

Rolling Covers Sectional Screens



This project shall be co-financed
by the European Fund for Regional Development
and by the Ministry of Trade and Industry.



DIN EN ISO 9001:2000
Zertifikat: 01100035105



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Company Profile

Our company was founded in 1995 for production of protective components for the moving parts of machine tools

1995

- Founding of the company HENNIG-IDEAL s.r.o.
- Beginning of the production of telescopic covers for the Czech market

1997

- Beginning of the production of steel flexible cable carriers, 95 % of which for export to Germany
- Beginning of the export of telescopic covers to Germany

1999

- The market share in telescopic covers in the Czech Republic is more than 90%
- The share of export is 30 to 50% of the company turnover

2001

- Beginning of the production of guide way wipers
- Moving to a new manufacturing plant with a production area of 3000 m². In this area, the production of telescopic covers can be increased to a target capacity of 2,000 to 2,500 covers per month.
- Cancel of the company HENNIG-IDEAL s.r.o.
- Founding of the company HESTEGO s.r.o.

2003

- Purchase of a CNC Trumatic 6000 L plate forming centre including a TRUMPF Sheet Master 1606 multifunctional automation control system offering a state-of-the-art punching, forming and laser cutting technology.
- ČSN EN ISO 9001 quality system introduction and certification by TÜV Rheinland.
- Beginning of preparatory and design work on the Vyškov manufacturing plant extension by 3200 m² of production area.

2005

- Building completion of the 2nd phase of our manufacturing plant with its manufacturer's area of 3200 m²
- Installation of CNC center for metal machining BYSTRONIC-BYSTAR 3015/4400 W
- Installation of powder paint line IDEAL-LINE
- Displacement of firm domicile to Vyškov
- Start of active participation in international trade fairs of engineering

The company owns a very efficient design software enabling a 3D design. Thanks to our long experience in the telescopic covers design and development we are able to comply with wishes and needs of the most demanding customers. Our firm successfully combines own production with sub-contracted orders for metal sheet made cooperation.

Rolling Covers

Rolling Covers can be used as a replacement for composed bags where lack of space does not allow for another technical solution and where perfect sealing is unnecessary.

We Supply Rolling Covers

- Without protective case
- With protective case

And according to the material used

- With a strip of regular steel
- With a strip of stainless steel
- With a plastic strip

For use at high temperatures steel or plastic strips of glass fibre, viton or preotex can be used.

Rolling Covers without Protective Case

For fastening the Rolling Covers without a protective case standard holders can be used (see the drawings) that provide simple and stable fastening. For standard fastening 2 basic types were developed that are used according to the requirement type. We also make special holders according to the customer's wish.

Rolling Covers with Protective Case

By using steel as the external strip material we recommend the design with the protective case for safety reasons. With smaller diameters of the roller with a shorter extension this is unimportant. The steel strip cannot be used if the strip diameter is under 40 mm and the strip width over 300 mm.

The largest selection of possibilities concerning drives and dimensions is in combination with the plastic strip. This way a cheaper version without the protective case can also be chosen if the level of pollution is limited. Dimensioning of the rolling cover is governed by certain factors that are stated in construction tables. These apply generally for standard use, the final design is determined upon an agreement with the customer.

Important warning:

By fastening the Rolling Covers it is necessary to consider the following factors:

- Running speed
- Planned total number of lifts, lifespan
- Fastening position, direction of splinter flow direction

Rolling Cover Drives

Rolling Covers are supplied with three different drive concepts. Drive option depends on the required cover type, its size, and the amount of expected costs.

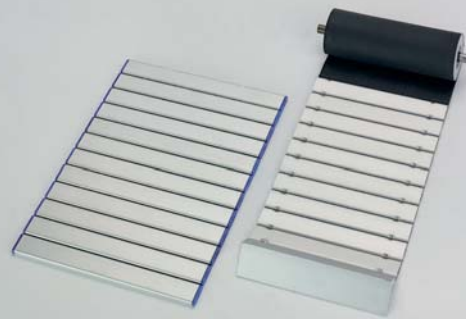
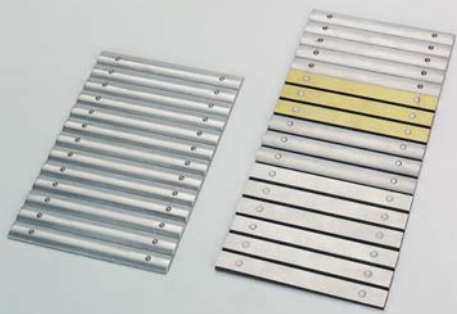
FM-drives – they are used with steel strips mostly with a higher tension load.

SA-drives – they are supplied only with standard steel strip because the external strip used for covering also serves as spring drive.

TF-drives – they are used for high running speeds with minimum strain. We recommend them mostly for plastic strips.

Order

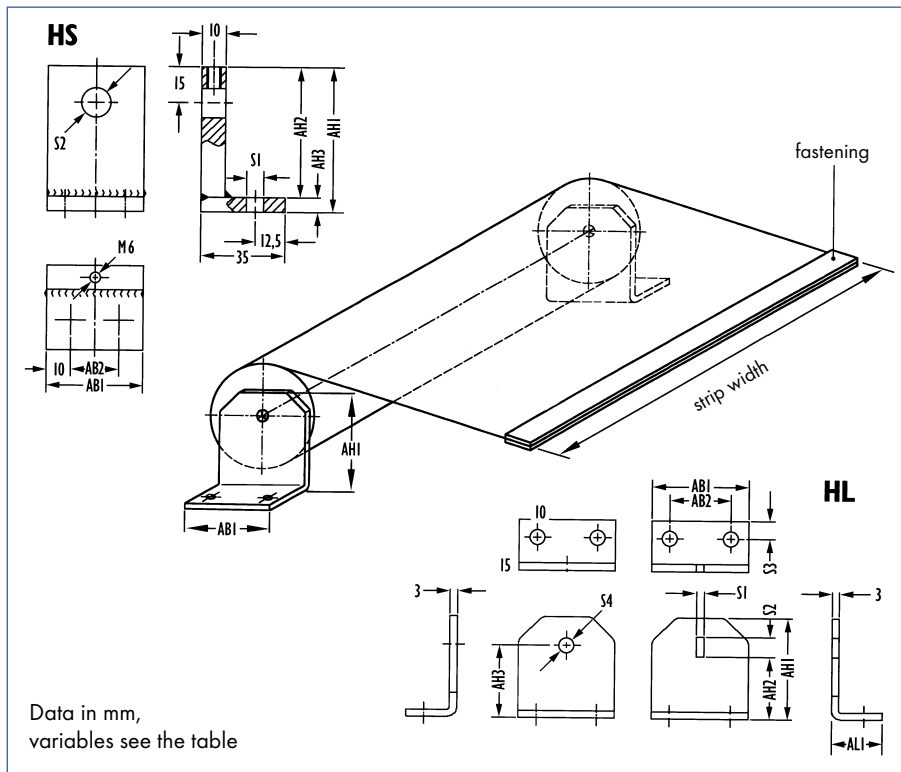
Always state the design type of the protective case (A) together with the manner of ending the stop (F) in the demand/order.



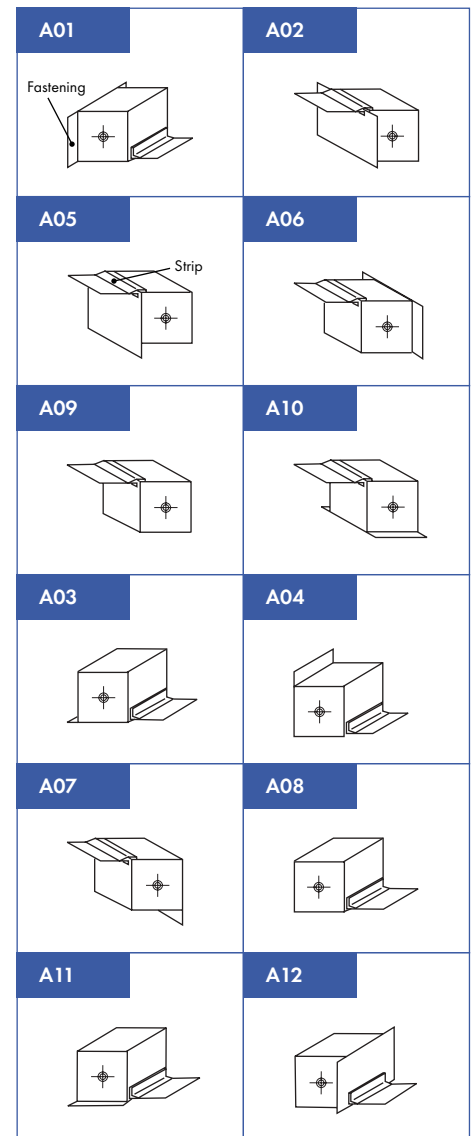
Data for Standard Holders

Holder type	Rolling diameter	AH1/AH2/AH3	AB1/AB2	ALI	S1	S2	S3	S4
HL 21-28	21-28mm	42/26/30	40/25	21	3	8	7,5	8
HL 30-35	30-35mm	48/32/37	45/30	21	4	10	7,5	8
HL 40-50	40-50mm	57/40/45	50/35	21	4	10	7,5	10
HL 50-60	50-60mm	80/49/55	75/50	25	4	12	10	12
HS 40	40mm	60/54/6	40/20	-	7	12	-	-
HS 45	45mm	65/59/6	50/30	-	9	12	-	-
HS 50	50mm	70/64/6	50/30	-	9	12	-	-
HS 60	60mm	75/65/10	60/40	-	9	12	-	-
HS 70	70mm	85/75/10	70/50	-	9	12	-	-
HS 80	80mm	95/85/10	80/60	-	9	12	-	-
HS 90	90mm	105/95/10	90/70	-	9	12	-	-
HS 100	100mm	115/105/10	100/80	-	9	12	-	-

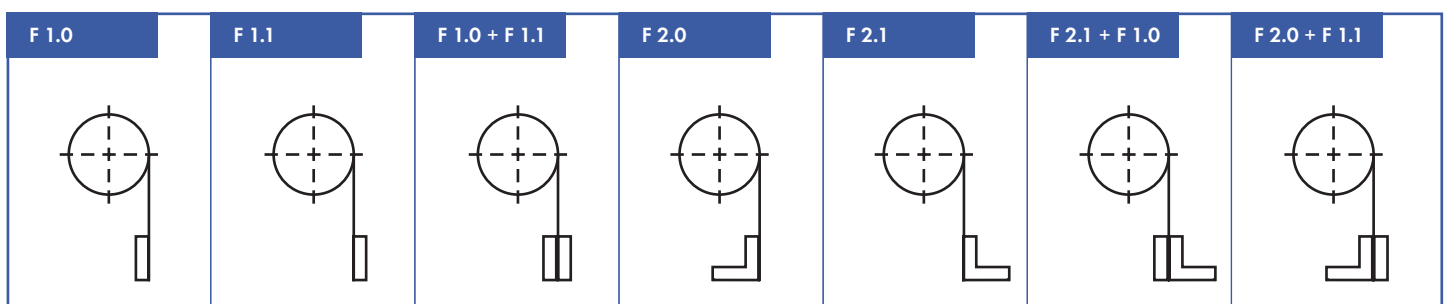
Series HL for normal, series HS for high demands; S2 corresponds to the axis diameter; special holders are supplied optionally; with type HS all edges are ready



Standard manners of fastening the protective case



Manners of ending the strip



Summary of material types

		Qualities														
Material number	Material description	Watertight	Emulsion resistant	Oil resistant	Chemical resistant	Spark resistant	Hot splinter resistant	Self-extinguishing	Without silicon content	Limited brace rigidity	Electrical qualities	Material colour	Material thickness in mm	Base	Temperature range from °C	Temperature range to °C
1	Aluminium-glass fibres	×	×	×	×	●	●	●	×	×	static	Silver	0,45	Glass fabric	-20	250
2	Aluminium-Nomex-Aluminium	×	●	●	×	●	×	●	●	●	static	Silver	0,55	Nomex	-40	150
3	Aluminium-Nomex	×	●	●	×	●	×	●	●	●	static	Silver	0,35	Nomex	-40	150
4	BLV Viton 36/70	●	●	●	×	●	●	●	×	×	static	Black	0,95	Polyamide	-40	150
5	CR-Rubber fabric	●	●	●	●*	×	×	×	Opt.	×	antistatic*	Black	0,5/1,0/1,5/2,0/2,5/3,0/3,5/4,0	Polyester - cotton	-30	100
6	CSM-Rubber foil	●	●	●	×	×	×	×	×	×	static	Black	0,5/0,7/1,0/2,2	Rubber	-20	120
7	E4/1 U0/V5H	●	●	●	●	×	×	×	●	×	antistatic	Green	1,1	Polyester	-10	70
8	E4/1 UH/UH-HC	●	●	●	●	×	×	×	●	×	Esp. antistatic	Black	0,9	Polyester	-30	100
9	ERA 7810	●	●	●	●	×	×	×	●	●	static	Black	0,35	Polyester	-15	100
10	ERA 7812	●	●	●	●	×	×	×	●	●	static	Beige	0,35	Polyester	-15	100
11	ERA 7815	●	●	●	●	×	×	×	●	●	static	Black	0,22	Polyester	-15	100
12	GEKALIT	●	×	×	●	×	×	×	●	×	static	Beige	0,35	Artificial fibre	0	80
13	Glass fibres - Viton	×	×	×	×	●	●	●	●	×	static	Black/Silver	0,47	Glass fabric	-30	250
14	GN 807	●	●	●	×	×	×	×	●	×	static	Black/Silver	0,7	Polyamide	-40	80
15	HO 419	×	×	×	×	×	×	×	●	×	static	Black	0,17	PVC	-10	80
16	Kevlar - metallised fabric*	●	×	●	●*	●	●	●	×	×	antistatic	Silver	0,8	Kevlar	-40	200
17	Carbon fibres metallised*	●	×	●	●*	●	●	●	×	×	antistatic	Silver	0,8	Preox - panaramide	-40	200
18	Leather*	×	×	●	●*	×	×	×	×	×	antistatic	Black	0,7-2,0	Leather	-20	70
19	NBR - Rubber foil	●	●	●	×	×	×	×	×	●	static	Black/White	0,5/0,7/1,0/2,2	Rubber	-20	90
20	Neoprene 2003	●	●	●	×	×	×	×	●	●	static	Black	0,6	Polyester	-20	100
21	Neoprene 2012	●	●	●	×	×	×	×	●	●	static	Black	0,9	Polyester	-20	100
22	Nomex	×	●	●	×	●	×	●	●	●	static	Black	0,34	Nomex	-40	150
23	Nylon - PU	×	×	●	×	×	×	×	●	●	static	Black	0,22	Polyamide	-40	120
24	OZ 23	●	●	●	×	×	×	×	●	●	static	Black/RAL	0,25	Polyester	-15	70
25	OZ 35	●	●	●	×	×	×	×	●	●	static	Black/RAL	0,38	Polyester	-30	70
26	OZ 45	●	●	●	×	×	×	×	●	●	static	Black/RAL	0,47	Polyester	-30	70
27	OZ PUR/OZ PUR silver	●	●	●	●	×	×	×	●	●	static	Black/Silver	0,38	Polyester	-40	120
28	Foil for entrance gate	●	×	×	×	×	×	×	●	×	static	Transparent	2,0/3,0		-10	40
29	Perltex	●	●	●	●	×	×	×	●	●	static	Black	0,4	Polyester	-15	80
30	PERL X 10	●	●	●	×	●	×	×	×	×	static	Black	1	Polyamide	-40	80
31	Canvas	●	●	●	●	×	×	×	×	×	static, antistat. as demanded	White/Yellow/Grey	0,5-1,1	Polyester	-10	80
32	Preotex 030	●	●	●	×	●	●	●	●	●	static	Black	0,3	Aramide - kevlar	0	600
33	Preotex 035	×	×	×	×	●	●	●	×	●	static	Black	0,35	Aramide - kevlar	0	600
34	Preotex 060	●	●	●	×	●	●	●	●	×	static	Black	0,6	Aramide - kevlar	0	600
35	PUR 017	●	●	●	×	×	×	×	×	●	static	Black	0,17	Polyester	-30	120
36	PUR Teflon 027	●	●	●	●	●	●	×	×	×	static	Black	0,27	Various	-20	250
37	PUR Teflon 045	●	●	●	●	●	●	×	×	×	static	Black	0,45	Various	-20	250
38	PVC	●	●	●	●	×	×	×	×	●	static	Black/colourless	0,22	Polyvinylchloride	-15	100
39	Stainless steel strip	●	●	●	●	●	●	×	●	×	antistatic	Metallic app.	0,1-1,0	Steel	-40	600
40	Steel strip	×	×	●	●	●	●	×	●	×	static	Metallic app.	0,1-1,0	Steel	-40	600
*	With teflon layer	×	×	×	●	●	●	×	×	×	antistatic	Black	1,0	Only possible with * marked material	-20	250

- Complies
- 1 hardened foil PVC 0.15/0.2 mm
- o smallest withdrawn amount
- * with teflon layer
- 2 hardened foil PVC 0.3 mm
- 3 Triflexil
- 4 hardened PVC foil 0.12 mm with matt internal surface
- Complies in a limited or insufficient manner
- ×- Does not comply/unsuitable

Bags									Roller		Material use														
Elastic sewn	Elastic glued	With lamellas	Laminated	Photographic	Sewn	Softened PVC	Rubber fabric	Rubber rings	Drive SA/FM	Drive TF	Universal use without specification	Milling/lathing of metal	Grinding of metal	Processing of wood, stone, glass, ceramics	Cutting using laser/plasma	Cutting using water beam	Handling, robotics, automation	Measurement and regulation equipment	Electrical equipment	Medical equipment	Chemistry, fuels, oils	Production and assembly of vehicles	Cameras, photographic and graphical industry	Printing equipment	Material number
●	×	×	● ²	×	●	×	×	×	●	●	×	×	×	×	●	×	×	×	×	×	×	×	×	×	1
●	●	×	×	×	×	×	×	×	●	●	×	×	×	×	●	×	●	×	●	×	×	●	×	×	2
●	●	×	● ³	×	×	×	×	×	×	×	×	×	×	×	●	×	●	×	●	×	×	●	×	×	3
×	×	×	×	×	×	×	×	×	●	●	×	●	●	●	×	×	×	×	×	×	×	×	×	×	4
×	×	×	×	×	×	×	●	×	×	×	●	●	●	●	×	×	●	●	●	×	×	×	×	×	5
×	×	×	×	×	×	×	×	●	×	×	●	×	×	×	×	×	×	×	×	×	×	×	×	×	6
×	×	×	×	×	×	×	×	×	●	●	×	×	×	×	×	×	●	●	●	×	×	×	×	×	7
×	×	×	×	×	×	×	×	×	●	●	×	×	×	×	×	×	●	●	●	×	×	×	×	×	8
●	●	●	×	×	×	×	×	×	●	●	×	●	●	●	×	●	●	●	×	●	●	●	×	●	9
●	●	●	×	×	×	×	×	×	×	×	×	×	×	×	×	×	●	●	×	●	×	×	●	×	10
●	●	●	×	×	×	×	×	×	×	×	×	●	●	●	×	●	●	●	×	●	×	●	×	●	11
×	×	×	● ²	×	×	×	×	×	×	×	×	×	×	×	×	×	×	●	×	●	×	×	×	×	12
●	×	×	×	×	●	×	×	×	●	●	×	×	×	×	●	×	×	×	×	×	×	×	×	×	13
×	×	×	×	×	×	×	×	×	●	●	●	●	●	●	×	×	×	×	×	×	×	×	×	●	14
×	×	×	×	● ⁴	×	×	×	×	×	×	×	×	×	×	×	×	×	●	×	×	×	×	●	×	15
×	×	×	×	×	×	×	●	×	×	×	×	×	×	×	●	×	×	×	●	×	×	×	×	×	16
×	×	×	×	×	×	×	●	×	×	×	×	×	×	×	●	×	×	×	●	×	×	×	×	×	17
×	×	×	×	×	×	×	●	×	×	×	×	×	×	×	×	×	●	●	×	×	×	×	●	×	18
×	×	×	×	×	×	×	×	×	●	●	×	●	×	×	×	×	×	×	×	×	×	●	●	×	19
×	×	×	×	×	×	×	×	×	●	●	×	●	×	×	×	×	●	×	×	×	×	×	●	×	20
●	●	×	● ³	×	×	×	×	×	×	×	×	×	×	×	●	×	×	×	×	×	×	×	×	×	22
●	×	●	● ^{1,3}	×	×	×	×	×	×	×	×	×	×	×	×	×	●	●	×	×	×	●	×	×	23
●	●	●	● ^{1,3}	×	×	×	×	×	×	×	●	●	●	●	×	×	●	●	×	●	●	●	×	●	24
●	●	●	● ^{1,2,3}	×	×	×	×	×	×	×	●	●	●	●	×	●	●	●	×	●	●	●	×	●	25
●	●	×	×	×	●	×	×	×	×	×	×	●	●	●	×	●	●	●	×	●	●	●	×	●	26
●	●	●	● ^{2,3}	×	×	×	×	×	×	×	×	●	●	●	×	×	●	●	×	●	●	●	×	●	27
×	×	×	×	×	×	×	×	×	●	●	×	×	×	×	×	×	●	×	×	×	×	●	×	×	28
●	●	●	●	×	×	×	×	×	●	●	●	●	●	×	●	×	×	×	×	●	●	●	×	●	29
×	×	×	×	×	×	×	×	×	●	●	×	●	●	●	×	●	×	×	×	×	×	●	×	×	30
×	×	×	×	×	×	×	×	×	●	●	×	×	×	×	×	×	●	●	×	●	×	●	×	●	31
●	●	×	●	×	●	×	×	×	●	●	×	×	×	×	●	●	×	×	×	×	×	×	×	×	32
●	●	×	●	×	●	×	×	×	●	●	×	×	×	×	●	×	×	×	●	×	×	×	×	×	33
●	●	×	×	×	●	×	×	×	●	●	×	×	×	×	●	●	×	×	×	×	×	×	×	×	34
●	●	●	×	×	×	×	×	×	×	×	×	×	×	×	×	×	●	●	×	●	×	●	×	●	35
×	●	●	×	×	×	×	×	×	●	●	×	●	●	●	×	●	×	×	×	×	●	×	×	●	36
×	●	●	×	×	×	×	×	×	●	●	×	●	●	●	×	●	×	×	×	×	●	×	×	●	37
×	×	×	×	×	×	●	×	×	×	×	●	×	×	×	×	×	●	●	×	●	×	●	×	●	38
×	×	×	×	×	×	×	×	×	●	×	●	●	●	●	×	●	●	●	●	×	●	●	×	●	39
×	×	×	×	×	×	×	×	×	●	×	×	●	×	●	×	×	●	●	●	×	×	●	×	●	40
×	×	×	×	×	×	×	●	×	×	×	×	●	●	●	×	●	●	●	×	×	●	●	×	●	*

Design Information – Rolling Cover Drives

Constructional options	Roller with TF drive	Roller with SA drive	Roller with FM drive
Torsion spring drive	x		
Possibility of using a protective case	x	x	x
Possibility of using a side holder	x	x	x
Possibility of using an articulated screen	x		x
External plastic strip	x		x
External stainless steel strip		x	x
External strip of normal steel		x	x
Max. strip width (mm)	6 000	300	6 000*
Max. extensive length (mm)	8 000	10 000	10 000
Max. movement speed	90 m/min	60 m/min	50 m/min
Fast change of the running direction	x	x	Limited
Permanent load	Very high	Average	High
Sensitivity to pollution	Limited	Average	Limited
Reaction to tension force	Evan	Increased at full extension	Slightly increased at full extension
Product price	Low	Low	Average

* with plastic strip; steel strip up to 1,000

Data for Calculation of Rolling Axis

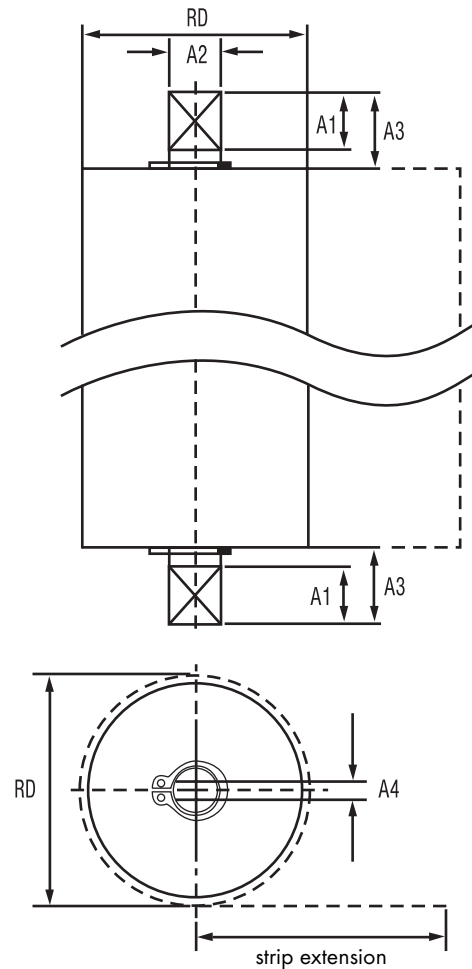
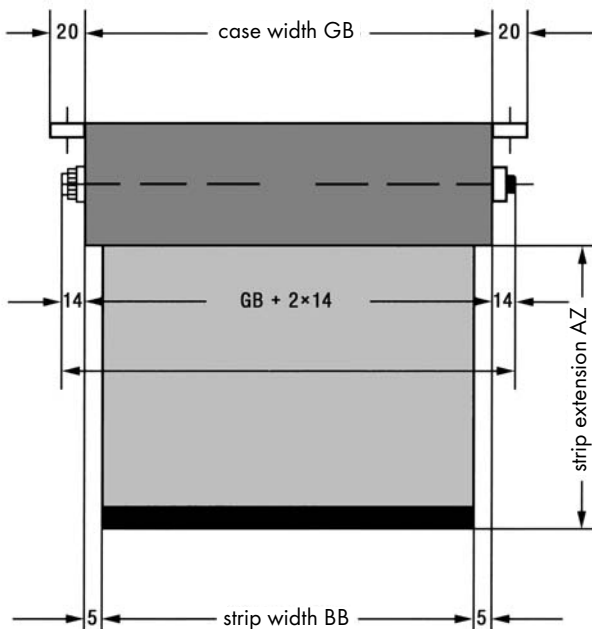
For technical determination of attachment of axes it is necessary to consider various parameters of the shutter diameter that are stated in the following table:

RD	A1	A2	A3	A4
21–28 mm	8 mm	8 mm	11 mm	3 mm
30–50 mm	8 mm	10 mm	11 mm	4 mm
up to 50 mm	8 mm	12 mm	11 mm	4 mm

Ending the strip is performed optionally using flat or angular steel laths that must be glued and riveted at one or both sides of strip ends.

For flawless functionality of the protective cover it is important to exactly enter the operating positions. Meanwhile it is very important from which side (front or rear) does the splinter flow and the coolant act.

Case Construction



Information for Design of the Protective Case and Drive

Strip width	Strip extension	Roller with TF drive without a case – rolling diameter	Roller with TF drive with a case - case diameter	Roller with FM drive without a case - rolling diameter	Roller with FM drive with a case - case dimensions	Roller with SA drive with a case - case dimensions
to 150	to 300	21/28*	40×40	40/50	60×60	40×40
to 150	to 500	21/30	50×50	40/50	60×60	50×50
to 150	to 1 000	30/32	60×60	45/50	70×70	60×60
to 150	to 1 500	50/60	80×80	50/60	80×80	70×70
to 150	to 2 000	-	-	60/70	90×90	75×75
to 150	to 2 500	-	-	70/80	110×110	80×80
to 150	to 3 000	-	-	80/90	120×120	90×90
to 150	to 4 000	-	-	90/100	130×130	100×100
to 150	to 5 000	-	-	100/120	140×140	110×110
to 150	to 7 000	-	-	120/133	150×150	120×120
to 150	to 9 000	-	-	120/133	160×160	120×120
to 150	to 10 000	-	-	120/150	170×170	120×120
to 300	to 300	21/28	40×40	40/45	60×60	40×40
to 300	to 500	21/28	50×50	50/60	70×70	50×50
to 300	to 1 000	30/32	60×60	50/60	70×70	60×60
to 300	to 1 500	40/45	70×70	50/60	80×80	70×70
to 300	to 2 000	50/60	80×80	60/70	90×90	75×75
to 300	to 2 500	50/60	80×80	70/80	100×100	80×80
to 300	to 3 000	60/70	90×90	80/90	110×110	90×90
to 300	to 4 000	70/80	100×100	90/100	120×120	100×100
to 300	to 5 000	80/90	120×120	90/100	130×130	110×110
to 300	to 7 000	-	-	100/120	150×150	120×120
to 300	to 9 000	-	-	100/120	160×160	140×140
to 300	to 10 000	-	-	120/150	170×170	150×150
above 300	to 300	21/28	40×40	40/45	60×60	-
above 300	to 500	21/28	50×50	45/50	70×70	-
above 300	to 1 000	30/32	60×60	45/50	70×70	-
above 300	to 1 500	40/45	70×70	50/60	80×80	-
above 300	to 2 000	50/60	80×80	60/70	90×90	-
above 300	to 2 500	50/60	80×80	70/80	110×110	-
above 300	to 3 000	60/70	90×90	80/90	120×120	-
above 300	to 4 000	70/80	100×100	80/100	130×130	-
above 300	to 5 000	80/90	120×120	90/100	140×140	-
above 300	to 7 000	90/100	130×130	100/120	150×150	-
above 300	to 9 000	100/120	150×150	100/120	160×160	-
above 300	to 10 000	100/120	150×150	120/150	170×170	-

* 21/28 means rolling diameter 21 mm at normal a 28 mm at increased demands

Notes

- All dimensions are in mm
- Special types and sizes upon request
- The rolling diameter corresponds to the external diameter of the pipe

Sectional Screens are used for frontal protection against small amount of splinters and coolant. Thanks to their simplicity they offer good mobility, easy assembly, and do not require much space.

In most cases Sectional Screens are used as a protective curtain. Fastening is designed using metal laths or metal angles that are screwed to the screen end. The lath shape and the manner of fastening can be chosen by the customer as needed. For difficult designs Sectional Screens are combined with the shutter system. This creates an alternative to a standard shutter system with plastic strip.

Sectional Screens FLEXSTAR-S, FLEXSTAR-C/CR

They are composed of aluminium profiles that are connected using polyurethane profiles and are supplied in a rounded form (FLEXSTAR-S – fully mobile in both directions) or a flat form (FLEXSTAR-C/CR only one-way movement of unwinding is admissible, while it also takes a stable position). With a vertical position the sliding qualities can be improved thanks to the ending tops. The gapping matter between the profiles is distributed so that the highest possible protection and tightness is achieved.

Sectional Screens FLEXSTAR-CR

This is a larger design of type C, designed for higher load. It secures high rigidity.

Sectional Screens FLEXPRO

They are made of highly resistant bearing plastic that is glued with metal lamellas from both sides or one side that are subsequently riveted. The lamellas can be of aluminium, brass, or steel, their profile either flat or convex.

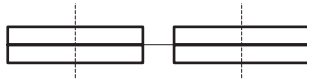
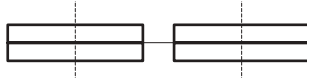
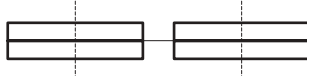



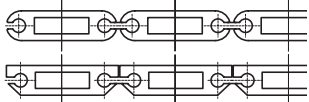

Sectional Screens FLEXWALK

They are made of highly resistant aluminium hollow profiles and plastic bearing material or of stainless steel strip in two sizes. The screens with the steel strip as a bearing material are glued using high quality glue that secures high gluing force after 30 hrs of drying and the corresponding flexibility.

Sectional Screens FLEXSTAR-WINDOWS

Favourite screens with visors of polycarbonate or flexible transparent foil. With large lengths of extension window reinforcement is necessary.

Technical Information – Constructional Data

Articulated screen type External/internal article Fastening	Connecting material	Article width	Article height	Smallest radius in unwound state	Profile
1 FLEXPRO 1 steel/steel Glued and riveted	Plastic strip	15/15	2,0/2,0	40	
2 FLEXPRO 2 steel/brass Glued and riveted	Plastic strip	15/15	2,0/2,0	40	
3 FLEXPRO 3 steel/aluminium Glued and riveted	Plastic strip	15/15	2,0/2,0	40	
4 FLEXPRO 4 aluminium semicircular Glued and riveted	Plastic strip	16	3,0	21	
5 FLEXPRO 5 aluminium semicircular/ aluminium Glued and riveted	Plastic strip	16/15	3,0/2,0	35	
6 FLEXWALK Hollow aluminium anodised profile Glued and riveted	Plastic or stainless steel strip	22 18	10,0 8,0	40*	
7 FLEXSTAR-C/-S Hollow aluminium anodised profile** Mechanical lock	Connection using plastic, plastic tops	20	5,5	35	
8 FLEXSTAR-CR Hollow aluminium anodised profile** Mechanical lock	Connection using plastic	25	8,0	Upon request	

* Only with plastic strip, with steel strip 100 mm

** Possible to insert visors of polycarbonate or foil for entrance gate