

Rolling shutters and rolling grilles in aluminium or steel Synthesis of functionality and flexibility





in aluminium or steel

Individual and universal

Our rolling shutters are individual and universal closures. They correspond to the main directives and standards. Of course the installation is also implemented by us according to the main existing standards.

The profile design and the high-quality clear varnish coating of aluminium shutters makes your rolling shutter the calling-card of your premises. On request, painted surfaces are also available.





You can find special fastopening rolling shutters in opening rolling shutters in our brochure "quick-action roller shutters".





in aluminium or steel



Tested security

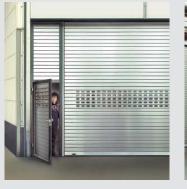
Our rolling shutters and rolling grilles have the necessary certification in the most common dimensions for tested security. Included as standard in the tested equipment are the direct drive with inte-

grated fail-safe device, as well as the shutter control. With this, our rolling shutters and rolling grilles correspond with the main standard regulations

















Overview and description

Type summary

Rolling shutters and rolling grilles



Rolling shutter TH80 thermalinsulated in natural aluminium, varnish or with paint coat, also with viewing window louvers Page 6



Rolling shutter TH100 thermalinsulated in natural aluminium, varnish or with paint coat, also with viewing window louvers Page 6



Rolling shutter V80 and V80 L single-walled, natural aluminium or steel galvanized, also with paint coat Page 7



Rolling grille RG galvanized steel or natural aluminium, also with paint coat Page 7

Technical description

Roller shutter reinforcement



Double walled... or Single-walled

produced with hinge-type connected louvers (for profiling see next double page), with water-draining implementation. The roller shutter reinforcement is fixed with suspension to the drum, its lower edge is reinforced through an end profile dimensioned according to requirements, with permanently elastic flexible seal to compensate for floor irregularities. TH80 and TH100 louvers are secured against displacement with respect to each other, in each case, by lateral end pieces, V80 louvers are secured against displacement in the hinge area.

Guide rails: Made of galvanized steel (see the following double page) for welding assembly or for installation without welding using steel connectors, standard with low-wear plastic strips for noise reduction.

Drum: made of steel, primed, dimen-

Drum: made of steel, primed, dimensioned according to permissible bending of 1/500 of its length, with a minimum diameter of 168 mm for improved winding of the door leaf.

Self-aligning ball bearing: Heavyduty dimensioning for the connection of the drum, placement on brackets.

Bracket fixing: By means of anchorbolt installations, screw-through assembly or welding assembly. In case of welding assembly, the fixing is implemented against the on-site-provided steel under-structure and/or against pre-installed anchor plates, according to our alignment plans.



Direct drive (standard): Maintenance free, completely oil-sealed, encased worm-drive safety gear attached directly to the steel shaft of the drum, with clearly reduced installation and maintenance effort compared to other alternatives. Failsafe device maintenance free, selfchecking and independent of position, as well as an encased limitswitch unit flanged directly onto the gear, with precisely adjustable final and safety limit switches. Emergency manual crank or fast-action hand-operated chain-hoist for manual operation in case of power failure. All electric connections can be plugged into the drive. Operating voltage 400 V three-phase a.c. current. Drive TÜV and VDE tested.

Sprocket chain wheel drive with fail-safe device (special dimen-

sions): Maintenance free, completely oil-sealed encased worm-drive safety gear with integrated limitswitch unit, including emergency manual crank or fast-action hand chain-hoist — as described in case of direct drive, however with the necessary sprocket chain wheels of steel and the appropriate roller chain for the power transfer from the drive to the drum roller. For this, the required TÜV approved fail-safe device, which prevents the door-leaf from falling down, even in case of failure of the supports.

Control (standard): Modular assembly shutter control with 24 V operating voltage, TÜV and VDE tested, prewired with motor and control circuits for the drive, as well as power cable with CE plug, including touch-sensitive keypad with "Open-Stop-Close" function for the operation of the shutter, without any external pushbutton having to be connected. In the basic version, the dead man's mode is standard, with which, for safety reasons, a shutter movement is implemented only as long as the operating pushbutton is pressed. The control can be retrofitted with additional modules through to automatic system function. Of course all operating and safety equipment usual in the roller door sector can be connected in addition, such as e.g. key-operated switch, pull switch, remote control, induction loop, photocells etc.

$In stallation \ / \ Electrical \ in stallation:$

Our installation conditions are coordinated to the main existing standards. According to this, the installation and connection of all electric parts, in accordance with our circuit diagrams, as well as the power supply and wiring system of the parts with respect to each other with the necessary lines, are an onsite-provided service. Main fusing and lockable main power switch normally provided by the customer, can also be installed.

Indication: The following alternatives are also available:

- Electrical drives for alternating current 230 V operating voltage
- Manual operation through spring shaft as self-roller (for shutters up to 3000 x 2800 mm)

Rolling grille reinforcement



Flat material...

in honeycomb form. Wire mesh connected to each other by strong joint connectors. Lower edge of the rolling grille reinforced by an angular closing-edge of steel, dimensioned according to the grille width.



Surfaces, installed situations

Surfaces

untreated

TH80 Rolling shutter

Natural aluminium with clear varnish (standard) or with paint coat on request Aluminium end profile natural-

TH100 Rolling shutter

Natural aluminium with clear varnish (standard) up to approx. 12000 mm shutter width, with paint coat on request Aluminium end profile natural-untreated

V80 Rolling shutter

Natural aluminium or galvanized steel (standard) with paint coat on request

V80L Ventilation louver

galvanized steel (standard) with paint coat on request

RG Rolling grille

Steel galvanized or natural aluminium (standard) with paint coat on request

Installed situations, equipment



Extreme dimensions – we realize the optimal solution for almost every logistic challenge.



Rolling grilles offer unobstructed ventilation with secure closure – ideal for underground garages.



A side door in the fixed or pivoting side section can also be filled with profile sections, with visual similarity to the rolling shutter.



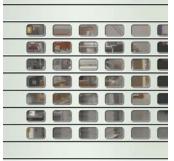
Rolling shutters traditionally guarantee secure and smooth work sequences in logistics companies.



Standard with our rolling shutters and rolling grilles is a control with touch-sensitive keypad "Open-Stop-Close" in dead man's mode – expandable with the usual control systems.



Also in the interior, rolling shutters or rolling grilles offer solutions for a large variety of applications.



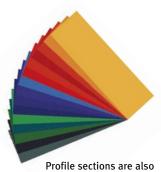
Light cut-out sections with doubleglazing combine transparency, light and visual contact with thermalinsulating properties and thus energy savings.



In case of internal lack of space external rollers can be used. The weather-proof cladding can be architecturally appealing at the same time.



With our know-how, we also offer diverse and individual special solutions for unusual situations and special customer preferences.



available painted in a wide range of RAL-colors.



Rolling shutters

Type summary and description

TH80 Natural aluminium with clear varnish



80 mm, double walled, aluminium louvers, approx. 20 mm thick. With thermal-insulating polyurethane non-plasticized foam core in adhesive-free connection with the shell, thus providing the highest level of surface stability. Especially developed profile section form in high-quality optics enables significantly tighter winding and low lintel height.

TH80 Natural aluminium with clear varnish



Aluminum louvers with optimized profile section, winding and guide properties for low-noise and low-abrasion running. End pieces of plastic countering side displacement and for smooth-running operation. Manufacture dimensions max. 5000 x 5000 mm.

TH80 with paint coat (special surface)



Specification as above, however with **paint coat** at additional cost. As a standard feature end profile aluminium natural-exposed.

THGL80 Aluminium glazed



Aluminum louvers with window openings and double glazing, double-leaf plastic inserts (not crystal-clear), max. 5 louvers with window openings per rolling shutter, surfaces as TH80.



TH100 Aluminium natural with varnish



100 mm aluminium louvers. More conventional profile section form with double-walled structure, also with thermal-insulating core of polyurethane non-plasticized foam, however approx. 23 mm thick. High level of surface stability through adhesive-free connection to shell and non-plasticized foam.

TH100 Aluminium natural with clear varnish



Aluminum louvers with end pieces of plastic countering side displacement and for low-noise, smooth-running operation.

Aluminium natural standard surface with varnish. Maximum manufacture dimensions to approx. 12.000 mm gate width. As a standard feature end profile aluminium natural-exposed.

TH100 with paint coat (special surface)



As implementation above, however with **paint coat** for additional price.

As a standard feature end profile aluminium natural-exposed.

THGL100 Aluminium glazed



With double glazing aluminum louvers with window openings, double-leaf plastic inserts (not crystal-clear), max. 5 louvers with window openings per rolling shutter, surfaces as TH100.







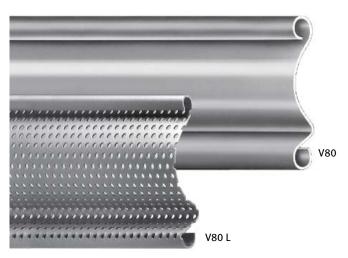


All rolling shutters presented here correspond to the requirements of DIN EN 13241-1.



Type summary and description

V80 aluminium or steel



Single-wall 80 mm louvers in classical profiling, optionally available in two different implementations: aluminium 1 or 1.25 mm thick, weather-resistant, surface natural-exposed, alternatively steel, 0.75 or 1 mm thick, surface galvanized.

V80 Aluminium or steel



Louvers optionally available in aluminium or steel, adjustment of the profile section thickness in accordance with the shutter size. Secured against side displacement in the hinge area.

<u>Standard surfaces</u> natural <u>aluminium</u> or galvanized <u>steel.</u>

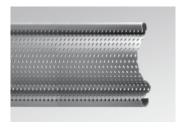
V80 with paint coat (special surface)



As **steel or aluminium design** specifications above, however as special surface with <u>paint coat.</u> Please enquire.

As a standard feature end profile aluminium natural-exposed.

V80 L Steel



Single-walled ventilation louvers, available in **steel** only, 1 mm thick, with 5 mm perforation, approx. 25% air passage.

Standard surface galvanized.

As a standard feature end profile aluminium natural-exposed.

With paint coat at additional cost.

Rolling grille RG



Rolling grilles offer a secure closure and simultaneously optimal ventilation. For this reason they are ideal, for example, for underground garages. Two types of grill are available in well-proven honeycomb design: made from flat material, available in steel or aluminium.

Rolling grille RG steel or aluminium



Rolling grille in honeycomb design, honeycomb dimension approx. 185 x 120 mm, alternatively available in **steel or aluminium** flat material 16 x 4, 20 x 4 and 23 x 4 mm.

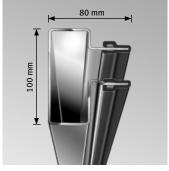
Surfaces: galvanized steel and natural aluminium untreated.

<u>Special surfaces</u> in case of aluminium: Anodized E6/EV1 or with <u>paint</u> <u>coat</u> (6 m maximum width).



Guide rail / end profile

Guide rails



FS2 Guide rail

for all our rolling shutters Guide rail of galvanized steel, with attached plastic strips, also with side sealing, possible installation methods: welding and also without welding using steel connectors.



FS2 Side seal for guide rail

Countering heat loss and draught, plastic strips provided at shutter inner side with brush seal.

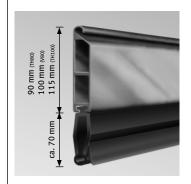


FS1 Guide rail

for rolling shutters V80 and rolling grilles RG

Guide rail galvanized, with plastic strips

Closure profiles



RH End profile

for rolling shutters V80, TH80 and TH100 of light metal, aluminium natural-exposed, section pressed, with permanently elastic flexible tubular seal.





Custom-built design / supplementary equipment

Custom-built designs and supplementary equipment



Burglary protection

against the lifting of the shutter door leaf, with lock for on-site-provided cylinder, hand-grip, including side locking bars and electronic safety switch.



Emergency control

from floor level, with emergency hand-operated chain-hoist.



Accident protection contact strip

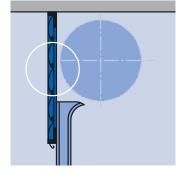
Under the end profile at the shutter bottom edge, causes instant stop if the closing shutter door leaf encounters an obstacle; after that the shutter door leaf is driven up (automatic reversal). Generally included in case of automatically operated shutters, exceptons on request.



Personnel entrance door

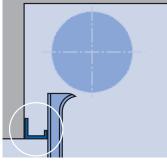
standard size 875 x in 2000 mm, for personnell traffic in case of closed shutter, pivoting or fixed side section (approx. 1050 mm total width).

- Configuration a) personnel entrance door as a double walled, single-leaf, multi-function door, facia panel in double-walled steel panel with insulation lining, galvanized and primered.
- Configuration b) personnel entrance door and facia panel filled with rolling shutter louvers, galvanized steel frame, primered.
- Configuration c) special dimensions available at additional cost.



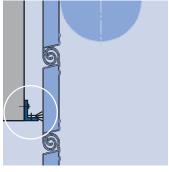
Vertical facia panel

required when no, or unsufficient lintel exists. Panel from same profile sections as the shutter door leaf, stationaty, mounted in steel frame, alternatively bent galavanised steel plate.



Horizontal facia panel

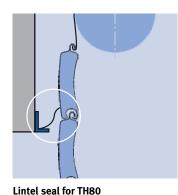
required when lintel is set back.
Stationary panel, mounted in bent galavanised steel plate, according to shutter type either single walled or insulated double-walled.



Lintel seal for V80 / TH100

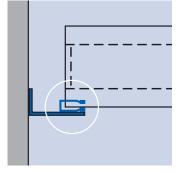
countering heat loss and draught:

- V80 with perlon brushes
- TH100 up to 5 m width, with rubber lip gasket, from 5 m width up with perlon brushes.



Lintet Seat for Theo

countering heat loss and draught: Through TH80 louver with fixed integrated plastic seal.



Side mounting profile section

required when the necessary floor space required for installing the rolling shutter is not existing or insufficient. Steel profile dimensionsd in accordance with the shutter weight.



Special structure

available at additional cost

Key-switch:

(see next page)

Other actuators:

- Pull switch
- Warning lights
- Remote controls
- Traffic lights
- Photocells
- Timer



Operation

Control with touch-sensitive keypad - standard for all our rolling shutters and rolling grilles



Control BoxControl D400

Standard for our rolling shutters and rolling grilles, plug-in-ready for 400/230V currents only, including 1.5 m connection wire with CEE shaped plug 16 A, as well as 2 x 5 m customized connecting wire for motor/limit switch connection,

operation through touch-sensitive keypad "Open-Stop-Close" in dead man's mode, expandable with additional controls e.g. through below-listed pushbutton switches and key-operated switches (at additional cost).





Available pushbuttons and switches (at additional cost)

Pushbutton No. 2

Surface mounted, function "Open-Stop-Close" (pushbutton "stop" in dead man's mode without function), Protection Type IP65.



Surface mounted key-switch No. 10

In light-metal casted housing with mechanical cover lock, with half cylinder lock, function "On-Off", Protection Type IP54.



Surface mounted key-switch No. 4

In light-metal casted housing with mechanical cover lock, with half cylinder lock, function "Open-Stop-Close", Protection Type IP54.



Surface mounted key-switch No. 5

In light-metal casted housing with mechanical cover lock, with half cylinder lock, function "On-Off" and "Open-Stop-Close", Protection Type IP54.



Flush mounted key-switch No. 7

In light-metal casted housing with mechanical cover lock, anodized front plate with half cylinder lock, function "Open-Stop-Close", Pro-



tection Type IP54, necessary cutout W 80 x H 140 x T 75 mm.

Installation key-operated switch No. 6

In light-metal casted housing with mechanical cover lock, anodized front plate with half cylinder lock, function "On-Off" and "Open-Stop-



Column No. 9 with built-in keyswitch No. 7

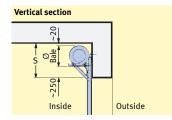
Column 1000 mm high, galvanized.





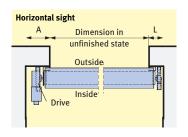
Lintel-Height / floor space requirements

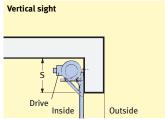
Minimum lintel height S



V80 and roll TH80 accord TH100 accord	ling to ta	ble + 50	•	TH100 according to table								
Gate width to -Height to	4000	5000	< 6000	≥ 6000	7000	8000	9000	10000	11000	12000		
2000	500	500	550	700	720	780	780	800	800	800		
2500	530	530	580	730	760	810	810	810	840	870		
3000	550	580	630	780	780	810	810	830	840	870		
3500	570	600	650	800	810	810	830	890	890	890		
4000	590	600	650	800	840	870	870	890	890	910		
4500	600	680	730	880	880	890	890	910	910	930		
5000	610	700	750	900	900	900	900	960	960	960		
6000	670	720	770	920	920	920	960	960	970	990		
7000	810	810	860	1010	1060	1060	1080	1080	1090	1090		
8000	810	810	860	1010	1100	1120	1120	1130	1150	1150		

Standard design with direct drive





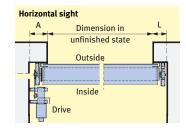
Side floor space required in case of standard design with direct drive (with shutter height up to 5000 mm)

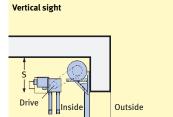
The necessary lateral floor space required (dimension L) can be reduced through on-site-provided recess for the bearing block.

- A = Minimum dimension for guide rail and direct drive, right or left (driveside)
- L = Minimum dimension for guide rail and bearing block (non-drive-side)
- S = Minimum dimension for lintel height (in separate matrix)

Width to	2000	3000	4000	5000	6000	7000
A	260	260	260	280	280	300
L	165	165	165	165	200	200

Custom-built design with sprocket chain wheel drive





Side floor space required with custom-built design with sprocket chain wheel drive (with shutter height up to 5000 mm)

The necessary lateral floor space required (dimension L) can be reduced through on-site-provided recess for the bearing block.

- A = Minimum dimension for guide rail and sprocket chain wheel drive, right or left (drive-side)
- L = Minimum dimension for guide rail and bearing block (non-drive-side)
- S = Minimum dimension for lintel height (in separate matrix)

Width to	4000	5000	6000	7000	8000	10000	12000
A	200	240	250	300	300	350	500
L	165	165	200	200	270	290	320

Measurement information for special designs and separate wall connections – in case of too little space – for additional price.



		Shutter The Description	Speed	Viewing Misec.	Sealen	Slide	Venilly	Galuan:	Palines	Manus.	"Operation Elect.	Saley, d.	Periodical de la	Personne emane Section 111 este
		TH80 aluminium	0.20	•	•	•			•		•	•	•	•
Standard rolling shutters and rolling grilles		TH100 aluminium	0.20	•	•	•			•	•	•	•	•	•
		V80 aluminium	0.20		•	•			•	•	•	•	•	•
	9	V80 steel	0.20		•	•	•	•	•		•	•	•	•
		Rolling grille RG steel	0.20			•		•			•	•	•	•
		Rolling grille RG aluminium	0.20			•			•		•	•	•	•
Quick-action roller shutters		Novo speed aluminium	up to 2.0	•	•	•			•		•	•	•	*
		Eco speed aluminium	0,45	•	•	*			*		•	•	•	*

Equipment: • = Standard • = Option (partially combinable)





Sectional door Thermo 45



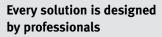
Sectional door Prisma 45-S



Alum. quick-action roller shutters



PVC quick-action roller shutter



Measuring and technical specifications are carried out on-site to customers needs and wishes. The installation is carried out by Novoferm Riexinger trained specialists. In this way you deal with only one partner from the consultation stage through to operational startup. This guarantees you time- and cost-benefits



PVC speed roller

during the building-stage, as well as a long term security for your investment.

Quality is our forte

Novoferm Riexinger is a company of the Novoferm Group, one of the biggest system providers of doors, gates, frames and drives for private, commercial and industrial use. Our production is based in Europe and Asia and we distribute our products in many countries around the world. Our company philosophy is based on a simple principle: quality not quantity.

We strive to offer our customers products of maximum quality, safety, comfort and aesthetics for minimal cost. Our products take into account various country-specific requirements and fulfil the national standards and inspection regulations. We are of course ISO 9001 certified and manufacture in accordance with the latest technological knowledge and in consideration of environmental factors.

We belong to the Sanwa Shutter Corporation, the biggest manufacturer of doors, gates and loading technology worldwide. This gives us so much entrepreneurial freedom, that we can concentrate fully on our competencies and on international market developments.

Your Novoferm Riexinger distribution partner:

Right reserved to dimensional and constructional changes

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