



# KONGSKILDE

Air solutions / your success

## **KCC Chain Conveyor**

### *Technical specifications*

Kongskilde KCC chain conveyors are ideal for horizontal conveying and are as standard supplied with capacities for 20, 40, 60, 80, 100 and 120 t/h. On request chain conveyors with capacities up to 300 t/h can be supplied. The capacities are for grain with a bulk density of 750 kg/m<sup>3</sup>.

The KCC chain conveyors are designed for horizontal conveying but can as standard be used for inclined conveying up to 7 degree, however with reduced capacity. The KCC conveyors are mainly produced in galvanized material to give max. protection against the impact from the weather on outdoor installations.

#### **Standard version**

The standard version of each size of the chain conveyor consists of a drive section, a tightening section and a number of extensions installed between these two units.

The components are designed for a total building length of the conveyor of up to 50m. The intermediate extensions are available in length of 2.97 - 1.27 - 0.67 - 0.37 m for each size of conveyor. There are two variants of intermediate extensions:

1. Extensions fully closed. Used for conveying from one point to another.
2. Extensions with side inlets are used as part of the conveyor, as example in the bottom of grain pits, where the grain beneficial is introduced into the conveyor along the side of the conveyor.

The power consumption of the conveyor depends on the length of the conveyor and some of the optional equipment chosen. All intermediate extensions are equipped with a 10mm PEHD wear liner in the bottom.

Drive sections for each size of conveyors are available with different shaft diameters to adapt to different sizes of geared motors. The drive unit is a geared motor. The gear unit is a high efficiency type with conical tooth wheel with the motor sitting in an angle of 90 degrees to the elevator shaft. This is giving the most compact, efficient and stable design.

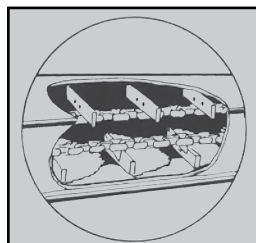
#### **Accessories**

A range of inlet and outlet adapters are available making it possible to connect pipe system to the unit.

For the drive section, outlet adapters are available without shutter.

To install on the intermediate sections outlets with shutters are available in different versions:

1. Outlet with shutter manual operated directly on the outlet.
2. Outlet with shutter manual remote operated via a chain arrangement.
3. Outlet with shutter operated by motor.



On the outlet with motor driven shutter, position switch is standard included. On the two manual shutter, position switch is an option.

A range of adapters in relevant diameters is available for the intermediate outlets making it possible to connect a down pipe system.

The KCC conveyors can be equipped with one or more inlets having capacity control. The inlet section is 1m long and consists of an additional bottom installed under the upper returning part of the conveying chain. A adjustable shutter controls the lay of grain, the upper return side of the conveying brings with a short distance backwards, before it drops down into the bottom of the conveyor to be conveyed in wanted direction.

If the conveyor is equipped with capacity control on the inlet more power is required to run the unit. As a guideline capacity control corresponds to 5m of conveying of the crop.

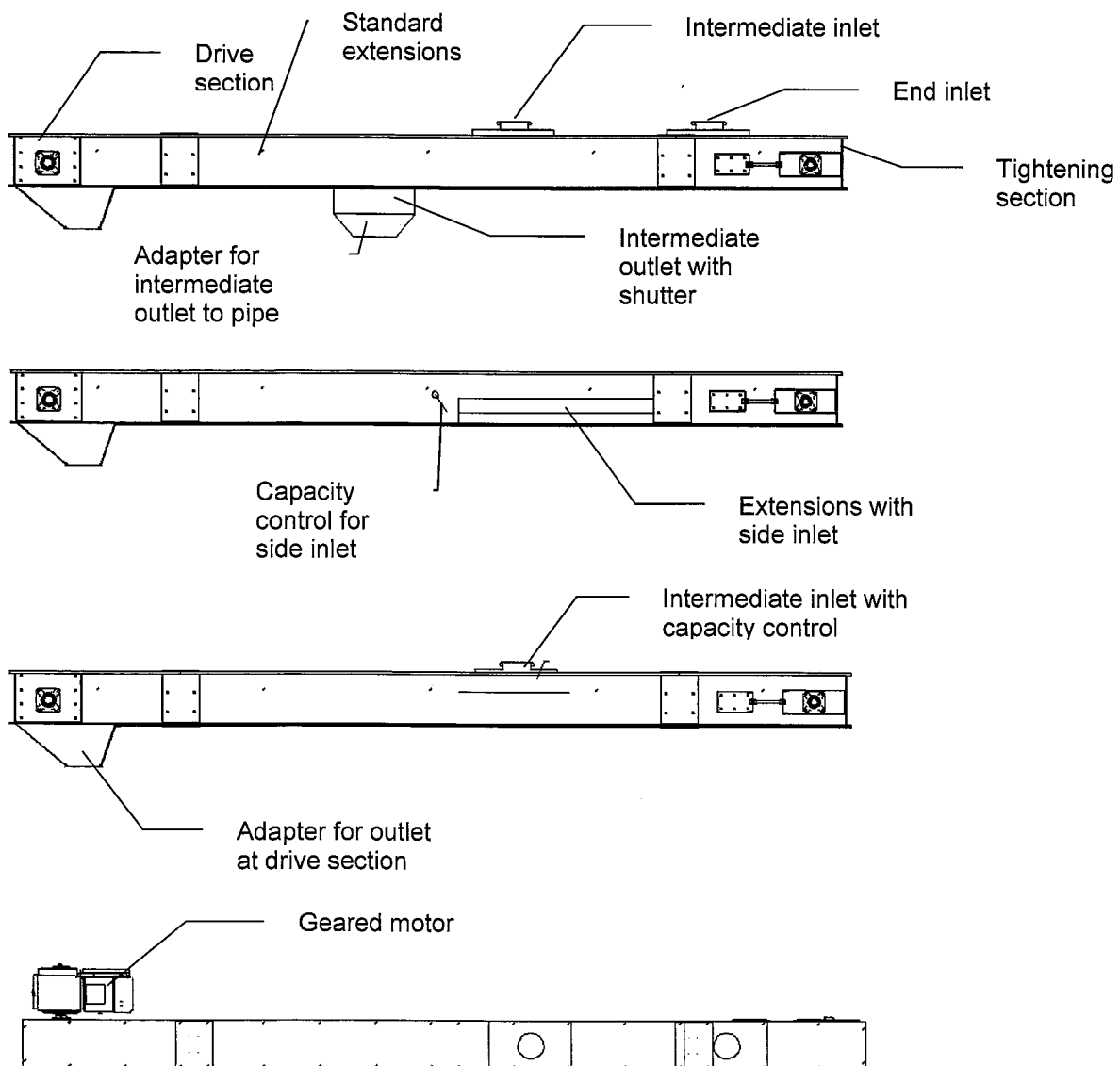
**Capacity control side inlet.**

Capacity control is also available for conveyors with side inlet. The capacity control is installed in the first section after the intermediate extensions with side inlet. The capacity control is adjusting the thickness of the layer of crop the conveying chain is bringing with.

**Rain cover.**

For outdoor installation it is recommended to install rain cover to protect the motor against impact from the weather.

Examples of conveyor configurations. The different examples shown on the three drawings below can be combined on the same conveyor.



## Technical data - Chain Conveyors type KCC

Item	Unit	KCC40 (40t/h)	KCC60 (60t/h)	KCC80 (80t/h)	KCC100 (100t/h)	KCC120 (120t/h)
<b>Drive Section</b>						
Rotations on drive shaft -nominal	RPM	38	38	35	28	23,5
Shaft diameter	Ø mm	50	50	60	70	70
Diameter on sprocket wheel (Mid)	Ø mm	230	261	261	326	326
Teeth on sprocket wheel	Pcs.	7	8	8	8	8
Length of section	mm	1000	1000	1000	1000	1000
Material thickness in	mm	2 - 3	2 - 3	2 - 3	2 - 3	2 - 3
Weight, empty	kg	65	83	90	140	145
Transitions for inlet available	Range	OK 200	OK200 - FK250	FK250	Q24 - FK250 - FK300	Q30 - FK300
<b>Tightening Section</b>						
Diameter on sprocket wheel (Mid)	Ø mm	230	261	261	326	326
Length of section	mm	1000	1000	1000	1000	1000
Material thickness in section	mm	2 - 3	2 - 3	2 - 3	2 - 3	2 - 3
Weight, empty	kg	50	70	75	110	135
Transitions for inlet available	Range	OK 200	OK200 - FK250	FK250	Q24 - FK250 - FK300	Q30 - FK300
Liner PE-HD- in bottom of section. Thickness	mm	10	10	10	10	10
<b>Extensions</b>						
Standard length of extensions	m	2,97-1,27- 0,67-0,37	2,97-1,27- 0,67-0,37	2,97-1,27- 0,67-0,37	2,97-1,27- 0,67-0,37	2,97-1,27- 0,67-0,37
Liner included – PEHD, Thickness	mm	10	10	10	10	10
Number of bolts in flange joints		4x4	4x4	4x4	12	12
Screw dimensions in flange joint	M x mm	8x30, 8x16	8x30, 8x16	8x30, 8x16	10x20	10x20
Material thickness of extensions	mm	2/3	2/3	2/3	2/3	2/3
Max. total building length	m	50	50	50	50	50
Max. distance between supports	m	6	6	6	6	6
Inlets available	Range	OK200/ FK250	OK200/ FK250	FK250	FK250/FK300/ Q24	FK300/ Q30
Weight of extensions with chain empty/full	kg/m	40/74	45/86	51/109	59/133	65/171
Cross dimension of extensions	b x h	230x310	230x360	330x360	330x410	330x510
Return roller for conveying chain		2,97m - 3pcs, other 1pc	2,97m - 3pcs, other 1pc	2,97m - 3pcs, other 1pc	2,97m - 3pcs, other 1pc	2,97m - 3pcs, other 1pc
Height of grain layer in conveyor	mm	180	215	215	276	396
Support of KCC for each	m	4	4	4	4	4

## Technical data - Chain Conveyors type KCC

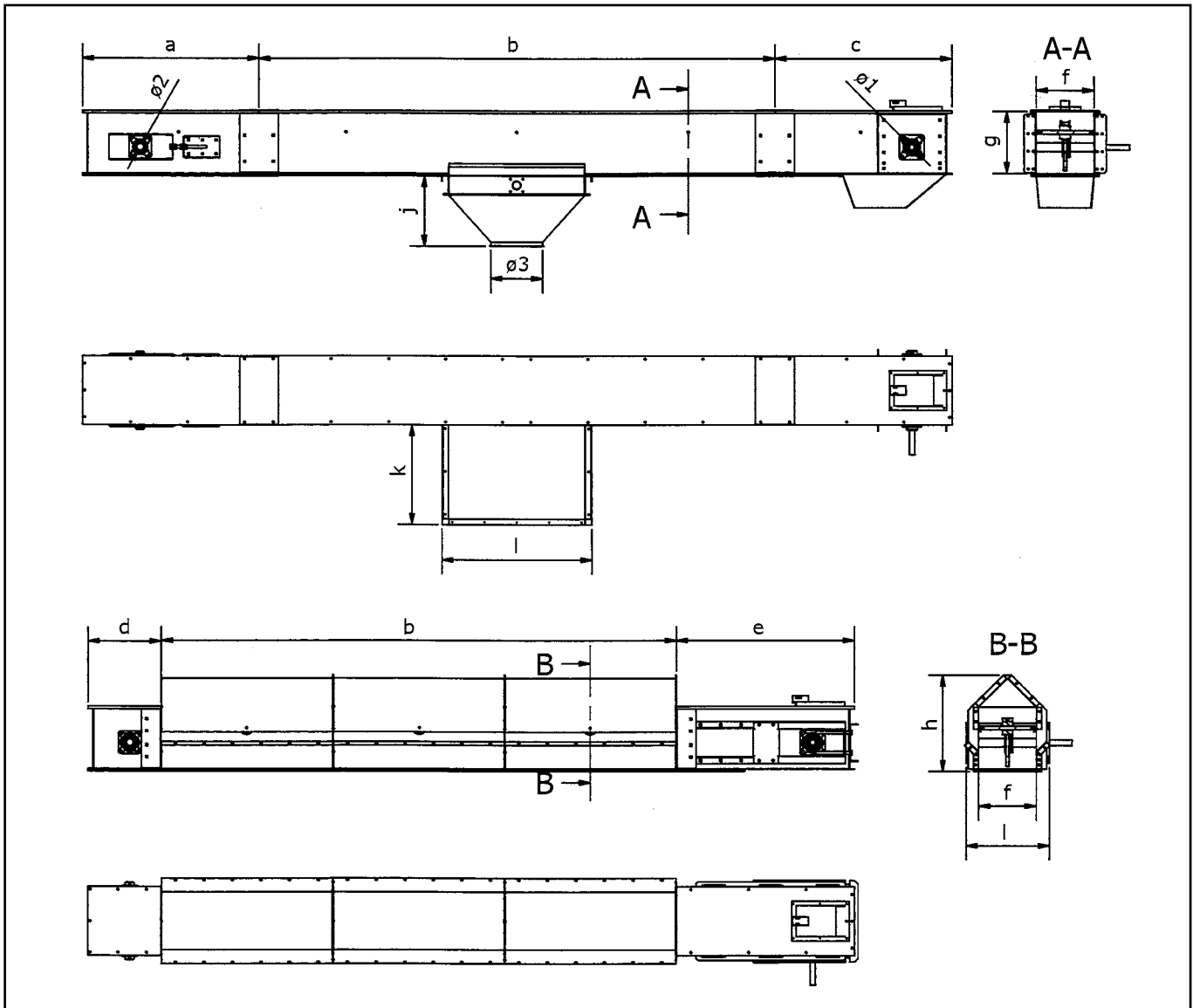
Item	Unit	KCC40 (40t/h)	KCC60 (60t/h)	KCC80 (80t/h)	KCC100 (100t/h)	KCC120 (120t/h)
<b>Extensions with side inlet</b>						
Standard length's in range	m	2,97-1,27- 0,67-0,37	2,97-1,27- 0,67-0,37	2,97-1,27- 0,67-0,37	2,97-1,27- 0,67-0,37	2,97-1,27- 0,67-0,37
Liner PEHD, thickness	mm	10	10	10	10	10
Number of bolts in flange joints	pcs	14-4	14-4	14-4	14-4	14-4
Bolt dimensions in flange joints	M x mm	8x16, 8x30	8x16, 8x30	8x16, 8x30	10-20, 10x30	10-20, 10x30
Material thickness in extensions	mm	2/3	2/3	2/3	2/3	2/3
Max. building length of extensions	m	30	30	30	30	30
Weight, empty	kg/m	40	45	51	59	65
Increase in power consumption compared to standard	%	50	50	50	50	50
Capacity control for side inlet		Turning flap	Turning flap	Turning flap	Turning flap	Turning flap
<b>Conveying chain</b>						
Standard for conveyor chain	DIN	8165	8165	8165	8165	8165
Partition on chain	mm	200	200	200	250	250
Chain speed	m/sec	0,6	0,6	0,6	0,6	0,6
Weight of chain	kg/m	5,5	5,5	6	8,5	8,5
<b>Inlet adapters for extensions</b>						
Choice	Ø mm	OK200	OK200/FK250	FK250	FK250/FK300/ Q24	FK300/Q30
<b>Adapters for end outlet</b>						
Choice	Ø mm	OK200	FK250	FK250	FK250/Q24	FK300/Q30
<b>Intermediate outlet</b>						
Manual operated		Option	Option	Option	Option	Option
Remote operated with chain		Option	Option	Option	Option	Option
Choice of outlet adapters	Ø mm	OK200	FK250	FK250	FK250/Q24	FK300/Q30
Position switch		Option	Option	Option	Option	Option
<b>Motor operated intermediate outlet</b>						
Power	kW	0,25	0,25	0,25	0,25	0,25
Power requirement	Ph, V	3x400	3x400	3x400	3x400	3x400
Position switch		Included	Included	Included	Included	Included
Choice of outlets is same as for manual intermediate outlets						

## Technical data - Chain Conveyors type KCC

Item	Unit	KCC40 (40t/h)	KCC60 (60t/h)	KCC80 (80t/h)	KCC100 (100t/h)	KCC120 (120t/h)
<b>Intermediate bottom with capacity control</b>						
Length of section	m	1	1	1	1	1
Inlet adapters	mm	From standard section	From standard section	From standard section	From standard section	From standard section
Power consumption		~5m conveying distance	~5m conveying distance	~5m conveying distance	~5m conveying distance	~5m conveying distance
<b>Rain cover for motor</b>		Option	Option	Option	Option	Option
<b>Power consumption in standard version</b>						
1,5 kW	m	< 10				
2,2 kW	m	10,1 - 19	< 11	< 7		
3,0 kW	m	19,1 - 30	11,1 - 18	7,1 - 12	<9	< 6
4,0 kW	m	30,1 - 44	18,1 - 27	12,1 - 19	9,1 - 14	6,1 - 11
5,5 kW	m	44,1 - 50	27,1 - 41	19,1 - 29	14,1 - 22	11,1 - 18
7,5 kW	m		41,1 - 50	29,1 - 43	22,1 - 33	18,1 - 27
9,2 kW	m			43,1 - 50	33,1 - 43	27,1 - 35
11,0 kW	m				43,1 - 50	35,1 - 43
15,0 kW	m					43,1 - 50
Power consumption for inlet with capacity control corresponds to conveying distance in standard extensions:	m	5	5	5	5	5
Power consumption for extensions with side inlet (Factor x standard)		1,5	1,5	1,5	1,5	1,5
Power consumption for capacity control on version with side inlet corresponds to in conveying in standard extensions	m	5	5	5	5	5

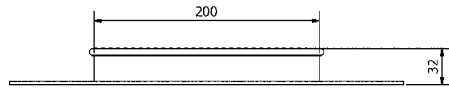
**NOTE: All Kongskilde motors are with IEC Standard frame size**

## Dimension - Chain Conveyors type KCC

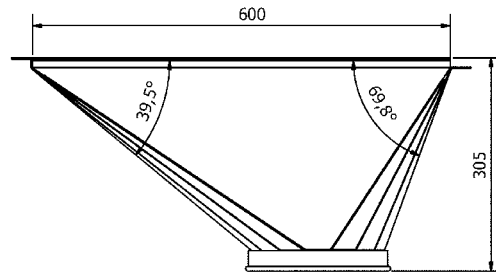
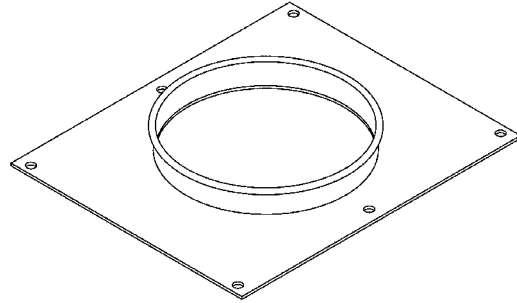


Dimension	KCC 40	KCC 60	KCC 80	KCC 100	KCC 120
a	1020	1020	1020	1020	1025
b	2970	2970	2970	2970	2970
	1270	1270	1270	1270	1270
	670	670	670	670	670
	370	370	370	370	370
c	1020	1020	1020	1020	1025
d	420	420	420	-	-
e	1020	1020	1020	-	-
f	230	230	330	330	390
g	310	360	360	410	520
h	457	507	544	607	741
i	378	378	478		
j	347	347	407	407	407
k	476	476	576	576	639
l	704	704	869	869	869
ø1	50	50	50	70	70
ø2	40	40	40	50	50
ø3	250	250	300	300	300

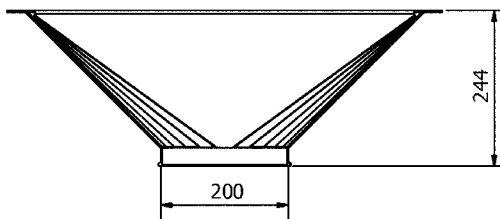
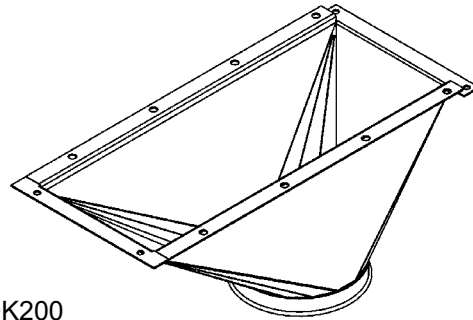
## Assesories - Chain Conveyors type KCC 40



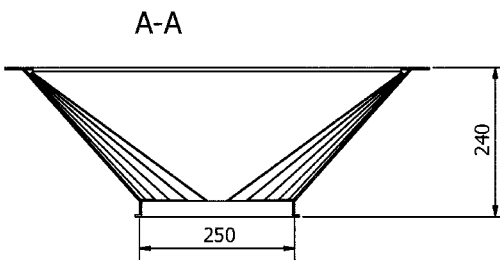
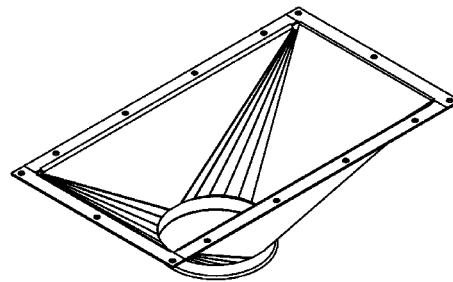
137 000 174: OK200 Inlet



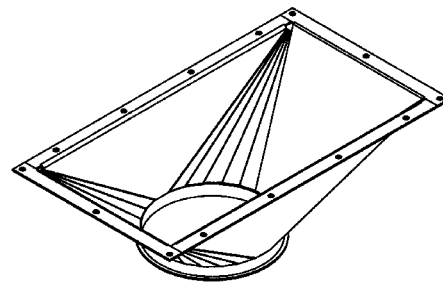
137 000 175: Outlet drive/tight sect. OK200



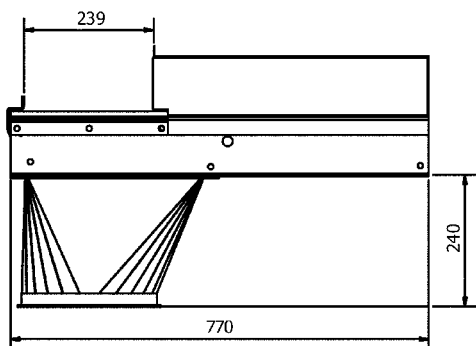
137 000 179: Adaptor outlet OK200



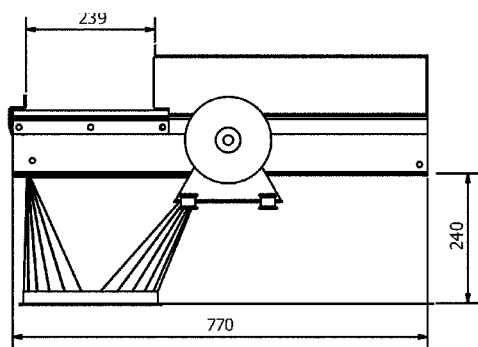
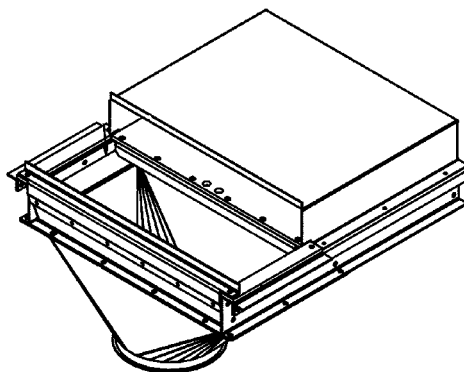
137 000 198: Adaptor outlet FK250



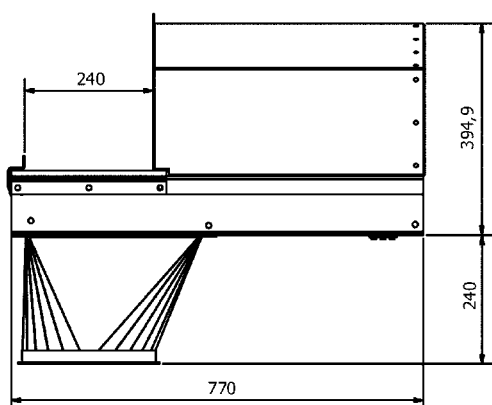
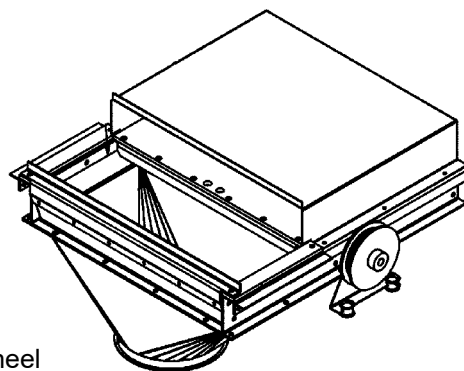
## Assesories - Chain Conveyors type KCC 40



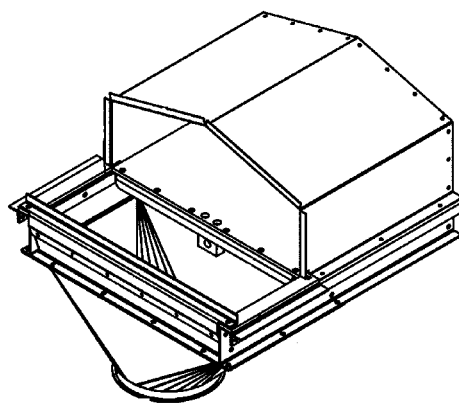
137 000 176: Outlet manual



137 000 177: Outlet manual with chain wheel

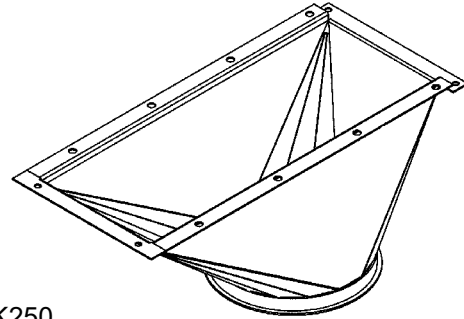
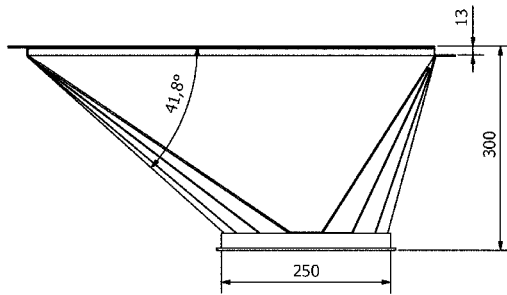


137 000 178: Outlet motorized

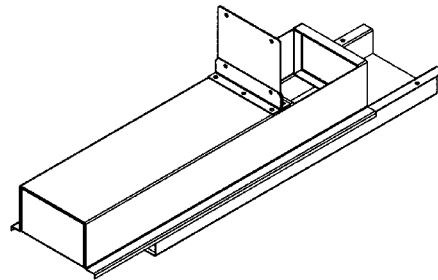
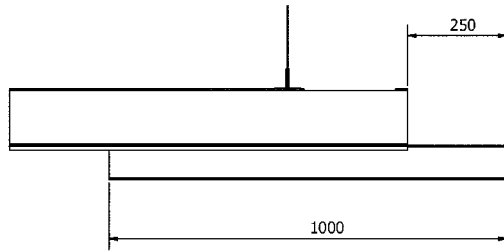




## Assesories - Chain Conveyors type KCC 40

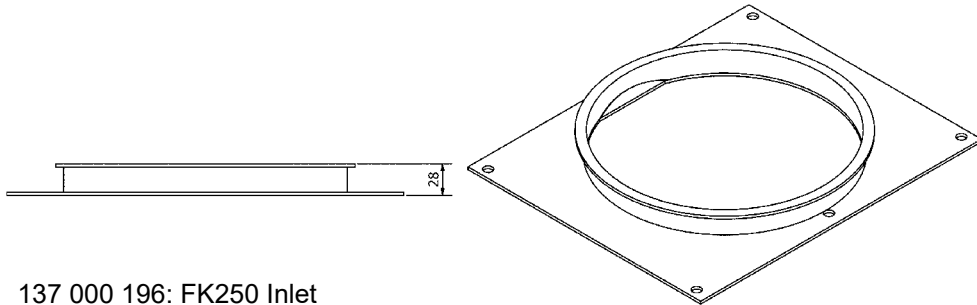


137 000 197: Outlet drive/tight sect. FK250

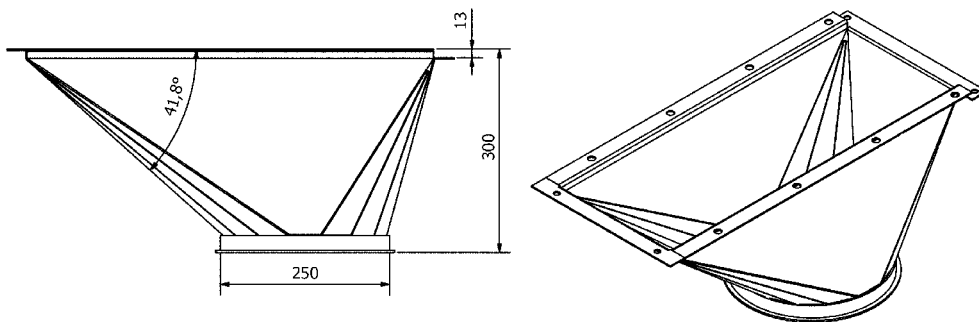


137 000 181: Inlet double bottom 1 m. cap. reg

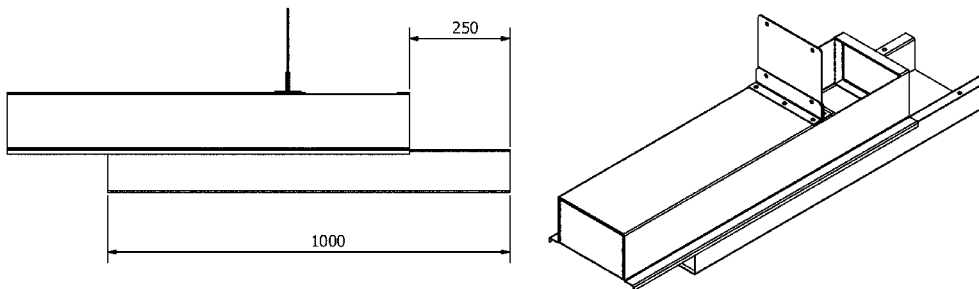
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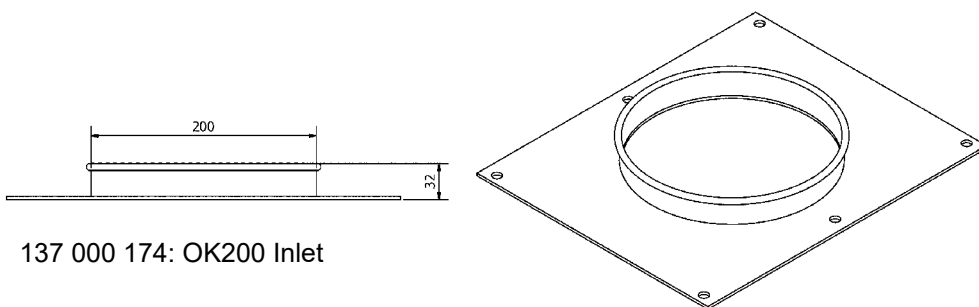
137 000 196: FK250 Inlet



137 000 197: Outlet drive/tight sect. FK250

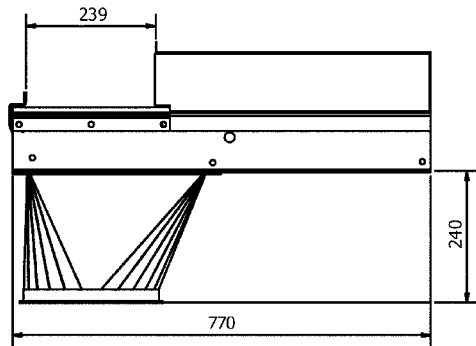


137 000 199: Inlet double bottom 1 m. cap. reg

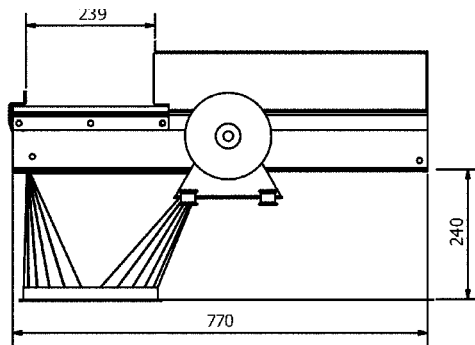
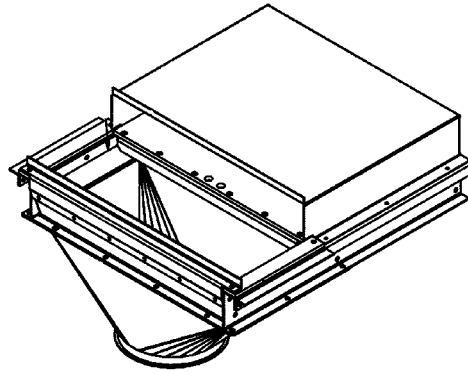


137 000 174: OK200 Inlet

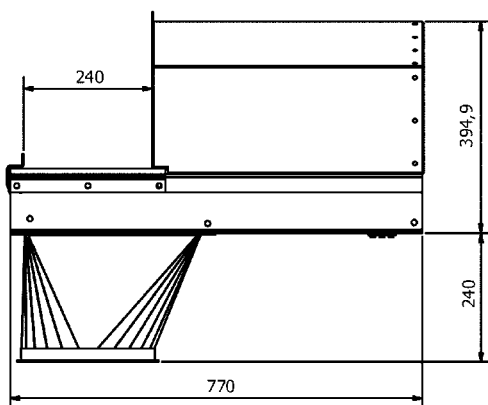
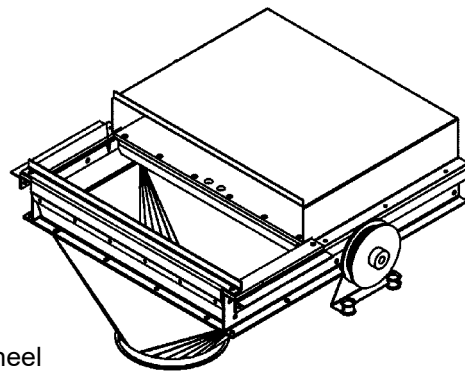
## Assesories - Chain Conveyors type KCC 60



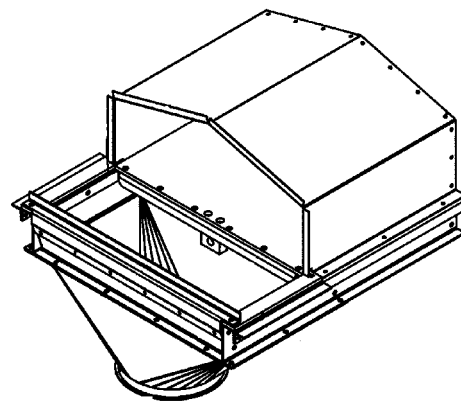
137 000 176: Outlet manual



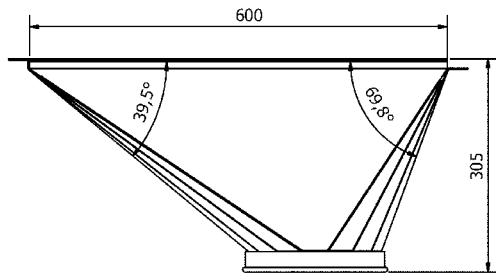
137 000 177: Outlet manual with chain wheel



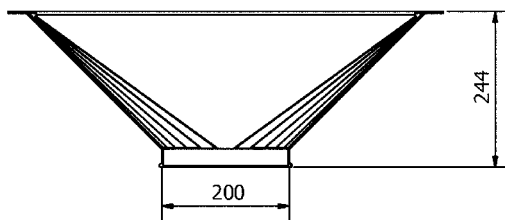
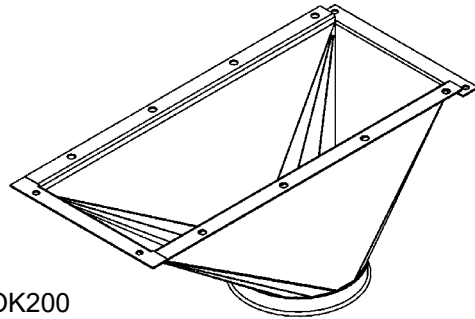
137 000 178: Outlet motorized



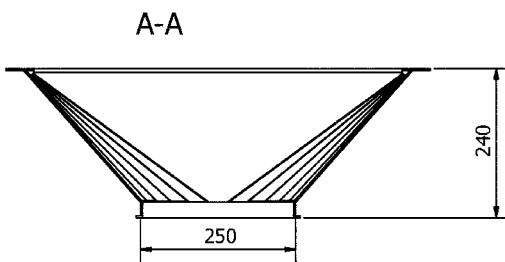
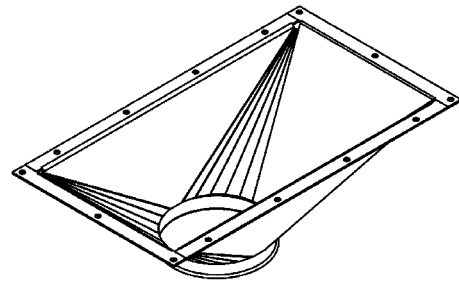
## Assesories - Chain Conveyors type KCC 60



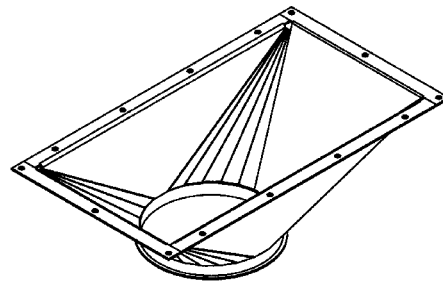
137 000 175: Outlet drive/tight sect. OK200



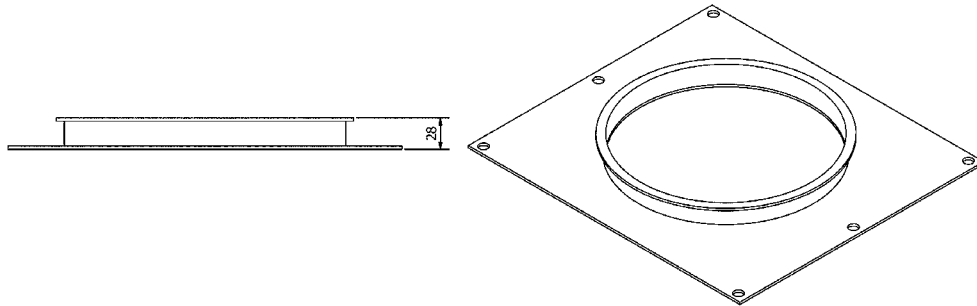
137 000 179: Adaptor outlet OK200



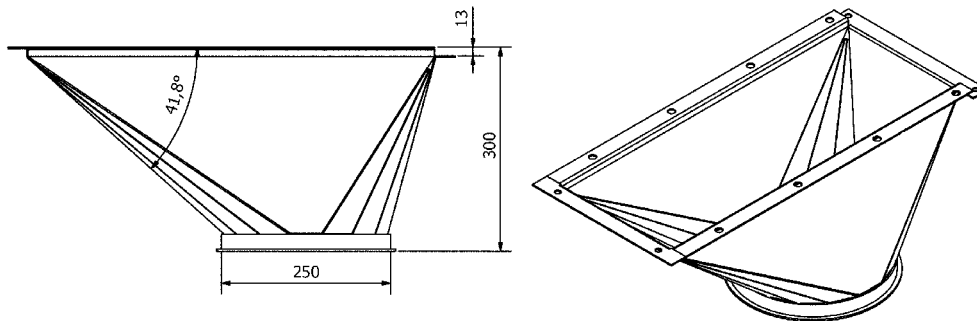
137 000 198: Adaptor outlet FK250



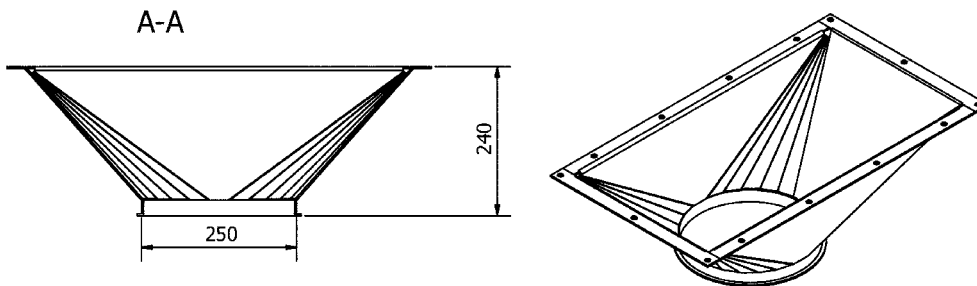
## Assesories - Chain Conveyors type KCC 80



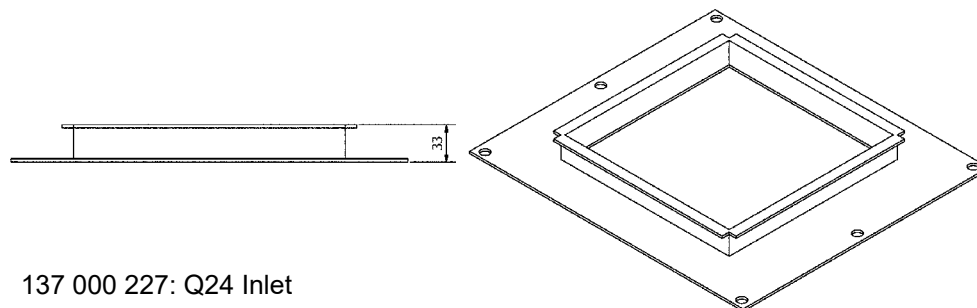
137 000 214: FK250 Inlet



137 000 215: Outlet drive/tight sect. FK250

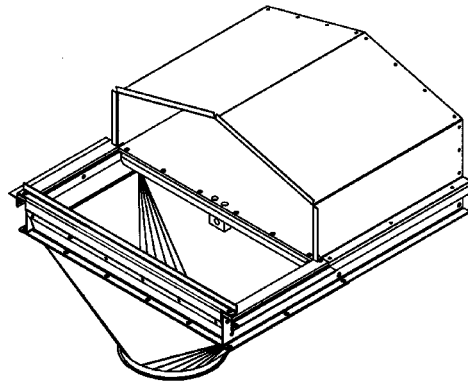
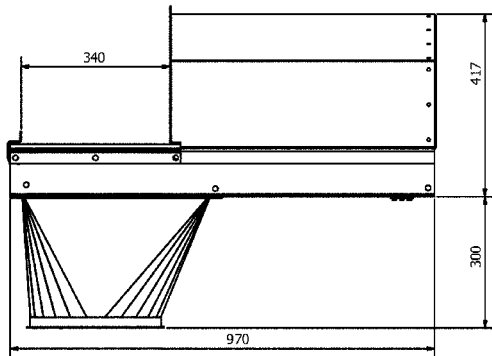


137 000 218: Adapter outlet FK250

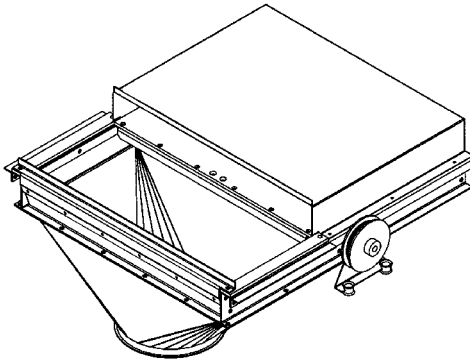
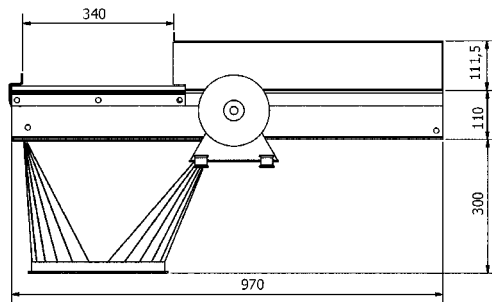


137 000 227: Q24 Inlet

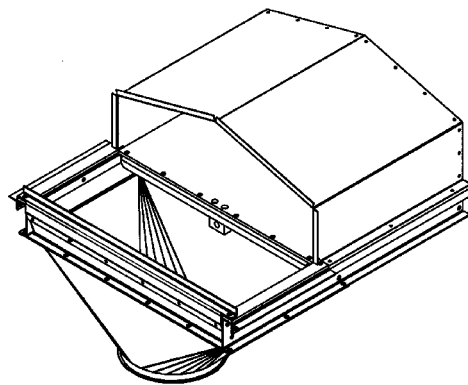
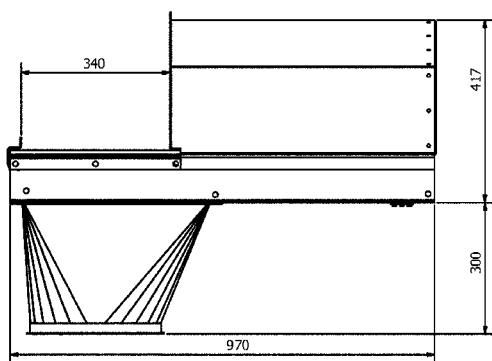
## Assesories - Chain Conveyors type KCC 80



137 000 321: Outlet manual

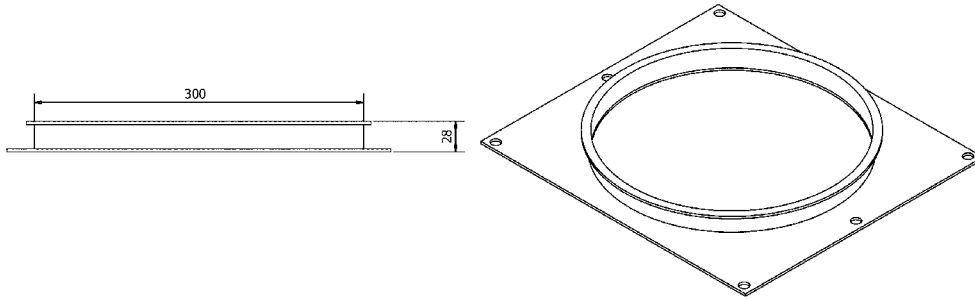


137 000 216: Outlet manual with chain wheel

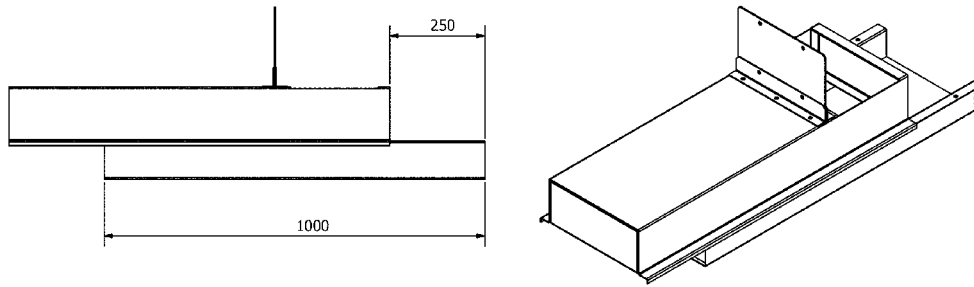


137 000 217: Outlet motorized

**Assesories - Chain Conveyors type KCC 80**

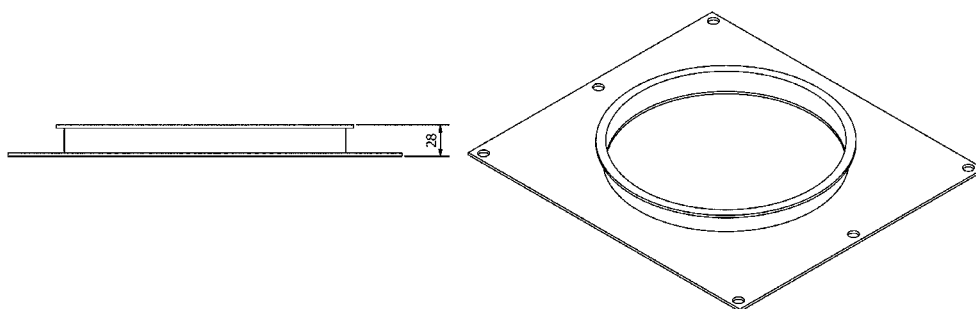


137 000 226: Inlet FK300

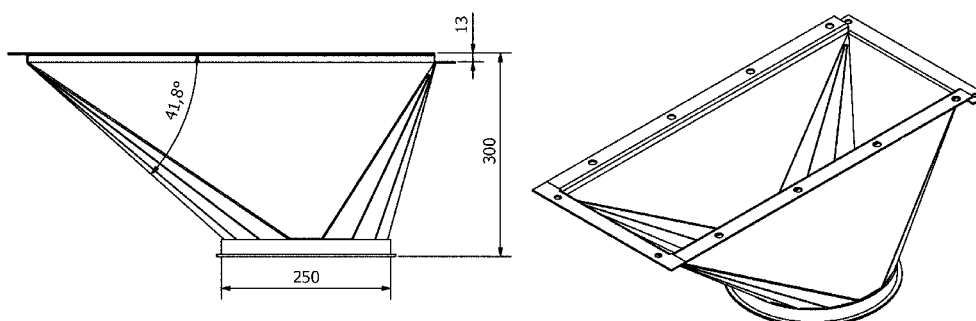


137 000 219: Inlet double bottom 1 m. cap. reg.

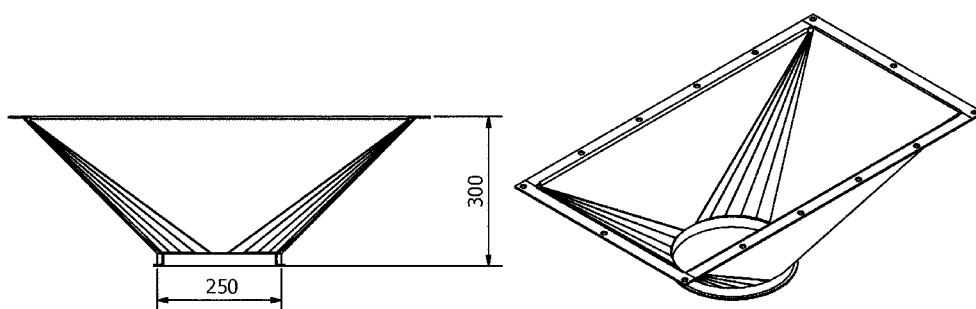
## Assesories - Chain Conveyors type KCC 100



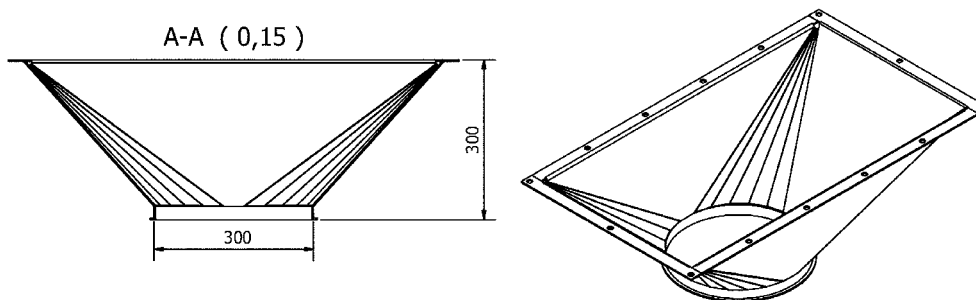
137 000 214: FK250 Inlet



137 000 228: Outlet drive/tight sect. FK250



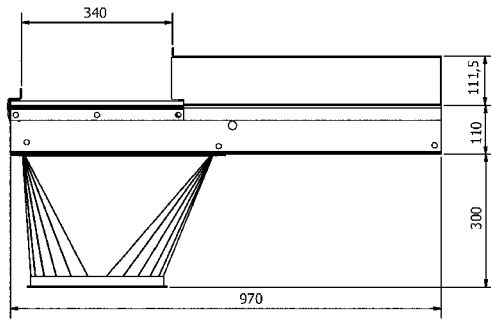
137 000 234: Adapter outlet FK250



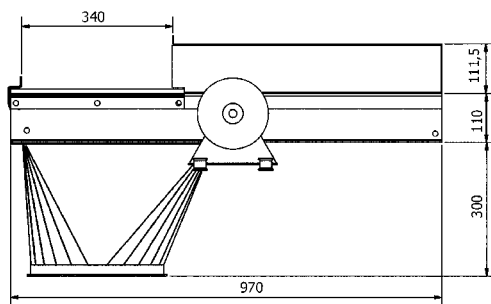
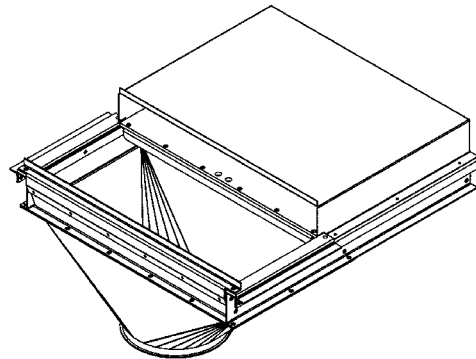
137 000 235: Adapter outlet FK300



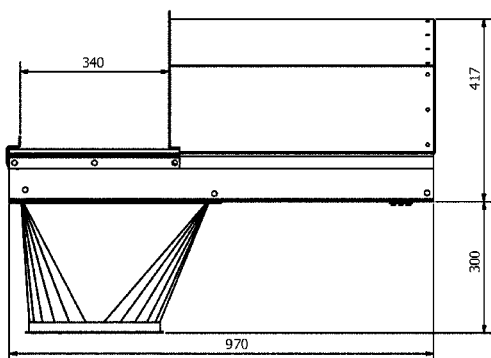
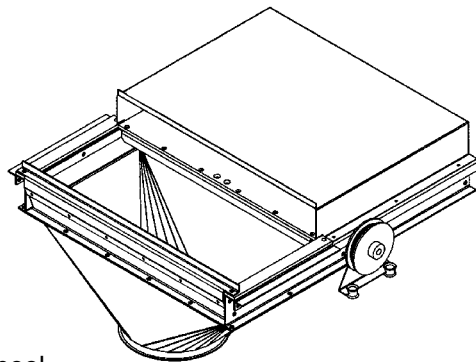
## Assesories - Chain Conveyors type KCC 100



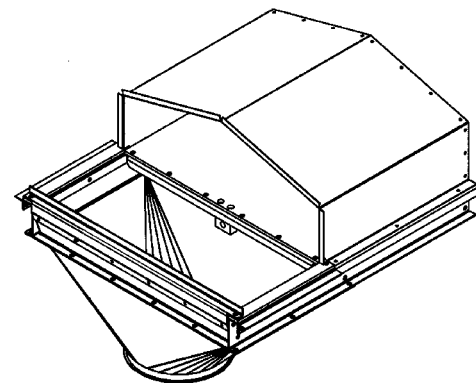
137 000 231: Outlet manual



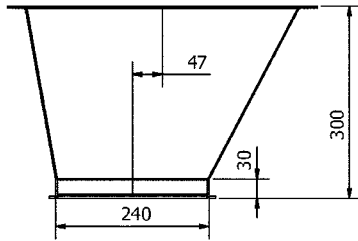
137 000 232: Outlet manual with chain wheel



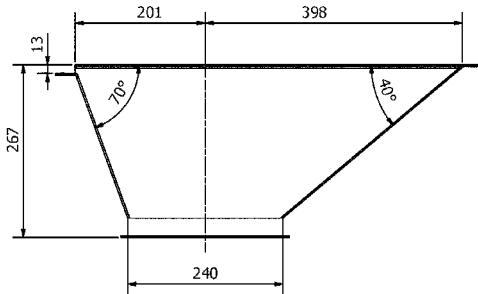
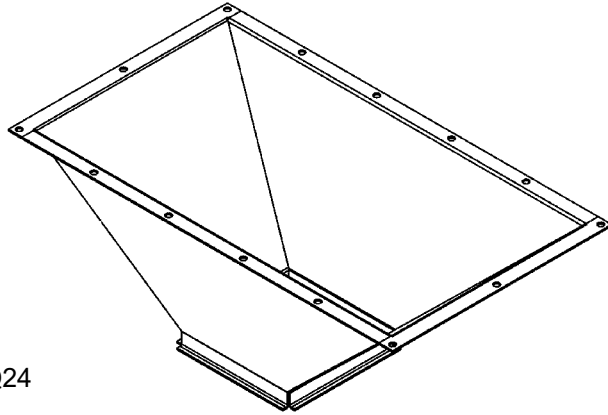
137 000 233: Outlet motorized



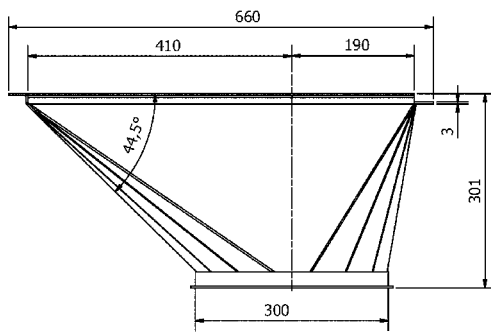
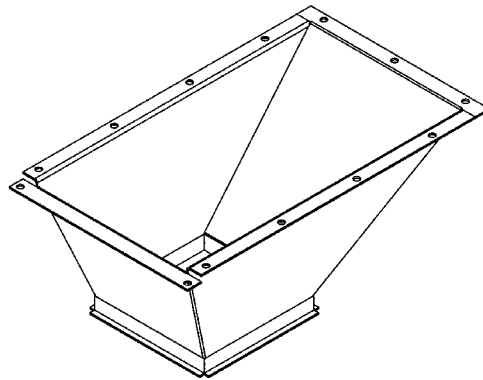
## Assesories - Chain Conveyors type KCC 100



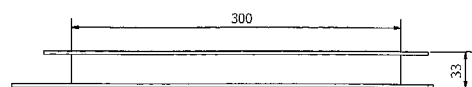
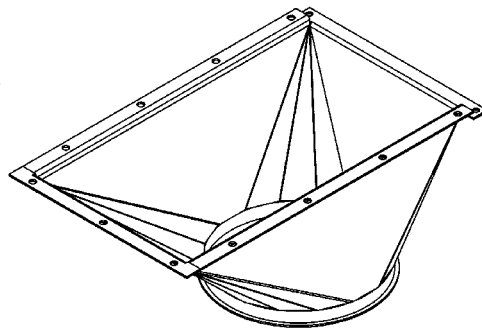
137 000 236: Adapter outlet Q24



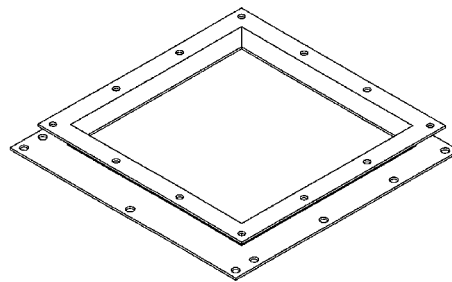
137 000 230: Adapter outlet Q24



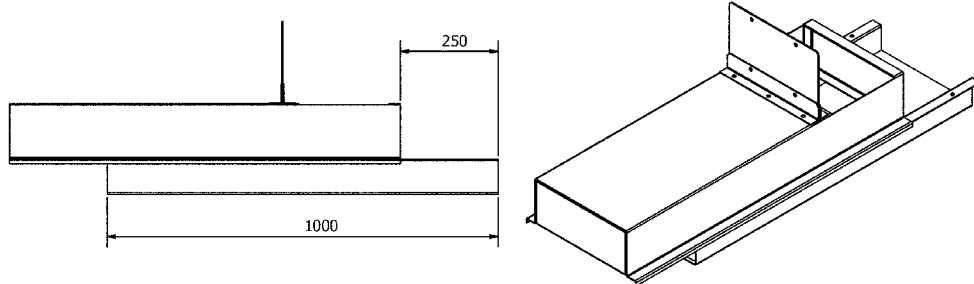
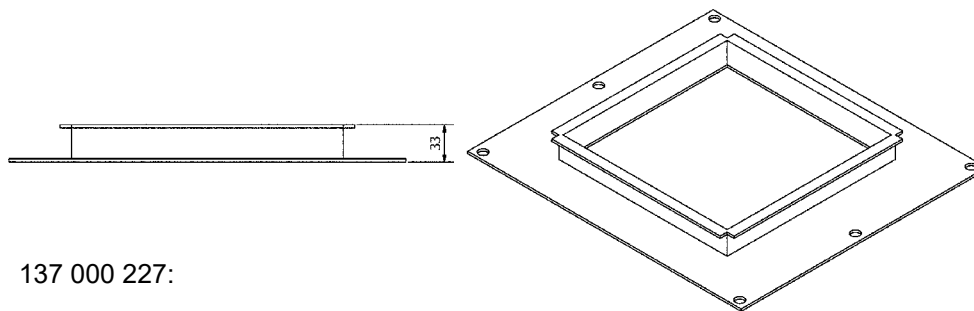
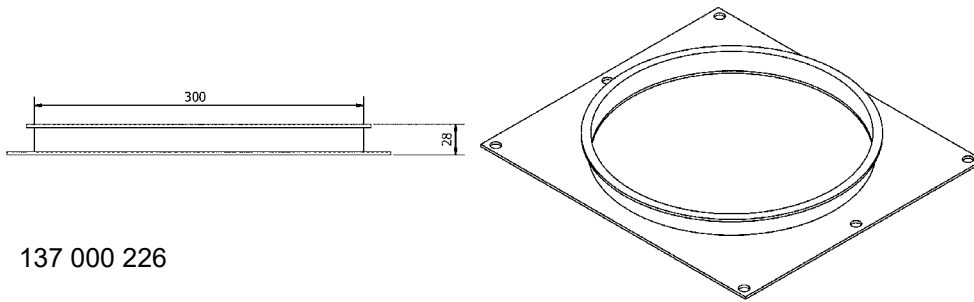
137 000 229: Adapter outlet FK300



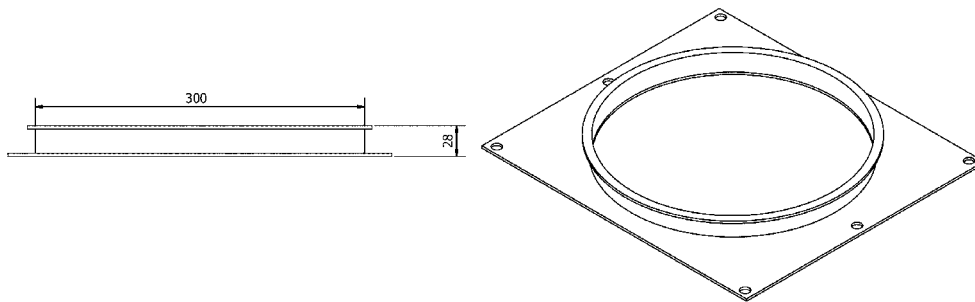
137 000 284: Adapter inlet Q30



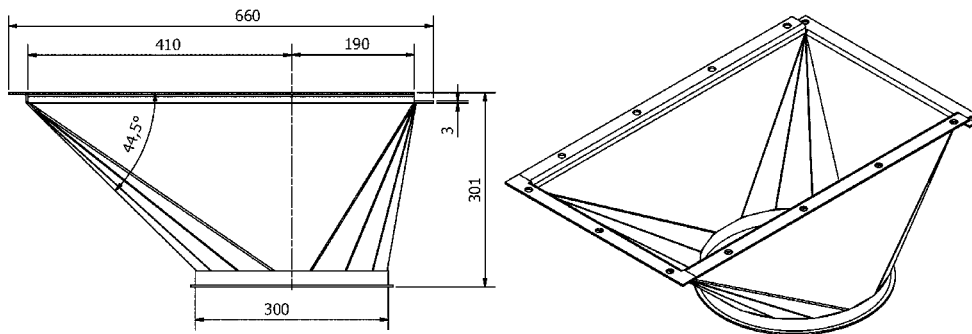
## Assesories - Chain Conveyors type KCC 100



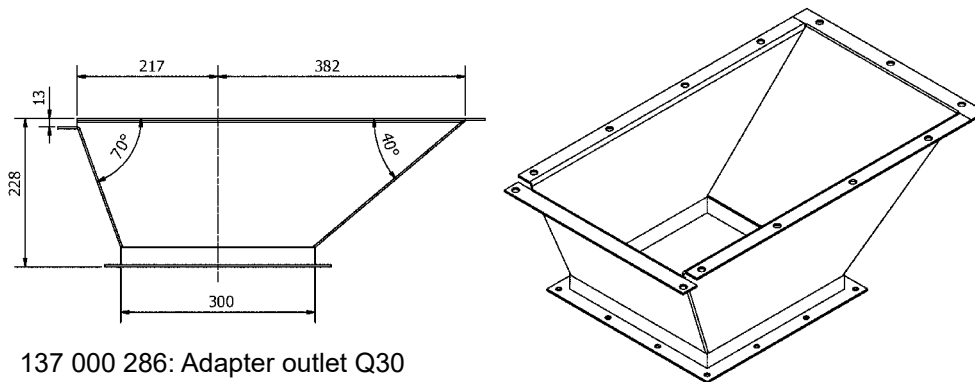
## Assesories - Chain Conveyors type KCC 120



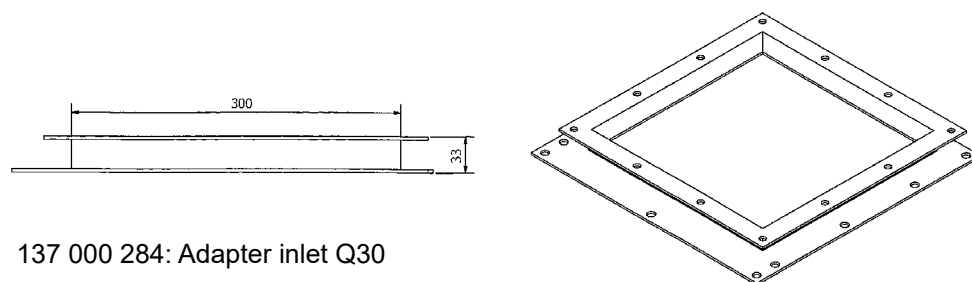
137 000 226: FK300 Inlet



137 000 285: Adapter outlet FK300

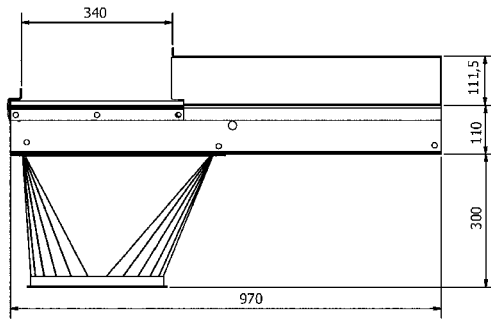


137 000 286: Adapter outlet Q30

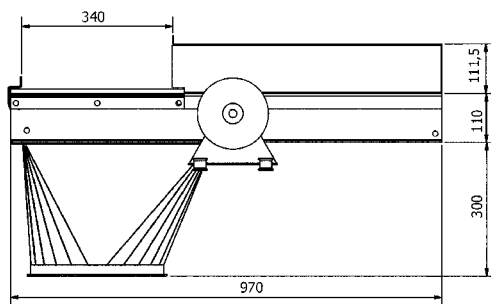
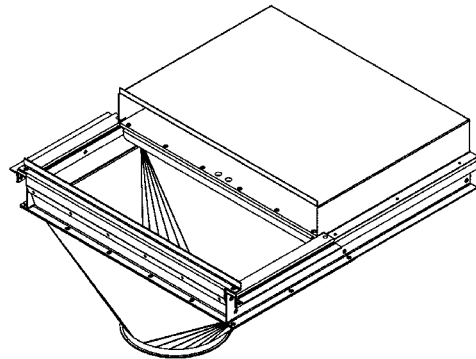


137 000 284: Adapter inlet Q30

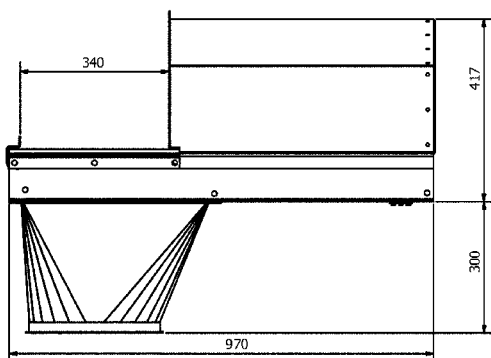
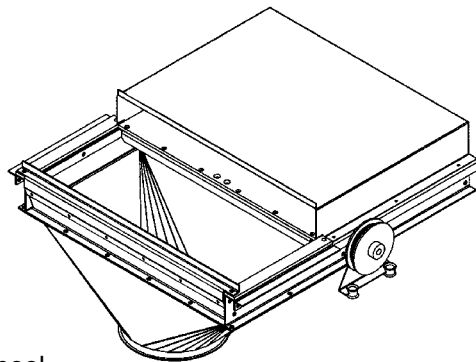
## Assesories - Chain Conveyors type KCC 120



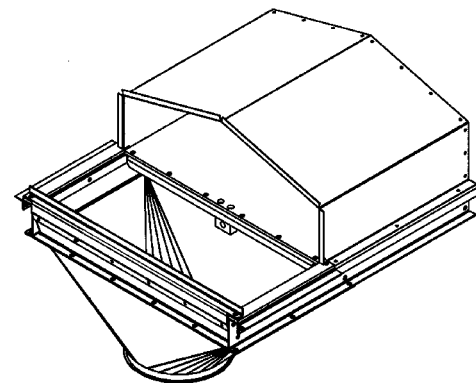
137 000 231: Outlet manual



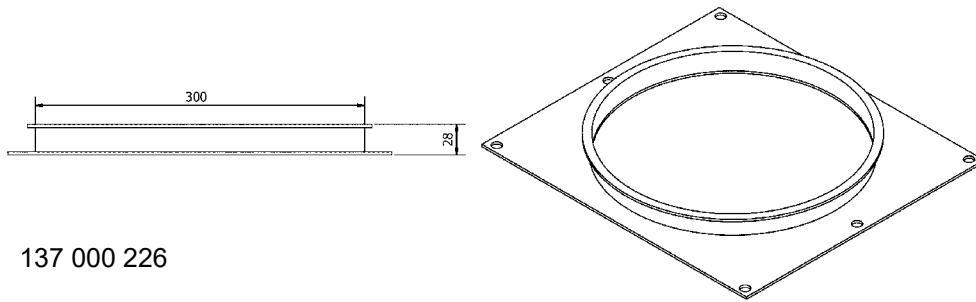
137 000 232: Outlet manual with chain wheel



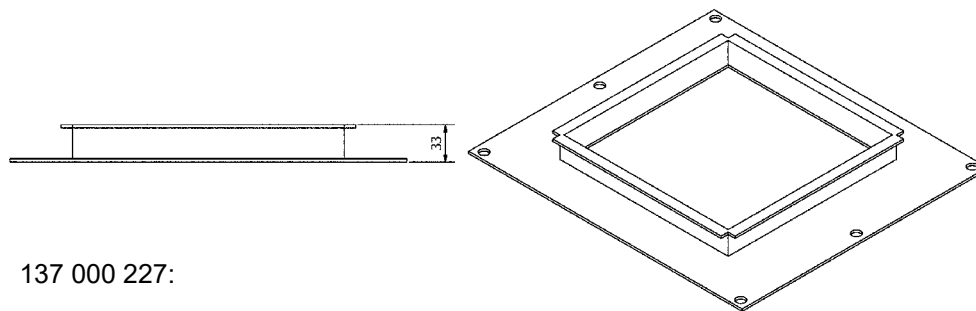
137 000 233: Outlet motorized



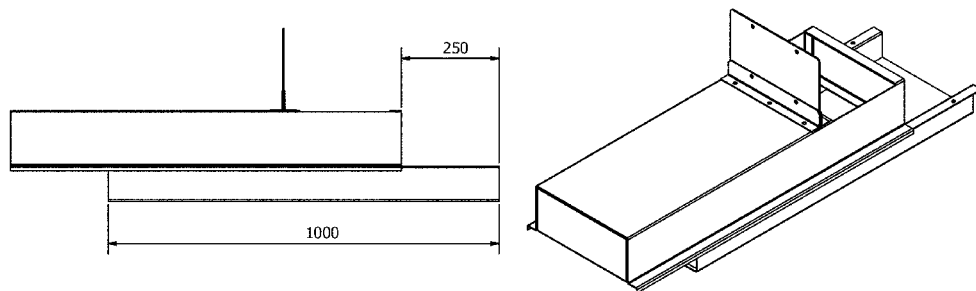
## Assesories - Chain Conveyors type KCC 120



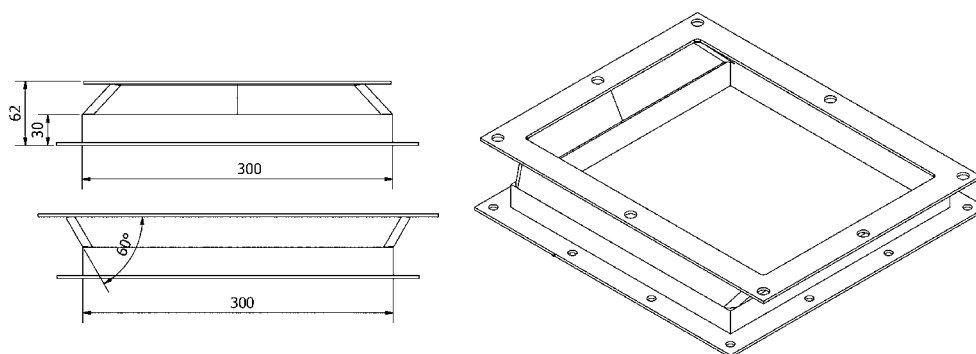
137 000 226



137 000 227:



137 000 237: Inlet double bottom 1 m. cap. reg



137 000 287: Adapter Q30





Air solutions / your success

Kongskilde Industries A/S  
Skælskørvej 64  
DK-4180 Sorø • Denmark  
Tel. +45 72 17 60 35  
[grain@kongskilde-industries.com](mailto:grain@kongskilde-industries.com)  
[www.kongskilde-industries.com](http://www.kongskilde-industries.com)