

POLYSLIDE CHAIN TRACK SYSTEMS



CHAIN TENSIONERS



COMPANY PROFILE

Dotmar Engineering Plastic Products was founded in 1967 and is currently the largest importer and distributor of thermoplastic stock shapes, polyurethanes and conveyor components in Australia and New Zealand. Dotmar's distribution footprint extends to over 5,000 customers servicing more than 100 diverse industry sectors.

Dotmar has built up its market-leading position by delivering a high level of customer service and applications advice, supported by a deep level of technical expertise. Dotmar is at the forefront of developing thermoplastic applications for commercial and industrial use and has built up a highly-skilled product development team supported by a group of product specialists and mechanical engineers. Dotmar offers an extensive knowledge base in thermoplastics, polyurethanes and conveyor products coupled with strong partnerships with world leading manufacturers.

Dotmar's focus is the technical application of thermoplastic materials in a number of exciting industries, ranging from pharmaceutical and materials handling to as far a field as architectural design. Dotmar excels in distribution, technical support, material selection and applications development.



Dotmar Comprises Three Focused Areas of Business:

Material Distribution

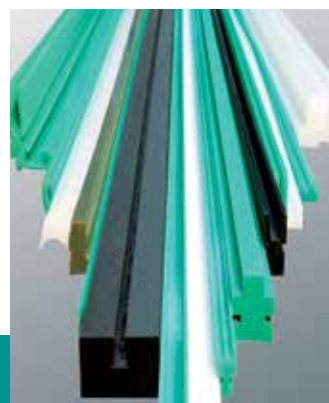
- Representing some of the world leaders of ISO9002 semi-finished engineering grade thermoplastics
- Semi-finished delivery programme in rod, sheet or tube
- Extensive range and largest stock holding
- Wide-spread distribution network through partner resellers

Application Solutions

- Supporting innovative applications development and creative solutions
- Utilizing in-house technical expertise and technology
- **CAMSAD**
"Computer Aided Material Selection and Design"
- **RITA**
"Rochling Integrated Tank Building Assistant"

Custom Engineering

- Thermoplastic trained, technical teams, using state of the art machining facilities.
- **CAD/CAM Manufacturing & Design CNC** – Machining Milling / Routing / Spindle Moulding
- Machined Parts and Components



POLYSLIDE CHAIN TRACK SYSTEMS

FOR POWER TRANSMISSION FOR CONVEYING AND ELEVATING FOR MATERIALS HANDLING

Traditional Steel guide profiles for transmission or conveyor chain lead to heavy wear on the link plates and rollers of the chain. In order to reduce wear and frictional resistance, the chain needs to be constantly lubricated.

DOTMAR offers an extensive range of profiles from Stock or manufactured to a customer's drawing that utilise unique properties of Polystone Ultra.

Applications exist in almost every industry where transmission chain, belts or link chain are driving equipment or delivering products.

Highly engineered systems allow designers to short circuit traditional structured components when incorporating the range of profiles that have been developed to support and guide chain.

KEY FEATURES

- Increased Chain Life
- Noise Reduction
- Light Weight Structural Parts
- High Abrasion Resistance
- Low Coefficient of Sliding Friction
- Self Lubricating
- Excellent Impact Resistance at Low Temperatures (-250°C)
- Highly Chemically Resistant
- Noise Dampening
- Absolutely Non-Corrosive
- Food Grade (Physiologically Safe)

INDEX

POLYSLIDE CHAIN GUIDES

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- 5 Design your own guides
- 6 Chain track systems

Standard Range - Guides for Roller Chains

- 7 Profile list Type TU, Type T
- 8 Profile list Type TS, Type T-Duplex
- 9 Profile list Type U, Type K
- 10 Profile list Type CTU, Type CT
- 11 Profile list Type CTS, Type CT-Duplex
- 12 Profile list Type CU
- 12 Profile list Type CF
- 13 Profile list Type CK, Type CKG
- 14 Profile list Type CKG 14H, Type CKG 15V
- 15 Profile list Type ETA

Standard Range - Guides for Round Link Chains

- 16 Profile list Type R, Type CRU, Type CR, Type CRO

POLYSLIDE BELT TRACK SYSTEMS

Standard range - Guides for belts

- 17 Profile list Type KR, Type KRC, Type RR, Type RRC, Type FR, Type FRC

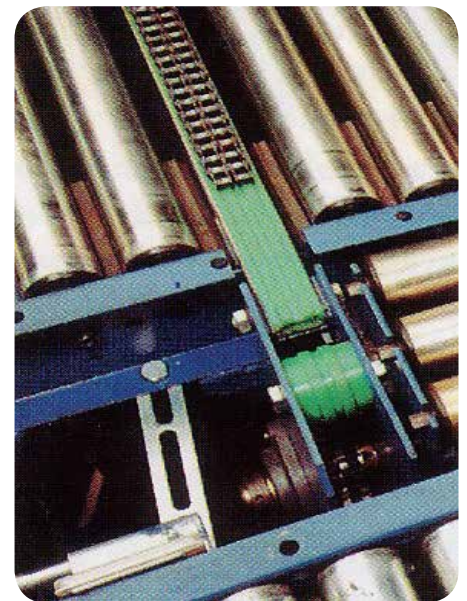
POLYSLIDE INSTALLATION SYSTEMS

Chain guides, belt guides and slide profiles

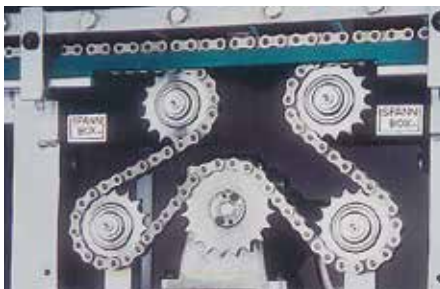
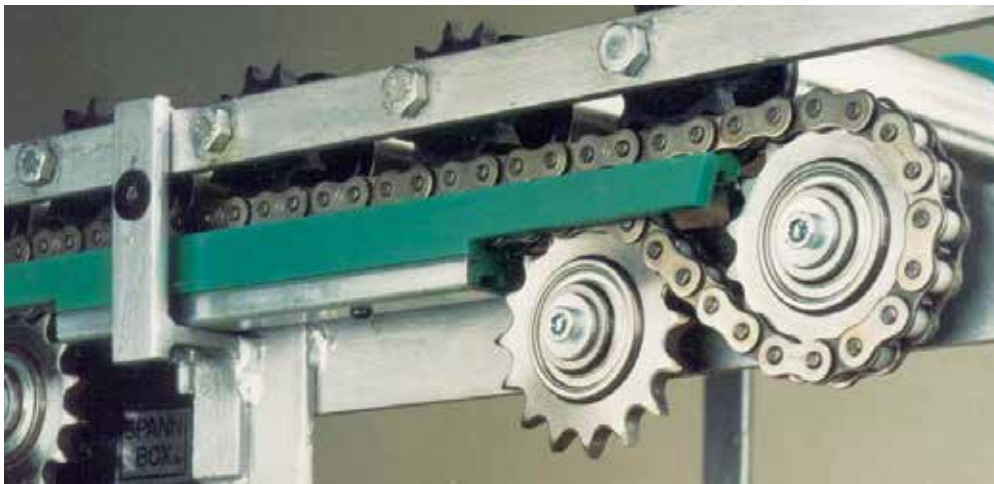
- 18 Steel-C-profiles – Standard range
- 18 T-head bolts for Steel-C-profiles – Standard range

CHAIN TENSIONERS

- 20 Spann Box / Spann Box Tensioners



APPLICATIONS



CAD/CAM
MANUFACTURING & DESIGN

CAMSAD
COMPUTER AIDED MATERIAL SELECTION & DESIGN

CNC
MACHINING | MILLING | ROUTING
SPINDLE MOULDING

POLYSLIDE – SYSTEMS SOLUTIONS

CONSULT OUR ENGINEERS WHEN DESIGNING...

- **CHAIN GUIDES**
- **BELT GUIDES**

Dotmar have technical people available to assist you in selection of the standard profile best suited to your application.

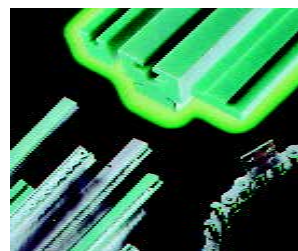
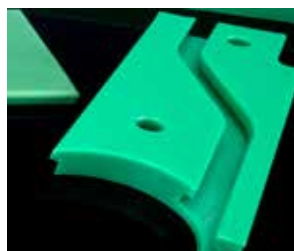
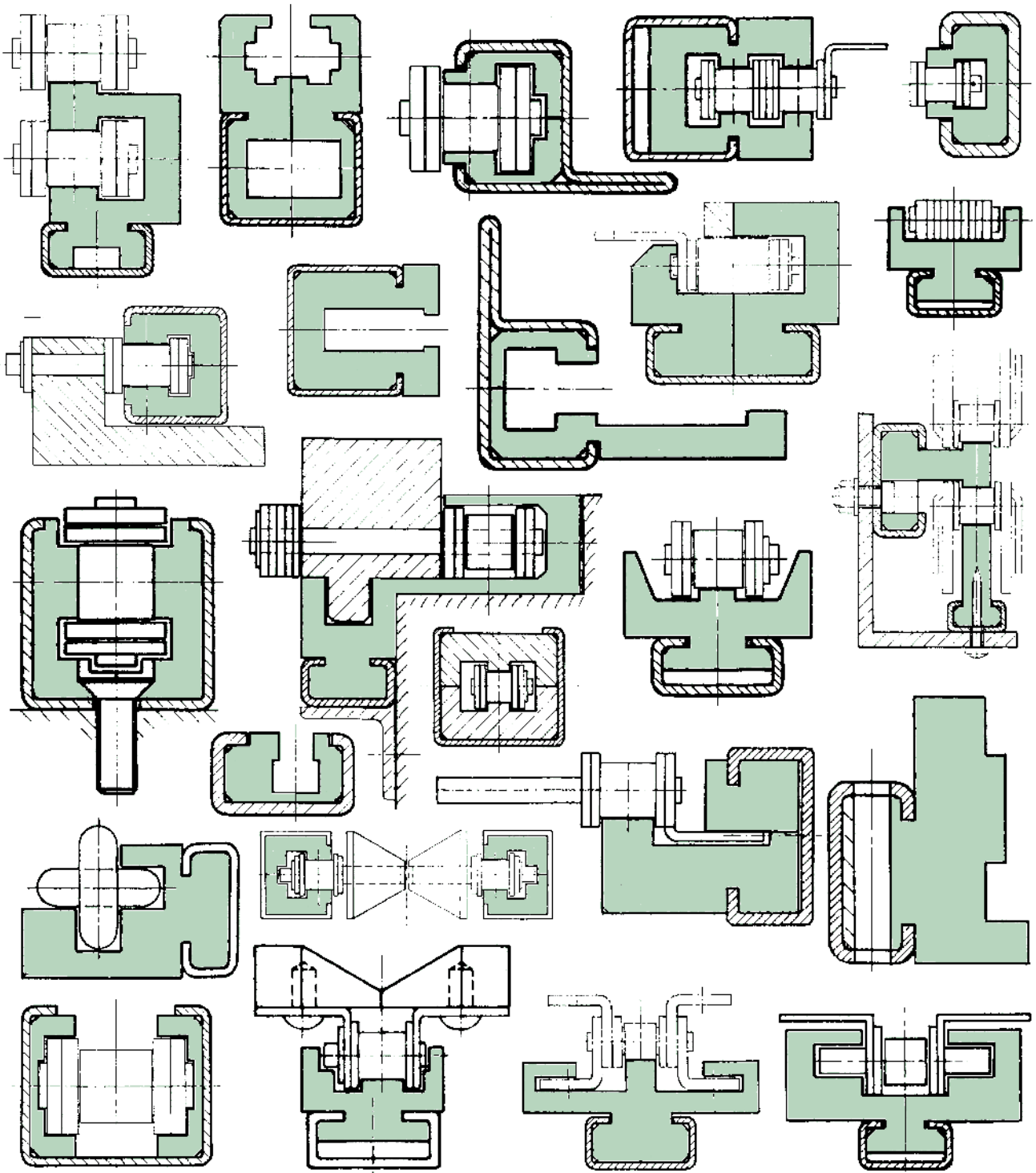
Additionally the focus and knowledge of Dotmar will help you use the best thermoplastic for your application.

DESIGN CONSIDERATIONS WITH POLYSLIDE SYSTEMS

- CAN I USE THIS SYSTEM TO REDUCE STRUCTURAL COMPONENTS?
- WHAT CONDITIONS (PHYSICAL/THERMAL/CHEMICAL) APPLY IN APPLICATION?
- ALLOW FOR THERMAL EXPANSION
- CONSIDER AFTER MARKET REPLACEMENT OF THE TRACK
- EASE OF INSTALLATION METHOD OF MOUNTING
- WHICH THERMOPLASTIC BEST SUITS THE APPLICATION?
- MY PROFILE IS NOT STANDARD (SKETCH IT FOR QUOTATION)

POLYSLIDE

DESIGN YOUR OWN GUIDES



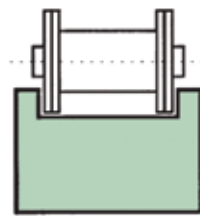
POLYSLIDE

CHAIN TRACK SYSTEMS

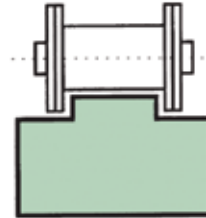
STANDARD RANGE

GUIDE FOR ROLLER CHAINS

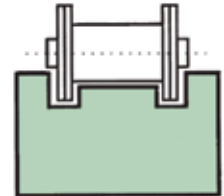
The Standard range “Guides for roller chains” comprises 15 different design types.



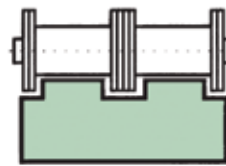
Type TU



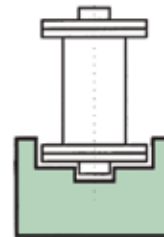
Type T



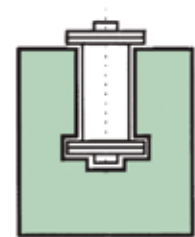
Type TS



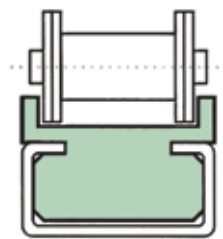
Type T-Duplex



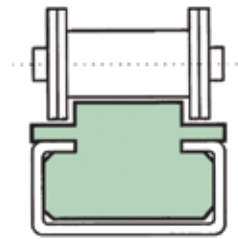
Type U



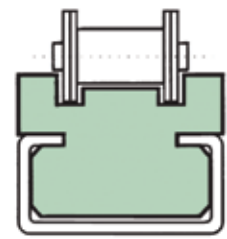
Type K



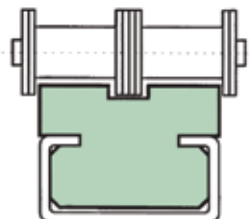
Type CTU



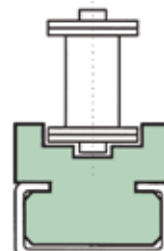
Type CT



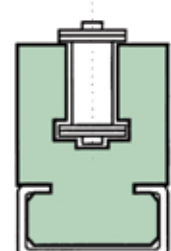
Type CTS



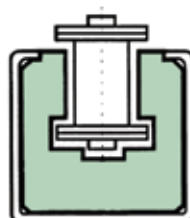
Type CT-Duplex



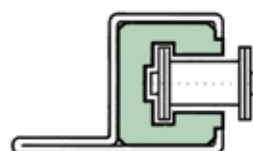
Type CU



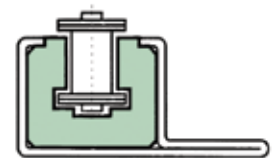
Type CK



Type CKG



Type CKG 14H



Type CKG 15V

SPECIAL PROFILES

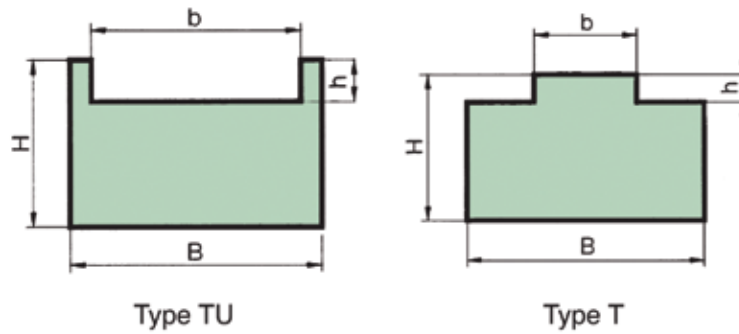
Utilising State of the Art machinery Dotmar is able to produce Special Purpose profiles in a variety of materials which include-

- PTFE
- NYLONS (PA)
- ACETAL (POM)
- PETP

and other materials upon request including High Performance Materials.

PROFILE: TYPE TU, TYPE T

Guide rails for roller chains made from Polystone Ultra



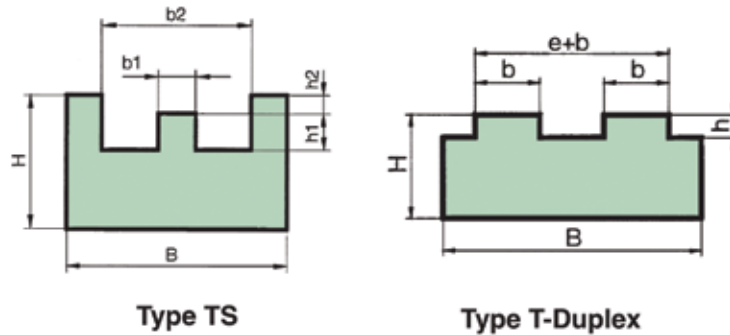
Part number	Chain dimension	Type	DIN ISO	Standard dimension in mm				Weight kg/m
				B	H	b	h	
Type TU Polystone Ultra								
114070	$\frac{3}{8}'' \times \frac{5}{32}''$	TU	–	15	10	12	3.3	0.116
114071	$\frac{1}{2}'' \times \frac{3}{16}''$	TU	–	15	10	12	2.2	0.116
Type T Polystone Ultra								
114002	$\frac{3}{8}'' \times \frac{7}{32}''$	T	06B-1	15	10	5.4	1.5	0.130
114003	$\frac{1}{2}'' \times \frac{3}{16}''$	T	083-1	15	10	4.5	1.5	0.130
114004	$\frac{1}{2}'' \times \frac{1}{4}''$	T	085-1	20	10	6.2	2.2	0.160
114005	$\frac{1}{2}'' \times \frac{5}{16}''$	T1	08B-1	20	10	7.4	2.2	0.175
114006	$\frac{1}{2}'' \times \frac{5}{16}''$	T1	08B-1	20	15	7.4	2.2	0.260
114007	$\frac{1}{2}'' \times \frac{5}{16}''$	T1	08B-1	20	20	7.4	2.2	0.340
114008	$1\frac{1}{2}'' \times \frac{5}{16}''$	T1	08B-1	20	30	7.4	2.2	0.550
114009	$\frac{5}{8}'' \times \frac{1}{4}''$	T	–	20	10	6.2	2.6	0.160
114010	$\frac{5}{8}'' \times \frac{3}{8}''$	T2	10B-1	20	10	9.3	2.6	0.160
114011	$\frac{5}{8}'' \times \frac{3}{8}''$	T2	10B-1	20	15	9.3	2.6	0.250
114012	$\frac{5}{8}'' \times \frac{3}{8}''$	T2	10B-1	20	20	9.3	2.6	0.355
114013	$\frac{5}{8}'' \times \frac{3}{8}''$	T2	10B-1	20	30	9.3	2.6	0.550
114014	$\frac{3}{4}'' \times \frac{7}{16}''$	T3	12B-1	25	10	11.3	2.4	0.200
114015	$\frac{3}{4}'' \times \frac{7}{16}''$	T3	12B-1	25	15	11.3	2.4	0.320
114016	$\frac{3}{4}'' \times \frac{7}{16}''$	T3	12B-1	25	20	11.3	2.4	0.430
114017	$\frac{3}{4}'' \times \frac{7}{16}''$	T3	12B-1	25	30	11.3	2.4	0.690
114018	1" x 17mm	T4	16B-1	40	15	16.0	3.5	0.450
114019	1" x 17mm	T4	16B-1	40	20	16.0	3.5	0.675
114020	1" x 17mm	T4	16B-1	40	30	16.0	3.5	1.050
114022	$1\frac{1}{4}'' \times \frac{3}{4}''$	T5	20B-1	45	15	18.0	4.2	0.545
114024	$1\frac{1}{2}'' \times 1''$	T6	24B-1	60	15	24.0	5.5	0.680
114026	$1\frac{3}{4}'' \times 31\text{mm}$	T7	28B-1	20	30.0	6.8	1.150	
114028	2" x 31mm	T8	32B-1	80	20	30.0	7.7	1.165

Standard lengths of Polyslide profiles 2000mm.
Intermediate lengths will be charged at the full metre price.
All special sections are available.

Profiles to suit ANSI Roller Chains on request.

PROFILE: TYPE TS, TYPE T-DUPLEX

Guide rails for roller chains made from Polystone Ultra



Part number	Chain dimension	Type	DIN ISO	Standard dimension in mm						Weight kg/m
				B	H	b ₁	b	h ₁	h ₂	
Type TS Polystone Ultra										
114029	3/8" x 7/32"	TS1	06B-1	20	10	3.8	13.0	1.5	1.1	0.188
114030	1/2" x 5/16"	TS2	083-1	20	10	3.0	12.4	1.6	1.4	0.188
114031	1/2" x 1/4"	TS3	085-1	22	10	4.5	15.1	2.2	1.6	0.207
114032	1/2" x 5/16"	TS4	08B-1	25	15	5.7	16.3	2.2	1.6	0.352
114033	5/8" x 1/4"	TS5	—	25	15	4.1	16.1	2.6	2.1	0.352
114034	5/8" x 3/8"	TS6	10B-1	28	15	7.4	19.2	2.6	2.1	0.394
114035	3/4" x 7/16"	TS7	12B-1	30	20	9.2	21.8	2.4	2.8	0.564
114036	1" x 17mm	TS8	16B-1	42	25	15.0	33.8	3.5	3.3	0.987
114037	1 1/4" x 3/4"	TS9	20B-1	50	25	16.8	40.0	4.2	4.0	1.175

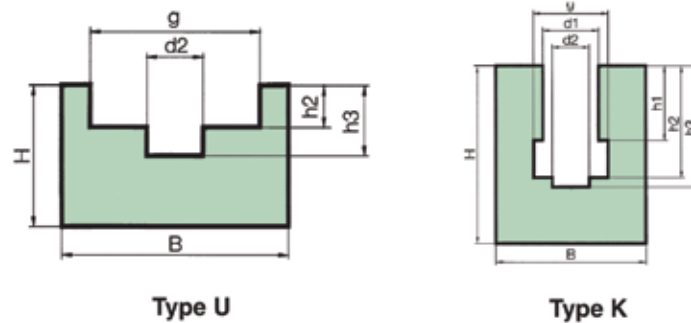
Part number	Chain dimension	Type	DIN ISO	B	Standard dimension in mm				Weight kg/m
					H	b	h	e+b	
Type T -Duplex Polystone Ultra									
114050	3/8" x 7/32"	T	06B-2	25	10	5.4	1.5	15.6	0.220
114051	1/2" x 5/16"	T1.2	08B-2	35	10	7.4	2.2	21.2	0.295
114052	1/2" x 5/16"	T1.2	08B-2	35	15	7.4	2.2	21.2	0.460
114053	1/2" x 5/16"	T1.2	08B-2	35	20	7.4	2.2	21.2	0.630
114054	1/2" x 5/16"	T1.2	08B-2	35	30	7.4	2.2	21.2	1.000
114055	5/8" x 3/8"	T2.2	10B-2	40	10	9.3	2.6	25.7	0.320
114059	3/4" x 7/16"	T3.2	12B-2	45	10	11.3	2.4	30.7	0.380
114061	1" x 17mm	T4.2	16B-2	48	15	16.0	3.5	48.0	0.600
114063	1 1/4" x 3/4"	T5.2	20B-2	55	15	18.0	4.2	55.0	0.670
114065	1 1/2" x 1"	T6.2	24B-2	72	20	24.0	5.5	72.0	1.400
114067	1 3/4" x 31mm	T7.2	28B-2	89	25	30.0	6.8	89.0	2.150
114069	2" x 31mm	T8.2	32B-2	88	30	30.0	7.7	88.0	2.550

Standard lengths of Polyslide profiles 2000mm.
Intermediate lengths will be charged at the full metre price.
All special sections (incl. triplex chains) are available.

Profiles to suit ANSI Roller Chains on request.

PROFILE: TYPE U, TYPE K

Guide rails for roller chains made from Polystone Ultra



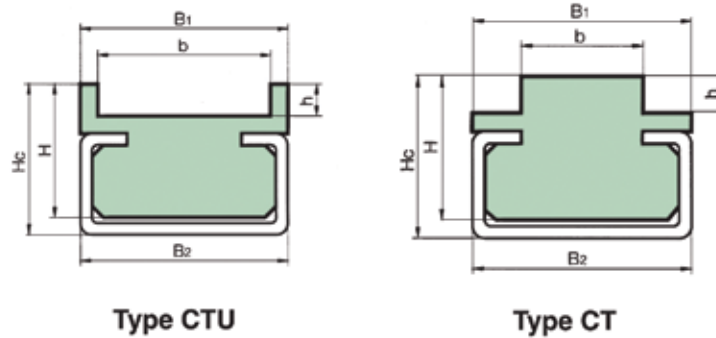
Part number	Chain dimension	Type	DIN ISO	Standard dimension in mm								Weight kg/m
				B	H	d ₁	d ₂	g	h ₁	h ₂	h ₃	
Type U Polystone Ultra												
114101	3/8" x 5/32"	U	–	20	15	–	4	9.4	–	2.8	4.2	0.260
114102	3/8" x 5/32"	U	06B-1	20	15	–	4	9.4	–	2.8	4.2	0.260
114103	1/2" x 3/16"	U	083-1	20	15	–	5	10.8	–	2.3	3.8	0.250
114107	1/2" x 1/4"	U	085-1	20	15	–	5	11.8	–	3.2	4.7	0.250
114104	1/2" x 1/4"	U	–	25	15	–	5	12.8	–	3.5	5.0	0.310
114106	1/2" x 5/16"	U1	08B-1	25	15	–	5	12.8	–	3.5	5.0	0.310
114105	5/8" x 1/4"	U	–	25	15	–	6	15.4	–	3.6	5.2	0.300
114108	5/8" x 3/8"	U2	10B-1	25	15	–	6	15.4	–	3.6	5.0	0.300
114110	3/4" x 7/16"	U3	12B-1	25	20	–	7	17.0	–	3.9	5.7	0.400
114112	1" x 17mm	U4	16B-1	35	25	–	10	24.0	–	8.4	10.6	0.600
114113	1 1/4" x 3/4"	U5	20B-1	55	25	–	11	28.0	–	10.0	12.2	1.076
114114	1 1/2" x 1"	U6	24B-1	60	30	–	16	36.6	–	13.0	16.0	1.272
114115	1 3/4" x 31mm	U7	28B-1	65	30	–	17	40.0	–	16.0	18.0	1.276
114116	2" x 31mm	U8	32B-1	70	30	–	19	44.6	–	16.0	18.7	1.336
Type K in one piece design Polystone Ultra (two piece model available on request without surcharge)												
114201	3/8" x 5/32"	K	–	20	25	6.6	4	9.4	3.6	7.0	8.0	0.430
114202	3/8" x 7/32"	K	06B-1	20	25	6.6	4	9.4	5.5	8.9	10.0	0.430
114203	1/2" x 3/16"	K	083-1	20	25	8.0	5	10.8	4.5	8.0	9.5	0.420
114204	1/2" x 1/4"	K	085-1	24	30	8.1	5	11.8	6.2	9.8	11.3	0.550
114205	1/2" x 1/4"	K	–	24	30	8.8	5	12.8	6.2	10.2	11.7	0.550
114206	1/2" x 5/16"	K1	08B-1	24	30	8.9	5	12.8	7.4	11.5	13.0	0.550
114207	5/8" x 1/4"	K	–	30	30	10.6	6	15.4	6.2	10.2	11.6	0.730
114208	5/8" x 3/8"	K2	10B-1	30	35	10.6	6	15.4	9.3	13.5	14.9	0.830
114210	3/4" x 7/16"	K3	12B-1	40	35	12.4	7	17.0	11.3	15.9	17.5	1.100
114212	1" x 17mm	K4	16B-1	40	45	16.4	10	24.0	16.0	25.7	27.0	1.220
114214	1 1/4" x 3/4"	K5	20B-1	50	50	20.0	11	28.0	18.0	29.5	31.7	1.760
114216	1 1/2" x 1"	K6	24B-1	60	60	27.0	16	36.6	24.0	38.2	41.2	2.350
114218	1 3/4" x 31mm	K7	28B-1	60	70	30.0	17	41.0	30.0	47.0	49.0	2.520
114220	2" x 36mm	K8	32B-1	70	75	31.0	19	44.6	30.0	47.3	50.0	3.350

Standard lengths of Polyslide profiles 2000mm.
Intermediate lengths will be charged at the full metre price.
All special sections are available.

Profiles to suit ANSI Roller Chains on request.

PROFILE: TYPE CTU, TYPE CT

Guide rails for roller chains made from Polystone Ultra with Steel-C-profiles (Chains to DIN 8187)



Steel-C-Profile dimensions on page 18.

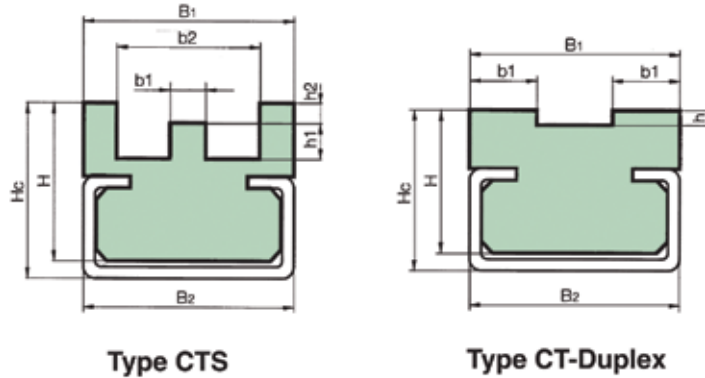
Part number	Chain dimension	Type	DIN ISO	C-profile S/S. galv.	Standard dimension in mm						Weight kg/m
					B ₁	B ₂	H	H _c	b	h	
Type CTU Polystone Ultra											
114480	3/8" x 5/32"	CTU3H15	—	C3	17.0	20	14	17	12.0	2.2	0.606
114481	1/2" x 3/16"	CTU3H15	083-1	C3	17.0	20	14	17	12.0	2.2	0.606
Type CT Polystone Ultra											
114416	3/8" x 7/32"	CT 3H15	06B-1	C3	17.0	20	14	17	5.4	1.5	0.805
114402	1/2" x 3/16"	CT 3H15	083-1	C3	17.0	20	14	17	4.5	1.5	0.805
114403	1/2" x 1/4"	CT 3H15	085-1	C3	17.0	20	14	17	6.2	2.2	0.805
114404	1/2" x 5/16"	CT 3H15	08B-1	C3	17.0	20	14	17	7.4	2.2	0.805
114405	5/8" x 1/4"	CT 3H15	—	C3	17.0	20	14	17	6.2	2.6	0.820
114406	5/8" x 3/8"	CT 3H15	10B-1	C3	17.0	20	14	17	9.3	2.6	0.820
114407	3/4" x 7/16"	CT 3H15	12B-1	C3	20.0	20	14	17	11.3	2.4	0.830
114408	3/4" x 7/16"	CT 5H15	12B-1	C5	24.0	28	14	18	11.3	2.4	1.220
114409	1" x 17mm	CT 5H15	16B-1	C5	24.0	28	14	18	16.0	3.5	1.225
114410	1 1/4" x 3/4"	CT 5H15	20B-1	C5	28.0	28	14	18	18.0	4.2	1.230
114412	1 1/2" x 1"	CT 9H25	24B-1	C9	33.0	38	23	30	24.0	5.5	2.610
114413	1 3/4" x 31mm	CT 9H25	28B-1	C9	38.0	38	23	30	30.0	6.8	2.660
114414	2" x 31mm	CT 9H25	32B-1	C9	38.0	38	23	30	30.0	7.7	2.660
114415	2" x 31mm	CT12H25	32B-1	C12	60.0	60	25	35	30.0	7.7	3.310

Standard lengths of Polystone profiles 2000mm, Steel-C-profiles max.6000mm.
Intermediate lengths will be charged at the full metre price.
All special sections are available.

Profiles to suit ANSI Roller Chains on request.

PROFILE: TYPE CTS, TYPE CT-DUPLEX

Guide rails for roller chains made from Polystone Ultra with Steel-C-profiles



Steel-C-profile dimensions on page 18.

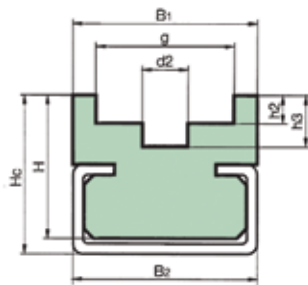
Part number	Chain dimension	Type	DIN ISO	C-profile S/S. galv.	Standard dimension in mm								Weight kg/m
					B ₁	B ₂	H	H _c	b ₁	b ₂	h ₁	h ₂	
Type CTS Polystone Ultra													
114427	3/8" x 7/32"	CTS1	06B-1	C3	20	20	14	17	3.8	13.0	1.5	1.1	0.772
114428	1/2" x 3/16"	CTS2	083-1	C3	20	20	14	17	3.1	12.4	1.6	1.4	0.772
114429	1/2" x 1/4"	CTS3	085-1	C3	22	20	14	17	4.5	15.1	2.2	1.6	0.800
114430	1/2" x 5/16"	CTS4	08B-1	C3	25	20	16	20	5.7	16.3	2.2	1.6	0.890
114431	5/8" x 1/4"	CTS5	—	C3	25	20	16	20	4.1	16.1	2.6	2.1	0.890
114432	5/8" x 3/8"	CTS6	10B-1	C5	28	28	16	20	7.4	19.2	2.6	2.1	1.307
114433	3/4" x 7/16"	CTS7	12B-1	C5	30	28	18	22	9.2	21.8	2.4	2.8	1.367
114434	1" X 17mm	CTS8	16B-1	C9	42	38	25	30	15.0	33.8	3.5	3.3	2.417
114435	1 1/4" x 3/4"	CTS9	20B-1	C9	50	38	30	35	16.8	40.0	4.2	4.0	2.840
Type CT- Duplex Polystone Ultra													
114426	3/8" x 7/32"	CT 3H15	06B-2	C3	15.7	20	14	17	5.5		1.5		0.710
114420	1/2" x 5/16"	CT 3H15	08B-2	C3	21.2	20	14	17	7.4		2.2		0.820
114421	5/8" x 3/8"	CT 3H15	10B-2	C3	25.7	20	14	17	9.3		2.6		0.830
114422	3/4" x 7/16"	CT 5H15	12B-2	C5	30.7	28	15	20	11.3		2.4		1.240
114423	1" x 17mm	CT 9H20	16B-2	C9	48.0	38	20	27	16.0		3.5		2.210
114424	1 1/4" x 3/4"	CT12H25	20B-2	C12	55.0	60	22	30	18.0		4.2		3.470
114425	1 1/2" x 1"	CT12H30	24B-2	C12	72.0	60	25	35	24.0		5.5		4.010

Standard lengths of Polystone profiles 2000mm, Steel-C-profiles max.6000mm.
Intermediate lengths will be charged at the full metre price.
All special sections (incl. triplex chains) are available.

Profiles to suit ANSI Roller Chains on request.

PROFILE: TYPE CU

Guide rails for roller chains made from Polystone Ultra with Steel-C-profiles

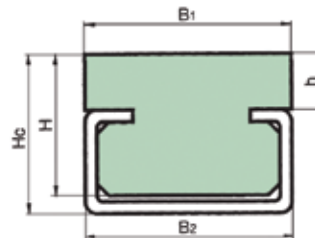


Type CU

Steel-C-profile dimensions on page 18

PROFILE: TYPE CF

Slide profiles made from Polystone Ultra with Steel-C-profiles



Type CF

Steel-C-profile dimensions on page 18

Part number	Chain dimension	DIN ISO	Type	C-profile S/S. galv.	Standard dimension in mm								Weight kg/m
					B ₁	B ₂	H	H _c	d ₂	g	h ₂	h ₃	
Type CU Polystone Ultra													
114503	3/8" x 5/32"	CU 3H15	–	C3	20	20	14	17	4	9.4	2.8	4.2	0.750
114507	3/8" x 7/32"	CU 3H15	06B-1	C3	20	20	14	17	4	9.4	2.8	4.2	0.750
114509	1/2" x 3/16"	CU 3H15	–	C3	20	20	14	17	5	10.8	2.3	3.8	0.740
114511	1/2" x 1/4"	CU 5H15	–	C5	28	28	14	18	5	11.8	3.2	4.7	1.110
114513	1/2" x 5/16"	CU 5H15	–	C5	28	28	14	18	5	12.8	3.5	5.0	1.170
114515	5/8" x 1/4"	CU 5H12	–	C5	24	28	12	18	6	15.4	3.6	5.2	1.160
114508	5/8" x 3/8"	CU 5H12	10B-1	C5	24	28	12	18	6	15.4	3.6	5.0	1.130
114510	3/4" x 7/16"	CU 5H12	12B-1	C5	24	28	12	18	7	17.0	3.9	5.7	1.130
114512	1" x 17mm	CU 9H20	16B-1	C9	33	38	20	30	10	24.0	8.4	10.6	2.260
114514	1 1/4" x 3/4"	CU12H25	20B-1	C12	60	60	25	35	11	28.1	10.0	12.2	3.210
114516	1 1/2" x 1"	CU12H30	24B-1	C12	60	60	30	40	16	36.6	13.0	16.0	3.510
114518	1 3/4" x 31mm	CU12H40	28B-1	C12	65	60	38	45	17	40.0	16.0	18.0	4.010
114520	2" x 31mm	CU12H40	32B-1	C12	70	60	38	45	19	44.6	16.0	18.7	4.210

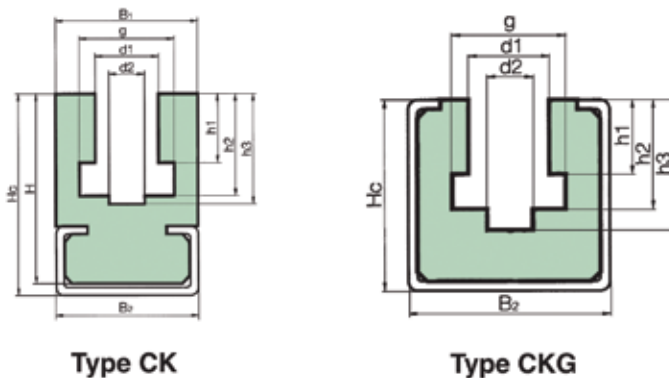
Part number	Type	C-profile S/S. galv.	Standard dimension in mm					Weight kg/m
			B ₁	B ₂	H	H _c	h	
Type CF made from Polystone Ultra								
114304	CF 3H10	C3	20	20	10	14	4,0	0,790
114306	CF 3H15	C3	20	20	14	17	7,0	0,880
114308	CF 3H18	C3	20	20	16	20	10,0	0,940
114310	CF 5H10	C5	28	28	10	15	3,0	1,180
114312	CF 5H15	C5	28	28	14	18	6,0	1,320
114314	CF 9H12	C9	38	38	12	22	4,0	2,200
114316	CF 9H20	C9	38	38	18	25	7,0	2,500
114318	CF 12H20	C12	60	60	20	30	10,0	3,300

Standard lengths of Polyslide profiles 2000mm, Steel-C-profiles max.6000mm.
Intermediate lengths will be charged at the full metre price.
All special sections are available.

Profiles to suit ANSI Roller Chains on request.

PROFILE: TYPE CK, TYPE CKG

Guide rails for roller chains made from Polystone Ultra with Steel-C-profiles



Steel-C-profile dimensions on page 18.

Part number	Chain dimension	Type	DIN ISO	C-profile S/S. galv.	Standard dimension in mm										Weight kg/m
					B ₁	B ₂	H	H _c	d ₁	d ₂	g	h ₁	h ₂	h ₃	
Type CK Polystone Ultra															
114550	3/8" x 5/32"	CK 3	–	C 3	20	20	18	21	6.6	4	9.4	3.6	7.0	8.0	0.920
114551	3/8" x 7/32"	CK 3	06B-1	C 3	20	20	18	21	6.6	4	9.4	5.5	8.9	10.0	0.919
114552	1/2" x 3/16"	CK 3	083-1	C 3	20	20	18	21	8.0	5	10.8	4.5	8.0	9.5	0.919
114553	1/2" x 1/4"	CK 5	085-1	C 5	24	28	28	32	8.0	5	11.8	6.2	9.8	11.3	1.755
114554	1/2" x 1/4"	CK 5	–	C 5	24	28	28	32	8.8	5	12.8	6.2	10.2	11.7	1.755
114555	1/2" x 5/16"	CK 5	08B-1	C 5	24	28	28	32	8.9	5	12.8	7.4	11.5	13.0	1.755
114556	5/8" x 1/4"	CK 5	–	C 5	24	28	28	32	10.6	6	15.4	6.2	10.2	11.6	1.690
114557	5/8" x 3/8"	CK 5	10B-1	C 5	24	28	28	32	10.6	6	15.4	9.3	13.5	14.9	1.690
114558	3/4" x 7/16"	CK 9	12B-1	C 9	32	38	35	43	12.4	7	17.0	11.3	15.9	17.5	2.860
114559	1" x 17mm	CK 9	16B-1	C 9	40	38	45	50	16.4	10	24.0	16.0	25.7	27.7	2.700
114560	1 1/4" x 3/4"	CK12	20B-1	C12	60	60	50	55	20.0	11	28.0	18.0	29.5	31.7	4.810
114561	1 1/2" x 1"	CK12	24B-1	C12	60	60	60	65	27.0	16	36.6	24.0	38.2	41.2	5.010
114562	1 3/4" x 31mm	CK12	28B-1	C12	70	60	75	80	30.0	17	40.0	30.0	47.0	49.0	6.210
114563	2" x 31mm	CK12	32B-1	C12	70	60	75	80	31.0	19	44.6	30.0	47.3	50.0	6.210
Type CKG in one piece design Polystone Ultra (two piece model available on request without surcharge)															
114599	3/8" x 5/32"	CKG10	–	C10	–	30	–	24	6.6	4	9.4	3.6	7.0	8.0	1.465
114600	3/8" x 7/32"	CKG10	06B-1	C10	–	30	–	24	6.6	4	9.4	5.5	8.9	10.0	1.295
114601	1/2" x 3/16"	CKG10	083-1	C10	–	30	–	24	8.0	5	10.8	4.5	8.0	9.5	1.295
114635	1/2" x 1/4"	CKG10	085-1	C10	–	30	–	24	8.0	5	11.8	6.2	9.8	11.3	1.295
114636	1/2" x 1/4"	CKG10	–	C10	–	30	–	24	8.8	5	12.8	6.2	10.2	11.7	1.295
114602	1/2" x 5/16"	CKG10	08B-1	C10	–	30	–	24	8.9	5	12.8	7.4	11.5	13.1	1.295
114637	5/8" x 1/4"	CKG10	–	C10	–	30	–	24	10.6	6	15.4	6.2	10.2	11.6	1.295
114603	5/8" x 3/8"	CKG10	10B-1	C10	–	30	–	24	10.6	6	15.4	9.3	13.5	14.9	1.295
114604	3/4" x 7/16"	CKG10	12B-1	C10	–	30	–	24	12.4	7	17.0	11.3	15.9	17.5	1.295
114605	1" x 17mm	CKG11	16B-1	C11	–	45	–	40	16.4	10	24.0	16.0	25.7	27.7	3.175
114606	1 1/4" x 3/4"	CKG11	20B-1	C11	–	45	–	40	20.0	11	28.0	18.0	29.5	31.7	3.070
114607	1 1/2" x 1"	CKG13	24B-1	C13	–	65	–	55	27.0	16	36.6	24.0	38.2	41.2	6.260
114608	1 3/4" x 31mm	CKG13	28B-1	C13	–	65	–	55	30.0	17	41.0	30.0	47.0	49.0	5.860
114609	2" x 31mm	CKG13	32B-1	C13	–	65	–	60	31.0	19	44.6	30.0	47.3	50.0	5.760

Standard lengths of Polystone profiles 2000mm, Steel-C-profiles max.6000mm.

Profiles to suit ANSI Roller Chains on request.

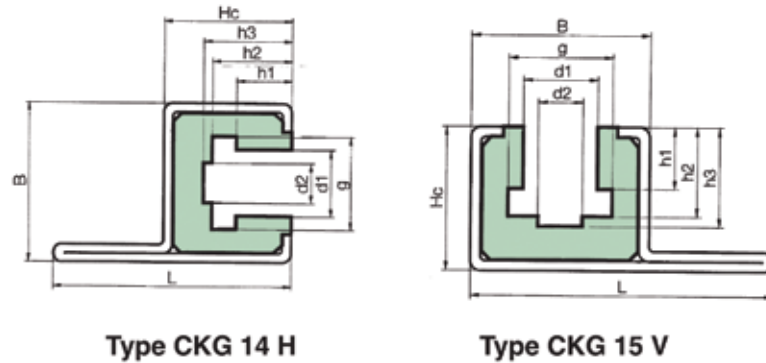
Intermediate lengths will be charged at the full metre price.

All special sections are available.

All standard dimensions are designed for a chain track with outward facing connecting link, if required the guide can also be delivered for inner facing connecting link. Please specify at time of ordering.

PROFILE: TYPE CKG 14 H, TYPE CKG 15V

Guide rails for roller chains made from Polystone Ultra with Steel-C-profiles



Steel-C-profile dimensions on page 18.

Part number	Chain dimension	Type	DIN ISO	C-profile S/S. galv.	Standard dimension in mm								Weight kg/m
					B	H _c	L	d ₁	g	h ₁	h ₂	h ₃	
Type CKG 14H Polystone Ultra													
114638	3/8" x 5/32"	CKG14H	—	C14H	31	25	47	6.6	9.4	3.6	7.0	8.0	2.30
114610	3/8" x 7/32"	CKG14H	06B-1	C14H	31	25	47	6.6	9.4	5.5	8.9	10.0	2.29
114639	1/2" x 3/16"	CKG14H	083-1	C14H	31	25	47	8.0	10.8	4.5	8.0	9.5	2.29
114640	1/2" x 1/4"	CKG14H	085-1	C14H	31	25	47	8.0	11.8	6.2	9.8	11.3	2.29
114641	1/2" x 1/4"	CKG14H	—	C14H	31	25	47	8.8	12.8	6.2	10.2	11.7	2.29
114611	1/2" x 5/16"	CKG14H	08B-1	C14H	31	25	47	8.9	12.8	7.4	11.5	13.0	2.29
114642	5/8" x 1/4"	CKG14H	—	C14H	31	25	47	10.6	15.4	6.2	10.2	11.6	2.24
114612	5/8" x 3/8"	CKG14H	10B-1	C14H	31	25	47	10.6	15.4	9.3	13.5	14.9	2.24
114613	3/4" x 7/16"	CKG14H	12B-1	C14H	31	25	47	12.4	17.0	11.3	15.9	17.5	2.20
Type CKG 15V in one piece design Polystone Ultra (two piece model available on request without surcharge)													
114643	3/8" x 5/32"	CKG15V	—	C15V	31	25	53	6.6	9.4	3.6	7.0	8.0	2.34
114615	3/8" x 7/32"	CKG15V	06B-1	C15V	31	25	53	6.6	9.4	5.5	8.9	10.0	2.34
114644	1/2" x 3/16"	CKG15V	083-1	C15V	31	25	53	8.0	9.4	4.5	8.0	9.5	2.30
114645	1/2" x 1/4"	CKG15V	085-1	C15V	31	25	53	8.0	10.8	6.2	9.8	11.3	2.30
114646	1/2" x 1/4"	CKG15V	—	C15V	31	25	53	8.8	11.8	6.2	10.2	11.7	2.30
114616	1/2" x 5/16"	CKG15V	08B-1	C15V	31	25	53	8.9	12.8	7.4	11.5	13.0	2.30
114647	5/8" x 1/4"	CKG15V	—	C15V	31	25	53	10.6	15.4	6.2	10.2	11.6	2.25
114617	5/8" x 3/8"	CKG15V	10B-1	C15V	31	25	53	10.6	15.4	9.3	13.5	14.9	2.25
114618	3/4" x 7/16"	CKG15V	12B-1	C15V	31	25	53	12.4	17.0	11.3	15.9	17.5	2.25

Standard lengths of Polystone profiles 2000mm, Steel-C-profiles max. 6000mm.

Profiles to suit ANSI Roller Chains on request.

Intermediate lengths will be charged at the full metre price.

All special sections are available.

All standard dimensions are designed for a chain track with outward facing connecting link, if required the guide can also be delivered for inner facing connecting link. Please specify at time of ordering.

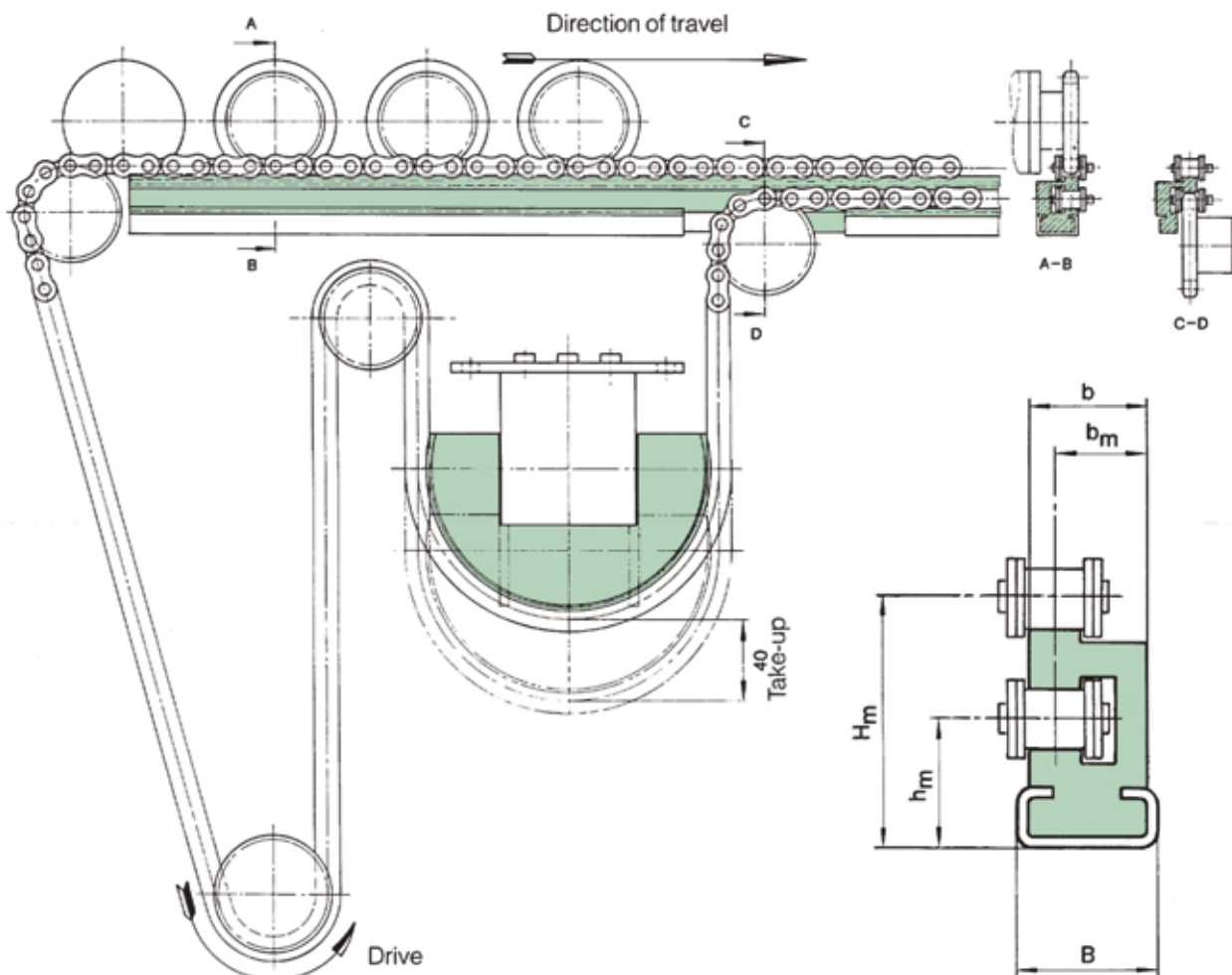
PROFILE: TYPE ETA

Double decker guide rails for roller chains made from Polystone Ultra with Steel-C-profiles

The double decker guide rails make possible considerable space saving in powered roller drives. The return side of the chain which drives the sprockets is led back through the lower deck of the guide rail. (Special machining of the sprocket teeth is recommended for tangential running chain). This excellent solution, with its undoubted technical advantage, also helps reduce the cost on such installations.

Part number	Chain dimension	Type	DIN ISO	C-profile S/S. galv.	Standard dimension in mm					Weight kg/m
					B	H _m	b	b _m	h _m	
Type ETA Polystone Ultra										
114702	3/8" x 7/32"	ETA0	06B-1	C 3	20	30.2	17	14.5	17	0.898
114704	1/2" x 5/16"	ETA1	08B-1	C 3	20	33.8	20	16.5	18	0.964
114706	5/8" x 3/8"	ETA2	10B-1	C 3	20	41.1	20	15.5	21	1.125
114708	3/4" x 7/16"	ETA3	12B-1	C 5	28	46.5	24	18.5	24	1.720
114710	1" x 17mm	ETA4	16B-1	C 9	38	62.0	33	25.0	34	3.167

Steel-C-profile dimensions on page 18.



Standard lengths of Polystone profiles 2000mm, Steel-C-profiles max. 6000mm.

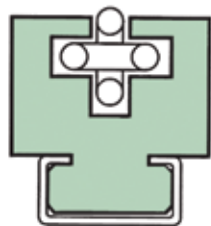
Intermediate lengths will be charged at the full metre price.

All special sections are available.

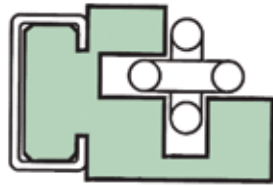
All standard dimensions are designed for a chain track with outward facing connecting link, if required the guide can also be delivered for inner facing connecting link. Please specify at time of ordering.

STANDARD RANGE GUIDES

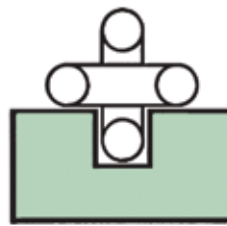
FOR ROUND LINK CHAINS MADE FROM POLYSTONE ULTRA



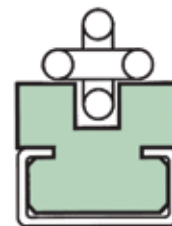
Type CR



Type CRO



Type R



Type CRU

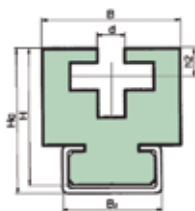
The standard range "Guides for round link chains" comprises 4 different design types.

Profile list Type CR, Type CRO

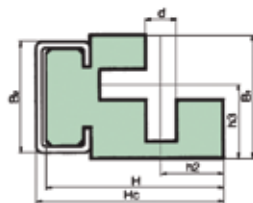
Guide rails for round link chain guides made from Polystone Ultra with steel-C-profile

Profile list Type R, Type CRU

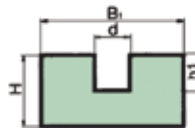
Guide rails for round link chain guides made from Polystone Ultra with/without steel-C-profile



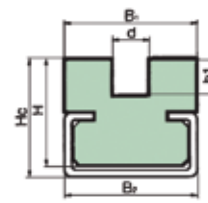
Type CR



Type CRO



Type R



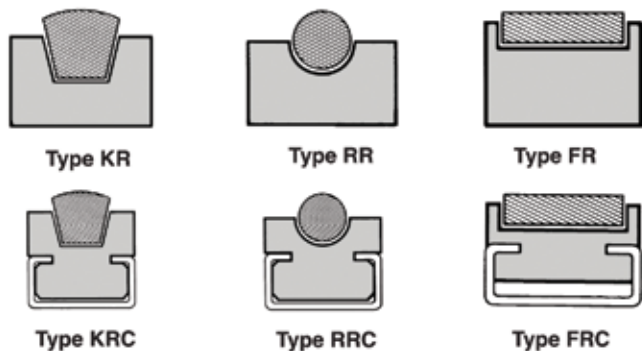
Type CRU

Part number	Chain dimension	Type	C-profile S/S. galv.	Standard dimension in mm									Weight kg/m
				B ₁	B ₂	H	H _c	d	h ₁	h ₂	h ₃		
Type CKG in two-piece design Polystone Ultra													
114654	6	CR 6	C 9	45	38	42	45	7.0	-	8.0	-	3.290	
114655	8	CR 8	C 9	50	38	47	50	9.5	-	9.5	-	3.932	
114656	10	CR10	C 9	50	38	57	60	11.5	-	14.0	-	3.970	
114657	13	CR13	C12	60	60	72	75	15.0	-	18.0	-	5.112	
Type CRO in one-piece design Polystone Ultra													
114660	6	CRO 6	C 3	27.0	20	32	34	7.0	-	10.5	17.5	1.157	
114661	8	CRO 8	C 5	32.0	28	39	42	9.5	-	12.5	20.5	2.203	
114662	10	CRO10	C 9	42.5	38	53	56	11.5	-	16.5	25.5	3.264	
114663	13	CRO13	C12	60.0	60	67	70	15.0	-	20.5	33.5	4.104	
Type R Polystone Ultra													
114650	6	R 6	-	30	-	15	-	7.0	7	-	-	0.401	
114651	8	R 8	-	35	-	20	-	9.5	9	-	-	0.619	
114652	10	R10	-	45	-	25	-	11.5	11	-	-	1.005	
114653	13	R13	-	55	-	30	-	15.0	15	-	-	1.425	
Type CRU Polystone Ultra													
114665	6	CRU 6	C 5	30	28	14	18	7.0	7	-	-	1.167	
114666	8	CRU 8	C 9	38	38	18	25	9.5	9	-	-	1.182	
114667	10	CRU10	C 9	45	38	18	25	11.5	11	-	-	2.111	
114668	13	CRU13	C12	60	60	25	33	15.0	15	-	-	5.531	

For round link chains that do not correspond to DIN766 or DIN764 please indicate dimensions.
 Standard lengths of Polyslide profiles 2000mm, Steel-C-profiles max.6000mm.
 Intermediate lengths will be charged at the full metre price.

POLYSLIDE BELT TRACK SYSTEMS

STANDARD RANGE GUIDES FOR BELTS



The following coefficients of friction have been determined:

Material	Belt Quality		
	PH	PW	PUW
Aluminium	0.45	0.75	0.75
Glass	0.30	0.30	0.40
Wood veneer in direction of grain	0.35	0.45	0.60
Polystone	0.10	0.25	0.25
Polished steel	0.40	0.70	0.95

Part No.	Belt No.	Type	C-profile S/S. galv.	Standard dimension in mm						Weight kg/m
				B ₁	B ₂	H	H _e	b	h	
Type KR Polystone 7000 SR										
114750	8	KR 8	-	20	-	10	-	6.0	3.0	0.17
114751	10	KR10	-	20	-	10	-	7.2	4.5	0.16
114752	13	KR13	-	20	-	12	-	9.2	6.0	0.17
114753	17	KR17	-	30	-	15	-	11.5	8.0	0.33
114754	20	KR20	-	30	-	20	-	13.5	9.0	0.43
114755	22	KR22	-	35	-	20	-	14.5	10.5	0.49
114756	25	KR25	-	40	-	25	-	16.5	12.0	0.73
114757	32	KR32	-	50	-	30	-	21.0	16.0	1.04
114758	40	KR40	-	60	-	35	-	26.0	21.0	1.37
Type KRC Polystone 7000 SR										
114760	8	KRC 8	C 3	20	20	10	15	6.0	3.5	0.63
114761	10	KRC10	C 3	20	20	15	18	7.2	4.5	0.70
114762	13	KRC13	C 5	25	28	18	22	9.2	6.0	1.19
114763	17	KRC17	C 5	30	28	18	24	11.5	8.0	1.20
114764	20	KRC20	C 5	30	28	18	24	13.5	9.0	1.18
114765	22	KRC22	C 9	35	38	25	30	14.5	10.5	2.06
114766	25	KRC25	C 9	40	38	25	32	16.5	12.0	2.05
114767	32	KRC32	C12	60	60	35	40	21.0	16.0	3.66
114768	40	KRC40	C12	60	60	35	40	26.0	21.0	3.37

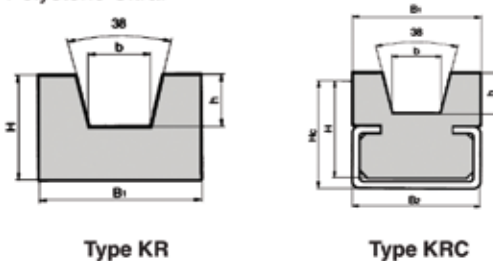
Standard lengths of Polyslide profiles 2000mm, steel-C-profiles max. 6000mm. Intermediate lengths will be charged at the full metre price.

Part No.	Belt No.	Type	C-profile S/S. galv.	Standard dimension in mm						Weight kg/m
				B ₁	B ₂	H	H _e	h	r	
Type RR Polystone 7000 SR										
114910	5.0	RR 5	-	20	-	10	-	3	3	0.18
114911	6.3	RR 6	-	20	-	10	-	4	4	0.17
114912	8.0	RR 8	-	20	-	12	-	5	5	0.20
114913	9.5	RR10	-	25	-	15	-	6	6	0.30
114914	12.5	RR12	-	30	-	20	-	8	7	0.49
114915	15.0	RR15	-	35	-	25	-	10	9	0.70
114916	18.0	RR18	-	40	-	25	-	12	10	0.78
Type RRC Polystone 7000 SR										
114920	5.0	RRC 5	C3	20	20	10	15	3	3	0.63
114921	6.3	RRC 6	C3	20	20	15	18	4	4	0.71
114922	8.0	RRC 8	C3	20	20	15	18	5	5	0.70
114923	9.5	RRC10	C5	25	28	15	20	6	6	1.12
114924	12.5	RRC12	C5	28	28	15	20	8	7	1.12
114925	15.0	RRC15	C9	33	38	20	25	10	9	1.93
114926	18.0	RRC18	C9	38	38	20	25	12	10	1.92

Standard lengths of Polyslide profiles 2000mm, Steel-C-profiles max. 6000mm. Intermediate lengths will be charged at the full metre price.

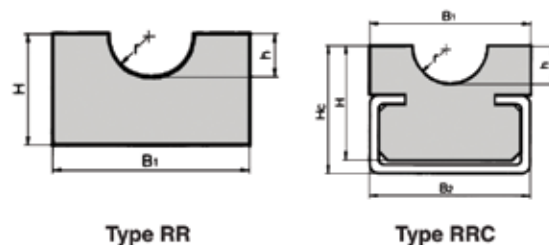
Profile list Type KR, Type KRC

Guide for V-belts made from Polystone 7000SR Black with/without steel-C-profile. Also available upon request in Polystone Ultra.



Profile list Type RR, Type RRC

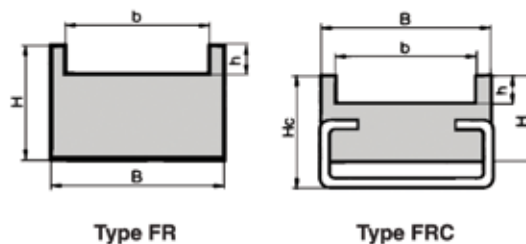
Guide for R-belts made from Polystone 7000SR Black with/without steel-C-profile. Also available upon request in Polystone Ultra.



Profile list Type FR, Type FRC

Guide for F-belts made from Polystone 7000SR Black with/without steel-C-profile. Also available upon request in Polystone Ultra.

Please state dimensions required upon request.



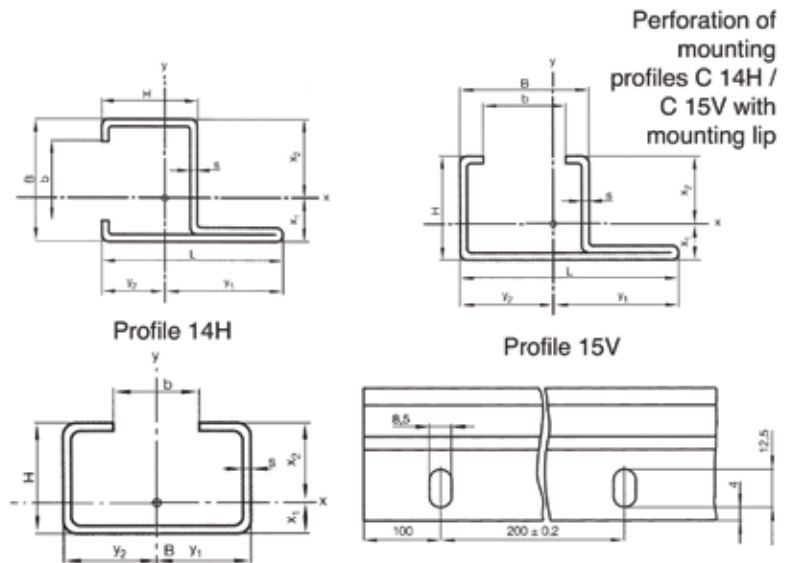
POLYSLIDE INSTALLATION SYSTEMS

MOUNTING WITH STANDARD RANGE STEEL-C-PROFILE

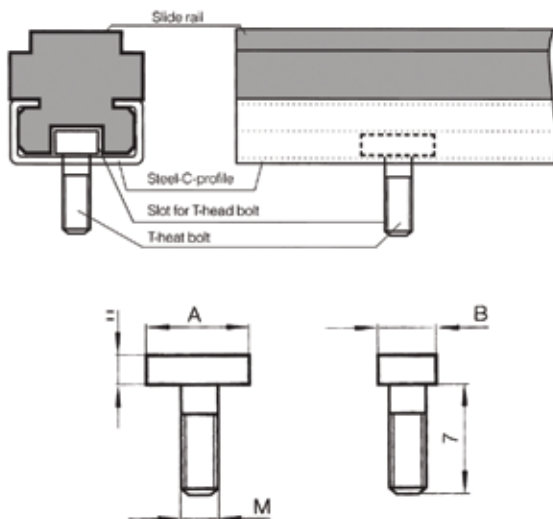
STANDARD LENGTH 2000mm AND 6000mm

(a) Mounting with Steel-C-profiles

Usually an optimum and especially economical mounting method Dotmar offer a range of 11 Steel-C-profiles types available ex stock for a large variety of chain/belt guides and slide profile arrangements. Using our own rolling equipment they are specially produced for use in combination with plastic profiles. Compared to the usual commercial technical profiles, the Steel-C-profiles have a substantially closer and more constant tolerance zone, and consequently, higher dimensional accuracy. The profiles are produced as standard from galvanized steel or corrosion resistant stainless steel.



Part Number		Profile No.	B	b	H	s	L	Profile centre of gravity cm		Section modulus cm ³				Moment of Inertia cm ⁴		Weight kg/m
Galv.	Stainless Steel							x ₁	y ₁	W _{z1}	W _{z2}	W _{y1}	W _{y2}	I _z	I _y	
177003	177103	C 3	20	10	10	1.5	-	0.41	1.00	0.210	0.142	0.368	0.368	0.085	0.368	0.49
177005	177105	C 5	28	14	12	2	-	0.43	1.40	0.414	0.234	0.840	0.840	0.180	1.176	0.86
177007	177107	C 7	28	14	16	2.5	-	0.65	1.40	0.773	0.532	1.253	1.253	0.504	1.754	1.18
177009	177107	C 9	38	22	18	2.5	-	0.69	1.90	1.911	0.735	2.166	2.166	0.819	4.116	1.49
177010	177110	C10	30	20	24	1.5	-	0.93	1.50	0.972	0.610	1.237	1.237	0.899	1.855	0.96
177011	177111	C11	45	31	40	2	-	1.55	2.25	3.412	2.158	4.089	4.089	5.289	9.202	2.07
177012	177112	C12	60	36	20	2.5	-	0.70	3.00	2.195	1.191	4.744	4.744	1.544	14.232	2.17
177013	177113	C13	65	40	55	3	-	2.17	3.25	6.414	4.185	5.560	5.560	13.930	18.070	4.34
177014	177114	C14H	31	20	25	2	47	1.09	2.46	3.810	2.055	1.499	1.650	4.141	3.693	1.87
177015	177115	C15V	31	20	25	2	53	1.79	2.84	0.925	2.334	2.479	2.860	1.656	7.039	1.90



The Steel-C-profiles are welded into position in several places. As they are cold rolled there is a danger of distortion during welding. Therefore, a bolt connection is generally preferable. We recommend a patented form of mounting the Steel-C-profiles using T-headbolts.

(b) Mounting with Steel-C-profiles and T-head bolts

The plastic profile is provided with an additional slot to hold the bolt head. The nuts are tightened from below during assembly. The slot in the plastic profile prevents the bolt from turning. The Steel-C-profiles/T-head bolt combination offers the following advantages:

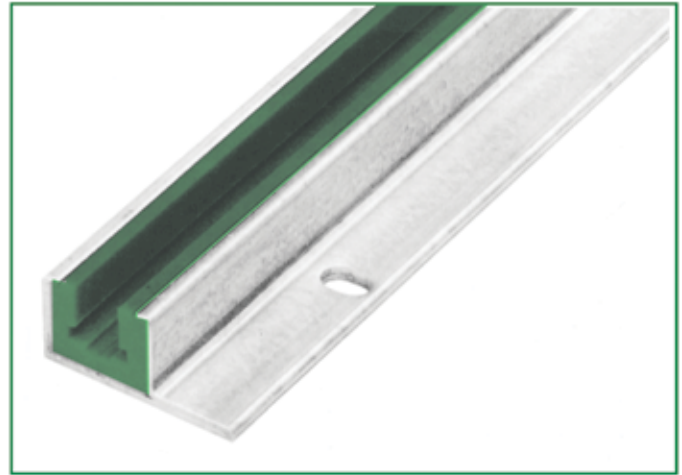
- the plastic profile is inserted freely and can expand and contract if subjected to temperature fluctuations
- no distortion of the Steel-C-profiles when mounting
- easy mounting and dismantling of the guide system
- easy alignment of the guide rails
- the Steel-C-profiles only require one through hole
- easy replacement of plastic profiles if worn

Part number	Suitable for C-profile	A mm	B mm	h mm	M mm	L mm	Thread mm
174400	C 3	15.5	9.5	4.0	6	20	M 6 x 20
174400	C 5	15.5	9.5	4.0	6	20	M 6 x 20
174410	C 7	15.5	9.0	5.5	6	20	M 6 x 20
174411	C 7	15.5	9.0	5.5	8	30*	M 8 x 30
174412	C 7	15.5	9.0	5.5	8	40*	M 8 x 40
174420	C 9	23.0	11.0	7.5	8	20	M 8 x 20
174421	C 9	23.0	11.0	7.5	10	30*	M 10 x 30
174422	C 9	23.0	11.0	7.5	10	40*	M 10 x 40
174430	C12	31.0	13.5	10.0	10	20	M 10 x 20
174431	C12	31.0	13.5	10.0	10	30*	M 10 x 30
174432	C12	31.0	13.5	10.0	12	40*	M 12 x 40

*also available in S/S. Available on special order.

(C) Mounting with Steel-C-profiles including mounting strip

An interesting, cost-effective mounting with bolt connections can be achieved with the use of Steel-C-profiles types CKG 14H and CKG 15V (patented). The profiles are rolled with a continuous mounting strip and have oblong holes every 200mm for 8mm Ø bolts. These bolt connections can be easily readjusted so that alignment errors can be corrected quickly and easily.



(D) Mounting with bolts

In view of the expansion possibilities of the plastic profiles a bolted connection is the least favourable fastening method. Furthermore, because of the bolt head, the material thickness available for wear is reduced. The profiles can only be bolted once, and since there are no lateral guides, must also be fixed laterally. For each subsequent rail a 45° expansion joint must be provided. Oblong holes have not proved themselves in practical operation, as they become dirty and clogged up. So that often, even after a short operating period, the plastic profile can no longer expand. In contrast with the other mounting methods described, with bolted connections it cannot be guaranteed that the plastic profiles will only expand lengthwise.

There is a danger of lateral displacement and “lifting”. Another disadvantage is high labour costs incurred in replacing the rails when worn.

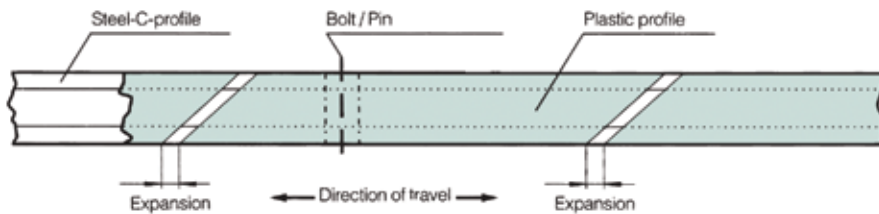
Allowing for expansion compensation with mounting systems a/b/c

After mounting the Steel-C-profiles the plastic profile is inserted into the Steel-C-profiles. There are various methods of mounting the plastic profile depending on the application. However, the basis for every mounting method is to make it possible for the plastic material to expand and contract during temperature fluctuations.

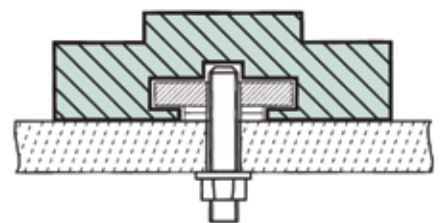
One direction of travel of the chain/ the belt/ the conveyor material

During expansion the profiles are displaced in the travel/conveyor direction. According to the anticipated expansion, appropriate expansion space should be provided in the direction of travel at the beginning of the plastic profile.

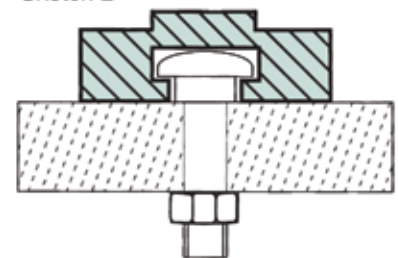
One or Changing direction of travel of the chain / the belt / the conveyor material.



Sketch 1



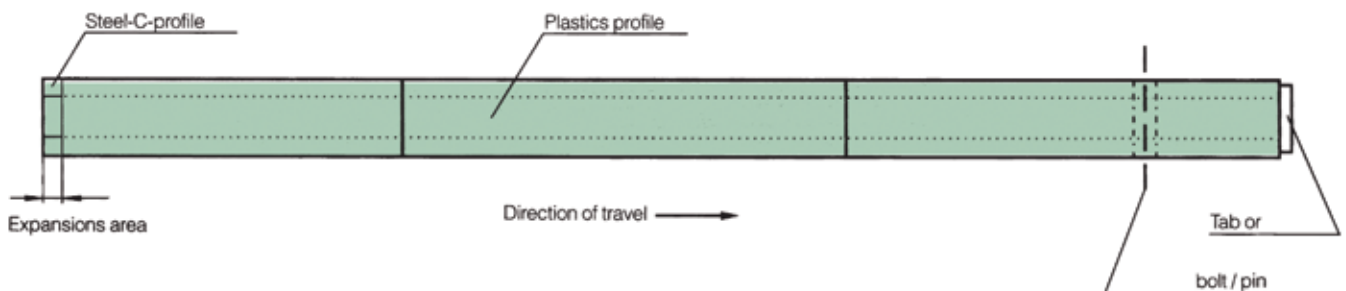
Sketch 2



(E) Mounting slide profiles with a T-slot

With plastic profiles it is possible to provide a T-slot for holding a tab or bolt head. During mounting, the tab is first bolted or welded on and then the plastic profile is fitted freely.

The fastening bolts shown in sketch 2 are also tightened with a distance sleeve. The plastic profile is then fitted freely. The mounting of the plastic profiles should be carried out according to the direction of travel.



AUTOMATIC CHAIN TENSIONERS

SPANN BOX and SPANN BOY DBP

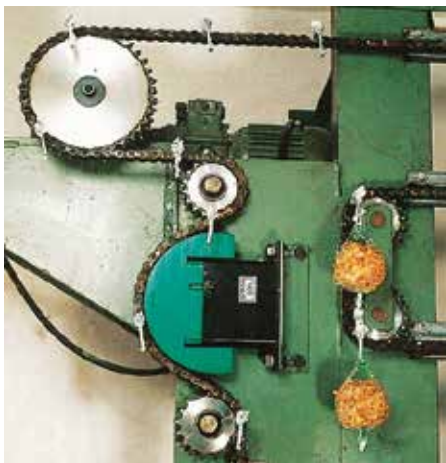
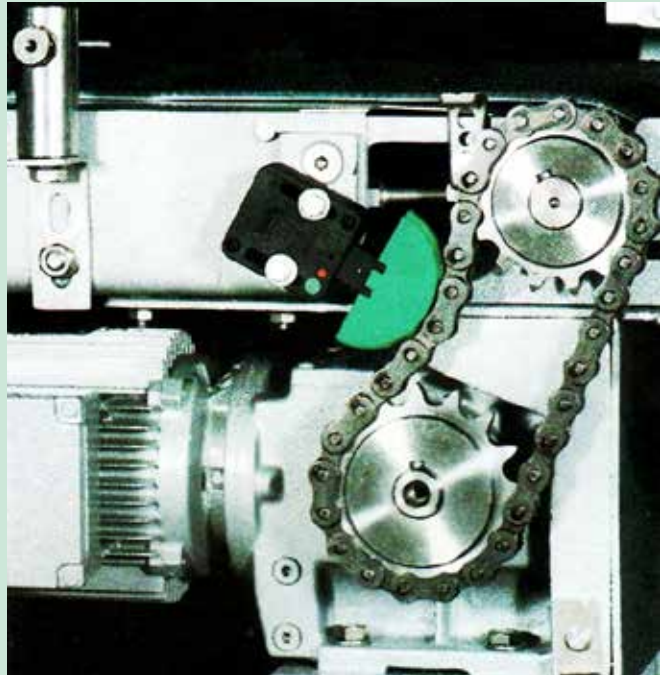
THE PRINCIPLE

Chains glide over a wear resistant synthetic profile with self-lubricating properties.

The variable tension is produced by three springs which can be released individually and can also be locked again individually.

Selection of spring force between 60 and 800N. Important: The tension force only decreases by approx. 50% of the initial force at full extent of travel 40/60mm.

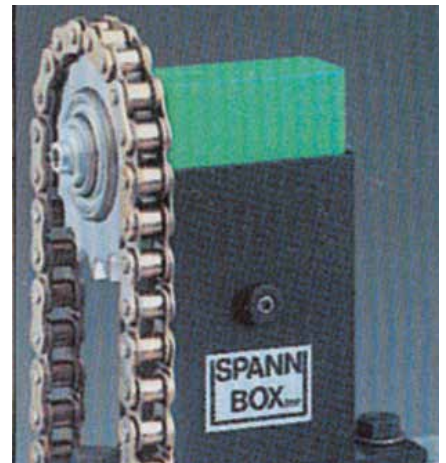
Corrosion protection of the steel parts through surface treatment or, on request, all parts made from Material 4301 (V2A) stainless steel. For small chain drives up to 5/8" pitch "Size 0" with only one spring suitable (right photograph).

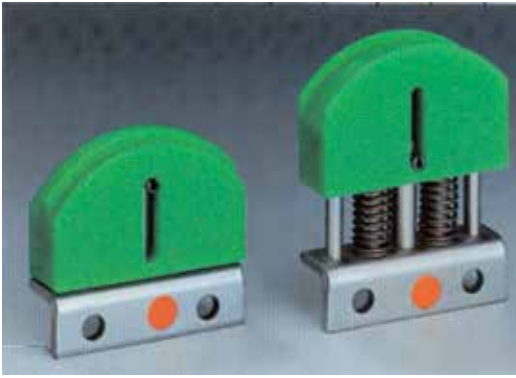


With a sliding profile height of max. 30mm the SPANN BOY® can be employed when there is insufficient space behind the chain for a SPANN BOX®. SPANN BOY® can also be supplied with chain sprockets up to 3/4" pitch.



The SPANN BOX® can also be used in tight mounting situations. This robust design is supplied with chain sprockets up to 3/4" pitch.





Mini Tensioners



Spann Boy



Spann Box Size 0



Spann Box Size 30



Spann Box Size 1



Spann Box Size 2

HOW TENSIONING SYSTEMS WORK

You can choose from a wide variety of solutions, depending on your individual tensioning requirements. Our tensioning systems range from single spring up to 3-spring systems. All systems are available for two different types of spring force (light/heavy duty).

Spring force is generated by individually pre-tensioned pressure springs. These generate their spring force only when individually released by several turns of the locking screws located in the base of the housing. To reduce or cancel spring force, push spring core completely back into casing and fasten the screws until they lock.

These adjustment options allow you to establish the appropriate spring force - at the very latest during the test run. And a spring initially unused and kept in reserve may well be useful later to help compensate for slightly reduced spring force.

As all tensioning systems come with the option of either normal (light) or strong (heavy duty) spring forces, each size offers min. 2, max. 6 (in 3-spring systems) options ranging in total from 13N to 786N.

Another advantage: If the installation remains unchanged, spring force is not exhausted after taking up the relatively long spring travel of 15/40/60 mm; at least 50% of the initial spring force remains effective.

SPANN BOX® and SPANN BOY® operate on a spring loaded/ free-running basis and, under load, are not intended to act as a rigid return which might result in excessive surface pressure and associated slide profile wear.

If SPANN BOX®/SPANN BOY® tensioners are fitted underneath the chain, the weight of the chain must be taken into account when selecting the spring force.

With relatively large centre distances, a supporting guide rail helps to ensure that the weight of the chain does not affect the spring power of the tensioner too much. A supporting roller or guide rail serves to keep the slack (which should be as short as possible) in place. Best results are achieved with a chain tensioner just behind the drive sprocket. Least favourable is a centre position.

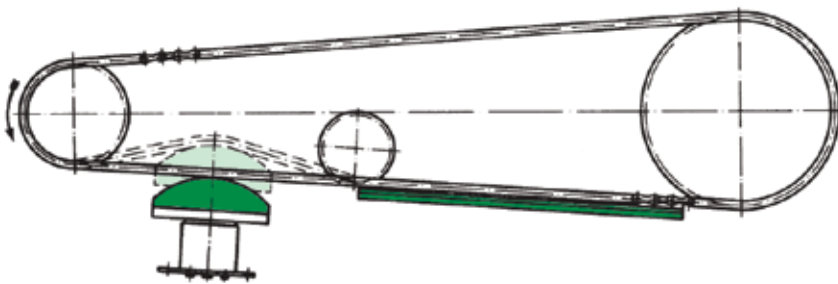
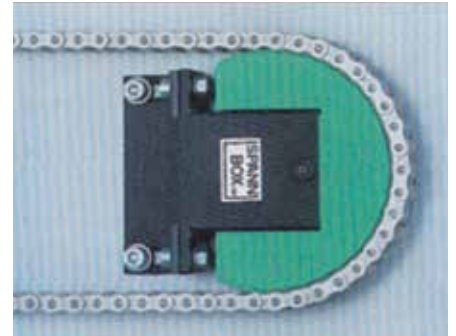
SELECTING A CHAIN TENSIONER

Even though our extensive standard range covers most applications, for best results a number of factors should be taken into account prior to selecting a particular chain tensioner.

That is why we offer our clients a free-of-charge advisory service. Our Service Department will be pleased to contact you on request, answer your queries and, if required, prepare drawings of the best solution for your problem.

The following points need to be clarified in order to suggest a suitable installation method:

- chain sprocket configuration;
distance between conveyor centres (please provide a sketch)
- chain type
- overall length of chain
- single direction of travel or reversible drive?
- chain speed (we can make appropriate recommendations if it exceeds 1m/s)
- is the chain lubricated or dry running?
- continuous or intermittent operation?
- do you expect dirt to accumulate on the chain (scales, wood chips, bore chips) which might accelerate wear on plastics?
- is the tensioner subject to temperatures above 60°C?
- chemical influences



OPERATION IN DIFFICULT TEMPERATURE RANGES

In normal temperature ranges (-10°C to +60°C), SPANN BOX® and SPANN BOY® can be used without any difficulties.

For temperatures above +60°C or below -10°C, we recommend that you contact us so we can select a suitable material for you.



The best profile form is the **arc segment** profile. It generally supports several rollers at a time, so ensuring that the chains run evenly and smoothly.



The **block profile** makes high demands on its construction due to both the tare weight of the large roller chains as well as the forces of gravity acting on the tensioner.

Slide profile and spring core are therefore made in one piece (no screwed connections) to ensure maximum stability.

For better support of large pitch chains, the slide profile has been extended to 300mm.



Chain sprocket or roller

For small return bends or where sliding stress is too high for plastics as a result of very high chain speeds (frictional heat), SPANN BOX® and SPANN BOY® are also available with chain sprockets or rollers made from MATERIAL S®.

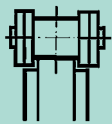
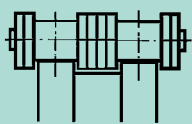
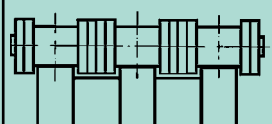


The **semi-circular profile**, by contrast, tends to be in contact with only a few chain rollers at a time which may lead to running noise and chain vibrations. Recommended only if space is tight.



The **return profile** is suitable for return bends of up to 180°. Properly installed, it controls excessive chain stretch (2 x spring travel).

SELECTION TABLE

Chain	Pitch P		Sizes															
			 Simplex chain						 Duplex chain						 Triplex chain			
DIN ISO	mm	inch	Size 1	Size 2	Size 30	Size 0	MINI	SPANN BOY®	Size 1	Size 2	Size 30	Size 0	MINI	SPANN BOY®	Size 1	Size 2	Size 30	SPANN BOY®
Chains not listed up to 15mm with ²⁾					◐	◑	◑	◑			◐	◑	◑	◑			◐	◑
					2) ◐	◑	◑	2) ◑			2) ◐	◑	◑	2) ◑			2) ◐	◑
06B	9.525	3/8	◐		◐	◑	◑	◑	◐	◑	◐	◑	◑	◑	◐	◑	◐	◑
08B	12.7	1/2	◐		◐	◑	◑	◑	◐	◑	◐	◑	◑	◑	◐	◑	◐	◑
10B	15.875	5/8	◐		◐	◑	◑	◑	◐	◑	◐	◑	◑	◑	◐	◑	◐	◑
12B	19.05	3/4	◐	◐	◐			◑	◐	◑	◐				◐	◑		
16B	25.4	1	◐	◐	◐				◐	◑						◐		
20B	31.75	1 1/4	◐	◐						◐						◐		
24B	38.1	1 1/2		◐						◐						◐		
28B	44.45	1 3/4		◐						◐	1)					◐	1)	
32B	50.8	2		◐						◐	1)					◐	1)	
40B	63.5	2 1/2		◐						◐	1)					◐	1)	
48B	76.2	3		◐						◐	1)					◐	1)	

1) For duplex/triplex chains, several SPANN-BOX tensioners can be installed side by side.

2) Slide profile/return roller equipped with U-profile.

Tension data and travel											
Type	MINI		SPANN-BOY		SPANN-BOX		SPANN-BOX Size 30 & 1		SPANN-BOX Size 2		
spring travel mm	16		40		40		40		60		
spring type	light	heavy-duty	light	heavy-duty	light	heavy-duty	light	heavy-duty	light	heavy-duty	
spring force	N	N	N	N	N	N	N	N	N	N	
1 spring released	19-13	85-58	58-32	132-60	58-32	132-60	58-35	132-60	148-82	262-116	
2 springs released	-	-	-	-	-	-	116-64	264-120	296-164	524-236	
3 springs released	-	-	-	-	-	-	174-96	396-180	444-246	786-454	

**The weight of the chain should not exceed the force of a spring already 50% released.
The second and third springs may be added later as required.**



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