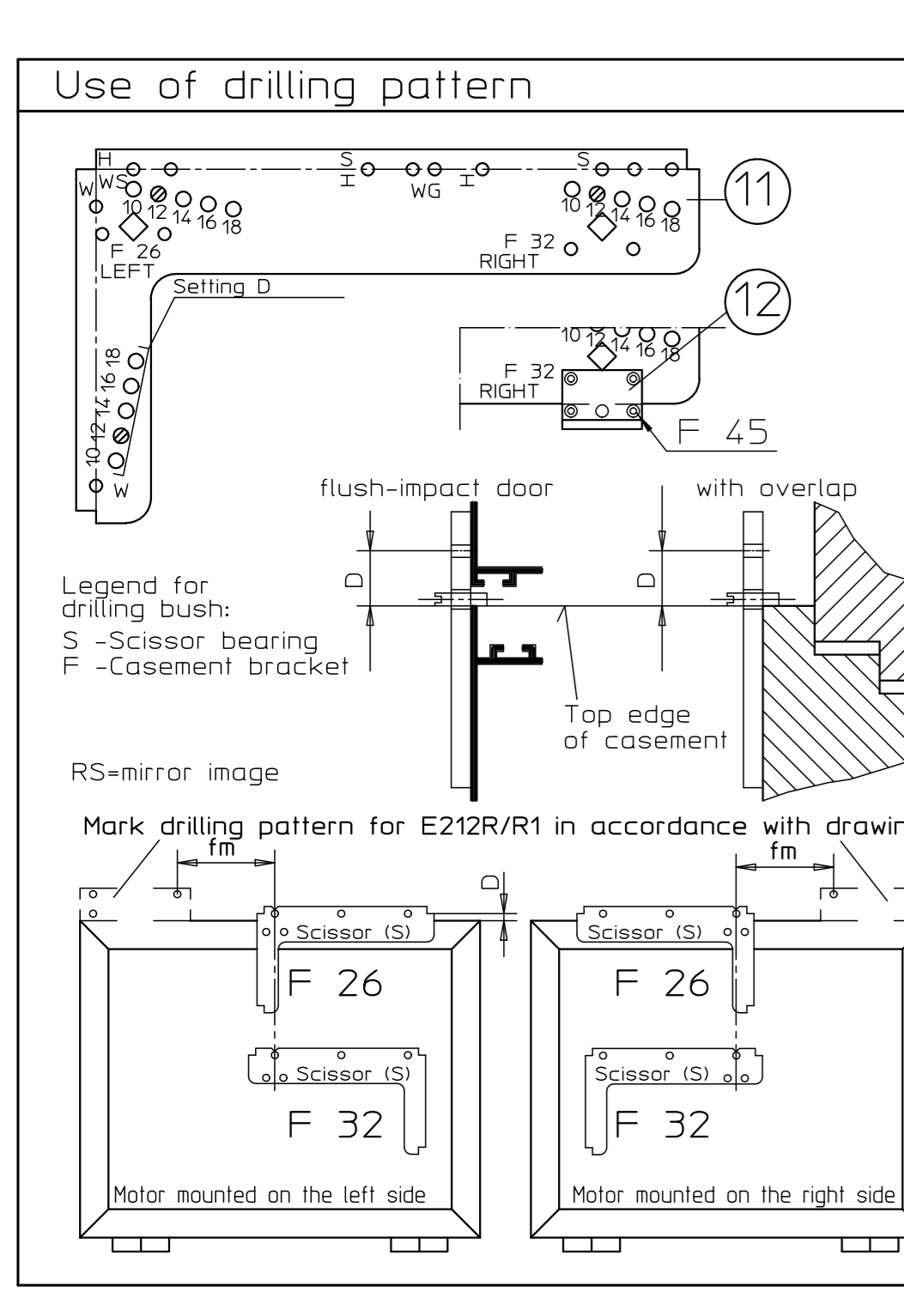


Type of window	Fastening screws	drilling
Wood	Flat head screw 4x35 DIN 97 or DIN 7997	2,5mm
Aluminium	Tapping screw with countersunk head 4,2xL DIN7972 or DIN7982 screw must penetrate through a profile wall of at least 1,8mm thickness	3,5mm
Plastic	Tapping screw with countersunk head 4,2xL DIN7972 or DIN7982 screw must penetrate through 2 profile walls	3,5mm

Order requirements * for OL90N with ...	Fittings (see list of parts)									
	I	II	A	B+B1	C	D	E	F	G	H
...Electric drive E212R1 for group control (see switches required)	X		X*		X	X	X**			
...Electric drive E212R for group control (see switches required)		X	X*		X	X			X**	
...Electric drive E212 24V for group control (see switches required)			X*		X					X E260N

X\* - up to 4 additional scissors per motor  
 X\*\* - group control for max. 6 motors  
 \* Cover profiles and rod must be ordered separately

Designation	Id.-No. for colour:					Pcs.
	anod. alu.	white RAL9006	dark bronze	black RAL 9005	RAL...	
I OL90N with drive E212ER1 for group control Contents: 1 Items-D,A,C 1 Rod L=273 1 Cover L=138	30668	30674	30670	30672	30672	9
II OL90N with drive E212ER for group control Contents: 1 Items-F,A,C 1 Rod L=273 1 Cover L=138	30656	30660	30657	30659	30659	9
A Scissor OL90N Contents: 1 Slimline scissor OL90N 1 Scissor bearing 1 Casement bracket 1 Rod guide 1 Back plate 1 Joint 13 Protective covers	30373	30377	30374	74509	30376	6
B Casement bracket f. timber-framed window with euro nut Contents: 1 Casem. bracket f. timber-framed window 1 Back plate	30886	30890	30887	99475	30889	2
C Rod coupling OL90			43546			
D Electric drive E212R1 for group control Contents: 1 E212R/230V AC Connecting rod	20835	20839	20836	20838	20838	3
E Change-over switch E33, surface-mounted, Open-Stop-Close 1 Change-over switch E27, flush-mounted, Open-Stop-Close			48941		48942	
F Electric drive E212R for group control Contents: 1 E212R/230V AC Connecting rod	05428	15435	05429	06683	06683	3
G Vent switch E50/1 Open-Stop-Close surface- and flushmounted			06575			
H Electric drive E212 24V Contents: 1 E212 24V DC Connecting rod	10899	15540	10901	10915	10915	3
Rods and cover profiles Cover profile L=2m * Cover profile L=3m * Cover profile L=6m Rod Ø8 galvanised L=3m Rod Ø8 galvanised L=6m	30401 30396 27558	30405 30400 27559	30402 30397 27559	74537 74539 74540	30404 30399 28342	
Accessories (must be ordered separately) 11 Drilling pattern 12 Add. drilling pattern OL90N f. timber-framed window F=45 10 Rod coupling OL90 4 Rod guide				28141 43546 10878		1 each



Width of casement a	f-dimensions	Length of the rods (LO) and cover profiles (LA)
600-760	f1=380	1 Scissor LA1=fm-26 a = 600-1200
760-1200	f1=a/2	2 Scissors LA1=fm-26 LA3=f2-225 a = 1200-2400
1200-1500	f1=380 f2=a-760	3 Scissors LA1=fm-26 LA3=f2-225 LA4=f3-225 a = 1600-2300
1500-2400	f1=a/4 f2=a/2	3 Scissors LA1=fm-26 LA3=f2-225 LA4=f3-225 a = 1600-3600
2300-3600	f1=a/6 f2=a/3 f3=a/3	3 Scissors LA1=fm-26 LA3=f2-225 LA4=f3-225 a = 1600-3600

### Range of application

For vertically installed rectangular windows only  
 For dry interior rooms only  
 Casement can be mounted on either left or right side  
 a = Width of casement min. 600mm  
 b = Height of casement min. 250mm  
 Unless the overall width of the casement is not exceeded, 4 scissors can be mounted per motor  
 Weight of casement max. 80kg

Overall width of casement a Panel weight  
 to 2500mm max. 40 kg/m<sup>2</sup>  
 to 2900mm max. 35 kg/m<sup>2</sup>  
 to 3600mm max. 27 kg/m<sup>2</sup>

i = Clearing dimension of centre of gravity of casement to pivot point of hinge = 10 to 60mm  
 ü = overlap height 0-25mm  
 D = Outer edge of casement to centre of rod assembly (see table)  
 Y = Top space requirements D+23mm

Height of casement b Dimension D on top Space requirements  
 250 to 300mm 16mm 39mm  
 300 to 400mm 16/14mm D+23mm  
 400mm 16/14/12mm D+23mm

- If an additional locking device is used, the casement must be fitted with D = 16mm  
 Group control for max. 6 motors

### Technical data

- Opening width approx. 170mm
- Stroke of fitting 54mm
- Stroke of motor adjustable from 42 to 66mm
- Enclosure rating IP54
- For further technical data of the electric drive see wiring diagram 45109-9-0950 (for E212R), 45109-9-0959 (for E212R1) and 45109-9-0956 (for E212/ 24V DC) (in entspr. Verpackungen vorhanden)

### Further installation drawings for OL90N:

Electric drive E212 vertical 40444-EP-004  
 Additional locking device OL90 N 40444-EP-005

### Switches required

Change-over switch E33 surface mounted E27 flush mounted  
 Electric drive E212R1 for group control (also suited for single control)  
 Ventilator switch E50/1 OPEN/STOP/CLOSE any number  
 Electric drive E212R for group control  
 E260 N2-N8: wiring diagram 45004-9-0973, -0971  
 E260 N12-N32: wiring diagram 45004-9-0956, -0955  
 Electric-drive E212 24V DC  
 Cable 3x...mm<sup>2</sup> without GN/YE  
 Diameter according to cable length

### Important information:

- Mounting drawing, terminal connection diagram, assembly instructions, requirements for maintenance and operating instructions as well as the directive for power operated windows, doors and gates (ZH 1/494) must be followed.
- The specified range of applications must be maintained.
- The mounting dimensions must be observed.
- The required fixtures must be used.
- To avoid injury, protective covers must be screwed on projecting threads of the fastening screws.
- Fittings have been drawn in the closed position, however, assembly must occur in open position.
- All attachment screws in open position must be tightened with an Allen key 3mm with 5Nm.
- After assembly and before operation check function and make sure all clamping screws are tightened.
- Linkage and sliding points must be lubricated with an acid-free grease according to DIN 51825.
- The free accessibility of the fittings for lubricating and maintenance must be guaranteed according to DIN 18357.
- If rods of cover profiles of other manufacturers are used, GEZE will neither assume any liability for material quality and sufficient corrosion protection in accordance with the RAL quality assurance nor for possibly occurring damages and consequential losses.
- As of a free rod length of 600mm, rod guides must be used.
- For bottom-hung windows, using a suitable catch guard is mandatory (see GEZE catch guard and cleaning safety).
- The equipment-on lamp must go out as soon as the casement has reached its final position (open or close).
- The drive unit is delivered in open position.

Diese Zeichnung entspricht dem Entwicklungsstand des Zeichnungsdatums bzw. der letzten Änderungsangabe. Aus der Benutzung der Zeichnung können keine Ansprüche, gleich welcher Art, einschließlich Schadensersatzansprüche abgeleitet und gegen GEZE geltend gemacht werden. Die Zeichnung bleibt unser Eigentum und ist Dritten nur für die Vertragsabwicklung zur Benutzung überlassen. Sollten sich aus der Zeichnung ergebende Ansprüche stellen ausschließlich GEZE zuzurechnen. Vorherige Zustimmung von GEZE darf diese Zeichnung weder vervielfältigt noch Dritten zugänglich gemacht werden.