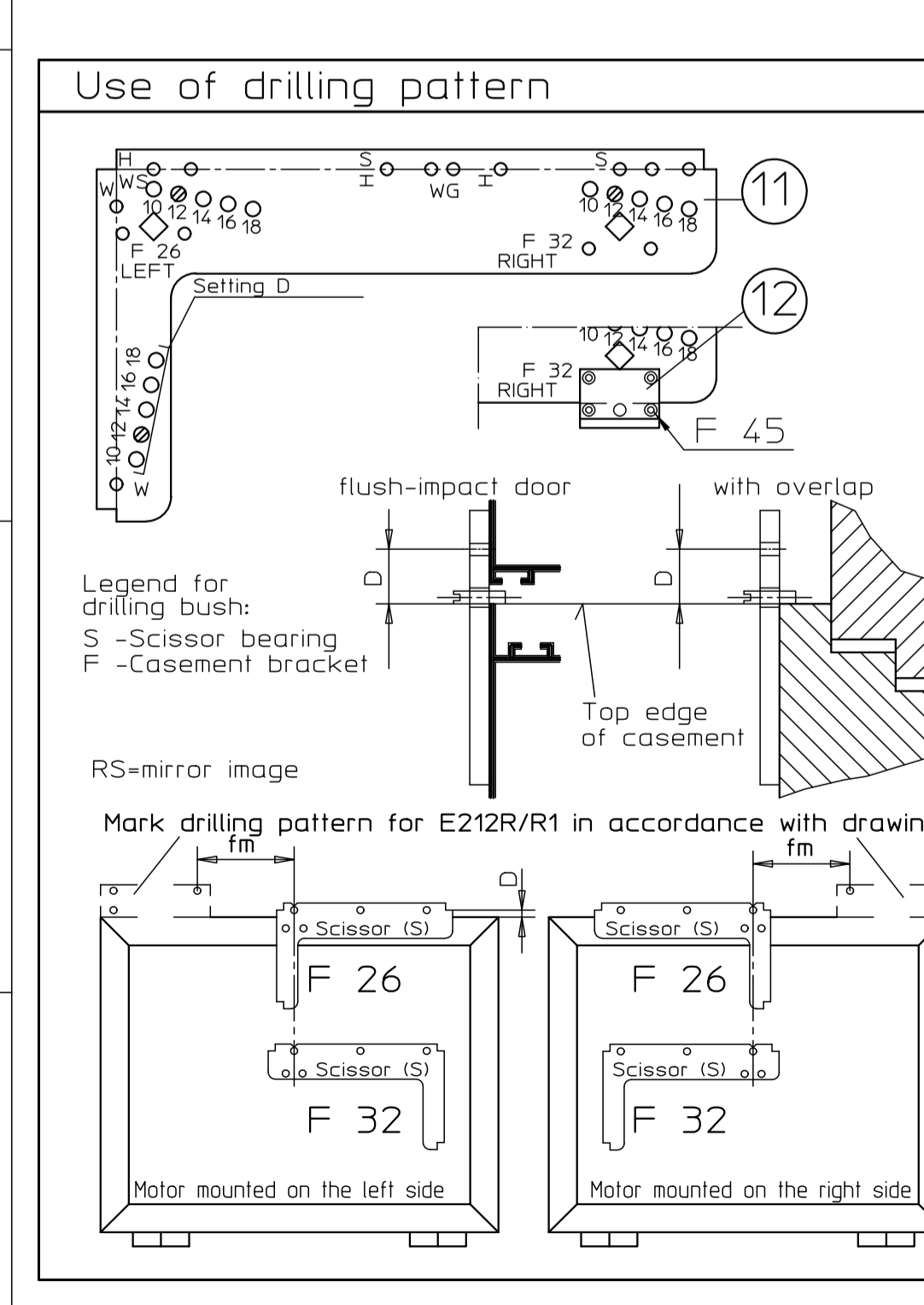
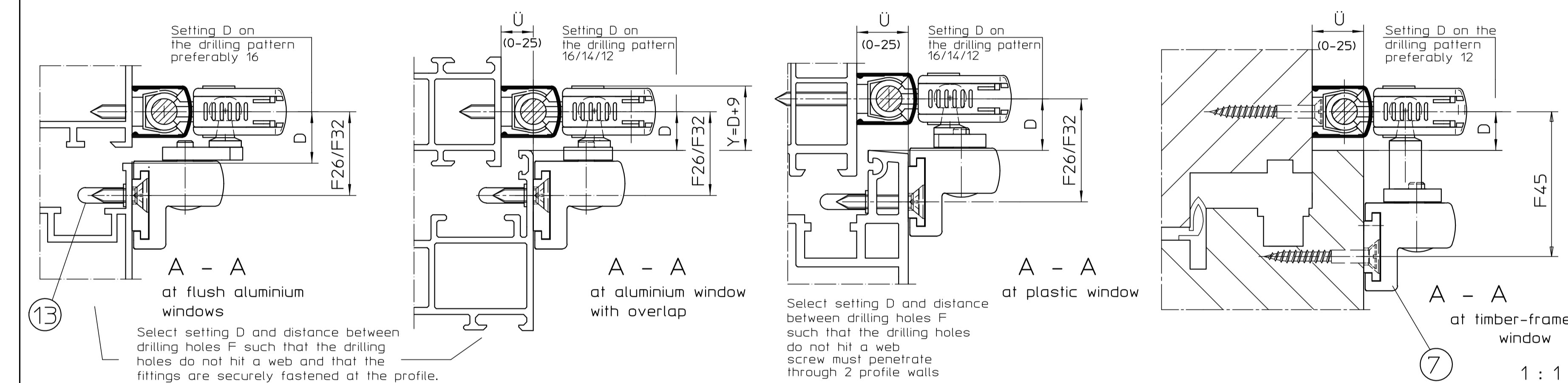
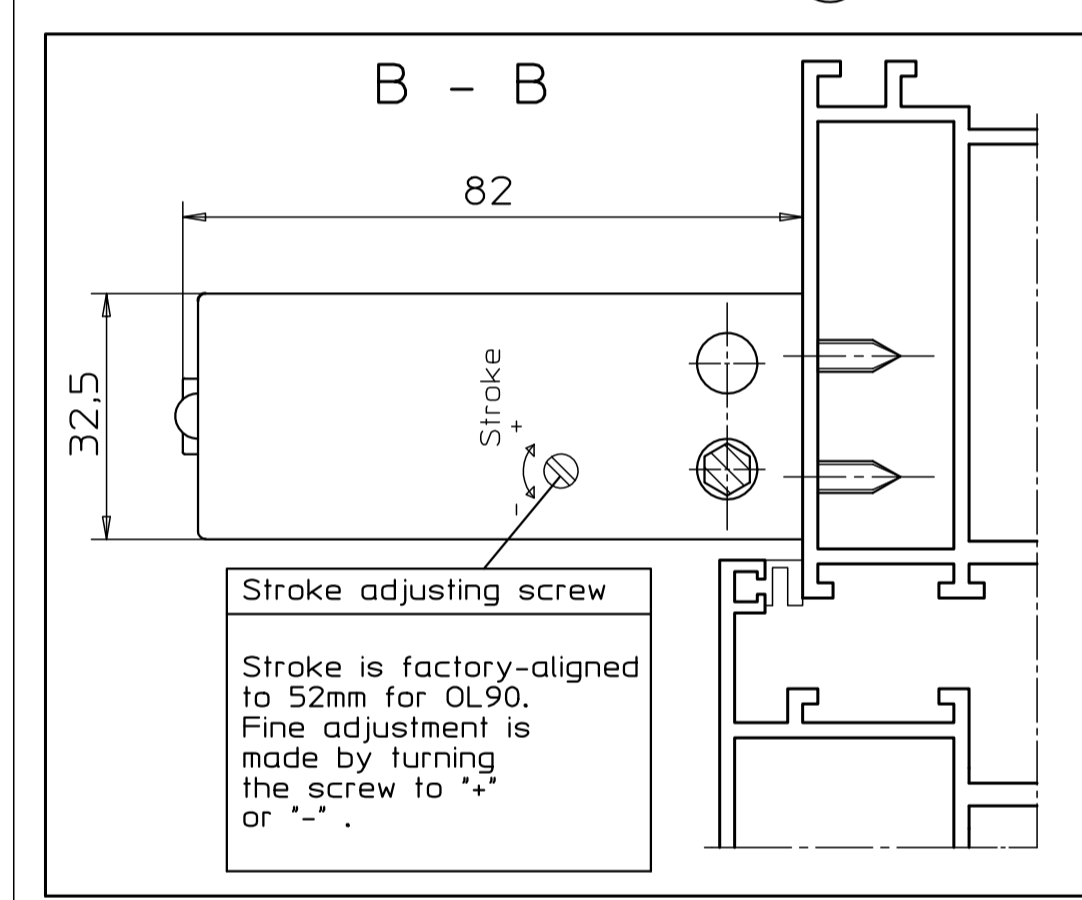
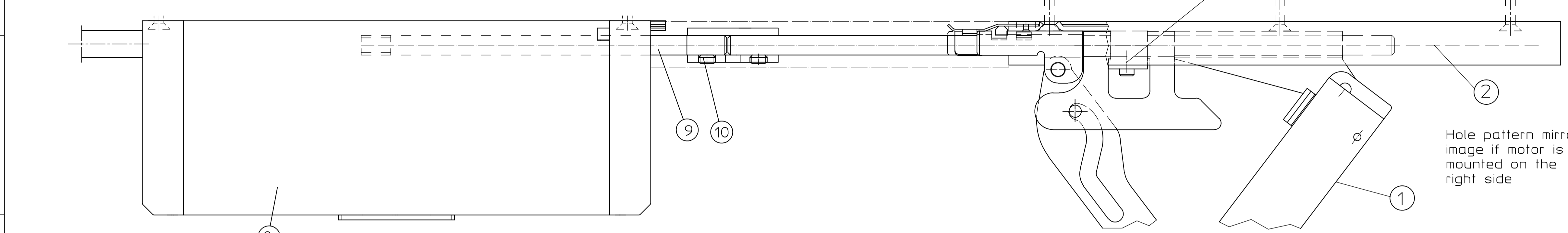


Fastening means		
Type of window	Fastening screws	drillingØ
Wood	Flat head screw 4x35 DIN 97 or DIN 7997	2,5mm
Aluminium	Tapping screw with countersunk head 4,2xL DIN7972 or DIN7982 screw must penetrate through a profile wall of at least 1,8mm thickness	3,5mm
Plastic	Tapping screw with countersunk head 4,2xL DIN7972 o.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**			
..Electric drive E212R for group control (see switches required)		X	X*		X	X	X**			X**
..Electric drive E212 24V aluminium/plastic window 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



Width of casement a	f-dimensions	Length of the rods (LQ) and cover profiles (LA)
600-760	f1=380	1 Scissor LA1=fm-26
760-1200	f1=a/2	LA1=fm-26 LA2=f2-225 a = 600-1200
1200-1500	f1=380 f2=a-760	2 Scissors LA1=fm-26 LA2=f2-225 LA3=f2-225
1500-2400	f1=a/4 f2=a/2	3 Scissors LA1=fm-26 LA2=f2-225 LA3=f2-225 LA4=f3-225 a = 1200-2400
1600-2300	f1=380 f2=a/2 - 380 f3=f2	3 Scissors LA1=fm-26 LA2=f2-225 LA3=f3-225 a = 1600-2300
2300-3600	f1=a/6 f2=a/3 f3=a/3	3 Scissors LA1=fm-26 LA2=f2-225 LA3=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>

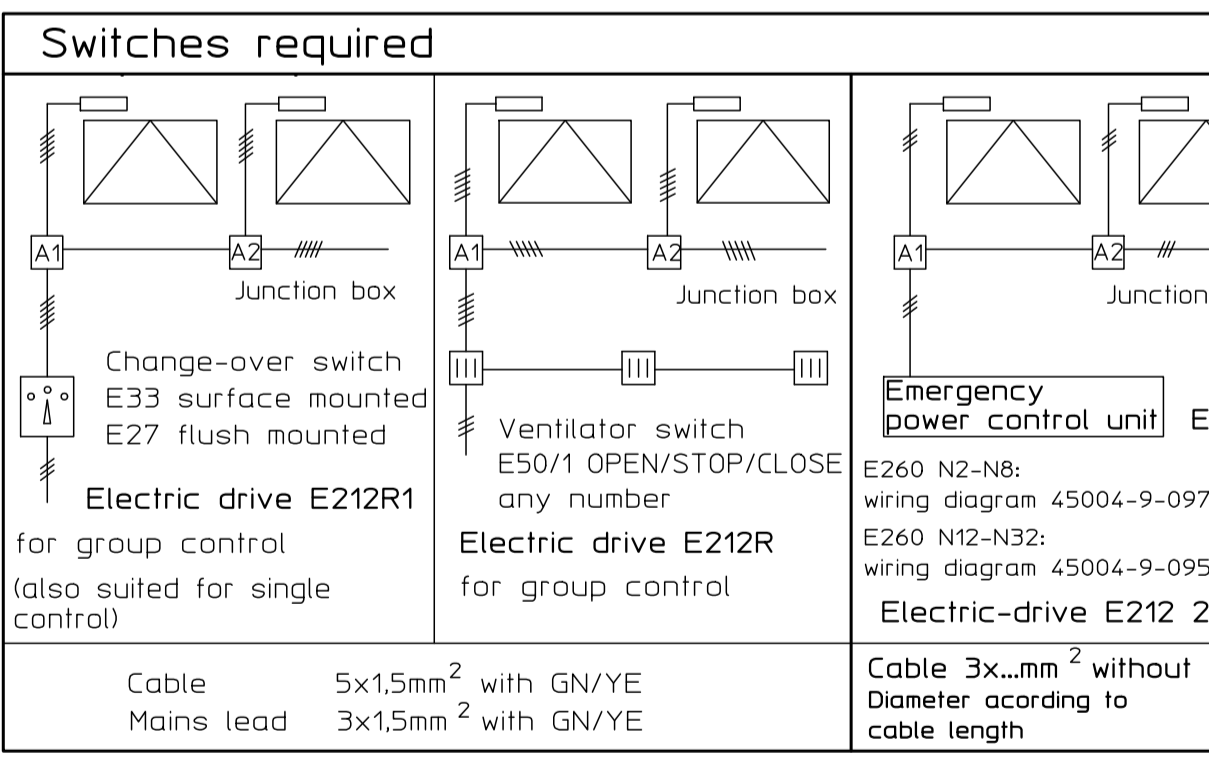
i = Clearing dimension of centre of gravity of casement to pivot point of hinge = 10 to 60mm  
 Ü = overlap height 0-25mm  
 D = Outer edge of casement to centre of rod assembly (see table)  
 Y = Top space requirements D+23mm

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 70mm  
 - 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



**Important information:**  
 - Mounting drawing, terminal connection diagram, assembly 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 or 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.

Designation	Id.-No. for colour:					Pcs.
	anod. alu.	white RAL9016	dark bronze	black	RAL...	
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 Scissor OL90N without casement bracket Contents: 1 Items: 1, 2, 4, 6;	71203	71207	71204	99477	71206	4
B1 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
C1 Rod coupling OL90	43546					
D Electric drive E212R1 for group control Contents: 1 E212R/230V AC 1 Connecting rod	20835	20839	20836	20838	20838	3
E1 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 1 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 1 Connecting rod	10899	15540	10901	10915	10915	3
Rods and cover profiles Cover profile L=2m * Cover profile L=3m * Cover profile L=6m	30401 30396 27558	30405 30400 27561	30402 30397 27559	74537 74539 74540	30404 30399 28342	
Rod Ø8 galvanised L=2m Rod Ø8 galvanised L=3m Rod Ø8 galvanised L=6m	16555 16591 16592					
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	for wood 54799 yellow for plastic/metal 54800 blue 28141 43546 10878					1 each

GEZE GmbH		Benennung / designation	
P.O. Box 13 63 7026 Leornberg Germany		OL90N with E212 horizontal mounting	
vertraulich / confidential			
erstell / drawn	08.03.12	Name / name	1/1
gepr. / checked	06.06.13	Skizze / scale	1:1
Erstellt für:	47863	Skizze für:	
Erstellt von:	16591	Skizze von:	
Erstellt durch:		Sprache / language	GB
Subst. mit:		Zeichnungs-Nr. / document-no.	40444-EP-003

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