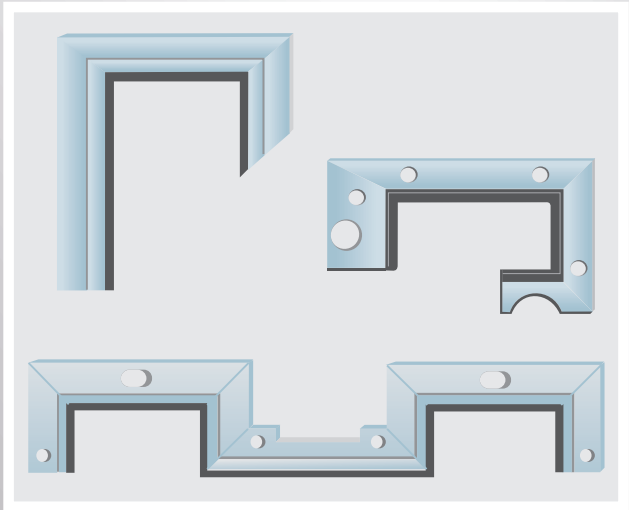
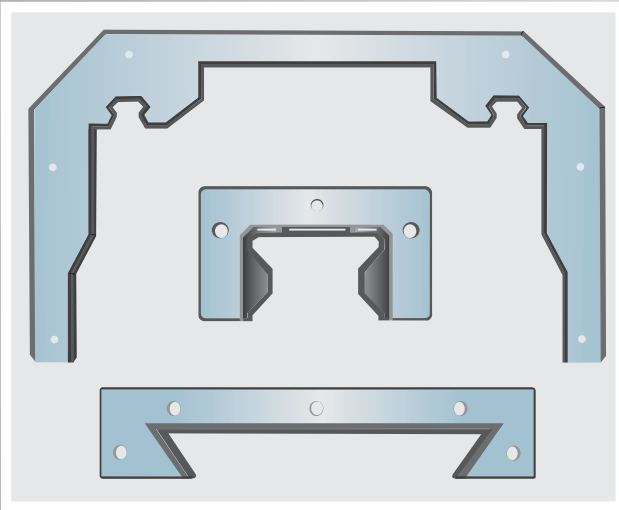
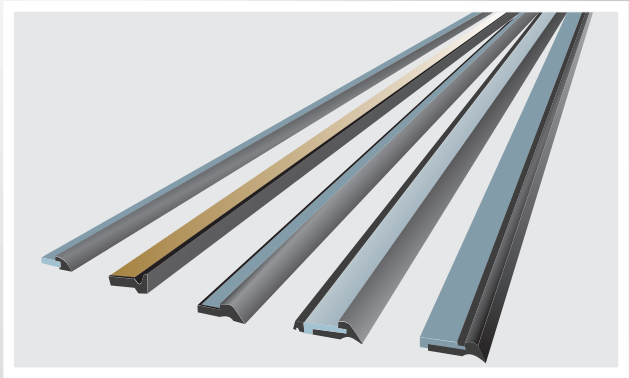
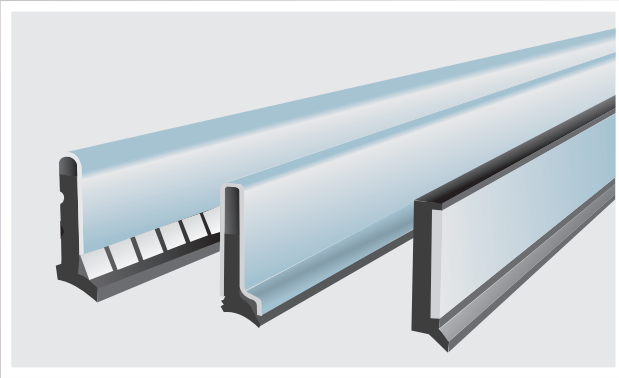


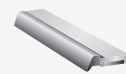


● **Wipers**



Subject to change without notice.

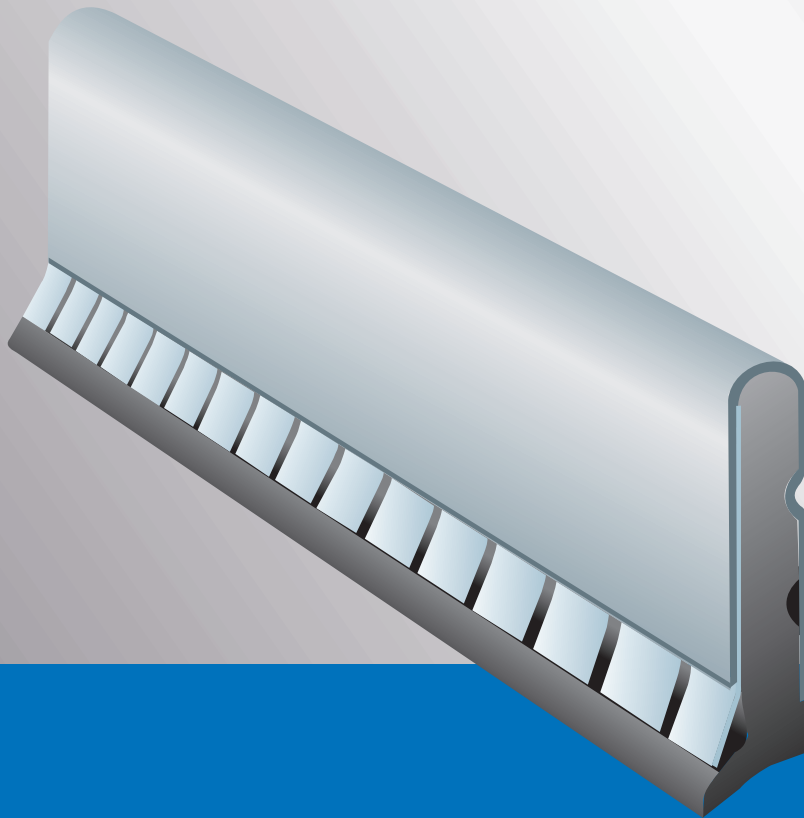
All dimensions in mm.

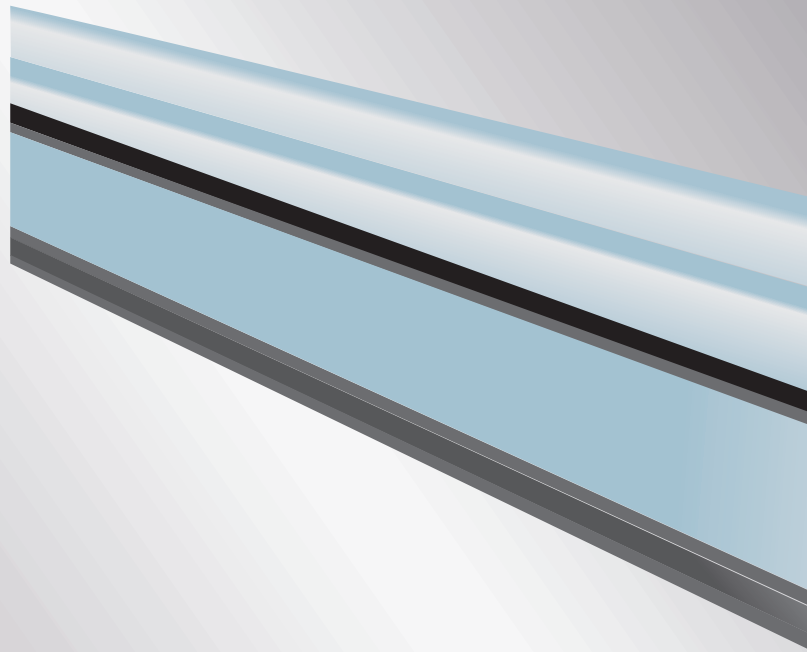


Copyright © 9/2010



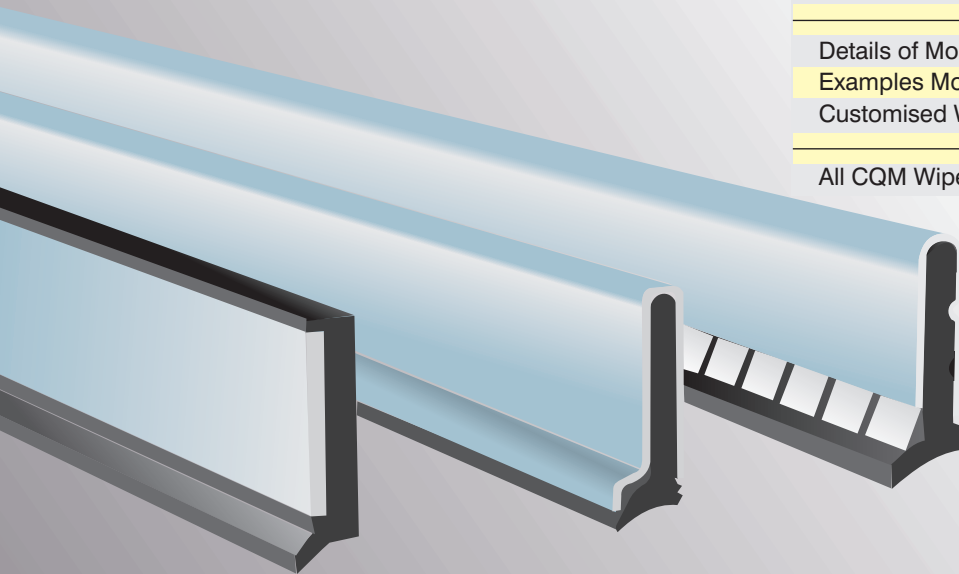
Wipers





The New Wiper Experience

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What wiper for what purpose?	5
Details of FB Way Wipers	6
FB Way Wipers, Series A , B und AW	7
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Examples Moulded Wipers	20
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All CQM Wipers at a Glance	22

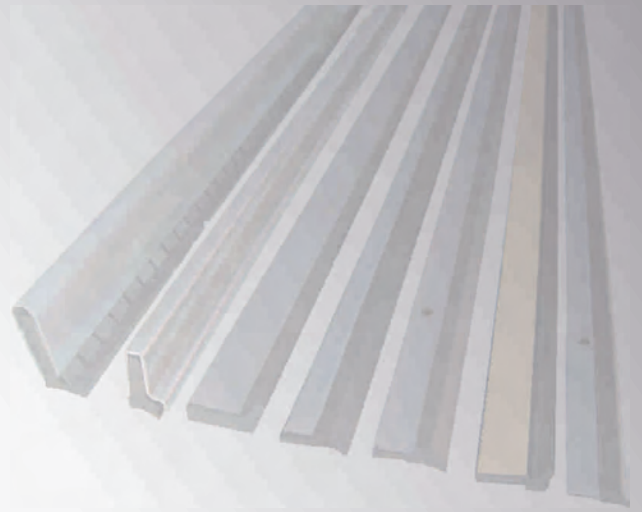


General Information on Wipers

Since there are so many different types of wiper, we would like to point out the difference between them so that you will find it easier to select the right product for your purposes.

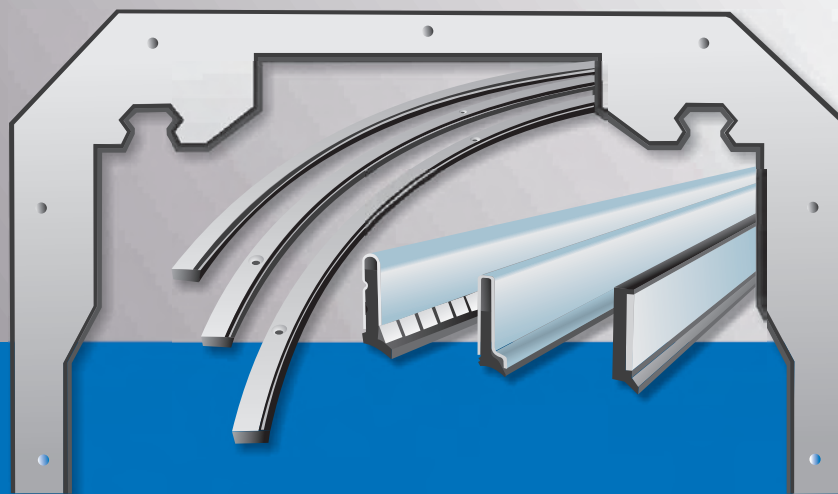
We distinguish between:

- Wipers primarily used on the guideways of machines, simply called way wipers or **FP** Wipers for short.
- Wipers used on telescopic steel covers, called **TA** Wipers.
- Moulded wipers, deriving their name from the name the way they are made - in **moulds**. They can be made to any geometrically possible shape.
- Customised wipers that are made to length, welded, pegged or drilled to customers' specifications,



CQM has more than 30 years of experience in the field of way wipers, marked by continual innovation and perfection. This applies equally to stock way wipers, wipers for telescopic steel covers and moulded way wipers made to customer's specifications.

CQM way wipers are manufactured according to latest machine-building advances. Depending on the material selected, they make allowance for criteria such as dry running, resistance to microorganisms, hydrolysis, mineral oil, coolants, acids, leaches and gasoline as well as operating temperatures up to 200°C.

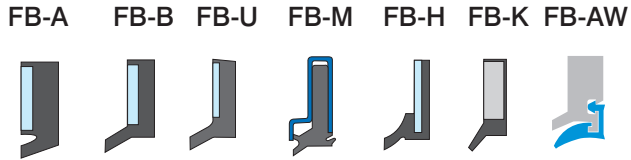


It is our aim to satisfy the requirements of diverse target groups and to find solutions where others have already given up.

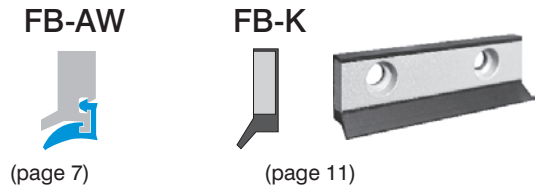
FB Way Wipers

What wiper for what purpose?

All-purpose wipers

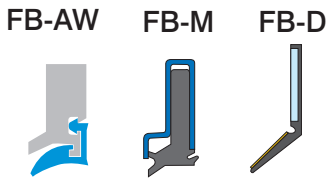


Wipers in which stepped holes can be drilled

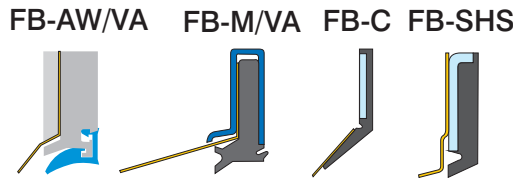


Hot-chip environments

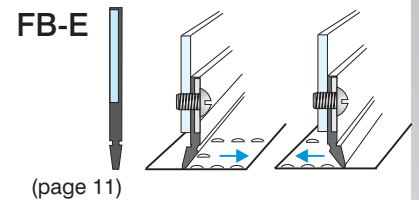
with Chip Guard



with Pregurad

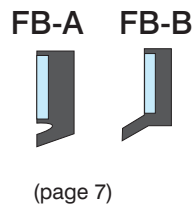


Wipers for surfaces with grooves or gaps

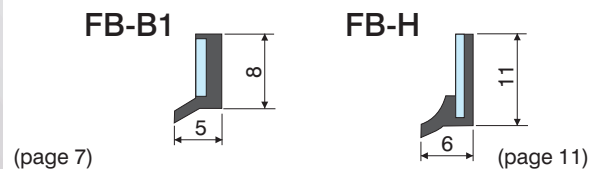


Wipers for milled slideways

Wipers for ground slideways:
Preload only slightly (~0.5mm)

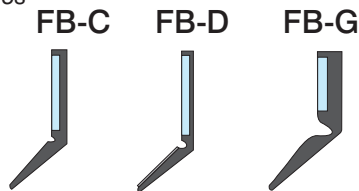


Wipers for flat slideways in confined space



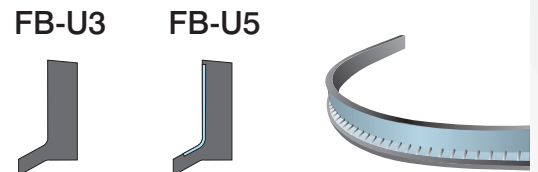
Wipers for uneven surfaces:
Extra-long wiper lips
ensure careful cleaning
even of irregular surfaces

(page 8)



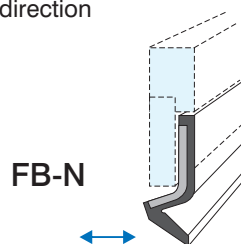
Wipers also suitable for circular operation

(page 9)



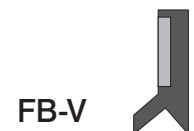
Wipers for mounting on machine doors or metal sheets where space in the direction of travel is a criterion

(page 11)

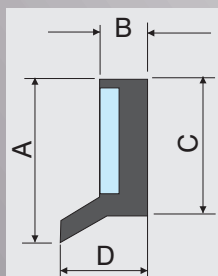
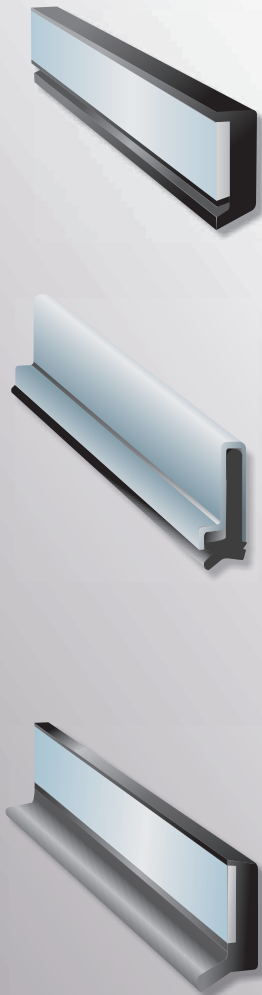


Use on hydrostatic slideways or without central lubrication (wiper retains lubricant in machine slide, at the same time cleaning the slideway)

(page 11)



FB Way Wipers



Design

Unless otherwise indicated in the drawing, FB Series way wipers are made of synthetic rubber with moulded-in steel insert.

Material properties of wiper lip

- Highly abrasion-resistant
- Temperature-resistant from -40°C to +100°C, short-term up to 140°C
- Very good mechanical characteristics
- Resistant to coolants and mineral oils
- Resistant to microorganisms
- Hydrolitic resistance.

For permanent operating temperatures of up to 200°C or where the wipers are exposed to particularly aggressive coolants or acids, they can also be made from other elastomeres, such as FPM.

Dimensional stability

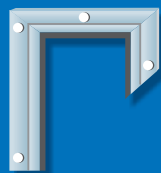
The wipers are manufactured in special moulds, ensuring 100 % repeat-order accuracy.

Protective coating

All wipers type FB are provided with a transparent coating as a protection against chips and corrosion, except series “M” (stainless steel) and “AW” (Aluminium Wipers).

Delivery

Standard lengths are available from stock. Moulded wipers and customised wipers are available on short notice.



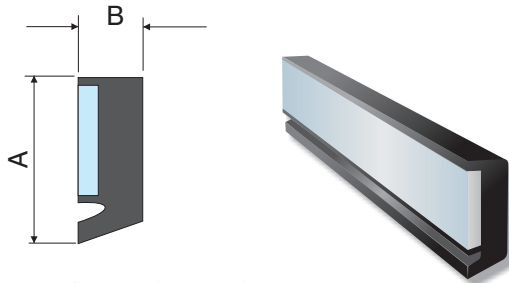
Preload

All wipers shown in relaxed position. **Recommended** preload: see drawings inside.

FB Way Wipers

A Series

Recommended preload: 0.5 - 1 mm



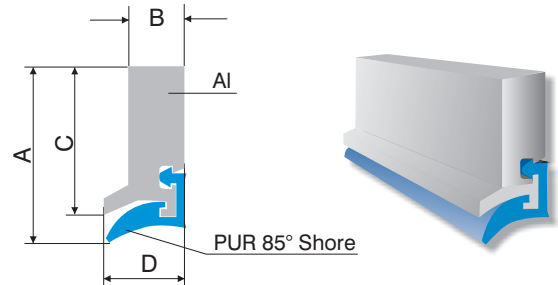
Art.No.	A	B
FB-A1	14	6,5
FB-A3	18	6,5
FB-A5	25	6,5
FB-A7	14	5
FB-A9	18	5
FB-A11	25	5

Length: 500 mm

AW Series

Ideal for stepped holes

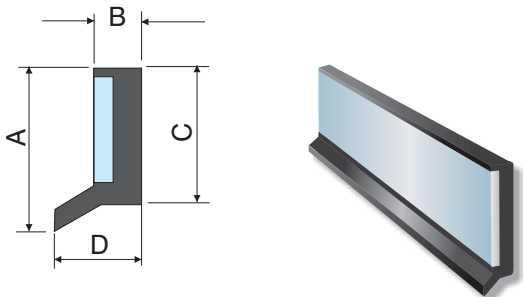
Recommended preload: 2 mm



Art.No.	A	B	C	D	Length
FB-AW1	18	7	14,0	10	1000
FB-AW1/2000	18	7	14,0	10	2000
FB-AW2	25	7	21,4	10	1000
FB-AW2/2000	25	7	21,4	10	2000
FB-AW3	Spare lip				endless

B Series

Recommended preload: 0.5 - 1 mm

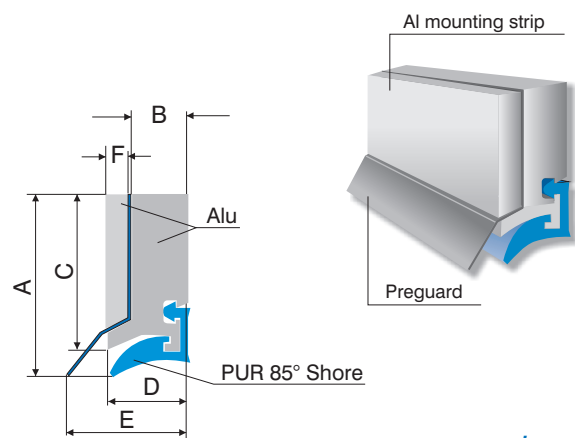


Art.No.	A	B	C	D	Length
FB-B1/560	9,5	2,5	8	5	560
FB-B1/1000	9,5	2,5	8	5	1000
FB-B3/560	15	5	12	7	560
FB-B3/1000	15	5	12	7	1000
FB-B5/560	18	5	15	9	560
FB-B5/1000	18	5	15	9	1000
FB-B7/560	21	5	17,5	7	560
FB-B7/1000	21	5	17,5	7	1000
FB-B9/560	25	6	21	11	560
FB-B9/1000	25	6	21	11	1000
FB-B11/560	26	5	23	7	560
FB-B11/1000	26	5	23	7	1000
FB-B15/560	31	5	28	7	560
FB-B15/1000	31	5	28	7	1000
FB-B19/560	39	5	36	7	560



Wiper lips can be replaced when worn out. They are available as continuous strips!

With stainless-steel preguard (0.25 mm thick).
Recommended only for hardened guideways.
 (Al mounting strip and preguard supplied separately).



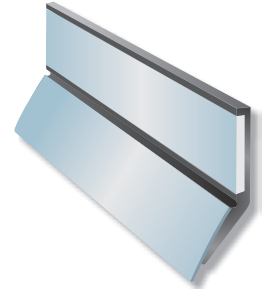
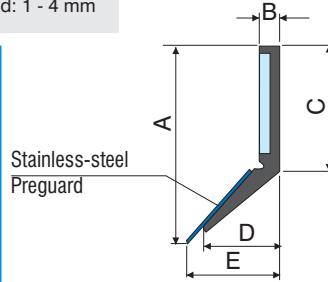
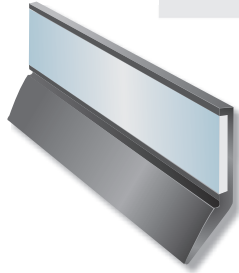
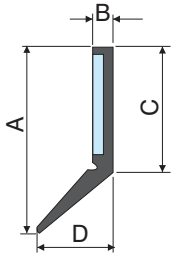
Art.No.	A	B	C	D	E	F	Length
FB-AW1/VA	18	7	14,0	10	14,05	3	1000
FB-AW2/VA	25	7	21,4	10	15,8	3	1000
FB-AW3	Spare lip						endless

FB Way Wipers

With stainless-steel preguard (0.25 mm thick) .
Recommended only for hardened guideways.
 (Al mounting strip and preguard supplied separately).

C Series

Recommended preload: 1 - 4 mm



Art.No.	A	B	C	D
FB-C3	25	3	15,5	12
FB-C7	30	3	20,5	12

Length: 800 mm

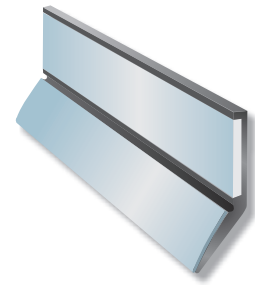
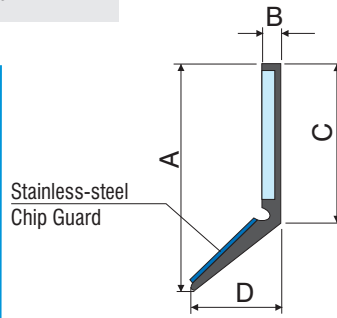
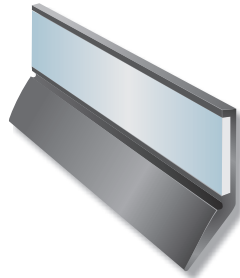
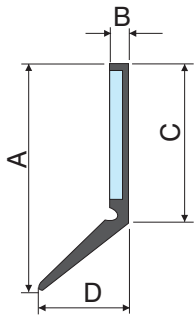
Art.No.	A	B	C	D	E
FB-C1	29	3	15,5	12	15
FB-C5	34	3	20,5	12	15

Length: 800 mm

D Series

With Chip Guard

Recommended preload: 1 - 4 mm



Art.No.	A	B	C	D
FB-D3	39	3	27	15

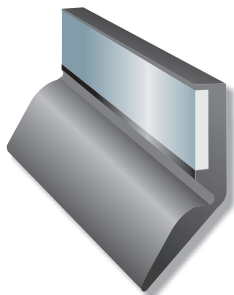
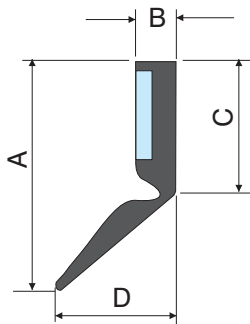
Length: 850 mm

Art.No.	A	B	C	D
FB-D1	39	3	27	15

Length: 850 mm

G Series

Recommended preload: 3 - 8 mm

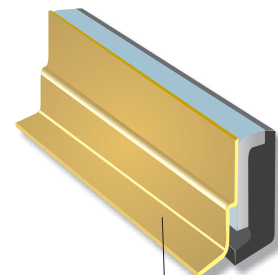
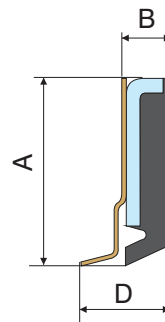


Art.No.	A	B	C	D
FB-G1	30	5	17	15,5
FB-G3	40	5	27	15,5

Length: 500 mm

SHS Series with Preguard

Recommended preload: 1 mm



Brass preguard
(supplied separately)

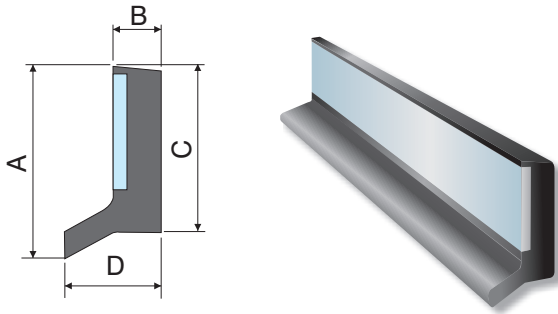
Art.No.	A	B	D
FB-SHS1	25	6,5	12

Length: 300 mm

FB Way Wipers

U Series

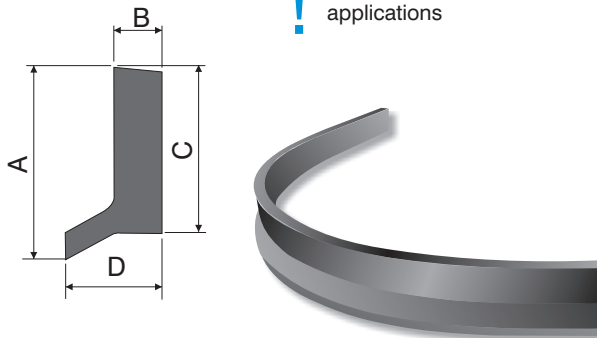
Length: 560 mm



Preload recommended for U Series: 1 - 2 mm

Art.No.	A	B	C	D
FB-U1	25,4	6,35	22	12,7

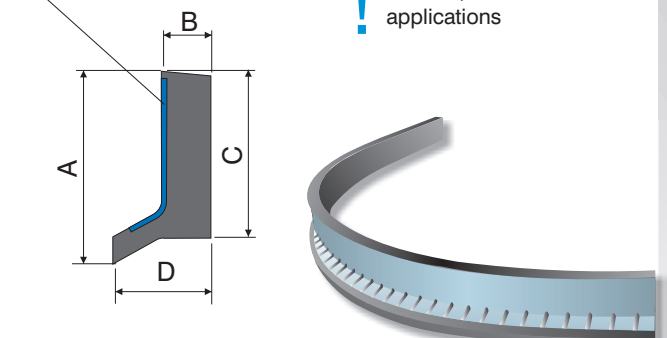
Length: 560 mm



Art.No.	A	B	C	D
FB-U3	25,4	6,35	22	12,7

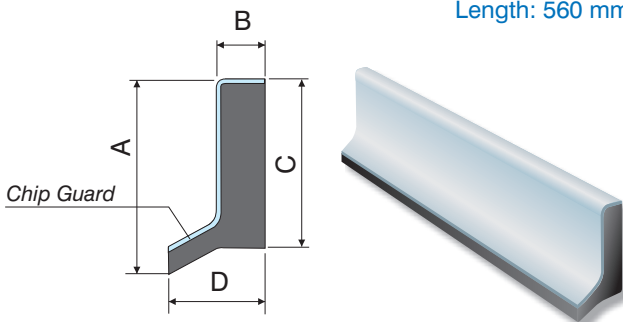
Stainless-steel Chip Guard

Length: 560 mm



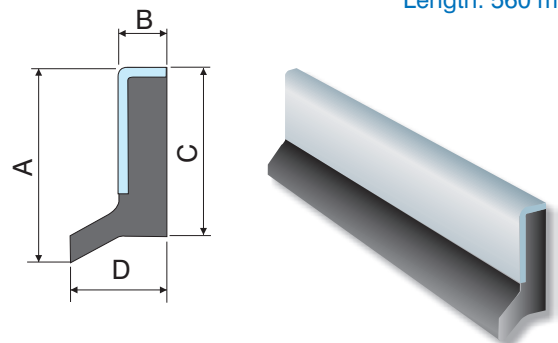
Art.No.	A	B	C	D
FB-U5	25,4	6,35	22	12,7

Length: 560 mm



Art.No.	A	B	C	D
FB-U60	25	6	21	11

Length: 560 mm

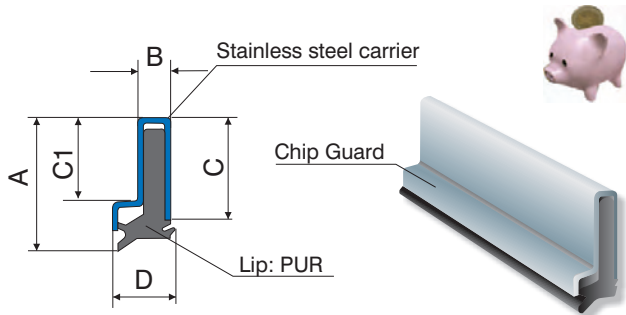


Art.No.	A	B	C	D
FB-U90	25	6	21	11

FB Way Wipers

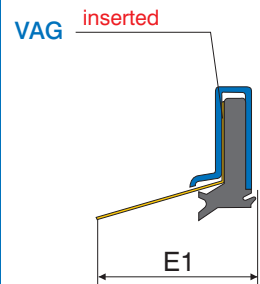
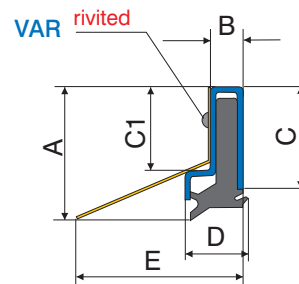
M Series

Preload recommende for M series: 0.5 - 1 mm

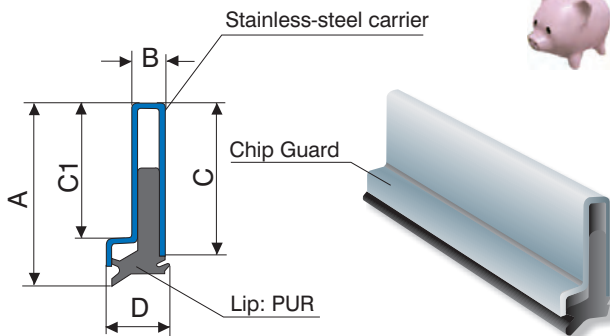


With stainless-steel preguard (0.25 mm thick) .
Recommended only for hardened guideways.
 (AI mounting strip and preguard supplied separately).

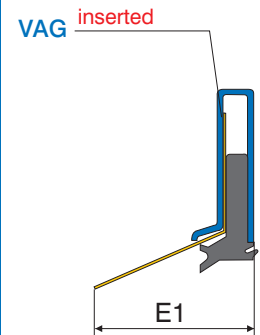
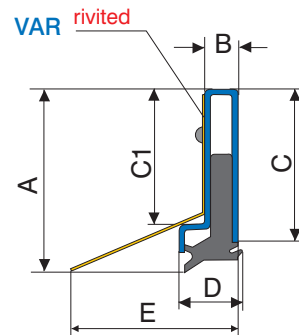
Art.No.	A	B	C	C1	D	Length
FB-M18/500	18	4,6	14,2	11,7	8,6	500
FB-M18/1000	18	4,6	14,2	11,7	8,6	1000
FB-M18/25 Lippe/Lip	Ersatzlippe/Spare lip		endlos/endless			



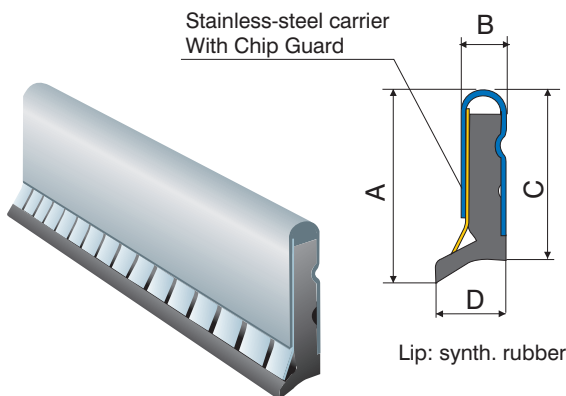
Art.No.	A	B	C	C1	D	E	E1	Length
FB-M18VAR/500	18	4,6	14,2	11,7	8,6	22	---	500
FB-M18VAG/500	18	4,6	14,2	11,7	8,6	---	21	500



Art.No.	A	B	C	C1	D	Length
FB-M25/500	25	4,6	21,2	18,7	8,6	500
FB-M25/1000	25	4,6	21,2	18,7	8,6	1000
FB-M18/25 Lippe/Lip	Ersatzlippe/Spare lip		endlos/endless			



Art.No.	A	B	C	C1	D	E	E1	Length
FB-M25VAR/500	25	4,6	21,2	18,7	8,6	22	---	500
FB-M25VAG/500	25	4,6	21,2	18,7	8,6	---	21	500



Art.No.	A	B	C	D	Length
FB-M27	27	6	24,6	10	500



Wiper lips can be replaced when worn out.
 They are available as continous strips!

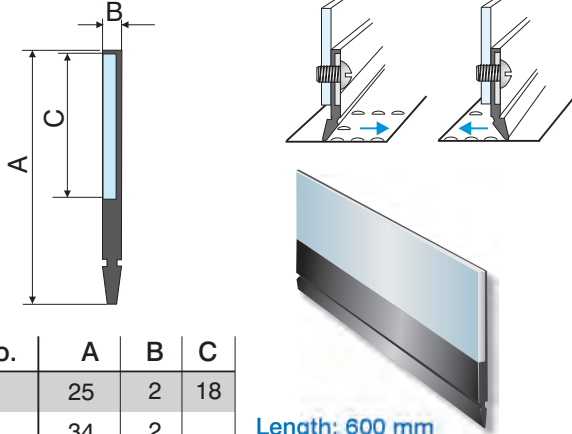
FB Way Wipers

for special applications (see also page 5)

E Series

Recommended preload: 1 - 3 mm

For surfaces with grooves or gaps



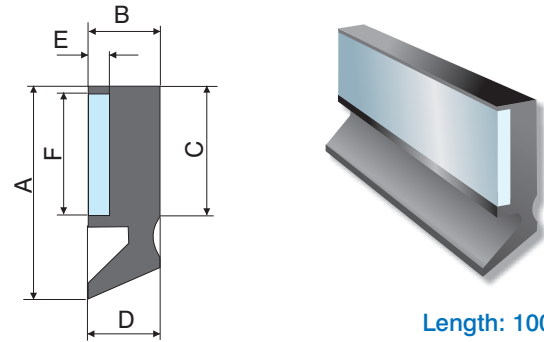
Art.No.	A	B	C
FB-E1	25	2	18
FB-E5	34	2	

Length: 600 mm

F Series

Recommended preload: 1-3 mm

For very dirty guide ways



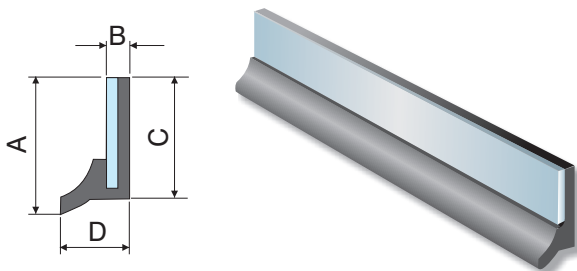
Length: 1000 mm

Art.No.	A	B	C	D	E	F
FB-F3	28	10	18,5	10	3	16

H Series

Recommended preload: 0.5 - 1 mm

For universal use, (reduced height (11 mm))



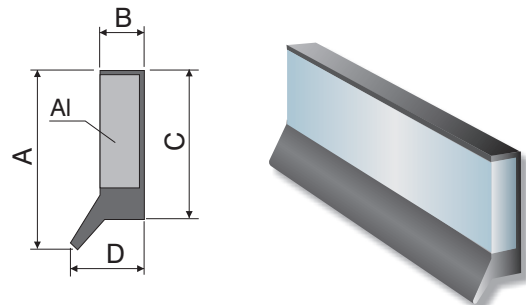
Art.No.	A	B	C	D
FB-H1	12,5	2	11	6

Length: 500 mm

K Series

Recommended preload: 1 - 2 mm

For universal use; ideal for stepped holes



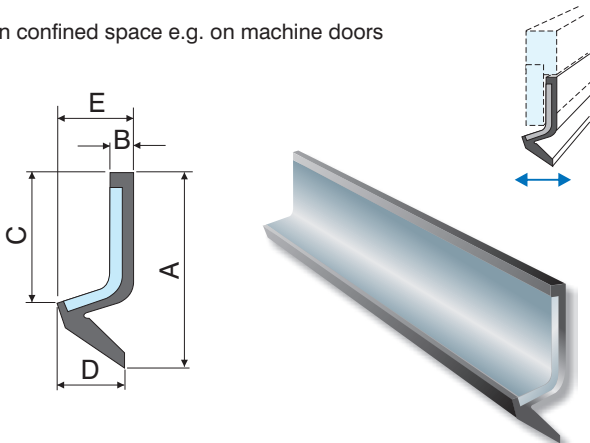
Art.No.	A	B	C	D
FB-K1	18	4,5	15	7,5
FB-K3	25	4,5	22	7,5

Length: 500 mm

N Series

Recommended preload: 1 - 3 mm

In confined space e.g. on machine doors



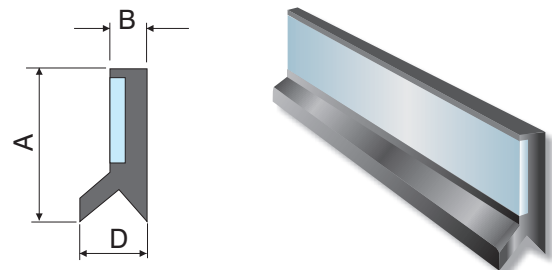
Art.No.	A	B	C	D	E
FB-N1	26	3	17,5	9	9,5

Length: 500 mm

V Series

Recommended preload: 1.5 - 2 mm

On hydrostatic slideways or without central lubrication

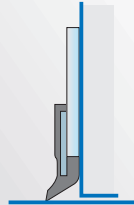
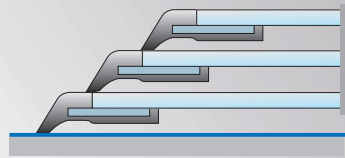


Art.No.	A	B	D
FB-V1	20	6	11
FB-V3	25	6	11

Length: 560 mm

TA Wipers

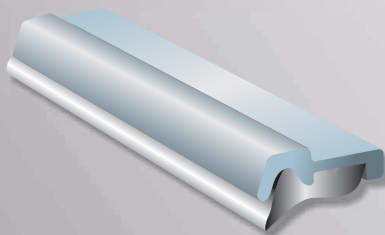
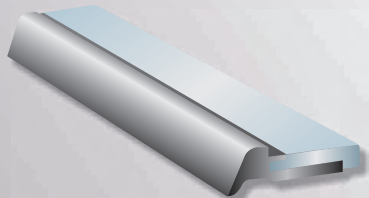
for Telescopic Steel Covers
or use in confined space



TA Wipers have been specially developed for telescopic steel covers. They keep cover boxes clean and prevent dirt and chips from entering. The wipers are spot-welded, riveted or screwed to the cover boxes. In confined spaces, some may also be used (vertically) as way wipers.

Design

Unless otherwise indicated in the drawing, TA Wipers are made of synthetic rubber with moulded-in steel insert.



Material properties of wiper lip

- Highly abrasion-resistant
- Temperature-resistant from -40°C to +100°C, short-term up to 140°C
- Very good mechanical characteristics
- Resistant to coolants and mineral oils
- Resistant to microorganisms
- Hydrolitic resistance.

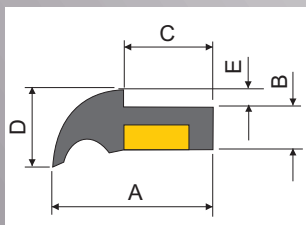
For permanent operating temperatures of up to 200°C or where the wipers are exposed to particularly aggressive coolants or acids, they can also be made from other elastomeres, such as FPM.

Dimensional stability

The wipers are manufactured in special moulds, ensuring 100% repeat-order accuracy.

Corrosion protection

All TA Wipers with a steel insert are corrosion-protected.



Delivery

Standard lengths are available from stock.
Customised wipers are available on short notice.

Preload

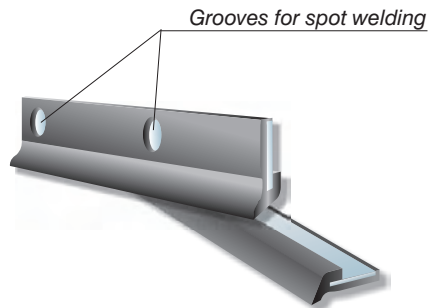
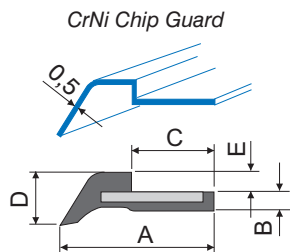
All wipers shown in relaxed position.
Recommended preload: see drawings inside.

TA Wipers

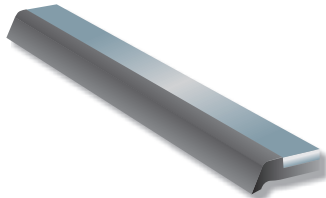
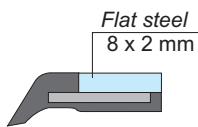
for Telescopic Steel Covers
or use in confined space

A Series

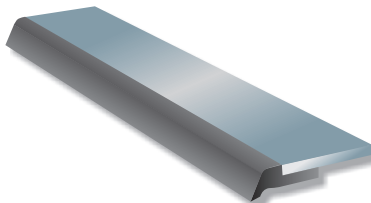
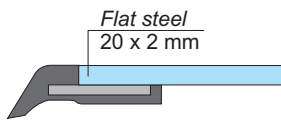
Recommended preload : 1 mm



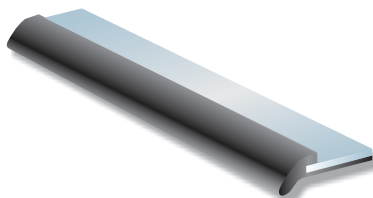
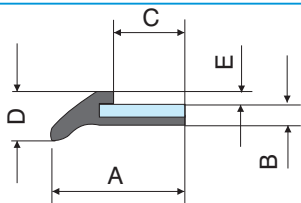
Art.No.	A	B	C	D	E	Length
TA-A1	15	2	8	6	2	500
TA-A3	15	2	8	6	2	1000
TA-A15	Späneschutz aus CrNi CrNi Chip Guard					1000



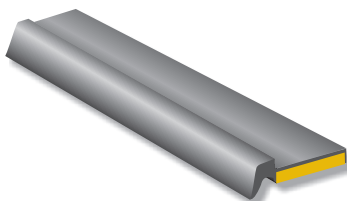
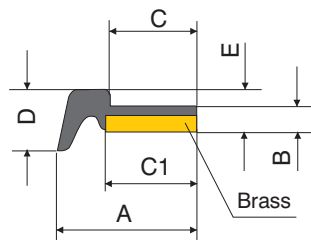
Art.No.	A	B	C	D	E	Length
TA-A5	15	2	8	6	2	500



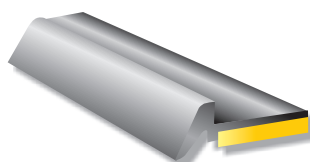
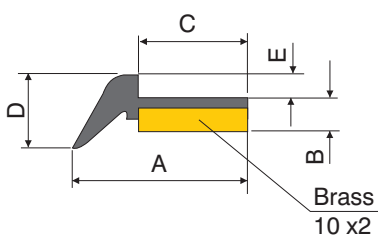
Art.No.	A	B	C	D	E	Length
TA-A7	15	2	8	6	2	500



Art.No.	A	B	C	D	E	Length
TA-A30	15	2,25	8	5,5	1,5	600



Art.No.	A	B	C	C1	D	E	Length
TA-A40	16	3	10	10,5	7	2	560
TA-A42	16	3	10	10,5	7	2	1000



Art.No.	A	B	C	D	E	Length
TA-A50	16	3	10	6,5	1,8	1000

TA Wipers

for Telescopic Steel Covers
or use in confined space

B Series

CrNi Chip Guard

Grooves for spot welding

Recommended preload series B: 1 mm

Art.No.	A	B	C	D	E	Length
TA-B1	18	3,3	12	6	1,5	500
TA-B3	18	3,3	12	6	1,5	1000
TA-B15	Späneschutz aus CrNi CrNi Chip Guard					1000

Flat steel
12 x 2 mm

Art.No.	A	B	C	D	E	Length
TA-B5	18	3,3	12	6	1,5	500

Flat steel
25 x 2 mm

Art.No.	A	B	C	D	E	Length
TA-B7	18	3,3	12	6	1,5	500

B Series with Bumper

CrNi Chip Guard

Art.No.	A	B	C	D	E	Length
TA-B9	20	3,3	14	5,5	1,5	500
TA-B15	CrNi Chip Guard					1000

CrNi Chip Guard

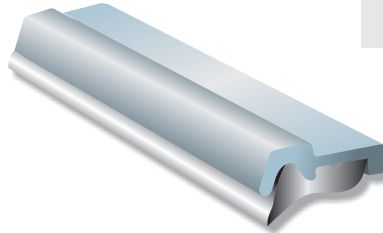
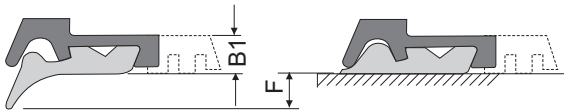
Art.No.	A	B	C	D	E	Length
TA-B11	22	3,3	16	5,5	1,5	500
TA-B15	CrNi Chip Guard					1000

TA Wipers

for Telescopic Steel Covers

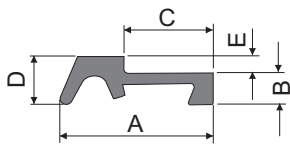
C Series

When mounted



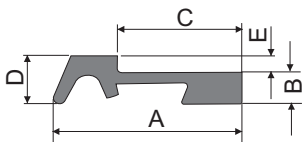
Recommended preload: 2.5 mm

Carrier



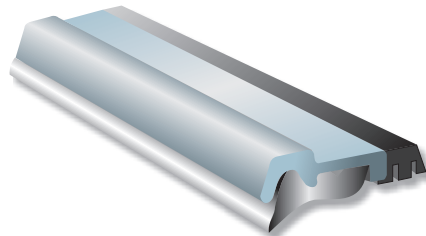
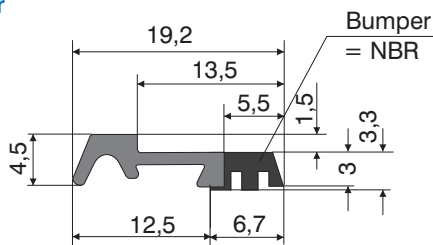
Art.No.	A	B	B1	C	D	E	F	Length	Material Carrier
TA-C1.5	14	3	3,5	8	4,5	1,5	2,5	1000	Steel
TA-C1.6	14	3	3,5	8	4,5	1,5	2,5	3000	Steel

Carrier



Art.No.	A	B	B1	C	D	E	F	Length	Material Carrier
TA-C2.5	18	3	3,5	12	4,5	1,5	2,5	1000	Steel
TA-C2.6	18	3	3,5	12	4,5	1,5	2,5	3000	Steel

Carrier



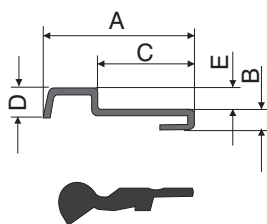
Art.No.	A	B	B1	C	D	E	F	G	H	Length	Material Carrier
TA-C1.4	19,25	3,3	3,0	13,5	4,5	1,5	5,5	6,7	12,5	1000	Steel

Lips

suitable for C Series carriers



Art.No.	Color	Length	Material Lip
TA-C1.7W	milky white	endless	PUR 83° Shore
TA-C1.7S	black		PUR 83° Shore
TA-C1.7R	red		PUR 83° Shore
TA-C1.9	black		PUR 95° Shore



Carrier

Lip

Art.No.	A	B	C	D	E	F	Length	Material
TA-C12 E	19,3	3,5	12,2	4,8	2	~8,5	1000	Steel
TA-C15 E	19,3	3,5	12,2	4,8	2	~8,5	3000	Steel

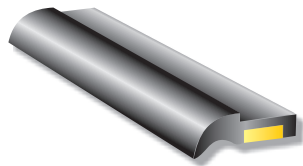
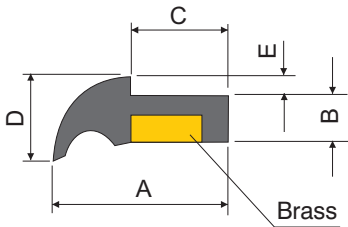
Art.No.	Length	Material Lip
TA-C13 E	endless	PUR 83° Shore

TA Wipers

for Telescopic Steel Covers

M Series

Preload recommended for M1 and M 2: 1 mm



Wiper complete

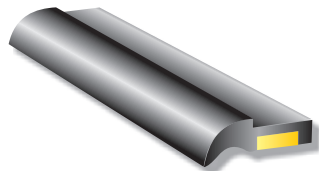
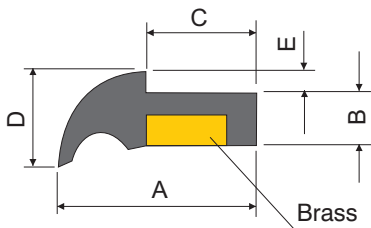
Art.No.	A	B	C	D	E	Length	Material Insert
TA-M1.0	16	4	10	~8	1	1000	Brass 8x2

Brass insert

Art.No.	Length	Material
TA-M1.2	for Way wiper TA-M1.0	Brass 8x2

Lip

Art.No.	Length
TA-M1.3	endless
TA-M1.4	1000



Wiper complete

Art.No.	A	B	C	D	E	Length	Material Insert
TA-M2.0	21	5	12	9	2	1000	Brass 8x3

Brass insert

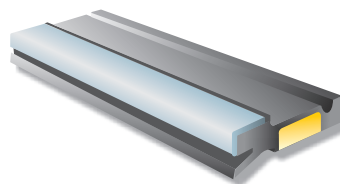
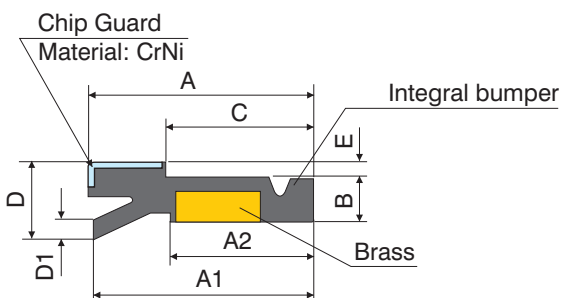
Art.No.	Length	Material
TA-M2.2	for Way wiper TA-M2.0	Brass 8x3

Lip

Art.No.	Length
TA-M2.3	endless
TA-M2.4	1000

All-Rounder

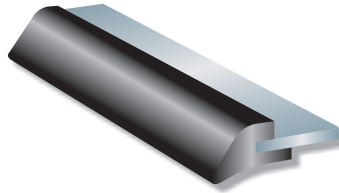
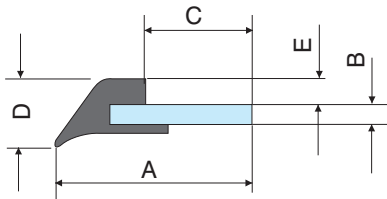
Preload recommended 1.5 mm



Art.No.	A	A1	A2	B	C	D	D1	E	Length
TA-M3.0	21,3	21	13,5	4,4	14	7,5	1,9	1,5	1000

TA Wipers for Telescopic Steel Covers

R Series

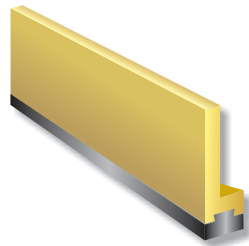
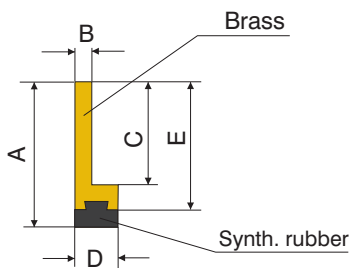


Length: 560 mm

Recommended preload: 0.5 - 1 mm

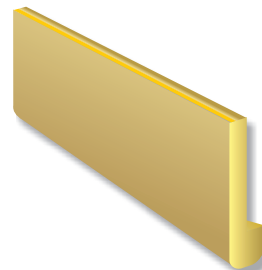
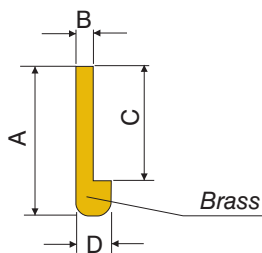
Art.No.	A	B	C	D	E
TA-RA1	16	2	9	6	1,5
TA-RA2	20	2	11	7	2,5
TA-RA3	13	1,5	7	4	1,3

Sliding Shoes for Telescopic Steel Covers



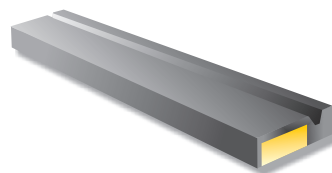
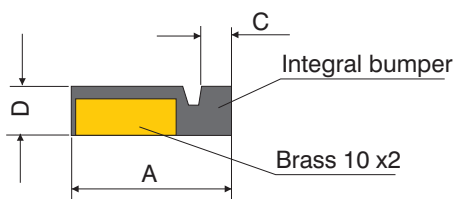
Length: 500 mm

Art.No.	A	B	C	D	E
TA-G1	17	2	12	5	15

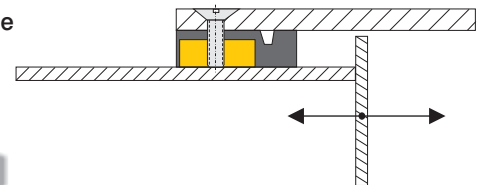


Length: 1000 mm

Art.No.	A	B	C	D
TA-G2	17	2	13	4
TA-G2.1	17	2	12	5



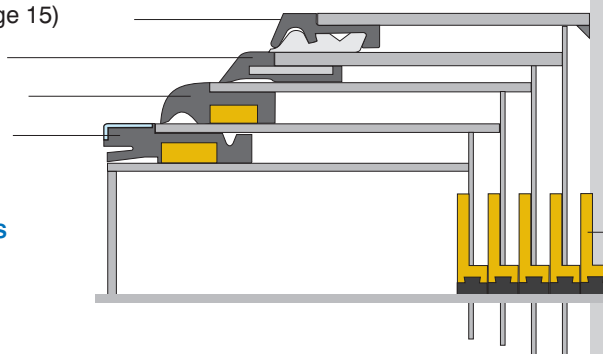
Example



Art.No.	A	C	D	Length
TA-G6	13	2,5	4	1000

- TA-C1.5/1.6 +1.7 (page 15)
- TA-A1 (page 13)
- TA-M1.0 (page 16)
- TA-M3 (page 16)

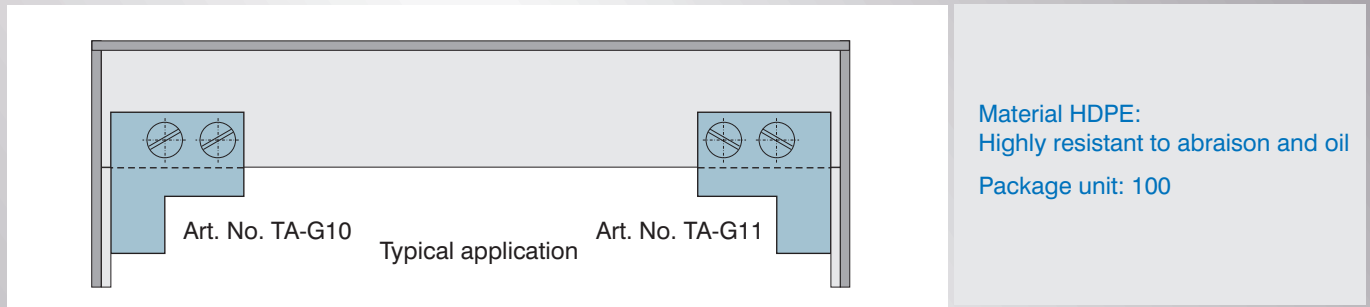
Typical applications



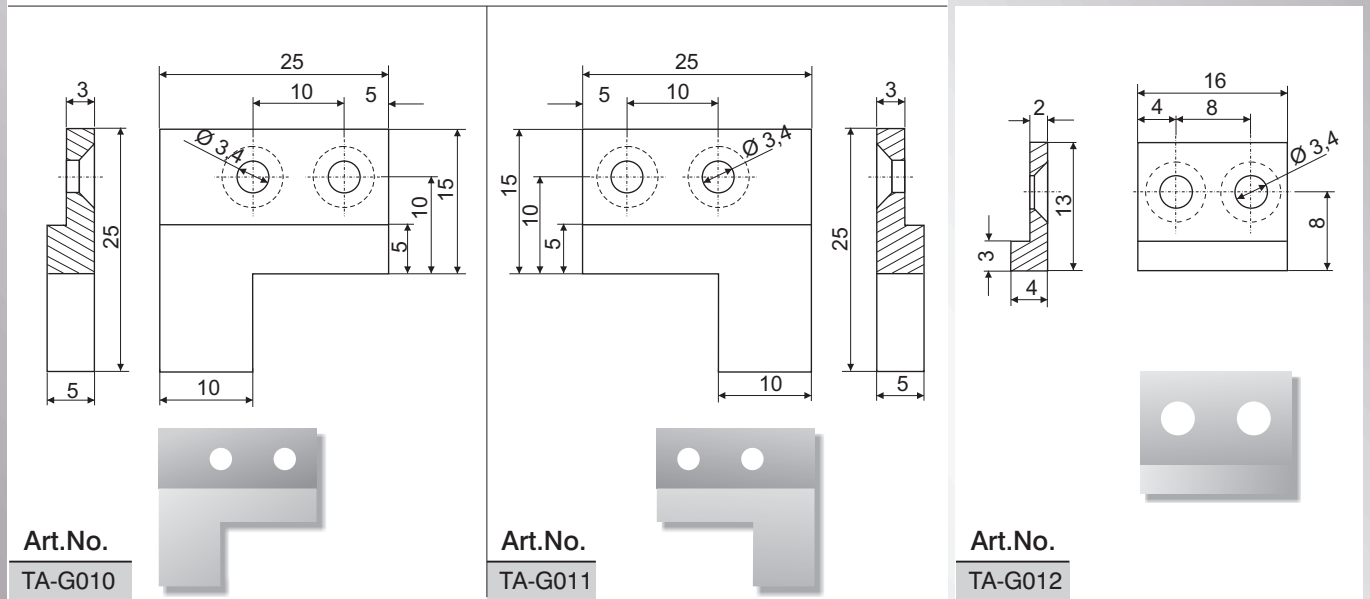
TA-G1 (page 17)

Accessories for Telescopic Steel Covers and Protective Bellows

Sliding Shoes



Material HDPE:
Highly resistant to abrasion and oil
Package unit: 100

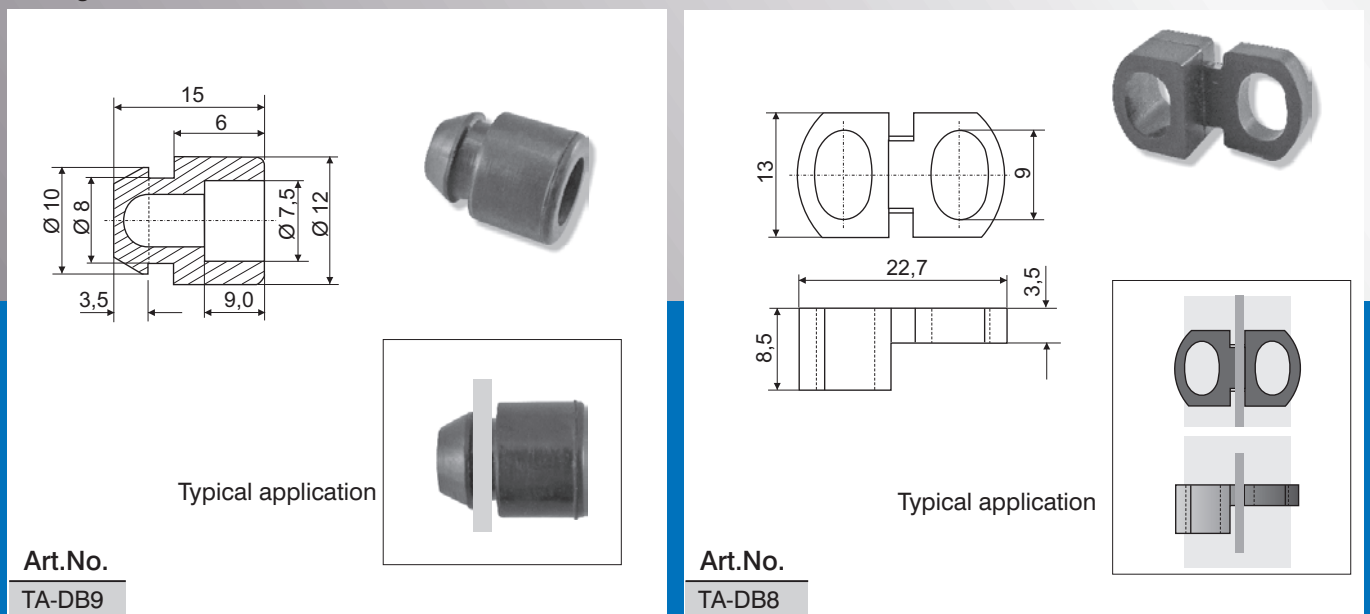


Bumpers

These bumpers have passed all endurance tests under the most difficult conditions with flying colors:
No breakage, no ruptures!

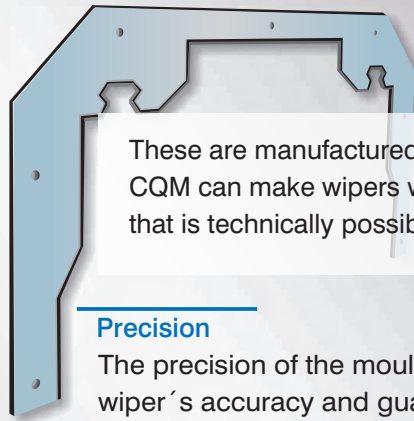
Material: Special mixtures of synthetic rubber.

Package unit: 100



Moulded Wipers

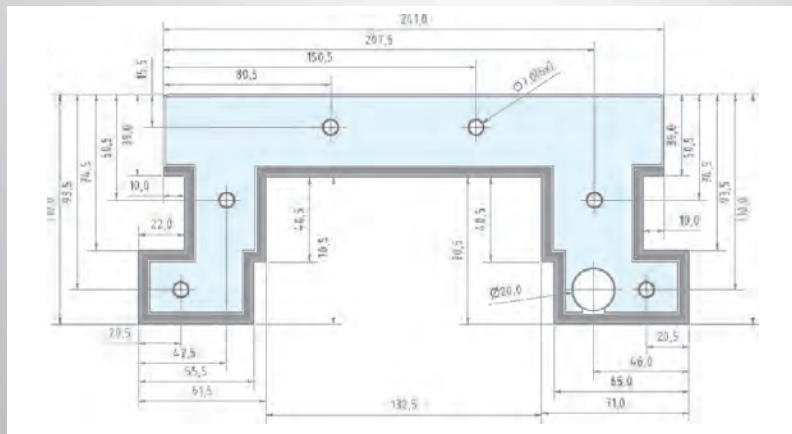
Custom-made



These are manufactured in special moulds. CQM can make wipers with any configuration that is technically possible.

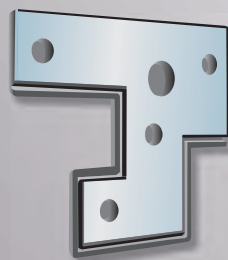
Precision

The precision of the mould is a criterion of the wiper's accuracy and guarantees optimum wiping results. And since CQM wipers are manufactured in moulds, 100 % accuracy is guaranteed for repeat orders.



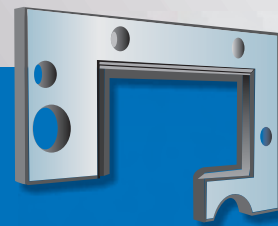
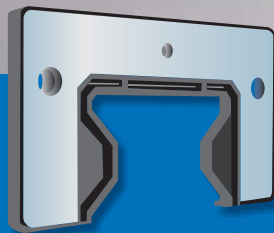
Safety

For your safety, we shall send you drawings for approval before production starts. We will gladly accept your CAD drawings which we will then adapt accordingly and return to you for your approval.



Protective coating

All moulded wipers are provided with a transparent coating as a protection against chips and corrosion. The coating is optionally available in black.



Lettering

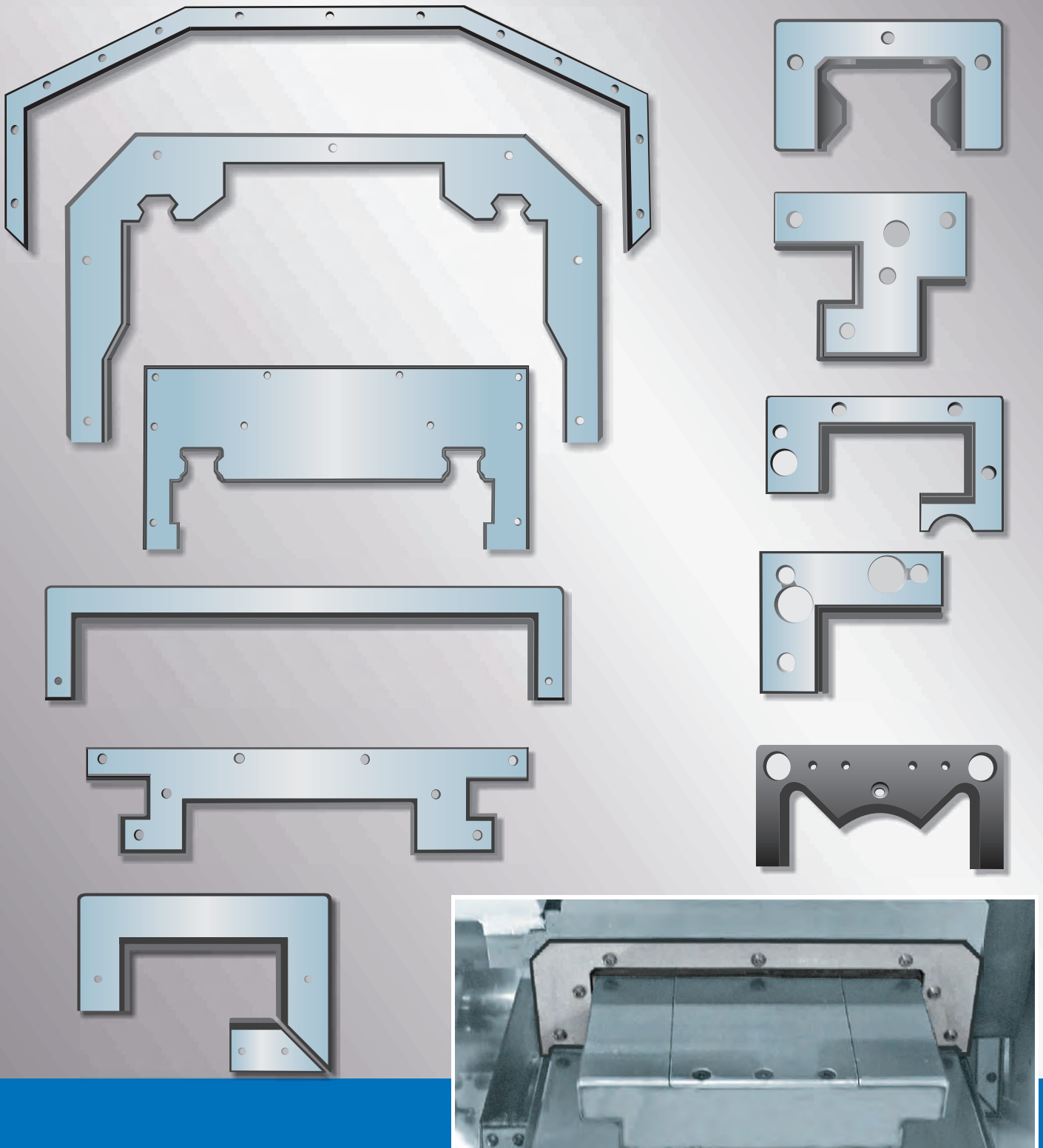
Moulded wipers can be marked to your specifications.

Moulded Wipers

Custom-made.

Any configuration that is technically possible.

Examples



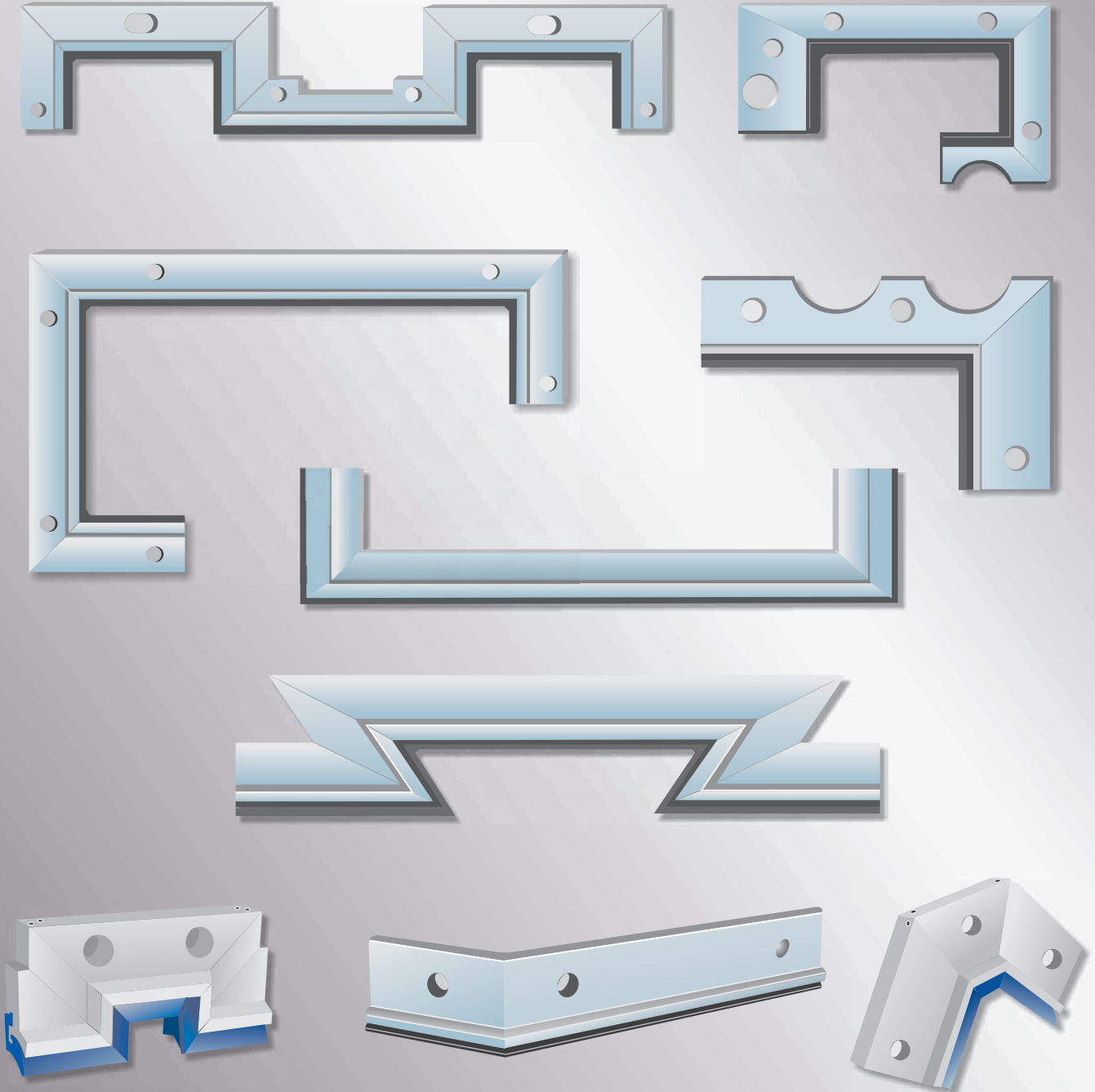
Inquiries/Orders

We would be pleased to submit our quotation, for which we only need your sketch or drawing and details about the quantities required. Orders should be accompanied by a detailed drawing, preferably CAD, which we shall use as a basis for the final drawing to be sent back to you for approval.

Custom made wipers

Any configuration that is technically possible.

Examples



CQM supplies **taylor-made wipers** to sketch or drawing – ready to mount – regardless of whether you need just one wiper or a small batch.

If you need the same wiper on a regular basis, we might suggest a moulded type (**formed wiper**) that could be cheaper in the long run.

All CQM Wipers at a Glance

CQM Series	Standard lengths ex stock (mm)	Material of carrier	Material of wiper lip	Continuous operating temp. (°C)	Microbial protection	Replaceable wiper lip	Recommended preload (mm)	Preguard	Chip Guard
FB-A	500	St	SK / FPM	100 / 200	X		0,5 - 1		
FB-B	560/1000	St	SK / FPM	100 / 200	X		0,5 - 1		
FB-AW	1000/2000	AL	PUR	90	X	X	2		X
FB-AW...VA	1000	AL	PUR	90	X		2	X	
FB-C3 + FB-C7	800	St	SK / FPM	100 / 200	X		1 - 4		
FB-C1 + FB-C5	800	St	SK / FPM	100 / 200	X		1 - 4	X	
FB-D1	850	St	SK / FPM	100 / 200	X		1 - 4		X
FB-D3	850	St	SK / FPM	100 / 200	X		1 - 4		
FB-E	600	St	SK / FPM	100 / 200	X		1 - 3		
FB-F	1000	St	SK / FPM	100 / 200	X		1 - 3		
FB-G	500	St	SK / FPM	100 / 200	X		3 - 8		
FB-H	500	St	SK / FPM	100 / 200	X		0,5 - 1		
FB-K	500	St	SK / FPM	100 / 200	X		1 - 2		
FB-N	500	St	SK / FPM	100 / 200	X		1 - 3		
FB-M18/M25	500/1000	CrNi	PUR	90	X	X	0,5 - 1		X
FB-M...VA	500/1000	CrNi	PUR	90	X		0,5 - 1	X	
FB-M27	500	CrNi	SK / FPM	100 / 200	X		0,5 - 1		X
FB-SHS	300	St	SK / FPM	100 / 200	X		1	X	
FB-U1	560	St	SK / FPM	100 / 200	X		1 - 2		
FB-U3	560	---	SK / FPM	100 / 200	X		1 - 2		
FB-U5	560	CrNi	SK / FPM	100 / 200	X		1 - 2		X
FB-U60 + U90	560	St	SK / FPM	100 / 200	X		1 - 2		U60 X
FB-V	560	St	SK / FPM	100 / 200	X		1,5 - 2		
TA-A1 + TA-A3	500/1000	St	SK / FPM	100 / 200	X		1		TA-B15 X
TA-A5, TA-A7, (TA-A30)	500 (600)	St	SK / FPM	100 / 200	X		1		
TA-A40, TA-A42, (TA-A50)	560/100 (1000)	Ms	SK / FPM	100 / 200	X		1		
TA-B1 + TA-B3	500/1000	St	SK / FPM	100 / 200	X		1		TA-B15 X
TA-B5 + TA-B7	500	St	SK / FPM	100 / 200	X		1		
TA-B9 + TA-B11	500/1000	St	SK / FPM	100 / 200	X		1		TA-B15 X
TA-C1 + TA-C2	1000/3000	St	PUR	90	X	X	2,5		X
TA-C1.4	1000	St/ Bumper	PUR	90	X	X	2,5		X
TA-C12E + TA-C15E	1000/3000	St	PUR	90	X	X	2,5		X
TA-M1.0 + TA-M2.0	1000	Ms	SK / FPM	100 / 200	X	X	1		
TA-M3.0	1000	Ms	SK / FPM	100 / 200	X		1,5		X
TA-RA	560	St	SK	100	X		0,5 - 1		
TA-G1	500	Ms	SK	100	X		---		

SK = Synth. Rubber

St = Steel

Ms = Brass

X = yes