

HI-TECH SOLUTIONS FOR CABLE PROTECTION IN MOTION

Controlwell presents a vast range of cable drag chains in glass fibre reinforced polyamide.

These drag chains are available in a wide range of basic designs like:

- **Open Type**
- **Semi Enclosed Type**
- **Fully Enclosed Type**
- **Sliding Type**

With the introduction of 'SABIN' cable drag chains which offer speeds as high as 15 m/s, noise as low as 30 dB and extremely low mote, Controlwell is one of the few suppliers across India to be able to offer solutions for sensitive environments.

SABIN chains are available in a wide range of basic designs like:

- **Open Type**
- **Fully Enclosed Type**
- **Sliding Type**

We at Controlwell work along with you to design and deploy solutions for all your needs of cable protection in motion.

CABLE DRAG CHAINS

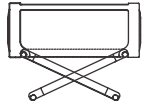
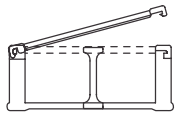
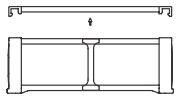
CABLE PROTECTION
IN MOTION



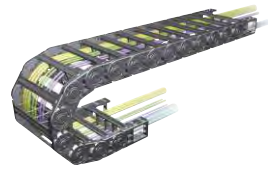
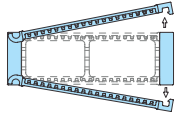
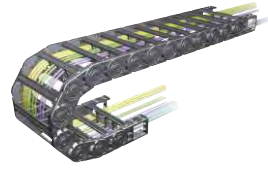
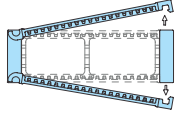
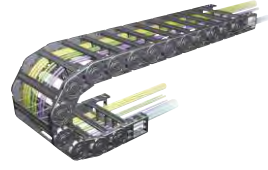
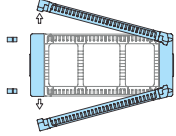
CABLE DRAG CHAINS IN GLASS FIBRE REINFORCED POLYAMIDE

CPS Chain - N Type (Both Side Open)



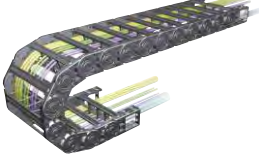
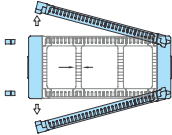
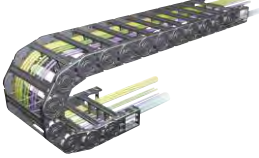
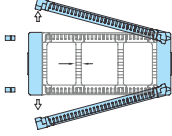
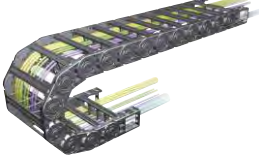
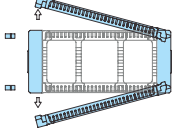
	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	CPS015.06	18, 28, 38	12.6	13	6	10	 Attached Side Band
	CPS015.10		16.6	13	10	10	
	CPS015.15		21.6	13	15	10	
	CPS015.20		26.6	13	20	10	
	CPS020.15	28, 38, 48	24	20	15	14.5	 Hinged Side Band
	CPS020.20		29	20	20	14.5	
	CPS020.30		39	20	30	14.5	
	CPS020.40		49	20	40	14.5	
	CPS030.15	38,48,75,100	29	26	15	19	 Hinged Side Band
	CPS030.25		39	26	25	19	
	CPS030.35		49	26	35	19	
	CPS030.50		64	26	50	19	
	CPS033.27	35, 45, 75, 100, 120	45	31	27	23	 Separated Side Band
	CPS033.37		55	31	37	23	
	CPS033.47		65	31	47	23	
	CPS033.67		85	31	67	23	
	CPS033.77		95	31	77	23	

Shift Chain - N Type (Both Side Open)

	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	ST044N.035	50, 70, 90, 120, 150	56	38	35	26	
	ST044N.050		71	38	50	26	
	ST044N.055		76	38	55	26	
	ST044N.075		96	38	75	26	
	ST044N.100		121	38	100	26	
	ST044N.125		146	38	125	26	
	ST044N.150		171	38	150	26	
	ST044N.175		196	38	175	26	
	ST044N.200		221	38	200	26	
	ST055N.035	65,75,100,125,150,200	56	52	35	40	
	ST055N.050		71	52	50	40	
	ST055N.055		76	52	55	40	
	ST055N.075		96	52	75	40	
	ST055N.100		121	52	100	40	
	ST055N.125		146	52	125	40	
	ST055N.150		171	52	150	40	
	ST055N.175		196	52	175	40	
	ST055N.200		221	52	200	40	
	ST072N.050	72,100,120,145,200,250,300	82	66	50	45	
	ST072N.075		107	66	75	45	
	ST072N.100		132	66	100	45	
	ST072N.125		157	66	125	45	
	ST072N.150		182	66	150	45	
	ST072N.175		207	66	175	45	
	ST072N.200		232	66	200	45	
	ST072N.250		282	66	250	45	
	ST072N.300		332	66	300	45	

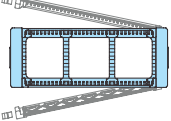
CABLE DRAG CHAINS IN GLASS FIBRE REINFORCED POLYAMIDE

Shift Chain - N Type (Both Side Open)

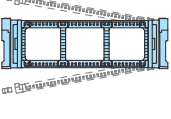
	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	ST095N.075	135,150,200,230,280,400	113	82	75	56	
	ST095N.100		138	82	100	56	
	ST095N.125		163	82	125	56	
	ST095N.150		188	82	150	56	
	ST095N.175		213	82	175	56	
	ST095N.200		238	82	200	56	
	ST095N.250		288	82	250	56	
	ST095N.300		338	82	300	56	
	ST095N.350		388	82	350	56	
	ST095N.400		438	82	400	56	
	ST120N.075	180,200,250,300,350,400,500	117	108	75	78	
	ST120N.100		142	108	100	78	
	ST120N.125		167	108	125	78	
	ST120N.150		192	108	150	78	
	ST120N.175		217	108	175	78	
	ST120N.200		242	108	200	78	
	ST120N.250		292	108	250	78	
	ST120N.300		324	108	300	78	
	ST120N.350		392	108	350	78	
	ST120N.400		442	108	400	78	
	ST120N.450		492	108	450	78	
	ST120N.500		542	108	500	78	
	ST120N.550		592	108	550	78	
	ST120N.600		642	108	600	78	
	ST150N.075	205,305,405,505,605	121	140	75	110	
	ST150N.100		146	140	100	110	
	ST150N.125		171	140	125	110	
	ST150N.150		196	140	150	110	
	ST150N.175		221	140	175	110	
	ST150N.200		246	140	200	110	
	ST150N.250		296	140	250	110	
	ST150N.300		346	140	300	110	
	ST150N.350		396	140	350	110	
	ST150N.400		446	140	400	110	
	ST150N.450		496	140	450	110	
	ST150N.500		546	140	500	110	
	ST150N.550		596	140	550	110	
	ST150N.600		646	140	600	110	

CABLE DRAG CHAINS IN GLASS FIBRE REINFORCED POLYAMIDE

Shift Chain - E Type (Both Side Enclosed)

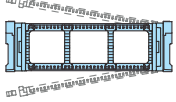
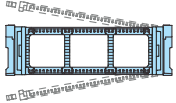
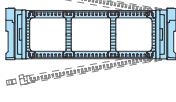
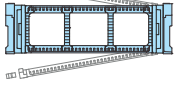
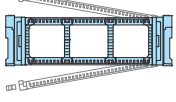
	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	ST044E.035	70,90,120,150	56	38	35	24.5	
	ST044E.055		76	38	55	24.5	
	ST044E.075		96	38	75	24.5	
	ST044E.100		121	38	100	24.5	
	ST055E.050	100,125,150,200	71	52	50	38.5	
	ST055E.075		96	52	75	38.5	
	ST055E.100		121	52	100	38.5	
	ST055E.125		146	52	125	38.5	
	ST055E.150		171	52	150	38.5	
	ST072E.050	120,145,200,250,300	82	66	50	44	
	ST072E.075		107	66	75	44	
	ST072E.100		132	66	100	44	
	ST072E.125		157	66	125	44	
	ST072E.150		182	66	150	44	
	ST095E.100	150,200,230,280,400	138	82	100	55	
	ST095E.125		163	82	125	55	
	ST095E.150		188	82	150	55	
	ST095E.175		213	82	175	55	
	ST095E.200		238	82	200	55	
	ST120E.150	200,250,300,350,400,500	192	108	150	76	
	ST120E.200		142	108	200	76	
	ST120E.250		292	108	250	76	
	ST120E.300		342	108	300	76	
	ST150E.200	305,405,505,605	246	141	200	110	
	ST150E.250		296	141	250	110	
	ST150E.300		346	141	300	110	
	ST150E.350		396	141	350	110	
	ST150E.400		446	141	400	110	

Shift Chain - S Type (Sliding with Skid)

	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	ST044S.035	70,90,120,150	74	38.5	35	26	
	ST044S.050		89	38.5	50	26	
	ST044S.055		94	38.5	55	26	
	ST044S.075		114	38.5	75	26	
	ST044S.100		139	38.5	100	26	
	ST044S.125		164	38.5	125	26	
	ST044S.150		189	38.5	150	26	
	ST044S.175		214	38.5	175	26	
	ST044S.200		239	38.5	200	26	

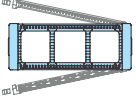
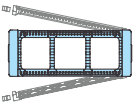
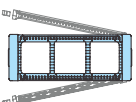
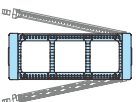
CABLE DRAG CHAINS IN GLASS FIBRE REINFORCED POLYAMIDE

Shift Chain - RS Type (Sliding with Roller Skid)

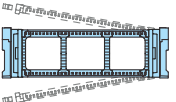
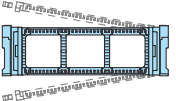
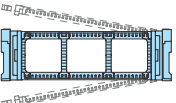
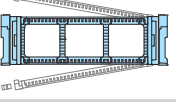
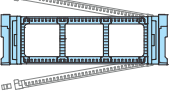
	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	ST044RS.035	70,90,120,150	73	40.5	35	26	
	ST044RS.050		88	40.5	50	26	
	ST044RS.055		93	40.5	55	26	
	ST044RS.075		113	40.5	75	26	
	ST044RS.100		138	40.5	100	26	
	ST044RS.125		163	40.5	125	26	
	ST044RS.150		188	40.5	150	26	
	ST044RS.175		213	40.5	175	26	
	ST044RS.200		238	40.5	200	26	
	ST072RS.050	100,120,145,200,250,300	104	69	50	45	
	ST072RS.075		129	69	75	45	
	ST072RS.100		154	69	100	45	
	ST072RS.125		179	69	125	45	
	ST072RS.150		204	69	150	45	
	ST072RS.175		229	69	175	45	
	ST072RS.200		254	69	200	45	
	ST072RS.250		304	69	250	45	
	ST072RS.300		354	69	300	45	
	ST095RS.075	135,150,200,230,280,400	143	90	75	56	
	ST095RS.100		168	90	100	56	
	ST095RS.125		193	90	125	56	
	ST095RS.150		218	90	150	56	
	ST095RS.175		243	90	175	56	
	ST095RS.200		268	90	200	56	
	ST095RS.250		318	90	250	56	
	ST095RS.300		368	90	300	56	
	ST095RS.350		418	90	350	56	
	ST095RS.400		468	90	400	56	
	ST120RS.075	180,200,250,300,350,400,500	143	117	75	78	
	ST120RS.100		168	117	100	78	
	ST120RS.125		193	117	125	78	
	ST120RS.150		218	117	150	78	
	ST120RS.175		243	117	175	78	
	ST120RS.200		268	117	200	78	
	ST120RS.250		318	117	250	78	
	ST120RS.300		368	117	300	78	
	ST120RS.350		418	117	350	78	
	ST120RS.400		468	117	400	78	
	ST120RS.450		518	117	450	78	
	ST120RS.500		568	117	500	78	
	ST120RS.550		618	117	550	78	
	ST120RS.600		668	117	600	78	
	ST150RS.075	305,405,505,605	162	145	75	110	
	ST150RS.100		187	145	100	110	
	ST150RS.125		212	145	125	110	
	ST150RS.150		237	145	150	110	
	ST150RS.175		262	145	175	110	
	ST150RS.200		287	145	200	110	
	ST150RS.250		337	145	250	110	
	ST150RS.300		387	145	300	110	
	ST150RS.350		437	145	350	110	
	ST150RS.400		487	145	400	110	
	ST150RS.450		537	145	450	110	
	ST150RS.500		587	145	500	110	
	ST150RS.550		637	145	550	110	
	ST150RS.600		687	145	600	110	

CABLE DRAG CHAINS IN GLASS FIBRE REINFORCED POLYAMIDE

Shift Chain - ES Type (Enclosed Sliding Type)

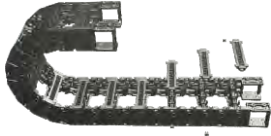
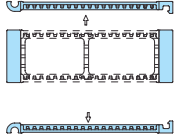
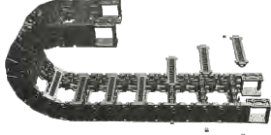
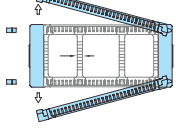
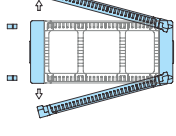
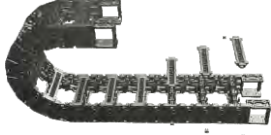
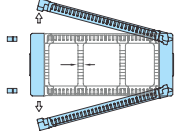
	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	ST044ES.035	70,90,120,150	74	38.5	35	26	
	ST044ES.055		94	38.5	55	26	
	ST044ES.075		114	38.5	75	26	
	ST044ES.100		139	38.5	100	26	
	ST072ES.050	120,145,200,250,300	105	71.8	50	44	
	ST072ES.075		130	71.8	75	44	
	ST072ES.100		155	71.8	100	44	
	ST072ES.125		180	71.8	125	44	
	ST072ES.150		205	71.8	150	44	
	ST095ES.100	150,200,230,280,400	162	89	100	55	
	ST095ES.125		187	89	125	55	
	ST095ES.150		212	89	150	55	
	ST095ES.175		237	89	175	55	
	ST095ES.200		262	89	200	55	
	ST0120ES.150	200,250,300,350,400,500	218	115	150	76	
	ST0120ES.200		268	115	200	76	
	ST0120ES.250		318	115	250	76	
	ST0120ES.300		368	115	300	76	

Shift Chain - ERS Type (Enclosed Sliding with Roller Skid)

	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	ST044ERS.035	70,90,120,150	73	40.5	35	24.5	
	ST044ERS.055		93	40.5	55	24.5	
	ST044ERS.075		113	40.5	75	24.5	
	ST044ERS.100		138	40.5	100	24.5	
	ST072ERS.050	120,145,200,250,300	104	69	50	44	
	ST072ERS.075		129	69	75	44	
	ST072ERS.100		154	69	100	44	
	ST072ERS.125		179	69	125	44	
	ST072ERS.150		204	69	150	44	
	ST095ERS.100	150,200,230,280,400	168	85	100	55	
	ST095ERS.125		193	85	125	55	
	ST095ERS.150		218	85	150	55	
	ST095ERS.175		243	85	175	55	
	ST095ERS.200		268	85	200	55	
	ST120ERS.150	200,250,300,350,400,500	218	112	150	76	
	ST120ERS.200		268	112	200	76	
	ST120ERS.250		318	112	250	76	
	ST120ERS.300		368	112	300	76	
	ST150ERS.200	305,405,505,605	287	145	200	110	
	ST150ERS.250		337	145	250	110	
	ST150ERS.300		387	145	300	110	
	ST150ERS.350		437	145	350	110	
	ST150ERS.400		487	145	400	110	

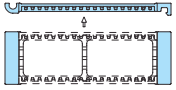
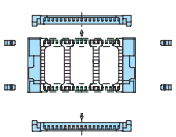
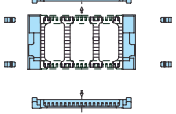
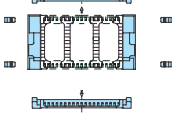
CABLE DRAG CHAINS IN GLASS FIBRE REINFORCED POLYAMIDE

SABIN Chain - N Type (BOTH SIDE OPEN)

	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	NSB028N.035	46, 66, 86, 116, 146	55	38	35	26	
	NSB028N.050		70	38	50	26	
	NSB028N.055		75	38	55	26	
	NSB028N.075		95	38	75	26	
	NSB028N.100		120	38	100	26	
	NSB028N.125		145	38	125	26	
	NSB028N.150		170	38	150	26	
	NSB028N.175		195	38	175	26	
	NSB028N.200		220	38	200	26	
	NSB035N.035	55, 65, 90, 115, 140, 190	55	52	35	40	
	NSB035N.050		70	52	50	40	
	NSB035N.055		75	52	55	40	
	NSB035N.075		95	52	75	40	
	NSB035N.100		120	52	100	40	
	NSB035N.125		145	52	125	40	
	NSB035N.150		170	52	150	40	
	NSB035N.175		195	52	175	40	
	NSB035N.200		220	52	200	40	
	NSB045N.050	90, 110, 135, 165, 185, 235, 285	80	66	50	45	
	NSB045N.075		105	66	75	45	
	NSB045N.100		130	66	100	45	
	NSB045N.125		155	66	125	45	
	NSB045N.150		180	66	150	45	
	NSB045N.175		205	66	175	45	
	NSB045N.200		230	66	200	45	
	NSB045N.250		280	66	250	45	
	NSB045N.300		330	66	300	45	
	NSB060N.075	125, 135, 150, 180, 230, 270, 340	115	82	75	56	
	NSB060N.100		140	82	100	56	
	NSB060N.125		165	82	125	56	
	NSB060N.150		190	82	150	56	
	NSB060N.175		215	82	175	56	
	NSB060N.200		240	82	200	56	
	NSB060N.250		290	82	250	56	
	NSB060N.300		340	82	300	56	
	NSB060N.350		390	82	350	56	
	NSB060N.400		440	82	400	56	
	NSB075N.075	160, 180, 230, 280, 330, 380, 480	115	108	75	78	
	NSB075N.100		140	108	100	78	
	NSB075N.125		165	108	125	78	
	NSB075N.150		190	108	150	78	
	NSB075N.175		215	108	175	78	
	NSB075N.200		240	108	200	78	
	NSB075N.250		290	108	250	78	
	NSB075N.300		340	108	300	78	
	NSB075N.350		390	108	350	78	
	NSB075N.400		440	108	400	78	
	NSB075N.450		490	108	450	78	
	NSB075N.500		540	108	500	78	
	NSB075N.550		590	108	550	78	
	NSB075N.600		640	108	600	78	

CABLE DRAG CHAINS IN GLASS FIBRE REINFORCED POLYAMIDE

SABIN Chain - E Type (BOTH SIDE ENCLOSED)

	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	NSB028E.035	66, 86, 116, 146	55	38	35	26	
	NSB028E.055		75	38	55	26	
	NSB028E.075		95	38	75	26	
	NSB028E.100		120	38	100	26	
	NSB035E.050	90, 115, 140, 190	70	52	50	40	
	NSB035E.075		95	52	75	40	
	NSB035E.100		120	52	100	40	
	NSB035E.125		145	52	125	40	
	NSB035E.150		170	52	150	40	
	NSB045E.075	90, 110, 135, 165, 185, 235, 285	105	66	75	45	
	NSB045E.100		130	66	100	45	
	NSB045E.125		155	66	125	45	
	NSB045E.150		180	66	150	45	
	NSB060E.100	125, 135, 150, 180, 230, 270, 340	140	82	100	56	
	NSB060E.150		190	82	150	56	
	NSB060E.200		240	82	200	56	
	NSB075E.150	160, 180, 230, 280, 330, 380, 480	190	108	150	78	
	NSB075E.200		240	108	200	78	
	NSB075E.300		340	108	300	78	

SABIN Chain - S Type (Sliding with Skid)

	Type	Bending Radius (mm)	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Chain Cross Section
	NSB050S.050	110, 135, 165, 185, 235, 285	104	71.5	50	45	
	NSB050S.075		129	71.5	75	45	
	NSB050S.100		154	71.5	100	45	
	NSB050S.125		179	71.5	125	45	
	NSB050S.150		204	71.5	150	45	
	NSB050S.175		229	71.5	175	45	
	NSB050S.200		254	71.5	200	45	
	NSB050S.250		304	71.5	250	45	
	NSB050S.300		354	71.5	300	45	
	NSB065S.075	140, 190, 220, 270, 390	137	89	75	56	
	NSB065S.100		162	89	100	56	
	NSB065S.125		187	89	125	56	
	NSB065S.150		212	89	150	56	
	NSB065S.175		237	89	175	56	
	NSB065S.200		262	89	200	56	
	NSB065S.250		312	89	250	56	
	NSB065S.300		362	89	300	56	
	NSB065S.350		412	89	350	56	
	NSB065S.400		462	89	400	56	
	NSB080S.075	180, 200, 250, 300, 350, 400, 500	143	115	75	78	
	NSB080S.100		168	115	100	78	
	NSB080S.125		193	115	125	78	
	NSB080S.150		218	115	150	78	
	NSB080S.175		243	115	175	78	
	NSB080S.200		268	115	200	78	
	NSB080S.250		318	115	250	78	
	NSB080S.300		368	115	300	78	
	NSB080S.350		418	115	350	78	
	NSB080S.400		468	115	400	78	
	NSB080S.450		518	115	450	78	
	NSB080S.500		568	115	500	78	
	NSB080S.550		618	115	550	78	
	NSB080S.600		668	115	600	78	

CPS CABLE DRAG CHAINS - N TYPE CPS015 / CPS020 (BOTH SIDE OPEN)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Printing Machine, Feeder Unit and Counting Machine
Speed	6m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths CPS015	Vertical Standing = max. 0.8 m Vertical Hanging = max. 3 m Side mounted, Unsupported = max. 0.2 m
Vertical Installation Lengths CPS020	Vertical Standing = max. 1.0 m Vertical Hanging = max. 5 m Side mounted, Unsupported = max. 0.5 m
Approvals	CE ATEX(Ex) RoHs2

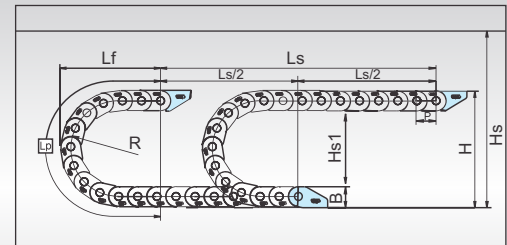
CPS015

Bending Radius R	18	28	38
Lp	117	148	180
Lf	55	65	75
H	49	69	89

CPS020

Bending Radius R	28	38	48
Lp	170	200	230
Lf	78	88	98
H	76	96	116

Technical Dimensions (mm)



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 10 \text{ mm}$

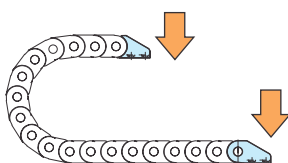
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
CPS015.06	12.6	13	6	10	
CPS015.10	16.6	13	10	10	18, 28, 38
CPS015.15	21.6	13	15	10	
CPS015.20	26.6	13	20	10	
CPS020.15	24	20	15	14.5	
CPS020.20	29	20	20	14.5	28, 38, 48
CPS020.30	39	20	30	14.5	
CPS020.40	49	20	40	14.5	

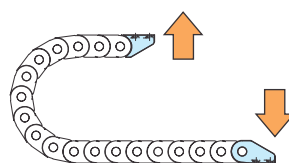
End Bracket (Polyamide)

Cat. No.	End Bracket Type	Suitable for Chain Size
S-TEB015	Tiewrap	CPS015
S-TEB020	Tiewrap	CPS020

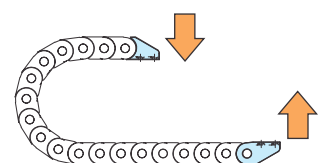
End Bracket Mounting Method



B1



B2



B3

CPS CABLE DRAG CHAINS - N TYPE CPS030 / CPS033 (BOTH SIDE OPEN)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	10m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths	Vertical Standing = max. 1.5 m Vertical Hanging = max. 10 m Side mounted, Unsupported = max. 0.6 m
Approvals	CE ATEX(Ex) RoHs2

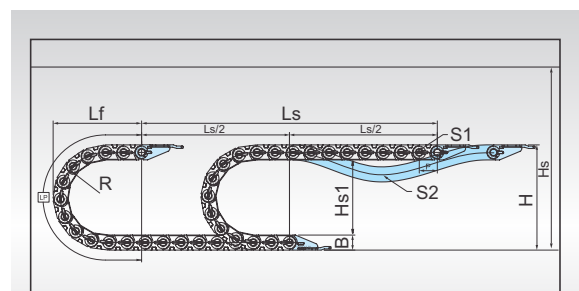
CPS030

Bending Radius R	38	48	75	100
Lp	240	271	356	434
Lf	110	119	148	173
H	101	121	175	225

CPS033

Bending Radius R	35	45	75	100	120
Lp	242	274	368	446	509
Lf	117	127	157	182	202
H	101	121	181	231	271

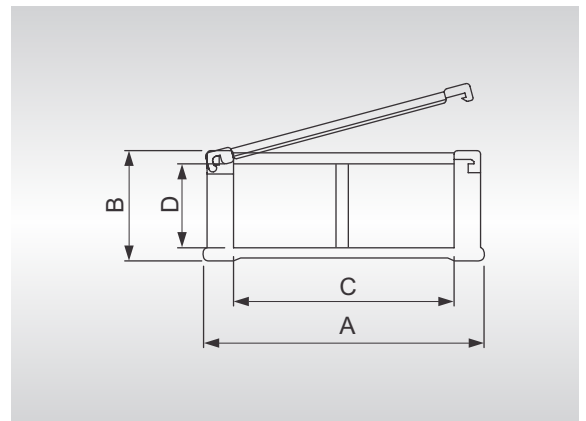
Technical Dimensions (mm)



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 30 \text{ mm}$

Chain Cross Section

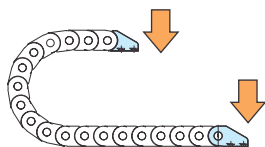
Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
CPS030.15	29	26	15	19	38, 48, 75, 100
CPS030.25	39	26	25	19	
CPS030.35	49	26	35	19	
CPS030.50	64	26	50	19	
CPS033.27	45	31	27	23	35, 45, 75, 100, 120
CPS033.37	55	31	37	23	
CPS033.47	65	31	47	23	
CPS033.67	85	31	67	23	
CPS033.77	95	31	77	23	



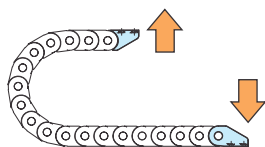
End Bracket (Polyamide)

Cat. No.	End Bracket Type	Suitable for Chain Size
S-TEB030	Tiewrap (B1/B2/B3)	CPS030
S-EEB033	Easy (B0)	CPS033

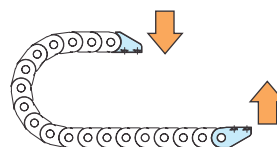
End Bracket Mounting Method



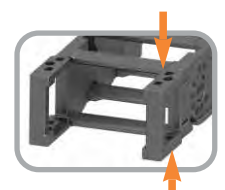
B1



B2



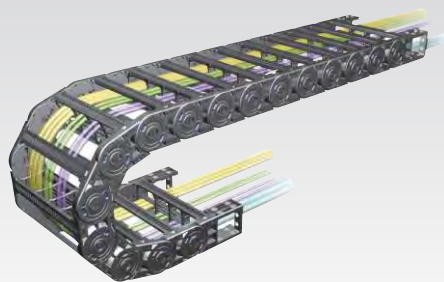
B3



Easy End Bracket B0

Fixing holes at upper & lower side

SHIFT CABLE DRAG CHAINS - N TYPE ST044N (BOTH SIDE OPEN)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	6m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths	Vertical Standing = max. 2 m Vertical Hanging = max. 40 m Side mounted, Unsupported = max. 1 m
Approvals	CE ATEX(Ex) RoHs2

ST044N

Bending Radius R	50	70	90	120	150
Lp	333	396	459	553	648
Lf	157	177	197	227	257
H	138	178	218	278	338

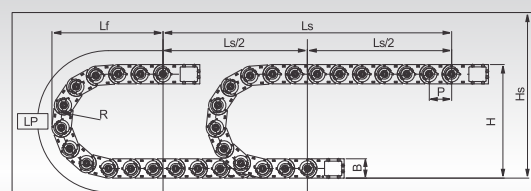
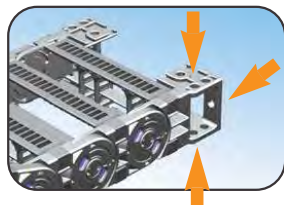
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST044N.035	56	38	35	26	50, 70, 90, 120, 150
ST044N.050	71	38	50	26	
ST044N.055	76	38	55	26	
ST044N.075	96	38	75	26	
ST044N.100	121	38	100	26	
ST044N.125	146	38	125	26	
ST044N.150	171	38	150	26	
ST044N.175	196	38	175	26	
ST044N.200	221	38	200	26	

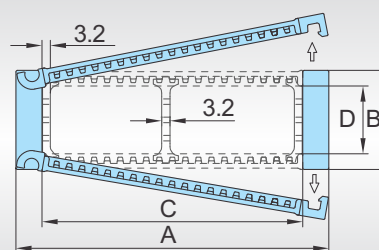
End Bracket (Polyamide)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB044N/S	Free	ST044

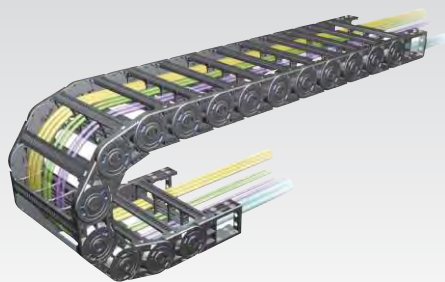
End Bracket



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 30 \text{ mm}$



SHIFT CABLE DRAG CHAINS - N TYPE ST055N (BOTH SIDE OPEN)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	6m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths	Vertical Standing = max. 3 m Vertical Hanging = max. 50 m Side mounted, Unsupported = max. 1 m
Approvals	CE ATEX(Ex) RoHs2

ST055N

Bending Radius R	65	75	100	125	150	200
Lp	424	456	535	613	692	849
Lf	201	211	236	261	286	336
H	182	202	252	302	352	452

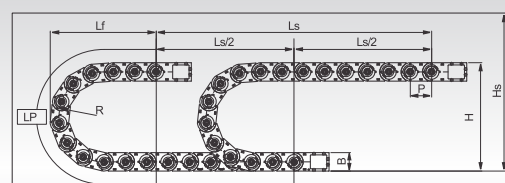
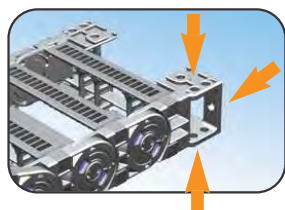
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST055N.035	56	52	35	40	65,75,100, 125,150,200
ST055N.050	71	52	50	40	
ST055N.055	76	52	55	40	
ST055N.075	96	52	75	40	
ST055N.100	121	52	100	40	
ST055N.125	146	52	125	40	
ST055N.150	171	52	150	40	
ST055N.175	196	52	175	40	
ST055N.200	221	52	200	40	

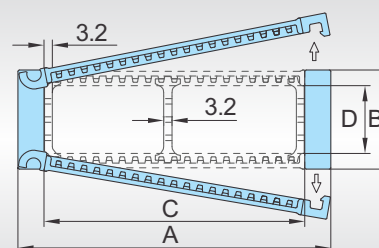
End Bracket (Polyamide)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB055N/E	Free	ST055N

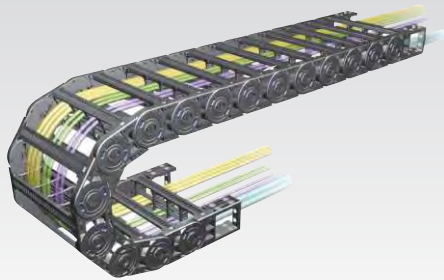
End Bracket



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 35 \text{ mm}$



SHIFT CABLE DRAG CHAINS - N TYPE ST072N (BOTH SIDE OPEN)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	6m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths	Vertical Standing = max. 6 m Vertical Hanging = max. 100 m Side mounted, Unsupported = max. 2.5 m
Approvals	CE ATEX(Ex) RoHs2

ST072N

Bending Radius R	72	100	120	145	200	250	300
Lp	514	603	665	743	916	1074	1230
Lf	249	277	297	322	377	427	477
H	210	266	306	356	466	566	666

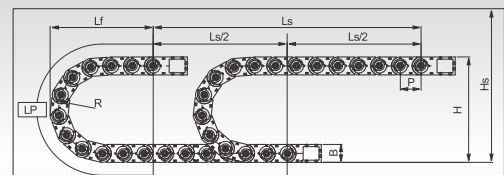
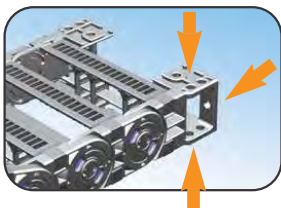
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST072N.050	82	66	50	45	
ST072N.075	107	66	75	45	
ST072N.100	132	66	100	45	
ST072N.125	157	66	125	45	72,100,
ST072N.150	182	66	150	45	120,145,
ST072N.175	207	66	175	45	200,250,300
ST072N.200	232	66	200	45	
ST072N.250	282	66	250	45	
ST072N.300	332	66	300	45	

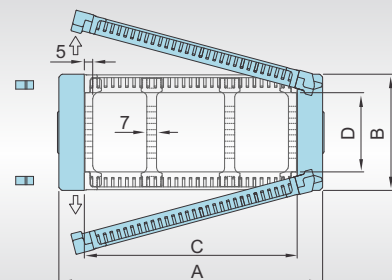
End Bracket (In Polyamide with Steel Spacers)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB072N/S	Free	ST072N

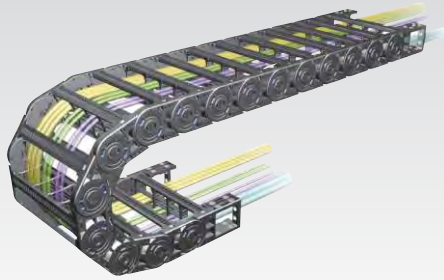
End Bracket



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$



SHIFT CABLE DRAG CHAINS - N TYPE ST095N (BOTH SIDE OPEN)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	6m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths	Vertical Standing = max. 6 m Vertical Hanging = max. 100 m Side mounted, Unsupported = max. 3 m
Approvals	CE ATEX(Ex) RoHs2

ST095N

Bending Radius R	135	150	200	230	280	400
Lp	805	855	1010	1110	1260	1640
Lf	364	374	428	459	505	629
H	352	382	482	542	642	882

Chain Cross Section

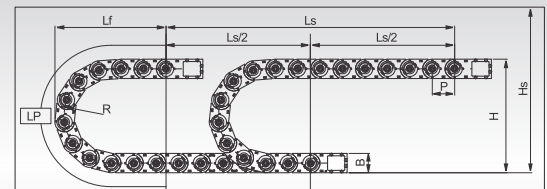
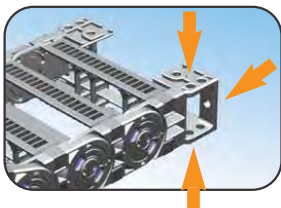
Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST095N.075	113	82	75	56	
ST095N.100	138	82	100	56	
ST095N.125	163	82	125	56	
ST095N.150	188	82	150	56	
ST095N.175	213	82	175	56	
ST095N.200	238	82	200	56	
ST095N.250	288	82	250	56	
ST095N.300	338	82	300	56	
ST095N.350	388	82	350	56	
ST095N.400	438	82	400	56	

135,150,200,
230,280,400

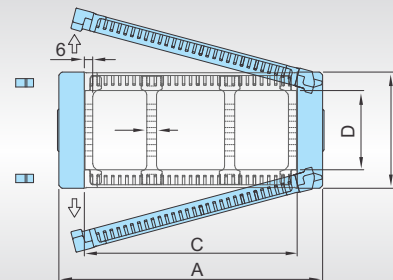
End Bracket (In Polyamide with Steel Spacers)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB095N/S	Free	ST095N

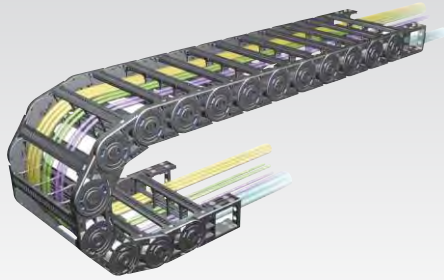
End Bracket



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 50 \text{ mm}$



SHIFT CABLE DRAG CHAINS - N TYPE ST120N (BOTH SIDE OPEN)



Technical Details :

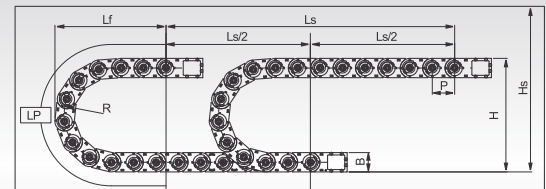
Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	6m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths	Vertical Standing = max. 6 m Vertical Hanging = max. 120 m Side mounted, Unsupported = max. 3 m
Approvals	CE ATEX(Ex) RoHs2

ST120N

Bending Radius R	180	200	250	300	350	400	500
Lp	1046	1109	1266	1423	1580	1737	2051
Lf	474	494	544	594	644	694	794
H	468	508	608	708	808	908	1108

Chain Cross Section

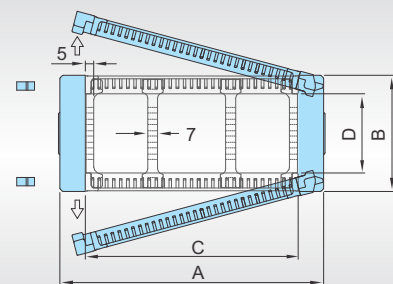
Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST120N.075	117	108	75	78	
ST120N.100	142	108	100	78	
ST120N.125	167	108	125	78	
ST120N.150	192	108	150	78	
ST120N.175	217	108	175	78	
ST120N.200	242	108	200	78	180,200,
ST120N.250	292	108	250	78	250,300,
ST120N.300	342	108	300	78	350,400,
ST120N.350	392	108	350	78	500
ST120N.400	442	108	400	78	
ST120N.450	492	108	450	78	
ST120N.500	542	108	500	78	
ST120N.550	592	108	550	78	
ST120N.600	642	108	600	78	



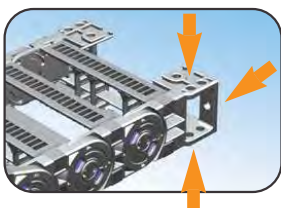
Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 60 \text{ mm}$

End Bracket (In Polyamide with Steel Spacers)

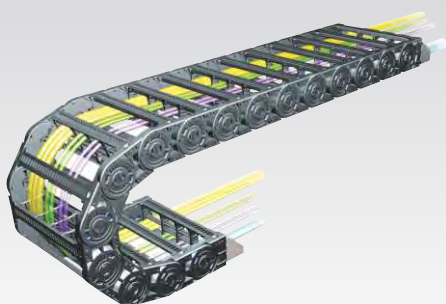
Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB120N/S	Free	ST120N



End Bracket



SHIFT CABLE DRAG CHAINS - N TYPE ST150N (BOTH SIDE OPEN)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Vertical Installation Lengths	Vertical Standing = max. 7 m Vertical Hanging = max. 150 m Side mounted, Unsupported = max. 4 m
Approvals	CE ATEX(Ex) RoHs2

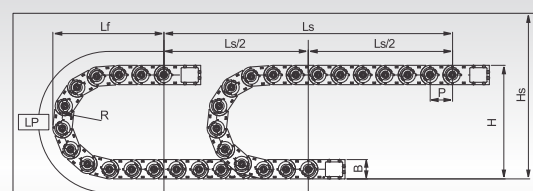
ST150N

Bending Radius R	205	305	405	505	605
Lp	1215	1510	1807	2106	2405
Lf	561	651	743	835	928
H	550	750	950	1150	1350

Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST150N.075	121	140	75	110	
ST150N.100	146	140	100	110	
ST150N.125	171	140	125	110	
ST150N.150	196	140	150	110	
ST150N.175	221	140	175	110	
ST150N.200	246	140	200	110	
ST150N.250	296	140	250	110	
ST150N.300	346	140	300	110	
ST150N.350	396	140	350	110	
ST150N.400	446	140	400	110	
ST150N.450	496	140	450	110	
ST150N.500	546	140	500	110	
ST150N.550	596	140	550	110	
ST150N.600	646	140	600	110	

205,305,
405,505,
605

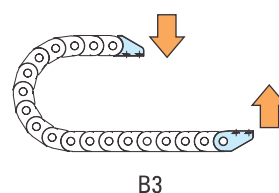
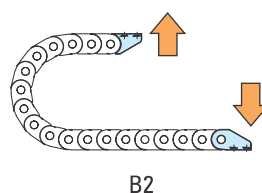
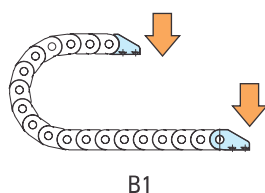
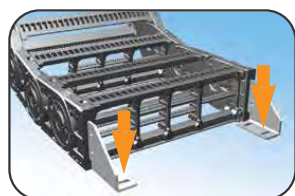


Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $H_s \geq H + 80 \text{ mm}$

End Bracket in Steel

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-SEB150/B1-B2-B3	B1/B2/B3	ST150N

End Bracket



SHIFT CABLE DRAG CHAINS - E TYPE ST044E / ST055E (BOTH SIDE ENCLOSED)



Technical Details :

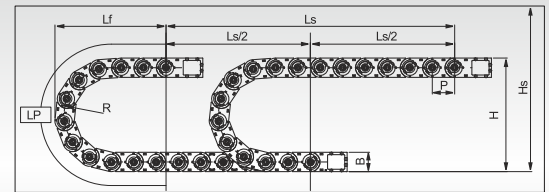
Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	6m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths ST044E	Vertical Standing = max. 2 m Vertical Hanging = max. 40 m Side mounted, Unsupported = max. 1.0 m
Vertical Installation Lengths ST055E	Vertical Standing = max. 3 m Vertical Hanging = max. 50 m Side mounted, Unsupported = max. 1.0 m
Approvals	CE ATEX(Ex) RoHs2

ST044E

Bending Radius R	70	90	120	150
Lp	396	459	553	648
Lf	177	197	227	257
H	178	218	278	338

ST055E

Bending Radius R	100	125	150	200
Lp	535	613	602	849
Lf	236	261	286	336
H	252	302	352	452



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 35 \text{ mm}$

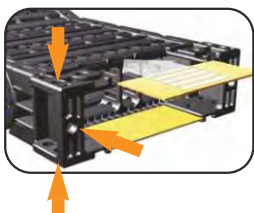
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST044E.035	56	38	35	24.5	
ST044E.055	76	38	55	24.5	70, 90,
ST044E.075	96	38	75	24.5	120, 150
ST044E.100	121	38	100	24.5	
ST055E.050	71	52	50	38.5	
ST055E.075	96	52	75	38.5	100, 125,
ST055E.100	121	52	100	38.5	150, 200
ST055E.125	146	52	125	38.5	
ST055E.150	171	52	150	38.5	

End Bracket (Polyamide)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB044E	Free	ST044E
ST-FEB055N/E	Free	ST055E

End Bracket



SHIFT CABLE DRAG CHAINS - E TYPE ST072E / ST095E (BOTH SIDE ENCLOSED)



Technical Details :

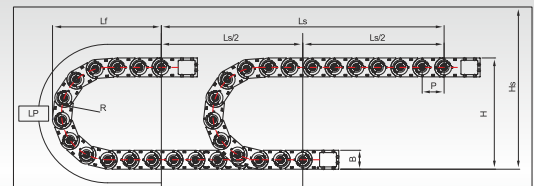
Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	6m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths ST072E	Vertical Standing = max. 6 m Vertical Hanging = max. 100 m Side mounted, Unsupported = max. 2.5 m
Vertical Installation Lengths ST095E	Vertical Standing = max. 6 m Vertical Hanging = max. 100 m Side mounted, Unsupported = max. 3.0 m
Approvals	CE ATEX(Ex) RoHs2

ST072E

Bending Radius R	120	145	200	250	300
Lp	665	743	916	1074	1230
Lf	297	322	377	427	477
H	306	356	466	566	666

ST095E

Bending Radius R	150	200	230	280	400
Lp	855	1010	1110	1260	1640
Lf	374	428	459	505	629
H	382	482	542	642	882



Ls : Stroke

Total Length $L = Ls / 2 + Lp$

For 72E Safe space $Hs = H + 40 \text{ mm}$

For 95E Safe space $Hs = H + 50 \text{ mm}$

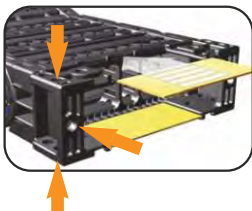
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST072E.050	82	66	50	44	120,145, 200,250,300
ST072E.075	107	66	75	44	
ST072E.100	132	66	100	44	
ST072E.125	157	66	125	44	
ST072E.150	182	66	150	44	
ST095E.100	138	82	100	55	150,200,230, 280,400
ST095E.125	163	82	125	55	
ST095E.150	188	82	150	55	
ST095E.175	213	82	175	55	
ST095E.200	238	82	200	55	

End Bracket (In Polyamide with Steel Washers)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB072E	Free	ST072E
ST-FEB095E	Free	ST095E

End Bracket



SHIFT CABLE DRAG CHAINS - E TYPE ST120E / ST150E (BOTH SIDE ENCLOSED)



Technical Details :

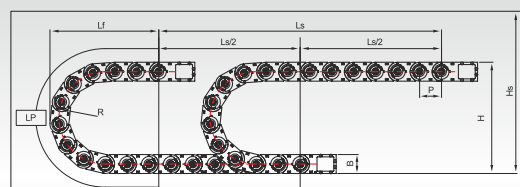
Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine
Speed	6m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths ST120E	Vertical Standing = max. 6 m Vertical Hanging = max. 120 m Side mounted, Unsupported = max. 3.0 m
Vertical Installation Lengths ST150E	Vertical Standing = max. 7 m Vertical Hanging = max. 150 m Side mounted, Unsupported = max. 4.0 m
Approvals	CE ATEX(Ex) RoHs2

ST120E

Bending Radius R	200	250	300	350	400	500
Lp	1109	1266	1423	1580	1737	2051
Lf	494	544	594	644	694	794
H	508	608	708	808	908	1108

ST150E

Bending Radius R	305	405	505	605
Lp	1510	1807	2106	2405
Lf	651	743	835	928
H	752	952	1152	1352



Ls : Stroke

Total Length $L = Ls / 2 + Lp$

For 120E Safe space $Hs = H + 60 \text{ mm}$

For 150E Safe space $Hs = H + 80 \text{ mm}$

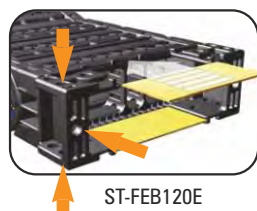
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST120E.150	192	108	150	76	200,250,300, 350,400,500
ST120E.200	242	108	200	76	
ST120E.250	292	108	250	76	
ST120E.300	342	108	300	76	
ST150E.200	246	141	200	110	305,405, 505,605
ST150E.250	296	141	250	110	
ST150E.300	346	141	300	110	
ST150E.350	396	141	350	110	
ST150E.400	446	141	400	110	

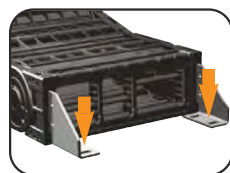
End Bracket with Steel Washers

Cat. No.	Material	End Bracket Type	Suitable for Chain Size
ST-FEB120E	Polyamide	Free	ST120E
ST-SEB150E/B1-B2-B3	Steel	B1/B2/B3	ST150E

End Bracket

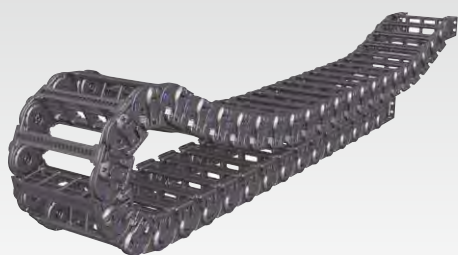


ST-FEB120E



ST-SEB150E

SHIFT CABLE DRAG CHAINS - S TYPE ST044S (SLIDING WITH SKID)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.07 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	 CE ATEX(Ex) RoHs2

ST044S

Bending Radius R	70	90	120	150
Lp	544	662	926	1190
Lf	249	289	393	497
H	110	110	110	110

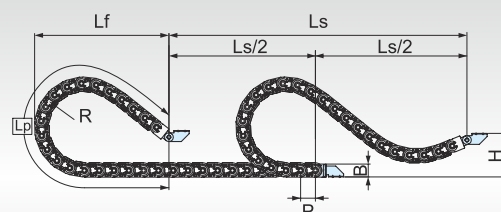
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST044S.035	74	38.5	35	26	
ST044S.050	89	38.5	50	26	
ST044S.055	94	38.5	55	26	
ST044S.075	114	38.5	75	26	
ST044S.100	139	38.5	100	26	70,90,
ST044S.125	164	38.5	125	26	120,150
ST044S.150	189	38.5	150	26	
ST044S.175	214	38.5	175	26	
ST044S.200	239	38.5	200	26	

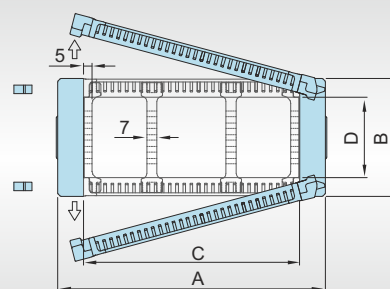
End Bracket in Polyamide

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB044N/S	Free	ST044S

End Bracket



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$



SHIFT CABLE DRAG CHAINS - RS TYPE ST044RS (SLIDING WITH ROLLER SKID)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.07 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	ATEX(Ex) RoHs2

ST044RS

Bending Radius R	70	90	120	150
Lp	544	662	926	1190
Lf	249	289	393	497
H	110	110	110	110

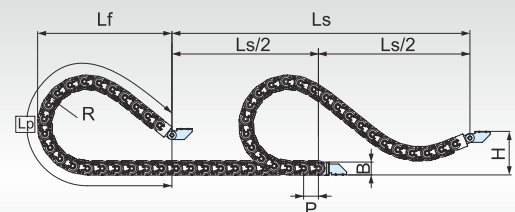
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST044RS.035	73	40.5	35	26	
ST044RS.050	88	40.5	50	26	
ST044RS.055	93	40.5	55	26	
ST044RS.075	113	40.5	75	26	
ST044RS.100	138	40.5	100	26	70,90,
ST044RS.125	163	40.5	125	26	120,150
ST044RS.150	188	40.5	150	26	
ST044RS.175	213	40.5	175	26	
ST044RS.200	238	40.5	200	26	

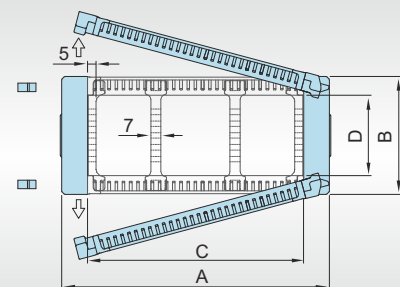
End Bracket in Polyamide

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB044N/S	Free	ST044RS

End Bracket



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$



SHIFT CABLE DRAG CHAINS - RS TYPE ST072RS (SLIDING WITH ROLLER SKID)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.07 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	ATEX(Ex) RoHs2

ST072RS

Bending Radius R	100	120	145	200	250	300
Lp	806	917	1063	1400	1840	2280
Lf	380	420	470	580	752	924
H	180	180	180	180	180	180

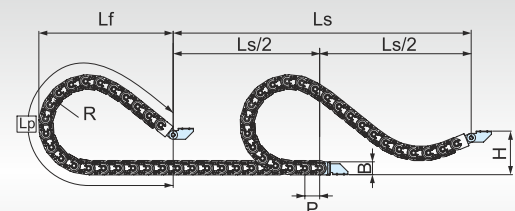
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST072RS.050	104	69	50	45	
ST072RS.075	129	69	75	45	
ST072RS.100	154	69	100	45	
ST072RS.125	179	69	125	45	100,120,145,
ST072RS.150	204	69	150	45	200,250,300
ST072RS.175	229	69	175	45	
ST072RS.200	254	69	200	45	
ST072RS.250	304	69	250	45	
ST072RS.300	354	69	300	45	

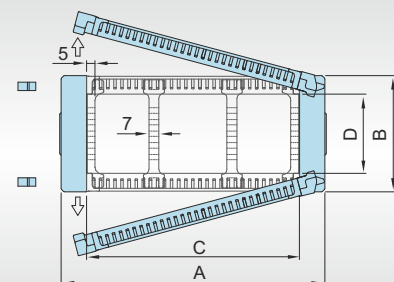
End Bracket (In Polyamide with Steel Washer)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB072N/S	Free	ST072RS

End Bracket



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $H_s \geq H + 40 \text{ mm}$



SHIFT CABLE DRAG CHAINS - RS TYPE ST095RS (SLIDING WITH ROLLER SKID)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.07 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	CE ATEX(Ex) RoHs2

ST095RS

Bending Radius R	135	150	200	230	280	400
Lp	1091	1178	1479	1666	2146	3232
Lf	504	534	634	694	889	1319
H	210	210	210	210	210	210

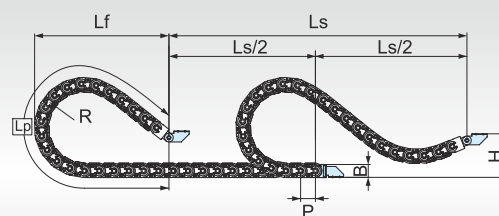
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST095RS.075	143	90	75	56	135,150,200, 230,280,400
ST095RS.100	168	90	100	56	
ST095RS.125	193	90	125	56	
ST095RS.150	218	90	150	56	
ST095RS.175	243	90	175	56	
ST095RS.200	268	90	200	56	
ST095RS.250	318	90	250	56	
ST095RS.300	368	90	300	56	
ST095RS.350	418	90	350	56	
ST095RS.400	468	90	400	56	

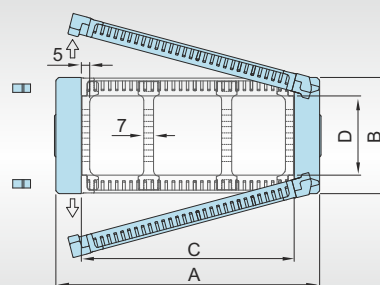
End Bracket (In Polyamide with Steel Washer)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB095N/S	Free	ST095RS

End Bracket



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $H_s \geq H + 40 \text{ mm}$



SHIFT CABLE DRAG CHAINS - RS TYPE ST120RS (SLIDING WITH ROLLER SKID)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.07 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	ATEX(Ex) RoHs2

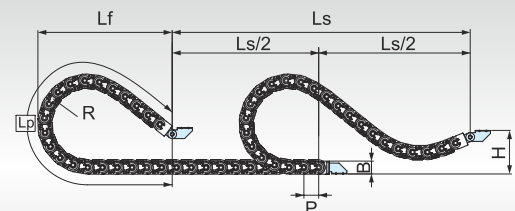
ST120RS

Bending Radius R	180	200	250	300	350	400	500
Lp	1441	1559	1864	2178	2701	3225	4062
Lf	654	694	794	894	1114	1334	1654
H	260	260	260	260	260	260	260

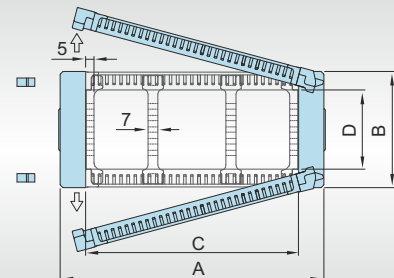
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST120RS.075	143	117	75	78	
ST120RS.100	168	117	100	78	
ST120RS.125	193	117	125	78	
ST120RS.150	218	117	150	78	
ST120RS.175	243	117	175	78	
ST120RS.200	268	117	200	78	
ST120RS.250	318	117	250	78	
ST120RS.300	368	117	300	78	
ST120RS.350	418	117	350	78	
ST120RS.400	468	117	400	78	
ST120RS.450	518	117	450	78	
ST120RS.500	568	117	500	78	
ST120RS.550	618	117	550	78	
ST120RS.600	668	117	600	78	

180,200,250,
300,350,400,
500



Ls : Stroke
Total Length $L = L_s / 2 + L_p$
Safe space $H_s \geq H + 40 \text{ mm}$



End Bracket (In Polyamide with Steel Washer)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB120N/S	Free	ST120RS

End Bracket



SHIFT CABLE DRAG CHAINS - RS TYPE ST150RS (SLIDING WITH ROLLER SKID)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.07 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	ATEX(Ex) RoHs2

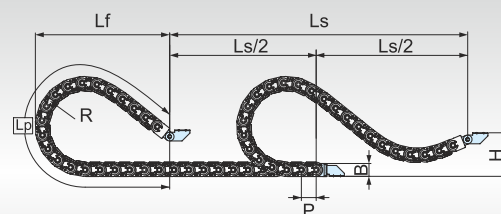
ST150RS

Bending Radius R	305	405	505	605
Lp	2272	3161	4050	4940
Lf	985	1335	1685	2035
H	400	400	400	400

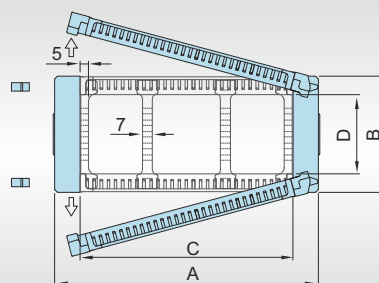
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST150RS.075	162	145	75	110	
ST150RS.100	187	145	100	110	
ST150RS.125	212	145	125	110	
ST150RS.150	237	145	150	110	
ST150RS.175	262	145	175	110	
ST150RS.200	287	145	200	110	
ST150RS.250	337	145	250	110	
ST150RS.300	387	145	300	110	
ST150RS.350	437	145	350	110	
ST150RS.400	487	145	400	110	
ST150RS.450	537	145	450	110	
ST150RS.500	587	145	500	110	
ST150RS.550	637	145	550	110	
ST150RS.600	687	145	600	110	

305,405,
505,605



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$



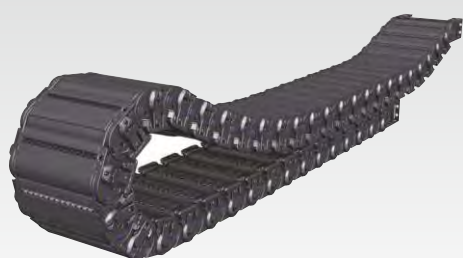
End Bracket (In Polyamide with Steel Washer)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-SEB150N/S B1-B2	B1/B2	ST150RS

End Bracket



SHIFT CABLE DRAG CHAINS - ES TYPE ST044ES / ST072ES (ENCLOSED SLIDING WITH SKID)



Technical Details :

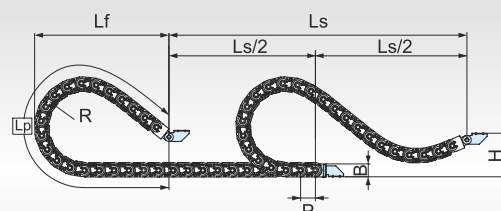
Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.04 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	 CE ATEX(Ex) RoHs2

ST044ES

Bending Radius R	70	90	120	150
Lp	544	662	926	1190
Lf	249	289	393	497
H	110	110	110	110

ST072ES

Bending Radius R	120	145	200	250	300
Lp	917	1063	1400	1840	2280
Lf	420	470	580	752	924
H	180	180	180	180	180



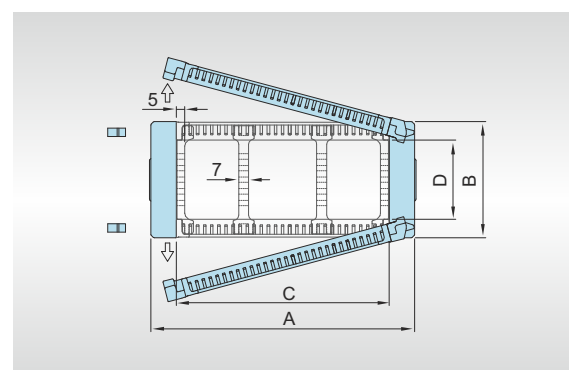
Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$

Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST044ES.035	74	38.5	35	26	70,90, 120,150
ST044ES.055	94	38.5	55	26	
ST044ES.075	114	38.5	75	26	
ST044ES.100	139	38.5	100	26	
ST072ES.050	105	71.8	50	44	
ST072ES.075	130	71.8	75	44	120,145,200, 250,300
ST072ES.100	155	71.8	100	44	
ST072ES.125	180	71.8	125	44	
ST072ES.150	205	71.8	150	44	

End Bracket (In Polyamide with Steel Washer)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB044ES	Free	ST044ES
ST-FEB072ES	Free	ST072ES



End Bracket



SHIFT CABLE DRAG CHAINS - ES TYPE ST095ES / ST120ES (ENCLOSED SLIDING WITH SKID)



Technical Details :

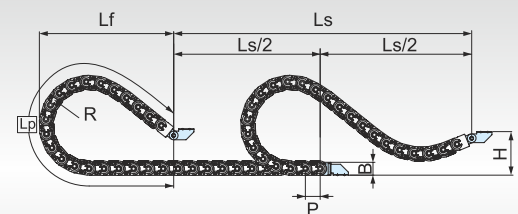
Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.3 - 0.4 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	ATEX(Ex) RoHs2

ST095ES

Bending Radius R	150	200	230	280	400
Lp	1178	1479	1666	2146	3232
Lf	534	634	694	889	1319
H	210	210	210	210	210

ST120ES

Bending Radius R	200	250	300	350	400	500
Lp	1559	1864	2178	2701	3225	4062
Lf	694	794	894	1114	1334	1654
H	260	260	260	260	260	260



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$

Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST095ES.100	162	89	100	55	150,200,230,280,400
ST095ES.125	187	89	125	55	
ST095ES.150	212	89	150	55	
ST095ES.175	237	89	175	55	
ST095ES.200	262	89	200	55	
ST120ES.150	218	115	150	76	200,250,300,350,400,500
ST120ES.200	268	115	200	76	
ST120ES.250	318	115	250	76	
ST120ES.300	368	115	300	76	

End Bracket (In Polyamide with Steel Washer)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB095ES	Free	ST095ES
ST-FEB120ES	Free	ST120ES

End Bracket



SHIFT CABLE DRAG CHAINS - ERS TYPE ST44ERS / ST072ERS (ENCLOSED SLIDING WITH ROLLER SKID)



Technical Details :

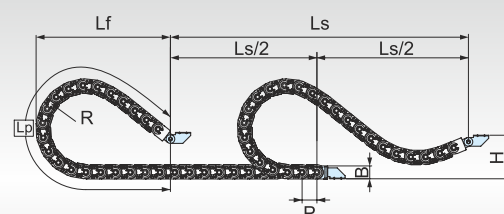
Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.07 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	CE ATEX(Ex) RoHs2

ST044ERS

Bending Radius R	70	90	120	150
Lp	544	662	926	1190
Lf	249	289	393	497
H	110	110	110	110

ST072ERS

Bending Radius R	120	145	200	250	300
Lp	917	1063	1400	1840	2280
Lf	420	470	580	752	924
H	180	180	180	180	180



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$

Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST044ERS.035	73	40.5	35	24.5	70,90,120,150
ST044ERS.055	93	40.5	55	24.5	
ST044ERS.075	113	40.5	75	24.5	
ST044ERS.100	138	40.5	100	24.5	
ST072ERS.050	104	69	50	44	120,145,200,250,300
ST072ERS.075	129	69	75	44	
ST072ERS.100	154	69	100	44	
ST072ERS.125	179	69	125	44	
ST072ERS.150	204	69	150	44	

End Bracket in Polyamide

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB044E	Free	ST044ERS
ST-FEB072E	Free (With Steel Washer)	ST072ERS

End Bracket



ST-FEB044E



ST-FEB072E

SHIFT CABLE DRAG CHAINS - ERS TYPE ST095ERS / ST120ERS (ENCLOSED SLIDING WITH ROLLER SKID)



Technical Details :

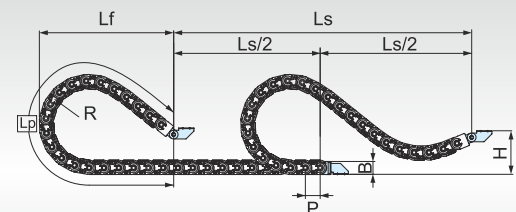
Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.07 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	 CE ATEX(Ex) RoHs2

ST095ERS

Bending Radius R	150	200	230	280	400
Lp	1178	1479	1666	2146	3232
Lf	534	634	694	889	1319
H	210	210	210	210	210

ST120ERS

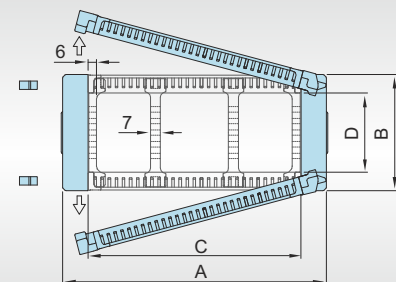
Bending Radius R	200	250	300	350	400	500
Lp	1559	1864	2178	2701	3225	4062
Lf	694	794	894	1114	1334	1654
H	260	260	260	260	260	260



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$

Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST095ERS.100	168	85	100	55	150,200,230, 280,400
ST095ERS.125	193	85	125	55	
ST095ERS.150	218	85	150	55	
ST095ERS.175	243	85	175	55	
ST095ERS.200	268	85	200	55	
ST120ERS.150	218	112	150	76	200,250,300, 350,400,500
ST120ERS.200	268	112	200	76	
ST120ERS.250	318	112	250	76	
ST120ERS.300	368	112	300	76	



End Bracket (In Polyamide with Steel Washer)

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-FEB095E	Free	ST095ERS
ST-FEB120E	Free	ST120ERS

End Bracket



SHIFT CABLE DRAG CHAINS - ERS TYPE ST150ERS (ENCLOSED SLIDING WITH ROLLER SKID)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	40 dB (DIN EN 61672-1)
Applications	Gantry Robot, Machine Center, Textile Machine, Welding Machine, Wood Work Machine and Fabric Machine having long stroke length
Coefficient of Friction	0.02 - 0.07 μ
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	 CE ATEX(Ex) RoHs2

ST150ERS

Bending Radius R	305	405	505	605
Lp	2272	3161	4050	4940
Lf	985	1335	1685	2035
H	400	400	400	400

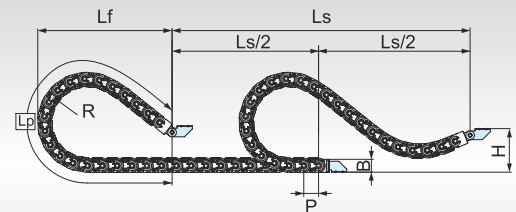
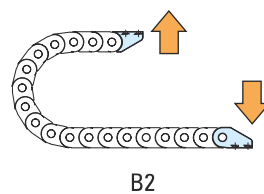
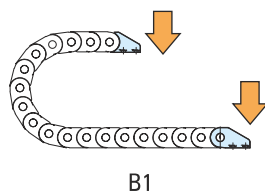
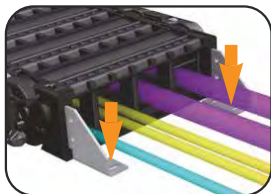
Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
ST150ERS.200	287	145	200	110	305,405, 505,605
ST150ERS.250	337	145	250	110	
ST150ERS.300	387	145	300	110	
ST150ERS.350	437	145	350	110	
ST150ERS.400	487	145	400	110	

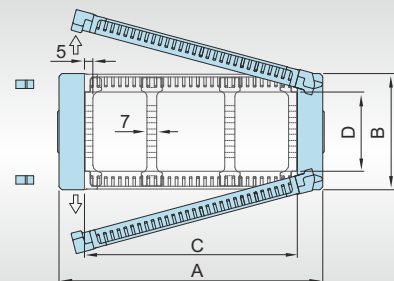
End Bracket in Steel

Cat. No.	End Bracket Type	Suitable for Chain Size
ST-SEB150E/B1-B2	Free B1/B2	ST150ERS

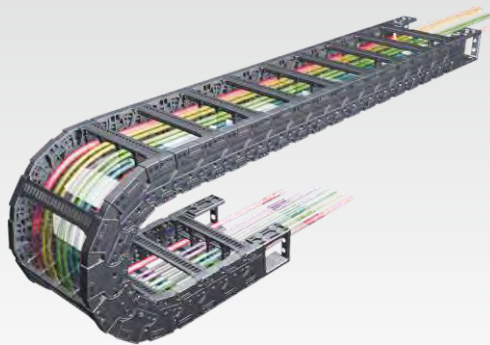
End Bracket



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$



SABIN CABLE DRAG CHAIN - N TYPE NSB028N / NSB035N (BOTH SIDE OPEN)



Technical Details :

Chain Material	CPS-amide UL 94-HB
Applications	Gantry Robot, Machining Center, Textile Machine, Welding Machine, Feeder Unit, Assembly Loader, Woodworking Machines, Lathes, Fabric Machines, etc.
Speed	10m / sec
Temperature Range	-30°C to +130°C Continuous
Vertical Installation Lengths	Vertical Standing = max. 2.0 m Vertical Hanging = max. 40 m Side mounted, Unsupported = max. 1.0
Approvals	CE ATEX(Ex) RoHs2

NSB028N

Bending Radius R	46	66	86	116	146
Lp	257	320	383	477	571
Lf	125	145	165	195	225
H	138	178	218	278	338

NSB035N

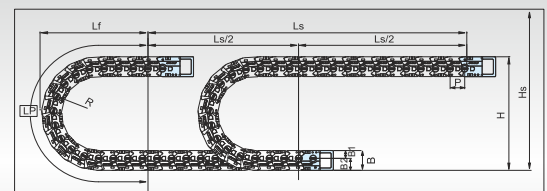
Bending Radius R	55	65	90	115	140	190
Lp	313	345	423	502	280	737
Lf	159	169	194	219	244	294
H	178	198	248	298	348	448

Chain Cross Section

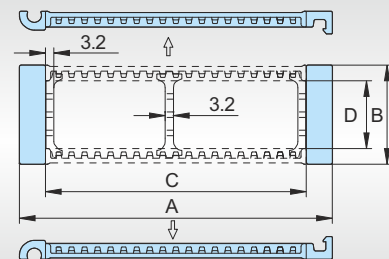
Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
NSB028N.035	55	38	35	26	46, 66, 86, 116, 146
NSB028N.050	70	38	50	26	
NSB028N.055	75	38	55	26	
NSB028N.075	95	38	75	26	
NSB028N.100	120	38	100	26	
NSB028N.125	145	38	125	26	
NSB028N.150	170	38	150	26	
NSB028N.175	195	38	175	26	
NSB028N.200	220	38	200	26	55, 65, 90, 115, 140, 190
NSB035N.035	55	52	35	40	
NSB035N.050	70	52	50	40	
NSB035N.055	75	52	55	40	
NSB035N.075	95	52	75	40	
NSB035N.100	120	52	100	40	
NSB035N.125	145	52	125	40	
NSB035N.150	170	52	150	40	
NSB035N.175	195	52	175	40	
NSB035N.200	220	52	200	40	

End Bracket (Polyamide)

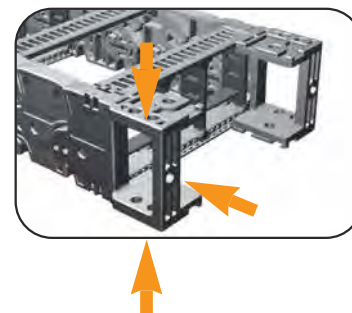
Cat. No.	End Bracket Type	Suitable for Chain Size
NSB-FEB028N/E	Free	NSB028N
NSB-FEB035N/E	Free	NSB035N



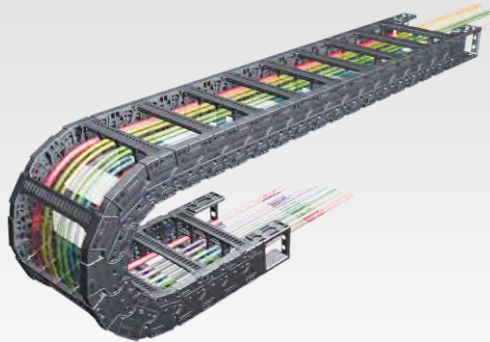
Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 30 \text{ mm}$



End Bracket



SABIN CABLE DRAG CHAIN - N TYPE NSB045N / NSB060N (BOTH SIDE OPEN)



Technical Details :

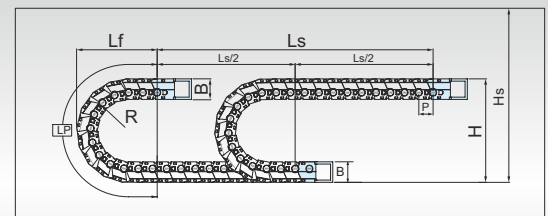
Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	30 dB (DIN EN 61672-1)
Mote (IPA)	VDI 2083 Class 2 DIN EN 14644-1 ISO CALSS 4
Applications	Gantry Robot, Machining Center, Textile Machine, Welding Machine, Feeder Unit, Assembly Loader, Woodworking Machines, Lathes, Fabric Machines, etc.
Speed	10m / sec
Temperature Range	-30°C to +130°C Continuous
Vertical Installation Lengths NSB045N	Vertical Standing = max. 6 m Vertical Hanging = max. 100 m Side mounted, Unsupported = max. 2.5
Vertical Installation Lengths NSB060N	Vertical Standing = max. 6 m Vertical Hanging = max. 100 m Side mounted, Unsupported = max. 3.0
Approvals	CE ATEX(Ex) RoHs2

NSB045N

Bending Radius R	90	110	135	165	185	235	285
Lp	633	695	774	868	931	1,088	1,245
Lf	553	616	694	789	851	1,008	1,165
H	266	306	356	416	456	556	656

NSB060N

Bending Radius R	125	135	150	180	230	270	340
Lp	753	784	831	926	1,083	1,208	1,428
Lf	359	369	384	414	464	504	574
H	357	377	407	467	567	647	787



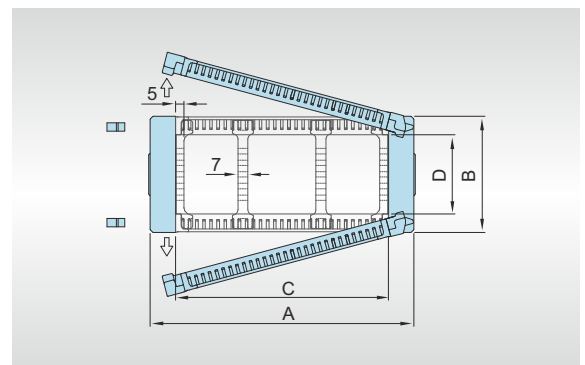
Ls : Stroke
Total Length $L = Ls / 2 + Lp$
For NSB045N Safe space $Hs \geq H + 40 \text{ mm}$
For NSB060N Safe space $Hs \geq H + 50 \text{ mm}$

Chain Cross Section

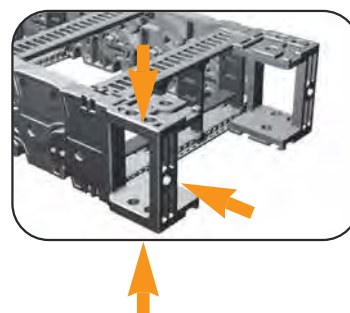
Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
NSB045N.050	80	66	50	45	90, 110, 135, 165 185, 235, 285
NSB045N.075	105	66	75	45	
NSB045N.100	130	66	100	45	
NSB045N.125	155	66	125	45	
NSB045N.150	180	66	150	45	
NSB045N.175	205	66	175	45	
NSB045N.200	230	66	200	45	
NSB045N.250	280	66	250	45	
NSB045N.300	330	66	300	45	125, 135, 150, 180, 230, 270, 340
NSB060N.075	115	82	75	56	
NSB060N.100	140	82	100	56	
NSB060N.125	165	82	125	56	
NSB060N.150	190	82	150	56	
NSB060N.175	215	82	175	56	
NSB060N.200	240	82	200	56	
NSB060N.250	290	82	250	56	
NSB060N.300	340	82	300	56	
NSB060N.350	390	82	350	56	
NSB060N.400	440	82	400	56	

End Bracket (Polyamide)

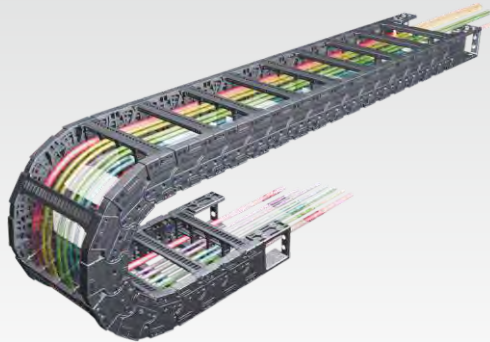
Cat. No.	End Bracket Type	Suitable for Chain Size
NSB-FEB045N/E	Free	NSB045N
NSB-FEB060N/E	Free	NSB060N



End Bracket



SABIN CABLE DRAG CHAIN - N TYPE NSB075N (BOTH SIDE OPEN)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	30 dB (DIN EN 61672-1)
Mote (IPA)	VDI 2083 Class 2 DIN EN 14644-1 ISO CALSS 4
Applications	Gantry Robot, Machining Center, Textile Machine, Welding Machine, Feeder Unit, Assembly Loader, Woodworking Machines, Lathes, Fabric Machines, etc.
Speed	10m / sec
Temperature Range	-30° C to + 130° C Continuous
Vertical Installation Lengths	Vertical Standing = max. 6 m Vertical Hanging = max. 100 m Side mounted, Unsupported = max. 3.0m
Approvals	CE ATEX(Ex) RoHs2

NSB075N

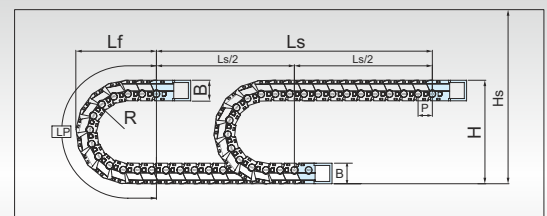
Bending Radius R	160	180	230	280	330	380	480
Lp	953	1,016	1,173	1,330	1,487	1,644	1,958
Lf	457	477	527	577	627	677	777
H	464	504	604	704	804	904	1,104

Chain Cross Section

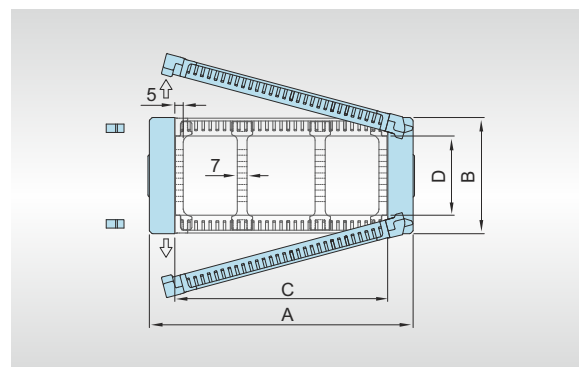
Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
NSB075N.075	115	108	75	78	
NSB075N.100	140	108	100	78	
NSB075N.125	165	108	125	78	
NSB075N.150	190	108	150	78	
NSB075N.175	215	108	175	78	
NSB075N.200	240	108	200	78	
NSB075N.250	290	108	250	78	
NSB075N.300	340	108	300	78	160, 180, 230, 280,
NSB075N.350	390	108	350	78	330, 380, 480
NSB075N.400	440	108	400	78	
NSB075N.450	490	108	450	78	
NSB075N.500	540	108	500	78	
NSB075N.550	590	108	550	78	
NSB075N.600	640	108	600	78	

End Bracket (Polyamide)

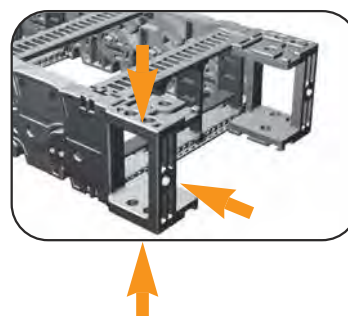
Cat. No.	End Bracket Type	Suitable for Chain Size
NSB-FEB075N/E	Free	NSB075N



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 60 \text{ mm}$



End Bracket



SABIN CABLE DRAG CHAIN - E TYPE NSB028E / NSB035E (BOTH SIDE ENCLOSED)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	30 dB (DIN EN 61672-1)
Mote (IPA)	Class II - VDE2083 ISO Class IV-DIN EN 14644-1
Applications	Semi conductor production line which requires dust regulation minimum class 10, industrial zone which requires cable protection from dust or foreign substance.
Speed	10m / sec
Temperature Range	-30° C to +130° C Continuous
Vertical Installation Lengths NSB028E	Vertical Standing = max. 2 m Vertical Hanging = max. 40 m Side mounted, Unsupported = max. 1.0m
Vertical Installation Lengths NSB035E	Vertical Standing = max. 3 m Vertical Hanging = max. 50 m Side mounted, Unsupported = max. 1.0m
Approvals	CE ATEX(Ex) RoHs2

NSB028E

Bending Radius R	66	86	116	146
Lp	320	383	477	571
Lf	145	165	195	225
H	178	218	278	338

NSB035E

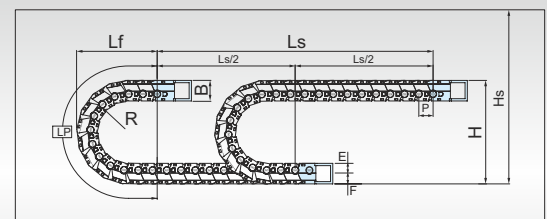
Bending Radius R	90	115	140	190
Lp	423	502	580	737
Lf	194	219	244	294
H	248	298	348	448

Chain Cross Section

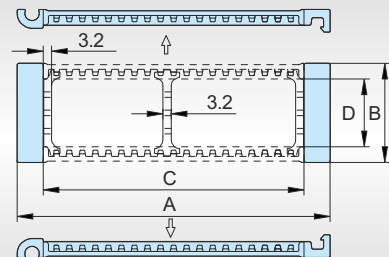
Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
NSB028E.035	55	38	35	26	66,86,116,146
NSB028E.055	75	38	55	26	
NSB028E.075	95	38	75	26	
NSB028E.100	120	38	100	26	
NSB035E.050	70	52	50	40	90,115,140,190
NSB035E.075	95	52	75	40	
NSB035E.100	120	52	100	40	
NSB035E.125	145	52	125	40	
NSB035E.150	170	52	150	40	

End Bracket (Polyamide)

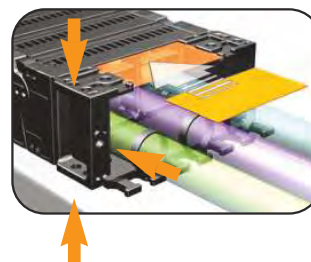
Cat. No.	End Bracket Type	Suitable for Chain Size
NSB-FEB028N/E	Free	NSB028E
NSB-FEB035N/E	Free	NSB035E



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs = H + 30 \text{ mm}$



End Bracket



SABIN CABLE DRAG CHAIN - E TYPE NSB045E / NSB060E / NSB075E (BOTH SIDE ENCLOSED)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide, UL 94-HB
Noise	30 dB (DIN EN 61672-1)
Mote (IPA)	Class II - VDE2083 ISO Class IV-DIN EN 14644-1
Applications	Semi conductor production line which requires dust regulation minimum class 10, industrial zone which requires cable protection from dust or foreign substance.
Speed	10m / sec
Temperature Range	-30°C to +130°C Continuous
Vertical Installation Lengths	Vertical Standing = max. 6 m Vertical Hanging = max. 100 m (045E & 060E) = max. 120 m (075E) Side mounted, Unsupported = max. 2.5m (045E) = max. 3.0m (060E & 075E)
Approvals	CE ATEX(Ex) RoHs2

NSB045E

Bending Radius R	90	110	135	165	185	235	285
Lp	553	616	694	789	851	1,008	1,165
Lf	272	292	317	347	367	417	467
H	266	306	356	416	456	556	656

NSB060E

Bending Radius R	125	135	150	180	230	270	340
Lp	753	784	831	926	1,083	1,208	1,427
Lf	359	369	384	414	464	504	574
H	357	377	407	467	567	647	787

NSB075E

Bending Radius R	160	180	230	280	330	380	480
Lp	953	1,016	1,172	1,329	1,487	1,644	1,958
Lf	457	477	527	577	627	677	777
H	464	504	604	704	804	904	1,104

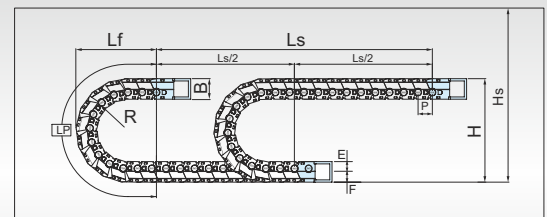
Technical Dimensions (mm)

Chain Cross Section

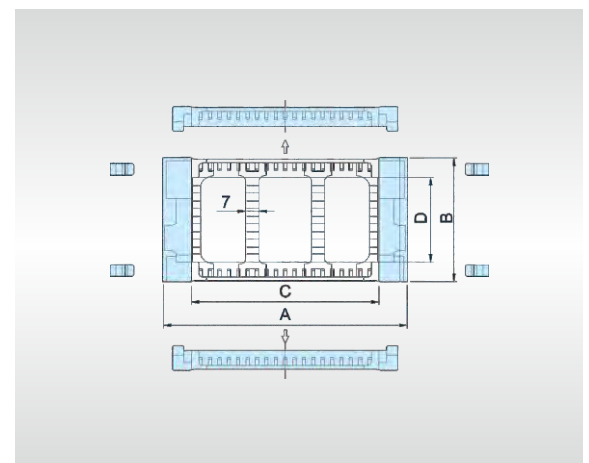
Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
NSB045E.075	105	66	75	45	90, 110, 135, 165 185, 235, 285
NSB045E.100	130	66	100	45	
NSB045E.125	155	66	125	45	
NSB045E.150	180	66	150	45	125, 135, 150, 180, 230, 270, 340
NSB060E.100	140	82	100	56	
NSB060E.150	190	82	150	56	
NSB060E.200	240	82	200	56	160, 180, 230, 280, 330, 380, 480
NSB075E.150	190	108	150	78	
NSB075E.200	240	108	200	78	
NSB075E.300	340	108	300	78	

End Bracket (Polyamide)

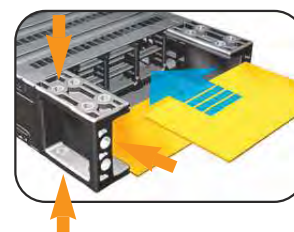
Cat. No.	End Bracket Type	Suitable for Chain Size
NSB-FEB045N/E	Free	NSB045E
NSB-FEB060N/E	Free	NSB060E
NSB-FEB075N/E	Free	NSB075E



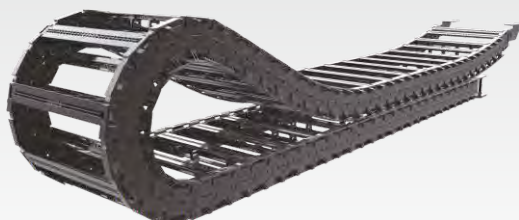
Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs = H + 40$ mm



End Bracket



SABIN CABLE DRAG CHAIN - S TYPE NSB050S / NSB065S (SLIDING WITH SKID)



Technical Details :

Chain Material	Glass fibre reinforced Polyamide 6 CPS-AMIDE
Noise	30 dB (DIN EN 61672-1)
Mote (IPA)	VDI 2083 Class 2 DIN EN 14644-1 ISO CALSS 4
Applications	Gantry Robot, Machining Center, Textile Machine, Welding Machine, Feeder Unit, Assembly Loader, Woodworking Machines, Lathes, Fabric Machines, etc.
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	CE ATEX(Ex) RoHs2

NSB050S

Bending Radius R	110	135	165	185	235	285
Lp	916	1,068	1,255	1,385	1,703	2,029
Lf	380	430	490	530	630	730
H	180	180	180	180	180	180

NSB065S

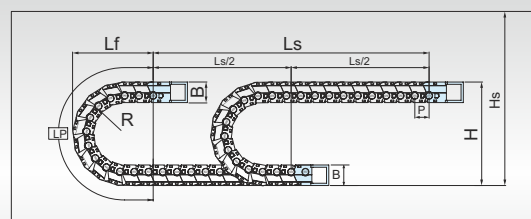
Bending Radius R	140	190	220	270	390
Lp	1,225	1,543	1,734	2,052	2,814
Lf	615	715	775	875	1,115
H	210	210	210	210	210

Chain Cross Section

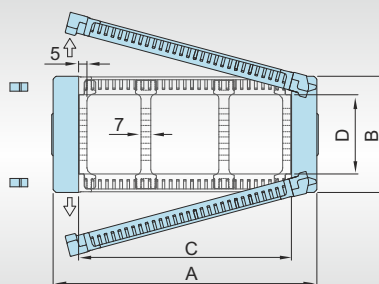
Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
NSB050S.050	104	71.5	50	45	110,135,165, 185,235,285
NSB050S.075	129	71.5	75	45	
NSB050S.100	154	71.5	100	45	
NSB050S.125	179	71.5	125	45	
NSB050S.150	204	71.5	150	45	
NSB050S.175	229	71.5	175	45	
NSB050S.200	254	71.5	200	45	
NSB050S.250	304	71.5	250	45	
NSB050S.300	354	71.5	300	45	140,190,220, 270,390
NSB065S.075	137	89	75	56	
NSB065S.100	162	89	100	56	
NSB065S.125	187	89	125	56	
NSB065S.150	212	89	150	56	
NSB065S.175	237	89	175	56	
NSB065S.200	262	89	200	56	
NSB065S.250	312	89	250	56	
NSB065S.300	362	89	300	56	
NSB065S.350	412	89	350	56	
NSB065S.400	462	89	400	56	

End Bracket (Polyamide)

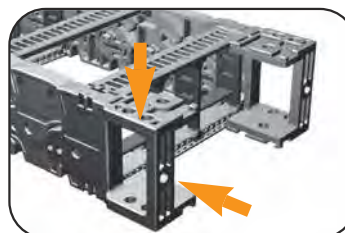
Cat. No.	End Bracket Type	Suitable for Chain Size
NSB-FEB050S	Free	NSB050S
NSB-FEB065S	Free	NSB065S



Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$



End Bracket



SABIN CABLE DRAG CHAIN - S TYPE NSB080S (SLIDING WITH SKID)



Technical Details :

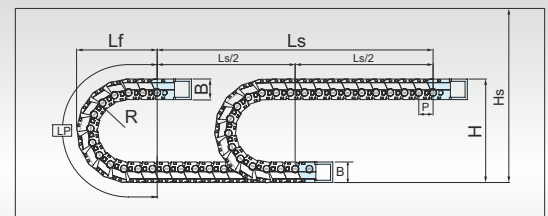
Chain Material	Glass fibre reinforced Polyamide 6 CPS-AMIDE
Noise	30 dB (DIN EN 61672-1)
Mote (IPA)	VDI 2083 Class 2 DIN EN 14644-1 ISO CALSS 4
Applications	Gantry Robot, Machining Center, Textile Machine, Welding Machine, Feeder Unit, Assembly Loader, Woodworking Machines, Lathes, Fabric Machines, etc.
Speed	6m / sec
Temperature Range	-30°C to +130°C Continuous
Approvals	CE ATEX(Ex) RoHs2

NSB080S

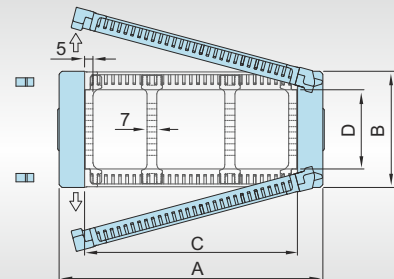
Bending Radius R	180	200	250	300	350	400	500
Lp	1,490	1,617	1,935	2,253	2,571	2,889	3,524
Lf	690	730	830	930	1,030	1,130	1,330
H	260	260	260	260	260	260	260

Chain Cross Section

Cat. No.	Outer Width (mm) A	Outer Height (mm) B	Inner Width (mm) C	Inner Height (mm) D	Bending Radius
NSB080S.075	143	115	75	78	180,200,250, 300,350, 400,500
NSB080S.100	168	115	100	78	
NSB080S.125	193	115	125	78	
NSB080S.150	218	115	150	78	
NSB080S.175	243	115	175	78	
NSB080S.200	268	115	200	78	
NSB080S.250	318	115	250	78	
NSB080S.300	368	115	300	78	
NSB080S.350	418	115	350	78	
NSB080S.400	468	115	400	78	
NSB080S.450	518	115	450	78	
NSB080S.500	568	115	500	78	
NSB080S.550	618	115	550	78	
NSB080S.600	668	115	600	78	



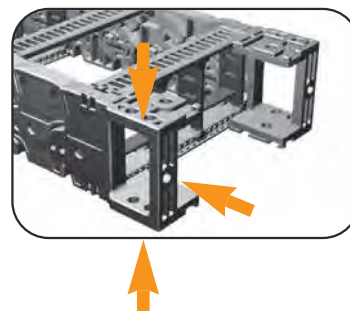
Ls : Stroke
Total Length $L = Ls / 2 + Lp$
Safe space $Hs \geq H + 40 \text{ mm}$



End Bracket (Polyamide)

Cat. No.	End Bracket Type	Suitable for Chain Size
NSB-FEB080S	Free	NSB080S

End Bracket



CABLE DRAG CHAIN ACCESSORIES - DIVIDERS



DV-M



DV-S



Accessories like Dividers help in the management of the cables within the Cable Drag Chain.

Dividers DV-M type act like vertical partitions which help differentiate the cables into different columns within the Cable Drag Chain.

The Dividers DV-S act like self supporting partitions at both sides of inner chain to support the Separators.

Cat. No.	Description
S-DV 030	Divider for 30 Series CPS Cable Drag Chains
S-DV 033	Divider for 33 Series CPS Cable Drag Chains
SB-DV028/044M	Divider for Sabin 028 & Shift 044 Series Chains
SB-DV035/055M	Divider for Sabin 035 & Shift 055 Series Chains
SB-DV045/072M	Divider for Sabin 045 & Shift 072 Series Chains
SB-DV060/095M	Divider for Sabin 060 & Shift 095 Series Chains
SB-DV075/120M	Divider for Sabin 075 & Shift 120 Series Chains
SB-DV100M	Divider for Shift 150 Series Chains

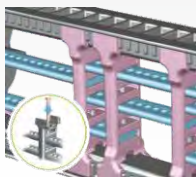
CABLE DRAG CHAIN ACCESSORIES - HORIZONTAL SEPARATORS



Separator (SP)

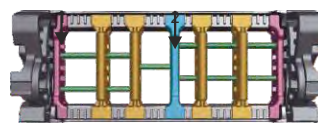


Separator Pin (SP-Pin)



Accessories like Separators Holders help in the management of the cables within the Cable Drag Chain.

Separators act like horizontal partitions which help manage different 'rows' of cables within the Cable Drag Chain. The Separators are locked in to place at each end by fixing pin passing through divider and separator.



1 DV-S



Cat. No.	Description
S-SP/M.35	Separator for NSB 028,035 & ST 044,055 Series Cable Drag Chain
S-SP/M.50	Separator for NSB 028,035 & ST 044,055 Series Cable Drag Chain
S-SP/M.75	Separator for NSB 028,035 & ST 044,055 Series Cable Drag Chain
S-SP/M.100	Separator for NSB 028,035 & ST 044,055 Series Cable Drag Chain
S-SP/M.125	Separator for NSB 028,035 & ST 044,055 Series Cable Drag Chain
S-SP/M.150	Separator for NSB 028,035 & ST 044,055 Series Cable Drag Chain
S-SP/M.175	Separator for NSB 028,035 & ST 044,055 Series Cable Drag Chain
S-SP/M.200	Separator for NSB 028,035 & ST 044,055 Series Cable Drag Chain
SB-SP/400.300	Separator for NSB 045,060,075 & ST 072,095,120 Series Cable Drag Chain
SB-SP/400.400	Separator for NSB 045,060,075 & ST 072,095,120 Series Cable Drag Chain
SB-SP/600.600	Separator for ST 150 Series Cable Drag Chain

CABLE DRAG CHAIN ACCESSORIES - TIE WRAP / SYSTEM TIE WRAP



CPS Series



NSB & ST Series

The cables passing through the Cable Drag Chain need to be fixed at the ends of the drag chain by means of tie wraps. Upon installation the Tie Wrap Holder provides a location for the cables to be tied to. Once the cables are tied to the Tie Wrap Holder they are prevented from tangling and the subsequent possibility of cable disconnection.

Tie Wrap

Cat. No.	Description
S-TW033.27	Tie Wrap Holder for CPS 33 Series Cable Drag Chains
S-TW033.37	Tie Wrap Holder for CPS 33 Series Cable Drag Chains
S-TW033.47	Tie Wrap Holder for CPS 33 Series Cable Drag Chains
S-TW033.67	Tie Wrap Holder for CPS 33 Series Cable Drag Chains
S-TW033.77	Tie Wrap Holder for CPS 33 Series Cable Drag Chains
S-TW028/044.35	Tie Wrap Holder for NSB 028 & ST 044 Series Cable Drag Chains
S-TW028/044.55	Tie Wrap Holder for NSB 028 & ST 044 Series Cable Drag Chains
S-TW028/044.75	Tie Wrap Holder for NSB 028 & ST 044 Series Cable Drag Chains
S-TW028/044.100	Tie Wrap Holder for NSB 028 & ST 044 Series Cable Drag Chains
S-TW028/044.125	Tie Wrap Holder for NSB 028 & ST 044 Series Cable Drag Chains
S-TW035/055.50	Tie Wrap Holder for NSB 035 & ST 055 Series Cable Drag Chains
S-TW035/055.75	Tie Wrap Holder for NSB 035 & ST 055 Series Cable Drag Chains
S-TW035/055.100	Tie Wrap Holder for NSB 035 & ST 055 Series Cable Drag Chains
S-TW035/055.125	Tie Wrap Holder for NSB 035 & ST 055 Series Cable Drag Chains
S-TW035/055.150	Tie Wrap Holder for NSB 035 & ST 055 Series Cable Drag Chains
S-TW035/055.175	Tie Wrap Holder for NSB 035 & ST 055 Series Cable Drag Chains
S-TW035/055.200	Tie Wrap Holder for NSB 035 & ST 055 Series Cable Drag Chains
S-TW50	Tie Wrap Holder for NSB 050S, 060S, 080S Series & ST 72, 95, 120 & 150 Series Cable Drag Chains
S-TW75	Tie Wrap Holder for NSB 050S, 060S, 080S Series & ST 72, 95, 120 & 150 Series Cable Drag Chains
S-TW100	Tie Wrap Holder for NSB 050S, 060S, 080S Series & ST 72, 95, 120 & 150 Series Cable Drag Chains
S-TW125	Tie Wrap Holder for NSB 050S, 060S, 080S Series & ST 72, 95, 120 & 150 Series Cable Drag Chains
S-TW150	Tie Wrap Holder for NSB 050S, 060S, 080S Series & ST 72, 95, 120 & 150 Series Cable Drag Chains

System Tie Wrap

Cat. No.	Description
S-TW.EB028	System Tie Wrap for NSB 028 & ST 044 Series Cable Drag Chains
S-TW.EB035	System Tie Wrap for NSB 035 & ST 055 Series Cable Drag Chains
S-TW.EB045	System Tie Wrap for NSB 045, 050S & ST 072 Series Cable Drag Chains
S-TW.EB050	System Tie Wrap for NSB 060, 060S & ST 095 Series Cable Drag Chains
S-TW.EB075	System Tie Wrap for NSB 075, 080S & ST 120 Series Cable Drag Chains