

nsb-S Series

Low Noise, Long Travel Type

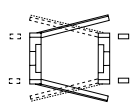
- Silent running-30dB
- Fit for high speed applications
- Low dust



Ordering Information

nsb 044 S . 100 . R185
 ① ② ③

① Pitch (mm)	② Inner Width	③ Bending Radius	Size (Unit : mm)				Frame type	Weight (kg/m)						
			A	B	C	D								
050	50 75 100 125 150 175 200 250 300	110 135 165 185 235 285	71.5	45	104	50	45	2.38						
					129	75		2.44						
					154	100		2.51						
					179	125		2.61						
					194	140		2.67						
					204	150		2.71						
					219	165		2.76						
					229	175		2.80						
					244	190		2.97						
					254	200		3.09						
					294	240		3.32						
					304	250		3.38						
					354	300		3.63						
					065	75 100 125 150 175 190 200 240 250 300 350 400		140 190 220 270 390	89	56	137	75	56	3.29
											162	100		3.34
187	125	3.49												
212	150	3.58												
237	175	3.68												
252	190	3.76												
262	200	3.82												
302	240	3.99												
312	250	4.03												
362	300	4.24												
412	350	4.53												
462	400	4.85												
080	75 100 125 150 175 200 250 300 350 400 450 500 550 600	180 200 250 300 350 400 500	115	76			143				75	76		4.27
							168				100			4.36
							183				115			4.43
					193	125	4.47							
					218	150	4.57							
					243	175	4.67							
					268	200	4.85							
					308	240	5.03							
					318	250	5.07							
					358	290	5.33							
					368	300	5.40							
					418	350	5.71							
					468	400	6.09							
					518	450	6.28							
					568	500	6.45							
618	550	7.08												
668	600	7.20												



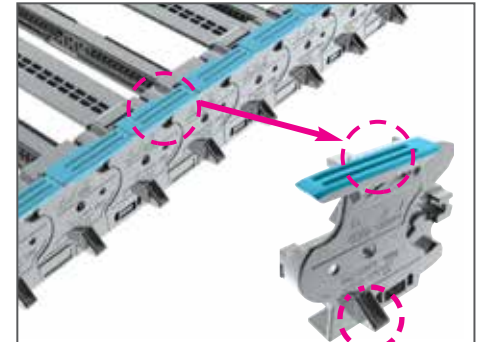
How to Choose Bending Radius

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

Specifications

Material	CPS-Amid(PA6+GF)
Noise Range	30dB
Speed	3m/s
Acceleration	10m/s ²
Temperature	-30°C~+130°C
Certificate	CE, ATEX(Ex), RoHS

nsb chain is designed to minimize dust as forming the groove on skid surface and by installing sliding bar (Nylon) which is same material with nsb cable chain on guide channel

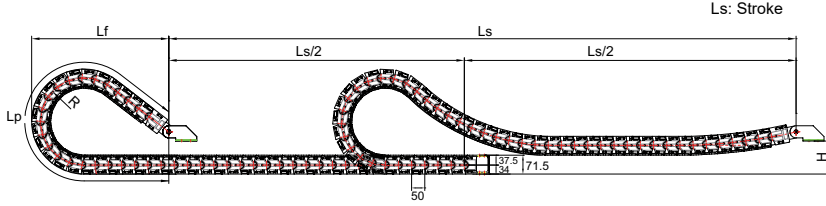


The side supports allow it to maintain a stable operation, making it suitable for high speed applications.

See page 65 - 66 for accessories

nsb 050S

Calculation of the chain length



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

(Unit : mm)

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

Accessories

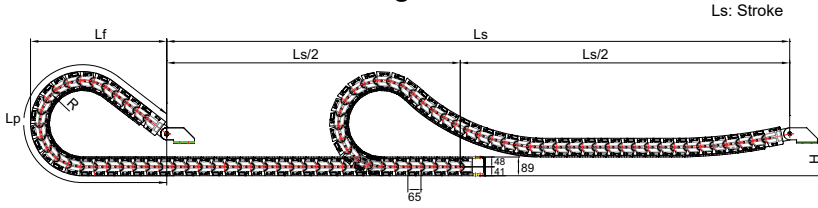
Free/Steel end bracket							System tie wrap			Tie wrap		
Ordering No.	A Width (Outer)	B Height (Outer)	C Frame	D Height (Inner)	E M.EB Bolt hole width	F F.EB Bolt hole width	Ordering No.	C Frame	Hole Type	Ordering No.	A	B
nsb-FEB050S /F nsb-FEB050S /M(SEB)(Steel)	104	71.5	50	45	38.7	62	S-TW.EB045.50	50	M6 Bolt Holes	S- TW50 S- TW75 S- TW100 S- TW125 S- TW150	58	65
	129				63.7	87	S-TW.EB045.75	75				
	154				88.7	112	S-TW.EB045.100	100				
	179				113.7	137	S-TW.EB045.125	125				
	194		128.7		152	S-TW.EB045.140	140					
	204		138.7		162	S-TW.EB045.150	150					
	219		153.7		177	S-TW.EB045.165	165					
	229		163.7		187	S-TW.EB045.175	175					
	244		178.7		202	S-TW.EB045.190	190					
	254		188.7		212	S-TW.EB045.200	200					
	294		228.7		252	S-TW.EB045.240	240					
	304		238.7		262	S-TW.EB045.250	250					
	354		288.7		312	S-TW.EB045.300	300					

Dividers	① sb-DV045/S		② sb-DV045/M	
	<p>① S divider is used to fix a separator that is the same length as the frame</p> <p>② M divider is used to separate individual cables</p> <p>③ T divider can be used at center position to support frame longer than 200mm and up</p> <p>④ W (Tie wrap) dividers are used to hold the cables in place at both ends of the cable chain</p>			
Separators		③ sb-DV045/T		④ sb-DV045/W
Ordering NO.				
sb-SP/400.400 Cut to length (400 mm)				

nsb 065S

Calculation of the chain length

$$[L = \frac{L_s}{2} + L_p] \quad (\text{Unit : mm})$$



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

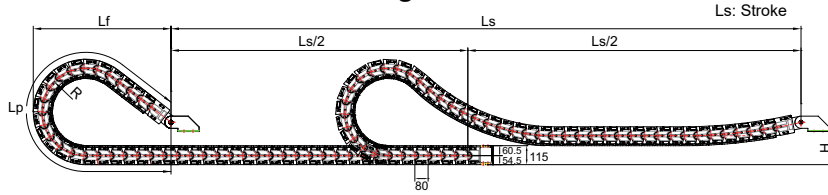
Accessories

Free/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	F F.EB Bolt hole width	G F.EB Bolt width	Ordering No.	C Frame	Hole Type	Ordering No.	A	B
nsb-FEB065S /F nsb-FEB065S /M(SEB)(Steel)	137	89	75	56	62.6	90	50	S-TW.EB060.75	75	M10 Bolt Holes	S-TW50 S-TW75 S-TW100 S-TW125 S-TW150	58 75 98 122 141	65 82 105 129 148
	162		100		87.6	115	75	S-TW.EB060.100	100				
	187		125		112.6	140	100	S-TW.EB060.125	125				
	212		150		137.6	165	125	S-TW.EB060.150	150				
	237		175		162.6	190	150	S-TW.EB060.175	175				
	252		190		177.6	205	165	S-TW.EB060.190	190				
	262		200		187.6	215	175	S-TW.EB060.200	200				
	292		230		217.6	245	205	S-TW.EB060.230	230				
	302		240		227.6	255	215	S-TW.EB060.240	240				
	312		250		237.6	265	225	S-TW.EB060.250	250				
362	300	287.6	315	275	S-TW.EB060.300	300							
412	350	337.6	365	325	S-TW.EB060.350	350							
462	400	387.6	415	375	S-TW.EB060.400	400							

Dividers	① sb-DV060/S	② sb-DV060/M	③ sb-DV060/R
	<p>① S divider is used to fix a separator that is the same length as the frame</p> <p>② M divider is used to separate individual cables</p> <p>③ R Side position roller divider to protect abrasion of moving cable at inner side of chain</p> <p>④ T divider can be used at center position to support frame longer than 200mm and up</p> <p>⑤ W (Tie wrap) dividers are used to hold the cables in place at both ends of the cable chain</p>		
Separators	④ sb-DV060/T	⑤ sb-DV060/W	
	Ordering NO.		
	sb-SP/400.400 Cut to length (400 mm)		

nsb 080S

Calculation of the chain length



$$[L = \frac{L_s}{2} + L_p] \quad (\text{Unit : mm})$$

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

Accessories

Free/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	F F.EB Bolt hole width	G F.EB Bolt width	Ordering No.	C Frame	Hole Type	Ordering No.	A	B	
NSB-FEB080S /F NSB-FEB080S /M(SEB)(Steel)	143	115	75	78	63	104	47	S-TW.EB075.75	75	M10 Bolt Holes	S-TW50 S-TW75 S-TW100 S-TW125 S-TW150	58	65	
	168				88	129	72	S-TW.EB075.100	100					
	183				103	144	87	S-TW.EB075.115	115					
	193				113	154	97	S-TW.EB075.125	125					
	218				125	138	179	122	S-TW.EB075.150					150
	243				150	163	204	147	S-TW.EB075.175					175
	268				175	188	229	172	S-TW.EB075.200					200
	308				200	228	269	212	S-TW.EB075.240					240
	318				250	238	279	222	S-TW.EB075.250					250
	358				300	278	319	262	S-TW.EB075.290					290
	368				350	288	329	272	S-TW.EB075.300					300
	418				400	338	379	322	S-TW.EB075.350					350
	468				450	388	429	372	S-TW.EB075.400					400
	518				500	438	479	422	S-TW.EB075.450					450
	568				550	488	529	472	S-TW.EB075.500					500
	618				600	538	579	522	S-TW.EB075.550					550
668		588	629	572	S-TW.EB075.600	600								

Dividers	<ul style="list-style-type: none"> 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 		
		<p>① sb-DV075/S</p>	<p>② sb-DV075/M</p>
	<p>④ sb-DV075/T</p>	<p>⑤ sb-DV075/W</p>	
<p>System Tie Wrap</p>	<p>Ordering NO.</p> <p>sb-SP/600.600 Cut to length (600 mm)</p>		
<p>Separators</p>			

Guide channel

nsb 050S

A- Zone	C- Zone	Housing (U-Shape)	A	C
			104 129 154 179 194 204 219 229 244 254 294 304 354	50 75 100 125 140 150 165 175 190 200 240 250 300
Side Panel				

nsb 065S

A- Zone	C- Zone	Housing (U-Shape)	A	C
			137 162 187 212 237 252 262 302 312 362 412 462	100 125 150 175 190 200 240 250 300 350 400
Side Panel				

nsb 080S

A- Zone	C- Zone	Housing (U-Shape)	A	C
			143 168 183 193 218 243 268 308 318 358 368 418 468 518 568 618 668	75 100 115 125 150 175 200 240 250 290 300 350 400 450 500 550 600
Side Panel				