



YOUR SUCCESS IS OUR MOTIVATION.

General catalogue
valid from 03/2020



Drives



Controls



Roller shutter
components

SELVE

Engineering in motion



Welcome to the world market leader

In 1866, SELVE was founded in Lüdenscheid, South Westphalia and stands today for a high competence in development and production of innovative drives, controls and components for roller shutters and sun protection. South Westphalia is the third largest industrial region in Germany. Many medium sized companies and well-known family businesses that are based here have developed a leading position in the world market. We can also proudly call ourselves world market leader in the sector of roller shutter strap coilers.

INNOVATION FROM TRADITION

For over 150 years at the cutting edge



Ludger Stracke
Managing director



Andreas Böck
Managing director

Dear customers,
Our aspiration is to develop roller shutters and sun protection products that make your life easier and safer. That is why we for example developed drives that find their end limit positions independently (▶ SEE, page 18) or a drive that opens the roller shutter in case of an emergency with just one handgrip (▶ SP Rescue, page 50). Another novelty is the SE Pro (▶ page 14). It comes in the new, grey tube and has the same features as the SEL Plus, but has been extended with some optional additional functions and was optimized extensively.

In addition we have further developed our radio control system commeo (▶ page 99) by intelligent components. The commeo Timer BT (▶ page 103) and the commeo Control (▶ page 112) are new members in the product family and provide the possibility to build a simple room control panel via app-control.

Of course, the topic Smart Home has gained more and more importance. The SELVE Home Server 2 (▶ page 101) finds its way into our product range. Not only roller shutters and sun protection can be controlled by app via the overall system SELVE Home but also e.g. heating thermostats, window contacts and motion sensors of Homematic IP – for maximum comfort at home and on the move.

Now we wish you especially one thing: Have fun with our new product highlights but also with our longtime proven solutions – all of them can be found in the new SELVE complete catalogue!

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Dear customers,
This catalogue is also available as pdf to be downloaded at > www.selve.de/en/catalogue.

All information in this catalogue corresponds to our present knowledge. It implies no liability or other legal responsibility on our part, including with regard to existing third party patent rights. In particular, no guarantee of properties in the legal sense is implied. We reserve the right to make any changes according to technical progress and operational further developments as well as printing errors.

Our plastic parts can not always be clearly assigned to a RAL-colour. The colour of the plastic is dependent on the type (material) and the age (storage and service life) as well as the operation site (UV and ozone influence). For white parts we use the description "pure white" – similar RAL 9010 and "traffic white" similar RAL 9016.

Our products are subject to the intended use. They are intended for the operation on roller shutter constructions. For the use and the installation, the legal standards and legal norms must be overserved.

Your success is our motivation

230 employees, both at the headquarters in Lüdenscheid as well as in the branch in Bad Arolsen, are committed to provide the widest range of products in our sector. Thanks to constant new developments and adaptations of existing products to new customer needs, we are at the cutting edge for more than 150 years now. All this is only possible with regular investments in our ultra-modern production. We ensure efficient processes and a lean production according to LEAN and ensure that quality "Made in Germany" remains affordable.

We build on a good partnership

Our highest goals are to support our specialized customers in their craft and to gain their trust in our technology, performance and service. We therefore work daily on a partnership-based support of our customers. This includes a high professional standard support by the sales department and the technical customer service as well as quick delivery times. Did you already know? By regular trainings on our products and new technologies, we will prepare you as specialist customer for the future.

It is just us who has this great variety

It is unique on the market what SELVE offers from just a single source. SELVE is a full-service provider of roller shutters and sun protection and has the most comprehensive range in the industry with more than 5.200 products. We are world market leader in the field of strap coilers and have also made a name for ourselves with innovative drive as well as control technology. Our range is from ball bearings, caps and octagonal shafts or bidirectional radio drives to internet based home automation - everything can be found in this catalogue.



Our technology makes life more comfortable

SELVE offers many applications that make daily life easier and that increase the living comfort: Sun protection that can be moved from the couch at the push of a button. Roller shutters that simulate presence while you are on vacation. Awnings that move out automatically in case of sunshine and retract automatically at wind. Or the complete sun protection construction that can be controlled via app from anywhere on the road. SELVE products also help to save energy and to increase the security at home. For all products our goal is to, in many respects, provide benefits and to inspire the specialist dealers by assembly advantages.



DRIVES

At SELVE you can be sure that you will find the right drive for every application. The individual drive types differ in their type of end limit – electronically or mechanically – and by individual functions that are reconciled to the constructions and the requests of the customer.

Overview of end limits:

- ▶ **SE..** electrical shut-off system
- ▶ **SE..-RC** electrical shut-off system with integrated radio
- ▶ **SP..** mechanical shut-off system

The article description is composed as follows:

type of drive torque
SEE 2 / 10 - RC
series addition (opt.): Radio commeo = radio drive

Explanation series 1-3:

- ▶ **GR 1** Series 1, outside diameters Ø 35 mm, starting from steel shaft SW 40
- ▶ **GR 2** Series 2, outside diameters Ø 45 mm, starting from steel shaft SW 50
- ▶ **GR 3** Series 3, outside diameters Ø 58 mm, starting from steel shaft SW 70

Drives with electronical shut-off system

- | | | |
|---------------------------------------|---|---|
| SE Pro (-RC)
▶ from page 14 | SE Plus (-RC)
▶ from page 24 | SE Plus-SMI
▶ from page. 40 |
| SEE (-RC)
▶ from page 18 | SEZ (-RC)
▶ from page 32 | 28 U/min (-RC)
▶ from page 42 |
| SEE-NHK
▶ from page 22 | SEM Plus (-RC)
▶ from page 36 | |



Drives with mechanical shut-off system

- SP**
▶ from page 46
- SP Rescue**
▶ from page 50
- SP-NHK**
▶ from page 52



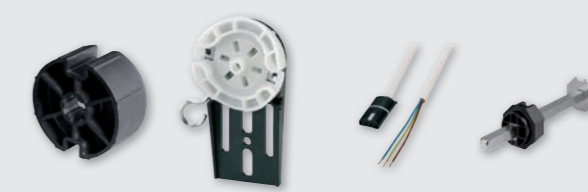
Special drives

- SIS, drives for internal blinds**
▶ from page 92
- RolloLift, electrical strap coilers**
▶ from page 93
- GDO, garage door drives** ▶ from page 95



Accessories for drives

- | | |
|---|--|
| Adapters
▶ from page 56 | Plug-in connecting cables
▶ from page 81 |
| Motor brackets
▶ from page 70 | Mechanical accessories
▶ from page 84 |



Our drives in an overview

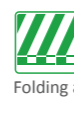
Use, Functions and Specifications

	SE Pro	SEE	SEE-NHK	SE Plus
Use	Roller shutter	X	X	X
	Screen			X
	Zip-Screen			X
				X
Technical execution	Wired version	X	X	X
	Radio version (-RC) available	X	X	X
	Integrated SMI technology available	X		X
	Series 1 (SW 40, for shafts starting from Ø 40)	X	X	X
	Series 2 (SW 50 + 60, for shafts starting from Ø 50)	X	X	X
	Series 3 (SW 70, for shafts starting from Ø 70)			X
	Short version available	X	X	
	Fast rotation speed 28 rpm available			X
	Round motor head available			
Functions	Mechanical limit stop			
	Electrical limit stop	X	X	X
	Plug & Play setting		X	X
	Automatic setting of the end limit positions	X	X	X
	Manual setting of the end limit positions	X	X	X
	Additional intermediate and ventilation position (-RC)	X	X	X
	Obstacle detection with reversion	X (soft)	X	
	Learning overload protection / freeze up protection	X	X	X
	Wind gust detection			
	Relief of the upper end limit position	X	X	X
	Use with burglar-proof fixations / blocking springs only		X	X
	Use with burglar-proof fixations / blocking springs possible	X (manually)	X	X
	Automatic direction assignment	X		X
	Parallel connection possible	X	X	X
	Emergency operation in case of power failure			X
	Use at second emergency escape route			X (crank)
	Plugable cable (series 2)	X	X	X
VDE sign (series 2, 7–30 Nm, also -RC)	X	X	X	

	SEZ	SEM Plus	SP	SP Rescue	SP-NHK
			X	X	X
			X		
	X		X		
		X	X		
	X	X	X	X	X
	X	X			
		X	X		X
	X		X	X	X
	X		X		
	X			X	X
	X	X			
	X	X	X	X	X
	X	X			
	X (soft, 3x)				
	X	X			
	X	X (deact.)			
			X	X	X
	X	X			
	X	X			
				X	X
				X	X (crank)
	X	X	X		
	X	X	X		

Symbol explanation for the following pages:

Range of application



Roller shutters

Screen

Zip screen

Folding arm awnings

Features



Radio drive

Emergency operation in case of power failure

Minimal power consumption in stand-by mode



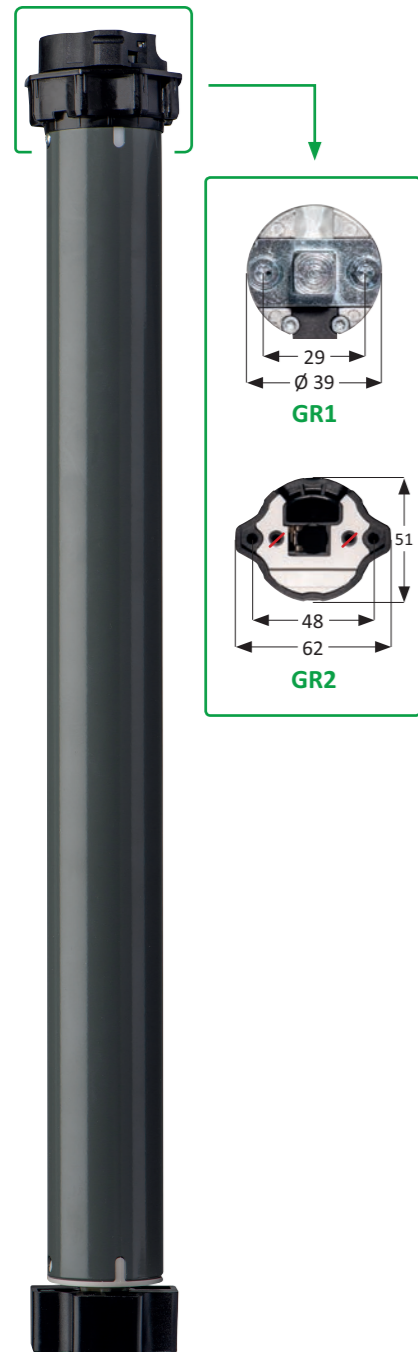


The roller shutter drive with obstacle detection

Especially made for roller shutters, the SE Pro drive combines all positive features of an easy assembly, comfort and maximal protection of the roller shutter installation in just one drive. The special motor head ensures an optimal sensibility in case an obstacle is on the way of motion. SE Pro drives can be installed with normal safety and fixing springs. When installed with blocking springs or burglar-proof fixations the manual setting of a lower end limit position is recommended. We recommend the use in one-piece constructions as only here the specified functions can fully be guaranteed. The parallel connection of several SE Pro drives is possible. After setting the end limit positions an automatic rotation detection will occur. Drives are available in series 1 (from shaft 40) and series 2 (from shaft 50). Series 1 SE Pro drives are delivered with adapters (shaft 40) as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

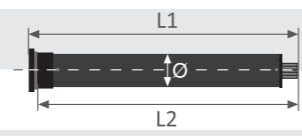
Advantages

- Automatic setting of the end limit positions: up-down-ready!
- Sensible obstacle detection in the downwards direction
- "Reverse function": Release of the obstacle
- Learning overload protection in upwards direction, freeze up protection
- Soft approach against the box
- Relief of upper end limit position
- Good & favourable: Installation with safety and fixing springs



Technical information of SE Pro drives*

Type	SE Pro 1/6	SE Pro 1/10
Ref.	41 02 23	41 02 43
Torque at rated load Nm	6	10
Effective shutter weight (kg) at shutter height of 1.5 m	14	25
Effective shutter weight (kg) at shutter height of 2.5 m	11	20
Shaft type	SW 40	SW 40
Pulling force N	270	450
Rotation speed rpm	15	15
Power rating W	115	115
Current consumption A	0,5	0,5
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	35	35
Cable length m	3	3
Length L 1 mm	508	508
Length L2 mm	494	494
Length of square fixing pivot mm	12	12



Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	4-wire, PVC, white, 2,5 m	29 05 45	
	4-wire, PVC, white, 5 m	29 05 48	
	4-wire, PVC, white, 10 m	29 05 49	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SE Pro 2/6-S	SE Pro 2/7	SE Pro 2/10	SE Pro 2/15	SE Pro 2/20	SE Pro 2/30	SE Pro 2/40	SE Pro 2/50
41 41 00	41 21 10	41 21 30	41 21 50	41 21 70	41 21 80	41 21 90	41 22 93
6	7	10	15	20	30	40	50
14	19	25	35	45	67	88	102
11	15	20	29	37	56	72	83
SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60
180	220	310	460	610	920	1230	1530
16	17	17	17	17	17	17	12
88	95	105	152	172	220	345	345
0.38	0.41	0.45	0.66	0.75	0.95	1.5	1.5
230	230	230	230	230	230	230	230
50	50	50	50	50	50	50	50
4	4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE	CE
-	-	-	-	-	-	-	-
45	45	45	45	45	45	45	45
0	0	0	0	0	0	0	3
399	505	505	530	545	565	566	564
383	488	488	513	528	548	549	548
12	12	12	12	12	12	12	12

* These information refer to the use in one-piece constructions.

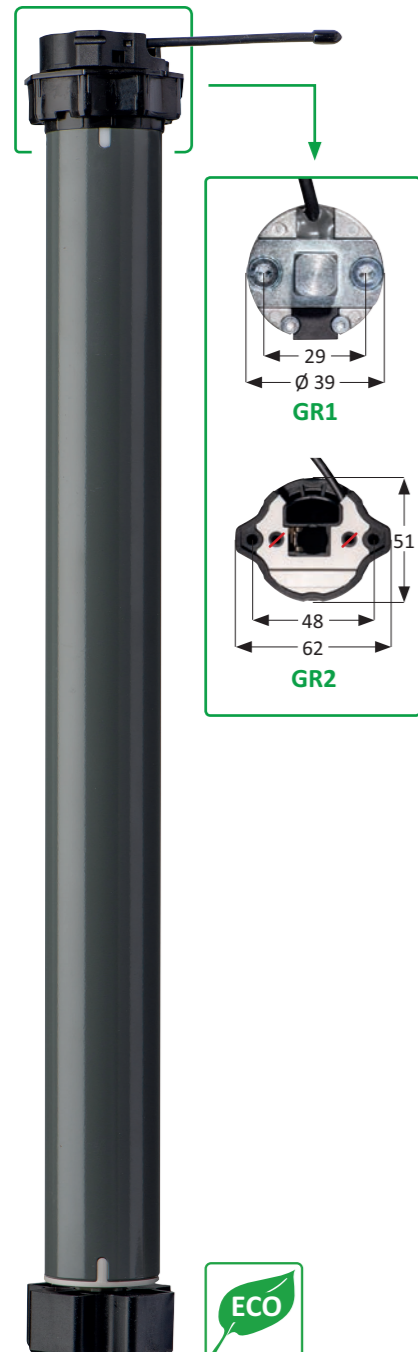


The roller shutter drive with obstacle detection

Especially made for roller shutters, the SE Pro-RC drive combines all positive features of an easy assembly, comfort and maximal protection of the roller shutter installation in just one drive. The special motor head ensures an optimal sensibility in case that an obstacle is on the way of motion. SE Pro-RC drives can be installed with normal safety and fixing springs. When installed with blocking springs or burglar-proof fixations the manual setting of a lower end limit position is recommended. We recommend the use in one-piece constructions as only here the specified functions can fully be guaranteed. The parallel connection of several SE Pro-RC drives is possible. After setting the end limit positions an automatic rotation detection will occur. SE Pro-RC drives can be operated with commo- or iveo/intronic radio transmitters. Drives are available in series 1 (from shaft 40) and series 2 (from shaft 50). Series 1 SE Pro-RC drives are delivered with adapters (shaft 40) as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

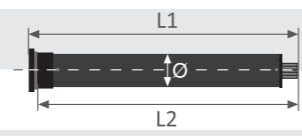
Advantages

- Automatic setting of the end limit positions: up-down-ready!
- Sensible obstacle detection in the downwards direction
- "Reverse function": Release of the obstacle
- Learning overload protection in upwards direction, freeze up protection
- Soft approach against the box
- Relief of upper end limit position
- Good & favourable: Installation with safety and fixing springs



Technical information of SE Pro-RC drives*

Type	SE Pro 1/6-RC	SE Pro 1/10-RC
Ref.	41 12 23	41 12 43
Torque at rated load Nm	6	10
Effective shutter weight (kg) at shutter height of 1.5 m	14	25
Effective shutter weight (kg) at shutter height of 2.5 m	11	20
Shaft type	SW 40	SW 40
Pulling force N	270	450
Rotation speed rpm	15	15
Power rating W	115	115
Current consumption A	0,5	0,5
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	35	35
Cable length m	3	3
Length L 1 mm	508	508
Length L2 mm	494	494
Length of square fixing pivot mm	12	12



Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	5-wire, PVC, white, 2.5 m	29 05 75	
	5-wire, PVC, white, 5.0 m	29 05 78	
	5-wire, PVC, white, 10.0 m	29 05 79	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SE Pro 2/7-RC	SE Pro 2/10-RC	SE Pro 2/15-RC	SE Pro 2/20-RC	SE Pro 2/30-RC	SE Pro 2/40-RC	SE Pro 2/50-RC
41 31 10	41 31 30	41 31 50	41 31 70	41 31 80	41 31 90	41 32 93
7	10	15	20	30	40	50
19	25	35	45	67	88	102
15	20	29	37	56	72	83
SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60
220	310	460	610	920	1230	1530
17	17	17	17	17	17	12
95	105	152	172	220	345	345
0.41	0.45	0.66	0.75	0.95	1.5	1.5
230	230	230	230	230	230	230
50	50	50	50	50	50	50
4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE	CE
-	-	-	-	-	-	-
45	45	45	45	45	45	45
0	0	0	0	0	0	3
505	505	530	545	565	566	564
488	488	513	528	548	549	548
12	12	12	12	12	12	12

* These information refer to the use in one-piece constructions.



The roller shutter drive with plug & play adjustment of end positions

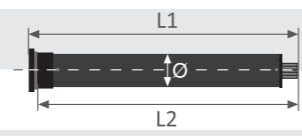
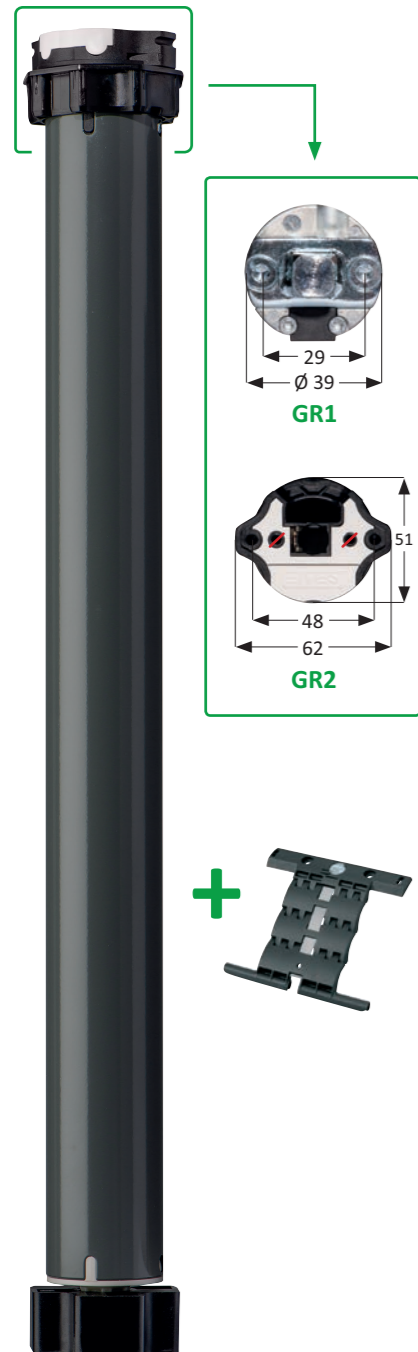
This plug & play drive for roller shutters combines simple end limit setting, maximum system protection and the tight closing of the shutters. The drive SEE only has to be connected – it does not matter which end limit is approached first. After 3 learning cycles both end limit positions are approached smoothly and an optimal obstacle and overload detection is guaranteed. SEE drives must be installed with blocking springs or burglar-proof fixations and need a fixed end limit on top. We recommend the use in one-piece constructions as only here the specified functions can fully be guaranteed. The parallel connection of various SEE drives is possible. Drives are available in series 1 (from shaft 40) and series 2 (from shaft 50). Series 1 SEE drives are delivered with adapters (shaft 40) as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

Advantages

- Plug & Play setting of end limits – sequence does not matter!
- Obstacle detection in downward direction
- “Reverse function”: Release of the obstacle
- Learning overload protection in upwards direction, freeze up protection
- Soft approach against the box
- Relief of the upper end limit position
- Burglar prevention by installation of burglar-proof fixations

Technical information of SEE drives*

Type	SEE 1/10	SEE 2/6-S
Ref.	38 03 43	38 43 20
Torque at rated load Nm	10	6
Effective shutter weight (kg) at shutter height of 1.5 m	25	14
Effective shutter weight (kg) at shutter height of 2.5 m	20	11
Shaft type	SW 40	SW 60
Pulling force N	450	180
Rotation speed rpm	15	16
Power rating W	115	88
Current consumption A	0,5	0,38
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	35	45
Cable length m	3	0
Length L 1 mm	508	393
Length L2 mm	494	377
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.

Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	4-wire, PVC, white, 2,5 m	29 05 45	
	4-wire, PVC, white, 5 m	29 05 48	
	4-wire, PVC, white, 10 m	29 05 49	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SEE 2/7	SEE 2/10	SEE 2/15	SEE 2/20	SEE 2/30
38 23 20	38 23 40	38 23 50	38 23 60	38 23 70
7	10	15	20	30
19	25	35	45	67
15	20	29	37	56
SW 60	SW 60	SW 60	SW 60	SW 60
220	310	460	610	920
17	17	17	17	17
95	105	152	172	220
0,41	0,45	0,66	0,75	0,95
230	230	230	230	230
50	50	50	50	50
4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44
CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE
-	-	-	-	-
45	45	45	45	45
0	0	0	0	0
497	497	522	537	557
481	481	521	30	541
12	12	12	12	12



The roller shutter drive with plug & play adjustment of end positions

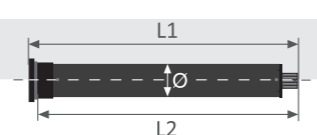
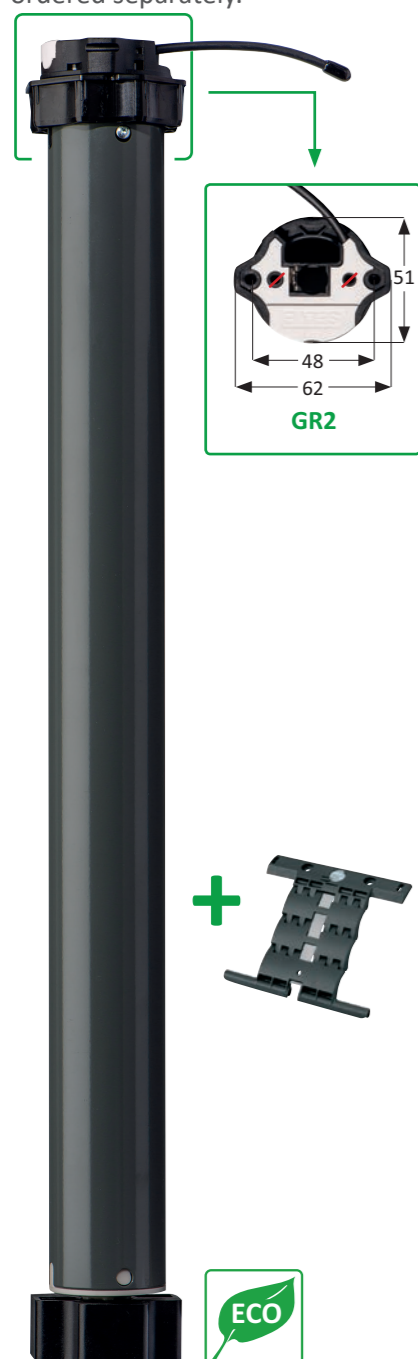
This plug & play drive for roller shutters combines simple end limit setting, maximum system protection and the tight closing of the shutters. The drive SEE-RC only has to be connected – it does not matter which end limit is approached first. After 3 learning cycles both end limit positions are approached smoothly and an optimal obstacle and overload detection is guaranteed. SEE-RC drives must be installed with blocking springs or burglar-proof fixations and need a fixed end limit on top. We recommend the use in one-piece constructions as only here the specified functions can fully be guaranteed. The parallel connection of various SEE-RC drives is possible. SEE-RC drives can be operated with comemo- or iveo/intronic radio transmitters. Drives are available in series 1 (from shaft 40) and series 2 (from shaft 50). Series 1 SEE-RC drives are delivered with adapters (shaft 40) as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

Advantages

- Plug & Play-Einstellung der Endlagen – Reihenfolge egal!
- Obstacle detection in downwards direction
- "Reverse function": Release of the obstacle
- Learning overload protection in upwards direction, freeze up protection
- Soft approach against the box
- Relief of the upper end limit position
- Burglar prevention by installation of burglar-proof fixations

Technical information of SEE-RC drives*

Type	SEE 2/7-RC	SEE 2/10-RC
Ref.	38 33 20	38 33 40
Torque at rated load Nm	7	10
Effective shutter weight (kg) at shutter height of 1.5 m	19	25
Effective shutter weight (kg) at shutter height of 2.5 m	15	20
Shaft type	SW 60	SW 60
Pulling force N	220	310
Rotation speed rpm	17	17
Power rating W	95	105
Current consumption A	0.41	0.45
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE, VDE	CE, VDE
Limit switch range U	-	-
Outer diameter mm	45	45
Cable length m	0	0
Length L 1 mm	497	497
Length L2 mm	481	481
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.

Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	5-wire, PVC, white, 2.5 m	29 05 75	
	5-wire, PVC, white, 5.0 m	29 05 78	
	5-wire, PVC, white, 10.0 m	29 05 79	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SEE 2/15-RC	SEE 2/20-RC	SEE 2/30-RC
38 33 50	38 33 60	38 33 70
15	20	30
35	45	67
29	37	56
SW 60	SW 60	SW 60
460	610	920
17	17	17
152	172	220
0.66	0.75	0,95
230	230	230
50	50	50
4	4	4
IP 44	IP 44	IP 44
CE, VDE	CE, VDE	CE, VDE
-	-	-
45	45	45
0	0	0
522	537	557
506	521	541
12	12	12

Roller shutter drives with emergency operation SEE-NHK

NEW
in catalogue



The roller shutter drive with emergency operation

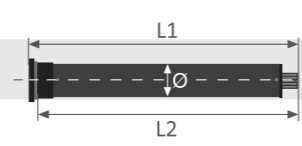
The drive SEE-NHK for roller shutters combines easy setting of end limit positions and maximum operating safety. Next to the thought out characteristics of the SEE drive (maximum construction protection and the tight closing of the construction) an operation with emergency hand crank is possible – e.g. in case of an emergency and power failure. After the SEE-NHK has been cranked upwards manually, the drive programs the end limit positions automatically. SEE-NHK drives have to be installed with blocking springs or burglar proof fixations and need a fixed end limit on top. The parallel connection of various SEE-NHK drives is possible. Available in series 2 (from SW 50) up to 20 Nm included. For drives of series 2 adapters have to be ordered separately. Standard length of the fixed motor cable 3 m. Upon request deliverable with uni plug for an additional charge.

Advantages

- Great operating safety thanks to emergency hand crank, gear ratio 1:26
- Plug and Play: End limit position setting not necessary, also not necessary after emergency operation
- Small design (motor head and length of drive)
- Obstacle detection in downwards direction
- Learning overload protection in upwards direction, freeze on protection

Technical information of SEE-NHK drives*

Type	SEE 2/7-NHK	SEE 2/10-NHK
Ref.	38 43 20	38 82 43
Torque at rated load Nm	7	10
Effective shutter weight (kg) at shutter height of 1.5 m	19	25
Effective shutter weight (kg) at shutter height of 2.5 m	15	20
Shaft type	SW 60	SW 60
Pulling force N	220	310
Rotation speed rpm	17	17
Power rating W	95	105
Current consumption A	0,41	0,45
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	45	45
Cable length m	3	3
Length L 1 mm	564	564
Length L2 mm	539,5	539,5



* These information refer to the use in one-piece constructions.

Please order adapters separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Mains supply line (for drives with Uni-plug)	4-wire, PVC, white, 3.3 m	29 01 46	
	4-wire, PVC, white, 5.3 m	29 01 48	
	4-wire, PVC, white, 10.0 m	29 01 49	

The entire range of adapters can be found from page 56 onwards. The article numbers below contain a 3 m long fixed cable.

SEE 2/15-NHK	SEE 2/20-NHK
38 82 53	38 82 63
15	20
35	45
29	37
SW 60	SW 60
460	610
17	17
152	172
0,66	0,75
230	230
50	50
4	4
IP 44	IP 44
CE	CE
-	-
45	45
3	3
589	604
564,5	579,5

Universal drives SE Plus

GR 1 and GR 2

The universal drive for many applications

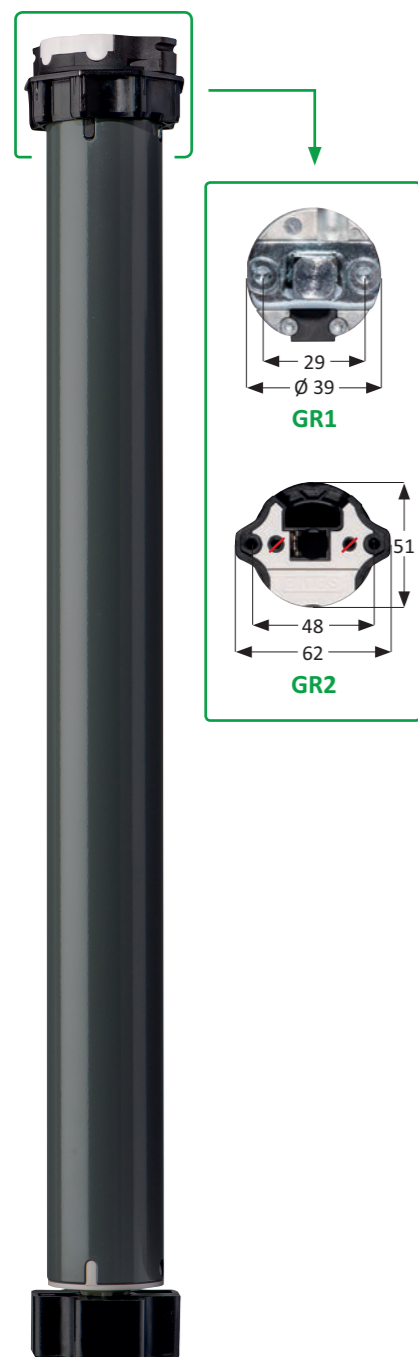
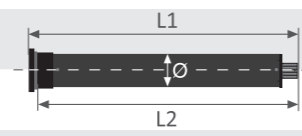
Regardless of whether you have roller shutters, folding arm awnings, screens, winter garden shading or interior blinds - the SE Plus drive is the all-rounder among the drives. All standard advantages of SELVE drives with electronic shut-off system can be found in this drive type. The parallel connection of several SE Plus drives is possible. After setting the end limit positions an automatic rotation detection will occur. Drives are available in series 1 (from shaft 40, shaft with Ø 40mm) and series 2 (from shaft 50, shaft with Ø 50mm) and series 3 (from shaft 70, shaft with Ø 70 mm). SE Plus drives of series 1 (shaft 40) and series 3 (shaft 70) are delivered with adapters as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

Advantages

- Setting of the end limits "point to upper end limit" or "point to point"
- End limits can be adjusted individually
- No upper end limit necessary at exact positioned shut-off
- Learning overload protection in upwards direction, freeze up protection
- Relief of the upper end limit position
- Suitable for many types of products

Technical information of SE Plus drives*

Type	SE Plus 1/4	SE Plus 1/6
Ref.	38 01 13	38 01 23
Torque at rated load Nm	4	6
Effective shutter weight (kg) at shutter height of 1.5 m	10	14
Effective shutter weight (kg) at shutter height of 2.5 m	8	11
Shaft type	SW 40	SW 40
Pulling force N	180	270
Rotation speed rpm	30	15
Power rating W	115	115
Current consumption A	0,5	0,5
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	35	35
Cable length m	3	3
Length L 1 mm	508	508
Length L2 mm	494	494
Length of square fixing pivot mm	12	12



Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	4-wire, PVC, white, 2,5 m	29 05 45	
	4-wire, PVC, white, 5 m	29 05 48	
	4-wire, PVC, white, 10 m	29 05 49	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SE Plus 1/7	SE Plus 1/10	SE Plus 2/7	SE Plus 2/10	SE Plus 2/15	SE Plus 2/20	SE Plus 2/30	SE Plus 2/40	SE Plus 2/50
38 01 33	38 01 43	38 20 20	38 20 40	38 20 50	38 20 60	38 20 70	38 20 80	38 21 90
7	10	7	10	15	20	30	40	50
14	25	19	25	35	45	67	88	102
11	20	15	20	29	37	56	72	83
SW 40	SW 40	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60
270	450	220	310	460	610	920	1230	1530
20	15	17	17	17	17	17	17	12
115	115	95	105	152	172	220	345	345
0,5	0,5	0.41	0.45	0.66	0.75	0.95	1.5	1.5
230	230	230	230	230	230	230	230	230
50	50	50	50	50	50	50	50	50
4	4	4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE	CE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE	CE
-	-	-	-	-	-	-	-	-
35	35	45	45	45	45	45	45	45
3	3	0	0	3	0	0	0	0
508	508	497	497	522	537	557	559	559
494	494	481	481	506	521	541	542	542
12	12	12	12	12	12	12	12	12

* These information refer to the use in one-piece constructions.

Continuation

Universal drives SE Plus

GR 3

The universal drive for many applications

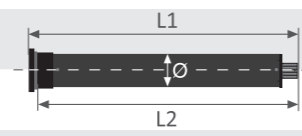
Regardless of whether you have roller shutters, folding arm awnings, screens, winter garden shading or interior blinds - the SE Plus drive is the all-rounder among the drives. All standard advantages of SELVE drives with electronic shut-off system can be found in this drive type. The parallel connection of several SE Plus drives is possible. After setting the end limit positions an automatic rotation detection will occur. Drives are available in series 1 (from shaft 40, shaft with Ø 40mm) and series 2 (from shaft 50, shaft with Ø 50mm) and series 3 (from shaft 70, shaft with Ø 70 mm). SE Plus drives of series 1 (shaft 40) and series 3 (shaft 70) are delivered with adapters as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

Advantages

- Setting of the end limits "point to upper end limit" or "point to point"
- End limits can be adjusted individually
- No upper end limit necessary at exact positioned shut-off
- Learning overload protection in upwards direction, freeze up protection
- Relief of the upper end limit position
- Suitable for many types of products

Technical information of SE Plus drives*

Type	SE Plus 3/50	SE Plus 3/60
Ref.	38 60 13	38 61 23
Torque at rated load Nm	50	60
Effective shutter weight (kg) at shutter height of 1.5 m	99	116
Effective shutter weight (kg) at shutter height of 2.5 m	81	100
Shaft type	SW 70	SW 70
Pulling force N	1330	1600
Rotation speed rpm	17	12
Power rating W	315	245
Current consumption A	1.4	1.1
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	58	58
Cable length m	3	3
Length L 1 mm	580	560
Length L2 mm	560	540
Length of square fixing pivot mm	22	22



* These information refer to the use in one-piece constructions.



Please order adapters separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 3	Octagonal steel shaft 70	28 81 00	28 83 05
	Hexagonal steel shaft B 75	28 81 02	28 81 03
	Octagonal steel shaft 102	28 81 32	28 81 33
	Octagonal steel shaft 114	28 82 02	28 82 03
	Round tube 102 x 2.5	28 81 34	28 81 35
	Round tube 105 x 2.5	28 81 38	28 81 39

The entire range of adapters can be found from page 56 onwards.

SE Plus 3/70	SE Plus 3/80	SE Plus 3/120
38 60 33	38 61 43	38 61 53
70	80	120
135	154	232
116	130	200
SW 70	SW 70	SW 70
1860	2130	3200
17	12	11
435	322	435
1.9	1.4	1.9
230	230	230
50	50	50
4	4	4
IP 44	IP 44	IP 44
CE	CE	CE
-	-	-
58	58	58
3	3	3
610	580	610
590	560	590
22	22	22

Universal drives (radio) SE Plus-RC

GR 1 and GR 2

The universal drive for many applications

Regardless of whether you have roller shutters, folding arm awnings, screens, winter garden shading or interior blinds - the SE Plus drive is the all-rounder among the drives. All standard advantages of SELVE drives with electronic shut-off system can be found in this drive type.

The parallel connection of several SE Plus drives is possible. After setting the end limit positions an automatic rotation detection will occur. SE Plus-RC drives can be operated with comemo or iveo/intronic radio transmitters.

Drives are available in series 1 (from shaft 40, shaft with \varnothing 40mm) and series 2 (from shaft 50, shaft with \varnothing 50mm) and series 3 (from shaft 70, shaft with \varnothing 70 mm).

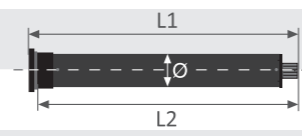
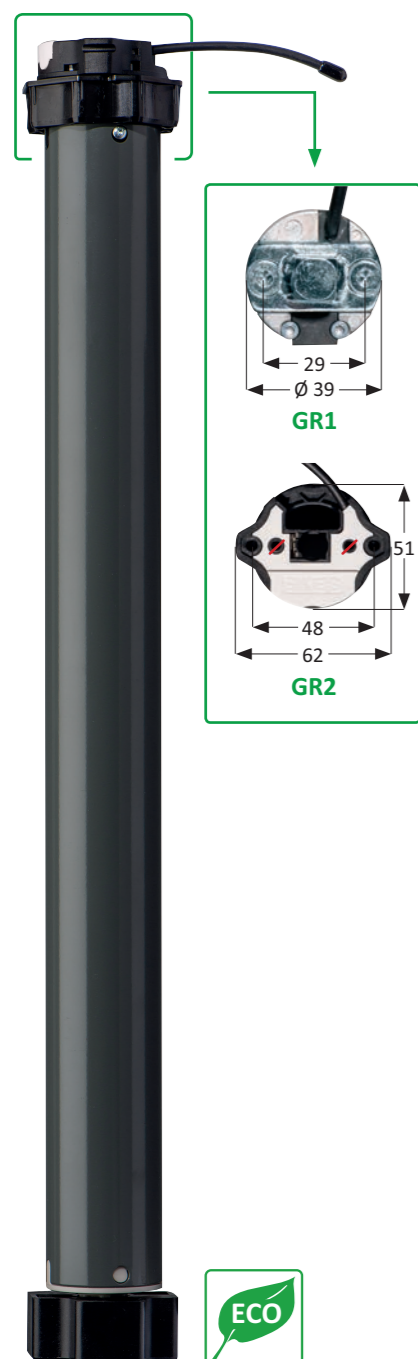
SE Plus drives of series 1 (shaft 40) and series 3 (shaft 70) are delivered with adapters as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

Advantages

- Setting of the end limits "point to upper end limit" or "point to point"
- Endpunkte einzeln nachstellbar
- No upper end limit necessary at exact positioned shut-off
- Learning overload protection in upwards direction, freeze up protection
- Relief of the upper end limit position
- Suitable for many types of products

Technical information of SE Plus-RC drives*

Type	SE Plus 1/4-RC	SE Plus 1/6-RC
Ref.	38 11 13	38 11 23
Torque at rated load Nm	4	6
Effective shutter weight (kg) at shutter height of 1.5 m	10	14
Effective shutter weight (kg) at shutter height of 2.5 m	8	11
Shaft type	SW 40	SW 40
Pulling force N	180	270
Rotation speed rpm	30	15
Power rating W	115	115
Current consumption A	0,5	0,5
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	35	35
Cable length m	3	3
Length L 1 mm	508	508
Length L2 mm	494	494
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.



Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	5-wire, PVC, white, 2.5 m	29 05 75	
	5-wire, PVC, white, 5.0 m	29 05 78	
	5-wire, PVC, white, 10.0 m	29 05 79	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SE Plus 1/7-RC	SE Plus 1/10-RC	SE Plus 2/7-RC	SE Plus 2/10-RC	SE Plus 2/15-RC	SE Plus 2/20-RC	SE Plus 2/30-RC	SE Plus 2/40-RC	SE Plus 2/50-RC
38 11 33	38 11 43	38 30 20	38 30 40	38 30 50	38 30 60	38 30 70	38 30 80	38 31 90
7	10	7	10	15	20	30	40	50
17	25	19	25	35	45	67	88	102
14	20	15	20	29	37	56	72	83
SW 40	SW 40	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60
320	450	220	310	460	610	920	1230	1530
20	15	17	17	17	17	17	17	12
115	115	95	105	152	172	220	345	345
0,5	0,5	0.41	0.45	0.66	0.75	0.95	1.5	1.5
230	230	230	230	230	230	230	230	230
50	50	50	50	50	50	50	50	50
4	4	4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE	CE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE	CE
-	-	-	-	-	-	-	-	-
35	35	45	45	45	45	45	45	45
3	3	0	0	0	0	0	0	0
508	508	497	497	522	537	557	559	559
494	494	481	481	506	521	541	542	542
12	12	12	12	12	12	12	12	12

Continuation

Universal drives (radio) SE Plus-RC

GR 3

The universal drive for many applications

Regardless of whether you have roller shutters, folding arm awnings, screens, winter garden shading or interior blinds - the SE Plus drive is the all-rounder among the drives. All standard advantages of SELVE drives with electronic shut-off system can be found in this drive type.

The parallel connection of several SE Plus drives is possible. After setting the end limit positions an automatic rotation detection will occur. SE Plus-RC drives can be operated with comemo or iveo/intronic radio transmitters.

Drives are available in series 1 (from shaft 40, shaft with \varnothing 40mm) and series 2 (from shaft 50, shaft with \varnothing 50mm) and series 3 (from shaft 70, shaft with \varnothing 70 mm).

SE Plus drives of series 1 (shaft 40) and series 3 (shaft 70) are delivered with adapters as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

Advantages

- Setting of the end limits "point to upper end limit" or "point to point"
- Endpunkte einzeln nachstellbar
- No upper end limit necessary at exact positioned shut-off
- Learning overload protection in upwards direction, freeze up protection
- Relief of the upper end limit position
- Suitable for many types of products

Technical information of SE Plus-RC drives*

Type	SE Plus 3/50-RC	SE Plus 3/60-RC
Ref.	38 70 13	38 71 23
Torque at rated load Nm	50	60
Effective shutter weight (kg) at shutter height of 1.5 m	99	116
Effective shutter weight (kg) at shutter height of 2.5 m	81	100
Shaft type	SW 70	SW 70
Pulling force N	1330	1600
Rotation speed rpm	17	12
Power rating W	315	245
Current consumption A	1.4	1.1
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	58	58
Cable length m	3	3
Length L 1 mm	580	560
Length L2 mm	560	540
Length of square fixing pivot mm	22	22

* These information refer to the use in one-piece constructions.



Please order adapters separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 3	Octagonal steel shaft 70	28 81 00	28 83 05
	Hexagonal steel shaft B 75	28 81 02	28 81 03
	Octagonal steel shaft 102	28 81 32	28 81 33
	Octagonal steel shaft 114	28 82 02	28 82 03
	Round tube 102 x 2.5	28 81 34	28 81 35
	Round tube 105 x 2.5	28 81 38	28 81 39

The entire range of adapters can be found from page 56 onwards.

SE Plus 3/70-RC	SE Plus 3/80-RC	SE Plus 3/120-RC
38 70 33	38 71 43	38 71 53
70	80	120
135	154	232
116	130	200
SW 70	SW 70	SW 70
1860	2130	3200
17	12	11
435	322	435
1.9	1.4	1.9
230	230	230
50	50	50
4	4	4
IP 44	IP 44	IP 44
CE	CE	CE
-	-	-
58	58	58
3	3	3
610	580	610
590	560	590
22	22	22



The drive especially for Zip-screens

The protection of high-quality Zip-screens is what the SEZ drive focuses on. Many clever functions were combined in this drive so that for example briefly occurring wind gusts can be distinguished from real obstacles.

SEZ drives are available with different motor head shapes and different basic crown diameters. The parallel connection of several SEZ drives is possible. After setting the end limit positions an automatic rotation detection will occur.

Drives are available in series 1 (from shaft with \varnothing 40 mm) and series 2 (from shaft with \varnothing 50 mm). SEZ drives are dispatched without adapters. The adapters and the plug-in connecting cables for series 2 drives need to be ordered separately.

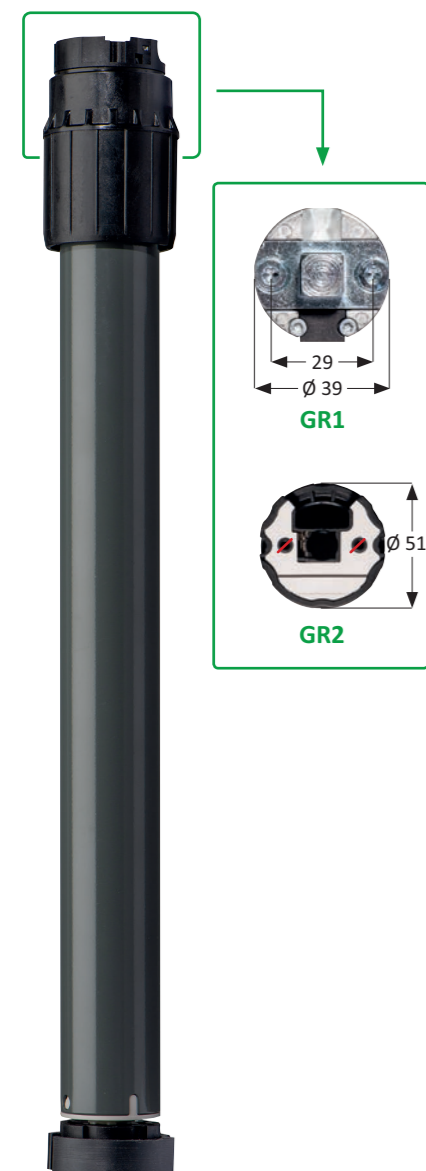
Advantages

- Automatic setting of the end limit positions: up-down-ready!
- Sensitive obstacle detection in downward direction: moves three times
- Detection of wind gusts in upwards direction, freeze up protection
- Soft approach against the zip-screen box
- Minimal relief of the upper end limit position
- Guarantees safe retracting in case of wind alarm and central motion commands

Please order adapters and connecting cables separately:

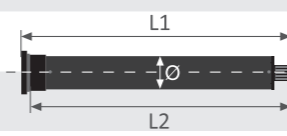
Designation		Article no. crown	Article no. coupling
Adapters for series 2	Grooved tube 63 x 1	Crown adapters should be requested separately.	28 80 19
	Grooved tube 70 x 1		28 80 15
	Grooved tube 78 x 1.0/1.25		28 81 21
	Grooved tube 85 x 1.25		28 81 23
Plug-in cable	4-wire, rubber, 3 m	29 05 56	
	4-wire, rubber, 5 m	29 05 58	
	4-wire, rubber, 10 m	29 05 59	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.



Technical information of SEZ drives*

Type	SEZ 1/4	SEZ 1/7
Ref.	31 06 13	31 06 33
Torque at rated load Nm	4	7
Pulling force N	160	270
Rotation speed rpm	30	20
Power rating W	115	115
Current consumption A	0,5	0,5
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	35	35
Cable length m	3	3
Length L 1 mm	508	508
Length L2 mm	494	494
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.

SEZ 1/10	SEZ 2/6-S	SEZ 2/7	SEZ 2/10	SEZ 2/15	SEZ 2/20	SEZ 2/30	SEZ 2/40
31 06 43	31 63 01	31 23 11	31 23 31	31 23 51	31 23 71	31 23 81	31 23 91
10	7	7	10	15	20	30	40
450	180	220	310	460	610	920	1230
15	16	17	17	17	17	17	17
115	88	95	105	152	172	220	345
0,5	0,38	0,41	0,45	0,66	0,75	0,95	1,5
230	230	230	230	230	230	230	230
50	50	50	50	50	50	50	50
4	4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE
-	-	-	-	-	-	-	-
35	45	45	45	45	45	45	45
3	0	0	0	0	0	0	0
508	454	505	505	530	545	565	566
494	438	488	488	513	528	548	549
12	12	12	12	12	12	12	12

NEW in catalogue

Zip-screen drives (radio) SEZ-RC



The drive especially for Zip-screens

The protection of high-quality Zip-screens is what the SEZ-RC drive focuses on. Many clever functions were combined in this drive so that for example briefly occurring wind gusts can be distinguished from real obstacles.

SEZ-RC drives are available with different motor head shapes and different basic crown diameters. The parallel connection of several SEZ-RC drives is possible. After setting the end limit positions an automatic rotation detection will occur. SEZ-RC drives can be operated with comneo- or iveo/ intronic radio transmitters.

Drives are available in series 1 (from shaft with \varnothing 40 mm) and series 2 (from shaft with \varnothing 50 mm). SEZ-RC drives are dispatched without adapters. The adapters and the plug-in connecting cables for series 2 drives need to be ordered separately.

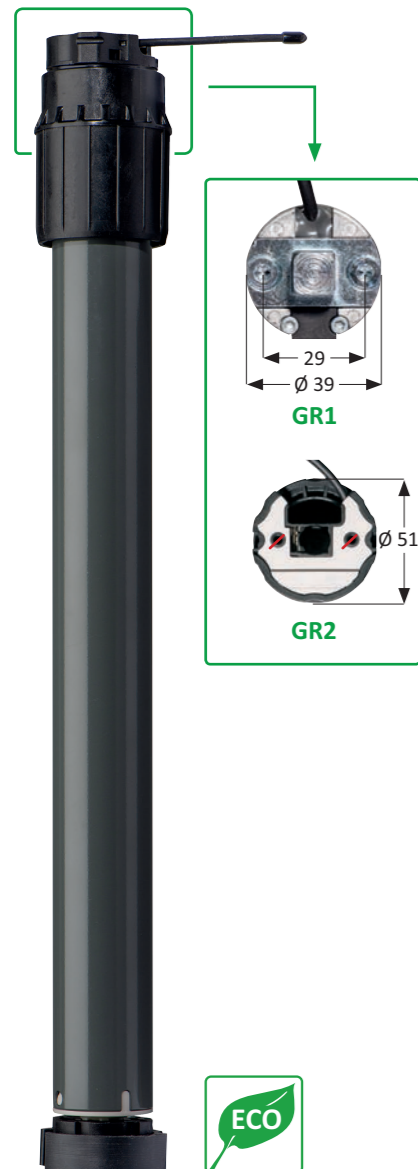
Advantages

- Automatic setting of the end limit positions: up-down-ready!
- Sensible obstacle detection in the downwards direction: dreimaliges Anfahren
- Detection of wind gusts in upwards direction, freeze up protection
- Soft approach against the zip-screen box
- Minimal relief of the upper end limit position
- Guarantees safe retracting in case of wind alarm and central motion commands

Please order adapters and connecting cables separately:

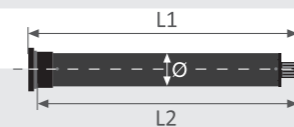
Designation		Article no. crown	Article no. coupling
Adapters for series 2	Grooved tube 63 x 1	Crown adapters should be requested separately.	28 80 19
	Grooved tube 70 x 1		28 80 15
	Grooved tube 78 x 1.0/1.25		28 81 21
	Grooved tube 85 x 1.25		28 81 23
Plug-in cable	5-wire, rubber, 3.0 m	29 05 86	
	5-wire, rubber, 5.0 m	29 05 88	
	5-wire, rubber, 10.0 m	29 05 89	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.



Technical information of SEZ-RC drives*

Type	SEZ 1/4-RC	SEZ 1/7-RC
Ref.	31 16 13	31 16 33
Torque at rated load Nm	4	7
Pulling force N	160	270
Rotation speed rpm	30	20
Power rating W	115	115
Current consumption A	0,5	0,5
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	35	35
Cable length m	3	3
Length L 1 mm	508	508
Length L2 mm	494	494
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.

SEZ 1/10-RC	SEZ 2/7-RC	SEZ 2/10-RC	SEZ 2/15-RC	SEZ 2/20-RC	SEZ 2/30-RC	SEZ 2/40-RC
31 16 43	31 33 11	31 33 31	31 33 51	31 33 71	31 33 81	31 33 91
10	7	10	15	20	30	40
450	220	310	460	610	920	1230
15	17	17	17	17	17	17
115	95	105	152	172	220	345
0,5	0.41	0.45	0.66	0.75	0.95	1.5
230	230	230	230	230	230	230
50	50	50	50	50	50	50
4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE
-	-	-	-	-	-	-
35	45	45	45	45	45	45
3	0	0	0	0	0	0
508	505	505	530	545	565	566
494	488	488	513	528	548	549
12	12	12	12	12	12	12



The drive especially for folding arm awnings

The SEM Plus drive is exactly adapted to the specificities of folding arm awnings. Depending on the requirement the awning will be tightly closed or a short release will be executed. A with time arising fabric extension will be recognized and compensated.

The parallel connection of several SEM Plus drives is possible. After setting the end limit positions an automatic rotation detection will occur.

Drives are available in series 2 (from shaft with \varnothing 50 mm) and series 3 (from shaft with \varnothing 70 mm). SEM Plus drives are dispatched without adapters. The adapters and the plug-in connecting cables for series 2 drives need to be ordered separately.

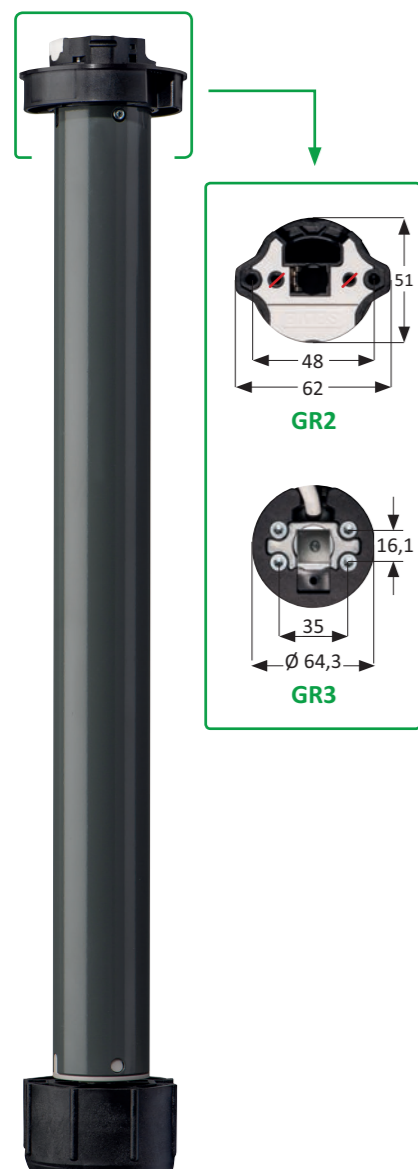
Advantages

- Tight closing of the cassette of a closed folding arm awning
- Relief of the upper end limit position of an opened folding arm awning
- No readjustment in case of fabric extension necessary

Please order adapters and connecting cables separately:

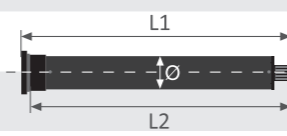
Designation		Article no. crown	Article no. coupling
Adapters for series 2	Grooved tube 63 x 1	28 80 18	28 80 19
	Grooved tube 70 x 1	28 80 14	28 80 15
	Grooved tube 78 x 1.0/1.25	28 80 16	28 81 21
	Grooved tube 85 x 1.25	28 82 08	28 81 23
Plug-in cable	4-wire, rubber, 3 m	29 05 56	
	4-wire, rubber, 5 m	29 05 58	
	4-wire, rubber, 10 m	29 05 59	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.



Technical information of SEM Plus drives*

Type	SEM Plus 2/7	SEM Plus 2/10
Ref.	38 28 20	38 28 40
Torque at rated load Nm	7	10
Pulling force N	220	310
Rotation speed rpm	17	17
Power rating W	95	105
Current consumption A	0.41	0.45
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE, VDE	CE, VDE
Limit switch range U	-	-
Outer diameter mm	45	45
Cable length m	0	0
Length L 1 mm	497	497
Length L2 mm	481	481
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.

SEM Plus 2/15	SEM Plus 2/20	SEM Plus 2/30	SEM Plus 2/40	SEM Plus 2/50	SEM Plus 3/50	SEM Plus 3/70
38 28 50	38 28 60	38 28 70	38 28 80	38 29 90	38 68 13	38 68 33
15	20	30	40	50	50	70
460	610	920	1230	1530	1330	1860
17	17	17	17	12	17	17
152	172	220	345	345	315	435
0.66	0.75	0.95	1.5	1.5	1,4	1.9
230	230	230	230	230	230	230
50	50	50	50	50	50	50
4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE, VDE	CE, VDE	CE, VDE	CE	CE	CE	CE
-	-	-	-	-	-	-
45	45	45	45	45	58	58
0	0	0	0	0	3	3
522	537	557	559	559	580	610
506	521	541	542	542	560	590
12	12	12	12	12	22	22

Awning drives (radio) SEM Plus-RC



The drive especially for folding arm awnings

The SEM Plus-RC drive is exactly adapted to the specificities of folding arm awnings. Depending on the requirement the awning will be tightly closed or a relief run will be executed. A with time arising fabric extension will be recognized and compensated.

The parallel connection of several SEM Plus-RC drives is possible. After setting the end limit positions an automatic rotation detection will occur. SEM Plus-RC drives can be operated with comneo- or iveo/intronic radio transmitters.

Drives are available in series 2 (from shaft with \varnothing 50 mm) and series 3 (from shaft with \varnothing 70 mm). SEM Plus-RC drives are dispatched without adapters. The adapters and the plug-in connecting cables for series 2 drives need to be ordered separately.

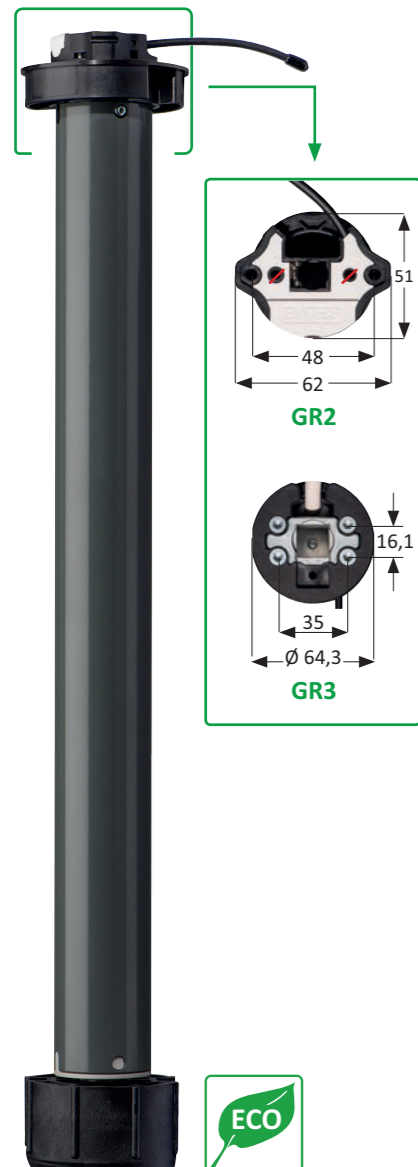
Advantages

- Tight closing of the cassette of a closed folding arm awning
- Relief of the upper end limit position of an opened folding arm awning
- No readjustment in case of fabric extension necessary

Please order adapters and connecting cables separately:

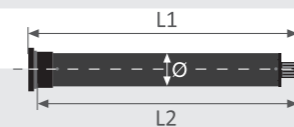
Designation		Article no. crown	Article no. coupling
Adapters for series 2	Grooved tube 63 x 1	28 80 18	28 80 19
	Grooved tube 70 x 1	28 80 14	28 80 15
	Grooved tube 78 x 1.0/1.25	28 80 16	28 81 21
	Grooved tube 85 x 1.25	28 82 08	28 81 23
Plug-in cable	5-wire, rubber, 3.0 m	29 05 86	
	5-wire, rubber, 5.0 m	29 05 88	
	5-wire, rubber, 10.0 m	29 05 89	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.



Technical information of SEM Plus-RC drives*

Type	SEM Plus 2/7-RC	SEM Plus 2/10-RC
Ref.	38 38 20	38 38 40
Torque at rated load Nm	7	10
Pulling force N	220	310
Rotation speed rpm	17	17
Power rating W	95	105
Current consumption A	0.41	0.45
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE, VDE	CE, VDE
Limit switch range U	-	-
Outer diameter mm	45	45
Cable length m	0	0
Length L 1 mm	497	497
Length L2 mm	481	481
Length of square fixing pivot mm	12	12



SEM Plus 2/15-RC	SEM Plus 2/20-RC	SEM Plus 2/30-RC	SEM Plus 2/40-RC	SEM Plus 2/50-RC	SEM Plus 3/50-RC	SEM Plus 3/70-RC
38 38 50	38 38 60	38 38 70	38 38 80	38 39 90	38 79 13	38 79 33
15	20	30	40	50	50	70
460	610	920	1230	1530	1330	1860
17	17	17	17	12	17	17
152	172	220	345	345	315	435
0.66	0.75	0.95	1.5	1.5	1.4	1.9
230	230	230	230	230	230	230
50	50	50	50	50	50	50
4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE, VDE	CE, VDE	CE, VDE	CE	CE	CE	CE
-	-	-	-	-	-	-
45	45	45	45	45	58	58
0	0	0	0	0	3	3
522	537	557	559	559	580	610
506	521	541	542	542	560	590
12	12	12	12	12	22	22

* These information refer to the use in one-piece constructions.

Drives with integrated SMI technology SE Plus-SMI



The drive for building automation with bus technology

SMI stands for "Standard Motor Interface" – a manufacturer spanning, consistent interface for building automation. The drives with integrated SMI technology are easy to install and can be included into a variety of bus systems.

The SMI drives are available in the drive variants SE Plus (see table below), SE Pro and SEZ (on request), therefore they can be used in almost all types of applications.

The parallel connection of up to 16 SMI drives is possible. After setting the end limit positions an automatic rotation detection will occur.

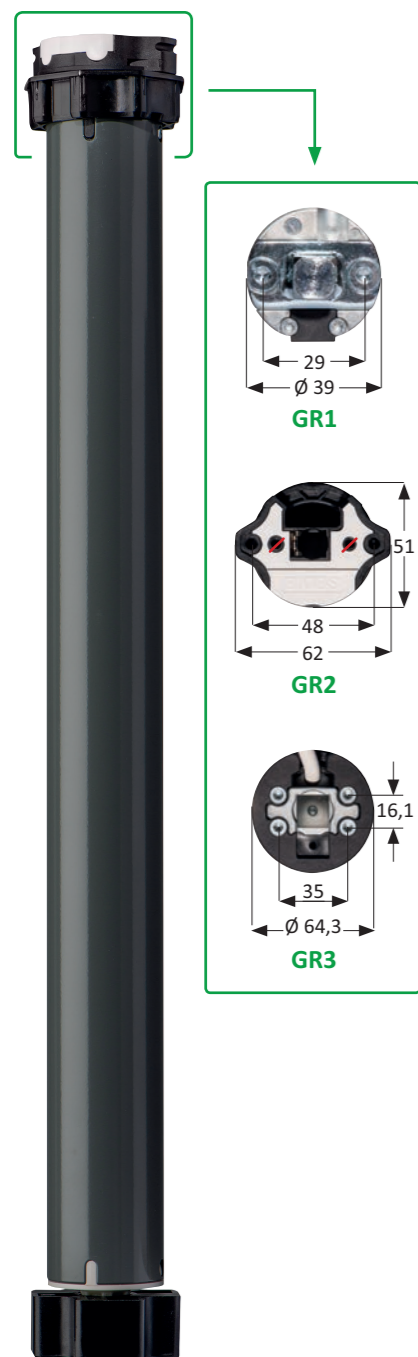
Drives are available in series 1 (from shaft 40 mm), series 2 (from shaft 50 mm) and series 3 (from shaft 70 mm). SMI drives are dispatched without adapters. The adapters and the plug-in connecting cables (5-wire) need to be ordered separately.

Advantages

- Usable for roller shutters, all types of awnings, (Zip) screens and interior blinds
- Individual drive ID enables the single control at parallel connection
- Feedback of every drive (e.g. position request)
- High precision at the positioning
- Parameter adjustment for the construction optimization or installation (by SMI)
- Several diagnose functions

Technical information of SE Plus-SMI drives*

Type	SE Plus 1/4-SMI	SE Plus 1/7-SMI
Ref.	38 50 10	38 50 11
Torque at rated load Nm	4	7
Effective shutter weight (kg) at shutter height of 1.5 m	10	14
Effective shutter weight (kg) at shutter height of 2.5 m	8	11
Shaft type	SW 40	SW 40
Pulling force N	180	270
Rotation speed rpm	30	20
Power rating W	115	115
Current consumption A	0,5	0,5
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	35	35
Cable length m	3	3
Length L 1 mm	508	508
Length L2 mm	494	494
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.

NEW in catalogue NEW in catalogue



Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	5-wire, PVC, white, 2.5 m	29 05 75	
	5-wire, PVC, white, 5.0 m	29 05 78	
	5-wire, PVC, white, 10.0 m	29 05 79	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SE Plus 1/10-SMI	SE Plus 2/7-SMI	SE Plus 2/10-SMI	SE Plus 2/15-SMI	SE Plus 2/20-SMI	SE Plus 2/30-SMI	SE Plus 2/40-SMI	SE Plus 3/50-SMI	SE Plus 3/70-SMI	SE Plus 3/120-SMI
38 50 13	38 50 20	38 50 40	38 50 50	38 50 60	38 50 70	38 50 80	38 80 13	38 80 23	38 81 43
10	7	10	15	20	30	40	50	70	120
25	19	25	35	45	67	88	99	135	232
20	15	20	29	37	56	72	81	116	200
SW 40	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 70	SW 70	SW 70
450	220	310	460	610	920	1230	1330	1860	3200
15	17	17	17	17	17	17	17	17	11
115	95	105	152	172	220	345	315	435	435
0,5	0,41	0,45	0,66	0,75	0,95	1,5	1,4	1,9	1,9
230	230	230	230	230	230	230	230	230	230
50	50	50	50	50	50	50	50	50	50
4	4	4	4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE	CE	CE	CE	CE	CE	CE	CE	CE	CE
-	-	-	-	-	-	-	-	-	-
35	45	45	45	45	45	45	58	58	58
3	0	0	0	0	0	0	3	3	3
508	497	497	522	537	557	559	580	610	610
494	481	481	506	521	541	542	560	590	590
12	12	12	12	12	12	12	22	22	22

NEW in catalogue

NEW in catalogue NEW in catalogue NEW in catalogue NEW in catalogue

Drives with rotation speed 28 rpm

The fast drive for all textile screens

Some drive types are available with fast rotation speed 28 rpm and are particularly suitable for the use in connection with textile screens. The individual functions can be found on the pages of the respective drive types.

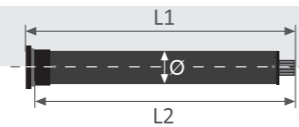
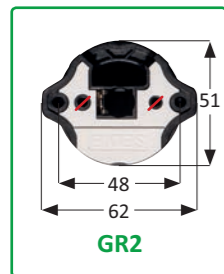
Drives are available in series 2 (from shaft with \varnothing 50 mm). Drives with 28 rpm are dispatched without adapters. The adapters and the plug-in connecting cables for series 2 need to be ordered separately.

Advantages

- Fast rotation speed for the use of small roller shafts and in connection with textile screens
- Shorter running time between the two end limit positions
- Available in 3 different drive types with individual functions

Technical information of 28 rpm drives*

Type	SE Plus 2/6	SE Plus 2/9
Ref.	38 87 10	38 87 30
Torque at rated load Nm	6	9
Effective shutter weight (kg) at shutter height of 1.5 m	14	22
Effective shutter weight (kg) at shutter height of 2.5 m	11	18
Shaft type	SW 60	SW 60
Pulling force N	180	280
Rotation speed rpm	28	28
Power rating W	105	152
Current consumption A	0,45	0,66
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	45	45
Cable length m	0	0
Length L 1 mm	497	522
Length L2 mm	481	506
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.



Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	4-wire, rubber, 3 m	29 05 56	
	4-wire, rubber, 5 m	29 05 58	
	4-wire, rubber, 10 m	29 05 59	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SE Plus 2/12	SE Plus 2/18	SEZ 2/6	SEZ 2/9	SEZ 2/12	SEZ 2/18	SP 2/6	SP 2/9	SP 2/12	SP 2/18
38 87 40	38 87 60	31 25 10	31 25 30	31 25 50	31 25 70	35 27 10	35 27 20	35 27 30	35 27 50
12	18	6	9	12	18	6	9	12	18
29	40	14	22	29	40	14	22	29	40
23	32	11	18	23	32	11	18	23	32
SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60
370	550	180	280	370	550	180	280	370	550
28	28	28	28	28	28	28	28	28	28
172	220	105	152	172	220	105	152	172	220
0,75	0,95	0,45	0,66	0,75	0,95	0,45	0,66	0,75	0,95
230	230	230	230	230	230	230	230	230	230
50	50	50	50	50	50	50	50	50	50
4	4	4	4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE	CE	CE	CE	CE	CE	CE	CE	CE	CE
-	-	-	-	-	-	22	22	22	22
45	45	45	45	45	45	45	45	45	45
0	0	0	0	0	3	0	0	0	0
537	557	505	530	545	565	523	523	537	557
521	541	488	513	528	548	506	506	521	541
12	12	12	12	12	12	12	12	12	12

Drives (radio) with rotation speed 28 rpm



The fast drive for all textile screens

Some drive types are available with fast rotation speed 28 rpm and are particularly suitable for the use in connection with textile screens. The individual functions can be found on the pages of the respective drive types.

These drives can be operated with comneo- or iveo/intronic radio transmitters.

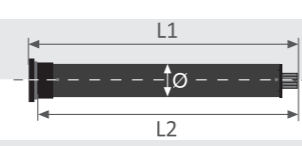
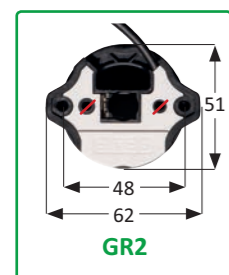
Drives are available in series 2 (from shaft with \varnothing 50 mm). Drives with 28 rpm are dispatched without adapters. The adapters and the plug-in connecting cables for series 2 need to be ordered separately.

Advantages

- Fast rotation speed for the use of small roller shafts and in connection with textile screens
- Shorter running time between the two end limit positions
- Available in 3 different drive types with individual functions

Technical information of 28 rpm-RC drives*

Type	SE Plus 2/6-RC	SE Plus 2/9-RC
Ref.	38 97 10	38 97 30
Torque at rated load Nm	6	9
Effective shutter weight (kg) at shutter height of 1.5 m	14	22
Effective shutter weight (kg) at shutter height of 2.5 m	11	18
Shaft type	SW 60	SW 60
Pulling force N	180	280
Rotation speed rpm	28	28
Power rating W	105	152
Current consumption A	0,45	0,66
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	-	-
Outer diameter mm	45	45
Cable length m	0	0
Length L 1 mm	497	522
Length L2 mm	481	506
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.

Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	5-wire, rubber, 3.0 m	29 05 86	
	5-wire, rubber, 5.0 m	29 05 88	
	5-wire, rubber, 10.0 m	29 05 89	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SE Plus 2/12-RC	SE Plus 2/18-RC	SEZ 2/6-RC	SEZ 2/9-RC	SEZ 2/12-RC	SEZ 2/18-RC
38 87 40	38 97 60	31 35 10	31 35 30	31 25 40	31 35 70
12	18	6	9	12	18
29	40	14	22	29	40
23	32	11	18	23	32
SW 60	SW 60	SW 60	SW 60	SW 60	SW 60
370	550	180	280	370	550
28	28	28	28	28	28
172	220	105	152	172	220
0,75	0,95	0,45	0,66	0,75	0,95
230	230	230	230	230	230
50	50	50	50	50	50
4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE	CE	CE	CE	CE	CE
-	-	-	-	-	-
45	45	45	45	45	45
0	0	0	0	0	3
537	557	505	530	545	565
521	541	488	513	528	548
12	12	12	12	12	12

Universal drives SP

GR 1 and GR 2

The universal drive with mechanical shut-off system

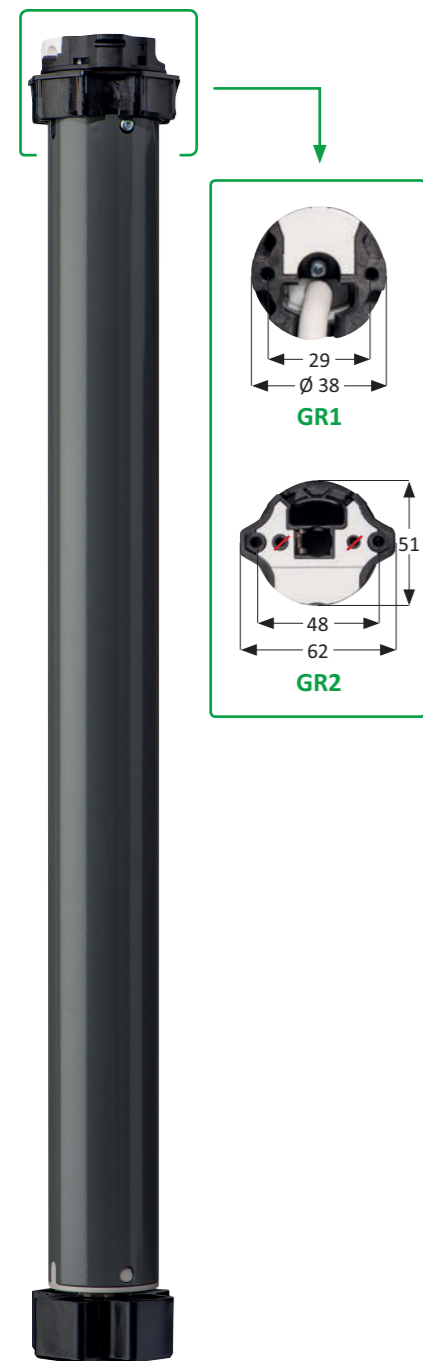
Regardless of whether you have roller shutters, all kinds of awnings, (Zip) screens or even interior blinds – the SP drive is universally usable. The end limit positions will be set manually at the motor head. The “classic” amongst the drives is offering the optimal price-performance ratio. SP drives are also available with rotation speed 28 rpm (see page 43).

The parallel connection of several SP drives is not permitted! In case of a simultaneous control of 2 or more SP drives by one switch / time switch a cut off relay has to be used.

Drives are available in series 1 (from shaft 40, shaft with Ø 40mm), series 2 (from shaft 50, shaft with Ø 50mm) and series 3 (from shaft 70, shaft with Ø 70 mm). SP drives of series 1 (from shaft 40) and series 3 (from shaft 70) are delivered with adapters as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

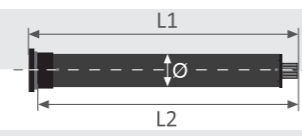
Advantages

- Mechanical setting of the end limit positions “point to point”
- No upper end limit necessary
- Suitable for many types of applications



Technical information of SP drives*

Type	SP 1/4	SP 1/6
Ref.	35 00 23	35 00 33
Torque at rated load Nm	4	6
Effective shutter weight (kg) at shutter height of 1.5 m	10	14
Effective shutter weight (kg) at shutter height of 2.5 m	8	11
Shaft type	SW 40	SW 40
Pulling force N	180	270
Rotation speed rpm	30	15
Power rating W	115	115
Current consumption A	0,5	0,5
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	22	22
Outer diameter mm	35	35
Cable length m	3	3
Length L 1 mm	508	508
Length L2 mm	497	497
Length of square fixing pivot mm	12	12



* These information refer to the use in one-piece constructions.



Please order adapters and connecting cables separately:

Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Plug-in cable	4-wire, PVC, white, 2,5 m	29 05 45	
	4-wire, PVC, white, 5 m	29 05 48	

The entire range of adapters can be found from page 56 onwards. Plug-in connecting cables are only available for series 2! Further plug-in connecting cables can be found on page 82.

SP 1/7	SP 1/10	SP 1/13	SP 2/7	SP 2/7-S	SP 2/10	SP 2/10-S	SP 2/15	SP 2/20	SP 2/30	SP 2/40	SP 2/50
35 04 53	35 00 43	35 00 53	35 24 50	35 44 50	35 24 60	35 44 60	35 24 70	35 24 80	35 24 90	35 24 00	35 20 50
7	10	13	7	7	10	10	15	20	30	40	50
18	25	32	19	19	25	25	35	45	67	88	102
15	20	26	15	15	20	20	29	37	56	72	83
SW 40	SW 40	SW 40	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60	SW 60
320	450	590	220	220	310	310	460	520	920	1230	1530
20	15	8	17	17	17	17	17	17	17	17	12
115	115	115	95	95	105	105	152	172	220	345	345
0,5	0,5	0,5	0.41	0.41	0.45	0.45	0.66	0.75	0.95	1.5	1.5
230	230	230	230	230	230	230	230	230	230	230	230
50	50	50	50	50	50	50	50	50	50	50	50
4	4	4	4	4	4	4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE	CE	CE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE, VDE	CE
22	22	22	22	22	22	22	22	22	22	22	22
35	35	35	45	45	45	45	45	45	45	45	45
3	3	3	0	0	0	0	0	0	3	0	0
508	508	523	523	395	523	395	523	537	557	559	559
497	497	512	506	379	506	379	506	521	541	542	542
12	12	12	12	12	12	12	12	12	12	12	12

Continuation



The universal drive with mechanical shut-off system

Regardless of whether you have roller shutters, all kinds of awnings, (Zip) screens or even interior blinds – the SP drive is universally usable. The end limit positions will be set manually at the motor head. The “classic” amongst the drives is offering the optimal price-performance ratio. SP drives are also available with rotation speed 28 rpm (see page 43).

The parallel connection of several SP drives is not permitted! In case of a simultaneous control of 2 or more SP drives by one switch / time switch a cut off relay has to be used.

Drives are available in series 1 (from shaft 40, shaft with Ø 40mm), series 2 (from shaft 50, shaft with Ø 50mm) and series 3 (from shaft 70, shaft with Ø 70 mm). SP drives of series 1 (from shaft 40) and series 3 (from shaft 70) are delivered with adapters as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

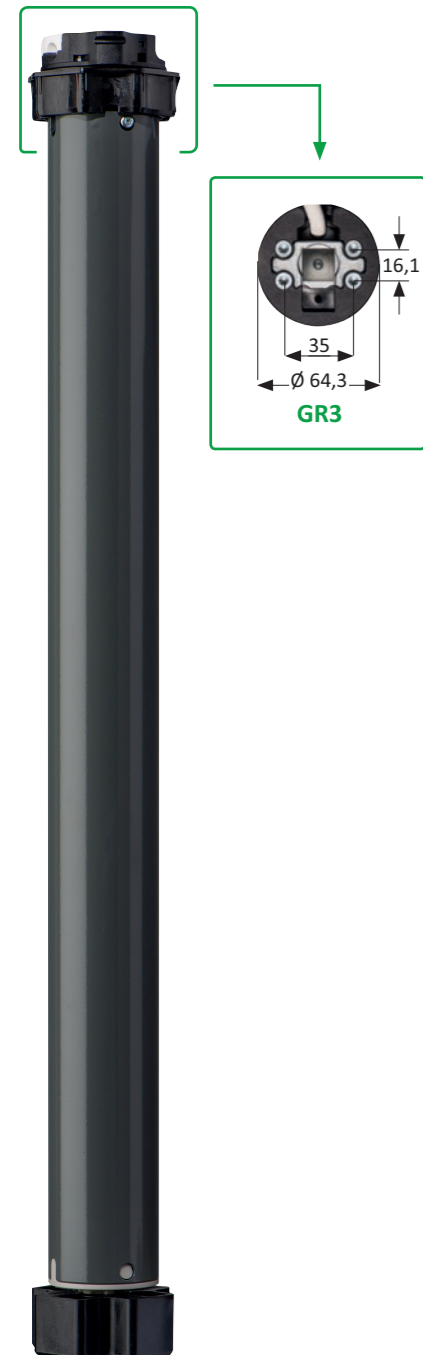
Advantages

- Mechanical setting of the end limit positions “point to point”
- No upper end limit necessary
- Suitable for many types of applications

Please order adapters separately:

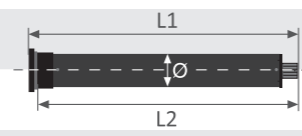
Designation		Article no. crown	Article no. coupling
Adapters for series 3	Octagonal steel shaft 70	28 81 00	28 83 05
	Hexagonal steel shaft B 75	28 81 02	28 81 03
	Octagonal steel shaft 102	28 81 32	28 81 33
	Octagonal steel shaft 114	28 82 02	28 82 03
	Round tube 102 x 2.5	28 81 34	28 81 35

The entire range of adapters can be found from page 56 onwards.



Technical information of SP drives*

Type	SP 3/50	SP 3/60
Ref.	35 64 63	35 63 23
Torque at rated load Nm	50	60
Effective shutter weight (kg) at shutter height of 1.5 m	99	116
Effective shutter weight (kg) at shutter height of 2.5 m	81	100
Shaft type	SW 70	SW 70
Pulling force N	1330	1600
Rotation speed rpm	17	12
Power rating W	315	245
Current consumption A	1.4	1.1
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	22	22
Outer diameter mm	58	58
Cable length m	3	3
Length L 1 mm	722	722
Length L2 mm	700	700
Length of square fixing pivot mm	22	22



SP 3/70	SP 3/80	SP 3/120
35 64 83	35 63 33	35 63 43
70	80	120
135	154	232
116	130	200
SW 70	SW 70	SW 70
1860	2130	3200
17	12	11
435	322	435
1.9	1.4	1.9
230	230	230
50	50	50
4	4	4
IP 44	IP 44	IP 44
CE	CE	CE
22	22	22
58	58	58
3	3	3
722	722	722
700	700	700
22	22	22

* These information refer to the use in one-piece constructions.

Drives for emergency opening within seconds SP Rescue

NEW
in catalogue



The roller shutter drive for the second emergency and escape route

The SP Rescue opens the roller shutter construction at the second emergency and escape route with only one handgrip in case of an emergency – within 2 seconds and also in case of power failure. At manual unlocking by the operating bar, a spring shaft will move the construction upwards in a matter of seconds and paves the way outside. After the return into the operating mode the end limits remain.

The parallel connection of various SP Rescue drives is not allowed! When controlling two or more SP Rescue drives simultaneously via a switch or a time switch a cutoff relay has to be used.

Available in series 2 (from shaft 50 mm) including 15 Nm. SP Rescue drives are provided with adapters for series 2 by default.

Advantages

- Opens the Roller shutter at the second emergency and escape route in 1-2 seconds – also in case of power failure
- Intuitive handling with only one handgrip
- End limits remain programmed after returning into the operating mode
- Easy assembly, requested opening width freely adjustable
- Maintenance-free, purely mechanical solution

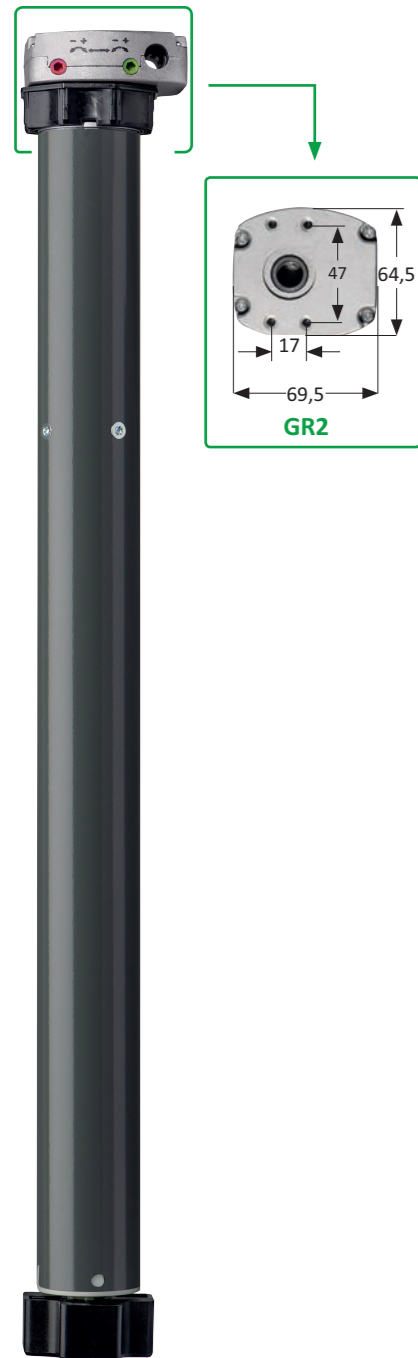
Please order accessories separately:

Designation		Ref.
Operation set SP Rescue	Operation set with cardan joint 50°	27 86 32
	Operation set with cardan joint 90°	27 86 35
Operating bar	Length 1,00 m, white	27 86 50

Further accessories can be found from page 86 onwards.

Note:

Next to the SP Rescue drives there is always a spring shaft and a telescopic shaft included in the standard scope of delivery.



Technical information of SP Rescue drives*

Type
Spring length mm
Ref.
Torque at rated load Nm
Effective shutter weight (kg) at shutter height of 1.5 m
Effective shutter weight (kg) at shutter height of 2.5 m
Shaft type
Pulling force N
Rotation speed rpm
Power rating W
Current consumption A
Voltage V
Frequency Hz
Time of operation min
Protective system
Test mark
Limit switch range U
Outer diameter mm
Cable length m
Length L 1 mm
Length L2 mm



* These information refer to the use in one-piece constructions.

SP 2/6-S-Rescue	SP 2/10-Rescue	SP 2/10-Rescue	SP 2/15-Rescue
500	500	700	920
35 90 53	35 90 63	35 90 73	35 90 83
6	10	10	15
8,5	9,5	13	18
0	0	12	17
SW 60	SW 60	SW 60	SW 60
180	310	310	460
16	17	17	17
88	105	105	152
0.38	0,45	0,45	0,66
230	230	230	230
50	50	50	50
4	4	4	4
IP 44	IP 44	IP 44	IP 44
CE	CE	CE	CE
22	22	22	22
45	45	45	45
0	3	3	3
950	1090	1290	1510
885	1025	1225	1445

Drives with emergency operation SP-NHK

transmission ratio 1:26

NEW
in catalogue



The universal drive with emergency operation

The drive SP NHK can be used in connection with all constructions. The end limits are set manually at the motor head. Additionally the operation with an emergency hand crank is possible – e.g. in case of emergency at power failure.

The end limit stops do not have to be reset after manual operation. The parallel connection of several SP drives is not permitted! In case of a simultaneous control of 2 or more SP drives by one switch/time switch a cut off relay has to be used.

SP-NHK drives of series 2 (from shaft 50/shaft with \varnothing 50 mm) up to and including 20 Nm. For drives of series 2 the adapters need to be ordered separately.

Advantages

- High operating safety thanks to the emergency hand crank, transmission ratio 1:26
- End limit positions do not have to be reset after manual operation
- Small design (motor head and length of drive)
- Easy mechanical setting of the end limit positions "point to point", no upper end limit necessary
- Suitable for many types of applications

Please order adapters separately:

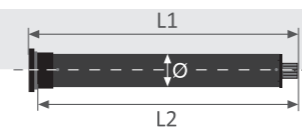
Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05

The entire range of adapters can be found from page 56 onwards. The article numbers below contain a 3 m long fixed cable.



Technical information of SP-NHK drives*

Type	SP 2/7-NHK	SP 2/10-NHK
Ref.	35 23 53	35 23 63
Torque at rated load Nm	7	10
Effective shutter weight (kg) at shutter height of 1.5 m	19	25
Effective shutter weight (kg) at shutter height of 2.5 m	15	20
Shaft type	SW 60	SW 60
Pulling force N	220	310
Rotation speed rpm	17	17
Power rating W	95	105
Current consumption A	0,41	0,45
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	22	22
Outer diameter mm	45	45
Cable length m	3	3
Length L 1 mm	567	567
Length L2 mm	542,5	542,5



* These information refer to the use in one-piece constructions.

SP 2/15-NHK	SP 2/20-NHK
35 23 73	35 23 83
15	20
35	45
29	37
SW 60	SW 60
460	610
17	17
152	172
0,66	0,75
230	230
50	50
4	4
IP 44	IP 44
CE	CE
22	22
45	45
3	3
567	567
542,5	542,5

Drives with emergency operation SP-NHK

transmission ratio 1:55



The universal drive with emergency operation

The drive with emergency crank handle offers a wide range of application, typically used for rolling gates, rolling grills and large awnings. In case of a power failure the respective system can be moved manually by the emergency crank handle.

The parallel connection of several SP drives is not permitted! In case of a simultaneous control of 2 or more SP drives by one switch/time switch a cut off relay has to be used.

Drives are available in series 2 (shaft with \varnothing 50mm) and series 3 (shaft with \varnothing 70 mm).

SP-NHK drives of series 3 (from shaft 70) are delivered with adapters as standard. For drives of series 2 the adapters and the plug-in connecting cables need to be ordered separately.

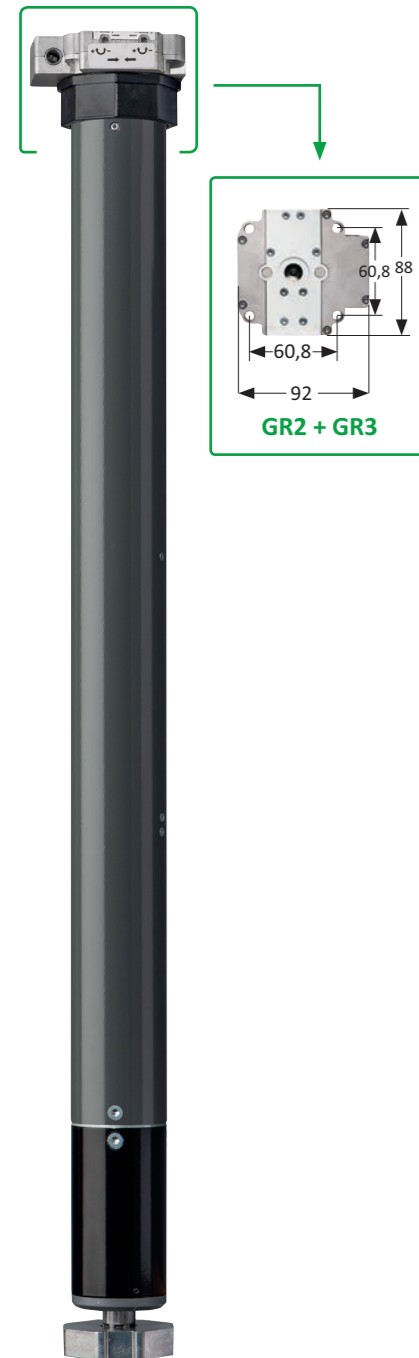
Advantages

- High operating safety thanks to the emergency hand crank, transmission ratio 1:55
- End limit positions stops do not have to be reset after manual operation
- Stable construction
- Easy mechanical setting of the end limit positions "point to point", no upper end limit necessary
- Suitable for many types of applications

Please order adapters separately:

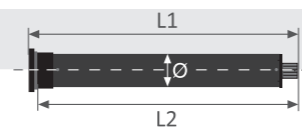
Designation		Article no. crown	Article no. coupling
Adapters for series 2	Octagonal steel shaft 50	28 80 26	28 82 19
	Octagonal steel shaft 60, up to 50 Nm	28 80 20	28 82 25
	Octagonal steel shaft 70	28 80 24	28 83 05
Adapters for series 3	Hexagonal steel shaft B 75	28 81 02	28 81 03
	Octagonal steel shaft 70	28 81 00	28 83 05

The entire range of adapters can be found from page 56 onwards.
The article numbers below contain a 3 m long fixed cable.



Technical information of SP-NHK drives*

Type	SP 2/30-NHK	SP 2/40-NHK
Ref.	35 22 93	35 22 03
Torque at rated load Nm	30	40
Effective shutter weight (kg) at shutter height of 1.5 m	67	88
Effective shutter weight (kg) at shutter height of 2.5 m	56	72
Shaft type	SW 60	SW 60
Pulling force N	920	1230
Rotation speed rpm	17	17
Power rating W	220	345
Current consumption A	0,95	1,5
Voltage V	230	230
Frequency Hz	50	50
Time of operation min	4	4
Protective system	IP 44	IP 44
Test mark	CE	CE
Limit switch range U	22	22
Outer diameter mm	45	45
Cable length m	3	3
Length L 1 mm	668	668
Length L2 mm	641	641





* These information refer to the use in one-piece constructions.

SP 2/50-NHK	SP 3/50-NHK	SP 3/60-NHK	SP 3/70-NHK	SP 3/80-NHK	SP 3/120-NHK
35 21 53	35 66 63	35 65 23	35 66 83	35 65 33	35 65 43
50	50	60	70	80	120
102	99	111	135	154	232
83	81	100	116	130	200
SW 60	SW 70	SW 70	SW 70	SW 70	SW 70
1530	1330	1600	1860	2130	3200
12	17	12	17	12	11
345	315	245	435	322	435
1.5	1.4	1.1	1.9	1.4	1.9
230	230	230	230	230	230
50	50	50	50	50	50
4	4	4	4	4	4
IP 44	IP 44	IP 44	IP 44	IP 44	IP 44
CE	CE	CE	CE	CE	CE
22	22	22	22	22	22
45	55	58	58	58	58
3	3	3	3	3	3
668	803	803	803	803	803
641	776	776	776	776	776

Adapters for roller shutter shafts







Overview of adapters for roller shutter shafts series 1

Designation	Dimensions	Article no. crown	Article no. coupling
 Profile tube ZF 45	43 mm	28 83 72	28 83 73
 Intermediate ring series 1, series 2	46.9 mm	28 83 12	---

Overview of adapters for roller shutter shafts series 2

Designation	Dimensions	Article no. crown	Article no. coupling
 Octagonal steel shaft 50	50.2 mm	28 80 26	28 82 19
 Octagonal steel shaft 60, up to 50 Nm	57.2 mm	28 80 20	28 82 25
 Octagonal steel shaft 60, up to 30 Nm	57.2 mm	28 80 20	28 82 26
 Octagonal steel shaft 70	67 mm	28 80 24	28 83 05
 Round tube 50 x 1.5	46.3 mm	Basic crown fits	28 83 07
 Round tube 50 x 1.5 from 40 Nm	46.6 mm	Basic crown fits	28 82 17
 Round tube 50 x 1.5 with groove (Siral)	46.1 mm	Basic crown fits	28 83 21
 Hexagonal steel shaft B 60	50.5 mm	28 80 22	28 82 52
 Profile tube 65 mm Eckermann, Simbac	63 mm	28 80 04	28 82 51
 Profile tube 65 mm, Rhe	60.5 mm	28 80 28	28 83 09
 Profile tube ZF 54 and Deprat 53	52.5 mm	28 82 10	28 82 11
 Profile tube ZF 64	61.5 mm	28 82 12	28 82 13
 Profile tube Deprat 62	60.2 mm	28 83 34	28 83 33
 Intermediate ring series 2, series 3	59.7 mm	28 83 13	---

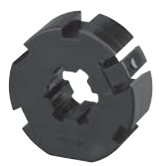

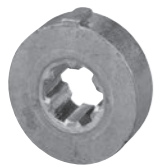









Overview of adapters for roller shutter shafts series 3

Designation	Dimensions	Article no. crown	Article no. coupling
 Octagonal steel shaft 70	67 mm	28 81 00	28 83 05
 Hexagonal steel shaft B 75	62 mm	28 81 02	28 81 03
 Octagonal steel shaft 102	96.4 mm	28 81 32	28 81 33
 Octagonal steel shaft 114	111 mm	28 82 02	28 82 03
 Round tube 102 x 2.5	97.6 mm	28 81 34	28 81 35
 Round tube 102 x 2.5 strong version	97.6 mm	28 81 34	28 81 41
 Round tube 105 x 2.5	99.7 mm	28 81 38	28 81 39
 Profile tube ZF 80, up to 50 Nm	76.6 mm	28 83 41	28 83 42
 Profile tube Deprat 89	85 mm	28 83 44	28 83 45









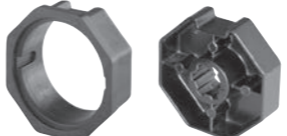

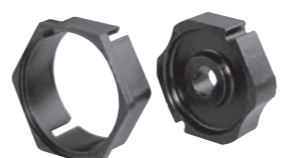

Adapters for roller shutter shafts

Product illustration	Ref.	Product description
	28 83 72 28 83 73	Adapters for roller shutter shafts, series 1, profile tube ZF 45 crown adapter coupling adapter
	28 83 12	Adapters for roller shutter shafts, series 1 intermediate ring for drives series 1 and crown adapter series 2
	28 80 26 28 82 19	Adapter for roller shutter shafts, series 2, for octagonal steel shaft 50 crown adapter coupling adapter
	28 80 20 28 82 25	Adapter for roller shutter shafts, series 2, for octagonal steel shaft 60 crown adapter coupling adapter, up to 50 Nm
	28 80 20 28 82 26	Adapter for roller shutter shafts, series 2, for octagonal steel shaft 60 crown adapter coupling adapter, up to 30 Nm
	28 80 24 28 83 05	Adapter for roller shutter shafts, series 2, for octagonal steel shaft 70 crown adapter coupling adapter

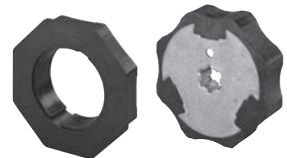

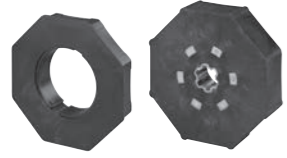

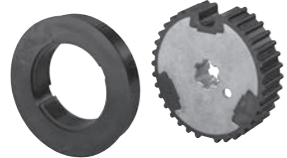


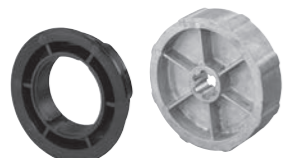



Adapters for roller shutter shafts

Product illustration	Ref.	Product description	
	28 83 07	Adapter for roller shutter shafts, series 2, for round tube 50 x 1.5 coupling adapter	
	28 82 17	Adapter for roller shutter shafts, series 2, for round tube 50 x 1.5 from 40 Nm coupling adapter die-casted	
	28 83 21	Adapter for roller shutter shafts, series 2, for round tube 50 x 1.5 with groove (Siral) coupling adapter die-casted	
	28 80 22 28 82 52	Adapter for roller shutter shafts, series 2, for hexagonal steel shaft B 60 crown adapter coupling adapter	
	28 80 04 28 82 51	Adapter for roller shutter shafts, series 2, for profile tube 65 mm, Eckermann, Simbac crown adapter coupling adapter	
	28 80 28 28 83 09	Adapter for roller shutter shafts, series 2, for profile tube 65 mm Ruhe crown adapter coupling adapter	



Adapters for roller shutter shafts

Product illustration	Ref.	Product description	
	28 82 10 28 82 11	Adapter for roller shutter shafts, series 2, for profile tube ZF 54 and Deprat 53 crown adapter coupling adapter	
	28 82 12 28 82 13	Adapter for roller shutter shafts, series 2, for profile tube ZF 64 crown adapter coupling adapter	
	28 83 34 28 83 33	Adapter for roller shutter shafts, series 2, for profile tube Deprat 62 crown adapter coupling adapter	
	28 83 13	Adapter for roller shutter shafts, series 2 intermediate ring for drives series 2 and crown adapter series 3	
	28 81 00 28 83 05	Adapter for roller shutter shafts, series 3, for octagonal steel shaft SW 70 crown adapter coupling adapter	
	28 81 02 28 81 03	Adapter for roller shutter shafts, series 3, for hexagonal steel shaft B 75 crown adapter coupling adapter	

Adapters for roller shutter shafts









Product illustration	Ref.	Product description	
	28 81 32 28 81 33	Adapter for roller shutter shafts, series 3, for octagonal steel shaft SW 102 crown adapter coupling adapter	
	28 82 02 28 82 03	Adapter for roller shutter shafts, series 3, for octagonal steel shaft SW 125 crown adapter coupling adapter	
	28 81 34 28 81 35	Adapter for roller shutter shafts, series 3, for round tube 102 x 2.5 crown adapter coupling adapter	
	28 81 34 28 81 41	Adapter for roller shutter shafts, series 3, for round tube 102 x 2.5 strong version crown adapter coupling adapter	
	28 81 38 28 81 39	Adapter for roller shutter shafts, series 3, for round tube 105 x 2.5 crown adapter coupling adapter	
	28 83 41 28 83 42	Adapter for roller shutter shafts, series 3, for profile tube ZF 80 crown adapter coupling adapter, for drives up to max. 50 Nm	

Adapters for roller shutter shafts










Product illustration	Ref.	Product description	
	28 83 44 28 83 45	Adapter for roller shutter shafts, series 3, for profile tube Deprat 89 crown adapter coupling adapter	

Adapters for awning shafts

Overview of adapters for awning shafts series 1







	Designation	Dimensions	Article no. crown	Article no. coupling
	Round tube 40 x 1	37.8 mm	28 83 18	28 83 19
	Round tube 40 x 1.5 (for SP series 1)	36.8 mm	28 83 48	28 83 49
	Round tube 40 x 1.5 (for SE series 1)	36.8 mm	28 83 56	28 83 49
	Grooved tube 50 mm	46.3 mm	28 83 25	28 83 07
	Grooved tube 43 mm, Disvel, Cortina	40.6 mm	28 83 54	28 83 53
	Round tube Micro Controle	36 mm	28 83 54	28 83 55
	Round tube 43 mm, Acmeda	40 mm	28 83 78	28 83 79
	Grooved tube 50 mm, Rolmatic	45.9 mm	28 83 16	28 83 17
	Grooved tube 50 x 1.5 Resstede	46.4 mm	28 83 76	28 83 77
	Grooved tube Turnils 54	49.8 mm	28 83 62	28 83 63
	Round tube 52 mm, Benthin	47.5 mm	28 83 70	28 83 71
	Intermediate ring series 1, series 2	46.9 mm	28 83 12	---

Overview of adapters for awning shafts series 2







	Designation	Dimensions	Article no. crown	Article no. coupling
	Round tube 60 x 1.5	56.6 mm	28 83 22	28 83 23
	Round tube 63 x 1.5	59 mm	28 80 38	28 80 39
	Grooved tube / round tube 63 / 62 mm, Deprat, Disvel	59.9 mm	28 83 34	28 82 06
	Grooved tube 63 x 1	60.2 mm	28 80 18	28 80 19
	Grooved tube 70 x 1.5	66.5 mm	28 83 30	28 83 31
	Grooved tube 70 x 1	67.5 mm	28 80 14	28 80 15
	Grooved tube 70 x 1.5 Simbac	67 mm	28 83 64	28 83 65
	Grooved tube 78 x 1.0/1.25	74.5 mm	28 80 16	28 81 21
	Grooved tube 85 x 1.25	82 mm	28 82 08	28 81 23

Adapters for awning shafts







Overview of adapters for awning shafts series 3

	Designation	Dimensions	Article no. crown	Article no. coupling
	Round tube 70 x 1.5, up to 50 Nm	66.5 mm	28 83 32	28 83 31
	Round tube 70 x 1.5 strong version	66.5 mm	28 83 32	28 83 51
	Grooved tube 78 x 1, up to 50 Nm	75.6 mm	28 81 24	28 81 25
	Grooved tube 78 x 1 Döhner	75.2 mm	28 83 58	28 83 59
	Grooved tube 85 x 1.25, up to 50 Nm	82 mm	28 81 26	28 81 23
	Round tube 63 x 1.5	60 mm	---	28 82 06

Adapters for awning shafts

Product illustration	Ref.	Product description
	28 83 18 28 83 19	Adapter for awning shafts, series 1, for round tube 40 x 1 crown adapter (for SE motors ref. 28 83 54 is required additionally) coupling adapter
	28 83 48 28 83 49	Adapter for awning shafts, SP series 1 drives, for round tube 40 x 1.5 crown adapter coupling adapter
	28 83 56 28 83 49	Adapter for awning shafts, SE series 1 drives, for round tube 40 x 1.5 crown adapter coupling adapter
	28 83 25 28 83 07	Adapter for awning shafts, series 1, for grooved tube 50 mm crown adapter coupling adapter
	28 83 54 28 83 53	Adapter for awning shafts, series 1, for grooved tube 43 mm, Disvel, Cortina crown adapter, not required for SP 1 coupling adapter
	28 83 54 28 83 55	Adapter for awning shafts, series 1, for round tube Micro Controle crown adapter, not required for SP 1 coupling adapter

Adapters for awning shafts

Product illustration	Ref.	Product description
	28 83 78 28 83 79	Adapter for awning shafts, series 1, for round tube 43 mm, Acmeda crown adapter coupling adapter
	28 83 16 28 83 17	Adapter for awning shafts, series 1, for grooved tube 50 mm, Rolmatic crown adapter coupling adapter
	28 83 76 28 83 77	Adapter for awning shafts, series 1, for grooved tube 50 x 1.5 Resstede, only in combination with ref. 28 83 12 crown adapter coupling adapter
	28 83 62 28 83 63	Adapter for awning shafts, series 1, for grooved tube Turnils 54, only in combination with ref. 28 83 12 crown adapter coupling adapter
	28 83 70 28 83 71	Adapter for awning shafts, series 1, for round tube 52 mm, Faber/Benthin, only in combination with ref. 28 83 12 crown adapter coupling adapter
	28 83 12	Adapter for awning shafts, series 1 intermediate ring for drives series 1 and crown adapter series 2

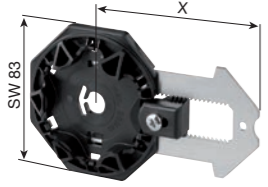
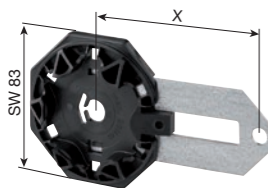
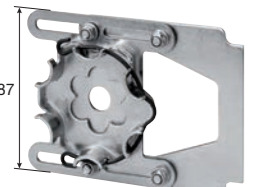
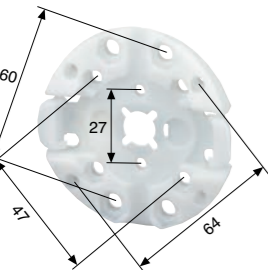
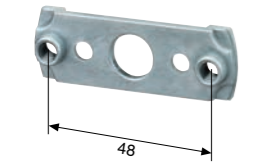
Adapters for awning shafts

Product illustration	Ref.	Product description	
	28 83 22 28 83 23	Adapter for awning shafts, series 2, for round tube 60 x 1.5 crown adapter coupling adapter	
	28 80 38 28 80 39 28 82 06	Adapter for awning shafts, series 2, for round tube 63 x 1.5 crown adapter coupling adapter coupling adapter, die-casted (without picture)	
	28 83 34 28 82 06	Adapter for awning shafts, series 2, for grooved tube / round tube 63 / 62 mm, Deprat, Disvel crown adapter coupling adapter	
	28 80 18 28 80 19	Adapter for awning shafts, series 2, for grooved tube 63 x 1 crown adapter coupling adapter	
	28 83 30 28 83 31	Adapter for awning shafts, series 2, for grooved tube 70 x 1.5 crown adapter coupling adapter	
	28 80 14 28 80 15	Adapter for awning shafts, series 2, for grooved tube 70 x 1 crown adapter coupling adapter	

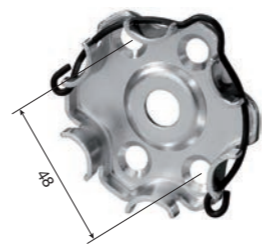
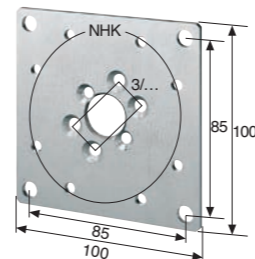
Adapters for awning shafts

Product illustration	Ref.	Product description	
	28 83 64 28 83 65	Adapter for awning shafts, series 2, for grooved tube 70 x 1.5 Simbac crown adapter coupling adapter	
	28 80 16 28 81 21	Adapter for awning shafts, series 2, for grooved tube 78 x 1,0/1,25 mm crown adapter coupling adapter	
	28 82 08 28 81 23	Adapter for awning shafts, series 2, for grooved tube 85 x 1.25 crown adapter coupling adapter, for drives up to max. 50 Nm	
	28 82 06	Adapter for awning shaft, series 3, for round tube 63 x 1.5 Crown adapter fits without adaptation onto the basic crown series 3 coupling adapter ! only suitable for round tube 63 !	
	28 83 32 28 83 31	Adapter for awning shafts, series 3, for round tube 70 x 1.5 crown adapter coupling adapter, for drives up to max. 50 Nm	
	28 83 32 28 83 51	Adapter for awning shafts, series 3, for round tube 70 x 1.5 crown adapter coupling adapter die-casted	


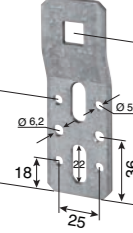
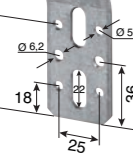
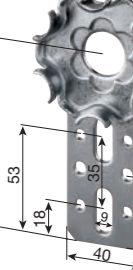




Motor brackets for surface-mounted roller shutter boxes

Product illustration	Ref.	Product description
	<p>28 01 93 Motor bracket for surface-mounted roller shutter boxes, for SP and SE drives</p> <p>Clamping bracket for head pieces 120 – 165 mm, x = 68 - 115 mm, with clip, max. 20 Nm</p> <p>28 01 95 clamping bracket for head pieces 165 – 225 mm, x = 105 - 152 mm, with clip, max. 20 Nm</p> <p>28 01 92 clamping bracket for head pieces 120 – 165 mm, x = 68 – 115 mm, without clip, max. 20 Nm (without picture)</p> <p>28 01 94 clamping bracket for head pieces 165 – 225 mm, x = 105 – 152 mm, without clip, max. 20 Nm (without picture)</p>	
	<p>28 01 96 clamping bracket for head pieces 137 – 205 mm, Heroal system, x = 60 - 108 mm, without clip, max. 20 Nm (without picture)</p> <p>28 01 97 clamping bracket for head pieces 137 – 205 mm, Heroal system, x = 60 - 108 mm, with clip, max. 20 Nm</p>	
	<p>28 01 90 Motor bracket for surface-mounted roller shutter boxes</p> <p>clamping bracket for head pieces 110 - 165 mm, for head contour, max. 30 Nm</p> <p>28 01 91 clamping bracket for head pieces 165 - 225 mm, for head contour, max. 30 Nm</p>	
	<p>28 01 75 Motor bracket for surface-mounted roller shutter boxes</p> <p>wall bracket, plastic, for SP and SE drives, series 1, only in connection with motor flange 28 01 76, max. 20 Nm</p> <p>28 01 78 wall bracket, plastic, for SP and SE drives, series 2, without additional motor flange, max. 20 Nm (without picture)</p>	
	<p>28 01 76 Motor flange for surface-mounted roller shutter boxes</p> <p>motor flange for bracket 28 01 75 and 28 30 38</p>	

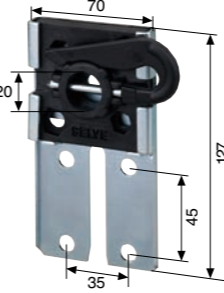

Motor brackets for surface-mounted roller shutter boxes

Product illustration	Ref.	Product description
	28 01 18	Motor bracket for surface-mounted roller shutter boxes galvanized steel for SELVE head contour, max. 50 Nm
	28 20 03	Motor bracket universal bearing plate, for serie 3 /... and SP... NHK

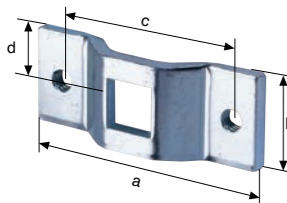
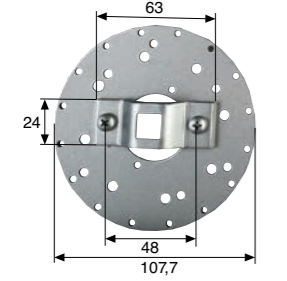

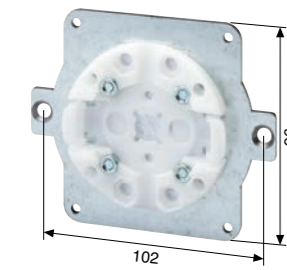
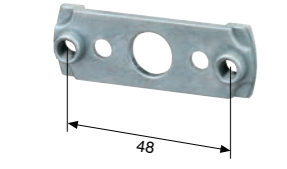
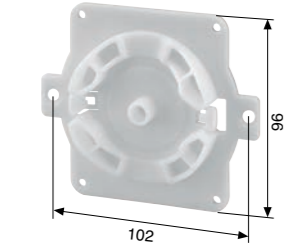
Motor bracket for prefabricated roller shutter boxes

Product illustration	Ref.	Product description
	28 19 00	Motor bracket for prefabricated roller shutter boxes galvanized steel, with 12 mm square pin
	28 19 10	Motor bracket for prefabricated roller shutter boxes galvanized steel, with 12 mm square pin, 143 mm x 50 mm x 6 mm, max. 50 Nm
	28 19 20	flush-mounted box bracket, with 12 mm square pin, 113 mm x 40 mm x 4 mm, max. 50 Nm, (not illustrated)
	28 19 34	Motor bracket for prefabricated roller shutter boxes galvanized steel for head contour, max. 50 Nm
	28 19 35	Motor bracket for prefabricated roller shutter boxes galvanized steel for head contour, max. 50 Nm, outreach 30 mm
	28 19 30	Motor bracket for prefabricated roller shutter boxes plastic motor bracket, roll type, 12 mm square pin, max. 30 Nm
	28 19 32	Motor bracket for prefabricated roller shutter boxes plastic, roll type, with clip, max. 20 Nm
	28 19 33	Motor bracket for prefabricated roller shutter boxes plastic, roll type, without clip (no picture), max. 20 Nm

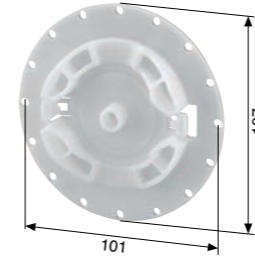
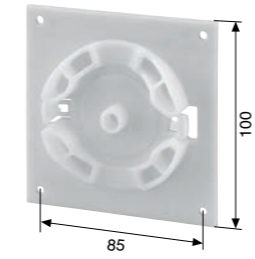
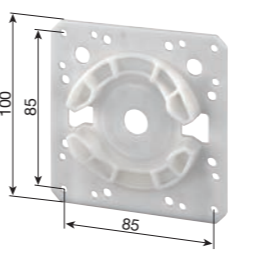
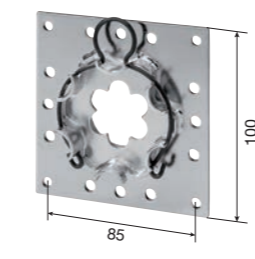
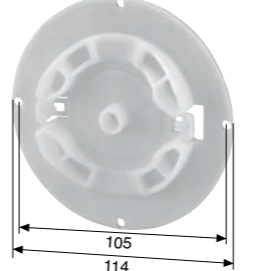

Motor bracket for prefabricated roller shutter boxes

Product illustration	Ref.	Product description
	28 19 50	Motor bracket for prefabricated roller shutter boxes motor bracket, roll type, for SP and SE drives, series 2, in conjunction with mounting pin 28 60 12, max. 30 Nm
	28 60 12	Motor bracket for prefabricated roller shutter boxes mounting pin for SP drives, series 2, max. 30 Nm and SE drives, series 2, max. 20 Nm, square 10 mm, for universal bracket 28 19 50

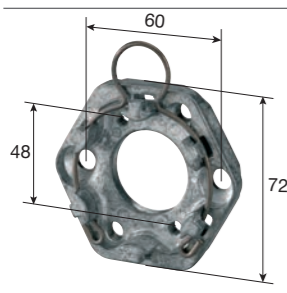

Motor bracket for top-mounted roller shutters

Product illustration	Ref.	Product description
	<p>28 01 20 galvanized steel, with 12 mm square pin, thread M6, dimensions: (a/b/c/d) 63 / 24 / 48 / 12 mm, for series 1 and 2</p> <p>28 01 22 galvanized steel, with 12 mm square pin, thread M8, dimensions: (a/b/c/d) 76 / 30 / 60 / 15 mm, for series 1 and 2</p>	
	28 30 31	Motor bracket for top-mounted roller shutters Thyssen system, 12 mm square pin, max. 50 Nm
	28 30 29	Motor bracket for top-mounted roller shutters Veka system, mounting plate with motor bracket 28 01 20, 12 mm square pin, max. 50 Nm
	<p>28 30 38 SKS system, clip bracket for SP and SE drives, series 1, only in conjunction with motor flange 28 01 76, max. 20 Nm</p> <p>28 30 40 SKS system, clips bracket, for SP and SE drives, series 2, without additional motor flange, and for SP and SE drives, series 1, only in conjunction with motor flange 28 60 34, max. 20 Nm</p>	
	28 01 76	Motor flange for top-mounted roller shutters motor flange for bracket 28 01 75 and 28 30 38
	<p>28 30 43 for system SKS, plastic, with clip, max. 20 Nm</p> <p>28 30 53 for system SKS, plastic, without clip, max. 20 Nm, (no picture)</p>	

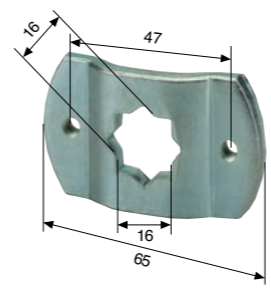
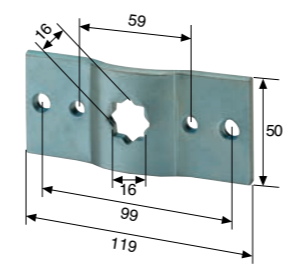
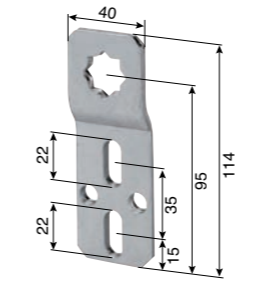
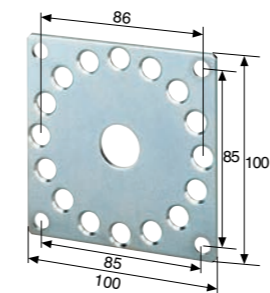
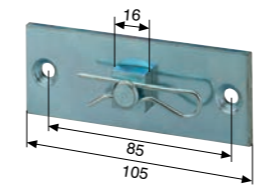
Motor bracket for top-mounted roller shutters

Product illustration	Ref.	Product description
	<p>28 30 42 for systems Inoutic and Gealan, plastic, with clip, max. 20 Nm</p> <p>28 30 52 for systems Inoutic and Gealan, plastic, without clip, max. 20 Nm, (no picture)</p>	
	<p>28 30 41 for system VEKA-Variant, plastic, with clip, max. 20 Nm</p> <p>28 30 51 for system VEKA-Variant, plastic, without clip, max. 20 Nm, (no picture)</p>	
	28 30 47	Motor bracket for top-mounted roller shutters for systems VEKA-Variant and DEPRAT-Réno, plastic, with clip, max. 20 Nm
	28 30 45	Motor bracket for top-mounted roller shutters bearing plate 100 x 100 mm, galvanized steel, for head contour, max. 50 Nm
	<p>28 30 44 for systems Kömmerling and Rola-Plus, plastic, with clip, max. 20 Nm</p> <p>28 30 54 for systems Kömmerling and Rola-Plus, plastic, without clip, max. 20 Nm, (no picture)</p>	
	28 30 46	Motor bracket for top-mounted roller shutters for system Profine varinova, plastic, with clip, max. 20 Nm, to be secured with the enclosed screw

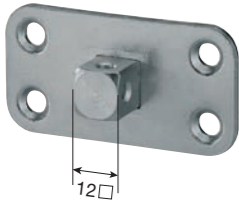
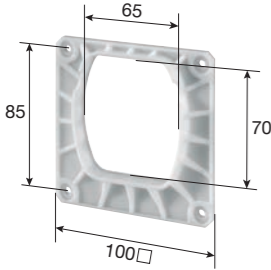
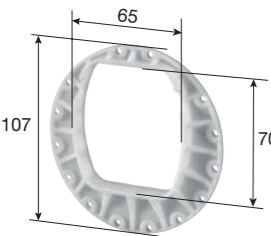
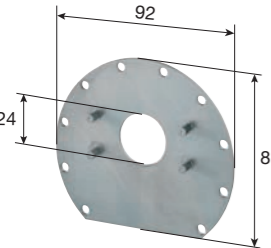
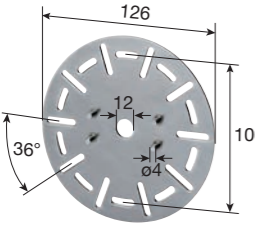
Awning brackets

Product illustration	Ref.	Product description
 <p>Dimensions: 60 (width), 48 (height), 72 (total height)</p>	<p>28 06 00 Die-cast zinc, uncoated 28 06 01 Die-cast zinc, white painted 28 06 02 Die-cast zinc, black painted</p>	<p>Awning bracket with wire hangers Die-cast zinc, uncoated Die-cast zinc, white painted Die-cast zinc, black painted</p> <p>NEW in catalogue</p>
	<p>28 60 43</p>	<p>Selve head adapter for support by the head contour Die-cast zinc, black painted</p> <p>NEW in catalogue</p>


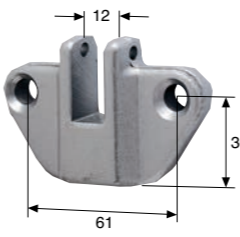

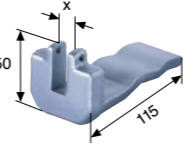
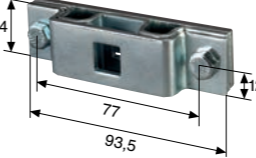
Motor brackets for series 3 and SP-NHK drives

Product illustration	Ref.	Product description
 <p>Dimensions: 16 (width), 47 (height), 65 (total width)</p>	<p>28 01 16</p>	<p>Motor bracket for series 3 and SP-NHK drives >20 Nm motor bracket, small, 16 mm square pin, for SE and SP drives, series 3 and SP-NHK in conjunction with motor flange ref. 28 20 08</p>
 <p>Dimensions: 16 (width), 59 (height), 99 (total width), 119 (total length)</p>	<p>28 01 17</p>	<p>Motor bracket for series 3 and SP-NHK drives >20 Nm motor bracket, big, 16 mm square pin, for SE and SP drives, series 3 and SP-NHK in conjunction with motor flange ref. 28 20 08</p>
 <p>Dimensions: 40 (width), 22 (height), 95 (total height), 114 (total length)</p>	<p>28 19 02</p>	<p>Motor bracket for series 3 and SP-NHK drives >20 Nm galvanized steel, 16 mm square pin, for SE and SP drives, series 3 and SP-NHK in conjunction with motor flange ref. 28 20 08</p>
 <p>Dimensions: 86 (width), 85 (height), 100 (total width), 100 (total height)</p>	<p>28 20 02</p>	<p>Motor bracket for SP-NHK drives >20 Nm adapter plate, 100 x 100 mm</p>
 <p>Dimensions: 16 (width), 85 (total width), 105 (total length)</p>	<p>28 20 08</p>	<p>Motor flange for SP-NHK drives >20 Nm, with square 16 mm with 2 countersunk screws, 2 nuts and cotter pin for motor brackets 28 01 16, 28 01 17 and 28 19 02</p>

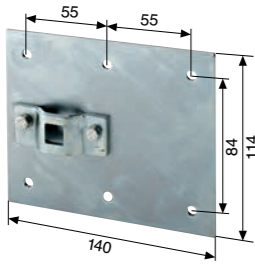
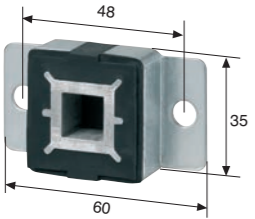
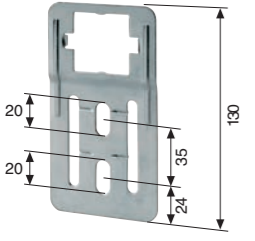

Motor brackets for NHK and SP Rescue drives

Product illustration	Ref.	Product description
	28 20 10	Motor flange for SEE-NHK and SP-NHK drives ≤ 20 Nm such as SP Rescue drives 12 mm square pin, small switching off NEW in catalogue
	28 20 11	Motor bracket for SEE-NHK and SP-NHK drives ≤ 20 Nm such as SP Rescue drives oval, for VEKA system NEW in catalogue
	28 20 12	Motor bracket for SEE-NHK and SP-NHK drives ≤ 20 Nm such as SP Rescue drives oval, for Inoutic (Thyssen) system NEW in catalogue
	28 20 05	Motor bracket for SEE-NHK and SP-NHK drives ≤ 20 Nm such as SP Rescue drives with bolt NEW in catalogue
	28 20 06	Motor bracket for SEE-NHK and SP-NHK drives ≤ 20 Nm such as SP Rescue drives for prefabricated roller shutter boxes NEW in catalogue


Other motor brackets

Product illustration	Ref.	Product description
	28 60 34 28 60 30	Motor flange for drives series 1 for motor brackets 28 01 78, 28 30 41 to 28 30 44, 28 30 46 and 28 30 51 to 28 30 54 for motor brackets 28 01 18, 28 01 90 to 28 01 97 and 28 30 45 (without picture)
	28 01 00	Surface-mounted square mounting surface-mounted square bracket, galvanized steel, with 12 mm square pin
	28 01 01 28 11 01	Surface-mounted square mounting like ref. 28 01 00, mit Innenvierkant 12 mm, but with grub screw like ref. 28 01 01, but with 16 mm square pin, for SE and SP drives, series 3, (no picture)
	28 01 40	Retrofit motor bracket for LUNAMAT bracket motor bracket insert for Lunamat bearings, grey cast iron, galvanized, 12 mm square pin
	28 03 00	Flush-mounted bracket with inner square flush-mounted square bracket, galvanized steel, with 12 mm square pin
	28 01 30	Retrofit motor bracket slot-in motor bracket, 12 mm square pin

Other motor brackets

Product illustration	Ref.	Product description
	28 01 55	Motor bracket for clinker buildings motor bracket for clinker buildings, 12 mm square pin
	28 01 47 28 01 46	Motor bracket for the sound insulation hunt bracket for 12 mm square, up to 20 Nm hunt bracket for 12 mm pivot (opposite side), no picture
	28 19 60	Retaining bracket for prefabricated roller shutter box for hunt bracket 28 01 46 and 28 01 47
	28 19 31	Retrofit motor bracket to refit in the prefabricated roller shutter box bracket 18 30 00, rollable, for 12 mm square, max. 15 Nm

Plug-in connecting cables and motor setting switches

Product illustration	Ref.	Product description
	29 01 11 29 01 12	Motor setting switch with locking position single-pole, for non-permanent connection with N and PE terminals, for a single AC drive like ref. 29 01 00, but without cable between switch and drive (no picture)
	29 01 00 29 01 01	Motor setting switch with mains plug, switch without locking position with quick-fit terminals like ref. 29 01 00, but switch with locking position
	29 01 03	Motor setting switch for SE drives for SELVE electronic drives, four-wire
	29 01 06	Motor setting switch for SE drives for SELVE electronic drives, four-wire, with Hirschmann plug STAK 3 (contact assignment 1 = blue)
	29 01 09	Motor setting switch for SE-RC and SMI drives for SELVE electronic radio and SMI drives, five-wire



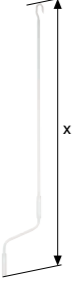
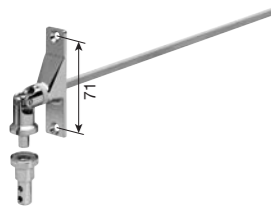
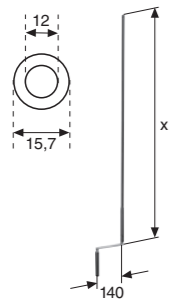
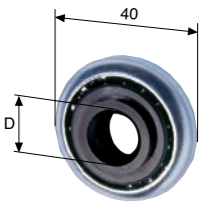
Plug-in connecting cables and motor setting switches

Product illustration	Ref.	Product description
	29 01 37 29 01 27	Hirschmann plug system Hirschmann-coupling, STAK 3 Hirschmann-coupling STAK 4 (without picture) The configuration of the contacts must be defined individually.
	29 01 38 29 01 39 29 01 28 29 01 29	Hirschmann plug system Hirschmann plug STAS 3, without clamp security clamp STASI 3 Hirschmann plug STAS 4, without clamp (without picture) security clamp STASI 4 (without picture) The configuration of the contacts must be defined individually.
	29 05 25	Plug-in cable three-wire for SELVE radio drives (series 2), types SE Pro-RC, SEE-RC, SE Plus-RC, SEZ-RC, SEM Plus-RC length 2.50 m, PVC, white NEW in catalogue
	29 05 45 29 05 48 29 05 49 29 05 56 29 05 58 29 05 59	Plug-in connecting cable four-wire for SELVE radio drives (series 2), types SE Pro, SEE, SE Plus, SEZ, SEM Plus, SP length 2.50 m, PVC, white length 5.00 m, PVC, white length 10.00 m, PVC, white length 3.00 m, rubber, black length 5.00 m, rubber, black length 10.00 m, rubber, black
	29 05 75 29 05 78 29 05 79 29 05 86 29 05 88 29 05 89	Plug-in connecting cable five-wire for SELVE radio drives (series 2), types SE Pro-RC, SEE-RC, SE Plus-RC, SEZ-RC, SEM Plus-RC and SMI drives, types SE Pro-SMI, SE Plus-SMI, SEZ-SMI length 2.50 m, PVC, white length 5.00 m, PVC, white length 10.00 m, PVC, white length 3.00 m, rubber, black length 5.00 m, rubber, black length 10.00 m, rubber, black

Plug-in connecting cables and motor setting switches

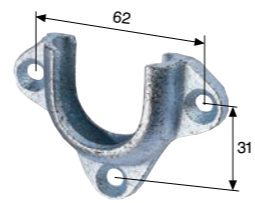
Product illustration	Ref.	Product description
	29 32 04 29 05 06 29 05 10	Plug-in connecting cable for SELVE drives, with/similar Hirschmann plug 4-wire, length 0.38 m, rubber, black, Typ CS-F3 (similar to Hirschmann plug STAS 3, compatible with Hirschmann coupling STAK 3) NEW in catalogue 4-wire, length 0.70 m, rubber, black, with Hirschmann plug STAS 3 5-wire, length 0.38 m, rubber, black, with Hirschmann plug STAS 4
	29 01 86 29 01 88 29 01 89	Mains supply line with Hirschmann coupling, without illustration 4-wire, length 3.00 m, rubber, black, with Hirschmann coupling STAK 3, open end with wire end ferrules 4-wire, length 5.00 m, rubber, black, with Hirschmann coupling STAK 3, open end with wire end ferrules 4-wire, length 10.00 m, rubber, black, with Hirschmann coupling STAK 3, open end with wire end ferrules
	29 01 89 29 01 48 29 01 49	Mains supply line with uni coupling, without illustration 4-wire, length 3.30 m, PVC, white, with uni coupling, open end with wire end ferrules 4-wire, length 5.30 m, PVC, white, with uni coupling, open end with wire end ferrules 4-wire, length 10.00 m, PVC, white, with uni coupling, open end with wire end ferrules NEW in catalogue

Mechanical accessory for SP-NHK/SEE-NHK drives

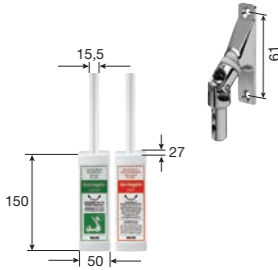
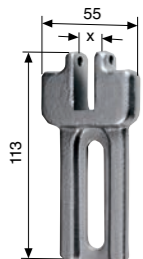
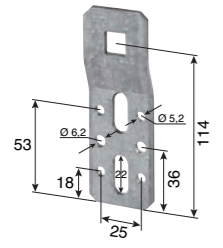
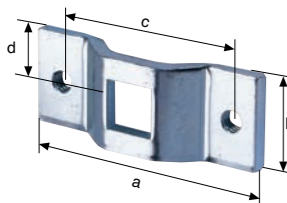
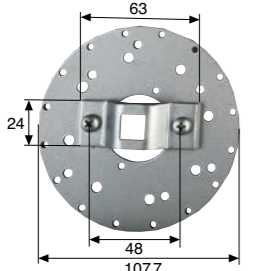
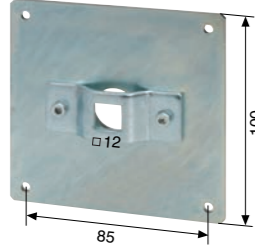
Product illustration	Ref.	Product description
	27 79 20 27 79 21 27 79 22	Eyelet with hexagon for SP-NHK drives bolt 70 mm bolt 250 mm bolt 450 mm
	27 79 25	Cardan joint 90° for SP-NHK drives bearing plate 23 x 85 mm, 7mm hexagon, 300 mm long, with eyelet for emergency hand crank
	27 79 30 27 79 31	Crank handle for awnings with hook for eyelet 27 79 20, 27 79 21, 27 79 22 and 27 79 25 x = 1200 mm x = 2000 mm
	27 79 05	Cardan joint for magnet system for SEE-NHK bearing plate 85 x 22 mm, 7 mm Sechskant, 300 mm long, 55°
	27 82 16 27 82 19 27 82 21 27 70 01	Crank handle for magnet system extended length = 1300 mm, x = 1000 mm, white extended length = 1600 mm, x = 1300 mm, white extended length = 1800 mm, x = 1500 mm, white Arrester (no picture) white
	18 20 00	Ball bearing D = Ø 12 mm

NEW in catalogue

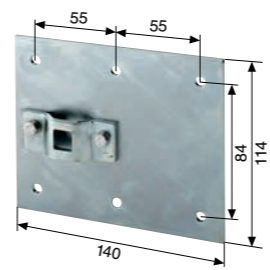
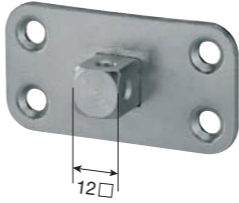
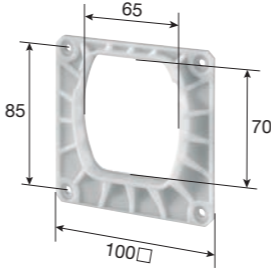
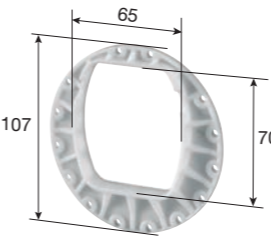
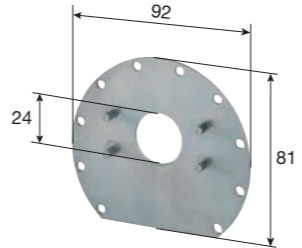
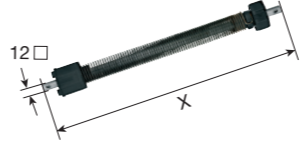
Mechanical accessory for SP-NHK/SEE-NHK drives

Product illustration	Ref.	Product description
	18 01 00	Surface-mounted bearing bracket cast

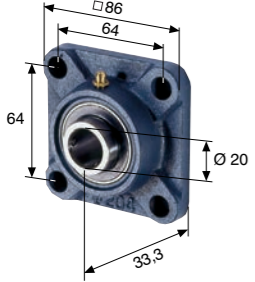
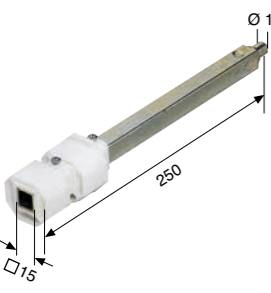
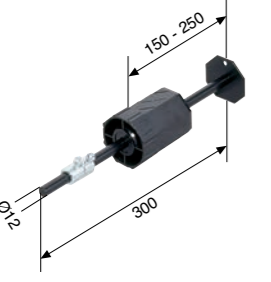
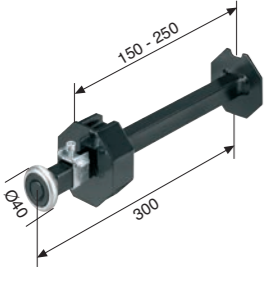
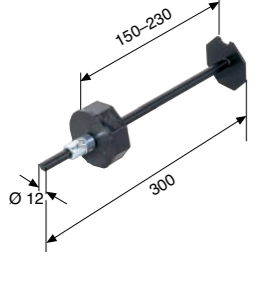
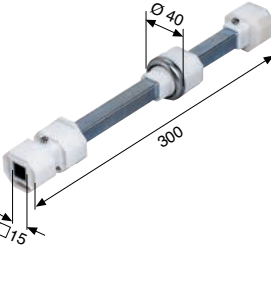
Mechanical accessory for SP Rescue drives

Product illustration	Ref.	Product description
	27 86 32 27 86 35 27 86 50	Operation set for SP Rescue with operation bar 1 m, white, cardan joint, hexagon and handle lock Operation set with cardan joint 50° Operation set with cardan joint 90° (without illustration) Operating bar 1.00 m, with handle piece (without illustration)
		NEW in catalogue
	28 19 00	Spring shaft bracket for prefabricated roller shutter boxes galvanized steel, with 12 mm square pin
	28 19 10 28 19 20	Spring shaft bracket for prefabricated roller shutter boxes galvanized steel, with 12 mm square pin, 143 mm x 50 mm x 6 mm, max. 50 Nm flush-mounted box bracket, with 12 mm square pin, 113 mm x 40 mm x 4 mm, max. 50 Nm, (not illustrated)
	28 01 20 28 01 22	Spring shaft bracket for top-mounted roller shutters galvanized steel, with 12 mm square pin, thread M6, dimensions: (a/b/c/d) 63 / 24 / 48 / 12 mm, for series 1 and 2 galvanized steel, with 12 mm square pin, thread M8, dimensions: (a/b/c/d) 76 / 30 / 60 / 15 mm, for series 1 and 2
	28 30 31	Spring shaft bracket for top-mounted roller shutters Thyssen system, 12 mm square pin, max. 50 Nm
	28 30 29	Spring shaft bracket for top-mounted roller shutters Veka system, mounting plate with motor bracket 28 01 20, 12 mm square pin, max. 50 Nm

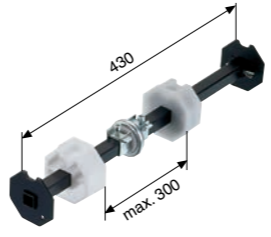
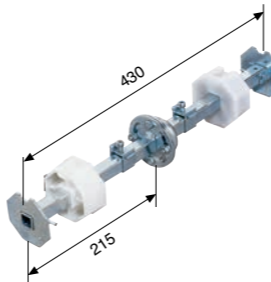
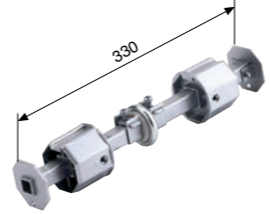


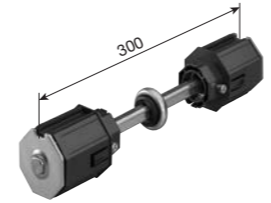
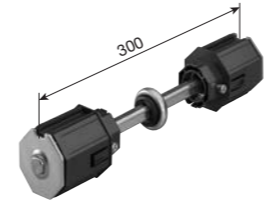
Mechanical accessory for SP Rescue drives

Product illustration	Ref.	Product description
	28 01 55	Spring shaft bracket for clinker buildings motor bracket for clinker buildings, 12 mm square pin
	28 20 10	Motor flange for SEE-NHK and SP-NHK drives ≤ 20 Nm such as SP Rescue drives 12 mm square pin, small switching off
		NEW in catalogue
	28 20 11	Motor bracket for SEE-NHK and SP-NHK drives ≤ 20 Nm such as SP Rescue drives oval, for VEKA system
		NEW in catalogue
	28 20 12	Motor bracket for SEE-NHK and SP-NHK drives ≤ 20 Nm such as SP Rescue drives oval, for Inoutic (Thyssen) system
		NEW in catalogue
	28 20 05	Motor bracket for SEE-NHK and SP-NHK drives ≤ 20 Nm such as SP Rescue drives with bolt
		NEW in catalogue
	28 17 00 28 17 01 28 17 02	Spring shaft for SP Rescue for SW 60 – already included in the SP Rescue set - x = 500 mm x = 700 mm x = 920 mm
		NEW in catalogue

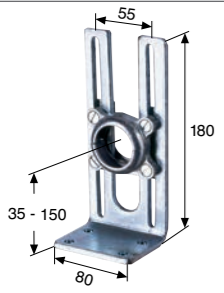
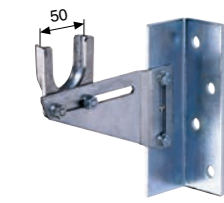
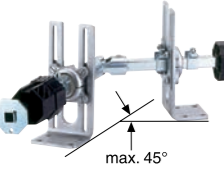
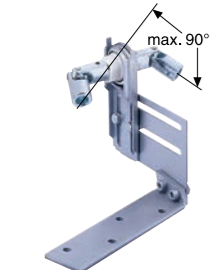
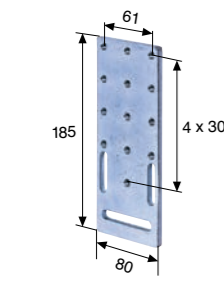
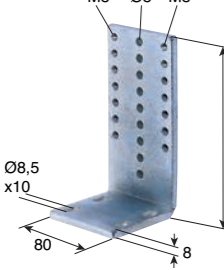
Mechanical accessory for drives

Product illustration	Ref.	Product description
	28 42 00	Flange ball bearing for Ø 20 mm pivot
	27 24 50	Shaft insert for octagonal tube 40 adjustable, galvanized
	27 25 10 27 25 30	Shaft insert for octagonal tube 60 plastic-coated, adjusting range: 150 - 250 mm galvanized, short, for ball bearing and LUNAMAT gear (no picture)
	27 84 10	Shaft insert for octagonal tube 70 anti-rust, adjusting range: 150 - 250 mm, with ball-bearing Ø 40 mm ref. 18 22 01
	27 22 10	Shaft insert for octagonal tube 70 plastic-coated, adjusting range: 150 - 230 mm
	19 59 00	Tube coupler for octagonal steel shaft 40 assembled, galvanized

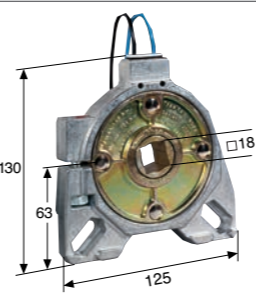
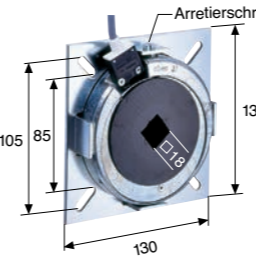
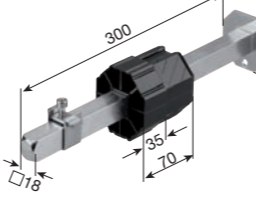
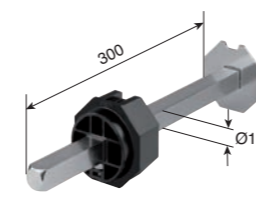
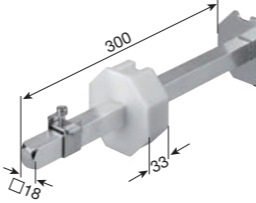
Mechanical accessory for drives

Product illustration	Ref.	Product description
	19 64 00	Tube coupler, adjustable, with ball-bearing Ø 50 mm, for octagonal steel shaft 70 plastic coated, assembled
	19 64 60	Tube coupler, adjustable, with ball-bearing Ø 50 mm, for octagonal steel shaft 70 galvanized, split in the middle and adjustable, assembled
	19 67 10	Tube coupler, adjustable, with ball bearing Ø 50 mm, for octagonal steel shaft 60 galvanized, with aluminium cap for tubes, assembled
	19 67 61	Tube coupler, adjustable, with ball bearing Ø 50 mm, for octagonal steel shaft 60 galvanized, with plastic cap for tubes, split in the middle and adjustable, assembled
	19 67 20	Tube coupler, adjustable, for octagonal steel shaft 60 galvanized, with plastic cap for tubes, assembled, with ball-bearing Ø 50 mm
	19 67 52	Tube coupler, adjustable, for octagonal steel shaft 60 galvanized, with plastic cap for tubes, assembled, with ball-bearing Ø 40 mm (without picture)
	19 67 53	Tube coupler, adjustable, with ball bearing Ø 40 mm, for octagonal steel shaft 60 galvanized, with plastic cap for tubes, assembled

Mechanical accessory for drives


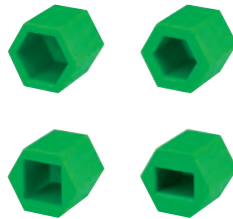



Product illustration	Ref.	Product description
	19 60 11	Mounting for tube couplers with casted bearing bracket for ball bearing Ø 50 mm, galvanized
	19 45 04	Mounting for tube couplers with casted bearing bracket for ball bearing Ø 50 mm
	27 60 00	Cardan joint tube coupler bracket for steel shaft 60
	27 60 50	Cardan joint tube coupler with two joints, swivels up to max. 90° to be used with: steel shaft 70 with two shaft inserts Ref. 27 22 10, steel shaft 60 with two shaft inserts Ref. 27 25 10
	28 00 00	Mounting plate galvanized steel
	28 02 00	Mounting angle galvanized steel

Safety brakes

Product illustration	Ref.	Product description
	28 55 00 28 55 01 28 55 02	Safety brake for right and left hand installation, max. torque 145 Nm, catching force max. 365 Nm, operating speed max. 22 (1/min), permit no. 93 035 28 55 01 console for ref. 28 55 00, pillow block installation 28 55 02 mounting plate for Ref. 28 55 00, for in a head piece mounting
	28 54 00	Safety brake with surface-mounted plate slim design, for right- and left-hand installation, max. torque 79 Nm, catching force max. 224 Nm, operating speed max. 20 [1/min], permit no. 87 028
	28 54 50	Shaft insert suitable for article numbers 28 54 00 and 28 55 00, for octagonal steel shaft SW 60
	28 54 55	Shaft insert suitable for article numbers 28 54 00 and 28 55 00, for octagonal steel shaft SW 70, without stoppers
	28 54 51	Shaft insert suitable for article numbers 28 54 00 and 28 55 00, for octagonal steel shaft SW 70




NEW in catalogue

Drives for internal blinds SIS

Product illustration	Ref.	Product description
	37 15 30 37 15 31 37 15 33	Internal blinds drive SIS 25/0,65 SMI, suitable for 25 mm blind headrails. Including connecting adapters for different turning bars: hexagon 5 mm hexagon 6 mm square 5 mm x 5 mm
	28 88 00 28 88 01 28 88 02 28 88 03	Mould adapter for blind drive SIS for SW 6 for SW 5 5 x 5 mm square 5 x 3 mm square
	29 06 90	Setting cable with mains adapter for one SIS drive, with RJ12 plug for direct connection to the SIS drive. Not suitable for continuous use.
	29 06 00 29 06 01	Connecting cable black, 2 x plug RJ12 for direct connection to the SIS drive and terminal box or switch box length: 5 m length: 10 m
	29 06 70	Terminal box for the connection of max. 4 SIS drives, several terminal boxes may be connected in line, surface mounted housing approx. 80 x 80 mm
	29 06 71	Switch box group controller, for the connection of 1 SIS drive and 2 blind switches, group and individual control possible, several switch boxes may be connected in line, surface mounted housing approx. 80 x 80 mm

NEW in catalogue

Electrical strap coilers RolloLift

Product illustration	Ref.	Product description
	09 01 10	RolloLift UP Electrical strap coiler (flush-mounting) for 23 mm straps, with internal, mains synchronous timer and settable switching times for opening and closing. Max. strap capacity: 4.8 m Max. tension performance: 45 kg Permitted roller shutter surface: approx. 6 sqm at 5 kg / sqm approx. 3 sqm at 10 kg / sqm Cover: 212 x 60 Depth of box: 139 mm Width of box: 34.5 mm Hole positions: 165 mm and 185 mm
	09 02 10	RolloLift UP Timer Electrical strap coiler (flush-mounting) for 23 mm straps, with display and internal, mains synchronous timer and settable switching times for opening and closing. Max. strap capacity: 4.8 m Max. tension performance: 45 kg Permitted roller shutter surface: approx. 6 sqm at 5 kg / sqm approx. 3 sqm at 10 kg / sqm Cover: 212 x 60 Depth of box: 139 mm Width of box: 34.5 mm Hole positions: 165 mm and 185 mm
	29 61 15	Light Sensor for RolloLift UP (Timer) and RolloLift AP (Timer) with suction cap for the direct fixing on the window. By the position of the suction cap it will be determined up to where the roller shutter will be lowered in case of sunshine. Length of cable: 1 m

Electrical strap coilers RolloLift

Product illustration	Ref.	Product description
	09 03 10	<p>RolloLift AP Electrical strap coiler with smoke detector identification (surface-mounting) for 15 mm straps, with internal, mains synchronous timer and settable switching times for opening and closing. Reacts to all common smoke detectors: roller shutters will be opened automatically in case of alarm.</p> <p>Max. strap capacity: 6.3 m Max. tension performance: 45 kg Permitted roller shutter surface: approx. 6 sqm at 5 kg / sqm approx. 3 sqm at 10 kg / sqm</p> <p>dimensions 193 x 158 x 37 mm</p>
	09 04 10	<p>RolloLift AP Timer Electrical strap coiler with smoke detector identification (surface-mounting) for 15 mm straps, with display and internal, mains synchronous timer and settable switching times for opening and closing. Reacts to all common smoke detectors: roller shutters will be opened automatically in case of alarm.</p> <p>Max. strap capacity: 6.3 m Max. tension performance: 45 kg Permitted roller shutter surface: approx. 6 sqm at 5 kg / sqm approx. 3 sqm at 10 kg / sqm</p> <p>dimensions 193 x 158 x 37 mm</p>

Garage door drives GDO

Product illustration	Ref.	Product description
	21 31 00	<p>Garage door drive Type GDO 600 for doors up to 9 m² door surface, max. door height: 2.4 m, electrical power: 110 W, max. pull force: 600 N, with tooth belt, steel slide rail, soft start / stop, electrical shut-off, obstacle detection with reversion, digital control panel display, LED-lighting, including 2 hand-held transmitters and 1 wall send</p>
	28 22 11	<p>rail extension for GDO 600 (without picture)</p>
	21 31 01	<p>Type GDO 800+ for doors up to 14 m² door surface, max. door height: 3.3 m, electrical power: 198 W, max. pull force: 1000 N, with tooth belt, steel slide rail, soft start / stop, electrical shut-off, obstacle detection with reversion, digital control panel display, LED-lighting, including 2 hand-held transmitters and 1 wall send</p>
	28 22 12	<p>rail extension for GDO 800+ (without picture)</p>
	28 22 02	<p>Emergency release with lock, for the installation into the door, with steel cable, including 2 keys</p>
	29 90 10	<p>Mini hand-held transmitter for ref. 21 31 00 and 21 31 01 1 channel, with keychain</p>
	29 90 20	<p>Radio code lock for ref. 21 31 00 and 21 31 01 1 channel, for wall installation, freely programmable 4-digit-code</p>
	29 90 11	<p>Radio wall switch for ref. 21 31 00 and 21 31 01 1 channel, for wall installation</p>



CONTROLS

Smart controls for every application make our drives really comfortable. Whether forward-looking SmartHome solutions via internet or the conventional operation via a wired wall switch – SELVE offers a wide range of products for the control of different drives and receivers in the house or at an object.

Central home automation with just one app

SELVE Home

- Convenient control of the roller shutters, sun protections and other receivers of Homematic IP via app
- Feedback and status display of the individual receivers
- 100% compatible to the radio systems commeo, iveo and intronic



▶ from page 100

Bidirectional radio control system

commeo

- Easy setting, high ease of use and greatest security
- Feedback function for highest transparency
- Products for time and home automation as well as hand-held transmitters and wall-mounted transmitters, receivers and sensors



▶ from page 102

Unidirectional radio control system

iveo-/intronic radio

- Proven radio system for many years
- Large product range
- Compatible to all SELVE radio drives ("-RC") and many commeo receivers



▶ from page 115

Wired controls

intronic

▶ from page 128



Cut-off relays

▶ page 137



Timers

▶ from page 134



Switches/Push buttons

▶ from page 138



Other control components

▶ from page 140




















commeo BIDIRECTIONAL RADIO

Latest radio control of roller shutters, zip-screens and awnings: The commeo product family consists of technically sophisticated drives, user friendly hand-held transmitters and intelligent weather sensors that together offer maximum functionality.

The bidirectional commeo radio solutions are offering many advantages:

- Feedback of the receiver on the process of the radio signal
- Easy initial setting and operation by bidirectional communication between transmitter and receiver
- Larger radio range by targeted forwarding (repeating) of the radio signal if necessary
- Fail-safe and tap-proof by fast radio protocol and rolling-code procedure
- Downward compatible: drives and receivers can also process iveo/intronic signals
- Wired switches connectable: Setting and operation possible by wire

<p>SELVE Home Server 2 Home automation via app Ref. 29 77 97</p>  <p>▶ page 101</p>	<p>commeo Timer BT Room control via Bluetooth® Ref. 29 77 01</p>  <p>▶ page 103</p>	<p>commeo USB-RF Gateway Radio interface on XML-basis Ref. 29 77 92</p>  <p>▶ page 104</p>
<p>commeo Multi Send Hand-held transmitter with 20 channels and 10 timers Ref. 29 77 24</p>  <p>▶ page 105</p>	<p>commeo Send 10 Hand-held transmitter with 10 channels Ref. 29 77 15</p> <p>commeo Send 1 Hand-held transm. with 1 ch. Ref. 29 77 13</p>  <p>▶ page 106</p>	<p>commeo Wall Send Wall transmitter with 1 channel Ref. 29 77 04/29 77 08</p>  <p>▶ page 107</p>
<p>commeo Light Send Transmitter with sun sensor Ref. 29 77 03</p>  <p>▶ page 108</p>	<p>commeo Transmit Transmitter for switches (flush-mounted) Ref. 29 77 81</p>  <p>▶ page 108</p>	<p>commeo Sensor WS Radio wind and sun sensor Ref. 29 77 51</p> <p>commeo Sensor WSRF Radio wind, sun, rain and frost sensor Ref. 29 77 53</p>  <p>▶ page 109</p>
<p>commeo Wind Sensor Radio motion sensor Ref. 29 77 54</p>  <p>▶ page 110</p>	<p>commeo Send WS 10 Hand-held transmitter for sensors Ref. 29 77 21/29 77 22</p>  <p>▶ page 110</p>	<p>commeo Receive Radio receiver (flush-mounted) Ref. 29 77 71</p>  <p>▶ page 111</p>
<p>commeo Receive Connect Radio receiver Hirschmann plug Ref. 29 77 74</p>  <p>▶ page 111</p>	<p>commeo Control Radio group/single control Ref. 29 77 30</p>  <p>▶ page 112</p>	<p>commeo Adapter Plug Radio receiver socket Ref. 29 77 77</p>  <p>▶ page 112</p>

Accessories for commeo controls can be found on page 113.

Smart upgrade for commeo, iveo and intronic:

Intelligent home control

via app or with Amazon Alexa



Exemplary presentation: A complete list of compatible Homematic IP-components can be found at www.selve.de/en/selvehome.

Compatible with:



App „SELVE Home“

SELVE Home Server 2

Make more of your radio system!

Provide your customers with maximum ease of use and the possibility to control their home via smartphone or with Amazon Alexa. From all over the world or conveniently from the living room sofa.

- ▶ Easy and intuitive SmartHome control via app “SELVE Home” for iOS and android
- ▶ Control of SELVE radio systems commeo, iveo, intronic as well as selected Homematic IP-components

Data protection issue – local or external data storage:

- ▶ Exclusive use at home in the private wireless network via smartphone or tablet computer (see functional example 1 on the right side)
- ▶ Control also from the outside via smartphone by the SELVE cloud (see functional example 2)
- ▶ Optional voice control via Alexa Skill in connection with SELVE cloud (see functional example 2)

More information at:

www.selve.de/en/selvehome





“SELVE Home” app is available free of charge in the app store or at Google Play.

commeo time and house automation

NEW
in catalogue

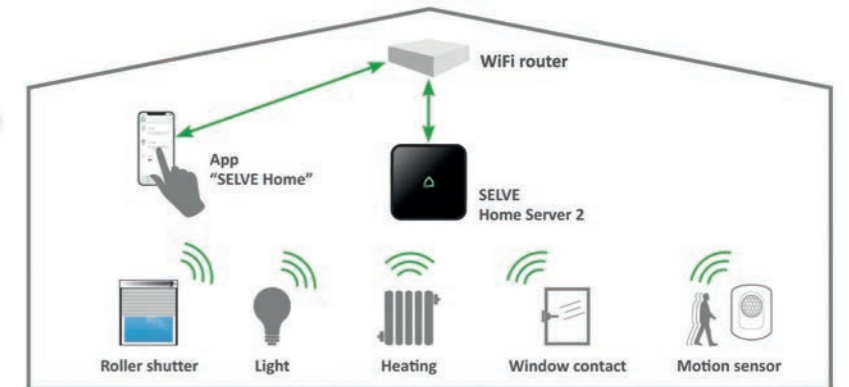
SELVE

Engineering in motion

Product illustration	Ref.	Product description
 	29 77 97	<p>SELVE Home Server 2</p> <p>SmartHome solution for commeo, iveo and intronic with scenarios and task manager</p> <p>With the SELVE Home Server 2 the SELVE radio systems commeo, iveo and intronic are made controllable conveniently and intuitively via app for smartphones and tablet computer. Also selected devices of Homematic IP can be integrated so that also heating, light and other consumers can be controlled with only one app.</p>
<p>Technical data</p> <p>Dimensions: 90 x 90 x 21 mm</p> <p>Operating voltage: 5 V DC via plug-in power supply</p> <p>Battery: not necessary</p> <p>Protection class: IP20</p> <p>Permitted ambient temp.: 0°C to +40°C</p> <p>Assembly: Floor-mounted appliance with power supply</p> <p>Frequency: 868 MHz</p>		<ul style="list-style-type: none"> • Easy and intuitive control of SELVE radio systems via a free of charge app “SELVE Home” for iOS and Android • Easy putting into service of the SELVE Home Server via the app “SELVE Home” or the putting into service app “SELVE Home Install” • Creation of individual groups and scenarios • Creation of time and sensor controlled actions (“tasks”) • Control via internet by the SELVE cloud • Commands via voice control Amazon Alexa via cloud and “SELVE Home”- connection possible • For the control in your own network there is no internet necessary • Comfortable setting of threshold values for sensors that are programmed in commeo receivers • Programmable in up to 64 commeo receivers and 32 iveo /intronic receivers • Control of selected Homematic IP devices • Lower standby power consumption with 1,3 W

Functional description:

Example 1
Application at home in the private WIFI



Example 2
Application with cloud Amazon Alexa and SELVE in order to use also without private WIFI



Controls

The easy start into the world of SmartHome:

Control roller shutters and sun protection via Bluetooth®-app



App „commeo Timer“



commeo Timer BT



App control – also for retrofitting!

The overarching SmartHome system is too complex for your customer but you would like to control roller shutter and sun protection with the smartphone? Then, the commeo Timer BT is just the right thing.

- ▶ The smartphone or tablet computer will become the display of the time switch
- ▶ Intuitive setting and operation via Bluetooth®-app for iOS and android
- ▶ High receipt stability and data security

Typical ranges of application:

- ▶ Central control of up to 8 radio drives /receivers in your own apartment
- ▶ Smart control of sun protection of one floor or a room (e.g. living or dining room)
- ▶ Use as wired time switch with app control
- ▶ Individual radio control in new construction and retrofitting

commeo time and house automation

NEW
in catalogue

SELVE
Engineering in motion

Product illustration



Ref.

29 77 01

Product description

commeo Timer BT

radio timer for group/single control and up to 8 radio receivers, setting via Bluetooth® app, traffic white colour
commeo radio timer, that can be set and controlled by an easy to use, free of charge app via Bluetooth®. Via radio, up to 8 commeo radio receivers can be controlled together with the timers. Additionally wired group controls can be set with the commeo Control, ref. 29 77 30, due to the potential-free control output and the group and single control input.

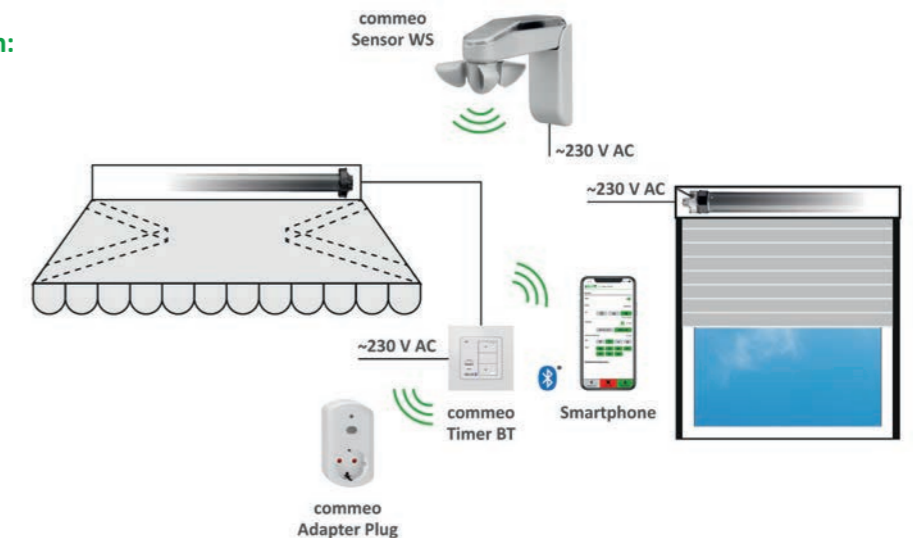
Technical data

Dimensions: 80 x 80 x 50 mm
Operating voltage: 230 V AC
Battery: 1 x CR2032
Protection class: IP20
Permitted ambient temp.: 0°C to +55°C
Assembly: flush mounted box Ø 60 x 40 mm
Frequency: 868 MHz

Product advantages:

- Operation via free of charge commeo Timer app: The smartphone/tablet is the display of the timer
- Control of a drive connected via cable and up to 8 additional commeo receivers
- Individual switching times for the total of 9 receivers can be set
- Manual operation is possible anytime by the buttons "UP", "STOP" and "DOWN"
- Switching off of the automatic commands by slide switch
- Assembly in 50 x 50 mm frames, suitable for many switch ranges

Functional description:




More information at:

www.selve.de/commeotimerbt



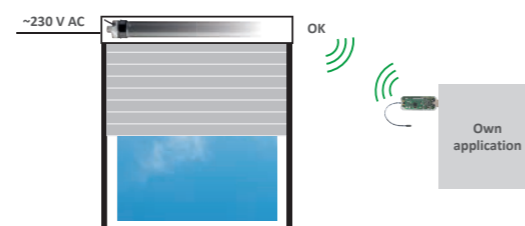
"commeo Timer" app is available free of charge in the app store or at Google Play.

Product illustration	Ref.	Product description
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	29 77 92	commeo USB-RF Gateway USB flash drive for commeo / iveo radio The commeo USB-RF Gateway is the connection between the SELVE radio technologies commeo, iveo (intrinsic) and the own individual application. As interface a free XML-based interface is provided. The integration of the unidirectional radio protocol iveo permits the operation of existing SELVE iveo radio installations, so that mixed installations of commeo (bidirectional) and iveo (unidirectional) can be built.
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Technical data Dimensions: 23 x 70 x 9 mm Operating voltage: 5 V DC (via USB) Battery: not necessary Protection class: IP20 Permitted ambient temp.: 0 to +40°C Assembly: USB 2.0 type A Frequency: 868 MHz	Product advantages: <ul style="list-style-type: none"> • Easy integration of SELVE radio systems commeo and iveo into other control systems via standardized XML interface commeo: <ul style="list-style-type: none"> • Administration, operation and feedback of up to 64 commeo receivers (RC-radio drives and commeo receivers, as e.g. commeo Receive) • Sensor data collection of up to 8 commeo sensors for further data progressing • Provision of up to 8 sensor simulations which enable to integrate external sensor through the application into the commeo radio system • Programming of up to 63 commeo transmitter channels (e.g. commeo Send 10) for the control of actions in the application iveo (intrinsic): <ul style="list-style-type: none"> • Administration and operation of up to 64 iveo transmitter channels for individual and group operation • Also compatible to all intrinsic receivers (since 2003) Software commeo USB-RF Gateway service / developing tool: <ul style="list-style-type: none"> • Provision of the free software "commeo USB-RF Gateway service/developing tool" at www.selve.de/en/downloads • Developing tool for the XML interface with logging • Service tool for commeo receivers and radio drives RC to set the end limits and for configuration • Display of feedback of commeo receivers • Possibility of firmware update of the USB-RF Gateway software
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Functional description:



Product illustration	Ref.	Product description
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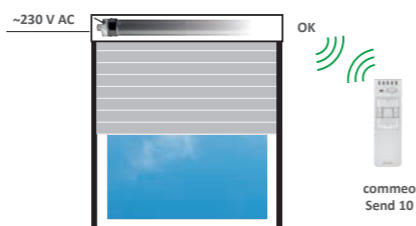
	29 77 24	commeo Multi Send radio hand-held transmitter, 20 channels with timers, traffic white colour Bidirectional 20 channel hand-held transmitter with 10 timers, wall fixing included. Feedback if a command has been executed correctly on large, illuminated display. Comfortable programming possible via configuration tool for PC and Mac (free of charge).
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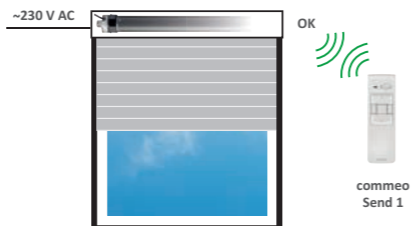
Technical data Dimensions: 42 x 169 x 20 mm Operating voltage: 3 V DC Battery: 2 x AAA Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: wall fixing Frequency: 868 MHz	Product advantages: <ul style="list-style-type: none"> • 20 channels, 9 groups and 1 central group, one timer per group • Free group formation • Free naming of receivers, channels and groups • Textual operation guidance by illuminated Dot-Matrix display • Optical feedback of the receiver • Setting of individual sensor parameters in the receivers • Extended sensor parameters as e.g. selection of the light sensor or setting of the twilight parameter • Indication of the sensor measured values in the display by settable sensor visualization • Astro program, individual program, holiday program • Summer / winter time adjustment can be deactivated • Manual operation is possible at any time • Configuration tool by USB connection for the computer or Mac at: www.selve.de/en/downloads
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Functional description:







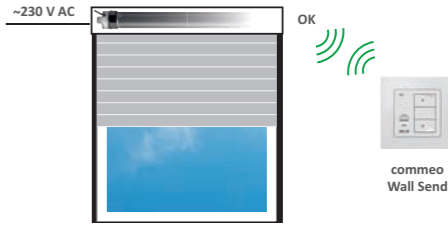
commeo hand-held transmitters and wall transmitters

Product illustration	Ref.	Product description
 	29 77 15	commeo Send 10 radio hand-held transmitter, 10 channel, traffic white colour Birectional 10 channel hand-held transmitter including wall fixing. The commeo Send 10 can control up to 10 individual receivers or groups. Each channel can be chosen separately or all 10 channels can be chosen together. With slide switch to easily switch off the automatic central commands for all groups.
Technical data Dimensions: 42 x 133 x 20 mm Operating voltage: 3 V DC Battery: 2 x AAA Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: wall fixing Frequency: 868 MHz	Product advantages	<ul style="list-style-type: none"> • Intuitive operation due to down, up and stop button • Feedback of the receiver is shown with DUO-LED • Easy reprogramming without group separation • AUTO/Man slide switch to switch off automatic commands • Use of standard batteries (AAA) • Two coloured versions in traffic white and black • Transmitters can be equipped with optional coloured clips
	Functional description:	




Product illustration	Ref.	Product description
 	29 77 13	commeo Send 1 radio hand-held transmitter, 1 channel, traffic white colour Birectional 1 channel hand-held transmitter including wall fixing. The commeo Send 1 can be programmed into several receivers and can control these as one group. With slide switch to easily switch off the automatic central commands.
Technical data Dimensions: 42 x 133 x 20 mm Operating voltage: 3 V DC Battery: 2 x AAA Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: wall fixing Frequency: 868 MHz	Product advantages	<ul style="list-style-type: none"> • Intuitive operation due to down, up and stop button • Feedback of the receiver is shown with DUO-LED • Easy reprogramming without group separation • AUTO/Man slide switch to switch off automatic commands • Use of standard batteries (AAA) • Two coloured versions in traffic white and black • Transmitters can be equipped with optional coloured clips
	Functional description:	



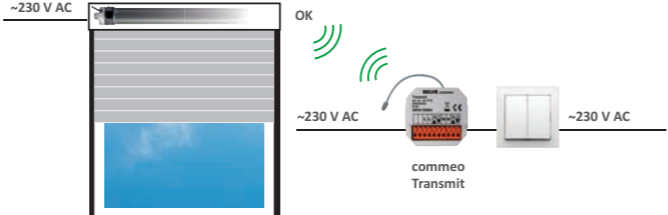
commeo hand-held transmitters and wall transmitters

Product illustration	Ref.	Product description
 	29 77 40 29 77 41 29 77 42 29 77 43 29 77 44 29 77 45 29 77 46 29 77 47	commeo clip set clips for commeo / iveo hand-held transmitters, blue clips for commeo / iveo hand-held transmitters, yellow clips for commeo / iveo hand-held transmitters, grey clips for commeo / iveo hand-held transmitters, green clips for commeo / iveo hand-held transmitters, red clips for commeo / iveo hand-held transmitters, black clips for commeo / iveo hand-held transmitters, white clips for commeo / iveo blue, yellow, grey, green, red
		With the use of the clips the commeo or iveo hand-held transmitters will be visually upgraded. In case of several hand-held transmitters in one house they are easier to distinguish. There are 5 clips in one set. Product advantages: <ul style="list-style-type: none"> • Better distinction of the transmitters in the house • Coloured amendment to the individual favourite colour • Easy change of the clip by unmounting of only one screw



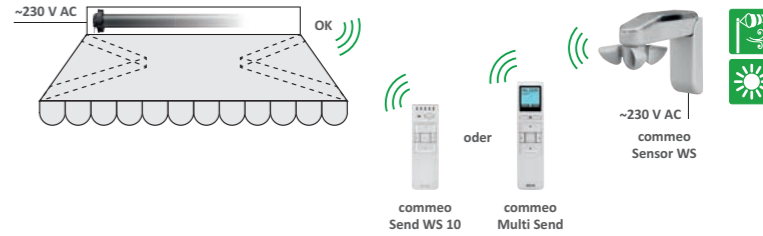
Product illustration	Ref.	Product description
 	29 77 08 29 77 04	commeo Wall Send radio wall transmitter, 1 channel, traffic white colour radio wall transmitter, 1 channel, pure white colour Bidirectional 1 channel wall mounted transmitter for the control of a radio receiver. The commeo Wall Send can be programmed into several receivers and can control these as one group. With slide switch to easily switch off the automatic central commands, for example of the commeo Multi Send.
Technical data Dimensions: 80 x 80 x 15 mm Operating voltage: 3 V DC Battery: 2 x AAAA Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: surface-mounted Frequency: 868 MHz	Product advantages:	<ul style="list-style-type: none"> • Intuitive operation due to down, up and stop button • Feedback of the receiver is shown with DUO-LED • AUTO/Man slide switch to switch off automatic commands • Easy front-panel mounting • Assembly in 50 x 50 mm frames, suitable for many switch ranges • No electrical connection necessary
	Functional description:	



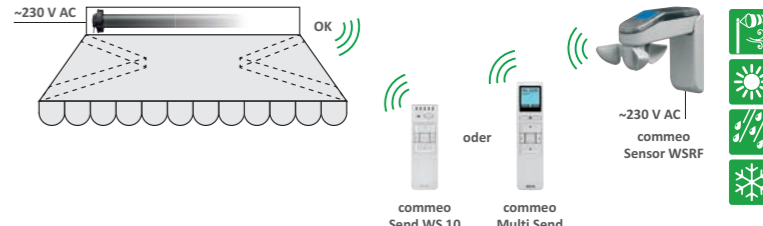
commeo hand-held transmitters and wall transmitters



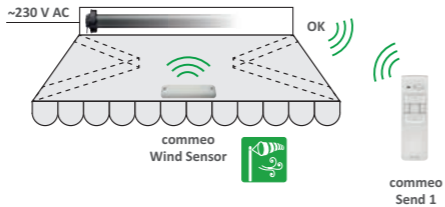
Product illustration	Ref.	Product description
	29 77 03	commeo Light Send radio transmitter with light sensor for window pane assembly The radio transmitter commeo Light Send moves the roller shutters in dependence of solar radiation and nightly twilight. The commeo Light Send will be fixed with a suction cup inside at the window pane. Vibrations of the window pane can be detected by a glass breakage sensor. A manual control of the roller shutter using the commeo Light Send is also possible.
		
Technical data Dimensions: 56 x 56 x 24 mm Operating voltage: 3 V DC Battery: CR 2450 Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: window pane inside Frequency: 868 MHz	Product advantages:	<ul style="list-style-type: none"> • Sun protection by automatic moving of the roller shutters to the set intermediate position or to the position of the commeo Light Send at sun radiation. • Optional indoor temperature depending delay for sun protection function • Automatic nightly closing of the roller shutters due to twilight function • Closing of the roller shutters in case of vibrations of the window pane by glass breakage sensor • Manual operation and switching off of the commeo Light Send is possible at the sensor
Functional description:		



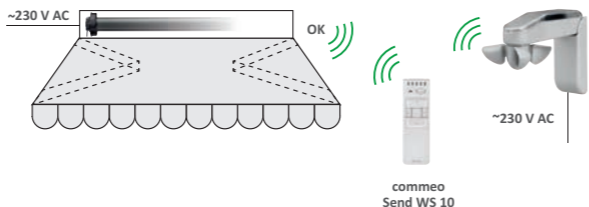
Product illustration	Ref.	Product description
	29 77 81	commeo Transmit radio transmitter for wired controls Using the commeo Transmit, wired devices like switches, push buttons or building controls can comfortably be integrated into commeo radio solutions. For central and group controls the commeo Transmit can be programmed in up to 32 receivers.
		
Technical data Dimensions: 52 x 49 x 29 mm Operating voltage: 230 V AC Battery: not necessary Protection class: IP20 Permitted ambient temp.: -25°C to +55°C Assembly: flush mounted box Ø 60 x 40 mm Frequency: 868 MHz	Product advantages:	<ul style="list-style-type: none"> • Switch input (dead-man mode) for switches and timers • Push button input for push buttons and controls like e.g. i-Control • Via push button input intermediate positions that are saved in the receiver are available • Programmable in up to 32 commeo receivers • Low standby usage with < 0,5 W
Functional description:		




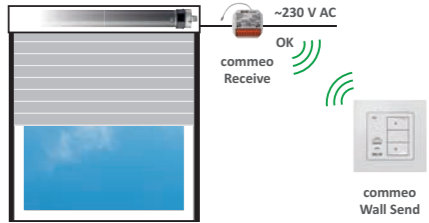
commeo sensors




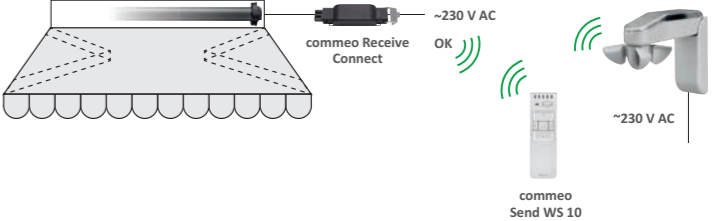
Product illustration	Ref.	Product description
	29 77 51	commeo Sensor WS radio sun protection control with wind and sun sensor The commeo Sensor WS controls the sun protection in dependence with the solar radiation. The sun protection installation will additionally be protected against wind damage. It can be programmed into every commeo receiver. The threshold value adjustment of the receivers can conveniently be made by using the commeo Multi Send or commeo Send WS 10.
		
Technical data Dimensions: 140 x 160 x 240 mm Operating voltage: 230 V AC Battery: not necessary Protection class: IP35 Permitted ambient temp.: -25°C to +55°C Assembly: surface-mounted Frequency: 868 MHz	Product advantages:	<ul style="list-style-type: none"> • Automatic moving of the awning to protect against heat and sun in dependence on the adjusted brightness level • Protection of the awning against wind damages • Surveillance of the transmission path to the receivers • Comfortable setting of the threshold values by using the transmitters commeo Multi Send or commeo Send WS 10 • Low standby power consumption with < 0,5 W
Functional description:		



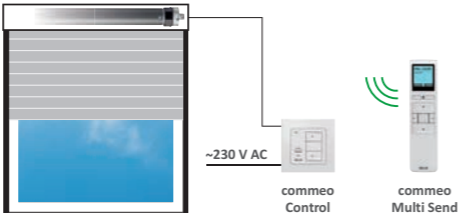
Product illustration	Ref.	Product description
	29 77 53	commeo Sensor WSRF NEW in catalogue radio sun protection control with wind, sun, rain and frost sensor The commeo Sensor WSRF controls the sun protection in dependence with the solar radiation. The sun protection installation will additionally be protected against wind, rain and frost damage. It can be programmed into every commeo receiver. The threshold value adjustment of the receivers can conveniently be made by using the commeo Multi Send or commeo Send WS 10.
		
Technical data Dimensions: 140 x 160 x 240 mm Operating voltage: 230 V AC Battery: not necessary Protection class: IP35 Permitted ambient temp.: -25°C to +55°C Assembly: surface-mounted Frequency: 868 MHz	Product advantages:	<ul style="list-style-type: none"> • Automatic moving of the awning to protect against heat and sun in dependence on the adjusted brightness level • Protection of the awning against wind, rain and frost damages • Surveillance of the transmission path to the receivers • Comfortable setting of the threshold values by using the transmitters commeo Multi Send or commeo Send WS 10 • Low standby power consumption with < 0,5 W
Functional description:		





Product illustration	Ref.	Product description
 	29 77 54	commeo Wind Sensor wind Sensor for folding arm awnings, grey colour
	29 77 55	wind Sensor for folding arm awnings, traffic white colour
	29 77 56	wind Sensor for folding arm awnings, black colour
<p>The commeo Wind Sensor was especially developed for folding arm awnings. The sensor measures the vibrations through wind and the inclination through a water bag on the front profile of the awning and retracts the awning automatically for safety reasons.</p>		
<p>NEW in catalogue</p> <p>NEW in catalogue</p>		
<p>Technical data</p> <p>Dimensions: 38 x 167 x 27 mm Operating voltage: 3 V DC Battery: 2 x AAA Protection class: IP54 Permitted ambient temp.: -20°C to +55°C Assembly: inside of front profile Frequency: 868 MHz</p>	<p>Product advantages:</p> <ul style="list-style-type: none"> • Protection of the folding arm awning against wind damage • Protection of the folding arm awning against damage through forming of water bags at rain • Fast and easy assembling to the front profile of the folding arm awning • Easy setting of threshold values on the Wind Sensor 	<p>Functional description:</p> 

Product illustration	Ref.	Product description
 	29 77 21	commeo Send WS 10 radio hand-held transmitter, 10 channel for sun protection installations, traffic white colour
	29 77 22	radio hand-held transmitter, 10 channel for sun protection installations, black colour
<p>With 10 transmitting channels and one central channel. Additionally the threshold values for sun and wind can be set in the receiver via this transmitter. For this purpose the transmitter has two additional buttons on the back side. A commeo sensor WS/WSRF has to be programmed into the receiver.</p>		
<p>NEW in catalogue</p>		
<p>Technical data</p> <p>Dimensions: 43 x 133 x 20 mm Operating voltage: 3 V DC Battery: 2 x AAA Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: surface-mounted Frequency: 868 MHz</p>	<p>Product advantages:</p> <ul style="list-style-type: none"> • Comfortable setting of threshold values for sun and wind • Feedback of the receiver is shown with DUO-LED • Easy reprogramming without group separation • AUTO/Man slide switch to switch off automatic commands • Transmitters can be equipped with optional coloured clips 	<p>Functional description:</p> 

Product illustration	Ref.	Product description
  	29 77 71	commeo Receive universal radio receiver for many applications
	29 00 60	surface-mounted casing L x W x H = 80 x 80 x 52 mm Note: Empty housing without electronic component
<p>The commeo Receive controls wired drives, either roller shutters, awnings or blinds. Alternatively other electrical consumers can also be controlled by the commeo Receive. The commeo Receive has extension inputs to connect a switch or push button.</p>		
<p>Technical data</p> <p>Dimensions: 49 x 47 x 29 mm Operating voltage: 230 V AC Battery: not necessary Protection class: IP20 Permitted ambient temp.: -25°C to +55°C Assembly: flush mounted box Ø 60 mm x 40 mm Frequency: 868 MHz</p>	<p>Product advantages:</p> <ul style="list-style-type: none"> • Easy, retrospective programming – it is also possible when the executing device is already installed • Versatile use by adjustable receiver application • Automatic direction assignment after setting the runtime • Intermediate position can be reached from every position • Installation in the flush-mounted box or damp-proof box • Extensions for the local or central operation • Low standby power consumption with < 0,5 W 	<p>Functional description:</p> 

Product illustration	Ref.	Product description
  	29 77 74	commeo Receive Connect radio receiver with Hirschmann plug / coupling
	29 00 61	surface-mounted casing L x B x H = 328 x 49 x 49 mm
<p>The commeo Receive Connect with Hirschmann connection was developed for the use in blind and awning installations. The connection of the drive and the power supply can easily be made by a plug connection with the Hirschmann plug / coupling (STAS 3 / STAK 3)</p>		
<p>NEW in catalogue</p>		
<p>Technical data</p> <p>Dimensions: 42 x 169 x 28 mm Operating voltage: 230 V AC Battery: not necessary Protection class: IP54 Permitted ambient temp.: -25°C to +55°C Assembly: on the headrail Frequency: 868 MHz</p>	<p>Product advantages:</p> <ul style="list-style-type: none"> • Easy, retrospective programming – it is also possible when the executing device is already installed • Versatile use by adjustable receiver application • Easy assembly by Hirschmann connection • Automatic direction assignment after setting the runtime • Intermediate position can be reached from every position • Low standby power consumption with < 0,5 W 	<p>Functional description:</p> 

Product illustration	Ref.	Product description
 	29 77 30	commeo Control NEW in catalogue radio group/single control, traffic white colour With the commeo Control wired drives can easily be upgraded with commeo radio. That is why the commeo Control suits very well for the modernisation and retrofiting. Additionally wired group controls can be set due to the potential-free control output and the group and single control input. Like this the commeo Control can be interconnected with the commeo Timer BT, ref. 29 77 01.
Technical data Dimensions: 80 x 80 x 50 mm Operating voltage: 230 V AC Battery: not necessary Protection class: IP20 Permitted ambient temp.: 0 to +55°C Assembly: flush mounted box Ø 60 x 40 mm Frequency: 868 MHz	Product advantages: <ul style="list-style-type: none"> • Easy assembly of a radio and/or group control with additional wired controls • Manual operation is possible anytime by the buttons "UP", "STOP" and "DOWN" • Switching off of the automatic commands by slide switch • Assembly in 50 x 50 mm frames, suitable for many switch ranges 	
	Functional description: 	
















Product illustration	Ref.	Product description
  	29 77 77	commeo Adapter Plug radio receiver for Schuko socket The radio socket adapter commeo Adapter Plug is designed to switch electrical devices with mains plugs. It can be controlled by every commeo or iveo transmitter. The manual switching on will be made by the UP button and the switching off by the STOP or DOWN button of a programmed transmitter. The commeo Adapter Plug can be automatically switched on and off by programmed transmitters with timers, e.g. commeo Multi Send.
Technical data Dimensions: 59 x 107 x 43 mm Operating voltage: 230 V AC Battery: not necessary Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: shockproof socket Frequency: 868 MHz	Product advantages: <ul style="list-style-type: none"> • Easy installation and retrofitting into an existing socket. • Button for the local operation • Manual and automatic switching on and off of an electrical device • Compatible with commeo and iveo radio transmitters • Low standby power consumption with < 0,5 W 	
	Functional description: 	

Product illustration	Ref.	Product description
	29 86 59	Rain sensor for commeo Timer BT und commeo Control potential-free output, changeover contact, 6A / 250V AC
 	29 50 07 29 50 08	Decoupling relay for commeo Timer BT, commeo Receive and commeo Control For the control of two mechanical drives with a roller shutter switch or a time switch. A second roller shutter button can be connected optionally; no single operation of the two motors is possible. When using several cut off relays there is the possibility of a central operation of several drives with additional single operation. With lose ground terminal. Operating voltage: 230 V AC / 50-60 Hz Current consumption: max. 5 A / 250 V AC Dimensions: 50 x 50 x 21 mm like article number 295007, but in plastic housing IP 44 (80x80 mm)
	29 00 60	Junction box IP 66 for commeo Transmit und commeo Receive surface-mounted casing L x W x H = 80 x 80 x 52 mm Note: Empty housing without electronic component
	29 00 61	Surface-mounted casing for commeo Receive Connect surface-mounted casing L x B x H = 328 x 49 x 49 mm



iveo UNIDIRECTIONAL RADIO

So many years in the market but not old-fashioned at all: with fully developed technology and an absolutely complete product range we are presenting our unidirectional iveo and intronic radio control products. The SELVE radio drives („RC”) as well as the receivers commeo Receive, commeo Receive Connect and Commeo Adapter Plug can receive commeo as well as iveo / intronic radio commands. This downward compatibility of the drives and receivers is unique on the market and opens up many possibilities.

<p>SELVE Home Server 2 Home automation via app Ref. 29 77 90</p>  <p>▶ page 116</p>	<p>iveo Multi Send Hand-held transmitter with 10 channels and 10 timers Ref. 29 87 24/29 87 25</p>  <p>▶ page 117</p>	<p>i-R Timer Plus Wall transmitter with timer Ref. 29 87 00</p>  <p>▶ page 117</p>
<p>iveo Send 10 Hand-held transmitter with 10 / 5 channels Ref. 29 87 15</p>  <p>▶ page 118</p>	<p>iveo Send 1 Hand-held transmitter with 1 channel Ref. 29 87 13</p>  <p>▶ page 118</p>	<p>iveo Wall Send Wall transmitter with 1 channel Ref. 29 87 04/ 29 87 08</p>  <p>▶ page 120</p>
<p>iveo KeySend Key ring transmitter with 1 channel Ref. 29 87 19</p>  <p>▶ page 120</p>	<p>i-R Light Sensor Light sensor Ref. 29 87 03</p>  <p>▶ page 121</p>	<p>i-R Transmit Transmitter for switches (flush-mounted) Ref. 29 77 81</p>  <p>▶ page 121</p>
<p>commeo Receive Radio receiver (flush-mounted) Ref. 29 77 71</p>  <p>▶ page 122</p>	<p>commeo Receive Connect Radio receiver Hirschmann plug Ref. 29 77 74</p>  <p>▶ page 122</p>	<p>i-R Receive Compact Radio receiver for roller shutter boxes Ref. 29 87 72</p>  <p>▶ page 123</p>
<p>i-R Control Radio receiver with individual control Ref. 29 87 30</p>  <p>▶ page 123</p>	<p>commeo Adapter Plug Radio receiver socket Ref. 29 77 77</p>  <p>▶ page 124</p>	<p>i-R Heat Connect Radio receiver for high switching capacity Ref. 29 77 75</p>  <p>▶ page 124</p>

Accessories for iveo/i-R controls can be found on page 125.

Product illustration **Ref.** **Product description**



29 77 97

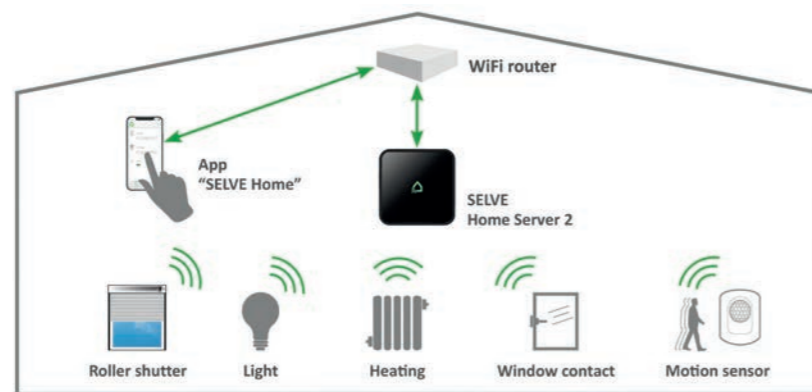
SELVE Home Server 2
SmartHome solution for commeo, iveo and intronic with scenarios and task manager
With the SELVE Home Server 2 the SELVE radio systems commeo, iveo and intronic are made controllable conveniently and intuitively via app for smartphones and tablet computer. Also selected devices of Homematic IP can be integrated so that also heating, light and other consumers can be controlled with only one app.

Technical data
Dimensions: 90 x 90 x 21 mm
Operating voltage: 5 V DC via plug-in power supply
Battery: not necessary
Protection class: IP20
Permitted ambient temp.: 0°C to +40°C
Assembly: Floor-mounted appliance with power supply
Frequency: 868 MHz

- Easy and intuitive control of SELVE radio systems via a free of charge app "SELVE Home" for iOS and android
- Easy putting into service of the SELVE Home Server via the app "SELVE Home" or the putting into service app "SELVE Home Install"
- Creation of individual groups and scenarios
- Creation of time and sensor controlled actions ("tasks")
- Control via internet by the SELVE cloud
- Commands via voice control Amazon Alexa via cloud and "SELVE Home"- connection possible
- For the control in your own network there is no internet necessary
- Comfortable setting of threshold values for sensors that are programmed in commeo receivers
- Programmable in up to 64 commeo receivers and 32 iveo /intronic receivers
- Control of selected Homematic IP devices
- Lower standby power consumption with 1,3 W

Functional description:

Example 1
Application at home in the private WIFI



Example 2
Application with cloud Amazon Alexa and SELVE in order to use also without private WIFI



Product illustration **Ref.** **Product description**



29 87 24

iveo Multi Send
radio hand-held transmitter, 10-channel with each one timer per channel, traffic white
The iveo Multi Send has 10 channels with each one timer and controls the roller shutters and sun protections at fixed times or at sunset time. Several receivers can be programmed per channel so that these can execute the motion commands at the same time as a group.

Technical data
Dimensions: 42 x 169 x 20 mm
Operating voltage: 3V DC
Battery: 2 x AAA
Protection class: IP20
Permitted ambient temp.: -10°C to +55°C
Assembly: wall fixing
Frequency: 868.3 MHz

Product advantages:

- Comfortable operation and easy setting by preprogramming
- Automatic closing of the roller shutters at sunset
- Automatic change of summer and winter time
- Pleasant shadowing or ventilation by free selectable intermediate positions, also movable by timer
- Manual operation is possible at any time
- Easy switching on and switching off of the automatic commands

Functional description:



Product illustration **Ref.** **Product description**



29 87 00

29 86 15

i-R Timer Plus
radio timer with astro, sunlight and twilight function, connection possibility for i-Light sensor
light sensor with 2 m supply lead
Several receivers can be programmed into this 1 channel radio timer in wall transmitter design, so that these execute the motion commands at the same time as a group. The roller shutters can be moved in the mornings and in the evenings to the sunrise and sunset times as well as to fixed times.

Technical data
Dimensions: 86 x 86 x 27 mm
Operating voltage: 3V DC
Battery: 2 x AAA
Protection class: IP20
Permitted ambient temp.: 0°C to +55°C
Assembly: surface-mounted
Frequency: 868.3 MHz




Product advantages:




- Comfortable operation and easy setting by preprogramming and textual operational guidance
- Sun protection function with optionally connectable light sensor
- Easy switching on and switching off of the automatic commands by a slide switch
- Shadowing or ventilation by free selectable intermediate positions
- Additional, adjustable switching time, up to 4 switching times per day

Functional description:





iveo / i-R hand-held transmitters and wall transmitters




Product illustration	Ref.	Product description
 	29 87 15	iveo Send 10 radio hand-held transmitter, 10-channel, traffic white colour Unidirectional 10 channel hand-held transmitter with wall fixing. The iveo Send 10 can control up to 10 groups individually, group 1-5, group 6-10 or all 10 groups at the same time. With slide switch to easily switch off the automatic central commands for all groups.
Technical data Dimensions: 42 x 133 x 20 mm Operating voltage: 3V DC Battery: 2 x AAA Protection class: IP20 Permitted ambient temp.: -10°C to +55°C Assembly: wall fixing Frequency: 868.3 MHz	Product advantages: <ul style="list-style-type: none"> • 10 channels, 2 groups and one central channel • Comfortable operation as it is transportable • Adjustable intermediate position in the receivers • Trouble-free control due to digital radio technology • Very easy operation, one button for each function • Easy switching on and switching off of the automatic commands by slide switch Functional description: 	




Product illustration	Ref.	Product description
 	29 87 13	iveo Send 1 radio hand-held transmitter, 1-channel, traffic white colour Unidirectional 1 channel hand-held transmitter with wall fixing. The iveo Send 1 can be programmed into several receivers so that a group of receivers can be controlled with the transmitter. With slide switch to easily switch off the automatic central commands.
Technical data Dimensions: 42 x 133 x 20 mm Operating voltage: 3V DC Battery: 2 x AAA Protection class: IP20 Permitted ambient temp.: -10°C to +55°C Assembly: wall fixing Frequency: 868.3 MHz	Product advantages: <ul style="list-style-type: none"> • 1 channel for individual or group operation • Comfortable operation as it is transportable • Adjustable intermediate position in the receivers • Trouble-free control due to digital radio technology • Very easy operation, one button for each function • Easy switching on and switching off of the automatic commands by slide switch Functional description: 	

iveo / i-R hand-held transmitters and wall transmitters




Product illustration	Ref.	Product description
 	29 77 40 29 77 41 29 77 42 29 77 43 29 77 44 29 77 45 29 77 46 29 77 47	iveo clip set clips for commeo / iveo hand-held transmitters, blue clips for commeo / iveo hand-held transmitters, yellow clips for commeo / iveo hand-held transmitters, grey clips for commeo / iveo hand-held transmitters, green clips for commeo / iveo hand-held transmitters, red clips for commeo / iveo hand-held transmitters, black clips for commeo / iveo hand-held transmitters, white clips for commeo / iveo blue, yellow, grey, green, red
		With the use of the clips the commeo or iveo hand-held transmitters will be visually upgraded. In case of several hand-held transmitters in one house they are easier to distinguish. There are 5 clips in one set. Product advantages: <ul style="list-style-type: none"> • Better distinction of the transmitters in the house • Coloured amendment to the individual favourite colour • Easy change of the clip by unmounting of only one screw



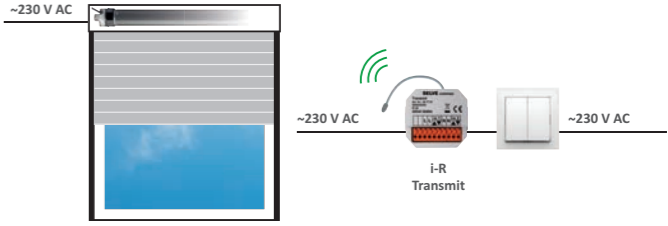
iveo / i-R hand-held transmitters and wall transmitters



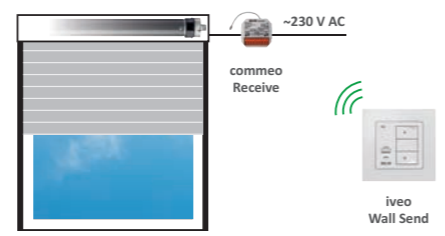
Product illustration	Ref.	Product description
	29 87 08 29 87 04	iveo Wall Send radio wall transmitter, 1 channel, traffic white colour radio wall transmitter, 1 channel, pure white colour Unidirectional 1 channel Wall Send with SELVE single frame. Due to the dimensions of 50 x 50 mm it can be integrated into many frame product ranges. The automatic control commands can be easily deactivated using the sliding switch. The radio Wall Send can be programmed into several receivers so that the iveo Wall Send controls one group.
		
Technical data Dimensions: 80 x 80 x 15 mm Operating voltage: 3 V DC Battery: 2 x AAAA Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: surface-mounted Frequency: 868.3 MHz	Product advantages: • Feedback of the receiver is shown with DUO-LED • AUTO/Man slide switch to switch off automatic commands • Easy front-panel mounting • Assembly in 50 x 50 mm frames, suitable for many switch ranges • No electrical connection necessary	Functional description: 



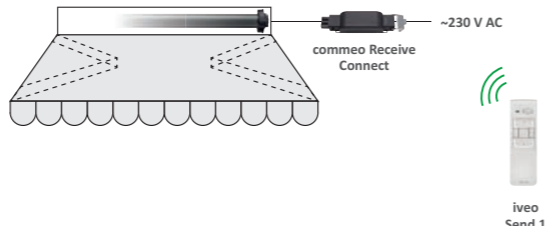
Product illustration	Ref.	Product description
	29 87 19	iveo Key Send Key-radio-hand-held transmitter, 1-channel, black Unidirectional 1 channel hand-held transmitter with key ring. The iveo Key Send can be programmed into several receivers so that a group of receivers can be controlled by the transmitter.
		
Technical data Dimensions: 32 x 64 x 15 mm Operating voltage: 9V DC Battery: 1 x A32 Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: hand device Frequency: 868.3 MHz	Product advantages: • Slender design for the jacket pocket • Key ring for the secure stowage with the keys • Transmitting-LED to display when a signal is transmitted	Functional description: 



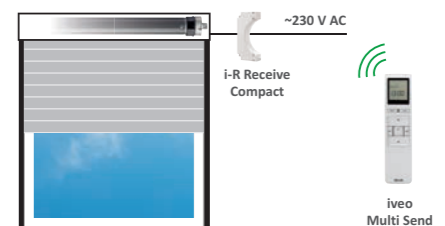
iveo / i-R hand-held transmitters and wall transmitters



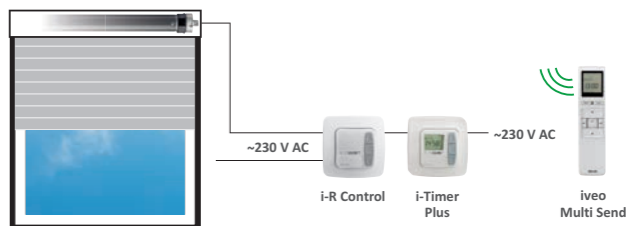
Product illustration	Ref.	Product description
	29 87 03	i-R Light Sensor radio light sensor The unidirectional radio Light Sensor moves the roller shutters in dependence of solar radiation and nightly twilight. The i-R Light Sensor will be fixed with a suction cup inside at the window pane. Vibrations of the window pane is detected by an integrated glass breakage sensor. A manual control of the roller shutter using the i-R Light Sensor is also possible.
		
Technical data Dimensions: 47 x 47 x 21 mm Operating voltage: 3V DC Battery: 1 x CR2032 Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: with suction cup Frequency: 868.3 MHz	Product advantages: • Sun protection by automatic moving of the roller shutters to the set intermediate position or to the position of the i-R Light Sensor at sun radiation • Automatic nightly closing of the roller shutters due to twilight function • Closing of the roller shutter at vibrations of the window pane by glass breakage sensor • Manual operation and switching off the i-R Light Sensor is possible at the sensor • Trouble-free control due to digital radio technology	Functional description: 




Product illustration	Ref.	Product description
	29 87 81 29 00 60	i-R Transmit radio transmitter for mains-connected control systems surface-mounted casing L x W x H = 80 x 80 x 52 mm Note: Empty housing without electronic component Using the i-R Transmit, wired devices like the i-Switch Plus (ref. 29 86 10) and the i-Switch (ref. 29 86 12), timers or roller shutter switches of any switch product range can comfortably be integrated into radio solutions. For central and group controls the i-R Transmit can also be programmed into several receivers.
		
Technical data Dimensions: 49 x 47 x 26 mm Operating voltage: 230V AC Battery: not necessary Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: flush mounted box Ø 60 mm x 40 mm Frequency: 868.3 MHz	Product advantages: • Switch input (dead-man mode) for switches and timers • Push button input for push buttons and controls like e.g. i-Control • Easy enhancement of existing controls • Trouble-free control due to digital radio technology • Invisible due to the installation on a flush-mounted box	Functional description: 



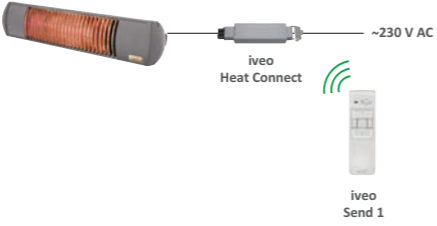
Product illustration	Ref.	Product description
 	29 77 71 29 00 60	commeo Receive (iveo-compatible) universal radio receiver for many applications surface-mounted casing L x W x H = 80 x 80 x 52 mm Note: Empty housing without electronic component The commeo Receive controls wired drives, either roller shutters, awnings or blinds. Alternatively other electrical consumers can also be controlled by the commeo Receive. The commeo Receive has extension inputs to connect a switch or push button. Also compatible to iveo / intronic radio products.
Technical data Dimensions: 49 x 47 x 29 mm Operating voltage: 230 V AC Battery: not necessary Protection class: IP20 Permitted ambient temp.: -25°C to +55°C Assembly: flush mounted box Ø 60 mm x 40 mm Frequency: 868 MHz	Product advantages: <ul style="list-style-type: none"> • Easy, retrospective programming – it is also possible when the executing device is already installed • Versatile use by adjustable receiver application • Automatic direction assignment after setting the runtime • Intermediate position can be reached from every position • Installation in the flush-mounted box or damp-proof box • Extensions for the local or central operation • Low standby power consumption with < 0,5 W 	Functional description: 

Product illustration	Ref.	Product description
 	29 77 74 29 00 61	commeo Receive Connect (iveo compatible) radio receiver with Hirschmann plug / coupling surface-mounted casing L x B x H = 328 x 49 x 49 mm NEW in catalogue The commeo Receive Connect with Hirschmann connection was developed for the use in blind and awning installations. The connection of the drive and the power supply can easily be made by the plug connection with the Hirschmann plug / coupling (STAS 3 / STAK 3).
Technical data Dimensions: 42 x 169 x 28 mm Operating voltage: 230 V AC Battery: not necessary Protection class: IP54 Permitted ambient temp.: -25°C to +55°C Assembly: on the headrail Frequency: 868 MHz	Product advantages: <ul style="list-style-type: none"> • Easy, retrospective programming – it is also possible when the executing device is already installed • Versatile use by adjustable receiver application • Easy assembly by Hirschmann connection • Automatic direction assignment after setting the runtime • Intermediate position can be reached from every position • Low standby power consumption with < 0,5 W 	Functional description: 

Product illustration	Ref.	Product description
 	29 87 72	i-R Receive Compact radio receiver for mains-connected drives, with 3 m supply lead The i-R Receive Compact can be controlled from every transmitter of the iveo/intronic product range. It is possible to program up to 16 transmitters. The drive will be connected to the i-R Receive Compact by using the supply lead. The receiver is especially suitable for the assembly in roller shutter boxes.
Technical data Dimensions: 50 x 106 x 20 mm Operating voltage: 230V AC Battery: not necessary Protection class: IP44 Permitted ambient temp.: -25°C to +55°C Assembly: surface-mounted Frequency: 868.3 MHz	Product advantages <ul style="list-style-type: none"> • Easy enhancement of existing controls • Trouble-free control due to digital radio technology • Easy installation in the roller shutter box • Settable intermediate position 	Functional description: 

Product illustration	Ref.	Product description
 	29 87 30	i-R Control radio individual control The i-R Control is a mains connected individual control and has additionally a radio receiver. Via the radio receiver the i-R Control can be controlled by iveo transmitters. With the additional group and single control input the i-R Control can be wired together with other mains connected devices like i-Timer Plus and i-Control into groups.
Technical data Dimensions: 86 x 86 x 55 mm Operating voltage: 230V AC Battery: not necessary Protection class: IP20 Permitted ambient temp.: -10°C to +55°C Assembly: flush-mounted box Ø 60 mm x 40 mm Frequency: 868.3 MHz	Product advantages: <ul style="list-style-type: none"> • Manual operation is possible at any time • Very easy operation due to buttons "Up", "Stop" and "Down" and slide switch for automatic moving commands • Pleasant shadowing or ventilation because of free selectable intermediate positions • Trouble-free control due to digital radio technology 	Functional description: 

Product illustration	Ref.	Product description
 	29 77 77	<p>commeo Adapter Plug (iveo-compatible) radio receiver for Schuko socket</p> <p>The radio socket adapter commeo Adapter Plug is designed to switch electrical devices with mains plugs. It can be controlled by every commeo or iveo transmitter. The manual switching on will be made by the UP button and the switching off by the STOP or DOWN-button of a programmed transmitter. The commeo Adapter Plug can be switched on and off by programmed transmitters.</p>
<p>Technical data</p> <p>Dimensions: 59 x 107 x 43 mm</p> <p>Operating voltage: 230 V AC</p> <p>Battery: not necessary</p> <p>Protection class: IP20</p> <p>Permitted ambient temp.: 0°C to +55°C</p> <p>Assembly: shockproof socket</p> <p>Frequency: 868 MHz</p>	<p>Product advantages:</p> <ul style="list-style-type: none"> • Easy installation and retrofitting into an existing socket. • Button for the local operation • Manual and automatic switching on and off of an electrical device • Compatible with commeo and iveo radio transmitters • Low standby usage with < 0,5 W <p>Functional description:</p> 	

Product illustration	Ref.	Product description
 	29 87 75	<p>iveo Heat Connect radio receiver for high switching capacity</p> <p>The receiver iveo Heat Connect can be used to switch on and to switch off electrical heatings and light systems with a power supply cord of up to 2000 W. The connection of the device and the power supply can be made by a Hirschmann plug connection.</p>
<p>Technical data</p> <p>Dimensions: 35 x 150 x 25 mm</p> <p>Operating voltage: 230V AC</p> <p>Battery: not necessary</p> <p>Protection class: IP54</p> <p>Permitted ambient temp.: -30°C to +70°C</p> <p>Assembly: to be protected against rain</p> <p>Frequency: 868.3 MHz</p>	<p>Product advantages</p> <ul style="list-style-type: none"> • Versatile use due to high switching capacity • Easy assembly because of Hirschmann connection • Automatic safety shut-down after 4 hours • Easy, subsequent programming <p>Functional description:</p> 	

Product illustration	Ref.	Product description
	29 50 07	<p>Decoupling relay for commeo Receive and i-R Control</p> <p>For the control of two mechanical drives with a roller shutter switch or a time switch. A second roller shutter button can be connected optionally; no single operation of the two motors is possible. When using several cut off relays there is the possibility of a central operation of several drives with additional single operation. With lose ground terminal.</p> <p>Operating voltage: 230 V AC / 50-60 Hz Current consumption: max. 5 A / 250 V AC Dimensions: 50 x 50 x 21 mm</p>
	29 50 08	<p>like article number 295007, but in plastic housing IP 44 (80x80 mm)</p>
	29 00 60	<p>Junction box IP 66 for i-R Transmit and commeo Receive surface-mounted casing L x W x H = 80 x 80 x 52 mm Note: Empty housing without electronic component</p>
	29 00 61	<p>Surface-mounted casing for commeo Receive Connect surface-mounted casing L x B x H = 328 x 49 x 49 mm</p>

WIRED CONTROLS


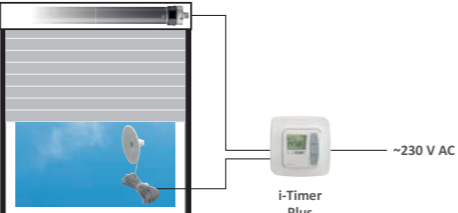
Always on the right track: The diverse control program from SELVE is rounded off by various wired control products. Next to group – and single controls and sun protection controls from the intronic program the well-known and the since years proved time switches Smarttimer Plus and Selvetimer Plus can be found here. This is completed by the cut off relays as well as various switches and buttons.


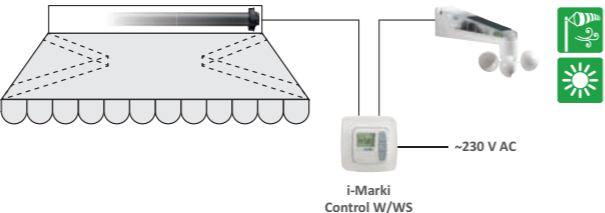
i-Timer Plus Timer for wall fixing Ref. 29 86 00  ▶ page 128	i-Marki Control W/WS Control with wind/sun sensor Ref. 29 86 51  ▶ page 129	i-Switch Plus Push button/switch Ref. 29 86 10  ▶ page 130
i-Switch Push button/switch Ref. 29 86 12  ▶ page 130	i-Switch AP Push button/switch surface-mounted Ref. 29 86 11  ▶ page 131	Zubehör intronic i-Light Sensor Light Sensor, rain sensor, surface-mounted housing, waterproof box, adapter and multiple frames ▶ page 132/133
Selvetimer Plus Design timer Ref. 29 70 00  ▶ page 134	Smarttimer Plus Timer Ref. 29 65 00  ▶ page 135	Rollmat Timer Ref. 29 60 05  ▶ page 136
Decoupling relay Ref. 29 50 07/29 50 08  ▶ page 137	Switches/Push buttons Rocker switch/push button, pole-changing toggle switch, key switch/push button, push button ▶ page 138/139	


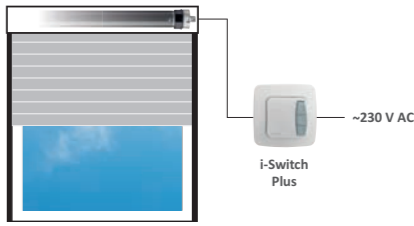
OTHER CONTROL COMPONENTS


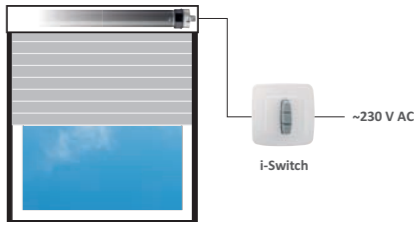
Special controls for potential-free devices as well as radio controls for rollerdoors are completing the SELVE product range.

Decentralised controller DZ 94 Decentral individual control device flush-mounted Ref. 29 81 00  ▶ page 140	Decoupling relay control M4 EGZ Switching device for 4 drives Ref. 29 91 55  ▶ page 141	Radio control for doors Radio controls and hand-held transmitters ▶ page 141
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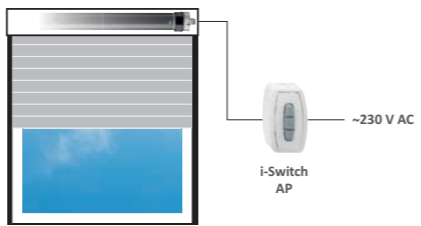
Product illustration	Ref.	Product description
	29 86 00 29 86 15	i-Timer Plus timer with astro, sunlight and twilight function, connection possibility for i-Light Sensor light sensor with 2 m supply lead Wired timer for the individual or group control with potential-free switch output. The roller shutters can be moved in the mornings and in the evenings at sunrise and sunset as well as to fixed switching times.
Technical data Dimensions: 86 x 86 x 55 mm Operating voltage: 230V AC / 50 - 60 Hz Battery: 1 x CR 2032 Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: flush-mounted box Ø 60 x 40 mm Frequency: main-connected	Product advantages:	
	<ul style="list-style-type: none"> • Status check shown on user-friendly display • Easy setting due to pre-programming and textual operator guidance • Automatic open and close at sunrise and sunset • The automatic commands can easily be deactivated using the sliding switch • Pleasant shadowing or ventilation because of free selectable intermediate positions • Security due to holiday function • No reprogramming after power failure • Optional sun protection function when connected to the i-Light Sensor 	
	Functional description:	

Product illustration	Ref.	Product description
	29 86 51	i-Marki Control W/WS awning control with wind and sun sensor Wired awning control for individual or group control with potential-free switching output. The threshold values for sun and wind can easily be set via the display menu. Additionally the awning can be moved by switching time.
Technical data Dimensions: 75 x 290 x 150 mm Operating voltage: 230V AC / 50 - 60 Hz Battery: 1 x CR 2032 Protection class: IP20 / IP33 Permitted ambient temp.: 0°C to 55°C / -25°C to 55°C Assembly: flush-mounted box Ø 60 x 40 mm Frequency: main-connected	Product advantages:	
	<ul style="list-style-type: none"> • Status check shown on user-friendly display • Easy setting due to pre-programming and textual operator guidance • Protection for household contents thanks to sun protection function • Protection of awning against wind damage • Comfortable control thanks to fixed settable times • The automatic commands can easily be deactivated using the sliding switch • Pleasant shadowing because of free selectable intermediate positions • No reprogramming after power failure 	
	Functional description:	

Product illustration	Ref.	Product description
	29 86 10 29 86 19	i-Switch Plus blind push button / switch 10 claw sets in one bag Flush-mounted blind switch / push-button in intrinsic design. The clear 3-button structure with stop button enables an easy operation. The i-Switch Plus can be combined with other switch program ranges by using adapter frames.
Technical data Dimensions: 86 x 86 x 53 mm Operating voltage: not necessary Battery: not necessary Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: flush-mounted box Ø 60 x 40 mm Frequency: main-connected	Product advantages:	
	<ul style="list-style-type: none"> • Operating buttons "UP", "STOP" and "DOWN" • Switchable push-button or switch functions • Claw assembly is possible • Adaptation into switch program ranges is possible 	
	Functional description:	

Product illustration	Ref.	Product description
	29 86 12 29 86 19	i-Switch blind push button / switch (no adaptation into other switching programmes) 10 claw sets in one bag Flush-mounted blind switch / push-button in intrinsic design. The clear 3-button structure with stop button enables an easy operation.
Technical data Dimensions: 86 x 86 x 53 mm Operating voltage: not necessary Battery: not necessary Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: flush-mounted box Ø 60 x 40 mm Frequency: main-connected	Product advantages:	
	<ul style="list-style-type: none"> • Operating buttons "UP", "STOP" and "DOWN" • Switchable push-button or switch functions • Claw assembly is possible 	
	Functional description:	


intrinsic Wired controls

Product illustration	Ref.	Product description
	29 86 11	i-Switch AP blind switch / push button Surface-mounted blind switch / push-button in intrinsic design. The clear 3-button structure with stop button enables an easy operation. Thanks to the surface-mounted assembly and the minimal dimensions the i-Switch is ideal for installations in which the decision of where the push button / switch will be positioned will only be made on-site.
Technical data Dimensions: 52 x 84 x 60 mm Operating voltage: not necessary Battery: not necessary Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: surface-mounted Frequency: main-connected	Product advantages: <ul style="list-style-type: none"> • Operating buttons "UP", "STOP" and "DOWN" • Switchable push-button or switch functions Functional description: 	

intrinsic accessories Wired controls

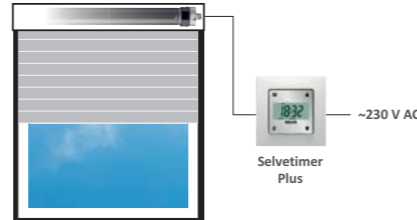
Product illustration	Ref.	Product description
	29 86 15 29 86 17	i-Light Sensor light sensor with 2 m supply lead light sensor with 5 m supply lead
	29 86 59	Rain sensor potential-free output, changeover contact, 6A / 250V AC
	29 00 50	Surface-mounted casing for intrinsic flush-mounted devices Busch-Jaeger Reflex SI switch range incl. adapter frames
	29 00 60	Junction box IP 66 surface-mounted casing L x W x H = 80 x 80 x 52 mm Note: Empty housing without electronic component
	29 86 19	Claw set for i-Switch Plus / i-Switch (2 pieces) 10 claw sets in one bag

Timers Wired controls


Product illustration	Ref.	Product description
	29 70 00	Design timer with astro-evening-programm, Light Sensor is connectable, silver display with flange frame in pure white
	29 70 03	Like article number 29 70 00, with extension input NEW in catalogue
	29 70 35	light sensor with 2 m cable
	29 00 90	housing for surface mounting, white (similar to RAL 9010)
<p>Wired timer with potential-free switch output. Control of the roller shutters by optional light sensor, for sunset as well as for fixed switching times.</p>		

Technical data	Product advantages:
<p>Dimensions: 86 x 86 x 43 mm Operating voltage: 230V AC / 50 Hz Battery: CR 2032 Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: flush-mounted box Ø 60 mm x 40 mm Frequency: main-connected</p>	<ul style="list-style-type: none"> • Memory function • Adjustable as day or week timer • Connection of a light sensor, article number 29 70 35, is possible • Ventilation and intermediate position can be set • Assembly in 50 x 50 mm frames • Flat design that fits perfectly into different switch program ranges • Status control by large and clear display • Easy setting by pre-programming • Automatic closing at sunset (astro-evening-program) • Safety due to the holiday function (random function) • Permanent control due to anytime executable manual control • No reprogramming of the switch program after power failure • Easy switching on and off of the automatic functions

Functional description:

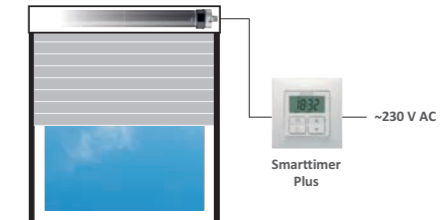


Timers Wired controls



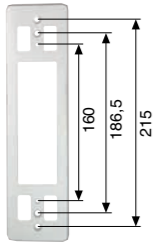
Product illustration	Ref.	Product description
	29 65 00	timer with astro-evening-programm, pure white
	29 65 20	surface-mounting housing, white (similar to RAL 9010)
	29 65 22	double flange frame, Berker S1, polar white (ähnlich RAL 9010), glossy
<p>Wired timer with SELVE frame. The roller shutters can be moved in the evenings at sunset times as well as at fixed switching times. Due to the dimensions of 50x 50 mm it can be integrated into many frame program ranges.</p>		

Technical data	Product advantages
<p>Dimensions: 80 x 80 x 51 mm Operating voltage: 230V AC / 50 Hz Battery: not necessary Protection class: IP20 Permitted ambient temp.: 0°C to +55°C Assembly: flush-mounted box Ø 60 mm x 40 mm Frequency: main-connected</p>	<ul style="list-style-type: none"> • Memory function • Adjustable as day or week timer • Assembly in 50 x 50 mm frames • Status control by large and clear display • Easy setting by pre-programming • Automatic closing at sunset (astro-evening-program) • Safety due to the holiday function (random function) • Permanent control due to anytime executable manual control • No reprogramming of the switch program after power failure • Easy switching on and off of the automatic functions • Low power consumption in standby of only 0,45 W



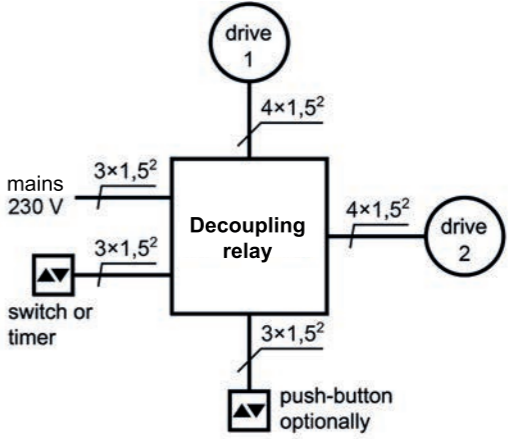
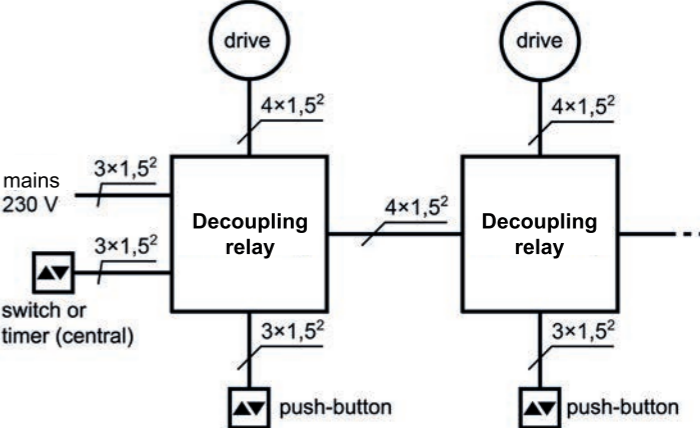
Functional description:



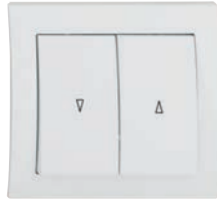



Timers Wired controls

Product illustration	Ref.	Product description
	29 60 05	Timer, model: Rollmat digital-timer, ultra white, flush-mounted, for installation into an existing flush-mounted box, battery back-up, for a single AC motor, option: day, week and astro program, random generator, with possibility to connect a sun and cullet sensor
	29 60 15	Sun sensor sun sensor for ref. 29 60 05, 2 m cable
	29 60 10	Intermediate plate for Rollmat intermediate plate for Rollmat





Cut-off relays

Product illustration	Ref.	Product description
	29 50 07	Decoupling relay For the control of two mechanical drives with a roller shutter switch or a time switch. A second roller shutter button can be connected optionally; no single operation of the two motors is possible. When using several cut off relays there is the possibility of a central operation of several drives with additional single operation. With lose ground terminal.
	29 50 08	like article number 295007, but in plastic housing IP 44 (80x80 mm)
		 

Switches, push-buttons Wired controls

Product illustration	Ref.	Product description
	29 37 60 29 37 65	Double rocker switch flush-mounted, locked housing for surface mounting for double rocker switch ref. 29 37 60 NEW <small>in catalogue</small>
	29 02 00	Pole-changing toggle switch, flush-mounted single-pole, for a single AC motor, locking position set, easy to change to operation without locking
	29 03 00	Pole-changing toggle switch, surface-mounted single-pole, for a single AC motor, locking position set, easy to change to operation without locking
	29 43 01	Key switch, flush mounted single-pole, for a single AC motor, moisture-proof, anti-burglar, no locking position


Switches, push-buttons Wired controls

Product illustration	Ref.	Product description
	29 45 00	Key switch, surface mounted single-pole, for a single AC motor, moisture-proof, anti-burglar, no locking position
	29 37 10	Double rocker push buttons switch flush-mounted, locked, without locking position set
	29 44 00	Key switch flush-mounted, moisture-proof, burglar-proof, button for impulse command and remote radio control
	29 44 01	Key switch like ref. 29 44 00, but surface-mounted

Other components Wired controls

Product illustration	Ref.	Product description
	29 81 00	Decentralised controller DZ 94 decentralised individual controller for installation in junction or switch boxes, pulsed operation
	29 70 00	Potential-free timer, model: SELVETIMER Design timer with astro-evening-programm, Light Sensor is connectable, silver display with flange frame in pure white
	29 00 90	Housing for surface mounting housing for surface mounting, white (similar to RAL 9010)
	29 37 10	Double rocker push buttons switch flush-mounted, locked, without locking position set

Other components Wired controls

Product illustration	Ref.	Product description
	29 91 55	Relay control M4 EGZ control unit for 4 motors
	29 70 00	Potential-free timer, model: SELVETIMER Design timer with astro-evening-programm, Light Sensor is connectable, silver display with flange frame in pure white
	29 00 90	Surface-mounted housing housing for surface mounting, white (similar to RAL 9010)
	29 73 42	Remote control system 433 MHz for garage doors 1 channel, complete with relay for direct connection of an AC motor, terminals for safe edge control system, (if necessary an additional analysis unit has to be installed) light barrier, possibility to connect an external push button
	29 73 44	Hand-held transmitter for ref. 29 73 42 2 channel, coding possible





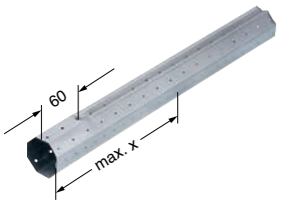
COMPONENTS FOR ROLLER SHUTTERS

As global leader in the sector of roller shutter components we are offering the most complete product range of the branche: Products for Mini or build-in systems, especially for front mounted, top mounted and build-in system boxes, for surface-mounted or flush-mounted, standard or individual special solutions – SELVE offers a perfectly suitable and professional solution for every assembly situation.

<p>Octagonal shafts, telescopic shafts</p>  <p>▶ from page 144</p>	<p>Pulleys, counter plates</p>  <p>▶ from page 149</p>	<p>Caps</p>  <p>▶ from page 153</p>
<p>Ball bearings, supports</p>  <p>▶ from page 159</p>	<p>Safety and fixing springs</p>  <p>▶ from page 165</p>	<p>Burglar-proof fixations, blocking springs</p>  <p>▶ from page 168</p>
<p>Stoppers, angle stoppers</p>  <p>▶ from page 170</p>	<p>Pressure rolls, iron weightings, angle stoppers</p>  <p>▶ page 172</p>	<p>Strap guides, guide rolls</p>  <p>▶ from page 173</p>
<p>Strap coilers, cord coilers, strap, cover plates</p>  <p>▶ from page 183</p>	<p>Flush-mounted boxes</p>  <p>▶ page 194</p>	<p>Insulating mats, insect protection brushes</p>  <p>▶ page 195</p>
<p>Gears with accessories</p>  <p>▶ from page 196</p>	<p>Crank gears with accessories</p>  <p>▶ from page 200</p>	<p>Shaft inserts, tube couplers, tube coupler holders</p>  <p>▶ from page 214</p>

Components for roller shutters



Steel shafts, telescopic shafts

Product illustration	Ref.	Pcs./PU	Product description
	24 32 00	5	Octagonal steel shafts 40 x 0.6 mm hot-dip galvanised steel, with various punch holes for several possibilities of fixing with internal seam length per piece 6 m (bundle 30 m)
	24 32 80	5	with external seam length per piece 6 m (bundle 30 m)
	24 30 00	5	Octagonal steel shafts 40 x 0.8 mm hot-dip galvanised steel, with various punch holes for several possibilities of fixing with internal seam length per piece 6 m (bundle 30 m)
	24 30 80	5	with external seam length per piece 6 m (bundle 30 m)
	24 30 93	10	with external seam, fixed lengths 2.00 m
	25 51 00	10	Mini-telescopic shaft SW 40 hot-dip galvanised steel, for octagonal steel shaft 40 Length: 300 mm without cap, max. adjustable x = 150 mm
	25 51 05	10	cap included ref. 25 23 00, internal pivot, max. adjustable x = 150 mm
	25 51 11	10	cap included ref. 25 23 11, internal steel pivot and internal hexagon, max. adjustable x = 150 mm
	25 51 13	10	cap included ref. 25 22 00, external pivot Ø 10 mm, max. adjustable x = 150 mm
	25 51 20	10	Length: 1150 mm without cap, max. adjustable x = 1000 mm

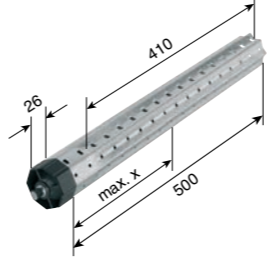
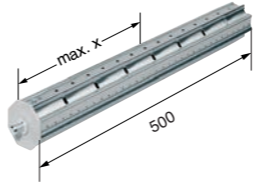
Steel shafts, telescopic shafts

Product illustration	Ref.	Pcs./PU	Product description
	24 40 00	5	Octagonal steel shafts 50 x 0.6 mm hot-dip galvanised steel, with various punch holes for several possibilities of fixing length per piece 6 m (bundle 30 m)
	24 41 00	5	Octagonal steel shafts 50 x 0.8 mm hot-dip galvanised steel, with various punch holes for several possibilities of fixing length per piece 6 m (bundle 30 m)
	24 41 13	10	fixed length 2.00 m
	25 52 00	10	Telescopic shaft SW 50 hot-dip galvanised steel, for octagonal steel shaft 50 Length: 400 mm without cap, max. adjustable x = 200 mm
	25 52 04	10	cap included, external steel pivot ref. 25 47 32, max. adjustable x = 200 mm
	25 52 05	1	cap included, internal steel pivot ref. 25 47 33, max. adjustable x = 200 mm

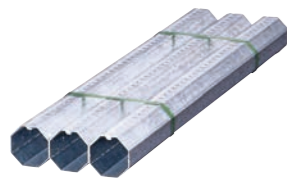
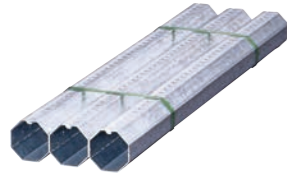
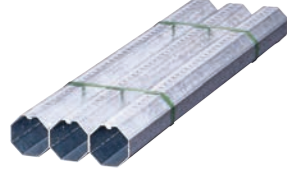
Steel shafts, telescopic shafts

Product illustration	Ref.	Pcs./PU	Product description
			Octagonal steel shafts 60 x 0.6 mm hot-dip galvanised steel, with various punch holes for several possibilities of fixing Meter length per piece 6 m (bundle 30 m) Fixed lengths
	24 35 00	5	
	24 35 01	10	0.80 m
	24 35 02	10	0.90 m
	24 35 03	10	1.00 m
	24 35 04	10	1.10 m
	24 35 05	10	1.20 m
	24 35 06	10	1.30 m
	24 35 07	10	1.40 m
	24 35 08	10	1.50 m
	24 35 09	10	1.60 m
	24 35 10	10	1.70 m
	24 35 11	10	1.80 m
	24 35 12	10	1.90 m
	24 35 13	10	2.00 m
	24 35 14	10	2.10 m
	24 35 15	10	2.20 m
	24 35 16	10	2.30 m
	24 35 17	10	2.40 m
	24 35 18	10	2.50 m
	24 35 19	10	2.60 m
	24 35 20	10	2.70 m
	24 35 21	10	2.80 m
	24 35 22	10	2.90 m
24 35 23	10	3.00 m	
			Octagonal steel shaft 60 x 0.9 mm hot-dip galvanised steel, with various punch holes for several possibilities of fixing length per piece 6 m (bundle 24 m)
	24 36 00	4	

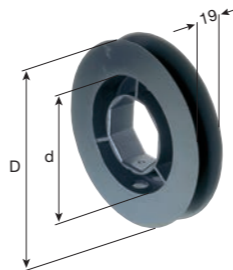
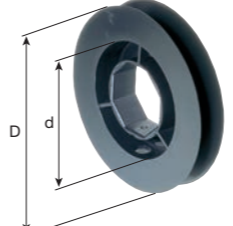

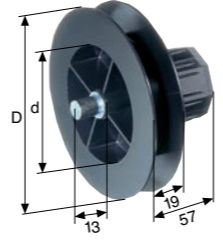
Steel shafts, telescopic shafts

Product illustration	Ref.	Pcs./PU	Product description
			Telescopic shaft 60, star shape hot-dip galvanised steel, for octagonal steel shaft 60 Length: 500 mm NEW in catalogue - on request also available with ball bearing or sliding bearing - without cap, max. adjustable x = 250 mm cap included, ref. 25 35 00, pivot Ø 12 mm, max. adjustable x = 250 mm cap included, ref. 25 06 00, pivot Ø 12 mm, max. adjustable x = 250 mm cap included, ref. 25 30 10, ball bearing intake Ø 28 mm, max. adjustable x = 250 mm Length: 350 mm (without illustration) NEW in catalogue - on request also available with ball bearing or sliding bearing - without cap, max. adjustable x = 150 mm cap included, ref. 25 35 00, pivot Ø 12 mm, max. adjustable x = 150 mm cap included, ref. 25 30 10, ball bearing intake Ø 28 mm, max. adjustable x = 150 mm Length: 1150 mm (without illustration) max. adjustable x = 900 mm
	25 53 00	10	
	25 53 02	10	
	25 53 11	10	
	25 53 14	10	
	25 53 40	10	
	25 53 42	10	
	25 53 44	10	
	25 50 20	10	
			
25 50 51		25	
	25 50 52	25	

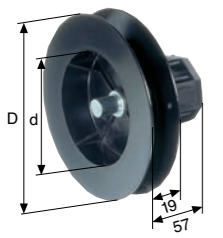
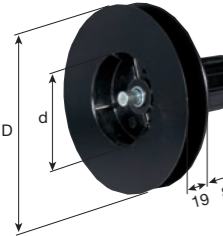
Steel shafts, telescopic shafts

Product illustration	Ref.	Pcs./PU	Product description
	24 00 00	3	Octagonal steel shaft 70 x 1.0 mm hot-dip galvanised steel, with various punch holes for several possibilities of fixing material sold by the metre length per piece 6 m (bundle 18 m)
	24 10 00	3	Octagonal steel shaft 70 x 1.2 mm hot-dip galvanised steel, with various punch holes for several possibilities of fixing material sold by the metre length per piece 6 m (bundle 18 m)
	24 50 00	3	Octagonal steel shaft 70 x 1.5 mm hot-dip galvanised steel, with various punch holes for several possibilities of fixing Meter length per piece 6 m (bundle 18 m) Fixed lengths
	24 50 05	3	3.20 m
	24 50 06	3	3.40 m
	24 50 07	3	3.60 m
	24 50 08	3	3.80 m
	24 50 09	3	4.00 m
	24 50 10	3	4.20 m
	24 50 11	3	4.40 m
	24 50 12	3	4.60 m
	24 50 13	3	4.80 m
	24 50 20	3	7.00 m

Pulleys, counter plates

Product illustration	Ref.	Pcs./PU	Product description
	13 80 00 13 81 00 13 82 00 13 82 02 13 82 04 13 83 00 13 84 00 13 85 10 13 85 01 13 85 00 13 86 00 13 87 00	100 100 100 100 100 100 100 100 100 100 100 100	Mini pulleys for 14 / 15 mm strap plastic, for steel shaft 40 D = Ø 85 mm, d = Ø 47 mm D = Ø 100 mm, d = Ø 64 mm D = Ø 114 mm, d = Ø 75 mm D = Ø 120 mm, d = Ø 75 mm D = Ø 124 mm, d = Ø 75 mm D = Ø 135 mm, d = Ø 90 mm D = Ø 138 mm, d = Ø 100 mm D = Ø 150 mm, d = Ø 100 mm D = Ø 154 mm, d = Ø 100 mm D = Ø 160 mm, d = Ø 100 mm D = Ø 170 mm, d = Ø 120 mm D = Ø 190 mm, d = Ø 140 mm
	13 82 20 13 84 20	100 100	Mini cord pulleys plastic, for steel shaft 40 D = Ø 114 mm, d = Ø 75 mm D = Ø 138 mm, d = Ø 100 mm
	13 80 01 13 81 01 13 82 01 13 82 03 13 84 01	100 100 100 100 100	Mini counter plates plastic, for steel shaft 40 D = Ø 85 mm D = Ø 100 mm D = Ø 114 mm D = Ø 120 mm D = Ø 138 mm
	13 20 00 13 20 01 13 20 02 13 20 03	100 100 100 100	Mini pulleys for steel shaft 40 with cap, short external steel pivot Ø 10 mm, plastic, for steel shaft 40 D = Ø 85 mm, d = Ø 47 mm D = Ø 100 mm, d = Ø 64 mm D = Ø 114 mm, d = Ø 75 mm D = Ø 140 mm, d = Ø 100 mm

Pulleys, counter plates

Product illustration	Ref.	Pcs./PU	Product description
			Mini pulleys for steel shaft 40 with cap, short internal steel pivot \varnothing 10 mm, plastic, for steel shaft 40
	13 20 10	100	D = \varnothing 85 mm, d = \varnothing 47 mm
	13 20 11	100	D = \varnothing 100 mm, d = \varnothing 64 mm
	13 20 12	100	D = \varnothing 114 mm, d = \varnothing 75 mm
	13 20 13	100	D = \varnothing 140 mm, d = \varnothing 100 mm
	13 20 14	100	D = \varnothing 135 mm, d = \varnothing 100 mm
	13 20 15	100	D = \varnothing 160 mm, d = \varnothing 100 mm
			Mini pulleys for steel shaft 40 with cap, long internal steel pivot \varnothing 10 mm, plastic, for steel shaft 40
	13 10 61	50	D = \varnothing 100 mm, d = \varnothing 64 mm
	13 10 62	50	D = \varnothing 110 mm, d = \varnothing 64 mm
	13 10 63	50	D = \varnothing 114 mm, d = \varnothing 64 mm
	13 10 64	50	D = \varnothing 120 mm, d = \varnothing 64 mm
	13 10 65	50	D = \varnothing 125 mm, d = \varnothing 64 mm
	13 10 66	50	D = \varnothing 135 mm, d = \varnothing 90 mm
	13 10 67	50	D = \varnothing 138 mm, d = \varnothing 90 mm
	13 10 68	50	D = \varnothing 150 mm, d = \varnothing 90 mm
	13 10 69	50	D = \varnothing 154 mm, d = \varnothing 100 mm
	13 10 70	50	D = \varnothing 160 mm, d = \varnothing 100 mm
	13 10 72	50	D = \varnothing 170 mm, d = \varnothing 120 mm
			
13 20 20		100	D = \varnothing 85 mm, d = \varnothing 47 mm
13 20 21		100	D = \varnothing 100 mm, d = \varnothing 64 mm
13 20 22		100	D = \varnothing 114 mm, d = \varnothing 75 mm
	13 20 23	100	D = \varnothing 140 mm, d = \varnothing 100 mm

Pulleys, counter plates

Product illustration	Ref.	Pcs./PU	Product description
			Mini pulleys for steel shaft 40 with cap, long, for 15 mm strap for slide and ball bearing \varnothing 28 mm, plastic, for steel shaft 40
	13 10 20	50	D = \varnothing 85 mm, d = \varnothing 47 mm, 2 parts
	13 10 21	50	D = \varnothing 100 mm, d = \varnothing 64 mm
	13 10 22	50	D = \varnothing 110 mm, d = \varnothing 64 mm
	13 10 23	50	D = \varnothing 114 mm, d = \varnothing 64 mm
	13 10 24	50	D = \varnothing 120 mm, d = \varnothing 64 mm
	13 10 25	50	D = \varnothing 125 mm, d = \varnothing 64 mm
	13 10 26	50	D = \varnothing 135 mm, d = \varnothing 90 mm
	13 10 27	50	D = \varnothing 138 mm, d = \varnothing 90 mm
	13 10 28	50	D = \varnothing 150 mm, d = \varnothing 90 mm
	13 10 29	50	D = \varnothing 154 mm, d = \varnothing 100 mm
	13 10 30	50	D = \varnothing 160 mm, d = \varnothing 100 mm
	13 10 32	50	D = \varnothing 170 mm, d = \varnothing 120 mm
	13 10 34	50	D = \varnothing 190 mm, d = \varnothing 140 mm, 2 parts
			Mini pulley for steel shaft 40 with cap Thyssen system, with external steel pivot \varnothing 10 mm, 8 mm long
	13 20 51	100	D = \varnothing 100 mm
	13 20 54	100	D = \varnothing 125 mm
	13 20 57	100	D = \varnothing 160 mm
	25 47 40	250	Plastic adapter for steel shaft 40/50 for mounting mini pulleys with cap for steel shaft 40
	25 34 30	125	Plastic adapter for steel shaft 40/60 for mounting mini pulleys with cap for steel shaft 40

NEW in catalogue

Note:

Pulleys SW 40 for 23 mm strap can be found on page 152

Pulleys, counter plates

Product illustration	Ref.	Pcs./PU	Product description
	13 46 60 13 45 60	50 50	Pulley for steel shaft 50 for 23 mm strap plastic, for steel shaft 50 D = Ø 170 mm, d = Ø 120 mm D = Ø 190 mm, d = Ø 135 mm
	13 44 00 13 46 00 13 45 00 13 47 00 13 46 81	100 50 50 50 100	Pulley for steel shaft 60 for 23 mm strap plastic, for steel shaft 60 D = Ø 130 mm, d = Ø 90 mm D = Ø 170 mm, d = Ø 127 mm D = Ø 190 mm, d = Ø 127 mm D = Ø 215 mm, d = Ø 164 mm D = Ø 160 mm, d = Ø 100 mm
	13 41 00 13 40 00 13 40 01	50 50 50	Pulley for steel shaft 60 with cap for 23 mm strap plastic, with steel pivot Ø 12 mm for steel shaft 60 D = Ø 170 mm, d = Ø 120 mm D = Ø 190 mm, d = Ø 145 mm D = Ø 190 mm, d = Ø 120 mm
	13 50 00 13 50 10	50 50	Counter plates plastic, for steel shaft 60 D = Ø 180 mm D = Ø 225 mm
	13 44 20 13 44 21	100 250	Pulley for steel shaft 40 for 23 mm strap plastic, for steel shaft 40 D = Ø 130 mm, d = Ø 47 mm D = Ø 150 mm, d = Ø 47 mm
	13 86 81	100	Pulley for steel shaft 40 for 23 mm strap plastic, for steel shaft 40 D = Ø 160 mm, d = Ø 100 mm

Caps for tubes

Product illustration	Ref.	Pcs./PU	Product description
	25 27 01 25 27 03	250 250	Mini cap for tubes with internal pivot Ø 10 mm, for steel shaft 40, max. adjustable 50 mm long, with steel pivot long, with steel pivot, with end stop
	25 01 02	250	Mini cap for tubes with external pivot Ø 12 mm, plastic, for steel shaft 40 short, with steel pivot
	25 26 00 25 26 10	250 250	Mini cap for tubes with external pivot Ø 10 mm, for steel shaft 40, max. adjustable 50 mm long, steel pivot x = 12 mm long, steel pivot x = 8 mm, Thyssen system
	25 22 00	250	Mini cap for tubes with external pivot Ø 10 mm, plastic, for steel shaft 40 short, steel pivot, without pulley head
	25 00 00	250	Mini cap for tubes, for sliding or ball bearing Ø 28 mm, plastic, for steel shaft 40 short
	25 25 00	250	Mini cap for tubes, for sliding or ball bearing Ø 28 mm, plastic, for steel shaft 40, max. adjustable 50 mm long

Caps for tubes

Product illustration	Ref.	Pcs./PU	Product description
	25 25 01 25 25 80	100 250	Mini cap for tubes, for sliding or ball bearing Ø 28 mm, plastic, for steel shaft 40, max. adjustable 50 mm long, with end stop long, with stop, with pressed in sliding bearing, article number 18 18 00 (without illustration) NEW in catalogue
	25 22 01	100	Mini cap for tubes, for sliding or ball bearing Ø 28 mm, plastic, for steel shaft 40, short, without pulley head
	25 91 00 25 91 01 25 91 50	250 250 250	Mini adapter rings for steel shaft 40 steel shaft 40 x 0.6 mm, with external seam, to increase to D = 50 mm steel shaft 40 x 0.8 mm to increase to D = 50 mm steel shaft 40 x 0.6 or 0.8 mm to increase to D = 60 mm
	25 91 10	250	Mini adapter rings for steel shaft 40, to be clipped on, with intake for safety and fixing springs steel shaft 40 x 0.6 mm and 40 x 0.8 mm, to increase to D = 53 mm
	25 47 30	100	Cap for tubes for steel shaft 50, long, for mini pulley and counter plates, max. adjustable 60 mm with intake for ball-bearing, Ø 28 mm
	25 47 32	100	Cap for tubes for steel shaft 50, long, for mini pulley and counter plates, max. adjustable 60 mm with external steel pivot, Ø 10 mm, 13 mm long

Caps for tubes

Product illustration	Ref.	Pcs./PU	Product description
	25 47 33	100	Cap for tubes for steel shaft 50, long, for mini pulley and counter plates, max. adjustable 60 mm with internal steel pivot, Ø 10 mm
	25 34 60	100	Cap for tubes for steel shaft 50, long, max. adjustable 60 mm with external steel pivot, Ø 10 mm, for pulleys 13 46 60 and 13 45 60
	25 10 00	100	Mini cap for tubes, for round tube Ø 50 x 1.5 mm, with external steel pivot, Ø 10 mm, plastic, short
	25 46 00 25 46 10 25 46 72	100 100 100	Cap for tubes for steel shaft 60, with intake for mini pulley for steel shaft 40, ball bearing Ø 28 mm, plastic length: x = 67 mm, not adjustable (without picture) length: x = 95 mm, with end stop, max. adjustable = 60 mm length: x = 95 mm, with end stop, max. adjustable = 60 mm, including ball bearing ref. 18 17 01 (without picture)
	25 30 60 25 30 61	50 50	Cap for tubes, for steel shaft 60, metal, to put over the steel shaft, max. adjustable 30 mm with ball bearing Ø 28 mm with slide bearing Ø 28 mm, ref. 18 18 00 (without picture)

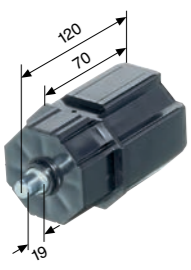
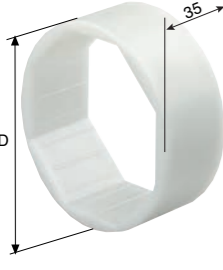
Caps for tubes

Product illustration	Ref.	Pcs./PU	Product description
	25 46 01	100	Cap for tubes for steel shaft 60, with intake for mini pulley for steel shaft 40, internal steel pivot Ø 10 mm, plastic length: 100 mm
	25 34 00	100	Cap for tubes, plastic, with steel pivot Ø 12 mm for steel shaft 60 long, max. adjustable 80 mm
	25 35 00	100	Cap for tubes, plastic, with steel pivot Ø 12 mm for steel shaft 60 short
	25 35 10	100	Cap for tubes, plastic, with steel pivot Ø 10 mm for steel shaft 60 short, Inoutic system
	25 06 00	100	Cap for tubes, plastic, with steel pivot Ø 12 mm for steel shaft 60 short, without pulley intake
	25 06 60	100	Cap for tubes, metal, with steel pivot Ø 12 mm for steel shaft 60 short, to put over the steel shaft

Caps for tubes

Product illustration	Ref.	Pcs./PU	Product description
	25 06 61	50	Cap for tubes, metal, with steel pivot Ø 12 mm for steel shaft 60, max. adjustable 50 mm long, to put over the steel shaft
	25 33 00 25 33 80	100 250	Cap for tubes, plastic, for sliding or ball bearing intake for steel shaft 60, max. adjustable 80 mm long, ball bearing intake Ø 28 mm long, including Gleitlager Ø 28 mm ref. 18 18 00, (without picture) NEW in catalogue
	25 30 00	100	Cap for tubes, plastic, for sliding or ball bearing mounting for steel shaft 60 short, ball-bearing intake Ø 40 mm
	25 30 10	100	Cap for tubes, plastic, for sliding or ball bearing mounting for steel shaft 60 short, ball-bearing intake Ø 28 mm
	25 31 00	100	Cap for tubes, plastic, with internal square 15 mm for steel shaft 60 short
	25 91 56	200	Adapter ring for steel shaft 60 for steel shaft 60 to increase to D = Ø 80 mm, to be clipped on

Caps for tubes

Product illustration	Ref.	Pcs./PU	Product description
	25 40 00	100	Cap for tubes, plastic, with steel pivot Ø 12 mm for steel shaft 70 for pulley for steel shaft 60, - for strap operation only -
	25 91 60 25 91 70	200 200	Adapter ring for steel shaft 70 for steel shaft 70 x 1.0 mm to increase to D = Ø 83 mm for steel shaft 70 x 1.2 mm und SW 70 x 1.5 mm to increase to D = Ø 105 mm

Ball bearings, supports for screw fixing

Product illustration	Ref.	Pcs./PU	Product description
	18 14 00 18 14 01 18 17 00 18 17 01	100 100 100 100	Mini ball bearing with steel inner ring D = Ø 10 mm, with collar D = Ø 10 mm, without collar D = Ø 12 mm, with collar D = Ø 12 mm, without collar
	18 14 10 18 14 11 18 17 10 18 17 11	100 100 100 100	Mini ball bearing with plastic inner ring D = Ø 10 mm, with collar D = Ø 10 mm, without collar D = Ø 12 mm, with collar D = Ø 12 mm, without collar
	18 15 00 18 15 01 18 18 00 18 18 01	500 500 500 500	Mini sliding bearing, plastic D = Ø 10 mm, with collar D = Ø 10 mm, without collar D = Ø 12 mm, with collar D = Ø 12 mm, without collar
	18 09 00	250	Mini surface mounted bearing bracket plastic
	19 08 00	250	Mini surface mounted bracket, die-casted with fixed pivot, Ø 11.8 mm
	19 10 00	50	Bearing pivot for Profine Varinova system, Ø 12 mm

NEW in catalogue

NEW in catalogue

Ball bearings, supports for screw fixing

Product illustration	Ref.	Pcs./PU	Product description
	19 08 20	100	Cap for external strap operation for front mounting 36 mm deep, only for ref. 13 80 00
	19 08 21	100	Cap for external strap operation for front mounting 52 mm deep, only for ref. 13 80 00
	19 08 01	250	Mini surface mounted bracket, die-casted for pivot \varnothing 11.8 mm, open
	19 07 02	250	Pivot for mini surface mounted bracket, die-casted pivot, \varnothing 11.5 mm, for ref. 19 08 01
	19 18 01 19 16 01	500 500	Mini surface mounted sliding bearing, plastic open, for pivot \varnothing 10 mm, x = 16 mm like ref. 19 18 01, but x = 20 mm (no picture)
	18 19 00	500	Sliding bearing with plastic inner ring D = \varnothing 12 mm

Ball bearings, supports for screw fixing

Product illustration	Ref.	Pcs./PU	Product description
	18 20 00 18 20 03 18 22 01 18 22 04	100 100 100 100	Ball bearing with plastic inner ring D = \varnothing 12 mm D = \varnothing 10 mm D = \varnothing 17 mm D = \varnothing 15 mm
	18 20 20	100	Ball bearing with metal inner ring \varnothing 12 mm
	18 20 01	100	Ball bearing with plastic inner ring \varnothing 40 mm, with inner square 15.2 mm
	18 23 00	100	Ball bearing with plastic inner ring \varnothing 50 mm, with inner square 18 mm
	18 00 00	250	Surface mounted bracket for ball bearing \varnothing 40 mm galvanized, wide version
	18 00 01	250	Surface-mounted bracket for ball-bearing \varnothing 40 mm galvanized, narrow version


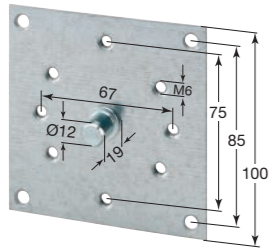
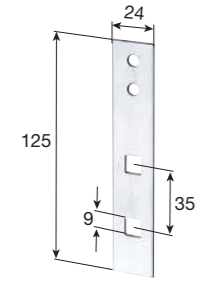
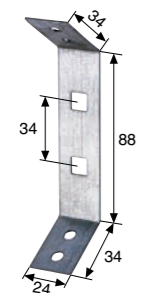
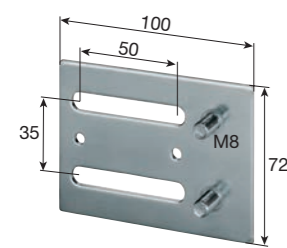
Ball bearings, supports for screw fixing

Product illustration	Ref.	Pcs./PU	Product description
	18 00 03	100	Surface-mounted bracket for ball-bearing Ø 40 mm galvanized, three pieces, with cheesehead screws
	18 01 00	100	Surface-mounted bearing for ball-bearing Ø 40 mm cast
	19 66 00	50	Ball bearing mount Casted ball-bearing mount for ball-bearing Ø 50 mm, single
	18 10 00	100	Flush-mounted bracket for ball-bearing Ø 40 mm web B = 30 mm, L = 95 mm
	18 30 00	250	Prefabricated roller shutter box bracket, galvanized, adjustable, for ball-bearing Ø 40 mm without outreach
	18 30 22 18 30 50	250 250	Prefabricated roller shutter box bracket, galvanized, adjustable, with ball-bearing Ø 40 mm without outreach, with ball-bearing ref. 18 20 00, both lugs flipped like no. 18 30 22, height adjustable (without illustration)

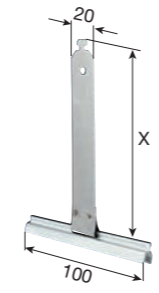
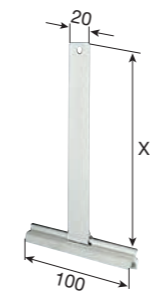
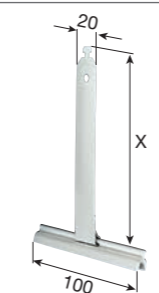

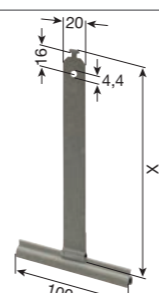
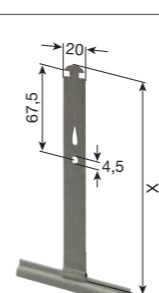
Ball bearings, supports for screw fixing

Product illustration	Ref.	Pcs./PU	Product description
	18 32 10 18 32 11 18 32 12	50 25 50	Prefabricated roller shutter box bracket, galvanized, adjustable, for ball-bearing Ø 40 mm outreach L = 35 mm outreach L = 85 mm outreach L = 100 mm
	18 32 00 18 32 01 18 32 02	25 25 50	Prefabricated roller shutter box bracket, galvanized, heavy-duty version, for ball-bearing Ø 40 mm outreach L = 35 mm outreach L = 85 mm outreach L = 100 mm
	19 52 02 19 52 03	100 100	Multi-purpose bracket for Ø 40 mm ball bearing, galvanized 140 x 104 mm, bearing bracket left 140 x 104 mm, bearing bracket right (without picture)
	19 52 10 19 52 11	100 100	Multi-purpose bracket for Ø 40 mm ball bearing, galvanized 129 x 80 mm, bearing bracket left 129 x 80 mm, bearing bracket right (without picture)
	19 55 00	100	Multi-purpose bracket for Ø 40 mm ball bearing, galvanized 104 x 100 mm, central bearing bracket
	19 55 02	100	Multi-purpose bracket for Ø 40 mm ball bearing, galvanized 100 x 100 mm

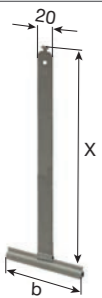
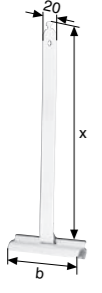
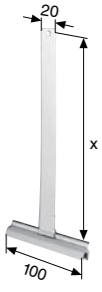
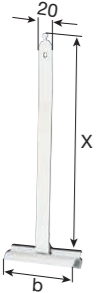
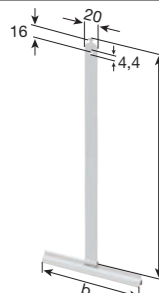
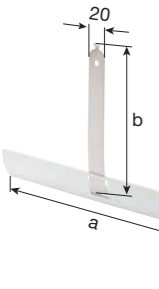
Ball bearings, supports for screw fixing

Product illustration	Ref.	Pcs./PU	Product description
	18 32 60	50	Bracket holder Speedy-Clip system
	27 14 13	100	Universal bearing plate, galvanized 100 x 100 mm, for Veka system
	18 35 00	250	Clamp, galvanized straight
	18 35 01	250	Clamp, galvanized angled
	18 33 00	50	Universal bearing plate, galvanized for horizontal readjusting of prefabricated roller shutter box brackets, adjusting range 30 mm





Safety and fixing springs

Product illustration	Ref.	Pcs./PU	Product description
	15 41 02 15 41 04 15 41 03	250 250 250	Mini safety and fixing spring, spring steel and aluminium profile, untreated, slot-in type x = 123 mm, 0.2 mm thick x = 136 mm, 0.2 mm thick x = 158 mm, 0.2 mm thick
	15 42 00 15 42 01 15 42 07	250 250 250	Mini safety and fixing spring, spring steel and aluminium profile, plastic-coated, screw-in type x = 125 mm, 0.2 mm thick x = 160 mm, 0.2 mm thick x = 136 mm, 0.2 mm thick
	15 42 02 15 42 03 15 42 04 15 42 05 15 42 42	250 250 250 250 250	Mini safety and fixing spring, spring steel and aluminium profile, plastic-coated, slot-in type x = 123 mm, 0.2 mm thick x = 158 mm, 0.2 mm thick x = 136 mm, 0.2 mm thick x = 174 mm, 0.2 mm thick x = 198 mm, 0.25 mm thick
	15 44 02 15 44 05	250 250	Mini safety and fixing spring, spring steel and plastic profile, untreated, slot-in type x = 135 mm, 0.25 mm thick x = 170 mm, 0.25 mm thick
	15 45 42 15 45 43 15 45 44 15 45 45	250 250 250 250	Mini safety and fixing spring, spring steel and aluminium profile, flocked, slot-in type x = 123 mm, b = 100 mm, 0.25 mm thick x = 158 mm, b = 100 mm, 0.25 mm thick x = 136 mm, b = 100 mm, 0.25 mm thick x = 174 mm, b = 100 mm, 0.25 mm thick
	15 45 72 15 45 73 15 45 74 15 45 75	250 250 250 250	Mini safety and fixing spring, spring steel and aluminium profile, flocked, slot-in type x = 123 mm, b = 100 mm, 0.25 mm thick x = 158 mm, b = 100 mm, 0.25 mm thick x = 136 mm, b = 100 mm, 0.25 mm thick x = 174 mm, b = 100 mm, 0.25 mm thick

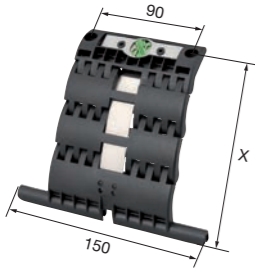
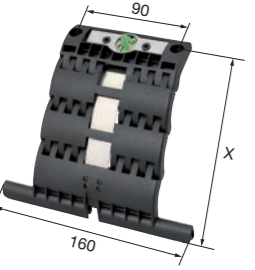
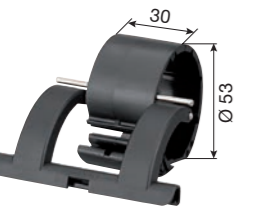
Safety and fixing springs

Product illustration	Ref.	Pcs./PU	Product description
	15 45 51	250	Safety and fixing springs, spring steel and aluminium profile, flocked, slot-in type x = 198 mm, b = 100 mm, 0.3 mm thick
	15 41 11	250	Safety and fixing springs, spring steel and aluminium profile, untreated, slot-in type x = 198 mm, b = 100 mm, 0.3 mm thick
	15 42 10	250	Safety and fixing springs, spring steel and aluminium profile, plastic-coated, screw-in type x = 190 mm, 0.3 mm thick
	15 42 11 15 42 61 15 42 62	250 250 250	Safety and fixing springs, spring steel and aluminium profile, plastic-coated, slot-in type x = 198 mm, b = 100 mm, 0.3 mm thick x = 198 mm, b = 150 mm, 0.3 mm thick x = 178 mm, b = 150 mm, 0.3 mm thick
	15 48 65	250	Safety and fixing springs, spring steel and aluminium profile, plastic-coated, slot-in type, for outside revision x = 300 mm, b = 150 mm, 0.4 mm thick
	15 45 11	100	Safety and fixing springs, spring steel and plastic profile, slot-in type a = 195 mm, b = 200 mm, 0.25 mm thick

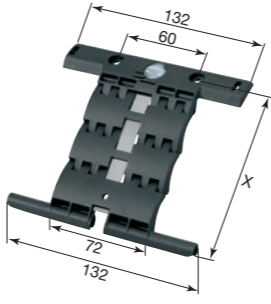
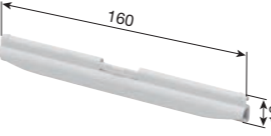
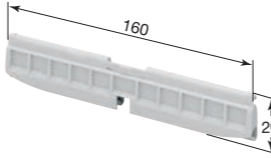

Safety and fixing springs

Product illustration	Ref.	Pcs./PU	Product description
	15 44 11	250	Safety and fixing spring, spring steel and plastic profile, untreated, slot-in type x = 198 mm, 0.25 mm thick
<p>Note: Use of springs The quantity and length of the to be used springs depends on different factors like roller shutter weight, profile shape, size of the roller shutter box etc. and has determined individually.</p>			
	15 40 40 15 40 41	100 100	Latch length x = 130 mm length x = 185 mm
	26 99 00	2000	Hanging loop with wire hooks for the fixing of the roller shutter slats onto the octagonal shaft
	26 52 10 26 52 11	10 1000	Fixing strap only for article number 26 99 00 for the fixing of the roller shutter slats onto the octagonal shaft strength rating approx. 340 daN, thickness ca. 0,9 mm, width 23 mm colour cream, material polypropylene 50 m roll 30 cm long

Burglar-proof fixations, blocking springs



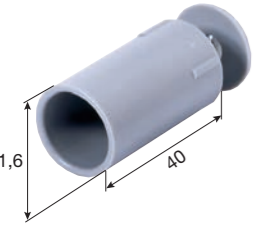

Product illustration	Ref.	Pcs./PU	Product description	
			Burglar-proof fixation SecuBlock for octagonal steel shafts up to 1.0 mm wall thickness with rectangular perforation 5.5 x 8 mm, hole distance = 60 mm SecuBlock rapid, with twist lock Mini, without intermediate part, x = 49 mm Mini, 1 part, x = 75 mm Mini, 2 parts, x = 101 mm Mini, 3 parts, x = 127 mm Mini, 4 parts, x = 153 mm screw on version (no picture) Mini, without intermediate part, x = 49 mm Mini, 1 part, x = 75 mm Mini, 2 parts, x = 101 mm Mini, 3 parts, x = 127 mm Mini, 4 parts, x = 153 mm	
	28 95 09	25		
	28 95 10	25		
	28 95 11	25		
	28 95 12	25		
	28 95 13	25		
	28 96 09	25		
	28 96 10	25		
	28 96 11	25		
	28 96 12	25		
	28 96 13	25		
				Burglar-proof fixations SecuBlock XL for mini and build-in system profile (partly) for octagonal shafts 60 and 70 with wall thickness of 0.9 to 1.5 mm with rectangular perforation 5.5 x 8 mm, hole distance = 60 mm SecuBlock XL rapid, with twist lock 1 part, x = 96 mm 2 parts, x = 128 mm 3 parts, x = 160 mm screw on version (no picture) 1 part, x = 96 mm 2 parts, x = 128 mm 3 parts, x = 160 mm
28 95 40		25		
28 95 41		25		
28 95 42		25		
28 96 40		25		
28 96 41		25		
28 96 42		25		
				Blocking spring SecuClick for octagonal shaft 40 x 0.6 with internal and external seam, not compatible with octagonal shafts SW 40 x 0.8 to be clipped onto the steel shaft
		28 94 00	25	

Burglar-proof fixations, blocking springs

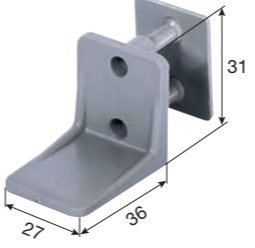
Product illustration	Ref.	Pcs./PU	Product description
			Blocking spring SecuFix for octagonal shaft SW 40/50/60 with rectangular perforation 5.5 x 8 mm, hole distance = 60 mm SecuFix rapid, with twist lock without intermediate part, x = 49 mm 1 part, x = 75 mm 2 parts, x = 101 mm 3 parts, x = 127 mm
	28 93 09	25	
	28 93 10	25	
	28 93 11	25	
	28 93 12	25	
	28 91 20	25	Slide-in profile for roller shutters for mini profiles
	28 91 22	25	for standard / build-in system profiles
	28 91 21	25	Adapter profile for roller shutters for mini profiles
	28 91 23	25	for standard / build-in system profiles
			Burglar-proof fixations and fixing rings Burglar-proof fixation with protective flap 2 parts 3 parts 4 parts mini, 2 parts mini, 3 parts Fixing rings for burglar-proof fixations for octagonal shaft 40 for octagonal shaft 50 for octagonal shaft 60 for octagonal shaft 70
	28 90 00	25	
	28 90 01	25	
	28 90 02	25	
	28 90 10	25	
	28 90 11	25	
	28 90 20	50	
	28 90 21	50	
	28 90 22	50	
	28 90 23	50	

Note: Use of burglar-proof fixations and blocking springs
 Burglar-proof fixations and blocking springs may only be used in connection with tubular drives and according to the corresponding installation instruction.
 Burglar-proof fixations and blocking springs are intended for the use with mini roller shutter profiles. When using with build in profiles or rather rolling gates the slide-in profile or compensation profile (article numbers 28 91 22 and 28 91 23) can be used if necessary.

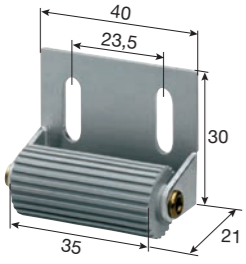
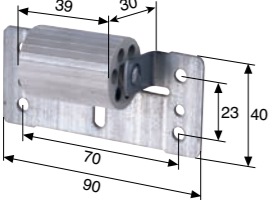
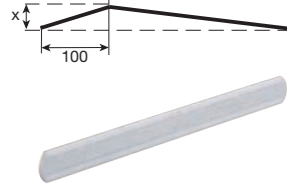
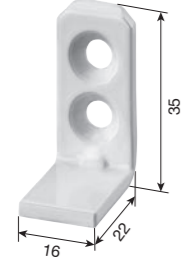
Stoppers, angle stoppers

Product illustration	Ref.	Pcs./PU	Product description	
			Stoppers for mini end slats, length: 15 mm	
	16 53 10	250	dark grey	
	16 53 11	250	white	
	16 53 12	250	brown	
	16 53 13	250	beige	
	16 53 14	250	anthracite	
				Stopper, length: 20 mm (without picture)
	16 54 10	250	dark grey	
	16 54 11	250	white	
	16 54 12	250	brown	
	16 54 13	250	beige	
	16 54 14	250	anthracite	
				Stopper, length: 30 mm
		16 50 10	250	dark grey
16 50 11		250	white	
16 50 12		250	brown	
16 50 13		250	beige	
16 50 14		250	anthracite	
				with inserted screw nut, length: 28 mm (without picture)
16 50 30		100	dark grey	
16 50 31		100	white	
16 50 32		100	brown	
			Stopper, length: 40 mm	
	16 51 10	250	dark grey	
	16 51 11	250	white	
	16 51 12	250	brown	
	16 51 13	250	beige	
	16 51 14	250	anthracite	
	16 51 15	250	light grey	
				with inserted screw nut
	16 51 30	100	dark grey	
	16 51 31	100	white	
	16 51 32	100	brown	
	16 51 33	100	beige	
				Stopper, length: 60 mm, with inserted screw nut
16 52 10		100	dark grey	
16 52 11		100	white	
16 52 12		100	brown	
16 52 13		100	beige	
16 52 14		100	anthracite	

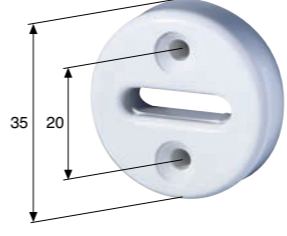
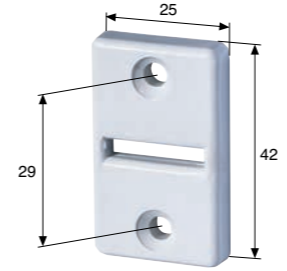
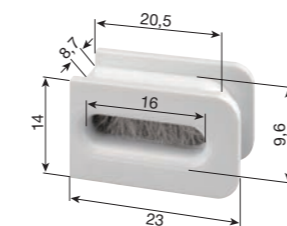
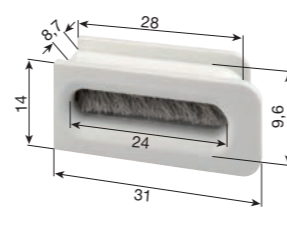
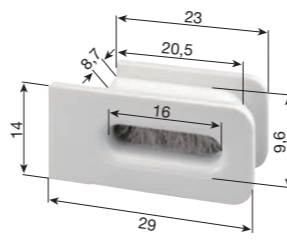
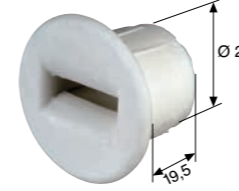
Stoppers, angle stoppers

Product illustration	Ref.	Pcs./PU	Product description
	16 17 00	500	Angle stopper, with pressed-in back panel plate grey

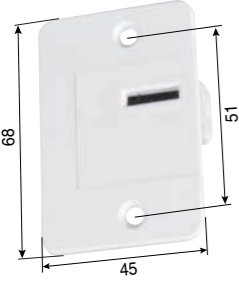
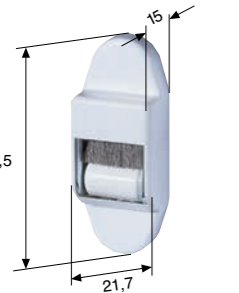
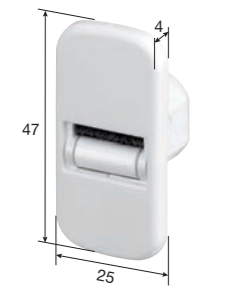
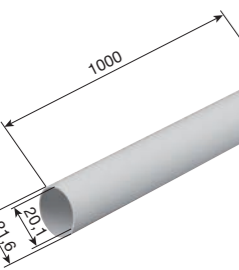
Pressure rolls, iron weightings, angle stoppers

Product illustration	Ref.	Pcs./PU	Product description
	17 33 10	100	Mini pressure roll with galvanized steel mounting plate supporting roller for wide roller shutters
	17 33 00	50	Pressure roll with galvanized steel mounting plate supporting roller for wide roller shutters
	16 60 10 16 60 11 16 60 12 16 60 13 16 60 14	25 25 25 25 25	Iron weighting, galvanized 3 x 25 mm, 300 mm long, with kink x = 7 mm 3 x 25 mm, 500 mm long, with kink x = 6 mm 3 x 25 mm, 200 mm long, without kink 3 x 25 mm, 300 mm long, with kink x = 5 mm 3 x 25 mm, 500 mm long, with kink x = 5 mm
	16 60 00 16 60 01 16 60 02 16 60 03	250 250 250 250	Angle stopper for guide rails white, plastic-coated brown, plastic-coated galvanized anthracite, plastic-coated

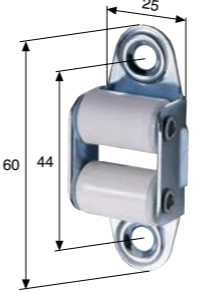
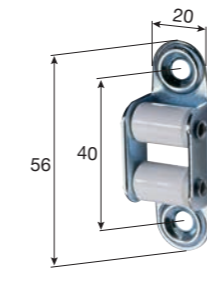
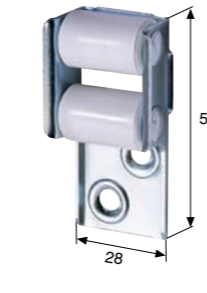
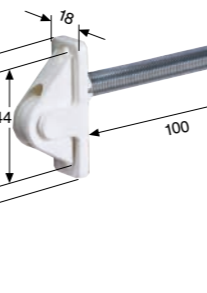
Strap guides, strap rollers

Product illustration	Ref.	Pcs./PU	Product description
	17 01 00	250	Mini strap guide, plastic, round, up to 18 mm strap white, straight slot
	17 09 00 17 09 01	250 250	Mini strap guide, plastic, up to 18 mm strap, 6 mm deep white, straight slot white, inclined slot
	17 61 10 17 61 11	100 100	Mini strap guide, plastic, up to 15 mm strap white, with brush, Exte system brown, with brush, Exte system (without picture)
	17 61 20 17 61 21	100 100	Mini strap guide, plastic, up to 15 mm strap white, with brush, Exte system, 23 mm strap brown, with brush, Exte system, 23 mm strap (without picture)
	17 61 15 17 61 16 17 61 13 17 61 14	500 500 100 100	Mini strap guide, plastic, up to 15 mm strap white, with brush, Profine system brown, with brush, Profine system (without picture) white, with brush, Inoutic system (without picture) brown, with brush, Inoutic system (without picture)
	17 62 00 17 62 01	100 100	Mini wallplug strap guide, plastic, up to 15 mm strap white brown

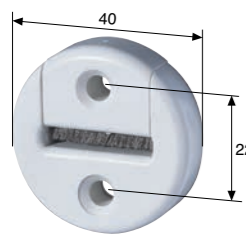
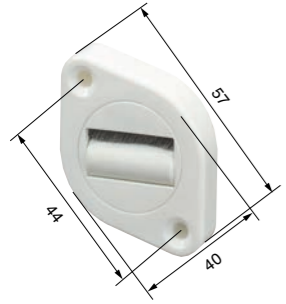
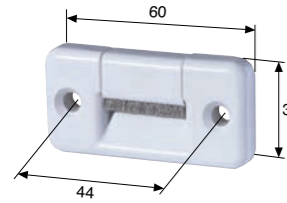
Strap guides, strap rollers

Product illustration	Ref.	Pcs./PU	Product description
	17 08 10 17 08 11	50 50	Strap guide for closing latch, for up to 15 mm strap, meets ENEV requirements class 2, white, adhesive sealing frame, flexible assembly, useable directly at the reveal straight / 90° incline / 45°
	17 21 12 17 21 22 17 21 14 17 21 13 17 21 23	100 100 100 100 100	Mini strap roller with a roll and brush seal for 15 mm strap, with protection cover mini strap roller white brown anthrazit NEW in catalogue protection cover, loose white brown
	17 21 30 17 21 32	100 100	Mini strap roller with a roll and brush seal for 15 mm strap, with protection cover, meets ENEV requirements white brown
	17 21 35	10	Socket pipe, plastic, for article numbers 17 21 30 and 17 21 32 length: 1 m, external diameter 22 mm


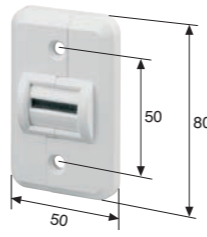
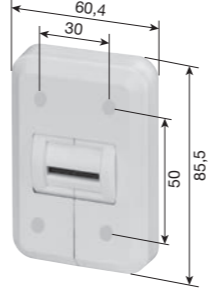
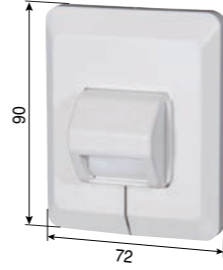

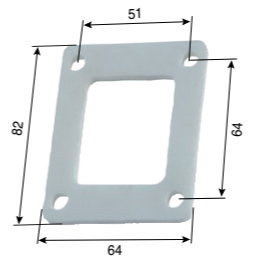
Strap guides, strap rollers

Product illustration	Ref.	Pcs./PU	Product description
	17 21 00	100	Mini strap roller, galvanized, white rollers up to 18 mm strap
	17 21 10	100	Mini strap roller, galvanized, white rollers up to 15 mm strap
	17 46 00	100	Mini strap roller, white rollers up to 18 mm strap
	17 60 00 17 60 10 17 60 01 17 60 11 17 60 02 17 60 12 17 60 15	200 100 100 100 100 100 100	Cord guides up to Ø 5 mm cord with coil spring white brown without coil spring white brown coil spring for ref. 17 60 01 and 17 60 11 length: 100 mm length: 200 mm (no picture) length: 400 mm (no picture)

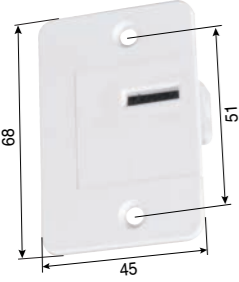
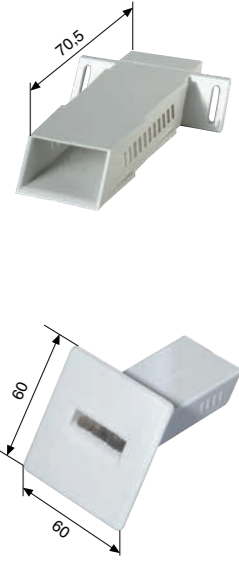
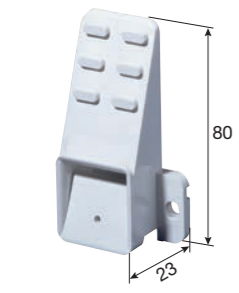

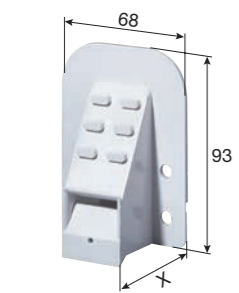
Strap guides, strap rollers

Product illustration	Ref.	Pcs./PU	Product description
	17 00 01 17 00 02 17 00 00	250 250 250	Strap guide, plastic, round, with brush insert, up to 23 mm strap white brown without brush, white (without picture)
	17 00 05	100	Strap guide, plastic, rotatable, with brush insert and strap roller, up to 23 mm strap white
	17 03 01 17 03 02 17 04 01	250 250 250	Strap guide, plastic, up to 23 mm strap white, inclined slot with brush insert brown, inclined slot with brush insert white, with brush insert, 66 x 18 mm (no picture)

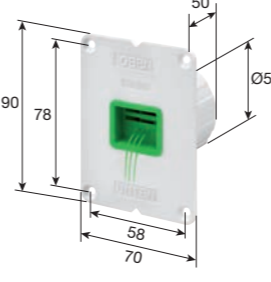
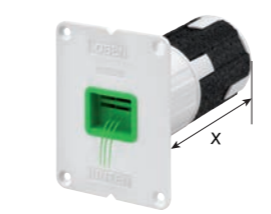
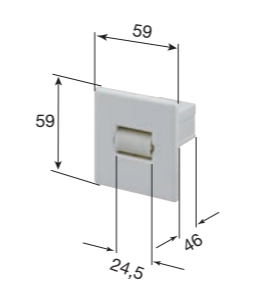
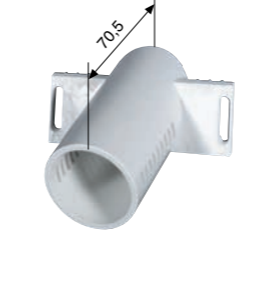
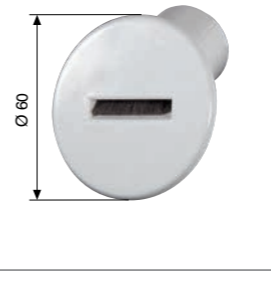
Strap guides, strap rollers

Product illustration	Ref.	Pcs./PU	Product description
	17 06 01	250	Strap guide for flush-mounting, plastic, up to 23 mm strap white, curved version with brush insert
	17 27 01	50	Strap guide for flush-mounting to retrofit, up to 23 mm strap, meets ENEV requirements white, with brush insert
	17 27 02	50	Strap guide for flush-mounting to retrofit, up to 23 mm strap, meets ENEV requirements white, with brush insert, with cover hood
	17 28 00	50	Strap guide for flush-mounting to retrofit, up to 23 mm strap, meets ENEV requirements class 2 white, with strap roller and 2 brushes, with cover hood, no strap dismounting necessary
	17 28 10	50	Strap guide for flush-mounting to retrofit, up to 23 mm strap, meets ENEV requirements class 2 white, with strap roller and 2 brushes, with cover hood, strap dismounting necessary
	17 28 01	50	Distance piece for strap guide for flush mounting to retrofit, for the compensation of larger excess ends 5 mm strong

Strap guides, strap rollers

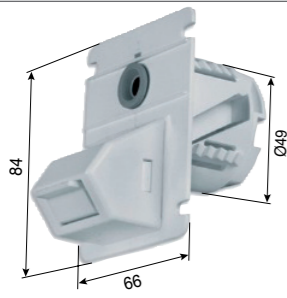
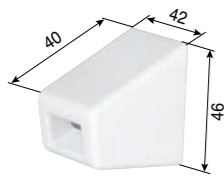
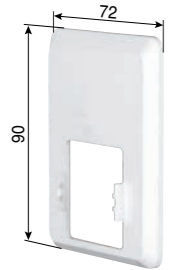
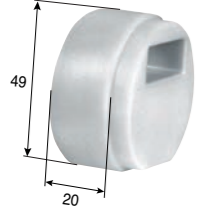
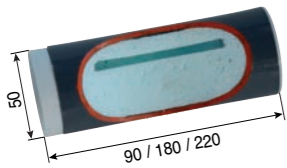

Product illustration	Ref.	Pcs./PU	Product description
	17 08 00 17 08 01	50 50	Strap guide for closing latch, for up to 23 mm strap, meets ENEV requirements class 2, white, adhesive sealing frame, flexible assembly, useable directly at the reveal straight / 90° incline / 45°
	17 51 00 17 51 01 17 51 02	100 100 100	Strap guide for flush-mounting, plastic, up to 23 mm strap, 2 pieces, snap-in, meets ENEV requirements basic unit latch for ref. 17 51 00 flush-mounting cover with strap holder for ref. 17 51 00 (not illustrated)
	17 13 01	250	Strap guide for flush-mounting, plastic, up to 23 mm strap, with 2 fixing angles height: 23 mm, airtight, with brush insert
	17 14 01 17 14 02	250 100	Strap guide for flush-mounting, plastic, up to 23 mm strap, with frame, meets ENEV requirements x = 23 mm, airtight, with brush insert x = 35 mm, with brush insert and roll
	17 17 01 17 17 02	250 100	Strap guide for flush-mounting, plastic, up to 23 mm strap, with frame, meets ENEV requirements x = 32 mm, airtight, with brush insert x = 45 mm, with brush insert and roller

Strap guides, strap rollers

Product illustration	Ref.	Pcs./PU	Product description
	17 52 00	100	Strap guide for flush-mounting, up to 23 mm strap, meets ENEV requirements class 2 basic unit with flush-mounting cover and insulation
	17 52 10 17 52 14 17 52 14	100 100 100	like ref. 17 52 00, but x = 74 mm like ref. 17 52 00, but x = 114 mm like ref. 17 52 00, but x = 174 mm
	17 52 01	100	latch for article number 17 52 00, with roll and brush seal
	17 53 00 17 53 01	100 100	Strap guide for flush-mounting, plastic, up to 23 mm strap, round, 2 pieces, snap-in, meets ENEV requirements basic unit latch for article number 17 53 00
	17 54 00 17 54 01	50 50	Strap guide for flush-mounting boxes, up to 23 mm strap, meets ENEV requirements two pieces, with flush mounting cover, strap roller and two brushes two-parts, with flush-mounting cover, strap roller and two brushes, length 70 mm (without picture)

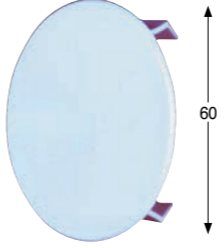
NEW in catalogue
NEW in catalogue
NEW in catalogue

Strap guides, strap rollers

Product illustration	Ref.	Pcs./PU	Product description
	17 55 00	100	Strap guide for flush-mounting boxes, up to 23 mm strap, meets ENEV requirements class 2 two pieces, with flush mounting cap, strap roller and two brushes
	17 55 10	100	Extension cover for flush-mounting strap guides white, extension by 10 mm
	17 55 11	100	Cover frame for flush-mounting strap guides white, for surface-mounted assembly
	17 55 01	100	Extension for flush-mounting strap guides 20 mm long, uninsulated
	17 55 02 17 55 05 17 55 07	1 1 1	Extension for flush-mounting strap guides 90 mm long, uninsulated 180 mm long, with insulation 220 mm long, with insulation
	17 55 20	100	Electric junction box white, with green cover, airtight, thermally insulated

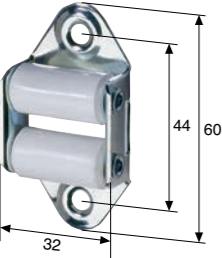
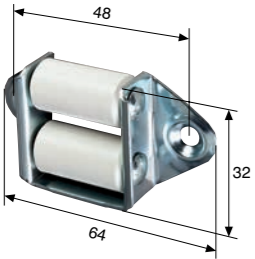
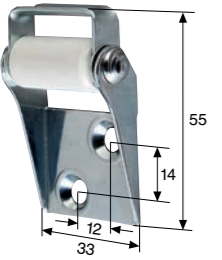
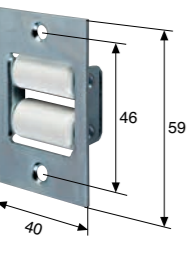
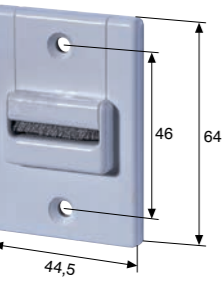
NEW in catalogue

Strap guides, strap rollers

Product illustration	Ref.	Pcs./PU	Product description
	17 55 21	100	Revision cover for electric junction box white, extension by 10 mm

NEW in catalogue

Strap guides, strap rollers

Product illustration	Ref.	Pcs./PU	Product description
	17 20 00	100	Strap rollers, galvanized, up to 23 mm strap with two white rolls, vertical version
	17 22 00	100	Strap rollers, galvanized, up to 23 mm strap with two white rolls, horizontal version
	17 23 00	100	Strap rollers, galvanized, up to 23 mm strap with 1 white roll, web and bar
	17 26 00	100	Strap rollers, galvanized, up to 23 mm strap with two white rolls
	17 26 01	100	Cover plate, plastic, for ref. 17 26 00 white, with brush insert

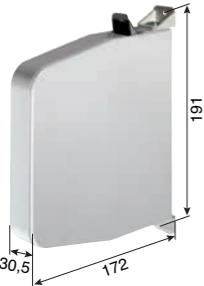
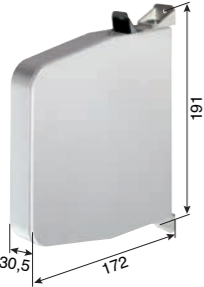
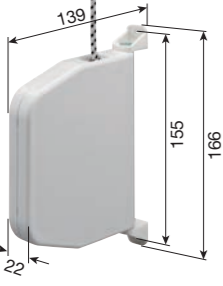
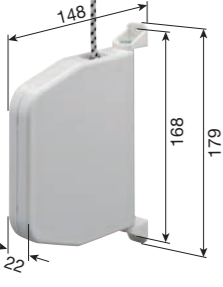
Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description
	08 46 01	50	white without strap, spring tensioned
	08 46 03	50	with 5.0 m strap
	08 46 41	50	brown without strap, spring tensioned
	08 46 43	50	with 5.0 m strap
	08 48 01	50	white without strap, spring tensioned
	08 48 03	50	with 5.0 m strap
	08 48 41	50	brown without strap, spring tensioned
	08 48 43	50	with 5.0 m strap
	08 48 51	25	creme without strap, spring tensioned
	08 48 53	25	with 5.0 m strap
	08 48 61	25	anthracite without strap, spring tensioned
	08 48 63	25	with 5.0 m strap
	08 72 01	25	white for 7.0 m strap, without strap, spring tensioned
	08 72 07	25	with 7.0 m strap
	08 72 41	25	brown for 7.0 m strap, without strap, spring tensioned
	08 72 47	25	with 7.0 m strap
	08 52 01	50	white without strap, spring tensioned
	08 52 03	50	with 5.0 m strap
08 52 41	50	brown without strap, spring tensioned	
08 52 43	50	with 5.0 m strap	

NEW in catalogue

NEW in catalogue

Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description
	08 70 01 08 70 50 08 70 51 08 70 11 08 70 60 08 70 61	20 10 10 10 10 10	Mini strap coiler for strap tension gear swivelling, for 15 mm strap white without strap, spring tensioned with 9.0 m strap with 11.0 m strap brown without strap, spring tensioned with 9.0 m strap with 11.0 m strap
	08 71 01 08 71 11	10 10	Mini cord coiler for strap tension gear swivelling, for cord Ø 4.0 - 4.5 mm, cord absorption approx. 9 m white without cord, spring tensioned brown without cord, spring tensioned
	08 44 01 08 44 03 08 44 41 08 44 43	50 50 50 50	Mini cord coiler hinged, swivelling, for Ø 4.0 - 4.2 mm cord white without cord, spring tensioned with 5.0 m cord, colour white/black brown without cord, spring tensioned with 5.0 m cord, colour white/black
	08 74 01 08 74 06 08 74 41 08 74 46	25 25 25 25	Mini cord coiler hinged, swivelling, for Ø 4.0 - 4.2 mm cord white for 6.5 m cord, without cord, spring tensioned with 6.5 m cord, colour white/black brown for 6.5 m cord, without cord, spring tensioned with 6.5 m cord, colour white/black

Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description
	08 10 01 08 10 03 08 10 41 08 10 43	50 50 50 50	Mini strap coiler unscrewable, for 15 mm strap white without strap, spring tensioned with 5.0 m strap brown without strap, spring tensioned with 5.0 m strap
	08 14 01 08 14 03 08 14 41 08 14 43 08 14 10 08 14 11	50 50 50 50 50 50	Mini semi-flush-mounted strap coiler for 15 mm strap cover white without strap with 5.0 m strap cover brown without strap with 5.0 m strap cover white, single cover brown, single
	08 14 50	50	Cover, white for article number 08 14 ..
	08 01 01 08 01 03 08 01 05 08 01 41	50 50 50 50	Mini flush-mounted strap coiler with flush-mounted box, for 15 mm strap cover white without strap, spring tensioned with 5.0 m strap loose cover plate, white, for ref. 08 01 .. NEW in catalogue cover brown without strap, spring tensioned
	08 05 01 08 05 03 08 05 10	50 50 50	Mini flush-mounted strap coiler with flush-mounted box, for 15 mm strap cover white without strap, spring tensioned with 5.0 m strap loose cover plate, white, for no. 08 05 .. NEW in catalogue

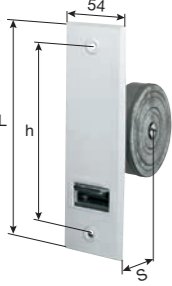
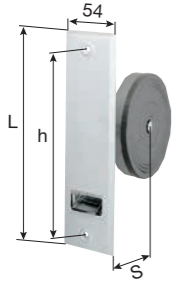
Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description
	08 04 05	10	Mini flush-mounted strap coiler without flush-mounted box, up to 18 mm strap, cover plate white without strap, spring tensioned
	15 65 00 15 65 40 15 65 01	250 250 250	Puller for 15 mm strap or Ø 4.0 - 4.2 mm cord, x = 20 mm white, plastic brown, plastic for 23 mm strap, x = 28 mm white, plastic
	20 35 00 20 35 01 20 35 03 20 35 40 20 35 41 20 35 43	10 10 10 10 10 10	Mini reduction gear crank coiler for 15 mm strap, gear ratio 3 : 1, without crank white without strap, with strap insertion without strap with 5.0 m strap brown without strap, with strap insertion without strap with 5.0 m strap
	20 36 00 20 36 01 20 36 03 20 36 40 20 36 41 20 36 43	10 10 10 10 10 10	Mini reduction gear crank coiler for Ø 4.0 - 4.2 mm cord, gear ratio 3 : 1, without crank white without cord, with cord insertion without cord with 5.0 m cord brown without cord, with cord insertion without cord with 5.0 m cord
	27 35 01 27 35 03	10 25	Folding crank for ref. 20 35 .. and 20 36 .. crank length x = 14 cm crank length x = 18 cm

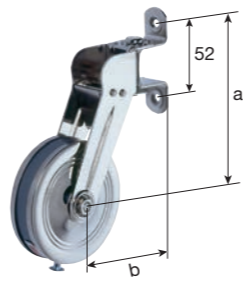
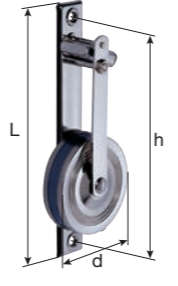
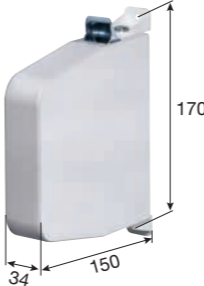
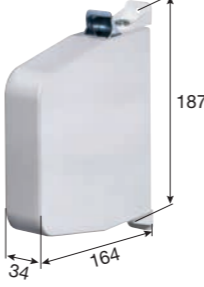
Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description																
	27 35 50 27 35 51	100 100	Mounting bracket with two screws, nuts and washers white, plastic coated brown, plastic coated																
	10 10 00	50	GURTOMAT flush-mounted strap coiler galvanized, white cover plate, for 23 mm strap strap capacity approx. 5.3 m, range of adjustment S = 70 - 90 mm, spring tensioned, spring box Ø 75 mm																
	10 21 00 11 35 00 11 33 00	25 25 25	Semi-flush-mounted strap coiler galvanized, cover white, spring not pretensioned, for 23 mm strap capacity approx. 5 m, range of adjustment S = 50-90 mm, h = 176 mm, L = 198 mm, spring box Ø 75 mm for strap tension gear, strap capacity approx. 5 m, range of adjustment S = 74-109 mm, h = 215 mm, L = 253 mm, spring box Ø 75 mm for strap tension gear, strap capacity approx. 11 m, range of adjustment S = 74 -109 mm, h = 260 mm, L = 298 mm, spring box Ø 95 mm																
	11 00 00 11 00 01 11 00 07 11 01 00 11 01 05 11 01 07 11 06 00 11 06 07 11 06 02	50 50 50 50 50 50 50 50 50	PARO flush-mounted strap coiler galvanized, adjustable, with white cover plate, spring tensioned, for 23 mm strap strap capacity approx. 3.5 m, spring box Ø 75 mm strap capacity approx. 3.5 m, spring box Ø 60 mm strap capacity approx. 3.5 m, spring box Ø 75 mm, cover plate with rounded corners (ref. 11 00 40) strap capacity approx. 5.3 m, spring box Ø 75 mm strap capacity approx. 7.0 m, spring box Ø 75 mm strap capacity approx. 5.3 m, spring box Ø 75 mm, cover plate with rounded corners (ref. 11 01 40) strap capacity approx. 5.3 m, spring box Ø 75 mm strap capacity approx. 5.3 m, spring box Ø 75 mm, cover plate with rounded corners (ref. 10 11 40) strap capacity approx. 6.0 m, spring box Ø 75 mm																
			<table border="1"> <thead> <tr> <th>Ref.</th> <th>h</th> <th>L</th> <th>s</th> </tr> </thead> <tbody> <tr> <td>11 00 ..</td> <td>134</td> <td>173</td> <td>70 - 90</td> </tr> <tr> <td>11 01 ..</td> <td>160</td> <td>193</td> <td>70 - 96</td> </tr> <tr> <td>11 06 ..</td> <td>186,5</td> <td>222</td> <td>70 - 90</td> </tr> </tbody> </table>	Ref.	h	L	s	11 00 ..	134	173	70 - 90	11 01 ..	160	193	70 - 96	11 06 ..	186,5	222	70 - 90
Ref.	h	L	s																
11 00 ..	134	173	70 - 90																
11 01 ..	160	193	70 - 96																
11 06 ..	186,5	222	70 - 90																






Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description																																
	11 30 01 11 30 00	50 5	Reduction gear flush-mounted strap coiler for the use with strap tension gear and flush-mounted box no. 14 73 01, white cover plate, spring tensioned, for 23 mm strap without strap, h = 160 mm, S = 70 - 96 mm, spring box Ø 85 mm with 12 m strap, Dicke 1,3 mm, h = 160 mm, S = 70 - 96 mm, spring box Ø 85 mm																																
	10 11 00 11 02 00 11 02 01 11 02 06 11 03 00 11 03 06 11 06 03	25 25 25 25 10 10 25	Reduction gear flush-mounted strap coiler for the use with strap tension gear, galvanized, white cover plate, for 23 mm strap strap capacity approx. 13.5 m, spring not tensioned, spring box Ø 115 mm strap capacity approx. 12 m, spring not tensioned, two armed (not illustrated), spring box Ø 95 mm strap capacity approx. 12 m, spring tensioned, spring box Ø 95 mm strap capacity approx. 5 m, spring tensioned, spring box Ø 75 mm strap capacity approx. 15 m, spring not tensioned, two armed (not illustrated), spring box Ø 140 mm strap capacity approx. 12 m, spring tensioned, spring box Ø 95 mm strap capacity approx. 12.0 m, spring box Ø 85 mm																																
			<table border="1"> <thead> <tr> <th>Ref.</th> <th>h</th> <th>L</th> <th>s</th> </tr> </thead> <tbody> <tr> <td>10 11 00</td> <td>186,5</td> <td>222</td> <td>115-132</td> </tr> <tr> <td>11 02 00</td> <td>214</td> <td>249</td> <td>90 - 127</td> </tr> <tr> <td>11 02 01</td> <td>214</td> <td>249</td> <td>90 - 127</td> </tr> <tr> <td>11 02 06</td> <td>214</td> <td>249</td> <td>90 - 127</td> </tr> <tr> <td>11 03 00</td> <td>260</td> <td>297</td> <td>100 - 137</td> </tr> <tr> <td>11 03 06</td> <td>260</td> <td>297</td> <td>100 - 137</td> </tr> <tr> <td>11 06 03</td> <td>186,5</td> <td>222</td> <td>70 - 90</td> </tr> </tbody> </table>	Ref.	h	L	s	10 11 00	186,5	222	115-132	11 02 00	214	249	90 - 127	11 02 01	214	249	90 - 127	11 02 06	214	249	90 - 127	11 03 00	260	297	100 - 137	11 03 06	260	297	100 - 137	11 06 03	186,5	222	70 - 90
Ref.	h	L	s																																
10 11 00	186,5	222	115-132																																
11 02 00	214	249	90 - 127																																
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11 02 06	214	249	90 - 127																																
11 03 00	260	297	100 - 137																																
11 03 06	260	297	100 - 137																																
11 06 03	186,5	222	70 - 90																																







Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description
	12 02 00 12 04 00	50 50	PIVO surface-mounted strap coiler swivelling, bright nickel-plated, for 23 mm strap (for strap: 26 51 ..) strap capacity approx. 5.3 m, a = 100 mm, b = 84 mm strap capacity approx. 7.2 m, a = 110 mm, b = 99 mm
	12 11 00 12 12 00 12 13 00	50 25 10	Surface-mounted strap coiler, standard bright nickel-plated, for 23 mm strap (recommended strap: 26 51 ..) applicable for right-hand and left-hand installation (spring box turnable) strap capacity approx. 5.5 m, h = 177 mm, L = 200 mm, d = 76 mm strap capacity approx. 11 m, h = 212 mm, L = 235 mm, d = 96 mm strap capacity approx. 15 m, h = 320 mm, L = 346 mm, d = 140 mm
Note: Nickel as surface protection The bright nickel plating is a visual upgrade and no 100% corrosion protection. The components with bright nickel plating are only intended for the operation in dry rooms (indoors).			
	12 05 01 12 05 02 12 05 03 12 05 41 12 05 42	25 25 25 25 25	PIVO surface-mounted strap coiler, enclosed swivelling, for 23 mm strap, spring tensioned max. strap capacity approx. 5.3 m white, without strap white, with 5.3 m grey strap white, with cream Rayon strap brown, without strap brown, with brown Rayon strap
	12 05 16 12 05 15 12 05 25 12 05 43	25 25 25 25	max. strap capacity approx. 7.0 m white, without strap white, with silver grey Rayon strap white, with cream Rayon strap brown, with brown Rayon strap
	12 06 00 12 06 03 12 06 01 12 06 41	10 10 10 10	Reduction gear surface-mounted strap coiler, enclosed for the use with strap tension gears, swivelling, for 23 mm strap, spring tensioned max. strap capacity 11 m with 12 m strap, grey with 12 m strap, cream white, without strap brown, without strap




Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description
	26 12 10 26 12 15 26 12 16 26 11 10	10 200 150 10	Mini strap strength rating approx. 190 daN, thickness approx. 1.2 mm, width 14 mm colour cream, material: polypropylene/polyester 50 m roll 5 m roll 6 m roll 240 daN, 50 m roll NEW in catalogue
	26 12 20 26 12 25 26 12 26 26 11 20	10 250 150 10	Mini strap strength rating approx. 200 daN, thickness approx. 1.2 mm, width 14 mm colour: grey, material: polypropylene/polyester 50 m roll 5 m roll 6 m roll 240 daN, 50 m roll NEW in catalogue
	26 13 30 26 13 35 26 13 36	10 250 150	Mini strap strength rating approx. 140 daN, thickness approx. 1.2 mm, width 14 mm colour: brown, material: polypropylene 50 m roll 5 m roll 6 m roll
	26 31 10	10	Strap strength rating approx. 340 daN, thickness approx. 1.7 mm, width 23 mm colour: cream, material: polypropylene/polyester 50 m roll
	26 31 20 26 31 27	10 75	Strap strength rating approx. 340 daN, thickness approx. 1.7 mm, width 23 mm colour: grey, material: polypropylene/polyester 50 m roll 7 m roll NEW in catalogue

Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description
	26 35 10 26 35 15 26 35 17	10 100 200	Strap strength rating approx. 280 daN, thickness approx. 1.5 mm, width 23 mm colour: cream, material: polypropylene 50 m roll 5 m roll 7 m roll
	26 35 20 26 35 25 26 35 27	10 100 100	Strap strength rating approx. 280 daN, thickness approx. 1.5 mm, width 23 mm colour: grey, material: polypropylene colour grey, 50 m roll colour grey, 5 m roll colour grey, 7 m roll
	26 33 30	10	Strap Strength rating approx. 250 daN, thickness approx. 1.4 mm, width 23 mm colour: brown, material: polypropylene 50 m roll
	26 36 10	10	Strap strength rating approx. 250 daN, thickness approx. 1.5 mm, width 23 mm colour: white, material: polypropylene 50 m roll
	26 52 20 26 52 25 26 52 26	10 10 10	Build in reversal strap strength rating approx. 350 daN, thickness approx. 1.5 mm, width 22 mm colour: grey/cream, material: polypropylene 50 m roll 50 m roll 6 m roll NEW in catalogue NEW in catalogue
	26 51 10 26 51 19	10 50	Gear strap strength rating approx. 430 daN, thickness approx. 1.3 mm, width 22 mm colour: cream, material: polypropylene 50 m roll 12 m roll

Strap coilers, cord coilers, straps, cover plates

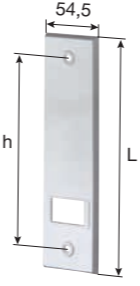
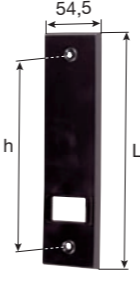
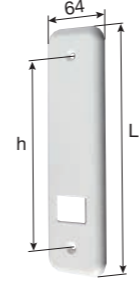
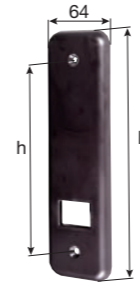

Product illustration	Ref.	Pcs./PU	Product description
	26 51 20 26 51 29	10 50	Gear strap strength rating approx. 430 daN, thickness approx. 1.3 mm, width 22 mm colour: grey, material: polypropylene 50 m roll colour grey, 12 m roll
	26 52 10 26 52 11	10 1000	Fastening strap only for ref. 26 99 00 for the fixing of the roller shutter slats onto the octagonal shaft strength rating approx. 340 daN, thickness approx. 0.9 mm, width 23 mm colour cream, material polypropylene 50 m roll 30 cm long
	15 75 10 15 75 02 15 75 05	1 1 1	Cord Ø 4,2 mm, colour: white/black roll of 100 m 5 m cut to length 6.5 m cut to length

Note: Condition of straps

Straps are subject to natural abrasion and staining when used. At the winding capacity of the strap coilers the different available strap thicknesses have to be observed. The straps are made solely of plastic fibres. Possible mould formation can be put to the residues of organic adhesions.

NEW in catalogue

Strap coilers, cord coilers, straps, cover plates

Product illustration	Ref.	Pcs./PU	Product description
	10 10 10 11 00 10 11 01 10 11 06 10 11 02 10 11 03 10	50 50 50 25 25 10	Cover plate, plastic, white h = 104 mm, L = 134 mm h = 134 mm, L = 173 mm h = 160 mm, L = 199 mm h = 186.5 mm, L = 221 mm h = 214 mm, L = 248 mm h = 260 mm, L = 292 mm
	11 01 12	50	Cover plate, plastic, brown h = 160 mm, L = 199 mm
	10 10 40 11 00 40 11 01 40 10 11 40	50 50 50 50	Cover plate, plastic, white, rounded h = 104 mm, L = 148 mm h = 134 mm, L = 184 mm h = 160 mm, L = 210 mm h = 186.5 mm, L = 232 mm
	11 01 41	50	Cover plate, plastic, brown, rounded h = 160 mm, L = 210 mm
	10 21 10 11 35 10 11 33 10	1 10 25	Cover, plastic, white for semi-flush mounted strap coiler, ref. 10 21 00, h = 176 mm, L = 198 mm, b = 54 mm for semi-flush mounted reduction gear, ref. 11 35 00, h = 215 mm, L = 253 mm for semi-flush mounted reduction gear, ref. 11 33 00, h = 260 mm, L = 298 mm

NEW in catalogue

Flush-mounted boxes

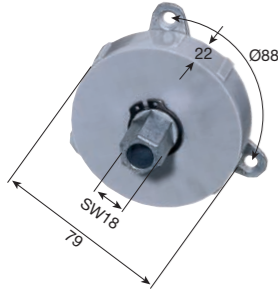
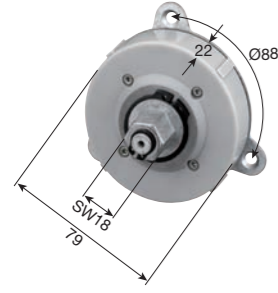

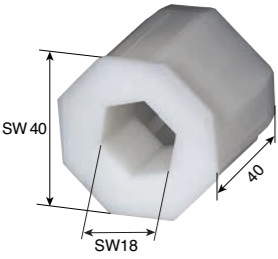
Product illustration	Ref.	Pcs./PU	Product description
	14 77 00	100	Flush-mounted box, plastic, with plaster template for GURTOMAT strap coilers for 5.3 m - strap coiler, ref. 10 10 00
	14 78 00	25	Flush-mounted box, plastic, with plaster template for GURTOMAT strap coilers for 13.5 m-strap coiler, ref. 10 11 00 and PARO coiler ref. 11 06 00
	14 72 01 14 73 01	100 100	Flush-mounted box, plastic, with plaster template for PARO strap coilers for 3.5 m - strap coiler, h = 136 mm, t = 140 mm, ref. 11 00 00 for ref. 11 01 00 and 11 30 .., h = 161 mm, t = 170 mm
	14 73 20 14 73 21	26 18	Flush mounted box, thermally insulated, with plaster template a = 168 mm, b = 148 mm, for 11 01 00 and 11 06 ... a = 238 mm, b = 179 mm, for 11 30 ... and 10 11 00
	14 73 30	12	Flush-mounted box, thermally insulated, with plaster template, 45 mm horizontal adjustment range 249 mm high, for 11 01 ... and 11 30 ...
	14 73 31	12	Flush-mounted box, thermally insulated, with plaster template, 45 mm horizontal adjustment range 499 mm high, for 11 01 ... and 11 30 ...

Insulating mats, insect protection brushes

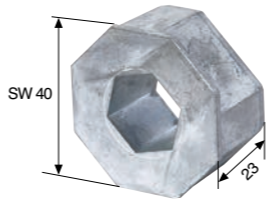
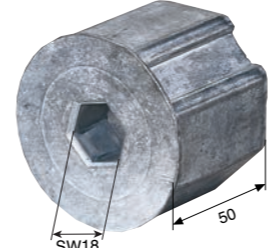
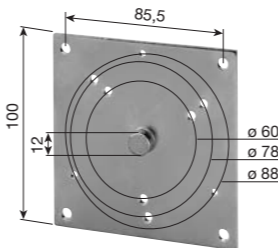
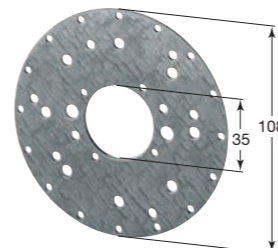

Product illustration	Ref.	Pcs./PU	Product description
	07 11 00 07 11 10 07 11 20 07 11 30	1 1 1 12	Insulating mat for thermal insulation, with adhesive back, rolled, Typ AF 1000 x 100 x 1 cm, 10 m ² 600 x 100 x 1.9 cm, 6 m ² 300 x 100 x 3.2 cm, 3 m ² tape for junctures, 3 x 50 mm, 15 m long
	07 10 00 07 10 10 07 10 20	60 30 20	Insulating mat for thermal insulation, with adhesive back 70 x 60 x 1 cm 70 x 60 x 2 cm 70 x 60 x 3 cm
	07 15 10 07 15 20	30 20	Insulating mat for thermal insulation, sound-absorbing, with adhesive back 70 x 60 x 2 cm 70 x 60 x 3 cm
	07 60 00 07 60 10 07 60 20	1 1 1	Insect protection brush seal with aluminium profile, for the assembly between build-in shutter box and roller shutter, 1 m long length of brush: 13 mm length of brush: 23 mm length of brush: 33 mm
	07 61 00 07 61 10	1 1	Insect protection brush seal with plastic profile, for the assembly between blind frame and roller shutter, 6 m long, rolled length of brush: 6 mm length of brush: 11 mm

NEW in catalogue

Gears with accessories

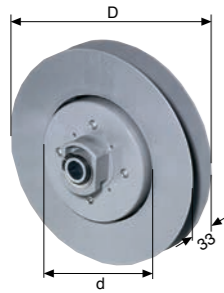
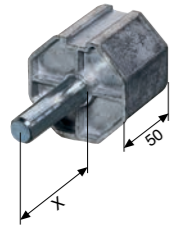
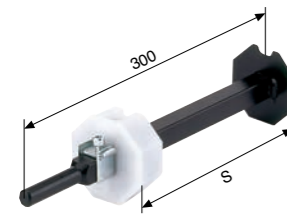
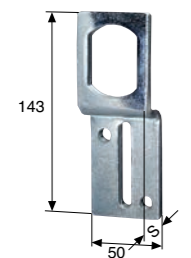
Product illustration	Ref.	Pcs./PU	Product description
	20 61 20	50	Mini strap reduction gear, gear ratio 3 : 1 steel shaft 40: max. shutter weight 35 kg steel shaft 60: max. shutter weight 30 kg
	20 61 00	10	without pulley
	20 61 10	10	with pulley Ø 140 mm, lateral space requirement 23 mm
	20 61 11	10	with pulley Ø 160 mm, lateral space requirement 23 mm
	20 62 20	50	Mini strap reduction gear, gear ratio 2 : 1 steel shaft 40: max. shutter weight 25 kg steel shaft 60: max. shutter weight 20 kg
	20 62 00	10	without pulley
	20 62 10	10	with pulley Ø 140 mm, lateral space requirement 23 mm
	20 62 11	10	with pulley Ø 160 mm, lateral space requirement 23 mm
	20 62 30	50	like 20 62 20, but strengthened for higher, dynamic force, without pulley
	13 61 12	100	Pulleys for ref. 20 61 20 and 20 62 20
	13 61 13	100	Ø 115 mm, max. strap capacity 3.70 m
	13 61 14	100	Ø 120 mm, max. strap capacity 4.40 m
	13 61 15	100	Ø 125 mm, max. strap capacity 5.10 m
	13 61 16	100	Ø 130 mm, max. strap capacity 6.00 m
	13 61 17	100	Ø 135 mm, max. strap capacity 6.80 m
	13 61 00	100	Ø 140 mm, max. strap capacity 7.50 m
	13 61 18	100	Ø 150 mm, max. strap capacity 9.00 m
	13 61 10	100	Ø 155 mm, max. strap capacity 10.30 m
	13 61 11	100	Ø 160 mm, max. strap capacity 10.80 m
	27 10 01	50	Coupling for octagonal steel shaft 40 plastic

Gears with accessories

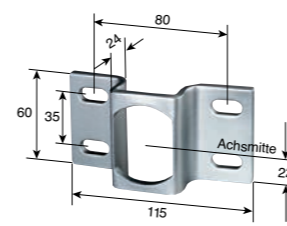
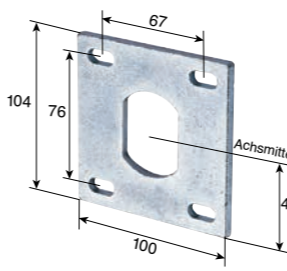
Product illustration	Ref.	Pcs./PU	Product description
	27 10 02	50	Coupling for octagonal steel shaft 40 die-cast
	27 08 00	25	Coupling, zinc die-cast for steel shaft 60
	27 08 01	25	for steel shaft 50
	27 14 12	80	Gear bearing plate with 12 mm bolts, galvanized 100 x 100 mm
	28 30 30	25	Mounting plate for gears and motor, galvanized Inautic system
	26 61 00	100	Fixing material 3 screws and 3 nuts made of stainless steel for ref. 20 61 .. and 20 62 ..

Note:
Mini gear coilers can be found on page 184




Gears with accessories

Product illustration	Ref.	Pcs./PU	Product description	
	20 77 00	10	LUNAMAT strap reduction gears Gear ratio 2 : 1, max. shutter weight 30 kg D = Ø 180 mm, d = Ø 109 mm, capacity approx. 8 m	
	20 77 01	10	D = Ø 166 mm, d = Ø 109 mm, capacity approx. 6 m	
	20 77 02	10	D = Ø 195 mm, d = Ø 109 mm, capacity approx. 10 m	
	20 70 00	10	Gear ratio 2.6 : 1, max. shutter weight 39 kg D = Ø 190 mm, d = Ø 128 mm, capacity approx. 6.5 m	
	20 70 01	10	D = Ø 210 mm, d = Ø 128 mm, capacity approx. 8.5 m	
	20 70 02	10	D = Ø 230 mm, d = Ø 128 mm, capacity approx. 11 m	
	20 72 00	10	Gear ratio 3.1 : 1, max. shutter weight 45 kg D = Ø 190 mm, d = Ø 99 mm, capacity approx. 9.0 m	
	20 72 01	10	D = Ø 180 mm, d = Ø 99 mm, capacity approx. 7.5 m	
	20 71 01	10	Gear ratio 3.7 : 1, max. shutter weight 55 kg D = Ø 210 mm, d = Ø 128 mm, capacity approx. 8.5 m	
	20 71 02	10	D = Ø 230 mm, d = Ø 128 mm, capacity approx. 11 m	
	20 71 03	10	D = Ø 250 mm, d = Ø 128 mm, capacity approx. 14 m	
		27 56 00	25	Reduction gear cap for tubes, die-cast, for steel shaft 60 for LUNAMAT strap reduction gears, long, x = 55 mm
		27 56 01	25	for LUNAMAT strap reduction gears, short, x = 30 mm
	27 46 10	10	Shaft insert, adjustable, anti-rust, for steel shaft 70 adjusting range S = 130 - 190 mm	
	27 45 00	50	Reduction gear bracket for prefabricated roller shutter boxes, galvanized outreach S = 28 mm	
	27 45 01	50	outreach S = 21 mm	
	27 45 03	50	outreach S = 35 mm	
	27 45 05	50	outreach S = 11 mm, for gear 2077..	

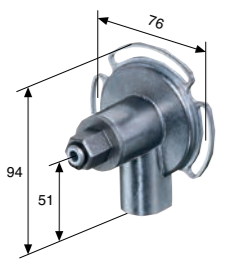
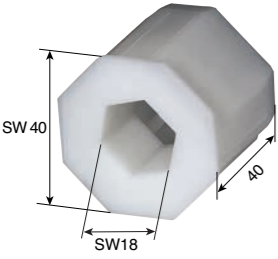
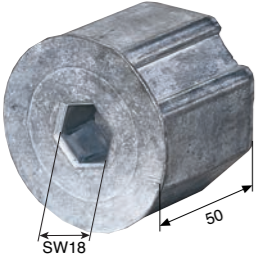
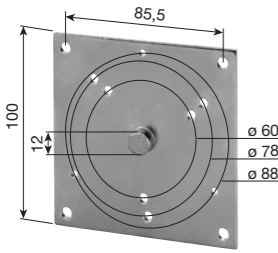

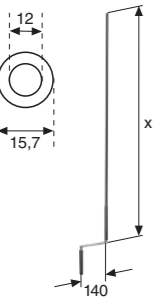
Gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	27 48 00	50	Reduction gear bracket, to be screwed-on, galvanized horizontal
	27 52 00	50	Reduction gear bracket, to be screwed-on, galvanized flat

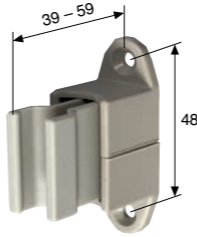
Wire rope winches

	20 31 51	1	Wire rope winches with crank 140 mm, folding handle flush-mounted with aluminium cover plate 161 x 88 mm, 50 kg pulling force, dimensions: 144 x 75 x 62 mm
	20 31 53	1	flush-mounted with aluminium cover plate 187 x 100 mm, 100 kg pulling force, gear ratio 2,5 : 1, dimensions: 140 x 85 x 52 mm
	20 31 50	1	Wire rope winches with crank 140 mm, folding handle surface-mounted with housing, 40 kg pulling force, dimensions: 112 x 71 x 50 mm
	20 31 52	1	surface-mounted with housing, 80 kg pulling force, gear ratio 2 : 1, dimensions: 145 x 90 x 60 mm (without picture)
	27 31 00	50	Wire cable Ø 2.5 mm, length: 7 m, for 50 kg cable winches
	27 32 00	50	Ø 3 mm, length: 7 m, for 100 kg cable winches

Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	20 11 01	10	Mini bevel-wheel train, gear ratio 3.7 : 1 with end stop, max. 11 turns, lifting capacity max. 15 kg shutter weight (steel shaft 40), lateral space requirement 23 mm, for right or left hand installation, drive: square bar 8 mm
	27 10 01 27 10 02	50 50	Coupling for steel shaft 40 plastic die-cast
	27 08 00 27 08 01	25 25	Coupling zinc die-cast for steel shaft 60 for steel shaft 50
	27 14 12	80	Gear bearing plate with 12 mm bolts, galvanized 100 x 100 mm
	27 85 02 27 85 80 27 85 83 27 85 85	50 100 100 50	Cardan joint bearing plate 52 x 22 mm, 50° square bar 8 mm, 150 mm long square bar 8 mm, 300 mm long square bar 8 mm, 500 mm long
	27 82 15 27 82 18 27 82 21	1 1 1	Crank handle for mini gear white, incl. colour matching security sleeve ref. 27 80 82/86/88, extended length = x + 260 mm extended length = 1200 mm extended length = 1500 mm extended length = 1800 mm

Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	27 70 01	125	Handle lock, height adjustable from 39 - 59 mm white
Hinweis: Further gear accessory can be found from page 210			

Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	20 13 00 20 13 01	10 10	Gear box, gear ratio 5 : 1 lifting capacity: max. 35 kg shutter weight (shaft SW 40), 25 kg (shaft SW 60), with integrated freewheel and push-through installation, same direction of crank handle rotation at right or left-hand installation, with head for steel shaft 40, drive: square bar 6 mm freewheel left, lateral space requirement 24 mm freewheel right, lateral space requirement 24 mm
	27 13 00 27 13 01	20 25	Coupling, die-cast for steel shaft 60 for steel shaft 50
	19 31 50	50	Screw-on plate for reduction gear galvanized
	27 81 11	50	Screw-on plate for cardan joint galvanized
	27 81 15 27 81 16	50 50	Screw-on plate for cardan joint 23 x 85 mm nickel-plated plastic-coated, white
	27 85 02 27 85 70 27 85 71 27 85 73 27 85 75	50 200 100 100 100	Cardan joint bearing plate 52 x 22 mm, 50° square bar 6 mm, 150 mm long square bar 6 mm, 200 mm long square bar 6 mm, 300 mm long square bar 6 mm, 500 mm long

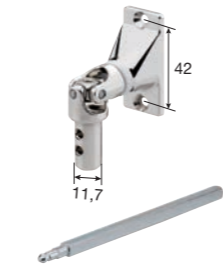
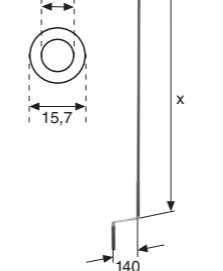
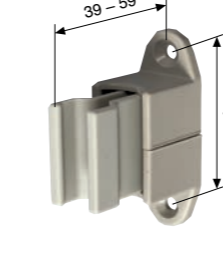
Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	27 85 05 27 85 73	50 100	90° cardan joint bearing plate 85 x 23 mm, 90° square bar 6 mm, 300 mm long
	27 82 15 27 82 18 27 82 21	1 1 1	Crank handle for mini gear white, incl. colour matching security sleeve ref. 27 80 82/86/88, extended length = x + 260 mm extended length = 1200 mm extended length = 1500 mm extended length = 1800 mm
	27 70 01	125	Handle lock, height adjustable from 39 - 69 mm white
Note: Further gear accessory can be found from page 210			

Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	20 17 10	25	Worm gear, ratio 5,3 : 1 usable to max. 17 kg, push-through installation for same direction of rotation at left and right hand installation plastic, with end stop, for Garbot 28, for 6 mm square
	27 17 00 27 17 02	100 100	Coupling for worm gear 5,3 : 1 for steel shaft 40, intake Grabot 28 for steel shaft 60, intake Grabot 28
	20 17 11	25	Worm gear, ratio 7 : 1 usable to max. 25 kg, push-through installation for same direction of rotation at left and right hand installation die-cast, with end stop, for 16 mm hexagon, for 6 mm square
	27 17 03	100	Adapter for worm gear 7 : 1 die-cast, 16 mm hexagon to 13 mm square
	27 17 04 27 17 06	200 200	Coupling for worm gear 7 : 1 for steel shaft 40, (without picture) for steel shaft 60
	27 85 41	50	Cardan joint bearing plate, 45 x 22 mm, bented, white, with 6 mm square, 320 mm long

Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	27 85 02 27 85 70 27 85 73 27 85 75	50 200 100 100	Cardan joint bearing plate 52 x 22 mm, 50° square bar 6 mm, 150 mm long square bar 6 mm, 300 mm long square bar 6 mm, 500 mm long
	27 82 15 27 82 18 27 82 21	1 1 1	Crank handle white, incl. colour matching security sleeve ref. 27 80 82/86/88, extended length = x + 260 mm extended length = 1200 mm extended length = 1500 mm extended length = 1800 mm
	27 70 01	125	Handle lock, height adjustable from 39 - 59 mm white
Note: Further gear accessory can be found from page 210			



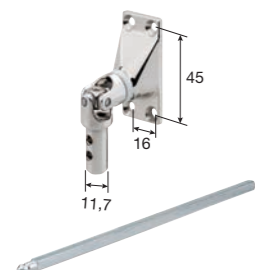
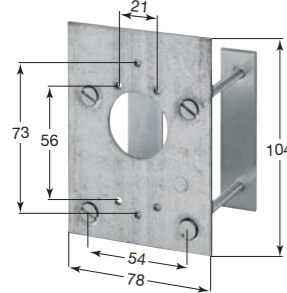
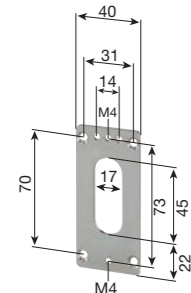
Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	20 10 00 27 14 10	20 20	Bevel-wheel gear 2,6 : 1 suitable for right and left assembling (same rotating direction), assembling of couplings without any tools, lower end stop at freewheel Gear reduction 2,6 : 1, a = 76 mm, b = 60 mm, max. roller shutter weight: 20 kg (SW40), 14 kg (SW60), drive: square 6 mm thermal separation plate, Ø 94 mm (without picture)
	20 14 00 27 14 10	20 20	Bevel-wheel gear 3,6 : 1 suitable for right and left assembling (same rotating direction), assembling of couplings without any tools, lower end stop at freewheel Gear reduction 3,6 : 1, a = 94 mm, b = 78 mm, max. roller shutter weight: 27 kg (SW40), 20 kg (SW60), drive: square 6 mm thermal separation plate, Ø 94 mm (without picture)
	27 14 00 27 14 01 27 14 02	100 100 100	Coupling for steel shaft SW 40 for steel shaft SW 50 for steel shaft SW 60
	27 14 12	80	Gear bearing plate with 12 mm bolts, galvanized 100 x 100 mm
	28 30 30	25	Mounting plate for gears and motor, galvanized Inautic system


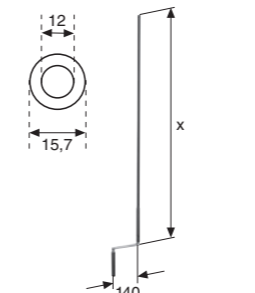
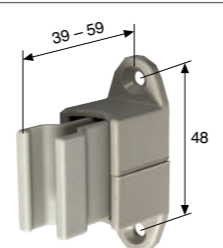
Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	27 85 02 27 85 70 27 85 71 27 85 73 27 85 75	50 200 100 100 100	Cardan joint Note: Square bars and hexagon bars with the article numbers 27 85 ... will be inserted into the cardan joints and will snap in. A removing after that is not possible anymore. bearing plate 52 x 22 mm, 50° square bar 6 mm, 150 mm long square bar 6 mm, 200 mm long square bar 6 mm, 300 mm long square bar 6 mm, 500 mm long
	27 85 05 27 85 70 27 85 71 27 85 73 27 85 75	50 200 100 100 100	90° cardan joint bearing plate 85 x 23 mm, 90° square bar 6 mm, 150 mm long square bar 6 mm, 200 mm long square bar 6 mm, 300 mm long square bar 6 mm, 500 mm long
	27 82 15 27 82 18 27 82 21	1 1 1	Crank handle white, incl. colour matching security sleeve ref. 27 80 82/86/88, extended length = x + 260 mm extended length = 1200 mm extended length = 1500 mm extended length = 1800 mm
	27 70 01	125	Handle lock, height adjustable from 39 - 59 mm white
Note: Further gear accessory can be found from page 210			


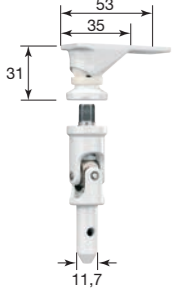

Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	20 20 00	10	External gearbox, gear ratio 6 : 1 with end stop and locking bolt, max. 11 turns, lifting capacity max. 30 kg shutter weight for grooved tube Ø 70 mm for awnings and octagonal steel shaft SW 60 (with reducing adapter ref. 27 20 00), with locking bolt ref. 27 23 00
	27 20 00	100	Reducing adapter for octagonal steel shaft 60 plastic
	27 85 03 27 85 83 27 85 85	50 100 50	Cardan joint bearing plate 56 x 27 mm, 50°, 4 bores square bar 8 mm, 300 mm long square bar 8 mm, 500 mm long
	27 81 11	50	Screw-on plate for cardan joint galvanized
	27 81 15 27 81 16	50 50	Screw-on plate for cardan joint 23 x 85 mm nickel-plated plastic-coated, white


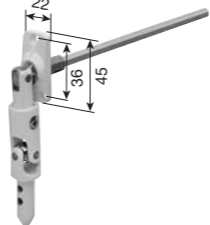

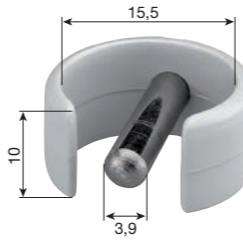
Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	27 85 05 27 85 83	50 100	90° cardan joint bearing plate 85 x 23 mm, 90° square bar 8 mm, 300 mm long
	27 82 15 27 82 18 27 82 21	1 1 1	Crank handle for external gearbox, white, incl. colour matching security sleeve ref. 27 80 82/86/88, extended length = x + 260 mm extended length = 1200 mm extended length = 1500 mm extended length = 1800 mm
	27 70 01 27 70 00	125 125	Handle lock, height adjustable from 39 - 59 mm white grey
Note: Further gear accessory can be found from page 210			

Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	27 79 62	50	Magnet cardan joint nickel-plated, for 6/8 mm square and 7 mm hexagon bearing plate 52 x 22 mm, 50°, 4 bores
	27 79 64	50	bearing plate 85 x 22 mm, 55°
	27 79 65	50	bearing plate 85 x 23 mm, 90°
	27 79 67	50	magnet tube adapter
			white, for 6/8 mm square and 7 mm hexagon
	27 79 72	50	bearing plate 52 x 22 mm, 50°, 4 bores
	27 79 74	50	bearing plate 85 x 22 mm, 55°
	27 79 75	50	bearing plate 85 x 23 mm, 90°
	27 79 77	200	magnet tube adapter
		27 79 08	50
	27 85 01	50	Cardan joint nickel-plated, for 6/8 mm square and 7 mm hexagon bearing plate 73 x 17 mm, 55°
	27 85 02	50	bearing plate 52 x 22 mm, 50°
	27 85 03	50	bearing plate 56 x 27 mm, 50°, 4 bores
	27 85 04	50	bearing plate 85 x 23 mm, 55°
	27 85 05	50	bearing plate 85 x 23 mm, 90°
			nickel-plated, for 6 mm hexagon
	27 85 07	50	bearing plate 85 x 23 mm, 90°
	27 85 08	50	bearing plate 85 x 23 mm, 55°
			white, for 6/8 mm square and 7 mm hexagon
	27 85 31	50	bearing plate 73 x 17 mm, 55°
	27 85 32	50	bearing plate 52 x 22 mm, 50°
	27 85 33	50	bearing plate 56 x 27 mm, 50°, 4 bores
	27 85 34	50	bearing plate 85 x 23 mm, 55°
	27 85 35	50	bearing plate 85 x 23 mm, 90°
			white, for 6 mm hexagon
	27 85 37	50	bearing plate 85 x 23 mm, 90°
	27 85 38	50	bearing plate 85 x 23 mm, 55°
			brown, for 6/8 mm square and 7 mm hexagon
	27 85 22	50	bearing plate 52 x 22 mm, 50°
	27 85 25	50	bearing plate 85 x 23 mm, 90°


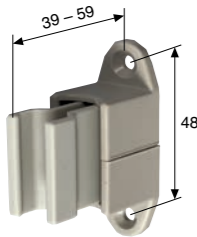
Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description
	27 85 55	50	Air stop silicone seal only for bearing plates 85 x 23 mm, 90°, ref. 27 79 65, 27 85 05, 27 85 07, 27 85 35, 27 85 37, 27 85 25
NEW in catalogue			
	27 85 39	50	Cardan joint bearing plate, 45 x 22 mm, bented, white, for 7 mm hexagon, 150 mm long
	27 85 41	50	bearing plate, 45 x 22 mm, bented, white, with 6 mm square, 320 mm long
	27 85 29	50	bearing plate, 45 x 22 mm, bented, brown, for 7 mm hexagon, 150 mm long
	27 80 80	100	Locking clip for gear adapters white, for gears ref. 20 10 00 und 20 14 00, for spare purpose
	27 80 82	10	Safety sleeve for crank handle white, 15 mm, for spare purpose
	27 80 86	100	grey, 15 mm, for spare purpose
	27 80 88	100	brown, 15 mm, for spare purpose

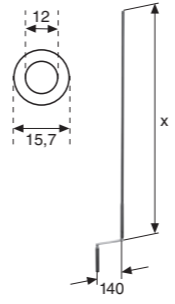
Note: Cardan joints and square / hexagon bars

The bright nickel plating of the cardan joints is a visual upgrade and no 100% corrosion protection. The components with bright nickel plating are only intended for the operation in dry rooms (indoors). Square bars and hexagon bars with the article numbers 27 85 ... will be inserted into the cardan joints and will snap in. A removing after that is not possible anymore.

Crank gears with accessories

Product illustration	Ref.	Pcs./PU	Product description	
	Square and hexagon bars			
	27 85 70	200	square bar 6 mm, 150 mm long	
	27 85 71	100	square bar 6 mm, 200 mm long	
	27 85 73	100	square bar 6 mm, 300 mm long	
	27 85 75	100	square bar 6 mm, 500 mm long	
	27 85 80	100	square bar 8 mm, 150 mm long	
	27 85 83	100	square bar 8 mm, 300 mm long	
	27 85 85	50	square bar 8 mm, 500 mm long	
	27 85 88	100	hexagon bar 6 mm, 300 mm long	
	27 85 89	100	hexagon bar 6 mm, 500 mm long	
	27 85 91	200	hexagon bar 7 mm, 150 mm long	
	27 85 93	100	hexagon bar 7 mm, 300 mm long	
	27 85 95	100	hexagon bar 7 mm, 500 mm long	
		Handle lock, height adjustable from 39 - 59 mm		
		27 70 00	125	grey
27 70 01		125	white	
27 70 02		125	brown	
27 70 10		125	grey, fixed height = 25 mm (without picture)	
27 70 11		125	white, fixed height = 25 mm (without picture)	
27 70 12		125	brown, fixed height = 25 mm (without picture)	

Crank gears with accessories

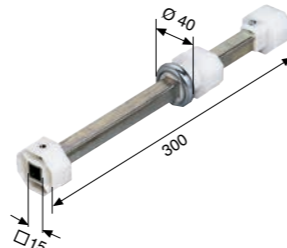
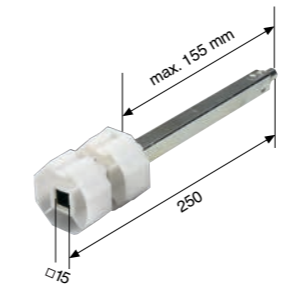
Product illustration	Ref.	Pcs./PU	Product description
	Crank handle incl. colour matching security sleeve ref. 27 80 82/86/88, extended length = x + 260 mm white, plastic-coated		
	27 82 09	1	extended length = 600 mm
	27 82 10	1	extended length = 700 mm
	27 82 11	1	extended length = 800 mm
	27 82 12	1	extended length = 900 mm
	27 82 13	1	extended length = 1000 mm
	27 82 14	1	extended length = 1100 mm
	27 82 15	1	extended length = 1200 mm
	27 82 16	1	extended length = 1300 mm
	27 82 17	1	extended length = 1400 mm
	27 82 18	1	extended length = 1500 mm
	27 82 19	1	extended length = 1600 mm
	27 82 21	1	extended length = 1800 mm
	27 82 23	1	extended length = 2000 mm
	27 82 28	1	extended length = 2500 mm
	27 82 33	1	extended length = 3000 mm
	silver anodised (E6 EV1)		
	27 83 10	1	extended length = 700 mm
	27 83 11	1	extended length = 800 mm
	27 83 12	1	extended length = 900 mm
	27 83 13	1	extended length = 1000 mm
	27 83 14	1	extended length = 1100 mm
	27 83 15	1	extended length = 1200 mm
	27 83 16	1	extended length = 1300 mm
	27 83 17	1	extended length = 1400 mm
	27 83 18	1	extended length = 1500 mm
	27 83 19	1	extended length = 1600 mm
	27 83 21	1	extended length = 1800 mm
27 83 23	1	extended length = 2000 mm	
27 83 28	1	extended length = 2500 mm	
brown, plastic-coated			
27 83 50	1	extended length = 700 mm	
27 83 51	1	extended length = 800 mm	
27 83 52	1	extended length = 900 mm	
27 83 53	1	extended length = 1000 mm	
27 83 54	1	extended length = 1100 mm	
27 83 55	1	extended length = 1200 mm	
27 83 56	1	extended length = 1300 mm	
27 83 57	1	extended length = 1400 mm	
27 83 58	1	extended length = 1500 mm	
27 83 63	1	extended length = 2000 mm	

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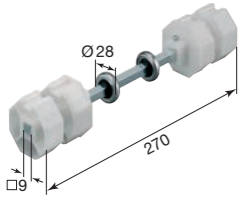
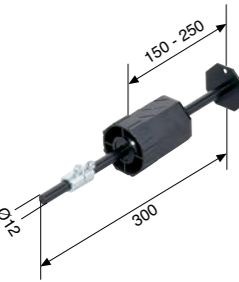
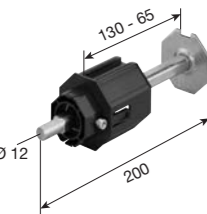

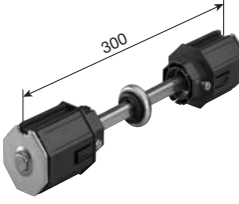
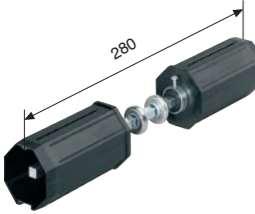
Shaft inserts, tube couplers, mountings for tube couplers

Product illustration	Ref.	Pcs./PU	Product description
	27 25 23	50	Shaft insert for steel shaft 40 for external gear drive to be completed with 25 28 00 snap-in coupling for shaft inserts 13 8... mini pulleys or 13 44 20/21 pulley for 23 mm strap
	27 25 25	20	Shaft insert for steel shaft 60 for external gear drive
	25 28 00	100	Snap-in coupling for shaft inserts article numbers 27 25 23 and 27 25 25 with clip, for mini pulleys
	25 31 30	100	Snap-in coupling for shaft inserts article numbers 27 25 23 and 27 25 25 with clip, for pulleys with article numbers 13 44 20 and 13 44 21
	13 44 20 13 44 21	100 250	Pulley for steel shaft 40 for 23 mm strap plastic, for snap-in coupling article number 25 31 30 D = Ø 130 mm, d = Ø 47 mm D = Ø 150 mm, d = Ø 47 mm
	27 24 50	10	Mini shaft insert for steel shaft 40 adjustable, galvanized

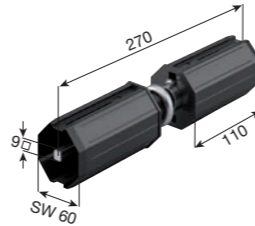
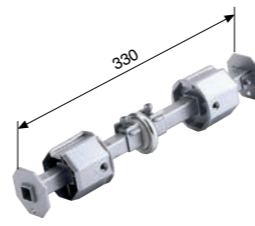
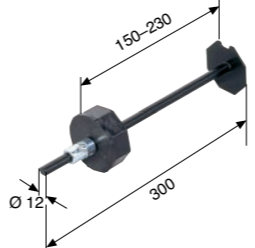
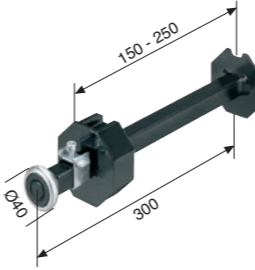
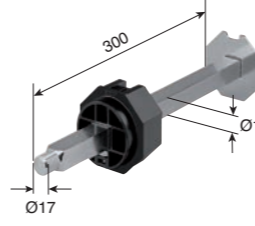
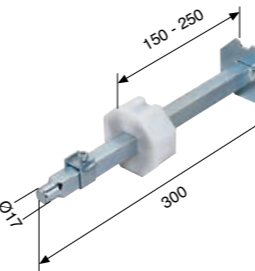
Shaft inserts, tube couplers, mountings for tube couplers

Product illustration	Ref.	Pcs./PU	Product description
	19 59 00	50	Tube coupler for steel shaft 40 assembled, galvanized
	19 59 01	50	Tube coupler for steel shaft 40 adjustable, with cap for external strap drive
	19 59 11	20	Tube coupler for steel shaft 40 adjustable, with cap, with ball-bearing Ø 40 mm
	19 59 10	50	Tube coupler for steel shaft 40 adjustable, with cap, with 2 Mini-ball-bearings
	27 26 00	20	Shaft insert for steel shaft 50 adjustable, galvanized
	19 61 00	25	Tube coupler for steel shaft 50 assembled, galvanized

Shaft inserts, tube couplers, mountings for tube couplers

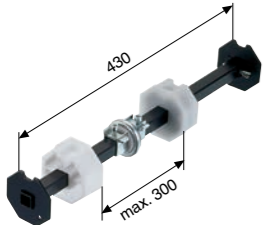
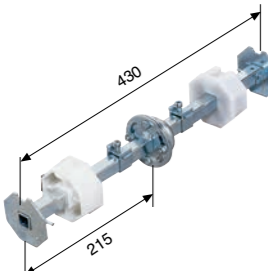
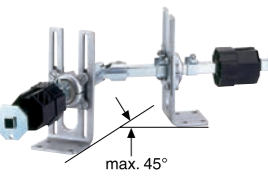
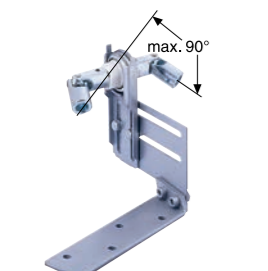
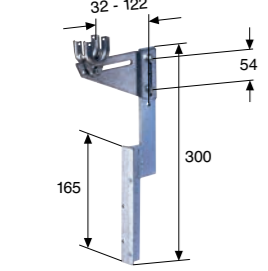
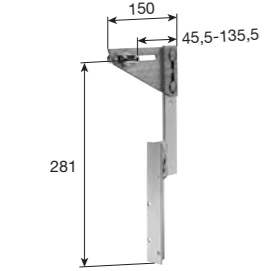
Product illustration	Ref.	Pcs./PU	Product description
	19 61 02 19 61 01	25 25	Tube coupler for steel shaft 50 assembled, galvanized, with 2 ball bearings \varnothing 28 mm like ref. 19 61 02, but with one ball-bearing \varnothing 28 mm
	27 25 10	25	Shaft insert, adjustable, for steel shaft 60 plastic-coated, adjusting range: 150 - 250 mm
	27 25 30	25	Shaft insert, adjustable, for steel shaft 60 galvanized, short, for ball bearing and LUNAMAT gear (no picture)
	19 67 20 19 67 52	15 15	Tube coupler, adjustable, with ball-bearing \varnothing 50 mm, for steel shaft 60 galvanized, with plastic cap for tubes, assembled, with ball-bearing \varnothing 50 mm galvanized, with plastic cap for tubes, assembled, with ball-bearing \varnothing 40 mm (without picture)
	19 67 53	15	Tube coupler, adjustable, with ball-bearing \varnothing 40 mm, for steel shaft 60 galvanized, with plastic cap for tubes, assembled
	19 67 30	15	Tube coupler, adjustable, for steel shaft 60 galvanized, with plastic cap for tubes, assembled, with 2 ball bearings \varnothing 28 mm

Shaft inserts, tube couplers, mountings for tube couplers

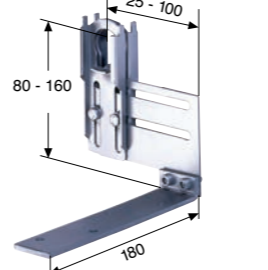
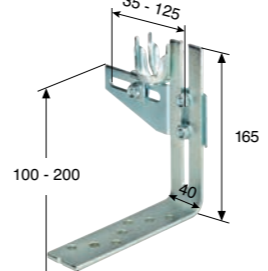
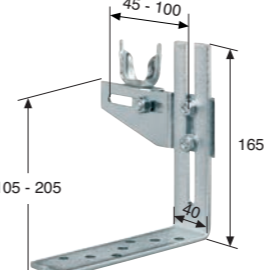
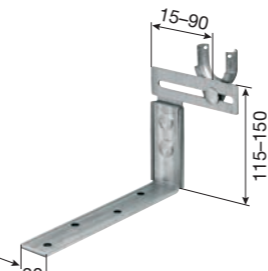
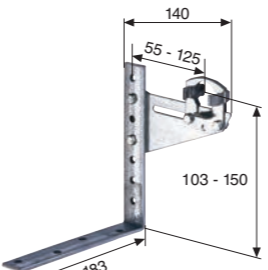
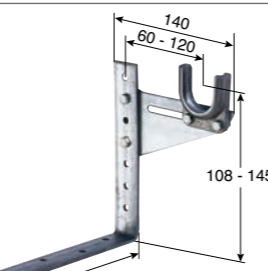
Product illustration	Ref.	Pcs./PU	Product description
	19 67 31	20	Tube coupler, adjustable, with ball bearing \varnothing 40 mm, for steel shaft 60 galvanized, with plastic cap for tubes, assembled, with ball bearing \varnothing 40 mm
	19 67 10	15	Tube coupler, adjustable, with ball-bearing \varnothing 50 mm, for steel shaft 60 galvanized, with aluminium cap for tubes, assembled
	27 22 10 27 22 50	25 25	Shaft insert, adjustable, for steel shaft 70 plastic-coated, adjusting range: 150 - 230 mm galvanized, short version, adjusting range: 65-125 mm, also applicable with LUNAMAT gear (without picture)
	27 84 10	10	Shaft insert, adjustable, for steel shaft 70 anti-rust, adjusting range: 150 - 250 mm, with ball-bearing \varnothing 40 mm ref. 18 22 01
	27 87 15	10	Shaft insert, adjustable, for steel shaft 70 anti-rust, without ball-bearing, adjusting range: 150 - 250 mm
	27 87 10	10	Shaft insert, adjustable, for steel shaft 70 anti-rust, without ball-bearing, adjusting range: 150 - 250 mm

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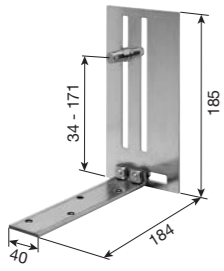
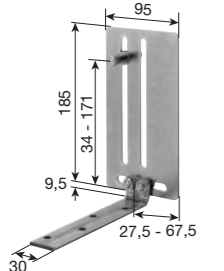

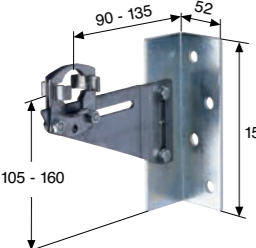
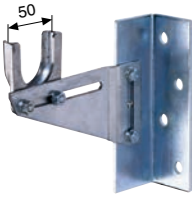
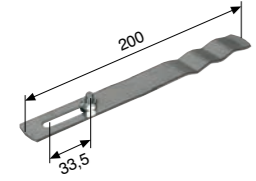
Shaft inserts, tube couplers, mountings for tube couplers

Product illustration	Ref.	Pcs./PU	Product description
	19 64 00	25	Tube coupler, adjustable, with ball-bearing Ø 50 mm, for steel shaft 70 plastic coated, assembled
	19 64 60	15	Tube coupler, adjustable, with ball-bearing Ø 50 mm, for steel shaft 70 galvanized, split in the middle and adjustable, assembled
	27 60 00	1	Cardan joint tube coupler, galvanized swivels up to max. 45° for steel shaft 60
	27 60 50	25	Cardan joint tube coupler with two joints, swivels up to max. 90° to be used with: steel shaft 70 with two shaft inserts Ref. 27 22 10, steel shaft 60 with two shaft inserts Ref. 27 25 10
	19 28 00	25	Mounting for tube coupler, galvanized with adjusting angle and two ball-bearing mounts for Ø 40 mm ball-bearings
	19 28 10	25	Mounting for tube coupler, galvanized with bearing bolts Ø 12 mm

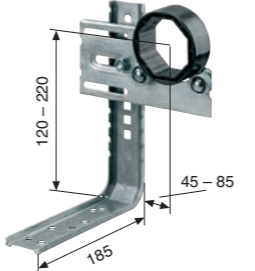
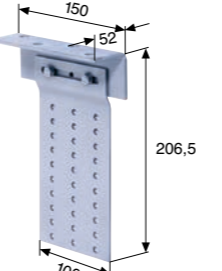
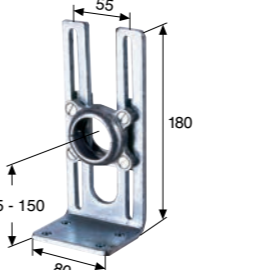
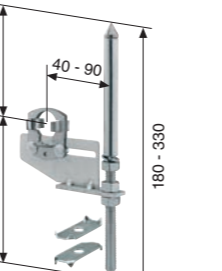
Shaft inserts, tube couplers, mountings for tube couplers

Product illustration	Ref.	Pcs./PU	Product description
	19 29 10	10	Mounting for tube coupler, galvanized consisting of: bearing plate, mounting bracket, two brackets for prefabricated roller shutter boxes for Ø 40 mm ball-bearing
	19 30 50	25	Mounting for tube coupler, galvanized, with adjustable angle with two bearing brackets, heavy-duty version, for Ø 40 mm ball-bearing
	19 30 58	10	Mounting for tube coupler, galvanized, with adjustable angle with one bearing bracket, heavy-duty version, for Ø 40 mm ball-bearing
	19 30 51 19 30 52	10 10	Mounting for tube coupler, galvanized, with adjustable angle with one bearing bracket, for Ø 40 mm ball-bearing like ref. 19 30 51, but with two bearing brackets, for Ø 40 mm ball-bearing
	19 30 01 19 30 14	10 10	Mounting for tube coupler, galvanized with two ball-bearing brackets for Ø 40 mm ball- bearings with two casted bearing brackets for Ø 40 mm ball- bearings
	19 30 03 19 66 00	10 50	Mounting for tube coupler, galvanized with cast bearing bracket for Ø 50 mm ball-bearing Casted ball-bearing mount for ball-bearing Ø 50 mm, single

Shaft inserts, tube couplers, mountings for tube couplers

Product illustration	Ref.	Pcs./PU	Product description
	19 30 30 19 30 31	25 25	Mounting for tube coupler, galvanized with bearing bolts \varnothing 12 mm, mounting bracket 40 mm Set includes 19 30 30, 2 ball-bearings (ref. 18 17 01) and 2 caps, long, for steel shaft 60 (ref. 25 33 00)
	19 30 32	25	Mounting for tube coupler, galvanized with bearing bolts \varnothing 12 mm, mounting bracket 30 mm
	19 35 10	10	Mounting for tube coupler for prefabricated roller shutter boxes, hanging for two ball bearings \varnothing 40 mm, plastics coated adjusting range, x = 50-133 mm
	19 45 03 19 45 14	25 25	Mounting for tube coupler with angle, galvanized with two bearing brackets for \varnothing 40 mm ball-bearings with two casted bearing brackets for \varnothing 40 mm ball-bearings
	19 45 04	25	Mounting for tube coupler with angle, galvanized with casted bearing bracket for ball bearing \varnothing 50 mm
	19 30 20	250	Flush-mounted bracket, galvanized with counter-sunk screw M6 and nut for mounting for tube coupler ref. 19 30 01, 19 30 14, 19 30 03

Shaft inserts, tube couplers, mountings for tube couplers

Product illustration	Ref.	Pcs./PU	Product description
	19 34 20 19 34 21	50 1	Central bearing for steel shaft central bearing for steel shaft 60 central bearing for steel shaft 70 (without picture)
	19 31 00	10	Universal mounting galvanized
	19 60 11 19 66 01	10 50	Mounting for tube coupler with casted bearing bracket for ball bearing \varnothing 50 mm, galvanized ball-bearing half insert for ball-bearing \varnothing 50 mm, cast, of article number 19 60 11 Preis pro 100 Stk.
	19 30 60	25	Clamping bracket with one bearing bracket and claws



SERVICE



Extremely short delivery times

We react quickly at the order entry in the service center, manufacture extremely flexible thanks to Lean production and our shipping process is constantly optimized.

Largest product pallet on the market

SELVE offers the most comprehensive product range in the sector of roller shutters and sun protection technology. As the world market leader for roller shutter components we can permanently deliver over 3.000 products immediately. SELVE has also made a name with innovative drive as well as control technology, as we are consequently investing in the development of new products.

Cooperative customer service

Technical advice, order acceptance or individual solution finding – for the specialist partners SELVE always provides many competent available contacts. Our sales representatives are taking care of our specialist partners as direct contact person on site. Additionally, employees of the sales consulting and the technical customer service for technical issues will help with your personal request. For individual customer requirements, a team of engineers together with the developing department will work out a customized solution that will exactly fit the customer's requirements.

made only if the security is redeemed. The related costs and fees shall be borne by the customer.

5.4. Pursuant to Section 247 of the German Civil Code (BGB), the customer shall pay interest at the rate of 8 % above the base interest rate on outstanding payments. SELVE expressly reserves the right to assert claims for further damage to be proven specifically in each instance.

5.5. If a customer does not meet his payment obligations, in particular does not honour a check or a bill of exchange, or cease payments, or if SELVE becomes aware, after conclusion of the contract, of other circumstances that have a negative impact on the customer's creditworthiness to an extent that is significant for the business relationship, SELVE shall be entitled to demand payment of the entire residual amount due, notwithstanding any payment terms previously granted by SELVE or if SELVE has accepted checks or bills of exchange. In this case, SELVE is furthermore entitled to demand prepayment or security.

5.6. The customer shall be entitled to exercise of a right of retention only if the customer's counterclaim is based on the same legal relationship.

6. Delivery terms, delivery delays, self-supply

6.1. For evidentiary purposes, delivery dates or delivery period must be agreed at least in text form. Delivery periods commence on the date on which the agreement is concluded. They do not commence until all details of the performance have been clarified. If delivery has been agreed according to the planning records of the customer, the delivery periods do not commence the complete planning records have been handed over.

6.2. Compliance with the delivery periods is contingent on fulfilment of the contractual obligations and duties by the customer.

6.3. SELVE shall not be held liable for delays in delivery and performance due to force majeure and due to events, which render our delivery substantially more difficult or impossible (these circumstances include, for example, strikes, lockouts, official orders, etc.), even if these circumstances occur with suppliers of SELVE or their sub-suppliers. These circumstances entitle SELVE to postpone the delivery or performance for the duration of the ob-

struction plus a reasonable period start-up period or to cancel the contract in total or in part in regard to the part not yet performed.

6.4. If the obstruction lasts for a period of more than two calendar months, the customer is entitled, after setting a reasonable period of grace, to cancel the contract in regard to the part not yet performed. The customer shall not be entitled to any damages, if the delivery period is extended or if SELVE is released from its obligation.

6.5. SELVE shall only be entitled to rely on the circumstances referred to in paras.

6.3. and 6.4. if SELVE informs the customer without undue delay of the occurrence of these events.

6.6. If an agreed fixed delivery date has not been observed, the customer may assert claims for damages or withdraw from the contract only after the fruitless expiry of a reasonable grace period set by the customer. If the customer asserts a claim for damages in this case, SELVE's liability in regard to claims for compensation of any damage shall be limited to a substitute transaction. Any further damage shall only be compensated to the extent of the contract sum. This limitation shall not apply to fixed date transactions that are specifically designated as such and to cases where the damage is caused by intent or gross negligence of executive staff of SELVE.

6.7. If SELVE does not receive delivery from its downstream suppliers for reasons that do not fall within the sphere of SELVE, SELVE as well as the customer are entitled to withdraw from the contract.

7. Delivery quantities, supply contracts on demand

7.1. Delivery of octagon steel shafts are delivered in the factory lengths of 6 m or at fixed lengths according to the respective effective SELVE catalogue. Any resulting excess or short deliveries of up to 5 % of the ordered volume shall be deemed to be proper contractual delivery.

7.2. In case of contracts for continuous supply on demand, SELVE shall be entitled to produce the total volume of the order according to their production planning at any time during the contract term, unless express agreements to the contrary have been made. Once the total quantity has been produced, it is no

longer possible to make any changes to the ordered goods.

7.3. The customer is under the contractual obligation to schedule the ordered quantity into lots within a period of three months after conclusion of the contract and to accept is according to the subdivision. If the customer does not comply with the obligation to schedule the ordered quantity in time, SELVE shall be entitled to set a reasonable period for such scheduling. Upon the fruitless expiry of this period, SELVE shall be entitled to demand acceptance and payment of the residual quantity.

7.4. In case of contracts on demand that span a period of more than four months, a reasonable adjustment of the price in the event of unforeseen cost or quantity developments during the supply contract on demand is deemed to have been agreed. The agreed prices may not be changed for any other reason, in particular not if a lower competitive offer has been made.

8. Transfer of risk, acceptance

8.1. The risk passes to the customer, as soon as the shipment is handed over to the party performing the transport at the SELVE factory/warehouse for the purpose of shipping. The same applies if SELVE bears the costs of transportation. If the shipping becomes impossible through no fault of SELVE, the risk passes to the customer upon notification of readiness for dispatch. No transport insurance is provided. SELVE is entitled to select the mode of shipping, unless the customer has issued explicit instructions in this regard. In case of transport damage, the carrier shall issue a legally binding certificate of damage immediately after receipt of the delivery.

8.2. If the parties have agreed that the goods shall be inspected according to special terms or that a formal acceptance of the goods shall take place, the inspection or acceptance shall take place at the supplying plant of SELVE. All costs of acceptance, travel and accommodation costs of the customer shall be borne by the latter. If the customer abstains from an agreed acceptance, the goods shall be deemed to have been accepted at the time of transfer of risk.

9. Notice of defects, warranty, return of goods

9.1. SELVE assumes warranty in accordance with the following provisions,

which exhaustively governs SELVE's liability under the warranty and does not represent a guarantee in the legal sense. In case of commercial goods, any guarantees of manufacturers remain unaffected by these provisions.

9.2. If SELVE's technical data sheets or installation instructions are not heeded, or if changes are made to the products, the warranty and liability for defects shall lapse. The same applies to defects in end products manufactured by the customer using SELVE products, if these goods are produced using construction parts, metal fittings and accessories of other manufacturers. These limitations do not apply if the customer can prove that the claimed defect is not based on these circumstances.

9.3. The customer is obliged to notify SELVE of obvious defects in text form without undue delay, at the latest, however, within eight calendar days after receipt of the delivery item; the notification must include a detailed description of the defect. Defects that cannot be detected even with careful inspection within this period must be reported to us in text form without undue delay after their discovery; such notification must include a detailed description of the defect. In case of failure to comply with these provisions, the goods shall be deemed to have been accepted. The customer bears the full onus of proof for all qualifying conditions for the claims, in particular for the defect itself, for the time of detecting the defect and for the timeliness of the notice of defect.

9.4. In derogation from Article 46 of the Convention, we shall be entitled, if the goods do not conform to the contract, to provide a replacement instead of repairing the goods. In this case, the customer shall make the non-conforming goods available to us at our expense.

9.5. We shall be obliged to provide compensation for non-conforming goods only if the non-conformity is based on fault on our part. Any claim for damages is limited to EUR 50.000,00.

9.6. Unless expressly otherwise agreed, the contractual conformity of SELVE Products shall be determined solely on the basis of the SELVE product description in the generally accessible technical sales documents of SELVE and - if applicable - the acceptance drawing signed by the customer. Acceptance samples merely

serve to verify the acceptance drawing; the sample does not serve to define the quality of the goods. Public statements, promotions, advertising and application examples in our promotional materials likewise do not amount to a contractual quality description of the goods.

9.7. Only the immediate contracting partner of SELVE shall be entitled to warranty claims against us; such claims are non-transferable.

9.8. SELVE has implemented a quality management system certified according to DIN EN ISO 9001. All products are continuously checked in accordance with our quality manual during production. Further tests than those defined in our quality manual require a separate written agreement between the customer and SELVE; such agreement must also specify in precise detail the test parameters and test methods.

9.9. The SELVE quality management system does not absolve the customer from the need for a proper inspection of incoming goods.

9.10. All claims of the customer based on non-conformity of the goods shall become time-barred after 12 months, starting with the day of the timely complaint pursuant to para. 9.3., but no later than 24 months after delivery of the goods concerned.

9.11. Goods that are returned for reasons other than being defective, shall be accepted by SELVE only after prior written consent. The costs for returning the goods shall be borne by the customer. SELVE will credit the customer for the returned goods for the initial purchase prices, less a standard industry discount of 25 %, but at least EUR 50,00, as compensation for the inspection of incoming goods, storage and commercial handling. The customer is entitled to provide evidence of lower costs.

10. Retention of title

10.1. SELVE retains title to the goods delivered until full settlement of all liabilities arising from the business relationship, including interest and cost. At the request of SELVE, the customer is obliged to provide special storage and insurance for the goods delivered subject to retention of title; at our request, the customer shall provide proof of compliance with such obligation.

10.2. Until further notice by SELVE, the customer is entitled to dispose of or process the goods delivered subject to retention of title in the ordinary course of business.

11. Proprietary rights, copyright

Records and drawings provided to the customer, as well as designs and proposals for the configuration and production of shutter or sun protection systems provided by SELVE may be used by the customer solely for the agreed purpose. The customer may not make these records or drawing available to third parties or use them for publications without our consent.

12. Confidentiality

Both the customer and SELVE are obliged to treat all non-obvious commercial and technical details of the other party of which they become aware in the course of the business relationship as a trade secret. Drawings, models, patterns, samples and similar objects may be not made available or otherwise accessible to third parties. The reproduction of such items is permitted only in the context of operational requirements and the confines of copyright.

13. Data protection

A data processing system will be used to manage the business relationship. Accordingly the customer data (address, delivery products, quantities, prices, payments, cancellations, etc.) will be collected in an automated file and stored within the temporal limits of the statutory retention requirements. The customer is herewith informed of this data storage. Legal basis: Sections 27 et seqq, Section 33 of the German Federal Data Protection Act (BDSG).

14. Place of performance/jurisdiction

Place of performance is Lüdenscheid. The place of jurisdiction for all disputes arising out of or in connection with this contract - including for actions on bills of exchange - shall be the court with jurisdictional competence for Lüdenscheid. The right of each party to sue.

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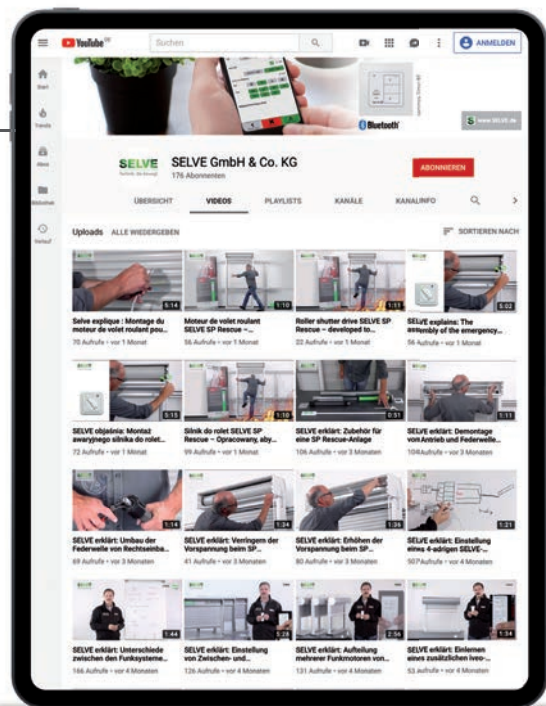
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