COMUNELLO

GATE DIVISION

Ranger

PERFECT
CABLELESS
TELESCOPIC
SYSTEM

Ranger

PATENT PENDING

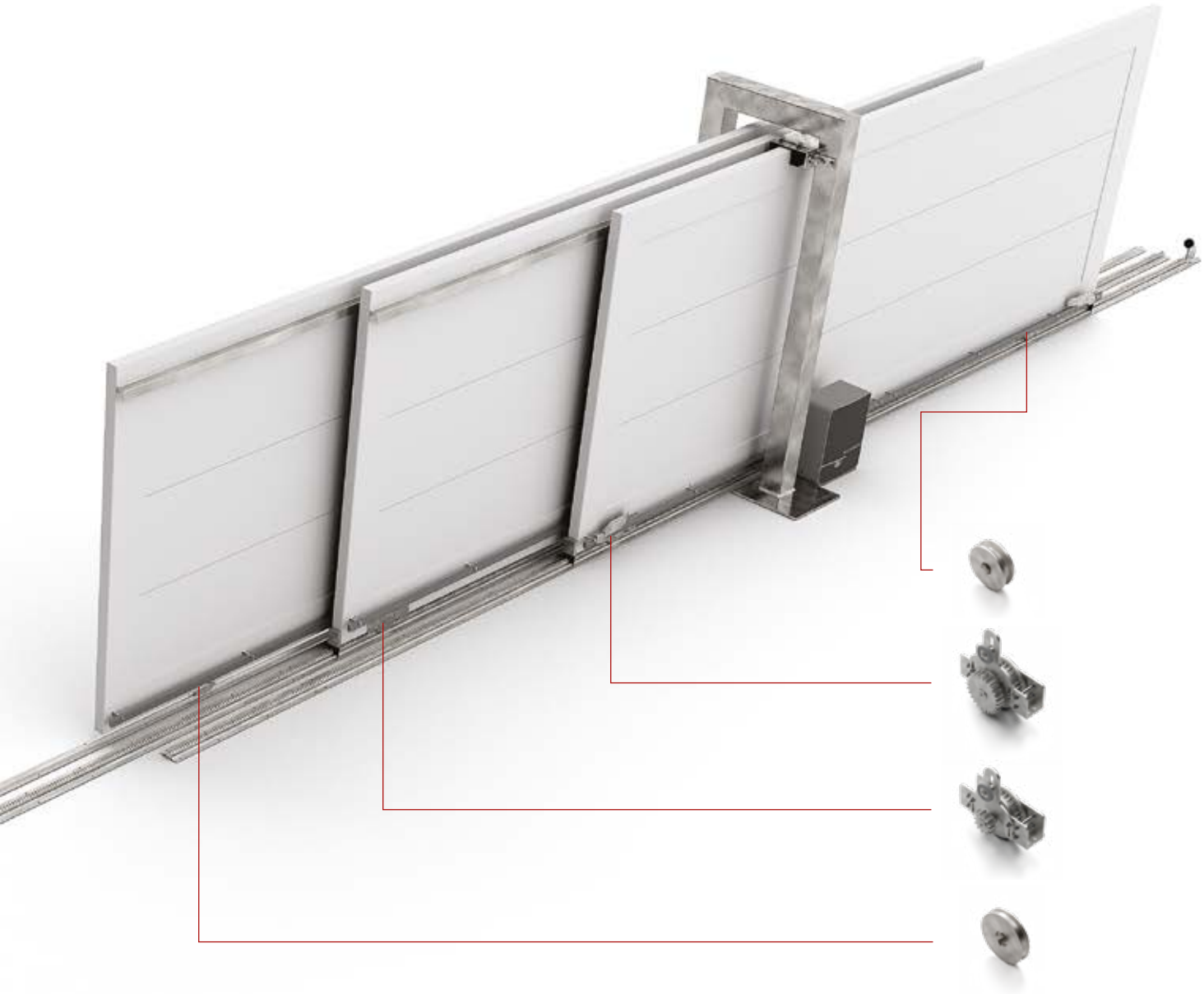
The Comunello telescopic system. A perfect cableless mechanism that maintains precision year after year.

- **Very large opening** with very compact closure
- **Precise**, **high quality**, ground-mounted rack driven track system
- **Cableless** rack and pinion transmission of movement between the leaves
- **Simplified template** guide for easy and accurate installation

RANGER

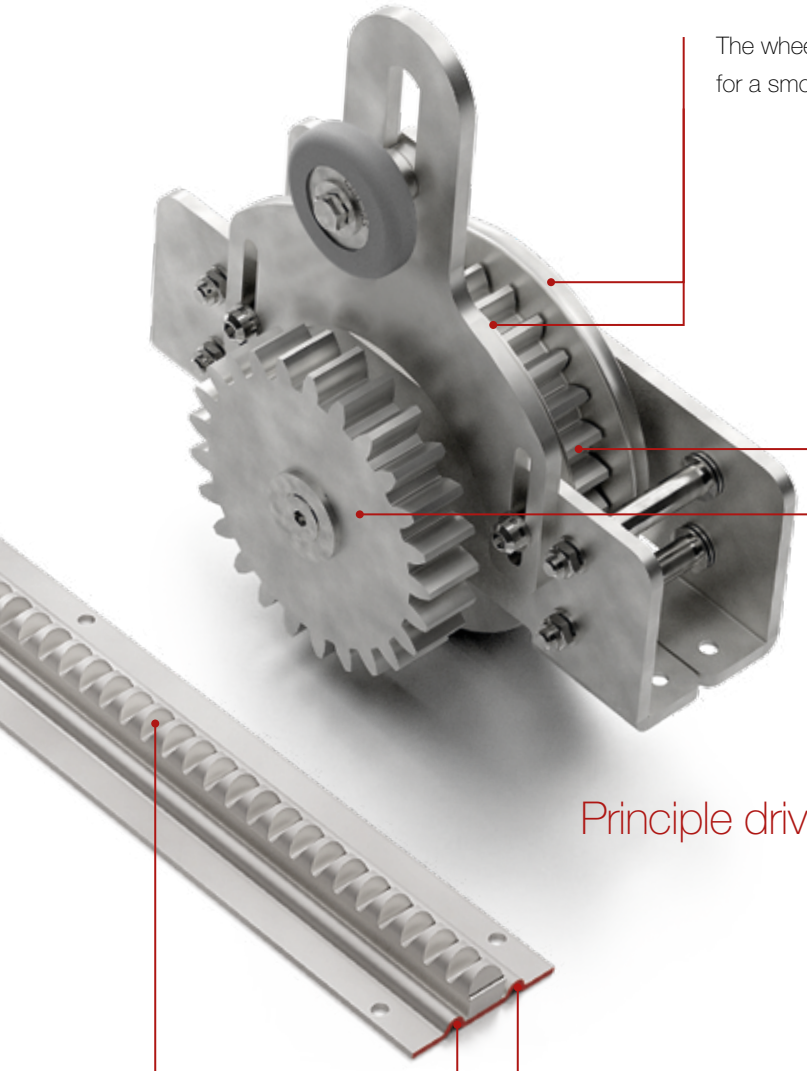
The Ranger telescopic system

The Ranger telescopic system does not use cables to transmit drive from one leaf to the next but instead it uses an innovative ground mounted rack track. This rack track transmits movement using a system of hidden pinions that connect to the side rack, motorising the next leaf. The simplicity of the system ensures that it very easy and rapid to install, remains reliable and requires very low maintenance. The rack tracks are brushed clean on every opening by the two cleaning brushes installed on the front and back of each leaf.



Ranger Components

For perfect power transmission for a two leaf or three leaf telescopic system.



The wheel sits on two external profiles of the track for a smoother movement.

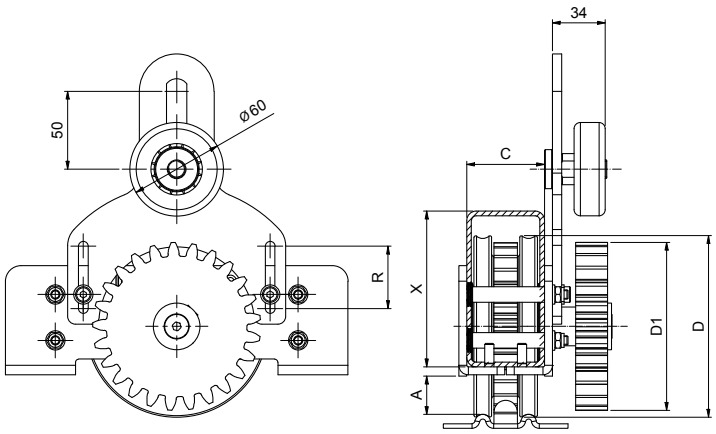
Wheel unit made up of principle pinion drive wheel that, rolling on the rack track, generates the rotation of the external secondary pinion.

The movement via the second external pinion is transmitted to the rack mounted onto the side of the second gate leaf.

The rack track is equipped with two side guides on which the wheel sits. This is to ensure that the weight of the gate is not loaded on the racks teeth.

Movement is generated by the ground mounted rack that also functions as a track.

Principle drive wheel for 2 or 3 leaf systems



D = Wheel diameter
C = Internal width (wheel unit)
D1 = Pinion diameter
X = Minimum tube hight

D	C	X	D1	A	R
117	50	100	108	25	40
117	75	100	108	25	40
117	100	100	108	25	40

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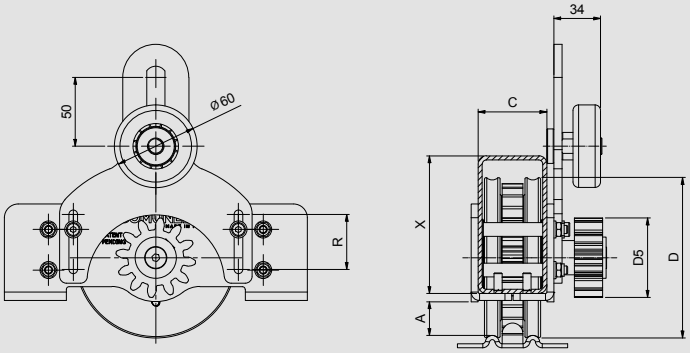
Drive wheel with low ratio secondary pinion for 3 leaf systems

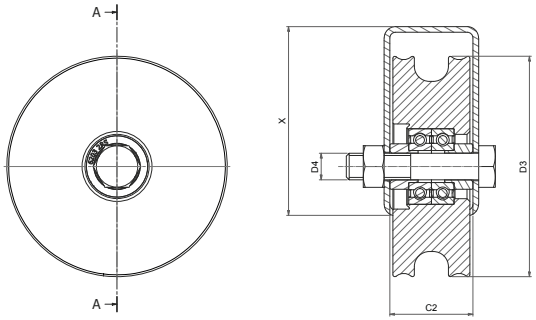


D = Wheel diameter
C = Internal width (wheel unit)

D5 = Pinion diameter
X = Minimum tube **height**

D	C	X min	D5	A	R
117	50	100	58	25	40
117	75	100	58	25	40
117	100	100	58	25	40

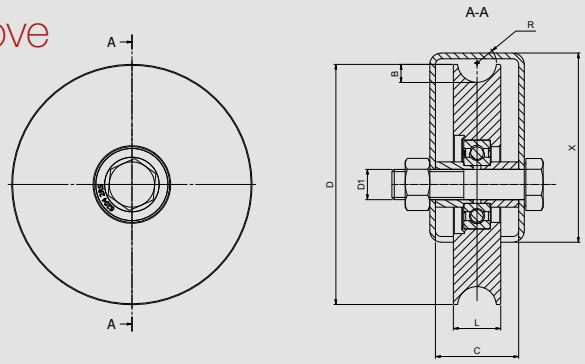
Free wheel



D3 = Wheel diameter
C2 = Internal tube width
D4 = Pin diameter
X = Minimum tube **height**

D3	C2	X min	D4
117	44	100	M14
117	69	100	M14
117	94	100	M14

Standard wheel with half-rounded groove



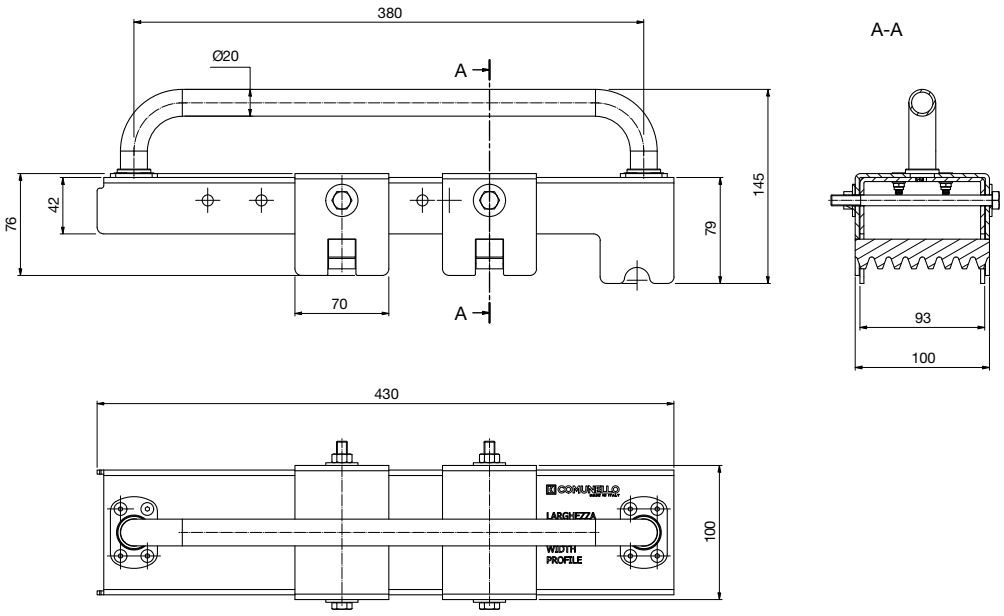
D = Wheel diameter
L = Wheel width
R = Groove radius
C = Internal tube width
B = Groove depth
X = Minimum tube **height**

D	L	R	C	B	D1	X min	N. BEARING
127	25	10.3	44	9.5	16	100	1
127	25	10.3	69	9.5	16	100	1
127	25	10.3	94	9.5	16	100	1

2 template guide kit for Rack Track installation

RG-DE-10

Template kit for alignment and placement of Ranger system tracks



This alignment guide tools ensure a rapid and precise installation of the rack tracks that make up the 2 or 3 leaf telescopic system. The simple track is the first to be installed, from this reference the rack tracks are positioned in perfect parallel alignment using two guide templates at a distance dictated by the tubular frame section of the gate. Thanks to the guide template the parallelism of the tracks is maintained and when two pieces of rack track are to be joined they will ensure the synchronization of the teeth.

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The values indicated on the template represent the widths of the tubular frame profile that can be used.

The first element is positioned on the classic simple track

The second and third elements, with internal teeth, are positioned on the rack tracks.

The width is set according to tubular frame profile sizes used to construct the gate.

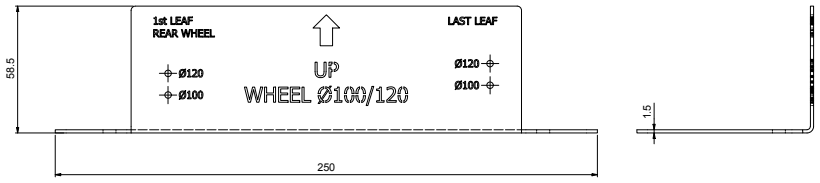
The Rack Track installation templates are used to ensure a precise and parallel alignment of the tracks and rack tracks, and can be width regulated depending on the thickness of the tubular profile used in the construction of the gate.

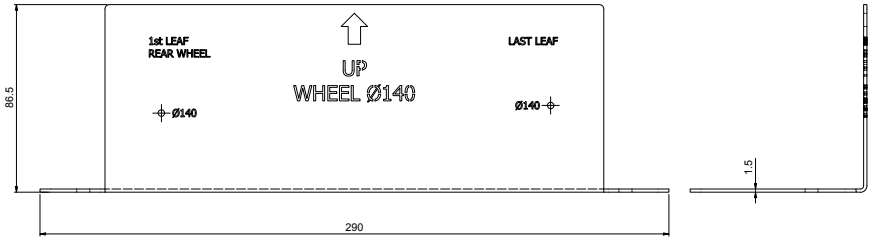
When two pieces of rack track are to be joined, the precise position for the teeth can be achieved using the toothed element of the template guide which should be positioned on the joint where the two pieces of track meet.

2 template kit for wheel unit fixing

RG-DE-20

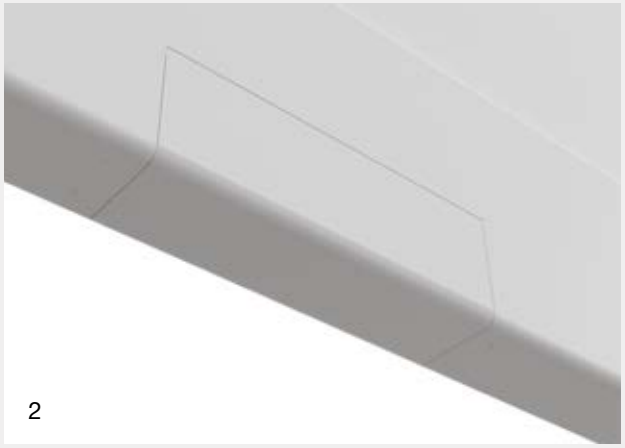
Template kit for wheels fixation





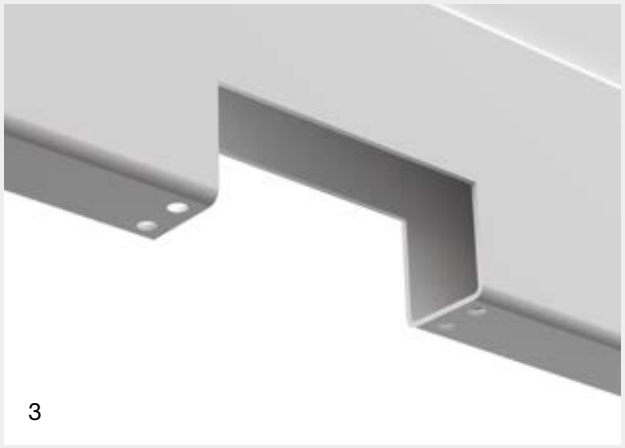
1

Using the template mark the area to cut and drill



2

The tubular section is marked



3

Cut and drill the tubular section

4

Fix the drive wheel

Ranger system components for **2 leaf** gates

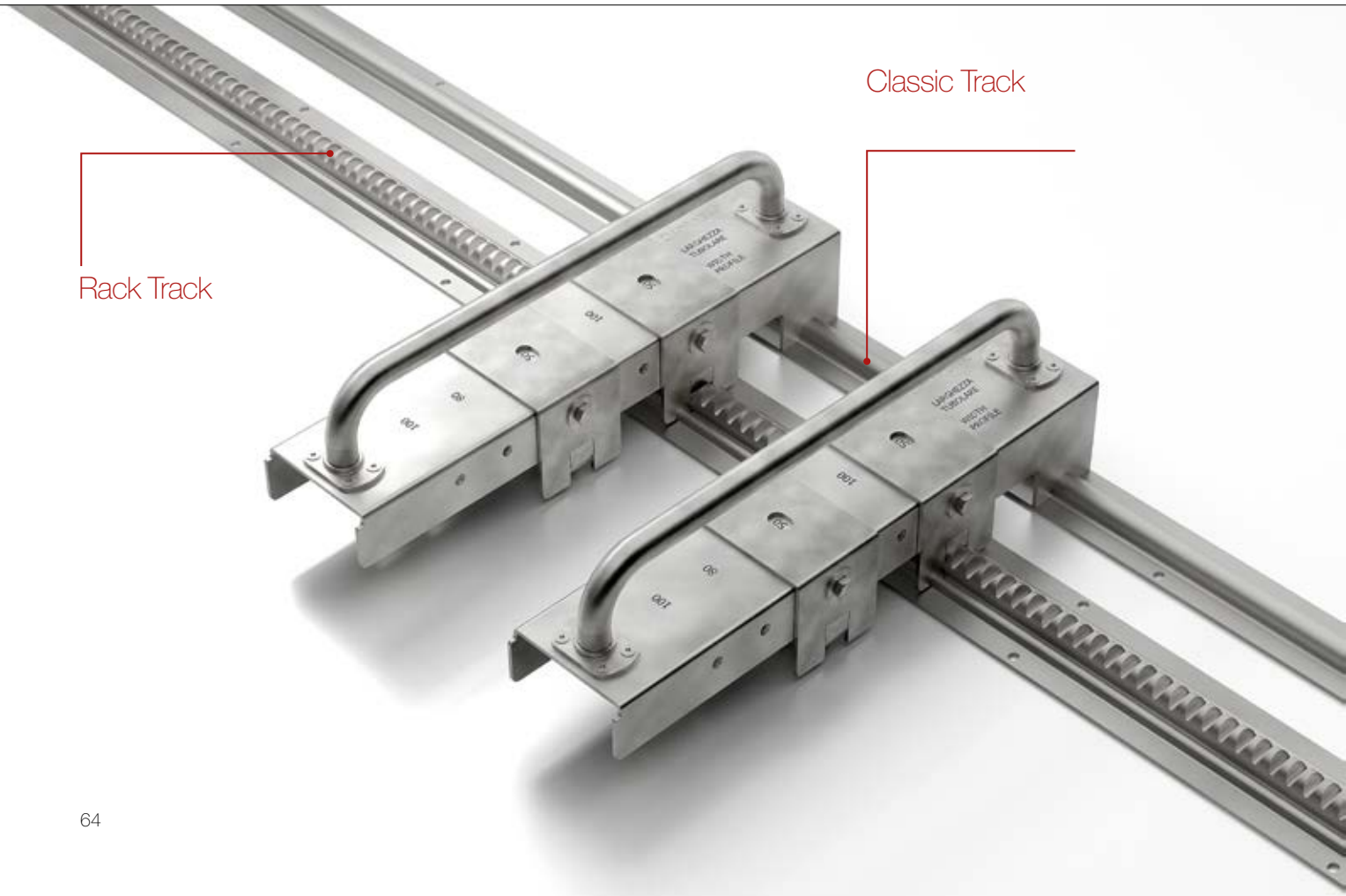
Drive wheel

Free wheel

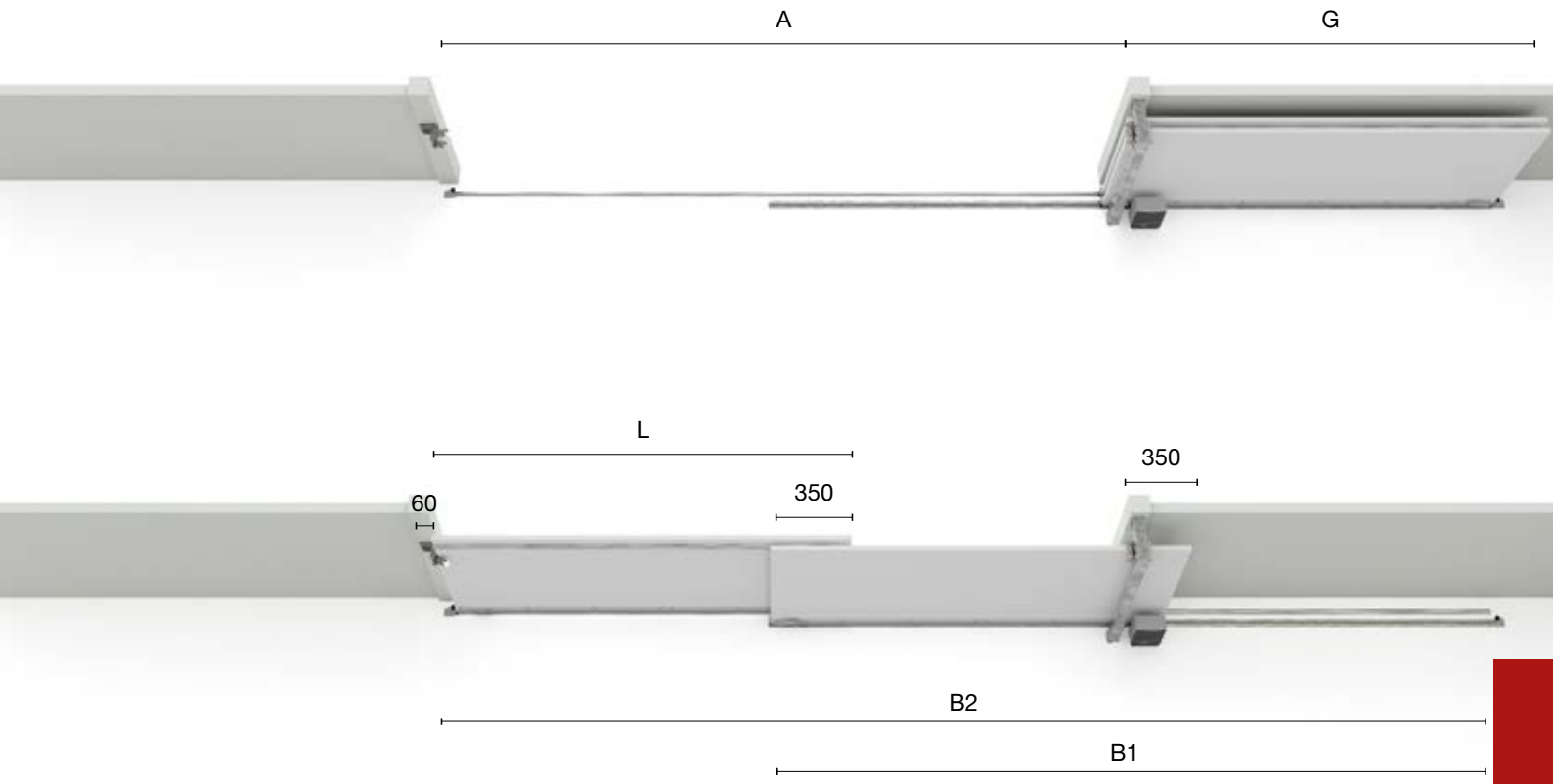
Standard wheel with half-rounded groove

Classic Track

Rack Track



Ranger configurator for **2 leaf** gates



Opening A (m)	N° Leaves	Leaf length L (m)	Minimum space available G (m)	Track length 1 RG-30 B1 (m)	Track length 2 289 B2 (m)
2	2	1.38	1.58	2.41	3.44
2,5	2	1.63	1.83	2.91	4.19
3	2	1.88	2.08	3.41	4.94
3,5	2	2.13	2.33	3.91	5.69
4	2	2.38	2.58	4.41	6.44
4,5	2	2.63	2.83	4.91	7.19
5	2	2.88	3.08	5.41	7.94
5,5	2	3.13	3.33	5.91	8.69
6	2	3.38	3.58	6.41	9.44
6,5	2	3.63	3.83	6.91	10.19
7	2	3.88	4.08	7.41	10.94
7,5	2	4.13	4.33	7.91	11.69
8	2	4.38	4.58	8.41	12.44

L (m) = (A + 0.06) ÷ 2 + 0.35
G min (m) = L + 0.2
B1 (m) = L x 2 - 0.35
B2 (m) = L x 3 - 0.7

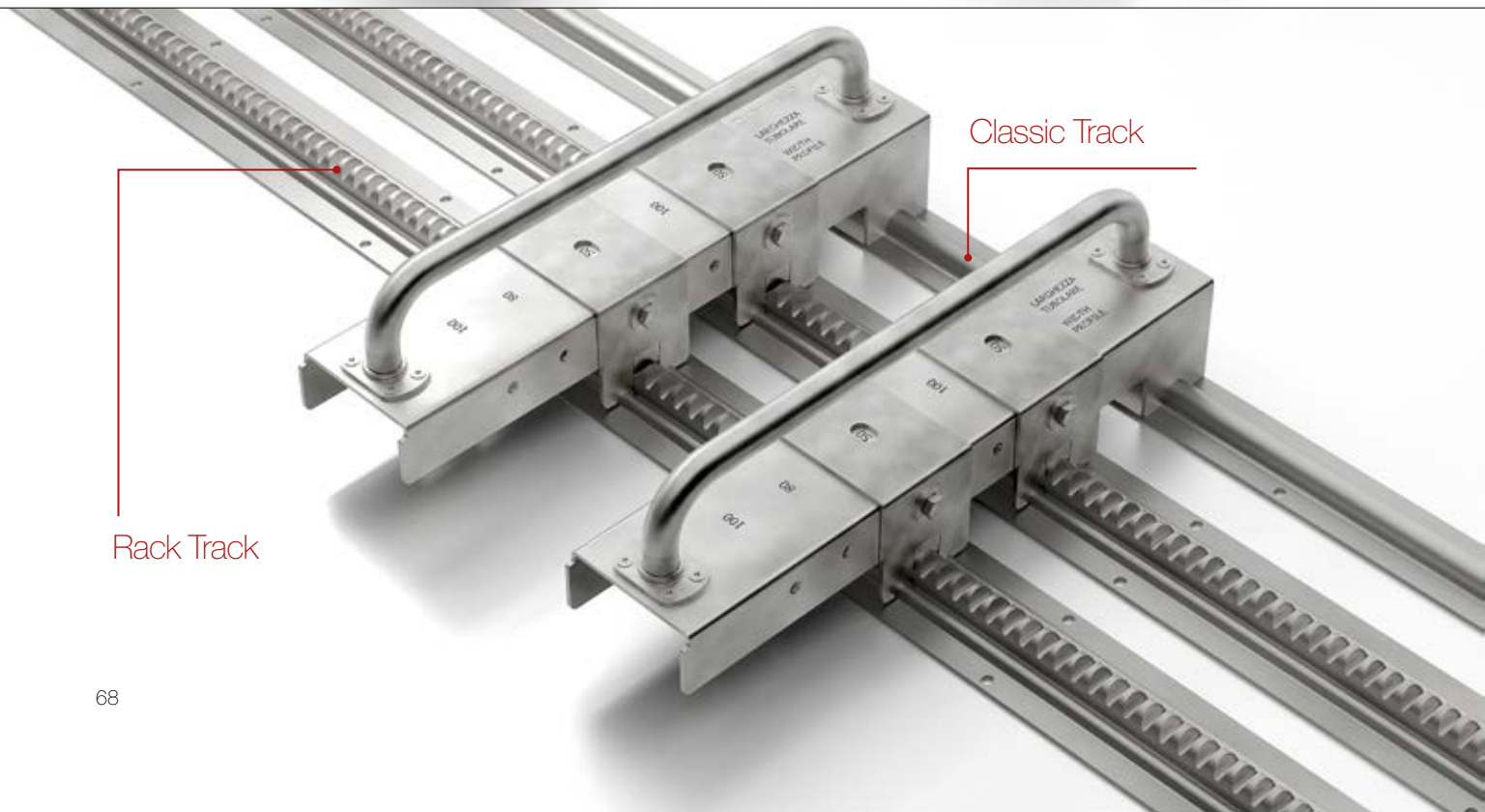
Ranger system components for **3 leaf** gates

Drive wheel

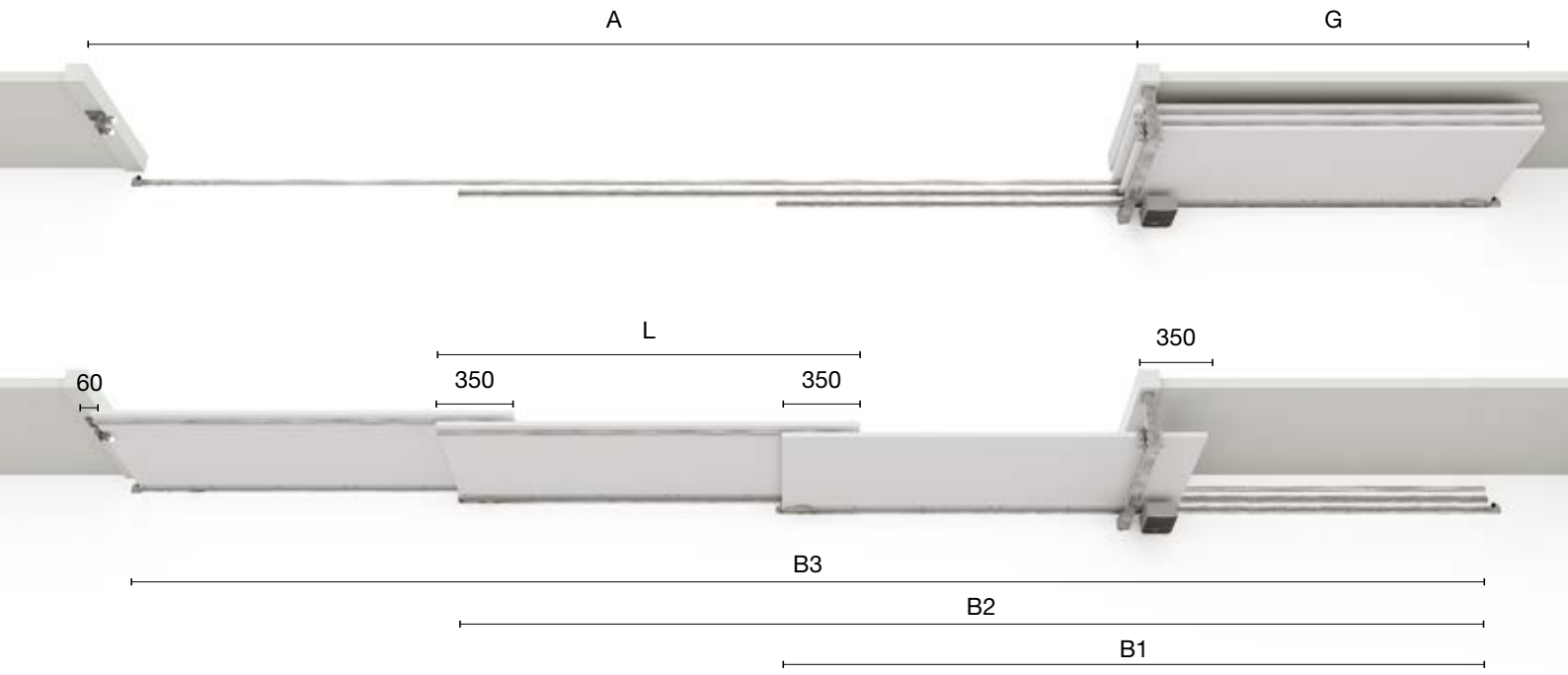
Free wheel

Drive wheel with low ratio

Standard wheel with rounded groove



Ranger configurator for **3 leaf** gates



Opening A (m)	N° Leaves	Leaf length L (m)	Minimum space available G (m)	Track length 1 RG-30 B1 (m)	Track length 2 RG-30 *L* B2 (m)	Track length 3 289
2	3	1.04	1.24	1.72	2.41	3.10
2.5	3	1.20	1.40	2.06	2.91	3.76
3	3	1.37	1.57	2.39	3.41	4.43
3.5	3	1.54	1.74	2.72	3.91	5.10
4	3	1.70	1.90	3.06	4.41	5.76
4.5	3	1.87	2.07	3.39	4.91	6.43
5	3	2.04	2.24	3.72	5.41	7.10
5.5	3	2.20	2.40	4.06	5.91	7.76
6	3	2.37	2.57	4.39	6.41	8.43
6.5	3	2.54	2.74	4.72	6.91	9.10
7	3	2.70	2.90	5.06	7.41	9.76
7.5	3	2.87	3.07	5.39	7.91	10.43
8	3	3.04	3.24	5.72	8.41	11.10
8.5	3	3.20	3.40	6.06	8.91	11.76
9	3	3.37	3.57	6.39	9.41	12.43
9.5	3	3.54	3.74	6.72	9.91	13.10
10	3	3.70	3.90	7.06	10.41	13.76
10.5	3	3.87	4.07	7.39	10.91	14.43
11	3	4.04	4.24	7.72	11.41	15.10
11.5	3	4.20	4.40	8.06	11.91	15.76
12	3	4.37	4.57	8.39	12.41	16.43

L (m) = (A + 0.06) ÷ 3 + 0.35
G min (m) = L + 0.2
B1 (m) = L x 2 - 0.35
B2 (m) = L x 3 - 0.7
B3 (m) = L x 4 - 0.99

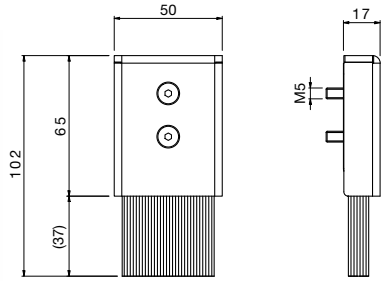
Ranger Accessories

RG-15

2 Brush kit

CODE	ART.	Box info	
		Pcs per pack	Kg
12301600 001	RG-15	1	0.8

Finishing: Galvanized

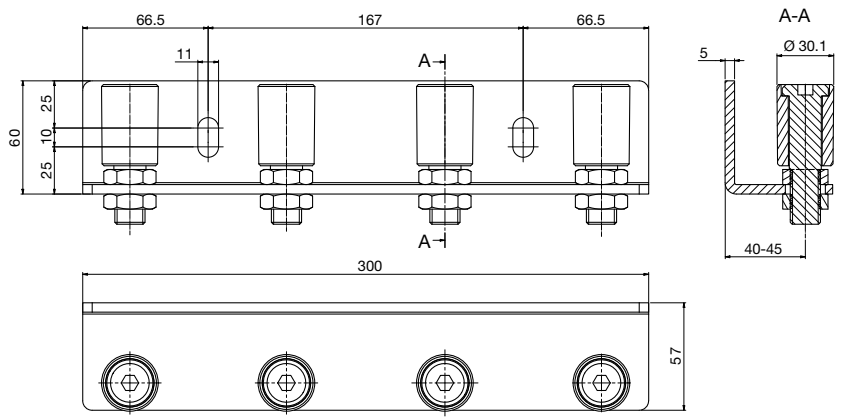


RG-254

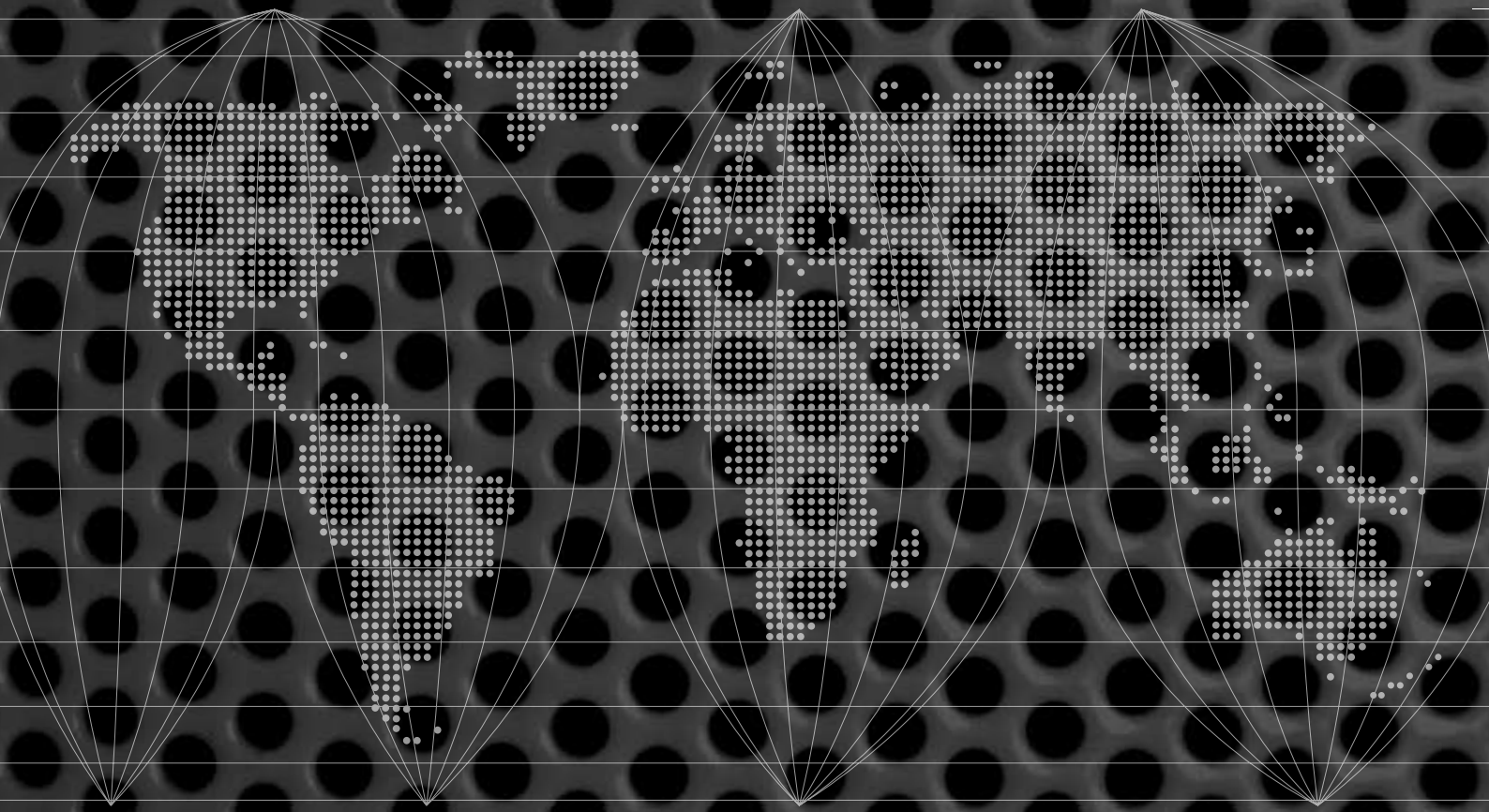
Guiding plate for gate with two 4 rollers

CODE	ART.	Box info	
		Pcs per pack	Kg
11306410 001	RG-254	1	2

Finishing: Galvanized



Gate innovation made in Comunello



COMUNELLO
GATE DIVISION

Downee
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