



Guide Trough Systems

Aluminum "SuperTrough" | Basic version - for general machinery



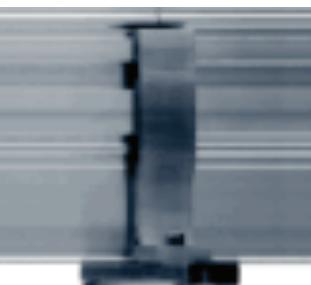
Basic version
► from page 9.20

Guide trough Series Part No.	Outer trough height H_{Ra} [mm]	Price index	Materials of side parts	Page
970.30.SL / 970.31.SL	77	● ● ●	Aluminum	9.20
970.30.SL / 970.32.SL	77	● ● ●	Aluminum	9.22
971.30.SL / 971.31.SL	87	● ● ●	Aluminum	9.24
972.02.30.SL / 972.02.31.SL	117	● ● ●	Aluminum	9.26
972.30.SL / 972.31.SL	117	● ● ●	Aluminum	9.28
972.30.SL / 972.32.SL	117	● ● ●	Aluminum	9.30
973.30.SL / 973.31.SL	144	● ● ●	Aluminum	9.32
974.30.SL / 974.31.SL	184	● ● ●	Aluminum	9.34
975.30.SL / 975.31.SL	236	● ● ●	Aluminum	9.38

Assembly kit for the basic version

The basic assembly kits are the standard for the super aluminum troughs. They can be fastened inside or outside and are recommended for most application areas. The basic clamping shoes are made of aluminum. The part numbers of the basic assembly kits can be found on the corresponding Super-Alu-Trough page.

Aluminum "SuperTrough" | Heavy-duty version - for rugged plant construction



Heavy-Duty Version
► fom page 9.24

Guide trough Series Part No.	Outer trough height H_{Ra} [mm]	Price index	Materials of side parts	Page
971.30.SL / 971.31.SL	87	● ● ●	Aluminum	9.24
972.02.30.SL / 972.02.31.SL	117	● ● ●	Aluminum	9.26
972.30.SL / 972.31.SL	117	● ● ●	Aluminum	9.28
972.30.SL / 972.32.SL	117	● ● ●	Aluminum	9.30
973.30.SL / 973.31.SL	144	● ● ●	Aluminum	9.32
974.30.SL / 974.31.SL	184	● ● ●	Aluminum	9.36
975.30.SL / 975.31.SL	236	● ● ●	Aluminum	9.40

Assembly kit for the heavy-duty version

The heavy-duty version of the Super-Alu-Trough is differentiated only by the type of the assembly kit. The part numbers of the channel side plates, slide bars, etc., are the same as the basic model. The heavy-duty assembly kit consists of a rugged aluminum bracket, fastened outside on the guide trough. The heavy-duty assembly kits are recommended for plant construction and extreme application areas. The part numbers of these assembly kits can be found on the corresponding Super-Alu-Trough page.

Steel guide troughs | For harsh environments



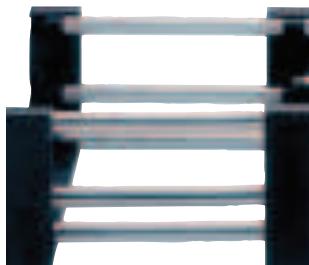
Steel guide troughs
► from page 9.44

Guide trough Series Part No.	Outer trough height H_{Ra} [mm]	Price index	Materials of side parts	Page
92.30 / 92.31	70	● ● ●	Galvanized steel*	9.44
95.30 / 95.31	100	● ● ●	Galvanized steel*	9.46
99.30 / 99.31	100	● ● ●	Galvanized steel*	9.48
97.30 / 97.31	130	● ● ●	Galvanized steel*	9.50
93.30 / 93.31	130	● ● ●	Galvanized steel*	9.52
94.30 / 94.31	170	● ● ●	Galvanized steel*	9.54
96.30 / 96.31	220	● ● ●	Galvanized steel*	9.56
98.30 / 98.31	300	● ● ●	Galvanized steel*	9.58
90.30 / 90.31	480	● ● ●	Galvanized steel*	9.60
91.10 - 91.71**	48	● ● ●	Galvanized steel*	9.63

*Stainless steel on request

**Steel guide troughs, one-piece

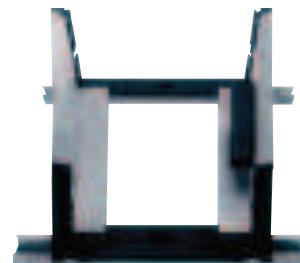
Tubular trough system RS | Lets debris through, and gives good visibility



Tubular trough
► from page 9.66

Guide trough Series Part No.	Outer trough height H_{Ra} [mm]	Price index	Materials of side parts	Page
92.70 / 92.71	90	● ● ●	Galvanized steel / Polymer	9.66
93.70 / 93.71	146	● ● ●	Galvanized steel / Polymer	9.67
95.70 / 95.71	126,3	● ● ●	Galvanized steel / Polymer	9.67

Snap-in trough system SP | Simple and cost effective



Snap-in trough
► from page 9.68

Guide trough Series Part No.	Outer trough height H_{Ra} [mm]	Price index	Materials of side parts	Page
91.930	55,5	● ● ●	Galvanized steel	9.68
92.930	76,6	● ● ●	Galvanized steel	9.68
93.930	138,6	● ● ●	Galvanized steel	9.69
95.930	106,6	● ● ●	Galvanized steel	9.69

Support tray | For support of the lower run



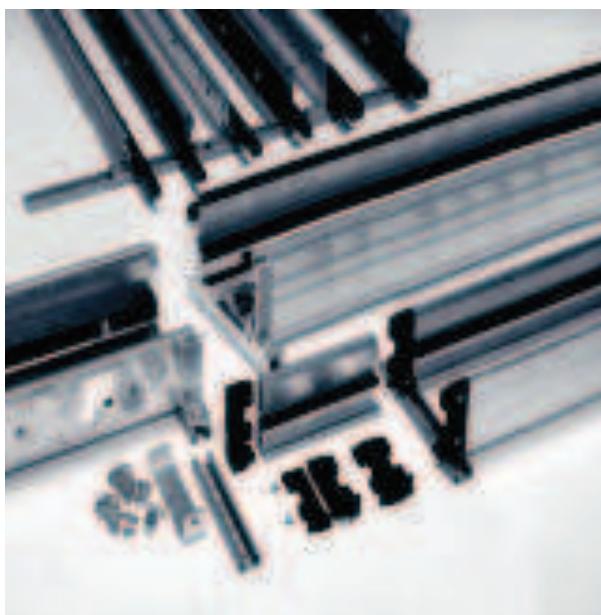
Support tray
► from page 9.70

Support tray Part No.	E-Chain® width	Inner trough - width B_{Ri} [mm]	Outer trough - width B_{Ra} [mm]	Material	Page
S9.010/011.05.XXXX.0	.05 / .050	89	80	Steel, black	9.70
S9.010/011.07.XXXX.0	.07 / .070	114	105	Steel, black	9.70
S9.010/011.10.XXXX.0	.10 / .100	139	130	Steel, black	9.70
S9.010/011.15.XXXX.0	.15 / .150	185	175	Steel, black	9.70
S9.020/021.10.XXXX.0	.10 / .100	167	156	Steel, black	9.70
S9.020/021.15.XXXX.0	.15 / .150	217	206	Steel, black	9.70
S9.020/021.20.XXXX.0	.20 / .200	267	256	Steel, black	9.70
S9.020/021.25.XXXX.0	.25 / .250	317	306	Steel, black	9.70

XXXX = length 1000 or 2000 mm - for almost every Series E2/000, E4.1 and E6 E-Chains® available

igus® guide troughs

Guide troughs are used for long travels, (travels from 5 to 12 m) and greater, depending on the E-Chain® type. They allow to continue smooth, low-friction operation in these long-travel situations. If the E-Chains® are installed in the center of the travel ("center-mounted"), they glide on themselves for half the travel. For the other half, we recommend glide bars, which are assembled in the trough and on which the E-Chains® glide. igus® guide troughs are available from stock with these highly abrasion-resistant polymer glide bars, which perform well with igus® E-Chains® regarding noise, abrasion and friction.



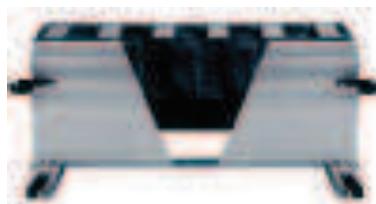
Various guide trough systems are available



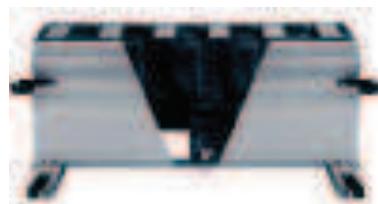
New in this catalog: igus® Support tray -
for support of the lower run ► page 9.70



Trough without glide bars -
E-Chain® glides on E-Chain®



Trough with glide bars -
E-Chain® glides on glide bars



Center mounted: 1/2 Travel with glide
bars - 1/2 Travel without glide bars

Trough type

igus® offers guide troughs made of corrosion-resistant aluminum, steel, stainless steel, as well as tubes and insert troughs (with steel side plates). The trough type to be used depends on the application conditions and the requirements of the customer. We recommend the igus® standard super aluminum guide troughs.

Glide bars

Glide bars made of igulen are optimally matched to the E-Chain® material and achieve the lowest values for friction, noise and wear. Glide bars must be used, if the fixed point is in the center of the travel. It means: Use half of the guide trough with glide bars and the other half of the guide trough without glide bars.

Delivery condition

The troughs are delivered in 2 meter sections. Special lengths up to 6 m are possible. The left and right side parts are installed on location with the appropriate distance - depending on the width of the E-Chain®. The necessary width is shown by the dimension B_{RI} on the guide trough pages. The E-Chain® sides can be linked with the base through screwing, welding or a special igus® installation set. The fixation module for the igus® Super-Alu-Trough is a quick fix for mounting the stationary end of an E-Chain® with a KMA-mounting bracket. With this module a fast and easy mounting onto the Super-Aluminum-Trough is possible without any drilling ► page 9.16.

Own production

The dimensions quoted in this chapter are for design and installation. They apply exclusively to igus® guide trough systems. If a user of igus® E-Chains® produces own designs, the manufacturing and installation dimensions for the necessary guide trough must be obtained from igus®. This applies in particular to the use of one-piece guide troughs and the play between guide trough and E-Chain®, depending on chain type, chain length, size bending radius and tolerance of the moving end and the base. One must be particularly careful here, since a function-compatible setting during installation and a subsequent adjustment is not possible for such guide troughs.

Guide Troughs | Long travels | Introduction



For long travels, the upper run of the igus® E-Chains® rests on the lower run. The upper run glides partially on the lower run and partially at the same height on a glide bar. The diagrams below show this. For lateral guidance, a Guide Trough is necessary. If the stationary mounting bracket and the fixed end of the cables and hoses can be placed **in the center**, the E-Chain® length is calculated as follows: $L_k = S/2 + K$. The shortest E-Chain® length is attained by the axial feeder module. The length of the E-Chain® then corresponds to about half the travel distance. Depending on the technical data and the selected E-Chain®, the mounting point of the moving end of the E-Chain® must be lowered on some units. In our system analysis for long travels, we give exact details for your specific application.

Selection criteria

Following parameters are required for the design of a trough system:

- E-Chain® type (Series, width Bi, radius R)
- Travel and travel speed
- Fill weight
- Acceleration and/or lagging
- Lateral accelerations
- Environmental conditions

Design and installation of the guide trough

The guide trough is an important element in long travel applications. Usually, the height of the trough must be at least twice that of the E-Chain® link height: $H_{Ri} \geq 2 \times ha$. The sides must provide a chamfered opening. The trough inner width is the same as the E-Chain® outer width, plus 5 mm ($B_{Ri} = Ba + 4$). Along the side of the trough, where the upper run cannot glide on the lower run, glide bars must be installed. We recommend the use of polymer glide bars from igus®. They are optimally matched to the E-Chain® material and achieve the lowest values for friction, noise and wear. Guide troughs with and without glide bars can

S	= Length of travel
R	= Bending radius
H_F	= Required clearance height
K₂	= Further add-on (if the mounting bracket location is set lower)
K	= $\pi \cdot R + \text{"safety"}$ Add-on for bending radius (K is taken from the data tables of the individual igus® Series)
D₂	= Over length for long travels gliding
B_a	= Outer E-Chain® width
B_i	= Inner E-Chain® width
ha	= Outer E-Chain® height
H_{Ri}	= Inner trough height
H_{Ra}	= Outer trough height
H₂	= Mounting height (if the mounting bracket location is set lower)
B_{Ri}	= Inner E-Chain® width ► depending on B_a
B_{Ra}	= Guide trough outer width
L_k	= E-Chain® length

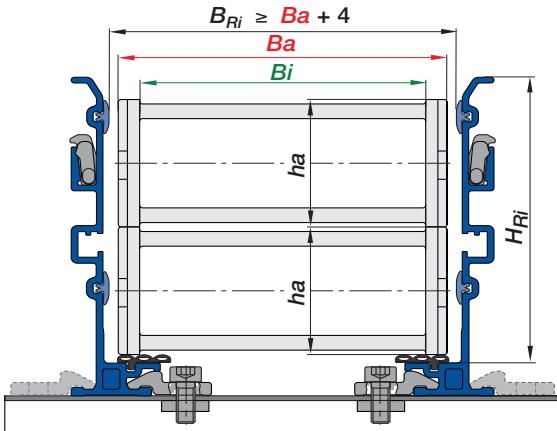
L_k = S/2 + K₂ | **H_{Ri} ≥ 2 × ha** | **B_{Ri} ≥ Ba + 4**

● Guide trough
● Installation set "Basic"

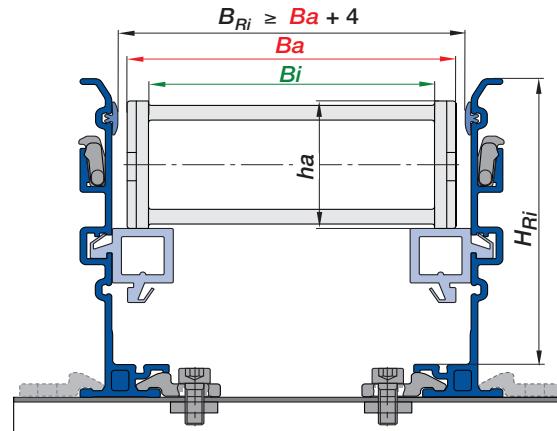
● Glide bar
● C-profile

be obtained for almost all igus® E-Chains®. **Important: When assembling the trough parts, the following points must be given particular attention:**

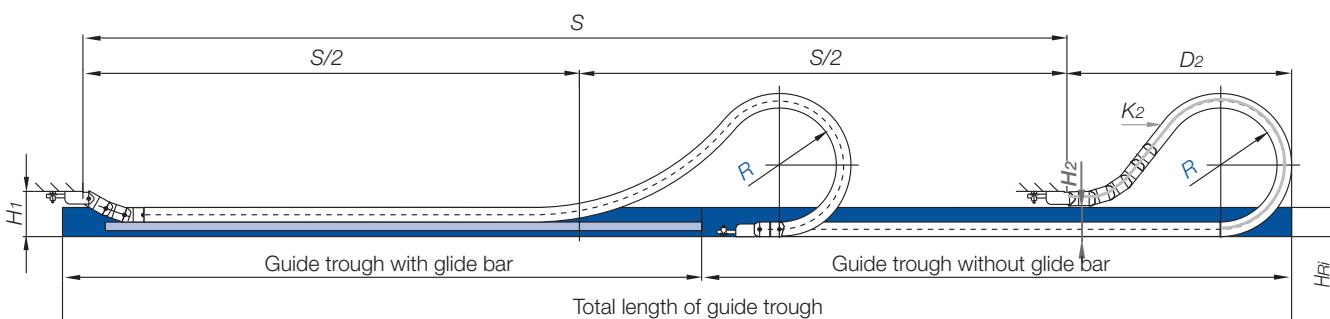
- Properly align all trough parts upon installation
- All screw heads should be flush with the trough
- Smooth levelled transition between the end of the E-Chain® and the glide bars
- Solid connection with the glide surface. **These points must be observed when using assembly-friendly igus® guide troughs.**



Guide troughs without glide bars -
upper run glides on the lower run



Guide troughs with glide bars - From the middle of
the travel the upper run glides off on the glide bar



The function of an E-ChainSystem® for gliding applications

The fixed end of the E-Chain® is located in the center of the travel distance

Long travels without guide troughsand further guidance possibilities ► from page 9.76

Selected guide trough Series	Type	Part No.	Optional noise dampening	Optional Heavy Duty	Part No. fixed end module ► page 9.16
10/B15.015	E2 mini	970.30.SL, 970.31.SL	–	–	970.80
10/B15.025	E2 mini	970.30.SL, 970.31.SL	–	–	970.80
10/B15.038	E2 mini	970.30.SL, 970.31.SL	–	–	970.80
10/B15.050	E2 mini	970.30.SL, 970.31.SL	–	–	970.80
10/B15.5	E2 mini	970.30.SL, 970.31.SL	–	–	970.80
10/B15.6	E2 mini	970.30.SL, 970.31.SL	–	–	970.80
10/B15.7	E2 mini	970.30.SL, 970.31.SL	–	–	970.80
15.015	Zipper	970.30.SL, 970.31.SL	–	–	970.80
15.025	Zipper	970.30.SL, 970.31.SL	–	–	970.80
15.038	Zipper	970.30.SL, 970.31.SL	–	–	970.80
15.050	Zipper	970.30.SL, 970.31.SL	–	–	970.80
15.5	Zipper	970.30.SL, 970.31.SL	–	–	970.80
15.6	Zipper	970.30.SL, 970.31.SL	–	–	970.80
15.7	Zipper	970.30.SL, 970.31.SL	–	–	970.80
1500	E2/000	970.30.SL, 970.32.SL	–	–	970.80
2500	E2/000	971.30.SL, 971.31.SL	●	●	971.80
2700	E2/000	972.30.SL, 972.32.SL	●	●	972.81
3500	E2/000	973.30.SL, 973.31.SL	●	●	973.80
250	E2 medium	971.30.SL, 971.31.SL	●	●	–
255	E2 medium	971.30.SL, 971.31.SL	●	●	–
27	E2 medium	972.30.SL, 972.32.SL	●	●	–
350	E2 medium	973.30.SL, 973.31.SL	●	●	–
R48	E2 R	971.30.SL, 971.31.SL	●	●	–
R58	E2 R	972.30.SL, 972.32.SL	●	●	–
R68	E2 R	973.30.SL, 973.31.SL	●	●	–
E4.21 (210)	E4.1	970.30.SL, 970.32.SL	–	–	–
E4.28/R4.28	E4.1	972.02.30.SL, 972.02.31.SL	●	●	972.82
E4.32/H4.32/R4.32	E4.1	972.30.SL, 972.31.SL	●	●	972.80
E4.42/H4.42/R4.42	E4.1	973.30.SL, 973.31.SL	●	●	973.81
E4.56/H4.56/R4.56	E4.1	974.30.SL, 974.31.SL	●	●	974.80
E4.80/H4.80/R4.80	E4.1	975.30.SL, 975.31.SL	●	●	975.80
220/R760	E4/00	972.02.30.SL, 972.02.31.SL	●	●	972.82
280/290/R770	E4/00	972.30.SL, 972.31.SL	●	●	972.80
380/390/R780	E4/00	973.30.SL, 973.31.SL	●	●	973.81
400/410/R880	E4/00	974.30.SL, 974.31.SL	●	●	974.80
2828/2928/R7728	E4/4	972.30.SL, 972.31.SL	●	●	972.80
3838/3938/R7838	E4/4	973.30.SL, 973.31.SL	●	●	973.81
4040/4140/R8840	E4/4	974.30.SL, 974.31.SL	●	●	974.80
4040HD/R8840HD	E4/4	974.30.SL, 974.31.SL	●	●	–
5050/5150/R9850	E4/4	975.30.SL, 975.31.SL	●	●	975.80
5050HD/R9850HD	E4/4	975.30.SL, 975.31.SL	●	●	–
14040/14140/R18840	E4/light	974.30.SL, 974.31.SL	●	●	974.81
14240/14340	E4/light	974.30.SL, 974.31.SL	●	●	974.81
15050/15150/R19850	E4/light	975.30.SL, 975.31.SL	●	●	975.81
E6.29/R6.29	E6	971.30.SL, 971.31.SL	●	●	–
E6.35	E6	972.02.30.SL, 972.02.31.SL	●	●	972.82
E6.40/R6.40	E6	972.30.SL, 972.31.SL	●	●	972.80
E6.52/R6.52	E6	973.30.SL, 973.31.SL	●	●	973.81
E6.62	E6	974.30.SL, 974.31.SL	●	●	974.80
E6.80	E6	975.30.SL, 975.31.SL	●	●	975.80

● as option possible – not possible

A quick fix for mounting the stationary end of an E-Chain®

With this module for the fixed end, fast and easy mounting onto the Aluminium "SuperTrough" is now possible without any drilling. Fast mounting of the E-Chain® by clamping onto the aluminum trough ● Quick relocation of the stationary end ● No drilling necessary

Selected guide trough Series	Type	Part No. Steel guide troughs	Part No. Tubular troughs	Part No. Snap-in troughs	Availability Support tray
10/B15.015	E2 mini	91.10, 91.11**	—	91.930	—
10/B15.025	E2 mini	91.20, 91.21**	—	91.930	—
10/B15.038	E2 mini	91.30, 91.31**	—	91.930	—
10/B15.050	E2 mini	91.40, 91.41**	—	91.930	—
10/B15.5	E2 mini	91.50, 91.51**	—	91.930	—
10/B15.6	E2 mini	91.50, 91.51**	—	91.930	—
10/B15.7	E2 mini	91.50, 91.51**	—	91.930	—
15.015	Zipper	91.10, 91.11**	—	91.930	—
15.025	Zipper	91.20, 91.21**	—	91.930	—
15.038	Zipper	91.30, 91.31**	—	91.930	—
15.050	Zipper	91.40, 91.41**	—	91.930	—
15.5	Zipper	91.50, 91.51**	—	91.930	—
15.6	Zipper	91.50, 91.51**	—	91.930	—
15.7	Zipper	91.50, 91.51**	—	91.930	—
1500	E2/000	92.30, 92.31*	92.70, 92.71	92.930	●
2500	E2/000	92.30, 92.31*	92.70, 92.71	92.930	●
2700	E2/000	95.30, 95.31*	95.70, 95.71	95.930	●
3500	E2/000	93.30, 93.31*	93.70, 93.71	93.930	●
250	E2 medium	92.30, 92.31*	92.70, 92.71	92.930	●
255	E2 medium	92.30, 92.31*	92.70, 92.71	—	●
27	E2 medium	95.30, 95.31*	95.70, 95.71	95.930	●
350	E2 medium	93.30, 93.31*	93.70, 93.71	93.930	●
R58	E2 R	95.30, 95.31*	—	—	—
R68	E2 R	93.30, 93.31*	—	—	—
E4.21 (210)	E4.1	—	—	—	●
E4.28/R4.28	E4.1	99.30, 99.31*	—	—	●
E4.32/H4.32/R4.32	E4.1	97.30, 97.31*	—	—	●
E4.42/H4.42/R4.42	E4.1	93.30, 93.31*	—	—	●
E4.56/H4.56/R4.56	E4.1	94.30, 94.31*	—	—	●
E4.80/H4.80/R4.80	E4.1	96.30, 96.31*	—	—	●
1640/1608	E4.1	98.30, 98.31*	—	—	●
800/840	E4.1	90.30, 90.31*	—	—	—
220/R760	E4/00	99.30, 99.31*	—	—	●
280/290/R770	E4/00	97.30, 97.31*	—	—	●
380/390/R780	E4/00	93.30, 93.31*	—	—	●
400/410/R880	E4/00	94.30, 94.31*	—	—	●
600/601/R608	E4/00	98.30, 98.31*	—	—	—
640	E4/00	98.30, 98.31*	—	—	—
2828/2928/R7728	E4/4	97.30, 97.31*	—	—	●
3838/3938/R7838	E4/4	93.30, 93.31*	—	—	●
4040/4140/R8840	E4/4	94.30, 94.31*	—	—	●
4040HD/R8840HD	E4/4	94.30, 94.31*	—	—	—
5050/5150/R9850	E4/4	96.30, 96.31*	—	—	●
5050HD/R9850HD	E4/4	96.30, 96.31*	—	—	—
14040/14140/R18840	E4/light	94.30, 94.31*	—	—	●
14240/14340	E4/light	94.30, 94.31*	—	—	●
15050/15150/R19850	E4/light	96.30, 96.31*	—	—	●
E6.29/R6.29	E6	92.30, 92.31*	92.70, 92.71	92.930	●
E6.35	E6	99.30, 99.31*	—	—	●
E6.40/R6.40	E6	97.30, 97.31*	—	—	●
E6.52/R6.52	E6	93.30, 93.31*	93.70, 93.71	93.930	●
E6.62	E6	94.30, 94.31*	—	—	●
E6.80	E6	96.30, 96.31*	—	—	●

● Available *Stainless steel on request

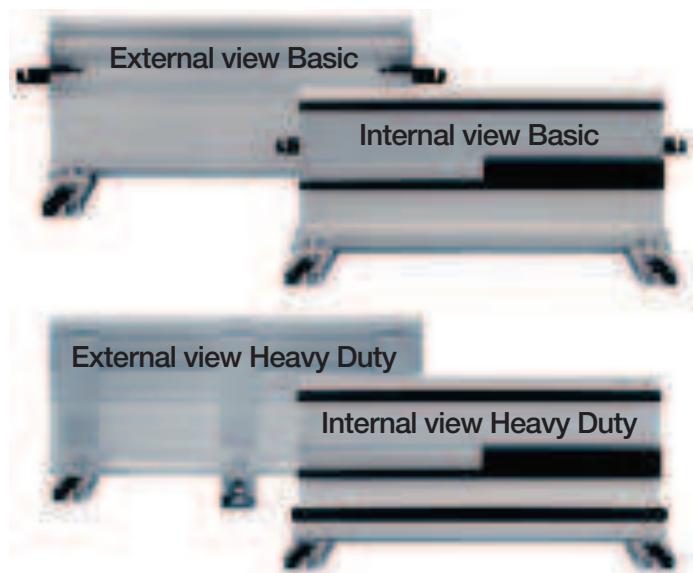
**Steel guide troughs, one-piece

Alu Super Trough



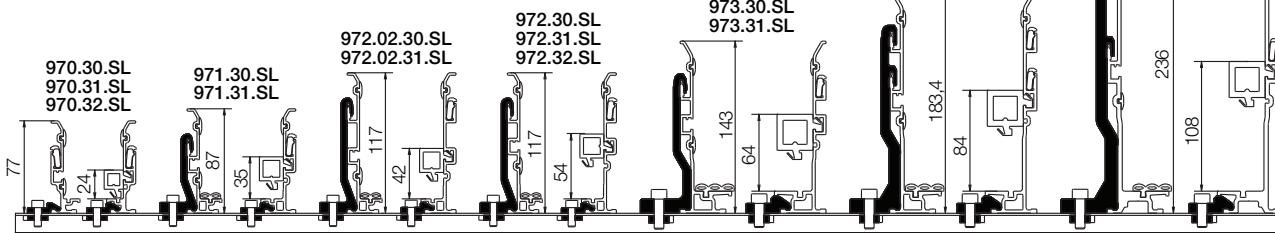
Aluminium "SuperTrough" - The igus® standard guide trough

- Modular design in two versions - Basic and Heavy Duty
- Very simple, modular assembly
- Side-mounted glide strips for wear protection in high-speed
- Corrosion resistant, seawater resistant aluminium profile
- Flexible assembly - Fastening on substructure
independent of profile lengths and butt joints
- Interface connector - Plastic with snap-in connection
- Plastic glide bar made of PE
- Bottom clamp can be mounted -inside
or outside- directly on the bottom or on the c-profile
- Glide strips and silencer profile for the minimization of the noise level
- Heavy duty brackets for safe connection also for rough applications
- C-profile for the fixation of the bottom clamp or Heavy duty brackets
- Fixed end module for fast and easy mounting onto the Aluminium "SuperTrough" - without any drilling



Aluminum "SuperTrough" is available in low cost "basic versions" and can be upgraded for heavy duty applications

Aluminium "SuperTrough" - Overview of sizes



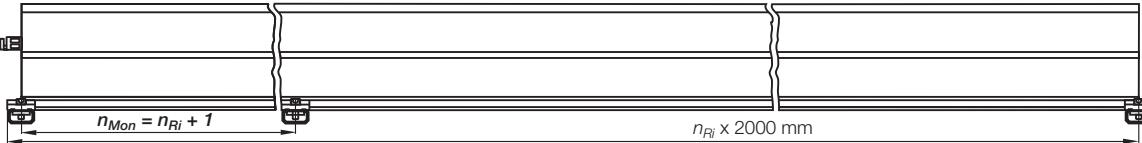
Super-Alu trough configuration according to your requirements

Assemble the right trough suited for your application quickly and easily

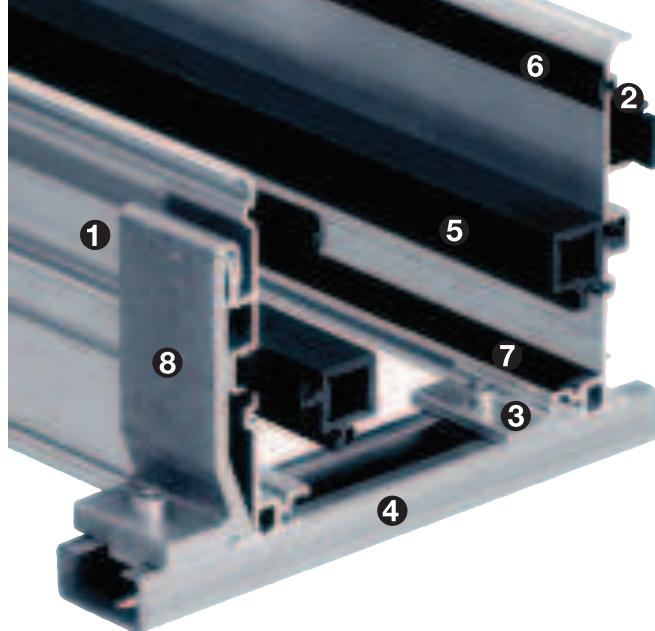
- Selection of the suitable guide trough according to the E-Chain® Series and E-Chain® width B_i ► page 9.10
- Determine the feeding point of the cables ► page 9.9
- Determine travel distance and thus the length of the required guide trough and the number of trough pieces. (Standard length of a trough side plate: 2000 mm). The length of the guide trough - for axial feeding - is calculated from half the travel length **with** and half the travel length **without** the glide bar
- Option: "Sound dampening" with silencer profile ► page 9.15
- Number and selection of the assembly kit ► page 9.14/9.15:

There are two assembly kit options: Basic (standard), Heavy Duty (for plant construction)

The quantity of the assembly kit is calculated from the number of the trough pieces + 1 kit:



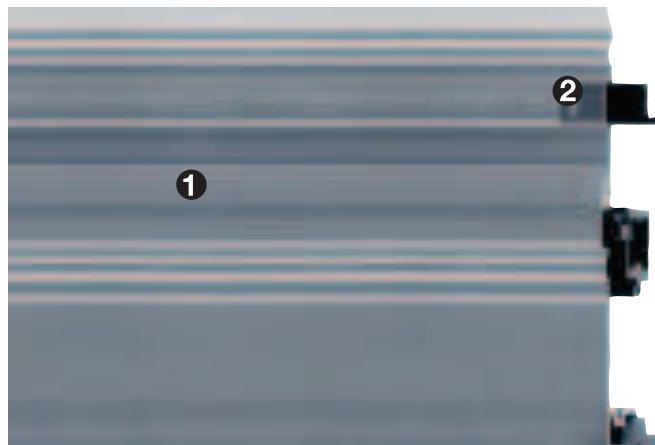
- Selection of the fastening of the assembly kit on the subsurface - igus® C rails option
- If you have opted for an E-Chain® with KMA mounting brackets, we offer you a fixed-end module for the quick and simple fastening of the E-Chain® in the trough without holes ► page 9.16



Aluminium "SuperTrough" | Advantages

Aluminum "Super Trough"- the igus® standard

The Aluminium "SuperTrough" is a modular guide trough system for long travels (when E-Chains® glide on themselves). Aluminium "SuperTrough" is available in low cost "basic versions" and can be upgraded for heavy duty applications. **This modular usage makes it the igus® recommended standard trough system.**

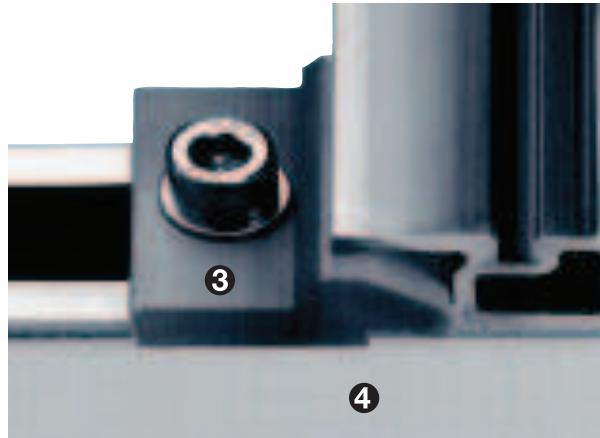


Huge program

- ① Aluminium profile (Standard: 2 m section)
- Fitted to the igus® E-Chain® program
- For almost all igus® E-Chains® available
- Seawater resistant and corrosion resistant

Fast connection

- ② Interface connector "Basic"
- Snap-on polymer connector
- Easy assembly, no tools needed
- Simply clipped on firmly in the provided slot



Simple fastening

- ③ Bottom clamp "Basic"
- Fast and easy single-bolt assembly
- Slider attached inwards or outwards, directly to the ground or onto a C-profile
- Standard assembly kit for igus® Super-Alu troughs
- Ideal for general mechanical engineering

④ C-profile

- Hold Bottom clamps or heavy duty brackets
- Available in zinc-plated or stainless steel



Misalignment-free installation

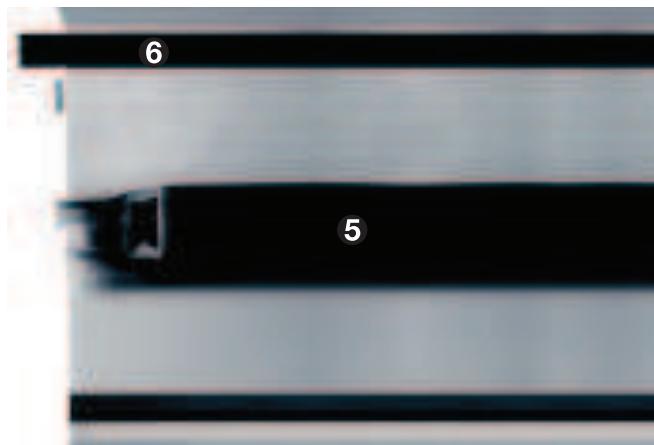
- Screwing or welding of the profiles not required
- Manifold fastening potentials with bracket, clamping shoe and connectors
- Flexible fastening on substructure independent of profile lengths and butt joints
- No screw heads sticking out inwards
- Even change-over between E-Chain® connection and glide bar

Aluminium "SuperTrough" | Advantages

Wear-reducing

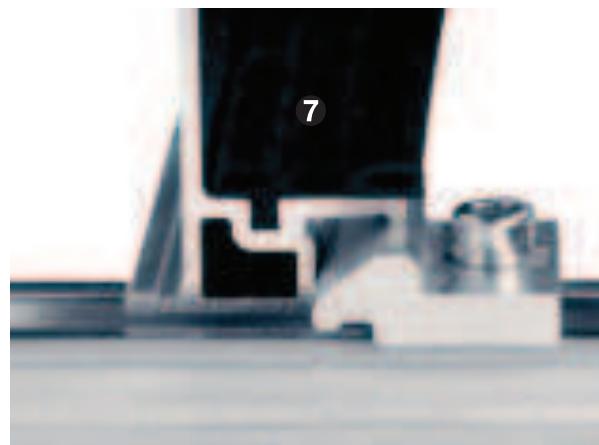
⑤ Polymer glide bar

- Easy click-on assembly (tongue and groove), no tools needed
- Even support due to the special slot design
- Glide bars are ideally suited for the E-Chain® material
- Minimum coefficients in terms of friction noise and wear



⑥ Glide strip

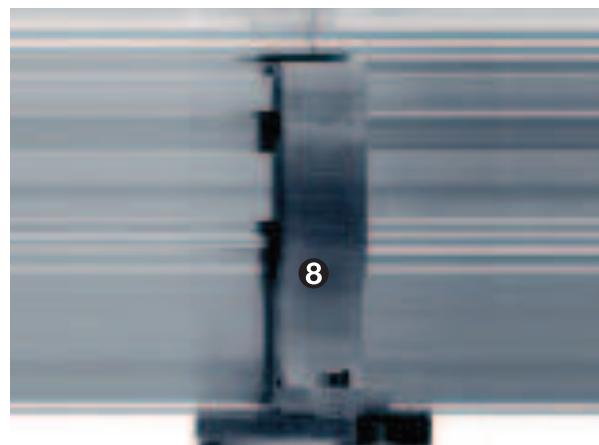
- Protect from wear on the sides
- Easy click-on assembly (tongue and groove), no tools needed



Noise-reducing

⑦ Silencer profile (add-on item)

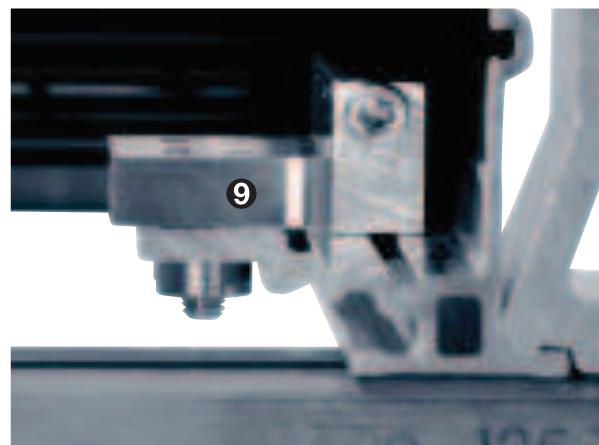
- Rubber profile insert for additional noise reduction
- Excellent wear and sound values when applied with igus® E-Chain® systems: In combination with optimized igus® roller E-Chain® and "dampening profile" of the Super-Alu trough, a distinct reduction in noise reduction of 9.0 dB (A) is evident
- Can be optionally ordered



Heavy stress

⑧ Heavy duty bracket (add-on item)

- Safe grip for heavy duty operation
- Easy tongue and groove assembly
- Attached directly to ground or to C-profiles
- Can be optionally ordered



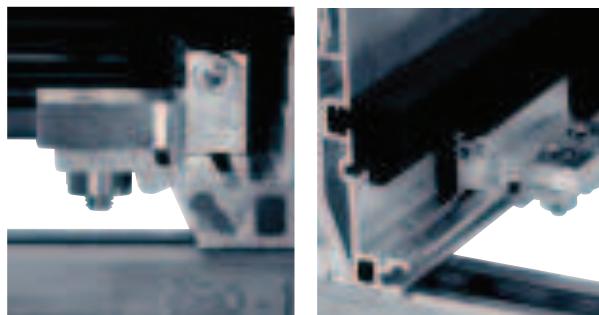
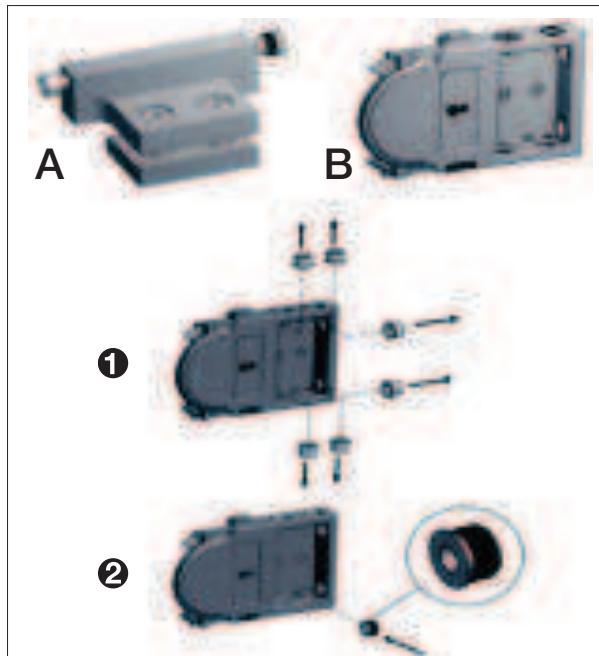
Simple connection to the E-Chain®

⑨ Fixed end module

- Quick assistance while fastening of the E-Chain® fixed end on the Super-Alu trough
- Fixed end module for fast and easy mounting onto the Aluminum "SuperTrough" - without any drilling
- Can be optionally ordered - Recommended for E-Chain® with KMA mounting bracket in conjunction with igus® Super-Alu trough

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Fax +49- (0) 22 03-96 49-222





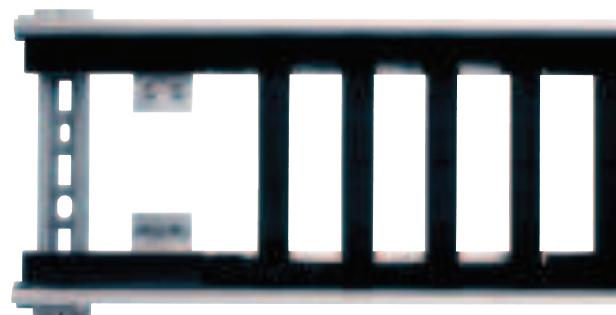
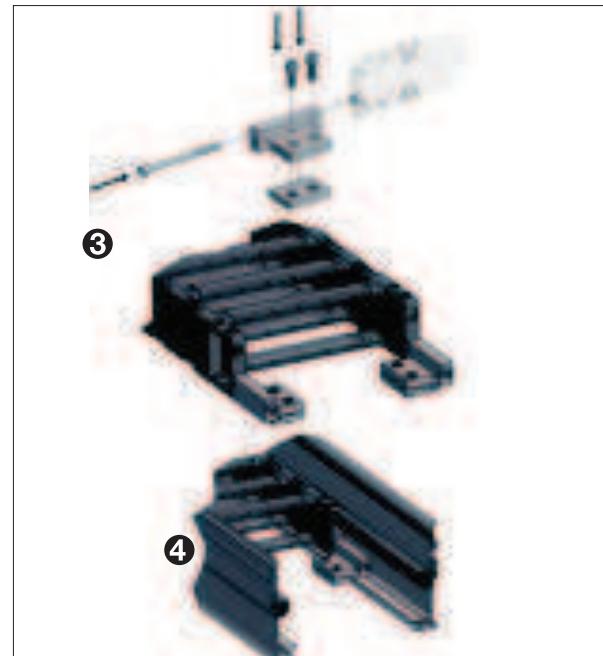
Fixed-end module - Simple fastening of the E-Chain® without drilling

A quick fix for mounting the stationary end of an E-Chain®

With this module for the fixed end, fast and easy mounting onto the Alu "SuperTrough" is now possible without any drilling. Fast mounting of the E-Chain® by clamping onto the alu trough ● Quick relocation of the stationary end ● No drilling necessary

Installation - A) Fixed-end module, B) KMA mounting bracket

- ① Removing the preassembled metal bushings
- ② Use of threaded bushings
- ③ Installation fixed-end module
- ④ Mounting on Super-Alu trough



Part No.	For Aluminum-SuperTrough	For Series	Application including Inner width (Bi)	Mounting Bracket
970.80	970.30.SL / 970.31.SL	10, B15, 15/R15, 1500	.025	one-piece
971.80	971.30.SL / 971.31.SL	2500	.07	KMA
972.82	972.02.30.SL / 972.02.31.SL	E4.28/R4.28, 220/R760, E6.35	.06	KMA
972.81	972.30.SL / 972.32.SL	2700	.06	KMA
972.80	972.30.SL / 972.31.SL	E4.32/H4.32/R4.32, 280/290/R770, 2828/2928/R7728, E6.40/R6.40	.06	KMA
973.81	973.30.SL / 973.31.SL	E4.42/H4.42/R4.42, 380/390/R780, 3838/3938/R7838, E6.52/R6.52	.10	KMA
973.80	973.30.SL / 973.31.SL	3500	.100	KMA
974.81	974.30.SL / 974.31.SL	14040/14140/R18840, 14240/14340	.10	KMA
974.80	974.30.SL / 974.31.SL	E4.56/H4.56/R4.56, 400/410/R880, 4040/4140/R8840, E6.62	.10	KMA
975.80	975.30.SL / 975.31.SL	E4.80/H4.80/R4.80, 5050/5150/R9850, E6.80	.10	KMA
975.81	975.30.SL / 975.31.SL	15050/15150/R19850	.10	

Material assembly kits: Aluminum AlMg3, seawater resistant. Material screw kits: Standard steel, galvanized. Also available in stainless steel 1.4571 as an option: e.g. 974.80.E4

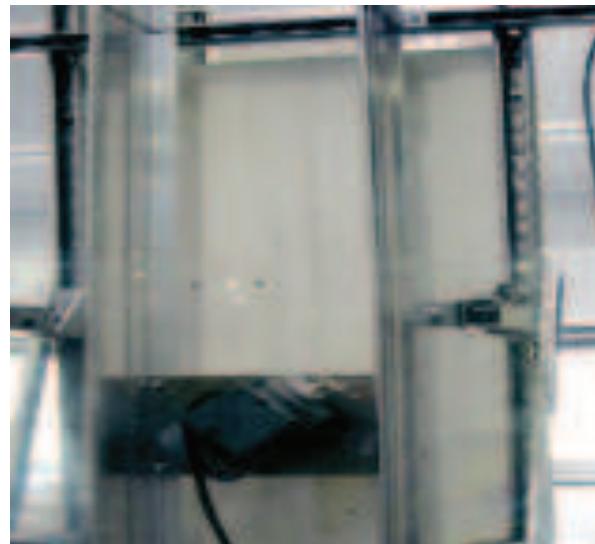


The igus® Super-Alu trough has been used in test setups since 2005.

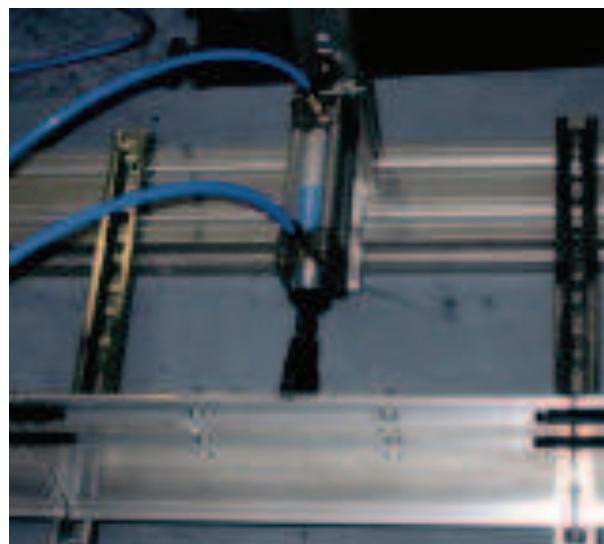
Test setup "Axis 1": Speed 1.5 m/s, Travel: 18 m, Mileage so far: about 50,000 km (test runs since 2005)



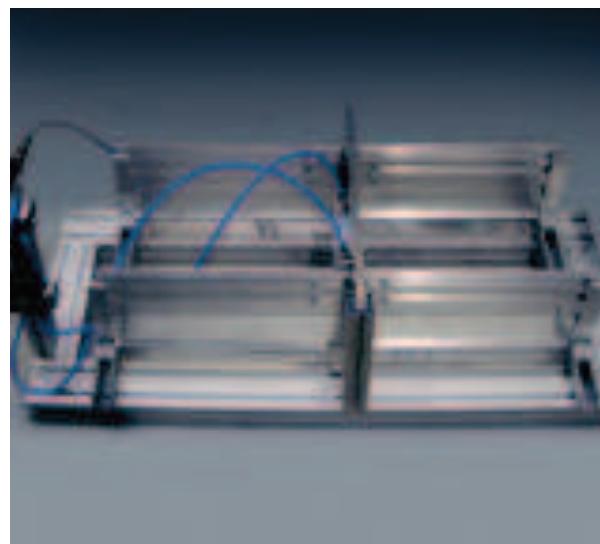
Test - Glide strips minimize wear
after 1.653.187 cycles, 4.300 km



Vibration test: No shifting of trough sections
after 108.000.000 rotations at 658 rpm.



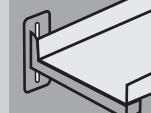
Test - Interface connector
 ● Push/pull force of 350N
 ● 9.890.000 cycles without shifting of the connector

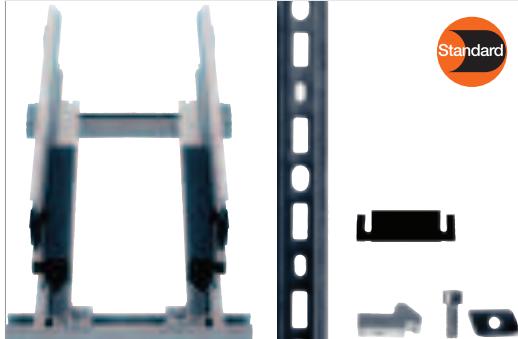
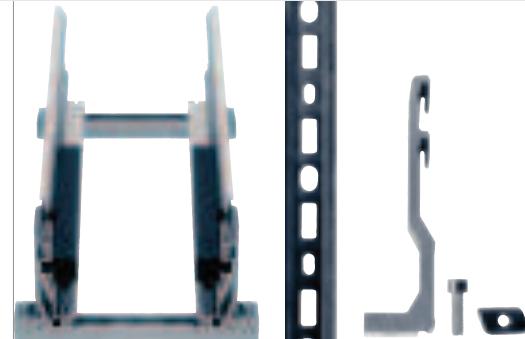


Alternating push- and pull force of
400N is induced on 2 trough side parts, with
no deformation after 1.700.000 cycles

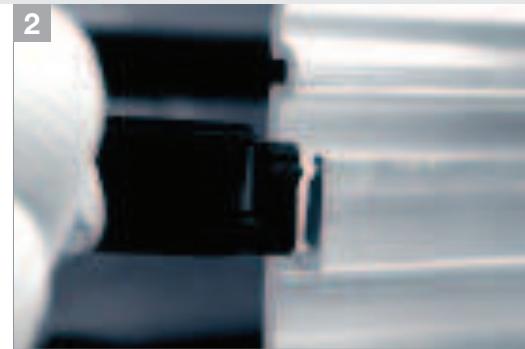
Aluminum "Super Trough"

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Fax +49- (0) 22 03-96 49-222

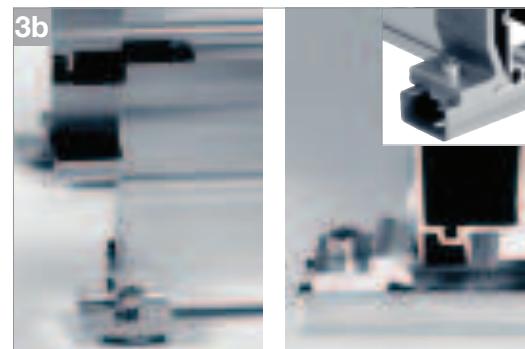
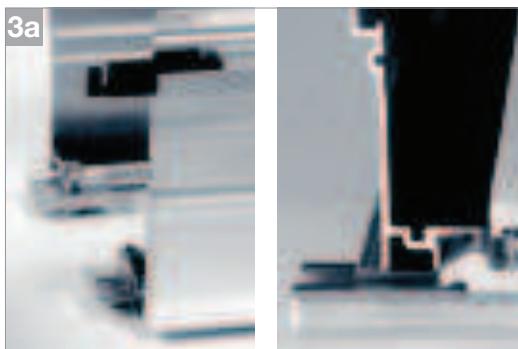


Installation sets | Basic and Heavy Duty**Installation set Basic****Installation set Heavy Duty****Pre-assembly of installation set | Basic - The Standard!**

Pre-assemble the clamping shoe and the screw kit



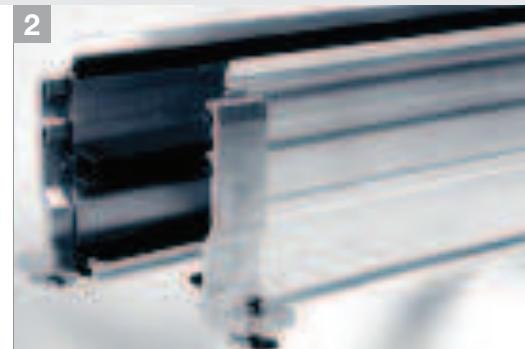
Clip in polymer connector on both sides of the designated support



Fasten Basic assembly set Basic inside ③a or outside ③b (Check stability of the fixing). Please note: half the length of the assembly set and connector must protrude out of the trough. The glide nut should be well fastened in the C-profile

Pre-assembly of installation set | Heavy Duty (alternative)

① Pre-assemble heavy duty bracket and screw set ② Fasten Heavy Duty assembly set outside.
Please note: half the length of the assembly set and connector must protrude out of the trough



Assembly | Adding the rubber profile (optional)



Cut the rubber profile in accordance to the length of the trough (standard 2 m) and press it into the designated groove. (Pictured: Left and right sides are the same. To be repeated for each trough section.)

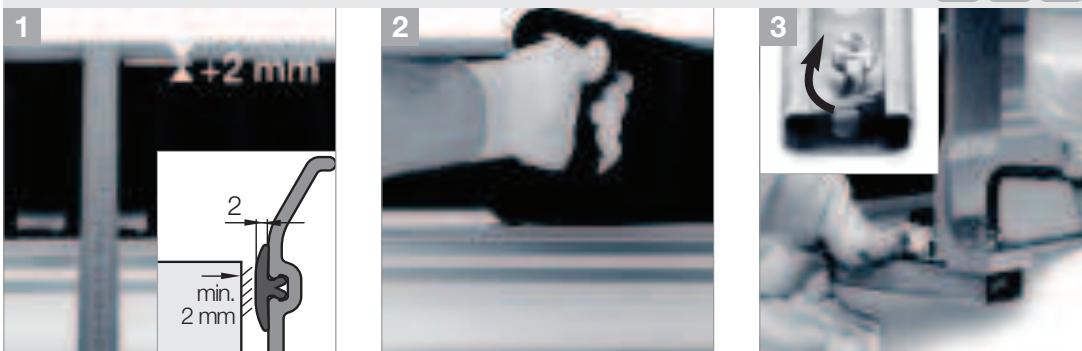
Connecting | Trough sections



① Join the sides of the trough side parts by pushing them together (min. +2 mm gap!)

② + ③ The pre-assembled parts join each trough section centrally

Adjusting the tolerance | Aligning trough sections



① Adjust by the necessary minimum "E-Chain®/trough" tolerance of 2 mm on both sides. Please note: the inner width B_{RI} of the trough decreases 2 mm per side with the assembled glide strip (pictured) ② Test to ensure the E-Chain® runs problem free and with low friction in the channel ③ After adjusting the minimum tolerance and alignment of all trough sections, please pull tight all screw tight all trough connections. Pay attention thereby to the correct installation direction of the sliding nut (see detail) Starting torque of the assembly set's fixing bolts: M6: 10 Nm / M8: 23 Nm.

Tools for the assembling of the SuperTrough



Pictogram aid:
Hand



Pictogram aid:
Rubber hammer



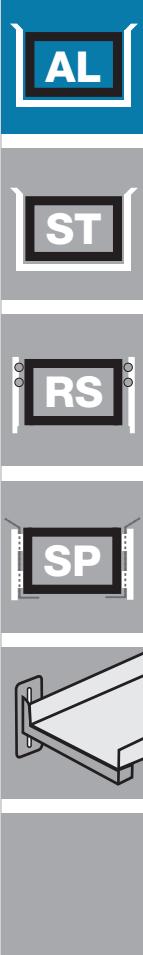
Pictogram aid:
Hexagonal wrench



Pictogram aid:
Ruler



Please consider health & safety regulations while handling sheet metals. We recommend using protective Category II gloves to protect against cuts when handling the aluminium profiles.



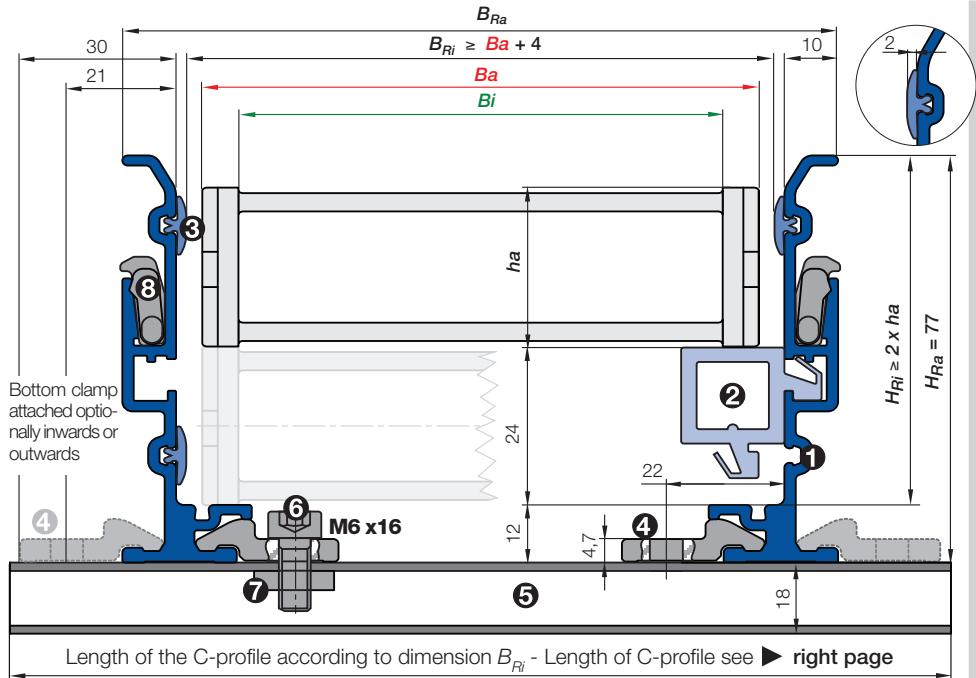
- For the following E-Chains®/E-Tubes:
System E2 Series
● 10
● B15
Zipper Series
● 15/R15

B_a = Outer E-Chain® width
B_i = Inner E-Chain® width
h_a = E-Chain® outer height
H_{Ri} = Inner trough height
H_{Ra} = Outer trough height
B_{Ri} = Inner trough width ► depends on dim. **B_a**
B_{Ra} = Outer trough width

H_{Ri} ≥ 2 • h_a
B_{Ri} ≥ B_a + 4

● = Guide trough
● = Glide bar
● = Installation set "Basic"
● = C-profile

Part No. 970.30.SL | 970.31.SL | Trough height: 77 mm Aluminum "SuperTrough" | Basic Version



- Components, trough "Basic": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide strips on request)
- Components, installation set "Basic": ④ Bottom clamp, aluminum ⑤ C-profile, steel galvanized ⑥ Screw M6 x 16 ⑦ Sliding nut M6 ⑧ Interface connector, plastic

Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight	kg
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	970.30.SL	~ 4,20 kg	
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	970.31.SL	~ 4,90 kg	
1 Installation set "Basic" without C-profile	960.30	~ 0,06 kg	
1 Installation set "Basic" with C-profile	960.30.□		
Single parts - description			
③ 1 Glide strip, individual, 2 m section	75.01	~ 0,06 kg	
④ 1 Bottom clamp, individual	75.40	~ 0,03 kg	
⑧ 1 Interface connector, individual	75.60		
⑥ 1 Screw M6 x 16, individual	MAT 0040209		
⑦ 1 Sliding nut M6, individual	MAT 0040057		
② 1 Glide bar, individual, 2 m section	82.79	~ 0,42 kg	
⑤ 1 C-profile, individual	92.52.□	~ 0,90 kg/m	



Order example: Length of travel 30 m - Center mounted for Series 10.5.038.0 with B_{Ri} = 80

Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar

Order text: 16 m guide trough without glide bar (8 x 2 m sections) **Part No.** 970.30.SL

Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar

Order text: 16 m guide trough with glide bar (8 x 2 m sections) **Part No.** 970.31.SL

Installation set "Basic" complete (guide trough-sets + 1)

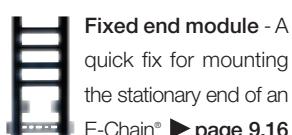
Order text: 17 installation sets "Basic" **Part No.** 960.30.125

Module for the fixed end

Order text: 1 set **Part No.** 970.80

Option: For an additional noise dampening with silencer profile, please add Index A Example:

Part No. 970.30.SLA



Lengths of C-profile for Basic version - Bottom clamp attached optionally **inwards or outwards**

10			B15			15			R15		
10.5.038.0			B15.5.038.0			15.5.038.0			R15.025.100.0		
B_{Ri} [mm]	Part No. attached inwards	Part No. attached outwards									
.015 30	*	960.30.125	.015 30	*	960.30.125	.015 30	*	960.30.125	.025 40	*	960.30.150
.025 40	*	960.30.150	.025 40	*	960.30.150	.025 40	*	960.30.150	.038 80	*	960.30.150
.038 53	*	960.30.150	.038 53	*	960.30.150	.038 53	*	960.30.150	.063 80	*	960.30.175
.050 65	960.30.125	960.30.175	.050 65	960.30.125	960.30.175	.050 65	960.30.125	960.30.175	.080 98	960.30.150	960.30.200
.5 80	960.30.125	960.30.175	.5 80	960.30.125	960.30.175	.5 80	960.30.125	960.30.175			
.6 98	960.30.150	960.30.200	.6 98	960.30.150	960.30.200	.6 98	960.30.150	960.30.200			
.7 117	960.30.175	960.30.225	.7 117	960.30.175	960.30.225	.7 117	960.30.175	960.30.225			

*upon request

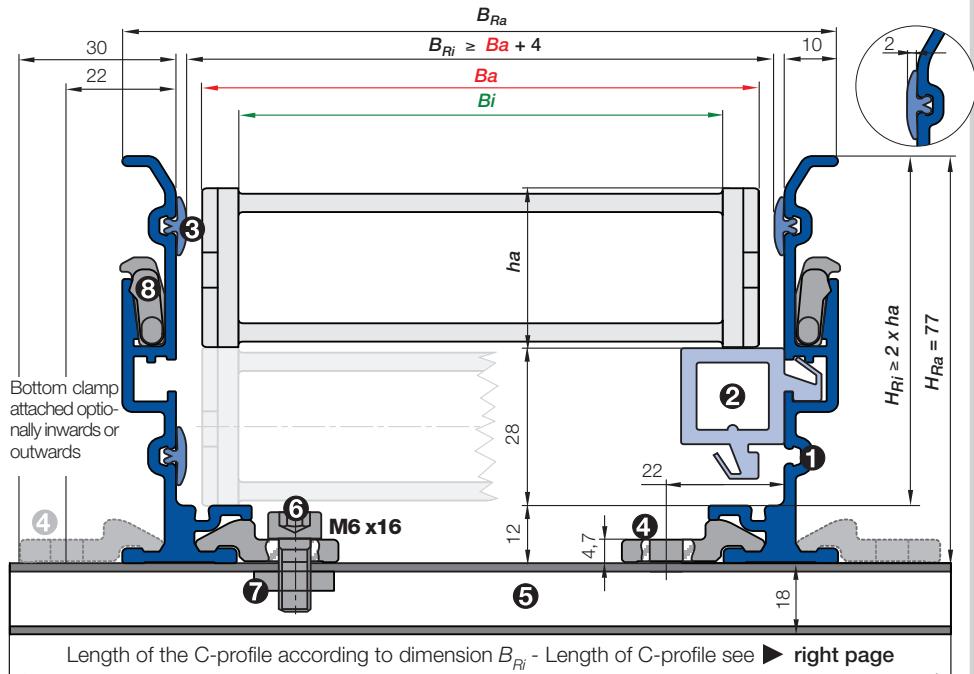
- For the following E-Chains®/E-Tubes:
System E2 Series
 ● 1500
System E4 Series
 ● E.21 (210)

B_a = Outer E-Chain® width
 Bi = Inner E-Chain® width
 ha = E-Chain® outer height
 H_{Ri} = Inner trough height
 H_{Ra} = Outer trough height
 B_{Ri} = Inner trough width ► depends on dim. B_a
 B_{Ra} = Outer trough width

 $H_{Ri} \geq 2 \cdot ha$
 $B_{Ri} \geq B_a + 4$

 ● = Guide trough
 ○ = Glide bar
 ■ = Installation set "Basic"
 ▲ = C-profile

Part No. 970.30.SL | 970.32.SL | Trough height: 77 mm Aluminum "SuperTrough" | Basic Version



- Components, trough "Basic": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide strips on request)
- Components, installation set "Basic": ④ Bottom clamp, aluminum ⑤ C-profile, steel galvanized ⑥ Screw M6 x 16 ⑦ Sliding nut M6 ⑧ Interface connector, plastic

Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight	kg
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	970.30.SL	≈ 4,20 kg	
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	970.32.SL	≈ 5,00 kg	
1 Installation set "Basic" without C-profile	960.30	≈ 0,06 kg	
1 Installation set "Basic" with C-profile	960.30.□	≈ 0,06 kg	
Single parts - description			
③ 1 Glide strip, individual, 2 m section	75.01	≈ 0,06 kg	
④ 1 Bottom clamp, individual	75.40	≈ 0,03 kg	
⑧ 1 Interface connector, individual	75.60		
⑥ 1 Screw M6 x 16, individual	MAT 0040209		
⑦ 1 Sliding nut M6, individual	MAT 0040057		
② 1 Glide bar, individual, 2 m section	82.79	≈ 0,42 kg	
⑤ 1 C-profile, individual	92.52.□	≈ 0,90 kg/m	



Order example: Length of travel 30 m - Center mounted for Series E4.21.050.100.0 with $B_{Ri} = 68$

Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar

Order text: 16 m guide trough without glide bar (8 x 2 m sections) **Part No.** 970.30.SL

Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar

Order text: 16 m guide trough with glide bar (8 x 2 m sections) **Part No.** 970.32.SL

Installation set "Basic" complete (guide trough-sets + 1)

Order text: 17 installation sets "Basic" **Part No.** 960.30.125

Option: For an additional noise dampening with silencer profile, please add Index A Example:

Part No. 970.30.SLA

Lengths of C-profile for Basic version - Bottom clamp attached optionally **inwards or outwards****1500**1500.**050**.035.0**E4.21 (210)**E4.21.**080**.100.0

<i>B_{Ri}</i> [mm]	Part No. attached inwards	Part No. attached outwards	<i>B_{Ri}</i> [mm]	Part No. attached inwards	Part No. attached outwards
.015 33	*	960.30.125	.030 48	*	960.30.150
.020 38	*	960.30.125	.040 58	960.30.125	960.30.150
.025 43	*	960.30.150	.050 68	960.30.125	960.30.175
.038 56	*	960.30.150	.060 78	960.30.125	960.30.175
.050 68	960.30.125	960.30.175	.070 88	960.30.150	960.30.175
.068 86	960.30.150	960.30.175	.080 98	960.30.150	960.30.200
.080 98	960.30.150	960.30.200	.100 118	960.30.175	960.30.225
.100 118	960.30.175	960.30.225	.120 138	960.30.200	960.30.225
.125 143	960.30.200	960.30.250			

*upon request

- For the following E-Chains®/E-Tubes:
- System E2 Series
 - 2500
 - 255
 - System E2 E-Tubes
 - R48
 - System E6 Series
 - E6.29/R6.29
 - E2 medium classic
 - 250 classic

B_a = Outer E-Chain® width
B_i = Inner E-Chain® width
h_a = E-Chain® outer height
H_{Ri} = Inner trough height
H_{Ra} = Outer trough height
B_{Ri} = Inner trough width ► depends on dim. **B_a**
B_{Ra} = Outer trough width

H_{Ri} ≥ 2 • h_a
B_{Ri} ≥ B_a + 4

- = Guide trough
- = Glide bar
- = Installation set "Basic"
- = C-profile

Calculation - travel center mounted

Half travel length, rounded down to full 2 m sections = **X m** guide trough length without glide bars + **X m** guide trough length with glide bars + installation sets "Basic" (number of trough pieces + 1)

Supplement Part No. with the indicated C-profile-length-index.

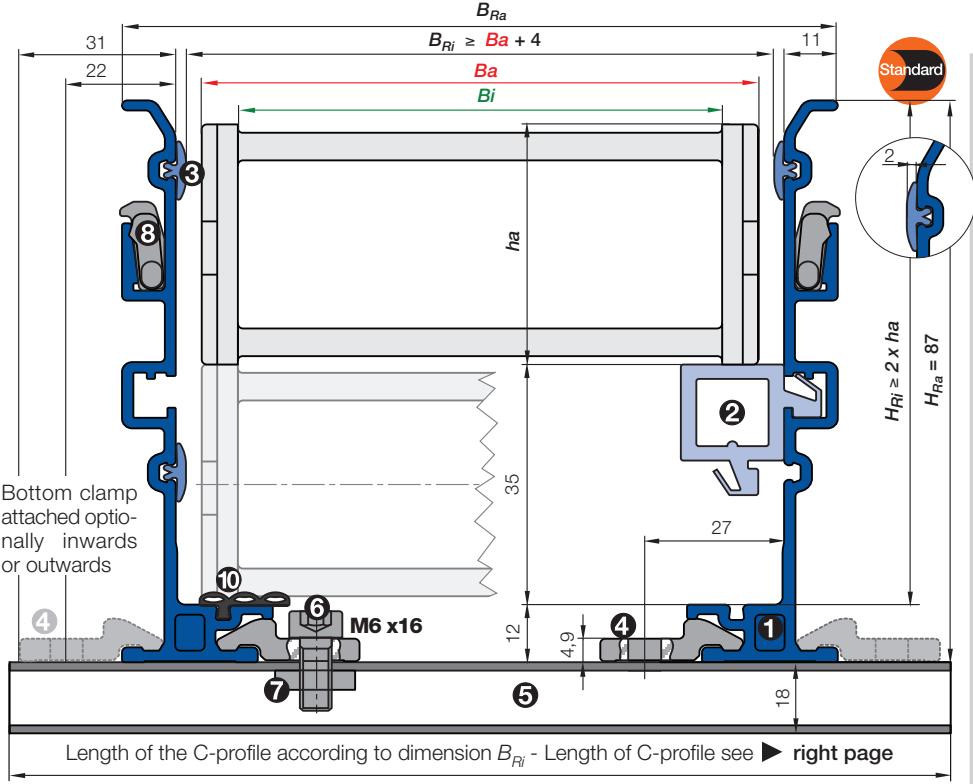
Example: 960.30.150

C-profile length-index for your chosen trough inner width **B_{Ri}** ► see table on the right or the respective page for chosen series

Fixed end module - A quick fix for mounting the stationary end of an E-Chain® ► page 9.16

Part No. 971.30.SL | 971.31.SL | Trough height: 87 mm

Aluminum "SuperTrough" | Basic Version



- Components, trough "Basic": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- Components, installation set "Basic": ④ Bottom clamp, aluminum ⑤ C-profile, steel galvanized ⑥ Screw M6 x 16 ⑦ Sliding nut M6 ⑧ Interface connector, plastic

Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	971.30.SL	≈ 5,00 kg
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	971.31.SL	≈ 6,40 kg
1 Installation set "Basic" without C-profile	960.30	≈ 0,06 kg
1 Installation set "Basic" with C-profile	960.30._____	≈ 0,06 kg

Single parts - description

③ 1 Glide strip, individual, 2 m section	75.01	≈ 0,06 kg
⑩ 1 Silencer profile, rubber, individual, 2 m section	75.67.H	
④ 1 Bottom clamp, individual	75.40	≈ 0,03 kg
⑧ 1 Interface connector, individual	75.60	
⑥ 1 Screw M6 x 16, individual	MAT 0040209	
⑦ 1 Sliding nut M6, individual	MAT 0040057	
② 1 Glide bar, individual, 2 m section	82.79	≈ 0,60 kg
⑤ 1 C-profile, individual	92.52._____	≈ 0,90 kg/m

Order example: Length of travel 30 m - Center mounted for Series 2500.07.200.0 with **B_{Ri} = 97**

Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar

Order text: 16 m guide trough without glide bar (8 x 2 m sections) Part No. 971.30.SL

Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar

Order text: 16 m guide trough with glide bar (8 x 2 m sections) Part No. 971.31.SL

Installation set "Basic" complete (guide trough-sets + 1)

Order text: 17 installation sets "Basic" Part No. 960.30.150

Module for the fixed end

Order text: 1 set Part No. 971.80

Option: For an additional noise dampening with silencer profile, please add Index A Example:

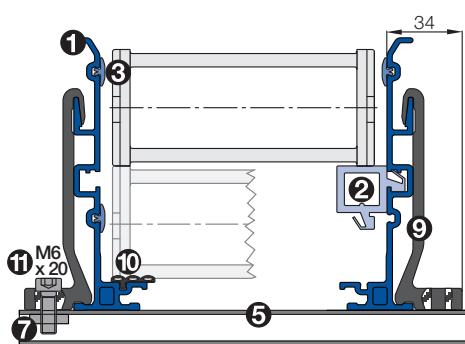
Part No. 971.30.SLA

Lengths of C-profile for Basic version - Bottom clamp attached optionally **inwards or outwards**

2500			255			E6.29/R6.29			R48		
2500.02.200.0			255.03.200.0			E6.29.030.100.0			48.050.100.0		
<i>B_{ri}</i> [mm]	Part No. attached inwards	Part No. attached outwards									
.02 45	*	960.30.150	.03 58	*	960.30.150	.030 50	*	960.30.150	.025 40	*	960.30.150
.03 58	*	960.30.150	.05 77	960.30.125	960.30.175	.040 60	*	960.30.175	.050 65	*	960.30.175
.05 77	960.30.125	960.30.175	.07 97	960.30.150	960.30.200	.050 70	*	960.30.175	.075 90	960.30.150	960.30.200
.07 97	960.30.150	960.30.200	.10 123	960.30.175	960.30.225	.060 80	960.30.150	960.30.175	.100 115	960.30.175	960.30.225
.09 109	960.30.175	960.30.225				.070 90	960.30.150	960.30.200	.130 145	960.30.200	960.30.250
.10 123	960.30.175	960.30.225				.080 100	960.30.150	960.30.200			
.12 145	960.30.200	960.30.250				.090 110	960.30.175	960.30.225			
						.100 120	960.30.175	960.30.225			
						.110 130	960.30.200	960.30.225			
						.120 140	960.30.200	960.30.250			

*upon request

"Heavy Duty" Version | Installation set Part No. 971.50



- Components, trough "Heavy Duty": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- Components, installation set "Heavy Duty": ⑤ C-profile, steel galvanized ⑦ Sliding nut M6 ⑨ Heavy duty bracket, aluminum ⑪ Screw M6 x 20



Note: Dimensions similar to Basic version!
Exception: Heavy duty bracket, see drawing

- = Guide trough
- = Glide bar
- = Installation set "Heavy duty"
- = C-profile



Insert for the installation set "Heavy-Duty": 971.50.XXX instead of 960.30.XXX on the right column "attached outwards"

"Heavy Duty" installation set Part No. 971.50.150

! The inner width of the guide through and the lenght of the C-Profile of the assembly kit can differ according to the bracket you choose. Please call us!

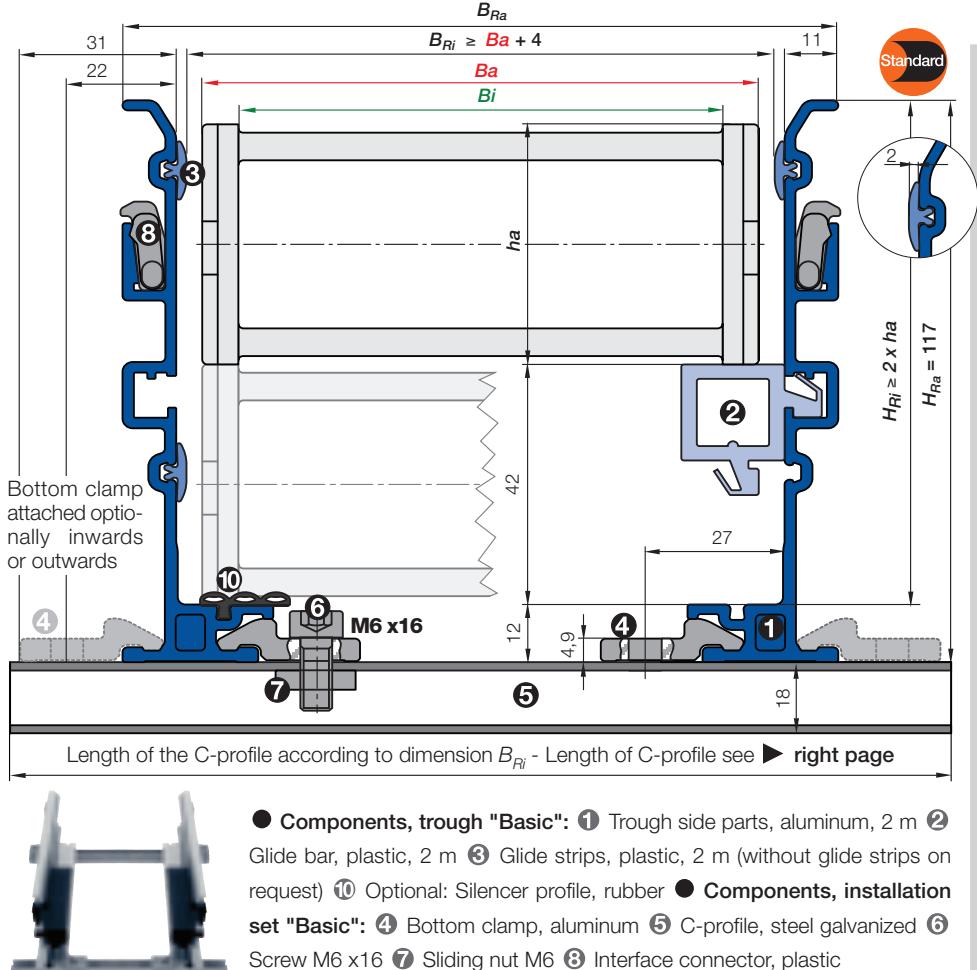


For the following
E-Chains®/E-Tubes:
System E4 Series
● E4.28/R4.28
● 220/R760
System E6 Series
● E6.35

B_a	= Outer E-Chain® width
B_i	= Inner E-Chain® width
h_a	= E-Chain® outer height
H_{Ri}	= Inner trough height
H_{Ra}	= Outer trough height
B_{Ri}	= Inner trough width ► depends on dim. B_a
B_{Ra}	= Outer trough width
H_{Ri}	$\geq 2 \cdot h_a$
B_{Ri}	$\geq B_a + 4$
●	= Guide trough
●	= Glide bar
●	= Installation set "Basic"
●	= C-profile

Part No. 972.02.30.SL | 972.02.31.SL | Trough height: 117 mm

Aluminum "SuperTrough" | Basic Version



- **Components, trough "Basic":** ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide bars on request) ⑩ Optional: Silencer profile, rubber
- **Components, installation set "Basic":** ④ Bottom clamp, aluminum ⑤ C-profile, steel galvanized ⑥ Screw M6 x 16 ⑦ Sliding nut M6 ⑧ Interface connector, plastic

Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight	kg
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	972.02.30.SL	~ 6,00 kg	
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	972.02.31.SL	~ 7,40 kg	
1 Installation set "Basic" without C-profile	960.30	~ 0,06 kg	
1 Installation set "Basic" with C-profile	960.30._____		
Single parts - description			
③ 1 Glide strip, individual, 2 m section	75.01	~ 0,06 kg	
⑩ 1 Silencer profile, rubber, individual, 2 m section	75.67.H		
④ 1 Bottom clamp, individual	75.40	~ 0,03 kg	
⑧ 1 Interface connector, individual	75.60		
⑥ 1 Screw M6 x 16, individual	MAT 0040209		
⑦ 1 Sliding nut M6, individual	MAT 0040057		
② 1 Glide bar, individual, 2 m section	82.79	~ 0,60 kg	
⑤ 1 C-profile, individual	92.52._____	~ 0,90 kg/m	



Order example: Length of travel 30 m - Center mounted for Series E6.35.100.055.0 with $B_{Ri} = 124$

Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar

Order text: 16 m guide trough without glide bar (8 x 2 m sections) **Part No.** 972.02.30.SL

Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar

Order text: 16 m guide trough with glide bar (8 x 2 m sections) **Part No.** 972.02.31.SL

Installation set "Basic" complete (guide trough-sets + 1)

Order text: 17 installation sets "Basic" **Part No.** 960.30.175

Module for the fixed end

Order text: 1 set **Part No.** 972.82

Option: For an additional noise dampening with silencer profile, please add Index A Example:

Part No. 972.02.30.SLA



Fixed end module - A
quick fix for mounting the stationary end of an E-Chain® ► page 9.16

Lengths of C-profile for Basic version - Bottom clamp attached optionally **inwards or outwards****E4.28/R4.28**

E4.28.070.250.0

220/R760

220.070.250.0

E6.35

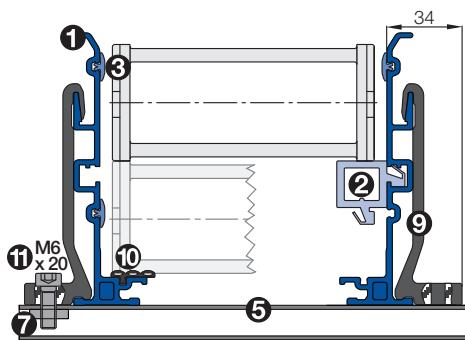
E6.35.100.063.0

B_{Ri} [mm]	Part No. attached inwards	Part No. attached outwards
.040 64	*	960.30.175
.050 74	960.30.125	960.30.175
.062 86	960.30.150	960.30.200
.070 94	960.30.150	960.30.200
.075 99	960.30.150	960.30.200
.087 111	960.30.175	960.30.225
.100 124	960.30.175	960.30.225
.125 149	960.30.200	960.30.250
.150 174	960.30.225	960.30.275
.175 199	960.30.250	960.30.300
.200 224	960.30.275	960.30.325
.225 249	960.30.300	960.30.350
.250 274	960.30.325	960.30.375
.275 299	960.30.350	960.30.400
.300 324	960.30.375	960.30.425

B_{Ri} [mm]	Part No. attached inwards	Part No. attached outwards
.040 64	*	960.30.175
.050 74	960.30.125	960.30.175
.062 86	960.30.150	960.30.200
.070 94	960.30.150	960.30.200
.075 99	960.30.150	960.30.200
.087 111	960.30.175	960.30.225
.100 124	960.30.175	960.30.225
.125 149	960.30.200	960.30.250
.150 174	960.30.225	960.30.275
.175 199	960.30.250	960.30.300
.200 224	960.30.275	960.30.325
.225 249	960.30.300	960.30.350
.250 274	960.30.325	960.30.375
.275 299	960.30.350	960.30.400
.300 324	960.30.375	960.30.425

B_{Ri} [mm]	Part No. attached inwards	Part No. attached outwards
.030 54	*	960.30.150
.040 64	*	960.30.175
.050 74	960.30.125	960.30.175
.060 84	960.30.150	960.30.200
.070 94	960.30.150	960.30.200
.080 104	960.30.150	960.30.200
.090 114	960.30.175	960.30.225
.100 124	960.30.175	960.30.225
.110 134	960.30.200	960.30.250
.120 144	960.30.200	960.30.250

*upon request

"Heavy Duty" Version | Installation set Part No. 972.50

- Components, trough "Heavy Duty": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- Components, installation set "Heavy Duty": ⑤ C-profile, steel galvanized ⑦ Sliding nut M6 ⑨ Heavy duty bracket, aluminum ⑪ Screw M6 x 20



- = Führungsrippen-Set
- = Gleitschiene
- = Montageset "Heavy duty"
- = C-Profil

Note: Dimensions similar to Basic version!
Exception: Heavy duty bracket, see drawing

Insert for the installation set "Heavy-Duty": **972.50.XXX** instead of **960.30.XXX** on the right column "attached outwards"**"Heavy Duty" installation set Part No. 972.50.150**

! The inner width of the guide through and the lenght of the C-Profile of the assembly kit can differ according to the bracket you choose. Please call us!



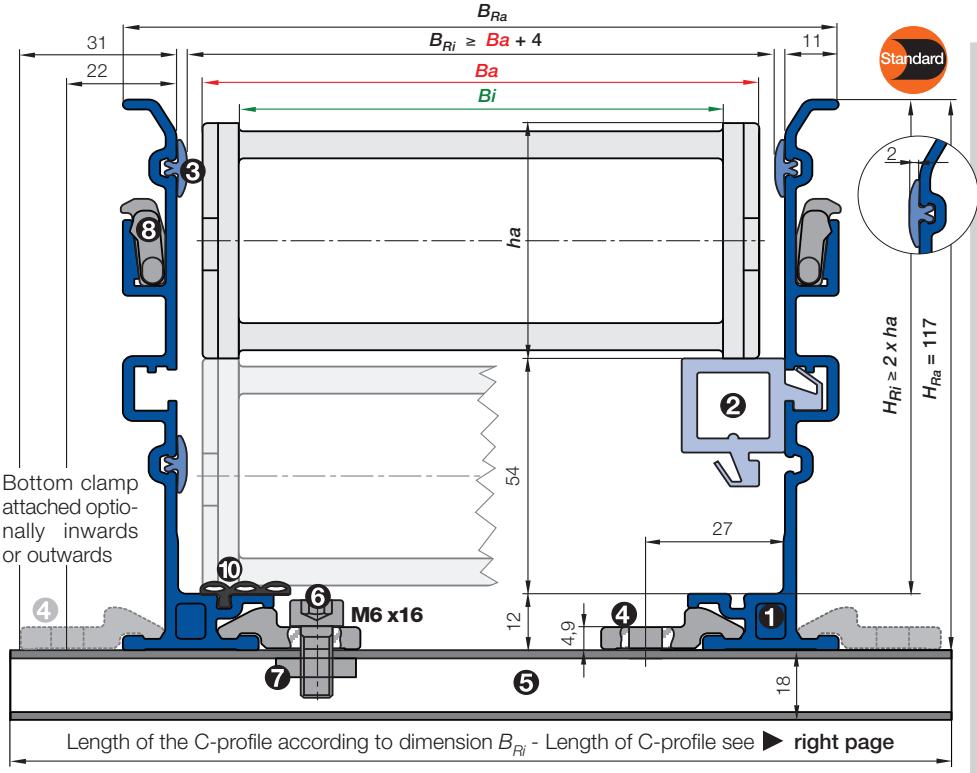
- For the following
E-Chains®/E-Tubes:
System E4 Series
● E4.32/H4.32/R4.32
● 280/290/R770
● 2828/2928/R7728
System E6 Series
● E6.40/R6.40

B_a = Outer E-Chain® width
B_i = Inner E-Chain® width
h_a = E-Chain® outer height
H_{Ri} = Inner trough height
H_{Ra} = Outer trough height
B_{Ri} = Inner trough width ► depends on dim. **B_a**
B_{Ra} = Outer trough width

H_{Ri} ≥ 2 • h_a
B_{Ri} ≥ B_a + 4

● = Guide trough
 ● = Glide bar
 ● = Installation set "Basic"
 ● = C-profile

Art. Nr. 972.30.SL | 972.31.SL | Trough height: 117 mm

Aluminum "SuperTrough" | Basic Version

● Components, trough "Basic": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber ● Components, installation set "Basic": ④ Bottom clamp, aluminum ⑤ C-profile, steel galvanized ⑥ Screw M6 x 16 ⑦ Sliding nut M6 ⑧ Interface connector, plastic

Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight	kg
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	972.30.SL	~ 6,00 kg	
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	972.31.SL	~ 7,40 kg	
1 Installation set "Basic" without C-profile	960.30	~ 0,06 kg	
1 Installation set "Basic" with C-profile	960.30.□		

Single parts - description

③ 1 Glide strip, individual, 2 m section	75.01	~ 0,06 kg
⑩ 1 Silencer profile, rubber, individual, 2 m section	75.67.H	
④ 1 Bottom clamp, individual	75.40	~ 0,03 kg
⑧ 1 Interface connector, individual	75.60	
⑥ 1 Screw M6 x 16, individual	MAT 0040209	
⑦ 1 Sliding nut M6, individual	MAT 0040057	
② 1 Glide bar, individual, 2 m section	82.79	~ 0,60 kg
⑤ 1 C-profile, individual	92.52.□	~ 0,90 kg/m

**Order example: Length of travel 30 m - Center mounted for Series E4.32.07.200.0 with B_{Ri} = 102**Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide barOrder text: **16 m guide trough without glide bar (8 x 2 m sections)** Part No. 972.30.SLGuide trough set (set of 2 trough side parts, incl. glide strips) **with** glide barOrder text: **16 m guide trough with glide bar (8 x 2 m sections)** Part No. 972.31.SL

Installation set "Basic" complete (guide trough-sets + 1)

Order text: **17 installation sets "Basic"** Part No. 960.30.150

Module for the fixed end

Order text: **1 set** Part No. 972.80

Option: For an additional noise dampening with silencer profile, please add Index A Example:

Part No. 972.30.SLA



Fixed end module - A
quick fix for mounting the stationary end of an E-Chain® ► page 9.16

Aluminum "SuperTrough" | Basic Version

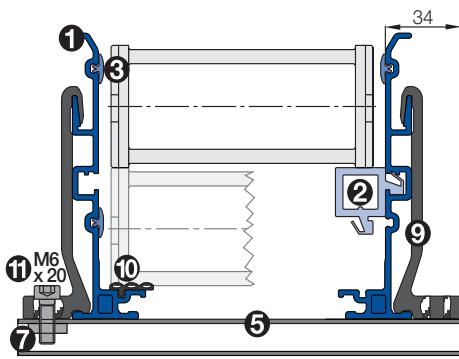


Lengths of C-profile for Basic version - Bottom clamp attached optionally inwards or outwards

E4.32/H4.32/R4.32		280/290/R770		2828/2928/R7728		E6.40/R6.40		
E4.32.05.200.0		280.05.200.0		2828.05.200.0		E6.40.040.063.0		
<i>B_{RI}</i> [mm]	Part No. attached inwards	Part No. attached outwards	<i>B_{RI}</i> [mm]	Part No. attached inwards	Part No. attached outwards	<i>B_{RI}</i> [mm]	Part No. attached inwards	Part No. attached outwards
.05 77	960.30.125	960.30.175	.05 77	960.30.125	960.30.175	.05 78	960.30.125	960.30.175
.06 95	960.30.150	960.30.200	.06 95	960.30.150	960.30.200	.06 96	960.30.150	960.30.200
.07 102	960.30.150	960.30.200	.07 102	960.30.150	960.30.200	.07 103	960.30.150	960.30.200
.087 114	960.30.175	960.30.225	.087 114	960.30.175	960.30.225	.087 115	960.30.175	960.30.225
.10 127	960.30.175	960.30.225	.10 127	960.30.175	960.30.225	.10 128	960.30.175	960.30.225
.11 135	960.30.200	960.30.250	.11 135	960.30.200	960.30.250	.11 136	960.30.200	960.30.250
.112 140	960.30.200	960.30.250	.112 140	960.30.200	960.30.250	.112 141	960.30.200	960.30.250
.12 152	960.30.200	960.30.250	.12 152	960.30.200	960.30.250	.12 153	960.30.200	960.30.250
.137 165	960.30.225	960.30.275	.137 165	960.30.225	960.30.275	.137 166	960.30.225	960.30.275
.15 177	960.30.225	960.30.275	.15 177	960.30.225	960.30.275	.15 178	960.30.225	960.30.275
.162 190	960.30.250	960.30.300	.162 190	960.30.250	960.30.300	.162 191	960.30.250	960.30.300
.17 195	960.30.250	960.30.300	.17 195	960.30.250	960.30.300	.17 196	960.30.250	960.30.300
.18 202	960.30.250	960.30.300	.18 202	960.30.250	960.30.300	.18 203	960.30.250	960.30.300
.187 215	960.30.275	960.30.325	.187 215	960.30.275	960.30.325	.187 216	960.30.275	960.30.325
.20 227	960.30.275	960.30.325	.20 227	960.30.275	960.30.325	.20 228	960.30.275	960.30.325
.212 240	960.30.300	960.30.350	.212 240	960.30.300	960.30.350	.212 241	960.30.300	960.30.350
.23 252	960.30.300	960.30.350	.23 252	960.30.300	960.30.350	.23 253	960.30.300	960.30.350
.237 265	960.30.325	960.30.375	.237 265	960.30.325	960.30.375	.237 266	960.30.325	960.30.375
.25 277	960.30.325	960.30.375	.25 277	960.30.325	960.30.375	.25 278	960.30.325	960.30.375
.262 290	960.30.350	960.30.400	.262 290	960.30.350	960.30.400	.262 291	960.30.350	960.30.400
.28 302	960.30.350	960.30.400	.28 302	960.30.350	960.30.400	.28 303	960.30.350	960.30.400
.29 315	960.30.375	960.30.425	.29 315	960.30.375	960.30.425	.29 316	960.30.375	960.30.425
.30 327	960.30.375	960.30.425	.30 327	960.30.375	960.30.425	.30 328	960.30.375	960.30.425
.312 340	960.30.400	960.30.450	.312 340	960.30.400	960.30.450	.312 341	960.30.400	960.30.450
.325 352	960.30.400	960.30.450	.325 352	960.30.400	960.30.450	.325 353	960.30.400	960.30.450
.337 365	960.30.425	960.30.475	.337 365	960.30.425	960.30.475	.337 366	960.30.425	960.30.475
.350 377	960.30.425	960.30.475	.350 377	960.30.425	960.30.475	.350 378	960.30.425	960.30.475
.362 390	960.30.450	960.30.500	.362 390	960.30.450	960.30.500	.362 391	960.30.450	960.30.500
.375 402	960.30.450	960.30.500	.375 402	960.30.450	960.30.500	.375 403	960.30.450	960.30.500
.387 415	960.30.475	960.30.525	.387 415	960.30.475	960.30.525	.387 416	960.30.475	960.30.525
.400 427	960.30.475	960.30.525	.400 427	960.30.475	960.30.525	.400 428	960.30.475	960.30.525

*upon request

"Heavy Duty" Version | Installation set Part No. 972.50



- Components, trough "Heavy Duty": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- Components, installation set "Heavy Duty": ⑤ C-profile, steel galvanized ⑦ Sliding nut M6 ⑨ Heavy duty bracket, aluminum ⑪ Screw M6 x 20



- = Guide trough
- = Glide bar
- = Installation set "Heavy duty"
- = C-profile

Note: Dimensions similar to Basic version!

Exception: Heavy duty bracket, see drawing

Insert for the installation set "Heavy-Duty": **972.50.XXX** instead of **960.30.XXX** on the right column "attached outwards"**"Heavy Duty" installation set Part No. 972.50.150**

! The inner width of the guide trough and the length of the C-Profile of the assembly kit can differ according to the bracket you choose. Please call us!

-  For the following E-Chains®/E-Tubes:
System E2 Series
 ● 2700
System E2 E-Tubes
 ● R58
E2 medium classic
 ● 27 classic

Ba = Outer E-Chain® width
Bi = Inner E-Chain® width

ha = E-Chain® outer height
H_{Ri} = Inner trough height

H_{Ra} = Outer trough height
B_{Ri} = Inner trough width ► depends on dim. **Ba**
B_{Ra} = Outer trough width

H_{Ri} ≥ 2 • **ha**
B_{Ri} ≥ **Ba** + 4

- = Guide trough
- = Glide bar
- = Installation set "Basic"
- = C-profile

Calculation - travel center mounted

Half travel length, rounded down to full 2 m sections = **X m** guide trough length without glide bars + **X m** guide trough length with glide bars + installation sets "Basic" (number of trough pieces + 1)

Supplement Part No. with the indicated C-profile-length-index.

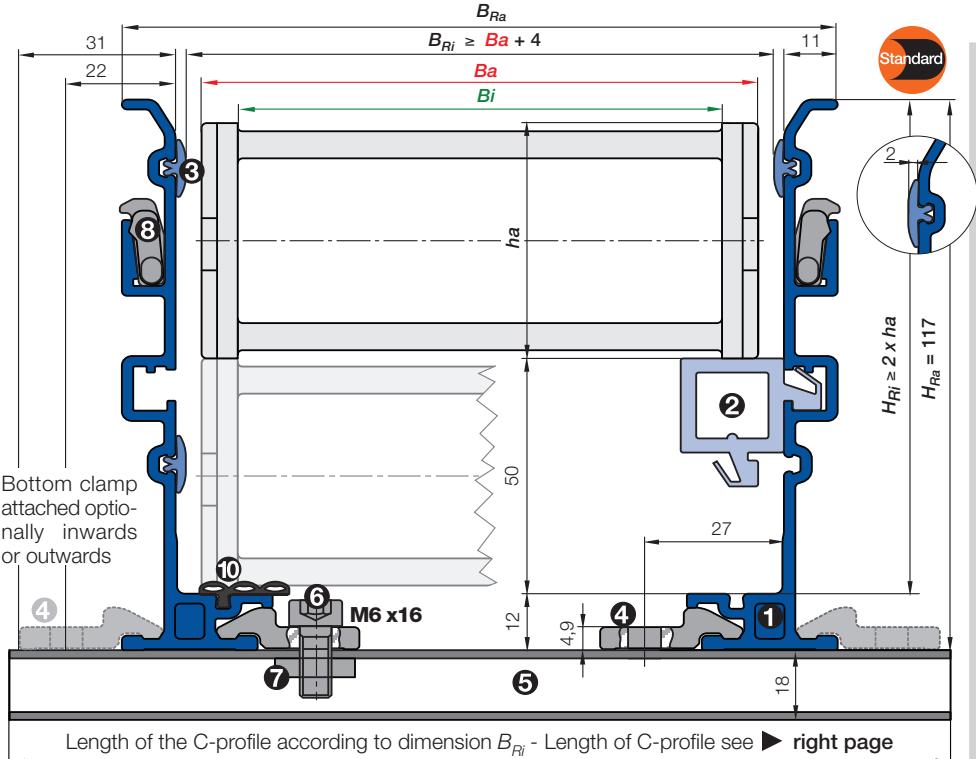
Example : 960.30.150

C-profile length-index for your chosen trough inner width **B_{Ri}** ► see table on the right or the respective page for chosen series

 Fixed end module - A quick fix for mounting the stationary end of an E-Chain® ► page 9.16

Part No. 972.30.SL | 972.32.SL | Trough height: 117 mm

Aluminum "SuperTrough" | Basic Version



- Components, trough "Basic": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- Components, installation set "Basic": ④ Bottom clamp, aluminum ⑤ C-profile, steel galvanized ⑥ Screw M6 x 16 ⑦ Sliding nut M6 ⑧ Interface connector, plastic

Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	972.30.SL	≈ 6,00 kg
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	972.32.SL	≈ 7,40 kg
1 Installation set "Basic" without C-profile	960.30	≈ 0,06 kg
1 Installation set "Basic" with C-profile	960.30.□	

Single parts - description

③ 1 Glide strip, individual, 2 m section	75.01	≈ 0,06 kg
⑩ 1 Silencer profile, rubber, individual, 2 m section	75.67.H	
④ 1 Bottom clamp, individual	75.40	≈ 0,03 kg
⑧ 1 Interface connector, individual	75.60	
⑥ 1 Screw M6 x 16, individual	MAT 0040209	
⑦ 1 Sliding nut M6, individual	MAT 0040057	
② 1 Glide bar, individual, 2 m section	82.79	≈ 0,60 kg
⑤ 1 C-profile, individual	92.52.□	≈ 0,90 kg/m

Order example: Length of travel 30 m - Center mounted for Series 2700.07.200.0 with **B_{Ri}** = 95

Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar

Order text: 16 m guide trough without glide bar (8 x 2 m sections) Part No. 972.30.SL

Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar

Order text: 16 m guide trough with glide bar (8 x 2 m sections) Part No. 972.32.SL

Installation set "Basic" complete (guide trough-sets + 1)

Order text: 17 installation sets "Basic" Part No. 960.30.150

Module for the fixed end

Order text: 1 set Part No. 972.81

Option: For an additional noise dampening with silencer profile, please add Index A Example:

Part No. 972.30.SLA

Lengths of C-profile for Basic version - Bottom clamp attached optionally **inwards or outwards****2700**

2700.05.200.0

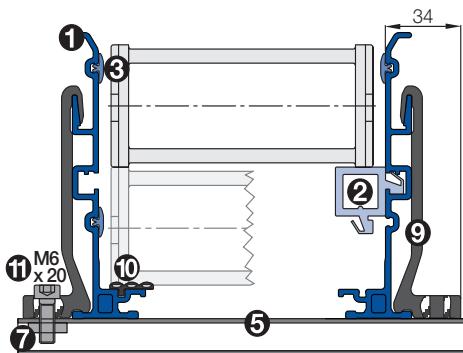
R58

58.075.200.0

B_{Ri} [mm]	Part No. attached inwards	Part No. attached outwards
.05 70	*	960.30.175
.06 85	960.30.150	960.30.200
.07 95	960.30.150	960.30.200
.09 110	960.30.175	960.30.225
.10 120	960.30.175	960.30.225
.12 145	960.30.200	960.30.250
.15 170	960.30.225	960.30.275
.17 198	960.30.250	960.30.300

B_{Ri} [mm]	Part No. attached inwards	Part No. attached outwards
.050 70	*	960.30.175
.075 95	960.30.150	960.30.200
.100 120	960.30.175	960.30.225
.125 145	960.30.200	960.30.250
.150 170	960.30.225	960.30.275
.175 195	960.30.250	960.30.300
.200 220	960.30.275	960.30.325

*upon request

"Heavy Duty" Version | Installation set Part No. Nr. 972.50

- **Components, trough "Heavy Duty":** ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- **Components, installation set "Heavy Duty":** ⑤ C-profile, steel galvanized ⑦ Sliding nut M6 ⑨ Heavy duty bracket, aluminum ⑪ Screw M6 x 20



- = Guide trough
- = Glide bar
- = Installation set "Heavy duty"
- = C-profile

Note: Dimensions similar to Basic version!
Exception: Heavy duty bracket, see drawing



Insert for the installation set "Heavy-Duty": **972.50.XXX** instead of **960.30.XXX** on the right column "attached outwards"

"Heavy Duty" installation set Part No. 972.50. 150

! The inner width of the guide through and the length of the C-Profile of the assembly kit can differ according to the bracket you choose. Please call us!



For the following

E-Chains®/E-Tubes:

System E2 Series

- 3500

System E2 E-Tubes Series

- R68

System E4 Series

- E4.42/H4.42/R4.42

- 380/390/R780

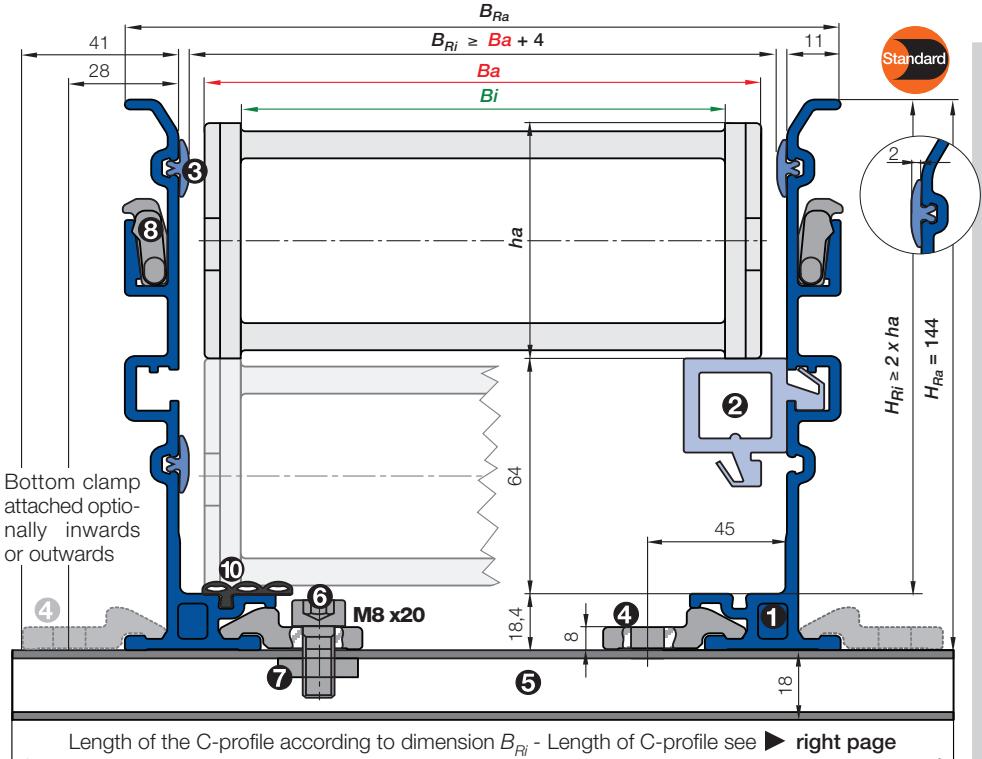
- 3838/3938/R7838

System E6 Series

- E6.52/R6.52

E2 medium classic

- 350 classic



● Components, trough "Basic": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide bars on request) ⑩ Optional: Silencer profile, rubber ● Components, installation set "Basic": ④ Bottom clamp, aluminum ⑤ C-profile, steel galvanized ⑥ Screw M8 x 20 ⑦ Sliding nut M8 ⑧ Interface connector, plastic

Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight	kg
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	973.30.SL	~ 8,00 kg	
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	973.31.SL	~ 10,8 kg	
1 Installation set "Basic" without C-profile	960.40.	~ 0,08 kg	
1 Installation set "Basic" with C-profile	960.40. <input type="checkbox"/>		
Single parts - description			
③ 1 Glide strip, individual, 2 m section	75.01	~ 0,06 kg	
⑩ 1 Silencer profile, rubber, individual, 2 m section	75.68.H		
④ 1 Bottom clamp, individual	75.50	~ 0,04 kg	
⑧ 1 Interface connector, individual	75.60		
⑥ 1 Screw M8 x 20, individual	MAT 0040445		
⑦ 1 Sliding nut M8, individual	MAT 0040413		
② 1 Glide bar, individual, 2 m section	83.79	~ 1,30 kg	
⑤ 1 C-profile, individual	92.52. <input type="checkbox"/>	~ 0,90 kg/m	



Order example: Length of travel 30 m - Center mounted for Series 3500.100.200.0 with $B_{Ri} = 124$

Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar

Order text: 16 m guide trough without glide bar (8 x 2 m sections) Part No. 973.30.SL

Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar

Order text: 16 m guide trough with glide bar (8 x 2 m sections) Part No. 973.31.SL

Installation set "Basic" complete (guide trough-sets + 1)

Order text: 17 installation sets "Basic" Part No. 960.40.175

Module for the fixed end

Order text: 1 set Part No. 973.80

Option: For an additional noise dampening with silencer profile, please add Index A Example:

Part No. 973.30.SLA



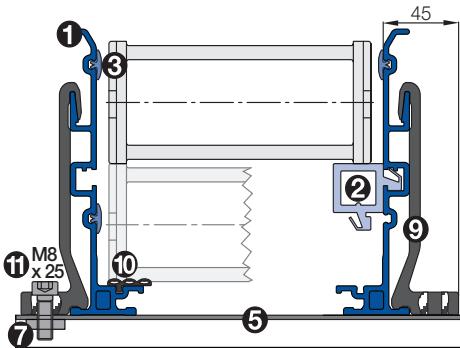
Fixed end module - A quick fix for mounting the stationary end of an E-Chain® ► page 9.16

Lengths of C-profile for Basic version - Bottom clamp attached optionally **inwards** or **outwards**

3500		E4.42/H4.42/R4.42		380/390/R780		3838/3938/R7838		E6.52/R6.52				
3500	.050	200.0	E4.42	.05	200.0	380	.05	200.0	E6.52	.040	200.0	
<i>B_{ri}</i> [mm]	Part No. attached inwards	Part No. attached outwards										
.050	74	*	.05	80	*	.05	80	*	.05	81	*	
.075	99	*	.06	98	*	.06	98	*	.06	99	*	
.100	124	960.40.175	960.40.250	.07	105	*	.07	105	*	.07	106	*
.115	139	960.40.200	960.40.275	.087	118	960.40.175	960.40.250	.087	118	960.40.175	960.40.250	
.125	149	960.40.200	960.40.275	.10	130	960.40.200	960.40.250	.10	130	960.40.200	960.40.250	
.150	174	960.40.225	960.40.300	.11	138	960.40.200	960.40.275	.11	138	960.40.200	960.40.275	
.175	199	960.40.250	960.40.325	.112	143	960.40.200	960.40.275	.112	143	960.40.200	960.40.275	
.200	224	960.40.275	960.40.350	.12	155	960.40.225	960.40.275	.12	155	960.40.225	960.40.275	
.225	249	960.40.300	960.40.375	.137	168	960.40.225	960.40.300	.137	168	960.40.225	960.40.300	
.250	274	960.40.325	960.40.400	.15	180	960.40.250	960.40.300	.15	180	960.40.250	960.40.300	
				.162	193	960.40.250	960.40.325	.162	193	960.40.250	960.40.325	
				.17	198	960.40.250	960.40.325	.17	198	960.40.250	960.40.325	
				.18	205	960.40.275	960.40.325	.18	205	960.40.275	960.40.325	
				.187	218	960.40.275	960.40.350	.187	218	960.40.275	960.40.350	
				.20	230	960.40.300	960.40.350	.20	230	960.40.300	960.40.350	
R68				.212	243	960.40.300	960.40.375	.212	243	960.40.300	960.40.375	
				.23	255	960.40.325	960.40.375	.23	255	960.40.325	960.40.375	
				.237	268	960.40.325	960.40.400	.237	268	960.40.325	960.40.400	
				.25	280	960.40.350	960.40.400	.25	280	960.40.350	960.40.400	
.050	72	*	960.40.200	.262	293	960.40.350	960.40.425	.262	293	960.40.350	960.40.425	
.075	97	*	960.40.225	.28	305	960.40.375	960.40.425	.28	305	960.40.375	960.40.425	
.100	122	960.40.175	960.40.250	.29	318	960.40.375	960.40.450	.29	318	960.40.375	960.40.450	
.115	137	960.40.200	960.40.275	.30	330	960.40.400	960.40.450	.30	330	960.40.400	960.40.450	
.125	147	960.40.200	960.40.275	.312	343	960.40.400	960.40.475	.312	343	960.40.400	960.40.475	
.150	172	960.40.225	960.40.300	.325	355	960.40.425	960.40.475	.325	355	960.40.425	960.40.475	
.175	197	960.40.250	960.40.325	.337	368	960.40.425	960.40.500	.337	368	960.40.425	960.40.500	
.200	222	960.40.275	960.40.350	.350	380	960.40.450	960.40.500	.350	380	960.40.450	960.40.500	
.225	247	960.40.300	960.40.375	.362	393	960.40.450	960.40.525	.362	393	960.40.450	960.40.525	
.250	272	960.40.325	960.40.400	.375	406	960.40.475	960.40.525	.375	406	960.40.475	960.40.525	
				.387	418	960.40.475	960.40.550	.387	418	960.40.475	960.40.550	
				.400	430	960.40.500	960.40.550	.400	430	960.40.500	960.40.550	

*upon request

"Heavy Duty" Version | Installation set Part No. 973.50



- **Components, trough "Heavy Duty":** ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- **Components, installation set "Heavy Duty":** ⑤ C-profile, steel galvanized ⑦ Sliding nut M8 ⑨ Heavy duty bracket, aluminum ⑪ Screw M8 x 25



Note: Dimensions similar to Basic version!
Exception: Heavy duty bracket, see drawing

- = Guide trough
- = Glide bar
- = Installation set "Heavy duty"
- = C-profile

Insert for the installation set "Heavy-Duty": **973.50.XXX** instead of 960.40.XXX on the right column "attached outwards"**"Heavy Duty" installation set Part No 973.50. 175**

! The inner width of the guide through and the length of the C-Profile of the assembly kit can differ according to the bracket you choose. Please call us!

-  For the following E-Chains®/E-Tubes:
- System E4 Series**
- E4.56/H4.56/R4.56
 - 400/410/R880
 - 4040/4140/R8840
 - 14040/14140/R18840
 - 14240/14340
- System E6 Series**
- E6.62

B_a = Outer E-Chain® width
B_i = Inner E-Chain® width
h_a = E-Chain® outer height
H_{Ri} = Inner trough height
H_{Ra} = Outer trough height
B_{Ri} = Inner trough width ► depends on dim. **B_a**
B_{Ra} = Outer trough width

H_{Ri} ≥ 2 • h_a
B_{Ri} ≥ B_a + 4

- = Guide trough
- = Glide bar
- = Installation set "Basic"
- = C-profile

Calculation - travel center mounted

Half travel length, rounded down to full 2 m sections = **X m** guide trough length without glide bars + **X m** guide trough length with glide bars + installation sets "Basic" (number of trough pieces + 1)

Supplement Part No. with the indicated C-profile-length-index.

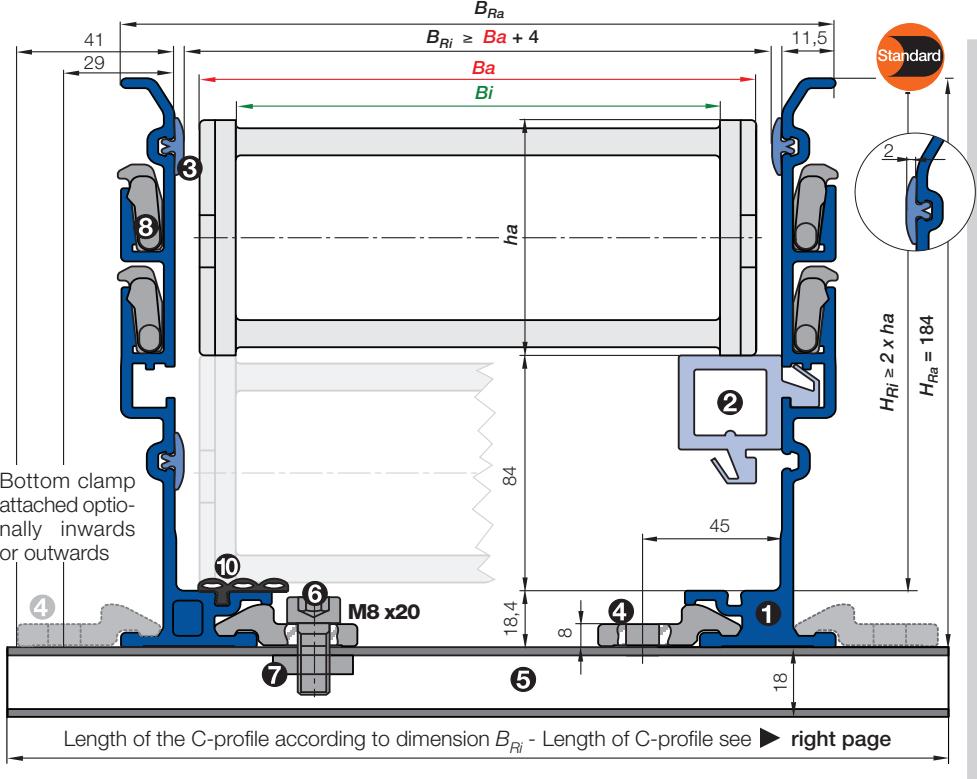
Example: 960.50.200

C-profile length-index for your chosen trough inner width **B_{Ri}** ► see table on the right or the respective page for chosen series

 **Fixed end module - A** quick fix for mounting the stationary end of an E-Chain® ► page 9.16

Part No. 974.30.SL | 974.31.SL | Trough height: 184 mm

Aluminum "SuperTrough" | Basic Version



- **Components, trough "Basic":** ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber ● **Components, installation set "Basic":** ④ Bottom clamp, aluminum ⑤ C-profile, steel galvanized ⑥ Screw M8 x 20 ⑦ Sliding nut M8 ⑧ Interface connector, plastic

Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight	kg
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	974.30.SL	~ 10,0 kg	
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	974.31.SL	~ 12,8 kg	
1 Installation set "Basic" without C-profile	960.50	~ 0,08 kg	
1 Installation set "Basic" with C-profile	960.50._____		

Single parts - description

③ 1 Glide strip, individual, 2 m section	75.01	~ 0,06 kg
⑩ 1 Silencer profile, rubber, individual, 2 m section	75.68.H	
④ 1 Bottom clamp, individual	75.50	~ 0,04 kg
⑧ 1 Interface connector, individual	75.60	
⑥ 1 Screw M8 x 20, individual	MAT 0040445	
⑦ 1 Sliding nut M8, individual	MAT 0040413	
② 1 Glide bar, individual, 2 m section	83.79	~ 1,30 kg
⑤ 1 C-profile, individual	92.52._____	~ 0,90 kg/m

Order example: Length of travel 30 m - Center mounted for Series E4.56.10.250.0 with **B_{Ri} = 138**

Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar

Order text: 16 m guide trough without glide bar (8 x 2 m sections) **Part No.** 974.30.SL

Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar

Order text: 16 m guide trough with glide bar (8 x 2 m sections) **Part No.** 974.31.SL

Installation set "Basic" complete (guide trough-sets + 1)

Order text: 17 installation sets "Basic" **Part No.** 960.50.200

Module for the fixed end

Order text: 1 set **Part No.** 974.80

Option: For an additional noise dampening with silencer profile, please add Index A Example:

Part No. 974.30.SLA

Lengths of C-profile for Basic version - Bottom clamp attached optionally **inwards or outwards**

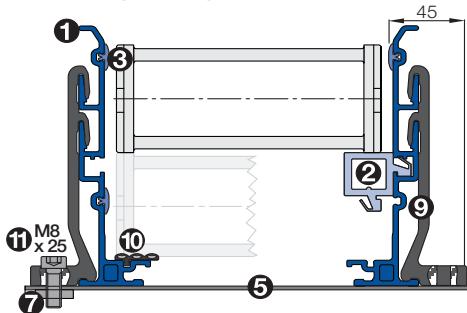
E4.56/H4.56/R4.56	400/410/R880	4040/4140/R8840	14040/14140/R18840	14240/14340	E6.62
E4.56.05.200.0	400.05.200.0	4040.05.200.0	14040.05.200.0	14240.05.200.0	E6.62.05.200.0
Part No. <i>B_{ri}</i> [mm]	Part No. attached inwards	Part No. <i>B_{ri}</i> [mm]	Part No. attached inwards	Part No. <i>B_{ri}</i> [mm]	Part No. attached inwards
.05 88	*	960.50.225	.05 88	*	960.50.225
.06 103	*	960.50.225	.06 103	*	960.50.225
.07 113	*	960.50.250	.07 113	*	960.50.250
.08 125	960.50.175	960.50.250	.08 125	960.50.175	960.50.250
.10 138	960.50.200	960.50.275	.10 138	960.50.200	960.50.275
.11 151	960.50.200	960.50.275	.11 151	960.50.200	960.50.275
.12 163	960.50.225	960.50.300	.12 163	960.50.225	960.50.300
.13 176	960.50.225	960.50.300	.13 176	960.50.225	960.50.300
.15 188	960.50.250	960.50.325	.15 188	960.50.250	960.50.325
.16 201	960.50.250	960.50.325	.16 201	960.50.250	960.50.325
.17 213	960.50.275	960.50.350	.17 213	960.50.275	960.50.350
.18 226	960.50.275	960.50.350	.18 226	960.50.275	960.50.350
.20 238	960.50.300	960.50.375	.20 238	960.50.300	960.50.375
.21 251	960.50.300	960.50.375	.21 251	960.50.300	960.50.375
.22 263	960.50.325	960.50.400	.22 263	960.50.325	960.50.400
.23 276	960.50.325	960.50.400	.23 276	960.50.325	960.50.400
.25 288	960.50.350	960.50.425	.25 288	960.50.350	960.50.425
.26 301	960.50.350	960.50.425	.26 301	960.50.350	960.50.425
.27 313	960.50.375	960.50.450	.27 313	960.50.375	960.50.450
.28 326	960.50.375	960.50.450	.28 326	960.50.375	960.50.450
.30 338	960.50.400	960.50.475	.30 338	960.50.400	960.50.475
.31 351	960.50.400	960.50.475	.31 351	960.50.400	960.50.475
.32 363	960.50.425	960.50.500	.32 363	960.50.425	960.50.500
.33 376	960.50.425	960.50.500	.33 376	960.50.425	960.50.500
.35 388	960.50.450	960.50.525	.35 388	960.50.450	960.50.525
.36 401	960.50.450	960.50.525	.36 401	960.50.450	960.50.525
.37 413	960.50.475	960.50.550	.37 413	960.50.475	960.50.550
.38 426	960.50.475	960.50.550	.38 426	960.50.475	960.50.550
.40 438	960.50.500	960.50.575	.40 438	960.50.500	960.50.575
.41 451	960.50.500	960.50.575	.41 451	960.50.500	960.50.575
.42 463	960.50.525	960.50.600	.42 463	960.50.525	960.50.600
.43 476	960.50.525	960.50.600	.43 476	960.50.525	960.50.600
.45 488	960.50.550	960.50.625	.45 488	960.50.550	960.50.625
.46 501	960.50.550	960.50.625	.46 501	960.50.550	960.50.625
.47 513	960.50.575	960.50.650	.47 513	960.50.575	960.50.650
.48 526	960.50.575	960.50.650	.48 526	960.50.575	960.50.650
.50 538	960.50.600	960.50.675	.50 538	960.50.600	960.50.675
.51 551	960.50.600	960.50.675	.51 551	960.50.600	960.50.675
.52 563	960.50.625	960.50.700	.52 563	960.50.625	960.50.700
.53 576	960.50.625	960.50.700	.53 576	960.50.625	960.50.700
.55 588	960.50.650	960.50.725	.55 588	960.50.650	960.50.725
.60 638	960.50.700	960.50.775	.60 638	960.50.700	960.50.775
					*upon request

"Heavy Duty" Version | Installation set Part No. 974.50

- Components, trough "Heavy Duty": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- Components, installation set "Heavy Duty": ⑤ C-profile, steel galvanized ⑦ Sliding nut M8 ⑨ Heavy duty bracket, aluminum ⑪ Screw M8 x 25

Note: Dimensions similar to Basic version!

Exception: Heavy duty bracket, see drawing



- = Guide trough
- = Glide bar
- = Installation set "Heavy duty"
- = C-profile

 Insert for the installation set "Heavy-Duty": **974.50.XXX** instead of **960.50.XXX** on the right column "attached outwards"

"Heavy Duty" installation set Part No. 974.50.200

! The inner width of the guide through and the lenght of the C-Profile of the assembly kit can differ according to the bracket you choose. Please call us!



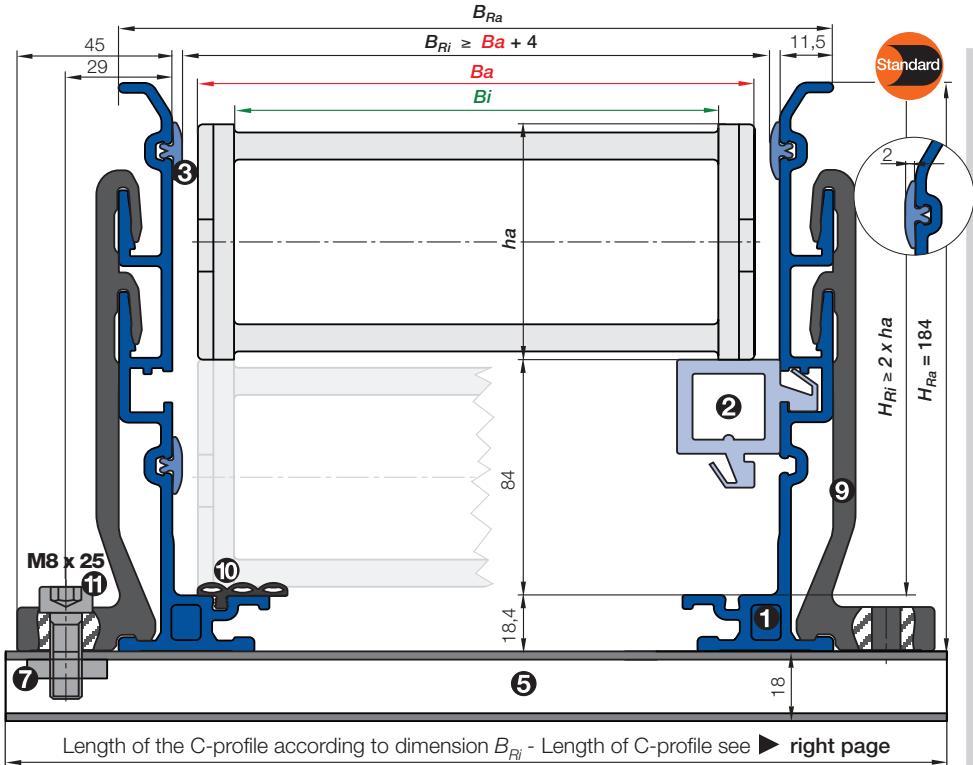
For the following
E-Chains®/E-Tubes:
System E4 Series
● 4040HD/R8840HD

We especially recommend for the igus® E4/4 series 4040 HD (Heavy Duty) this trough system. Structurally identical with trough 974.30.SL yet with special HD-installation set, suitable for ambitious applications.

B_a = Outer E-Chain® width
B_i = Inner E-Chain® width
h_a = E-Chain® outer height
H_{Ri} = Inner trough height
H_{Ra} = Outer trough height
B_{Ri} = Inner trough width ► depends on dim. **B_a**
B_{Ra} = Outer trough width

! $H_{Ri} \geq 2 \cdot h_a$
 $B_{Ri} \geq B_a + 4$

- = Guide trough
- = Glide bar
- = Installation set
- = C-profile



● Components, trough "Heavy Duty": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber ● Components, installation set "Heavy Duty": ⑤ C-profile, steel galvanized ⑦ Sliding nut M8 ⑨ Heavy duty bracket, aluminum ⑪ Screw M8 x 25

Heavy Duty version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	974.30.SL	≈ 10,0 kg
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	974.31.SL	≈ 12,8 kg
⑨ 1 Installation set "Heavy Duty" without C-profile	974.50	≈ 0,40 kg
1 Installation set "Heavy Duty" with C-profile	974.50._____	≈ 0,40 kg

Single parts - description

③ 1 Glide strip, individual, 2 m section	75.01	≈ 0,06 kg
⑩ 1 Silencer profile, rubber, individual, 2 m section	75.68.H	
⑪ 1 Screw M8 x 25, individual	MAT 0040445	
⑦ 1 Sliding nut M8, individual	MAT 0040413	
② 1 Glide bar, individual, 2 m section	83.79	≈ 1,30 kg
⑤ 1 C-profile, individual	92.52._____	≈ 0,90 kg/m



Order example: Length of travel 30 m - Center mounted for Series 4040HD.10.250.0 with $B_{Ri} = 158$

Guide trough set (set of 2 trough side parts, incl. glide strips) without glide bar	
Order text: 16 m guide trough without glide bar (8 x 2 m sections)	Part No. 974.30.SL
Guide trough set (set of 2 trough side parts, incl. glide strips) with glide bar	
Order text: 16 m guide trough with glide bar (8 x 2 m sections)	Part No. 974.31.SL
Installation set "Heavy Duty" complete (guide trough-sets + 1)	
Order text: 17 installation sets "Heavy Duty"	Part No. 974.50.275
Module for the fixed end	
Order text: 1 set	Part No. 974.80
Option: For an additional noise dampening with silencer profile, please add Index A Example:	Part No. 974.30.SLA

Supplement Part No. with the indicated C-profile-length-index.

Example: 974.50. [200]

C-profile length-index for your chosen trough inner width B_{Ri} ► see table on the right or the respective page for chosen series

Lengths of C-profile

4040HD/R8840HD

4040HD.05.250.0

B_{Ri} [mm]	Part No. assembled
.05 108	974.50.225
.06 123	974.50.250
.07 133	974.50.250
.08 146	974.50.275
.10 158	974.50.275
.11 170	974.50.300
.12 183	974.50.300
.13 195	974.50.325
.15 208	974.50.325
.16 220	974.50.350
.17 233	974.50.350
.18 245	974.50.375
.20 258	974.50.375
.21 270	974.50.400
.22 283	974.50.400
.23 295	974.50.425
.25 308	974.50.425
.26 320	974.50.450
.27 333	974.50.450
.28 345	974.50.475
.30 358	974.50.475
.31 370	974.50.500
.32 383	974.50.500
.33 395	974.50.525
.35 408	974.50.525
.36 420	974.50.550
.37 433	974.50.550
.38 445	974.50.575
.40 458	974.50.575
.41 470	974.50.600
.42 483	974.50.600
.43 495	974.50.625
.45 508	974.50.625
.46 520	974.50.650
.47 533	974.50.650
.48 545	974.50.675
.50. 558	974.50.675
.51 570	974.50.700
.52 583	974.50.700
.53 595	974.50.725
.55 608	974.50.725
.60 658	974.50.775

-  For the following E-Chains®/E-Tubes:
- System E4 Series**
- E4.80/H4.80/R4.80
 - 5050/5150/R9850
 - 15050/15150/R19850
- System E6 Series**
- E6.80

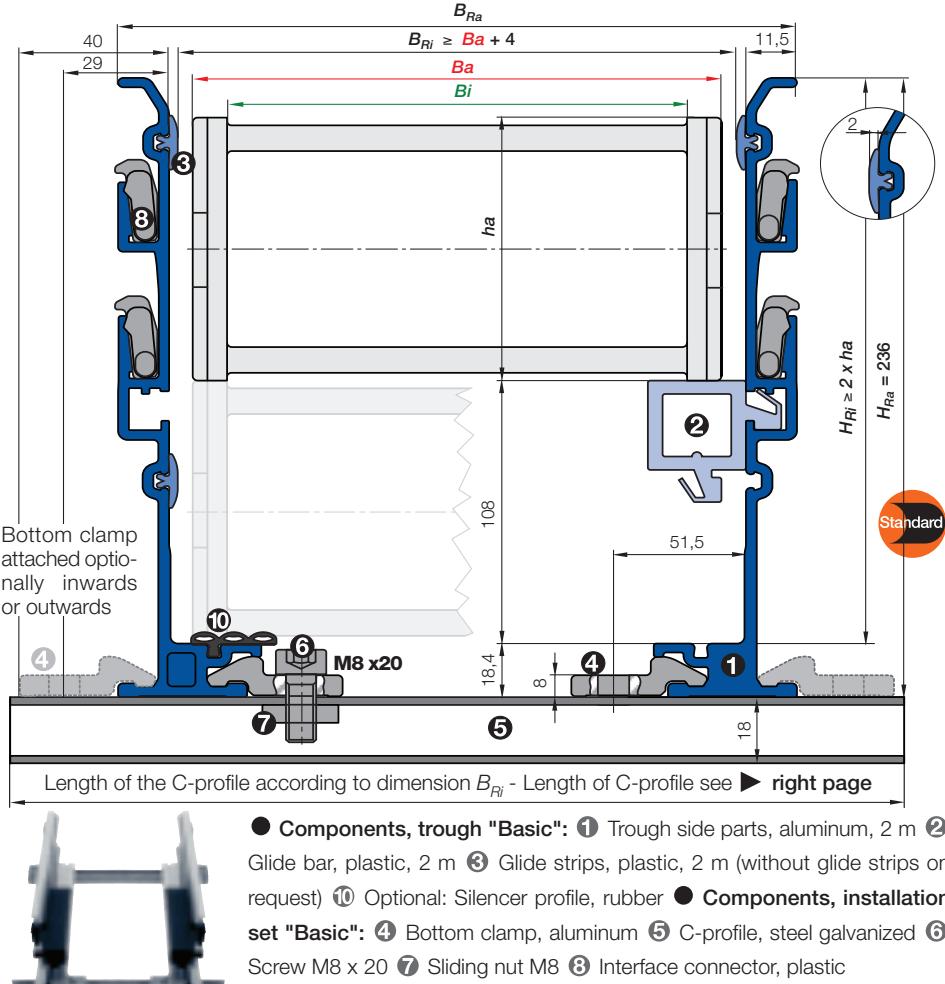
B_a = Outer E-Chain® width
B_i = Inner E-Chain® width
h_a = E-Chain® outer height
H_{Ri} = Inner trough height
H_{Ra} = Outer trough height
B_{Ri} = Inner trough width ► depends on dim. **B_a**
B_{Ra} = Outer trough width

H_{Ri} ≥ 2 • h_a
B_{Ri} ≥ B_a + 4

● = Guide trough
 ● = Glide bar
 ● = Installation set "Basic"
 ● = C-profile

Part No. 975.30.SL | 975.31.SL | Trough height: 236 mm

Aluminum "SuperTrough" | Basic Version



Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight	kg
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	975.30.SL	≈ 14,0 kg	
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	975.31.SL	≈ 16,6 kg	
1 Installation set "Basic" without C-profile	960.50	≈ 0,08 kg	
1 Installation set "Basic" with C-profile	960.50.□	≈ 0,08 kg	
Single parts - description			
③ 1 Glide strip, individual, 2 m section	75.01	≈ 0,06 kg	
⑩ 1 Silencer profile, rubber, individual, 2 m section	75.68.H	≈ 0,02 kg	
④ 1 Bottom clamp, individual	75.50	≈ 0,04 kg	
⑧ 1 Interface connector, individual	75.60	≈ 0,01 kg	
⑥ 1 Screw M8 x 20, individual	MAT 0040445	≈ 0,005 kg	
⑦ 1 Sliding nut M8, individual	MAT 0040413	≈ 0,005 kg	
② 1 Glide bar, individual, 2 m section	83.79	≈ 1,30 kg	
⑤ 1 C-profile, individual	92.52.□	≈ 0,90 kg/m	



Order example: Length of travel 30 m - Center mounted for Series 5050.30.300.0 with B_{Ri} = 345

Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar

Order text: 16 m guide trough without glide bar (8 x 2 m sections) Part No. 975.30.SL

Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar

Order text: 16 m guide trough with glide bar (8 x 2 m sections) Part No. 975.31.SL

Installation set "Basic" complete (guide trough-sets + 1)

Order text: 17 installation sets "Basic" Part No. 960.50.425

Module for the fixed end

Order text: 1 set Part No. 975.80

Option: For an additional noise dampening with silencer profile, please add Index A Example:

Part No. 975.30.SLA

 Fixed end module - A quick fix for mounting the stationary end of an E-Chain® ► page 9.16

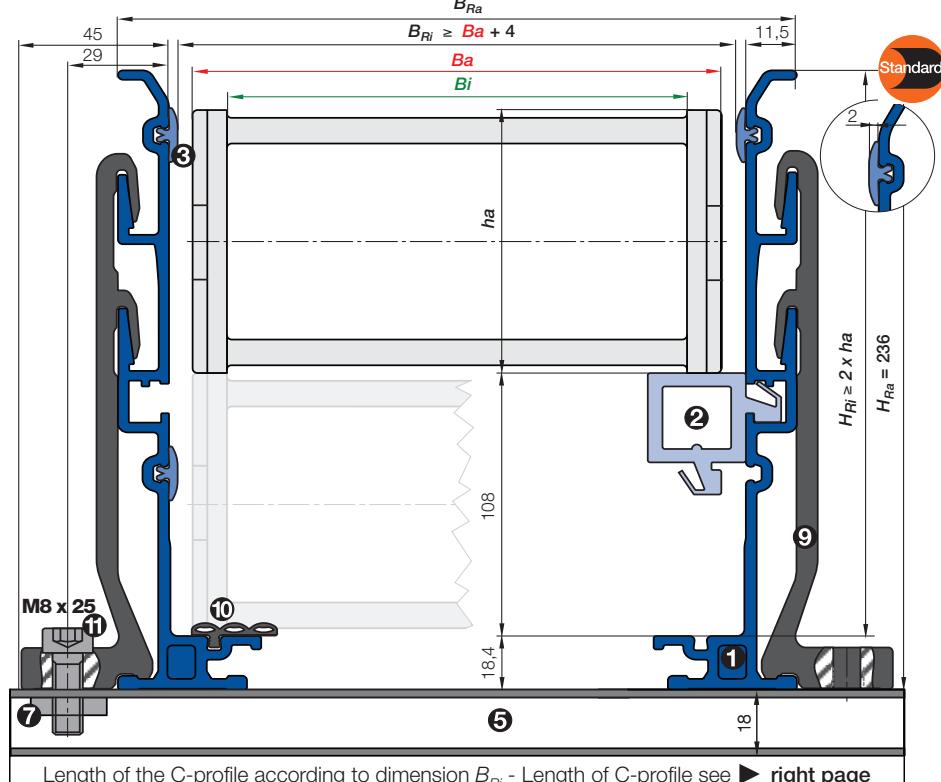
For the following
E-Chains®/E-Tubes:
System E4 Series
● 5050HD/R9850HD

We especially recommend for the igus® E4/4 series 5050 HD (Heavy Duty) this trough system. Structurally identical with trough 975.30.SL yet with special HD-installation set, suitable for ambitious applications.

B_a = Outer E-Chain® width
B_i = Inner E-Chain® width
h_a = E-Chain® outer height
H_{Ri} = Inner trough height
H_{Ra} = Outer trough height
B_{Ri} = Inner trough width ► depends on dim. **B_a**
B_{Ra} = Outer trough width

! $H_{Ri} \geq 2 \cdot h_a$
 $B_{Ri} \geq B_a + 4$

- = Guide trough
- = Glide bar
- = Installation set
- = C-profile



- Components, trough "Heavy Duty": ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- Components, installation set "Heavy Duty": ⑤ C-profile, steel galvanized ⑦ Sliding nut M8 ⑨ Heavy duty bracket, aluminum ⑪ Screw M8 x 25

Heavy Duty version: Aluminum "SuperTrough" components

Complete guide trough sets - description	Part No.	Weight
① Set of 2 trough side parts, incl. glide strips, without glide bars, 2 m section	975.30.SL	≈ 14,0 kg
① Set of 2 trough side parts, incl. glide strips, with glide bars, 2 m section	975.31.SL	≈ 16,6 kg
⑨ 1 Installation set "Heavy Duty" without C-profile	975.50	≈ 0,53 kg
1 Installation set "Heavy Duty" with C-profile	975.50.□	≈ 0,90 kg/m

Single parts - description

③ 1 Glide strip, individual, 2 m section	75.01	≈ 0,06 kg
⑩ 1 Silencer profile, rubber, individual, 2 m section	75.68.H	
⑪ 1 Screw M8 x 25, individual	MAT 0040445	
⑦ 1 Sliding nut M8, individual	MAT 0040413	
② 1 Glide bar, individual, 2 m section	83.79	≈ 1,30 kg
⑤ 1 C-profile, individual	92.52.□	≈ 0,90 kg/m

Order example: Length of travel 30 m - Center mounted for Series 5050HD.10.250.0 with $B_{Ri} = 975.30.SL$

Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar

Order text: 16 m guide trough without glide bar (8 x 2 m sections) Part No. 975.31.SL

Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar

Order text: 16 m guide trough with glide bar (8 x 2 m sections) Part No. 975.50.300

Installation set "Heavy Duty" complete (guide trough-sets + 1)

Order text: 17 installation sets "Heavy Duty" Part No. 975.80

Module for the fixed end

Order text: 1 set Part No. 975.30.SLA

Option: For an additional noise dampening with silencer profile, please add Index A Example:

Part No.

Lengths of C-profile

5050HD/R9850HD

5050HD.30.300.0

B_{Ri} [mm]	Part No. assembled
.05 114	974.50.250
.06 129	974.50.250
.07 139	974.50.275
.08 152	974.50.275
.10 164	974.50.300
.11 176	974.50.300
.12 189	974.50.325
.13 201	974.50.325
.15 214	974.50.350
.16 226	974.50.350
.17 239	974.50.375
.18 251	974.50.375
.20 264	974.50.400
.21 276	974.50.400
.22 289	974.50.425
.23 301	974.50.425
.25 314	974.50.450
.26 326	974.50.450
.27 339	974.50.475
.28 351	974.50.475
.30 364	974.50.500
.31 376	974.50.500
.32 389	974.50.525
.33 401	974.50.525
.35 414	974.50.550
.36 426	974.50.550
.37 439	974.50.575
.38 451	974.50.575
.40 464	974.50.600
.41 476	974.50.600
.42 489	974.50.625
.43 501	974.50.625
.45 514	974.50.650
.46 526	974.50.650
.47 539	974.50.675
.48 551	974.50.675
.50 564	974.50.700
.51 576	974.50.700
.52 589	974.50.725
.53 601	974.50.725
.55 614	974.50.750
.60 664	974.50.800