

ST-RS Series

Shift Cable Chain - Enclosed Long Travel Type



Ordering Information

ST 044 RS . 100 . R120

① ② ③

① Pitch (mm)	② Inner Width	③ Bending Radius	Size (Unit : mm)				Frame type	Weight (kg/m)					
			A	B	C	D							
044	35	70	73	40.5	35	26		1.09					
	50		88		50			1.15					
	55		93		55			1.17					
	75		113		75			1.24					
	100		138		100			1.33					
	125		163		125			1.47					
	150		188		150			1.59					
	175		213		175			1.88					
	200		238		200			2.05					
	072		50		100			104	69	50	45		2.59
75		129	75	2.67									
100		154	100	2.77									
125		179	125	2.91									
140		194	140	3.02									
150		204	150	3.05									
175		219	175	3.12									
200		229	200	3.17									
250		244	250	3.42									
300		254	300	3.59									
		294		3.91									
		304		3.99									
		354		4.34									
095		75	135	143		90	75	56					3.48
	100	168		100	3.55								
	125	193		125	3.73								
	150	218		150	3.84								
	175	243		175	3.96								
	190	258		190	4.07								
	200	268		200	4.14								
	240	308		240	4.36								
	250	318		250	4.41								
	300	368		300	4.67								
	350	418		350	5.03								
	400	468		400	5.43								
	120	75		180	143		117		75		78		4.75
		100			168				100				4.87
125		183	125		4.96								
150		218	150		5.02								
175		243	175		5.10								
200		268	200		5.28								
250		308	250		5.52								
300		318	300		5.76								
350		358	350		5.82								
400		368	400		5.82								
450		418	450		6.16								
500		468	500		6.25								
550		518	550		6.67								
600		568	600		6.96								
		618			7.42								
		668			7.65								
150		75	305		162	145		75	110				7.87
		100			187			100					7.98
	115	202		115	8.06								
	125	212		125	8.11								
	150	237		150	8.18								
	175	262		175	8.34								
	200	287		200	8.55								
	240	327		240	8.76								
	250	337		250	8.81								
	290	377		290	9.11								
	300	387		300	9.18								
	350	437		350	9.55								
	400	487		400	9.98								
	450	537		450	10.21								
	500	587		500	10.41								
	550	637		550	11.14								
	600	687		600	11.29								

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

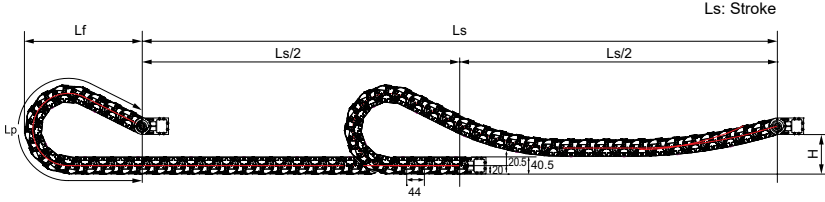
Specifications

Material	Polyamide with reinforced glass fiber : UL94-HB
Noise Range	40dB
Speed	3m/s
Acceleration	10m/s ²
Temperature	-30°C~+130°C
Certificate	CE, ATEX(Ex), RoHS

See page 65 - 66 for accessories

ST 044RS

Calculation of the chain length



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

(Unit : mm)

Bending Radius (R)	L p Loop Length	L f Loop Projection	H Moving Height
70	544	249	110
90	662	289	
120	926	393	
150	1,190	497	

Accessories

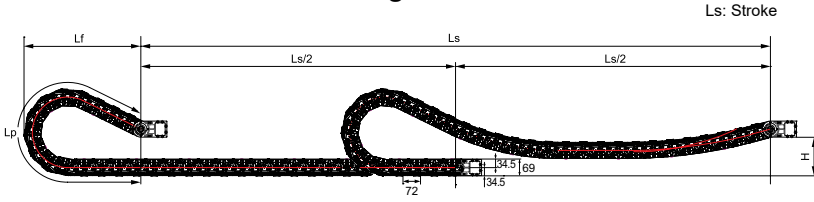
Free end bracket					System tie wrap			Tie wrap				
Ordering No.	A Width (Outer)	B Height (Outer)	C Frame	D Height (Inner)	E M.EB Bolt hole width	Ordering No.	C Frame	Hole Type	Ordering No.	A	B	C
ST-FEB044N/S	73 88 93 113 138 163 188 213 238	40.5	35 50 55 75 100 125 150 175 200	26	0.4 15.4 20.4 40.4 65.4 90.4 115.4 140.4 165.4	S-TW.EB028.35 S-TW.EB028.50 S-TW.EB028.55 S-TW.EB028.75 S-TW.EB028.100 S-TW.EB028.125 S-TW.EB028.150 S-TW.EB028.175 S-TW.EB028.200	35 50 55 75 100 125 150 175 200	M6 Bolt Holes	S- TW036/025CR.35 S- TW036/025CR.50 S- TW036/025CR.55 S- TW036/025CR.75 S- TW036/025CR.100 S- TW036/025CR.125	46 69 70 94 118 142	35.4 48.9 48.9 48.9 48.9 48.9	- 15 20 40 65 90

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 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 			
		<p>① sb-DV028/S</p>	<p>② sb-DV028/M1</p>	<p>③ sb-DV028/M2</p>
	<p>④ sb-DV028/T</p>	<p>⑤ sb-DV028/W</p>		
Separators		<p>Ordering NO.</p> <p>S-SP/M.35 S-SP/M.50 S-SP/M.55 S-SP/M.75 S-SP/M.100 S-SP/M.125 S-SP/M.150 S-SP/M.175 S-SP/M.200</p>	<p>Frame</p> <p>35 50 55 75 100 125 150 175 200</p>	

ST 072RS

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
100	806	380	180
120	917	420	
145	1,063	470	
200	1,400	580	
250	1,840	752	
300	2,280	924	

Accessories

Free end bracket	System tie wrap	Tie wrap

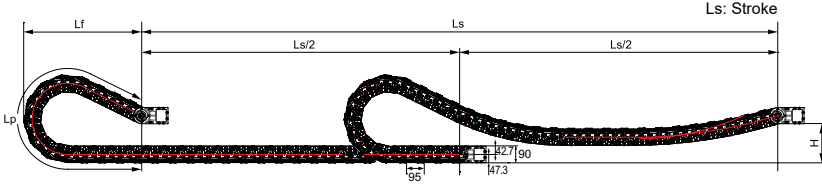
Ordering No.	A Width (Outer)	B Height (Outer)	C Frame	D Height (Inner)	E M.EB Bolt hole width	Ordering No.	C Frame	Hole Type	Ordering No.	A	B							
ST-FEB072N/S	104	69	50	45	10	S-TW.EB045.50	50	M6 Bolt Holes	S-TW50	58	65							
	129				35	S-TW.EB045.75	75											
	154				60	S-TW.EB045.100	100											
	179				85	S-TW.EB045.125	125											
	194				100	S-TW.EB045.140	140											
	204				110	S-TW.EB045.150	150											
	219				125	S-TW.EB045.165	165											
	229				150	S-TW.EB045.175	175											
	244				175	S-TW.EB045.190	190											
	254				200	S-TW.EB045.200	200											
	294				250	S-TW.EB045.240	240											
	304				300	S-TW.EB045.250	250											
	354				210	S-TW.EB045.300	300											
					260													

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
	System Tie Wrap			
	Ordering NO.			

⑤ Separators		<p style="text-align: center;">sb-SP/400.400 Cut to length (400 mm)</p>
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ST 095RS

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
135	1,091	504	210
150	1,178	534	
200	1,479	634	
230	1,666	694	
280	2,146	889	
400	3,232	1,319	

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	Ordering No.	C Frame	Hole Type	Ordering No.	A	B	
ST-FEB095N/S	143	90	75	56	24	S-TW.EB060.75	75	M10 Bolt Holes	S-TW50	58	65	
	168		S-TW.EB060.100		100	S-TW75	75					82
	193		S-TW.EB060.125		125	S-TW100	98					105
	218		S-TW.EB060.150		150	S-TW125	122					129
	243		S-TW.EB060.175		175	S-TW150	141					148
	258		S-TW.EB060.190		190							
	268		S-TW.EB060.200		200							
	298		S-TW.EB060.230		230							
	308		S-TW.EB060.240		240							
	318		S-TW.EB060.250		250							
	368		S-TW.EB060.300		300							
	418		S-TW.EB060.350		350							
	468		S-TW.EB060.400		400							

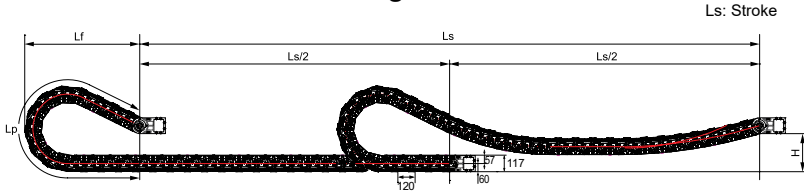
Dividers	<p>① S divider is used to fix a separator that is the same length as the frame</p> <p>② M divider is used to separate individual cables</p> <p>③ R Side position roller divider to protect abrasion of moving cable at inner side of chain</p> <p>④ T divider can be used at center position to support 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>			
		① sb-DV060/S	② sb-DV060/M	③ sb-DV060/R
		④ sb-DV060/T	⑤ sb-DV060/W	
<p>⑥ Separators</p>	<p>Ordering NO.</p> <p>sb-SP/400.400 Cut to length (400 mm)</p>			

ST 120RS

Calculation of the chain length

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

(Unit : mm)



Bending Radius (R)	Lp Loop Length	Lf Loop Projection	H Moving Height
180	1,441	654	260
200	1,559	694	
250	1,864	794	
300	2,178	894	
350	2,701	1,114	
400	3,225	1,334	
450	3,749	1,554	
500	4,273	1,774	

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	Ordering No.	C Frame	Hole Type	Ordering No.	A	B	
ST-FEB120N/S	143	117	75	78	15	S-TW.EB075.75	75	M10 Bolt Holes	S-TW50	58	65	
	168				S-TW.EB075.100	100	S-TW75					75
	183				S-TW.EB075.115	115	S-TW100					98
	193				S-TW.EB075.125	125	S-TW125					122
	218				S-TW.EB075.150	150	S-TW150					141
	243				S-TW.EB075.175	175						
	268				S-TW.EB075.200	200						
	308				S-TW.EB075.240	240						
	318				S-TW.EB075.250	250						
	358				S-TW.EB075.290	290						
	368				S-TW.EB075.300	300						
	418				S-TW.EB075.350	350						
	468				S-TW.EB075.400	400						
	518				S-TW.EB075.450	450						
	568				S-TW.EB075.500	500						
618	S-TW.EB075.550	550										
668	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
Separators	Ordering NO				
	sb-SP/600.600 Cut to length (600 mm)				

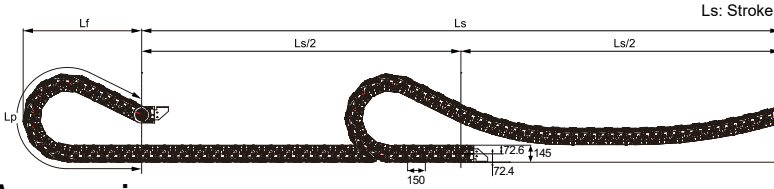
ST 150RS

Calculation of the chain length

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

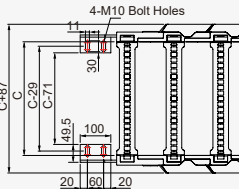
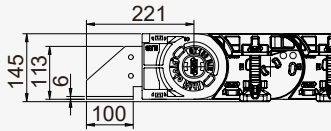
(Unit : mm)

Bending Radius (R)	L p Loop Length	L f Loop Projection	H Moving Height
305	2,272	985	400
405	3,161	1,335	
505	4,050	1,685	
605	4,940	2,035	



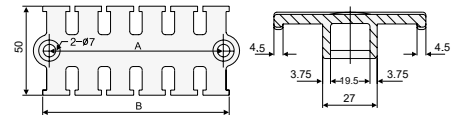
Accessories

Steel end bracket



Moving Point

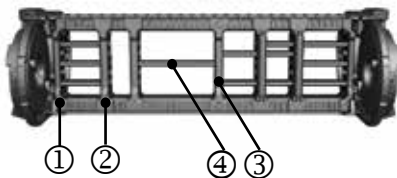
Tie wrap



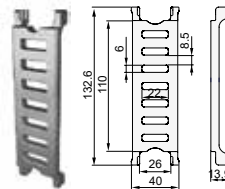
Ordering No.	B Height (Outer)	C Frame	D Height (Inner)	Hole Type	Ordering No.	A	B		
ST-SEB150N	145	75	110	M10 Bolt Holes	S- TW50	58	65		
		100						S-TW75	82
		115						S-TW100	105
		125						S-TW125	129
		150						S-TW150	148
		175							
		200							
		240							
		250							
		290							
		300							
		350							
		400							
		450							
500									
550									
600									

Dividers

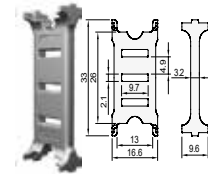
- ① S divider is used to fix a separator that is the same length as the frame
- ② M1 divider is used to separate individual cables
- ③ T divider can be used at center position to support frame longer than 300mm and up



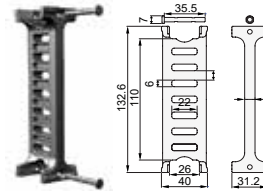
① sb-DV100/S



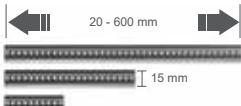
② sb-DV100/M



③ sb-DV100/T



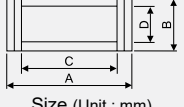
Separators

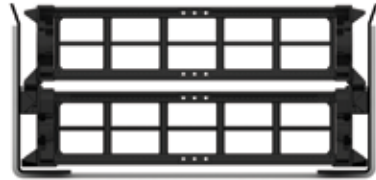


Ordering NO.

sb-SP/600.600
Cut to length (600 mm)

Guide channel

 Size (Unit : mm)	ST 044RS	ST 072RS	ST 095RS	ST 120RS	ST 150RS	
A	73	104	143	143	162	
	88	129	168	183	168	
	93	154	193	193	187	
	113	179	218	243	202	
	138	194	243	268	212	
	163	204	258	308	237	
	188	219	268	318	262	
	213	229	308	418	287	
	238	244	318	468	327	
	238	254	368	518	337	
B	40.5	69	90	117	145	
	C		50	75	75	75
			75	100	100	100
			100	125	125	115
			125	150	150	125
			150	175	175	150
			175	200	200	150
			200	225	225	175
			225	250	250	200
			250	275	275	200
275			300	300	240	
D	26	45	56	78	110	

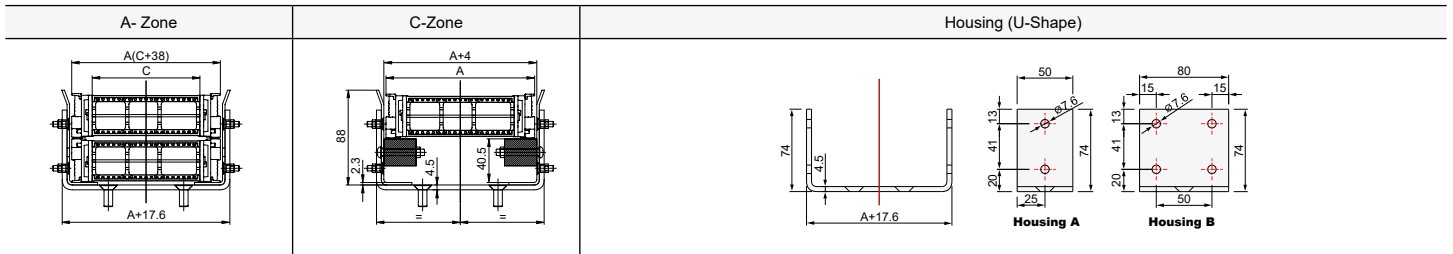


A- Zone

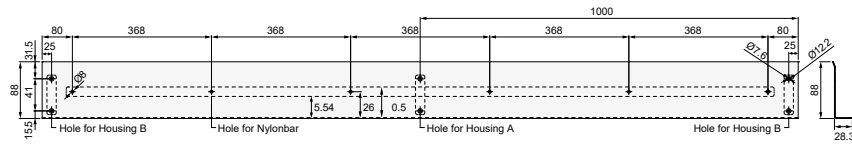


C- Zone

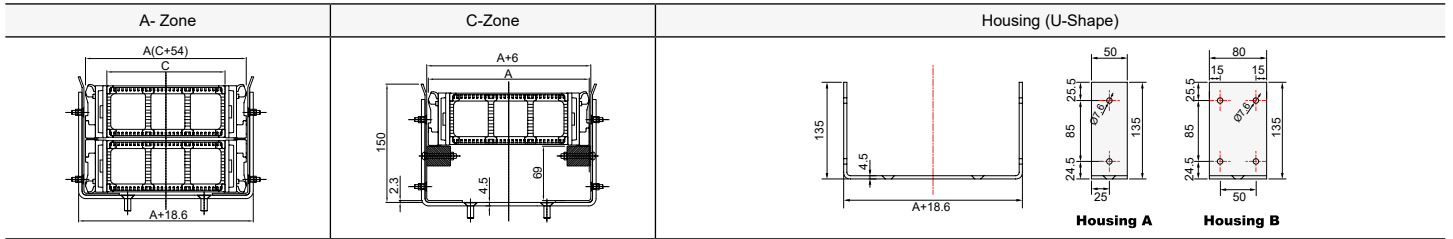
ST 044RS



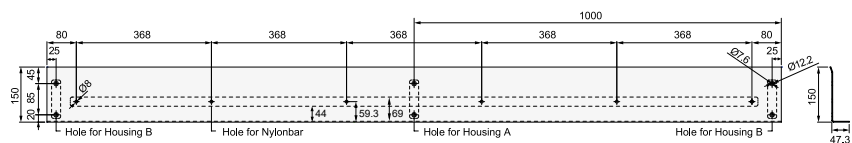
Side Panel



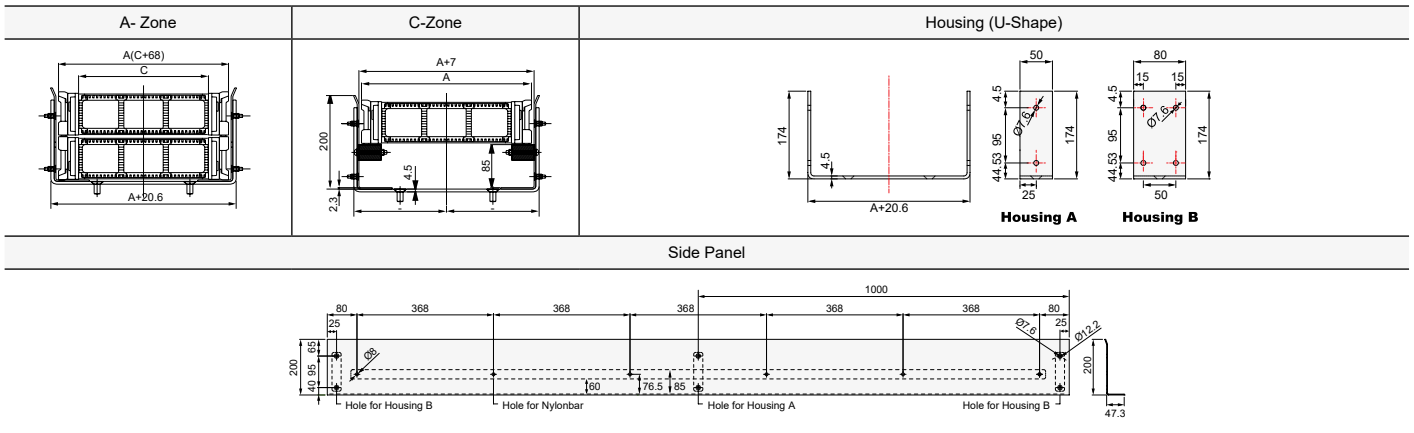
ST 072RS



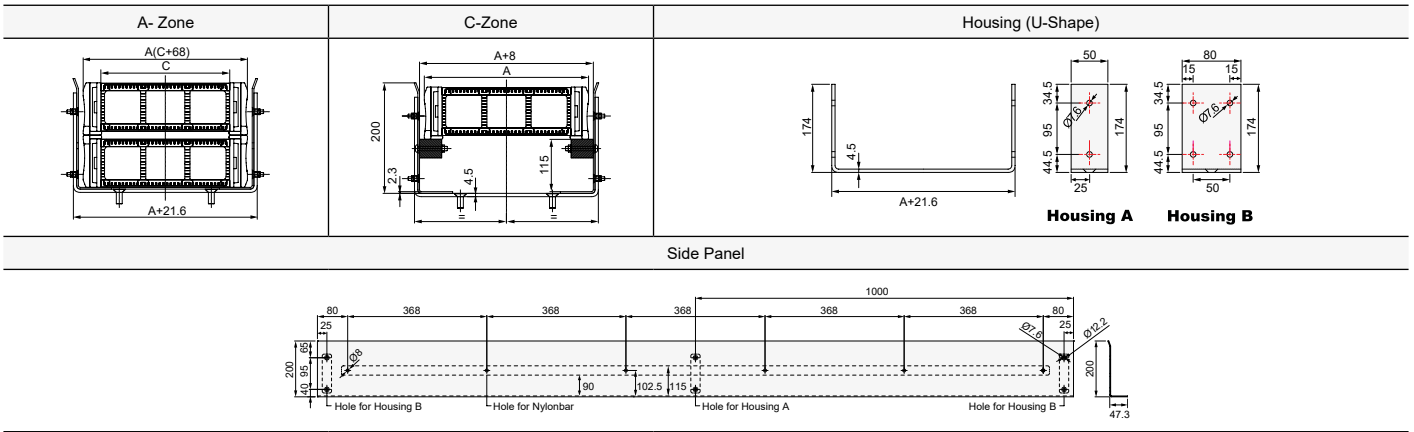
Side Panel



ST 095RS



ST 120RS



ST 150RS

