

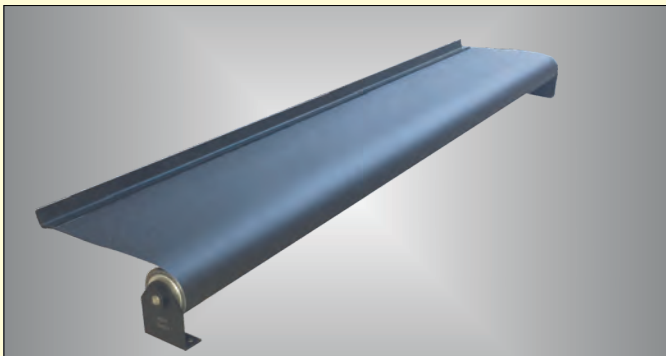


**STEINBOCK GmbH**

Industrie-Ausrüstungen • Industrial Components

# Industrial-Roll-up Covers and Cover Aprons

- As protection of the operating personnel
- As closure of openings
- As an accident protection
- As protection against contamination
- As protection against mechanical damage
- As protection against involuntary hand contact

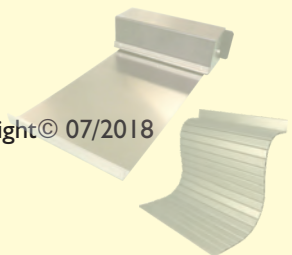


**RG 01/e**

All Dimensions in mm.

Subject to change without notice.

Copyright© 07/2018



# Content

## Roll-up Covers

	Page
General and Special	5
Guide Rails	6
Roll-up Systems	6
Band Material	6
Inquiry form for Roll-up Covers	7 + 8

## ProFlex Apron Covers

	Page
Apron Covers type K (hinge version)	11
Apron Covers type S (plugged in profiles)	11
Apron Covers type L (lightweight version)	11
Guide Rails	12
Snail-shell roll-in system	12
Inquiry form for apron covers	13
Variations and applications	14



## Roll-up Covers



## General and Special

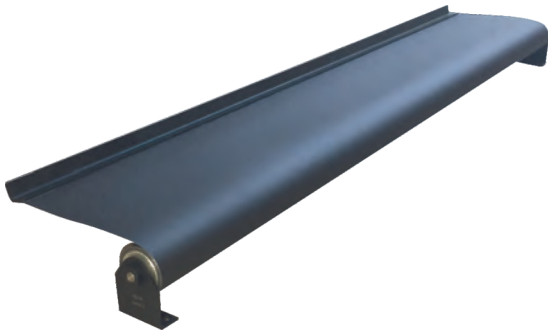
STEINBOCK roll-up covers are used successfully in all areas of the industry. They are robust, long-term proven and are manufactured customized according to the latest state-of-the-art technology.

They take into account the requirements of machinery and personal protection in accordance with European CE directives (2006/42 / EC, 2014/35 / EU) and functional safety (ISO 13849).

## Selection

Basically, all roll-up covers and ProFlex apron covers are tailor-made according to your requirements and dimensions.

When to choose a roll-up cover or apron cover **with** and when **without** housing?



### Without housing

- if a simple, inexpensive cover solution is sought,
- if the installation conditions are tight.



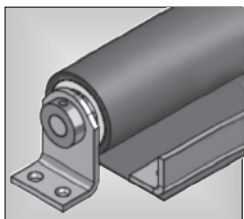
### With housing

- When the roll-up roller and/or the winding mechanism should be protected, e.g. against mechanical influences or against pollution,
- if a wiper is to be attached,
- if a pulley is to be integrated on the housing,
- if a steel band is desired.

## Selection of cover bands

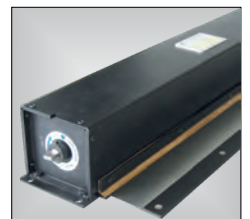
- Please see table on page 6

## Mounting

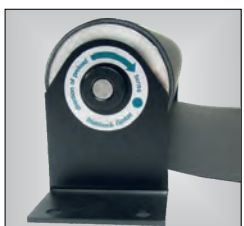


- With brackets (pointing inwards or outwards). The brackets are default in black or optionally painted in any RAL color.

- In fact, any mounting requirement for the housing can be realized (see inquiry form on page 7/8). The housing is painted in standard black or optionally in any RAL color.

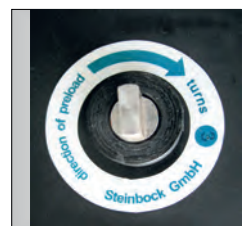


## Preload



- For roll-up covers without housing, the adjustment is made on site according to the installation instructions. The number of calculated preload revolutions is indicated on the bracket.

- Roll-up covers with housing are factory set with optimal torque. The number of preload turns is indicated on the housing and can be changed if necessary.



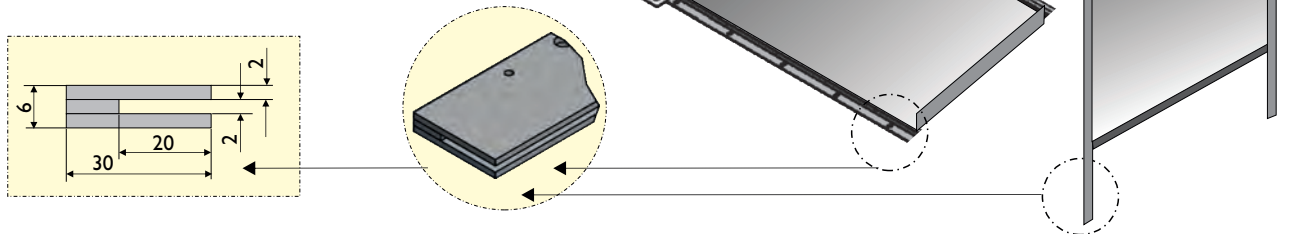
### **BETTER SAFE THAN SORRY!**

Therefore, we provide detailed drawings after receipt of the order for checking and approval.

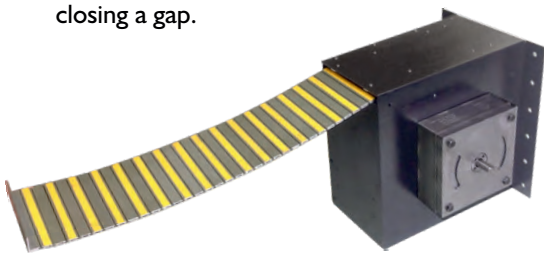


## Guide Rails

While roll-up covers with fabric band normally do not require lateral guide rails, these are indispensable for those with steel band (see illustration), as there is a risk of injury at the side edges.



Moving apron cover for closing a gap.



With AWS spring motor

## Roll-up Systems

For rolling in and out of the cover band, an internal spring motor is used. In special cases, it can also be flanged on the outside. Both equally apply to roll-up covers with fabric bands and with apron covers.

For steel band covers, the steel band itself serves as a spring motor.

## Excerpt from our wide range of cover bands for Roll-up Covers

	Material	Thickness in mm	Color	max. band width in mm
1	PUR/PES/PUR	0,21	black	1500
2	PUR/PES/PUR	0,34	black	1500
3	PUR/PES/-	0,90	black	2000
4	PUR/PES/PUR	1,10	black	1600
5	TPU/Nylon/TPU	0,80	black	1450
6	TPU/Nylon/TPU	1,10	black	1450
7	PUR/NOMEX/PUR	0,28	black	1500
8	PUR/NOMEX/PUR	0,35	black	1500
9	PTFE/PES/PUR	0,35	black	1500
10	PVC/PES/PVC	0,26	black	1500
11	PVC/PES/PVC	0,50	black	2000
12	PVC/PES/PVC	0,50	red	1500
13	PVC/PES/PVC	0,73	black	3000
14	PVC/PES/-	1,00	black	2000
15	PVC	1,00	transparent	1000
16	Stainless steel band	0,2/0,4		1200/600

PES = polyester fabric  
 PUR = polyurethane  
 TPU = Thermoplastic PUR

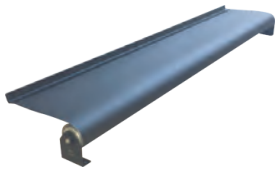
PTFE = Teflon® (®Dupont)  
 Nomex® = heat and flame retardant carrier material (®Dupont)

# Inquiry Form for Roll-up Covers (Page 1)

Please tick just how you imagine your new roll-up cover

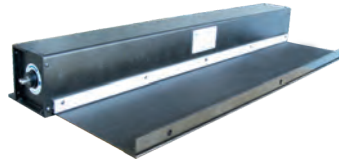
After ordering, you will receive a drawing for checking and approval.

• Without or with housing?



**Without housing**

- with fabric band
- with ProFlex apron cover



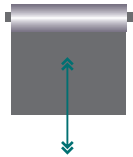
**With housing**

- with fabric band
- with steel band
- with ProFlex apron cover

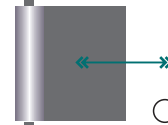
• Working direction:?



horizontal



vertical



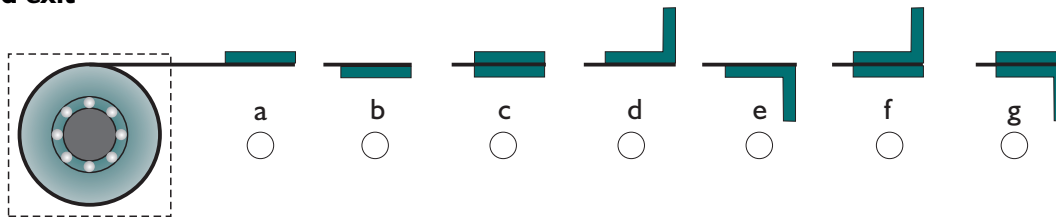
frontal

• With or without wiper?



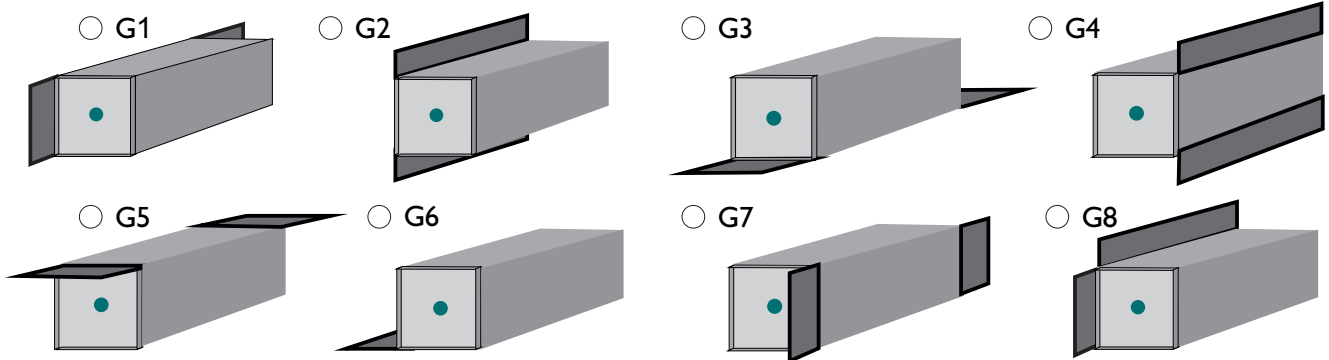
\* Chip or pollution side

• Band exit

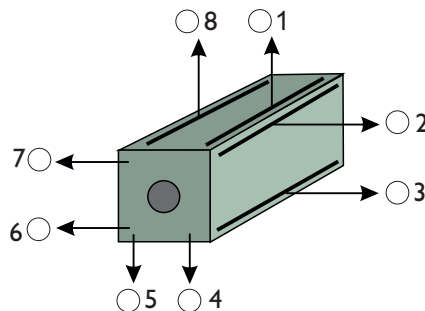


• Standard mounting of housing

Every possible mounting can be provided. A sketch or drawing is required for custom mounting



• Band exit



• Material of housing

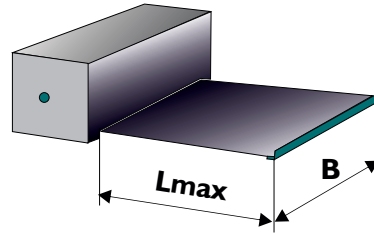
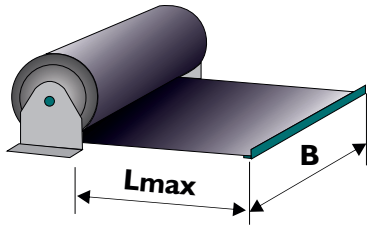
- steel
- stainless steel

Continued on next page

# Inquiry Form for Roll-up Covers (Page 2)

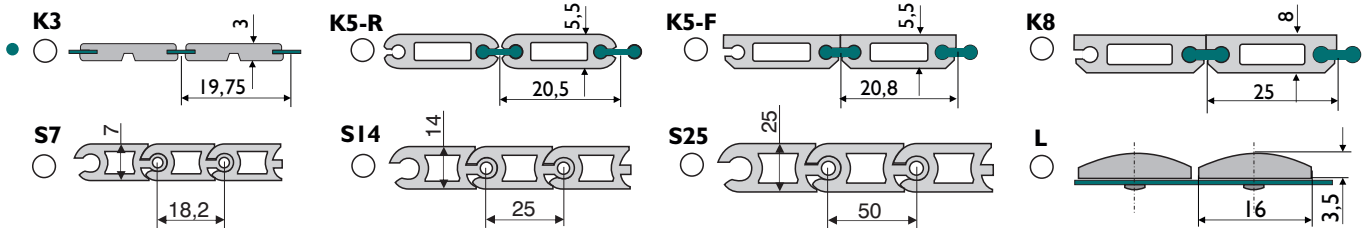
**For selecting the correct cover band and the best possible spring motor we ask to answer the following questions:**

- Intended use of cover? .....
- Will the cover be exposed for any material?     Yes     No  
 If so, which? .....  
 Which amount? .....    Temperature? ..... °C

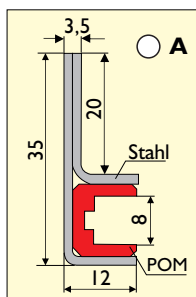


- Width of cover band or the ProFlex cover apron (B): ..... mm  
 Max. extension length (Lmax); .....mm  
 Max. travel speed: .....m/min,    max. acceleration: ..... g  
 Working cycles / h: .....    Working hours daily: .....

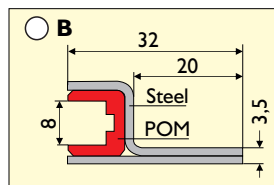
• For roll-up covers with ProFlex aprons, please state the apron type



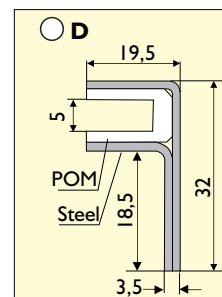
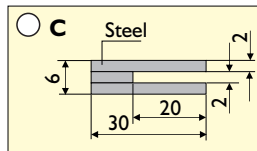
• Do you want lateral guide rails?     No     Yes (please make a selection)



For apron cover K5-R and K5-F



For textile/steel band



For apron cover K3

• Special desires? .....

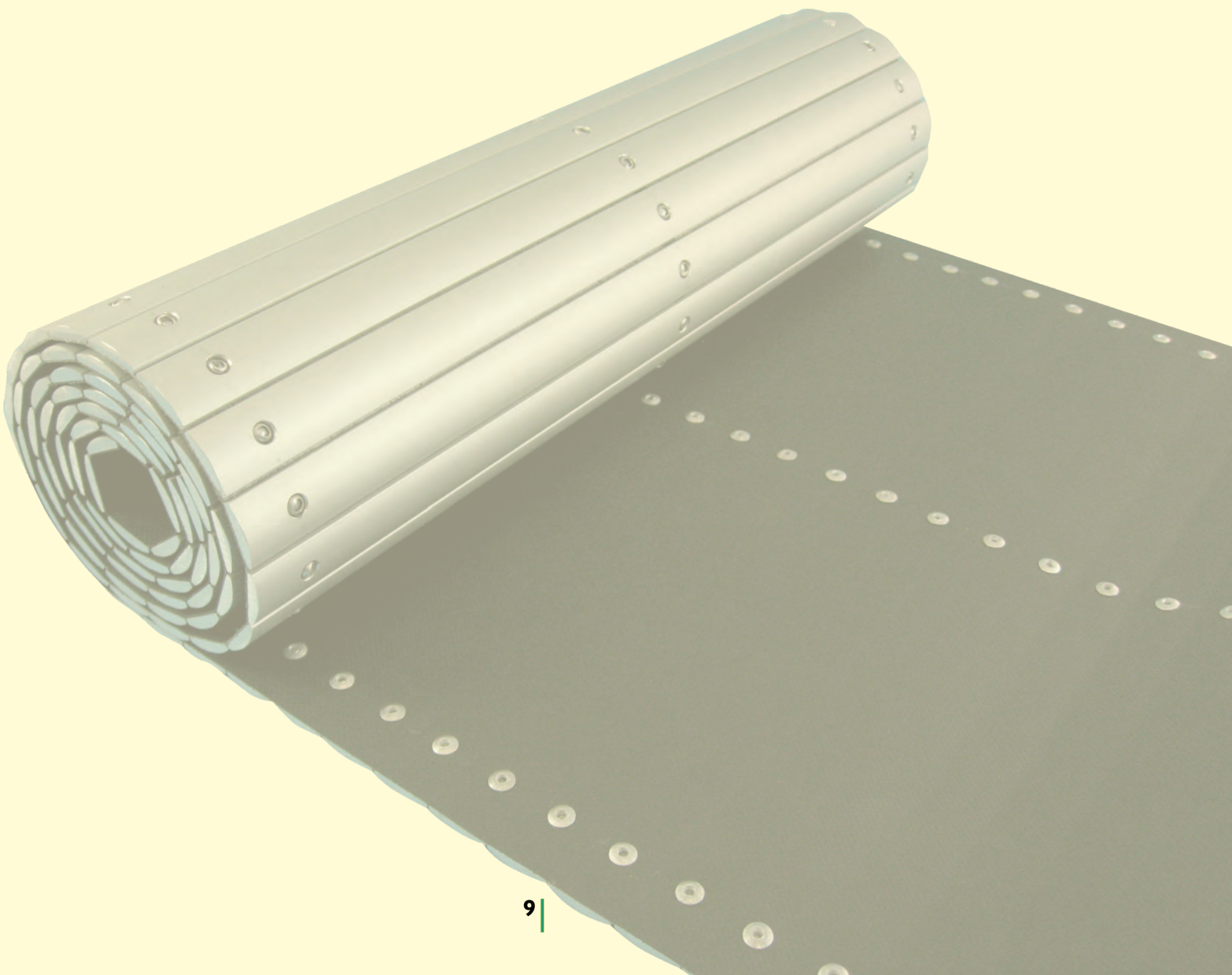
• Your requirements: ..... piece(s) only once    lot sizes ..... pieces

Company .....	Name .....
Postal code/City .....	Phone/Fax .....
Street .....	Email .....

Please copy page 7 and 8 and send it by Fax to 0049/89/999 399 85 or by Mail to: info@steinbock-industrie.de



## ProFlex Apron Covers

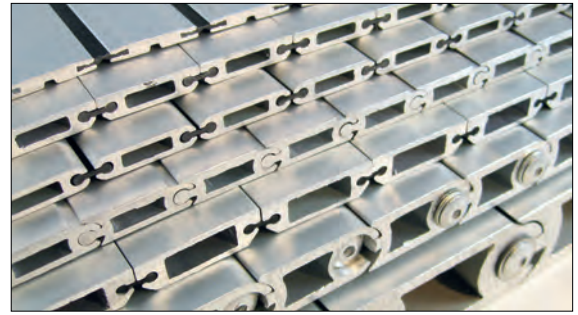


## Overview of ProFlex Apron Covers

ProFlex covers are made of precision aluminum profiles. They are anodized, light, inexpensive and fast available.

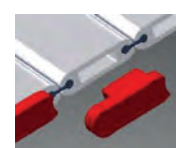
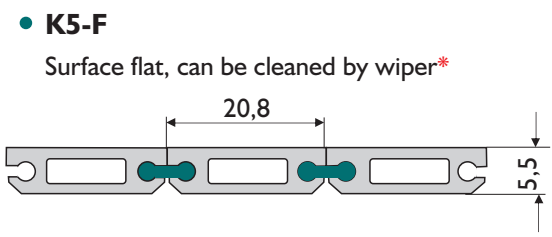
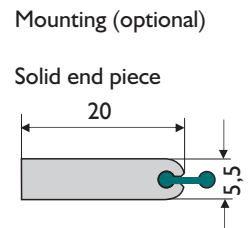
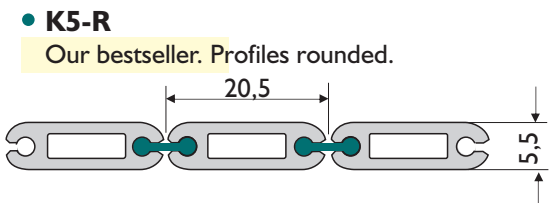
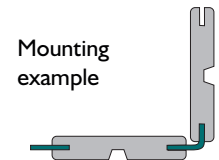
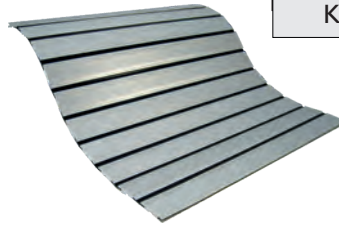
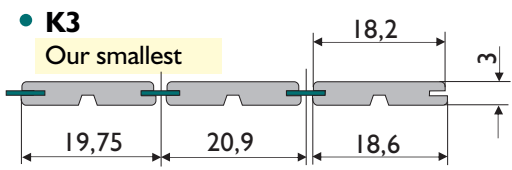
There are three series:

- 1) **Apron Covers type K** (hinge version)
- 2) **Apron Covers type S** (plugged in version)
- 3) **Apron Covers type L** (lightweight version)

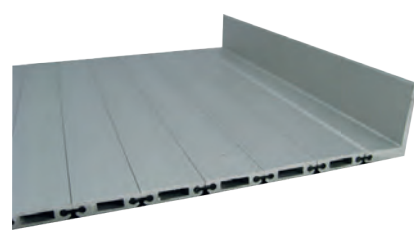
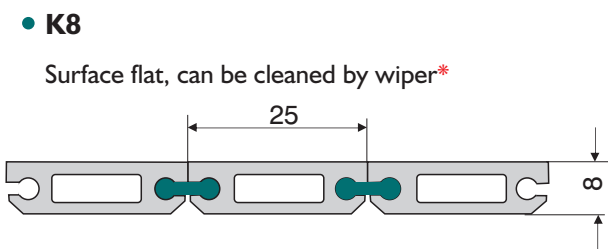
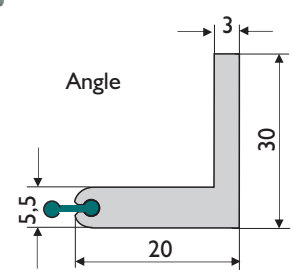


1) **Hinge version aprons (K)**. The profiles are positively connected with a highly tear-resistant polyurethane hinge. This creates an oil- and coolant-resistant surface that prevents ingress of liquids and dirt (IP54).

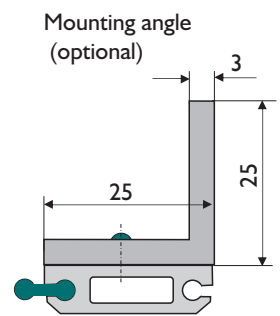
Type	Thickness mm	Min. radius mm	Bendable to both sides
K3	3	11	Yes
K5-R	5,5	25	Yes
K5-F	5,5	25	No
K8	8	25	No



Optionally with side end caps, e.g. as a glider in frontal use



Example: with mounting angle

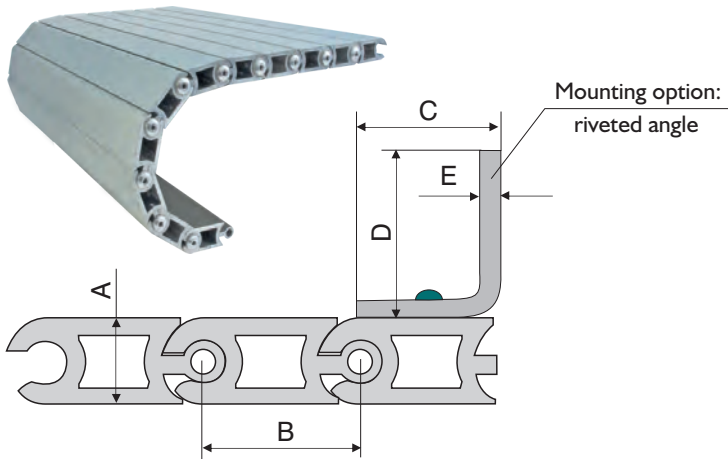


\* Can be cleaned by wiper. We recommend *started* wiper position!

## Overview of ProFlex Apron Covers

### 2) ProFlex apron covers type S (plugged in profiles)

They are available in thicknesses of 7, 14 and 25 mm. The profiles S7 are caulked against lateral slipping. The profiles S14 and S25 are riveted, either with external rivets or with countersunk rivets. The profiles can be replaced if damaged. These link aprons are **laser-compatible** and also ideal as a **tank cover** or as a **pit cover**.

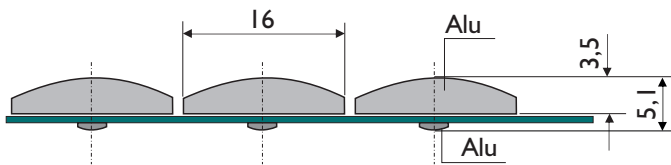


Type	A mm	B mm	C mm	D mm	E mm	min. Radius mm
S7	7	18,2	19	19	3	31
S14	14	25	25	25	3	35
S25	25	50	50	25	3	100

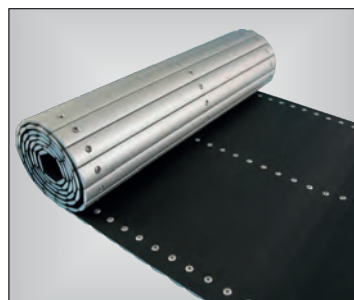
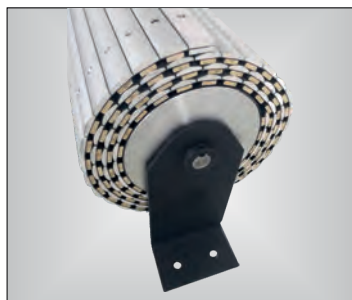
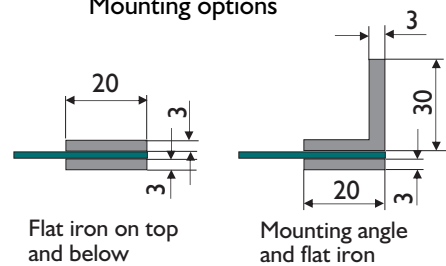
### 3) ProFlex lightweight aprons L

These long time proven ProFlex lightweight aprons are used where a simple and cost-effective protection is required.

Construction: Aluminum segments are riveted onto a highly tear-resistant coated fabric. Optionally available with steel or brass profiles.



Mounting options



Also available with spring motor





## ProFlex Aprons as roll-up covers

ProFlex aprons have proven to be ideal as a simple, cost-effective protective cover or as complex machine doors, roller shutters, lifting doors, roof covers, tank or pit covers.

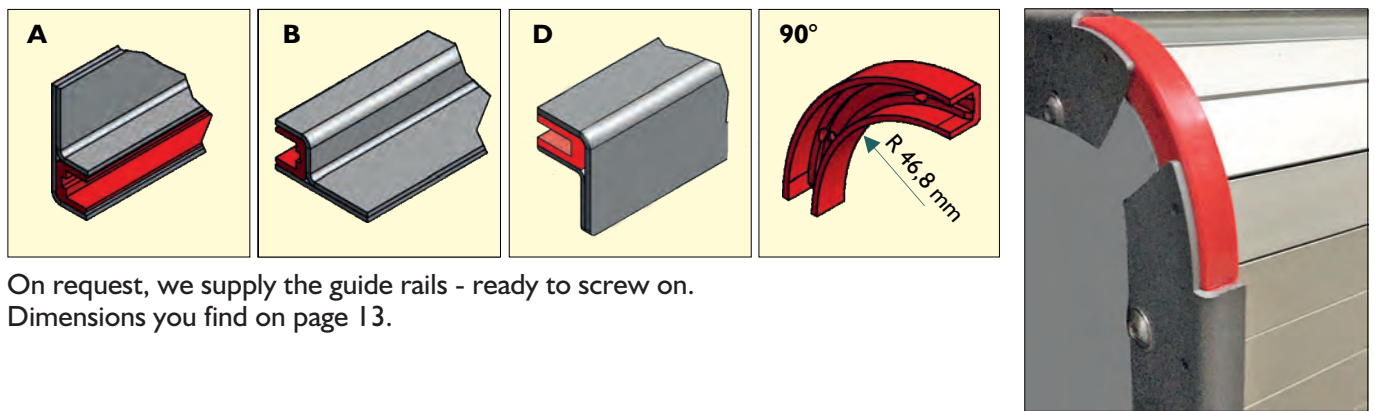
They are manufactured according to customer requirements

- with and without housing,
- with spring motor or electrically driven,
- with inspection windows,
- with lateral guide rails,
- with snail-shell roll-in system,
- with connection to the machine.

*In most cases, a protective roll-up is connected to the machine and follows the movement of the machine. If your use is different, please consider the cover system's strength and weight when configuring the application. To prevent the apron from falling down in an uncontrolled manner, there are balancer systems and retraction aids available. Please call us.*

### Guide Rails

Lateral guide rails are an ideal option for apron covers.



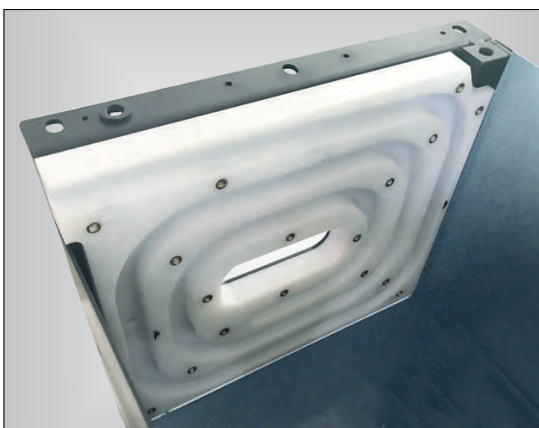
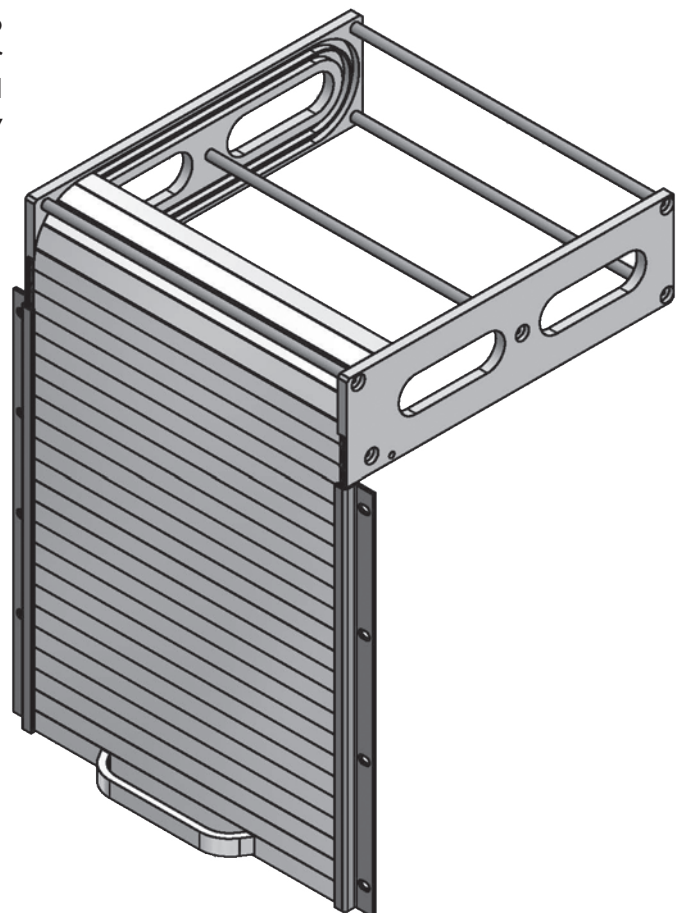
On request, we supply the guide rails - ready to screw on. Dimensions you find on page 13.

### Roll-up Systems

In addition to the explanations on page 6, there is also an ingenious rolling-in system for apron covers - similar to a snail shell. In interaction with sliding shoes and lateral guide rails, the apron cover runs easily and almost smoothly into the snail shell.

The side panels of the snail shell roll-in system are made to order from POM and connected with spacer bars to a unit.

Optionally, the system can also be housed. If there is enough space available, the snail shell roll-in system is the ideal solution.



# Inquiry Form for ProFlex Apron Covers

Please tick just how you imagine your new apron cover

After ordering, you will receive a drawing for checking and approval.

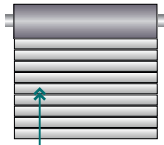
• Intended use of cover .....

.....

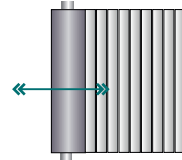
• Working direction?



horizontal



vertical



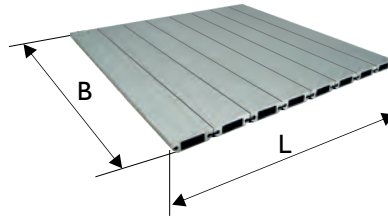
frontal

• Profile Type (e.g. K5-R - see page 10 and 11) .....

• Dimensions

Width (B) ..... mm

Length (L) ..... mm



- without attachment
- with mounting angle
- with solid end piece

• Max. travel speed: ..... m/min, max. acceleration: ..... g

Working cycles / h: .....

Working hours daily: .....

• How the apron cover will be moved?

**Roll-up system**

Manually     Shall we provide a handle? →  Yes →  No

With spring motor     With snail-shell roll-in system     With electric drive (please specify your need)

Without housing     With housing → made of:  steel     stainless steel

The cover will be connected to the machine

• Do you want lateral guide rails? →  No →  Yes (please make a selection)

**Guide rails**

**A**

For apron cover  
K5-R and K5-F

**B**

**90°**

**D**

For apron cover K3

• Your requirement: ..... piece(s) only once    lot sizes ..... pieces

Company .....

Name .....

Postal code/City .....

Phone/Fax .....

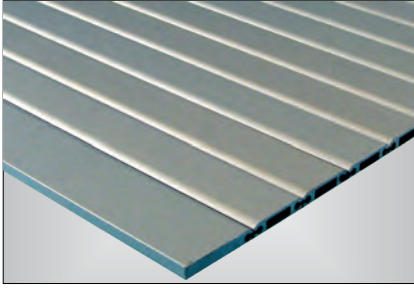
Street .....

Email .....

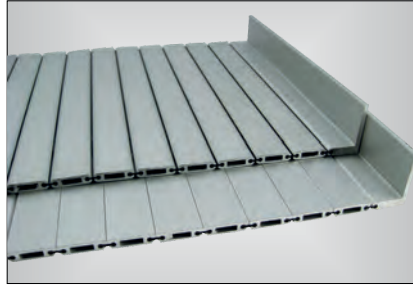
Please copy this page and send it by Fax to 0049/89/999 399 85 or by Mail to: info@steinbock-industrie.de



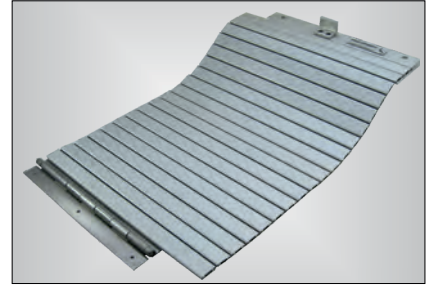
## ProFlex Apron Covers - Variations and Applications



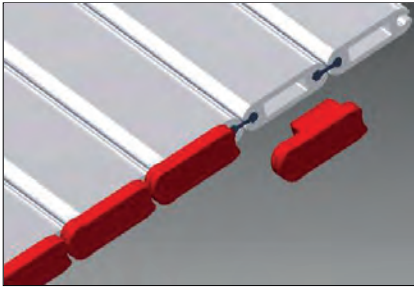
With solid end piece



With mounting angle



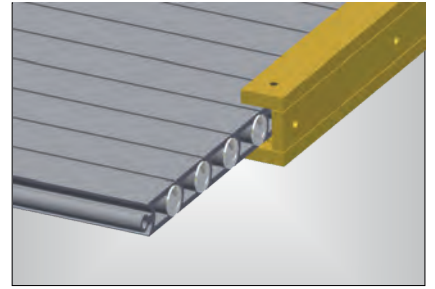
With hinge



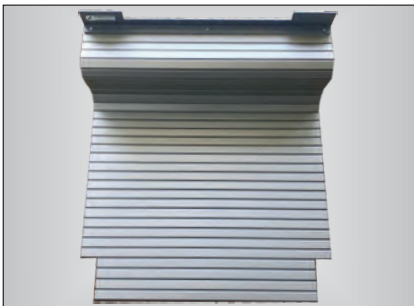
With sliding shoes



With handle



With guide rail



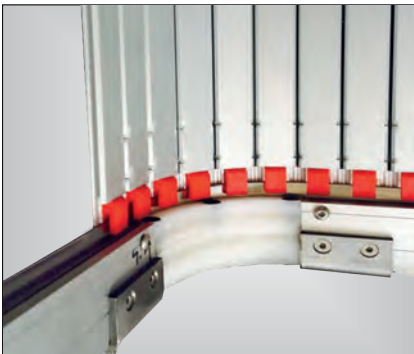
With recess



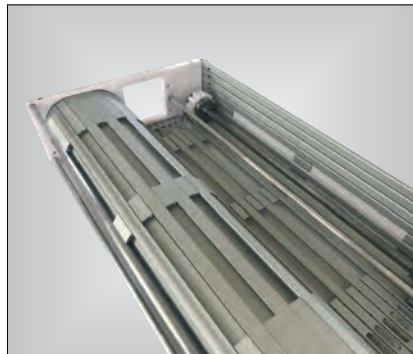
With inspection windows



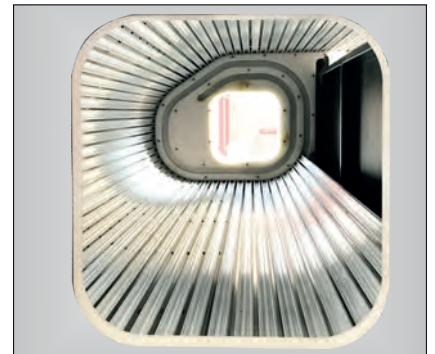
With special mounting



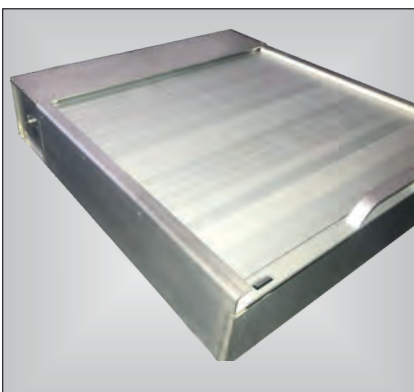
With steelband guide rail



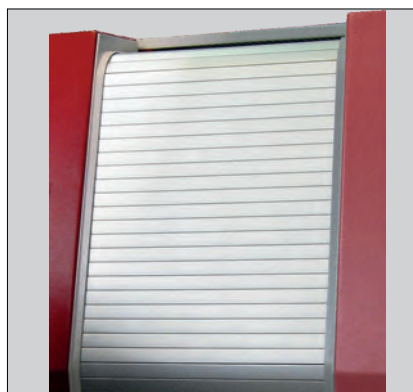
With gear ratchet and windows



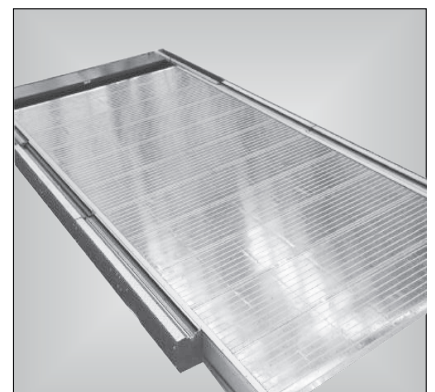
With snail-shell roll-in system



As tank cover



As machine cover

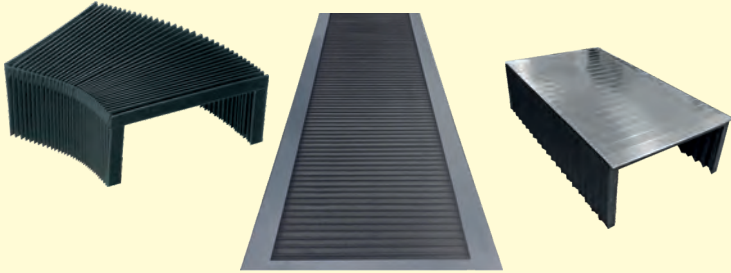


As pit cover



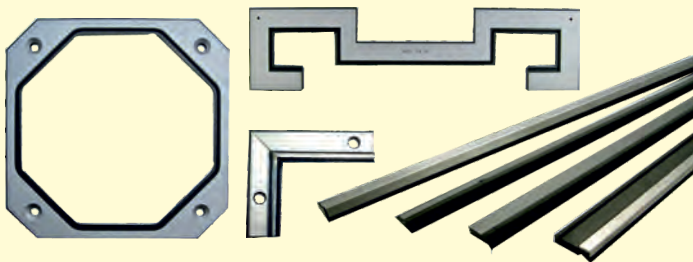
## Round and shaped Bellows

- Moulded bellows
- Rubber disk bellows
- Soft PVC-bellows
- Fabric bellows
- Leather bellows
- Loading hoses



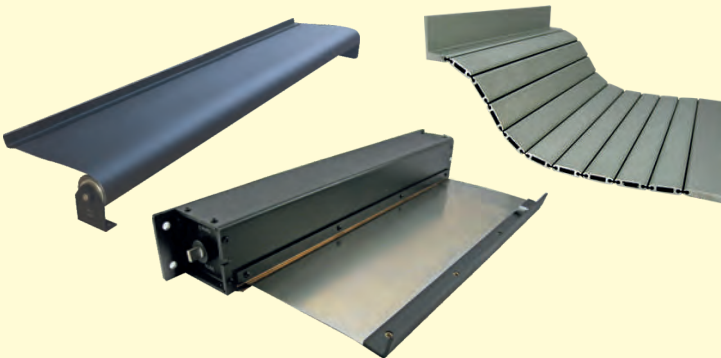
## Slideway Bellows

- With and without stainless steel blades
- Box type bellows
- Apron-type covers



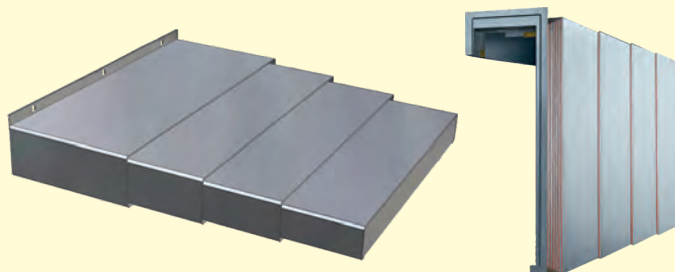
## Way Wipers

- *Standard lengths*
- *Moulded wipers*
- *Custom wipers*



## Roll-up Covers and Apron Covers

- Roll-up covers with and without housing, with textile or steel band or apron cover
- ProFlex aluminum apron covers in different designs and thicknesses



## Telescopic Steel Covers

- From normal or stainless steel
- With or without scissor systems



## TelaSpring Teleskopic Spings

- Protection for shafts and spindles
- Made of steel or stainless steel