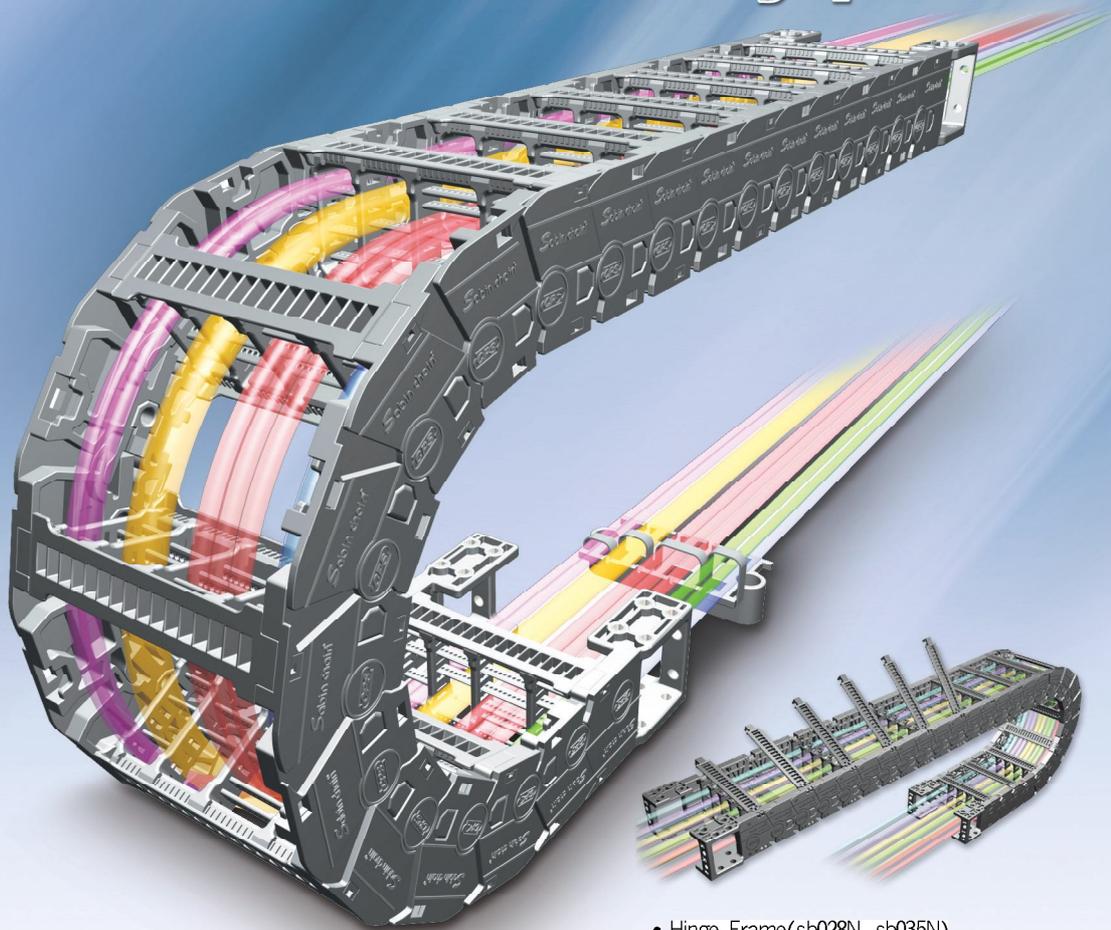
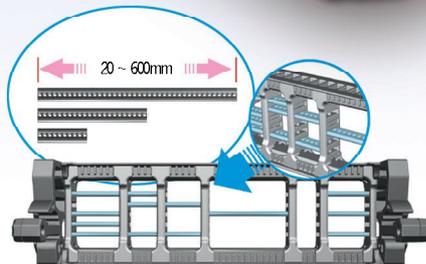


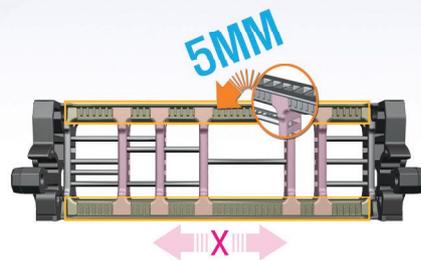
Sabin chain® N-Type



• Hinge Frame(sb028N, sb035N)



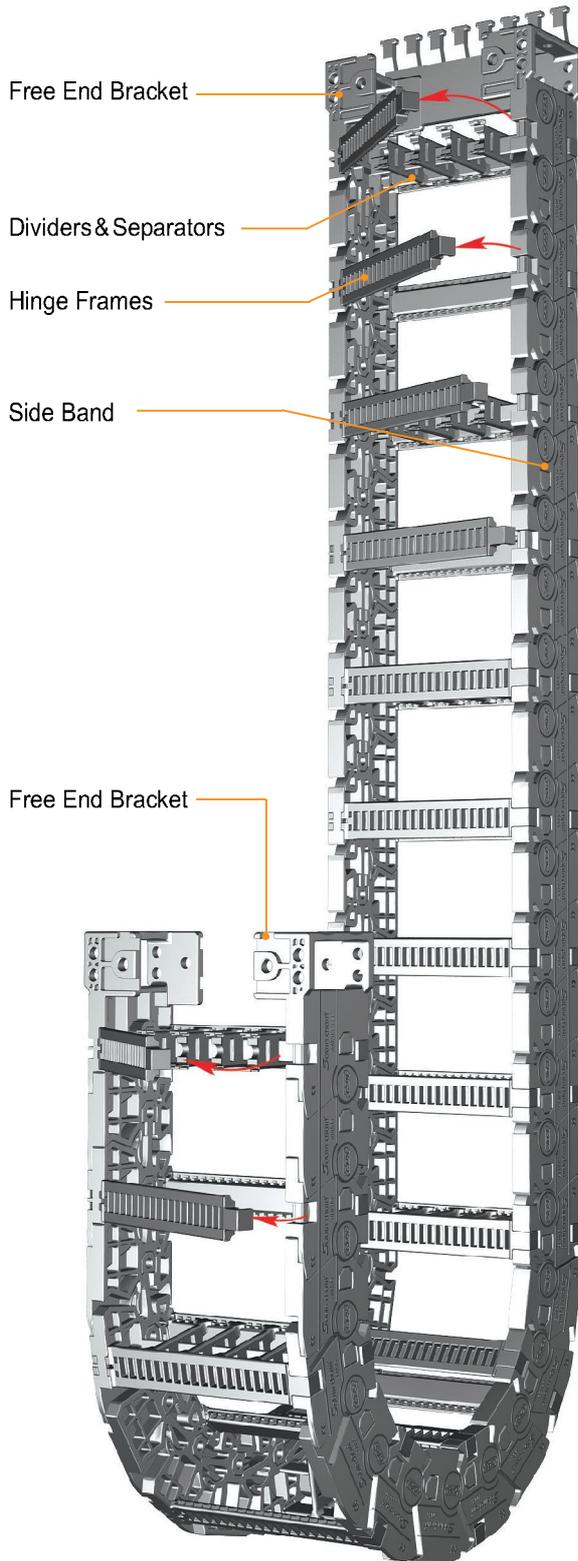
- With separators available in lengths from 20mm to 400mm we are able to custom design the most effective cable pattern for our clients.
- 세퍼레이터 길이 최소20mm ~ 최대600mm, 5mm 간격으로 절단사용 가능.



- With teeth positioned every 5mm, Sabin Chain's patented grooves grip the dividers locking them in place and eliminating any left or right movement during operation.
- 프레임에 5mm 간격 돌기형성 으로 디바이더 유동 방지.

Low Dust Low Noise Cable Chain

Normal Type



Sabin Chain

NEW

sb 028N

1 Chain material

CPS-amide UL94-HB

2 Low Noise : TUV Test 30 dB (DIN EN 61672-1)

3 Low Mote :
IPA Test VDI 2083 CLASS 2
DIN EN 14644-1 ISO CLASS4

4 Speed : 15m/sec

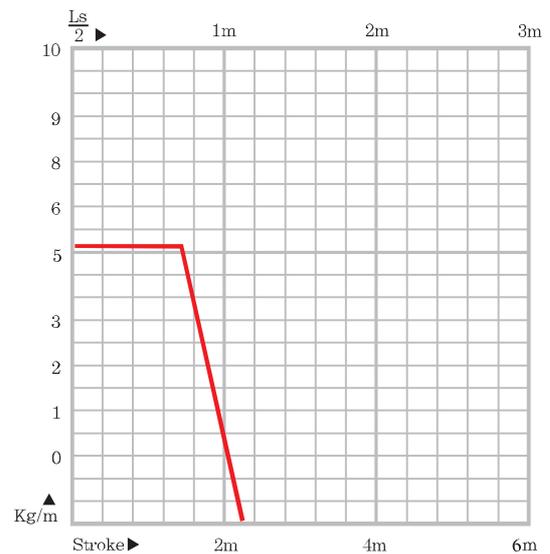
5 Temperature : -40°C ~ +130°C

6 Vertical installation Length

Curve above = max 2.0m
Curve below = max 40m
Side Mounted, Unsupported = max 1.0m

7 Applications : Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.
기존 케이블체인의 적용사업장에 사용가능

8 Load diagrams self-supporting length



9 Calculation of the chain length

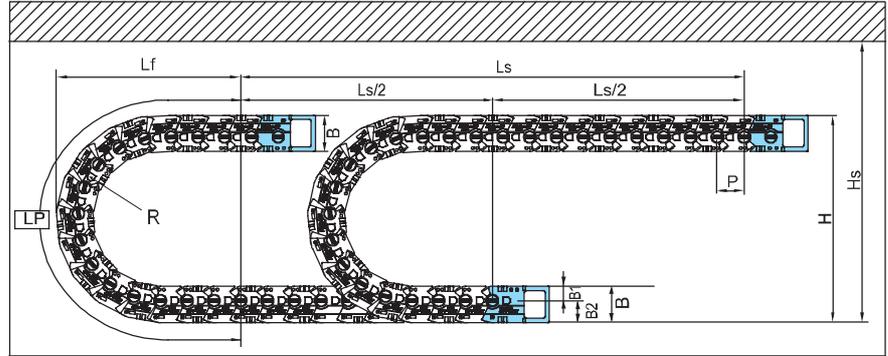
$$L = \frac{Ls}{2} + Lp$$

sb 028N

Low Dust Low Noise Cable Chain

Lay out of the chain

- L_s : Stroke
- L_p : Loop Length
- L_f : Loop Projection
- H_s : Safe Space
- B1:15mm B2:23mm



(Dimensions in mm)

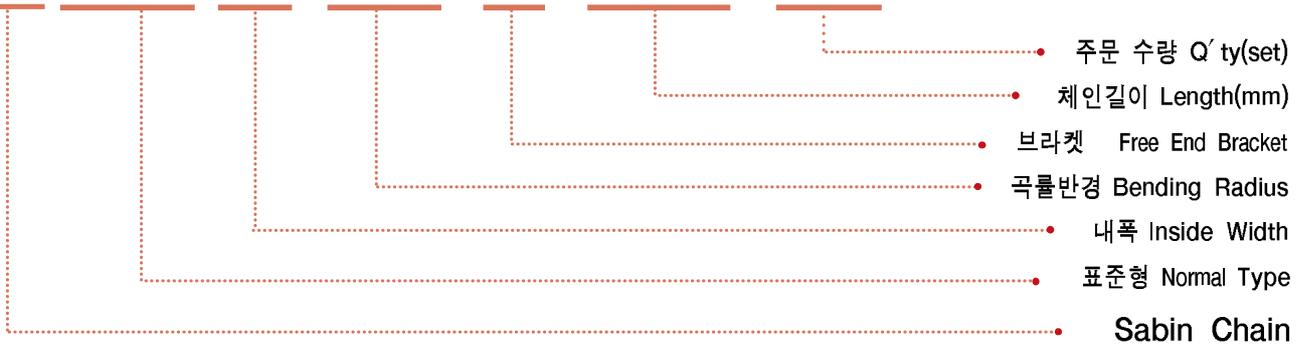
sb 028N Type

Pitch P: 28mm
 Height B: 38mm
 Height H: 2R+46mm
 HS \geq H+30mm

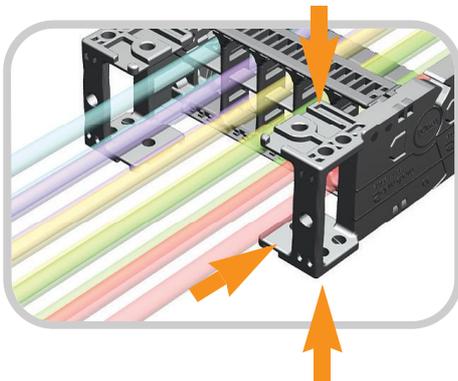
Bending radius R	46	66	86	116	146
L_p	313	376	439	533	627
L_f	153	173	193	223	253
H	138	178	218	278	338

Ordering (주문방법)

sb 028N. 075. R116 / F - 2000L: 10ST



Bracket Type



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 Bracket.

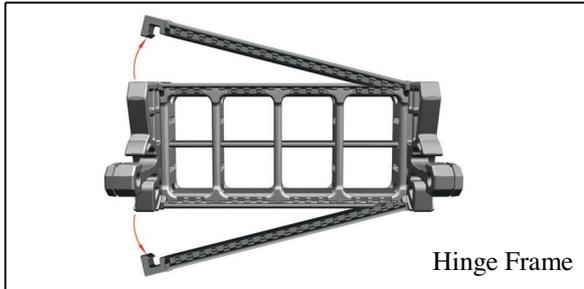
체인을 고정하는 끝부분으로 기존 Easy end bracket 과 Normal end bracket을 하나로 통합한 방식으로 취부의 효율성을 높였습니다.

* Above products are patent registered item which can be protected by industrial property right. 상가제품은 특허등록 제품으로 산업재산권의 보호를 받는 제품입니다.

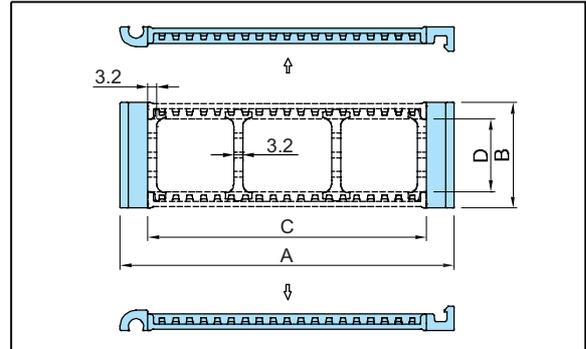
Low Dust Low Noise Cable Chain

sb 028N

Chain cross section

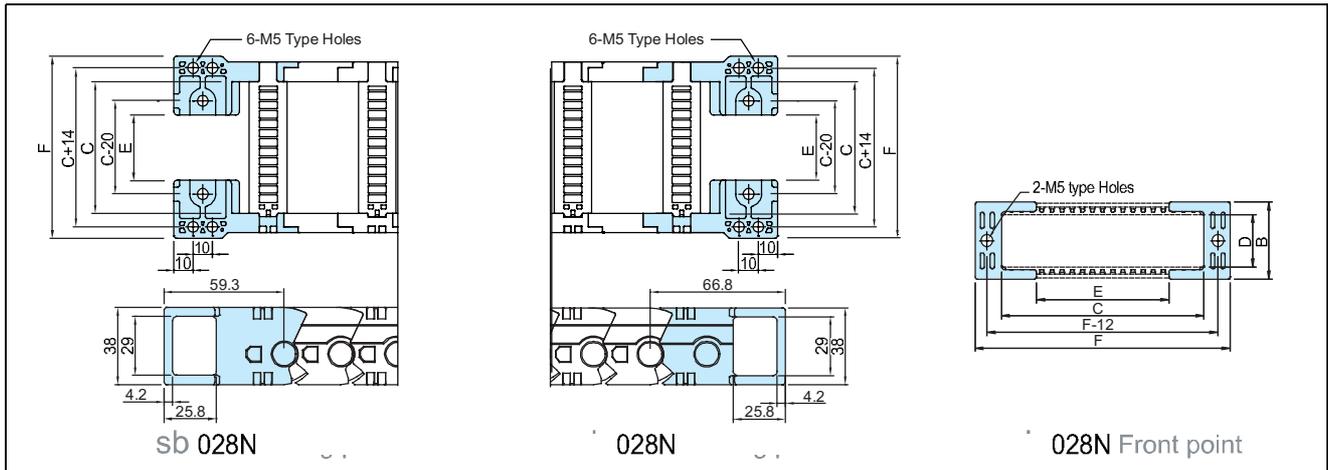


Hinge Frame



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
sb 028N. 035	55		35			0.72
sb 028N. 050	70		50			0.76
sb 028N. 055	75		55			0.78
sb 028N. 075	95		75			0.83
sb 028N.100	120	38	100	26	46, 66, 86, 116, 146	0.90
sb 028N.125	145		125			0.97
sb 028N.150	170		150			1.06
sb 028N.175	195		175			1.14
sb 028N.200	220		200			1.19

Free End Bracket



Chain Type	F	B	C	D	E	Hole Type
sb 028N. 035	61		35		0.4	M5 Holes
sb 028N. 050	75		50		15.4	
sb 028N. 055	81		55		20.4	
sb 028N. 075	101		75		40.4	
sb 028N.100	126	38	100	26	65.4	
sb 028N.125	151		125		90.4	
sb 028N.150	175		150		115.4	
sb 028N.175	201		175		140.4	
sb 028N.200	226		200		165.4	



sb 028N

Low Dust Low Noise Cable Chain

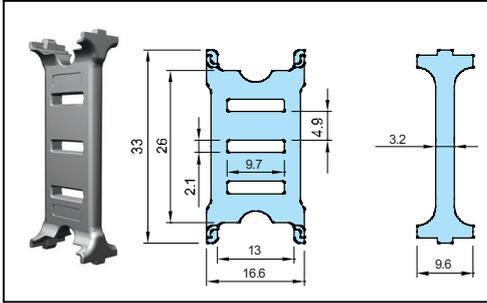
DIVIDERS & SEPARATORS

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 separate 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.

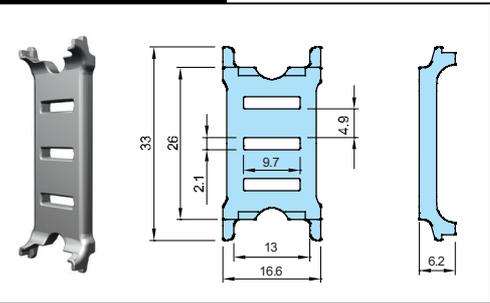
디바이더(세로분리대)와 세퍼레이터(가로분리대)는 체인내에 많은 케이블들이 입선될 시 케이블들을 서로 분리하여 케이블상호간의 마찰로 인한 피복손상 및 단선을 방지하는 역할을 하며 케이블과 10%이상의 여유공간을 확보해야합니다. 또한 케이블을 체인내 2단이상 입선시 반드시 세퍼레이터를 디바이더에 결합하여 사용해야 케이블의 꼬임방지과 피복손상을 방지할 수 있습니다.



sb028N Divider-M



sb028N Divider-S



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

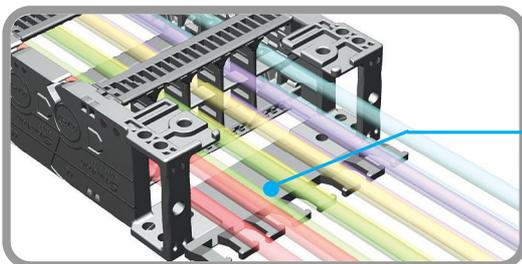
Separators (No. : S-SP/M)

Chain Type	Separators								
	SP035	SP050	SP055	SP075	SP100	SP125	SP150	SP175	SP200
sb 028N	○	○	○	○	○	○	○	○	○
sb 035N	○	○	○	○	○	○	○	○	○

Tie Wrap

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

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



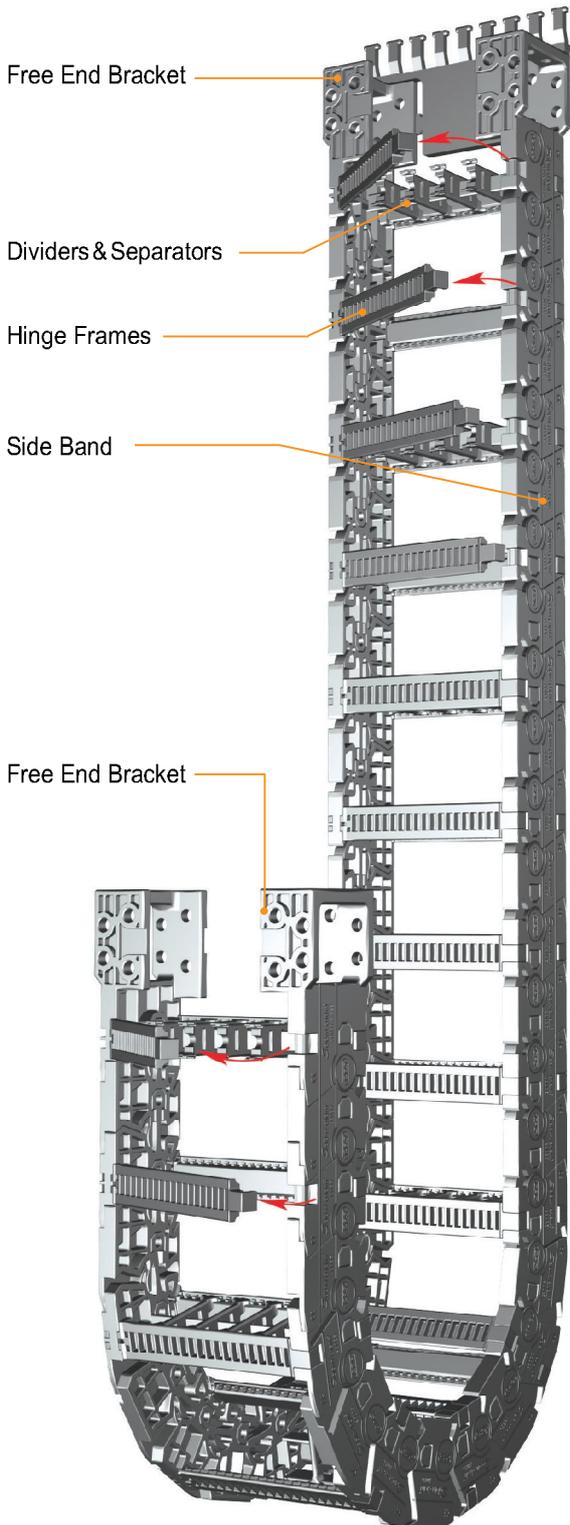
[Tie Wrap 삽입형]

When using the tie wrap option for the Sabin Chain sb028 series, the corresponding frame sizes will be 35, 55, 75, 100, and 125mm respectively.

sb028N, 제품은 삽입형 Tie Wrap을 사용하며 적용되는 Frame은 35, 55, 75, 100, 125 입니다.

Low Dust Low Noise Cable Chain

Normal Type



Sabin Chain

NEW

sb 035N

1 Chain material

CPS-amide UL94-HB

2 Low Noise : TUV Test 30 dB (DIN EN 61672-1)

3 Low Mote :

IPA Test VDI 2083 CLASS 2
DIN EN 14644-1 ISO CLASS4

4 Speed : 15m/sec

5 Temperature : -40°C ~ +130°C

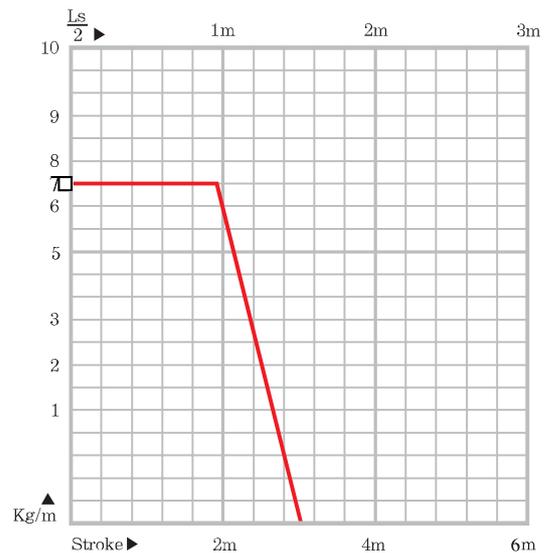
6 Vertical installation Length

Curve above = max 3.0m
Curve below = max 50m
Side Mounted, Unsupported = max 1.0m

7 Applications : Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.

기존 케이블체인의 적용사업장에 사용가능

8 Load diagrams self-supporting length



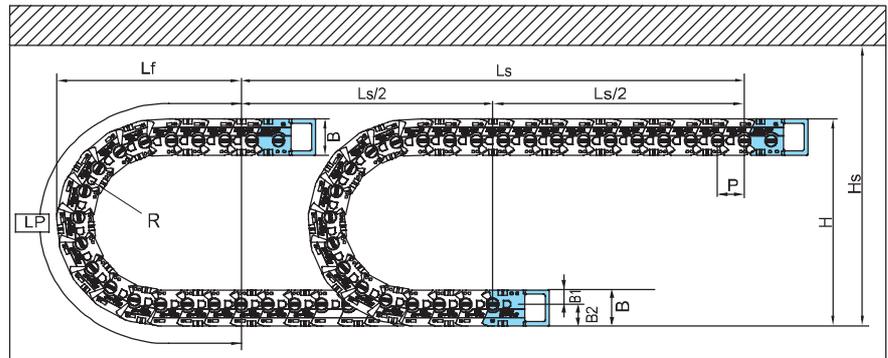
9 Calculation of the chain length

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

sb 035N

Lay out of the chain

- Ls : Stroke
- Lp : Loop Length
- Lf : Loop Projection
- Hs : Safe Space
- B1:18mm B2:34mm



(Dimensions in mm)

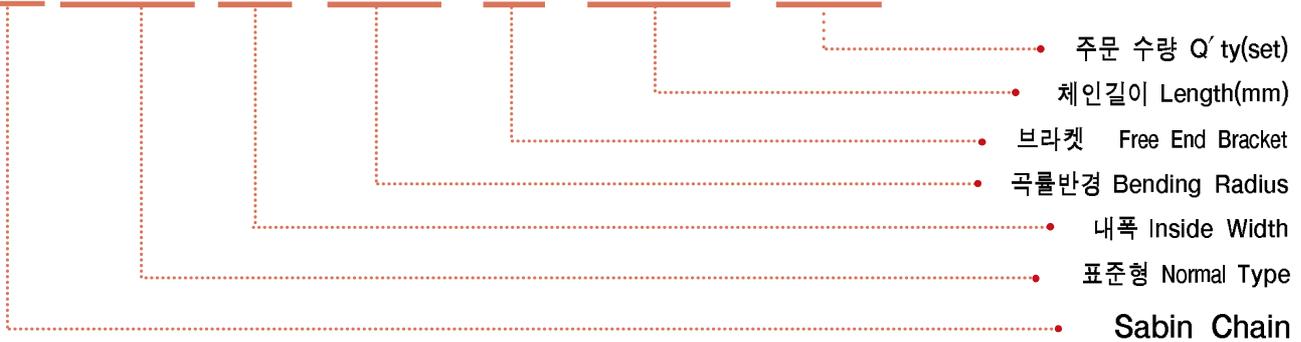
sb 035N Type

Pitch P: 35mm
 Height B: 52mm
 Height H: 2R+68mm
 HS ≥ H+30mm

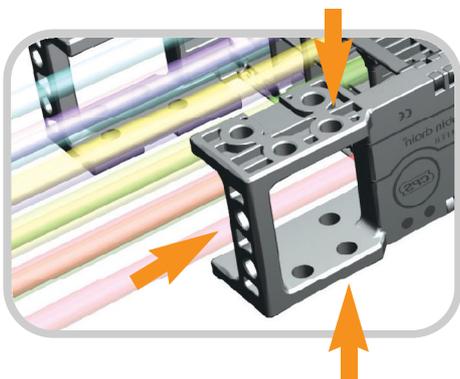
Bending radius R	55	65	90	115	140	190
Lp	383	414	493	572	650	807
Lf	194	204	229	254	279	329
H	178	198	248	298	348	448

Ordering (주문방법)

sb 035N. 100. R140 / F - 2000L: 10ST



Bracket Type



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 Bracket.

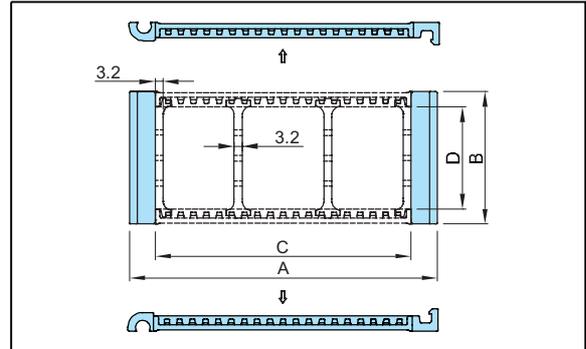
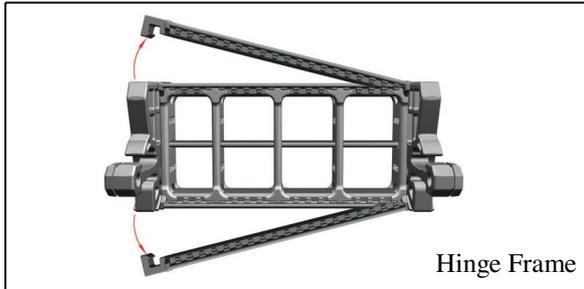
체인을 고정하는 끝부분으로 기존 Easy end bracket 과 Normal end bracket을 하나로 통합한 방식으로 취부의 효율성을 높였습니다.

* Above products are patent registered item which can be protected by industrial property right. 상가제품은 특허등록 제품으로 산업재산권의 보호를 받는 제품입니다.

Low Dust Low Noise Cable Chain

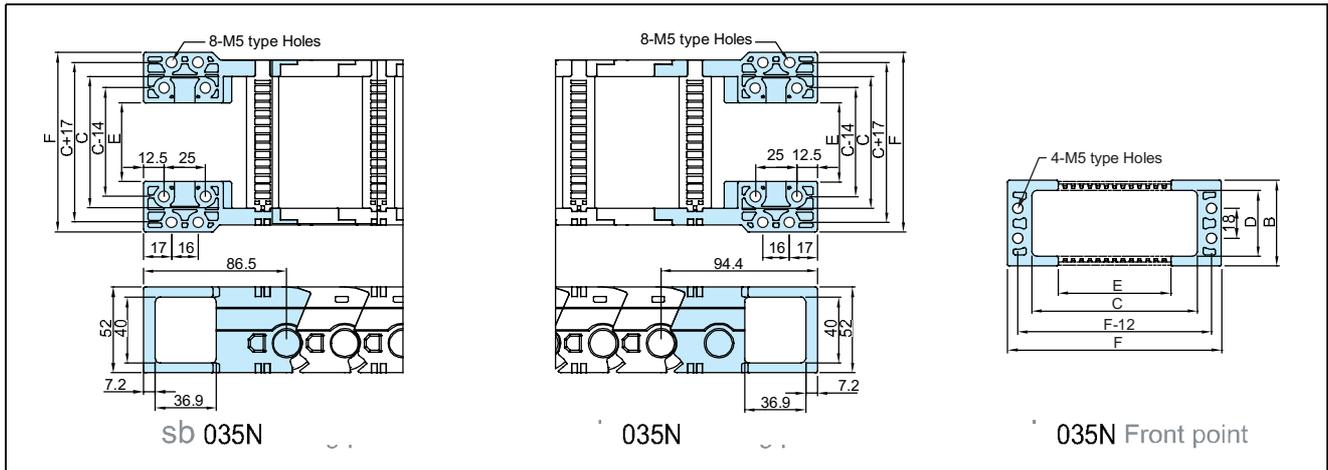
sb 035N

Chain cross section



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
sb 035N. 035	55		35			0.86
sb 035N. 050	70		50			0.89
sb 035N. 055	75		55			0.91
sb 035N. 075	95		75			0.95
sb 035N.100	120	52	100	40	55, 65, 90, 115, 140, 190	1.09
sb 035N.125	145		125			1.06
sb 035N.150	170		150			1.13
sb 035N.175	195		175			1.19
sb 035N.200	220		200			1.23

Free End Bracket



Chain Type	F	B	C	D	E	Hole Type
sb 035N. 035	64		35		3	M5 Holes
sb 035N. 050	79		50		18	
sb 035N. 055	84		55		23	
sb 035N. 075	104		75		43	
sb 035N.100	129	52	100	40	68	M5 Holes
sb 035N.125	154		125		93	
sb 035N.150	179		150		118	
sb 035N.175	204		175		143	
sb 035N.200	229		200		168	

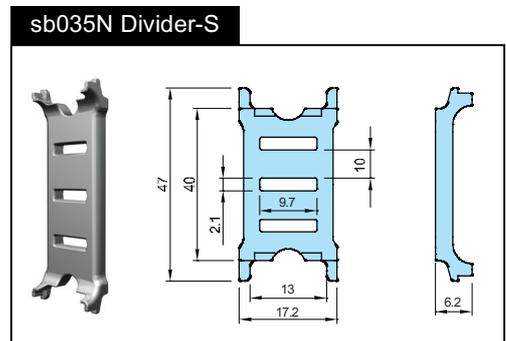
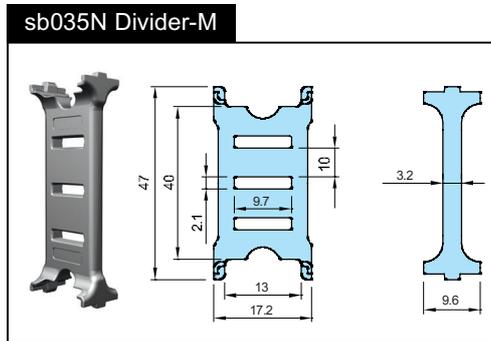
sb 035N

Low Dust Low Noise Cable Chain

DIVIDERS & SEPARATORS

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 separate 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 사용하여 케이블의 꼬임방지과 피복손상을 방지할 수 있습니다.



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

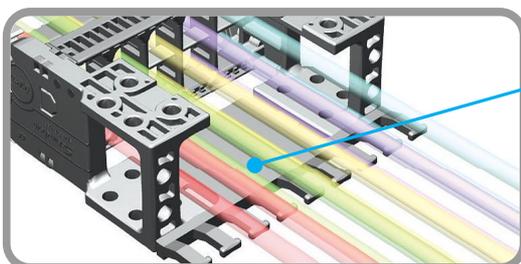
Separators (No. : S-SP/M)

Chain Type	Separators									
	SP035	SP050	SP055	SP075	SP100	SP125	SP150	SP175	SP200	
sb 028N	○	○	○	○	○	○	○	○	○	○
sb 035N	○	○	○	○	○	○	○	○	○	○

Tie Wrap

The tie wrap separate 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 삽입형]

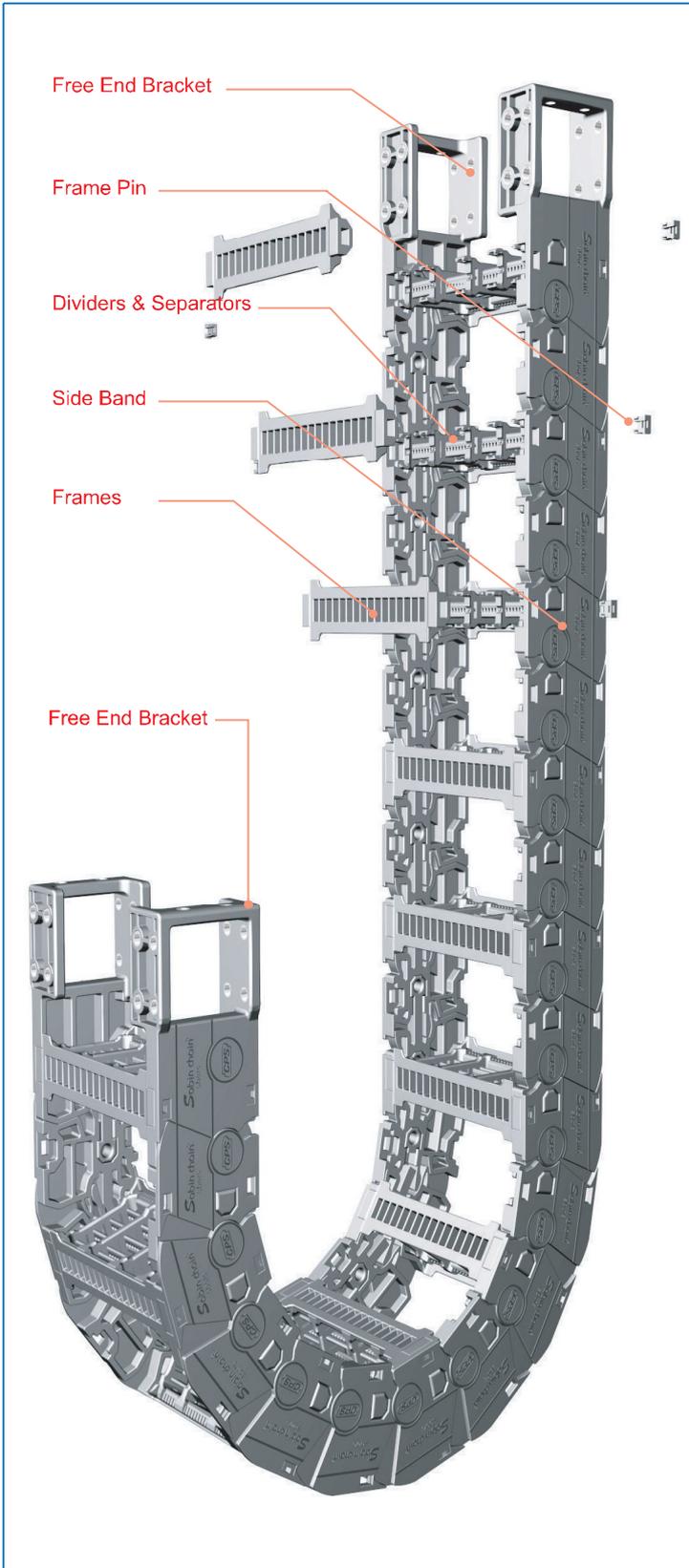
When using the tie wrap option for the Sabin Chain sb035 series, the corresponding frame sizes will be 35, 55, 75, 100, and 125mm respectively.

sb035N, 제품은 삽입형 Tie Wrap을 사용하며 적용되는 Frame은 50, 75, 100, 125, 150, 175, 200 입니다.

Low Dust Low Noise Cable Chain

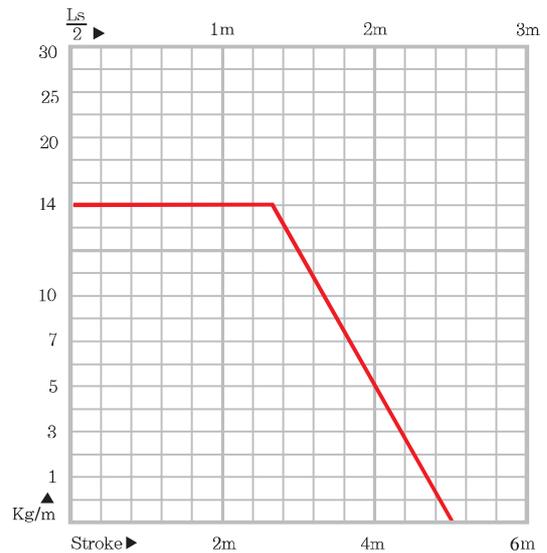
Normal Type

Sabin Chain



sb 045N

- 1 Chain material**
CPS-amide UL94-HB
- 2 Low Noise :** TUV Test 30 dB (DIN EN 61672-1)
- 3 Low Mote :**
IPA Test VDI 2083 CLASS 2
DIN EN 14644-1 ISO CLASS4
- 4 Speed :** 15m/sec
- 5 Temperature :** -40°C ~ +130°C
- 6 Vertical installation Length**
Curve above = max 6.0m
Curve below = max 100m
Side Mounted, Unsupported = max 2.5m
- 7 Applications :** Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.
기존 케이블체인의 적용사업장에 사용가능
- 8 Load diagrams self-supporting length**



9 Calculation of the chain length

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

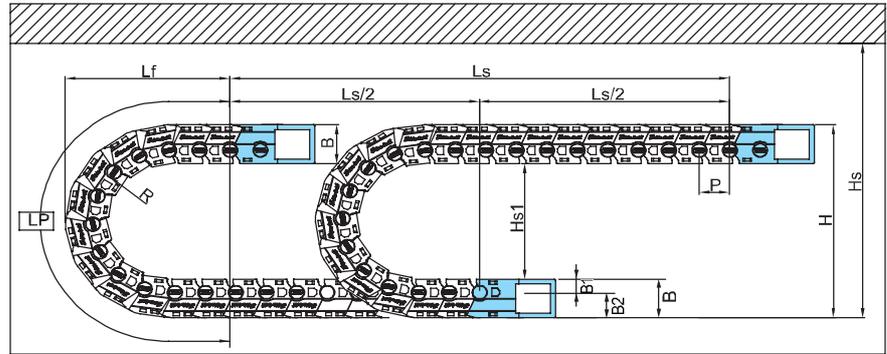


sb 045N

Low Dust Low Noise Cable Chain

Lay out of the chain

- Ls : Stroke
- Lp : Loop Length
- Lf : Loop Projection
- Hs : Safe Space
- B1:22mm B2:44mm



(Dimensions in mm)

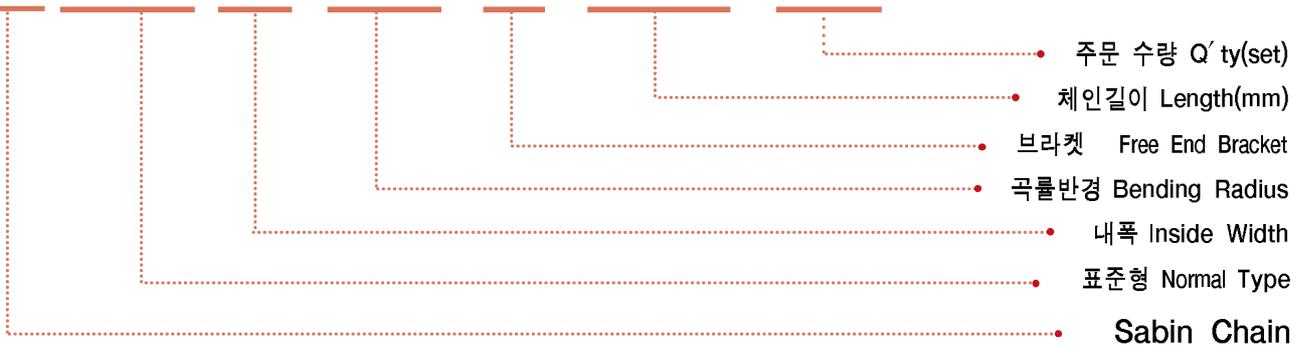
sb 045N Type

Pitch P: 45mm
 Height B: 66mm
 Height H: 2R+88mm
 HS ≥ H+40mm

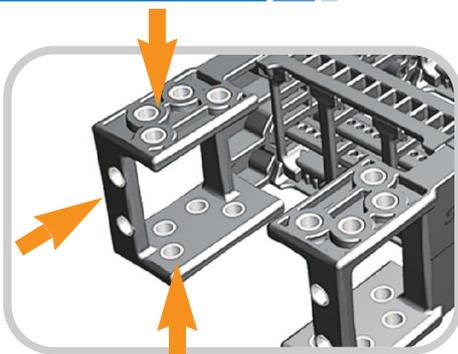
Bending radius R	90	110	135	165	185	235	285
Lp	633	695	774	868	931	1,088	1,245
Lf	291	311	336	366	386	436	486
H	268	308	358	418	458	558	658

Ordering (주문방법)

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



Bracket Type



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 Bracket. For added strength, steel spacers are inserted into the fixing holes of each Free End Bracket.

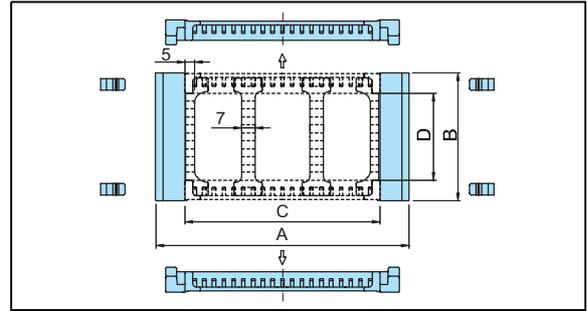
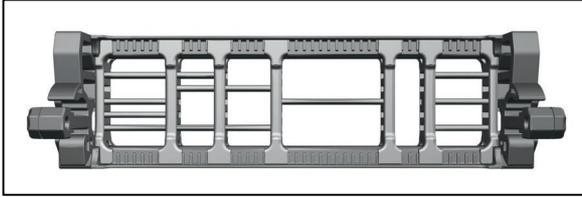
체인을 고정하는 끝부분으로 기존 Easy end bracket 과 Normal end bracket을 하나로 통합한 방식으로 취부의 효율성을 높임. 또한 스틸 와셔를 결합하여 더욱 견고한 취부가 가능.

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

Low Dust Low Noise Cable Chain

sb 045N

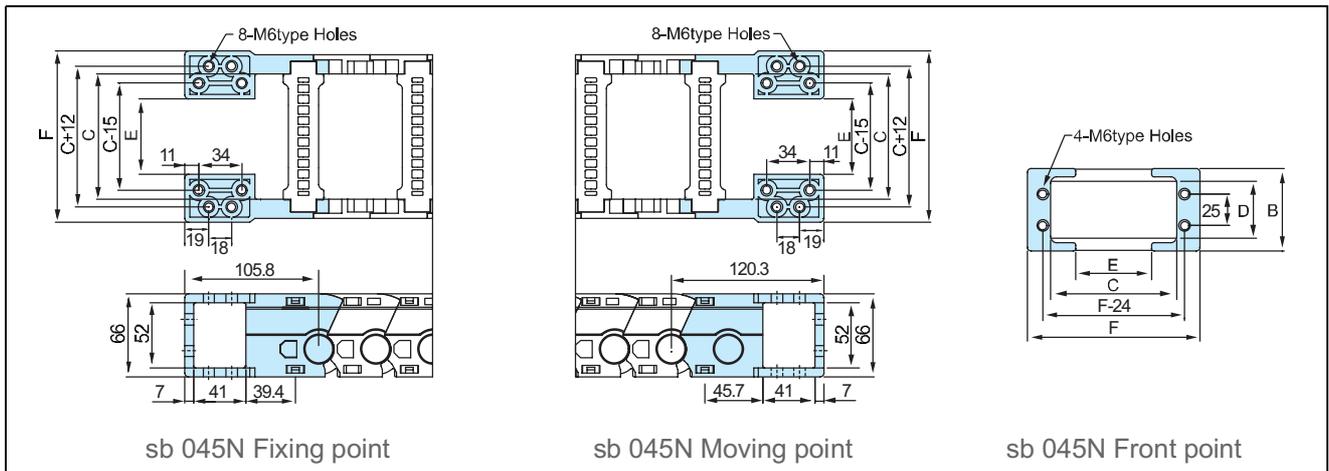
Chain cross section



Sabin Chain

Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
sb 045N.050	80		50			1.60
sb 045N.075	105		75			1.67
sb 045N.100	130		100			1.75
sb 045N.125	155		125			1.88
sb 045N.150	180	66	150	45	90, 110, 135, 165, 185, 235, 285	1.96
sb 045N.175	205		175			2.06
sb 045N.200	230		200			2.19
sb 045N.250	280		250			2.28
sb 045N.300	330		300			2.51

Free End Bracket



sb 045N Fixing point

sb 045N Moving point

sb 045N Front point

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



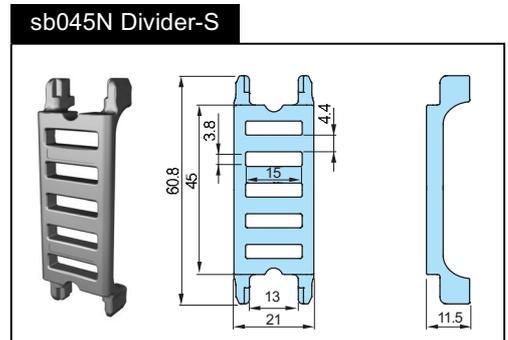
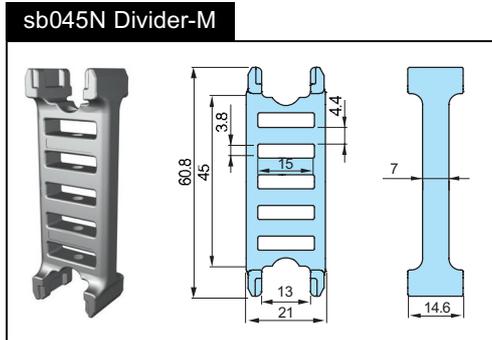
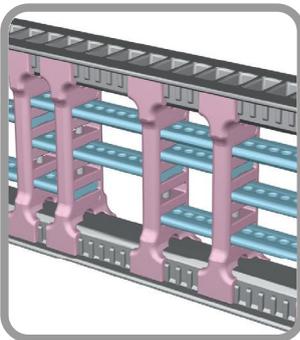
Low Dust Low Noise Cable Chain

sb 045N

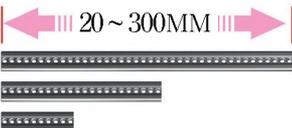
DIVIDERS & SEPARATORS

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 separate 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 it's 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 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.



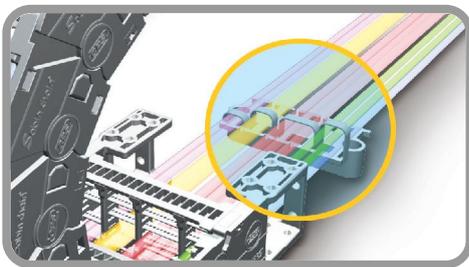
▲ Separator

Separator Pin (SP-Pin) ▶

Available in ranges from 20mm to 300mm in length, and with holes placed strategically every 5mm to line up with the grooves in the frame, cables of virtually any size and shape can be inserted together in the same cable chain effectively and safely. Respectively, levels can be created to eliminate the need for wider applications. (Available on sb N-Type, sb E-Type and sb S-Type)

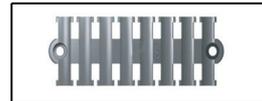
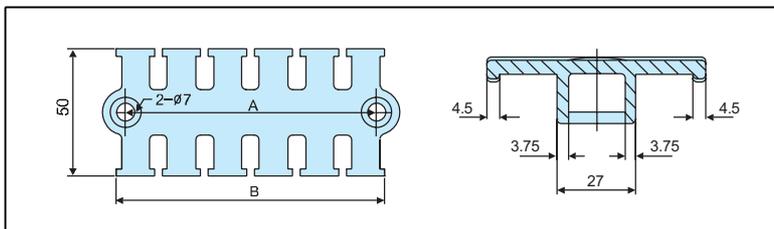
세퍼레이터의 사용길이는 최소20mm부터 최대300mm까지 사용가능하며 5mm간격으로 절단하여 원하는 길이로 사용가능합니다. 크기가 각각 다른 케이블을 크기에 맞게끔 공간분할이 용이하고 세퍼레이터 핀으로 결합하여 어떠한 경우에도 안전하게 케이블의 입선공간을 유지하여 안전하게 케이블을 보호할 수 있습니다. (sb N -Type, sb E-Type, sb S -Type 시리즈에 적용.)

Tie Wrap



The tie wrap separate 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..

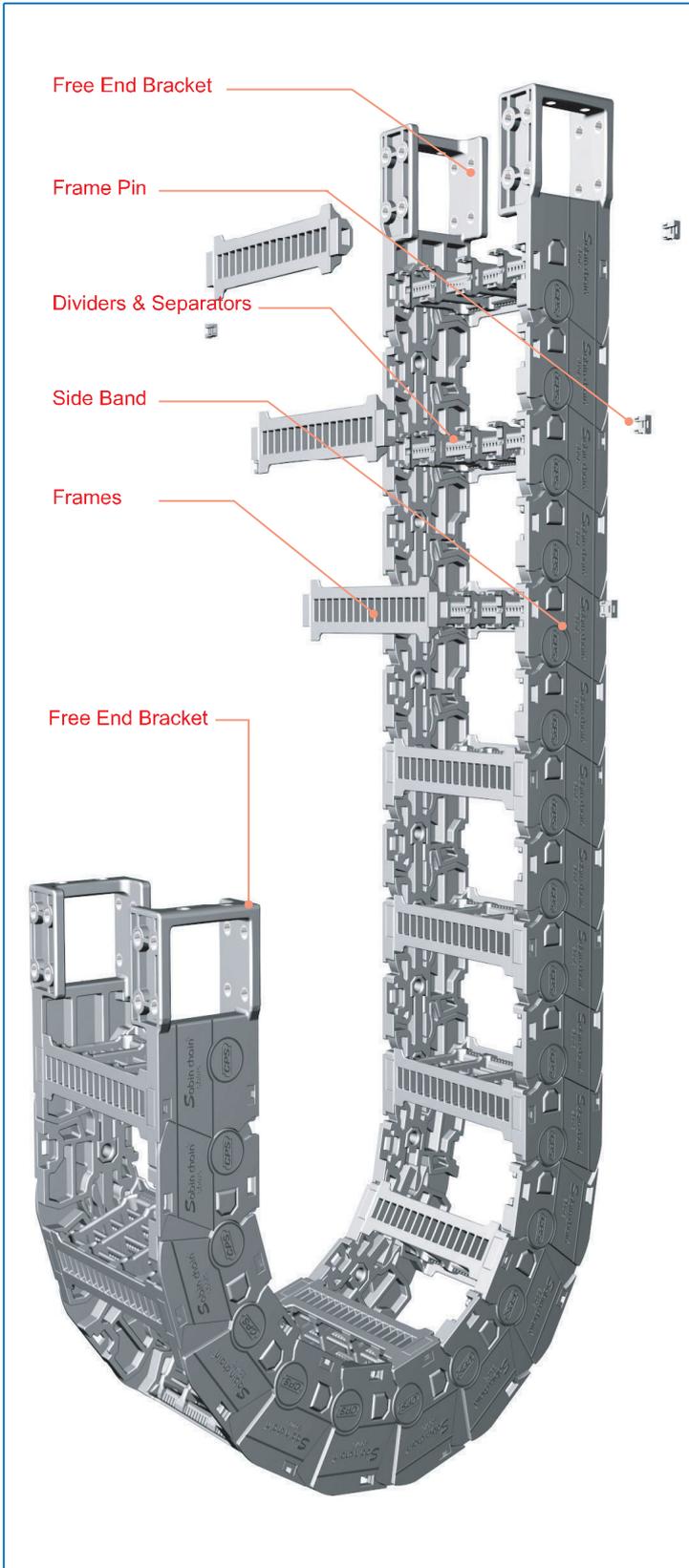


	050	075	100	125	150
A	58	75	98	122	141
B	65	82	105	129	148

Low Dust Low Noise Cable Chain

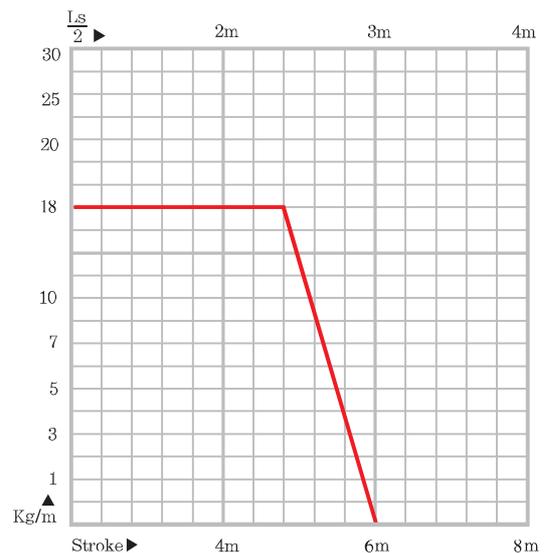
Normal Type

Sabin Chain



sb 060N

- 1 Chain material**
CPS-amide UL94-HB
- 2 Low Noise :** TUV Test 30 dB (DIN EN 61672-1)
- 3 Low Mote :**
IPA Test VDI 2083 CLASS 2
DIN EN 14644-1 ISO CLASS4
- 4 Speed :** 15m/sec
- 5 Temperature :** -40°C ~ +130°C
- 6 Vertical installation Length**
Curve above = max 6.0m
Curve below = max 100m
Side Mounted, Unsupported = max 3.0m
- 7 Applications :** Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.
기존 케이블체인의 적용사업장에 사용가능
- 8 Load diagrams**
self-supporting length



9 Calculation of the chain length

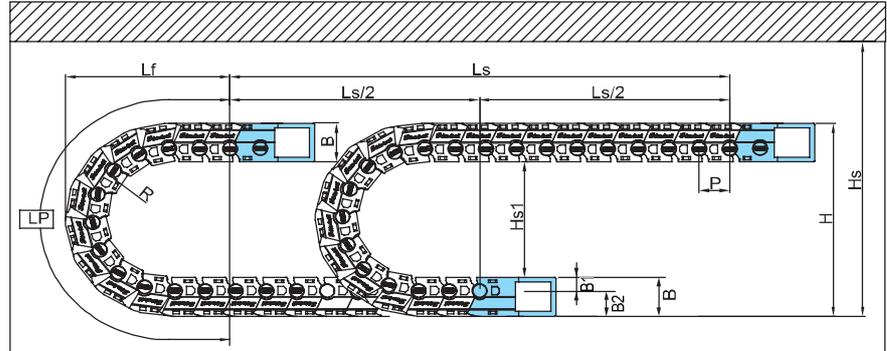
$$L = \frac{L_s}{2} + L_p$$

sb 060N

Low Dust Low Noise Cable Chain

Lay out of the chain

- Ls : Stroke
- Lp : Loop Length
- Lf : Loop Projection
- Hs : Safe Space
- B1:28mm B2:54mm



(Dimensions in mm)

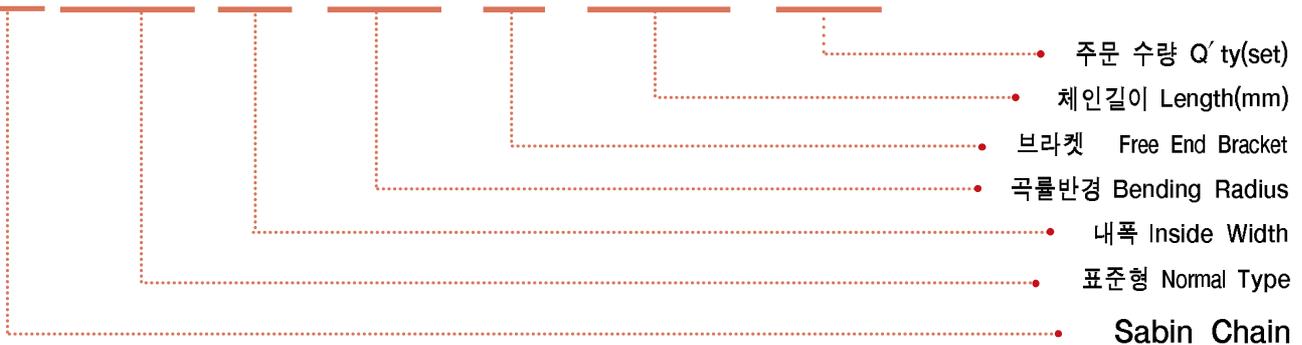
sb 060N Type

Pitch P : 60mm
 Height B : 82mm
 Height H : 2R+108mm
 HS ≧ H+40mm

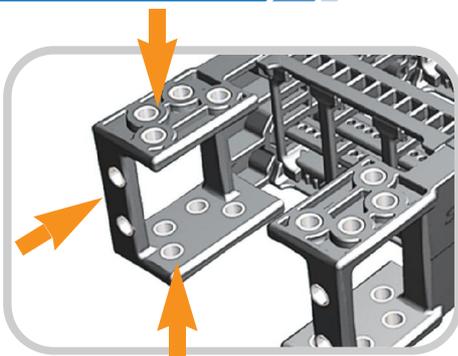
Bending radius R	125	135	150	180	230	270	340
Lp	854	885	932	1,026	1,183	1,309	1,529
Lf	389	399	414	444	494	534	604
H	358	378	408	468	568	648	788

Ordering (주문방법)

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



Bracket Type



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 Bracket. For added strength, steel spacers are inserted into the fixing holes of each Free End Bracket.

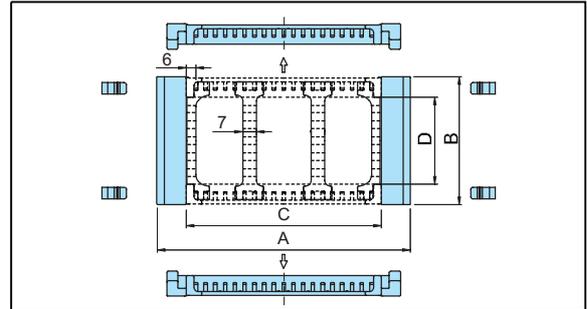
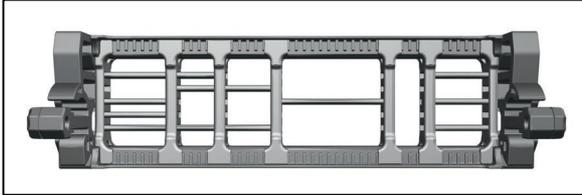
체인을 고정하는 끝부분으로 기존 Easy end bracket 과 Normal end bracket을 하나로 통합한 방식으로 취부의 효율성을 높임. 또한 스틸 와셔를 결합하여 더욱 견고한 취부가 가능.

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

Low Dust Low Noise Cable Chain

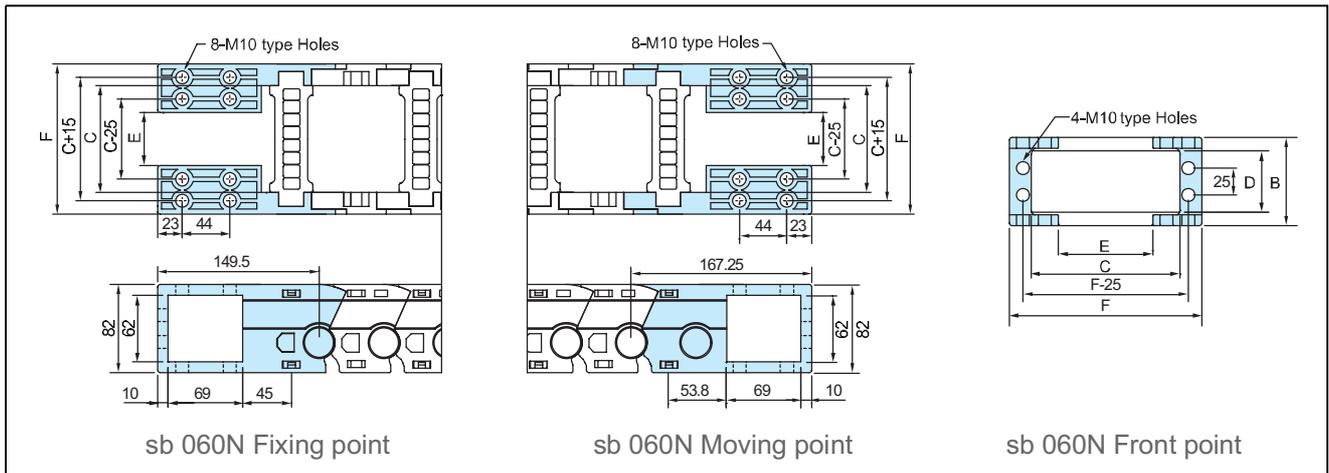
sb 060N

Chain cross section



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
sb 060N.075	115		75			2.56
sb 060N.100	140		100			2.60
sb 060N.125	165		125			2.76
sb 060N.150	190		150			2.84
sb 060N.175	215	82	175	56	125, 135, 150, 180, 230, 270, 340	2.93
sb 060N.200	240		200			3.09
sb 060N.250	290		250			3.24
sb 060N.300	340		300			3.45
sb 060N.350	390		350			3.72
sb 060N.400	440		400			3.97

Free End Bracket



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



Low Dust Low Noise Cable Chain

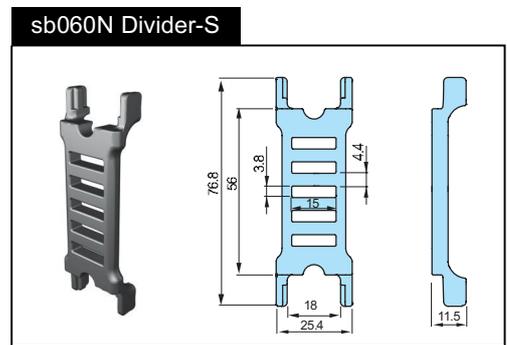
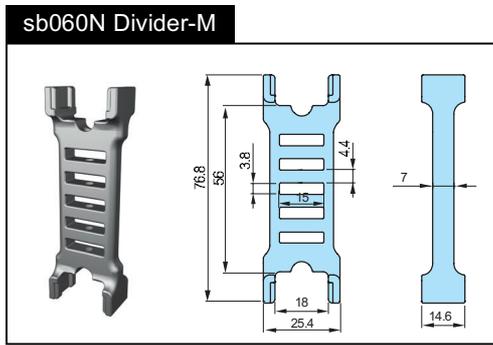
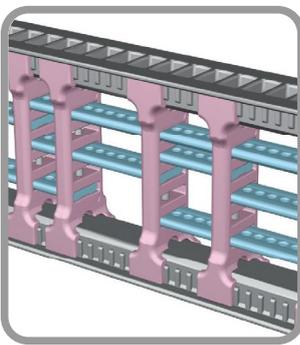
sb 060N

DIVIDERS & SEPARATORS

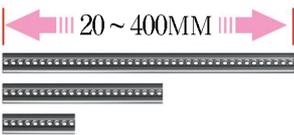
Dividers (Vertical) and Separators (Horizontal) divide the inner chamber of the cable chain to give each cable diameter its own center and keep the cables separate from each other. The use of a separator in some cases, can also reduce the width requirements as two or more levels can be made within the 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.

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



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



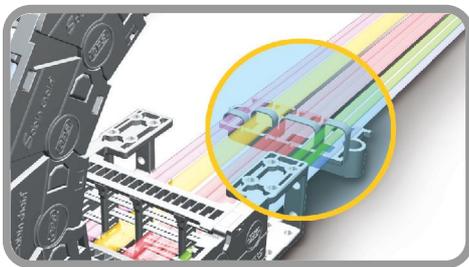
▲ Separator

Separator Pin (SP-Pin) ▶

Available in ranges from 20mm to 400mm in length, and with holes placed strategically every 5mm to line up with the grooves in the frame, cables of virtually any size and shape can be inserted together in the same cable chain effectively and safely. Respectively, levels can be created to eliminate the need for wider applications. (Available on sb N-Type, sb E-Type and sb S-Type)

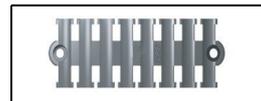
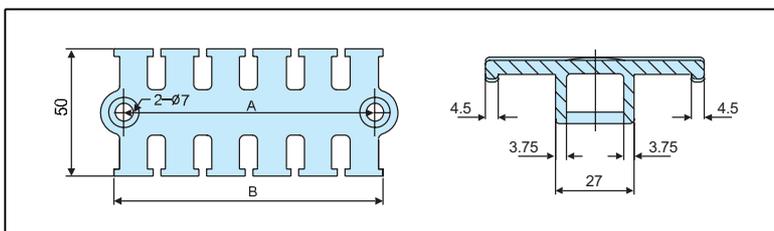
세퍼레이터의 사용길이는 최소20mm부터 최대400mm까지 사용가능하며 5mm간격으로 절단하여 원하는 길이로 사용가능합니다. 크기가 각각 다른 케이블을 크기에 맞게끔 공간분할이 용이하고 세퍼레이터 핀으로 결합하여 어떠한 경우에도 안전하게 케이블의 입선공간을 유지하여 안전하게 케이블을 보호할 수 있습니다. (sb N -Type, sb E-Type, sb S -Type 시리즈에 적용.)

Tie Wrap



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

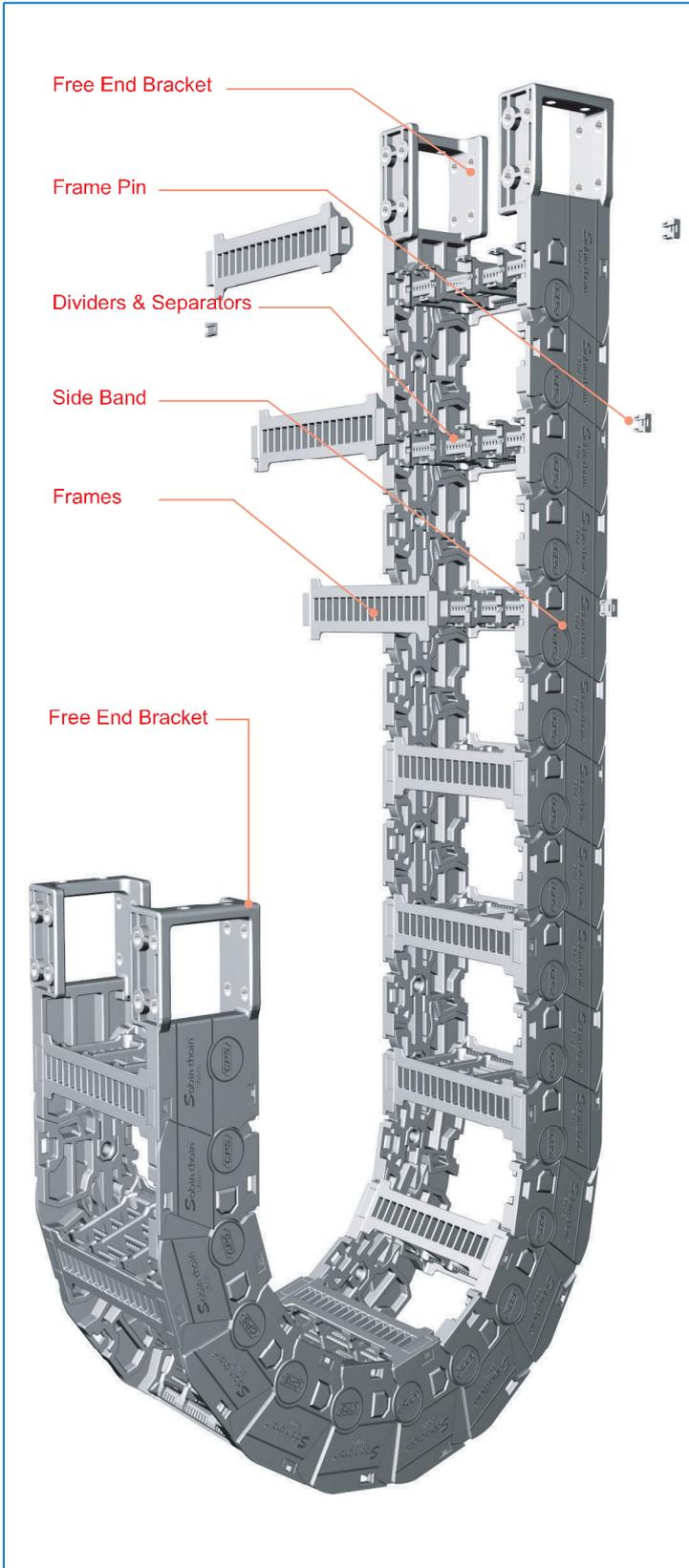
Tie wrap은 Sabin Chain의 브라켓을 기준으로 바깥쪽으로 설치함으로써 체인의 움직임으로 인해 케이블의 유동을 방지하고자 고정하는 시스템으로 케이블의 피복손상 및 단선을 방지하는 역할을 합니다..



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

Low Dust Low Noise Cable Chain

Normal Type



sb 075N

1 Chain material

CPS-amide UL94-HB

2 Low Noise :

TUV Test 30 dB (DIN EN 61672-1)

3 Low Mote :

IPA Test VDI 2083 CLASS 2
DIN EN 14644-1 ISO CLASS4

4 Speed :

15m/sec

5 Temperature :

-40°C ~ +130°C

6 Vertical installation Length

Curve above = max 6.0m
Curve below = max 120m
Side Mounted, Unsupported = max 3.0m

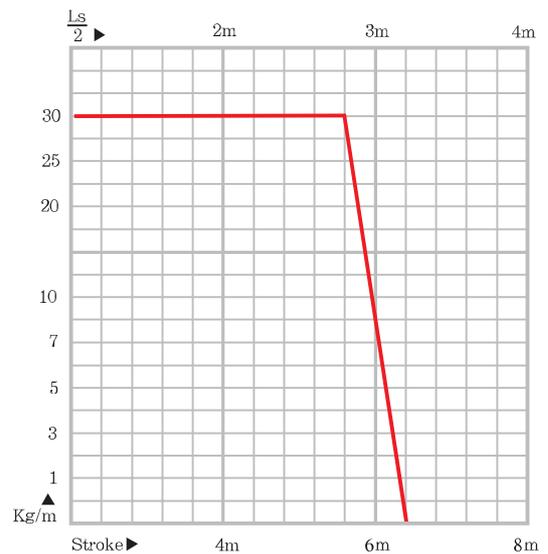
7 Applications :

Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.

기존 케이블체인의 적용사업장에 사용가능

8 Load diagrams

self-supporting length



9 Calculation of the chain length

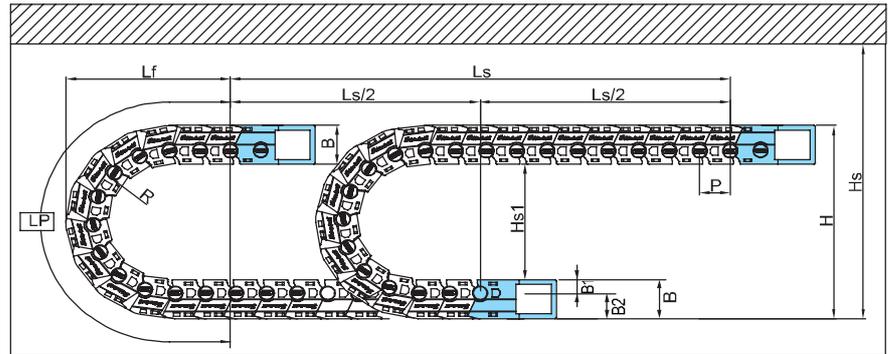
$$L = \frac{L_s}{2} + L_p$$

sb 075N

Low Dust Low Noise Cable Chain

Lay out of the chain

- Ls : Stroke
- Lp : Loop Length
- Lf : Loop Projection
- Hs : Safe Space
- B1:36mm B2:72mm



(Dimensions in mm)

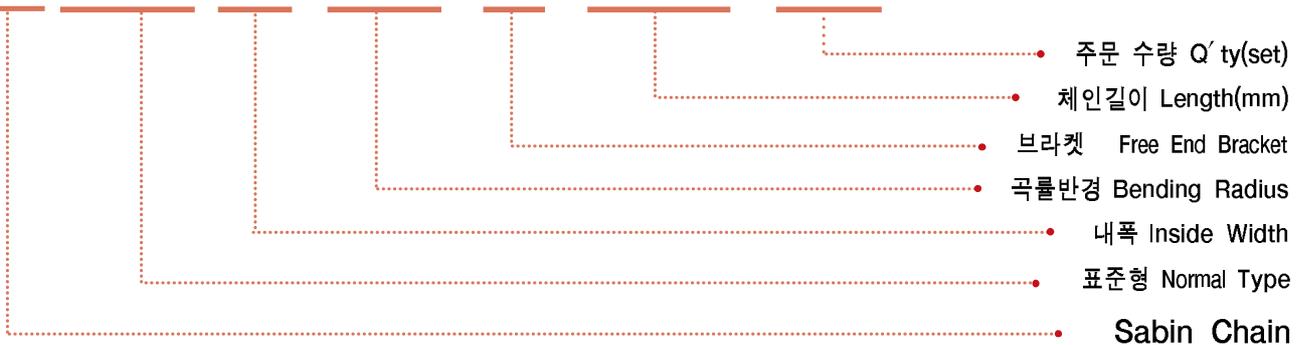
sb 075N Type

Pitch P: 75mm
 Height B: 108mm
 Height H: 2R+144mm
 HS ≥ H+40mm

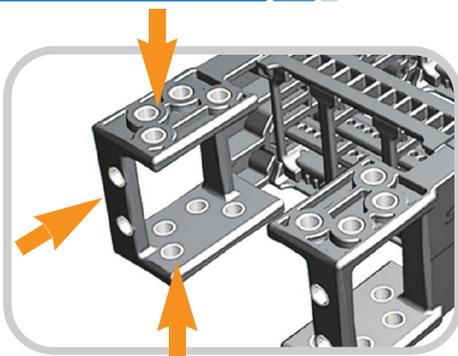
Bending radius R	160	180	230	280	330	380	480
Lp	1,084	1,147	1,304	1,461	1,618	1,775	2,089
Lf	495	515	565	615	665	715	815
H	464	504	604	704	804	904	1,104

Ordering (주문방법)

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



Bracket Type



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 Bracket. For added strength, steel spacers are inserted into the fixing holes of each Free End Bracket.

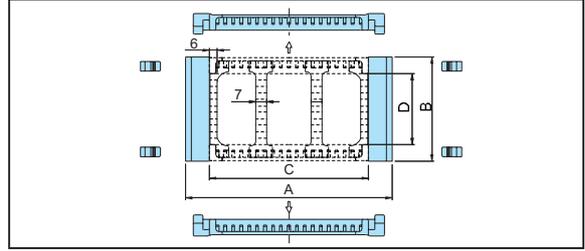
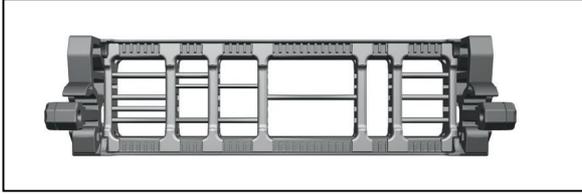
체인을 고정하는 끝부분으로 기존 Easy end bracket 과 Normal end bracket 을 하나로 통합한 방식으로 취부의 효율성을 높임. 또한 스틸 와셔를 결합하여 더욱 견고한 취부가 가능.

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Low Dust Low Noise Cake Chain

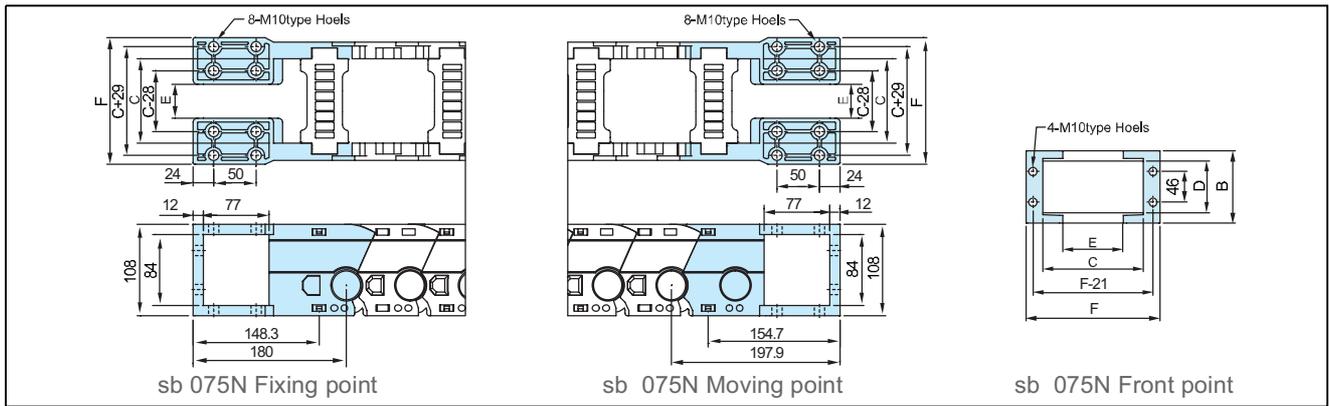
sb 075N

Chain cross section



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
sb 075N.075	115		75			3.65
sb 075N.100	140		100			3.76
sb 075N.125	165		125			3.88
sb 075N.150	190		150			3.97
sb 075N.175	215		175			4.13
sb 075N.200	240		200			4.31
sb 075N.250	290	1C8	250	78	160, 180, 230, 280, 330 380, 480	4.56
sb 075N.300	340		300			4.90
sb 075N.350	390		350			5.27
sb 075N.400	440		400			5.63
sb 075N.450	490		450			5.96
sb 075N.500	540		500			6.24
sb 075N.550	590		550			6.52
sb 075N.600	640		600			6.82

Free End Bracket



Chain Type	F	B	C	D	E	Hole Type
sb 075N.075	125		75		15	M10 Holes
sb 075N.100	150		100		40	
sb 075N.125	175		125		65	
sb 075N.150	200		150		90	
sb 075N.175	225		175		115	
sb 075N.200	250		200		140	
sb 075N.250	300	1C8	250	78	190	
sb 075N.300	350		300		240	
sb 075N.350	400		350		290	
sb 075N.400	450		400		340	
sb 075N.450	500		450		390	
sb 075N.500	550		500		440	
sb 075N.550	600		550		490	
sb 075N.600	650		600		540	



Low Dust Low Noise Cable Chain

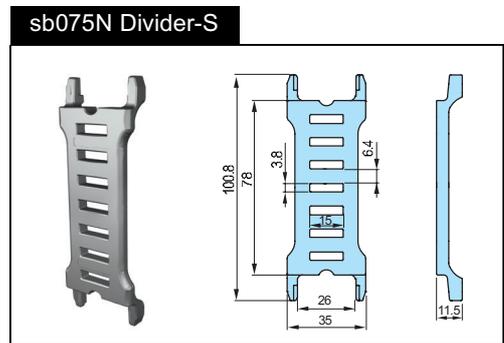
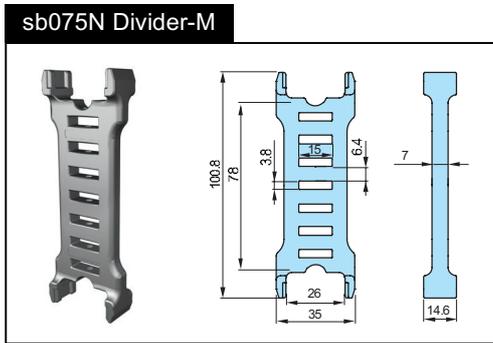
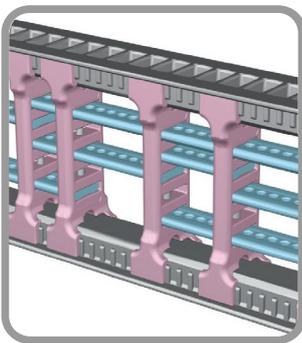
sb 075N

DIVIDERS & SEPARATORS

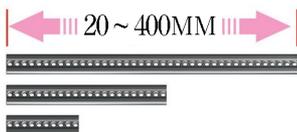
Dividers (Vertical) and Separators (Horizontal) divide the inner chamber of the cable chain to give each cable diameter its own center and keep the cables separate from each other. The use of a separator in some cases, can also reduce the width requirements as two or more levels can be made within the 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 it's 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 사용해야 케이블의 꼬임방지와 피복손상을 방지할 수 있습니다.



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



▲ Separator

Separator Pin (SP-Pin) ▶



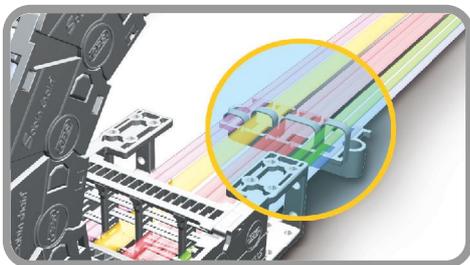
Available in ranges from 20mm to 400mm in length, and with holes placed strategically every 5mm to line up with the grooves in the frame, cables of virtually any size and shape can be inserted together in the same cable chain effectively and safely. Respectively, levels can be created to eliminate the need for wider applications.

(Available on sb N-Type, sb E-Type and sb S-Type)

세퍼레이터의 사용길이는 최소20mm부터 최대400mm까지 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.

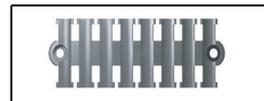
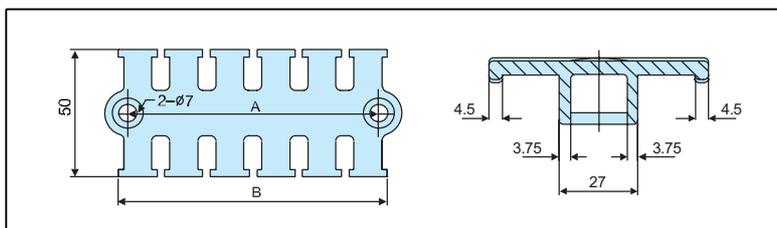
(sb N -Type, sb E-Type, sb S -Type 시리즈에 적용.)

Tie Wrap



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

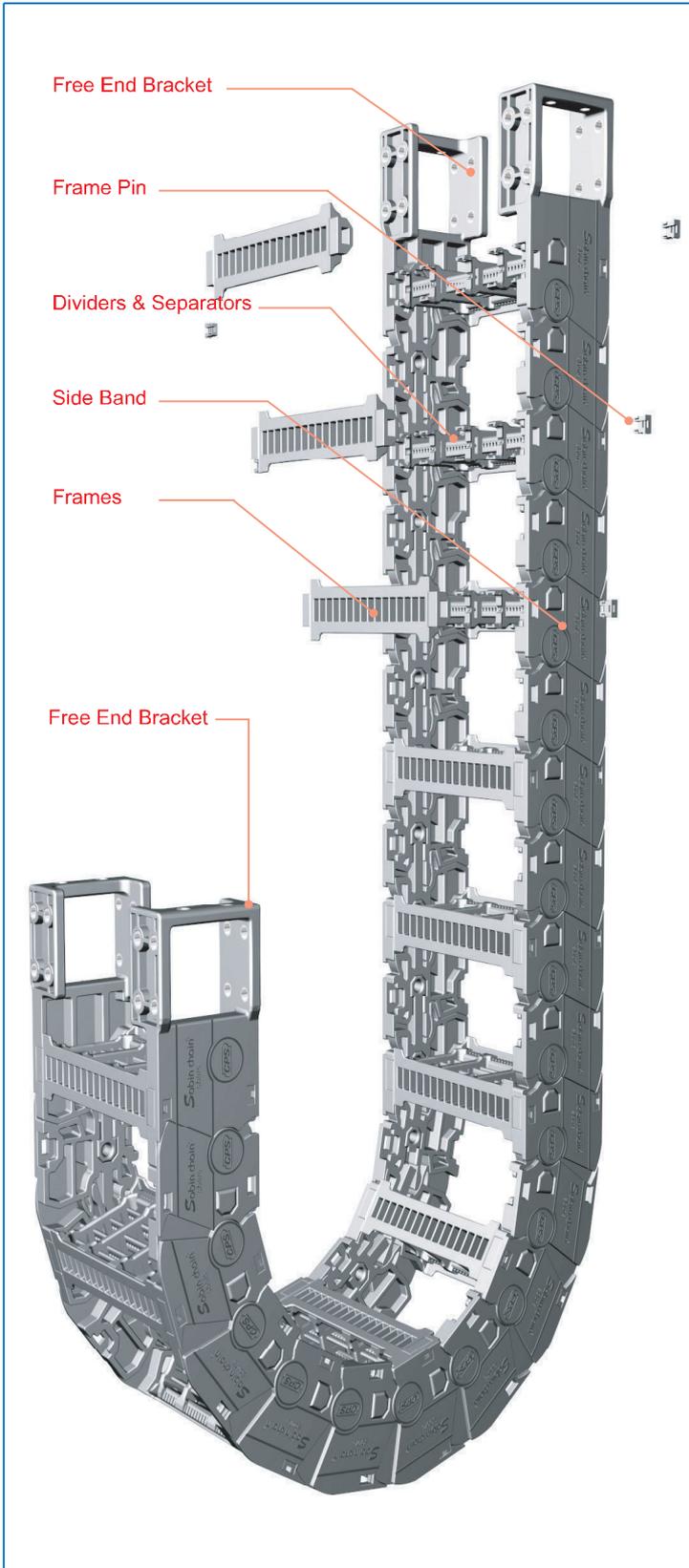
Tie wrap은 Sabin Chain의 브라켓을 기준으로 바깥쪽으로 설치함으로써 체인의 움직임으로 인해 케이블의 유동을 방지하고자 고정하는 시스템으로 케이블의 피복손상 및 단선을 방지하는 역할을 합니다..



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

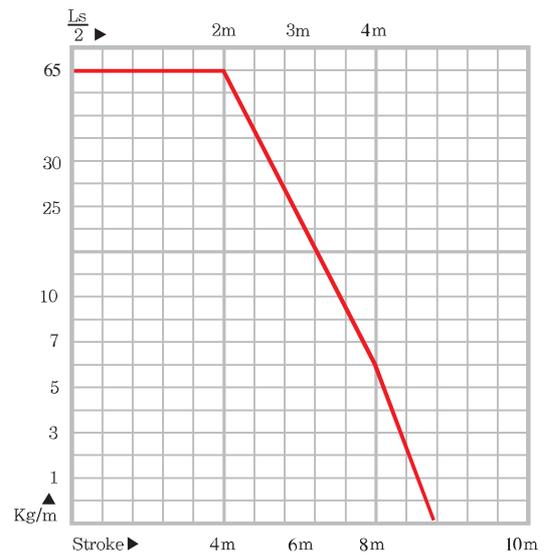
Low Dust Low Noise Cable Chain

Normal Type



sb 100N

- 1 Chain material**
CPS-amide UL94-HB
- 2 Low Noise :** TUV Test 30 dB (DIN EN 61672-1)
- 3 Low Mote :**
IPA Test VDI 2083 CLASS 2
DIN EN 14644-1 ISO CLASS4
- 4 Speed :** 15m/sec
- 5 Temperature :** -40°C ~ +130°C
- 6 Vertical installation Length**
Curve above = max 6.0m
Curve below = max 120m
Side Mounted, Unsupported = max 3.0m
- 7 Applications :** Gantry robot, Machining center, Textile machine, Welding machine, Feeder unit, Assembly Loader, Wood work machine, Fabric machine.
기존 케이블체인의 적용사업장에 사용가능
- 8 Load diagrams self-supporting length**



9 Calculation of the chain length

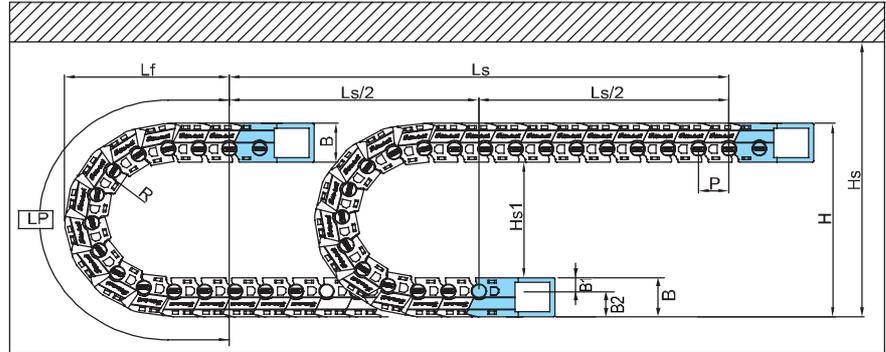
$$L = \frac{L_s}{2} + L_p$$

sb 100N

Low Dust Low Noise Cable Chain

Lay out of the chain

- L_s : Stroke
- L_p : Loop Length
- L_f : Loop Projection
- H_s : Safe Space
- B1:50.5mm B2:89.5mm



(Dimensions in mm)

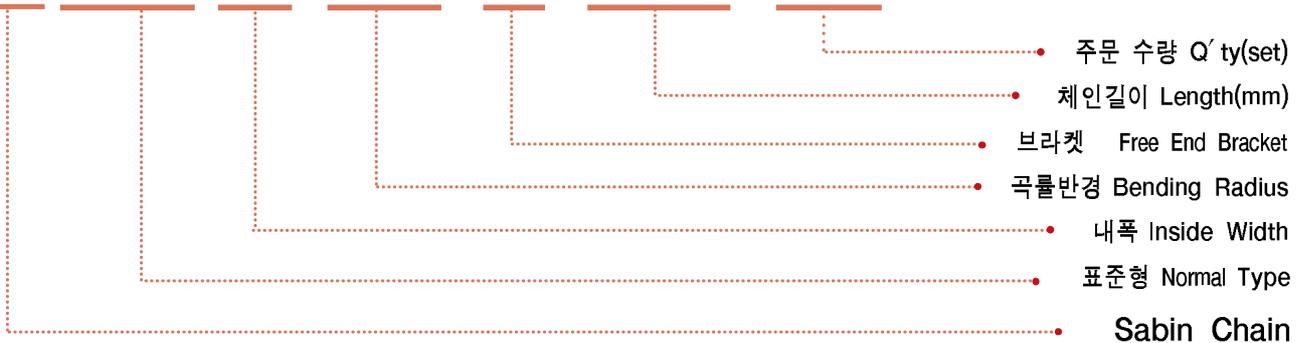
sb 100N Type

Pitch P: 100mm
 Height B: 140mm
 Height H: $2R+179$ mm
 $H_s \geq H+40$ mm

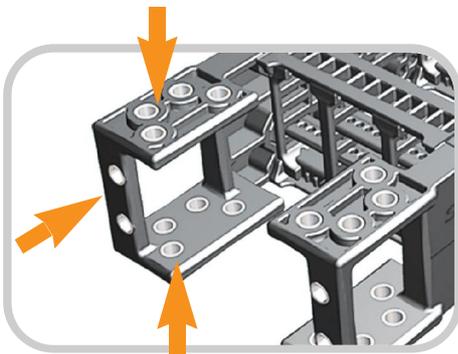
Bending radius R	190	290	390	490	590
L_p	1,258	1,572	1,866	2,200	2,514
L_f	610	710	810	910	1,010
H	559	759	959	1,159	1,359

Ordering (주문방법)

sb 100N. 400. R490 / F - 3000L: 10ST



Bracket Type



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 Bracket. For added strength, steel spacers are inserted into the fixing holes of each Free End Bracket.

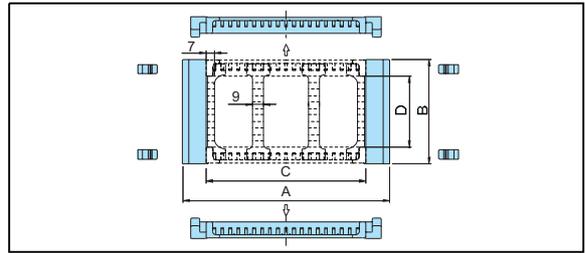
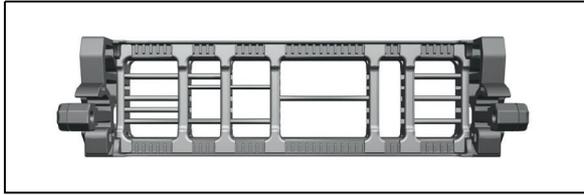
체인을 고정하는 끝부분으로 기존 Easy end bracket 과 Normal end bracket을 하나로 통합한 방식으로 취부의 효율성을 높임. 또한 스틸 와셔를 결합하여 더욱 견고한 취부가 가능.

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

Low Dust Low Noise Cable Chain

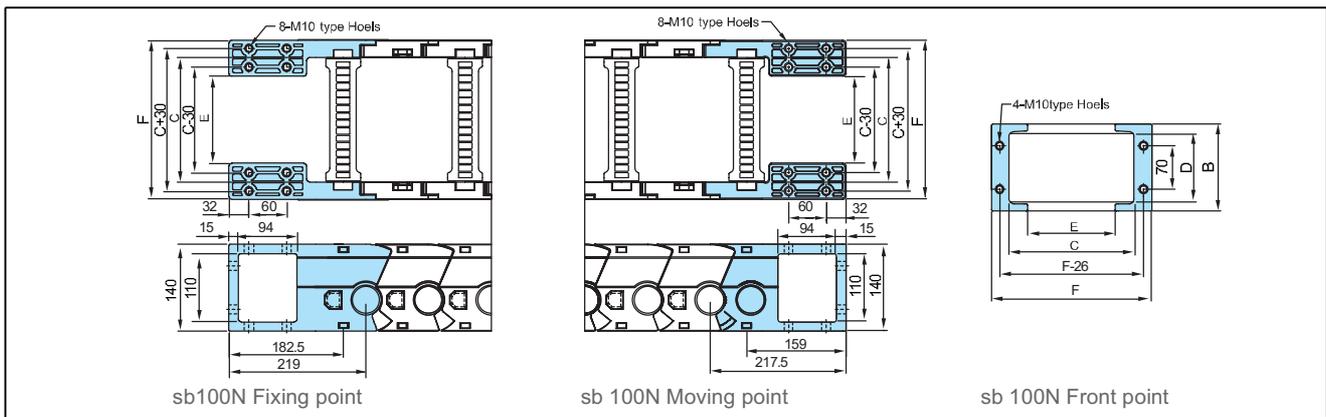
sb 100N

Chain cross section



Chain Type	A	B	C	D	Bending Radius(R)	Weight in kg/m
sb 100N.075	131		75			5.93
sb 100N.100	156		100			6.01
sb 100N.125	181		125			6.09
sb 100N.150	206		150			6.15
sb 100N.175	231		175			6.27
sb 100N.200	256		200			6.40
sb 100N.250	306		250			6.58
sb 100N.300	356	140	300	110	190, 290, 390, 490, 590	6.82
sb 100N.350	406		350			7.08
sb 100N.400	456		400			7.34
sb 100N.450	506		450			7.58
sb 100N.500	556		500			7.78
sb 100N.550	606		550			7.98
sb 100N.600	656		600			8.19

Free End Bracket



Chain Type	F	B	C	D	E	Hole Type
sb 100N.075	131		75		15	
sb 100N.100	156		100		40	
sb 100N.125	181		125		65	
sb 100N.150	206		150		90	
sb 100N.175	231		175		115	
sb 100N.200	256		200		140	
sb 100N.250	306		250		190	
sb 100N.300	356	140	300	110	240	
sb 100N.350	406		350		290	
sb 100N.400	456		400		340	
sb 100N.450	506		450		390	
sb 100N.500	556		500		440	
sb 100N.550	606		550		490	
sb 100N.600	656		600		540	



Low Dust Low Noise Cable Chain

sb 100N

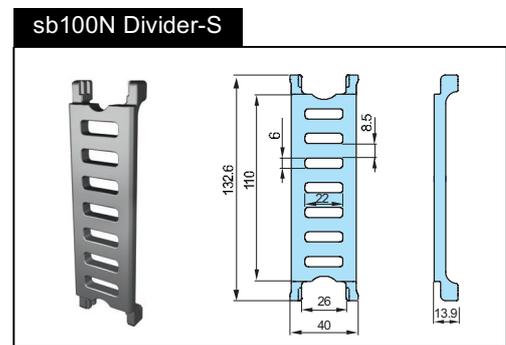
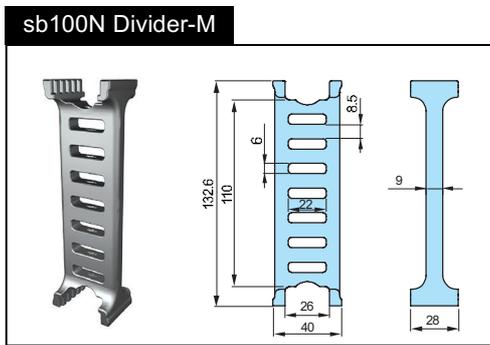
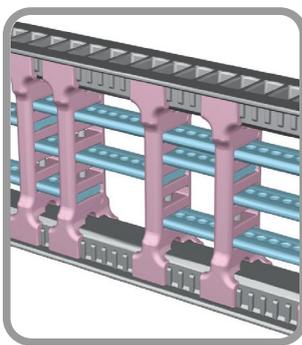
Sabin Chain

DIVIDERS & SEPARATORS

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



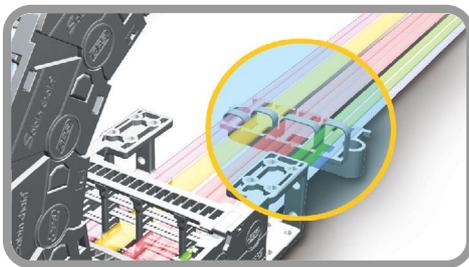
▲ Separator

Separator Pin (SP-Pin) ▶

Available in ranges from 20mm to 600mm in length, and with holes placed strategically every 5mm to line up with the grooves in the frame, cables of virtually any size and shape can be inserted together in the same cable chain effectively and safely. Respectively, levels can be created to eliminate the need for wider applications. (Available on sb N-Type, sb E-Type and sb S-Type)

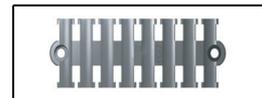
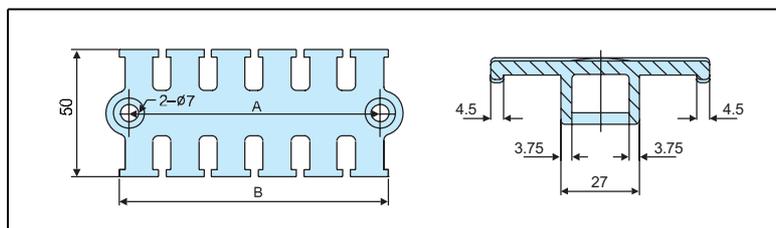
세퍼레이터의 사용길이는 최소20mm부터 최대600mm까지 사용가능하며 5mm간격으로 절단하여 원하는 길이로 사용가능합니다. 크기가 각각 다른 케이블을 크기에 맞게끔 공간분할이 용이하고 세퍼레이터 핀으로 결합하여 어떠한 경우에도 안전하게 케이블의 입선공간을 유지하여 안전하게 케이블을 보호할 수 있습니다. (sb N -Type, sb E-Type, sb S -Type 시리즈에 적용.)

Tie Wrap



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

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



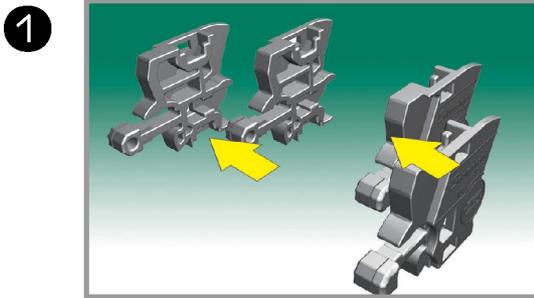
	050	075	100	125	150
A	58	75	98	122	141
B	65	82	105	129	148

Low Dust Low Noise Cable Chain

Assembly procedure

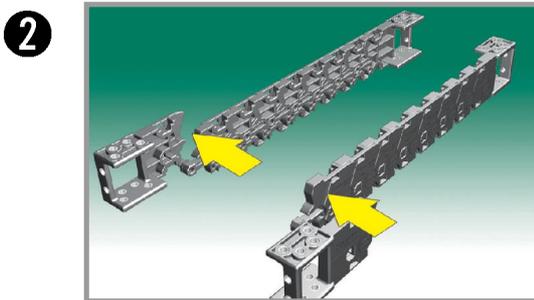
To ensure safe and effective assembly, CPS strongly recommends that you review the following closely before proceeding.

Sabin Chain의 N-Type의 조립순서는 아래와 같이 진행하며 반드시 고무망치를 사용하여 조립하여야 하며 케이블의 입선수량에 따라 디바이더와 세퍼레이터를 조합을 유의하면서 조립합니다.(Sabin Chain E-Type의 조립순서 역시 N-Type과 동일한 순서로 진행합니다.)



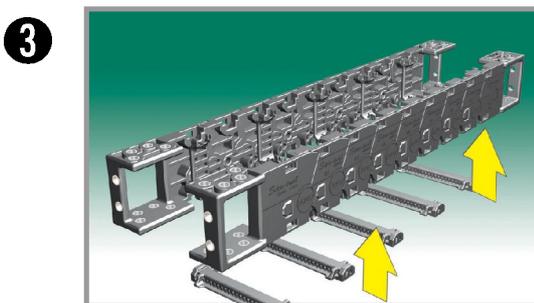
- ① Link together as many sidebands as needed to equal the desired length.

사이드밴드를 원하는 길이만큼 연결.



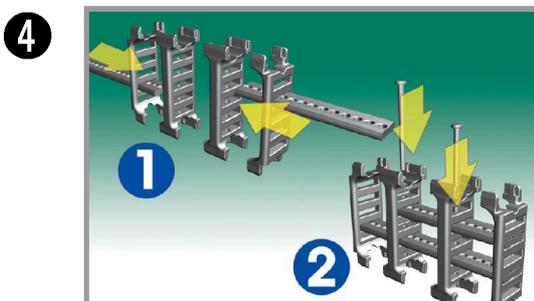
- ② Assemble the end brackets on both ends using the same method.

사이드밴드 양쪽 끝부분에 브라켓을 연결.



- ③ Attach frames starting with the bottom side of the carrier.

하부 프레임은 사이드밴드에 결합.

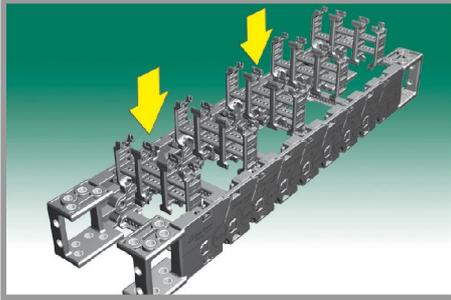


- ④ Insert the separator into the divider at the level(s) desired and when ready, push the locking pin through the holes in the top of the divider straight through the separator right to the end.

디바이더에 세퍼레이터를 결합하고 고정핀으로 디바이더와 세퍼레이터를 고정.

Low Dust Low Noise Cable Chain

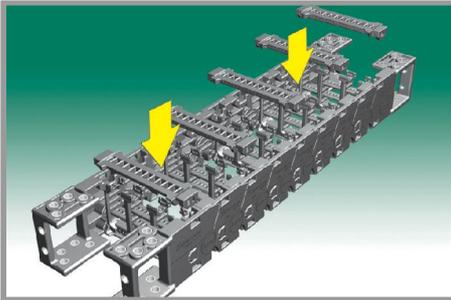
5



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

세퍼레이터가 결합된 디바이더를 하측프레임에 결합.

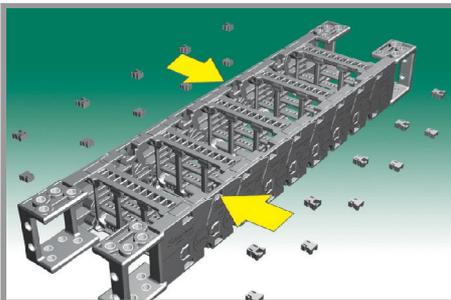
6



- Fix the topside frames to the carrier.

상측 프레임은 사이드밴드와 디바이더의 홈에 정확하게 결합.

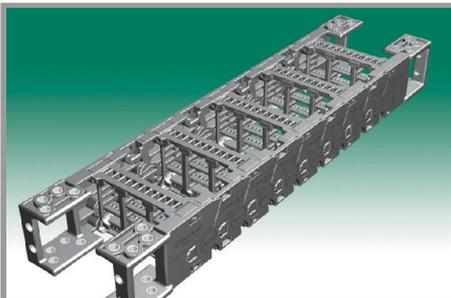
7



- Insert frame pins to secure the frames and complete the carrier.

결합된 프레임과 사이드밴드의 측면의 홈에 프레임 핀으로 결합.

8



- Assembled Sabin N-Type, Sabin Chain

Sabin Chain N-Type조립완료.

