

Sabin chain[®] N - TYPE : Normal

nsb028N _ 267p

nsb035N _ 271p

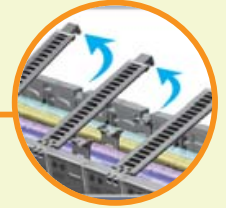
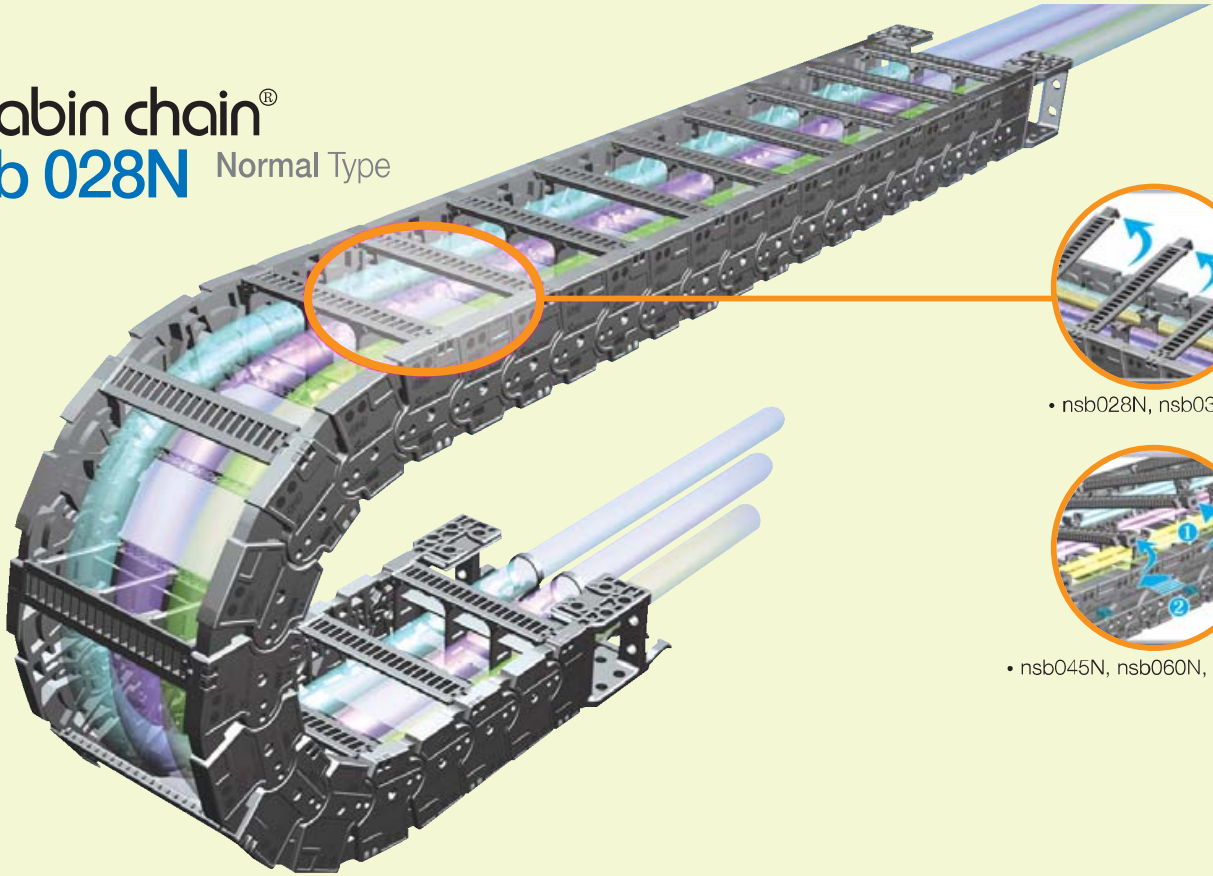
nsb045N _ 275p

nsb060N _ 279p

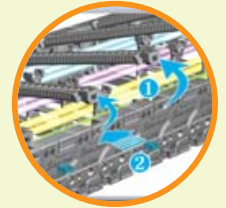
nsb075N _ 283p

Min ●●●●●●● Max

Sabin chain® nsb 028N Normal Type



• nsb028N, nsb035N •



• nsb045N, nsb060N, nsb075N •

• Frames are assembled at every other link. (2링크마다 프레임 결합방식)

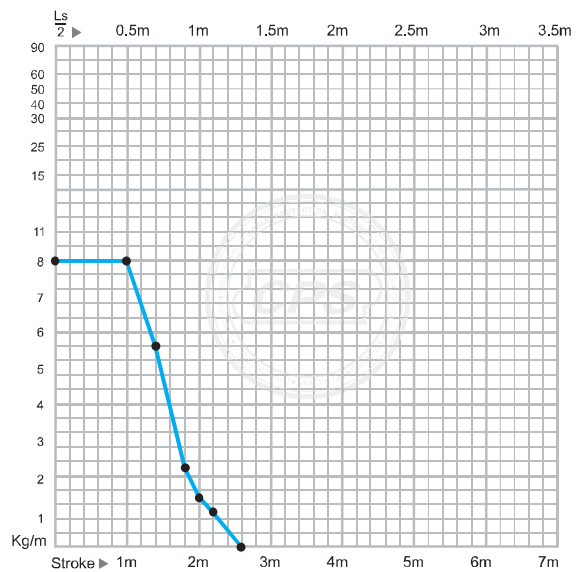
MATERIAL

- **Chain material:**
CPS-amide UL94-HB
- **Low Noise**
- **Low Mote**
- **Speed :** 15m / sec
- **Temperature :** -40°C ~ +130°C
- **Other installation Length:**
Vertical curve above, Unsupported= max 2.0m
Vertical curve below, Unsupported= max 40m
Side Mounted, Unsupported= max 1.0m
- **Applications**
Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.
저분진, 저소음을 요구하는 사업장 및 긴추리로더, 로봇캐리지, 공작기계, 절단/용접기계, 인쇄기계등에 적용.

Calculation of the chain length

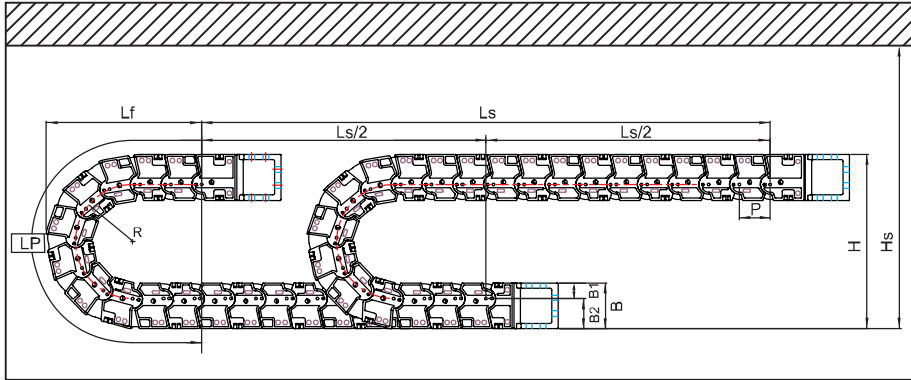
$$[L = \frac{Ls}{2} + Lp]$$

Load diagrams self-supporting length



nsb 028N Normal Type

LAYOUT OF THE CHAIN



(Dimensions in mm)

Bending radius R	46	66	86	116	146
Lp	313	376	439	533	627
L f	153	173	193	223	253
H	138	178	218	278	338

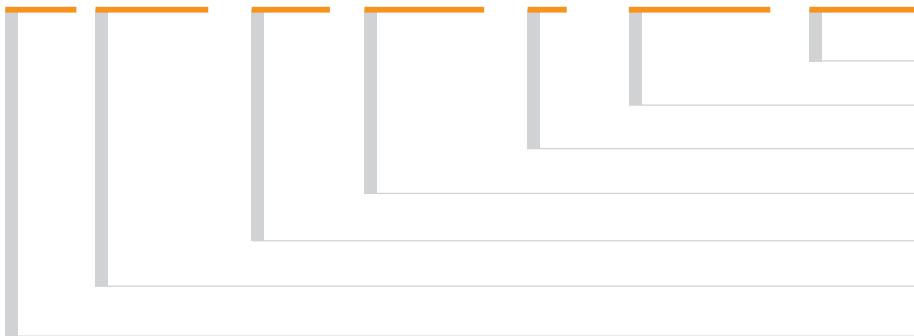
- Ls:** Stroke
- Lp:** Loop Length
- L f:** Loop Projection
- Hs:** Safe Space

nsb 028N Type

- Pitch P:** 28mm
- Height B:** 38mm
- Height H:** 2R+46mm
- Hs ≥ H+30mm**
- B1:** 15mm **B2:** 23mm

ORDERING (주문방법)

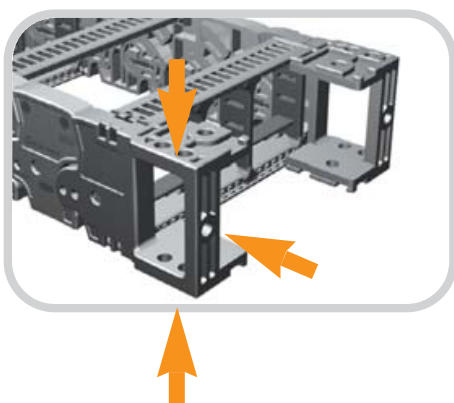
nsb 028N. 050. R66 / F -1000L : 10ST



- 주문수량 Q'ty(set)
- 체인길이 Length(mm)
- 브라켓 Free End Bracket
- 곡률반경 Bending Radius
- 내폭 Inside Width
- 표준형타입 Normal Type

New Sabin Chain

BRACKET TYPE (브라켓타입)



FEB (Free End Bracket)

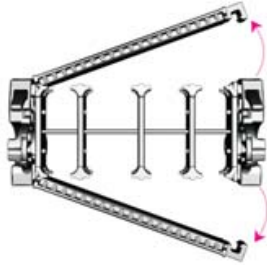
Fixes the cable chain to the machinery or moving application. CPS has improved mounting efficiency by unifying the existing Easy End Bracket and Normal End Bracket.

체인을 고정하는 끝부분으로 기존 Easy End Bracket 과 Normal End Bracket 을 하나로 통합한 방식으로 취부의 효율성을 높임.

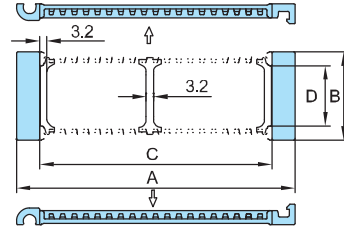
▶ Above products are patent registered item which can be protected by industrial property right. (상기제품은 특허등록 제품으로 산업재산권의 보호를 받는 제품입니다.)

nsb 028N Normal Type

CHAIN CROSS SECTION

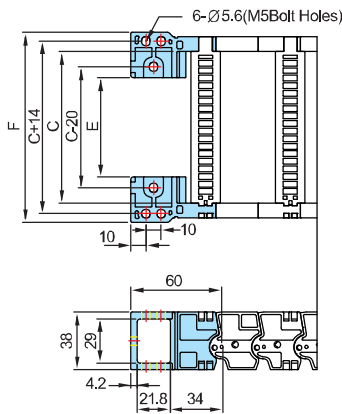


• Hinge Type

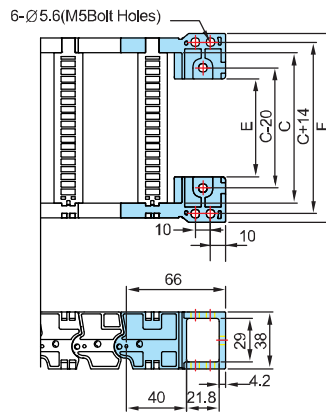


Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
nsb 028N.035	55		35			0.79
nsb 028N.050	70		50			0.82
nsb 028N.055	75		55			0.85
nsb 028N.075	95		75			0.90
nsb 028N.100	120	38	100	26	46, 66, 86, 116, 146	0.98
nsb 028N.125	145		125			1.08
nsb 028N.150	170		150			1.18
nsb 028N.175	195		175			1.45
nsb 028N.200	220		200			1.59

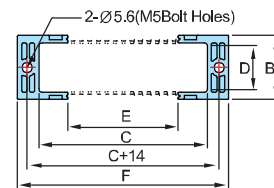
FREE END BRACKET



nsb028N Fixing point



nsb028N Moving point

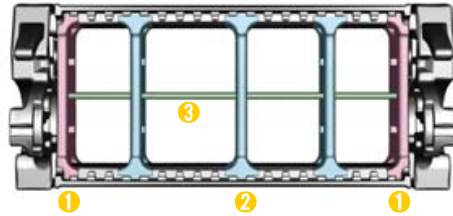


nsb028N Front point

Chain Type	F	B	C	D	E	Hole Type
nsb 028N.035	60.4		35		0.4	M5 Bolt Holes
nsb 028N.050	75.4		50		15.4	
nsb 028N.055	80.4		55		20.4	
nsb 028N.075	100.4		75		40.4	
nsb 028N.100	125.4	38	100	26	65.4	
nsb 028N.125	150.4		125		90.4	
nsb 028N.150	175.4		150		115.4	
nsb 028N.175	200.4		175		140.4	
nsb 028N.200	225.4		200		165.4	

nsb 028N Normal Type

DIVIDERS & SEPARATORS

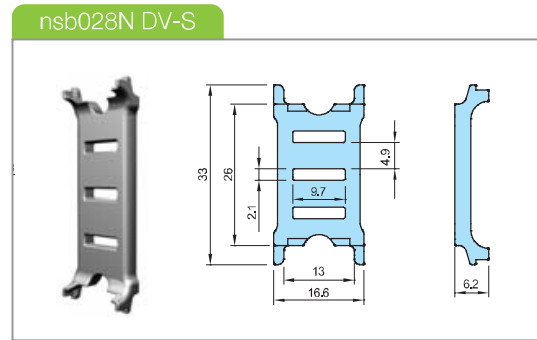
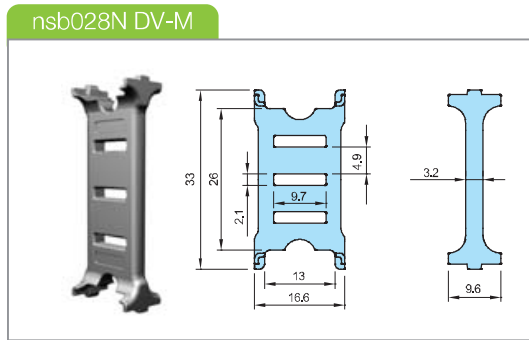


- ❶ DV-S (측면전용디바이더)
- ❷ DV-M
- ❸ Separator(SP)

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

디바이더(세로분리대)와 세퍼레이터(가로분리대)는 체인내에 많은 케이블들이 입선될 시 케이블들을 서로 분리하여 케이블상호간의 마찰로 인한 피복손상 및 단선을 방지하는 역할을 하며 케이블과 10%이상의 여유공간을 확보해야합니다.

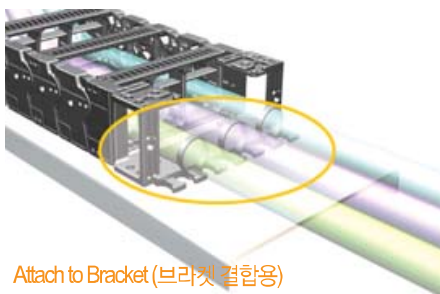
또한 케이블을 체인내 2단이상 입선시 반드시 세퍼레이터를 디바이더에 결합하여 케이블의 꼬임방지과 피복손상을 방지할 수 있습니다.



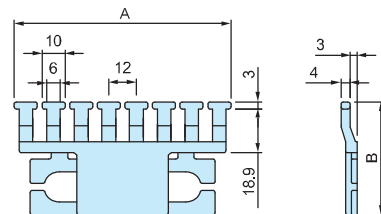
nsb028N Separators (SP) (No. : S-SP/M)

Chain Type \ Separators	SP035	SP050	SP055	SP075	SP100	SP125	SP150	SP175	SP200
nsb028N	○	○	○	○	○	○	○	○	○
nsb035N	○	○	○	○	○	○	○	○	○

TIE WRAP



Attach to Bracket (브라켓 결합용)



(Dimensions in mm)

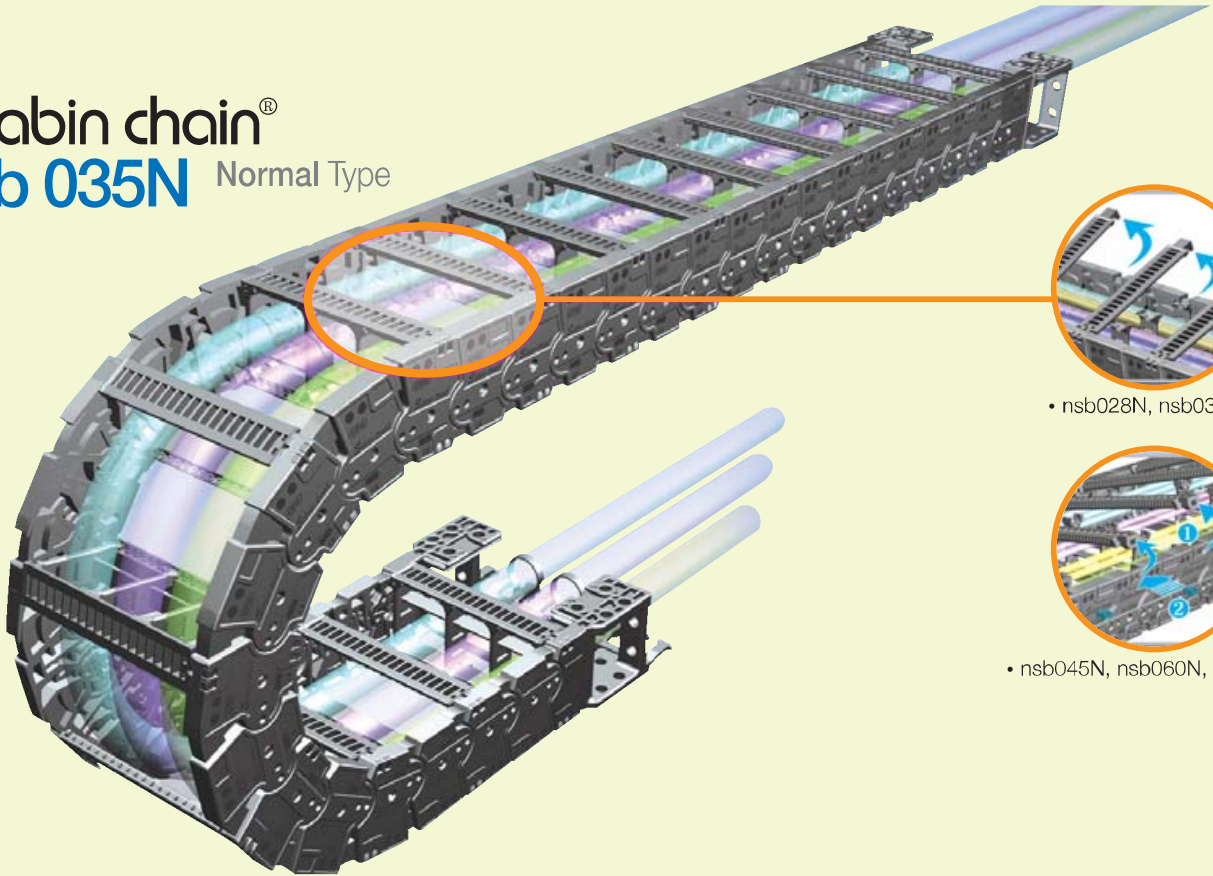
Tie Wrap	035	055	075	100	125
A	46	70	94	118	142
B	35.4	48.9	48.9	48.9	48.9

The tie wrap separated from the Sabin Chain bracket, when installed properly, protects the inserted cables from becoming entangled and twisted during operation. There are two types in the tie wrap; Attached & Unattached to the bracket.

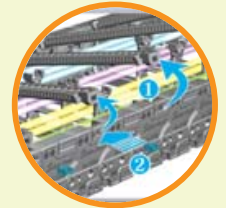
Tiewrap은 Sabin Chain 의 브라켓을 기준으로 설치함으로써 체인의 움직임으로 인해 체인내의 케이블이나 호스가 당겨져 단선되는 경우를 방지할 수 있다. Sabin Chain의 Tiewrap은 브라켓부분과 근접해서 사용할 수 있는 사양 과 브라켓에 결합해서 사용할 수 있는 사양으로 구분되어 사용할 수 있다.

Min ●●●●●●●● Max

Sabin chain® nsb 035N Normal Type



• nsb028N, nsb035N •



• nsb045N, nsb060N, nsb075N •

• Frames are assembled at every other link, (2링크마다 프레임 결합방식)

SHFT-CHAIN

SABIN-CHAIN

REVOLVING-CHAIN

LEX-CHAIN

ROBO-KIT

OPSTEX

OPSTX

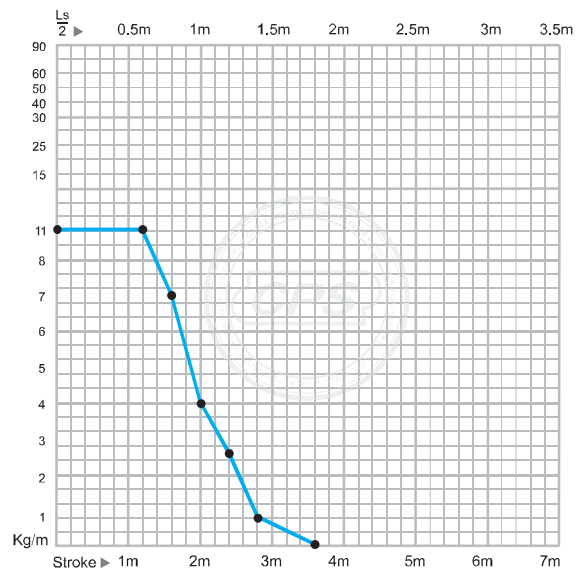
MATERIAL

- **Chain material:**
CPS-amide UL94-HB
- **Low Noise**
- **Low Mote**
- **Speed :** 15m / sec
- **Temperature :** -40°C ~ +130°C
- **Other installation Length:**
Vertical curve above, Unsupported= max 2.0m
Vertical curve below, Unsupported= max 40m
Side Mounted, Unsupported= max 1.0m
- **Applications**
Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.
저분진, 저소음을 요구하는 사업장 및 갠츨리더, 로봇캐리지, 공작기계, 절단/용접기계, 인쇄기계등에 적용.

● Calculation of the chain length

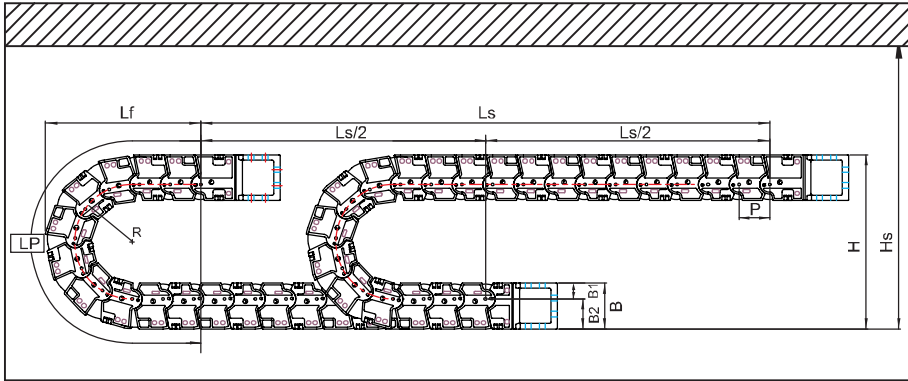
$$\left[L = \frac{L_s}{2} + L_p \right]$$

● Load diagrams self-supporting length



nsb 035N Normal Type

LAYOUT OF THE CHAIN



(Dimensions in mm)

Bending radius R	55	65	90	115	140	190
Lp	383	414	493	572	650	807
L f	194	204	229	254	279	329
H	178	198	248	298	348	448

- Ls:** Stroke
- Lp:** Loop Length
- L f:** Loop Projection
- Hs:** Safe Space

nsb 035N Type

- Pitch P:** 35mm
- Height B:** 52mm
- Height H:** 2R+68mm
- Hs ≥ H+30mm**
- B1:** 18mm **B2:** 34mm

ORDERING (주문방법)

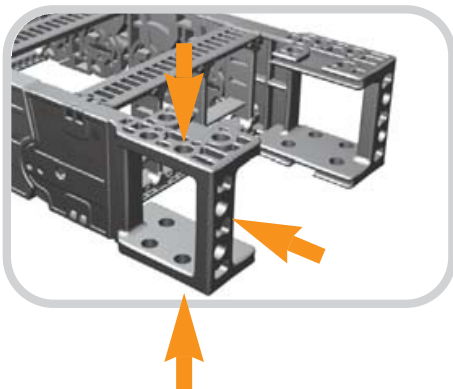
nsb 035N. 075. R90 / F -1000L : 10ST



- 주문수량 Q' ty(set)
- 체인길이 Length(mm)
- 브라켓 Free End Bracket
- 곡률반경 Bending Radius
- 내폭 Inside Width
- 표준형타입 Normal Type

New Sabin Chain

BRACKET TYPE (브라켓타입)



FEB (Free End Bracket)

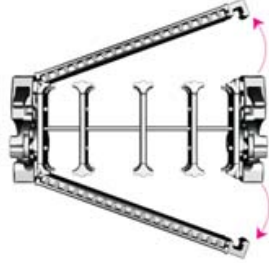
Fixes the cable chain to the machinery or moving application. CPS has improved mounting efficiency by unifying the existing Easy End Bracket and Normal End Bracket.

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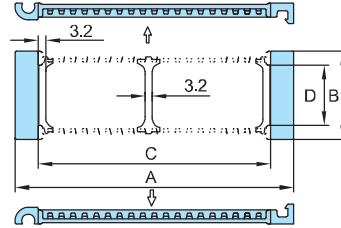
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nsb 035N Normal Type

CHAIN CROSS SECTION

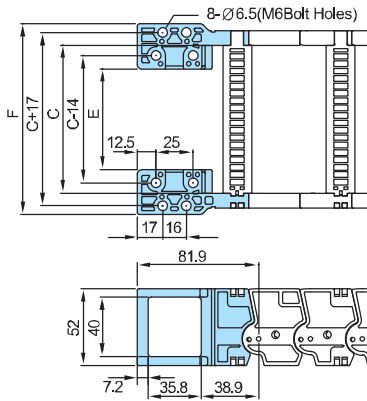


• Hinge Type

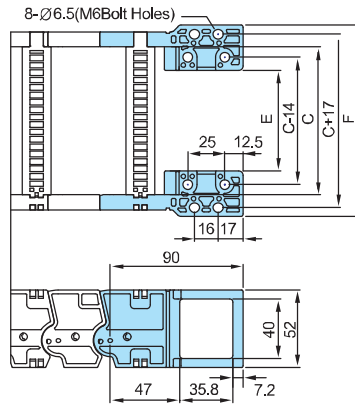


Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
nsb 035N.035	55		35			1.10
nsb 035N.055	70		50			1.13
nsb 035N.075	75		55			1.15
nsb 035N.100	95		75			1.18
nsb 035N.125	120	52	100	40	55, 65, 90, 115, 140, 190	1.25
nsb 035N.150	145		125			1.32
nsb 035N.175	170		150			1.41
nsb 035N.175	195		175			1.62
nsb 035N.200	220		200			1.72

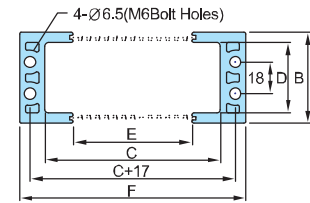
FREE END BRACKET



nsb035N Fixing point



nsb035N Moving point

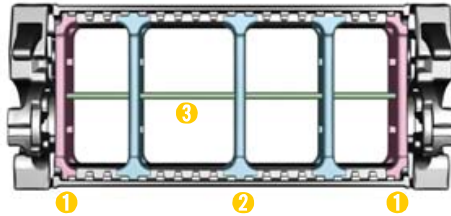


nsb035N Front point

Chain Type	F	B	C	D	E	Hole Type
nsb 035N.035	64		35		3	M6 Bolt Holes
nsb 035N.050	79		50		18	
nsb 035N.055	84		55		23	
nsb 035N.075	104		75		43	
nsb 035N.100	129	52	100	40	68	
nsb 035N.125	154		125		93	
nsb 035N.150	179		150		118	
nsb 035N.175	204		175		143	
nsb 035N.200	229		200		168	

nsb 035N Normal Type

DIVIDERS

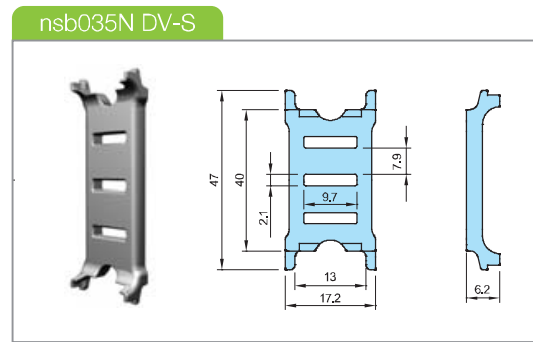
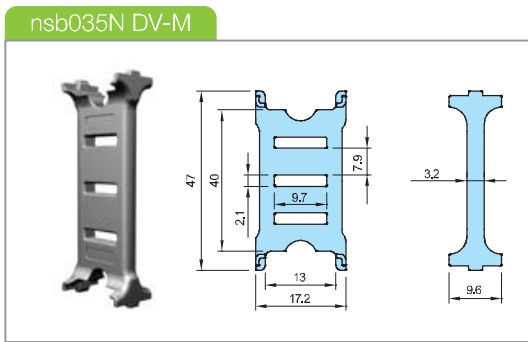


- ① DV-S (측면전용디바이더)
- ② DV-M
- ③ Separator(SP)

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

디바이더(세로분리대)와 세퍼레이터(가로분리대)는 체인내에 많은 케이블들이 입선될 시 케이블들을 서로 분리하여 케이블상호간의 마찰로 인한 **피복손상 및 단선**을 방지하는 역할을 하며 케이블과 10%이상의 여유공간을 확보해야합니다.

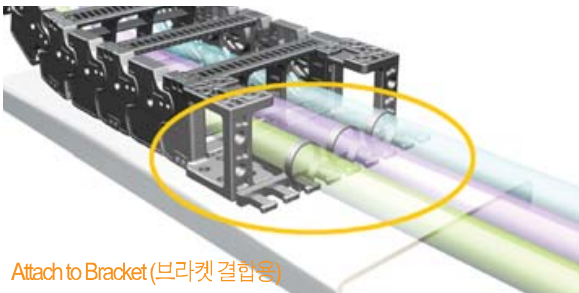
또한 케이블을 체인내 2단이상 입선시 반드시 세퍼레이터를 디바이더에 결합하여 사용하여 케이블의 꼬임방지과 피복손상을 방지할 수 있습니다.



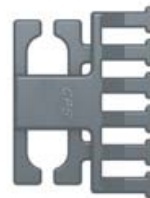
nsb035N Separators (SP) (No. : S-SP/M)

Chain Type	Separators	SP035	SP050	SP055	SP075	SP100	SP125	SP150	SP175	SP200
nsb028N		○	○	○	○	○	○	○	○	○
nsb035N		○	○	○	○	○	○	○	○	○

TIE WRAP



Attach to Bracket (브라켓 결합용)



When using the tie wrap option for the Sabin Chain nsb035 series, the corresponding frame sizes will be 50, 75, 100, 125, 150, 175 and 200mm respectively.

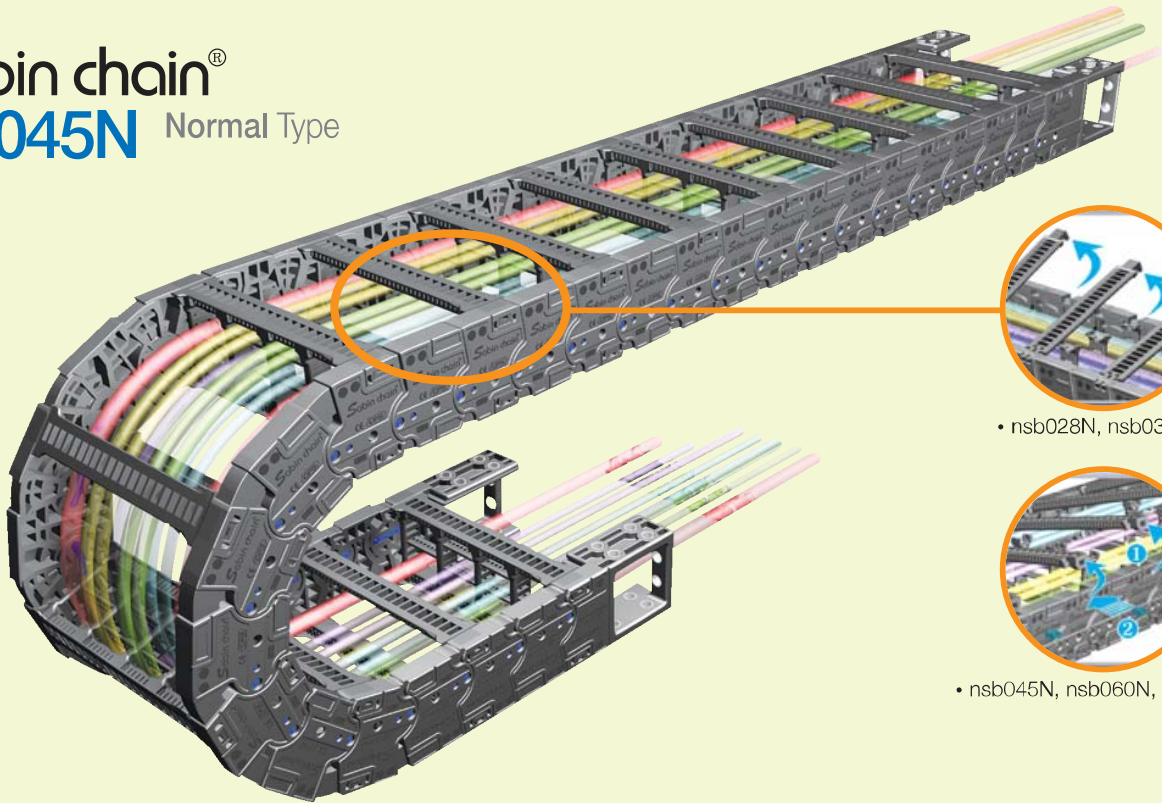
nsb035 제품은 삼입형 Tie Wrap을 사용하며 적용되는 Frame은 50, 75, 100, 125, 150, 175, 200 입니다.

The tie wrap separated from the Sabin Chain bracket, when installed properly, protects the inserted cables from becoming entangled and twisted during operation. There are two types in the tie wrap; Attached & Unattached to the bracket.

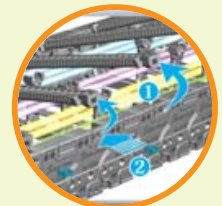
Tiewrap은 Sabin Chain의 브라켓을 기준으로 설치함으로써 체인의 움직임으로 인해 체인내의 케이블이나 호스가 당겨져 단선되는 경우를 방지할 수 있다. Sabin Chain의 Tiewrap은 브라켓부분과 근접해서 사용할 수 있는 사양 과 브라켓에 결합해서 사용할 수 있는 사양 으로 구분되어 사용할 수 있다

Min ●●●●●●●●●● Max

Sabin chain[®] nsb 045N Normal Type



• nsb028N, nsb035N •



• nsb045N, nsb060N, nsb075N •

• Frames are assembled at every other link. (2링크마다 프레임 결합방식)

SHIFT CHAIN

SABIN CHAIN

REVOLVING CHAIN

INDEX CHAIN

ROBOT-KIT

OP-51EX

OP-51X

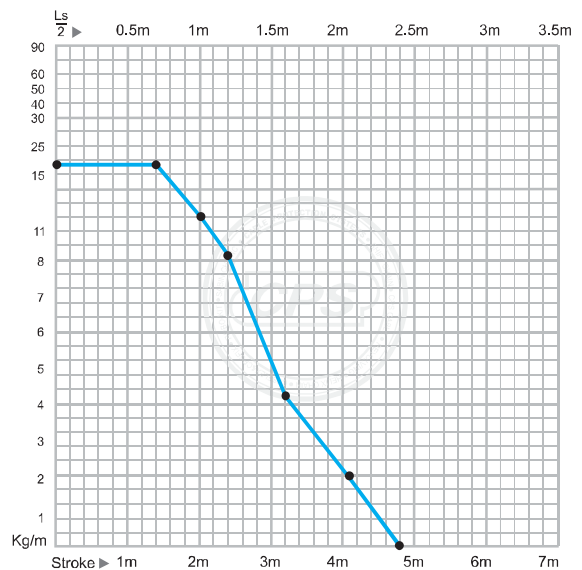
MATERIAL

- **Chain material:**
CPS-amide UL94-HB
- **Low Noise**
- **Low Mote**
- **Speed :** 15m / sec
- **Temperature :** -40°C ~ +130°C
- **Other installation Length:**
Vertical curve above, Unsupported= max 6.0m
Vertical curve below, Unsupported= max 100m
Side Mounted, Unsupported= max 2.5m
- **Applications**
Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.
저분진, 저소음을 요구하는 사업장 및 컨츄리러더, 로봇캐리리지, 공작기계, 절단/용접기계, 인쇄기계등에 적용.

● Calculation of the chain length

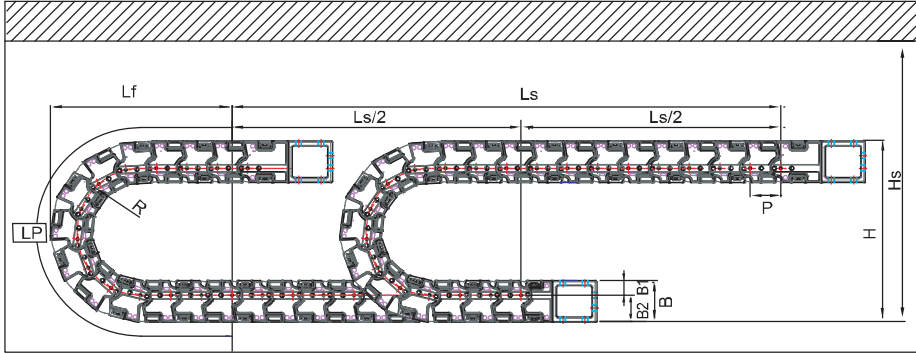
$$\left[L = \frac{Ls}{2} + Lp \right]$$

● Load diagrams self-supporting length



nsb 045N Normal Type

LAYOUT OF THE CHAIN



- Ls:** Stroke
- Lp:** Loop Length
- Lf:** Loop Projection
- Hs:** Safe Space

nsb 045N Type

- Pitch P:** 45mm
- Height B:** 66mm
- Height H:** 2R+86mm
- Hs** ≥ H+40mm
- B1:** 23mm **B2:** 43mm

(Dimensions in mm)

Bending radius R	90	110	135	165	185	235	285
Lp	633	695	774	868	931	1,088	1,245
Lf	291	311	336	366	386	436	486
H	266	306	356	416	456	556	656

ORDERING (주문방법)

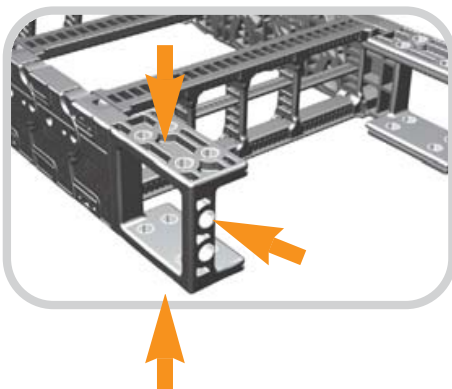
nsb 045N. 125. R165 / F- 2000L : 10ST



- 주문수량 Q' ty(set)
- 체인길이 Length(mm)
- 브라켓 Free End Bracket
- 곡률반경 Bending Radius
- 내폭 Inside Width
- 표준형타입 Normal Type

New Sabin Chain

BRACKET TYPE (브라켓타입)



FEB (Free End Bracket)

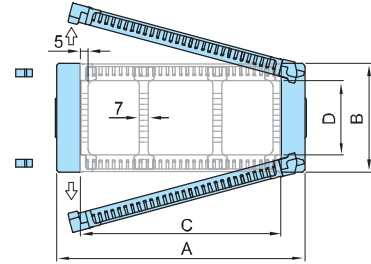
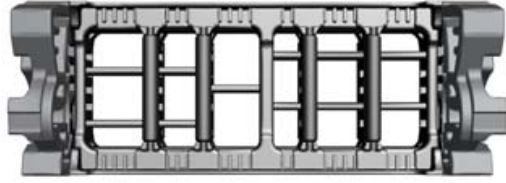
Fixes the cable chain to the machinery or moving application. CPS has improved mounting efficiency by unifying the existing Easy End Bracket and Normal End Bracket. For added strength, steel washers are inserted into the fixing holes of each Free End Bracket.

체인을 고정하는 끝부분으로 기존 Easy Eend Bbracket 과 Normal End Bracket을 하나로 통합한 방식으로 취부의 효율성을 높임. 또한 스틸와셔를 결합하여 더욱 견고한 취부가 가능.

▶ Above products are patent registered item which can be protected by industrial property right. (상기제품은 특허등록 제품으로 산업재산권의 보호를 받는 제품입니다.)

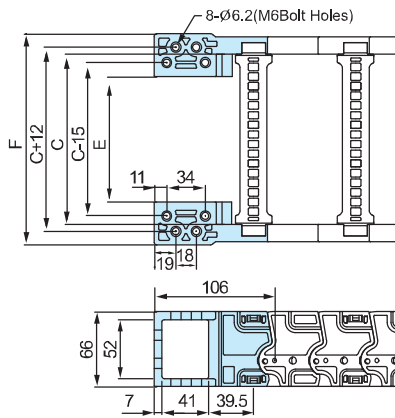
nsb 045N Normal Type

CHAIN CROSS SECTION

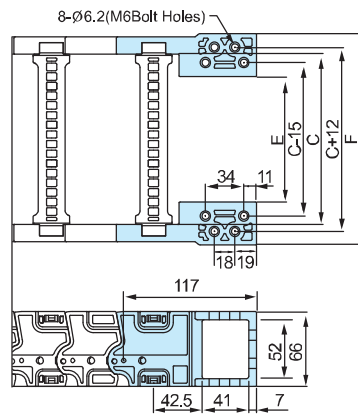


Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
nsb 045N.050	80		50			2.06
nsb 045N.075	105		75			2.14
nsb 045N.100	130		100			2.22
nsb 045N.125	155		125			2.32
nsb 045N.150	180	66	150	45	90, 110, 135, 165, 185, 235, 285	2.42
nsb 045N.175	205		175			2.51
nsb 045N.200	230		200			2.86
nsb 045N.250	280		250			3.15
nsb 045N.300	330		300			3.43

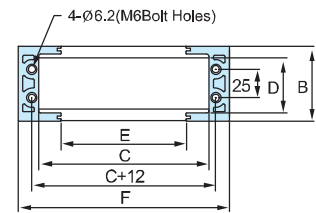
FREE END BRACKET



nsb 045N Fixing point



nsb 045N Moving point

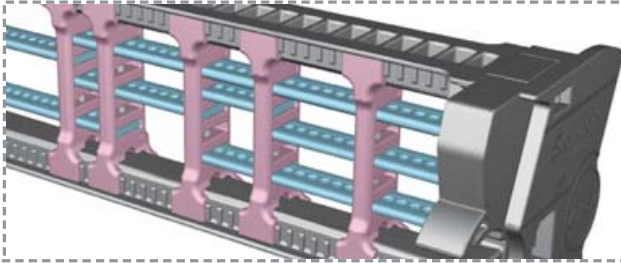


nsb 045N Front point

Chain Type	F	B	C	D	E	Hole Type
nsb 045N.050	86		50		10	M6 Bolt Holes
nsb 045N.075	111		75		35	
nsb 045N.100	136		100		60	
nsb 045N.125	161		125		85	
nsb 045N.150	186	66	150	45	110	
nsb 045N.175	211		175		135	
nsb 045N.200	236		200		160	
nsb 045N.250	286		250		210	
nsb 045N.300	336		300		260	

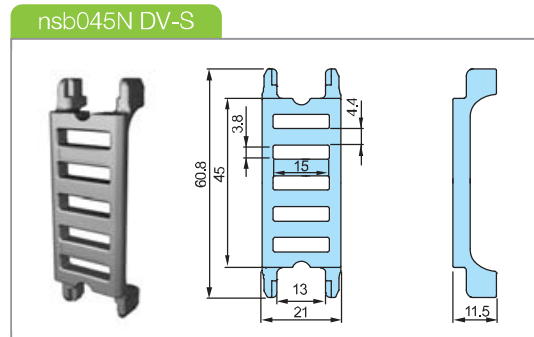
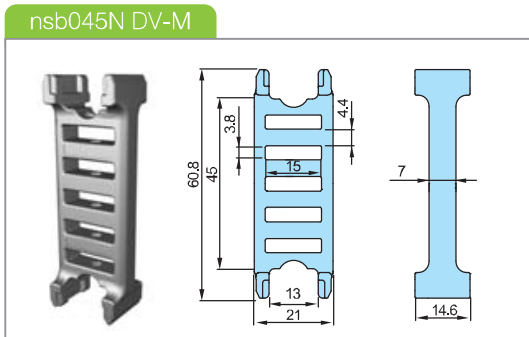
nsb 045N Normal Type

DIVIDERS



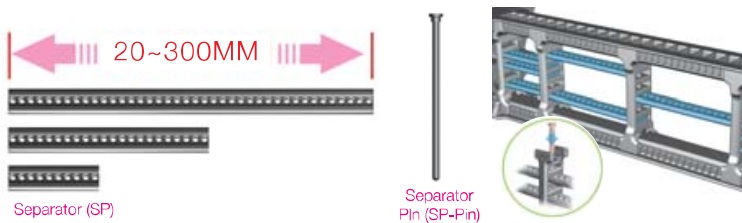
Dividers (Vertical) and Separators (Horizontal) divide the inner chamber of the cable chain to give each cable diameter its own center and keep the cables separated from each other. The use of a separator in some cases, can also reduce the width requirements as two or more levels can be made within the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

디바이더(세로분리대)와 세퍼레이터(가로분리대)는 체인내에 많은 케이블들이 입선될 시 케이블들을 서로 분리하여 케이블상호간의 마찰로 인한 **피복손상 및 단선**을 방지하는 역할을 하며 케이블과 10%이상의 여유공간을 확보해야 합니다.
또한 케이블을 체인내 2단이상 입선시 반드시 세퍼레이터를 디바이더에 결합하여 사용하여 케이블의 꼬임방지와 피복손상을 방지할 수 있습니다.



• Assemble divider every four links. / 4링크마다 1개씩 결합.

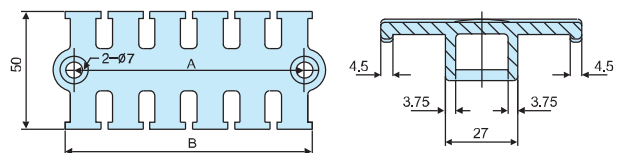
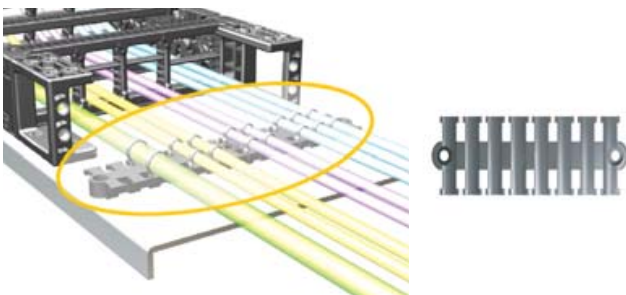
SEPARATORS



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

세퍼레이터의 사용길이는 최소20mm부터 최대300mm까지 사용가능하며 **5mm간격으로 절단**하여 원하는 길이로 사용가능합니다. 크기가 각각 다른 케이블을 크기에 맞게끔 공간분할이 용이하고 **세퍼레이터 핀으로 결합**하여 어떠한 경우에도 안전하게 케이블의 입선공간을 유지하여 안전하게 케이블을 보호할 수 있습니다.

TIE WRAP



(Dimensions in mm)

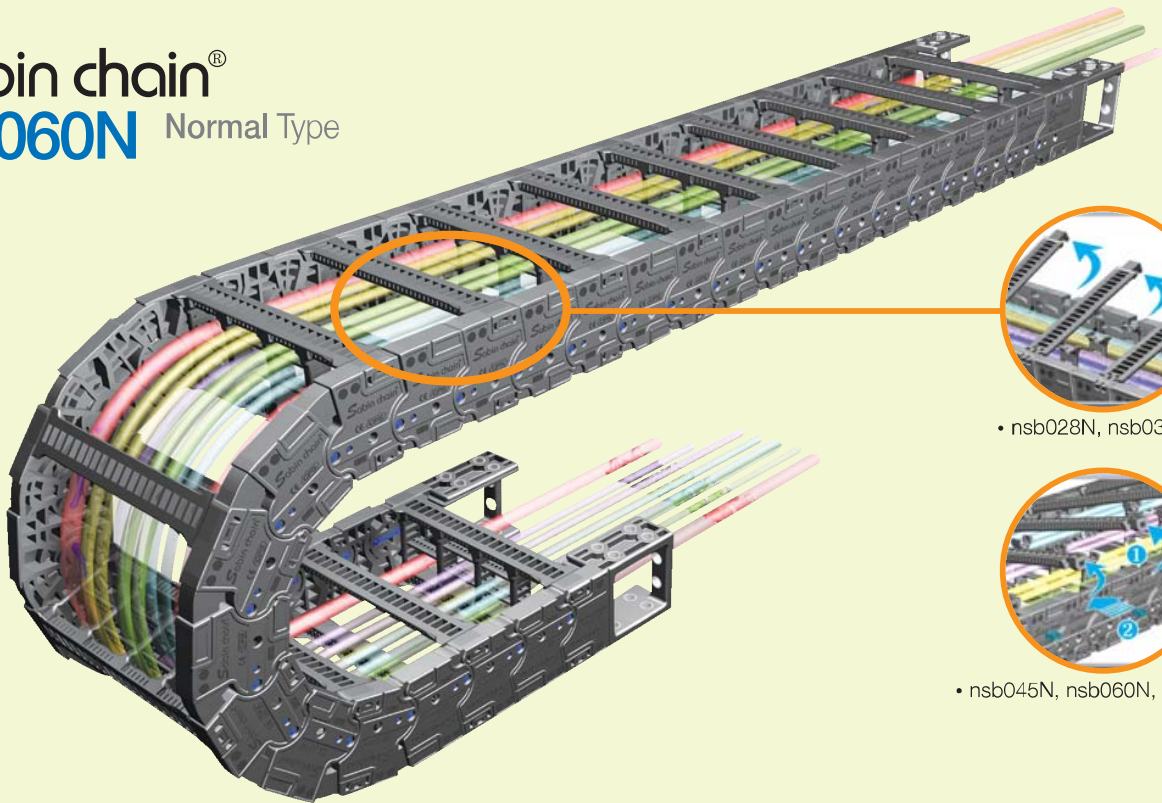
The tie wrap separated from the Sabin Chain bracket, when installed properly, protects the inserted cables from becoming entangled and twisted during operation.

Tie wrap은 Sabin Chain의 브라켓을 기준으로 바깥쪽으로 설치함으로써 체인의 움직임으로 인해 **케이블의 유동을 방지하고자 고정하는 시스템**으로 케이블의 피복손상 및 단선을 방지하는 역할을 합니다.

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

Min ●●●●●●●●●● Max

Sabin chain® nsb 060N Normal Type



• nsb028N, nsb035N •

• nsb045N, nsb060N, nsb075N •

• Frames are assembled at every other link. (2링크마다 프레임 결합방식)

SHFT CHAIN

SABIN CHAIN

REVOLVING CHAIN

LEX CHAIN

ROBOT

OPSTEX

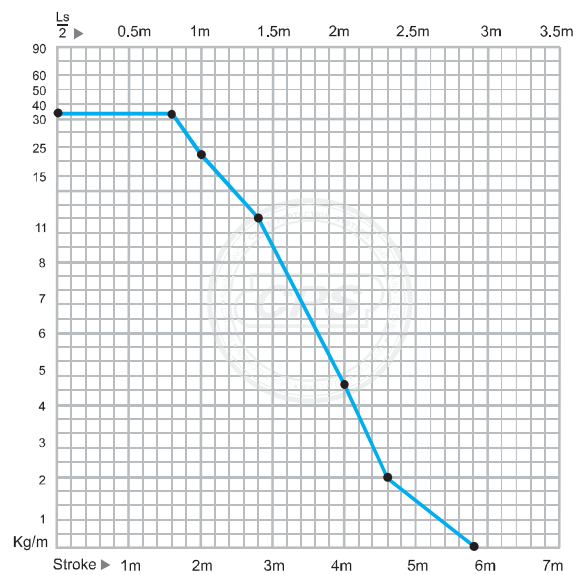
OPSTX

MATERIAL

- **Chain material:**
CPS-amide UL94-HB
- **Low Noise**
- **Low Mote**
- **Speed :** 15m / sec
- **Temperature :** -40°C ~ +130°C
- **Other installation Length:**
Vertical curve above, Unsupported= max 6.0m
Vertical curve below, Unsupported= max 100m
Side Mounted, Unsupported= max 3.0m
- **Applications**
Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.
저분진, 저소음을 요구하는 사업장 및 컨츄리로더, 로봇캐리지, 공작기계, 절단/용접기계, 인쇄기계등에 적용.
- **Calculation of the chain length**

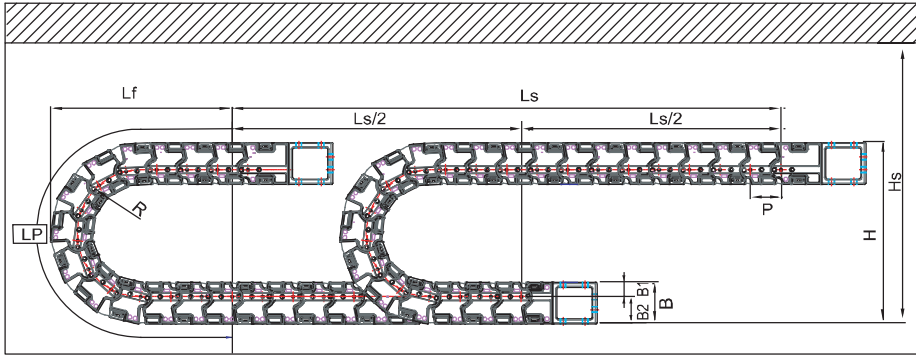
$$\left[L = \frac{L_s}{2} + L_p \right]$$

Load diagrams self-supporting length



nsb 060N Normal Type

LAYOUT OF THE CHAIN



- Ls:** Stroke
- Lp:** Loop Length
- Lf:** Loop Projection
- Hs:** Safe Space

nsb 060N Type

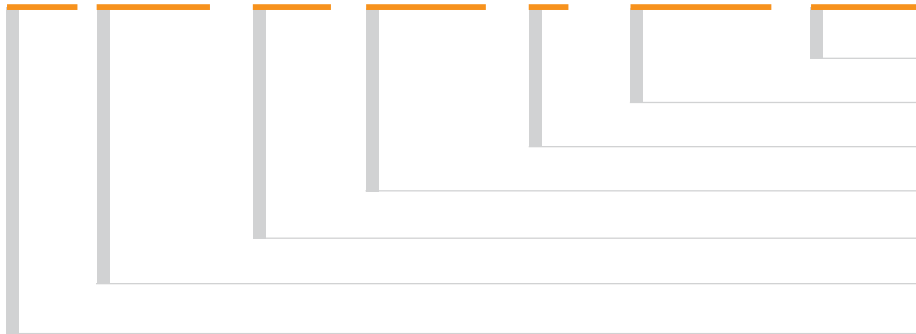
- Pitch P:** 60mm
- Height B:** 82mm
- Height H:** 2R+108mm
- Hs ≥ H+40mm**
- B1:** 28mm **B2:** 54mm

(Dimensions in mm)

Bending radius R	125	135	150	180	230	270	340
Lp	854	885	932	1,026	1,183	1,309	1,529
Lf	389	399	414	444	494	534	604
H	357	377	407	467	567	647	787

ORDERING (주문방법)

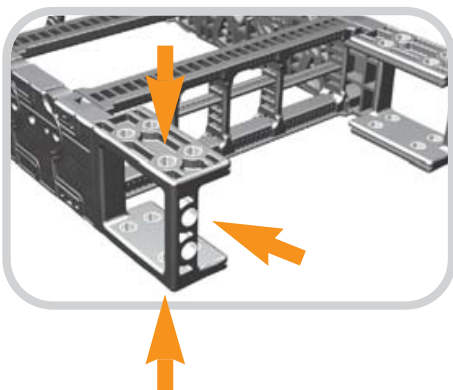
nsb 060N. 150. R180 / F- 2500L : 10ST



- 주문수량 Q'ty(set)
- 체인길이 Length(mm)
- 브라켓 Free End Bracket
- 곡률반경 Bending Radius
- 내폭 Inside Width
- 표준형태입 Normal Type

New Sabin Chain

BRACKET TYPE (브라켓타입)



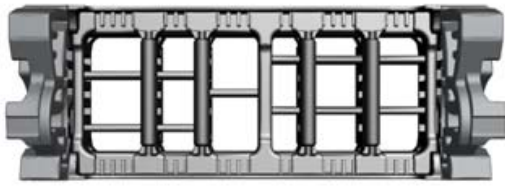
FEB (Free End Bracket)

Fixes the cable chain to the machinery or moving application. CPS has improved mounting efficiency by unifying the existing Easy End Bracket and Normal End Bracket. For added strength, steel washers are inserted into the fixing holes of each Free End Bracket.

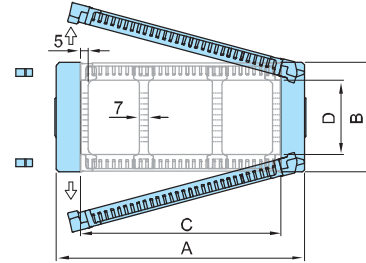
체인을 고정하는 끝부분으로 기존 Easy End Bracket 과 Normal End Bracket을 하나로 통합한 방식으로 취부의 효율성을 높임, 또한 스틸와셔를 결합하여 더욱 견고한 취부가 가능.

▶ Above products are patent registered item which can be protected by industrial property right. (상기제품은 특허등록 제품으로 산업재산권의 보호를 받는 제품입니다.)

CHAIN CROSS SECTION

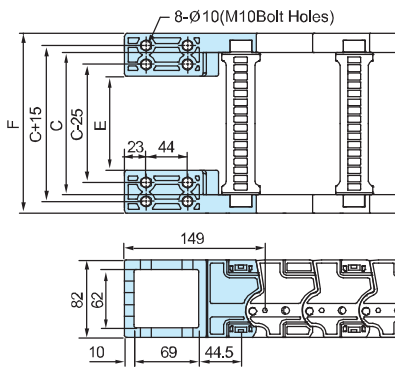


nsb 060N Normal Type

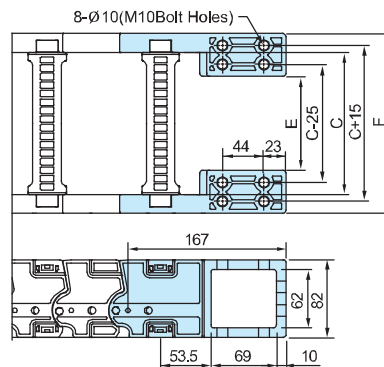


Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
nsb 060N.075	115	82	75	56	125, 135, 150, 180, 230, 270, 340	3.30
nsb 060N.100	140		100			3.35
nsb 060N.125	165		125			3.51
nsb 060N.150	190		150			3.60
nsb 060N.175	215		175			3.69
nsb 060N.200	240		200			3.84
nsb 060N.250	290		250			4.05
nsb 060N.300	340		300			4.26
nsb 060N.350	390		350			4.57
nsb 060N.400	440		400			4.86

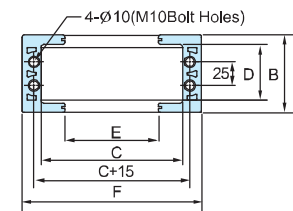
FREE END BRACKET



nsb 060N Fixing point



nsb 060N Moving point

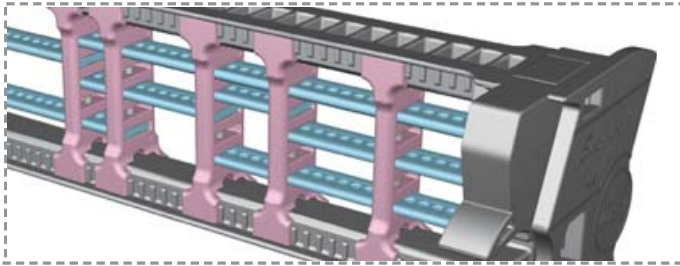


nsb 060N Front point

Chain Type	F	B	C	D	E	Hole Type
nsb 060N.075	115	82	75	56	24	M10 Bolt Holes
nsb 060N.100	140		100		49	
nsb 060N.125	165		125		74	
nsb 060N.150	190		150		99	
nsb 060N.175	215		175		124	
nsb 060N.200	240		200		149	
nsb 060N.250	290		250		199	
nsb 060N.300	340		300		249	
nsb 060N.350	390		350		299	
nsb 060N.400	440		400		349	

nsb 060N Normal Type

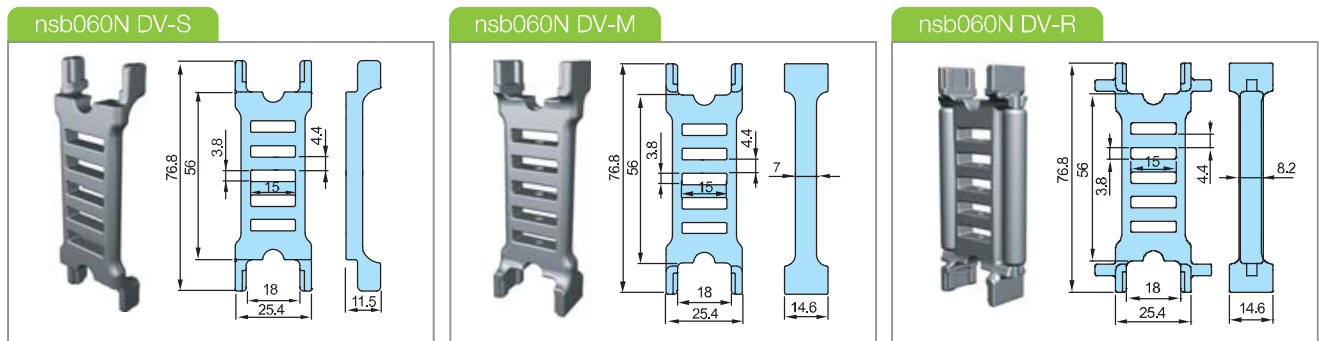
DIVIDERS



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

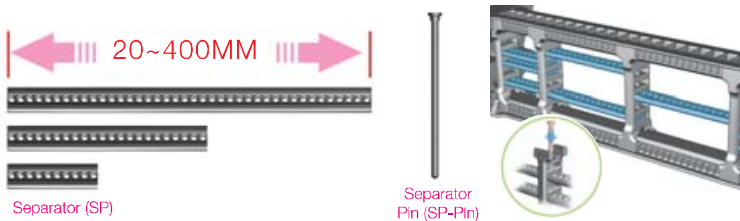
디바이더(세로분리대)와 세퍼레이터(가로분리대)는 체인내에 많은 케이블들이 입선될 시 케이블들을 서로 분리하여 케이블상호간의 마찰로 인한 **피복손상 및 단선**을 방지하는 역할을 하며 케이블과 10%이상의 여유공간을 확보해야합니다.

또한 케이블을 체인내 2단이상 입선시 반드시 세퍼레이터를 디바이더에 결합하여 사용해야 케이블의 꼬임방지과 피복손상을 방지할 수 있습니다.



※ Assemble divider every four links. (4링크마다 1개씩 결합.)

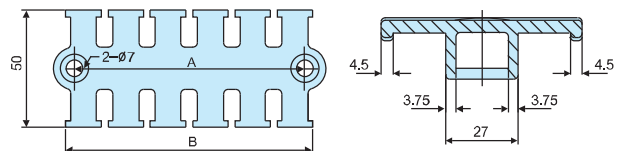
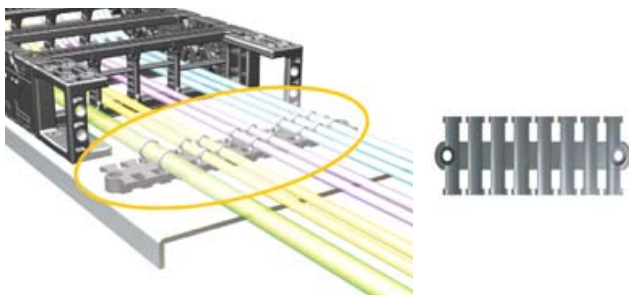
SEPARATORS (SP)



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

세퍼레이터의 사용길이는 최소20mm부터 최대400mm까지사용가능하며 5mm간격으로 절단하여 원하는 길이로 사용가능합니다. 크기가 각각 다른 케이블을 크기에 맞게끔 공간분할이 용이하고 세퍼레이터 핀으로 결합하여 어떠한 경우에도 안전하게 케이블의 입선공간을 유지하여 안전하게 케이블을 보호할 수 있습니다.

TIE WRAP



(Dimensions in mm)

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

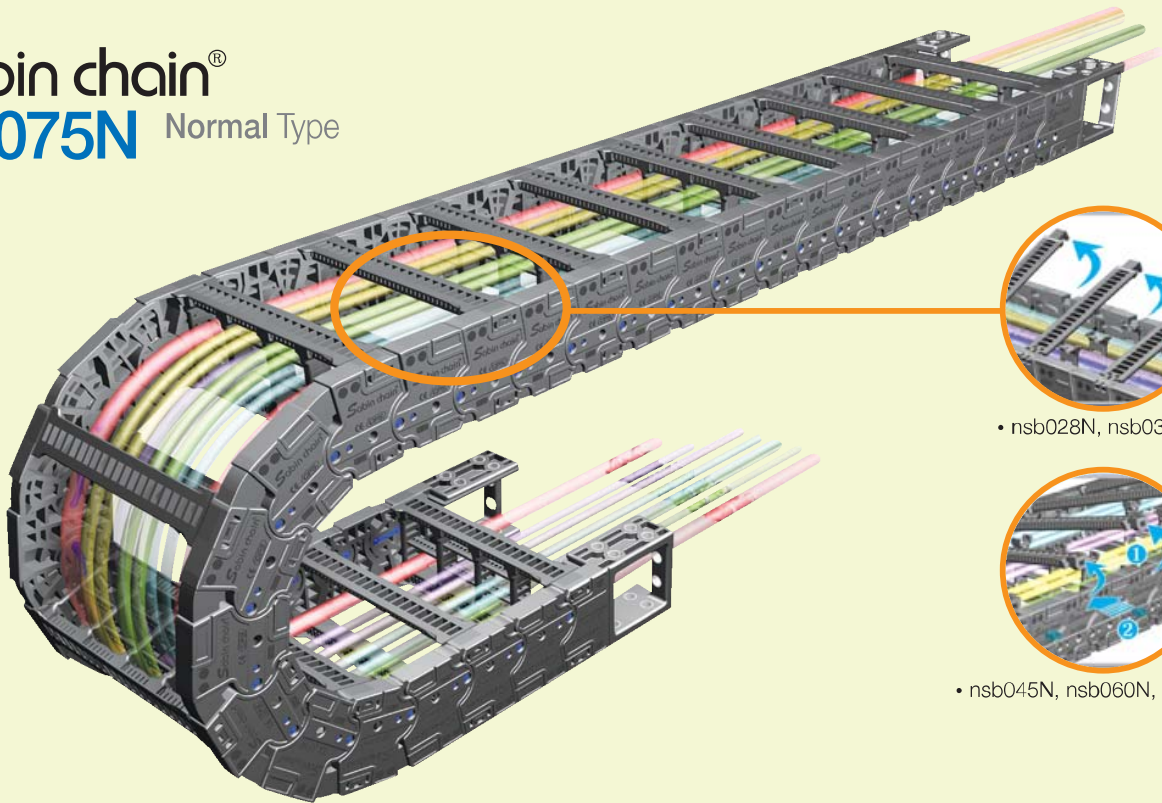
Tie Wrap은 Sabin Chain의 브라켓을 기준으로 바깥쪽으로 설치함으로써 체인의 움직임으로 인해 케이블의 유동을 방지하고자 고정하는 시스템으로 케이블의 피복손상 및 단선을 방지하는 역할을 합니다..

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

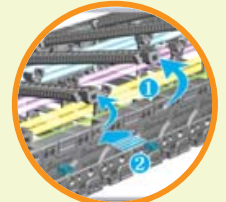
Min ●●●●●●●● Max

Sabin chain®

nsb 075N Normal Type



• nsb028N, nsb035N •



• nsb045N, nsb060N, nsb075N •

• Frames are assembled at every other link. (2링크마다 프레임 결합방식)

SFT-CHAIN

SABIN-CHAIN

REVOLVING-CHAIN

ELIX-CHAIN

ROBO-KIT

OP-STEELX

OP-SILX

MATERIAL

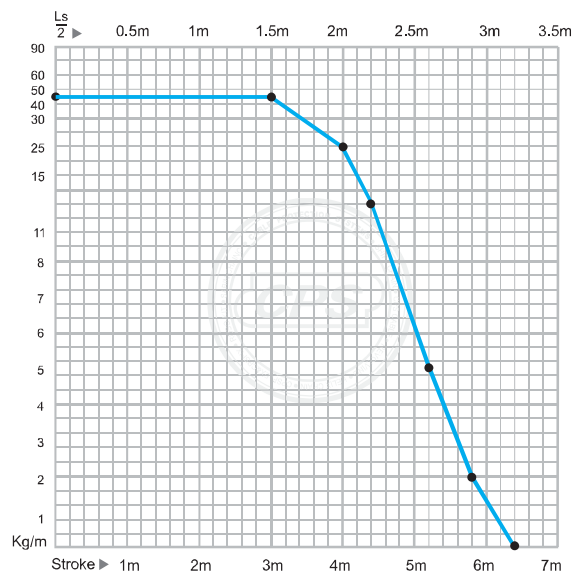
- **Chain material:**
CPS-amide UL94-HB
- **Low Noise**
- **Low Mote**
- **Speed :** 15m / sec
- **Temperature :** -40°C ~ +130°C
- **Other installation Length:**
Vertical curve above, Unsupported= max 6.0m
Vertical curve below, Unsupported= max 120m
Side Mounted, Unsupported= max 3.0m

- **Applications**
Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.
저분진, 저소음을 요구하는 사업장 및 겐츨리로더, 로봇캐리지, 공작기계, 절단/용접기계, 인쇄기계등에 적용.

Calculation of the chain length

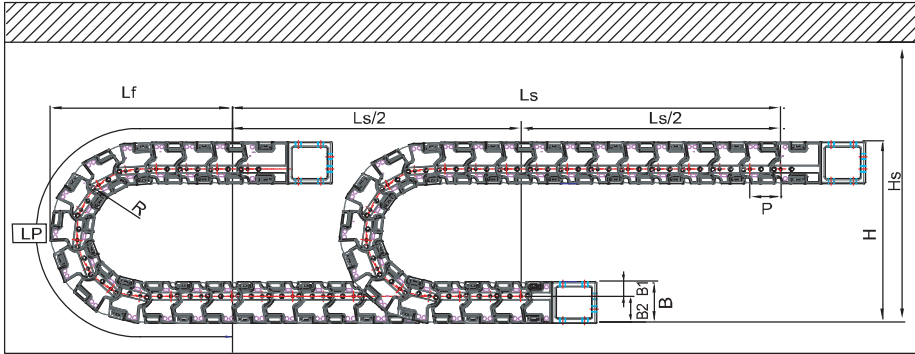
$$[L = \frac{Ls}{2} + Lp]$$

Load diagrams self-supporting length



nsb 075N Normal Type

LAYOUT OF THE CHAIN



- Ls:** Stroke
- Lp:** Loop Length
- Lf:** Loop Projection
- Hs:** Safe Space

nsb 075N Type

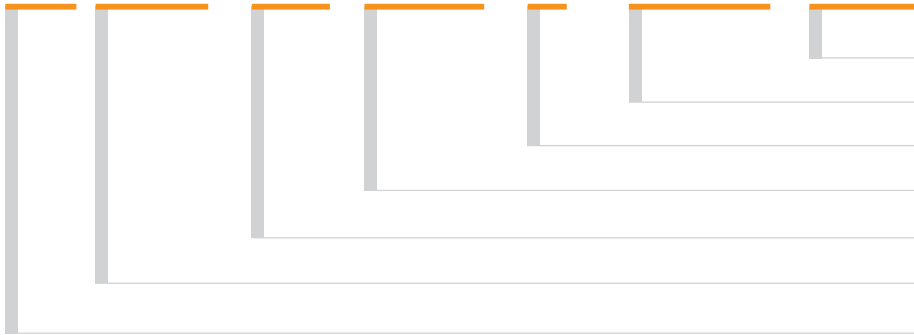
- Pitch P:** 75mm
- Height B:** 108mm
- Height H:** 2R+144mm
- Hs** ≥ H+40mm
- B1:** 36mm **B2:** 72mm

(Dimensions in mm)

Bending radius R	160	180	230	280	330	380	480
Lp	1,084	1,147	1,304	1,461	1,618	1,775	2,089
Lf	495	515	565	615	665	715	815
H	464	504	604	704	804	904	1,104

ORDERING (주문방법)

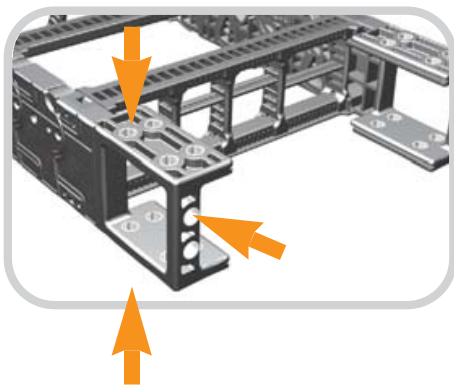
nsb 075N. 200. R380 / F- 3000L : 10ST



- 주문수량 Q' ty(set)
- 체인길이 Length(mm)
- 브라켓 Free End Bracket
- 곡률반경 Bending Radius
- 내폭 Inside Width
- 표준형타입 Normal Type

New Sabin Chain

BRACKET TYPE (브라켓타입)



FEB (Free End Bracket)

Fixes the cable chain to the machinery or moving application. CPS has improved mounting efficiency by unifying the existing Easy End Bracket and Normal End Bracket. For added strength, steel washers are inserted into the fixing holes of each Free End Bracket.

체인을 고정하는 끝부분으로 기존 Easy Eend Bbracket 과 Normal End Bracket을 하나로 통합한 방식으로 취부의 효율성을 높임, 또한 스틸와셔를 결합하여 더욱 견고한 취부가 가능.

▶ Above products are patent registered item which can be protected by industrial property right. (상기제품은 특허등록 제품으로 산업재산권의 보호를 받는 제품입니다.)

nsb 075N Normal Type

SHFT CHAIN

SABIN CHAIN

REVOLVING CHAIN

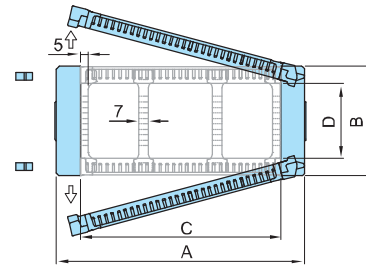
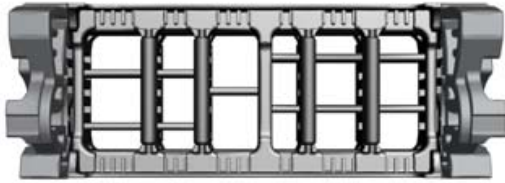
LEX CHAIN

ROBO-KIT

OP-3-LEX

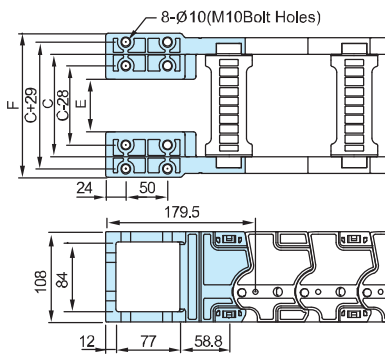
OP-3-IX

CHAIN CROSS SECTION

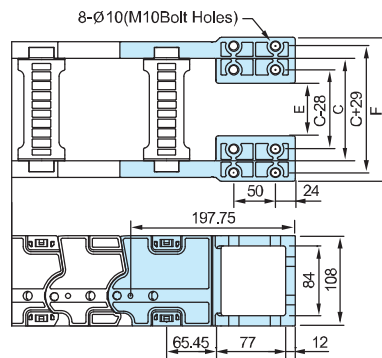


Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
nsb 075N.075	115		75			4.80
nsb 075N.100	140		100			4.90
nsb 075N.125	165		125			5.02
nsb 075N.150	190		150			5.12
nsb 075N.175	215		175			5.25
nsb 075N.200	240		200			5.46
nsb 075N.250	290	108	250	78	160, 180, 230, 280, 330	5.72
nsb 075N.300	340		300		380, 480	6.09
nsb 075N.350	390		350			6.45
nsb 075N.400	440		400			6.83
nsb 075N.450	490		450			7.12
nsb 075N.500	540		500			7.32
nsb 075N.550	590		550			8.06
nsb 075N.600	640		600			8.20

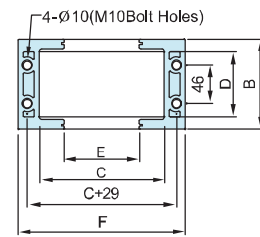
FREE END BRACKET



nsb 075N Fixing point



nsb 075N Moving point



nsb 075N Front point

Chain Type	F	B	C	D	E	Hole Type
nsb 075N.075	125		75		15	M10 Bolt Holes
nsb 075N.100	150		100		40	
nsb 075N.125	175		125		65	
nsb 075N.150	200		150		90	
nsb 075N.175	225		175		115	
nsb 075N.200	250		200		140	
nsb 075N.250	300		250		190	
nsb 075N.300	350	108	300	78	240	
nsb 075N.350	400		350		290	
nsb 075N.400	450		400		340	
nsb 075N.450	500		450		390	
nsb 075N.500	550		500		440	
nsb 075N.550	600		550		490	
nsb 075N.600	650		600		540	

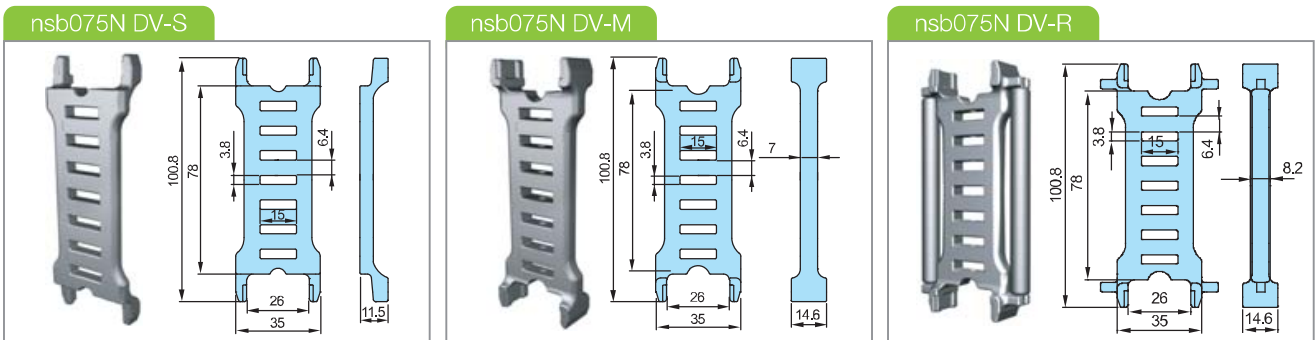
nsb 075N Normal Type

DIVIDERS

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

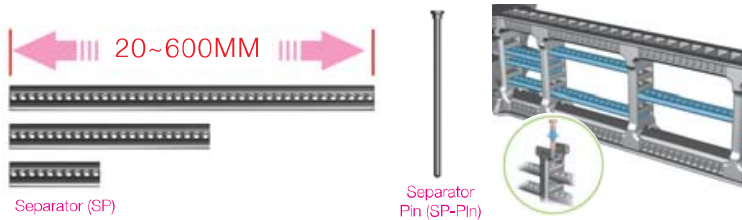
디바이더(세로분리대)와 세퍼레이터(가로분리대)는 체인내에 많은 케이블들이 입선될 시 케이블들을 서로 분리하여 케이블상호간의 마찰로 인한 **피복손상 및 단선**을 방지하는 역할을 하며 케이블과 10%이상의 여유공간을 확보해야 합니다.

또한 케이블을 체인내 2단이상 입선시 반드시 세퍼레이터를 디바이더에 결합하여 사용해야 케이블의 꼬임방지와 피복손상을 방지할 수 있습니다.



* Assemble divider every four links, (4링크마다 1개씩 결합.)

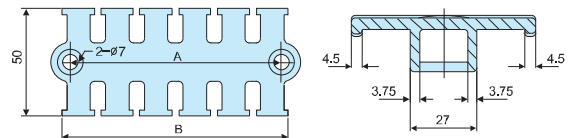
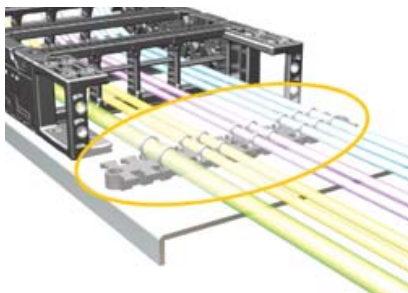
SEPARATORS (SP)



Separator is available in length from 20mm to 600mm and can be cut every 5mm for use. The combined use of divider and separator with the pin creates the most effective cable pattern and keep insertion space for cables safely, so it protects the inserted cables.

세퍼레이터의 사용길이는 최소20mm부터 최대600mm까지 사용가능하며 5mm간격으로 절단하여 원하는 길이로 사용가능합니다. 크기가 각각 다른 케이블을 크기에 맞게끔 공간분할이 용이하고 세퍼레이터 핀으로 결합하여 어떠한 경우에도 안전하게 케이블의 입선공간을 유지하여 안전하게 케이블을 보호할 수 있습니다.

TIE WRAP



(Dimensions in mm)

The tie wrap separated from the Sabin Chain bracket, when installed properly, protects the inserted cables from becoming entangled and twisted during operation.

Tie wrap은 Sabin Chain의 브라켓을 기준으로 바깥쪽으로 설치함으로써 체인의 움직임으로 인해 **케이블의 유동을 방지하고자 고정하는 시스템**으로 케이블의 피복손상 및 단선을 방지하는 역할을 합니다.

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

ASSEMBLY PROCEDURE / NORMAL Type

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

New Sabin Chain의 N-Type의 조립순서는 아래와 같이 진행하며 케이블의 입선수량에 따라 디바이더와 세퍼레이터의 조합을 유의하면서 반드시 고무망치를 사용하여 조립합니다.

SHIFT CHAIN

SABIN CHAIN

REVOLVING CHAIN

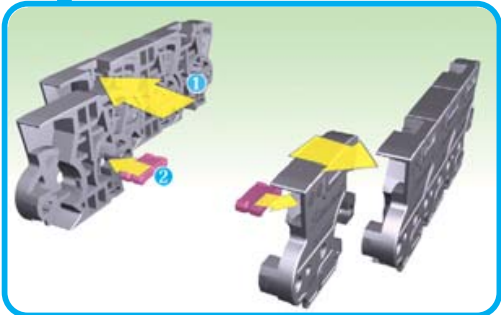
INDEX CHAIN

ROBO-KIT

OP-51EX

OP-51X

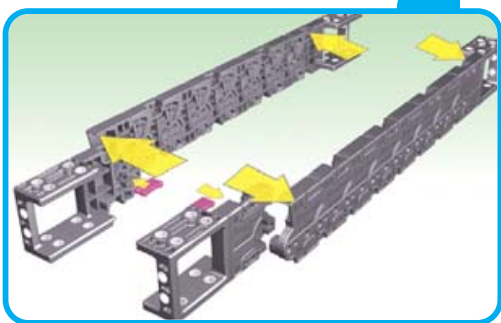
1



Connect each side band as many as you need, then insert holding pin to connecting groove.

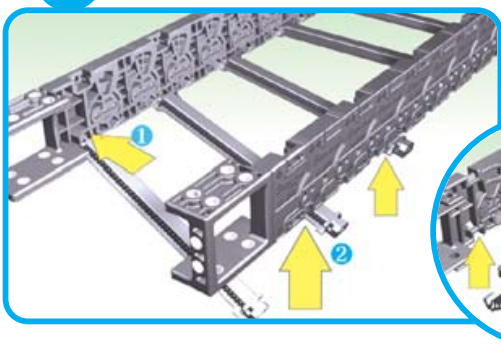
사이드밴드를 원하는 길이만큼 연결(1)하고 홀딩핀을 사이드밴드 연결홈에 끼워서 고정(2).

2

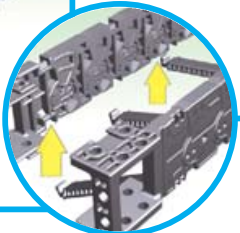


Assemble the end brackets on both ends with holding pin.
사이드밴드 양쪽 끝부분에 브라켓을 연결하고 홀딩핀으로 결합하여 고정.

3

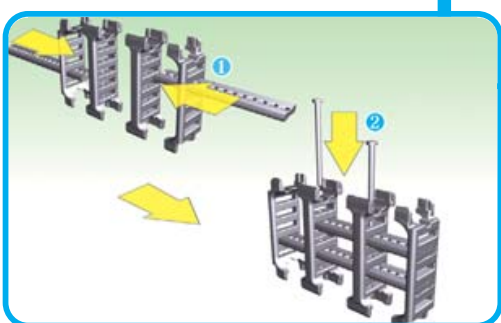


Attach frames to one side groove on the frames, then the other side.
프레임을 사이드밴드 측면 홈에 끼우고(1) 다른측면의 사이드밴드홈에 결합(2).



nsb028,035 N Frame Type

4

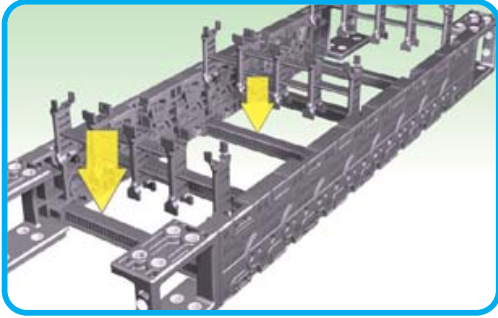


For nsb045, 060 and 075, connect the pin of separator in hole of divider after inserting separator in hole of divider.
For nsb028 and nsb035, separator fixing pins are not used.

디바이더를 종류별로 구분하여 미리 절단된 세퍼레이터를 디바이더 홈에 결합시킨 후 세퍼레이터 고정핀을 디바이더 홈에 결합(ns045,060,075).
028,035 Type은 세퍼레이터 고정핀 사용안함.

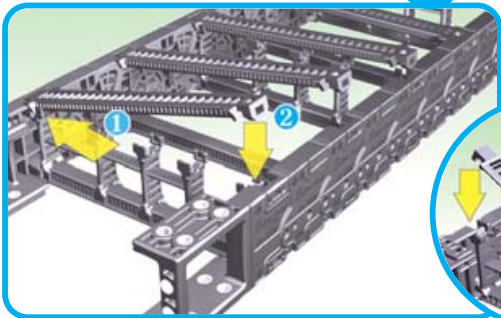
ASSEMBLY PROCEDURE / NORMAL Type

5

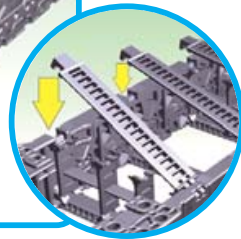


- Fix the separator and divider patterns to the bottom-side frames as needed.
세퍼레이터가 결합된 디바이더를 하측프레임에 결합.

6

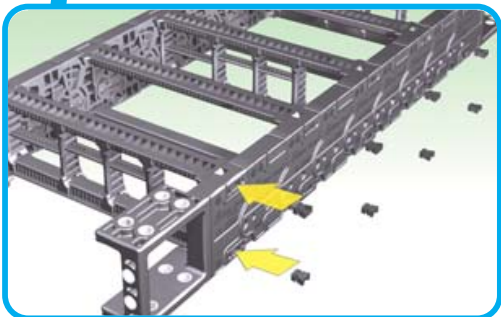


- Attach frames to one side groove on the frames, then the other side.
프레임을 사이드밴드 측면 홈에 끼우고(①) 다른측면의 사이드밴드홈에 결합(②).



- nsb028,035 N Frame Type

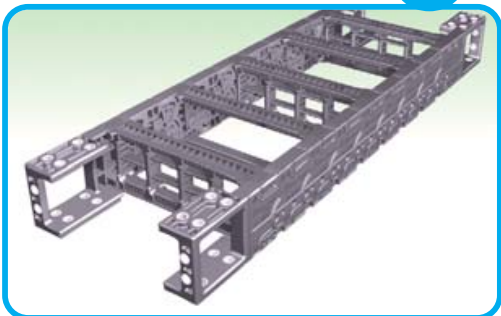
7



- 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.)

결합된 프레임과 사이드밴드의 측면의 홈에 프레임 고정핀으로 결합.
(프레임 고정핀은 nsb045,060,075 Type에 적용되며 028, 035Type의 경우 Hinge Type이나 프레임 고정핀 없이 Hook 고정방식.)

8



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