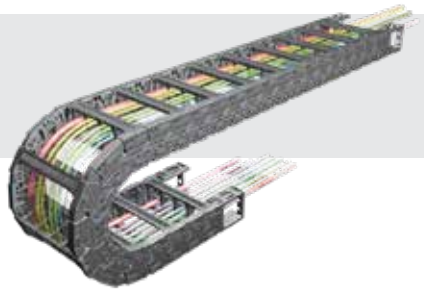


nsb-N Series

Low Noise, Normal type

RoHS CE Ex

Ordering Information

nsb 028 N . 50 . R66

① ② ③

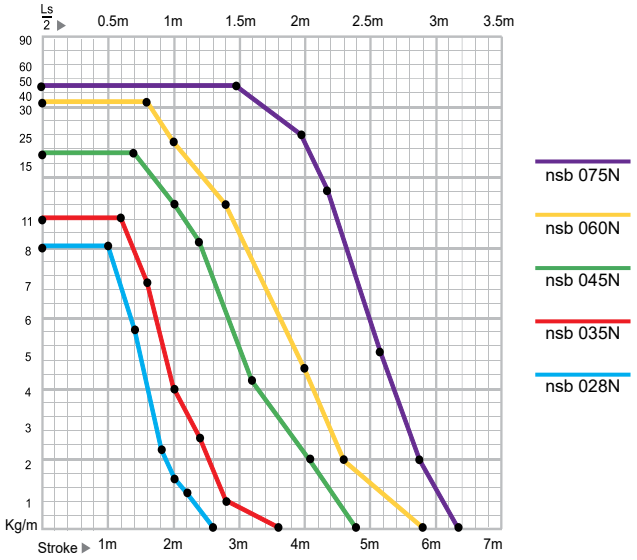
① Pitch (mm)	② Inner Width	③ Bending Radius	Size (Unit : mm) A	B	C	D	Frame type	Weight (kg/m)
028	35 50 55 75 100 125 150 175 200	46 66 86 116 146	55 70 75 95 120 145 170 195 220	38	35 50 55 75 100 125 150 175 200	26		0.79 0.82 0.85 0.90 0.98 1.08 1.18 1.45 1.59
035	35 50 55 75 100 125 150 175 200	55 65 90 115 140 190	55 70 75 95 120 145 170 195 220	52	35 50 55 75 100 125 150 175 200	40		1.10 1.13 1.15 1.18 1.25 1.32 1.41 1.62 1.72
045	50 75 100 125 140 150 175 200 250 300	90 110 135 165 185 235 285	80 105 130 155 170 180 195 205 220 230 270 280 330	66	50 75 100 125 140 150 165 175 190 200 240 250 300	45		2.06 2.14 2.22 2.32 2.38 2.42 2.47 2.51 2.72 2.86 3.09 3.15 3.43
060	75 100 125 150 175 200 250 300 350 400	125 135 150 180 230 270 340	115 140 165 190 215 230 240 280 290 340 390 440	82	75 100 125 150 175 190 200 240 250 300 350 400	56		3.30 3.35 3.51 3.60 3.69 3.78 3.84 4.01 4.05 4.26 4.57 4.85
075	75 100 125 150 175 200 250 300 350 400 450 500 550 600	160 180 230 280 330 380 480	115 140 155 165 190 215 240 280 290 330 340 390 440 490 540 590 640	108	75 100 115 125 150 175 200 240 250 290 300 350 400 450 500 550 600	78		4.80 4.90 4.97 5.02 5.12 5.25 5.46 5.67 5.72 6.02 6.09 6.45 6.83 7.12 7.32 8.06 8.20

See page 65 - 66 for accessories

Specifications

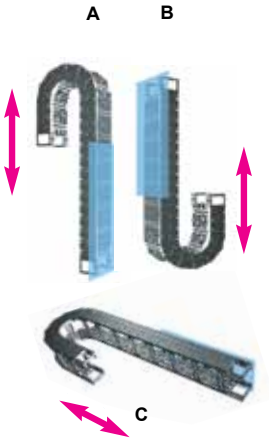
Material	Polyamide with reinforced glass fiber: UL94-HB
Noise Range	30dB
Speed	5m/s
Acceleration	15m/s²
Temperature	-30°C~+130°C
Special Production	ESD, UV, Customized color
Certificate	CE, ATEX(Ex), RoHS

Unsupported Length



Other Length Restrictions

Type	Vertial standing (Max) A	Vertical Hanging (Max) B	Side Mounted Unsupported (Max) C
nsb 028N	2.0m	40m	1.0m
nsb 035N	2.0m	40m	1.0m
nsb 045N	6.0m	100m	2.5m
nsb 060N	6.0m	100m	3.0m
nsb 075N	6.0m	100m	3.0m

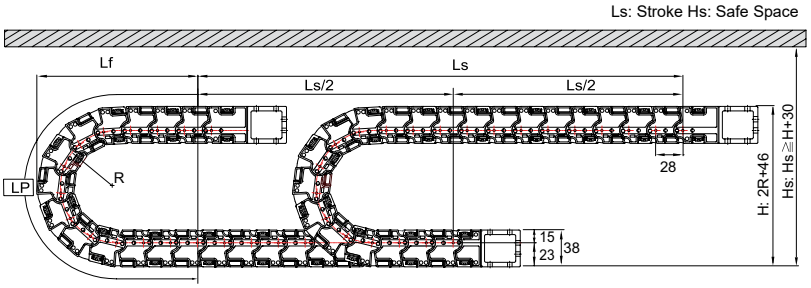


How to Choose Bending Radius

Bending Radius	The biggest Cable inserted	Multiply 8~10 by the OD of the biggest cable
	The biggest Hydraulic Hose inserted	Multiply 15~20 by the OD of the biggest hose

nsb 028N

Calculation of the chain length



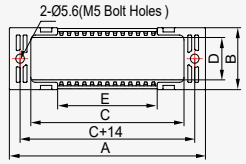
$$[\quad L = \frac{Ls}{2} + Lp \quad]$$

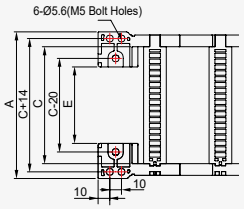
(Unit : mm)

Bending Radius (R)	L p Loop Length	L f Loop Projection	H Moving Height
46	313	153	138
66	376	173	178
86	439	193	218
116	533	223	278
146	627	253	338

Accessories

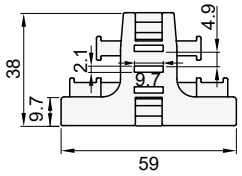
Free end bracket

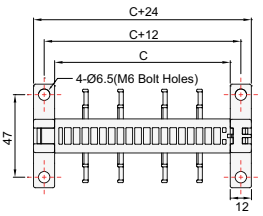




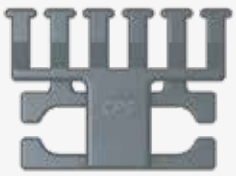
Moving Point

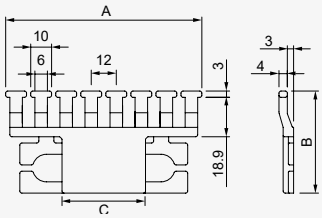
System tie wrap





Tie wrap





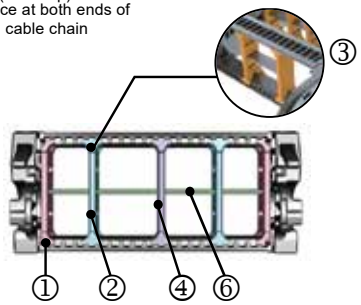
Ordering No.	A Width (Outer)	B Height (Outer)	C Frame	D Height (Inner)	E M.EB Bolt hole width
nsb-FEB028N	60.4	38	35	26	0.4
	75.4		50		15.4
	80.4		55		20.4
	100.4		75		40.4
	125.4		100		65.4
	150.4		125		90.4
	175.4		150		115.4
	200.4		175		140.4
	225.4		200		165.4

Ordering No.	C Frame	Hole Type
S-TW.EB028.35	35	M6 Bolt Holes
S-TW.EB028.50	50	
S-TW.EB028.55	55	
S-TW.EB028.75	75	
S-TW.EB028.100	100	
S-TW.EB028.125	125	
S-TW.EB028.150	150	
S-TW.EB028.175	175	
S-TW.EB028.200	200	

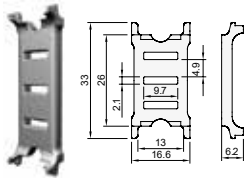
Ordering No.	A	B	C
S-TW036/025CR.35	46	35.4	-
S-TW036/025CR.50	69	48.9	15
S-TW036/025CR.55	70	48.9	20
S-TW036/025CR.75	94	48.9	40
S-TW036/025CR.100	118	48.9	65
S-TW036/025CR.125	142	48.9	90

Dividers

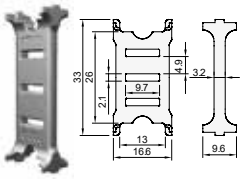
①**S** divider is used to fix a separator that is the same length as the frame
②**M1** divider is used to separate individual cables
③**M2** divider is used to fasten a separator that is shorter than the frame length
④**T** divider can be used at center position to support frame longer than 125mm and up
⑤**W** (Tie wrap) dividers are used to hold the cables in place at both ends of the cable chain



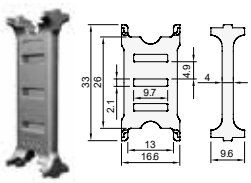
① sb-DV028/S



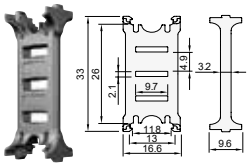
② sb-DV028/M1



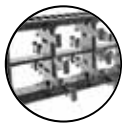
③ sb-DV028/M2



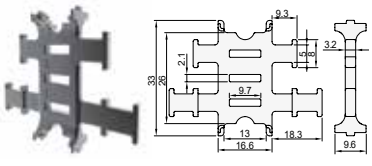
④ sb-DV028/T



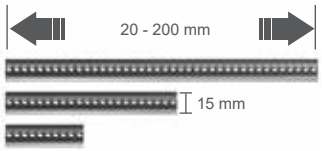
⑤ sb-DV028/W



System Tie Wrap



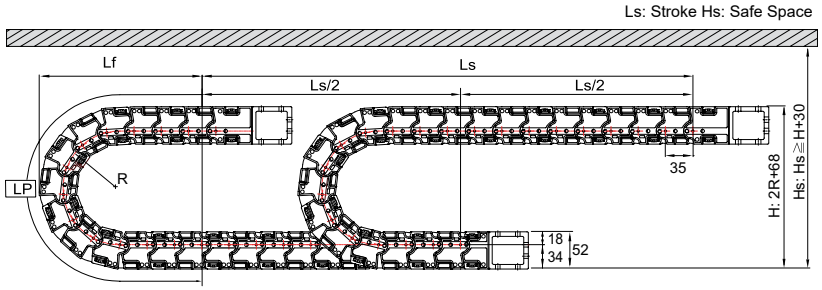
⑥ Separators



Ordering NO.	Frame
S-SP/M.35	35
S-SP/M.50	50
S-SP/M.55	55
S-SP/M.75	75
S-SP/M.100	100
S-SP/M.125	125
S-SP/M.150	150
S-SP/M.175	175
S-SP/M.200	200

nsb 035N

Calculation of the chain length



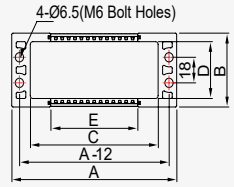
$$[\quad L \quad = \quad \frac{Ls}{2} \quad + \quad Lp \quad]$$

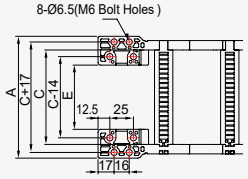
(Unit : mm)

Bending Radius (R)	L p Loop Length	L f Loop Projection	H Moving Height
55	383	194	178
65	414	204	198
90	493	229	248
115	572	254	298
140	650	279	348
190	807	329	448

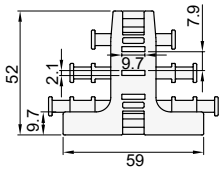
Accessories

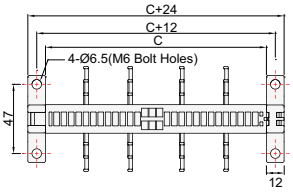
Free end bracket



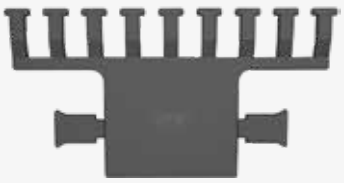


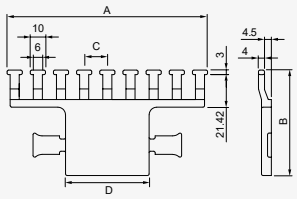
System tie wrap





Tie wrap





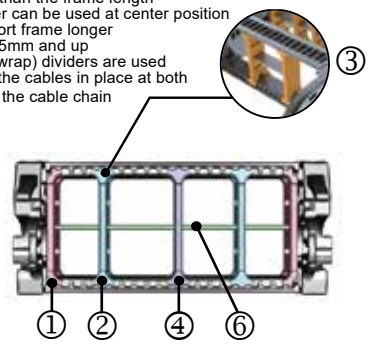
Ordering No.	A Width (Outer)	B Height (Outer)	C Frame	D Height (Inner)	E M.EB Bolt hole width
nsb-FEB035N	64 79 84 104 129 154 179 204 229	52	35 50 55 75 100 125 150 175 200	40	3 18 23 43 68 93 118 143 168

Ordering No.	C Frame	Hole Type
S-TW.EB028.35	35	M6 Bolt Holes
S-TW.EB028.50	50	
S-TW.EB028.55	55	
S-TW.EB028.75	75	
S-TW.EB028.100	100	
S-TW.EB028.125	125	
S-TW.EB028.150	150	
S-TW.EB028.175	175	
S-TW.EB028.200	200	

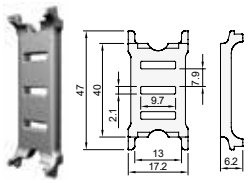
Ordering No.	A	B	C	D
S-TW050/035N.50	82	64.5	12.00	5
S-TW050/035N.55	82		12.00	10
S-TW050/035N.75	107		12.13	30
S-TW050/035N.100	132		15.25	55
S-TW050/035N.125	157		14.70	80
S-TW050/035N.150	182		14.35	105
S-TW050/035N.175	203		12.31	130
S-TW050/035N.200	232		13.88	155

Dividers

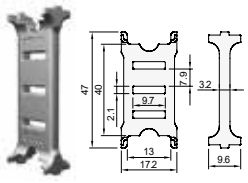
①**S** divider is used to fix a separator that is the same length as the frame
②**M1** divider is used to separate individual cables
③**M2** divider is used to fasten a separator that is shorter than the frame length
④**T** divider can be used at center position to support frame longer than 125mm and up
⑤**W** (Tie wrap) dividers are used to hold the cables in place at both ends of the cable chain



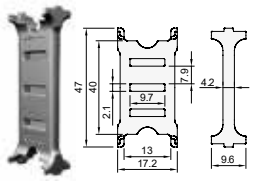
① sb-DV035/S



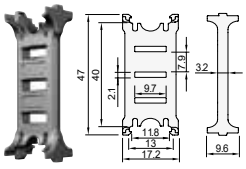
② sb-DV035/M1



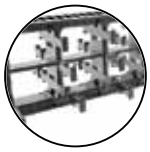
③ sb-DV035/M2

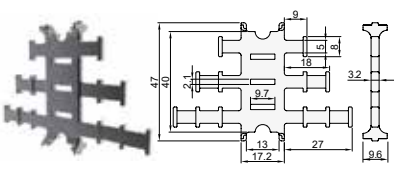


④ sb-DV035/T

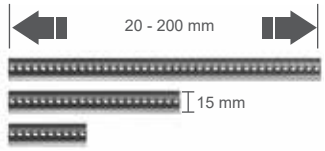


⑤ sb-DV035/W


System Tie Wrap



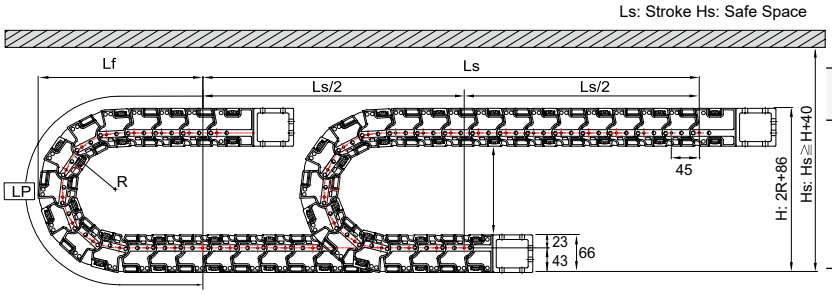
Separators



Ordering NO.	Frame
S-SP/M.35	35
S-SP/M.50	50
S-SP/M.55	55
S-SP/M.75	75
S-SP/M.100	100
S-SP/M.125	125
S-SP/M.150	150
S-SP/M.175	175
S-SP/M.200	200

nsb 045N

Calculation of the chain length



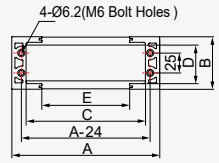
$$[\quad L = \frac{Ls}{2} + Lp \quad]$$

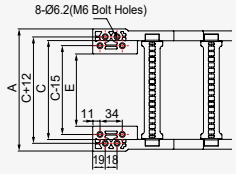
(Unit : mm)

Bending Radius (R)	L p Loop Length	L f Loop Projection	H Moving Height
90	633	291	266
110	695	311	306
135	774	336	356
165	868	366	416
185	931	386	456
235	1,088	436	556
285	1,245	486	656

Accessories

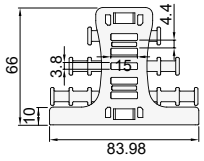
Steel end bracket

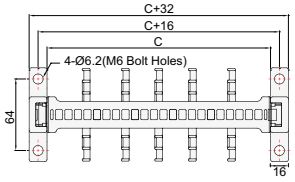




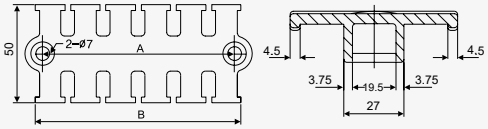
Moving Point

System tie wrap





Tie wrap



Ordering No.	A Width (Outer)	B Height (Outer)	C Frame	D Height (Inner)	E M.EB Bolt hole width	Ordering No.	C Frame	Hole Type	Ordering No.	A	B
	86		50		10	S-TW.EB045.50	50				
	111		75		35	S-TW.EB045.75	75				
	136		100		60	S-TW.EB045.100	100				
	161		125		85	S-TW.EB045.125	125				
	176		140		100	S-TW.EB045.140	140		S- TW50	58	65
	186		150		110	S-TW.EB045.150	150		S-TW75	75	82
nsb-FEB045N	201	66	165	45	125	S-TW.EB045.165	165	M6 Bolt Holes	S-TW100	98	105
	211		175		135	S-TW.EB045.175	175		S-TW125	122	129
	226		190		150	S-TW.EB045.190	190		S-TW150	141	148
	236		200		160	S-TW.EB045.200	200				
	276		240		200	S-TW.EB045.240	240				
	286		250		210	S-TW.EB045.250	250				
	336		300		260	S-TW.EB045.300	300				

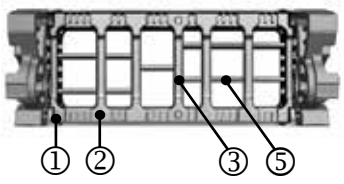
Dividers

①**S** divider is used to fix a separator that is the same length as the frame

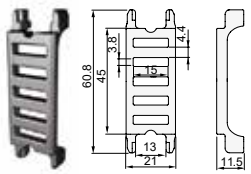
②**M** divider is used to separate individual cables

③**T** divider can be used at center position to support frame longer than 200mm and up

④**W** (Tie wrap) dividers are used to hold the cables in place at both ends of the cable chain



① sb-DV045/S



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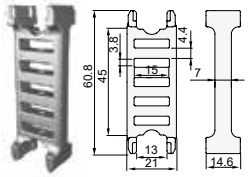

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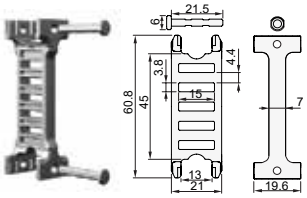
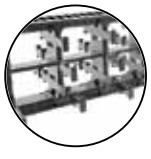
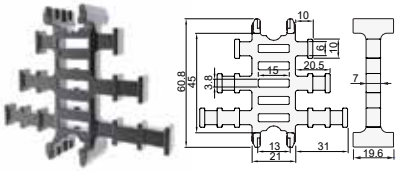


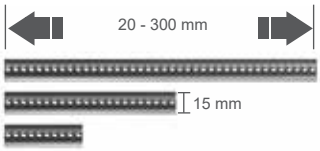
④ sb-DV045/W



System Tie Wrap



Separators

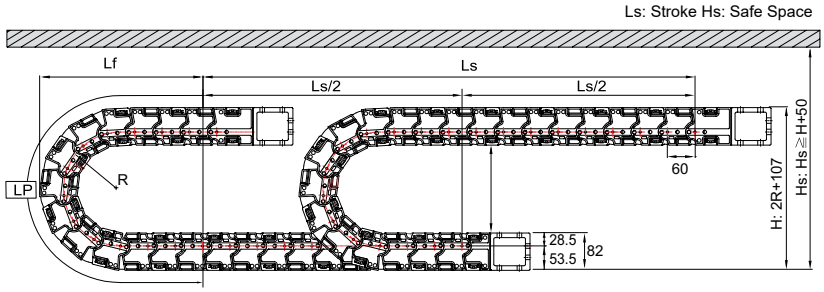


Ordering NO.

sb-SP/400.400
Cut to length (400 mm)

nsb 060N

Calculation of the chain length



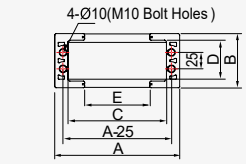
$$[\quad L \quad = \quad \frac{Ls}{2} \quad + \quad Lp \quad]$$

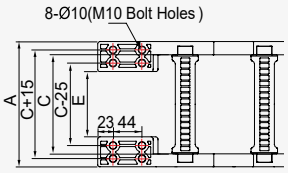
(Unit : mm)

Bending Radius (R)	L p Loop Length	L f Loop Projection	H Moving Height
125	854	389	357
135	885	399	377
150	932	414	407
180	1,026	444	467
230	1,183	494	567
270	1,309	534	647
340	1,529	604	787

Accessories

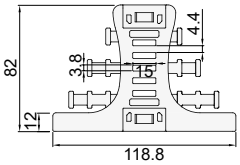
Steel end bracket

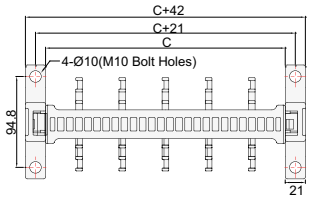




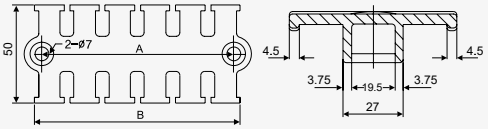
Moving Point

System tie wrap





Tie wrap



Ordering No.	A Width (Outer)	B Height (Outer)	C Frame	D Height (Inner)	E M.EB Bolt hole width
nsb-FEB060N	115	82	75	55	24
	140		100		49
	165		125		74
	190		150		99
	215		175		124
	230		190		139
	240		200		149
	270		230		179
	280		240		189
	290		250		199
	340		300		249
	390		350		299
	440		400		349

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

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

Dividers

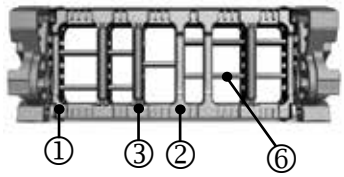
①**S** divider is used to fix a separator that is the same length as the frame

②**M** divider is used to separate individual cables

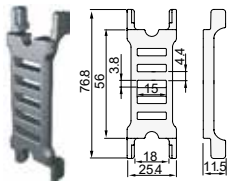
③**R** Side position roller divider to protect abrasion of moving cable at inner side of chain

④**T** divider can be used at center position to support frame longer than 200mm and up

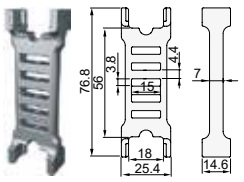
⑤**W** (Tie wrap) dividers are used to hold the cables in place at both ends of the cable chain



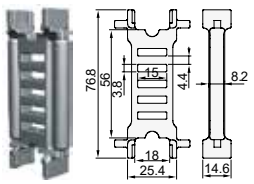
① sb-DV060/S



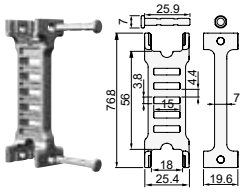
② sb-DV060/M



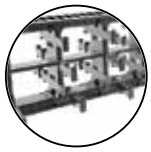
③ sb-DV060/R



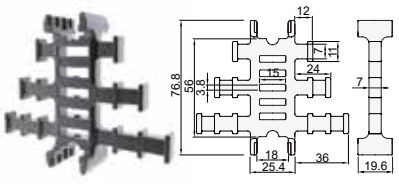
④ sb-DV060/T



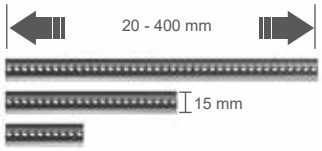
⑤ sb-DV060/W



System Tie Wrap



⑥Separators

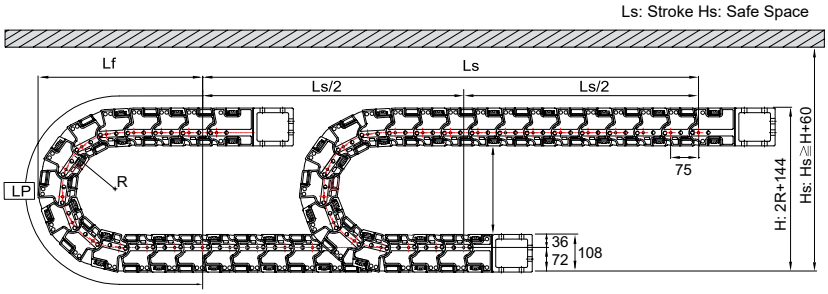


Ordering NO.

sb-SP/400.400
Cut to length (400 mm)

nsb 075N

Calculation of the chain length



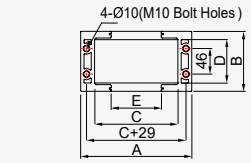
$$[\quad L = \frac{Ls}{2} + Lp \quad]$$

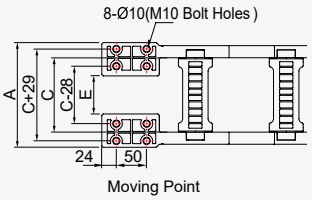
(Unit : mm)

Bending Radius (R)	L p Loop Length	L f Loop Projection	H Moving Height
160	1,084	495	464
180	1,147	515	504
230	1,304	565	604
280	1,461	615	704
330	1,618	665	804
380	1,775	715	904
480	2,089	815	1,104

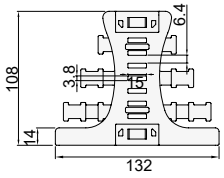
Accessories

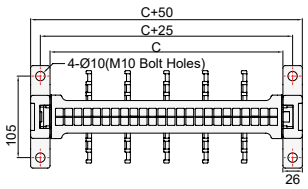
Steel end bracket



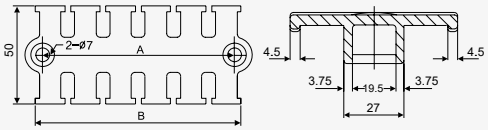


System tie wrap





Tie wrap



Ordering No.	A Width (Outer)	B Height (Outer)	C Frame	D Height (Inner)	E M.EB Bolt hole width	Ordering No.	C Frame	Hole Type	Ordering No.	A	B
	125		75		15	S-TW.EB075.75	75				
	150		100		40	S-TW.EB075.100	100				
	165		115		55	S-TW.EB075.115	115				
	175		125		65	S-TW.EB075.125	125				
	200		150		90	S-TW.EB075.150	150				
	225		175		115	S-TW.EB075.175	175				
	250		200		140	S-TW.EB075.200	200		S- TW50	58	65
	290		240		180	S-TW.EB075.240	240	M10	S-TW75	75	82
nsb-FEB075N	300	108	250	78	190	S-TW.EB075.250	250	Bolt	S-TW100	98	105
	340		290		230	S-TW.EB075.290	290	Holes	S-TW125	122	129
	350		300		240	S-TW.EB075.300	300		S-TW150	141	148
	400		350		290	S-TW.EB075.350	350				
	450		400		340	S-TW.EB075.400	400				
	500		450		390	S-TW.EB075.450	450				
	550		500		440	S-TW.EB075.500	500				
	600		550		490	S-TW.EB075.550	550				
	650		600		540	S-TW.EB075.600	600				

Dividers

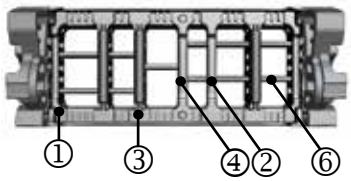
①**S** divider is used to fix a separator that is the same length as the frame

②**M** divider is used to separate individual cables

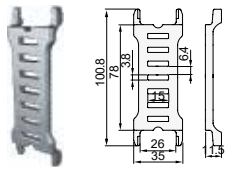
③**R** Side position roller divider to protect abrasion of moving cable at inner side of chain

④**T** divider can be used at center position to support frame longer than 300mm and up

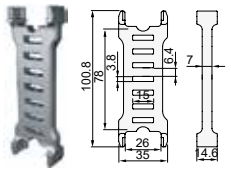
⑤**W** (Tie wrap) dividers are used to hold the cables in place at both ends of the cable chain



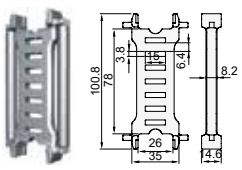
① sb-DV075/S



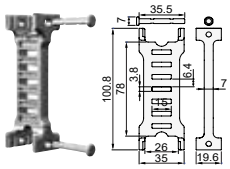
② sb-DV075/M



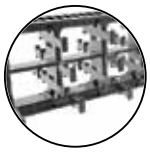
③ sb-DV075/R

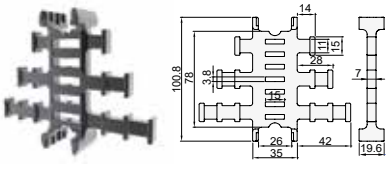


④ sb-DV075/T

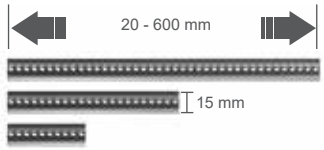


⑤ sb-DV075/W





⑥ Separators



Ordering NO.
sb-SP/600.600 Cut to length (600 mm)