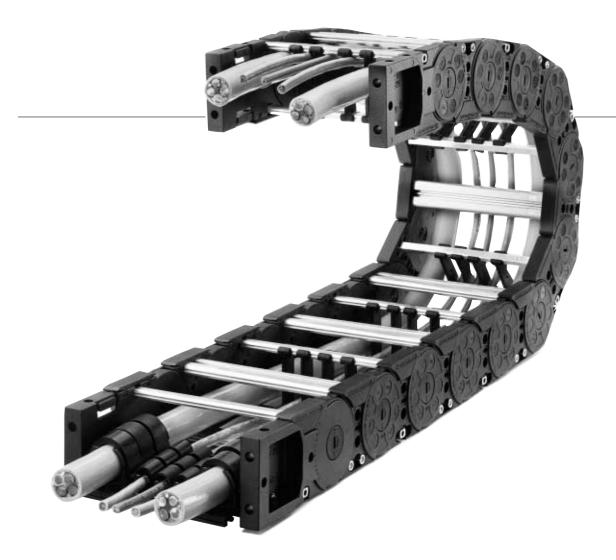
# Energy Guiding Chains Series 3113/3114 Cobra

3113 Cobra 38 K 3114 Cobra 58 M 3114 Cobra 72 M





3113 Cobra 38 K

### Energy Guiding Chains Series 3113/3114 Cobra

Versatile <b>Cobra</b> Energy Guiding Chains make it possible to configure the ideal solution for medium to high loads.	Main applications -Medium-size to large bridge cranes -Container cranes and RTGs -Order picking systems -Vertical people movers -Composting plants -Woodworking machinery -Washing systems/car washe	S Series 3112 Series 3116/3117	Chain typeMaterialsDuo-link plastic chain with nar- row RS aluminum frame stays, force-fit design for easy removal.Glass-fiber reinfor (halogen-free, sili Aluminum alloy. Special materials for applications ir or high temperation in explosion-prot
<b>Ordering Guide</b> (Example) <b>Cobra 58 M</b> Energy Guiding	<ul> <li>-Water-treatment plants</li> <li>-Transport of fluid media (molding sand, hydraulic oil, compressed air)</li> <li>B<sub>i</sub> = 300 mm, bending radius KR = 170 mm, with desired</li> </ul>	Viper Воа in every second link, abrasion-proof anti-friction	RS Half frame
Chain system with solid RM ame stays, inside width System components energy Text for order	length of 14 meters, seven vertical separators preinstalled guiding chain Quantity		
<b>1. Chain</b> Cobra 58 M RM half frame Ene with inside width $B_i = 300 \text{ mm}$ with bending radius $K_B = 170 \text{ r}$		311458-300-RM-170	
<b>2. Vertical separators</b> 7 vertical separators TS 0 in ever second link, preassembled	ery 98.42 m	311458-TS0-RM-MT	
<b>3. Connectors</b> Universal connector with C pro	file 1 set	311458-ASU-C	
<b>4. Skids</b> Anti-friction skids, preassemble	ed 14.06 m	311458-GLE-MT	a to to
<ul> <li>System components for guid see technical data sheets for S</li> <li>System components for cab see technical data sheets for S</li> </ul>	Series 3110 Dies	Sector     Sector       Bender     Control       Bender	
<ul> <li><sup>1</sup> Rounded up to 95 mm.</li> <li><sup>2</sup> Seven separators x chain length.</li> <li><sup>3</sup> Same as chain length.</li> <li><sup>4</sup> It is not necessary to provide article numbers when ordering systems. They are, however, necessary when ordering individual or replacement parts.</li> </ul>		Series 3110 Guiding elements Series 3000 Cables	

www.wampfler.com



-fiber reinforced PA en-free, silicone-free). Inside height 38 mm

al materials are available plications involving low h temperatures or use losion-protected areas.





RS Half frame

Chain types

**Energy Guiding Chain** 

Inside width Outside witdh

**B<sub>K</sub>** (mm) **B<sub>EF w/ glider disks**</sub>

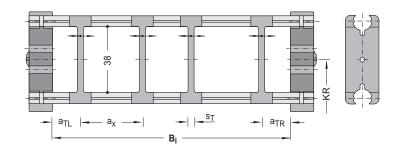
3113 Cobra 38 K

B<sub>i</sub> (mm)

### **Energy Guiding Chain** 3113 Cobra 38 K

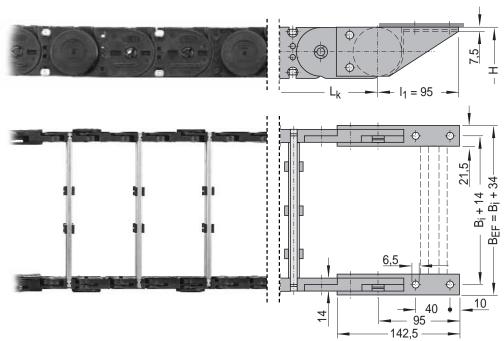
RS Half frame

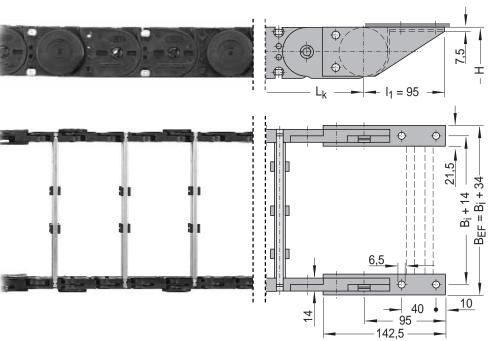
#### Vertical separators TS 0 Article Vertical separators TS 0 for Cobra 38 K, pr Vertical separators TS 0 for Cobra 38 K, se



Connectors	Standard						
	Article	Article number					
	Connectors for Cobra 38 K, standard	311338-ASE					
	Connectors for Cobra 38 K, standard with C profile	311338-ASE-C					

The standard connector is optionally available with a C profile that is used to hold the strain-relief elements. Please remember to mention this article in orders.



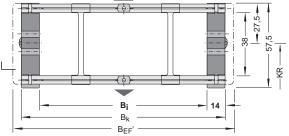


Vertical	separators	TS

150	178	186	2.1	311338-150-RS-
200	228	236	2.3	311338-200-RS-
250	278	286	2.6	311338-250-RS-
300	328	336	2.9	311338-300-RS-
350	378	386	3.2	311338-350-RS-
400	428	436	3.5	311338-400-RS-
1 = Space	e for the bending radius	KR of the chain.		5 27,5 4

Weight

G<sub>k</sub> (kg/m)

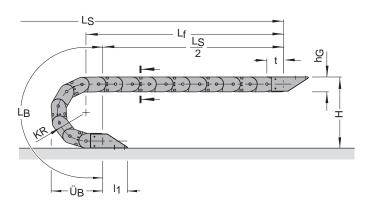


Article number KR<sup>1</sup>

#### **Design parameters**

besign parameters							
Bending radius	KR	075	115	145	175	220	
Length of bend	L <sub>B</sub>	336	492	586	680	822	
Projecting length of bend	Ü <sub>B</sub>	168	208	238	268	313	
Connecting height	Н	205	285	345	405	495	
Chain pitch	t	65					
Inside height	H <sub>i</sub>	38					
Link height	h <sub>G</sub>	57.5					
Connector length	l <sub>1</sub>	Standa	rd connecte	or 95			
		Univers	al connecto	or 71			
Self-supporting length	Lf	L <sub>f</sub> = 2.3	35 m + KR/2	250 - q <sub>z</sub> /2	2		
Additional load	Q <sub>z</sub>	max. 20	0 kg/m				

All dimensions in mm except for the self-supporting length.



To determine the length  $L_{K}$  for a self-supporting chain:

#### $L_{k} = L_{S}/2 + L_{B} + 2t$

#### Important:

If the length  $L_f$  is exceeded, the upper run will start to sag and slide on top of the lower run. The factors that determine the length of the chain vary as a function of actual operating parameters. We recommend consulting our design engineers.

L<sub>S</sub> = Travel distance

www.wampfler.com



	Article number
reassembled	311338-TS0-RS-MT
eparate	311338-TS0-RS-LS

Cobra 38 K with TS 0							
Separator thickness	$S_{T}$	3 mm					
Min. distance middle	a <sub>x min</sub>	13 mm					
Min. distance edge	a <sub>T min</sub>	6.5 mm					
The senarators can be moved							

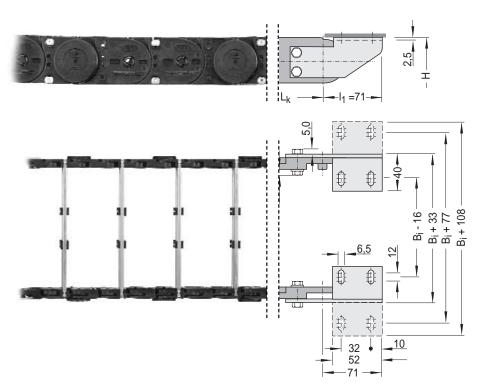
The separators can be moved horizontally and are normally provided on every second link.

RS Half frame

Connectors	Steel						
	Article	Article number 311338-ASS					
	Connectors for Cobra 38 K, steel						
	Connectors for Cobra 38 K, steel with C profile	311338-ASS-C					
	ASS connectors are made of galvan. The dimension	one of the elements for					

ASS connectors are made of galvanized steel and are primarily for vertical configurations and heavier loads.

The dimensions of the elements for the fixed point and driver element are identical.



#### **Glider disks**

Glider disks Cobra 38 K, preassembled (every 4 <sup>th</sup> link) 3	11338-GLE-MT
Glider disks Cobra 38 K, separate 3	11338-GLE-LS

The use of glider disks is recommended to achieve optimum operation of the chain in the case of long travel distances.



### **Energy Guiding Chain** 3114 Cobra 58 M

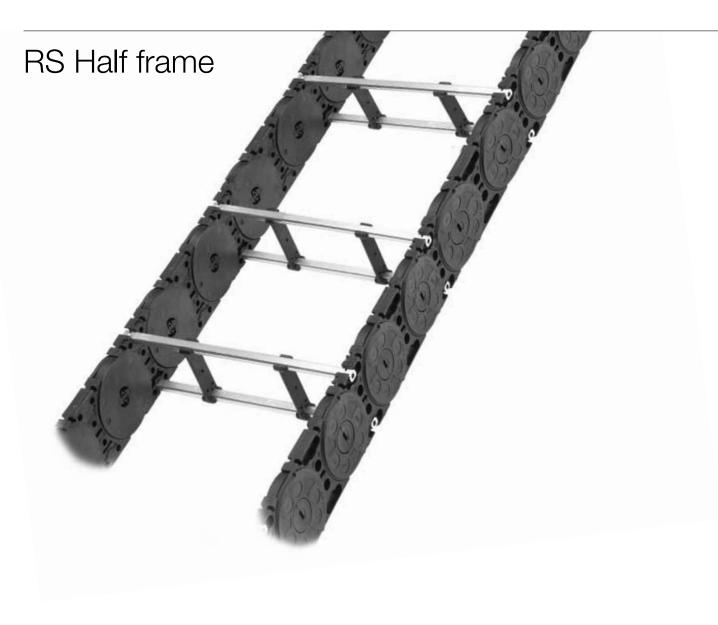
#### Chain type

Duo-link plastic chain with narrow RS aluminum frame stays, force-fit design for easy removal.

Heavy-duty energy guiding chain that features smooth operation and low weight.

#### Materials

Glass-fiber reinforced PA (halogen-free, silicone-free). Aluminum alloy. Special materials are available for applications involving low or high temperatures or use in explosion-protected areas.





Inside height 58 mm



RS Half frame

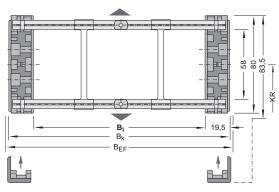
### **Energy Guiding Chain** 3114 Cobra 58 M

#### RS Half frame

#### Chain types

Inside width	Outside witdh		Weight	Article number	KR <sup>1</sup>
<b>B</b> <sub>i</sub> (mm)	<b>B<sub>k</sub></b> (mm)	<b>B<sub>EF w/ anti-friction skids</sub></b>	<b>G<sub>k</sub></b> (kg/m)		
150	189	194	3.2	311458-150-RS-	
200	239	244	3.4	311458-200-RS-	
250	289	294	3.7	311458-250-RS-	
300	339	344	3.9	311458-300-RS-	
400	439	444	4.5	311458-400-RS-	

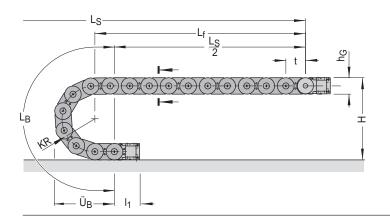
<sup>1</sup> = Space for the bending radius KR of the chain.



#### **Design parameters**

Bending radius	KR	140	170	200	260	320
Length of bend	L <sub>B</sub>	630	725	819	1007	1196
Projecting length of bend	Ü <sub>B</sub>	275	305	335	395	455
Connecting height	Н	360	420	480	600	720
Chain pitch	t	95				
Inside height	Hi	58				
Link height	h <sub>G</sub>	80 / with anti-friction skids 83.5				
Connector length	l <sub>1</sub>	Standard connector 136				
		Univers	al connecto	or 164.5		
Self-supporting length	L <sub>f</sub>	L <sub>f</sub> = 3.65 m + KR/310 - q <sub>z</sub> /12				
Additional load	Q <sub>z</sub>	max. 30	) kg/m			

All dimensions in mm except for the self-supporting length.



To determine the length  $L_{\rm K}$  for a self-supporting chain:

 $L_{k} = L_{S}/2 + L_{B} + 2t$ 

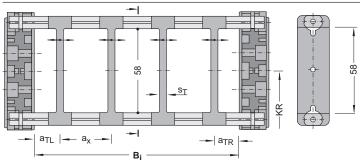
#### Important:

If the length L<sub>f</sub> is exceeded, the upper run will start to sag and slide on top of the lower run. The factors that determine the length of the chain vary as a function of actual operating parameters. We recommend consulting our design engineers.

L<sub>S</sub> = Travel distance

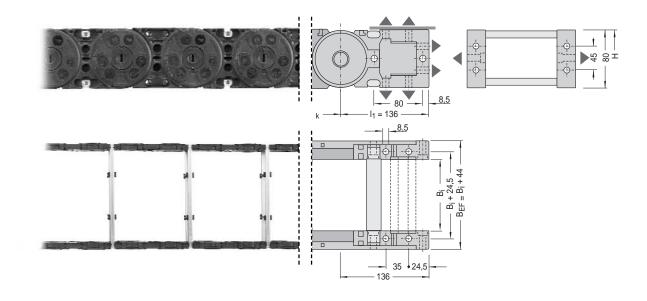
#### Vertical separators TS 0

Article	Article number
Vertical separators TS 0 for Cobra 58 M RS, preassembled	311458-TS0-RS-MT
Vertical separators TS 0 for Cobra 58 M RS, separate	311458-TS0-RS-LS



Connectors	Standard			
	Article	Article number		
	Connectors for Cobra 58 M, aluminum	311458-ASU		
	Connectors for Cobra 58 M, aluminum with C profile	311458-ASU-C		

The standard connector is optionally available with a C profile that is used to hold the strain-relief elements. Please remember to mention this article in orders.



8

www.wampfler.com

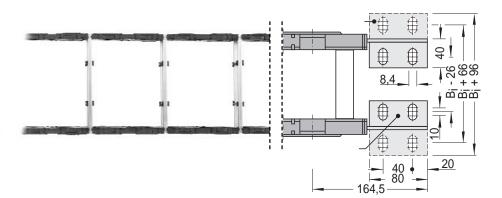
	Cobra 58 M RS wit	h TS 0		
-	Separator thickness	$S_{T}$	4 mm	
	Min. distance middle	a <sub>x min</sub>	14 mm	
8	Min. distance edge	a <sub>T min</sub>	4.5 mm	
	The separators can be moved horizontally and are normally provided on every second link.			

#### RS Half frame

Connectors	Steel			
	Article	Article number		
	Connectors for Cobra 58 M, steel	311458-ASS		
	Connectors for Cobra 58 M, steel with C profile	311458-ASS-C		
	ASS connectors are made of galvan- The dime	nsions of the elements for		

ized steel and are primarily for vertical configurations and heavier loads.

 $-l_1 = 164.5$ 



#### **Anti-friction skids**

Article	Article number
Anti-friction skids Cobra 58 M, preassembled (every link)	311458-GLE-MT
Anti-friction skids Cobra 58 M, separate	311458-GLE-LS



The use of anti-friction skids is recommended to achieve optimum operation of the chain in the case of long travel distances and short intervals between operating cycles.



the fixed point and driver element

are identical.

### **Energy Guiding Chain** 3114 Cobra 58 M

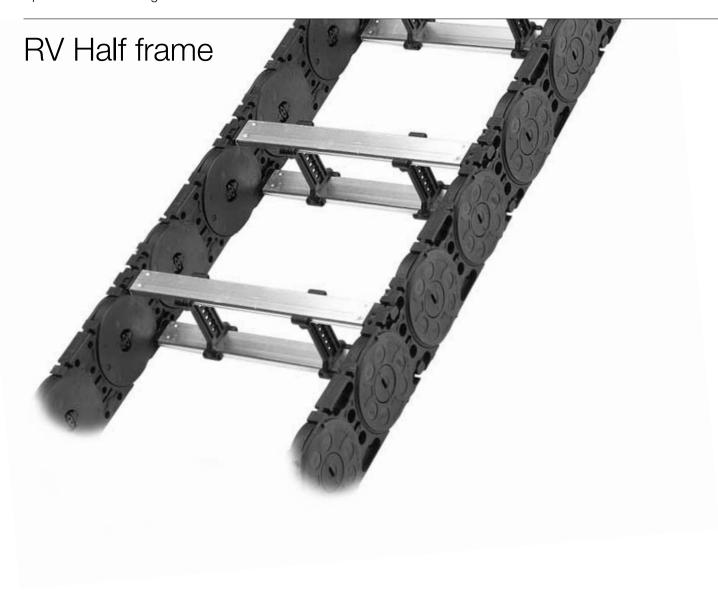
#### Chain type

Duo-link plastic chain with heavy-duty RV aluminum frame stays, force-fit design for easy removal.

Heavy-duty energy guiding chain that features smooth operation and low weight.

#### Materials

Glass-fiber reinforced PA (halogen-free, silicone-free). Aluminum alloy. Special materials are available for applications involving low or high temperatures or use in explosion-protected areas.



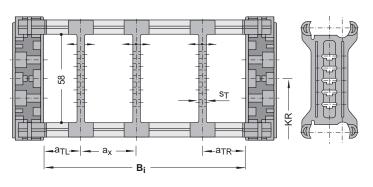


Inside height 58 mm



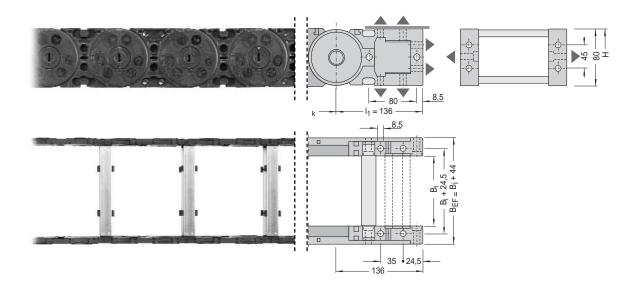
RV Half frame

#### Vertical separators TS 0 Article Vertical separators TS 0 for Cobr Vertical separators TS 0 for Cobr



Connectors	Standard			
	Article	Article number		
	Connectors for Cobra 58 M, aluminum	311458-ASU		
	Connectors for Cobra 58 M, aluminum with C profile	311458-ASU-C		

The standard connector is optionally available with a C profile that is used to hold the strain-relief elements. Please remember to mention this article in orders.



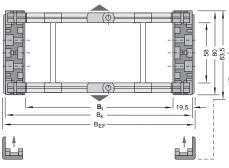
# **Energy Guiding Chain** 3114 Cobra 58 M

#### RV Half frame

#### Chain types

Inside wid	Ith Outside v	witdh	Weight	Article number	$KR^1$
<b>B</b> <sub>i</sub> (mm)	<b>B<sub>k</sub></b> (mm)	<b>B<sub>EF w/ anti-friction skids</sub></b>	<b>G<sub>k</sub></b> (kg/m)		
150	189	194	3.5	311458-150-RV-	
200	239	244	3.8	311458-200-RV-	
250	289	294	4.1	311458-250-RV-	
300	339	344	4.4	311458-300-RV-	
400	439	444	5.1	311458-400-RV-	
500	539	544	5.7	311458-500-RV-	

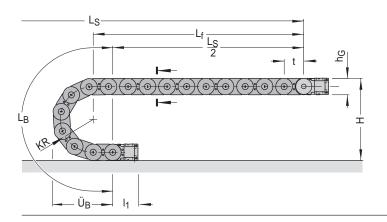
<sup>1</sup> = Space for the bending radius KR of the chain.



#### **Design parameters**

Bending radius	KR	140	170	200	260	320
Length of bend	L <sub>B</sub>	630	725	819	1007	1196
Projecting length of bend	Ü <sub>B</sub>	275	305	335	395	455
Connecting height	Н	360	420	480	600	720
Chain pitch	t	95				
Inside height	Hi	58				
Link height	h <sub>G</sub>	80 / with anti-friction skids 83.5				
Connector length	l <sub>1</sub>	Standard connector 136				
		Steel connector 164.5				
Self-supporting length	L <sub>f</sub>	$L_{f} = 3.65 \text{ m} + \text{KR}/310 - q_{z}/12$				
Additional load	Q <sub>z</sub>	max. 3	0 kg/m			

All dimensions in mm except for the self-supporting length.



To determine the length  $L_{k}$  for a self-supporting chain:

#### $L_{k} = L_{S}/2 + L_{B} + 2t$

#### Important:

If the length  $L_f$  is exceeded, the upper run will start to sag and slide on top of the lower run. The factors that determine the length of the chain vary as a function of actual operating parameters. We recommend consulting our design engineers.

L<sub>S</sub> = Travel distance

www.wampfler.com

www.wampfler.com

	Article number
ra 58 M RV, preassembled	311458-TS0-RV-MT
ra 58 M RV, separate	311458-TS0-RV-LS

Cobra 58 M RV with TS 0			
Separator thickness	ST	4 mm	
Min. distance middle	a <sub>x min</sub>	14 mm	
Min. distance edge $a_{T min}$ 4.5 mm			
The separators can be moved			

The separators can be moved horizontally and are normally provided on every second link.

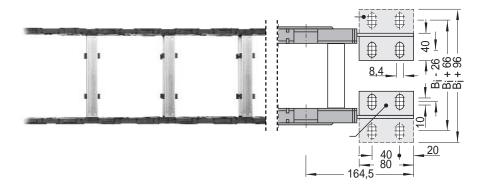
#### RV Half frame

Connectors	Steel	
	Article	Article number
	Connectors for Cobra 58 M, steel	311458-ASS
	Connectors for Cobra 58 M, steel with C pr	ofile 311458-ASS-C
	ASS connectors are made of galvan- Th	e dimensions of the elements for

are identical.

ized steel and are primarily for vertical the fixed point and driver element configurations and heavier loads.

 $-I_1 = 164,5$ 



#### Anti-friction skids

	Article	Article number
	Anti-friction skids Cobra 58 M, preassembled (every link)	311458-GLE-MT
	Anti-friction skids Cobra 58 M, separate	311458-GLE-LS
DECENT	The use of anti-friction skids is re- commended to achieve optimum operation of the chain in the case of long travel distances and short intervals between operating cycles.	

### **Energy Guiding Chain** 3114 Cobra 58 M

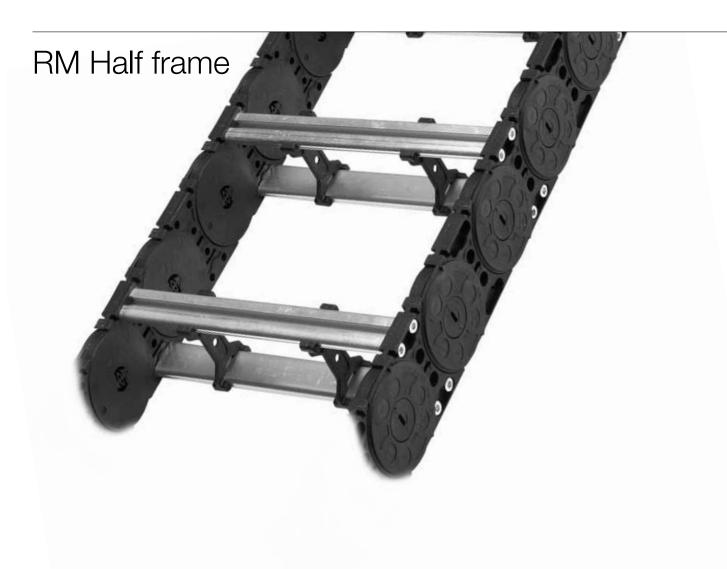
#### Chain type

Duo-link plastic chain with solid RM aluminum frame stays, installed with four screws.

Heavy-duty energy guiding chain that features smooth operation and low weight.

#### Materials

Glass-fiber reinforced PA (halogen-free, silicone-free). Aluminum alloy. Special materials are available for applications involving low or high temperatures or use in explosion-protected areas.



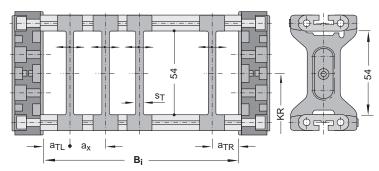


Inner height 54 mm



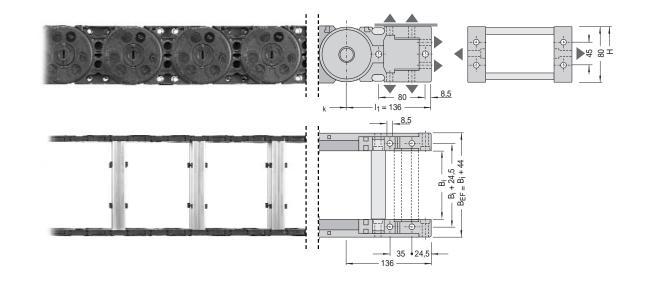
RM Half frame

Vertical separators TS 0				
Article	Article number			
Vertical separators TS 0 for Cobra 58 M RM, preassembled	311458-TS0-RM-MT			
Vertical separators TS 0 for Cobra 58 M RM, separated	311458-TS0-RM-LS			



Standard						
Article	Article number					
Connectors for Cobra 58 M, aluminum	311458-ASU					
Connectors for Cobra 58 M, aluminum with C profile	311458-ASU-C					
	Article Connectors for Cobra 58 M, aluminum					

The standard connector is optionally available with a C profile that is used to hold the strain-relief elements. Please remember to mention this article in orders.



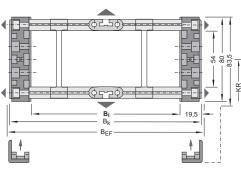
# **Energy Guiding Chain** 3114 **Cobra 58 M**

#### RM Half frame

#### Chain types

Inside	width Outs	Outside witdh		Weight	Article number	$KR^1$
<b>B</b> <sub>i</sub> (mn	n) <b>B<sub>K</sub></b> (r	mm) <b>B<sub>EF w</sub></b>	v/ anti-friction skids	<b>G<sub>k</sub></b> (kg/m)		
150	189	194		3.7	311458-150-RM-	
200	239	244		4.1	311458-200-RM-	
250	289	294		4.4	311458-250-RM-	
300	339	344		4.6	311458-300-RM-	
400	439	444		5.2	311458-400-RM-	
500	539	544		5.7	311458-500-RM-	

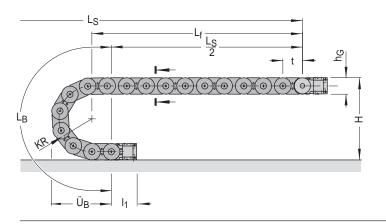
<sup>1</sup> = Space for the bending radius KR of the chain.



#### **Design parameters**

Bending radius	KR	140	170	200	260	320
Length of bend	L <sub>B</sub>	630	725	819	1007	1196
Projecting length of bend	ÜΒ	275	305	335	395	455
Connecting height	Н	360	420	480	600	720
Chain pitch	t	95				
Inside height	Hi	54				
Link height	h <sub>G</sub>	80 / wi	th anti-frict	ion skids	83.5	
Connector length	l <sub>1</sub>	Standard connector 136				
		Steel c	onnector 1	64.5		
Self-supporting length	L <sub>f</sub>	L <sub>f</sub> = 3.6	65 m + KR	/310 - q <sub>z</sub> /-	12	
Additional load	q <sub>z</sub>	max. 3	0 kg/m			

All dimensions in mm except for the self-supporting length.



To determine the length  $L_{\!K}$  for a self-supporting chain:

$$L_{k} = L_{S}/2 + L_{B} + 2t$$

#### Important:

If the length  $L_f$  is exceeded, the upper run will start to sag and slide on top of the lower run. The factors that determine the length of the chain vary as a function of actual operating parameters. We recommend consulting our design engineers.

 $L_S$  = Travel distance

www.wampfler.com

Cobra 58 M RM with TS 0					
Separator thickness	ST	4 mm			
Min. distance middle	a <sub>x min</sub>	14 mm			
Min. distance edge	a <sub>T min</sub>	7 mm			

horizontally and are normally provided on every second link.

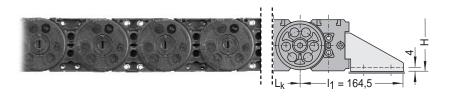
#### RM Half frame

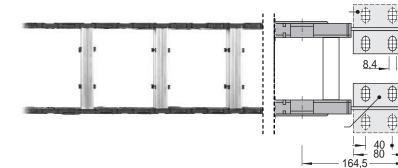
Connectors	Steel	
	Article	Article number
	Connectors for Cobra 58 M, steel	311458-ASS
	Connectors for Cobra 58 M, steel with C profile	311458-ASS-C
	ASS connectors are made of galvan- The dime	ensions of the elements for

ized steel and are primarily for vertical configurations and heavier loads.

the fixed point and driver element are identical.

in ma





#### Anti-friction skids

	Article	Article number
	Anti-friction skids Cobra 58 M, preassembled (every link)	311458-GLE-MT
	Anti-friction skids Cobra 58 M, separate	311458-GLE-LS
STORE I	The use of anti-friction skids is re- commended to achieve optimum operation of the chain in the case of long travel distances and short intervals between operating cycles.	

### **Energy Guiding Chain** 3114 Cobra 58 M

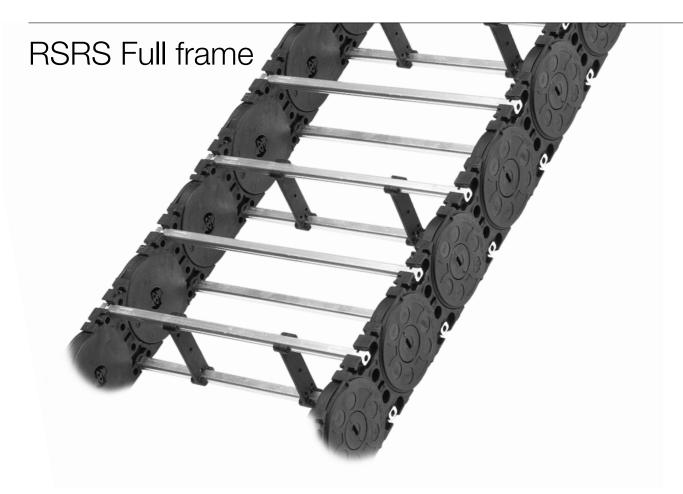
#### Chain type

Duo-link plastic chain with narrow RS aluminum frame stays, force-fit design for easy removal.

Heavy-duty energy guiding chain that features smooth operation and low weight.

#### Materials

Glass-fiber reinforced PA (halogen-free, silicone-free). Aluminum alloy. Special materials are available for applications involving low or high temperatures or use in explosion-protected areas.





Inside height 58 mm



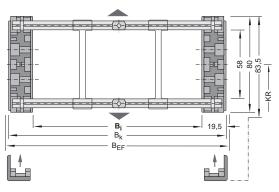
RSRS Full frame

### Energy Guiding Chain 3114 Cobra 58 M RSRS Full Frame

#### Chain types

Inside width	Outside v	Outside witdh		Article number	$KR^1$
<b>B<sub>i</sub></b> (mm)	<b>B<sub>k</sub></b> (mm)	BEF w/ anti-friction skids	<b>G<sub>k</sub></b> (kg/m)		
150	189	194	3.3	311458-150-RSRS-	
200	239	244	3.6	311458-200-RSRS-	
250	289	294	3.9	311458-250-RSRS-	
300	339	344	4.2	311458-300-RSRS-	
 400	439	444	4.9	311458-400-RSRS-	

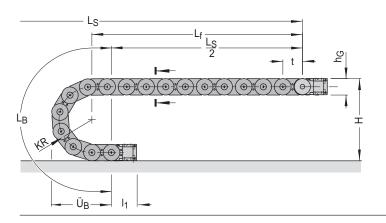
<sup>1</sup> = Space for the bending radius KR of the chain.



#### **Design parameters**

Bending radius	KR	140	170	200	260	320	
Length of bend	L <sub>B</sub>	630	725	819	1007	1196	
Projecting length of bend	Ü <sub>B</sub>	275	305	335	395	455	
Connecting height	Н	360	420	480	600	720	
Chain pitch	t	95					
Inside height	Hi	58					
Link height	h <sub>G</sub>	80 / wi	ith anti-fricti	on skids	33.5		
Connector length	l <sub>1</sub>	Standa	ard connect	or 136			
		Steel c	onnector	164.5			
Self-supporting length	Lf	L <sub>f</sub> = 3.6	65 m + KR/	310 - q <sub>z</sub> /1	2		
Additional load	Q <sub>z</sub>	max.30	) kg/m				

All dimensions in mm except for the self-supporting length.



To determine the length  $L_{\rm K}$  for a self-supporting chain:

$$L_{k} = L_{S}/2 + L_{B} + 21$$

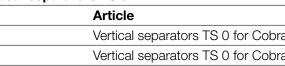
#### Important:

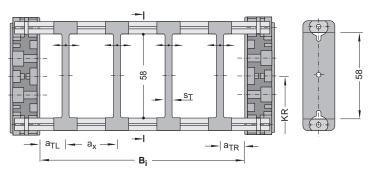
If the length L  $_{\rm f}$  is exceeded, the upper run will start to sag and slide on top of the lower run. The factors that determine the length of the chain vary as a function of actual operating parameters. We recommend consulting our design engineers.

L<sub>S</sub> = Travel distance

www.wampfler.com

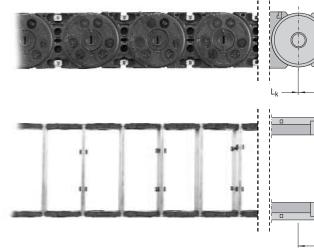
Vertical separators TS 0





Connectors	Standard	
	Article	Article number
	Connectors for Cobra 58 M, aluminum	311458-ASU
	Connectors for Cobra 58 M, aluminum with C profile	311458-ASU-C

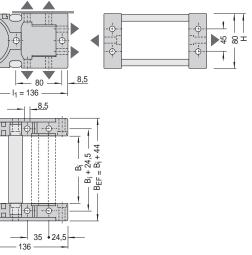
The standard connector is optionally available with a C profile that is used to hold the strain-relief elements. Please remember to mention this article in orders.



	Article number
a 58 M RS, preassembled	311458-TS0-RS-MT
a 58 M RS, separate	311458-TS0-RS-LS

Cobra 58 M RS wit	h TS 0	
Separator thickness	$S_T$	4 mm
Min. distance middle	a <sub>x min</sub>	14 mm
Min. distance edge	a <sub>T min</sub>	4.5 mm
The separators can be		

horizontally and are normally provided on every second link.



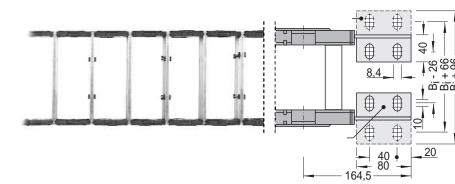
RSRS Full frame

Connectors	Steel	
	Article	Article number
	Connectors for Cobra 58 M, steel	311458-ASS
	Connectors for Cobra 58 M, steel with C profile	311458-ASS-C
	ASS connectors are made of galvan- The dime	nsions of the elements for

are identical.

ized steel and are primarily for vertical the fixed point and driver element configurations and heavier loads.

 $-l_1 = 164,5$ 



#### Anti-friction skids

	Article	Article number
	Anti-friction skids Cobra 58 M, preassembled (every link)	311458-GLE-MT
	Anti-friction skids Cobra 58 M, separate	311458-GLE-LS
<b>BARRIE</b>	The use of anti-friction skids is re- commended to achieve optimum operation of the chain in the case of long travel distances and short intervals between operating cycles.	

### **Energy Guiding Chain** 3114 Cobra 58 M

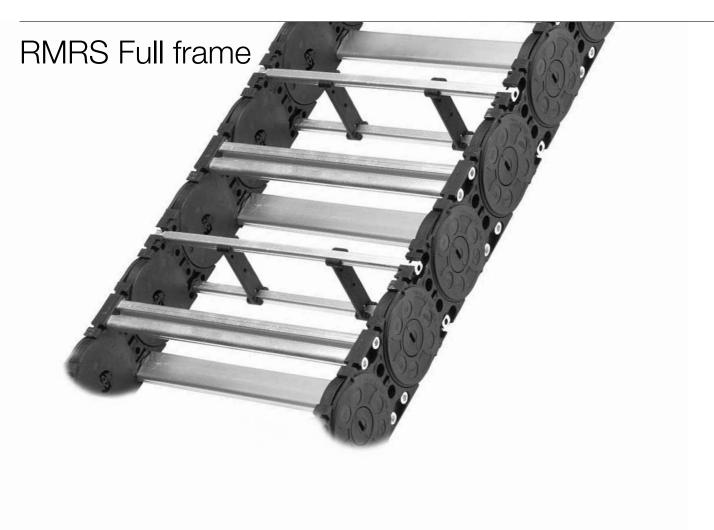
#### Chain type

Duo-link plastic chain with narrow RS aluminum frame stays with force-fit for easy removal alternating with solid RM aluminum frame stays installed with four screws.

Heavy-duty energy guiding chain that features smooth operation and low weight.

#### Materials

Glass-fiber reinforced PA (halogen-free, silicone-free). Aluminum alloy. Special materials are available for applications involving low or high temperatures or use in explosion-protected areas.





Inside height 54 mm



**RMRS Full Frame** 

#### 3114 Cobra 58 M **RMRS** Full frame Chain types Inside width Outside witdh Weight B<sub>i</sub> (mm) **B<sub>k</sub>** (mm) BEF w/ anti-friction skids **G<sub>k</sub>** (kg/m) 150 189 194 3.8 200 239 244 4.3 250 294 289 4.6

**Energy Guiding Chain** 

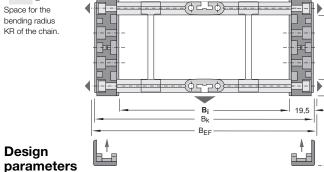
1 = Space for the bending radius KR of the chain.

Design

300

400

500



339

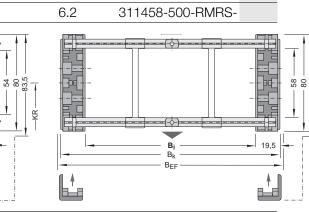
439

539

344

444

544



Article number

311458-150-RMRS-

311458-200-RMRS-

311458-250-RMRS-

311458-300-RMRS-

311458-400-RMRS-

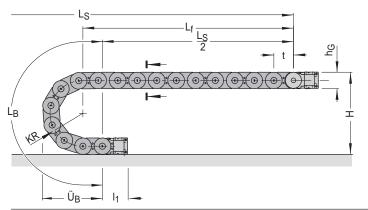
4.9

5.6

 $\mathsf{KR}^1$ 

Bending radius	KR	140	170	200	260	320	
Length of bend	L <sub>B</sub>	630	725	819	1007	1196	
Projecting length of bend	ÜΒ	275	305	335	395	455	
Connecting height	Н	360	420	480	600	720	
Chain pitch	t	95					
Inside height	H <sub>i</sub>	54					
Link height	h <sub>G</sub>	80 / wi	th anti-fricti	on skids 8	33.5		
Connector length	l <sub>1</sub>	Standa	ard connec <sup>.</sup>	tor 136			
		Steel c	onnector	164.5			
Self-supporting length	L <sub>f</sub>	$L_{f} = 3.0$	65 m + KR	/310 - q <sub>z</sub> /1	12		
Additional load	qz	max. 3	0 kg/m				

All dimensions in mm except for the self-supporting length.



To determine the length  $L_{k}$  for a self-supporting chain:

#### $L_{k} = L_{S}/2 + L_{B} + 2t$

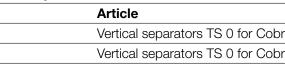
#### Important:

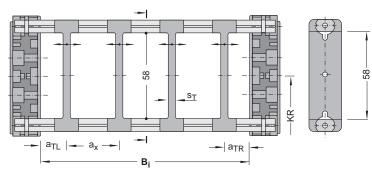
If the length  $L_f$  is exceeded, the upper run will start to sag and slide on top of the lower run. The factors that determine the length of the chain vary as a function of actual operating parameters. We recommend consulting our design engineers.

L<sub>S</sub> = Travel distance

www.wampfler.com

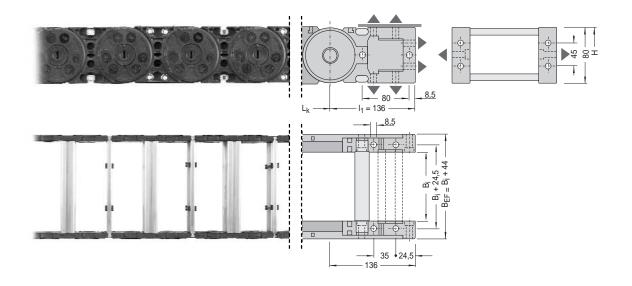
Vertical separators TS 0





Connectors	Standard	
	Article	Article number
	Connectors for Cobra 58 M, aluminum	311458-ASU
	Connectors for Cobra 58 M, aluminum with C profile	311458-ASU-C

The standard connector is optionally available with a C profile that is used to hold the strain-relief elements. Please remember to mention this article in orders.



www.wampfler.com

	Article number
ra 58 M RS, preassembled	311458-TS0-RS-MT
ra 58 M RS, separate	311458-TS0-RS-LS

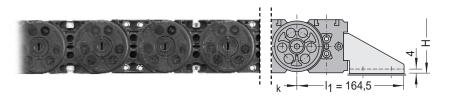
Cobra 58 M RS wit	h TS 0	
Separator thickness	$S_{T}$	4 mm
Min. distance middle	a <sub>x min</sub>	14 mm
Min. distance edge	a <sub>T min</sub>	4.5 mm
The separators can be horizontally and are r provided on every se	normally	1

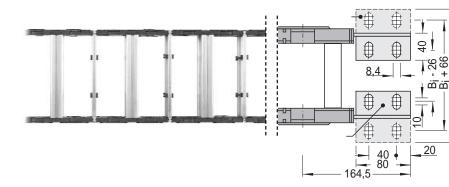
#### RMRS Full frame

Connectors	Steel	
	Article	Article number
	Connectors for Cobra 58 M, steel	311458-ASS
	Connectors for Cobra 58 M, steel with C profile	311458-ASS-C
	ASS connectors are made of galvan-	ions of the elements for

are identical.

ized steel and are primarily for vertical the fixed point and driver element configurations and heavier loads.





#### Anti-friction skids

	Article	Article number
	Anti-friction skids Cobra 58 M, preassembled (every link)	311458-GLE-MT
	Anti-friction skids Cobra 58 M, separate	311458-GLE-LS
STORE I	The use of anti-friction skids is re- commended to achieve optimum operation of the chain in the case of long travel distances and short intervals between operating cycles.	

### **Energy Guiding Chain** 3114 Cobra 72 M

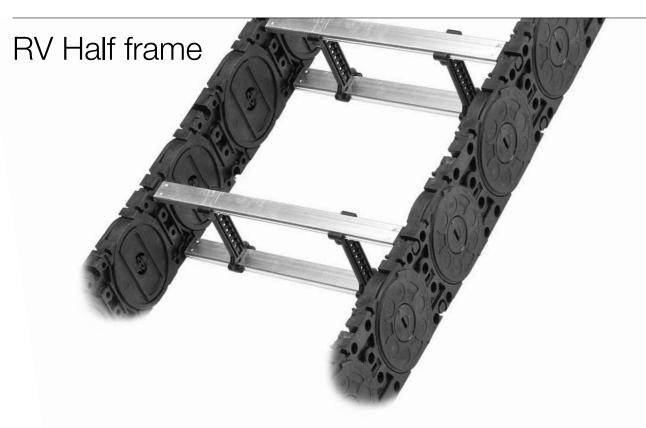
#### Chain type

Duo-link plastic chain with heavy-duty RV aluminum frame stays, force-fit design for easy removal.

Heavy-duty energy guiding chain that features smooth operation and low weight.

#### Materials

Glass-fiber reinforced PA (halogen-free, silicone-free). Aluminum alloy. Special materials are available for applications involving low or high temperatures or use in explosion-protected areas.



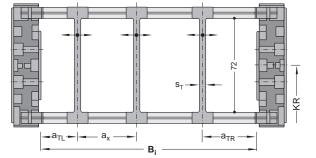


Inside height 72 mm



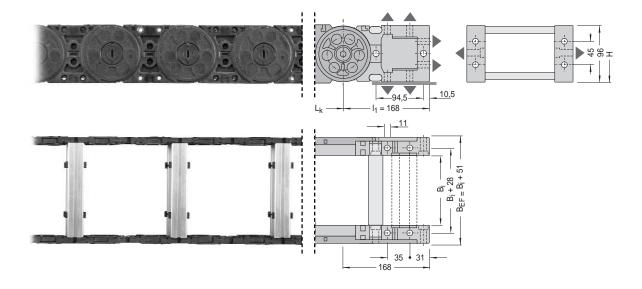
RV Half frame

#### Vertical separators TS 0 Article Vertical separators TS 0 for Cobra Vertical separators TS 0 for Cobra



Connectors	Standard	
	Article	Article number
	Connectors for Cobra 72 M, aluminum	311472-ASU
	Connectors for Cobra 72 M, aluminum with C profile	311472-ASU-C

The standard connector is optionally available with a C profile that is used to hold the strain-relief elements. Please remember to mention this article in orders.



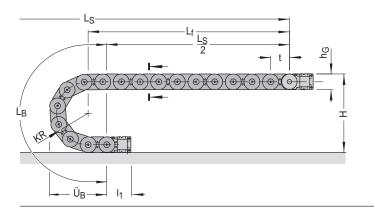
# **Energy Guiding Chain** 3114 Cobra 72 M

RV Half frame

#### Chain types

	Inside width	Outside v	vitdh		Weig	ht	Article nu	mber	KR
	<b>B<sub>i</sub></b> (mm)	<b>B<sub>k</sub></b> (mm)	B <sub>EF w/ a</sub>	nti-friction skids	G <sub>k</sub> (k	(g/m)			
	150	195	201		4.3		311472-18	50-RV-	
	200	245	251		4.6		311472-20	00-RV-	
	250	295	301		4.8		311472-25	50-RV-	
	300	345	351		5.0		311472-30	00-RV-	
	350	395	401		5.2		311472-38	50-RV-	
	400	445	451		5.3		311472-40	00-RV-	
	500	545	551		5.6		311472-50	00-RV-	
	600	645	651		6.0		311472-60	00-RV-	
					16 1	11			
esign para	ameters						(()) B <sub>i</sub> B <sub>k</sub> B <sub>EF</sub>		
esign para	ameters Bending radio	us	KR	180	220	260	(0) B <sub>1</sub> B <sub>2</sub> B <sub>3</sub> B <sub>4</sub> B <sub>4</sub> B 4 B <sub>4</sub> B <sub></sub>	340	
esign para			KR L <sub>B</sub>	<b>180</b> 816	<b>220</b> 942	<b>260</b> 1067	(Ф) В <sub>1</sub> В <sub>2</sub> В <sub>3</sub> В	Ĥ	
esign para	Bending radiu	d						340	
esign para	Bending radio	d :h of bend	L <sub>B</sub>	816	942	1067	1193	<b>340</b> 1319	
esign para	Bending radiu Length of benc Projecting lengt	d :h of bend	L <sub>B</sub> Ü <sub>B</sub>	816 353	942 393	1067 433	1193 473	<b>340</b> 1319 513	
esign para	Bending radiu Length of bence Projecting lengt Connecting he	d :h of bend	L <sub>B</sub> Ü <sub>B</sub> H	816 353 456	942 393	1067 433	1193 473	<b>340</b> 1319 513	
esign para	Bending radiu Length of benc Projecting lengt Connecting he Chain pitch	d :h of bend	L <sub>B</sub> Ü <sub>B</sub> H	816 353 456 125	942 393 536	1067 433 616	1193 473 696	<b>340</b> 1319 513	
esign para	Bending radiu Length of bence Projecting lengt Connecting he Chain pitch Inside height	d :h of bend ight	L <sub>B</sub> Ü <sub>B</sub> H t H <sub>i</sub>	816 353 456 125 72	942 393 536 anti-frictio	1067 433 616 on skids	1193 473 696	<b>340</b> 1319 513	
esign para	Bending radiu Length of bence Projecting lengt Connecting he Chain pitch Inside height Link height	d :h of bend ight	L <sub>B</sub> Ü <sub>B</sub> H t H <sub>i</sub> h <sub>G</sub>	816 353 456 125 72 96/with	942 393 536 anti-frictio connect	1067 433 616 on skids	1193 473 696	<b>340</b> 1319 513	
esign para	Bending radiu Length of bence Projecting lengt Connecting he Chain pitch Inside height Link height	d :h of bend :ight gth	L <sub>B</sub> Ü <sub>B</sub> H t H <sub>i</sub> h <sub>G</sub>	816 353 456 125 72 96 / with Standard	942 393 536 anti-frictio connect nector	1067 433 616 on skids or 168 212	1193 473 696 99.5	<b>340</b> 1319 513	

All dimensions in mm except for the self-supporting length.



To determine the length  $L_{K}$  for a self-supporting chain:

 $L_{k} = L_{S}/2 + L_{B} + 2t$ 

#### Important:

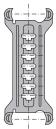
If the length L  $_{\rm f}$  is exceeded, the upper run will start to sag and slide on top of the lower run. The factors that determine the length of the chain vary as a function of actual operating parameters. We recommend consulting our design engineers.

L<sub>S</sub> = Travel distance

www.wampfler.com

www.wampfler.com

	Article number
a 72 M RV, preassembled	311472-TS0-RV-MT
a 72 M RV, separate	311472-TS0-RV-LS



Cobra 72 M RV with TS 0					
Separator thickness	$S_T$	6 mm			
Min. distance middle	a <sub>x min</sub>	16 mm			
Min. distance edge	a <sub>T min</sub>	5.5 mm			
The separators can be moved					

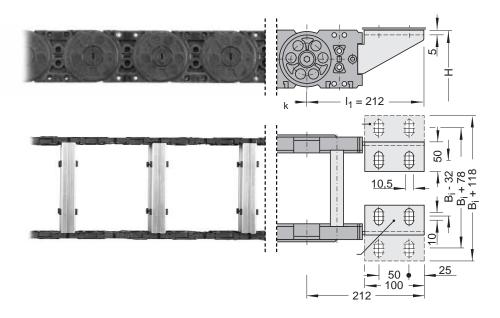
horizontally and are normally provided on every second link.

#### RV Half frame

Connectors	Steel			
	Article	Article number		
	Connectors for Cobra 72 M, steel		311472-ASS	
	Connectors for Cobra 72 M, steel with	C profile	311472-ASS-C	
	ASS connectors are made of galvan-		ons of the elements for	

ized steel and are primarily for vertical configurations and heavier loads.

the fixed point and driver element are identical.



#### Anti-friction skids

Article	Article number
Anti-friction skids Cobra 72 M, preassembled (every link)	311472-GLE-MT
Anti-friction skids Cobra 72 M, separate	311472-GLE-LS



The use of anti-friction skids is recommended to achieve optimum operation of the chain in the case of long travel distances and short intervals between operating cycles.



### **Energy Guiding Chain** 3114 Cobra 72 M

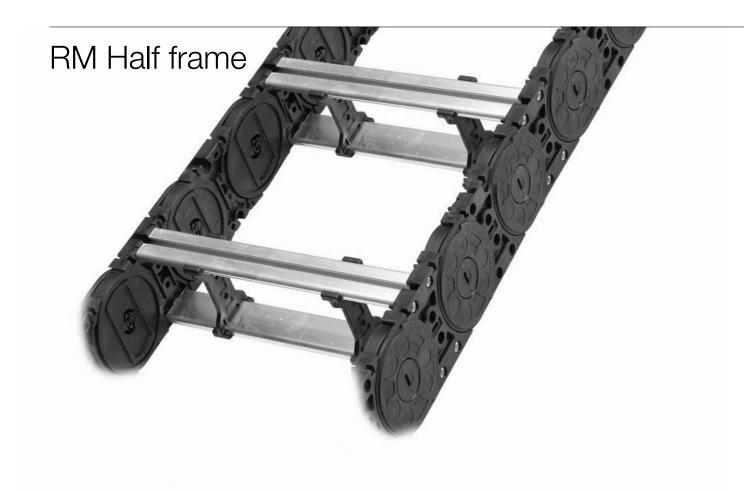
#### Chain type

Duo-link plastic chain with solid RM aluminum frame stays, installed with four screws.

Heavy-duty energy guiding chain that features smooth operation and low weight.

#### Materials

Glass-fiber reinforced PA (halogen-free, silicone-free). Aluminum alloy. Special materials are available for applications involving low or high temperatures or use in explosion-protected areas.

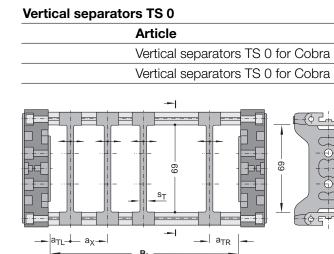




Inside height 69 mm

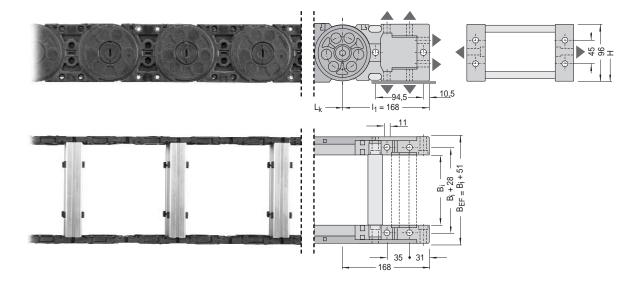


RM Half frame



Connectors	Standard		
	Article		Article number
	Connectors for Cobra 72 M, aluminum	I	311472-ASU
	Connectors for Cobra 72 M, aluminum	with C profile	311472-ASU-C
	The standard connector is optionally available with a C profile that is used		r elements can be mod- ne. A complete set is
	to hold the strain-relief elements. Please remember to mention this	• •	contains both the fixed er element connectors.

Please remember to mention this article in orders.

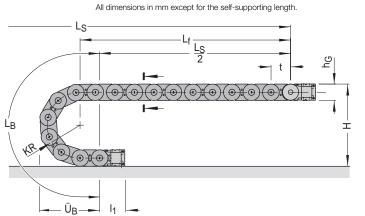


# **Energy Guiding Chain** 3114 Cobra 72 M

RM Half frame

#### Chain types

<b>B</b> <sub>i</sub> (mm) 150 200 250 300 350 400 500 600	<b>B</b> <sub>k</sub> (mm) 195 245 295 345 395 445 545	<b>B</b> <sub>EF w/</sub> 201 251 301 351 401 451 551	anti-friction ski	4.3 4.6 4.8 5.1 5.4	g/m)	311472-15 311472-20 311472-25 311472-30 311472-35	0-RM- 0-RM- 0-RM-	
200 250 300 350 400 500	245 295 345 395 445 545	201 251 301 351 401 451		4.3 4.6 4.8 5.1 5.4		311472-20 311472-25 311472-30	0-RM- 0-RM- 0-RM-	
250 300 350 400 500	295 345 395 445 545	301 351 401 451		4.8 5.1 5.4		311472-25 311472-30	0-RM- 0-RM-	
300 350 400 500	345 395 445 545	351 401 451		5.1 5.4		311472-30	0-RM-	
350 400 500	395 445 545	401 451		5.4				
400 500	445 545	451				311472-35	0-RM-	
500	545					5		
		661		5.7		311472-40	0-RM-	
600		100		6.2		311472-50	0-RM-	
	645	651		6.8		311472-60	0-RM-	
neters						() () () () () () () () () () () () () (		
Bending radiu	IS	KR	180	220	260	300	340	
Length of bend	1	L <sub>B</sub>	816	942	1067	1193	1319	
Projecting lengtl	h of bend	Ü <sub>B</sub>	353	393	433	473	513	
Connecting hei	ight	Н	456	536	616	696	776	
Chain pitch		t	125					
Inside height		H <sub>i</sub>	69					
Link height		h <sub>G</sub>	96/with	anti-friction	skids	99.5		
Connector leng	yth	$I_1$	Standard	d connector	168			
			Steel cor	nnector	212			
Self-supporting	g length	L <sub>f</sub>	L <sub>f</sub> = 4.5 ı	m + KR/250	) - q <sub>z</sub> /1	4		
Additional load		Q <sub>z</sub>	max. 50	kg/m				
	<b>Bending radiu</b> Length of bence Projecting lengt Connecting hei Chain pitch Inside height Link height Connector lenge Self-supporting Additional load	neters Bending radius Length of bend Projecting length of bend Connecting height Chain pitch Inside height Link height Connector length Self-supporting length Additional load	Bending radius       KR         Length of bend       L <sub>B</sub> Projecting length of bend       Ü <sub>B</sub> Connecting height of bend       H         Chain pitch       H         Inside height       H <sub>i</sub> Link height       h <sub>G</sub> Connector length       I <sub>1</sub> Self-supporting length       L <sub>f</sub> Additional load       q <sub>z</sub>	Bending radiusKR180Length of bend $L_B$ 816Projecting length of bend $\ddot{U}_B$ 353Connecting heightH456Chain pitcht125Inside heightHi69Link heighth_G96/withConnector lengthI1StandardSteel coSteel coSelf-supporting lengthL_fL_f = 4.5Additional load $q_z$ max. 50	netersKR180220Length of bend $L_B$ 816942Projecting length of bend $U_B$ 353393Connecting heightH456536Chain pitcht125Inside heightHi69Link heighthG96 / with anti-frictionConnector lengthI1Standard connectorSteel connectorSteel connectorSelf-supporting lengthLfLf = 4.5 m + KR/250	$\begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c } \hline \hline \begin{tabular}{ c c } \hline$	$\begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c } \hline \begin{tabular}{ c c } \hline \begi$	$ \begin{array}{c c c c c c c } \hline \begin{tabular}{ c c c c } \hline \end{tabular} \\ \hline \end{tabular} $



To determine the length  $L_{K}$  for a self-supporting chain:

- $L_{k} = L_{S}/2 + L_{B} + 2t$
- Important:

If the length  $L_f$  is exceeded, the upper run will start to sag and slide on top of the lower run. The factors that determine the length of the chain vary as a function of actual operating parameters. We recommend consulting our design engineers.

L<sub>S</sub> = Travel distance

www.wampfler.com

www.wampfler.com

	Article number
a 72 M RM, preassembled	311472-TS0-RM-MT
a 72 M RM, separate	311472-TS0-RM-LS

	P
₩ ₽ ₽	

Cobra 72 M RM with TS 0				
Separator thickness	ST	5 mm		
Min. distance middle	a <sub>x min</sub>	20 mm		
Min. distance edge	a <sub>T min</sub>	10 mm		
The separators can be moved				

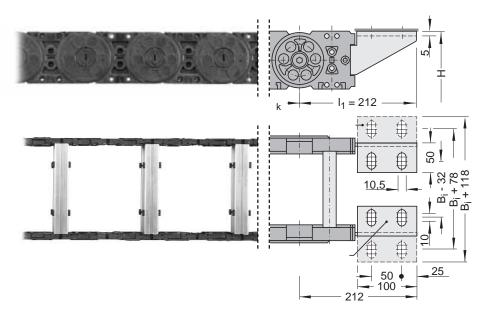
horizontally and are normally provided on every second link.

#### RM Half frame

Connectors	Steel			
	Article	Article number		
	Connectors for Cobra 72 M, steel	311472-ASS		
	Connectors for Cobra 72 M, steel with C	profile 311472-ASS-C		
	ASS connectors are made of galvan-	The dimensions of the elements for		

ized steel and are primarily for vertical configurations and heavier loads.

the fixed point and driver element are identical.



#### Anti-friction skids

	Article	Article number
	Anti-friction skids Cobra 72 M, preassembled (every link)	311472-GLE-MT
	Anti-friction skids Cobra 72 M, separate	311472-GLE-LS
0000	The use of anti-friction skids is re- commended to achieve optimum operation of the chain in the case of long travel distances and short intervals between operating cycles.	

### **Energy Guiding Chain** 3114 Cobra 72 M

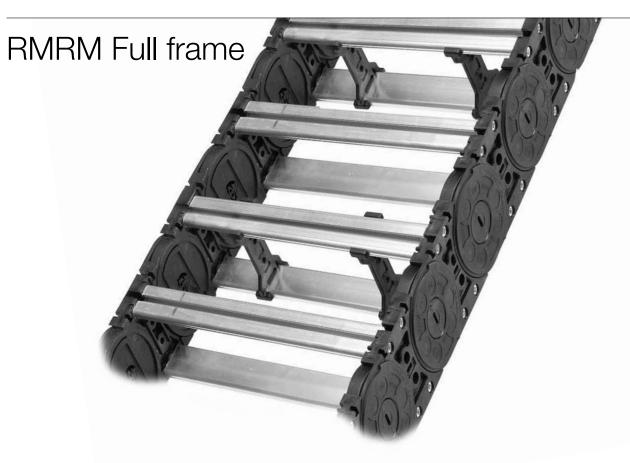
#### Chain type

Duo-link plastic chain with solid RM aluminum frame stays installed with four screws.

Heavy-duty energy guiding chain that features smooth operation and low weight.

#### Materials

Glass-fiber reinforced PA (halogen-free, silicone-free). Aluminum alloy. Special materials are available for applications involving low or high temperatures or use in explosion-protected areas.





Inside height 69 mm

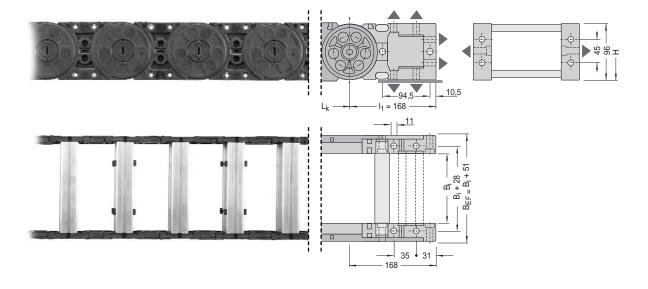


RMRM Full frame

### Vertical separators TS 0 Article Vertical separators TS 0 for Cobra Vertical separators TS 0 for Cobra \_\_|a<sub>TL</sub>↓\_\_ a<sub>X</sub>-\_\_| \_\_ a<sub>TR</sub>

Connectors	Standard			
	Article		Article number	
	Connectors for Cobra 72 M, aluminum		311472-ASU	
	Connectors for Cobra 72 M, aluminum	with C profile	311472-ASU-C	
	The standard connector is optionally available with a C profile that is used		r elements can be mod- ne. A complete set is	
	to hold the strain-relief elements. Please remember to mention this		contains both the fixed er element connectors.	

article in orders.

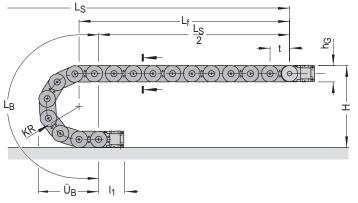


# **Energy Guiding Chain** 3114 Cobra 72 M

RMRM Full frame

#### Chain types

	Inside width	Outside witdh		Weig	ht	Article number		KR	
	<b>B<sub>i</sub></b> (mm)	B <sub>k</sub> (mm) B <sub>EF w/</sub>		anti-friction skids <b>G</b> <sub>k</sub> (kg/m)		(g/m)			-
	150	195	201		4.6		311472-150	)-RM-	
	200	245	251		5.0		311472-200	)-RM-	
	250	295	301		5.3		311472-250	)-RM-	
	300	345	351		5.6		311472-300	)-RM-	
	350	395	401		5.9		311472-350	)-RM-	
	400	445	451		6.1		311472-400	)-RM-	
	500	545	551		6.6		311472-500	)-RM-	
	600	645	651		7.2		311472-600	)-RM-	
Design pa	rameters						B <sub>i</sub>		
<u></u>	Bending radi	us	KR	180	220	260	300	340	
	Length of bend	b	L <sub>B</sub>	816	942	1067	1193	1319	
	Projecting lengt	h of bend	Ü <sub>B</sub>	353	393	433	473	513	-
	Connecting he	ight	Н	456	536	616	696	776	
	Chain pitch		t	125					
	Inside height		H <sub>i</sub>	69					
	Link height		h <sub>G</sub>	96/with a	anti-frictior	n skids 🤉	99.5		
	Connector leng	gth	l <sub>1</sub>	Standard	connecto	r 168			
				Steel conr	nector	212			
	Self-supportine	g length	L <sub>f</sub>	L <sub>f</sub> = 4.5 m	ı + KR/25	0 - q <sub>z</sub> /14	4		
	Additional load		q <sub>z</sub>	max. 50 k	g/m				
	All dimensions in mm ex	cept for the self-sup -L <sub>f</sub> $\frac{1}{L_s}$	pporting leng	th.			ermine the ler oporting chai		or a



 $L_{k} = L_{S}/2 + L_{B} + 2t$ 

#### Important:

If the length L<sub>f</sub> is exceeded, the upper run will start to sag and slide on top of the lower run. The factors that determine the length of the chain vary as a function of actual operating parameters. We recommend consulting our design engineers.

L<sub>S</sub> = Travel distance

www.wampfler.com

www.wampfler.com

	Article number			
a 72 M RM, preassembled	311472-TS0-RM-MT			
a 72 M RM, separate	311472-TS0-RM-LS			
Cobra 72 M BM with TS 0				

5	27
D	
).	
)	
2.6	

Cobra 72 M RM with TS 0				
Separator thickness	$S_{T}$	5 mm		
Min. distance middle	a <sub>x min</sub>	20 mm		
Min. distance edge	a <sub>T min</sub>	10 mm		
The separators can be moved				

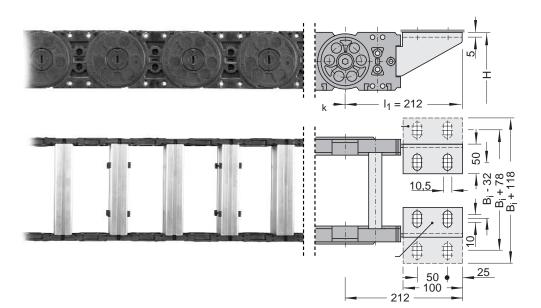
horizontally and are normally provided on every second link.

RMRM Full frame

Connectors	Steel				
	Article	Article number			
	Connectors for Cobra 72 M, steel	311472-ASS			
	Connectors for Cobra 72 M, steel with C profile	311472-ASS-C			
	ASS connectors are made of galvan- The dimensi	ons of the elements fo			

ized steel and are primarily for vertical the fixed point and driver element configurations and heavier loads.

are identical.



#### Anti-friction skids

Article	Article number
Anti-friction skids Cobra 72 M, preassembled (every link)	311472-GLE-MT
Anti-friction skids Cobra 72 M, separate	311472-GLE-LS



The use of anti-friction skids is recommended to achieve optimum operation of the chain in the case of long travel distances and short intervals between operating cycles.





3113 Cobra 38 K 3114 Cobra 58 M 3114 Cobra 72 M

#### www = wampfler world wide

The easy way: WWW. Wampfly.com

#### Wampfler AG

Rheinstrasse 27 + 33 79576 Weil am Rhein-Maerkt Germany

Customer Support Phone +49(0)7621/662222

Phone +49 (0) 76 21/6 62-0 Fax +49 (0) 76 21/6 62-144 info@wampfler.com www.wampfler.com

