

# LUBING

## Conveyor systems



**Assembly instructions  
and operators manual**

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Dear Reader,

Permanent development of our products and innovative new designs mean that our assembly and operating instructions as well as spare parts sheets are regularly updated. If you have any queries, please contact us or your LUBING dealer.

Website: [www.lubingsystem.com](http://www.lubingsystem.com)

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## 1. GENERAL INFORMATION

### 1.1 Warnings and symbols

You will come across the following symbols while reading this manual:



**DANGER!**

Warns of general danger



**DANGER!**

Warns of dangerous electrical current



**WARNING**

General mandatory sign

### 1.2 General safety guidelines

The relevant guidelines for the prevention of accidents as well as other generally recognised technical safety and medical regulations for the workplace must be observed. Check that the safety and functional equipment work safely and correctly:

- prior to start-up,
- at the appropriate intervals,
- following modifications or maintenance.

These operating Instructions include the most important information for operating the conveyor systems in a safe manner.

### 1.3 Obligations



**WARNING**

Observe information in the operating instructions

A basic prerequisite for the safe handling and smooth operation of this conveyor system is the knowledge of the basic safety information and safety guidelines. These operating instructions and the safety instructions in particular, must be observed by all persons working on the conveyor system. Furthermore, all regulations and guidelines governing the prevention of accidents and applicable for the respective site must also be observed.

The conveyor system may only be used as designated and when it is in a safe technical state. Any problem which may impair safety must be remedied without delay.

Organisational measures: all safety equipment must be examined at regular intervals.

### 1.4 Warranty and liability

As a general rule, our “general terms and conditions governing sale and supply” shall apply.

Warranty and liability claims in the event of personal and material damage are excluded if they are attributable to one or more of the following causes:

- non-designated use of the conveyor system,
- improper fitting, commissioning, operation and service of the conveyor,
- operation of the conveyor despite defective safety equipment or safety and protective equipment which has been fitted incorrectly or is non-functional,
- non-observance of the information in the operating instructions as regards transport, storage, fitting, commissioning, operation, service and equipment of the system,
- independent structural modifications to the system,
- poor supervision of components subject to wear,
- repairs carried out incorrectly,
- catastrophes caused by foreign bodies and forces majeures.

## 1.5 Electrical system



### DANGER!

Always isolate the power supply before working on the electrical system.

All tasks extending beyond the framework of system maintenance may only be carried out by qualified personnel. Always isolate the power supply when working on the device and secure against unauthorised reactivation by another person.

Examine electrical cables for visible damage prior to commissioning.

Replace any damaged lines before putting the device into operation.

Damaged or destroyed plug devices must be replaced by a qualified electrician.

Do not remove plugs from sockets by pulling the cable.

Covering electrical components can give rise to heat concentration with high temperatures which can in turn destroy the equipment and cause fires.

## 2. ASSEMBLY

### 2.1 Assembly information

Please read the following pages carefully. The instructions in this manual apply for various conveyor systems. For this reason, we would ask you to select and apply the sections which concern you.

When using this manual for LUBING standard versions, please note all alterations to and/or deviations from the scope of your supply.

### 2.2 Spare parts

Spare parts for the curve conveyor system can be found in the "Spare parts list for curve conveyor" article no. 0901.

It contains the exact name of the respective part and its item number, which we require in the event of spare parts being ordered.

In order to procure electrical components, we require information on the power supply, e.g. 230/400 V – 3 Ph. 50 Hz.

A current version is appended to these assembly and operating instructions.

## 3. INFORMATION FOR PLANNING + INSTALLATION

Information for sales staff and service staff and anyone who deals with the planning and installation of curve-conveyors.

The LUBING curve-conveyor is designed on the unit construction principle, i.e. any combination of the individual components and units is possible.

There are five broadness systems available: width 200 mm, 250 mm, 350 mm, 500 mm and 750 mm (technical data can be taken from the drawings).

You can choose between four drive systems for the different lengths of the conveyors.

LENGTH	DRIVE TYPE
Up to 30 m length	mini drive
Up to 50 m length	front drive
Over 100 m length	front drive with intermediate drives

It can not be said in general which arrangement of the drive systems would be the best. This depends on the construction of the whole system, e.g. the arrangement of bends, ascendings or descending and the lengths.

We made installations - and system-drawings – to be able to solve any technical problems.

It is particularly important to find the best possible system layout for your purposes, because this can be a decisive factor affecting both price and operating efficiency.

There are three different kinds of curve conveyors:

1. curve conveyors for the use with elevators
2. curve conveyors for the use with lift-systems
3. curve conveyors for the use with multitier systems

### **Conveyor systems for elevators:**

To keep the assembly costs as low as possible, it is best not to shorten any of the frame units. You should try to use the standard length of 2 or 3 meters.

Two different types of frame units are available: connecting-part closed and connecting-part opened at one side, for the use of dirt-plates.

Usually the connecting-parts are already assembled. To keep the volume of the freight low, it is sometimes necessary to deliver the connecting-parts on their own/as single parts. But they can easily be installed at the building site. (Details can be taken from the drawings M3-M8).

There are 2 pivoting units necessary for ascendings or descendings gradients. Ascendings with front drive need only one pivoting unit, because the second one is already in the drive system.

Gradients must not exceed max. 20°. At gradients of 20° the system rises or falls by 36 cm/m.

If bends are to be incorporated in the system the following points must be observed:

- bends can be freely combined with all the other units;
- they can also be used ascendingly or descendingly;
- if a left-hand bend is to be followed by a right-hand bend (or vice-versa), they must be separated by a distance of at least 2 m (dimensions are given on the drawings).

An allowance of 10 m must be calculated for every 90° bend.

In general, the maximum conveyor run with a front drive is of 50 m, or 100 m if an additional end drive is fitted. Intermediate drives are planned for lengths over 100 m.

In individual cases there may be considerable deviations from these figures, as in the following two examples:

- A 50 m long conveyor system is planned with the 90° bend directly behind the drive-unit.
- The full tractive power of the conveyor chain passes through the bend.  
Length: 50 m + 10 m = 60 m
- A second system has the same length of 50 m, but the bend is located in the middle of the system. In this case only a part of the tractive power (the remaining length of the system up to the bend) is transmitted by the bend, the full allowance of 10 m is not necessary.

It should be noted, that with S-bends the power has to be transferred to the opposite side of the conveyor chain.

### **Conveyors for lift-systems:**

The information, given above, also applies to conveyors with lift-systems.

The arrangement of lifting-columns is of great importance for lift-systems. They are mostly integrated in the drive units for egg-belts. Distances of more than 3 m between the lifting-columns should be avoided.

Many systems require a 90° or 180° bend actually on the lift. This is generally possible, but it is better to insert the telescopic unit between the lift unit and the required bend.

If intermediate drives or end drives are planned in the lift, an additional lifting-column is necessary.

The arrangement of these lifting-columns can be seen in the system-drawing S1.

An allowance of 10 m (conveyor length) must be calculated for the complete telescopic unit.

It must be recognized that the parking position can reach an ascending of 25° but the conveyor ascending of the telescopic unit must not be more than 20°.

The same conditions, regarding the total conveyor length apply to conveyors with lift system as to those with elevators.

### **Conveyors with intermediate drive:**

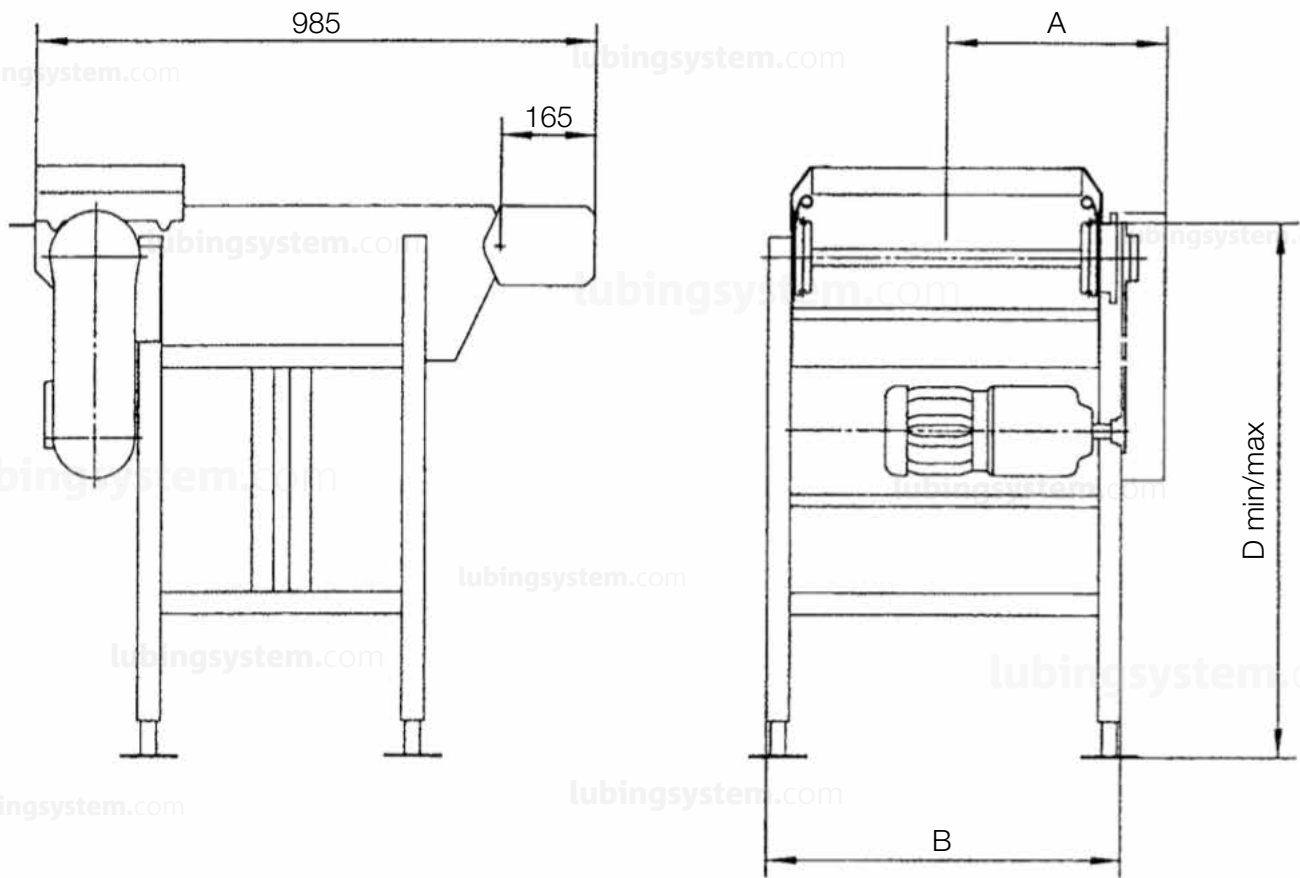
Intermediate drives can also be combined with every piece of the conveyor system, but they should not be installed directly before or after a bend or pivoting unit. There has to be a connecting-part between them.

Another important thing is the insurance element in the closing rod of the conveyor chain. It prevents the closing rod from unhooking during the usage.

If you encounter any problems or questions with the layout of your conveyor system, please do not hesitate to contact us. We shall be pleased to provide you with any suitable advice and assistance.

## 3.1 Dimensions

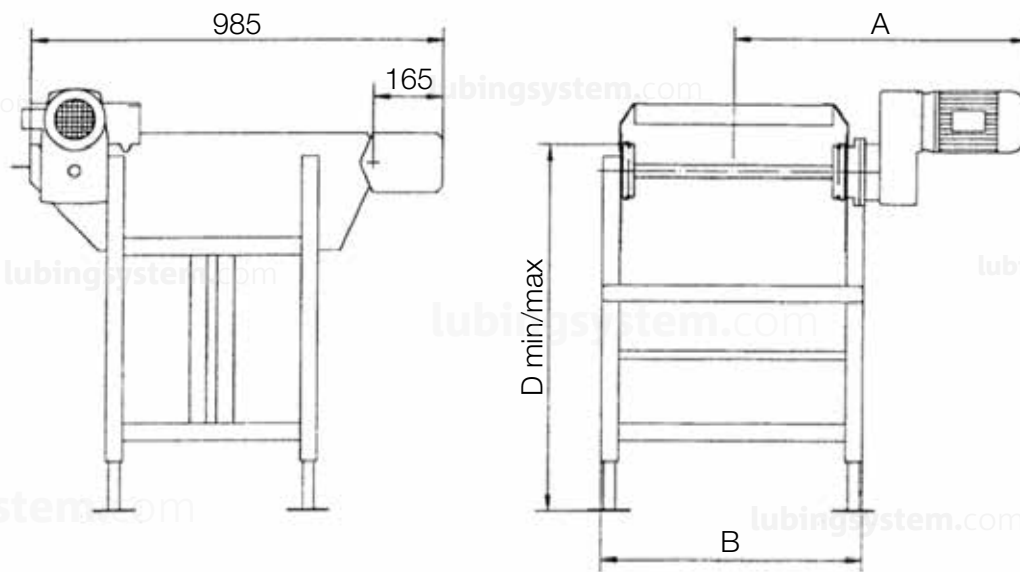
### 3.1.1 Front drive, foot mounted



Front drive

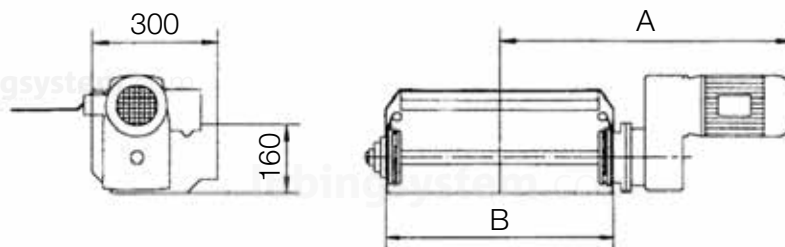
CONVEYOR WIDTH (MM)	A	B	D min.	D max.
250	259	370	940	1250
350	309	470	940	1250
500	384	620	940	1250
750	509	870	940	1250

### 3.1.2 Front drive / mini drive flange mounted



Front drive

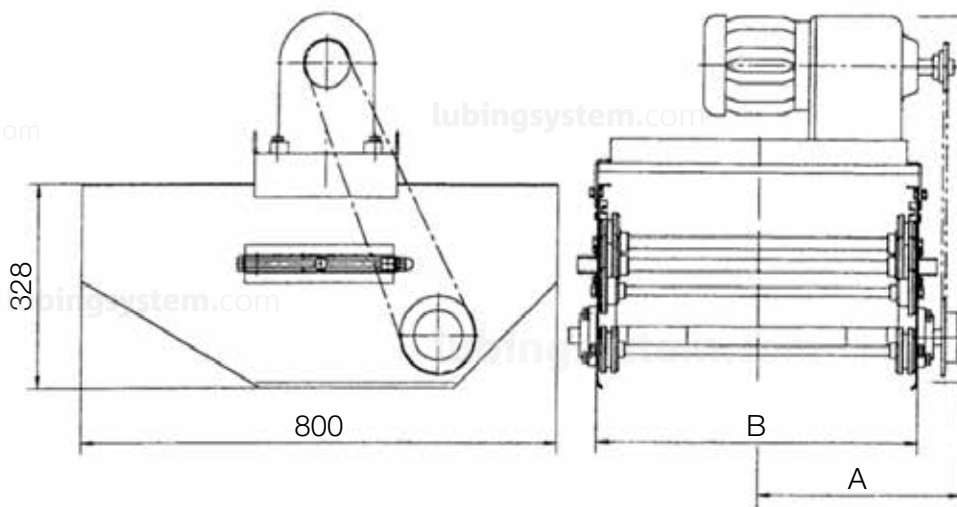
CONVEYOR WIDTH (MM)	A	B	D min.	D max.
250	570	370	940	1250
350	620	470	940	1250
500	695	620	940	1250
750	820	870	940	1250



Mini drive

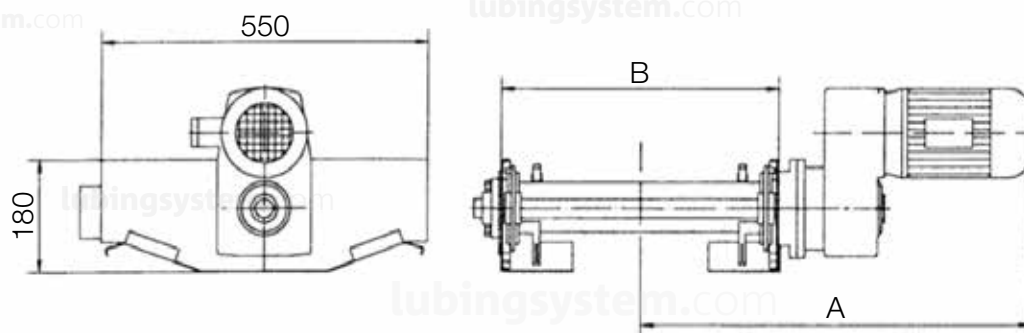
CONVEYOR WIDTH (MM)	A	B	H min/max	H min/max	H min/max
200	545	240	190-320	310-610	600-1300
250	570	290	190-320	310-610	600-1300
350	620	390	190-320	310-610	600-1300
500	695	540	190-320	310-610	600-1300
750	820	790	190-320	310-610	600-1300

### 3.1.3 End drive / Intermediate drive



End drive

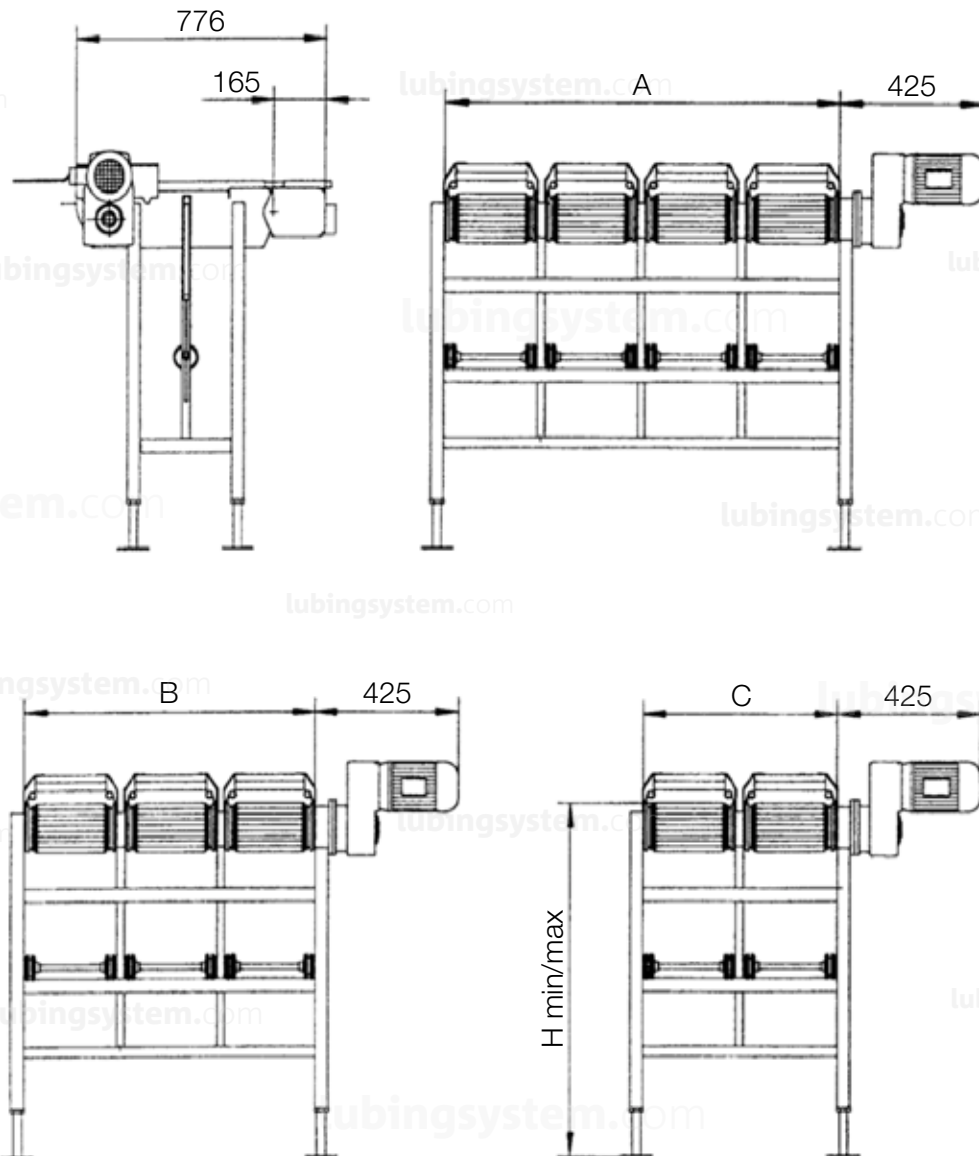
CONVEYOR WIDTH (MM)	A	B	H min/max	H min/max	H min/max
350	297	390	190-320	310-610	600-1300
500	372	540	190-320	310-610	600-1300
750	497	790	190-320	310-610	600-1300



Intermediate drive

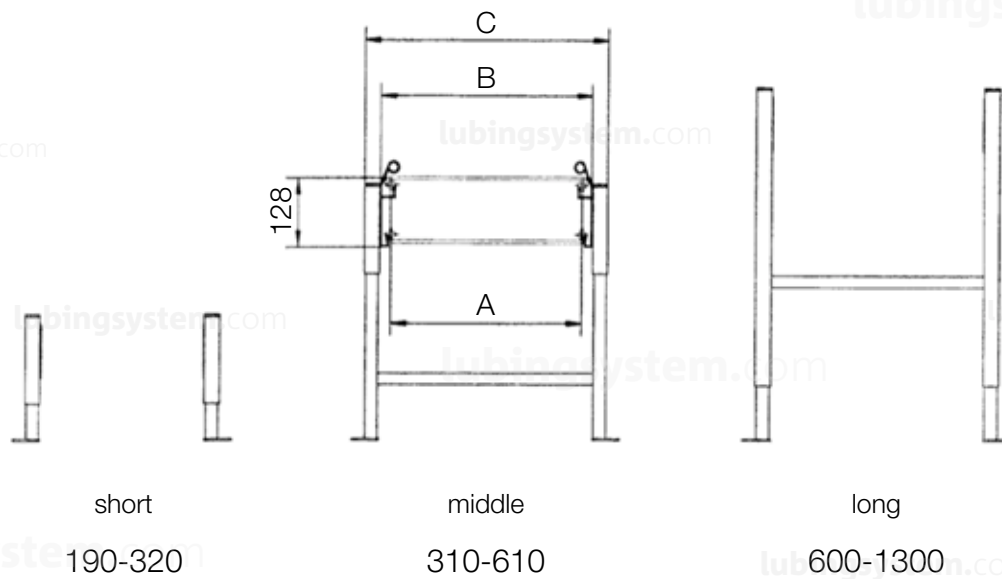
CONVEYOR WIDTH (MM)	A	B	H min/max	H min/max	H min/max
200	540	240	190-320	310-610	600-1300
250	565	290	190-320	310-610	600-1300
350	297	390	190-320	310-610	600-1300
500	372	540	190-320	310-610	600-1300
750	497	790	190-320	310-610	600-1300

## 3.1.4 Multiple drive



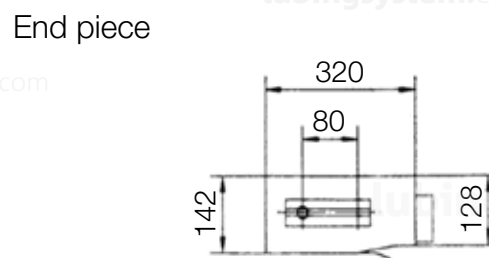
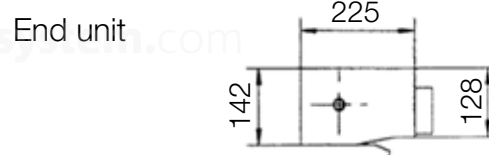
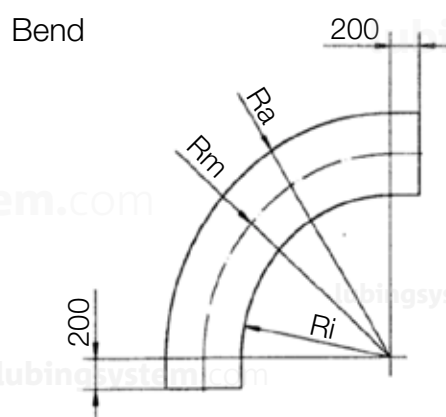
CONVEYOR WIDTH (MM)	A	B	C	H min	H max
200	1035	770	505	880	1200
250	1235	920	605	880	1200
350	1635	1220	805	880	1200

## 3.1.5 Floor support / Bend / End unit / End piece

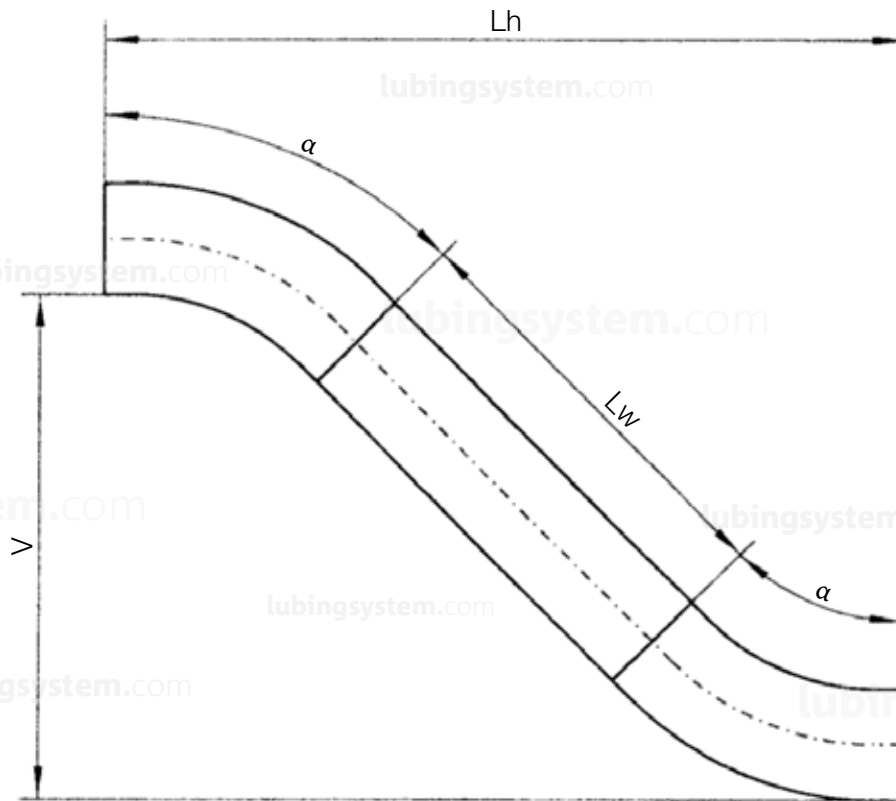


Height from floor to surface chain (mm)

CONVEYOR WIDTH (MM)	A	B	C	Ri	Rm	Ra
200	200	240	304	420	540	660
250	250	290	354	530	675	820
350	350	390	454	750	945	1140
500	500	540	604	1080	1350	1620
750	750	790	854	1630	2025	2420

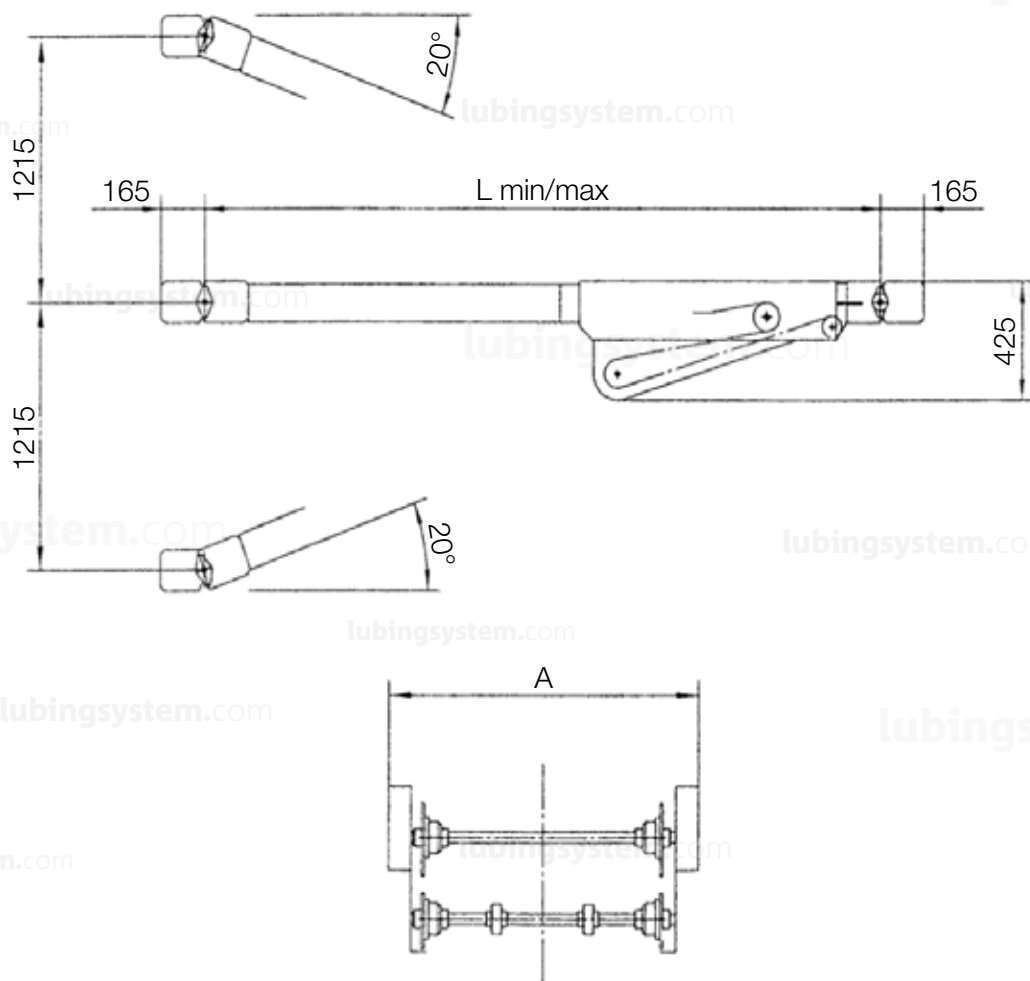


### 3.1.6 Minimum distance between bends



Type 200	$L_w=1500\text{mm}$
Type 250	$L_w=1600\text{mm}$
Type 350	$L_w=1800\text{mm}$
Type 500	$L_w=2000\text{mm}$
Type 750	$L_w=3000\text{mm}$
Type 1000	$L_w=4000\text{mm}$

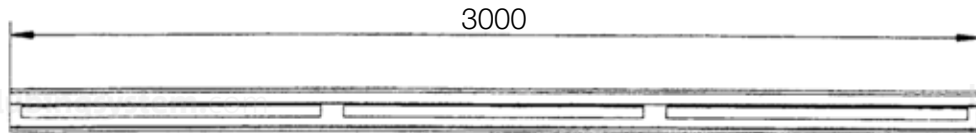
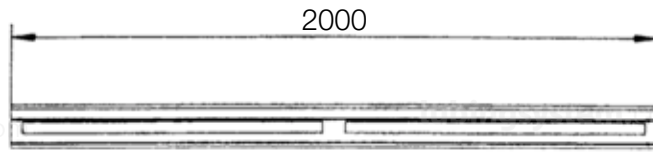
## 3.1.7 Telescopic unit cpl.



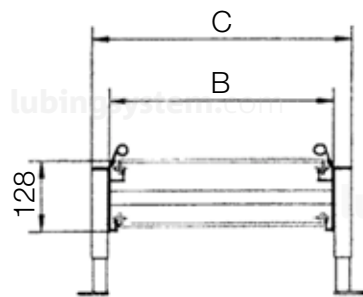
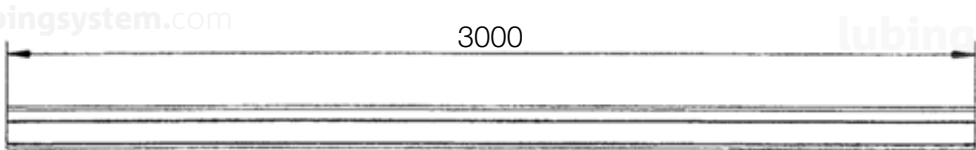
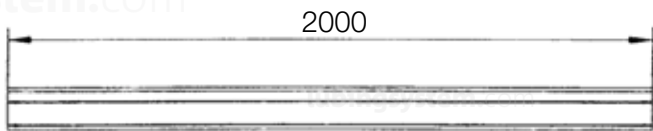
Extension up to 2m possible

CONVEYOR WIDTH (MM)	A	L min.	L max.
200	344	3375	3775
250	394	3375	3775
350	494	3375	3775
500	644	3375	3775
750	894	3375	3775

### 3.1.8 Connecting part open and closed / Pivoting unit

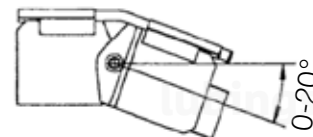
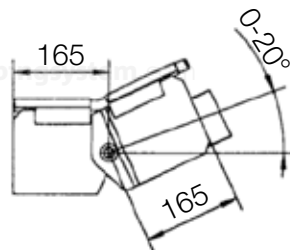


Connecting part closed



CONVEYOR WIDTH (MM)	B	C
200	240	304
250	290	354
350	390	454
500	540	604
750	790	854

Pivoting unit



## 4. INSTALLATION INSTRUCTION FOR LUBING CURVE CONVEYOR

The curve-conveyor is designed on the unit construction principle, i.e. all the individual components and units etc. can be freely combined or interchanged.

There will be a system drawing with a statement about the individual elements for each arrangement. Before beginning to assemble the conveyor system, you should first consider the overall layout of the system and of the delivered individual elements.

Our **installation drawings (M3-M11)** show also how to assemble on the site.

**Drawings of the construction pieces (B1-B17)** give you an overall view about the run of the chain and the construction of the different elements.

**System-drawings (S1-S3)** show technical details about installation and arrangement.

You should make sure that the batteries, lift-systems or elevators are precisely aligned. Later problems are, according to our experience, mostly the fault of inaccurately installed systems. Therefore we again want to direct your attention to this point!

When the above steps have been taken, the assembly of the curve-conveyor can begin.

A distinction is made between cage-systems equipped with elevators and those equipped with a lift-system.

### 4.1 Installation of curve-conveyors at batteries with elevators

1. In practice it has been proved most successful to begin the assembly at the end of the battery cages, starting with the end unit.

2. The first connecting-part (opened or closed) is, together with the appropriate floor support, fitted to the end-unit (drawing B7). Floor supports on the outside, thread-plate on the inside, tighten up the 4 screws.

The other connecting-parts are to be put together in the same way.

You have to take care that the side sections are assembled close together.

If the connecting-parts are not installed because of cargo problems, look at installation drawing M3 - M8.

There is a distinction between 2 types of connection-parts: connecting-parts with an open side to insert the dirt-plate and closed connection-parts.

The closed ones are, depending on their length, equipped with distance rods. The open ones are equipped with traverses to hold the dirt-plates. The connection-parts should be installed, right-angled (see drawings M1 - M8), on an even surface. After the installation you have to control the parallelism of the individual elements.

At the same time you should examine whether the diagonals have the same value. Tighten all screws well.

3. When all the frame units are assembled move the system to the elevators into the final conveying position. Check again the length and the height.

4. If bends are necessary in the system, they can be combined with each individual element. See drawings B13 - B15.

If you have S-bends, the distance between them must be of at least 2 m.

First fasten the inside floor support to the bend (wholes are already there). Then screw the bend with the outside floor supports to the fitting connecting-parts (B13). Tighten the screws with the thread-plate well.

#### IMPORTANT INFORMATION



When you fix the bends to the open connecting-parts, you have to change the following things on the traverse:

1. remove the green slide-pieces
2. cut out the bending of the traverse, 40 mm deep on both sides in direction of the bend

5. Ascending and descending can be handled with 2 pivoting units. Max. installation angle 20°. The pivoting unit can be installed at each point of the conveyor-system (drawing B5). Tighten it with thread-plates and screws. The necessary floor support is to be installed at the horizontal connecting point of the unit. After finding the right ascending- and descending-angle you can stabilise the unit when you tighten the outside screws. In the main drive the upper pivoting unit is already integrated.

6. The type of drive depends on the length of the conveying-system:

- mini drive
- front drive
- front drive with end drive
- front drive with intermediate drive

Therefore look at the information about planning and installation.

The front drive and the mini drive have always floor supports for the conveying at table height. They can be screwed in front of the conveying system with screws and thread-plates (drawings B1 + B2).

End drives have appropriately to be installed to the end of the system, intermediate drives to the corresponding intermediate places (drawing B3 + B4). These units can be fixed to the wanted height

together with the suitable floor supports.

7. When the system is completely installed, start with the lining-up. This lining-up starts at the drive-unit. The drive has to be put close to the egg grading machine. The height and adjustment of the delivery plate can be done according to drawings M11 + M12. Then all following elements have to be lined up again. In case of conveyor systems, you must interrupt at some places for the lining up movement. If it is necessary to shorten the connecting-parts please consult drawing M10.

8. After this procedure the conveyor system has to be screwed to the floor:

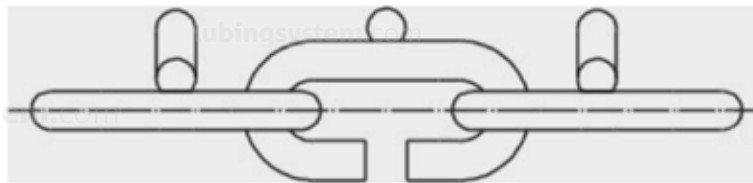
- dowel the connecting-parts every 6 m
- dowel the bends to every support
- dowel the end-unit or end drive
- dowel the intermediate drives



**DANGER!**

Dowel the front drive not, until the chain is installed and a test run has been done. Often there are corrections of the height necessary.

9. After installing the curve conveyor and doweling it to the floor, the conveyor-chain can be fitted. Please oil the gliding-profiles, gliding-rail and the turns (use a paint brush). Here again, the easiest method is to begin at the end of the system by installing the chain into the lower belt of the conveyor via the end-unit. For this purpose, leave 10 m of chain on the floor, and pull it through the entire system to the drive. Here it must be pulled over the appropriate rollers and wheels, into the upper belt of the drive as far as the pivoting unit (see drawing B1). Then pull all the remaining chains into the lower belt and connect them with closing rods.

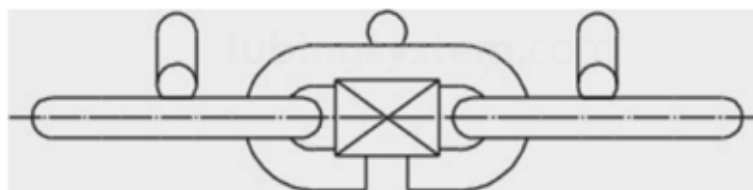


After the complete chain is pulled into the lower belt, repeat the same procedure with the upper belt. Then connect upper and lower conveyor chain by means of closing rods at the end unit and behind the drive-unit. Doing this you have to take care that the straining wheel of the main-drive is in medium height. If you have intermediate-drives in the system you must pay attention to some points when pulling in the chain. A detailed description can be seen on the following extra paper and in the drawing S2, S3, B4.



**DANGER!**

every closing rod of the chain needs a security element to avoid the unhook of the closing rod (only for intermediate-drives).



10. Once the chain has been fully inserted, tension the tightening spindle on the front drive uniformly and just enough to take up any slack. The chain must not be put under tension at this stage.

11. Remove the rubber plug from the gear motor and connect up the system to the power supply.

12. Now carry out a careful check of the entire system. Is the conveyor chain fitted correctly? - i.e. is it sitting everywhere on the running strips? Have all objects, tools etc. been removed?

13. Now the test run can begin. For this the conveyor-chain must be lubricated on both sides with a good (resin-free) oil. This procedure must be carried out very carefully: for a 50 m long conveyor running at 5 m/min., the lubrication takes approx. 20 min. (drawing B 17).

14. Afterwards tension the tightening spindle, if necessary again. The spring should be compressed from its original length of 65 mm down to approx. 55 mm (do not compress fully).

15. On the second test-run, the conveyor should run smoothly, without any jerking, and the tightening spindle springs should expand and contract slightly during operation.

16. The last point is the installation of the red cappings. The front capping must be put on, drilled ( $\varnothing$  3mm) and fastened by the knipping-screws. (The cappings have the appropriate holes) Then the back capping is to be put on. On the transfer points the capping has to be cut. Afterwards the red capping must also be drilled and screwed.

If pivoting units exist, you have 2 possibilities to use the protecting cap.

- Lead the capping of the connecting part to the middle of the pivoting unit while cutting of the stage of the capping, so that the round-pipes are close to each other together (drawing M9).
- Another possibility is to heaten a round-pipe with hot water and bend it to the angle of the pivoting unit. Then hold the bent pipe between the ends of the connecting-parts, cut them to the right length and connect them with the coupling (drawing M9).
- The capping can also be cut and bended at the main-drive.

If you use round-pipes, heat them in hot water, and form them easily into the right position (drawing M9). At intermediate drives the round-pipe with the couplings is leaded through the drive and connected to the capping at the connecting-parts (drawing M9).

The fixing of the capping to the end-piece is the same as to the connecting-parts. Then you have to install on the whole system the safety devices, the egg-guiding plates and, if you use open profiles, the dirt-plates.

17. Finally, great care must be taken in setting up the egg-transfer point between drive-unit and the egg-dragging-machine, since all the eggs handled have to pass over this critical section of the system. The transfer point should be adjusted so that the arriving eggs roll gently over it (drawing M11). This should be tested with the curve-conveyor in motion. At the end the drive unit can be doweled to the floor.

► **The system is now ready for operation.**

## 4.1 Installation of curve-conveyors at batteries with lift-system

As a general rule, all the installation instructions for elevator systems also apply to lift systems.

The arrangement of lift-column is of great importance for lift-systems. Normally the lift-columns are already integrated in the drive units for egg belts. Then you only have to pay attention that the distance between the supports is not over 3 m. Many systems require a 90° or 180° bend, actually moved on the lift. This is generally possible, but it is better to install the telescopic unit between lift unit and the required bends.

If intermediate or end drives are planned in the lift, an additional lift-column is necessary.

The arrangement of these lifting-columns can be seen in the system-drawing S1.

1. The lift unit should be raised to an operating height of approx. 90 cm (this corresponds to the second tier of battery cages).
2. Starting from the last row of cages, as described above, push the connecting parts into the holding arms of the lift columns. Afterwards drill them in this position and secure with bolts.
3. If a bend is required, which is moved by the lift-system, the bend should also be lifted 90 cm off the ground, and screwed to the holding arms of the lift columns.
4. The telescopic unit can now be installed. The system drawing B12 shows the range of possible combinations with other elements. The telescopic unit is connected to the already installed connecting parts. The telescopic unit should be aligned horizontally (approx. 90 cm) to the system with appropriate floor supports. Ensure that the telescopic unit is pushed together to approx. 2 cm in horizontal position.
5. Screw the cross-struts to the floor supports and dowel them to the floor. With this arrangement you can absorb the shifting power of the telescopic unit. The telescopic unit is designed to operate at any gradient between 20° upwards, trough 0° (horizontal) to 20° downwards. An angle of 25° from the horizontal position is only allowed for the parking position. At 20° the conveyor climbs 36 cm per metre, at 25° the conveyor climbs 46 cm per metre.
6. After completing all these steps, the rest of the system up to the main-drive, can be assembled.
7. When the complete framework has been assembled and the chain has been pulled in, the red cappings can be installed. The front capping must be put on, drilled (Ø 3 mm) and fastened with the knipping-screws (the cappings have the appropriate holes). Then the back capping is to be put on. On the transfer points the capping has to be cut. Afterwards the red capping must also be drilled and screwed on the connecting part. If you use telescopic units or a bend the capping is pre-installed in the factory.

For all further installation work, follow the same procedure as for curve conveyors with elevators.

**Lift systems should only be operated when the conveyor is standing.**

## 5 INFORMATION FOR PLANING + INSTALLATION FOR INTERMEDIATE DRIVES

Intermediate drives are used for conveyors with lengths of more than 100 meters.

The conveyor starts with the front drive (packer, grader). The intermediate drives have to be distributed regularly to the conveyor chain.

The intermediate drive pulls only the upper or the lower conveyor chain. It can be changed to the necessary working position (top or bottom) easily. (See installation instruction).

Front drive and intermediate drives have to be equipped with the same gearmotors (flange gear).

Please take positions of the intermediate drives from the drawing or the installation sketch of the supplier. If there is no drawing, please fix the positions of the intermediate drives as follows:

- Take from list A1 the max. conveying length.
- Curves, pivoting units and telescopic units have to be taken into account and must be deducted from the max. conveying length. (See list A2).

► **So you get the permitted distance between the drives.**

Start your measurement at the front drive and lay out all intermediate drives for the working positions "lower chain", till the idling unit. From the idling unit all the intermediate drives for working position "upper chain" have to be fixed. Deduct the distance between end unit and last intermediate drive (bottom chain) from the permitted distance of the next drive (top chain). Then fix all further intermediate drives in direction to the front drive.

The min. distance between intermediate drive and curve, pivoting unit and telescopic unit must be 3 m.

### Maximum conveyor lengths

#### List A1

TYPE	200	250	350	500	750
Max. conveyor lengths (per drive)	65	65	60	55	50

#### List A2

Pivoting unit more 10°	1m	1m	2m	2m	3m
Telescopic unit	6m	6m	6m	8m	10m
Bend till 45°	2m	2m	2m	3m	4m
Bend till 90°	3m	3m	3m	4m	6m
Bend till 180°	4m	4m	5m	6m	10m

Example: Curve conveyor type 500

Max. conveyor length	55m
With 1 x 45° bend	- 3m
With 2 x pivoting units more 10°	- 2x2m

Permitted distance between the drives	48m
---------------------------------------	-----

### 5.1 Gearing position of intermediate drives

Intermediate drives are useable for gearing in upper or lower chain.

Please install according to the layout.

It may happen that the gearing of the present intermediate drive has to be changed into gearing in top or bottom chain. Changing is possible.

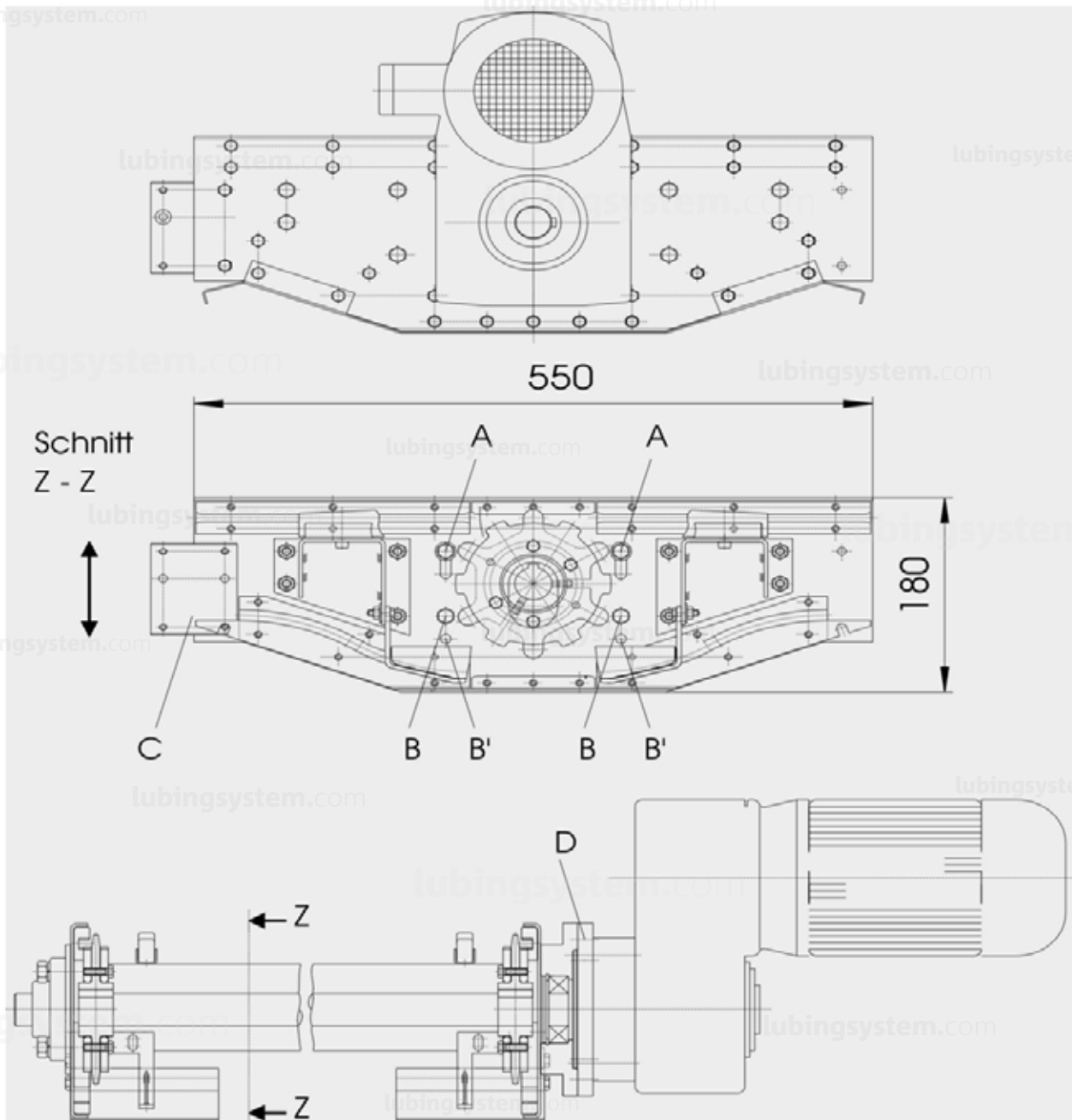
For easy changing of the gearing position please follow the below stated instructions:

1. Remove the gearmotor from the drive shaft, take off the 4 screws pos. D.
2. Adjust the working position of driving sprockets. Loosen the 2 upper screws pos. A. Take off the 2 screws pos. B. Lower the drive shaft till the sprockets gear is in the lower working position. Insert the screws in pos. B'.

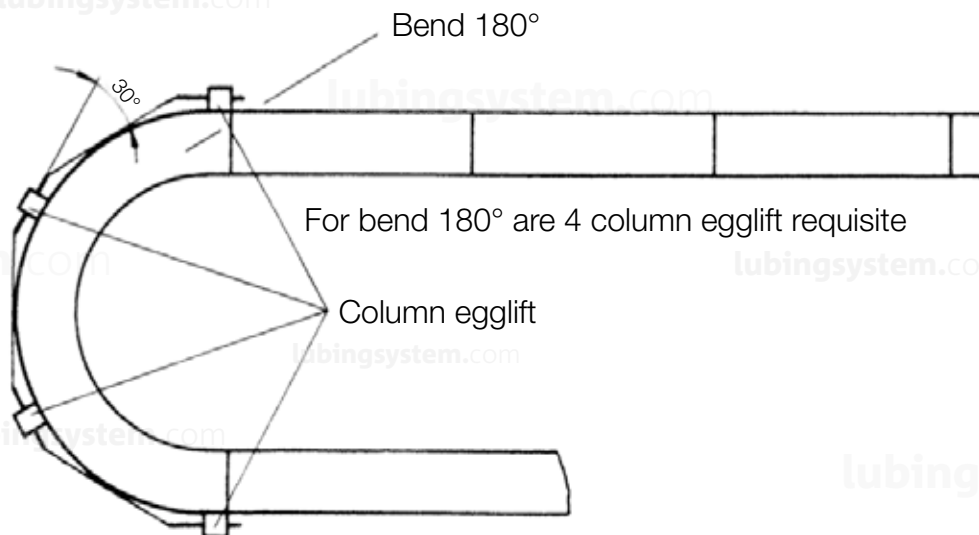
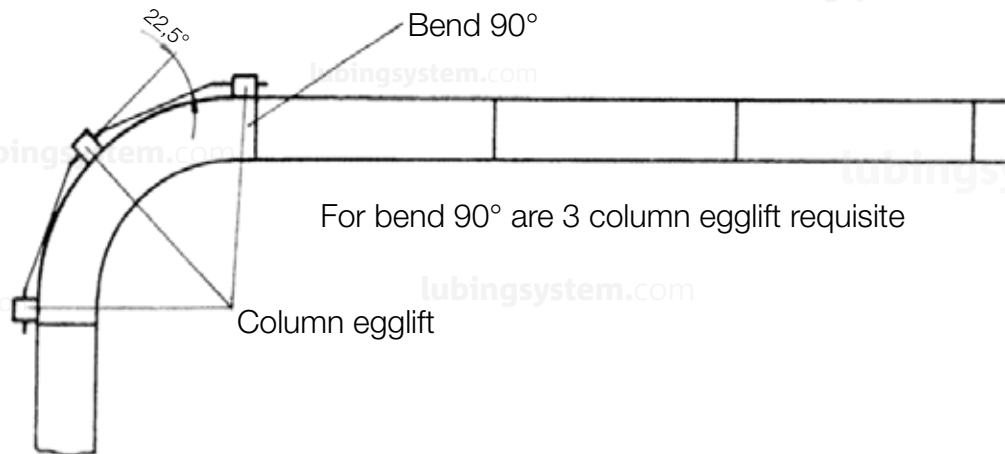
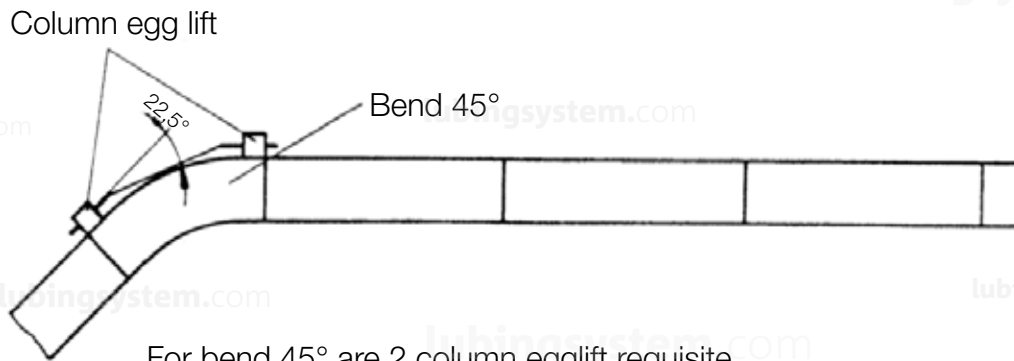
Fasten the screws pos. A and pos. B'.

3. The intermediate drive has to be assembled with the horizontal elements and supports according to the mentioned location of the layout. Use the connecting plate pos. C.

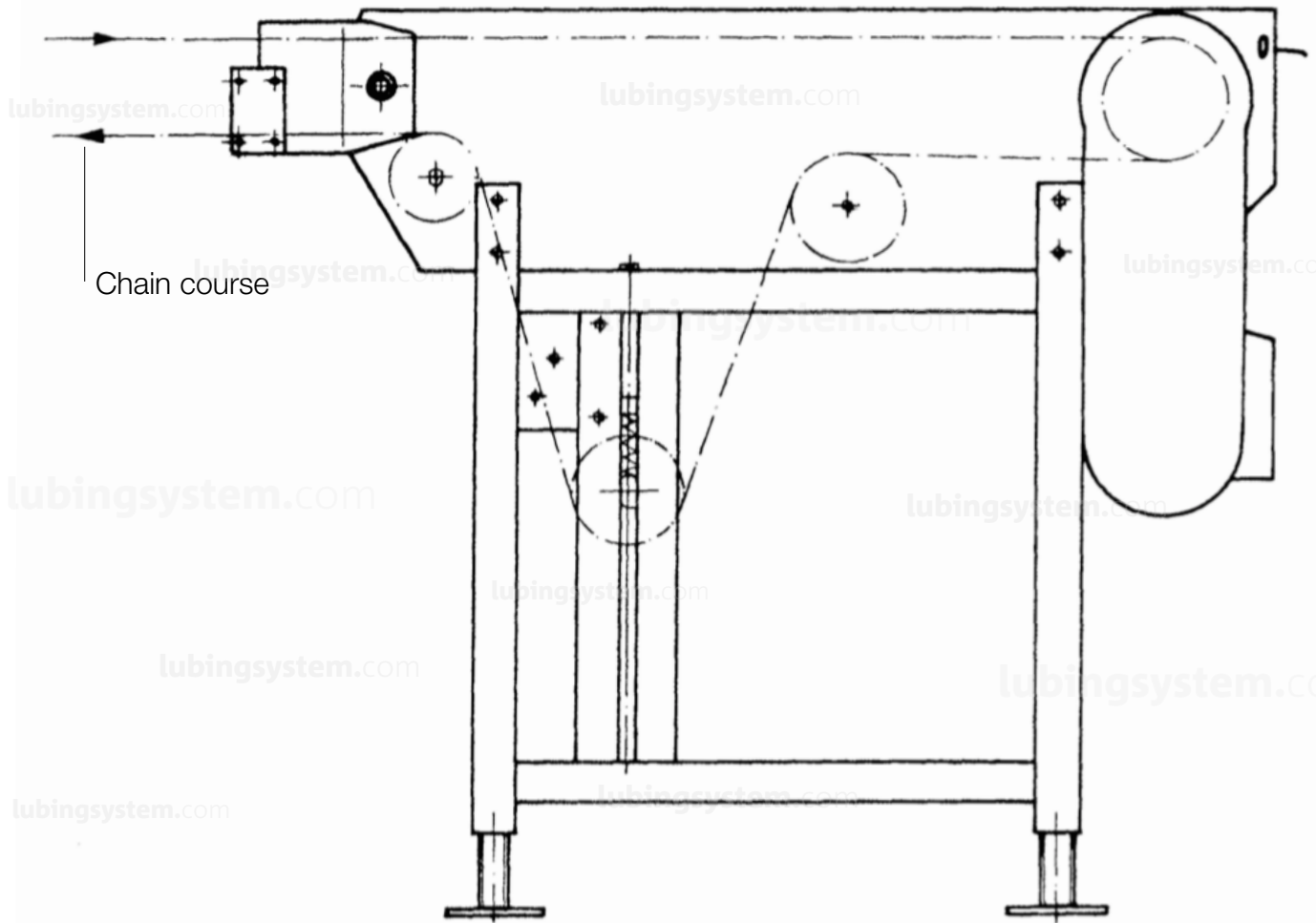
4. After the installation of the conveyor chain the gearmotor can be assembled into the required position. Fix it with 4 screws pos. D.



## 5.1.1 S1 Disposition of egg lift column

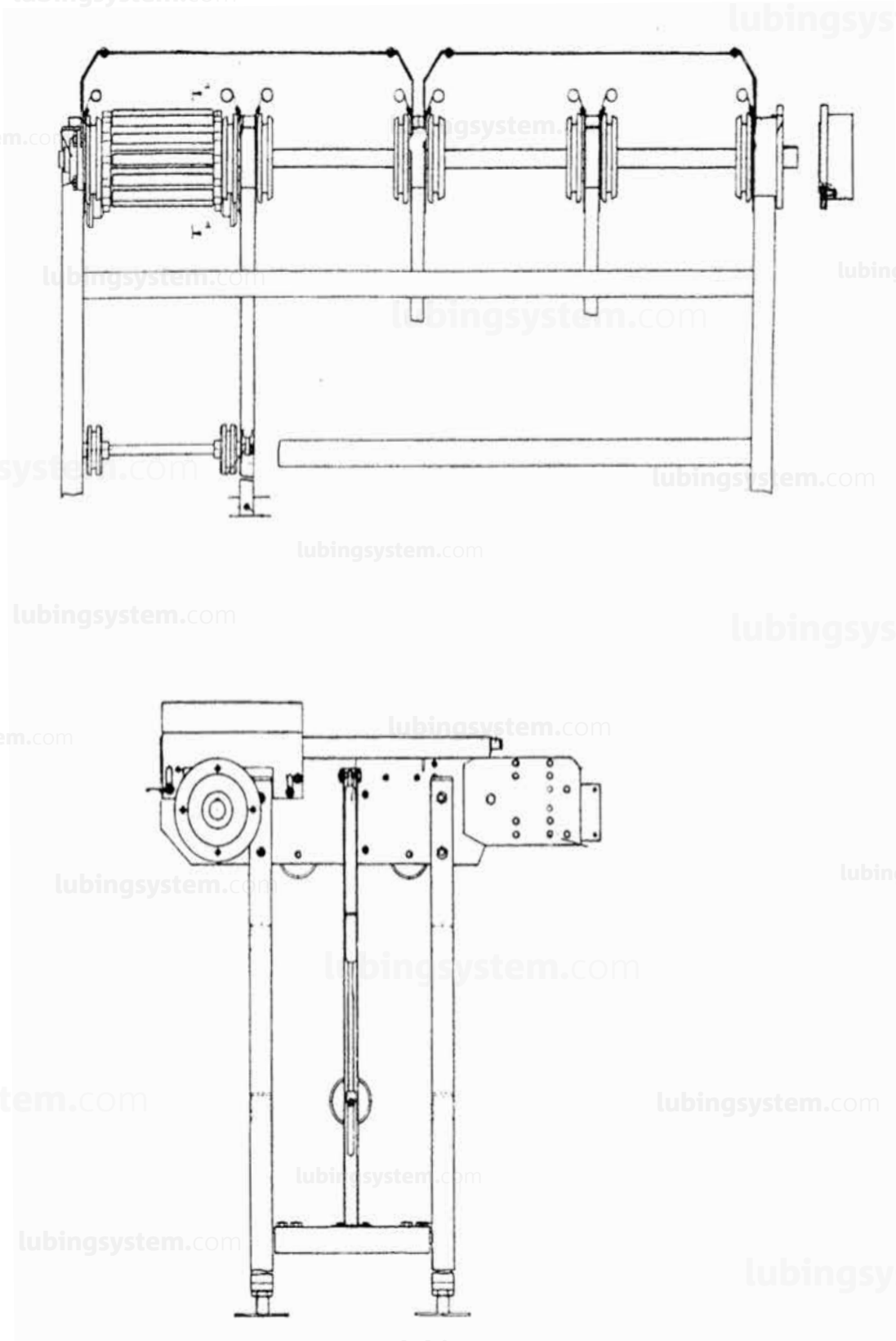


## 5.1.2 B1 Drive - Item no. 4840 / 4801 / 4870 - Type 350 / 500 / 750

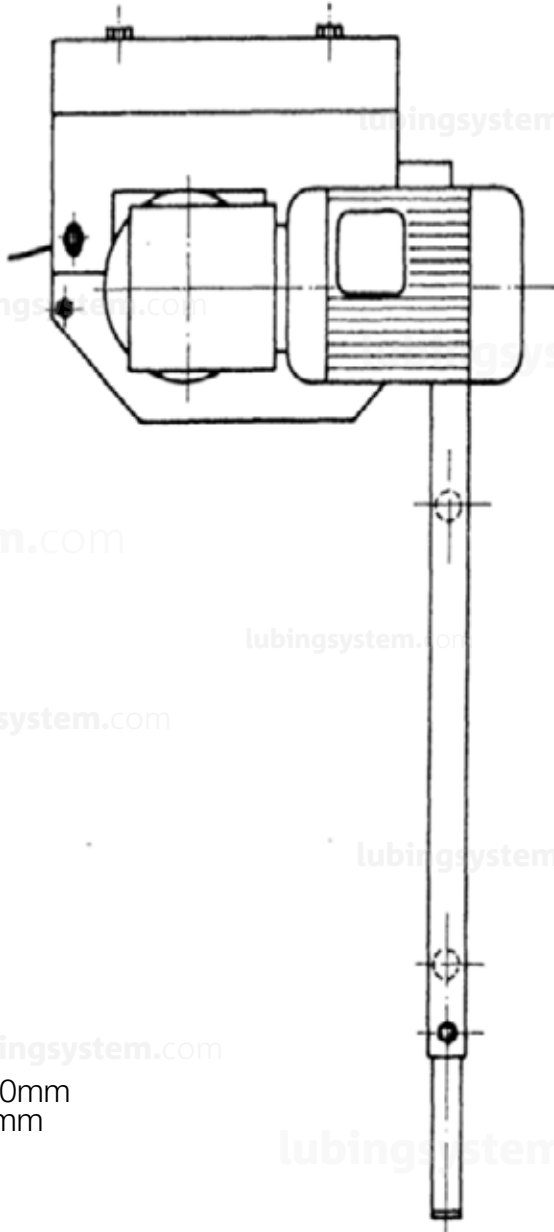


H. max.: 1250mm  
H. min.: 940mm

## 5.1.3 B1.1 Multiple drive - Type 200 / 250 / 350

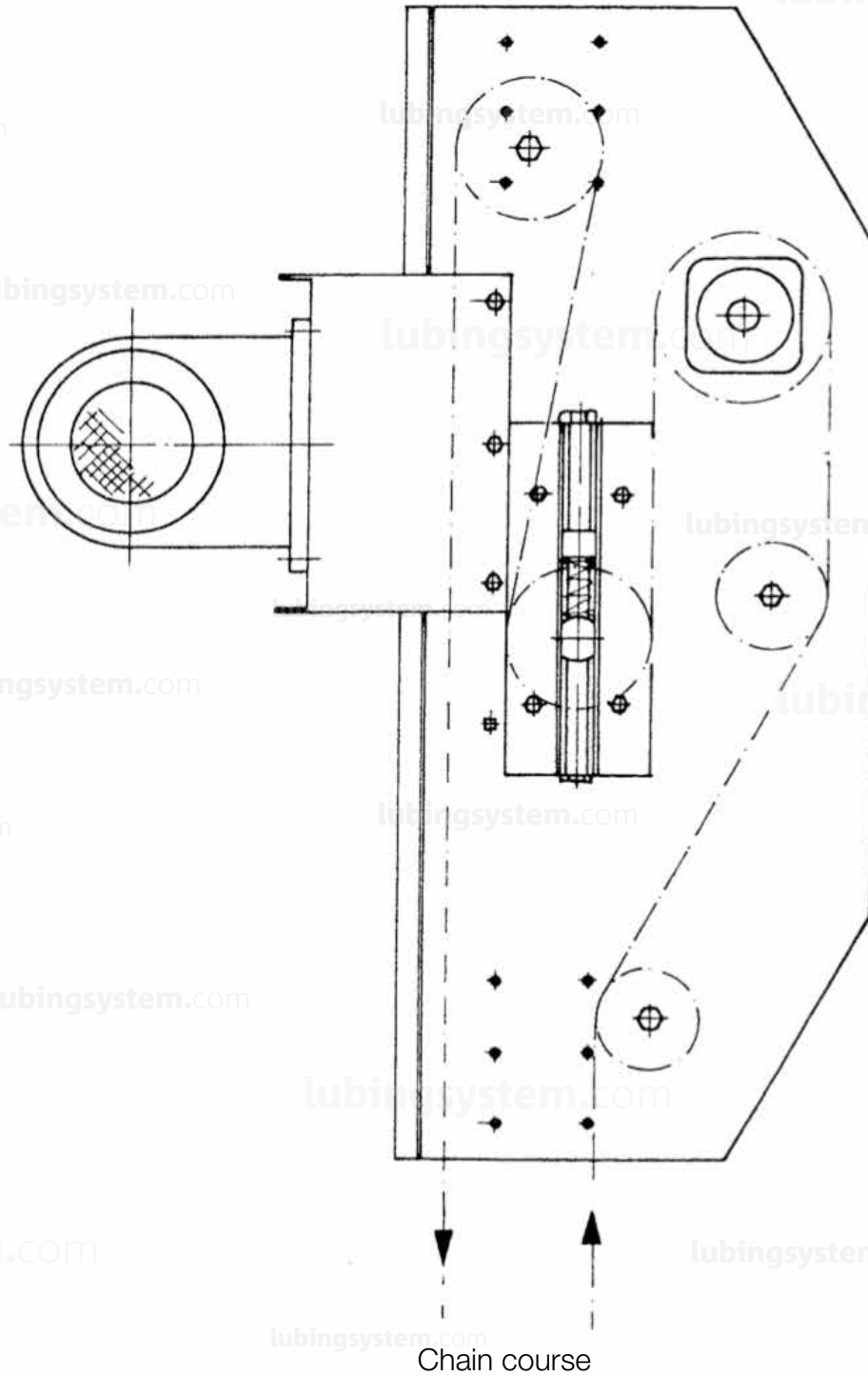


## 5.1.4 Mini drive - Item no. 4841 / 4802 - Type 350 / 500



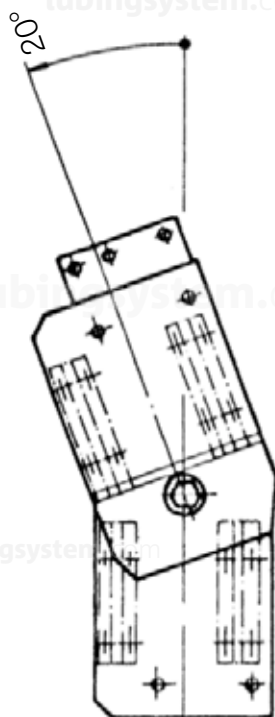
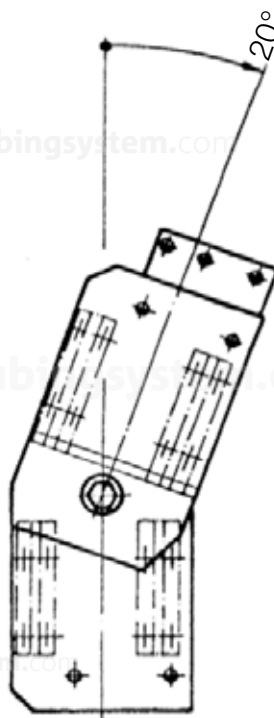
H. max.: 1300mm  
H. min.: 600mm

## 5.1.5 B3 End drive - Item no. 4842 / 4803 / 4872 - Type 350 / 500 / 750

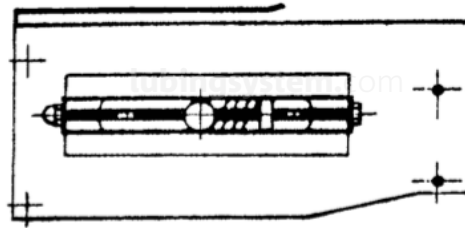


Chain course

## 5.1.6 B5 Pivoting unit - Item no. 4844 / 4805 / 4874 - Type 350 / 500 / 750



## 5.1.7 B6 Endpiece with tension unit - Item no. 4845 / 4806 - Type 350 / 500



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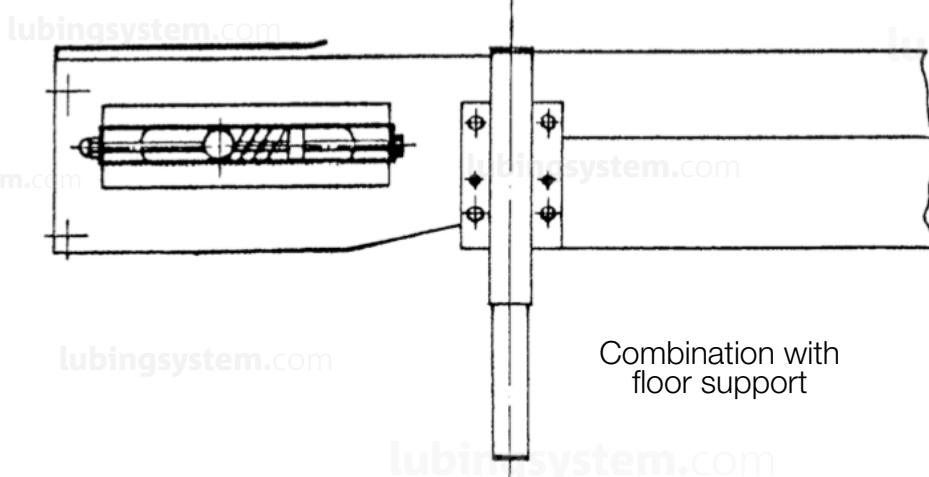
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Combination with  
floor support

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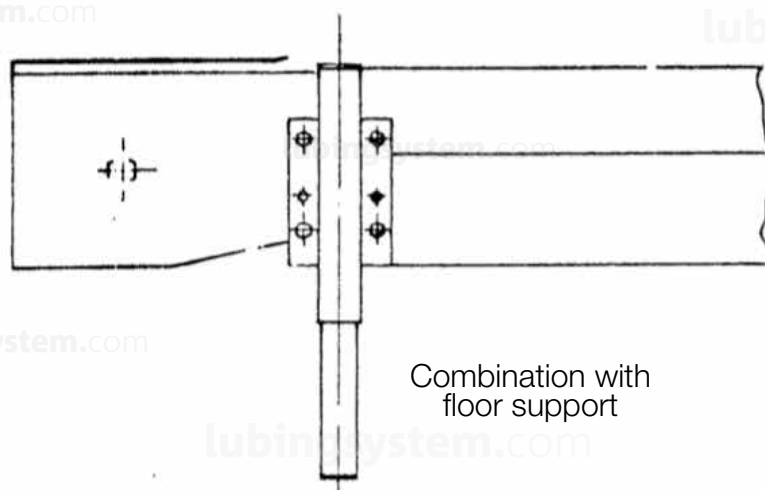
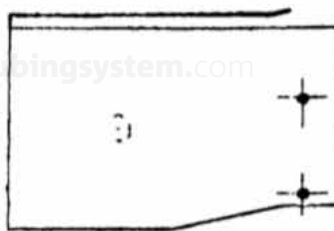
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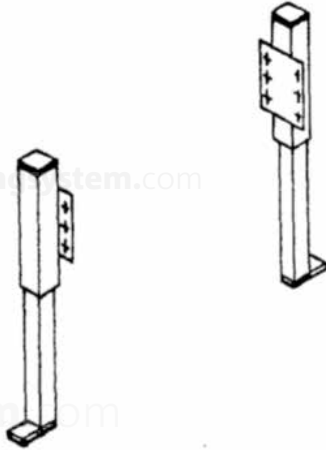
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## 5.1.8 B7 End unit - Item no. 4846 / 4807 / 4876 - Type 350 / 500 / 750



## 5.1.9 B8 Floor support - Item no. 4815 - Type 350 / 500 / 750



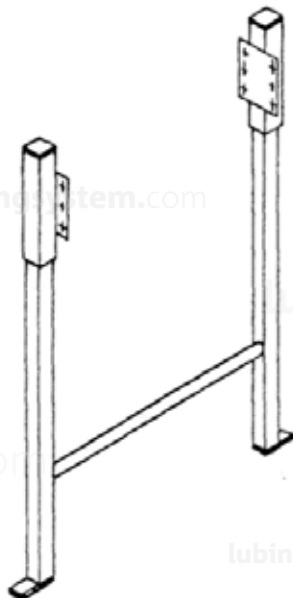
Use for:

- connecting part, open
- connecting part, closed
- bend

Height:

- max. 320 mm
- min. 190 mm

## 5.1.10 Floor support - Item no. 4855 / 4816 / 4885 - Type 350 / 500 / 750



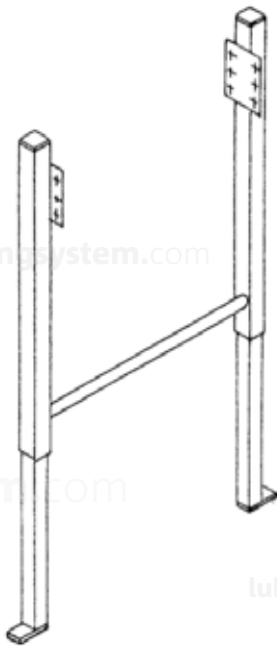
Use for:

- connecting part, open
- connecting part, closed
- bend

Height:

- max. 610 mm
- min. 310 mm

## 5.1.11 B10 Floor support - Item no. 4856 / 4817 / 4886 - Type 350 / 500 / 750



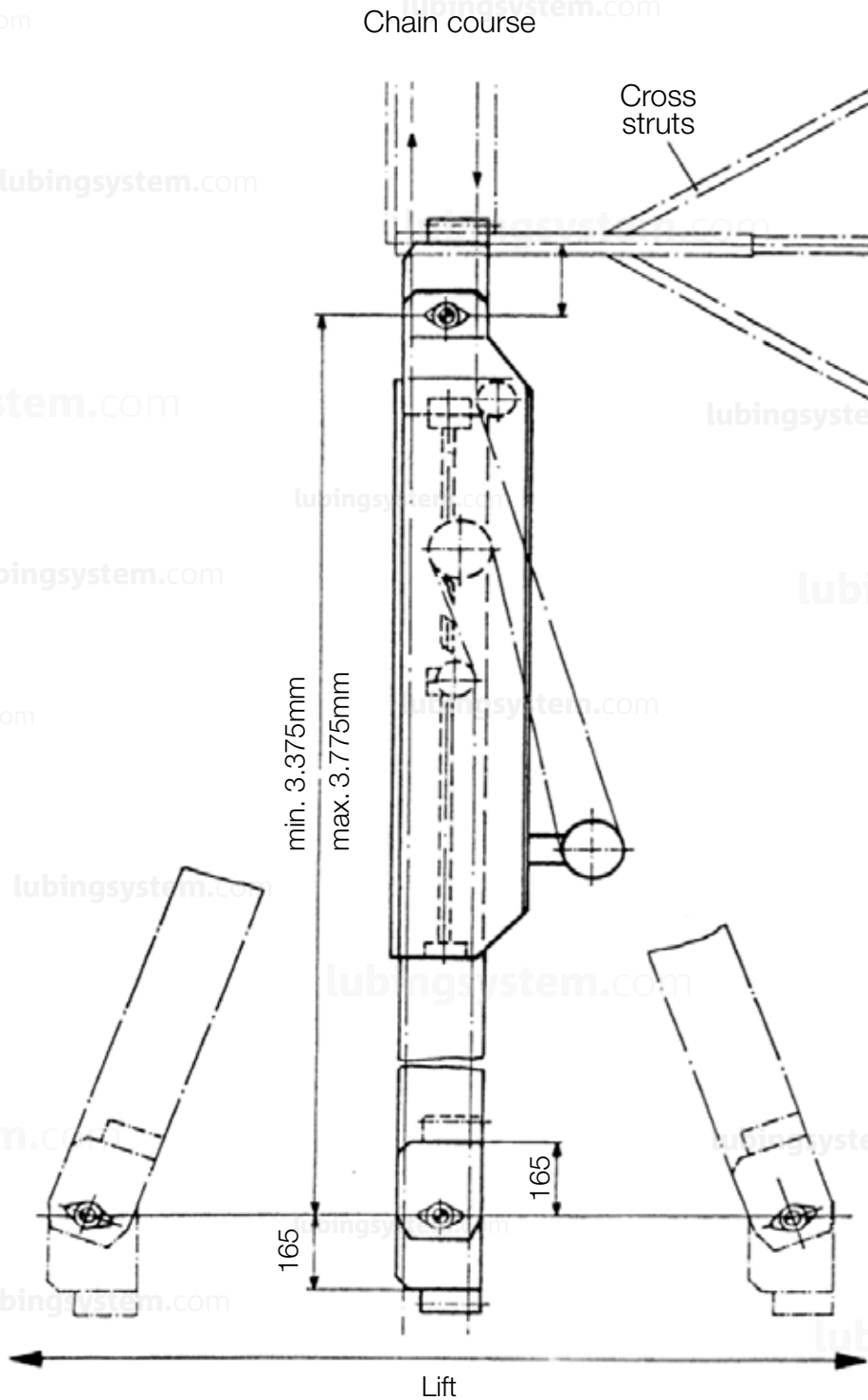
Use for:

- connecting part, open
- connecting part, closed
- bend

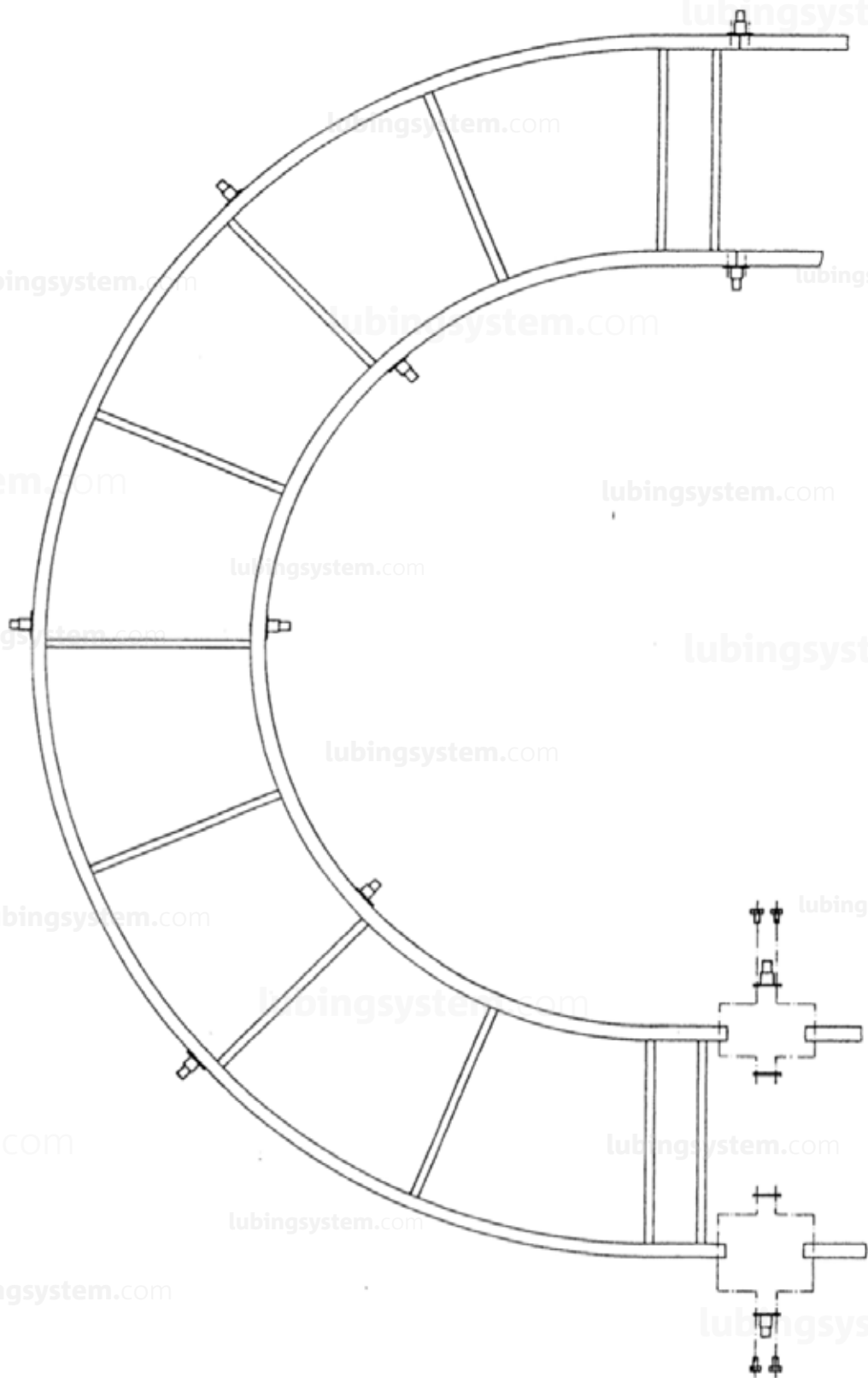
Height:

- max. 1300 mm
- min. 600 mm

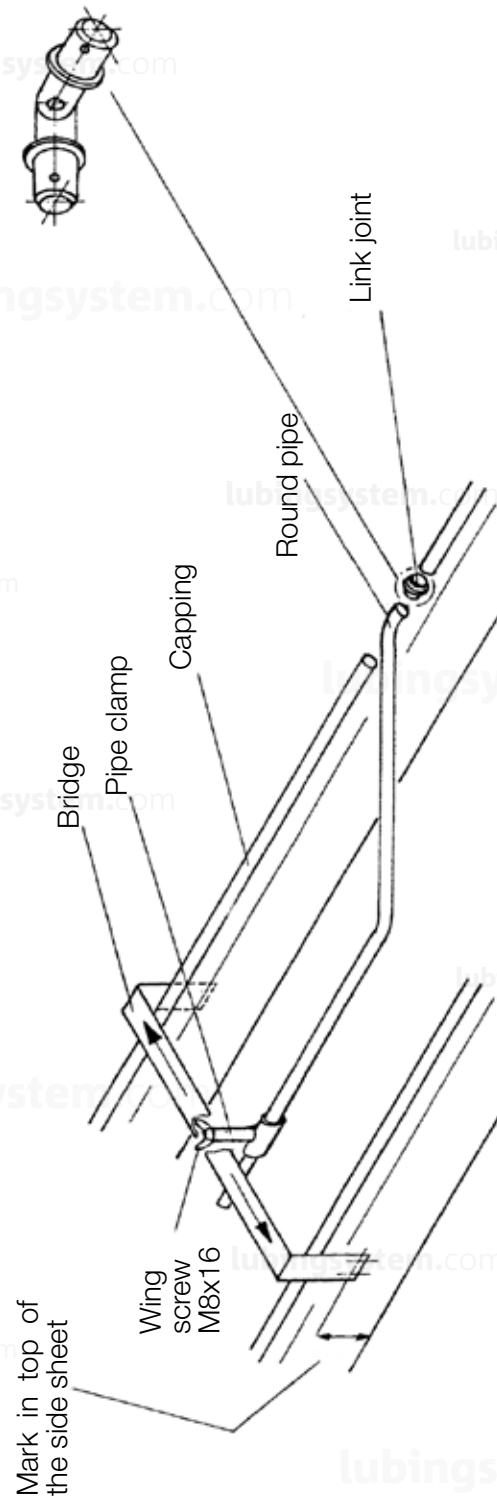
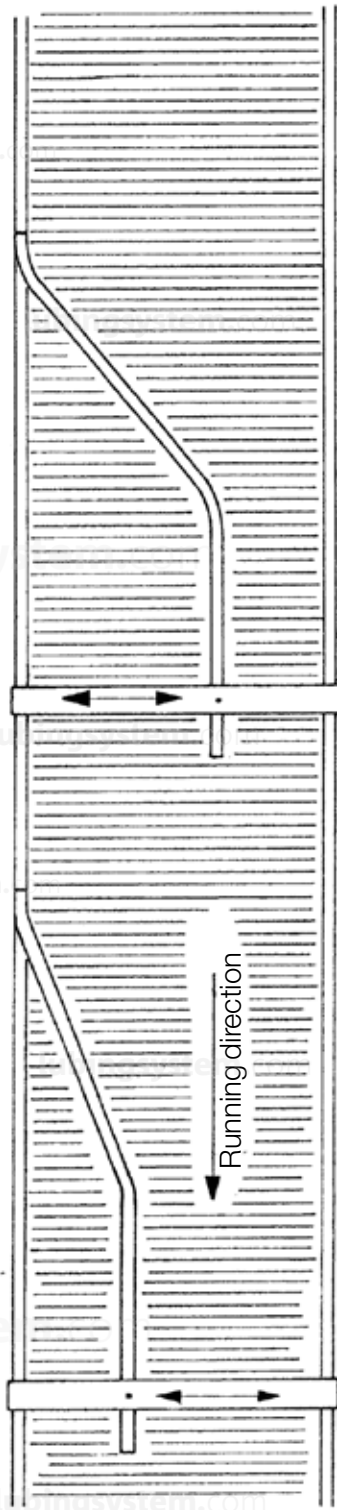
## 5.1.12 B12 Telescopic unit - Item no. 4865 / 4830 - Type 350 / 500



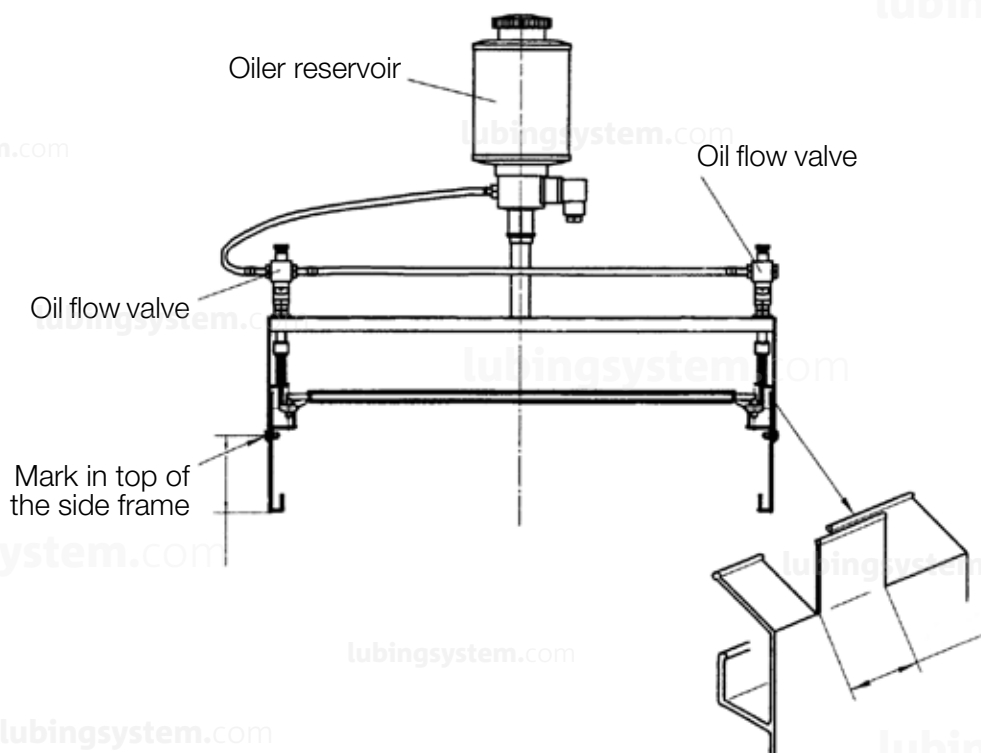
## 5.1.13 B15 Bend 180° - Item no. 4853 / 4814 - Type 350 / 500



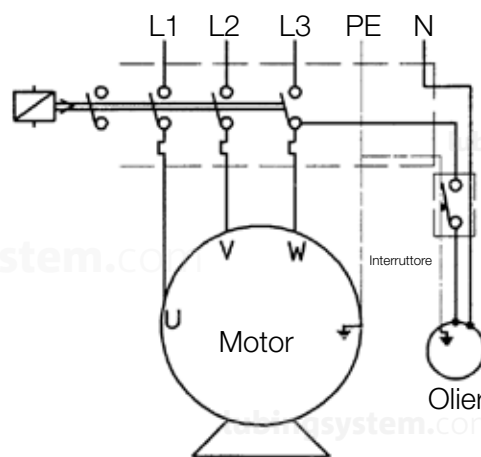
## 5.1.14 B16 Guide unit - Item no. 4858 / 4828 / 4888 - Type 350 / 500 / 750



## 5.1.15 B17 Drip oiler - Item no. 4859 / 4829 / 4889 - Type 350 / 500 / 750



Oiler wiring diagram

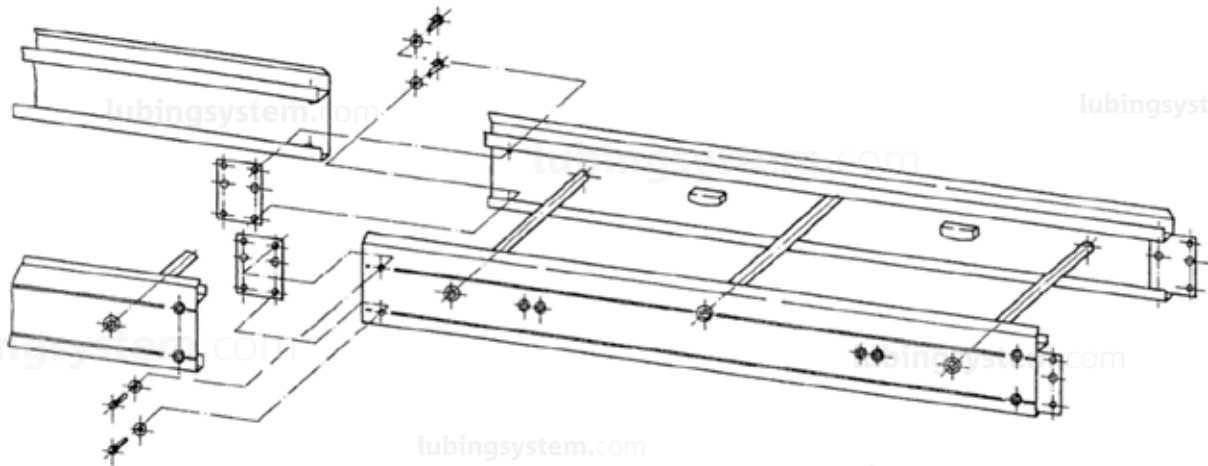


**Do not use the drip oiler without oil – coil can be destroyed.**

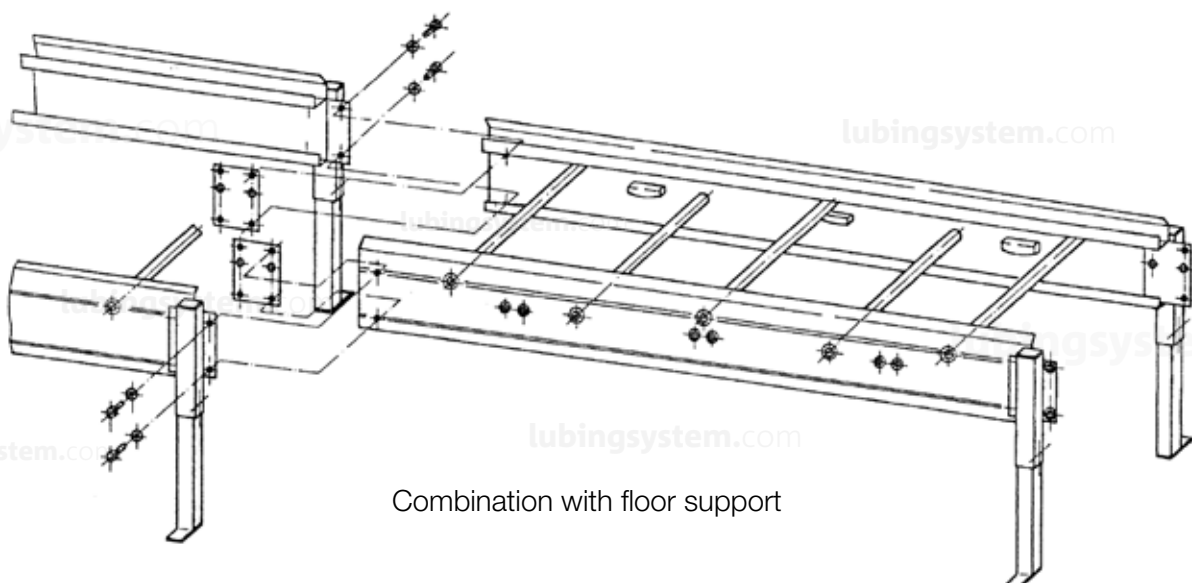
1. Install the drip oiler in the end of the conveyor.
2. Cut the side sheets till the edge (see sketch) and bend it upright.
3. Drill holes  $\varnothing 7\text{mm}$  into the mark on top of the side frames.
4. Cut out the red copping (max. 20 mm).
5. Assemble the oiler with 4 screw M6x12.
6. Electrical connection (consult the wiring diagram)
7. Fill the oiler reservoir with oil and adjust the oil flow.
8. Do not run the oiler empty.
9. When the chain is properly lubricated, switch the oiler off.

Type of oil: Paraffinum Liquidum whiteoil DAB 10 (food industry)

**5.1.16 M3 Connecting part closed L= 2 m - Item no. 4848 / 4809 / 4878 -  
Type 350 / 500 / 750**

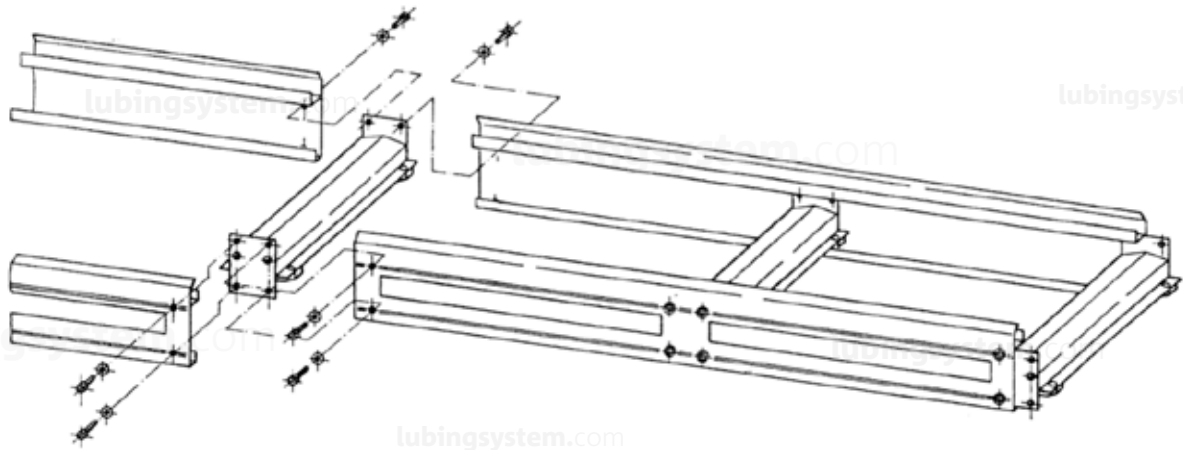


**5.1.17 M4 Connecting part closed L=2 m - Item no. 4848 / 4809 / 4878 -  
Type 350 / 500 / 750**

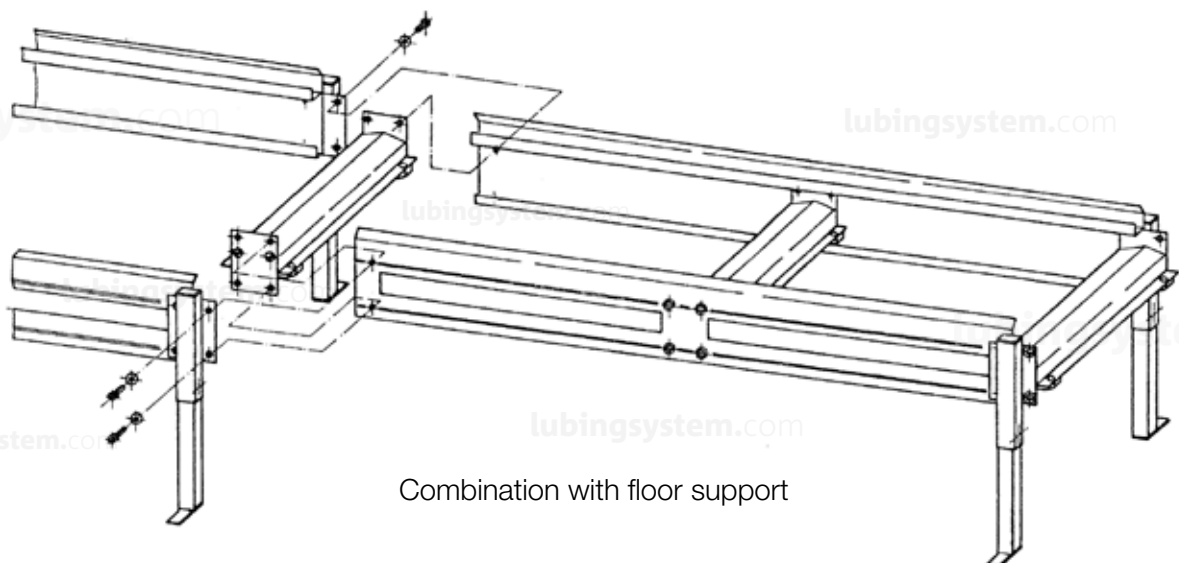


Combination with floor support

## 5.1.18 M7 Connecting part open L=2 m - Item no. 4850 / 4811 / 4880 - Type 350 / 500 / 750

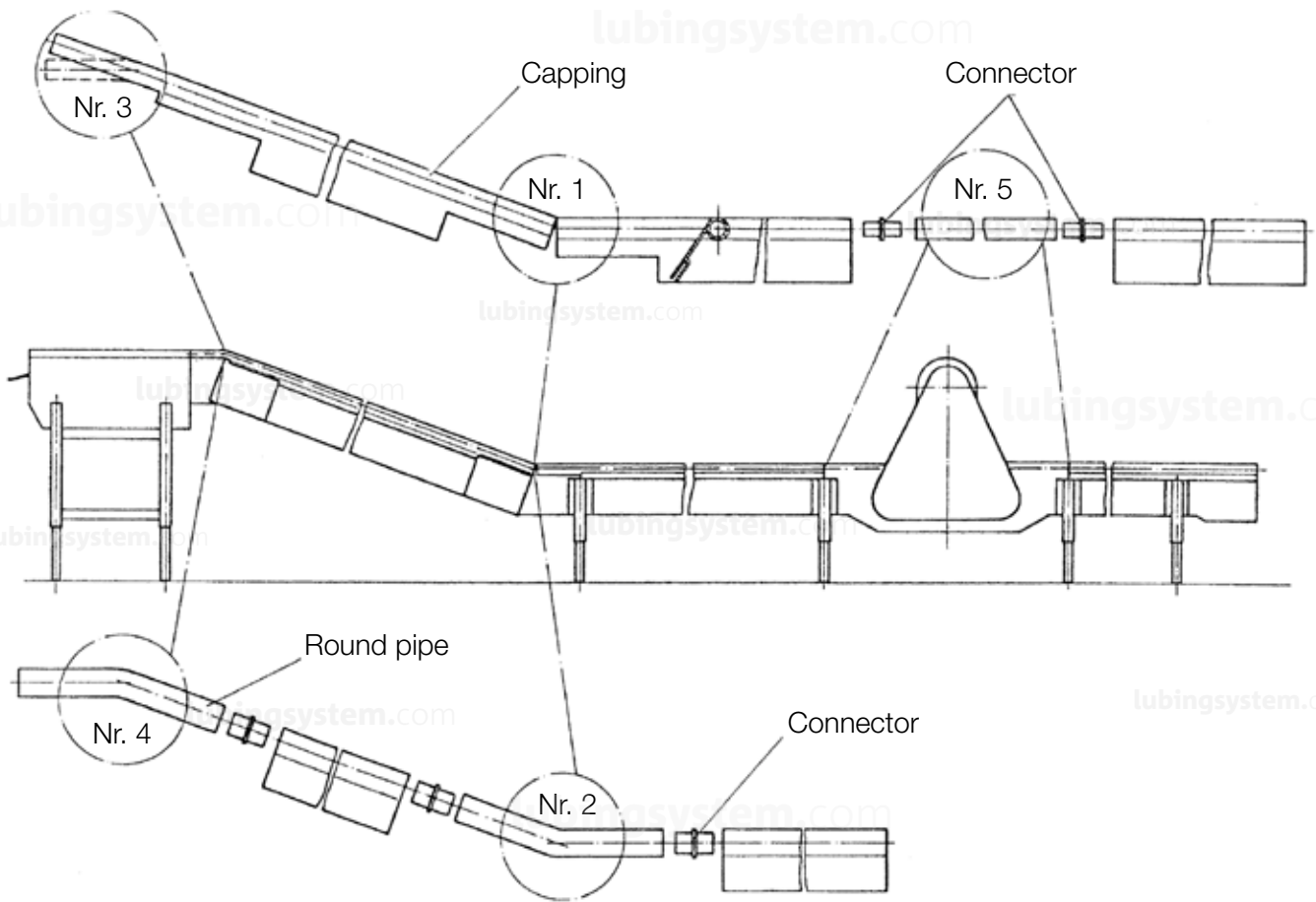


## 5.1.19 M8 M7 Connecting part open L=2 m - Item no. 4850 / 4811 / 4880 - Tipo 350 / 500 / 750

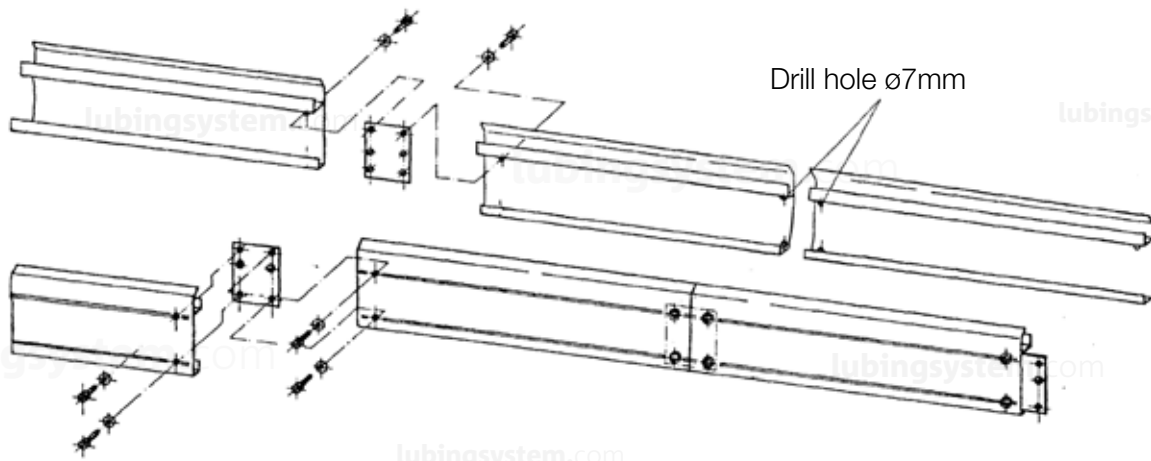


Combination with floor support

## 5.1.20 M9 Assembly plan for capping



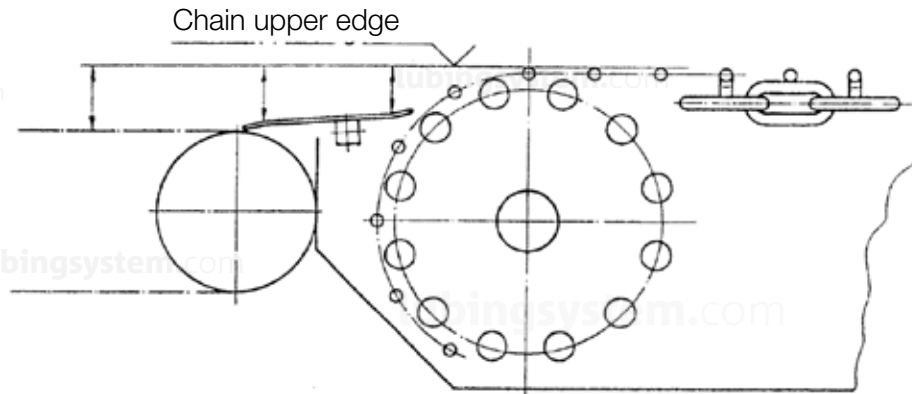
## 5.1.21 M10 Cut off the connecting part



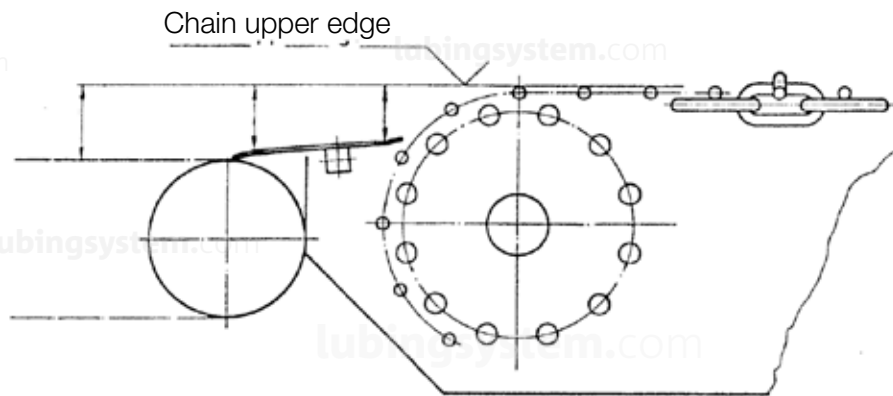
It is possible to cut connecting parts with closed profiles.  
Do not cut off one side. Cut off a piece in the middle, drill the holes and connect the both ends with the thread plate. Fit the sliding profil without interruption.

**Do not cut connecting parts with open profiles!**

## 5.1.22 M11 and M12 Adjusting of transfer



Item no. 4861 Type 350  
Item no. 4821 Type 500  
Item no. 4891 Type 750



Item no. 4820 Type 500

## 6. OPERATING INSTRUCTIONS FOR LUBING CURVE CONVEYOR

The following maintenance work is necessary to ensure trouble-free operation and long working life.

All bearing-mounted components are permanently lubricated, but a few maintenance measures are nevertheless essential. The sliding profiles are manufactured from high-strength, abrasion-resistant plastic and should be visually examined every 500 operating hours.

Special attention must be given to the heart of the system, namely the conveyor-chain. The articulating surfaces of the chains are subject to high levels of stress when they are not traveling in a straight line, and a lubricating film is essential to reduce wear at these points to a minimum and to keep the chain easy-running. A significant reduction in friction between chain and running strip is achieved in the same way. For these reasons the conveyor-chain should be oiled from time to time, depending on the level of use, and also the driving chain from the gear motor to the drive-shaft.

The gear motor is maintenance-free.

The system should be thoroughly cleaned at intervals depending on the amount of accumulated dirt and dust. If the conveyor is taken out of operation for a relatively long period of time, it is advisable to wash it with a high-pressure hose and hot water. It must then be dried, lubricated and briefly run in order that the oil film is evenly spread over all sliding and articulating surfaces etc.

## 7. ACCIDENT PREVENTION

Whenever the curve-conveyor is put into operation, check that nobody is working on it or in the immediate vicinity and that no objects or tools have been left either on or, especially with lift systems, underneath the conveyor.

The switch boxes for this type of system should, whenever possible, be located so that the whole conveyor run is visible.

Operators must be completely familiar with all the operational details of these conveyors and must be capable of closing it down very rapidly in case of emergency.

If any questions should arise, concerning the operating instructions, do not hesitate to contact the service department in your area or our factory direct.

### 7.1 Cable emergency stop kit (Item no. 4990)

Critical points for the LUBING conveyor system are areas where employees are working long-term next to the conveyor line. Due to the moving conveyor chain these employees are exposed to a higher risk of injury. So it is often necessary to secure these critical points by an additional safety measure.

For this purpose LUBING has created a cable emergency stop kit which allows the immediate stop of the entire conveyor line in case of an emergency. The cable emergency stop kit is designed for distances up to 15 meters and is suitable for all types of conveyor.

Main components:



Cable



Cable safety switch



Turnbuckle



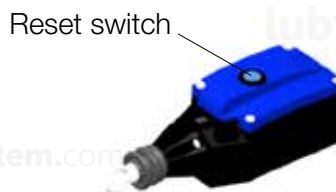
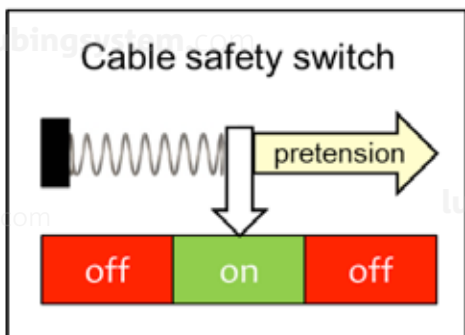
Bracket



End bracket

For correct operation a pretension on the cable is required. The conveyor line is stopped if pretension is removed (e.g. broken cable). For maximum security there is an extra reset switch located on the cable safety switch.

The cable safety switch must be connected with the switch board / control panel for the conveyor on site. Please make sure that the electrical equipment used in switch board / control panel is suitable for the use with safety related devices.



One emergency stop kit includes the following main parts plus small components:

QUANTITY	ITEM NO.	DESCRIPTION
1	53 01 081	Interruttore di sicurezza ZQ 900-02
1	185 520 51 01	Profilo di base per interruttore di sicurezza
12	185 600 43 00	Profilo di attacco con gancio
1	185 600 44 00	Supporto finale per interruttore
1	39 02 003	Unità cavo completa 15 m

The cable can be installed on inner and outer bends as well as on inclines and declines. The brackets for installation which are part of the cable emergency stop kit can be mounted to existing connection points on the conveyor like aluminium traverses. The pictures below are showing some examples of an installation.

### Installation examples:



Installation on drive unit



End bracket



Installation on bend



Bracket on connecting part



**LUBING**



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