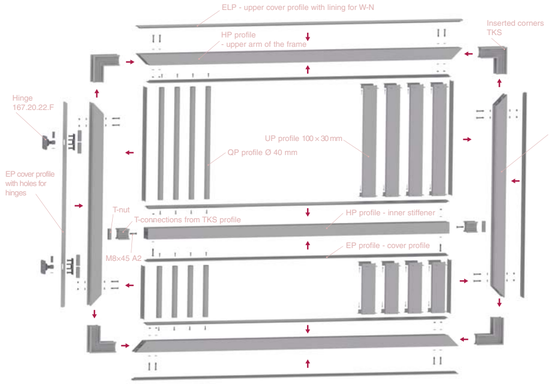

Winged gates comprise one or two wings moving on hinges inwards or outwards of a passage of 90°. This type of the gate is suitable when there is no space for a sliding gate. On the other hand, free space for movement of the wings is required.

The gate can be controlled manually or automatically with use of the drive (underground or overground).

Over-ground drive in its simplest version is based on the principle of an electro-mechanical drive with a steel helix with an endless screw and a pin that is fastened to the wings of the gate. The principle of the underground gate is based on the turning of the gate. The gate is fitted to the bar of the drive through a hinge. The bar is moved with use of an electro-mechanical drive that is located under the gate.
The HP profile is a basic profile that forms the whole frame of a wing. The corners are made of welded TKS profiles and fastened with bolts M8x50.

In the lower part of the wing there is a brace made of HP profile which at the same is used for connecting the drive.

The HP profile has got T-slots on both sides where T-nuts made of TM profile can be inserted and used for fastening not only hinges but also other components. On the edges of T-slots there are notches that serve for fastening EP profiles to cover the slots.

A brace, made of HP profile, is fastened to the frame part, also made of HP profile, with a connection made of TKS profile and T-nut made of TM-profile inserted into a T-slot.

EP profiles are fitted into T-slots in the assembled frame. When assembling the gate T-nuts are inserted into T-slots of vertical HP profiles at the same height and then they are used to fasten T-connections with use of Allen head screws M8x45.

Corners are fastened to the lower and upper profiles with the use of bolts M8x50. HP profile of the brace is fitted to T-connections and the lower and upper profiles with corners are fitted to the vertical HP profiles and all profiles are assembled with the use of stainless steel bolts M8x50.

When assembling the wing of the gate with panelling inside the frame the procedure is the same, with the only exception, that prior to fitting the lower and upper profile with fastened corners it is necessary to connect the panelling to covering EP profiles and insert the whole assembly into the frame consisting so far of only outside HP profiles and a brace.

Finally the covering profiles are fitted, i.e. anchoring bars are pressed into relevant T-slots.

durability | covering | surface finish | gate panelling | easy transport | unification | free delivery | user safety

Durability
Aluminium is highly resistant to climatic conditions. Along with the use of stainless steel joining material long-term durability of the product can be achieved without corrosion.

Covering
The whole surface is perfectly protected with covers and the gate with its smart rounded shapes has an attractive appearance.

Surface finish
It is possible to leave the surface of the product untreated as it is or, if required, the surface can be painted in a desired colour shade according to RAL, or it can be covered with a wood-like foil finish.

Gate Panelling
The gate can be supplied with panelling inside, outside or without it. Inner panelling can be made of any profiles that have guide-ways for self-cutting screws, or string systems. Any type of profile can be used for outer panelling depending on the surrounding fencing. Shape and arrangement of the panelling can be adapted to the customer's wishes. It is only necessary to observe the maximum weight of the panelling which is 12 kg per meter.

Price
From the very beginning the price to quality trade off was the most important factor for us. It is true that the price of aluminium is higher than that of steel, but on the other hand, it economizes on future expenses spent on surface maintenance. In addition it significantly reduces the total weight of the gate, which makes it possible to be used with lighter and less expensive drives and lightweight driving claws. In doing so transport costs are also reduced. We think that we did a great job!

Packaging and transport
High-quality packaging protects the product during it´s transport. Packaging is charged separately so that you have a clear idea of the individual costs.

Easy transport
Low weight and a self-assembly style design are ideal for transporting the gate to the place of delivery. You can do it with just a van instead of a lorry.

Do it yourself
With the help of the instructions you can easily assemble the gate with no need for a workshop or expensive equipment. You can also avoid welding and the certification involved. All parts that must be connected through shielded arc welding are supplied ready-assembled. The whole assembly is designed so that only general tools are required to easily finish the assembly in a short time.

User safety
Thanks to the low weight of the product it is not necessary to employ a strong drive and the gate is moved using low power. These state-of-the-art types of drives are very sensitive to any resistance that occurs during movement as a result of hitting an obstacle. They react immediately and reverse the direction of movement without delay. That is why the aluminium gate is much safer than similar gates made of steel.

Unification
The gate is ready to be installed with components that have been produced and are tried and tested: VO555.N, HR050.N, and VV-N they have proved their quality in thousands of applications.

Testing
Every new product that our company supplies to the market is thoroughly tested on a long term basis. Everything is aimed at our customers' satisfaction.

Why a self-supporting construction?
If you decide to invest in a sliding gate then the self-supporting construction is the right choice as it requires no maintenance in winter time and saves your money when constructing foundations.

01 - 2009

Fragmentica
aluminium self-supporting gate

self-supporting gates

aluminium
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technical information

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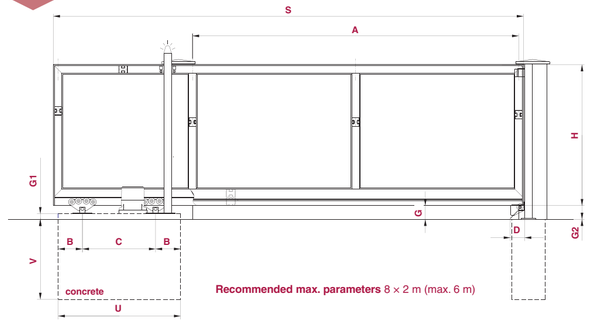
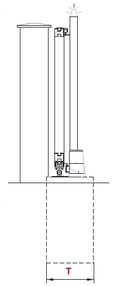


Recommended max. parameters 8 × 2 m (max. 6 m)

Specification of identification - chart 1

A	clear width of passage
B	minimum distance of the centre VO555.N from the edge of concrete foundation (see chart 3)
C	axial distance of carriers VO555.N (see chart 3)
D	space for overrun pockets KA555.A (106,5 mm)
G	gap between gate and ground (G1 + 86 mm)
G1	height of concrete foundation for carriers, drive and gatepost from ground (recommended 50 mm)
G2	height of concrete foundation for overrun gatepost from the ground (recommended 0 mm)
S	total gate length
T	width of concrete foundation (recommended at least 100 mm from the axes of bolts)
U	length of concrete foundation (recommended at least 100 mm from the axes of bolts)
V	depth of concrete foundation (non freezing depth as minimum)



Technical data of self-supporting gate - chart 2

Dimensions	width of passage		height
	max. 6 m		max. 2 m
Weight	without panelling		with panelling
	max. 180 kg		max. 12 kg/m
Supply	construction set	individual profiles	assembled product
Surface finish	none	any RAL	Decoral – Golden oak

Recommended dimensions - chart 3

A [mm]		B [mm]	C [mm]	D [mm]	G [mm]	G1 [mm]	G2 [mm]	S-A [mm]
from	to	min.						
-	3000	200	1150	106,5	136	50	0	1637,5
3001	4500	200	1420	106,5	136	50	0	1907,5
4501	6000	200	1470	106,5	136	50	0	1957,5

CP profile
The first basic profile is intended for a self-supporting gate construction. It consists of two chambers. The lower C-shaped part is intended for the travelling rollers of the supporting carriers. The upper H-shaped part includes a T slot and serves as the lower frame of the gate. The T slot is used to connect the profiles and the parts of the gate.

HP profile
The second basic profile is intended for a self-supporting gate construction. It consists of one H-shaped chamber with T slots on both sides. The T slots are used to connect the various profiles and the parts of the gate. This profile is suitable for a pillar, upper crossbar and also to create frames for sliding gates, winged gates or pillars.

TKS profile
This connecting profile is intended for a self-supporting gate construction. It has an H-shaped profile with a hole for a bolt in the middle. This profile can be used to connect other profiles lengthwise and also perpendicularly. It is also suitable for creating corners.

TM profile
This T-shaped connecting profile is intended for a self-supporting gate construction. This profile can be used to connect various parts to the frame of the gate with the use of bolts.

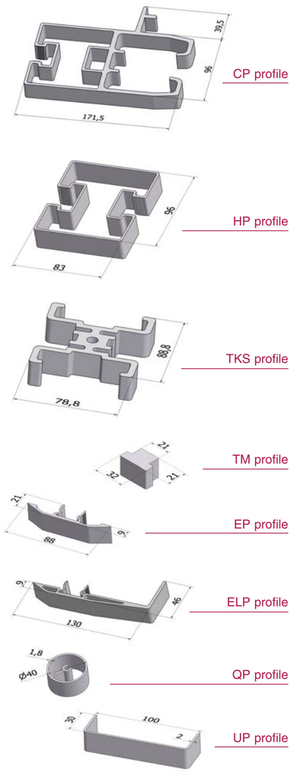
EP profile
A covering profile to cover T slots in HP and CP profiles. The profile is also intended to fasten panelling inside the gate.

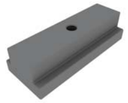
ELP profile
A covering and leading profile intended to cover T slots in HP profiles and lead guiding rollers.

QP profile
A profile for panelling, tube Ø 40mm with a guide for a self-cutting screw.

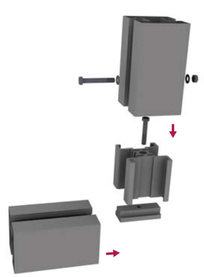
UP profile
A profile for panelling. U-shaped profile 100 × 30 × 2,5 mm to be riveted on.

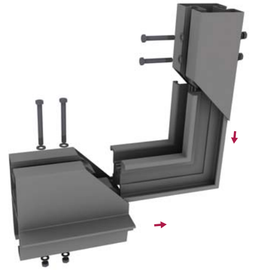
Cross-sections of profiles of aluminium gate



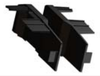
item	description	weight [kg]	
Alu Corner	Intended to connect basic profiles CP-HP and HP-HP squarely.	1.56	
Alu T-nut	The basic use is to create running perpendicular connections; in addition it is used to fasten various parts of the gate (hinges, guiding roller holders …).	0.11	
Alu T-connection	In the basic version it can be used to create running perpendicular connections (together with a T-nut). In a modified version it can create connections at a required angle.	0.39	

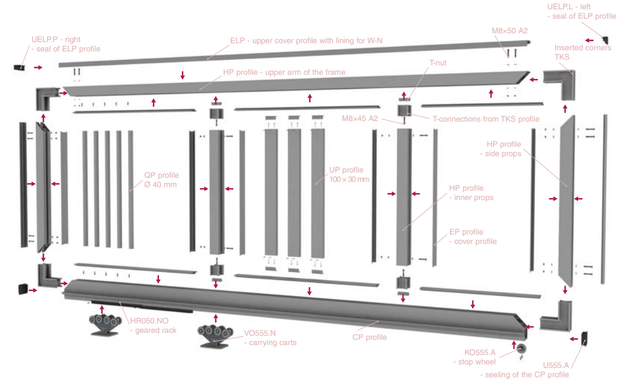
Examples of corner construction, T-nuts, T-connections.





Description of other components of the aluminium gate

item	description	dimensions [mm]	weight [kg]	
VO 555.N	rocking carrier, galvanized, with nylon rollers	200 × 150 × 170	11,2	
HR050.N0	nylon driving claw Rack without fittings, with stainless steel bolts M5	25 × 12 × 504	0,100	
KO555.A	overrun roller on the lower part of the gate face	100 × 68 - Ø 68	0,250	
KA555.A	overrun pocket for an overrun roller	107 × 153 × 147	1,150	
U555.A	plastic seal for CP-profile	96 × 90 × 28	0,042	
UELP.L UELP.P	corner ending with ELP+EP profiles set (left and right seal)	130 × 46 × 40	0,025	
US	plastic seal for gateposts of EP+HP+EP profiles	103 × 96 × 29	0,055	
167.20.22.F	adjustable hinge pin with a screw on board	100 × 100 × 77-100	1,4	
170/S.F	upper hinge set with a frame fastener, to be used with Metro drive	275 × 70 × 65	1,75	



The gate slides to the side and its advantage is that its lower part does not touch the ground. Please, bear in mind that adequate space should be available next to the passage (see chart 3) for the purposes of installing the sliding gate. The gate works on the following principle: next to the passage there are two carriers. The CP profile moves along the carriers together with the gate frame. This type of gate is currently the most popular on the market due to its easy maintenance and trouble free operation. The gate can be controlled manually or with an electro-mechanic drive that slides the gate over the rack fastened to the gate.

The CP profile VO555.N on carriers forms the basis of the gate.

The CP profile has got a lower travelling part for carriers and an upper frame part with a T-slot.

The CP profile includes a bar intended for fastening the rack HR050 with stainless steel bolts.

The CP profile and HP profile are used to create a gate frame.

The HP profile is used to create outside gateposts that are connected to the frame part of the CP profile and to the upper bar of the HP profile through the inserted corners of the TKS profiles.

The inner gateposts of HP profiles are fastened to the frame part of the CP profile and to the upper bar through a T-connection made of TKS profile and a T-nut made of M profile inserted into a T-slot.

EP profiles are inserted into the T-slots in the assembled frame. Only the upper wall of the upper bar is fitted with ELP profiles as it is intended to lead the guiding rollers VV-N.

When assembling the gate, first insert T-nuts into a T-slot in the CP profile and fasten them with bolts M8x40mm to the T-connections intended for the inner gateposts. Insert corners into the end parts of the frame made of the CP profile and fasten them with bolts M8-70mm.

Fasten corners, T-connections with a T-nut to the upper bar of the frame in a similar way.

Then fit the posts on the T-connections and corners on the CP profile. Fit the upper bar on the posts with T-connections and fasten all posts with bolts M8x50mm.

Finally fit the covering profiles, i.e. press their anchoring bars into the relevant T-slot.