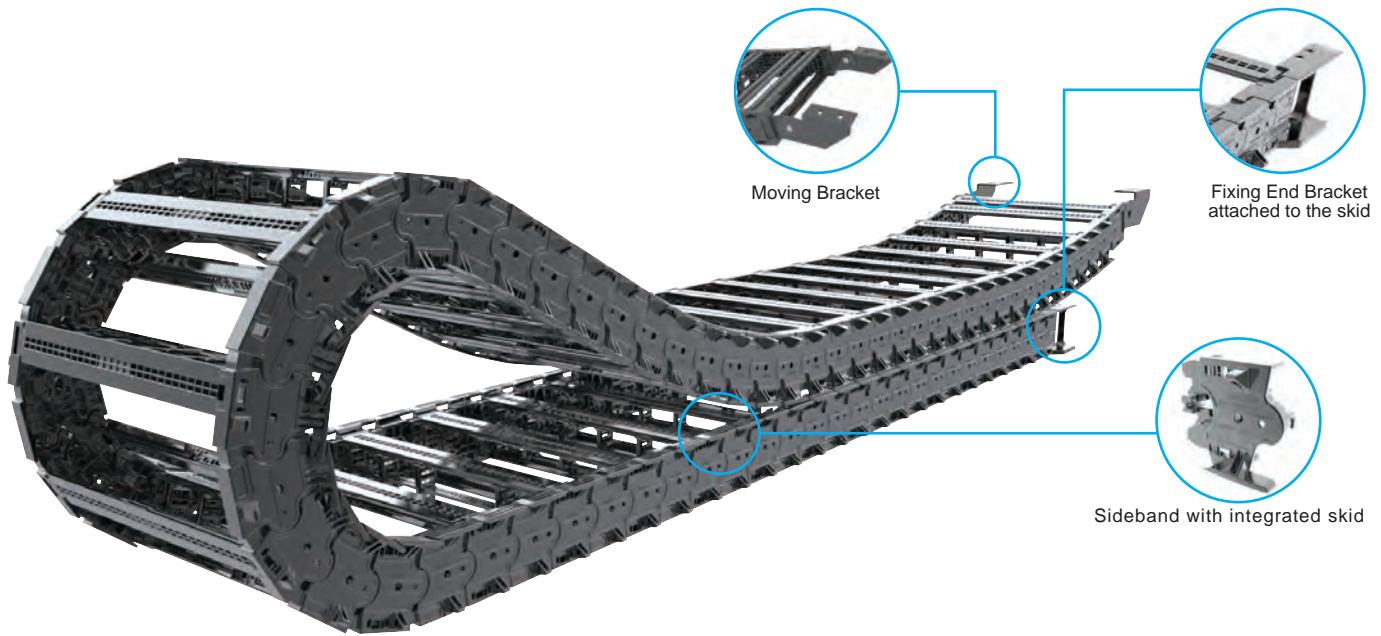
※ Please refer to below part list and description to understand composition of cable chain.

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	Frame, 50mm
		sb-FR045.75	Frame, 75mm
		sb-FR045.100	Frame, 100mm
		sb-FR045.125	Frame, 125mm
		sb-FR045.140	Frame, 140mm
		sb-FR045.150	Frame, 150mm
		sb-FR045.165	Frame, 165mm
		sb-FR045.175	Frame, 175mm
		sb-FR045.190	Frame, 190mm
		sb-FR045.200	Frame, 200mm
sb-FR045.240	Frame, 240mm		
sb-FR045.250	Frame, 250mm		
sb-FR045.300	Frame, 300mm		
FREE END BRACKET	NSB-FEB050S /F	Free End bracket of nsb050S	
	NSB-FEB050S /M(SEB) nsb-FEB/WH050	Normal divider To fix separstors at the both side section	
DIVIDER	sb-DV045/M	Normal divider	
	sb-DV045/S	To fix separstors at the both side section	
	sb-DV045/T sb-DV045/TP	T divider T divider pin	
SEPARATOR	sb-SP/400.Frame SP-PIN045	Separator, 400mm Separator pin to fix	
TIE WRAP	S-TW50	Tie wrap for end bracket to fix cables, 50mm	
	S-TW75	Tie wrap for end bracket to fix cables, 75mm	
	S-TW100	Tie wrap for end bracket to fix cables, 100mm	
	S-TW125	Tie wrap for end bracket to fix cables, 125mm	
SYSTEM TIE WRAP	S-TW150	Tie wrap for end bracket to fix cables, 150mm	
	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	
nsb065S	SIDE BAND	nsb-SB065S.R*(LH) nsb-SB065S.R*(RH)	Left side band of nsb065S Right side band of nsb065S
	FRAME PIN	S-FP/S1	Frame pin
	FRAME	sb-FR060.75	Frame, 75mm
		sb-FR060.100	Frame, 100mm
		sb-FR060.125	Frame, 125mm
		sb-FR060.150	Frame, 150mm
		sb-FR060.175	Frame, 175mm
		sb-FR060.190	Frame, 190mm
		sb-FR060.200	Frame, 200mm
		sb-FR060.230	Frame, 230mm
		sb-FR060.250	Frame, 250mm
		sb-FR060.300	Frame, 300mm
sb-FR060.350	Frame, 350mm		
sb-FR060.400	Frame, 400mm		
FREE END BRACKET	NSB-FEB065S /F	Free End bracket of nsb065S	
	NSB-FEB065S /M(SEB) nsb-FEB/WH065	Normal divider To fix separstors at the both side section	
DIVIDER	sb-DV060/M	Normal divider	
	sb-DV060/S	To fix separstors at the both side section	
	sb-DV060/R	Roller divider to reduce friction with cables	
	sb-DV060/T sb-DV060/TP	T divider T divider pin	
SEPARATOR	sb-SP/400.Frame SP-PIN060	Separator, 400mm Separator pin to fix	
TIE WRAP	S-TW50	Tie wrap for end bracket to fix cables, 50mm	
	S-TW75	Tie wrap for end bracket to fix cables, 75mm	
	S-TW100	Tie wrap for end bracket to fix cables, 100mm	
	S-TW125	Tie wrap for end bracket to fix cables, 125mm	
SYSTEM TIE WRAP	S-TW150	Tie wrap for end bracket to fix cables, 150mm	
	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	

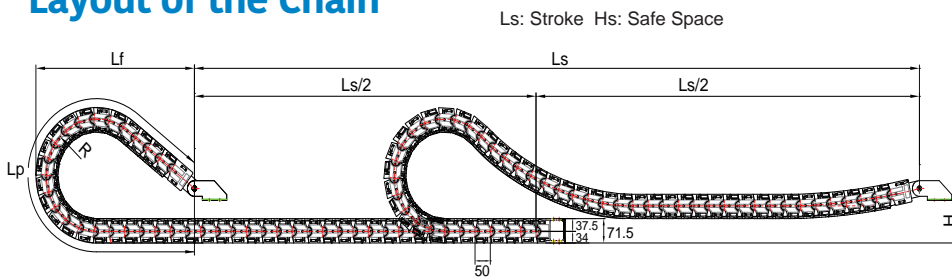
nsb Chain-Sliding Type



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	Frame, 75mm
		sb-FR075/100.100	Frame, 100mm
		sb-FR075/100.115	Frame, 115mm
		sb-FR075/100.125	Frame, 125mm
		sb-FR075/100.150	Frame, 150mm
		sb-FR075/100.175	Frame, 175mm
		sb-FR075/100.200	Frame, 200mm
		sb-FR075/100.240	Frame, 240mm
		sb-FR075/100.250	Frame, 250mm
		sb-FR075/100.290	Frame, 290mm
		sb-FR075/100.300	Frame, 300mm
		sb-FR075/100.350	Frame, 350mm
sb-FR075/100.400	Frame, 400mm		
sb-FR075/100.450	Frame, 450mm		
sb-FR075/100.500	Frame, 500mm		
sb-FR075/100.550	Frame, 550mm		
sb-FR075/100.600	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	Normal divider	
	sb-DV075/S	To fix separstors at the both side section	
	sb-DV075/R	Roller divider to reduce friction with cables	
	sb-DV075/T	T divider	
SEPARATOR	sb-DV075/TP	T divider pin	
	sb-SP/400.프레임 SP-PIN075	Separator, 400mm Separator pin to fix	
TIE WRAP	S-TW50	Tie wrap for end bracket to fix cables, 50mm	
	S-TW75	Tie wrap for end bracket to fix cables, 75mm	
	S-TW100	Tie wrap for end bracket to fix cables, 100mm	
	S-TW125	Tie wrap for end bracket to fix cables, 125mm	
	S-TW150	Tie wrap for end bracket to fix cables, 150mm	
SYSTEM TIE WRAP	sb-DV075/W	Divider for fixing cables at end bracket	
	S-TW.EB075	System tie wrap to arrange for cables right after moving bracket or fixing bracket	



Layout of the Chain

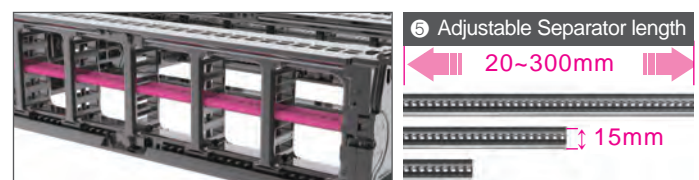


Bending Radius(R)	Lp(Loop Length)	LF(Loof Projection)	H(Moving Height)
110	916	380	180
135	1,068	430	
165	1,255	490	
185	1,382	530	
235	1,703	630	
285	2,029	730	

Chain Cross Section

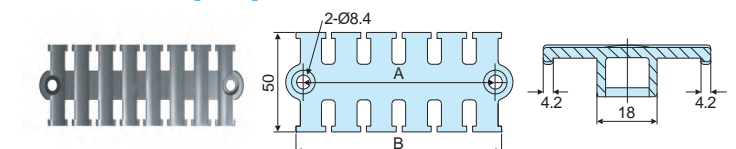


Separators (SP)



Chain Type	Ordering No.
nsb050S	sb-SP/400.Frame

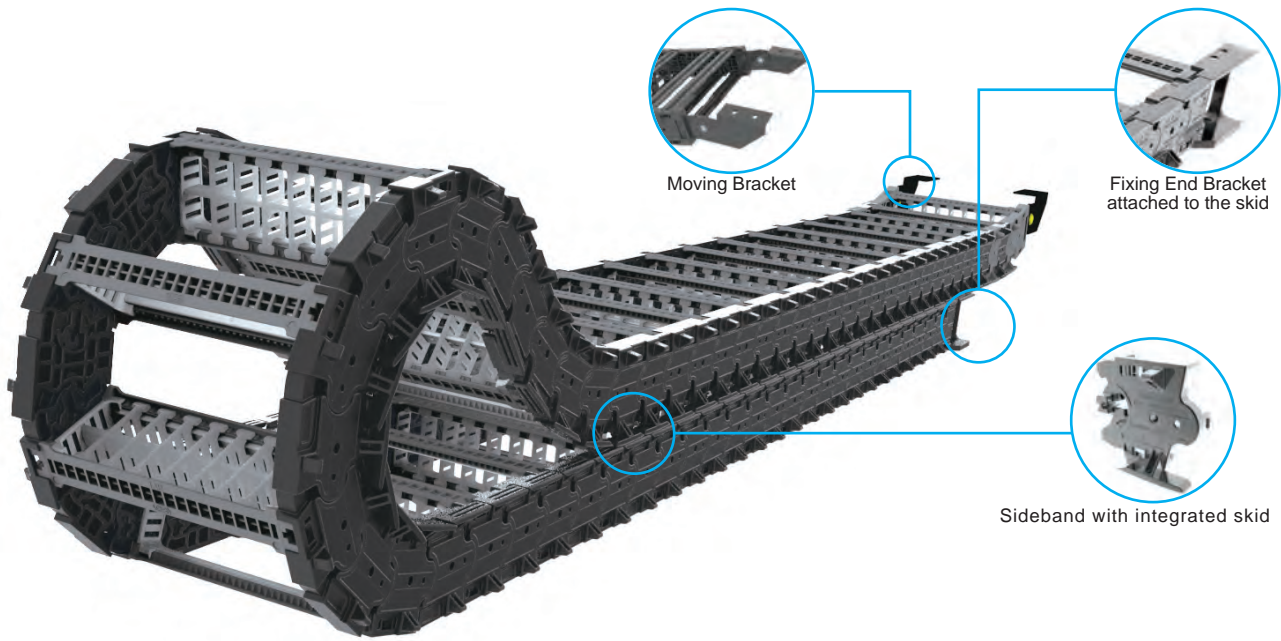
Tie Wrap (TW)



Chain Type	Ordering No.	A	B
nsb050S	S-TW50	58	65
	S-TW75	75	82
	S-TW100	98	105
	S-TW125	122	129
	S-TW150	141	148

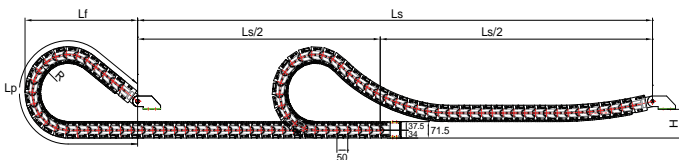
nsb050S (CRG Type)

Sabin Chain®



Layout of the Chain

Ls: Stroke Hs: Safe Space



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	

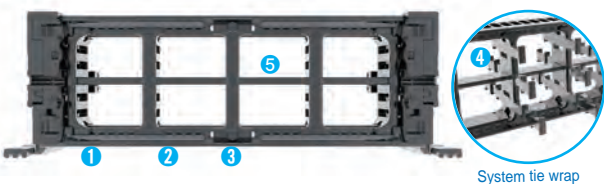
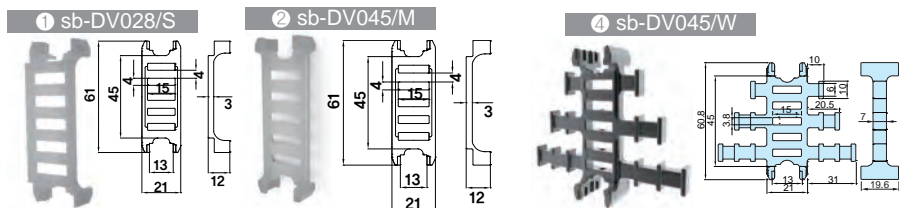
Chain Cross Section



Chain Type	A Width (Outer)	B Height (Outer)	C Frame Width (Inner)	D Height (Inner)	Weight kg/m
nsb050S	129	71.5	75	45	2.65
	154		100		2.78
	179		125		2.91
	204		150		3.04
	229		175		3.17
	254		200		3.30

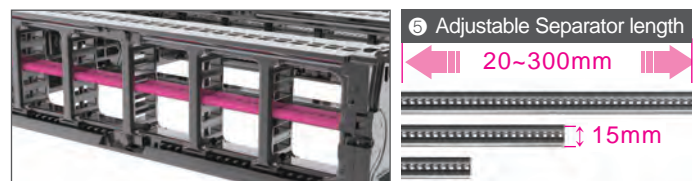
Dividers (DV)

Assembled to every 4th link
 DV/T Applied to Frame 200~300
 DV/M Normal divider
 DV/W
 Applicable to System Tie Wrap or FEB

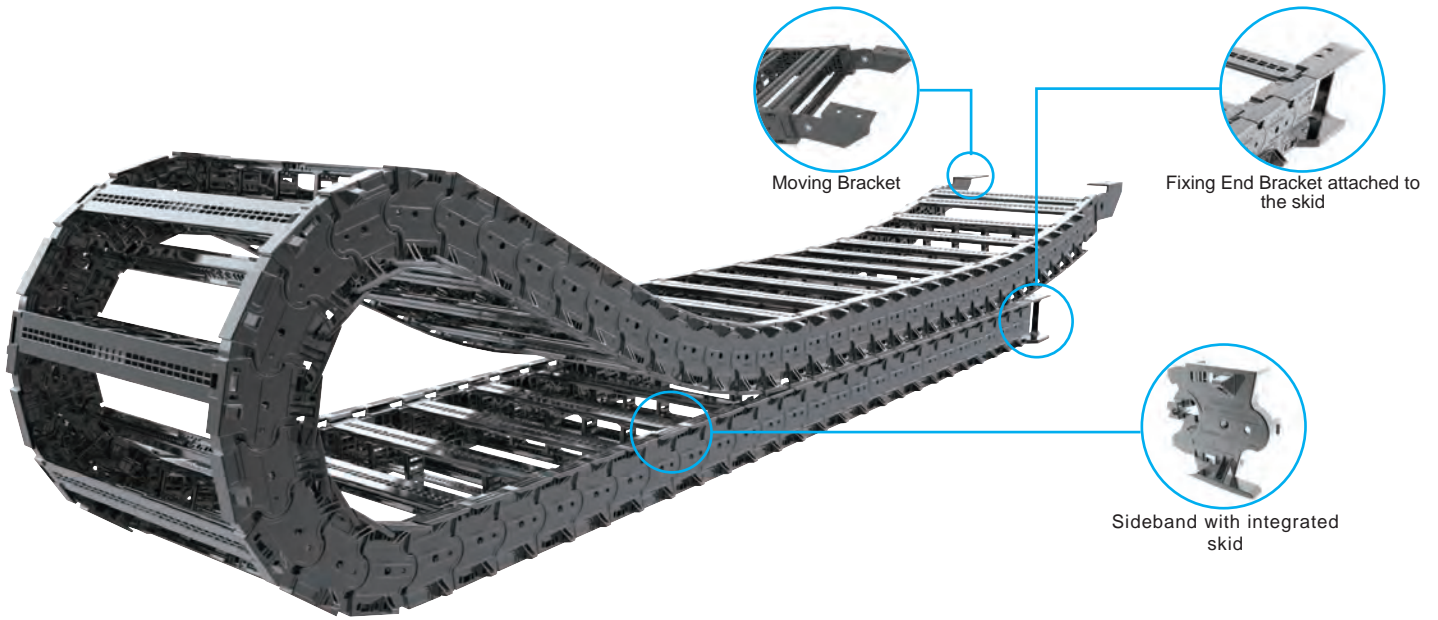


System tie wrap

Separators (SP)

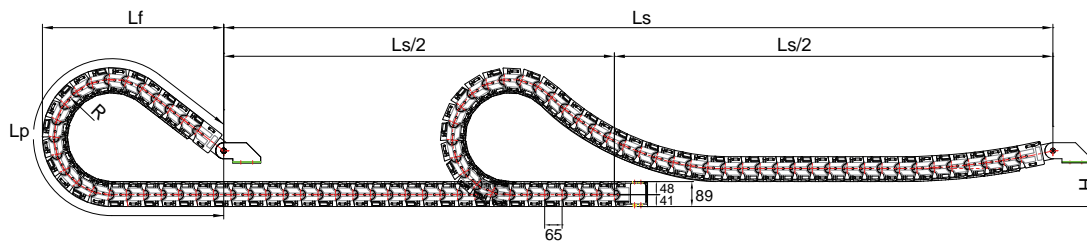


Chain Type	Ordering No.
nsb050S	sb-SP/400.Frame



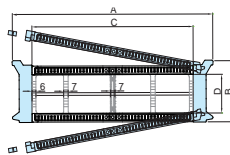
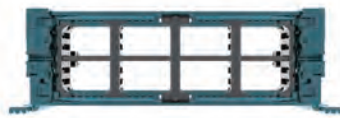
Layout of the Chain

Ls: Stroke Hs: Safe Space



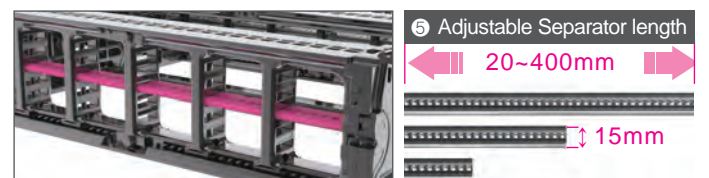
Bending Radius(R)	Lp(Loop Length)	LF(Loof Projection)	H(Moving Height)
140	1,225	615	210
190	1,543	715	
220	1,734	775	
270	2,052	875	
390	2,814	1,115	

Chain Cross Section



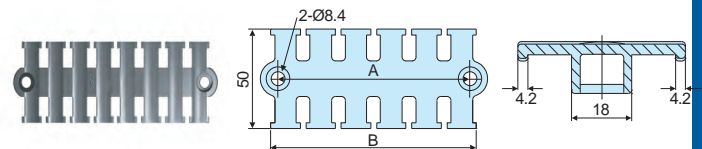
Chain Type	A Width (Outer)	B Height (Outer)	C Frame Width (Inner)	D Height (Inner)	Weight kg/m
nsb065S	137	89	75	56	3.29
	162		100		3.34
	187		125		3.49
	212		150		3.58
	237		175		3.68
	252		190		3.76
	262		200		3.82
	292		230		3.94
	302		240		3.99
	312		250		4.03
	362		300		4.24
	412		350		4.53
462	400	4.85			

Separators (SP)



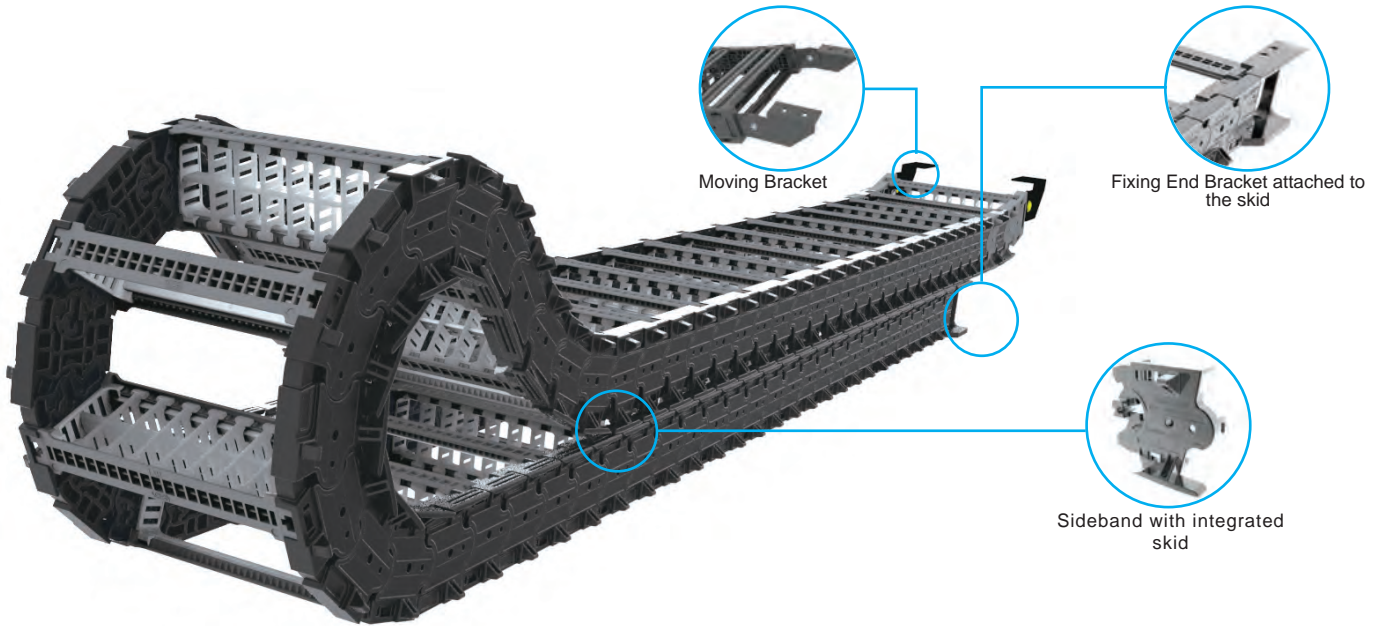
Chain Type	Ordering No.
nsb065S	sb-SP/400.Frame

Tie Wrap (TW)



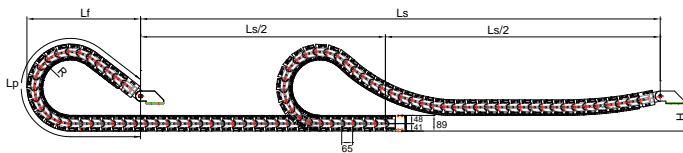
Chain Type	Ordering No.	A	B
nsb050S	S-TW50	58	65
	S-TW75	75	82
	S-TW100	98	105
	S-TW125	122	129
	S-TW150	141	148

nsb060S (CRG Type)



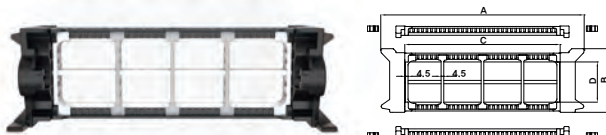
Layout of the Chain

Ls: Stroke Hs: Safe Space



Bending Radius(R)	Lp(Loop Length)	LF(Loof Projection)	H(Moving Height)
140	1,225	615	180
190	1,543	715	
220	1,734	775	
270	2,052	875	
390	2,814	1,115	

Chain Cross Section

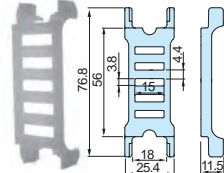


Chain Type	A Width (Outer)	B Height (Outer)	C Frame Width (Inner)	D Height (Inner)	Weight kg/m
nsb050S	162	89	100	56	3.66
	212		150		4.00
	262		200		4.27
	312		250		4.61

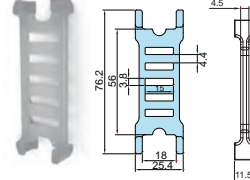
Dividers (DV)

Assembled to every 4th link
 DV/T Applied to Frame 250~400
 DV/M Normal divider
 DV/W
 Applicable to System Tie Wrap or FEB

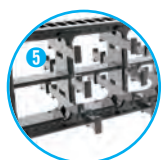
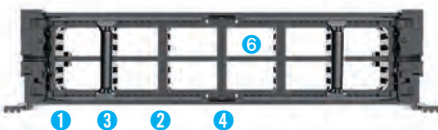
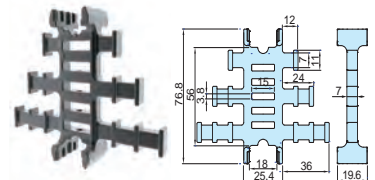
1 sb-DV060/S



2 sb-DV060/M



4 sb-DV045/W

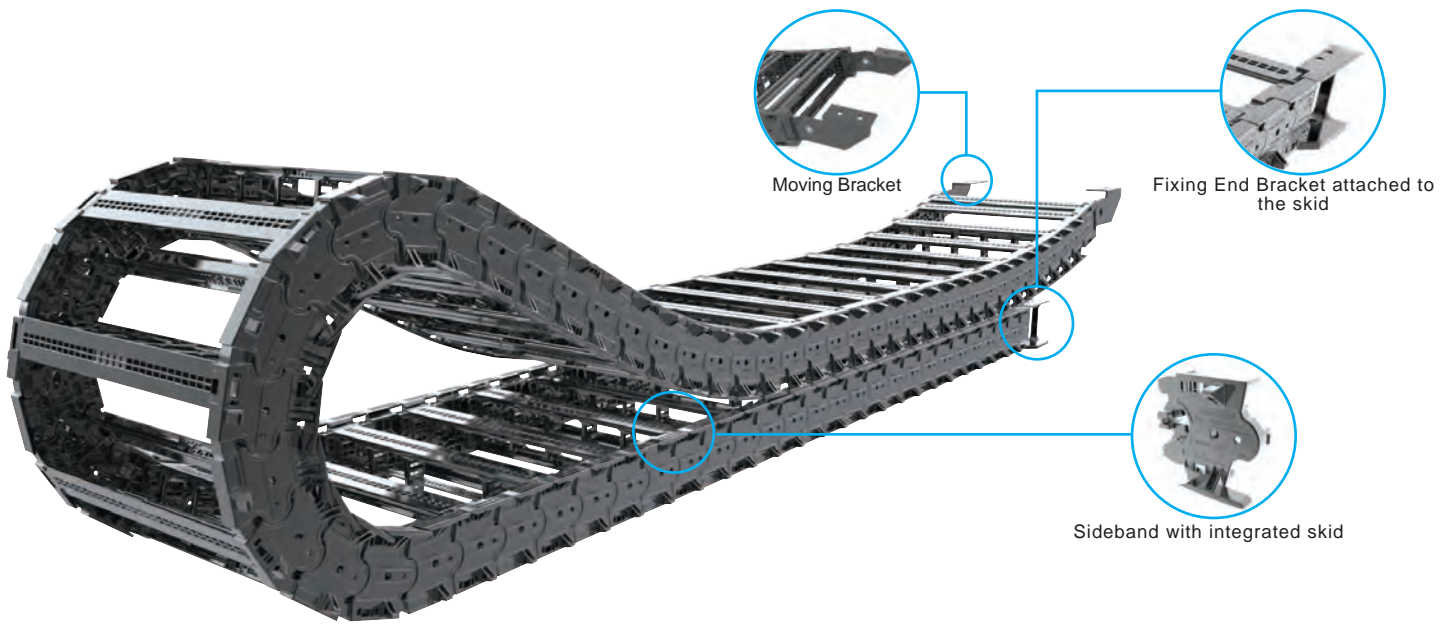


System tie wrap

Separators (SP)

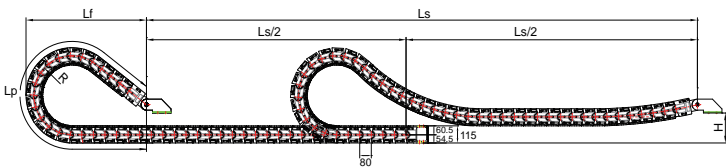


Chain Type	Ordering No.
nsb065S	sb-SP/400.Frame



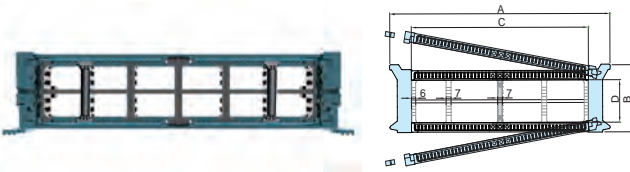
Layout of the Chain

Ls: Stroke Hs: Safe Space

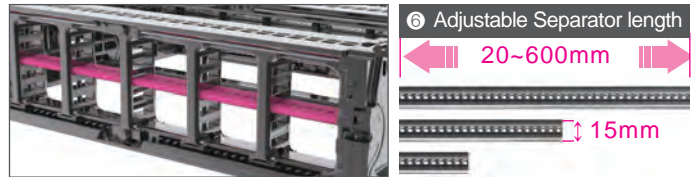


Bending Radius(R)	Lp(Loop Length)	LF(Loop Projection)	H(Moving Height)
180	1,490	690	260
200	1,617	730	
250	1,935	830	
300	2,253	930	
350	2,571	1,030	
400	2,889	1,130	
450	3,207	1,230	
500	3,524	1,330	

Chain Cross Section



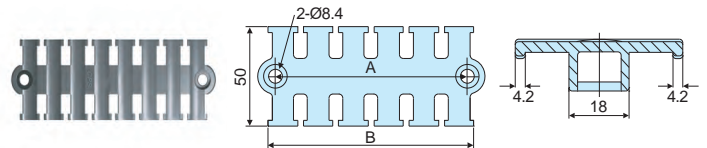
Separators (SP)



Chain Type	Ordering No.
nsb065S	sb-SP/600.600

Chain Type	A Width (Outer)	B Height (Outer)	C Frame Width (Inner)	D Height (Inner)	Weight kg/m
nsb080S	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			

Tie Wrap (TW)



Chain Type	Ordering No.	A	B
nsb080S	S-TW50	58	65
	S-TW75	75	82
	S-TW100	98	105
	S-TW125	122	129
	S-TW150	141	148

