



nsb028N	200
nsb035N	202
nsb045N	204
nsb060N	206
nsb075N	208

General Information

Material : CPS-Amide (PA6+G.F)
Speed : 10m/s
Acceleration : 20m/s²
Temperature : -30℃ ~ +130℃
Special production : ESD, UV, Customized color
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

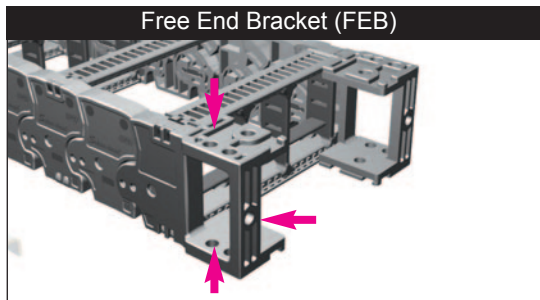
: $L = \frac{1}{2} \times L_s + L_p$

Bending Radius

: Multiply 8~10 of the biggest cable

: Multiply 15~20 of the biggest hose

Bracket Type



Dimension Table

nsb Chain-Normal Type	Pitch	Bending Radius (R)	Weight kg/m	Speed m/s	Temperature ℃	Size				Frame Type	Section-Composition
						A	B	C	D		
nsb028N	28		0.79	10	-30 ~ +130	55	38	35	26		
			0.82			70		50			
			0.85			75		55			
			0.90			95		75			
			0.98			120		100			
			1.08			145		125			
			1.18			170		150			
			1.45			195		175			
			1.59			220		200			
nsb035N	35		1.10	10	-30 ~ +130	55	52	35	40		
			1.13			70		50			
			1.15			75		55			
			1.18			95		75			
			1.25			120		100			
			1.32			145		125			
			1.41			170		150			
			1.62			195		175			
			1.72			220		200			
nsb045N	45		2.06	10	-30 ~ +130	80	66	50	45		
			2.14			105		75			
			2.22			130		100			
			2.32			155		125			
			2.38			170		140			
			2.42			180		150			
			2.47			195		165			
			2.51			205		175			
			2.72			220		190			
			2.86			230		200			
			3.09			270		240			
			3.15			280		250			
			3.43			330		300			
nsb060N	60		3.30	10	-30 ~ +130	115	82	75	56		
			3.35			140		100			
			3.51			165		125			
			3.60			190		150			
			3.69			215		175			
			3.78			230		190			
			3.84			240		200			
			4.01			280		240			
			4.05			290		250			
			4.26			340		300			
			4.57			390		350			
			4.85			440		400			
nsb075N	75		4.80	10	-30 ~ +130	115	108	75	78		
			4.90			140		100			
			4.97			155		115			
			5.02			165		125			
			5.12			190		150			
			5.25			215		175			
			5.46			240		200			
			5.67			280		240			
			5.72			290		250			
			6.02			330		290			
			6.09			340		300			
			6.45			390		350			
			6.83			440		400			
			7.12			490		450			
			7.32			540		500			
			8.06			590		550			
			8.20			640		600			

Ordering

nsb 028N. 50. R66 / F 1000L : (DV:2)

Quantity of Divider(Link)

Length(mm)

Bracket Type : F-Free End Bracket

Bending radius FT-Tie Wrap

Inside width FST-System Tie Wrap

nsb Chain-Normal Type (N)

Sabin Chain

Application of nsb Chain Normal type

nsb Chain can be applied to all kinds of machine tools and factory lines.

nsb045N & 035N

Application

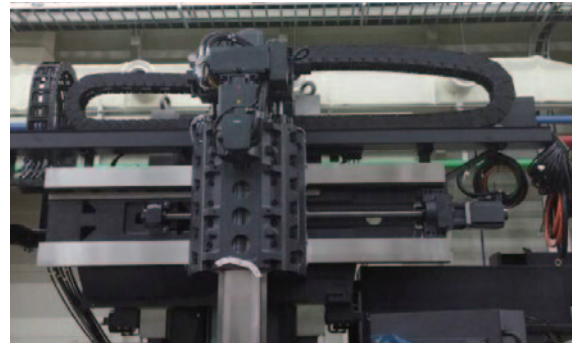
Machine tools

Location

Korea

Remark

2 meters of Stroke



nsb060N

Application

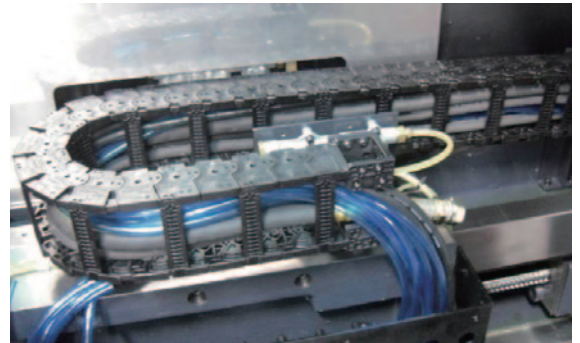
Machine tools

Location

Korea

Remark

2 meters of Stroke



nsb045N

Application

Factory production line

Location

Korea

CPS can produce customized product such as ESD type of cable chain and Special color applied type of cable chain.

nsb035N



Application

PCTC Ship

Location

Korea(H-Heavy Industries)

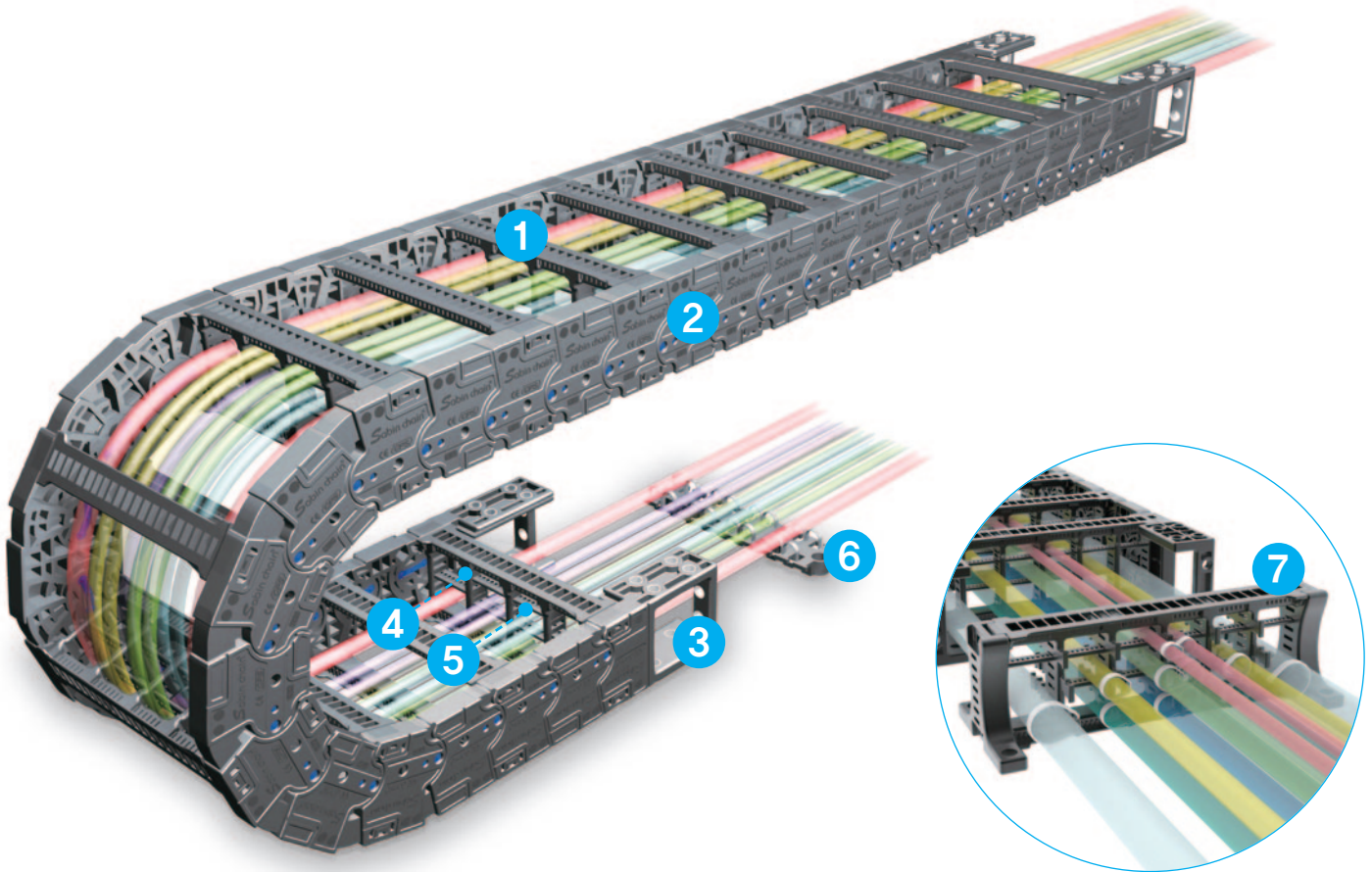
Remark

ESD,

Orange Color Applied

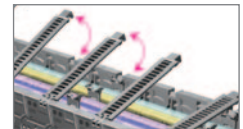


Part of Shift Chain-Normal Type



❶ Frame (FR) (Hinge Type)

A part that connects with LH, RH Side Band. There are every 5mm bumps that prevent dividers to be securely positioned at a place. One side of frame has a hinge structure that helps easy assembly and disassembly.



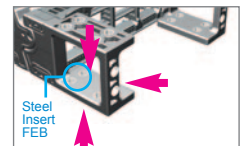
Hinge Type Frame

❷ Side Band (SB)

A part that connects upper and lower frame. There are LH and RH type.

❸ Free End Bracket (FEB)

A part that connects to each end of Cable Chain. There are holes are formed where steel washers are inserted to fix FEB to fixing plate securely.



❹ Divider (DV-S, M, R, T)

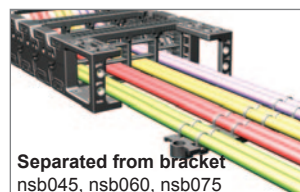
A part that prevents entanglement risk of cables and hoses by being installed vertically.

❺ Separator (SP)

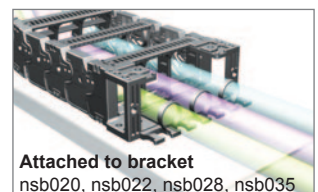
A part that prevent entanglement risk of cable and hoses by being installed horizontally.

❻ Tie Wrap (TW)

A part that prevents damage of the cable and hose by twisting & pulling movements. It can be used as assembling with bracket or separating from the bracket at end position of chain.



Separated from bracket
nsb045, nsb060, nsb075



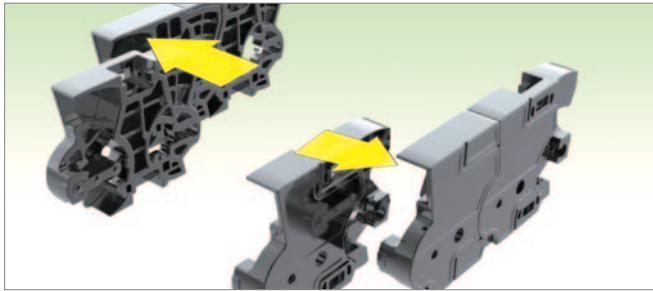
Attached to bracket
nsb020, nsb022, nsb028, nsb035

❼ System Tie Wrap (STW)

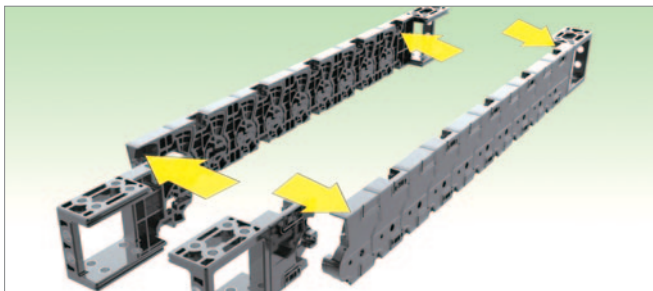
A part that connects to first or end of Cable Chain. Cables and hoses are arranged at System Tie Wrap by several layers and being tightened using Cable Tie. There are 2 types. One is separated from FEB and the other one is assembled to FEB.

Assembly procedure of nsb Chain Normal Type

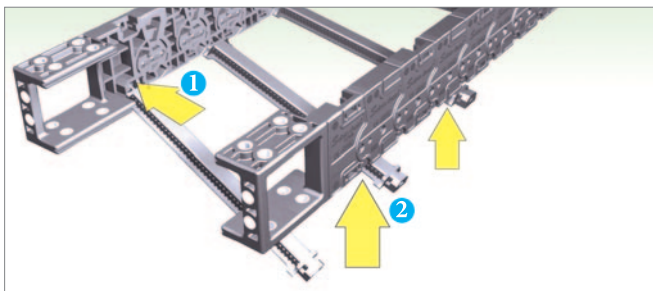
The assembling process of N-Type of New Sabin Chain is like below and user must use rubber hammer with careful combination of Divider and Separator.



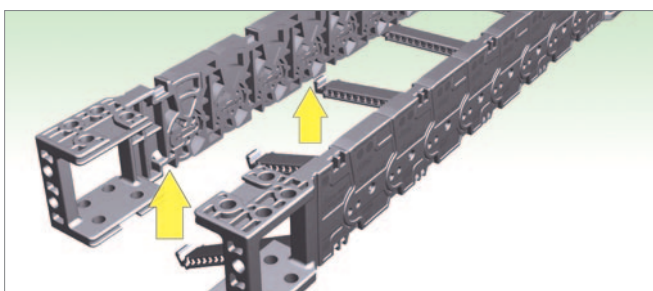
1 Connect each side band as many as you need.



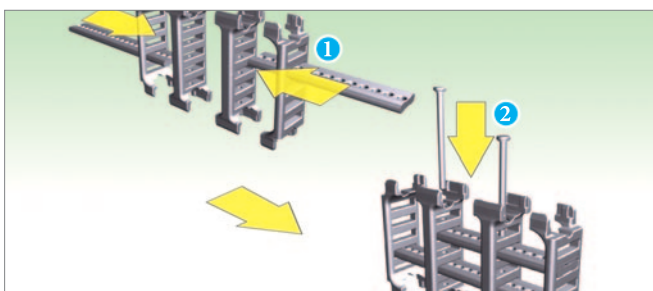
2 Assemble the end brackets on both ends.



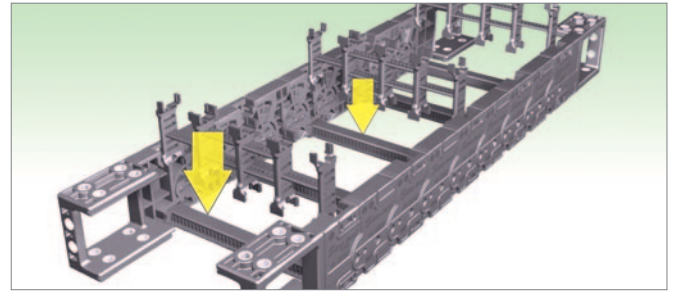
3 Attach frames to one side groove on the frames, then the other side.



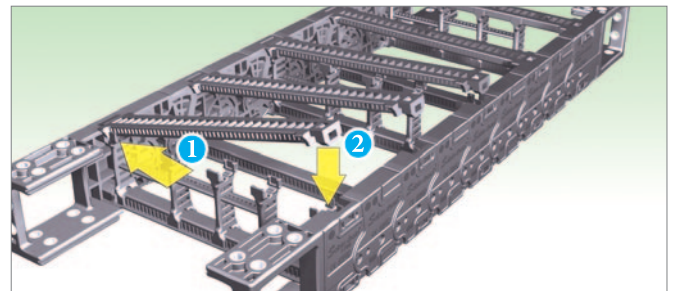
3-1 028N, 035N Type are Hinge Frame Type.



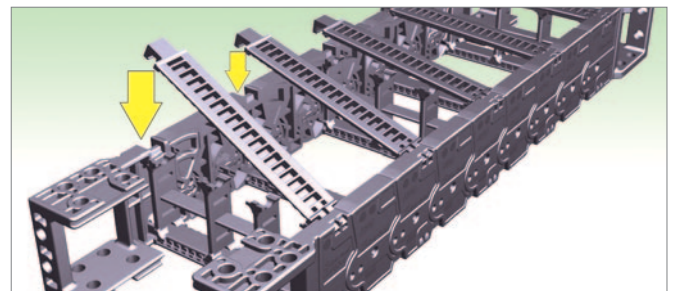
4 For nsb 045, 060, and 075, connect the pin of separator in hole of divider after inserting separator in hole of divider.
For nsb028 and nsb035, separator fixing pins are not used.



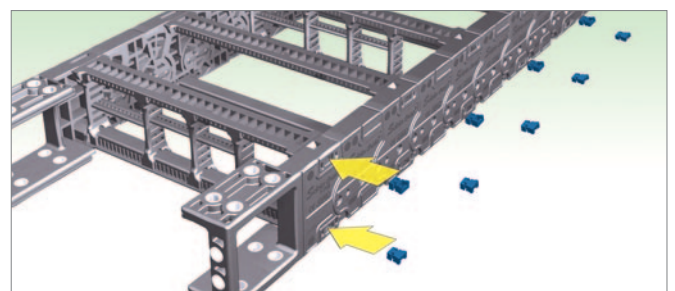
5 Fix the separator and divider patterns to the bottom-side frames as needed.



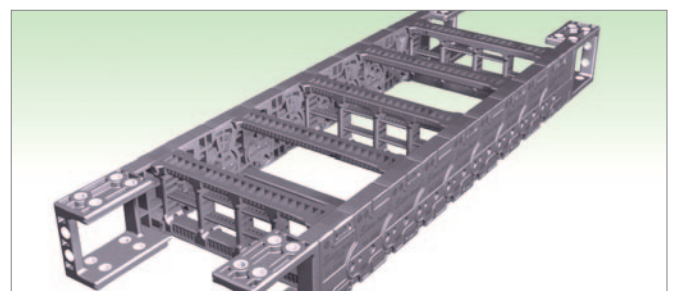
6 Attach frames to one side groove on the frames, then the other side.



6-1 028N, 035N Type are Hinge Frame Type.



7 Insert frame pins to secure the frames and complete carrier.
(nsb045, 060, 075 are applied with frame pin, and nsb028, 035 are Hinge Type or Hook Type without frame pin.)



8 Complete to assemble New Sabin N-Type, Sabin Chain.

Part list of nsb Chain-Normal Type



Composition of nsb Chain Normal

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

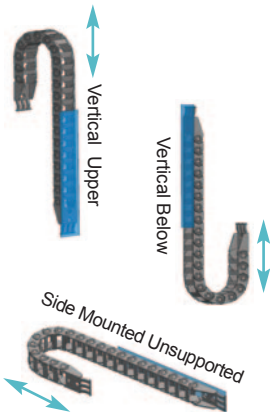
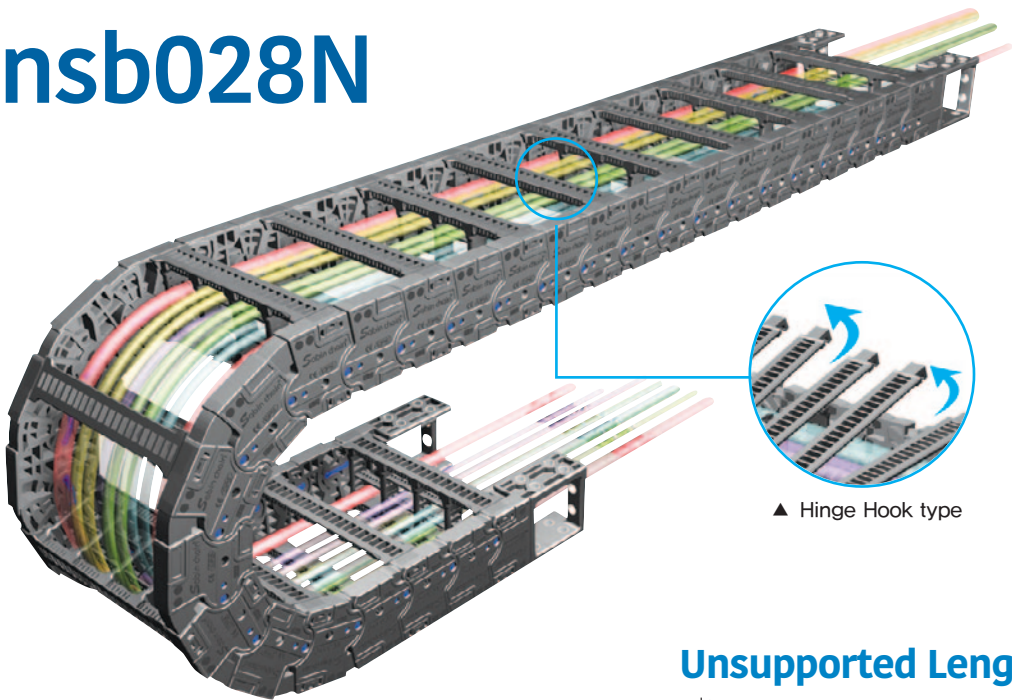
M divider(normal divider) should be applied every second frames to make a section composition.

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

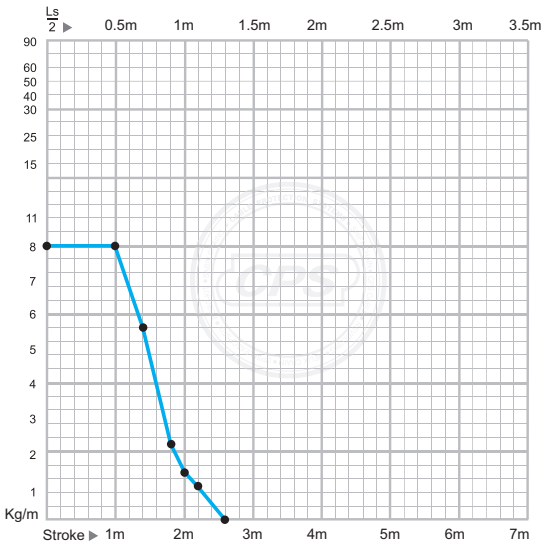
Model	Classification	Part number	Description
nsb028N	SIDE BAND	nsb-SB028N.R*(RH) nsb-SB028N.R*(LH)	Left side band of nsb028N Right side band of nsb028N
	FRAME	sb-FR/M.35	Frame, 35mm
		sb-FR/M.50	Frame, 50mm
		sb-FR/M.55	Frame, 55mm
		sb-FR/M.75	Frame, 75mm
		sb-FR/M.100	Frame, 100mm
		sb-FR/M.125	Frame, 125mm
		sb-FR/M.150	Frame, 150mm
		sb-FR/M.175	Frame, 175mm
		sb-FR/M.200	Frame, 200mm
	FREE END BRACKET	nsb-FEB028N	Free End bracket of nsb028N
	DIVIDER	sb-DV028/M sb-DV028/T sb-DV028/S	Normal divider To fix separstors at the both side section
	SEPARATOR	S-SP/M.35	Separator, 35mm
		S-SP/M.50	Separator, 50mm
		S-SP/M.75	Separator, 75mm
		S-SP/M.100	Separator, 100mm
		S-SP/M.125	Separator, 125mm
		S-SP/M.150	Separator, 150mm
		S-SP/M.175	Separator, 175mm
		S-SP/M.200	Separator, 200mm
	TIE WRAP	S-TW036/025CR.35	Tie wrap for end bracket to fix cables, 35mm
		S-TW036/025CR.50	Tie wrap for end bracket to fix cables, 50mm
		S-TW036/025CR.55	Tie wrap for end bracket to fix cables, 55mm
		S-TW036/025CR.75	Tie wrap for end bracket to fix cables, 75mm
		S-TW036/025CR.100	Tie wrap for end bracket to fix cables, 100mm
		S-TW036/025CR.125	Tie wrap for end bracket to fix cables, 125mm
		S-TW036/025CR.150	Tie wrap for end bracket to fix cables, 150mm
		sb-DV028/W S-TW.EB028	Divider for fixing cables at end bracket System tie wrap to arrange for cables right after moving bracket or fixing bracket
nsb035N	SIDE BAND	nsb-SB035N.R*(RH) nsb-SB035N.R*(LH)	Left side band of nsb035N Right side band of nsb035N
	FRAME	sb-FR/M.35	Frame, 35mm
		sb-FR/M.50	Frame, 50mm
		sb-FR/M.55	Frame, 55mm
		sb-FR/M.75	Frame, 75mm
		sb-FR/M.100	Frame, 100mm
		sb-FR/M.125	Frame, 125mm
		sb-FR/M.150	Frame, 150mm
		sb-FR/M.175	Frame, 175mm
		sb-FR/M.200	Frame, 200mm
	FREE END BRACKET	nsb-FEB035N	Free End bracket of nsb035N
	DIVIDER	sb-DV028/M sb-DV028/T sb-DV028/S	Normal divider To fix separstors at the both side section
	SEPARATOR	S-SP/M.35	Separator, 35mm
		S-SP/M.50	Separator, 50mm
		S-SP/M.75	Separator, 75mm
		S-SP/M.100	Separator, 100mm
		S-SP/M.125	Separator, 125mm
		S-SP/M.150	Separator, 150mm
		S-SP/M.175	Separator, 175mm
		S-SP/M.200	Separator, 200mm
	TIE WRAP	S-TW050/035N.50	Tie wrap for end bracket to fix cables, 50mm
		S-TW050/035N.75	Tie wrap for end bracket to fix cables, 75mm
		S-TW050/035N.100	Tie wrap for end bracket to fix cables, 100mm
		S-TW050/035N.125	Tie wrap for end bracket to fix cables, 125mm
		S-TW050/035N.150	Tie wrap for end bracket to fix cables, 150mm
		S-TW050/035N.175	Tie wrap for end bracket to fix cables, 175mm
		S-TW050/035N.200	Tie wrap for end bracket to fix cables, 200mm
		sb-DV035/W S-TW.EB035	Divider for fixing cables at end bracket System tie wrap to arrange for cables right after moving bracket or fixing bracket
nsb045N	SIDE BAND	nsb-SB045N.R*(LH) nsb-SB045N.R*(RH)	Left side band of nsb045N Right side band of nsb045N
	FRAME PIN	S-FP/S1	Frame pin
	FRAME	sb-FR/M.50	Frame, 50mm
		sb-FR/M.75	Frame, 75mm
		sb-FR/M.100	Frame, 100mm
		sb-FR/M.125	Frame, 125mm
		sb-FR/M.140	Frame, 140mm
		sb-FR/M.150	Frame, 150mm
		sb-FR/M.165	Frame, 165mm
		sb-FR/M.175	Frame, 175mm
		sb-FR/M.190	Frame, 190mm
		sb-FR/M.200	Frame, 200mm
		sb-FR/M.240	Frame, 240mm
		sb-FR/M.250	Frame, 250mm
		sb-FR/M.300	Frame, 300mm
	FREE END BRACKET	nsb-FEB045N sb-FEB/WH045	Free End bracket of nsb045N Steel washer for end bracket
	DIVIDER	sb-DV045/M sb-DV045/S sb-DV045/T	Normal divider To fix separstors at the both side section T divider
	SEPARATOR	sb-SP/400.Frame SP-PIN045	Separator, 400mm Separator pin to fix

Model	Classification	Part number	Description
nsb045N	TIE WRAP	S-TW50	Tie wrap for end bracket to fix cables, 50mm
		S-TW75	Tie wrap for end bracket to fix cables, 75mm
	SYSTEM TIE WRAP	S-TW100 S-TW125 S-TW150	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
nsb060N	SIDE BAND	nsb-SB060N.R*(LH) nsb-SB060N.R*(RH)	Left side band of nsb060N Right side band of nsb060N
	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-FR060.240	Frame, 240mm
		sb-FR060.250	Frame, 250mm
		sb-FR060.300	Frame, 300mm
		sb-FR060.350	Frame, 350mm
		sb-FR060.400	Frame, 400mm
	FREE END BRACKET	nsb-FEB060N sb-FEB/WH060	Free End bracket of nsb060N 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, Clean room type T divider T divider pin
	SEPARATOR	sb-SP/400.Frame 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
nsb075N	SIDE BAND	nsb-SB075N.R*(LH) nsb-SB075N.R*(RH)	Left side band of nsb075N Right side band of nsb075N
	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-FEB075N sb-FEB/WH075	Free End bracket of nsb075N 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, Clean room type T divider T divider pin
	SEPARATOR	sb-SP/400.Frame 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

nsb028N



Unsupported Length



Other Length Restrictions

- Vertical Upper(Max) = 2.0m
- Vertical Below(Max) = 40.0m
- Side Mounted Unsupported(Max) = 1.0m

Caculation of the Chain Length

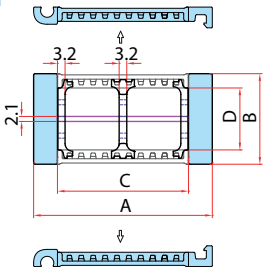
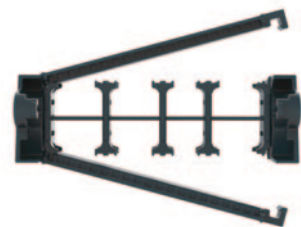
[
$$L = \frac{L_s}{2} + L_p$$
]

Ordering

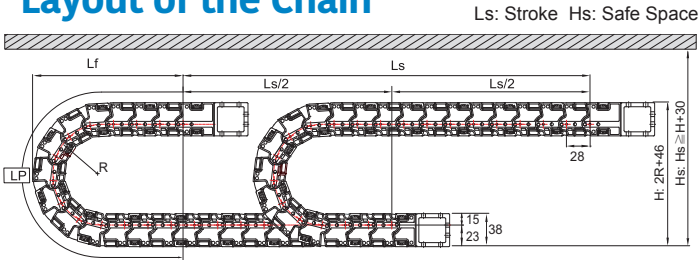
nsb 028N. 100.R46/F-840L:(DV:2)

Normal Type (N)	Bending Radius	Length (mm)	Quantity of Divider (Link)
Sabin Chain	Inside Width	Bracket Type	

Chain Cross Section



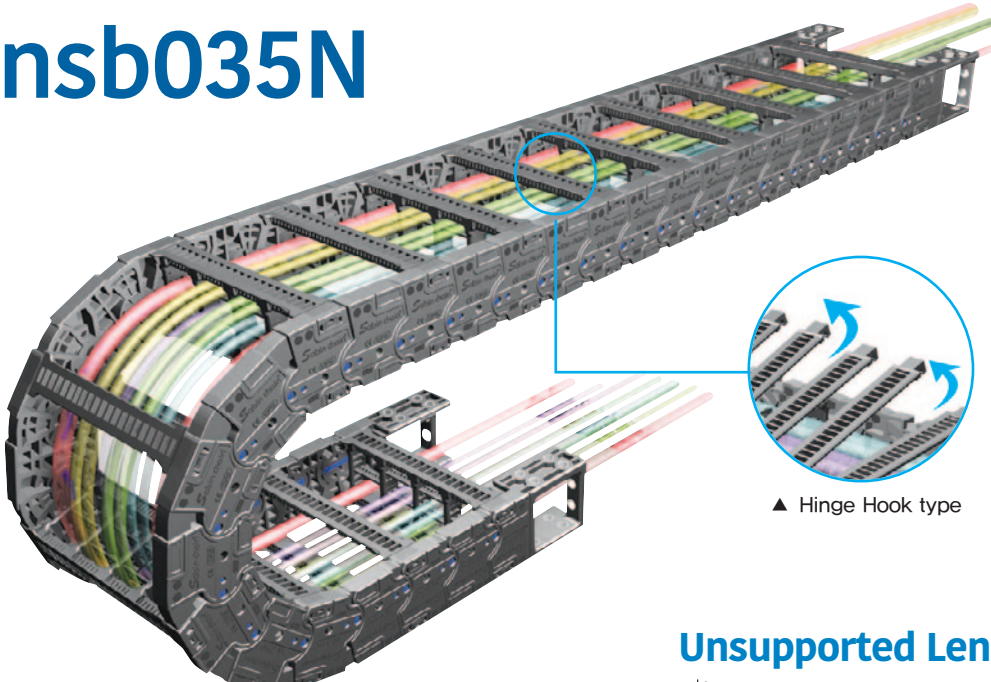
Layout of the Chain



Bending Radius(R)	Lp(Loop Length)	LF(Loof Projection)	H(Moving Height)
46	257	125	138
66	320	145	178
86	383	165	218
116	477	195	278
146	571	225	338

Chain Type	A Width (Outer)	B Height(Outer)	C Frame/Width(Inner)	D Height (Inner)	Weight kg/m
nsb028N	55	38	35	26	0.79
	70		50		0.82
	75		55		0.85
	95		75		0.90
	120		100		0.98
	145		125		1.08
	170		150		1.18
	195		175		1.45
	220		200		1.59

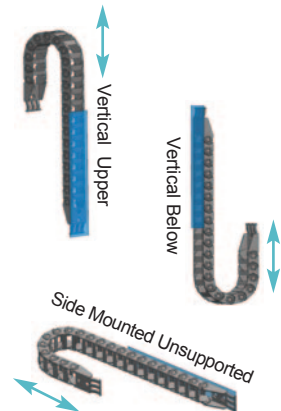
nsb035N



▲ Hinge Hook type

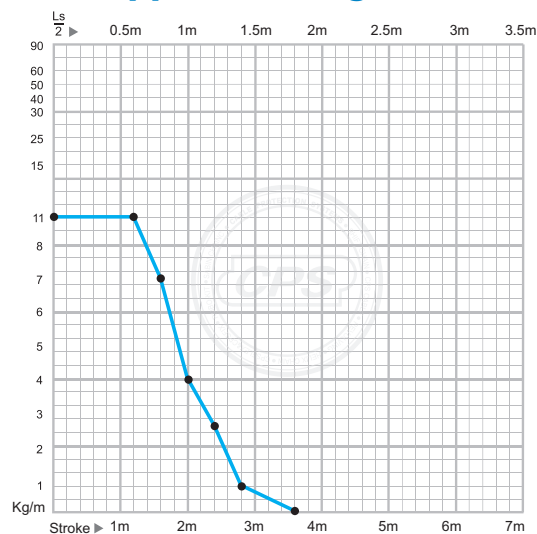
Unsupported Length

Ls



Other Length Restrictions

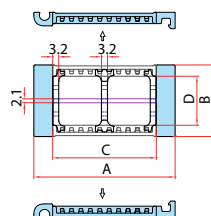
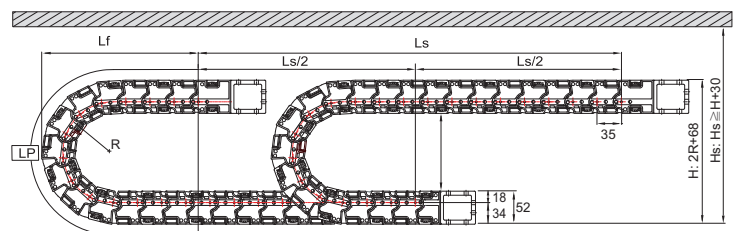
Vertical Standing(Max) = 2.0m
Vertical Hanging(Max) = 40.0m
Side Mounted Unsupported(Max) = 1.0m

$$\left[L = \frac{L_s}{2} + L_p \right]$$


nsb 035N. 100.R115/F-1050L:(DV:2)

Nomal Type (N)		Bending Radius	Length (mm)	Quantity of Divider (Link)
Sabin Chain	Inside Width	Bracket Type		

Ls: Stroke Hs: Safe Space

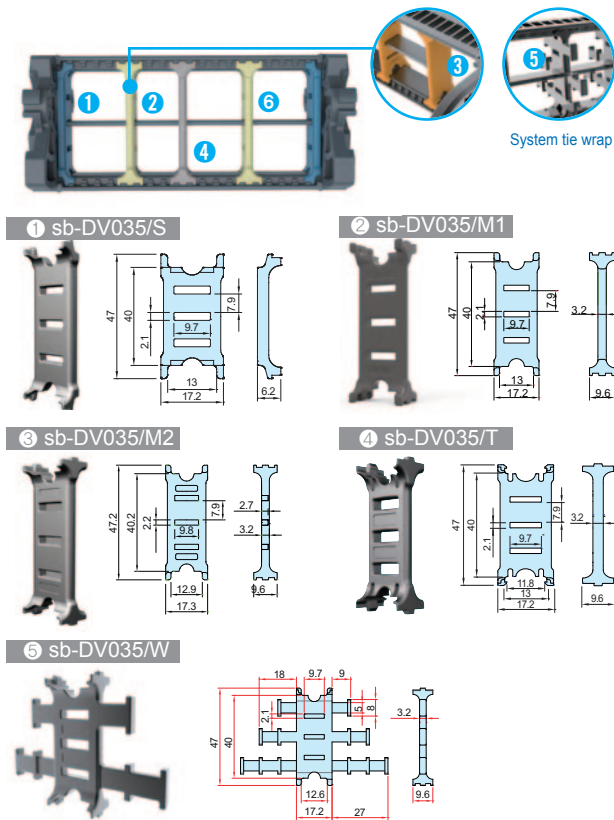


Bending Radius(R)	Lp(Loop Length)	LF(Loof Projection)	H(Moving Height)
55	313	159	178
65	345	169	198
90	423	194	248
115	502	219	298
140	580	244	348
190	737	294	448

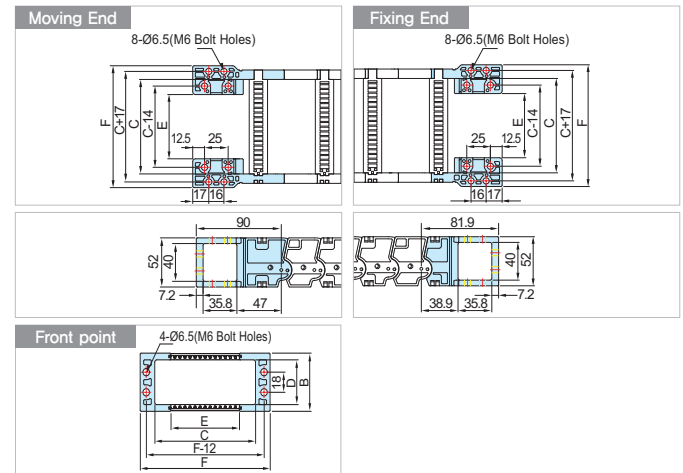
202

Dividers (DV)

Assembled to every 4th link
DV/T Applied to Frame 125~200
DV/M There are two types: M1 and M2
DV/W
Tie wrap divider for free end bracket(FEB)

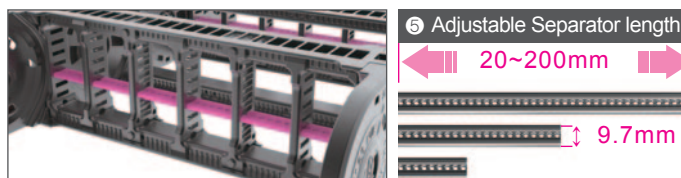


Free End Bracket (FEB)



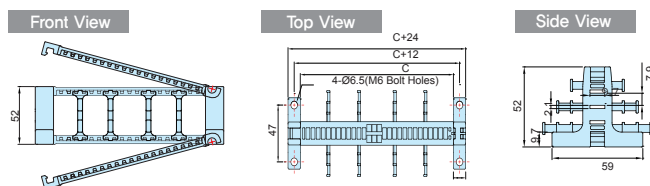
Chain Type	A Width (Outer)	B Height (Outer)	C Frame Width	D Height (Inner)	E EB Inner	Hole Type
nsb035N	64	52	35	40	3	M6 Bolt Holes
	79		50		18	
	84		55		23	
	104		75		43	
	129		100		68	
	154		125		93	
	179		150		118	
	204		175		143	
	229		200		168	

Separators (SP)



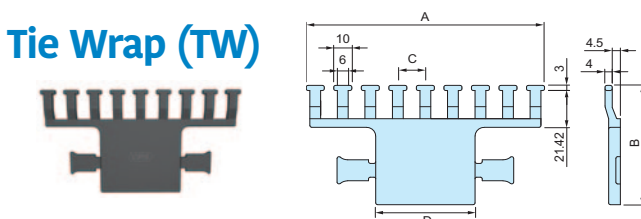
Chain Type	Ordering No.	Frame
nsb035N	S-SP/M.35	35
	S-SP/M.50	50
	S-SP/M.55	55
	S-SP/M.75	75
	S-SP/M.100	100
	S-SP/M.125	125
	S-SP/M.150	150
	S-SP/M.175	175
	S-SP/M.200	200

System Tie Wrap (STW)



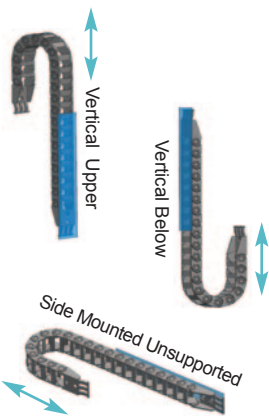
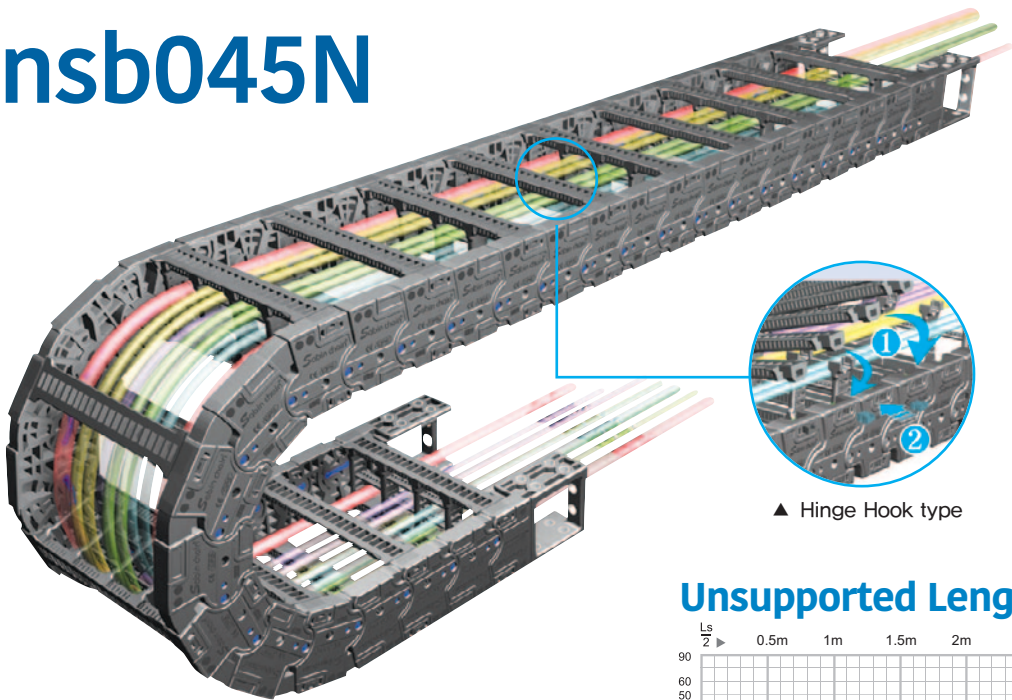
Chain Type	Ordering No.	C Frame	Hole Type
nsb035N	S-TW.EB035.35	35	M6 Bolt Holes
	S-TW.EB035.50	50	
	S-TW.EB035.55	55	
	S-TW.EB035.75	75	
	S-TW.EB035.100	100	
	S-TW.EB035.125	125	
	S-TW.EB035.150	150	
	S-TW.EB035.175	175	
	S-TW.EB035.200	200	

Tie Wrap (TW)



Chain Type	Ordering No.	A	B	C	D
nsb035N	S-TW050/035N.50	82	64.5	12.00	5
	S-TW050/035N.55	82		12.00	10
	S-TW050/035N.75	107		12.13	30
	S-TW050/035N.100	132		15.25	55
	S-TW050/035N.125	157		14.70	80
	S-TW050/035N.150	182		14.35	105
	S-TW050/035N.175	203		12.31	130
	S-TW050/035N.200	232		13.88	155

nsb045N



▲ Hinge Hook type

Other Length Restrictions

- Vertical Standing(Max) = 6.0m
- Vertical Hanging(Max) = 100.0m
- Side Mounted Unsupported(Max) = 2.5m

Caculation of the Chain Length

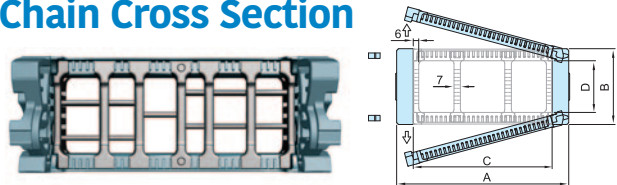
$$[\quad L = \frac{L_s}{2} + L_p \quad]$$

Ordering

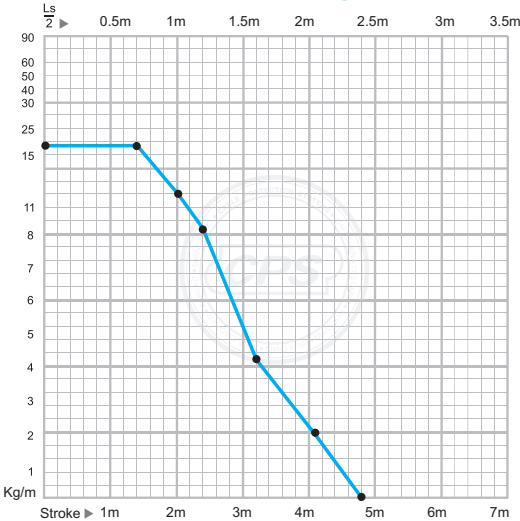
nsb 045N. 100.R135/F-1050L:(DV:2)

	Nomal Type (N)	Bending Radius	Length (mm)	Quantity of Divider (Link)
Sabin Chain	Inside Width	Bracket Type		

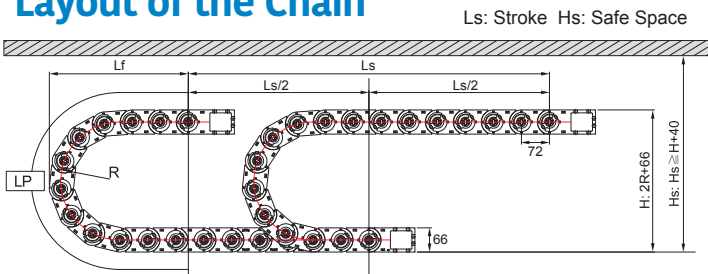
Chain Cross Section



Unsupported Length



Layout of the Chain



Bending Radius(R)	Lp(Loop Length)	LF(Loof Projection)	H(Moving Height)
90	553	272	266
110	616	292	306
135	694	317	356
165	789	347	416
185	851	367	456
235	1008	417	556
285	1165	467	656

Chain Type	A Width (Outer)	B Height(Outer)	C Frame/Width(Inner)	D Height (Inner)	Weight kg/m
nsb045N	80	66	50	45	2.06
	105		75		2.14
	130		100		2.22
	155		125		2.32
	170		140		2.38
	180		150		2.42
	195		165		2.47
	205		175		2.51
	220		190		2.72
	230		200		2.86
	270		240		3.09
	280		250		3.15
	330		300		3.43

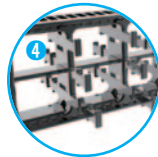
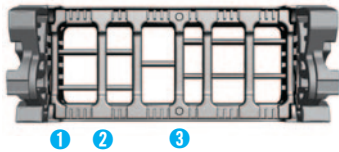
Dividers (DV)

Assembled to every 4th link

DV/T

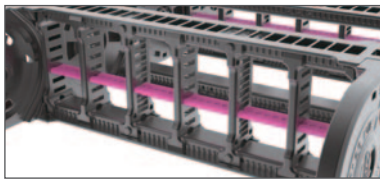
Applied to Frame 200 ~ 300(Connects Upper and Lower Frame)

DV/W Applicable to System Tie Wrap or FEB



System tie wrap

Separators (SP)



Adjustable Separator length

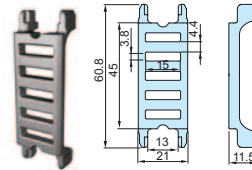
20~300mm



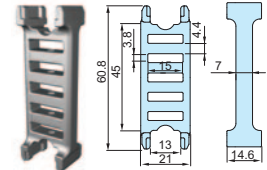
15mm

Chain Type	Ordering No.
nsb045N	sb-SP/400.Frame

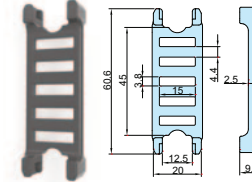
1 sb-DV045/S



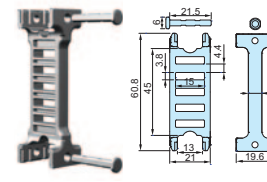
2 sb-DV045/M



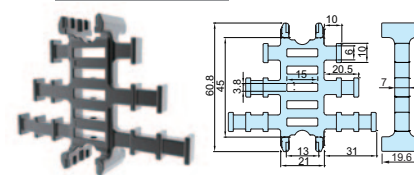
2 sb-DV045/MS



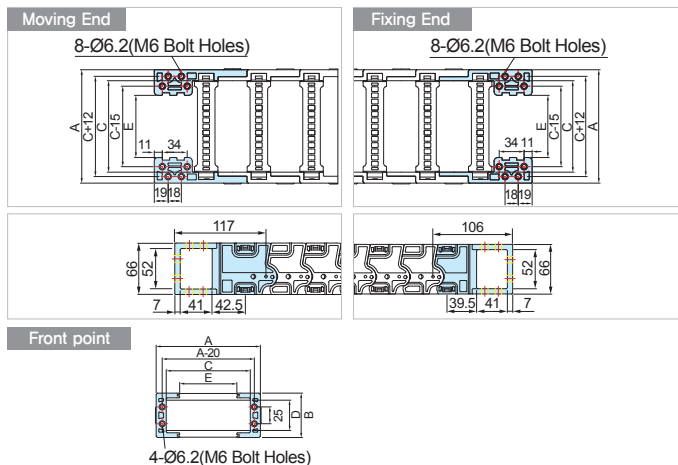
3 sb-DV045/T



4 sb-DV045/W

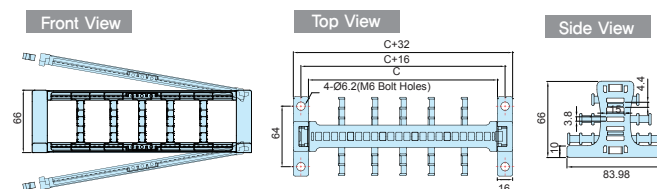


Free End Bracket (FEB)

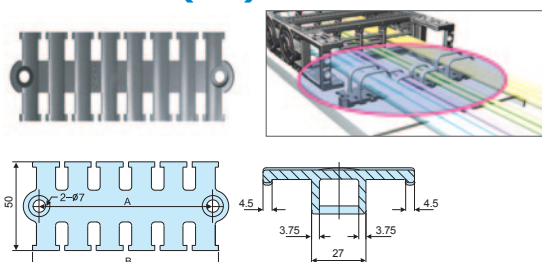


Chain Type	A Width (Outer)	B Height (Outer)	C Frame Width	D Height (Inner)	E EB B width	Hole Type
nsb045N	86	66	50	45	10	M6 Bolt Holes
	111		75		35	
	136		100		60	
	161		125		85	
	176		140		100	
	186		150		110	
	201		165		125	
	211		175		135	
	226		190		150	
	236		200		160	
	276		240		200	
	286		250		210	
	336		300		260	

System Tie Wrap (STW)



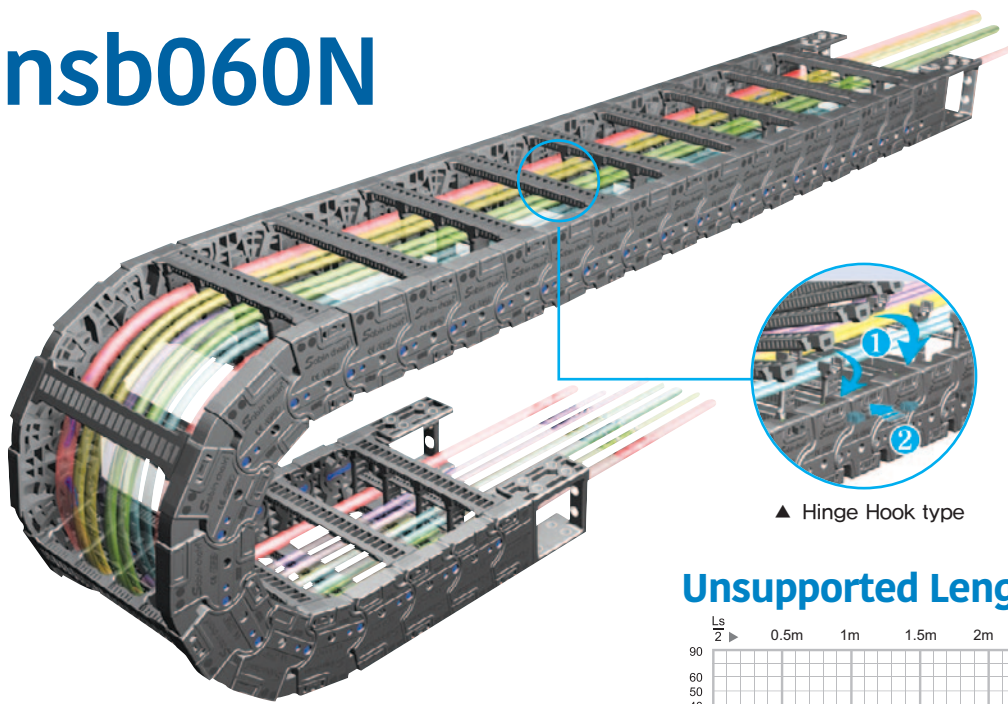
Tie Wrap (TW)



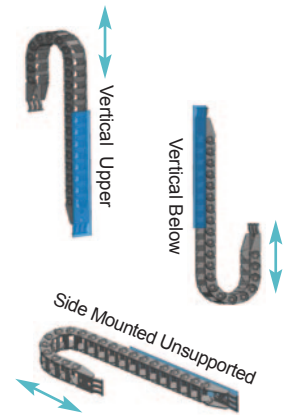
Chain Type	Ordering No.	C Frame	Hole Type
nsb045N	S-TW.EB045.50	50	M6 Bolt Holes
	S-TW.EB045.75	75	
	S-TW.EB045.100	100	
	S-TW.EB045.125	125	
	S-TW.EB045.140	140	
	S-TW.EB045.150	150	
	S-TW.EB045.165	165	
	S-TW.EB045.175	175	
	S-TW.EB045.190	190	
	S-TW.EB045.200	200	
	S-TW.EB045.240	240	
	S-TW.EB045.250	250	
	S-TW.EB045.300	300	

Chain Type	Ordering No.	A	B
nsb045N	S-TW50	58	65
	S-TW75	75	82
	S-TW100	98	105
	S-TW125	122	129
	S-TW150	141	148

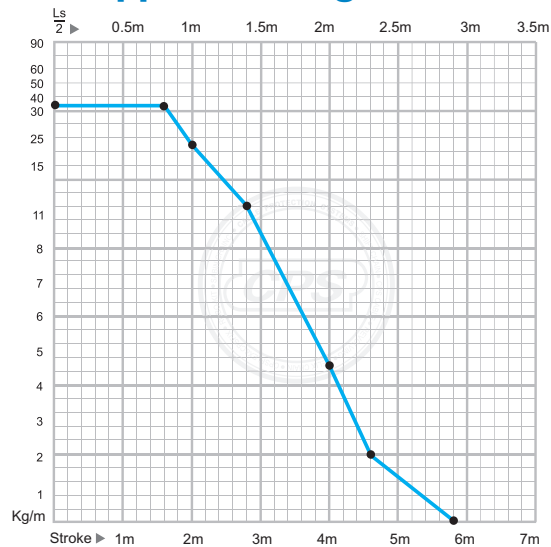
nsb060N



▲ Hinge Hook type



Unsupported Length



Other Length Restrictions

Vertical Standing(Max) = 6.0m
 Vertical Hanging(Max) = 100.0m
 Side Mounted Unsupported(Max) = 3.0m

Caculation of the Chain Length

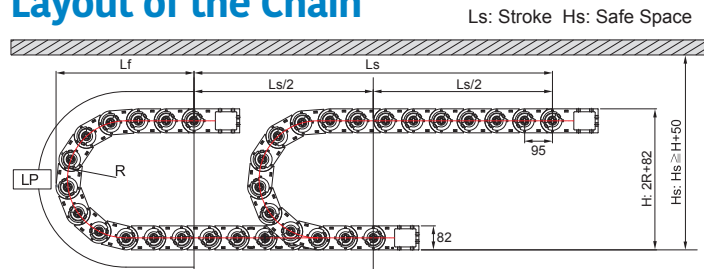
$$\left[L = \frac{L_s}{2} + L_p \right]$$

Ordering

nsb 060N, 100, R125/F-1800L : (DV:2)

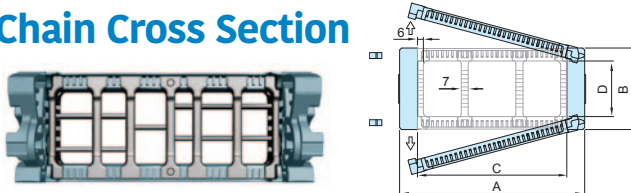
Normal Type (N)	Bending Radius	Length (mm)	Quantity of Divider (Link)
Sabin Chain	Inside Width	Bracket Type	

Layout of the Chain



Bending Radius(R)	Lp(Loop Length)	Lf(Loop Projection)	H(Moving Height)
125	753	359	357
135	784	369	377
150	831	384	407
180	926	414	467
230	1083	464	567
270	1208	504	647
340	1428	574	787

Chain Cross Section



Chain Type	A Width (Outer)	B Height(Outer)	C Frame/Width(Inner)	D Height (Inner)	Weight kg/m
ST060N	115	82	75	55	3.30
	140		100		3.35
	165		125		3.51
	190		150		3.60
	215		175		3.69
	230		190		3.78
	240		200		3.84
	270		230		3.97
	280		240		4.01
	290		250		4.05
	340		300		4.26
	390		350		4.57
	440		400		4.86

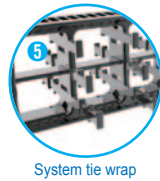
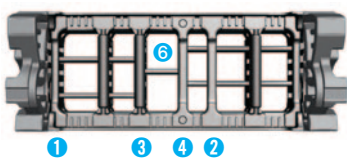
Dividers (DV)

Assembled to every 4th link

DV/T

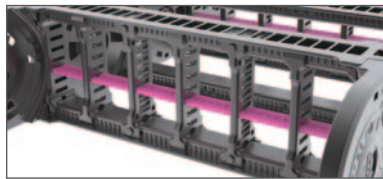
Applied to Frame 250 ~ 400(Connects Upper and Lower Frame)

DV/W Applicable to System Tie Wrap or FEB

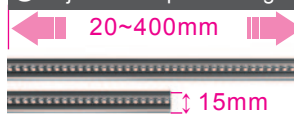


System tie wrap

Separators (SP)

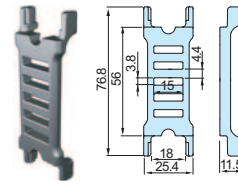


Adjustable Separator length

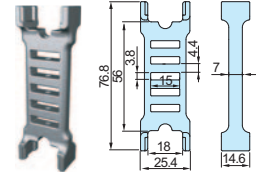


Chain Type	Ordering No.
nsb060N	sb-SP/400.Frame

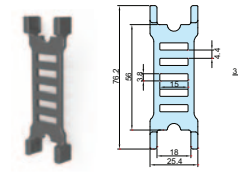
1 sb-DV060/S



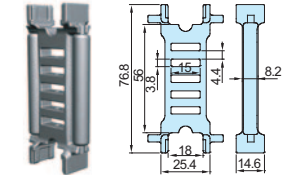
2 sb-DV060/M



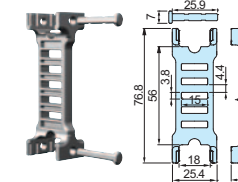
2 sb-DV060/MS



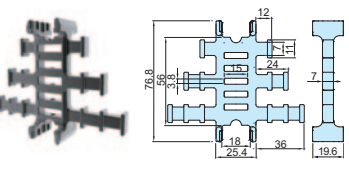
3 sb-DV060/R



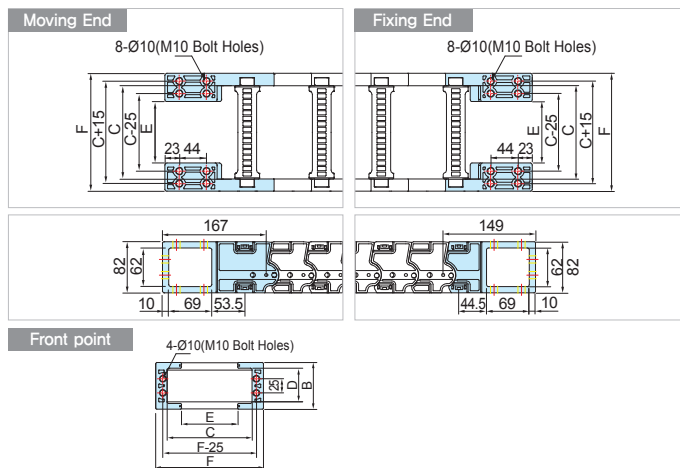
4 sb-DV060/T



5 sb-DV060/W

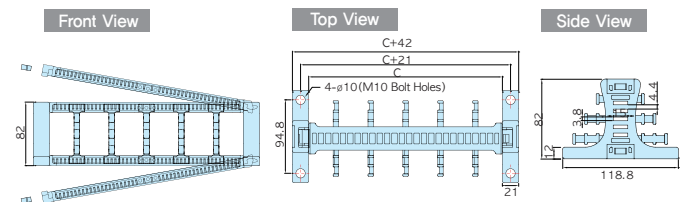


Free End Bracket (FEB)



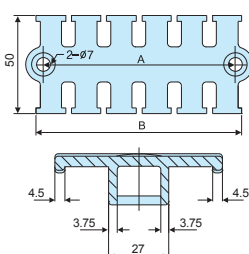
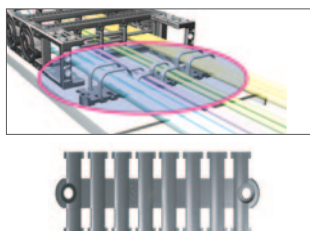
Chain Type	A Width (Outer)	B Height (Outer)	C Frame Width	D Height (Inner)	E EB width	Hole Type
nsb060N	115	82	75	55	24	M10 Bolt Holes
	140		100		49	
	165		125		74	
	190		150		99	
	215		175		124	
	230		190		139	
	240		200		149	
	270		230		179	
	280		240		189	
	290		250		199	
	340		300		249	
	390		350		299	
	440		400		349	

System Tie Wrap (STW)



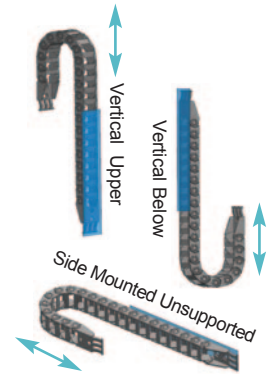
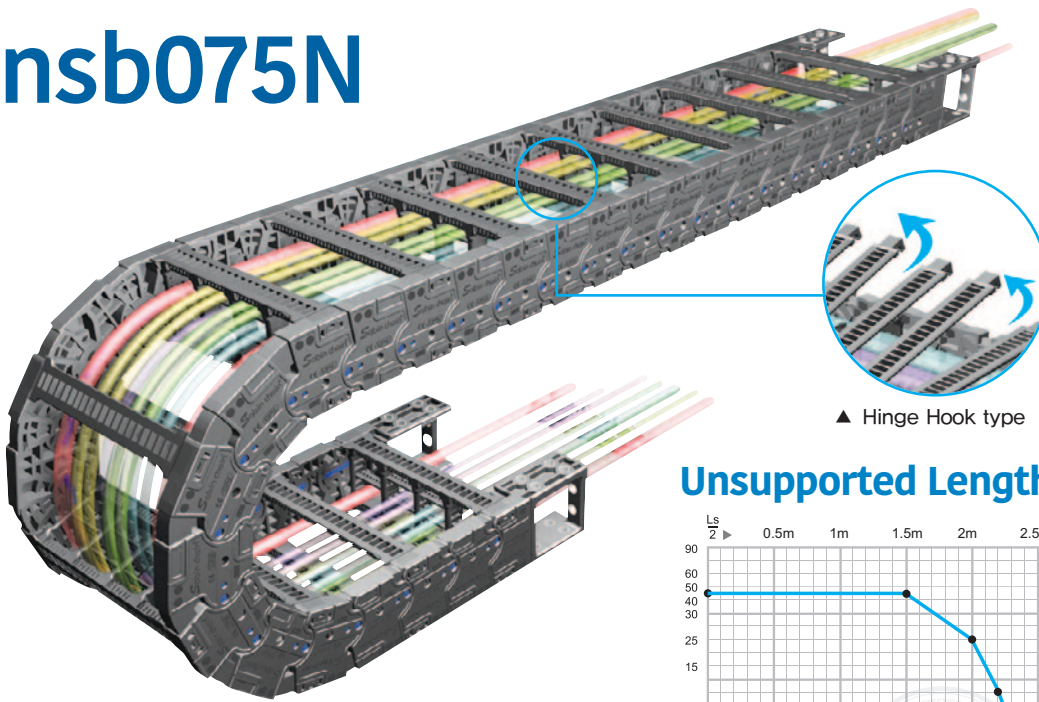
Chain Type	Ordering No.	C Frame	Hole Type
nsb060N	S-TW.EB060.75	75	M10 Bolt Holes
	S-TW.EB060.100	100	
	S-TW.EB060.125	125	
	S-TW.EB060.150	150	
	S-TW.EB060.175	175	
	S-TW.EB060.190	190	
	S-TW.EB060.200	200	
	S-TW.EB060.230	230	
	S-TW.EB060.240	240	
	S-TW.EB060.250	250	
	S-TW.EB060.300	300	
	S-TW.EB060.350	350	
	S-TW.EB060.400	400	

Tie Wrap (TW)



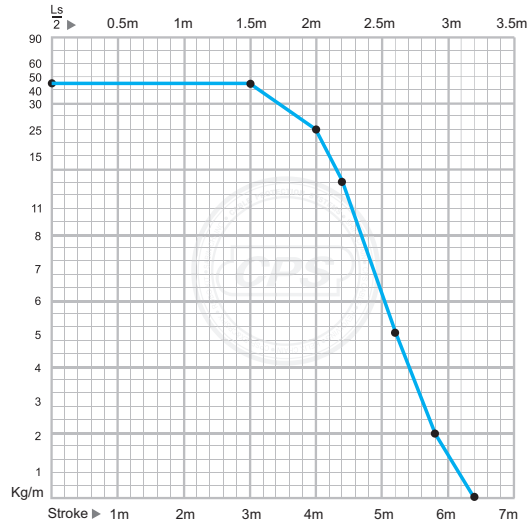
Chain Type	Ordering No.	A	B
nsb060N	S-TW50	58	65
	S-TW75	75	82
	S-TW100	98	105
	S-TW125	122	129
	S-TW150	141	148

nsb075N



▲ Hinge Hook type

Unsupported Length



Other Length Restrictions

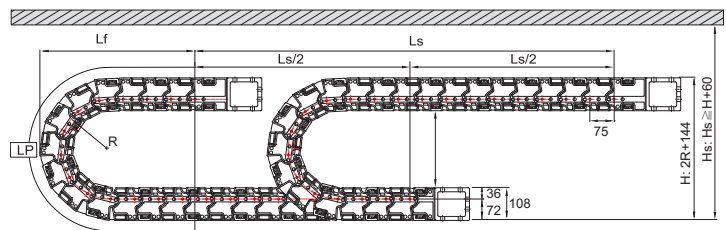
Vertical Standing(Max) = 6.0m
 Vertical Hanging(Max) = 100.0m
 Side Mounted Unsupported(Max) = 3.0m

Calculation of the Chain Length

$$\left[L = \frac{L_s}{2} + L_p \right]$$

Layout of the Chain

Ls: Stroke Hs: Safe Space



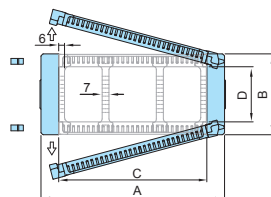
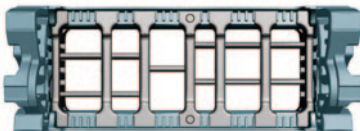
Bending Radius(R)	Lp(Loop Length)	LF(Loop Projection)	H(Moving Height)
160	953	457	464
180	1016	477	504
230	1173	527	604
280	1330	577	704
330	1487	627	804
380	1644	677	904
480	1958	777	1,104

Ordering

nsb075N. 100.R160/F-1875L:(DV:2)

Nomal Type (N)	Bending Radius	Length (mm)	Quantity of Divider (Link)
Sabin Chain	Inside Width	Bracket Type	

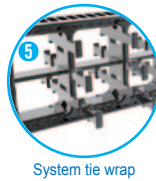
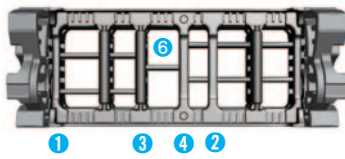
Chain Cross Section



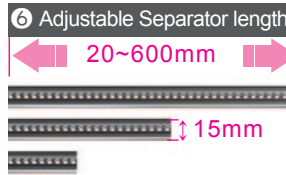
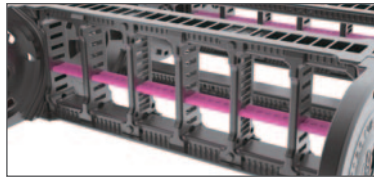
Chain Type	A Width (Outer)	B Height(Outer)	C Frame/Width(Inner)	D Height (Inner)	Weight kg/m
nsb075N	115	108	75	78	4.80
	140		100		4.90
	155		115		4.97
	165		125		5.02
	190		150		5.12
	215		175		5.25
	240		200		5.46
	280		240		5.67
	290		250		5.72
	330		290		6.02
	340		300		6.09
	390		350		6.45
	440		400		6.83
	490		450		7.12
	540		500		7.32
	590		550		8.06
	640		600		8.20

Dividers (DV)

Assemble divider every second frame
DV/T Applied to Frame 300~600
DV/M Normal Divider

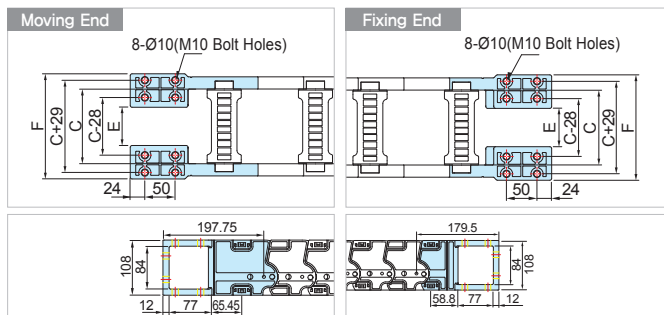


Separators (SP)

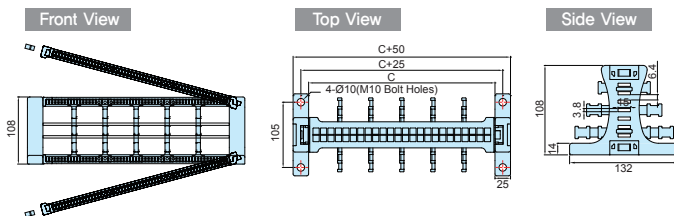


Chain Type	Ordering No.
nsb075N	sb-SP/400.Frame

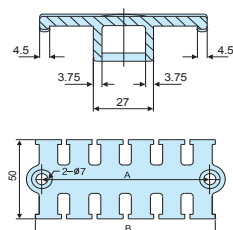
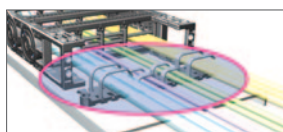
Free End Bracket(FEB)



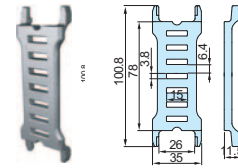
System Tie Wrap (STW)



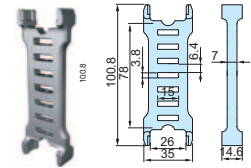
Tie Wrap (TW)



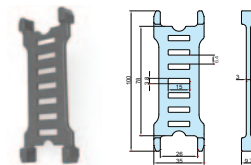
1 sb-DV075/S



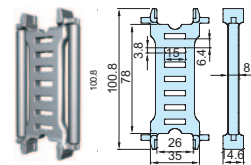
2 sb-DV075/M



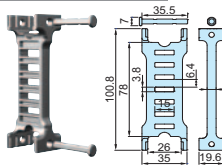
2 sb-DV075/MS



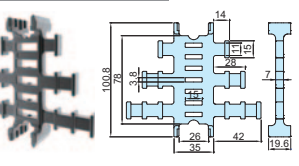
4 sb-DV075/R



4 sb-DV075/T



5 sb-DV075/W



Chain Type	A Width (Outer)	B Height(Outer)	C Frame Width	D Height(Inner)	E EB width	Hole Type
nsb 075N	115	108	75	78	15	M10 Bolt Holes
	140		100		40	
	155		115		55	
	165		125		65	
	190		150		90	
	215		175		115	
	240		200		140	
	280		240		180	
	290		250		190	
	330		290		230	
	340		300		240	
	390		350		290	
	440		400		340	
	490		450		390	
	540		500		440	
	590		550		490	
	640		600		540	

Chain Type	Ordering No.	C Frame	Hole Type
nsb075N	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	

Chain Type	Ordering No.	A	B
nsb075N	S-TW50	58	65
	S-TW75	75	82
	S-TW100	98	105
	S-TW125	122	129
	S-TW150	141	148