



LV7R/B & LV20R/B RACKS



Rack-and-pinion vent opening system for greenhouse vents

Highlights

- Patented racks and pinions
- Less wear – longer durability
- Minimum of maintenance
- Low noise level
- High flexibility

The LV7R/B and LV20 R/B aluminium racks form part of the Senmatic vent opening system for greenhouse vents. The patented and registered racks are based on more than 40 years' experience in development and production of rack-and-pinion opening systems. They are therefore thoroughly tested products.

The design of the original Senmatic rack ensures that the weight from the windows is always resting on the whole rack. The low weight of LV7R/B and LV20R/B meets the requirements for still lighter greenhouse constructions without reducing the strength. The construction of the rack-and-pinion system ensures also a low noise level during operation.

Solid, reliable and flexible

The meshes are placed as close as possible to the drive shaft, resulting in reduced torque and reduced twisting on

the shaft. With less torque required, smaller gear motors can be used. The aluminium rack also exhibits great tolerance towards temperature changes and smaller mechanical irregularities in the construction.

Super ellipse

The super ellipse profile gives the strongest rack and an accurate adaptation between the compressive load and the bending torque. LV20 has been further reinforced to stand up to the continually increasing load demands.

Curved racks

LV7B and LV20B curved racks are for example ideal for side vents, or where the screen system requires space considerations.

Materials

The rack is made from a hard aluminium alloy which – together with the softer zinc pinion – gives a considerable strength and optimal durability. The pinion is provided with special rollers in a synthetic material, resulting in a minimum of friction during operation.



SPECIFICATIONS / LV7R/B & LV20R/B

Type	Lenght (cm)	Radius (cm)	Max. recommended load (kg)
LV7R	75		60
LV7R	100		60
LV7R	125		60
LV7R	150		50
LV7B	75	75	25
LV7B	100	75	25
LV7B	125	75	25
LV20R	100		75
LV20R	125		75
LV20R	150		75
LV20R	165		75
LV20R	180		60
LV20R	200		60
LV20R	300		Only for pulling
LV20R	400		Only for pulling
LV20B	125	140	50
LV20B	140	140	40

LV7R / LV20R = straight rack

LV7B / LV20B = curved rack

Tolerance: +/- 5 cm

The following products are delivered as standard equipment with the rack & pinion system:

- Rack
- Rack housing
- Split rivet
- Rack T-bracket
- M8x10 grub screws

Maintenance

LV7R/B and LV20R/B require only a minimum of maintenance, as the closed housing keeps dirt out. All movable parts in the pinion have been specially factory-treated with a Teflon lubricant and require only a minimum of maintenance. The rack should be greased once a year as a minimum.

Patented unloading flange

- Less wear
- Longer durability
- Lower noise level

Housing

The pinion rests in special synthetic bearing materials, as the radial force (about 60 % of the lifting power) is to be transferred. The rollers in synthetic bearing materials, influenced by the same strong force, give a smooth and silent operation. The pinion is reinforced for a safe fastening on the drive shaft and to transfer the maximum screw force.

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