

# Solutions

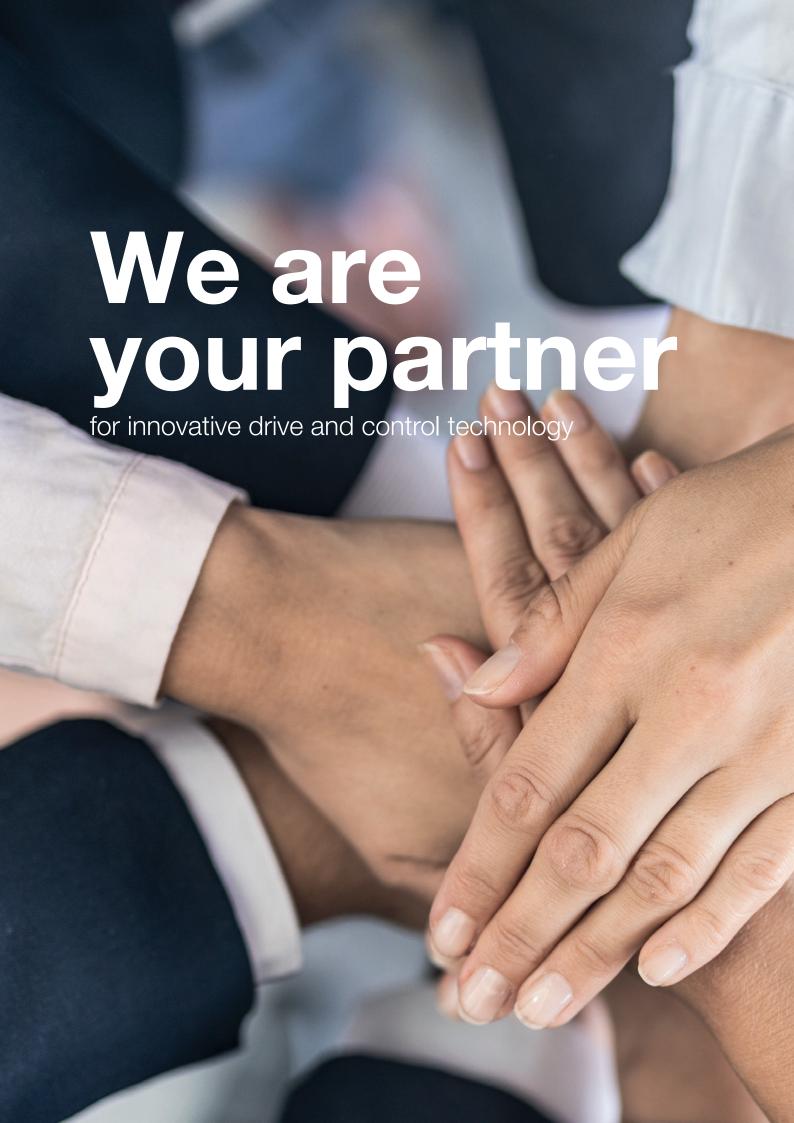
for intelligent building technology: Drives, controls and sensors

**Tubular motors Venetian blind drives Special drives** 

Home automation Controls Sensors

Door drives
Door controls
Accessories

Adapterprofiles
Lifting capacity tables



# Intelligent solutions for the home

Elero is one of the largest global manufacturers of electrical drives and control units for roller shutters and sun protection systems.

The drive manufacturer is a wholly-owned subsidiary of the Italian Nice Group and specializes in roller shutters and sun protection within Nice.

We are convinced that intelligent, comprehensive control of light and temperature significantly improves well-being and living comfort significantly. That is why we are constantly market requirements with constant further developments and offer innovative control systems for almost every requirement proven drive technology.





# The Vision: A world without barriers

#### Improving our quality of life, safety, living comfort and energy efficiency is at the heart of everything we do.

elero is a company of the Nice group, a global manufacturer of smart home, security and building automation solutions based in Oderzo, Italy. Nice employs more than 3,000 people in five continents and have 15 R&D centres and 14 production facilities serving partners and customers in over 100 countries. With its comprehensive product portfolio, Nice provides a complete ecosystem for buildings.

Founding the "Sun Shading Solutions" business unit at the beginning of 2021 set a major course for further international development in the sun protection market segment. This business division, which is headed by elero's managing director, is responsible for all of the Group's sun shading activities. Elero's expertise in this sector as well as the strength of Nice as an active global player should expand and secure the market position on an international level in the future.



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RevoLine S + M tubular drives

















Revoline L RH / L NHK tubular drives







**Venetian blind drives** 







Solar drive systems and speciality drives









Home automation, radio control systems and wireless sensors















Wired control systems, sensors and special control systems









Door drives and door control systems







Adapter profiles and lifting capacity tables





#### **Applications**



**Roller shutters** 



**ZIP** screen



Venetian blind / outdoor venetian blinds



Interior roller blind



**Awnings** 



Insect screen



**Rolling door** 



Folding shutters



Pergola



Door video intercom



Radiator thermostat



Radiant heater



Lighting



RGB-Lighting



Radio-controlled socket

#### Technical features



#### **Bidirectional**

The ProLine 2 bidirectional radio system provides feedback and ensures reliable relaying of signals.



#### Wired

Wired drive and control solutions for the automation of roller shutters and sun protection systems.



#### Unidirectional

The ProLine unidirectional radio system provides a reliable radio connection to receivers within range.



#### Plug & play

The end positions are taught in automatically during the first movements. Rigid shaft connectors are necessary for this.



#### Solar power

Ecological drive solutions for motorising privacy and sun protection without. a power connection..



#### Globalität

Worldwide access possible

#### Networking

works with



#### Marked in the catalog with this logo

Almost all bidirectional elero radio drives and receivers can be integrated into the Yubii Home smart home environment (see page 146).

The Yubii Home compatibility list can be downloaded at

www.elero.com/yubiihome-compatibility

#### Drive advantages / user benefits



#### **SilentMotion**

Drives with optimised running behaviour move the blinds almost silently in quiet mode.



#### Soft brake<sup>1</sup>

Drives with a soft brake stop the movement of the blind completely silently without any disturbing clacking noises.



#### Soft start<sup>2</sup>

Drives start and turn the slats at reduced speed particularly quietly and gently.



#### Soft stop<sup>2</sup>

Slow travel with reduced speed before the end positions and during slat turning.



#### **Anti-blocking detection**

Drives detect when the blind is frozen stuck or blocked and stop automatically.



#### Intelligent blind protection

Drives stop and move in the opposite direction a little if the blind meets an obstacle.



#### Anti push-up device

Motorised roller shutters with drives and mechanical anti push-up devices withstand break-in attempts for a long time.



#### End position adjustment<sup>3</sup>

Intelligent drives automatically compensate for changes in the winding behaviour of the blind over time.

#### Environment



#### Sun sensor

The automatic control of the roller shutters and sun protection systems is optimally based on the light conditions.



#### Rain sensor

Sun protection systems are retracted and protected as soon as raindrops are detected by the rain sensor.



#### **Temperature control**

For an optimal room climate, blinds can also be automatically controlled based on the current temperature.



#### Wind sensor

Sun protection systems are retracted and protected as soon as strong wind is detected by the wind sensor.



#### **Astro function**

Efficient opening and closing of the blinds according to sunrise and sunset times.



#### Time control

Blinds are opened and closed at fixed times to simulate presence.



#### **Twilight function**

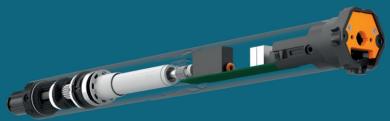
When dusk falls, the blinds lower automatically to protect against prying eyes and the cold.

Soft brake up to 8 Nm for RevoLine S, up to 20 Nm for RevoLine M and 25 Nm for RevoLine L as well as up to 9 Nm for JA /JAR Soft drives and all JA Comfort (/-868) drives

<sup>&</sup>lt;sup>2</sup> Only in combination with soft brake

<sup>&</sup>lt;sup>3</sup> With at least 1 stop run





### Perfect tubular drives

You can find out which drive has the desired functions in the overview from page 14.



#### **Anti-blocking detection**

Drives detect when the blind is frozen stuck or blocked and stop automatically.



#### Obstacle detection with free travel

The drive stops and moves a little in the opposite direction when the blind encounters an obstacle.



#### Soft start/Soft stop<sup>2</sup>

With reduced torque, the drive starts and stops particularly quietly and gently.



#### Softbremse<sup>1</sup>

Drives with a soft brake stop the movement of the blind completely silently without any disturbing clacking noises.



#### Anti push-up device

Motorised roller shutters with drives and mechanical anti push-up devices withstand break-in attempts for a long time.



#### Learning power curve

Intelligent drives provide exactly the torque required and thus protect the system.



#### SilentMotion

Drives with optimised running behaviour move the blinds almost silently in quiet mode.



#### Plug & play

The end positions are taught in automatically during the first few journeys. Rigid shaft connectors are required for this.



#### **Bidirectional/Wired**

elero drives are available as wired versions or with the bidirectional radio system ProLine 2 is available.



#### Solar power

Ecological drive solutions for motorising privacy and sun protection without a power connection.

<sup>&</sup>lt;sup>1</sup> Soft brake up to 8 Nm for RevoLine S, up to 20 Nm for RevoLine M and 25 Nm for RevoLine L

<sup>&</sup>lt;sup>2</sup> Only in combination with soft brake





## **Perfect Venetian Blind drives**

You can find out which drive has the desired functions in the overview from page 16.



#### **Anti-blocking detection**

Drives detect when the blind is frozen stuck or blocked and stop automatically.



#### **End position adjustment**

Reference runs ensure the blinds are always optimally positioned in the end positions.



#### Soft start/Soft stop<sup>2</sup>

With reduced torque, the drive starts and stops particularly quietly and gently.



#### Soft brake<sup>1</sup>

Drives with a soft brake stop the movement of the blind completely silently without any disturbing clacking noises.



#### Bidirectional/Wired

elero drives are available as wired versions or with the bidirectional radio system ProLine 2 is available.



#### Solar power

Ecological drive solutions for motorising privacy and sun protection without a power connection.

<sup>&</sup>lt;sup>1</sup> Soft brake up to 9 Nm for JA /JAR Soft drives and for all JA Comfort (/-868) drives

A legend of the individual pictograms can be found on page 10.

#### **Drives**

Applications / drive advantages / user benefits / features

Item	Page	Applications	Driv	e advan	tages / ι	ıser ben	efits		ı	Features	S
RevoLine S									ı		
RolTop S-868	24		Ž.		STOP		SIOP		<b>B</b>		
RolTop S	25				STOP		SIOP-		$\mathbb{U}$		
RolTop/D+ S-868	26		Ž.		STOP		SIOP-		<u>©</u>		
RolTop/D+ S	26		Î.		STOP		SIOP-		$\mathbb{I}$		
RolTop/T S-868	27	Î			STOP		STOP		®		
SunTop S-868	30						SIOP		®		
SunTop S	31		Ž V				SIOP		IJ		
VariEco S-868	34								<u>©</u>		
VariEco S VariEco S -K	34 35								Ü		
RevoLine M											
RolMotion M-868	46				STOP		SIOP	1	<b>B</b>		
RolMotion M	47				STOP		SIOP	7	Ü		
RolMotion/D+ M -868	48				STOP		510P	1		(C)	
RolMotion/D+ M	49				STOP		510P	7		IJ	
RolTop M-868 /-K	52				STOP		-SIOP-		©		
RolTop M /-K	54				STOP		SIOP		Ü		
RolTop/D+ M-868	56				STOP		SIOP		(C)		
RolTop/D+ M	56		Î.		STOP		SIOP		IJ		
RolTop/D+ M NHK	57				STOP		510P		IJ		

Item	Page	Applications		Drive advantages / u	ser benefits		Features
RolTop M-868 s_onro	58		À V	STOP			<b>©</b>
RolTop M s_onro	58			STOP			<b>TI</b>
RolTop/J M-868	59			STOP		HH R	<u>©</u>
RolTop/J M	59			STOP			m
SunTop M-868	62		À Y			WW R	<b>©</b>
SunTop M	63		À Y			WW R	<b>TI</b>
SunTop/Z M-868	64	Î	Y	STOP			<u> </u>
SunTop/Z M	65	Î	À	STOP			<b>M</b>
VariEco M-868 VariEco+ M-868	68						<u> </u>
VariEco M VariEco+ M	69						<b>TI</b>
VariEco M NHK	70						<b>TI</b>
RevoLine L							
RolTop L-868 RH	88			STOP	-SIQ		1
RolTop L-RH	89			STOP	-SIQ		<b>M</b>
SunTop L-868 RH	92				-SIQ		<u> </u>
SunTop L RH	93				-SIQ		<b>TI</b>
VariEco L RH	96						<b>TI</b>
VariEco L NHK	97						<b>n</b>

A legend of the individual pictograms can be found on page 10.

#### **Drives**

Applications / drive advantages / user benefits / features

Item	Page	Applications	Driv	e advantages	/ user ben	efits	F	eatures
Venetian blind driv	es							
JA Comfort-868 JA Comfort	110					-5101-	©	<b>M</b>
JA Comfort SMI	111					-510P-	Ŋ	
JA Soft	112						<b>U</b>	
JA e / dk	112						<b>M</b>	
JAR Soft	113						<b>M</b>	
JAR dk	113						IJ	
JA NHK	114						IJ	
Speciality drives								
Folding shutter drive	123			STO	•		$\mathbb{U}$	
Solar drive system	ıs							
RolSolar-868 DC	130			STO		-SIOP-	©	
RolSolar /D+ -868 DC	131			STO		STOP 1		
VariEco M DC	136						IJ	
VariEco M-868 DC	136						$\mathcal{G}$	
SunTop L-868 DC	136					-SIOP-	$\mathcal{S}$	
JA Soft DC	136						IJ	
Door drives								
Type 15 W Type 15 W NMA	244 245	<u> </u>					IJ	

#### **Control systems and sensors**

Applications / features / environment

Item	Page		Applications			Features	Environment
Smart Home							
Yubii Home	146	25°C† ( )		\$\$\$\$\$ -}		<b>®</b>	
Centero Home NXT	169	25°C† ( §		\$\$\$\$\$ - <del>}</del>	•	<b>®</b>	
Hand-held transmitte	ers						
VarioSon-868 Slide	174			<u> </u>	<b>\$</b> -	<b>S</b>	
LumeroSon-868 (Slide)	174			<u> </u>	<b>\$</b> -	<b>©</b>	
LumeroSon-868 Mini MonoSon-868 Mini	175			-	<b>\$</b> -	<u> </u>	
VarioCom (Slide)	176			-)	<b>\$</b> -	<u> </u>	
LumeroCom MonoCom (Slide)	176			-)	<b>\$</b> -	<u> </u>	
TempoTel 2	178			-)	<b>\$</b> -	<u>©</u> C	
MultiTel 2	178			-	<b>\$</b> -	<u> </u>	
VarioTel 2	178			-)	<b>\$</b> -	<b>3 5</b>	
LumeroTel 2 MonoTel 2	179			-)	<b>\$</b> -	<b>3 5</b>	
Radio transmitters							
VarioSon W-868	184			<u> </u>	<b>\$</b> -	<u> </u>	
LumeroSon W-868 MonoSon W-868	185			<u> </u>	<b>\$</b> -	<u> </u>	
AstroTec-868	186			-)		0	
AstroTec-868 bidi	186			-)		<u> </u>	<u>**</u>

A legend of the individual pictograms can be found on page 10.

#### **Control systems and sensors**

Applications / features / environment

Item	Page	Applications	Features	Environment
MonoTec-868	187		<u> </u>	
QuinTec-868	187		<b>©</b>	
Invio-868 UniTec-868 UniClic-868	188 189 189		<b>3</b>	
Radio receivers				
VarioTec-868	194		<b>3 5</b>	
Unio-868	195	<b>Φ</b>		
Revio-868 /P /SW	196		<b>©</b>	
AeroControl-868	197		$\mathcal{G}$	
Combio-868 JA /Pulse /RM	198		S S	
Combio-868 HE /LI	199		S S	
Combio-868 LI-D	201		<b>©</b>	
Wireless sensors				
Sensero-868 AC	208		S C W	
Sensero-868 AC /Plus	208		S C I	
Aero-868 /AC	209		S C I	<b>₩</b>
Aero-868 /Plus Aero /Z-868 Plus	209		S S	<b>*</b>
Protero-868	210		<b>3 5</b>	<u> </u>
Lumero-868	210		S S	
Lumo-868	211		<b>3 5</b>	

<sup>&</sup>lt;sup>5</sup> only Revio-868 SW

#### **Control systems and sensors**

Applications / features / environment

Item	Page	Applications	Features	Environment
Wall-mounted units				
AstroTec TempoTec AstroClic	216 217 217		M	
AeroTec	218		<b>I</b>	
VarioTec	218		$\mathbb{T}$	
TimeTec	219		M	<u></u>
Sensors				
Lumo	228		M	
Lumero	228		<b>M</b>	
Thermostat	229	25°C‡	<b>M</b>	
Aquero	229		<b>M</b>	* * * * * * • *
Aero	230		M	<del>**</del>
Relay and special co	ntrol s	ystems		
ExitSafe	236		<b>M</b>	
VarioTec-868 DC	237		S C I	
Central control units	238		<b>M</b>	
Control Unit DC	240		TI 🞬	
Door control system	s			
DoorControl	251		<b>M</b>	

<sup>&</sup>lt;sup>6</sup> only AstroTec and AstroClic <sup>7</sup> in combination with AstroTec and AeroTec <sup>8</sup> in combination with AstroTec

<sup>&</sup>lt;sup>9</sup> in combination with AeroTec

## elero

## Revoline S Tubular drives

RolTop S /-868	24.
RolTop/D+ S /-868	26.
RolTop/T S-868	27.
SunTop S /-868	30.
VariEco S /-868	34.
VariEco S /-K	35.
RevoLine S accessories	36.

## RolTop S-868 / RolTop S



RolTop-868 S / RolTop S tubular drives of the S series are especially suitable for small roller shutters, roller blinds and screens. Functions such as blind protection, intelligent force measurement and soft brake (up to 8 Nm) ensure gentle operation. All drives can be easily installed and adjusted in a time-saving manner. RolTop drives are

available with and without an integrated radio system. With a diameter of 35 mm and for shaft sizes of min. Ø 38 mm, the drives are ideally designed for space-saving systems. Configurations of 1.5 to 12 Nm and, depending on the version, 11 to 70 rpm are available. The RolTop/T S-868 is specially designed for dual screens with its jog/rest mode.

#### RolTop S drives are available with different drive heads:

#### White drive head

- Up to 5 Nm
- Suitable for RevoLine motor bearings in conjunction with a motor bearing or intermediate plate

Radio control







#### Black drive head

- Min. 5 Nm
- Suitable for RevoLine motor bearings in conjunction with a motor bearing or intermediate plate





#### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.







Applications	RolTop S-868 RolTop S	RolTop S-868 RolTop S high-speed version	RolTop/D+ S-868 RolTop/D+ S	RolTop/T S-868
Page	24/25	24/25	26	27
Roller shutters	•	•	•	
Roller blinds and screens	•	•		
Dual screens				•

TOP functions	RolTop S-868 RolTop S	RolTop S-868 RolTop S high-speed version	RolTop/D+ S-868 RolTop/D+ S	RolTop/T S-868
Special features	End positions freely adjustable	High-speed version	Plug & play / self-learning end positions	Jog/rest mode, high-speed version
Mechatronic end position detection with soft cut-out	•	•	•	•
Intelligent force measurement	•	•	•	•
Upward/downward blind protection and free travel	•	•	•	•
Self-learning end positions with release function			•	
End positions can be adjusted with assembly cable and/or hand-held* transmitter	•	•		•
Parallel connection possible (wired version only)	•	•	•	
Only in conjunction with rigid shaft connectors			•	

<sup>\*</sup> Only for 868 MHz radio drives

Technical data	RolTop S-868 RolTop S	RolTop S-868 RolTop S high-speed version	RolTop/D+ S-868 RolTop/D+ S	RolTop/T S-868
Rated torque (Nm)	5 to 12	1,5 to 5	5 to 12	1,5 to 5
Rated speed (rpm)	11 and 17	30 and 70	17	30 and 70
Min. shaft diameter (mm)	38	38	38	38
Diameter (mm)	35	35	35	35
Length (mm)	Min. 525	Min. 545	Min. 545	Min. 545
Noiseless soft brake (up to 8 Nm)	•	•	•	•
Protection class (IP)	44	44	44	44
Limit switch range (rev.)	40	80 to 160	40	80 to 160
Ambient operating temperature (°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Conformity	C€∰⊈	C€∰∰	C€∰∰	C€
Plug-in connection cable, 2.0 m	•	•	•	•

End position programmir		RolTop S-868 RolTop S	RolTop S-868 RolTop S high-speed version	RolTop/D+ S-868 RolTop/D+ S	RolTop/T S-868
Oben	Unten				
To stop	Freely adjustable	•	•		
Freely adjustable	To stop	•	•		
To stop	To stop	•	•	• Self-learning end positions	
Freely adjustable	Freely adjustable	•	•		•

## RolTop S-868

## Radio tubular drives for roller shutters and textile sun protection<sup>1</sup>

Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, end positions adjustable by radio control or with assembly cable, bidirectional radio control (868 MHz) with automatic routing function and feedback for radio drives. <sup>1</sup>Blind protection function can respond in the event of wind loads (for textile sun protection)











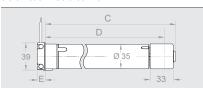






Yubii Home

#### elero head - radio control



White head	S1,5/70	S3/30	S5/30
	-868	-868	-868
Item number	30 222.0006	30 212.0006	30 232.0006

Black	S5	S8	S10	S12	S12/11
head	-868	-868	-868 FL	-868 FL	-868 FL
Item number	30 234.0006	30 254.0006	30 824.0006	30 814.0006	30 812.0006

#### Technical data

Rated torque (Nm) 1,5 3 5	
Dated around	
Rated speed (rpm)         70         30         30	)
Rated voltage (V) 1 ~ 230 1 ~ 230 1 ~ 2	230
Rated frequency 50 50 50	)
Noiseless soft brake	
High-speed version • • •	
<b>Rated current (A)</b> 0.55 0.55 0.7	3
Rated power consumption (W) 130 130 16	8
Operating time (min. S2) 5 4	
<b>Length C (mm)</b> 534 534 53	4
<b>Length D (mm)</b> 517.5 517.5 517	.5
<b>Length E (mm)</b> 11 11 11	
Weight (kg) 1.3 1.2 1.3	3

#### Technical data

Rated torque (Nm)	5	8	10	12	12
Rated speed (rpm)	17	17	17	17	11
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Noiseless soft brake	•	•	-	-	-
High-speed version	-	-	-	-	-
Rated current (A)	0.55	0.73	0.6	0.73	0.6
Rated power consumption (W)	130	168	140	168	140
Operating time (min. S2)	5	4	4	4	4
Length C (mm)	534	534	514	534	514
Length D (mm)	517.5	497.5	517.5	517.5	497.5
Length E (mm)	11	11	11	11	11
Weight (kg)	1.2	1.3	1.2	1.3	1.2

Accessories, such as connection and assembly cables, adapter sets, motor bearings and adapter plates, can be found in the section "RevoLine S accessories" on page 36. Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" from page 138.

## RolTop S

## Tubular drives for roller shutters and textile sun protection<sup>1</sup>





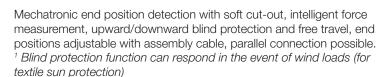


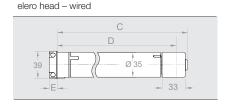












White head		S1,5/70	S3/30	S5/30
Item num	ber	30 221.0001	30 211.0001	30 231.0001

Black head	S5	<b>S</b> 8	S10 FL	S12 FL	S12/11 FL
Item number	30 233.0001	30 253.0001	30 823.0001	30 813.0001	30 811.0001

#### Technical data

Rated torque (Nm)	1,5	3	5
Rated speed (rpm)	70	30	30
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50
Noiseless soft brake	•	•	•
High-speed version	•	•	•
Rated current (A)	0.55	0.55	0.73
Rated power consumption (W)	130	130	168
Operating time (min. S2)	5	5	4
Length C (mm)	534	534	534
Length D (mm)	517.5	517.5	517.5
Length E (mm)	11	11	11
Weight (kg)	1.3	1.2	1.3

#### Technical data

Rated torque (Nm)	5	8	10	12	12
Rated speed (rpm)	17	17	17	17	11
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Noiseless soft brake	•	•	-	_	_
High-speed version	_	_	-	-	-
Rated current (A)	0.55	0.73	0.6	0.73	0.6
Rated power consumption (W)	130	168	140	168	140
Operating time (min. S2)	5	4	4	4	4
Length C (mm)	534	534	514	534	514
Length D (mm)	517.5	497.5	517.5	517.5	497.5
Length E (mm)	11	11	11	11	11
Weight (kg)	1.2	1.3	1.2	1.3	1.2

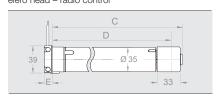
Accessories, such as connection and assembly cables, adapter sets, motor bearings and adapter plates, can be found in the section "RevoLine S accessories" on page 36. Suitable control systems, transmitters and sensors can be found in the section "Control systems" from page 214.

## RolTop/D+ S-868 RolTop/D+ S

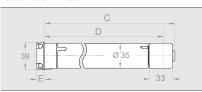
#### **Tubular drives for roller shutters**

Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, self-learning end positions with release function, parallel connection possible (for wired drives), bidirectional radio (868 MHz) with automatic routing function and feedback for radio drives.

#### elero head – radio control



#### elero head - wired





















**Yubii** Home

Only in conjunction with rigid shaft connectors!

Black	D+ S5	D+ S8	D+ S12
head	-868	-868	-868
Item number	30 238.0006	30 258.0006	30 818.0006

Black head	D+ S5	D+ S8	D+ S12
Item number	30 237.0001	30 257.0001	30 817.0001

#### Technical data

Rated torque (Nm)	5	8	12
Rated speed (rpm)	17	17	17
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50
Noiseless soft brake	•	•	-
High-speed version	_	_	_
Rated current (A)	0.55	0.55	0.73
Rated power consumption (W)	130	130	168
Operating time (min. S2)	5	4	4
Length C (mm)	534	534	534
Length D (mm)	517.5	517.5	517.5
Length E (mm)	11	11	11
Weight (kg)	1.3	1.3	1.3

Accessories, such as connection and assembly cables, adapter sets, motor bearings and adapter plates, can be found in the section "RevoLine S accessories" on page 36. Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" from page 138.

## RolTop/T S-868

#### Radio tubular drives for dual screen











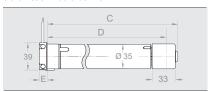






Mechatronic end position detection with soft cut-out, jog/rest mode, intelligent force measurement, upward/downward blind protection and free travel, end positions adjustable with assembly cable or hand-held transmitter, min. shaft size  $\emptyset$  = 38 mm, noiseless soft brake, bidirectional radio control (868 MHz) with automatic feedback and routing function.

#### elero head - radio control



White head	T S1,5/70	T S3/30	T S5/30
	-868	-868	-868
Item number	30 226.0006	30 216.0006	30 236.0006

#### **Technical data**

Rated torque (Nm)	1,5	3	5
Rated speed (rpm)	70	30	30
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50
Noiseless soft brake	•	•	•
High-speed version	•	•	•
Rated current (A)	0.55	0.55	0.73
Rated power consumption (W)	130	130	168
Operating time (min. S2)	5	5	4
Length C (mm)	534	534	534
Length D (mm)	517.5	517.5	517.5
Length E (mm)	11	11	11
Weight (kg)	1.3	1.2	1.3

Accessories, such as connection and assembly cables, adapter sets, motor bearings and adapter plates, can be found in the section "RevoLine S accessories" on page 36. Suitable control systems as well as radio transmitters and sensors can be found in the section "Home automations" from page 138.

## SunTop S-868 / SunTop S



The SunTop S-868 / SunTop S tubular drives of the S series for small window awnings and roller blinds are available both with and without an integrated radio system. Where noise is particularly disturbing, drives with noiseless soft brakes can be used.

In addition, the drives are equipped with blockage detection and intelligent force measurement. With a diameter of 35 mm, the drives are ideally designed for space-saving systems. 5 to 7 Nm and 30 rpm are available.

#### SunTop S drives are available with different drive heads:

#### White drive head

- Up to 5 Nm
- Suitable for Revolution motor bearings in conjunction with a motor bearing or intermediate plate

#### Radio control







#### Black drive head

- From 5 Nm
- Suitable for RevoLine motor bearings in conjunction with a motor bearing or intermediate plate



#### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.





Applications	SunTop S-868 SunTop S
Page	30/31
Textile sun protection	•

TOP functions	SunTop S-868 SunTop S
Special features	High-speed version
Mechatronic limit position detection with soft cut-out	•
Intelligent force measurement	•
Blocking recognition	•
End positions can be set with assembly cable and/or hand-held transmitter	•
Noiseless soft brake (up to 5 Nm)	•
Parallel connection possible (wired version only)	•

<sup>\*</sup> only for 868 MHz radio drives

Technical data	SunTop S-868 SunTop S
Rated torque (Nm)	5 and 7
Rated speed (rpm)	30
Min. shaft diameter (mm)	38
Diameter (mm)	35
Length (mm)	545
Noiseless soft brake (up to 5 Nm)	•
Protection class (IP)	44
Limit switch range (rev.)	40, 80
Ambient operating temperature (°C)	-20 to +60
Conformity	C€∰∭
Plug-in connection cable, 2.0 m	•

End position programming		SunTop S-868 SunTop S
Тор	Bottom	
To stop	Freely adjustable	•
Freely adjustable	To stop	•
To stop	To stop	•
Freely adjustable	Freely adjustable	•

## SunTop S-868

#### Radio tubular drives for textile sun protection







Yubii Home

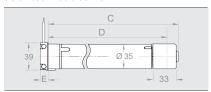






Mechatronic end position detection with soft cut-out, intelligent force measurement, blocking detection, end positions adjustable with assembly cable or hand-held transmitter, min. shaft size  $\emptyset$  = 38 mm, noiseless soft brake up to 5 Nm, bidirectional radio (868 MHz) with automatic routing function and feedback.

elero head - radio control



White head	S5/30 -868
Item number	30 732.0006

Black	S7/30
head	-868 FL
Item number	30 752.0006

Technical data	
Rated torque (Nm)	5
Rated speed (rpm)	30
Rated voltage (V)	1 ~ 230
Rated frequency (Hz)	50
Noiseless soft brake	•
High-speed version	•
Rated current (A)	0.73
Rated power consumption (W)	168
Operating time (min S2)	4
Length C (mm)	534
Length D (mm)	517.5
Length E (mm)	11
Weight (kg)	1.3

Technical data	
Rated torque (Nm)	7
Rated speed (rpm)	30
Rated voltage (V)	1 ~ 230
Rated frequency (Hz)	50
Noiseless soft brake	-
High-speed version	•
Rated current (A)	0.73
Rated power consumption (W)	168
Operating time (min S2)	4
Length C (mm)	534
Length D (mm)	517.5
Length E (mm)	11
Weight (kg)	1.4

Accessories, such as connection and assembly cables, adapter sets, motor bearings and adapter plates, can be found in the section "RevoLine S accessories" on page 36. Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" from page 138.

## SunTop S

## **Tubular drives for textile sun protection**







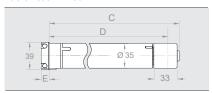






Mechatronic end position detection with soft cut-out, intelligent force measurement, blocking detection, end positions adjustable with assembly cable, min. shaft size  $\emptyset$  = 38 mm, noiseless soft brake up to 5 Nm, parallel connection possible.

#### elero head - wired



White head	S5/30
Item number	30 731.0001

Black head	S7/30 FL
Item number	30 751.0001

Technical data
Rated torque
(Nm)

#### Technical data

recillical data	
Rated torque (Nm)	5
Rated speed (rpm)	30
Rated voltage (V)	1 ~ 230
Rated frequency (Hz)	50
Noiseless soft brake	•
High-speed version	•
Rated current (A)	0.73
Rated power consumption (W)	168
Operating time (min S2)	4
Length C (mm)	534
Length D (mm)	517.5
Length E (mm)	11
Weight (kg)	1.3

Rated speed (rpm)	30
Rated voltage (V)	1 ~ 230
Rated frequency (Hz)	50
Noiseless soft brake	_
High-speed version	•
Rated current (A)	0.73

 Rated power consumption (W)
 168

 Operating time (min S2)
 4

 Length C (mm)
 534

 Length D (mm)
 517.5

 Length E (mm)
 11

 Weight (kg)
 1.4

Accessories, such as connection and assembly cables, adapter sets, motor bearings and adapter plates, can be found in the section "RevoLine S accessories" on page 36. Suitable control systems can be found in the section "Control systems" from page 214.

## VariEco S-868 / VariEco S



VariEco S-868 / VariEco S tubular drives of the S series for roller shutters and textile sun protection are available both without and with an integrated radio system. With a diameter of 35 mm, the drives are ideally designed for space-saving systems. In addition, the VariEco S-K

drive impresses with its short design. 1.5 to 12 Nm and 42 rpm are available. Where noise is particularly disturbing, drives with noiseless soft brakes can be used. All drives can be easily installed and adjusted in a timesaving manner.

#### VariEco S drives are available with different drive heads:

#### White drive head

- Up to 5 Nm
- Suitable for RevoLine motor bearings in conjunction with a motor bearing or intermediate plate

#### Radio control







#### Black drive head

- Min. 5 Nm
- Suitable for Revolution motor bearings in conjunction with a motor bearing or intermediate plate

#### - IVIIII. 5 IVIII





- Connection cable not interchangeable
- Short design



#### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards. At the heart of the technology (868 MHz) are bidirectional radio components (transceivers) that are capable

not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.









Applications	VariEco S-868 VariEco S	VariEco S-868 VariEco S high-speed version	VariEco S-K	VariEco S-K high-speed version
Page	34	34	35	35
Roller shutters	•	•	•	•
Textile sun protection	•	•	•	•

TOP functions	VariEco S-868 VariEco S	VariEco S high-speed version	VariEco S-K	VariEco S-K high-speed version
Mechanical limit switch	•	•	•	•
Short design			•	•

Technical data	VariEco S-868 VariEco S	VariEco S-868 VariEco S high-speed version	VariEco S-K	VariEco S-K high-speed version
Rated torque (Nm)	5 to 12	1.5 to 5	5	1,2 and 3
Rated speed (rpm)	11 and 17	30 and 70	17	30 and 70
Rated frequency (Hz)	50	50	50	50
Min. shaft diameter (mm)	38	38	38	38
Diameter (mm)	35	35	35	35
Length (mm)	from 525	545	421	421
Noiseless soft brake (up to 8 Nm)	(not VariEco FL / -868)	•	•	•
Protection class (IP)	44	44	44	44
Limit switch range (rev.)	42	42	33	33
Ambient operating temperature (°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Conformity	C€♠ℚ	C€♠₾	C€♠ℚ	C€∰⊈
Plug-in connection cable, 2.0 m	•	•	3.0 m not interchangeable	3.0 m not interchangeable

End position programming		VariEco S-868 VariEco S	VariEco S-868 VariEco S high-speed version	VariEco S-K	VariEco S-K high-speed version
Тор	Bottom				
Freely adjustable*	Freely adjustable*	•	•	•	•

<sup>\*</sup> Mechanical

## VariEco S-868 / VariEco S

## **Tubular drives for roller shutters** and textile sun protection









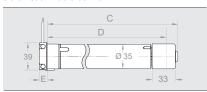




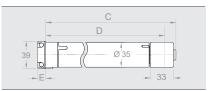


Mechanical limit switch, min. shaft size  $\emptyset$  = 38 mm, noiseless soft brake up to 8 Nm, bidirectional radio (868 MHz) with automatic feedback and routing function (with radio drives).

#### elero head - radio control



#### elero head - wired



Head white	S1.5/70 -868	S3/30 -868	\$5/30 -868	
Item number	30 922.0106	30 912.0106	30 932.0106	

Head	S5	S8	S8	S12	
black	-868 FL	-868	-868 FL	-868 FL	
Item number	30 844.0106	30 954.0106	30 854.0106	30 864.0106	

Head white	S1 5/70		S5/30	S5/30 FL
Item number	30 921.0101	30 911.0101	30 931.0101	30 831.0101

Head black	S5 FL	S8	S10 FL	S12 FL	S12/11 FL
Item number	30 843.0101	30 953.0101	30 873.0101	30 863.0101	30 855.0101

#### Technical data

Rated torque (Nm)	1.5	3	5	5
Rated speed (Upm)	70	30	30	30
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50
Noiseless soft brake	•	•	•	_
High-speed version	•	•	•	•
Rated current (A)	0,55	0,55	0,73	0,6
Rated power consumption (W)	130	130	168	140
Operating time (min S2)	5	5	4	4
Length C (mm)	534	534	534	514
Length D (mm)	517,5	517,5	517,5	497,5
Length E (mm)	11	11	11	11
Weight (kg)	1,3	1,3	1,3	1,2

#### Technical data

Rated torque (Nm)	5	8	10	12	12
Rated speed (Upm)	17	17	17	17	11
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Noiseless soft brake	-	•	-	-	-
High-speed version	-	-	-	-	-
Rated current (A)	0.60	0.73	0.6	0.73	0.6
Rated power consumption (W)	140	168	140	168	140
Operating time (min S2)	4	4	4	4	4
Length C (mm)	514	534	514	534	514
Length D (mm)	497.5	517.5	497.5	517.5	497.5
Length E (mm)	11	11	11	11	11
Weight (kg)	1,3	1,3	1,3	1,4	1,2

Accessories, such as connection and assembly cables, adapter sets, motor bearings and adapter plates, can be found in the section "RevoLine S accessories" on page 36. Suitable control systems can be found in the section "Home automations" from page 138.

## VariEco S-K

## **Tubular drives for roller shutters and textile sun protection**







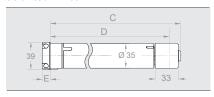






Mechanical limit switch, short design, min. shaft size  $\emptyset = 38$  mm, noiseless soft brake, 3.0 m connection cable (not replaceable).

#### elero head - wired



Head white	S1.2/70-K	S3/30-K	S5-K
Item number	30 971.0101	30 991.0101	30 981.0101

#### Technical data

Rated torque (Nm)         1.2         3         5           Rated speed (Upm)         70         30         17           Rated voltage (V)         1 ~ 230         1 ~ 230         1 ~ 230           Rated frequency (Hz)         50         50         50           Noiseless soft brake         •         •         •           High-speed version         •         -         -           Rated current (A)         0.52         0.52         0.52           Rated power consumption (W)         120         120         120           Operating time (min S2)         4         4         4           Length C (mm)         410         410         410           Length D (mm)         393         393         393           Length E (mm)         11         11         11           Weight (kg)         1.2         1.2         1.2				
Rated voltage (V)		1.2	3	5
(V)         1~230         1~230         1~230           Rated frequency (Hz)         50         50         50           Noiseless soft brake         •         •         •           High-speed version         •         -         -           Rated current (A)         0.52         0.52         0.52           Rated power consumption (W)         120         120         120           Operating time (min S2)         4         4         4           Length C (mm)         410         410         410           Length D (mm)         393         393         393           Length E (mm)         11         11         11		70	30	17
frequency (Hz)         50         50         50           Noiseless soft brake         •         •         •           High-speed version         •         -         -           Rated current (A)         0.52         0.52         0.52           Rated power consumption (W)         120         120         120           Operating time (min S2)         4         4         4           Length C (mm)         410         410         410           Length D (mm)         393         393         393           Length E (mm)         11         11         11	•	1 ~ 230	1 ~ 230	1 ~ 230
soft brake         -           High-speed version         -           Rated current (A)         0.52         0.52         0.52           Rated power consumption (W)         120         120         120           Operating time (min S2)         4         4         4           Length C (mm)         410         410         410           Length D (mm)         393         393         393           Length E (mm)         11         11         11		50	50	50
Version         —           Rated current (A)         0.52         0.52         0.52           Rated power consumption (W)         120         120         120           Operating time (min S2)         4         4         4           Length C (mm)         410         410         410           Length D (mm)         393         393         393           Length E (mm)         11         11         11		•	•	•
(A) 0.52 0.52 0.52  Rated power consumption (W) 120 120 120  Operating time (min S2) 4 4 4  Length C (mm) 410 410 410  Length D (mm) 393 393 393  Length E (mm) 11 11 11		•	•	_
consumption (W)         120         120         120           Operating time (min S2)         4         4         4           Length C (mm)         410         410         410           Length D (mm)         393         393         393           Length E (mm)         11         11         11		0.52	0.52	0.52
(min S2)     4     4     4       Length C (mm)     410     410     410       Length D (mm)     393     393     393       Length E (mm)     11     11     11	consumption	120	120	120
Length D (mm)         393         393         393           Length E (mm)         11         11         11		4	4	4
Length E (mm) 11 11 11	Length C (mm)	410	410	410
9 ()	Length D (mm)	393	393	393
Weight (kg) 1.2 1.2 1.2	Length E (mm)	11	11	11
	Weight (kg)	1.2	1.2	1.2

Accessories, such as connection and assembly cables, adapter sets, motor bearings and adapter plates, can be found in the section "RevoLine S accessories" on page 36. Suitable control systems can be found in the section "Wall-mounted devices" from page 214.

#### Cables and accessories

The return of connecting cables is not possible!



Connection cable without drive, white

Item number	Type/Item Description
23 615.2501	0.2 m pluggable
23 395.0201	2.0 m pluggable
23 395.0301	3.0 m pluggable
23 395.0401	5.0 m pluggable
23 395.0501	10.0 m pluggable
23 395.0901	15.0 m pluggable
23 395.0601	20.0 m pluggable
23 395.2601	QuickConnect with MiniPlug, IP 65 Cable length of 0.25 m
23 395.0101	0.4 m, pluggable with Hirschmann plug STAS3, light grey, moulded on
23 395.0801	2.0 m pluggable with Hirschmann plug STAS3, light grey, screwed on

Assembly and connection cables and accessories

Item number	Type/Item Description
23 395.8502	Assembly cable with 4-pin terminal
13 710.5101	Quick clamp as replacement for assembly cable 23 395.8501
23 285.1201	Cable adapter, 0.25 m, 4-core/ STAK3
23 395.2701	QuickConnect, quick connection system, IP 65
23 395.4701	QuickConnect, set of 10
23 846.0001	Hirschmann plug STAS3 (motor side), light grey with clip
13 701.5301	Hirschmann coupling STAK3 (connection side), light grey
23 999.1001	Hirschmann plug STAS3 (motor side), with clip, black
13 703.1001	Hirschmann plug STAK3 (connection side), black
13 308.0001	Flexible adjustment aid
23 375.6001	Wire jumper for Hirschmann plug for radio motors
13 308.4201	Rubber grommet

Cable extensions with Hirschmann STAS3 can be found on page 116!



Connection cable without drive, black

Item number	Type/Item Description
23 395.6101	0.5 m pluggable halogen-free
23 395.2201	2.0 m pluggable
23 395.2301	3.0 m pluggable
23 395.9301	3.0 m pluggable halogen-free
23 395.2401	5.0 m pluggable
23 395.9401	5.0 m pluggable halogen-free
23 395.2501	10.0 m pluggable
23 395.9501	10.0 m pluggable halogen-free
23 395.4001	10,0 m pluggable halogen-free with grommet
23 395.2101	0.4 m, pluggable with Hirschmann plug STAS3, light grey, moulded on
23 395.8101	0.4 m, pluggable with Hirschmann plug STAS3, light grey, moulded on, halogen-free
23 395.2901	2.0 m, pluggable with Hirschmann plug STAS3, black, screwed on



Assembly and disassembly must be carried out only in a de-energised state! The connections to the 230 V mains must be made by authorised specialist personnel.

## **Drive adapters**

Profiles of the adapter sets in 1:1 scale can be found on page 254.















Item number	Type/Item Description	Notch tubes	Round tubes	Profile tubes
22 017.0001	Ø 52 x 1.5 mm	•		
22 004.0001	Ø 63 x 1.0 mm	•		
22 011.0001	Ø 40 x 1.0 mm		•	
22 009.0001	Ø 40 x 1.5 mm		•	
13 101.5301	Ø 40 x 1.5 mm (limit switch crown only), white for interior roller blind application		•	
13 119.0301	Ø 40 x 1.5 mm (coupling only)		•	
13 119.0601	Ø 40 x 2.0 mm (coupling only), Ø 38 x 1.0 mm		•	
22 015.0001	Ø 42 x 1.0 mm		•	
22 071.0001	Ø 50 x 1.5 mm		•	
22 016.0001	Ø 50 x 2.0 mm, Italy		•	
22 010.0001	For octagonal, size 40, aluminium tube, Selve			•
23 097.0001	For aluminium profile tube, Ø 42 mm, Silentgliss			•
22 013.0001	Ø 42 x 2.0 mm, Bautex, Sundrape			•
22 018.0001	Ø 43.5 mm, Tecnolight/Acmeda, Ø 44 mm, Garattoni			•
22 083.0001	Ø 43 mm, Spain			•
22 014.0001	Ø 45 mm, Zurflüh-Feller ZF 45			•
22 068.0001	Ø 47 mm			•
22 002.0001	AXE Ø 48 mm, Griesser-Hüppe			•
22 006.0001	Für 8-kant, SW 50 Selve			•
22 007.0001	Ø 50 x 1.5 mm, Siral			•
22 012.0001	Ø 50 mm, Alu			•
22 054.0001	Ø 50 mm, Alu, Latin America			•
22 084.0001	Ø 53 mm, Spain			•
22 008.0001	54 x 0.5 mm, Zurflüh-Feller			•
22 135.0001	55 x 1.5 mm profile tube, Weinor (coupling only)			•
22 005.0001	60 mm, octagonal, Selve, Döhner			•
10 111.0296	Rubber circlip for motor coupling, 2 mm			
10 111.0264	Rubber circlip, reinforced for motor coupling, 2	2.7 mm		
13 300.9701	RevoLine metal clip for motor coupling			
13 121.3001	Adapter ring for using S drives with M adapter	sets		
23 028.0001	Adapter for Somfy adapter set, max. 40 Nm (suitable for Somfy and Simu, 50 mm motor co	ouplings)		

### **RevoLine motor adapter plates**



To use S-motor in RevoLine bearing (see below). Order with this number so that the plate is mounted on the ordered motor.



Like number 99 000.7501, as retrofit or spare part for existing drive.

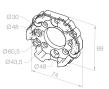
### RevoLine motor bearing in conjunction with motor bearing plate



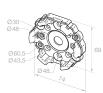
23 004.0001 Universal motor bearing (plastic), torque limitation, max. 50 Nm



23 615.4401 Universal motor bearing, disengageable, torque limitation, max. 30 Nm



23 003.0001 Pitch circle 48/60 with 4 x M6 nuts



23 003.0201 (aluminium) with 4 x M6 nuts and centring

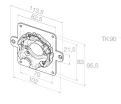


23 003.0401 Pitch circle of 48 mm with 2 x M5 nuts, pitch circle of 60 mm



23 003.0301 with M6/M8 thread - for awnings

#### SKS



23 004.0101 Motor bearing for SKS torque limitation Max. 50 Nm

### With base plate



23 615.9901 Base plate with motor bearing, e.g. for VEKA

### With mounting plate



23 615.7101 Mounting plate with plastic bearing up to max. 30 Nm (Thyssen, Schüco, Veka, Home)



23 615.9101 Motor bearing, cranked, up to max. 50 Nm (60 mm wall distance)



23 615.3501 Special bolt bearing with height adjustment with M10 bolt, max 80 Nm



Clamp bearing

23 615.7201 Clamp bearing for roller bearing bracket, torque limitation up to max. 30 Nm

#### Screwless, left



23 615.8201 For built-in roller shutters. size 137 mm, d = 64 - 65.5 mm, up to max. 30 Nm

### Screwless, right



23 615.9201 For built-in roller shutters. size 137 mm, d = 64 - 65.5 mm, up to max. 30 Nm

#### Screwless, left



23 615.8301 For built-in roller shutters. size 150 mm, up to max. 30 Nm

Screwless, right



23 615.9301

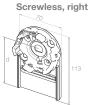


For built-in roller shutters, size 150 mm, up to max. 30 Nm

#### Screwless, left



23 615.8401 For built-in roller shutters, size 165 mm, d = 78.2 - 79.7 mm,up to max. 30 Nm



23 615.9401 For built-in roller shutters, size 165 mm, d = 78.2 - 79.7 mm,up to max. 30 Nm

#### Screwless Left + right



23 003.1601 For Heroal elements FMR/FME/FMB Size 125-205 mm up to max. 30 Nm

### Screwless, left



23 003.1501 For Heroal elements FMR/FME/FMB Size 125-205 mm

#### Screwless, right



23 003.1401 For Heroal elements FMR/FME/FMB Size 125-205 mm

### Motor adapter plates – intermediate plates



To use S-motor in the bearings below. Order with this number so that the plate is mounted on the ordered motor.



Like number 99 000.7501, as retrofit or spare part for existing drive.



Like number 99 000.7401, in white. As retrofit or spare part for existing drive.

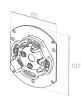
### Motor bearing in conjunction with intermediate plate



23 322.0001 Pitch circle 48 and 60 With oblong hole



23 108.0001 Pitch circle 48 and 60



23 277.0001 With motor bearing (Thyssen, Schüco, Brügmann)

### Intermediate, motor bearing and adapter plates Intermediate plates

Set of intermediate plates



22 145.0001 For use with RevoLine wall bearings



23 375.9001<sup>2</sup> Motor bearing plate set for use in star head bearing (Somfy compatible)



22 141.0001 Orange, complete, incl. mounting accessories



22 144,0001 White, complete, incl. mounting accessories



22 140.0001 Without leaf, orange, complete, incl. mounting accessories



22 042.0001 Without leaf, white, complete Incl. mounting accessories

Intermediate plate



22 042.0101

Without leaf, white, complete, incl. mounting accessories with long screws for use with following metal adapter plates

Bearing plates \*



22 143.0001<sup>3</sup>

16 x 16 mm (incl. white

intermediate plate and

mounting accessories),

can be used up to 5 Nm

22 064.0001 22 065.0001 Cross = 13 mm Slot = 16.4 mmComplete, incl. mounting accessories accessories



23 367.0001° 16 x 16 mm, complete

Adapter \*

22 040.0001 complete, incl. accessories



23 099.0001 With 10 x 6.5 mm bolt (11 mm high) incl. fixing screws



Complete, incl. mounting



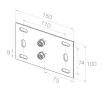
22 080.0001 (15 x 3 mm slot), Benthin incl. mounting accessories

Only the accessory plates marked with \* are suitable for VariEco S-K drives.

## Wall bearings/mounting plates



13 300.9202 Plaster bearings up to max. 80 Nm



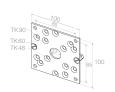
**24 554.0001**Mounting plate for universal bearing (23 004.0001 and 23 615.4401)



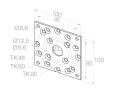
13 302.2601 Mounting plate for motor bearing (Stakusit)



13 302.7801 Mounting plate for motor bearing, pitch circle of 78 mm E.g. for Weru elements



23 687.0501 Base plate with 2 retractable M6 x 16 screws and nuts



13 109.2902
Base plate with 48/60/90
mm pitch circle
(without motor bearing
and screws)



23 687.0401 Spacer plate, aluminium, black, with 2x M6 x 14 mm

### Angle bracket



**13 110.5101** 130 mm high



**13 110.5201** 180 mm high

### Fixing clips



13 301.8201 For T-spring 40 mm, octagonal shaft



13 301.8501 For T-spring 50 mm, octagonal shaft

### Hochschiebesicherungen

#### Miniprofil anti push-up devices

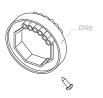


**13 301.8901** 2-membered



**13 301.9101** 3-membered

#### Attachment rings



**13 301.9401**For 40 mm octagonal shaft



**13 302.1501**For 50 mm
Octagonal shaft

### MiniClick and MaxiClick rigid shaft connectors

Universal for size 40, 50, 60 and 70 octagonal shafts



#### MiniClick, with twist lock

For mini profiles and octagonal shafts, size 40, 50 (0.6 and 0.8 mm) and size 60 (0.6 and 0.9 mm)

Item number	Type/Item Description	
13 309.0001	MiniClick, 1-membered	
13 309.0101	MiniClick, 2-membered	
13 309.0201	MiniClick, 3-membered	
13 309.0301	MiniClick, 4-membered	
13 309.0401	MiniClick slide-in profile	
13 309.0501	MiniClick compensation profile	

### MaxiClick, with twist lock

For standard/new construction profiles and octagonal shafts, size 60 (0.9 mm) and size 70 (1.0/1.2 and 1.5 mm)

Type/Item Description	
MaxiClick, 1-membered	
MaxiClick, 2-membered	
MaxiClick, 3-membered	
MaxiClick slide-in profile	
MaxiClick compensation profile	

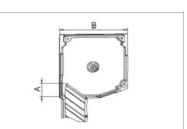
#### **Determination of the suitable MiniClick shaft connector**

Shaft connector	With box depth B1 (mm)	Number per blind	Blind weight (kg)	Application range
1-membered	115 – 150	One rigid shaft		
2-membered	155 – 180	connector per 60 cm shaft length or per	Max. 8	N 40-17N 4-1-1-1-1
3-membered	185 – 210		per shaft connector	Mini/Maxi profile <sup>1</sup>
4-membered	215 – 240	4 Nm motor output		

### **Determination of the suitable MaxiClick shaft connector**

Shaft connector	With box depth B1 (mm)	Number per blind	Blind weight (kg)	Application range
1-membered	125 – 160	One rigid shaft		
2-membered	160 – 200	connector per 60 cm shaft length or per	Max. 12 per shaft connector	Mini/Maxi profile1
3-membered	200 – 250	6 Nm motor output	per snart connector	

<sup>&</sup>lt;sup>1</sup> Values depend, among other things, on the shaft type.



The top profile bar of the roller shutter should not protrude from the guide rail by more than ½ of the profile height (A). The "push-up effect" works only if the individual members are supported against each other and the first roller shutter profile is pressed down into the guide!

## elero

# Revoline M Tubular drives

RolMotion M /-868	46.
RolMotion/D+ M /-868	48.
RolTop M /-868	52.
RolTop/D+ M /-868	56.
RolTop/D+ M NHK	57.
RolTop M s_onro /-868	58.
RolTop/J M /-868	59.
<b>SunTop M /-868</b>	62.
SunTop/Z M /-868	64.
VariEco M / VariEco+ M	68.
VariEco M NHK	70.
RevoLine M accessories	72.
SunTop/Z M /-868 VariEco M / VariEco+ M VariEco M NHK	64. 68. 70.

## RolMotion M-868 / RolMotion M



RolMotion drives from elero ensure slower and quieter movement of motorised roller shutters thanks to their optimised running behaviour. In addition to proven technologies, such as the soft brake and obstacle and blockage detection, quiet mode offers you even greater living comfort at minimum noise pollution. The RolMotion M-868 and M tubular drives are available both with and without an integrated radio system. They have a diameter of 45 mm and a minimum length of 478 mm.

Configurations of 6 to 25 Nm and, depending on the version, 5 to 14 rpm are available. All drives can be easily installed and adjusted in a time-saving manner. With the RH and SH tubular drives, the range of applications of the M series has been further expanded. The main feature of RH drives is that the round head can be wound over, which significantly reduces the space required on the side. Drives of the SH series (star motor head) fit, among others, in motor bearings of various competitors.

### RolMotion M drives are available with different drive heads:

#### elero head

- Small deduction dimension
- Suitable for all RevoLine motor bearings from elero

#### Radio control







#### RH head (round head)

- Tubular drive with wrap-around round motor head
- Very small deduction dimension
- Individually deployable



### SH head (star head)

- Tubular drive with star motor head
- Suitable for common star motor bearings



### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.







Applications	RolMotion M-868 RolMotion M	RolMotion/D+ M-868 RolMotion/D+ M	
Page	46/47	48/49	
Roller shutters	•	•	

TOP functions	RolMotion M-868 RolMotion M	RolMotion/D+ M-868 RolMotion/D+ M
Special features	End positions freely adjustable	Plug & play / self- learning end positions
Mechatronic end position detection with soft cut-out	•	•
Quiet mode	•	•
Long runtime (10 Min.)	•	•
Intelligent force measurement	•	•
Upward/downward blind protection and free travel	•	•
Self-learning end positions with release function		•
End positions freely adjustable	•	
Parallel connection possible (up to 3 drives) (wired version only)	•	•
Ventilation and intermediate position adjustable (radio drives)	•	•
Only in conjunction with rigid shaft connectors		•

Technical data	RolMotion M-868 RolMotion M	RolMotion/D+ M-868 RolMotion/D+ M
Rated torque (Nm)	6 to 25	6 to 25
Rated speed (Upm)	14	14
Rated speed in quiet mode (rpm)	5	5
Min. shaft diameter (mm)	50	50
Diameter (mm)	45	45
Length (mm)	from 478	from 478
Noiseless soft brake	•	•
Protection class (IP)	44	44
Limit switch range (rev.)	70	70
Ambient operating temperature (°C)	-20 to +60	-20 to +60
Conformity	C€	C€
Plug-in connection cable, 2.0 m	•	•

End position programming		RolMotion M-868	RolMotion/D+ M-868
		RolMotion M	RolMotion/D+ M
Тор	Bottom		
To stop	Freely adjustable	•	
Freely adjustable	To stop	•	
To stop	To stop	•	Self-learning end positions
Freely adjustable	Freely adjustable	•	

## **RolMotion M-868**

## Radio tubular drives for roller shutters with quiet mode





















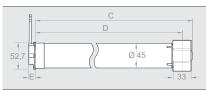
Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, automatic release for torque cut-off at end position, end positions adjustable with radio transmission or assembly cable, min. shaft size  $\varnothing=50$  mm, noiseless soft brake up to 5 Nm, bidirectional radio control (868 MHz) with automatic routing function and feedback.

Yubii Home

elero head - radio control



Round head RH - radio control



Star head SH - radio control



elero	M6	M10	M20	M25
head	-868	-868	-868	-868
Item number	44 302.0001	44 222.0001	44 232.0001	44 242.0001

Round head	M6	M10	M20	M25
	-868 RH	-868 RH	-868 RH	-868 RH
Item number	48 302.0001	48 222.0001	48 232.0001	48 242.0001

Star	M6	M10	M20	M25
head	-868 SH	-868 SH	-868 SH	-868 SH
Item number	49 302.0001	49 222.0001	49 232.0001	49 242.0001

#### Technical data

Rated torque (Nm)	6	10	20	25
Rated speed (Upm)	14/5	14/5	14/5	14/5
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50
Noiseless soft brake	•	•	•	•
Rated current (A)	0.4	0.5	0.8	1.1
Rated power consumption (W)	92	115	184	253
Operating time (min S2)	10	10	10	10
Length C (mm)	466	466	526	546
Length D (mm)	449	449	509	529
Length E (mm)	elero head	l = 14, round h	ead = 12, star	head = 19
Weight (kg)	1.7	1.7	2.1	2.5

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72.

Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" on page 138.

## **RolMotion M**

## Tubular drives for roller shutters with quiet mode

















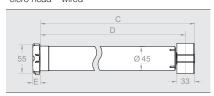




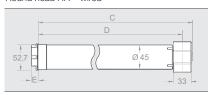


Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, automatic release for torque cut-off at end position, end positions adjustable with assembly cable, min. shaft size  $\emptyset=50$  mm, noiseless soft brake up to 25 Nm. Parallel connection with up to three drives possible.

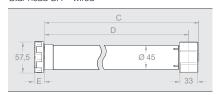
elero head - wired



Round head RH - wired



Star head SH - wired



elero head	М6	M10	M20	M25
Item number	44 301.0001	44 221.0001	44 231.0001	44 241.0001

Round head	M6 RH	M10 RH	M20 RH	M25 RH
Item number	48 301.0001	48 221.0001	48 231.0001	48 241.0001

Star head	M6 SH	M10 SH	M20 SH	M25 SH
Item number	49 301.0001	49 221.0001	49 231.0001	49 241.0001

#### Technical data

Rated torque (Nm)	6	10	20	25
Rated speed (Upm)	14/5	14/5	14/5	14/5
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50
Noiseless soft brake	•	•	•	•
Rated current (A)	0.4	0.5	0.8	1.1
Rated power consumption (W)	92	115	184	253
Operating time (min S2)	10	10	10	10
Length C (mm)	466	466	526	546
Length D (mm)	449	449	509	529
Length E (mm)	elero head	= 14, round h	ead = 12, star	head = 19
Weight (kg)	1.7	1.7	2.1	2.5

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72.

Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

## RolMotion/D+ M-868

## Radio tubular drives for roller shutters with quiet mode

















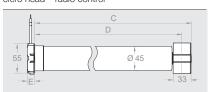




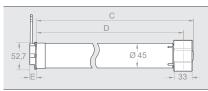
Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, automatic release for torque cut-off at end position, min. shaft size  $\varnothing=50$  mm, noiseless soft brake up to 25 Nm, bidirectional radio control (868 MHz) with automatic routing function and feedback.



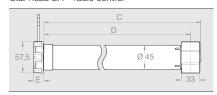
elero head - radio control



Round head RH - radio control



Star head SH - radio control



elero	/D+ M6	/D+ M10	/D+ M20	/D+ M25
head	-868	-868	-868	-868
Item number	44 014.0001	44 024.0001	44 034.0001	44 044.0001
Round head	/D+ M6	/D+ M10	/D+ M20	/D+ M25
	-868 RH	-868 RH	-868 RH	-868 RH
Item number	48 014.0001	48 024.0001	48 034.0001	48 044.0001
Star	/D+ M6	/D+ M10	/D+ M20	/D+ M25
head	-868 SH	-868 SH	-868 SH	-868 SH
Item number	49 014.0001	49 024.0001	49 034.0001	49 044.0001

#### Technical data

Rated torque (Nm)	6	10	20	25
Rated speed (Upm)	14/5	14/5	14/5	14/5
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50
Noiseless soft brake	•	•	•	•
Rated current (A)	0.4	0.5	0.8	1.1
Rated power consumption (W)	92	115	184	253
Operating time (min S2)	10	10	10	10
Length C (mm)	466	466	526	546
Length D (mm)	449	449	509	529
Length E (mm)	elero head	l = 14, round h	ead = 12, star	head = 19
Weight (kg)	1.7	1.7	2.1	2.5

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72.

Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" on page 138.

## RolMotion/D+ M

## Tubular drives for roller shutters with quiet mode

















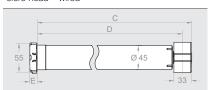




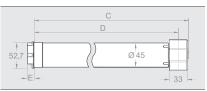
Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, automatic release for torque cut-off at end position, min. shaft size  $\emptyset$  = 50 mm, noiseless soft brake up to 25 Nm. Parallel connection with up to three drives possible.



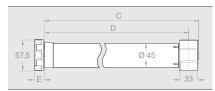




Round head RH - wired



Star head SH - wired



elero head	/D+ M6	/D+ M10	/D+ M20	/D+ M25
Item number	44 013.0001	44 023.0001	44 033.0001	44 043.0001

Round head	/D+ M6 RH	/D+ M10 RH	/D+ M20 RH	/D+ M25 RH
Item number	48 013.0001	48 023.0001	48 033.0001	48 043.0001

Star head	/D+ M6 SH	/D+ M10 SH	/D+ M20 SH	/D+ M25 SH
Item number	49 013.0001	49 023.0001	49 033.0001	49 043.0001

#### Technical data

Rated torque (Nm)	6	10	20	25
Rated speed (Upm)	14/5	14/5	14/5	14/5
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50
Noiseless soft brake	•	•	•	•
Rated current (A)	0.4	0.5	0.8	1.1
Rated power consumption (W)	92	115	184	253
Operating time (min S2)	10	10	10	10
Length C (mm)	466	466	526	546
Length D (mm)	449	449	509	529
Length E (mm)	elero head	I = 14, round h	ead = 12, star	head = 19
Weight (kg)	1.7	1.7	2.1	2.5

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72.

Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

## RolTop M-868 / RolTop M



With a diameter of 45 mm and a minimum length of 403 mm (K version), the tubular drives of the RolTop M series are suitable for space-saving roller shutters, blinds and screens.

The majority of drives are available with or without an integrated radio system. Drives from 2.5 to 50 Nm are available with 14 to 90 rpm, depending on the version. Drives with soft brakes (up to max. 20 Nm) are suitable for low-noise movement of the blind. All drives are easy

to install and adjust in a time-saving manner. With the RH and SH tubular drives, the range of applications of the M series has been further expanded. The main feature of the RH drives is the wrap-around round head, which reduces the space required on the side significantly. Drives of the SH series (star head motor bearing) fit, among others, in motor bearings of various competitors. The NHK drives also offer an emergency operation option with an emergency crank handle.

### RolTop M drives are available with different drive heads:

#### elero head

- Small deduction dimension
- Suitable for all RevoLine motor bearings from elero

#### Radio control W





#### RH head (round head)

- Tubular drive with wrap-around round motor head
- Very small deduction dimension
- Individually deployable



#### SH head (star head)

- Tubular drive with star motor head
- Suitable for common star motor bearings





#### NHK head (emergency manual operation)

- NHK operation with 7 mm, hexagonal and 6 mm, square crank



### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.







Applications	RolTop M-868 /-K RolTop M /-K	RolTop M-868 RolTop M high-speed version	RolTop/D+ M-868 RolTop/D+ M	RolTop/D+ M NHK	RolTop s_onro M-868 RolTop s_onro M	RolTop/J M-868 RolTop/J M
Page	52/54	52/54	56	57	58	59
Roller shutters	•	•	•	•		
Roller blinds and screens	•	•				
s_onro roller shutter					•	
Tiltable roller shutters						•

TOP functions	RolTop M-868 /-K RolTop M /-K	RolTop M-868 RolTop M high-speed version	RolTop/D+	RolTop/D+ M NHK	RolTop s_onro M-868 RolTop s_onro M	RolTop/J M-868 RolTop/J M
Special features	End positions freely adjustable - K = short design	High-speed version	Plug & play / self-learning end positions	Emergency manual operation	Soft cut-out in downward direction	Roller shutter with venetian blind function
Mechatronic limit position detection with soft cut-out	•	•	•	•	•	•
Intelligent force measurement	•	•	•	•	•	•
Upward/downward blind protection and free travel	•+	•+	•	•	•	•
Self-learning end positions with release function			•	•		
Release can be activated at end positions	•	•			•	
End positions can be set with assembly cable and/or hand-held transmitter	•	•			•	•
Parallel connection possible (wired version only)	•	•	•	•	•	•
Only in conjunction with rigid shaft connectors			•	•		

<sup>\*</sup> Without free travel +without free travel depending on version

Technical data	RolTop M-868 /-K RolTop M /-K	RolTop M-868 RolTop M high-speed version	RolTop/D+ M-868 RolTop/D+ M	RolTop/D+ M NHK	RolTop s_onro M-868 RolTop s_onro M	RolTop/J M-868 RolTop/J M
Rated torque (Nm)	6 to 50	1.8 to 12	6 to 30	6 to 30	10 to 50	10 to 50
Rated speed (Upm)	14	23 to 90	14	14	14	14
Min. shaft diameter (mm)	50	50	50	50	50	50
Diameter (mm)	45	45	45	45	45	45
Length (mm)	from 405 (K version)	from 478	from 460	from 550	from 480	from 480
Noiseless soft brake (up to 20 Nm)	•	• (not M9/35/-868)	•	•	•	•
Protection class (IP)	44	44	44	44	44	44
Limit switch range (rev.)	40	40	40	40	40	40
Ambient operating temperature (°C	-20 to +60	-20 o +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Conformity	C€∰®	C€∰®	C€∰Œ	C€∰®	C€♠҈҈	<b>(€</b> <u>∰</u> <u></u>
Plug-in connection cable, 2.0 m	•	•	•	•	•	•

End position		RolTop M-868 /-K RolTop M /-K	RolTop M-868 RolTop M high-speed version	RolTop/D+	RolTop/D+ M NHK	RolTop s_onro M-868 RolTop s_onro M	RolTop/J M-868 RolTop/J M
Тор	Bottom						
To stop	Freely adjustable	•	•			•	•
Freely adjustable	To stop	•	•			•	•
To stop	To stop	•	•	• 1	• 1	•	•
Freely adjustable	Freely adjustable	•	•			•	•

<sup>&</sup>lt;sup>1</sup> Self-learning end positions

## RolTop M-868 /-K

## Radio tubular drives for roller shutters, blinds, insect protection and screens















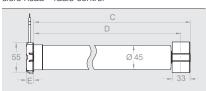


position, end positions adjustable by radio or with assembly cable, min. shaft size  $\emptyset = 50$  mm, noiseless soft brake up to 20 Nm, bidirectional radio control at 868 MHz with automatic routing function and feedback.



**Yub**iii Home

#### elero head - radio control



#### Round head RH - radio control



#### Star head SH - radio control



elero	M2,5/90	M6	M6/35	M7/23	M9/35
head	-868	-868	-868	-868	-868
Item number	34 160.0006	34 302.0006	34 238.0006	34 226.0006	34 248.0006

Round head	M1,8/138 -868 RH	M2,5/90 -868 RH	M4/60 -868 RH	M6/35 -868 RH	M7/23 -868 RH	M9/35 -868 RH
Item number	38 450.0006	38 160.0006	38 460.0006	38 438.0006	38 226.0006	38 448.0006

Observe the attachment instructions on page 76!

1		
Star head	M6 -868 SH	
Item number	39 302.0006	

#### Technical data

Rated torque (Nm)	1.8	2,5	4	6	6	7	9
Rated speed (Upm)	138	90	60	14	35	23	35
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	230 – 240	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50	50
Noiseless soft brake	•	•	•	•	•	•	-
High-speed version	•	•	•	_	•	•	•
Rated current (A)	0.9	0.9	0.9	0.52	0.9	0.6	0.9
Rated power consumption (W)	200	200	200	118	200	140	140
Operating time (min. S2)	5	5	5	4	5	5	4
Length C (mm)	526	526	526	445	526	466	466
Length D (mm)	509	509	509	428	509	449	449
Length E (mm)		elero h	ead = 14,	round head $= 1$	2, star hea	nd = 19	
Weight (kg)	1.9	1.9	1.9	1.6	1.8	1.7	1.7

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72. Suitable control units such as radio transmitters and sensors can be found in the section "Home automations" from page 138.

## RolTop M-868 /-K

## Radio tubular drives for roller shutters, blinds, insect protection and screens













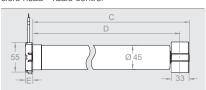




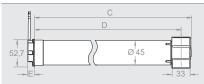
Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection, with and without free travel, activatable release at end position, end positions adjustable by radio control or with assembly cable, min. shaft size  $\varnothing=50$  mm, noiseless soft brake up to 20 Nm, bidirectional radio control at 868 MHz with automatic routing function and feedback.



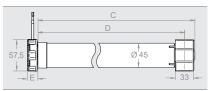
#### elero head - radio control







#### Star head SH - radio control



elero	M10	M10	M12/23	M20	M30	M40	M50
head	-868	-868-K	-868	-868	-868	-868	-868
Item number	34 222.0006	34 112.0007	34 236.0006	34 232.0006	34 242.0006	34 252.0006	34 262.0006

elero head	Without free travel M10-868	Without free travel M20-868	Without free travel M30-868	Without free travel M40-868	Without free travel M50-868
Item number	34 222.0076	34 232.0076	34 242.00076	34 252.0076	34 262.0076

Special motors "without free travel" do not reverse if they cut out due to an obstacle. These motors are suitable for lockable roller shutters and small doors.

Round head	M10	M10	M12/23	M20	M30
	-868 RH	-868-K RH	-868 RH	-868 RH	-868 RH
Item number	38 222.0006	38 112.0007	38 236.0006	38 232.0006	38 242.0006

Observe	the	att	achm	ent
instruction	ons	on	page	76!

Star	M10	M10	M20	M30	M40	M50
head	-868 SH	-868-K SH	-868 SH	-868 SH	-868 SH	-868 SH
Item number	39 222.0006	39 112.0007	39 232.0006	39 242.0006	39 252.0006	39 262.0006

#### Technical data

Rated torque (Nm)	10	10	12	20	30	40	50
Rated speed (Upm)	14	14	23	14	14	14	14
Rated voltage (V)	230 – 240	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50	50
Noiseless soft brake	•	•	•	•	_	-	-
High-speed version	_	_	•	_	_	_	_
Rated current (A)	0.6	0.6	0.9	0.9	0.9	1.2	1.3
Rated power consumption (W)	140	140	200	200	200	270	300
Operating time (min. S2)	5	4	5	4	4	5	4
Length C (mm)	466	391	526	526	516	546	546
Length D (mm)	449	374	509	509	499	529	529
Length E (mm)		elero h	ead = 14,	round head = 1	2, star hea	ıd = 19	
Weight (kg)	1.7	1.5	1.9	2.1	2.3	2.6	3.1

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72. Suitable control units such as radio transmitters and sensors can be found in the section "Home automations" from page 138.

## RolTop M /-K

## Tubular drives for roller shutters, blinds, insect protection and screens











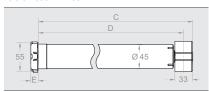




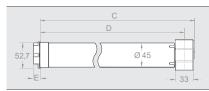


Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, activatable release at end position, end positions adjustable with assembly cable, min. shaft size  $\emptyset$  = 50 mm, noiseless soft brake up to 20 Nm, parallel connection possible.

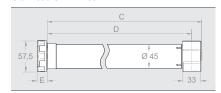
#### elero head - wired



#### Round head RH - wired



#### Star head SH - wired



elero head	M2.5/90	M6	M6/35	M7/23	M9/35
Item number	34 169.0001	34 301.0001	34 237.0001	34 225.0001	34 247.0001

Round head	M1.8/138 RH	M2.5/90 RH	M4/60 RH	M7/23 RH	
Item number	38 459.0001	38 169.0001	38 469.0001	38 225.0001	

Observe the attachment instructions on page 76!

Star head	M6	SH	
Item number	39 301	.0001	

#### Technical data

Rated torque (Nm)	1,8	2,5	4	6	6	7	9
Rated speed (Upm)	138	90	60	14	35	23	35
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	230 – 240	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50	50
Noiseless soft brake	•	•	•	•	•	•	-
High-speed version	•	•	•	_	•	•	•
Rated current (A)	0.9	0.9	0.9	0.52	0.9	0.6	0.9
Rated power consumption (W)	200	200	200	118	200	140	140
Operating time (min. S2)	5	5	5	4	5	5	4
Length C (mm)	526	526	526	445	526	466	466
Length D (mm)	509	509	509	428	509	449	449
Length E (mm)		elero h	ead = 14,	round head = 1	2, star hea	nd = 19	
Weight (kg)	1.9	1.9	1.9	1.6	1.8	1.7	1.7

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72. Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

## RolTop M /-K

## Tubular drives for roller shutters, blinds, insect protection and screens











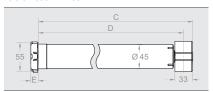




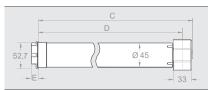


Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection, with and without free travel, activatable release at end position, end positions adjustable with assembly cable, min. shaft size  $\emptyset$  = 50 mm, noiseless soft brake up to 20 Nm, parallel connection possible.

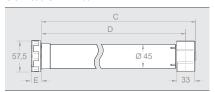
#### elero head - wired







#### Star head SH - wired



elero head	M10	M10-K	M12/23	M20	M30	M40	M50
Item number	34 221.0001	34 111.0002	34 235.0001	34 231.0001	34 241.0001	34 251.0001	34 261.0001

elero head	Without free travel M10	Without free travel M20	Without free travel M30	Without free travel M40	Without free travel M50
Item number	34 221.0007	34 231.0007	34 241.0007	34 251.0007	34 261.0007

Special motors "without free travel" do not reverse if they cut out due to an obstacle. These motors are suitable for lockable roller shutters and small doors.

Round head	M10 RH	M10-K RH	M12/23 RH	M20 RH	M30 RH
Item number	38 221.0001	38 111.0002	38 235.0001	38 231.0001	38 241.0001

Observe the	attachment
instructions	on page 76!

Star head	M10 SH	M10-K SH	M20 SH	M30 SH	M40 SH	M50 SH
Item number	39 221.0001	39 111.0002	39 231.0001	39 241.0001	39 251.0001	39 261.0001

#### Technical data

							I
Rated torque (Nm)	10	10	12	20	30	40	50
Rated speed (Upm)	14	14	23	14	14	14	14
Rated voltage (V)	230 – 240	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50	50
Noiseless soft brake	•	•	•	•	-	-	_
High-speed version	-	_	•	-	-	-	_
Rated current (A)	0.6	0.6	0.9	0.9	0.9	1.2	1.3
Rated power consumption (W)	140	140	200	200	200	270	300
Operating time (min. S2)	5	4	5	4	4	5	4
Length C (mm)	466	391	526	526	516	546	546
Length D (mm)	449	374	509	509	499	529	529
Length E (mm)		elero h	ead = 14,	round head = 1	2, star hea	ıd = 19	
Weight (kg)	1.7	1.5	1.9	2.1	2.3	2.6	3.1

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72. Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

## RolTop/D+ M-868 RolTop/D+ M

### **Tubular drives for roller shutters**

Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, self-learning end positions with automatic release function, min. shaft size  $\emptyset$  = 50 mm, noiseless soft brake up to 20 Nm, bidirectional radio control at 868 MHz with automatic routing function and feedback (with radio drives). Parallel connection possible (with wired drives).











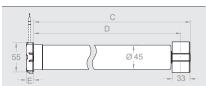




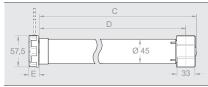




#### elero head



### Star head SH



### **Yubii** Home

Only in conjunction with rigid shaft connectors!

elero	/D+ M6	/D+ M10	/D+ M20	/D+ M30
head	-868	-868	-868	-868
Item number	34 014.0006	34 024.0006	34 034.0006	34 044.0006

Star head		/D+ M6 -868 SH	/D+ M10 -868 SH	/D+ M20 -868 SH	/D+ M30 -868 SH
Item nur	mber	39 014.0006	39 024.0006	39 034.0006	39 044.0006

elero head	/D+ M6	/D+ M10	/D+ M20	/D+ M30
Item number	34 013.0001	34 023.0001	34 033.0001	34 043.0001

Star head	/D+ M6 SH	/D+ M10 SH	/D+ M20 SH	/D+ M30 SH
Item number	39 013.0001	39 023.0001	39 033.0001	39 043.0001

#### Technical data

Rated torque (Nm)	6	10	20	30	
Rated speed (Upm)	14	14	14	14	
Rated voltage (V)	1 ~ 230	230 – 240	1 ~ 230	1 ~ 230	
Rated frequency (Hz)	50	50	50	50	
Noiseless soft brake	•	•	•	-	
Rated current (A)	0.52	0.6	0.9	0.9	
Rated power consumption (W)	118	140	200	200	
Operating time (min. S2)	4	5	4	4	
Length C (mm)	446	466	526	516	
Length D (mm)	429	449	509	499	
Length E (mm)	elero head = 14				
Weight (kg)	1.4	1.8	2.2	2.3	

#### Technical data

Rated torque (Nm)	6	10	20	30	
Rated speed (Upm)	14	14	14	14	
Rated voltage (V)	1 ~ 230	230 – 240	1 ~ 230	1 ~ 230	
Rated frequency (Hz)	50	50 50 50		50	
Noiseless soft brake	•	•	•	_	
Rated current (A)	0.52	0.6	0.9	0.9	
Rated power consumption (W)	118	140	200	200	
Operating time (min. S2)	4	5	4	4	
Length C (mm)	446	466	526	516	
Length D (mm)	429	449	509	499	
Length E (mm)	Star head = 19				
Weight (kg)	1.4	1.8	2.2	2.3	

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72.

Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" from page 138 and in the section "Wall-mounted-devices" on page 214.

## RolTop/D+ M NHK

## Tubular drives with emergency crank handle













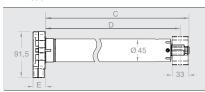
Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, self-learning end positions with release function, min. shaft size  $\emptyset$  = 50 mm, noiseless soft brake up to 20 Nm, NHK operation with 7 mm, hexagonal and 6 mm, square crank.







#### NHK head



NHK	/D+ M6	/D+ M10	/D+ M20	/D+ M30
head	NHK	NHK	NHK	NHK
Item number	34 103.0001	34 113.0001	34 123.0001	34 133.0001

#### **Technical data**

Rated torque (Nm)	6	10	20	30
Rated speed (Upm)	14	14	14	14
Rated voltage (V)	1 ~ 230	230 – 240	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50
Noiseless soft brake	•	•	•	-
Rated current (A)	0.52	0.6	0.9	0.9
Rated power consumption (W)	118	140	200	200
Operating time (min. S2)	4	5	4	4
Length C (mm)	524	544	604	594
Length D (mm)	507	527	587	577
Length E (mm)	26	26	26	26
Weight (kg)	2.0	2.4	2.9	3.1
NHK transmission ratio	18:1	18:1	18:1	30:1

Compatible accessories	Assembly kit (including 16 x 16 mm motor bolts)
Item number	23 162.0801

Accessories such as connection and assembly cables, adapter sets and motor bearings can be found in the section "RevoLine M NHK accessories" on page 79.

Suitable control systems and transmitters and sensors can be found in the section "Control systems" on page 214.

## RolTop M-868 s\_onro RolTop M s\_onro

## Tubular drives with particularly gentle downward cut-out











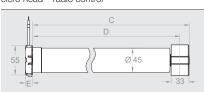




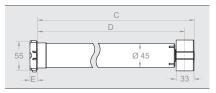


Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, activatable release at end position, end positions adjustable by radio or with assembly cable, min. shaft size  $\varnothing=50$  mm, noiseless soft brake up to 20 Nm, bidirectional radio control at 868 MHz with automatic routing function and feedback (with radio drives). For s\_onro roller shutters.

elero head - radio control







elero head	M10-868 s_onro	M20-868 s_onro	M30-868 s_onro	
Item number	34 222.5606	34 232.5606	34 242.5606	

elero head	M10 s_onro	M20 s_onro	M30 s_onro
Item number	34 221.5601	34 231.5601	34 241.5601

SH head	M10 s_onro SH	M20 s_onro SH	M30 s_onro SH	M40 s_onro SH	M50 s_onro SH
Item number	39 221.5601	39 231.5601	39 241.5601	39 251.5601	39 261.5601

#### **Technical data**

i ecnnicai data					
Rated torque (Nm)	10	20	30	40	50
Rated speed (Upm)	14	14	14	14	14
Rated voltage (V)	230 – 240	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Noiseless soft brake	•	•	-	-	-
Rated current (A)	0.6	0.9	0.9	1.2	1.3
Rated power consumption (W)	140	200	200	270	300
Operating time (min. S2)	5	4	4	5	4
Length C (mm)	446	526	516	546	546
Length D (mm)	449	509	499	529	529
Length E (mm)		elero he	ad = 14 Star he	ead = 19	
Weight (kg)	1.9	2.2	2.3	2.6	3.1

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72.

Suitable control systems as well as transmitters and sensors can be found in the section "Control systems" on page 214.

## RolTop/J M-868 RolTop/J M

### **Tubular drives for roller shutters** with venetian blind function

Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel, activatable release at end position, end positions adjustable by radio control or with assembly cable, min. shaft size Ø = 50 mm, noiseless soft brake up to 20 Nm, adapted to various systems, special function with third position (venetian blind position). Bidirectional radio control at 868 MHz with automatic routing function and feedback (with radio drives).











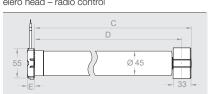




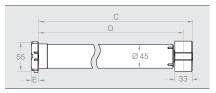




#### elero head - radio control







elero head	/J M10-868	/J M20-868	/J M30-868	/J M40-868	/J M50-868
Item number	34 224.0006	34 234.0006	34 244.0006	34 254.0006	34 264.0006

elero head	/J M10	/J M20	/J M30	/J M40	/J M50
Item number	34 223.0001	34 233.0001	34 243.0001	34 253.0001	34 263.0001

#### **Technical data**

Rated torque (Nm)	10	20	30	40	50
Rated speed (Upm)	14	14	14	14	14
Rated voltage (V)	230 – 240	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Noiseless soft brake	•	•	-	-	_
Rated current (A)	0.6	0.9	0.9	1.2	1.3
Rated power consumption (W)	140	200	200	270	300
Operating time (min. S2)	5	4	4	5	4
Length C (mm)	466	526	516	546	546
Length D (mm)	449	509	499	529	529
Length E (mm)			elero head = 14		
Weight (kg)	1.8	1.9	2.2	2.6	3.1

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72. Suitable control systems as well as radio transmitters and sensors can be found in the section "Control systems" on page 214.

## SunTop M-868 / SunTop M



The SunTop M-868 and SunTop M tubular drives of the M series are especially suitable for awnings, roller blinds and screens. With a diameter of 45 mm and a minimum length of 478 mm, the medium-sized drive of the SunTop series is especially designed for space-saving systems. The drives are available with and without an integrated radio system. Drives from 2.5 to 50 Nm are available with 14 to 90 rpm, depending on the version. Where noise is particularly disturbing, the use of drives

(up to max. 20 Nm) with noiseless soft brakes is recommended. All drives can be easily installed and adjusted in a time-saving manner. With the RH and SH tubular drives, the range of applications of the M series has been further expanded. The main feature of the RH drives is the wrap-around round head, which significantly reduces the space required on the side. Drives of the SH series fit, among others, in numerous motor bearings of various competitors.

### SunTop M drives are available with three different drive heads:

#### elero head

- Small deduction dimension
- Suitable for all RevoLine motor bearings from elero

#### Radio control







#### RH head (round head)

- Tubular drive with wrap-around round motor head
- Very small deduction dimension
- Individually deployable



#### SH head (star head)

- Tubular drive with star motor head
- Suitable for common star motor bearings



### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.







Applications	SunTop M-868 SunTop M	SunTop M-868 SunTop M High-speed version	SunTop/Z M-868 SunTop/Z M	SunTop/Z M-868 SunTop/Z M High-speed version
Page	62/63	62/63	64/65	64/65
Textile sun protection	•	•	•	•

TOP functions	SunTop M-868 SunTop M	SunTop M-868 SunTop M High-speed version	SunTop/Z M-868 SunTop/Z M	SunTop/Z M-868 SunTop/Z M High-speed version
Special features	End positions freely adjustable	High-speed version	Blocking detection (upward direction) and blind protection (downward direction) with repeat function	Blocking detection (upward direction) and blind protection (downward direction) with repeat function
Mechatronic end position detection with soft cut-out	•	•	•	•
Intelligent force measurement	•	•	•	•
Upward/downward blocking detection	•	•		
Upward blocking detection with repeat function			•	•
Downward blind protection with repeat function			•	•
Release can be activated at end positions	•	•	•	•
End positions can be set with assembly cable and/or hand-held transmitter	•	•	•	•
Parallel connection possible (wired version only)	•	•	•	•

Technical data	SunTop M-868 SunTop M	SunTop M-868 SunTop M High-speed version	SunTop/Z M-868 SunTop/Z M	SunTop/Z M-868 SunTop/Z M High-speed version
Rated torque (Nm)	10 to 50	7 to 12	10 to 30	2.5 to 28
Rated speed (rpm)	14	23	14	23 to 90
Min. shaft diameter (mm)	50	50	50	50
Diameter (mm)	45	45	45	45
Length (mm)	from 478	from 478	from 478	from 478
Noiseless soft brake (up to 20 Nm)	•	•	(not SunTop/Z M 18/23-868)	• (not SunTop/Z M18/23)
Protection class (IP)	44	44	44	44
Limit switch range (rev.)	40	40	40	40
Ambient operating temperature (°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Conformity	C€∰∭	C€∰ℚ	C€∰®	C€∰⊈
Plug-in connection cable, 2.0 m	•	•	•	•

End position programming		SunTop M-868 SunTop M			SunTop/Z M-868 SunTop/Z M High-speed version
Тор	Bottom				_
To stop	Freely adjustable	•	•	•	•
Freely adjustable	To stop	•	•	•	•
To stop	To stop	•	•	•	•
Freely adjustable	Freely adjustable	•	•	•	•

## SunTop M-868

## Radio tubular drives for textile sun protection









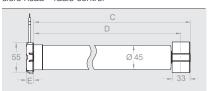




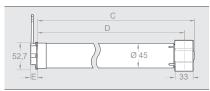
Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blocking detection, activatable release at end position, end positions adjustable by radio transmission or with assembly cable, min. shaft size  $\emptyset$  = 50 mm, noiseless soft brake up to 20 Nm, bidirectional radio (868 MHz) with automatic routing function and feedback.



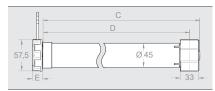
#### elero head - radio control



#### Round head RH - radio control



#### Star head SH - radio control



elero head	M7/23 -868	M10 -868	M12/23 -868	M20 -868	M30 -868	M40 -868	M50 -868
Item number	34 726.0006	34 722.0006	34 736.0006	34 732.0006	34 742.0006	34 752.0006	34 762.0006
Round head		M10 -868 RH		M20 -868 RH	M30 -868 RH	M40 -868 RH	M50 -868 RH
Item number		38 722.0006		38 732.0006	38 742.0006	38 752.0006	38 762.0006
Star head		M10-868 SH		M20 -868 SH	M30 -868 SH	M40 -868 SH	M50 -868 SH
Item number		39 722.0006		39 732.0006	39 742.0006	39 752.0006	39 762.0006

#### Technical data

Rated torque (Nm)	7	10	12	20	30	40	50
Rated speed (rpm)	23	14	23	14	14	14	14
Rated voltage (V)	230 – 240	230 – 240	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50	50
Noiseless soft brake	•	•	•	•	-	_	_
High-speed version	•	-	•	-	-	-	-
Rated current (A)	0.6	0.6	0.9	0.9	0.9	1.2	1.3
Rated power consumption (W)	140	140	200	200	200	270	300
Operating time (min. S2)	5	5	5	4	4	5	4
Length C (mm)	466	466	526	526	516	546	546
Length D (mm)	449	449	509	509	499	529	529
Length E (mm)		elero	head = 14,	round head = 1	2, star head	I = 19	
Weight (kg)	1.7	1.7	2.1	2.2	2.3	2.5	3.1

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72.

Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" on page 138.

## SunTop M

### **Tubular drives** for textile sun protection







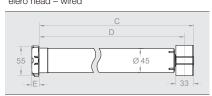




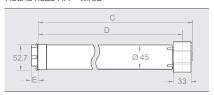


Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blocking detection, activatable release at end position, end positions adjustable with assembly cable, min. shaft size  $\emptyset$  = 50 mm, parallel connection possible, noiseless soft brake up to 20 Nm.

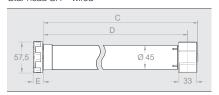
elero head - wired



Round head RH - wired



Star head SH - wired



elero head	M7/23	M10	M12/23	M20	M30	M40	M50
Item number	34 725.0001	34 721.0001	34 735.0001	34 731.0001	34 741.0001	34 751.0001	34 761.0001

Round head	M7/23 RH	M10 RH	M12/23 RH	M20 RH	M30 RH	M40 RH	M50 RH
Item number	38 725.0001	38 721.0001	38 735.0001	38 731.0001	38 741.0001	38 751.0001	38 761.0001

Star head	M10 SH	M20 SH	M30 SH	M40 SH	M50 SH
Item number	39 721.0001	39 731.0001	39 741.0001	39 751.0001	39 761.0001

#### **Technical data**

Rated torque	7	10	12	20	30	40	50
(Nm) Rated speed	23	14	23	14	14	14	14
(rpm) Rated voltage (V)	230 – 240	230 – 240	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50	50
Noiseless soft brake	•	•	•	•	-	-	-
High-speed version	•	-	•	-	-	-	-
Rated current (A)	0.6	0.6	0.9	0.9	0.9	1.2	1.3
Rated power consumption (W)	140	140	200	200	200	270	300
Operating time (min. S2)	5	5	5	4	4	5	4
Length C (mm)	466	466	526	526	516	546	546
Length D (mm)	449	449	509	509	499	529	529
Length E (mm)		elero	head = 14,	round head = 12	2, star head	l = 19	
Weight (kg)	1.7	1.7	2.1	2.2	2.3	2.5	3.1

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72. Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

## SunTop/Z M-868

### Radio tubular drives for ZIP systems















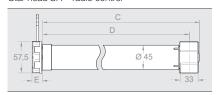
Yubii Home

Mechatronic end position detection with soft cut-out, intelligent force measurement, upward blocking detection with repeat function, downward blind protection with repeat function, release activatable at end position, end positions adjustable by radio control or with assembly cable, min. shaft size  $\emptyset = 50$  mm, noiseless soft brake up to 20 Nm (except SunTop/Z M 18/23-868), bidirectional radio control (868 MHz) with automatic routing function and feedback.

#### Round head RH - radio control



#### Star head SH - radio control



Round head		/Z M2,5/90 -868 RH	/Z M4/60 -868 RH	/ <b>Z</b> M7/23 -868 RH	/Z M10 -868 RH	/Z M12/23 -868 RH	/Z M18/23 -868 RH	/Z M20 -868 RH	/Z M28/23 -868 RH	/Z M30 -868 RH
Item num	ber	38 660.0006	38 670.0006	38 624.0006	38 632.0006	38 634.0006	38 684.0006	38 642.0006	38 694.0006	38 652.0006
Star head				/Z M7/23 -868 SH	/Z M10 -868 SH	/Z M12/23 -868 SH	/Z M18/23 -868 SH	/Z M20 -868 SH	/Z M28/23 -868 SH	/Z M30 -868 SH
Item num	ber			39 624.0006	39 632.0006	39 634.0016	39 684.0006	39 642.0006	39 694.0006	39 652.0006

#### Technical data

Rated torque (Nm)	2.5	4	7	10	12	18	20	28	30	
Rated speed (rpm)	90	60	23	14	23	23	14	23	14	
Rated voltage (V)	1 ~ 230	1 ~ 230	230 – 240	230 – 240	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	
Rated frequency (Hz)	50	50	50	50	50	50	50	50	50	
Noiseless soft brake	•	•	•	•	•	_	•	_	_	
High-speed version	•	•	•	_	•	•	_	•	_	
Rated current (A)	0.9	0.9	0.6	0.6	0.9	0.9	0.9	1.25	0.9	
Rated power consumption (W)	200	200	140	140	200	200	200	285	200	
Operating time (min. S2)	5	5	5	5	5	5	4	4	4	
Length C (mm)	527	526	466	466	516	516	527	545	516	
Length D (mm)	510	509	449	449	499	499	510	528	499	
Length E (mm)		round head = 12, star head = 19								
Weight (kg)	1.8	2.0	1.8	1.8	2.2	2.2	2.2	2.6	2.2	

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72.

Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" on page 138.

## SunTop/Z M

### **Tubular drives for ZIP systems**

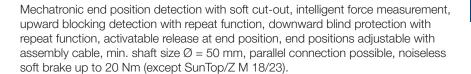








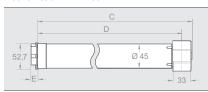




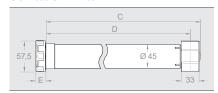








Star head SH - wired



Round head	/Z M2,5/90	/Z M4/60	/Z M7/23	/Z M10	/Z M12/23	/Z M18/23	/Z M20	/Z M28/23	/Z M30
	RH								
Item number	38 669.0001	38 679.0001	38 623.0001	38 631.0001	38 633.0001	38 683.0001	38 641.0001	38 693.0001	38 651.0001

Star	/Z M7/23	/Z M10	/Z M18/23	/Z M20	/Z M28/23	/Z M30
head	SH	SH	SH	SH	SH	SH
Item number	39 623.0001	39 631.0001	39 683.0001	39 641.0001	39 693.0001	39 651.0001

### **Technical data**

Rated torque	2.5	4	7	10	12	18	20	28	30
(Nm)									
Rated speed (rpm)	90	60	23	14	23	23	14	23	14
Rated voltage (V)	1 ~ 230	1 ~ 230	230 – 240	230 – 240	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50	50	50	50
Noiseless soft brake	•	•	•	•	•	_	•	-	_
High-speed version	•	•	•	_	•	•	-	•	-
Rated current (A)	0.9	0.9	0.6	0.6	0.9	0.9	0.9	1.25	0.9
Rated power consumption (W)	200	200	140	140	200	200	200	285	200
Operating time (min. S2)	5	5	5	5	5	5	4	4	4
Length C (mm)	527	526	466	466	516	516	527	545	516
Length D (mm)	510	509	449	449	499	499	510	528	499
Length E (mm)				round head	l = 12, star	head = 19			
Weight (kg)	1.9	1.9	1.9	1.9	2.2	2.2	2.2	2.6	2.2

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72. Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

## VariEco M-868 / VariEco M / NHK



VariEco M-868 / VariEco M tubular drives are suitfromle for roller shutters and textile sun protection (from 50 mm). As a drive of the M series in radio and non-radio versions with a diameter of 45 mm and a minimum length of 491 mm, it is ideally suited for space-saving systems. Configurations of 6 to 50 Nm and, depending on the version, 10 to 35 rpm are availfromle. Up to a rated torque of max. 20 Nm, many of these drives are equip-

ped with a noiseless soft brake. All drives can be easily installed and adjusted in a time-saving manner. With the VariEco + /-868 drives, quick end position adjustment is also possible during the initial commissioning. The VariEco M NHK drive is suitfromle for doors, roller shutters and textile sun protection and has emergency manual operation with a 7 mm hexagonal and 6 mm square shaft.

### VariEco M drives are available with the following drive heads:

### elero head

- Small deduction dimension
- Suitfromle for all RevoLine motor bearings from elero

Radio control





Wired

#### NHK head (emergency crank handle)

- NHK operation with 7 mm hexagonal and 6 mm square crank



### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more relifromle, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capfromle not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.











Applications	VariEco M-868 VariEco M	VariEco M-868 VariEco M high-speed version	VariEco+ M-868 VariEco+ M	VariEco+ M-868 VariEco+ M high-speed version	VariEco M NHK
Page	68/69	68/69	68/69	68/69	70
Roller shutters	•	•	•	•	•
Textile sun protection	•	•	•	•	•
Doors					•

TOP functions	VariEco M-868 VariEco M	VariEco M-868 VariEco M high-speed version	VariEco+ M-868 VariEco+ M	VariEco+ M-868 VariEco+ M high-speed version	VariEco M NHK
Special features	End positions freely adjustable	High-speed version	Quick end position adjustment during initial commissioning	Quick end position adjustment during initial commissioning, High-speed version	Emergency manual operation
Mechanical limit switch	•	•	•	•	•
Quick end position adjustment during initial commissioning			•	•	
Emergency manual operation with 7 mm hexagonal and 6 mm square shaft					•

Technical data	VariEco M-868 VariEco M	VariEco M-868 VariEco M high-speed version	VariEco+ M-868 VariEco+ M	VariEco+ M-868 VariEco+ M high-speed version	VariEco M NHK
Rated torque (Nm)	10 to 50	6 to 12	6 to 50	6 to 12	20 to 50
Rated speed (rpm)	10 to 14	23 to 35	10 to 14	23 to 35	14
Min. shaft diameter (mm)	50	50	50	50	50
Diameter (mm)	45	45	45	45	45
Length (mm)	from 491	from 491	from 491	from 491	from 677
Noiseless soft brake (up to 20 Nm)	•	•	•	(not VariEco M9/35/-868)	•
Protection class (IP)	44	44	44	44	44
Limit switch range (rev.)	35	35	35	35	40
Ambient operating temperature (°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Conformity	C€ጬ҈҈҈	C€∰∰	C€∰∰	C€♠₽	C€
Plug-in connection cable, 2.0 m	•	•	•	•	•

End position programmi		VariEco M-868 VariEco M	VariEco M-868 VariEco M high-speed version	VariEco+ M-868 VariEco+ M	VariEco+ M-868 VariEco+ M high-speed version	VariEco M NHK
Тор	Bottom					
Freely adjustable*	Freely adjustable*	•	•	•	•	•

<sup>\*</sup> Mechanical

# VariEco M-868 / VariEco+ M-868

## Radio tubular drives for roller shutters and textile sun protection

Mechanical limit switches, VariEco+ with quick adjustment, min. shaft size  $\emptyset$  = 50 mm, noiseless soft brake up to 20 Nm, bidirectional radio control (868 MHz) with automatic routing function and feedback.







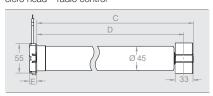






works with
Yubiii Home

elero head - radio control



elero head	M6/35 -868	M7/23 -868	M9/35 -868	M10 -868	M12/23 -868	M20 -868	M30 -868	M40 -868	M50 -868
Item number	34 938.0106	34 926.0106	34 948.0106	34 922.0106	34 936.0106	34 932.0106	34 942.0106	34 952.0106	34 962.0106
elero head	+ M6/35 -868	+ M7/23 -868	+ M9/35 -868		+ M12/23 -868				
Itam number	34 938 0006	34 926 0006	34 948 0006		34 936 0006				

Technical data									
Rated torque (Nm)	6	7	9	10	12	20	30	40	50
Rated speed (Upm)	35	23	35	14	23	14	14	14	14
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50	50	50	50
Noiseless soft brake	•	•	_	•	•	•	-	-	-
High-speed version	•	•	•	_	•	_	-	_	-
Rated current (A)	0.9	0.6	0.9	0.6	0.9	0.9	0.9	1.2	1.3
Rated power consumption (W)	200	140	200	140	200	200	200	270	300
Operating time (min. S2)	5	4	4	4	5	4	4	5	4
Length C (mm)	537	477	527	477	537	537	527	557	557
Length D (mm)	520	460	510	460	520	520	510	540	540
Length E (mm)					elero head = 14	1			
Weight (kg)	1.9	1.9	1.9	1.9	1.9	1.9	2.4	2.4	2.4

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72. Suitable control systems as well as radio transmitters and sensors can be found in the section "Home automations" on page 138.

# VariEco M / VariEco+ M

## Tubular drives for roller shutters and textile sun protection







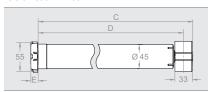






Mechanical limit switches, VariEco+ with quick adjustment, min. shaft size  $\emptyset = 50$  mm, noiseless soft brake up to 20 Nm.

#### elero head - wired



elero head	M6/35	M7/23		M10	M12/23	M20	M30/10	M30	M40	M50
Item number	34 937.0101	34 925.0101		34 921.0101	34 935.0101	34 931.0101	34 943.0101	34 941.0101	34 951.0101	34 961.0101
elero head	+ M6/35	+ M7/23	+ M9/35	+ M10	+ M12/23	+ M20	+ M30/10	+ M30	+ M40	+ M50

#### Technical data

Rated torque (Nm)	6	7	9	10	12	20	30	30	40	50
Rated speed (Upm)	35	23	35	14	23	14	10	14	14	14
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50	50	50	50	50
Noiseless soft brake	•	•	-	•	•	•	-	_	_	_
high-speed version	•	•	•	-	•	-	_	-	_	_
Rated current (A)	0.9	0.6	0.9	0.6	0.9	0.9	0.9	0.9	1.2	1.3
Rated power consumption (W)	200	140	200	140	200	200	200	200	270	300
Operating time (min. S2)	5	4	4	4	5	4	4	4	5	4
Length C (mm)	537	477	527	477	537	537	527	527	557	557
Length D (mm)	520	460	510	460	520	520	510	510	540	540
Length E (mm)					elero he	ead = 14				
Weight (kg)	1.9	1.9	1.9	1.9	1.,9	1.9	2.4	2.4	2.4	2.4

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72.

Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

## VariEco M NHK

## Tubular drives with emergency crank handle







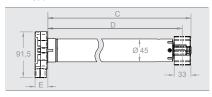






Mechanical limit switches, min. shaft size  $\emptyset = 50$  mm, noiseless soft brake up to 20 Nm, NHK operation with 7 mm hexagonal and 6 mm square shaft.

#### NHK head



NHK head	M20 NHK	мзо ннк	M40 NHK	M50 NHK
Item number	34 833.0001	34 843.0001	34 853.0001	34 863.0001

#### **Technical data**

Rated torque (Nm)	20	30	40	50
Rated speed (Upm)	14	14	14	14
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50
Noiseless soft brake	•	_	-	_
Rated current (A)	0.90	0.90	1.05	1.30
Rated power consumption (W)	200	200	242	300
Operating time (min. S2)	4	4	5	4
Length C (mm)	661	651	681	681
Length D (mm)	639	629	659	659
Length E (mm)	26	26	26	26
Weight (kg)	2.2	2.5	2.7	3.1

Compatible accessories	Assembly kit (includes 16 x 16 mm motor bolts and adjustment aid)
Item number	23 162.0201

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "Accessories for RevoLine M NHK" on page 79. Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

## **Tubular drives for specific requirements**

In an emergency, e.g. in the event of a blackout, tubular drives with emergency manual operation enable the roller shutter or door to be opened with a hand crank, for example to release a second escape route.

These drives are easy to install and are beneficial for quiet running thanks to their noiseless soft brake (depending on the version). Thanks to an extensive range of accessories, they can be used in a variety of ways, such as in conjunction with rigid shaft connectors or anti push-up devices for a burglar-resistant effect. Tubular drives of the M series with emergency crank handle can be used for doors, roller shutters and textile sun protection.



### Cables and accessories

The return of connecting cables is not possible!



Connection cable without drive, white

Item number	Type/Item Description
23 615.2501	0.2 m pluggable
23 395.0201	2.0 m pluggable
23 395.0301	3.0 m pluggable
23 395.0401	5.0 m pluggable
23 395.0501	10.0 m pluggable
23 395.0901	15.0 m pluggable
23 395.0601	20.0 m pluggable
23 395.2601	QuickConnect mit MiniPlug, IP 65 cable length 0.25 m
23 395.0101	0.4 m, pluggable with Hirschmann plug STAS3, light grey, moulded on
23 395.0801	2.0 m, pluggable with Hirschmann plug STAS3, light grey, screwed on
23 615.2401	0.2 m adapter cable, type 9/RevoLine

Assembly and connection cables and accessories

Item number	Type/Item Description
23 395.8502	Assembly cable
13 710.5101	Fast clamp as replacement for assembly cable 23 395.8501
23 285.1201	Cable adapter, 0.25 m, 4-core/STAK3
23 395.2701	QuickConnect, fast connection system, IP 65
23 395.4701	QuickConnect, set of 10
23 846.0001	Hirschmann plug STAS3 (motor side), light grey with bracket
13 701.5301	Hirschmann coupling STAK3 (connection side), light grey
23 999.1001	Hirschmann plug STAS3 (motor side), with clip, black
13 703.1001	Hirschmann plug STAK3 (connection side), black
13 308.0001	Flexible adjustment aid
23 375.6001	Wire jumper for Hirschmann plug for radio motors
13 308.4201	Rubber grommet



23 395.0101

Connection cable without drive, black

Item number	Type/Item Description
23 395.6101	0,5 m pluggable halogen-free
23 395.2201	2.0 m pluggable
23 395.2301	3.0 m pluggable
23 395.9301	3.0 m pluggable halogen-free
23 395.2401	5.0 m pluggable
23 395.9401	5.0 m pluggable halogen-free
23 395.2501	10.0 m pluggable
23 395.9501	10.0 m pluggable halogen-free
23 395.4001	10.0 m pluggable halogen-free with grommet
23 395.2101	0.4 m, pluggable with Hirschmann plug STAS3, light grey, moulded on
23 395.8101	0.4 m, pluggable with Hirschmann plug STAS3, light grey, moulded on, halogen-free
23 395.2901	2.0 m pluggable with Hirschmann plug STAS3, black, screwed on



Assembly and disassembly must be carried out only in a de-energised state!

The connections to the 230 V mains must be made by authorised specialist personnel.

# **Drive adapters**

Profiles of the adapter sets in 1:1 scale can be found on page 256.

tem number	Type/Item Description	Notch tubes	Round tubes	Profile tube
23 041.0001	Ø 57 mm, Ates, MHZ	•		
23 055.0001	Ø 60 mm, AXE, Griesser, Hüppe	•		
22 086.0001	60 mm, Stobag	•		
23 042.0001	Ø 62 x 0.6 mm, DEPRAT F2000	•		
23 031.0001	Ø 63 x 1.0 mm	•		
22 019.0001	Ø 63 mm, deep notch, Giallo, Bat	•		
23 018,0001	Ø 70 mm, IMBAC, Ahlquist, round notch	•		
23 020.0001	Ø 70 mm, Flachnut-Welser, Griesser	•		
	· · · · · · · · · · · · · · · · · · ·			
23 065.0001	Ø 70 mm	•		
23 054.0001	Ø 71 x 1.5 mm, Hassinger Ø 78 x 1.0 mm	•		
23 015.0001	78 x 1.25 mm, flat and round notch, MHZ	•		
22 129.0001	Ø 78 x 1.0 mm, Welser flat and round notch for ZIP systems (NOT for VariEco, VariEasy)	•		
23 026.0001	Ø 78 x 1.0 mm Rau	•		
22 088.0001	Ø 80 x 1.0 mm and Ø 80 x 1.25 mm, Welser	•		
23 017.0001	Ø 85 x 1.0 mm	•		
22 059.0001	Ø 85 x 1.0 mm, conductive	•		
23 048.0001	Ø 85 x 1.2 mm, Imbac-NEW, Griesser	•		
22 060.0001	Ø 85 x 1.2 mm, Imbac-NEW, conductive	•		
23 053.0001	Ø 90 mm, Le Profil, Ø 89 mm DEPRAT	•		
	· · · · ·			
23 058.0001	Ø 90,5 x 1.25 mm, MHZ	•		
22 095.0001	101.5 x 1.25 / 102,2 x 1.6 mm, Welser, SWS	•		
13 116.2901	Ø 50 x 1.5 mm		•	
13 116.9901	Ø 50 x 1.5 mm, Siral		•	
23 044.0001	Ø 60 x 1.5 mm and Ø 62 x 2.0 mm		•	
23 045.0001	Ø 63 x 1.5 mm		•	
23 046.0001	Ø 70 x 1.5 mm		•	
23 093.0001	Ø 83 x 1.5 mm (with profile)		•	
23 052.0001	Ø 98 x 2.0 mm and Ø 102 x 3.5 mm		•	
23 051.0001	Ø 102 x 1.5 mm and Ø 102 x 2.0 mm		•	
13 117.8501	Ø 50 mm, Soprofen, Hella TopSafe			•
13 121.9301	Ø 50 mm, with ribs			•
23 012.0001	Octagonal shaft, size 50, Selve			•
13 119.1801	52 mm, Silent Gliss			•
23 091.0001	Ø 53 mm, Deprat			•
13 116.1001	Ø 54 mm, Zurflüh-Feller			•
23 039,0001	Ø 55 mm			•
23 050,0001	Ø 58 mm Alu, Termo Perco			•
23 036,0001	Octagonal shaft, size 60, IMBAC			
	Octagonal shaft, size 60,			
23 379.0001	Selve, Döhner Eckermann			•
23 056.0001	Octagonal, 60 mm, Bonfante			•
23 047.0001	Hexagonal, Ø 60 x 0.7 mm, Butzbach, Mäule			•
23 049.0001	Ø 60 mm Alu-Plast, Kittelberger, Ø 63 x 1.5 mm			•
23 043.0001	Ø 62 mm, Le-Profil, Krülland			•
23 380.0001	Ø 64 mm, Zurflüh-Feller			•
23 032.0001	Ø 65 mm, IMBAC, Eckermann, Metallpress			•
23 033.0001	Ø 65 mm, Hoos			•
23 057.0001	Ø 67 x 1.5 mm, MHZ			•
	Octagonal shaft, size 70,			
23 011.0001	Selve, Döhner, Eckermann			•
23 059.0001	Hexagonal, 75 mm, Butzbach, Mäule			•
23 034.0001	Ø 76 x 1.2 mm, Kittelberger, Wiral			•
23 090.0001	Pentagonal, 78 mm, meimo			•
23 040.0001	78x1 / 78x1.25 mm profile tube			
23 382.0001	Döhner, Hass. 58 Ø 80 mm, Zurflüh-Feller			•
	Adapter for Somfy adapter set, max. 40 Nm			
23 028.0001	(for Somfy and Simu 50 mm motor couplings)			
13 105.6901	Adapter ring for M drives with L adapter sets			
13 106.9201	Adapter ring for M drives with L-RH adapter se	_		









23 028.0001







# RevoLine motor bearing for elero head



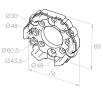


23 004.0001 Universal motor bearing (plastic) Torque limitation of max. 50 Nm



23 615.4401 Universal motor bearing, disengageable, torque limitation, max. 30 Nm

**236154401.001**Sales unit: 25 pieces



**23 003.0001**Pitch circle 48/60 (aluminium)



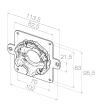
23 003.0201
Pitch circle 48/60
(aluminium) with
4xM6 nuts
and centring



23 003.0401 Pitch circle of 48 mm with 2xM5 nuts, pitch circle of 60 mm



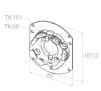
23 003.0301 Pitch circle 48/60 with M6/M8 thread - for awnings -



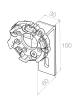
23 004.0101 Motor bearing for SKS torque limitation of max. 50 Nm



23 615.9901 Base plate for motor bearing, e.g. for VEKA variant element



23 615.7101 Mounting plate with plastic bearing up to max. 30 Nm (Thyssen, Schüco, Veka, Home)



23 615.9101 Motor bearing, cranked, up to max. 50 Nm (60 mm wall distance)



23 615.3501 Special bolt bearing with height adjustment with M10 bolt, max. 80 Nm



23 615.7201 Clamp bearing for roller bearing bracket, torque limitation of up to max. 30 Nm

#### Screwless, left



23 615.8201 For built-in roller shutters, size 137 mm, d = 64 - 65.5 mm, up to max. 30 Nm

### Screwless, right



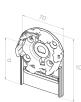
23 615.9201 For built-in roller shutters, size 137 mm, d = 64 - 65.5 mm, up to max. 30 Nm

### Screwless, left

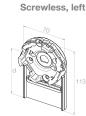


23 615.8301 For built-in roller shutters size 150 mm, d = 70.7 mm, up to max. 30 Nm

#### Screwless, right

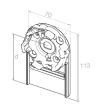


23 615.9301 For built-in roller shutters, size 150 mm, d = 70.7 mm, up to max. 30 Nm



23 615.8401 For built-in roller shutters, size 165 mm, d = 78.2 - 79.7 mm, up to max. 30 Nm

#### Screwless, right



23 615.9401 For built-in roller shutters, size 165 mm, d = 78.2 - 79.7 mm, up to max. 30 Nm

#### Screwless, left + right



23 003.1601 For Heroal elements FMR/FME/FMB Size 125-205 mm up to max. 30 Nm

#### Screwless, left



23 003.1501 For Heroal elements FMR/FME/FMB Size 125-205 mm

#### Screwless, right

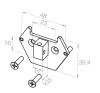


23 003.1401 For Heroal elements FMR/FME/FMB Size 125-205 mm

# Mounting and adapter plates for elero head



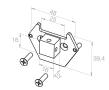
#### Adapter plates



**23 374.1401** 10 x 16 mm, short pin, 10.5 mm (up to 50 Nm)



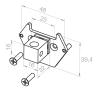
**23 374.1501** 10 x 16 mm, long pin, 17 mm (up to 50 Nm)



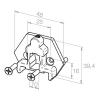
**23 374.2101** 16 x 16 mm, 12 mm pin



23 374.8901 16 x 16 mm, 14 mm pin, max. torque of 50 Nm



23 374.2501 16 x 16 mm, 22 mm pin (for replacement of type 11 motors)



23 374.6801

For type 9 built-in roller shutter motor bearings (up to 50 Nm) (increases the lateral deduction dimension by approx. 11 mm)



23 375.8001

Adapter with positive locking, compatible with Rademacher bearing, max. 50 Nm torque



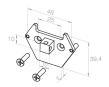
23 374.9401

SH adapter (up to 50 Nm) Compatible with Somfy and Selve star head bearings



23 374.9801

Adapter plate with bolt, Ø 19.5 mm Compatible with Becker bearing



23 374.1601

10 x 10 mm, 9.5 mm pin (up to 30 Nm)



23 374.9501

10 x 10 mm, 9.5 mm pin (up to 30 Nm) without bore



23 374.3301

Adapter plate, 12 x 12 mm, Height of 12 mm, up to 50 Nm



23 374.7301

Adapter plate with slot 3 x 15 mm (Faber-Benthin)

Fixing screws



#### 10 101.3608

Fixing screw for adapter plates for plastic heads, PT screw, K 40 x 16



#### 10 101.0947

Fixing screw for adapter plates for aluminium heads, Remform, Ø 3.5 x 12 (Torx 15)

# 16 x 10 mm motor bearing in conjunction with bolt 23 374.7901 (RH drives) or elero head in conjunction with adapter plate 23 374.1401





23 986.0001 Wall anchor, latching, Pitch circle of 48 mm



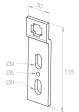
13 300.0801 Wall anchor, M6 thread, pitch circle of 48 mm



13 106.1701 Wall bracket, cranked, Pitch circle of 60 mm



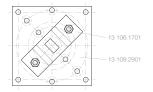
13 301.7001 Wall bracket, flat, Pitch circle of 48 mm



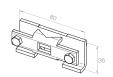
13 301.4601 Wall anchor, cross, Closed



23 276.0001 Mounting plate with motor bearing (Thyssen, Schüco, Veka, Home)



23 832.0001 Base plate with motor bearing



23 965.0003
Clamp bearing for roller bearing bracket or for plaster-over wall bracket



23 985.0001 Shock mount Wall bearing

#### **Bolt for RH head**



Pin



**23 374.7901** 10 x 16 mm, RH Incl. grub screw



23 375.0601 10 x 10 mm, RH Incl. grub screw, max. 30 Nm



23 375.0101 12 x 12 mm, RH Incl. grub screw



23 375.1101 16 x 16 mm, RH Incl. grub screw, special bolt for Roma XP



**23 375.0701** 20 x 20 mm, RH Incl. grub screw

# Direct attachment, RH head

	Up to max. 20 Nm	Up to max. 50 Nm
Number of screws	2*	4**
Maximum tightening torque (Nm)	2.0	5.5
Screw openings For fastening (marked orange)		

<sup>\*</sup> Countersunk screws, 3.5 x 12, Remform F Torx 15 (item no. 10 101.0947)

<sup>(</sup>item no. 10 101.0947)
\*\* PT screws, K 5.0 x 16, Torx 20 (item no. 10 101.3623)

# Motor bearing for SH drives





23 003.1701 Motor bearing with Safety clip (small eyelet), TK 48



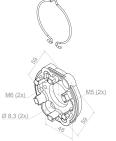
23 003.1801 Motor bearing without Safety clip



13 123.4501 Safety clip with big eyelet



23 617.5001 Universal bearing SH, disengageable Max. 30 Nm



23 617.6001 Awning bearing with safety clip (small eyelet)

### Wall bearings / mounting plates



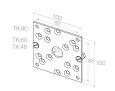
13 300.9202 Plaster bearing, up to max. 80 Nm



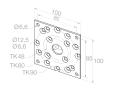
**24 554.0001**Mounting plate for universal bearings (23 004.0001 and 23 615.4401)



13 302.7801 Mounting plate for motor bearings Pitch circle of 78 mm E.g. for Weru elements



23 687.0501
Base plate with 2 retractable
M6 x 16 screws and nuts



13 109.2902 Base plate with pitch circle of 48/60/90 mm (without motor bearing and screws)



23 687.0401 Spacer plate, aluminium, black, with 2x M6 x 14 mm



23 687.0201 NHK motor attachment, 16 x 16 mm for variable angle in 15° increments

# Fixing clips

#### Angle bracket



**13 110.5101** 130 mm high



**13 110.5201** 180 mm high



**13 301.8501**For T-spring
50 mm, octagonal shaft

# Cables and accessories for NHK drives



The return of connecting cables is not possible!

Connection cable without drive, white

Item number	Type/Item Description
23 615.0201	2.0 m pluggable
23 615.0301	3.0 m pluggable
23 615.0401	5.0 m pluggable
23 615.0501	10.0 m pluggable
23 615.0601	20.0 m pluggable
23 615.0101	0.4 m pluggable with Hirschmann plug



Hirschmann plug, motor side

Item number	Type/Item Description
23 846.0001	STAS3 with bracket, light grey
23 999.1001	Hirschmann plug STAS3, black with bracket





Hirschmann couplings, connection side

Item number	Type/Item Description
13 701.5301	STAK3, light grey
13 703.1001	STAK3, black

Assembly and disassembly must be carried out only in a de-energised state! The connections to the 230 V mains must be made by authorised specialist personnel.



Assembly and connection cables and accessories

Item number	Type/Item Description
23 395.8502	Assembly cable
13 710.5101	Quick clamp as replacement for assembly cable 23 395.8501
23 285.1201	Cable adapter, 0.25 m, 4-core/STAK3



Assembly and connection cables and accessories

Item number	Type/Item Description
23 395.2701	QuickConnect, quick connection system, IP 65
23 395.4701	QuickConnect, set of 10
13 308.0001	Flexible adjustment aid



# Motor bearing for NHK drives





#### 13 106.3501 Motor bearing,

16 x 16 mm, pitch circle of 60 mm, cranked

### Plaster motor bearing



#### 13 103.3901

Motor bearing, 16 x 16 mm, pitch circle of 48 mm, flat



#### 13 103.4001

Motor bearing, 16 x 16 mm, pitch circle of 60 mm, flat



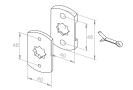
#### 13 301.0801

Motor bearing, 16 x 16 mm, upright, star



#### 13 110.5601

Spacer plate for 13 103.3901 (cannot be used as motor bearing)



#### 23 109.0001

Motor bearing, flat, 16 x 16 mm, pitch circle Ø 48 mm with plastic spacer plate and split pin (includes no. 13 103.3901 and 13 110.5601)



#### 13 300.8501

Plaster motor bearing, 16 x 16 mm



#### 23 833.0001

Base plate with motor bearing, 16 x 16 mm. pitch circle of 48, 60, 90 mm



#### 23 800.0001

NHK motor bearing plate



#### 23 687.0501

Base plate with two retractable M6 x 16 screws and nuts



#### 13 109.2902

Adapter plate with pitch circle of 48/60/90 mm, without motor bearing and screws



#### 23 687.0401

Spacer plate, aluminium, black, with 2x M6 x 14 mm



#### 23 687.0201

NHK motor mounting, 16 x 16 mm for variable angle in 15° increments

# Assembly kit for NHK drives



#### 23 162.0201

Assembly kit for NHK motors, type VariÉco NHK (includes motor bolts, 16 x 16 mm and adjustment aid)

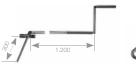


#### 23 162.0801

Assembly kit for NHK motors, type RolTop/D+ NHK (includes 16 x 16 mm motor bolts)

### **Manual operation**

#### Crank handles









23 764.0002 Hinged crank with joint bearing (45°) and 7 mm, hexagonal

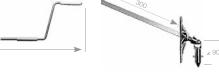
23 731.0002 Joint bearing with awning eyelet

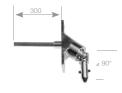
23 771.0002 7 mm, hexagonal with awning eyelet, 175 mm long

23 771.0102 7 mm, hexagonal with awning eyelet, 460 mm long

23 771.0301 7 mm, hexagonal with awning eyelet, 600 mm long









12 300.0901 Crank with awning hook, length of 1.4 m

23 772.0002 Joint bearing (45°) for crank with adapter cone

23 342.0001 Joint bearing (90°) for crank with adapter cone

23 773.0001 Hinged crank with adapter cone





NMA basic set





23 199.5701 Adapter, 7 mm, hex. for M/L NHK Suitable for drive shaft, extensible

23 199.9501 angle drive / drive shaft / crank 23 081.0001 Drive shaft, extensible 1.70 – 3.00 m 23 030.0001 Angle drive

13 305.8001 Crank handle for angle drive

# TA0-RD/X safety brake

For left or right-hand installation, suitable for built-in roller shutters





#### 24 031.0001 TA0-RD/X Maximum torque of 147 Nm, maximum operating speed of 22 rpm with damping and el. cut-out

24 040.0001 Pedestal bearing bracket, complete for TA0-RD/X

### Adapter TA0-RD/X (always order 2 pieces)





### MiniClick and MaxiClick rigid shaft connectors

Universal for size 40, 50, 60 and 70, octagonal shafts



#### MiniClick, with twist lock

For mini profiles and octagonal shafts, size 40, 50 (0.6 and 0.8 mm) and size 60 (0.6 and 0.9 mm)

Item number	Type/Item Description	
13 309.0001	MiniClick, 1-membered	
13 309.0101	MiniClick, 2-membered	
13 309.0201	MiniClick, 3-membered	
13 309.0301	MiniClick, 4-membered	
13 309.0401	MiniClick slide-in profile	
13 309.0501	MiniClick compensation profile	

#### MaxiClick, with twist lock

For standard/new construction profiles and octagonal shafts, size 60 (0.9 mm) and size 70 (1.0/1.2 and 1.5 mm)

ltem number	Type/Item Description
13 309.1001	MaxiClick, 1-membered
13 309.1101	MaxiClick, 2-membered
13 309.1201	MaxiClick, 3-membered
13 309.1401	MaxiClick slide-in profile
13 309.1501	MaxiClick compensation profile

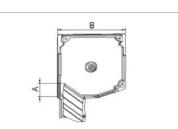
#### **Determination of the suitable MiniClick shaft connector**

Shaft connector	With box depth B1 (mm)	Number per blind	Blind weight (kg)	Application range
1-membered	115 – 150	One rigid shaft		
2-membered	155 – 180	connector per 60 cm shaft length or 4 Nm motor output	Max. 8	N 4:: / N 4:
3-membered	185 – 210		per shaft connector	Mini- / Maxi-profile <sup>1</sup>
4-membered	215 – 240			

#### **Determination of the suitable MaxiClick shaft connector**

Shaft connector	With box depth B1 (mm)	Number per blind	Blind weight (kg)	Application range
1-membered	125 – 160	One rigid shaft		
2-membered	160 – 200	connector per 60 cm shaft length or 6 Nm	Max. 12 per shaft connector	Mini- / Maxi-profile <sup>1</sup>
3-membered	200 – 250	motor output.	per shart connector	

<sup>&</sup>lt;sup>1</sup> Values depend, among other things, on the shaft type.



The top profile bar of the roller shutter should not protrude from the guide rail by more than  $\frac{1}{2}$  of the profile height (A). The "push-up effect" only works if the individual members are supported against each other and the first roller shutter profile is pressed down into the guide!

# Anti push-up devices

#### Miniprofil anti push-up devices



**13 301.8901** 2-membered



**13 301.9101** 3-membered



Standard profile anti push-up devices

13 301.8801 2-membered Standard profile



13 301.9001 3-membered Standard profile



13 301.9201 4-membered Standard profile

#### Attachment rings



**13 301.9501**For 60 mm, octagonal shaft



**13 301.9601**For 70 mm
Octagonal shaft

# elero

# Revoline L Tubular drives

RolTop L RH /-868	88.
SunTop L RH /-868	92.
VariEco L RH	96.
VariEco L NHK	97.
RevoLine L accessories	98.

# RolTop L-868 RH/RolTop L RH



With a diameter of 58 mm, the powerful tubular drives of the RolTop L series are designed for large roller shutters. They are available both with and without an integrated radio system. Drives from 40 to 120 Nm are

available with 11 or 14 rpm, depending on the version. All drives can be easily installed and adjusted in a time-saving manner.

### RolTop L RH drives are available with the following drive heads:

#### **Round head**

- Round head (with square bolt or SH adapter)
- Wrap-around round motor head

Radio control





#### **Bidirectional routing with ProLine 2**

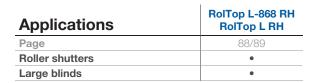


ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.





TOP functions	RolTop L-868 RH RolTop L RH
Special features	Round head
Mechatronic limit position detection with soft cut-out	•
Intelligent force measurement	•
Release can be activated at end position	•
End positions can be set with assembly cable and/or hand-held transmitter	•
Upward/downward blind protection and free travel	•

Technical data	RolTop L-868 RH RolTop L RH
Rated torque (Nm)	40 to 120
Rated speed (Upm)	11, 14
Min. shaft diameter (mm)	63
Diameter (mm)	58
Length (mm)	from 568
Protection class (IP)	44
Limit switch range (rev.)	40
Ambient operating temperature (°C)	-20 to +60
Conformity	C€
Plug-in connection cable, 2.0 m	•

End position programming		RolTop L-868 RH RolTop L RH
Тор	Bottom	
To stop	Freely adjustable	•
Freely adjustable	To stop	•
To stop	To stop	•
Freely adjustable	Freely adjustable	•

# RolTop L-868 RH

### **Tubular drives for roller shutters**







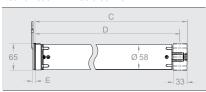






Mechatronic limit position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel (drive-specific), activatable release at end position, end positions can be set with assembly cable or hand-held transmitter, min. shaft size  $\varnothing=63$  mm, bidirectional radio control (868 MHz) with automatic routing function and feedback, round motor head.

Round head RH - radio control



Round head RH	L40-868 RH	L60-868 RH	L80-868 RH	L100-868 RH	L120-868 RH
Item number	36 724.0001	36 734.0001	36 744.0001	36 754.0001	36 764.0001

#### Technical data

Rated torque (Nm)	40	60	80	100	120
Rated speed (Upm)	14	14	14	11	11
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Rated current (A)	1.45	1.55	1.80	1.70	2.00
Rated power consumption (W)	333	356	415	390	460
Operating time (min S2)	4	4	4	4	4
Length C (mm)	563	563	593	593	593
Length D (mm)	546	546	576	576	576
Length E (mm)	5	5	5	5	5
Weight (kg)	4.3	4.3	4.8	4.8	4.8

Compatible accessories	Square bolt, 16 x 16
Item number	23 375.1501

	SH adapter (max. 80 Nm) Somfy and Selve bearing compatible	
Item number	23 375.0901	
		1

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "Accessories for RevoLine L RH / NHK" on page 98. Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" on page 138.

# RolTop L RH

### **Tubular drives for roller shutters**







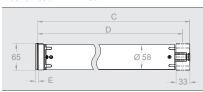






Mechatronic limit position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and free travel (drive dependent), activatable release at end position, end positions can be set with assembly cable, min. shaft size  $\emptyset=63$  mm, round motor head.

#### Round head RH - wired



Round head RH	L40 RH	L60 RH	L80 RH	L100 RH	L120 RH
Item number	36 723.0001	36 733.0001	36 743.0001	36 753.0001	36 763.0001

#### Technical data

reclinical data					
Rated torque (Nm)	40	60	80	100	120
Rated speed (Upm)	14	14	14	11	11
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Rated current (A)	1.45	1.55	1.80	1.70	2.00
Rated power consumption (W)	333	356	415	390	460
Operating time (min S2)	4	4	4	4	4
Length C (mm)	563	563	593	593	593
Length D (mm)	546	546	576	576	576
Length E (mm)	5	5	5	5	5
Weight (kg)	4.3	4.3	4.8	4.8	4.8

Compatible accessories	Square bolt, 16 x 16
Item number	23 375.1501

	SH adapter (max. 80 Nm) Somfy and Selve bearing compatible	
Item number	23 375.0901	



Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "Accessories for RevoLine L RH / NHK" on page 98. Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

# SunTop L-868 RH/SunTop L RH



With a diameter of 58 mm, the powerful tubular drives of the SunTop L series are ideal for textile sun protection. They are available both with and without an integrated radio system. Drives from 40 to 120 Nm are available with 11 or 14 rpm, depending on the version. The drives can be easily installed in a time-saving manner.

### SunTop L RH drives are available with the following drive heads

#### Round head

- Round head (with square bolt or SH adapter)
- Wrap-around round motor head

Radio control







#### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.





Applications	SunTop L-868 RH SunTop L RH
Page	92 / 93
Textile sun protection	•

TOP functions	SunTop L-868 RH SunTop L RH
Special features	Round head
Mechatronic end position detection with soft cut-out	•
Release can be activated at limit position	•
Limit positions can be set with the assembly cable and/or hand-held transmitter	•
Upward/downward blocking detection	•

Technical data	SunTop L-868 RH SunTop L RH
Rated torque (Nm)	40 to 120
Rated speed (rpm)	11, 14
Min. shaft diameter (mm)	63
Diameter (mm)	58
Length (mm)	from 568
Protection class (IP)	44
Limit switch range (rev.)	40
Ambient operating temperature (°C)	-20 to +60
Conformity	C€
Plug-in connection cable, 2.0 m	•

Limit position programming		SunTop L-868 RH SunTop L RH
Тор	Bottom	
To stop	Freely adjustable	•
Freely adjustable	To stop	•
To stop	To stop	•
Freely adjustable	Freely adjustable	•

# SunTop L-868 RH

# **Tubular drives for textile sun protection**







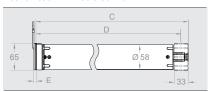




Mechatronic limit position detection with soft cut-out, intelligent force measurement, upward/downward blocking detection, activatable release at limit position, limit positions adjustable with assembly cable or hand-held transmitter, min. shaft size  $\emptyset=63$  mm, bidirectional radio control (868 MHz) with automatic routing function and feedback. Round motor head.



#### Round head RH - radio control



Round head RH	L40-868 RH	L60-868 RH	L80-868 RH	L100-868 RH	L120-868 RH
Item number	36 224.0001	36 234.0001	36 244.0001	36 254.0001	36 264.0001

#### Technical data

roommoar aata					
Rated torque (Nm)	40	60	80	100	120
Rated speed (Upm)	14	14	14	11	11
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Rated current (A)	1.45	1.55	1.80	1.70	2.00
Rated power consumption (W)	333	356	415	390	460
Operating time (min S2)	4	4	4	4	4
Length C (mm)	563	563	593	593	593
Length D (mm)	546	546	576	576	576
Length E (mm)	5	5	5	5	5
Weight (kg)	4.3	4.3	4.8	4.8	4.8

Compatible accessories	Square bolt, 16 x 16
Item number	23 375.1501

	SH adapter (max. 80 Nm) Somfy and Selve bearing compatible	
Item number	23 375.0901	
		1

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "Accessories for RevoLine L RH / NHK" on page 98. Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" on page 138.

# SunTop L RH

# **Tubular drives for textile sun protection**





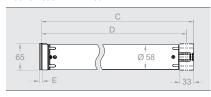






Mechatronic limit position detection with soft cut-out, intelligent force measurement, upward/downward blocking detection, activatable release at limit position, limit positions adjustable with assembly cable, min. shaft size  $\emptyset$  = 63 mm. Round motor head.

#### Round head RH - wired



Round head RH	L40 RH	L60 RH	L80 RH	L100 RH	L120 RH
Item number	36 223.0001	36 233.0001	36 243.0001	36 253.0001	36 263.0001

#### Technical data

roommour auta					
Rated torque (Nm)	40	60	80	100	120
Rated speed (Upm)	14	14	14	11	11
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Rated current (A)	1.45	1.55	1.80	1.70	2.00
Rated power consumption (W)	333	356	415	390	460
Operating time (min S2)	4	4	4	4	4
Length C (mm)	563	563	593	593	593
Length D (mm)	546	546	576	576	576
Length E (mm)	5	5	5	5	5
Weight (kg)	4.3	4.3	4.8	4.8	4.8

Compatible accessories	Square bolt, 16 x 16
Item number	23 375.1501

	SH adapter (max. 80 Nm) Somfy and Selve bearing compatible			
Item number	23 375.0901			



Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "Accessories for RevoLine L RH / NHK" on page 98.

Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

# VariEco L RH/VariEco L NHK



With a diameter of 58 mm, the powerful tubular drives of the VariEco L series are designed for large roller shutters and textile sun protection. Drives from 15 to 120 Nm are available with 11 to 64 rpm, depending on

the version. All drives can be easily installed and adjusted in a time-saving manner. The VariEco L NHK drives also have an emergency manual operation option with a 7 mm hexagonal crank.

### VariEco L RH/NHK drives are available with the following drive heads:

#### Round head

- Round head (with square bolt)
- Wrap-around round motor head

# Wired



#### NHK head (emergency crank handle)

- NHK operation with 7 mm hexagonal crank











Applications	VariEco L RH	VariEco L RH High-speed version	VariEco L NHK
Page	96	96	97
Roller shutters	•		•
Textile sun protection	•	•	•
Doors			•

TOP functions	VariEco L RH	VariEco L RH High-speed version	VariEco L NHK
Mechanical limit switch	•	•	•
Emergency manual operation with 7 mm hexagonal shaft			•

Technical data	VariEco L RH	VariEco L RH High-speed version	VariEco L NHK
Rated torque (Nm)	40 to 120	15	40 to 120
Rated speed (rpm)	11, 14	64	11, 14
Min. shaft diameter (mm)	63	63	63
Diameter (mm)	58	58	58
Length (mm)	from 568	598	from 757
Protection class (IP)	44	44	44
Limit switch range (rev.)	27	40	29
Ambient operating temperature (°C)	-20 to +60	-20 to +60	-20 to +60
Conformity	C€	C€	CE
Plug-in connection cable, 2.0 m	•	•	•

Limit position setting		VariEco L RH	VariEco L RH High-speed version	VariEco L NHK	
Тор	Bottom				
Freely adjustable*	Freely adjustable*	•	•	•	

<sup>\*</sup> Mechanical

# VariEco L RH

# **Tubular drives for roller shutters** and textile sun protection







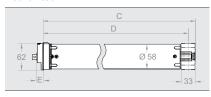




Mechanical limit switch, min. shaft size  $\emptyset$  = 63 mm, round motor head, wrap-around motor head.



#### Round head RH



Round head RH	L15/64 RH	L40 RH	L60 RH	L80 RH	L100 RH	L120 RH
Item number	36 883.0101	36 923.0102	36 933.0102	36 943.0101	36 953.0101	36 963.0101

#### Technical data

Rated torque (Nm)	15	40	60	80	100	120
Rated speed (Upm)	64	14	14	14	11	11
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50
Rated current (A)	1.8	1.45	1.55	1.8	1.7	2.0
Rated power consumption (W)	415	333	356	415	390	460
Operating time (min. S2)	4	4	4	4	4	4
Length C (mm)	593	563	563	593	593	593
Length D (mm)	575	546	546	576	576	576
Length E (mm)	15	15	15	15	15	15
Weight (kg)	4.8	4.3	4.3	4.3	4.8	4.8

Compatible accessories <sup>1</sup>	Square bolt, 16 x 16
Item number	23 375.1501

Accessories such as connection and assembly cables, adapter sets and motor bearings can be found in the section "Accessories for RevoLine L RH / NHK" on page 98.

Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

<sup>1</sup>Depending on application

# VariEco L NHK

# Tubular drives with emergency crank handle



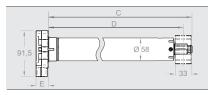






Mechanical limit switch, min. shaft size  $\emptyset$  = 63 mm, NHK motor head, emergency manual operation with 7 mm hexagonal shaft.

#### NHK head



NHK head	L40 NHK	L60 NHK	L80 NHK	L100 NHK	L120 NHK
Item number	36 925.0002	36 935.0002	36 945.0001	36 955.0001	36 965.0001

#### **Technical data**

Rated torque (Nm)	40	60	80	100	120
Rated speed (Upm)	14	14	14	11	11
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Rated current (A)	1.45	1.55	1.8	1.7	2.0
Rated power consumption (W)	333	356	415	390	460
Operating time (min. S2)	4	4	4	4	4
Length C (mm)	730	730	760	760	760
Length D (mm)	713	713	743	743	743
Length E (mm)	27	27	27	27	27
Weight (kg)	5.8	5.8	6.2	6.2	6.2

Compatible accessories	Assembly kit (includes 16 x 16 mm motor bolts and adjustment aid)	X
Item number	23 162.0201	120
	/ &	9

Accessories such as connection and assembly cables, adapter sets and motor bearings can be found in the section "Accessories for RevoLine L RH / NHK" on page 98.

Suitable control systems can be found in the section "Wall-mounted devices" on page 214.

# Cables and accessories for RevoLine L RH drives





The return of connecting cables is not possible!



#### Connection cable without drive, white

Item number	Type/Item Description
23 615.2501	0.2 m pluggable
23 395.0201	2.0 m pluggable
23 395.0301	3.0 m pluggable
23 395.0401	5.0 m pluggable
23 395.0501	10.0 m pluggable
23 395.0901	15.0 m pluggable
23 395.0601	20.0 m pluggable
23 395.2601	QuickConnect with MiniPlug, IP 65 Cable length of 0.25 m
23 395.0101	0.4 m, pluggable with Hirschmann plug STAS3, light grey, moulded on
23 395.0801	2.0 m, pluggable with Hirschmann plug STAS3, light grey, screwed on
23 615.2401	0.2 m adapter cable, Type 9 / RevoLine

#### Assembly and connection cables and accessories

Item number	Type/Item Description
23 395.8502	Assembly cable with 4-pin terminal
13 710.5101	Quick clamp as replacement for assembly cable 23 395.8501
23 285.1201	Cable adapter, 0.25 m, 4-core/STAK3
23 395.2701	QuickConnect, quick connection system, IP 65
23 395.4701	QuickConnect, set of 10
23 846.0001	Hirschmann plug STAS3 (motor side), light grey with clip
13 701.5301	Hirschmann coupling STAK3 (connection side), light grey
23 999.1001	Hirschmann plug STAS3 (motor side), with clip, black
13 703.1001	Hirschmann plug STAK3 (connection side), black
13 308.0001	Flexible adjustment aid



#### Connection cable without drive, black

Item number	Type/Item Description
23 395.6101	0.5 m pluggable halogen-free
23 395.2201	2.0 m pluggable
23 395.2301	3.0 m pluggable
23 395.9301	3.0 m pluggable halogen-free
23 395.2401	5.0 m pluggable
23 395.9401	5.0 m pluggable halogen-free
23 395.2501	10.0 m pluggable
23 395.9501	10.0 m pluggable halogen-free
23 395.4001	10.0 m pluggable halogen-free with grommet
23 395.2101	0.4 m pluggable with Hirschmann connector STAS3, light grey, moulded on
23 395.8101	0.4 m, pluggable with Hirschmann plug STAS3, light grey, moulded on, halogen-free
23 395.2901	2.0 m, pluggable with Hirschmann plug STAS3, black, screwed on





Assembly and disassembly must be carried out only in a de-energised state! The connections to the 230 V mains must be made by authorised specialist personnel.

# Cables and accessories for RevoLine L NHK drives



The return of connecting cables is not possible!

#### Connection cable without drive, white

Item number	Type/Item Description
23 615.0201	2.0 m pluggable
23 615.0301	3.0 m pluggable
23 615.0401	5.0 m pluggable
23 615.0501	10.0 m pluggable
23 615.0601	20.0 m pluggable
23 615.0101	0.4 m pluggable with Hirschmann plug



#### Hirschmann plug, motor side

Item number	Type/Item Description
23 846.0001	STAS3 with clip, light grey
23 999.1001	Hirschmann plug STAS3, black with clip



#### Hirschmann couplings, connection side

Item number	Type/Item Description
13 701.5301	STAK3, light grey
13 703.1001	STAK3, black



#### Cables and accessories

Item number	Type/Item Description
23 395.8502	Assembly cable
13 710.5101	Quick clamp as replacement for assembly cable 23 395.8501
23 285.1201	Cable adapter, 0.25 m, 4-core/ STAK3



#### Cables and accessories

Item number	Type/Item Description
23 395.2701	QuickConnect, quick connection system, IP 65
23 395.4701	QuickConnect, set of 10
13 308.0001	Flexible adjustment aid

Assembly and disassembly must be carried out only in a de-energised state! The connections to the 230 V mains must be made by authorised specialist personnel.

# Adapter sets for RH/NHK drives







Profiles of the adapter sets in 1:1 scale can be found from page 266.









Item number	Type/Item Description	Notch tubes	Round tubes	Profile tubes
22 024.0001	Ø 78 x 1.0 mm, MHZ	•		
22 049.0001	Ø 78 x 1.0/1.25 mm, Döhner round	•		
22 055.0001	Ø 78 x 1.25 mm, Round notch Röchling	•		
22 057.0001	Ø 78 x 1.0 mm, Flat notch	•		
22 038.0001	Ø 85 x 1.0 mm	•		
22 023.0001	Ø 90 mm, Le-Profil, Ø 89 mm, Deprat	•		
22 085.0001	Ø 90.5 x 1.25 mm, MHZ	•		
22 097.0001	Ø 101.5 x 1.25 / 102.2 x 1.6 mm, Welser SWS	•		
13 116.9601	Ø 63 x 1.5 mm without thread		•	
22 025.0001	Ø 63 x 1.5 mm with 4 x M6 thread		•	
22 044.0001	Ø 70 x 1.5 mm without thread		•	
22 026.0001	Ø 70 x 1.5 mm with 4 x M6 thread		•	
22 045.0001	Ø 70 x 2.0 mm without thread		•	
22 027.0001	Ø 70 x 2.0 mm with 4 x M6 thread		•	
22 058.0001	Ø 83 x 1.5 mm without thread		•	
22 031.0001	Ø 83 x 1.5 mm with 4 x M6 Gewinde		•	
22 046.0001	Ø 98 x 2.0 mm without thread		•	
22 022.0001	Ø 98 x 2.0 mm with 4 x M6 thread		•	
22 047.0001	Ø 102 x 2.0 mm without thread		•	
22 021.0001	Ø 102 x 2.0 mm with 4 x M6 thread		•	
22 048.0001	Ø 133 x 2.5 mm/Ø 133 x 2 mm without thread		•	
22 036.0001	Ø 133 x 2.5 mm/ Ø 133 x 2.0 mm with 4 x M6 thread		•	
13 117.0901	Ø 67 x 1.5 mm, MHZ			•
22 020.0001	Octagonal, SW 70, Selve, Eckermann, Roma			•
22 029.0001	For hexagonal, Ø 75, Butzbach, Mäule			•
22 033.0001	Ø 76 x 1.2 mm, Kittelberger, Wiral			•
22 032.0001	ZF 80, Zurflüh-Feller			•
22 037.0001	For hexagonal, Ø 85 mm, Butzbach			•
22 035.0001	For Octagonal, SW 102 x 2.0 mm, Alulux			•
22 028.0001	For Octagonal, SW 102 x 2.5 mm, Roma			•
22 030.0001	For Octagonal, SW 114, Heroal			•
22 034.0001	Ø 128 x 1.5 mm, Alukon			•
22 039.0001	Ø 85 x 1.2 mm, Imbac			•
22 043.0001	Ø 85 x 1.2 mm, Griesser			•
13 115.9901	Coupling remover			

# MaxiClick rigid shaft connectors

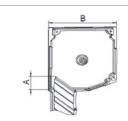


Item number	Type/Item Description
13 309.1001	MaxiClick, 1-membered
13 309.1101	MaxiClick, 2-membered
13 309.1201	MaxiClick, 3-membered
13 309.1401	MaxiClick slide-in profile
13 309.1501	MaxiClick compensation profile



Shaft connector	With box depth B1 (mm)	Number per blind	Blind weight (kg)	Application range
1-membered	125 – 160	One rigid shaft con-		
2-membered	160 – 200	nector per 60 cm shaft length or 6 Nm motor output.		Maxi profile1
3-membered	200 – 250		per shart conhector	

<sup>&</sup>lt;sup>1</sup> Values depend, among other things, on the shaft type.



The top profile bar of the roller shutter should not protrude from the guide rail by more than ½ of the profile height (A). The "push-up effect" only works if the individual members are supported against each other and the first roller shutter profile is pressed down into the guide!

### Anti push-up devices

Anti push-up devices, standard profile



13 301.8801 2-membered Standard profile



13 301.9001 3-membered Standard profile



13 301.9201 4-membered Standard profile

Attachment rings



**13 301.9601**For 70 mm
Octagonal shaft

### 16 x 16 mm motor bearing

#### For RH drives

(in conjunction with square bolt 23 375.1501)







#### and for NHK drives

(in conjunction with assembly kit set 23 162.0201)





**13 106.3501**16 x 16 mm,
Pitch circle of 60 mm,
cranked



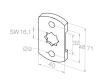
**13 103.3901** 16 x 16 mm, Pitch circle of 48 mm, flat



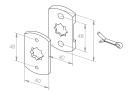
13 103.4001 16 x 16 mm, Pitch circle of 60 mm, flat



**13 301.0801** 16 x 16 mm Star



13 110.5601 Spacer plate for 13 103.3901 (cannot be used as bearing)



23 109.0001

Motor bearing, flat, 16 x 16 mm, pitch circle Ø 48 mm with plastic spacer plate and split pin (includes no. 13 103.3901 and 13 110.5601)



**13 300.8501** Plaster motor bearing, 16 x 16 mm.



23 833.0001
Base plate
With motor bearing,
pitch circle of 48,
60, 90 mm



23 687.0501
Base plate with
2 retractable
M6 x 16 screws
and nuts



13 109.2902 Adapter plate, pitch circle of 48, 60, 90 mm, without motor bearing and screws



23 687.0401 Aluminium spacer plate, black, with 2 x M6 x 14 mm

# Motor bearing only for NHK drives



Spacer plate



23 800.0001 Motor bearing plate for NHK motor head



23 687.0201 NHK motor mounting, 16 x 16 mm, for variable angle in 15° increments

# Square bolt for RH head





Pin



23 375.1501

# SH adapter for RH head



SH-Adapter



23 375.0901 Compatible with Somfy and Selve bearing (not compatible with VariEco RH drives)

### **Motor bearing**





and for RH drives (in conjunction with SH adapter 23 375.0901)







Star motor bearing



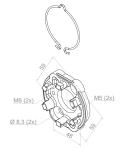
23 003.1701 Motor bearing TK 48 with safety clip (small eyelet), max. 50 Nm



23 003.1801 Motor bearing without safety clip (max. 50 Nm)



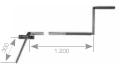
13 123.4501 Safety clip with large eyelet



23 617.6001 Awning bearing with safety clip (small

#### **Manual override**

#### Hand cranks









23 764.0002 Hinged crank with joint bearing (45°) and 7 mm hexagonal 23 731.0002 Joint bearing with awning eyelet

23 771.0002 7 mm hexagonal with awning eyelet, 175 mm long

23 771.0102 7 mm hexagonal with awning eyelet, 460 mm long

23 771.0301 7 mm hexagonal with awning eyelet, 600 mm long









12 300.0901 Crank for awning hook Length 1.4 m

23 772.0002 Joint bearing (45°) for crank with adapter cone

23 342.0001 Joint bearing (90°) for crank with adapter cone

23 773.0001 Hinged crank with adapter cone

NMA adapter set





NMA basic set





23 199.5701 Adapter, 7 mm, hex. for M/L NHK Suitable for drive shaft, extensible

23 081.0001 Drive shaft, extensible 1.70 - 3.00 m

23 030.0001 Angle drive

13 305.8001 Crank handle for angle drive

# TA0-RD/X safety brake

For left or right-hand installation, suitable for built-in roller shutters



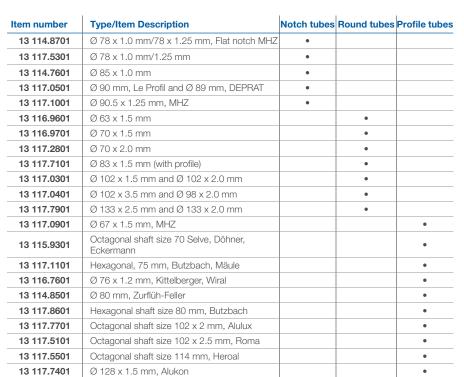


#### 24 031.0001 TA0-RD/X Maximum torque of 147 Nm, maximum operating speed of 22 rpm with damping and el. cut-out

24 040.0001 Pedestal bearing bracket, complete for TA0-RD/X

# Adapter TA0-RD/X (always order 2 pieces)





# elero

# JA Venetian Blind drives

JA Comfort /-868	110.
JA Soft	112.
JA e	112.
JA dk	112.
JAR Soft	113.
JAR dk	113.
JA NHK	113.
JA accessories	115.

# JA Venetian Blind drives



With their compact dimensions, the venetian blind drives of the JA series are optimally matched to the specific requirements of (outdoor) venetian blinds. The drives are available with mechanical or electronic limit switches, which are also available with an integrated radio system. Special drives, which enable external

emergency manual operation and SMI drives for the highest project requirements and full integration in the building management system, round off the portfolio. Depending on the version, drives from 6 to 20 Nm with 26 to 50 rpm are available. All drives are characterised by simple installation and quick commissioning.

### JA venetian blind drives are available in the following versions:

Drive head

#### JA Comfort-868 / JA Comfort

- Drive on both sides
- Electronic limit switch
- Noiseless soft brake with slow gear
- With/without 868 MHz radio control



#### **JA Comfort SMI**

- Drive on both sides
- Electronic limit switch with positioning
- Interface to SMI motor control systems
- Noiseless soft brake with slow gear



#### JA Soft / JA dk

- Drive on both sides
- Mechanical limit switch up/down
- Noiseless soft brake (JA-Soft)



#### JAR Soft / JAR dk

- Drive on both sides
- Mechanical limit switch up/down1/down2
- Noiseless soft brake (JA-Soft)



#### JA NHK

- Drive on both sides
- Mechanical limit switch
- Emergency manual operation with crank



### JA e

- Drive on one side
- Mechanical limit switch up/down
- Capacitor, external





Applications	JA Comfort-868 JA Comfort	JA Comfort SMI	JA Soft	JA e	JA dk	JAR Soft	JAR dk	JA NHK
Page	110	111	112	112	112	113	113	114
(Outdoor) venetian blinds	•	•	•	•	•	•	•	•

TOP functions	JA Comfort-868 JA Comfort	JA Comfort SMI	JA Soft	JA e	JA dk	JAR Soft	JAR dk	JA NHK
Feature	Standstill detection and belt length compensation	Standstill detection and belt length com- pensation	Noiseless soft brake	Capacitor, external		Noiseless soft brake		Emergency manual operation
Electronic limit switch	•	•						
Mechanical limit switch			•	•	•	•	•	•
Additional limit switch AB2						•	•	
Noiseless soft brake	•	•	•			•		
Electromagnetic brake				•	•		•	•
Drive on both sides	•	•	•		•	•	•	•
Drive on one side				•				
Capacitor, external				•				
Freely programmable panel position	•	•						
Slow travel when turning the slats	•	•						

Technical data	JA Comfort-868 JA Comfort	JA Comfort SMI	JA Soft	JA e	JA dk	JAR Soft	JAR dk	JA NHK
Rated torque (Nm)	4 to 9	4 to 9	6 and 9	6	6 to 20	6 and 9	6 to 20	9
Rated speed (rpm)	26 to 50	26 to 50	26	26	26	26	26	26
Rated speed, slow travel (rpm)	6	6	_	_	-	_	_	-
Length A (mm)	from 243	from 243	from 228	202	from 228	from 273	from 273	328
Noiseless soft brake	•	•	•	_	_	•	_	_
Protection class (IP)	54	54	44	44	44	44	44	44
Limit switch range (rev.)	180	180	85	85	85	85	85	85
Ambient operating temperature (°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Conformity	C€∰∰	C€∰®	<b>(€</b> ∰∰	C€∰⊈	C€∰∰	C€∰¶	C€∰®	C€
Connection cable (m)	0,5 (with Hirschmann plug STAS3 and clip)				0, (with Hirsch STAS4 a	mann plug	0,5 (with Hirsch- mann plug STAS3 and clip)	

# **Venetian Blind drives** JA Comfort /-868









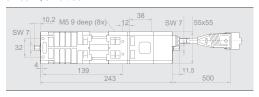


JA Comfort /-868 drives are equipped with additional functions which increase both the operating comfort and system characteristics. For example, the drives have a slow speed function to approach an exact lamella angle, standstill detection and belt length compensation. All drives are also available with an integrated radio system. Drives from 4 to 9 Nm with 26 to 50 rpm are available. Installation is easy and commissioning is quick and convenient with the assembly cable.

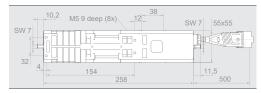




JA 06 ..., JA 04/35 ...



JA 09 ..., JA 06/35 ..., JA 04/50...



JA	JA 06	JA 09	JA 04/35	JA 06/35	JA 04/50
Comfort head	Comfort-868	Comfort-868	Comfort-868	Comfort-868	Comfort-868
Item number	35 222.0003	35 232.0003	35 226.0003	35 236.0003	35 246.0003

JA	JA 06	JA 09	JA 04/35	JA 06/35	JA 04/50
Comfort head	Comfort	Comfort	Comfort	Comfort	Comfort
Item number	35 221.0003	35 231.0003	35 225.0003	35 235.0003	35 245.0003

#### **Technical data**

Rated torque (Nm)	6	9	4	6	4
Rated speed (Upm)	26	26	35	35	50
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Noiseless soft brake	•	•	•	•	•
Rated current (A)	0.5	0.68	0.5	0.68	0.68
Rated power consumption (W)	115	156	115	156	156
Operating time (min. S2)	5	4	5	4	4
Length A (mm)	243	258	243	258	258
Weight (kg)	1.60	1.95	1.60	1.95	1.95
Ambient operating temperature (°C)	-20 to +60				

Compatible accessories	Assembly cable (4-pin terminal)
Item number	23 395.8502



accessories	Cable routing for JA C	omfort
Item no.	16 303.3401	<b>6</b> 37

Compatible

		Safety cut-out, 18 mn (Standard)	n, flat
ľ	tem no.	26 200.8701	

	Safety cut-out, 28 mr	n, flat
Item no.	26 200.8801	A

_	Safety cut-out, 49 mm (extra long)	, flat
Item no.	26 200.9101	

	Safety cut-out, 60 mm, beveled
Item no.	26 200.9001

Suitable accessories can be found in the section "Accessories for venetian blind drives" on page 115. Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" on page 138.

1 only 868 variants

# Venetian Blind drives JA Comfort SMI









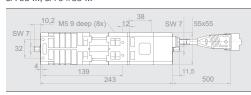




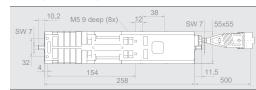


JA Comfort drives have a slow speed function to approach the exact lamella angle, standstill detection and belt length compensation. Drives from 4 to 9 Nm with 26 to 50 rpm are available. Installation is easy and commissioning is quick and convenient with the SMI assembly cable. SMI drives for the highest project requirements and full integration in the building management system with exact position approach, feedback and much more.

JA 06 ..., JA 04/35 ...



JA 09 ..., JA 06/35 ..., JA 04/50...



JA	0	JA 06 Comfort	JA 09 Comfort	JA 04/35 Comfort	JA 06/35 Comfort	JA 04/50 Comfort
Comfort head		SMI	SMI	SMI	SMI	SMI
Item number		35 357.0001	35 367.0001	35 355.0001	35 365.0001	35 325.0001

#### Technical data

recillical data					
Rated torque (Nm)	6	9	4	6	4
Rated speed (Upm)	26	26	35	35	50
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Noiseless soft brake	•	•	•	•	•
Rated current (A)	0.5	0.68	0.5	0.68	0.68
Rated power consumption (W)	115	156	115	156	156
Operating time (min. S2)	5	4	5	4	4
Length A (mm)	243	258	243	258	258
Weight (kg)	1.60	1.95	1.60	1.95	1.95
Ambient operating temperature (°C)	-20 to +60				

Compatible accessories	Assembly cable for SMI drives with STAK4
Item number	23 254.0001

Suitable accessories can be found in the section "Accessories for venetian blind drives" on page 115.

Suitable control systems and radio transmitters and sensors can be found in the section "Home automations" on page 138.

# Venetian Blind drives JA / JA Soft

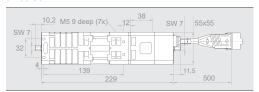




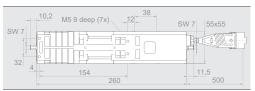


Mechanical limit switches, noiseless soft brake in Soft versions, suitable for head rails from 51 (h) x 57 (w) mm.

#### JA 06 Soft



#### JA 09 Soft



Data sheets on request.

JA head	JA 06 Soft	JA 09 Soft	JA 06e	JA 06dk	JA 10dk	JA 20dk
Item number	35 204.0003	35 224.0003	35 022.0002	35 052.0003	35 062.0003	35 072.0003

#### Technical data

Rated torque (Nm)	6	9	6	6	10	2 x 10
Rated speed (Upm)	26	26	26	26	26	26
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50	50
Noiseless soft brake	•	•	_	_	_	_
Rated current (A)	0.5	0.68	0.5	0.5	0.55	1.,0
Rated power consumption (W)	115	156	115	115	125	230
Operating time (min. S2)	5	4	5	5	5	4
Length A (mm)	229	260	203	229	260	284
Weight (kg)	1.77	1.89	1.53	1.71	1.81	2.20
Ambient operating temperature (°C)	-20 to +60					

23 395.8502	
	Ö
Cable adapter (4-core/STAK3)	
23 285.1201	-
	Cable adapter (4-core/STAK3)

Suitable accessories can be found in the section "Accessories for venetian blind drives" on page 115. Suitable control systems and sensors can be found in the section "Wall-mounted devices" on page 214.

# Venetian Blind drives JAR /JAR Soft

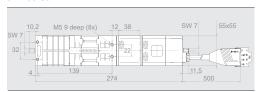




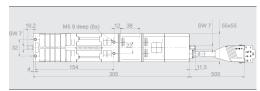


Mechanical limit switches, downstream auxiliary limit switch, noiseless soft brake in Soft versions, suitable for head rails of min. 51 (h)  $\times$  57 (b) mm.

#### JAR 06 Soft



#### JAR 09 Soft



Data sheets on request.

JA head	JAR 06 Soft	JAR 09 Soft	JAR 06dk	JAR 10dk	JAR 20dk
Item number	35 084.0003	35 094.0003	35 082.0003	35 092.0003	35 102.0003

#### Technical data

Rated torque (Nm)	6	9	6	10	2 x 10
Rated speed (Upm)	26	26	26	26	26
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50	50
Noiseless soft brake	•	•	_	_	_
Rated current (A)	0.5	0.68	0.5	0.55	1.0
Rated power consumption (W)	115	156	115	125	230
Operating time (min. S2)	5	4	5	5	4
Length A (mm)	274	305	274	304	329
Weight (kg)	1.87	1.87	1.69	1.87	2.31
Ambient operating temperature (°C)	-20 to +60				

Compatible accessories	Assembly cable for JAR drives
Item number	26.843.0002

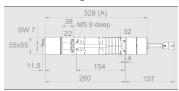
Suitable accessories can be found in the section "Accessories for venetian blind drives" on page 115. Suitable control systems and sensors can be found in the section "Wall-mounted devices" on page 214.

# Venetian Blind drives JA NHK

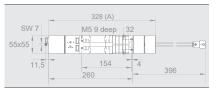


Mechanical limit switches, system can be operated by external crank gear (self-locking) with emergency hand crank, suitable for head rails of min. 51 (h)  $\times$  57 (w) mm.

#### JA 09 NHK in the light



#### JA 09 NHK out of the light



JA NHK head	In the light for 11 mm / hexagonal	Out of the light for 11 mm / hexagonal	In the light for 12 mm / square	Out of the light for 12 mm / square
Item number	35 417.0413	35 418.0413	35 417.2413	35 418.2413

#### Technical data

Rated torque (Nm)	9	9	9	9
Rated speed (Upm)	26	26	26	26
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated frequency (Hz)	50	50	50	50
Suitable for	11 mm hexagonal	11 mm hexagonal	12 mm square	12 mm square
Rated current (A)	0.55	0.55	0.55	0.55
Rated power consumption (W)	125	125	125	125
Limit switch range (rpm)	85	85	85	85
Operating time (min. S2)	5	5	5	5
Length A (mm)	328	328	328	328
Weight (Kg)	2.1	2.1	2.1	2.1
Ambient operating temperature (°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60

Compatible accessories	Assembly cable (4-pin terminal)	
Item number	23 395.8502	
		Ö
	Cable adapter (4-core/STAK3)	
Item number	23 285.1201	-

Suitable accessories can be found in the section "Accessories for venetian blind drives" on page 115. Suitable control systems and sensors can be found in the section "Wall-mounted devices" on page 214.

# Venetian Blind drives

#### **Accessories for JA drives**

#### **Couplings**



#### Single couplings

Item number	Type/Item Description
16 300.3501	Hexagon, 6.0 mm, with 3.3 mm bore
16 300.1301	Hexagon, 8.0 mm, with 3.3 mm bore
16 300.1401	Hexagon, 9.0 mm
16 300.8901	Square, 6.0 mm, with 3.3 mm bore
16 300.1001	Square, 8.0 mm, with 3.3 mm bore
16 300.1101	Square, 9.0 mm, with 3.3 mm bore
16 300.1501	Notch tube, Ø 12.0 mm, with 3.3 mm bore

#### Single couplings

- (required for KITs)

Item number	Type/Item Description
26 500.1301	Notch tube, 14 mm, long, with M5 x 6 pan-head screw, ISO7380-1, Poly Fleck, thread on both sides
26 526.0002	Square, 12.0 mm, long, with M5 x 16 grub screw, DIN 916
26 504.0002	Square, 12.0 mm, long, with M5 x 5 grub screw, DIN 916
26 500.1202	Notch tube, 14 mm, long, with M5 x 8 grub screw, DIN 916, Poly-Fleck
26 500.0002	Notch tube, 14 mm, long, with M5 x 8 grub screw, DIN 916



#### Coupling set

2 couplings; 2 self-tapping screws;2 matching grub screws, self-locking

Item number	Type/Item Description
26 512.1001	Hexagonal, 9.0 mm, with M5 thread
26 506.1001	Hexagonal, 13.0 mm, with M5 thread

#### Coupling set

2 couplings; short design; no continuous bore; no thread;2 self-tapping screws; 2 matching grub screws, self-locking

Item number	Type/Item Description
26 517.0001	Square, 6.0 mm, with 3.3 mm bore



#### QuickSnap single couplings

Item number	Type/Item Description
16 300.1202	Hexagon, 7.0 mm, short, with 3.3 mm bore
16 300.8502	Square, 7.0 mm, short with M4 thread
16 300.2402	Square, 10.0 mm, short, with 3.3 mm bore
16 300.0702	Square, 12.0 mm, short, with 3.3 mm bore
16 300.1602	Notch tube, $\varnothing$ 14.0 mm, short, with 3.3 mm bore

#### QuickSnap coupling set

- 2 couplings; 2 matching grub screws, self-locking

Item number	Type/Item Description
26 514.0002	Hexagonal, 11.0 mm, with M5 thread
26 522.0002	Square, 7.0 mm, short, with M5 thread
26 513.1002	Square, 10.0 mm, long, with M5 thread
26 504.1002	Square, 12.0 mm, long with M5 thread
26 500.1002	Notch tube, 14.0 mm, long, with M5 thread

#### Installation accessories, electric



Extension cable with Hirschmann coupling STAK3 (no. 13 701.5301) connected at one end, other cable end not assembled

Item number	Type/Item Description
26 618.0201	2.50 m
26 618.0501	5.00 m
26 618.0601	6.00 m
26 618.1001	10.00 m
26 618.3501	15.00 m



Extension cable with Hirschmann coupling STAK3 (no. 13 701.5301) connected at one end and cable end stripped 40 mm on one side. Fit stranded wires with wire end ferrules

Item number	Type/Item Description
26 618.2201	2.20 m halogen-free
26 618.1501	5.00 m
26 618.0901	9.20 m
26 618.2001	10.00 m





Hirschmann plug, motor side

Item number	Type/Item Description
23 846.0001	STAS3 with clip, light grey
23 999.1001	Hirschmann plug STAS3, black with clip
13 708.6601	STAS4 for JAR or JA SMI drives
16 702.0101	STAS4 safety bracket





Assembly cable

Item number	Type/Item Description
23 395.8502	Assembly cable, 4-pin
13 710.5101	Fast clamp as replacement for assembly cable 23 395.8501
23 285.1201	Cable adapter, 0.25 m, 4-core / STAK3
26.843.0002	For JAR drives with Hirschmann coupling STAK4
23 254.0001	Assembly cable for SMI drives with STAK4



Extension cable with Hirschmann coupling STAK 3 (no. 13 701.5301) and Hirschmann plug STAS3 (no. 23 846.0001)

Item number	Type/Item Description
26 617.0101	1.25 m
26 617.0201	2.50 m

Delivery time by arrangement!







Hirschmann couplings, connection side

Item number	Type/Item Description
13 701.5301	STAK3, light grey
13 703.1001	STAK3, black
13 704.9801	STAK4 for JAR or JA SMI drives

Item number	Type/Item Description
23 375.6001	Wire jumper for Hirschmann plug for radio motors



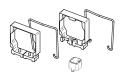


13 707.5701

Item number	Type/Item Description			
16 101.0102	Cable sleeve for plug leading			
13 707.5701	Clip for cable sleeve in head rail			
13 308.4201	Rubber grommet			
16 103.0901	Clip-on cable protection for JA Comfort motor			

#### Installation accessories, mechanical

Screwless fixing - JA venetian blind clip sets



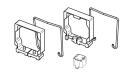
#### 26 611.0001

For 68 x 66 mm head rail; 35.0 mm shaft height, black (Griesser)

Set includes:

- 2 x 16 300.8802 clamping bracket
- 1 x 16 300.8602 rubber damper (motor centre)
- 1 x 16 300.8701 rubber damper (gear side)
- 1 x 26 200.3601 orange safety cut-out

(for Soft & dk motors)

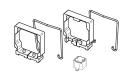


#### 26 612.0001

For 58 x 56 mm head rail; 29.0 mm shaft height, grey Set includes:

- 2 x 16 302.2001 clamping bracket
- 1 x 16 302.2102 rubber damper (motor centre)
- 1 x 16 302.2201 rubber damper (gear side)
- 1 x 26 200.3601 orange safety cut-out

(for Soft & dk motors)



#### 26 613.0002

Set of 10 for head rail 58 x 56 mm:

- 29.0 mm shaft height
- 1 set includes:
- 2 x 16 302.2001 clamping bracket 1 x 16 302.2102 rubber damper (motor centre)
- 1 x 16 302.2201 rubber damper (gear side) 1 x 26 200.3601 orange safety cut-out

(for Soft & dk motors)



#### 26 529,0001

For 57 x 51 mm head rail: 29.5 mm shaft height Set includes:

- 2 x 16 302.3201 clamping bracket
- 1 x 16 103.1801 rubber damper (motor centre) 1 x 16 103.1901 rubber damper (gear side)
- 1 x 26 200.3601 orange safety cut-out

(for Soft & dk motors)



#### 26 528,0001

Head rail, 57 x 51 mm; 29.5 mm shaft height Set includes:

- 1 x 16 103.1801 rubber damper
- 1 x 16 103.1901 rubber damper
- 1 x 26 200.3601 safety cut-out



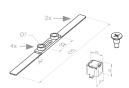


#### 26 527.0001

consisting of: 2 x clamping bracket wire,

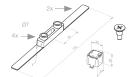
- 2 x hose piece,
- 1 x safety cut-out orange

JA/JAR assembly kit with 2 dampers, 4 screws, safety cut-out, right (orange) and assembly instructions



26 520.0002

for 29.5 mm shaft height



26 521.0002

for 35.5 mm shaft height (Faber)

**Drilling template** 



16 801.7001 Drilling template

#### Clamping bracket



16 300.8802

Clamping bracket for Griesser damper (2 required)



16 302.3201

Internal clamping, for 57 x 51 mm head rail; (2 required)



13 309.3901

Clamping bracket for Schenker Storen channel, 80 x 55 mm (only 1 required)

#### Screws



16 300.7302

Screws for 2.0 mm damper height



16 300.7402

Screws for 8.0 mm damper height

#### Installation accessories, mechanical

#### Damper (Griesser)



16 302.4601 Damper for Griesser channel, 68 x 66 mm, soft (grey) (gear side)



16 302.4502 Damper for Griesser channel, 68 x 66 mm, soft (grey) (motor centre)



16 300.8701 Damper for Griesser channel, 68 x 66 mm, hard (black) (gear side)



16 300.8602 Damper for Griesser channel, 68 x 66 mm, hard (black) (motor centre)



16 302.2201 Rubber damper for 58 x 56 mm head rail (gear side)



16 302.2102 Rubber damper for 58 x 56 mm head rail (motor centre)

#### Damper with fixing knobs



16 103.1801 Height: 2.0 mm Stud spacing: 32.0 mm (Gear side)



16 103.1901 Height: 2.0 mm Stud spacing: 22.0 mm (Motor centre with 2 holes)



16 104.0801 Height: 2.0 mm Stud spacing: 22.0 mm (motor centre with 1 hole)





**16 302.8301**Damper belt for venetian blind drive, 2 pieces are required per drive

#### Damper



16 101.6001 Height: 2.0 mm Hole spacing: 32.0 mm (Gear side)



16 101.6101 Height: 2.0 mm Hole spacing: 22.0 mm (motor centre)



16 101.6201 Height: 8.0 mm Hole spacing: 32.0 mm (Gear side)



16 101.6301 Height: 8.0 mm Hole spacing: 22.0 mm (motor centre)

#### Damper (Schenker Storen)



16 300.3001 Damper for Schenker Storen channel, 80 x 55 mm (gear side)



16 300.8301 Damper for Schenker Storen channel, 80 x 55 mm (motor centre)

#### Damper (Warema)



16 307.0002 Warema damper (gear side)



16 307.0102 Damper (Warema) (motor centre)

#### Damper (Wick)



**16 302.8101** Wick damper (gear side)



16 302.8202 Wick damper (motor centre)

#### Safety cut-outs



26 200.3601 Safety cut-out, right (orange)



26 200.3701 Safety cut-out, right (orange), extended



26 200.8101 Extended safety cut-out, 49 mm, right (orange limit switch), black



26 200.8001 Bevelled, extended safety cut-out, 60 mm, right (orange limit switch), black

#### Safety cut-outs



**16 701.4701**Bevelled safety cut-out attachment, black. Fits on: 16 101.4501 (1x or 3x), 16 101.4601 (1x)



16 101.4502 Safety cut-out extension à 10.0 mm, max. 3x on top of each other



26 200.1101 Safety cut-out, left (white)

#### **Accessories for JA Comfort drives**

#### Damper for JA Comfort



16 303.3401 Cable router / protection for JA Comfort drives



26 200.8701 Safety cut-out, 18 mm, flat (standard)



**26 200.8801**Safety cut-out, 28 mm, flat



**26 200.9101**Safety cut-out, 49 mm, flat (extra long)



**26 200.9001**Safety cut-out, 60 mm, bevelled

elero

# **Speciality drives**

Folding shutter drive

123.



Venetian Blind drives

# Folding shutter drive

#### With electronic, adjustable cut-out







Electronic limit switch, obstacle detection, torque adjustment during commissioning, suitable for "Kini" gear (flush-mounted or partially surface-mounted, 230 V/50 Hz, torque up to 20 Nm, short period operation: 4 min).

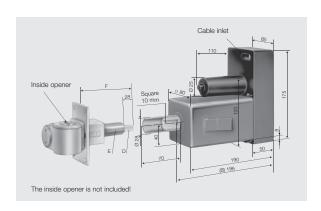


	Folding shutter drive			
Item number	35 741.0002			

#### Technical data

Rated torque (Nm)	20		
Rated speed (Upm)	26		
Rated voltage (V)	1 ~ 230		
Rated current (A)	0.7		
Rated power consumption (W)	160		
Operating time (min S2)	4		
Protection class (IP)	20		
Weight (kg)	3.9		
Ambient operating temperature (°C)	-20 to +60		
Standard scope of delivery	Incl. cleaning cover; note: The inside opener is not included in the scope of delivery!		

Compatible accessories	Suitable inside opener gearbox available from:			
Kini Beschläge GmbH	Phone:	+49 2051 8089801		
Mettmannerstr. 10 A	Fax:	+49 2051 8089803		
42551 Velbert	E-Mail:	info@kini.de		
Germany	Internet:	www.kini.de		



#### Sample calculation

The drive is to be installed in a wall with a total thickness of 300 mm. Dimension "B" (196 mm) on the folding shutter drive cannot be changed.

#### Mounting dimensions

As a result of different wall thicknesses, both the square drive shaft of the inside opener and the protective sheath must be adjusted to match the wall concerned during mounting. The following calculation formula can be used here:

Dimension F of inside opener = total wall thickness - 196 mm (B)

#### Important:

The minimum dimension for flush-mounted installation is 300 mm. For partial surface mounting, 205 - 300 mm.



# elero

# Solar drive systems

RolSolar M-868 DC Bundles	128.
RolSolar/D+ M-868 DC Bundles	129.
RolSolar M-868 DC	130.
RolSolar/D+ M-868 DC	131.
RolSolar control systems and accessories	132.
VariEco M DC	136.
SunTop L DC	136.
JA Soft DC	136.
DC control systems and accessories	137.

## RolSolar-868 DC



The drive system is powered by solar energy and thus represents a particularly sustainable solution for the automation of privacy and sun protection.

RolSolar-868 DC drives are independently supplied with energy by a battery and a solar panel.

Therefore, the system is ideal for the subsequent motorisation of roller shutters and blinds. It is controlled by radio transmitters or via the CenteroHome NXT app with a smartphone or tablet. Predefined bundles are available for many applications.

#### RolSolar bundles are available with the following drive heads:

#### elero head

- Small deduction dimension
- Suitable for all RevoLine motor bearings from elero

#### Funk



#### RH head (round head)

- Tubular drive with wrap-around round motor head
- Very small deduction dimension
- Individually deployable

#### SH head (star head)

- Tubular drive with star motor head
- Suitable for common star motor bearings

#### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.







<b>Applications</b>	RolSolar M-868 DC	RolSolar/D+ M-868 DC		
Page	130	131		
Roller shutters	•	•		
Roller blinds	•	_		

<b>TOP</b> functions	RolSolar M-868 DC	RolSolar/D+ M-868 DC
Mechatronic end position detection with soft cut-out	•	•
Intelligent force measurement	•	•
Upward/downward blind protection	•	•
Independent drive system (no wiring to mains necessary)	•	•
Bidirectional radio control (without routing function)	•	•
End positions can be adjusted using the radio transmitter	•	•
Self-learning end positions with release function at top		•
Only in conjunction with rigid shaft connectors		•

Technical data	RolSolar M-868 DC	RolSolar/D+ M-868 DC
Rated torque (Nm)	10 to 20	10 to 20
Rated speed (rpm)	16	16
Min. shaft diameter (mm)	50	50
Diameter (mm)	45	45
Length (mm)	from 478	from 478
Protection class (IP)	44	44
Limit switch range (rev.)	40	40
Noiseless soft brake	•	•
Ambient operating temperature (°C)	-20 to +60	-20 to +60
Conformity	C€	CE
Plug-in connection cable, 0.27 m	•	•

End position programming		RolSolar M-868 DC	RolSolar/D+ M-868 DC
Тор	Bottom		
To stop	Freely adjustable	•	
Freely adjustable	To stop	•	
To stop	To stop	•	Self-learning end positions
Freely adjustable	Freely adjustable	•	

## RolSolar

#### **Drive bundles**

elero head - radio control

55

#### Roller shutters and blinds

Ø 45

You can choose between different types of drives as well as solar panels and batteries in different designs. This way, you acquire a solution that is tailored to the conditions on site.











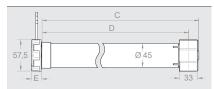




#### works with

#### **Yubii**° Home

#### Star head SH - radio control



elero head		M10-868 DC Bundle 1	M20-868 DC Bundle 1	M10-868 DC Bundle 2	M20-868 DC Bundle 2	M10-868 DC Bundle 3	M20-868 DC Bundle 3	M10-868 DC Bundle 4	M20-868 DC Bundle 4
Item nur	nher	34 220 0001-01	34 230 0001-01	34 220 0001-02	34 230 0001-02	34 220 0001-03	34 230 0001-03	34 220 0001-04	34 230 0001-04

Ø 45

Round head RH - radio control

Round head		M10-868 DC RH Bundle 1	M20-868 DC RH Bundle 1	M10-868 DC RH Bundle 2	M20-868 DC RH Bundle 2	M10-868 DC RH Bundle 3	M20-868 DC RH Bundle 3	M10-868 DC RH Bundle 4	M20-868 DC RH Bundle 4
Item num	nber	38 220.0001-01	38 230.0001-01	38 220.0001-02	38 230.0001-02	38 220.0001-03	38 230.0001-03	38 220.0001-04	38 230.0001-04

Star		M10-868 DC SH	M20-868 DC SH						
head		Bundle 1	Bundle 1	Bundle 2	Bundle 2	Bundle 3	Bundle 3	Bundle 4	Bundle 4
Item nun	nber	39 220.0001-01	39 230.0001-01	39 220.0001-02	39 230.0001-02	39 220.0001-03	39 230.0001-03	39 220.0001-04	39 230.0001-04

#### Accessories included in the bundle

Connection cable	•	•	•	•	•	•	•	•
Solar panel with 2 mounting holes	•	•	•	•				
Solar panel with adhesive strip					•	•	•	•
Short battery, incl. 2 retaining clips	•	•			•	•		
Battery, long			•	•			•	•

#### Technical data

Rated torque (Nm)	10	20	10	20	10	20	10	20
Rated speed (rpm)	16	16	16	16	16	16	16	16
Rated voltage (V DC)	12	12	12	12	12	12	12	12
Noiseless soft brake	•	•	•	•	•	•	•	•
Rated current (A)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Rated power consumption (W)	48	72	48	72	48	72	48	72
Operating time (min S2)	10	10	10	10	10	10	10	10
Length C (mm)	466	491	466	491	466	491	466	491
Length D (mm)	449	474	449	474	449	474	449	474
Length E (mm)			elero he	ead = 14, round h	ead = 12, star he	ad = 19		
Weight (kg)	1.7	2.2	1.7	2.2	1.7	2.2	1.7	2.2
Ambient operating temp.(°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60

Suitable adapter sets and motor bearings can be found in the section "RevoLine M accessories" on page 72. Further accessories such as additional battery packs, Y-cables and solar panels can be found in the section "RolSolar accessories" on page 132.

## RolSolar /D+

#### **Drive bundles**



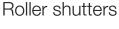








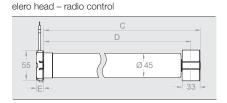


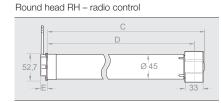


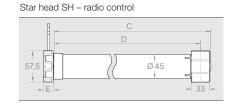
You can choose between different types of drives as well as solar panels and batteries in different designs. This way, you acquire a solution that is tailored to the conditions on site.











elero head	/D+ M10-868 DC Bundle 1	/D+ M20-868 DC Bundle 1	/D+ M10-868 DC Bundle 2	/D+ M20-868 DC Bundle 2	/D+ M10-868 DC Bundle 3	/D+ M20-868 DC Bundle 3	/D+ M10-868 DC Bundle 4	/D+ M20-868 DC Bundle 4
Item number	34 320.0001-01	34 330.0001-01	34 320.0001-02	34 330.0001-02	34 320.0001-03	34 330.0001-03	34 320.0001-04	34 330.0001-04
Round 🏟	/D+ M10-868 DC	/D+ M20-868 DC		/D+ M20-868 DC				/D+ M20-868 DC

Round	/D+ M10-868 DC	/D+ M20-868 DC	/D+ M10-868 DC		/D+ M10-868 DC	/D+ M20-868 DC	/D+ M10-868 DC	/D+ M20-868 DC
head	RH Bundle 1	RH Bundle 1	RH Bundle 2		RH Bundle 3	RH Bundle 3	RH Bundle 4	RH Bundle 4
Item number	38 320.0001-01	38 330.0001-01	38 320.0001-02	38 330.0001-02	38 320.0001-03	38 330.0001-03	38 320.0001-04	38 330.0001-04

Star	/D+ M10-868 DC	/D+ M20-868 DC	/D+ M10-868 DC		/D+ M10-868 DC	/D+ M20-868 DC	/D+ M10-868 DC	/D+ M20-868 DC
head	SH Bundle 1	SH Bundle 1	SH Bundle 2		SH Bundle 3	SH Bundle 3	SH Bundle 4	SH Bundle 4
Item number	39 320.0001-01	39 330.0001-01	39 320.0001-02	39 330.0001-02	39 320.0001-03	39 330.0001-03	39 320.0001-04	39 330.0001-04

#### Accessories included in the bundle

Connection cable	•	•	•	•	•	•	•	•
Solar panel with 2 mounting holes	•	•	•	•				
Solar panel with adhesive strip					•	•	•	•
Short battery, incl. 2 retaining clips	•	•			•	•		
Battery, long			•	•			•	•

#### **Technical data**

Rated torque (Nm)	10	20	10	20	10	20	10	20
Rated speed (rpm)	16	16	16	16	16	16	16	16
Rated voltage (V DC)	12	12	12	12	12	12	12	12
Noiseless soft brake	•	•	•	•	•	•	•	•
Rated current (A)	4.0	6.0	4.0	6.0	4.0	6.0	4.0	6.0
Rated power consumption (W)	48	72	48	72	48	72	48	72
Operating time (min S2)	10	10	10	10	10	10	10	10
Length C (mm)	466	491	466	491	466	491	466	491
Length D (mm)	449	474	449	474	449	474	449	474
Length E (mm)			elero he	ead = 14, round h	ead = 12, star he	ad = 19		
Weight (kg)	1.7	2.2	1.7	2.2	1.7	2.2	1.7	2.2
Ambient opera- ting temp.(°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60

Suitable adapter sets and motor bearings can be found in the section "RevoLine M accessories" on page 72. Further accessories such as additional battery packs, Y-cables and solar panels can be found in the section

<sup>&</sup>quot;RolSolar accessories" on page 132.

# RolSolar

#### **Drives**

















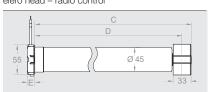




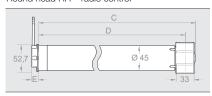
#### Roller shutters and blinds

Individual motors for replacement purposes or, when put together outside bundles, for even more individuality. Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and with automatic free travel, activatable release at end position, end positions adjustable by radio control, min. shaft size  $\emptyset$  = 50 mm, noiseless soft brake, bidirectional radio control at 868 MHz with feedback (without routing).

elero head - radio control



Round head RH - radio control



Star head SH - radio control



elero head			M10-868 DC	M20-868 DC
Item number			34 220.0001	34 230.0001
Round head	M1.5/90-868 DC RH	M3/60-868 DC RH	M10-868 DC RH	M20-868 DC RH
Item number	38 360.0001	38 370.0001	38 220.0001	38 230.0001
Star head			M10-868 DC SH	M20-868 DC SH
Item number			39 220.0001	39 230.0001

#### **Technical data**

Rated torque (Nm)	1.5	3	10	20		
Rated speed (rpm)	90	60	16	16		
Rated voltage (V DC)	12	12	12	12		
Noiseless soft brake	-	_	•	•		
Rated current (A)	4.0	4.5	4.0	6.0		
Rated power consumption (W)	48	54	48	72		
Operating time (min S2)	10	10	10	10		
Length C (mm)	466	491	466	491		
Length D (mm)	449	474	449	474		
Length E (mm)	elero head = 14, round head = 12, star head = 19					
Weight (kg)	1.7	1.7	1.7	2.2		
Ambient operating temperatur (°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60		

Suitable adapter sets and motor bearings can be found in the section "RevoLine M accessories" on page 72. Further accessories such as additional battery packs, Y-cables and solar panels can be found in the section "RolSolar accessories" on page 132.

## RolSolar /D+

#### **Drives**



Ø 45

















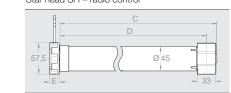












#### Roller shutters

Individual motors for replacement purposes or, when put together outside bundles, for even more individuality. Mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blind protection and automatic free travel, self-learning end positions with automatic release function, min. shaft size  $\emptyset$  = 50 mm, noiseless soft brake, bidirectional radio control at 868 MHz with feedback (without routing).

#### elero head - radio control





Round head RH - radio control

elero head	/D+ M10-868 DC	/D+ M20-868 DC
Item number	34 320.0001	34 330.0001
Round head	/D+ M10-868 DC RH	/D+ M20-868 DC RF
Item number	38 320.0001	38 330.0001
Star head	/D+ M10-868 DC SH	/D+ M20-868 DC SH
Item number	39 320.0001	39 330.0001

#### **Technical data**

Rated torque (Nm)	10	20	
Rated speed (rpm)	16	16	
Rated voltage (V DC)	12	12	
Noiseless soft brake	•	•	
Rated current (A)	4.0	6.0	
Rated power consumption (W)	48	72	
Operating time (min S2)	10	10	
Length C (mm)	466	491	
Length D (mm)	449	474	
Length E (mm)	ngth E (mm) elero head = 14, round head star head = 19		
Weight (kg)	1.7	2.2	
Ambient operating temperature (°C)	-20 to +60	-20 to +60	

Suitable adapter sets and motor bearings can be found in the section "RevoLine M accessories" on page 72. Further accessories such as additional battery packs, Y-cables and solar panels can be found in the section "RolSolar accessories" on page 132.

# RolSolar

#### Control systems and accessories







A radio transmitter is required for each RolSolar bundle and is not included in the scope of delivery. The following transmitters are available for selection:

#### MonoCom



 Single-channel handheld transmitter

#### **VarioCom**



- 6-channel handheld transmitter
- Manual/automatic operation switchover

#### MonoTec-868



- Single-channel wall transmitter
- Transmit indicator LED

#### QuinTec-868



- 5-channel wall transmitter
- Manual/automatic operation switchover

	MonoCom	VarioCom
Item number	28 405.0002	28 445.0002

MonoTec-868	QuinTec-868
28 650.0002	28 655.0002

#### Technical data

i echnicai data		
Rated voltage (V DC)	3	3
Battery type	2 x Micro LR03 (AAA)	2 x Micro LR03 (AAA)
Protection class (IP)	20	20
Ambient operating temperature (°C)	0 to +50	0 to +50
Individual channels	1	6
Channels can be combined in groups	_	•
Central channel	_	_
Bidirectional radio control (868 Mhz)	•	•
Dimensions L x W x H (mm)	151 x 49 x 14	151 x 49 x 14
Standard scope of delivery	Incl. wall bracket, mo	unting set, 2 batteries

3	3				
3 V Battery CR 2032	3 V Battery CR 2032				
20	20				
0 to +50	0 to +50				
1	5				
-	-				
_	1				
•	•				
50 x 50 x 9.6	50 x 50 x 9.6				
Incl. mounting set and battery					

## RolSolar

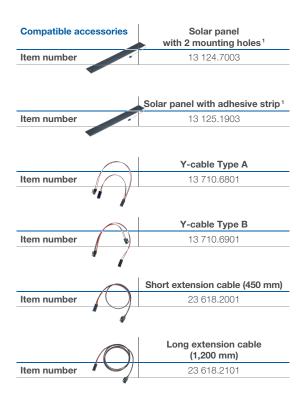
#### **Control systems and accessories**

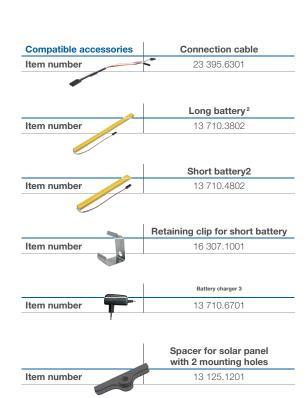






Each RolSolar drive system can also be retrofitted with an additional battery and/ or solar panel with a Y-cable (if the battery or solar radiation proves insufficient). A mains unit can also charge the batteries on dark winter days.





#### Technical data

recillical data	
Solar panel	
Dimensions of solar panel with 2 mounting holes (mm)	470 × 60
Dimensions of solar panel with adhesive strip (mm)	455 × 60
Solar panel (peak) power (W)	4.2
Protection class (IP code) of solar panel	64
Battery pack	
Type battery pack	NiMH
Dimensions of short battery pack, without cable (mm)	250 × 29.5 × 15
Dimensions of long battery pack, without cable (mm)	500 × 16 × 16
Dimensions of retaining clip for short battery (mm)	24.1 × 28.1 × 15
Charging current (mA)	230
Discharge current (recommended) (mA)	210 to 4.000 (at 20 °C)
Rated voltage, battery pack (V)	12.0
Capacity, battery pack (Ah)	2.1
Nominal charge (Wh), battery pack	25.8
Protection class (IP code) of battery pack	X4
Protection class	III
Cable	
Connection cable length (mm)	270
Length of Y-cable A (mm)	300 / 200
Length of Y-cable B (mm)	300 / 200
Length of short extension cable (mm)	450
Length of long extension cable (mm)	1,200
Battery charger	
Cable length (m)	1.80

- <sup>1</sup> A Y-cable of type A is required to connect the solar panel to the existing solar panel.
- <sup>2</sup> A Y-cable of type B is required to connect the battey to the existing battery.
- <sup>3</sup> A Y-cable of type A is required to use the battery charger.

# Solar drive systems



The energy unit, consisting of a solar panel and battery as well as a wide range of drives and control components, enables use in roller shutters, textile sun protection systems and (outdoor) venetian blinds.

And this exclusively with solarenergy!

Operation is convenient via a radio transmitter based on the unidirectional elero radio system with 868 MHz.

#### The following drive versions are available for solar systems from elero:

#### VariEco M DC / -868 DC

- Mechanical limit switch
- Unidirectional radio (868 MHz)

#### Radio control





Wired

#### SunTop L-868 DC

- Mechatronic end position detection with soft cut-out
- Unidirectional radio control (868 MHz)

#### JA Soft DC

- Mechanical limit switch
- Quickon end piece (QuickConnect)











Applications	VariEco M DC	VariEco M-868 DC	SunTop L-868 DC	JA Soft DC
Page	136	136	136	136
Roller shutters	•	•		
Textile sun protection	•	•	•	
(Outdoor) venetian blinds				•

TOP functions	VariEco M DC	VariEco M-868 DC	SunTop L-868 DC	JA Soft DC
Mechatronic end position detection with soft cut-out			•	
Mechanical limit switch	•	•		•
Intelligent force measurement			•	
Independent drive system (no wiring to mains necessary)	•	•	•	•
Unidirectional radio control at 868 MHz (without routing function)		•	•	
End positions can be adjusted using the radio transmitter			•	
End positions can be adjusted with assembly cable			•	

Technical data	VariEco M DC	VariEco M-868 DC	SunTop L-868 DC	JA Soft DC
Rated torque (Nm)	2.5, 10 and 12	10 and 12	6 and 40	4 and 10
Rated speed (Upm)	16	16	50 and 12	33 and 26
Min. shaft diameter ab (mm)	50	50	63	_
Diameter (mm)	45	45	59	_
Length (mm)	491 and 511	491 and 511	558	260 (device without connection cable)
Protection class (IP)	44	44	44	44
Limit switch range (rev.)	35	35	40	85
Noiseless soft brake	•	•	_	•
Ambient operating temperature (°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Conformity	C€	C€	C€	C€
Plug-in connection cable, 3.0 m	•	•	•	
Connection cable 0.8 m				•

End position programm		VariEco M DC	VariEco M-868 DC	SunTop L40-868 DC	JA Soft DC
Тор	Bottom				
To stop	Freely adjustable			•	
Freely adjustable	Freely adjustable	•	•	•	•

# Solar drive systems

#### **Drives**

















Roller shutter, textile sun protection, (outdoor) venetian blind

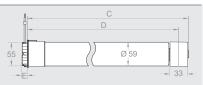
VariEco M DC / -868 DC: mechanical limit switch, noiseless soft brake, min. shaft size Ø = 50 mm, 3.0 m plug-in connection cable, unidirectional radio control at 868 MHz (radio version only)

SunTop L-868 DC: mechatronic end position detection with soft cut-out, intelligent force measurement, upward/downward blocking detection, end positions adjustable with mounting cable and hand-held transmitter, min. shaft size  $\emptyset = 63$  mm JA Soft DC: mechanical limit switch, noiseless soft brake, 0.8 m connection cable with Quickon end piece (QuickConnect)

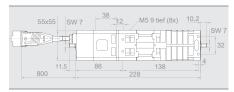
#### VariEco M (-868) DC







#### JA Soft DC



	VariEco	VariEco	VariEco	VariEco	VariEco	SunTop	SunTop	JA 04	JA 10
	M2.5/60 DC	M10 DC	M12 DC	M10-868 DC	M12-868 DC	L6/50-868 DC	L40-868 DC	Soft DC	Soft DC
Item number	34 600.0101	34 621.0101	34 611.0101	34 622.0101	34 612.0101	36 403.0001	36 352.0002	35 113.0001	35 093.0002

#### **Technical data**

Rated torque (Nm)	2.5	10	12	10	12	6	40	4	10
Rated speed (rpm)	60	16	16	16	16	50	12	33	26
Rated voltage (V DC)	12	12	12	12	12	12	12	12	12
Rated current (A)	3.0	3.75	3.5	3.75	3.5	8	10	4.0	8.5
Rated power consumption (W)	36	45	42	45	42	96	120	48	102
Noiseless soft brake	•	•	•	•	•	-	_	•	•
Operating time (min S2)	10	10	10	10	10	10	10	10	10
Length C (mm)	497	477	497	477	497	542	542	260	260
Length D (mm)	480	460	480	460	480	525	525	800	800
Length E (mm)	14	14	14	14	14	16	16	11.5	11.5
Weight (kg)	1.7	1.6	1.7	1.6	1.7	3.78	3.78	1.6	1.6
Ambient operating temperatur (°C)	-20 to +60								

Accessories for the tubular drives, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "RevoLine M accessories" on page 72 and on the following page "Solar drive systems, control systems and accessories". Accessories for the JA drives on page 115.

Suitable control systems and radio transmitters and sensors can be found in the section "Control systems" on page 182. For RevoLine SunTop L40-868 DC, please use suitable adapter sets for RevoLine L RH on page 100.

# Solar drive systems

#### **Control systems and accessories**















#### Combio-868 JA DC

 Unidirectional radio receiver for venetian blind DC drives (with connection cables and double-sided adhesive tape)

#### **Energy unit**

- Complete energy unit:
- Solar module incl. battery with charge control (pre-charged and ready for use)
- Plug connectors and 2 wall brackets

	Combio-868 JA DC	Energy unit
Item number	28 506.0005	22 150.0001

#### Technical data

12 – 13.5	13.2	
3.75	_	
45	_	
100	_	
56	44	
-20 to +70	-20 to +60	
5	_	
100 x 40 x 15	523 x 83 x 50	
	3.75 45 100 56 -20 to +70	

Compatible accessories	Battery with charge control (LiFePo, 13.2 V, 2300 mAh)
Item number	13 709.8102

	Plug connector, energy unit / drive (for tubular drives)
Item number	13 306.9601

		Plug-in connection cable, 3.0 m (for tubular drives)
Item number	-90	23 395.6001
	7	

	QuickConnect (required when using the drives without a control system and energy unit)
Item number	23 395.2701

1	DC assembly cable
Item number	23 279.0001



# elero

# Smart Home Home automation

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CO Alarm-Control	164.
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Push-Control	167.
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# Smart elero world

A smart home is primarily about making living safer and more comfortable as well as about saving energy. The daily routines of the users are facilitated by automatic scenes, voice commands and the remote control of devicep. Smart home solutions are increasingly in demand – both for new buildings and for retrofitting. If you want to remain flexible, choose an open system that can also incorporate devices from other manufacturerp.

# Systems for every requirement:

As an international reference in building automation, we meet the high demands of the market and offer you smart home systems for every requirement.

#### Yubii Home

The smart home system fully automates your house or flat and is a genuine all-in-one system offering a world full of possibilitiep. Versatile, flexible and reliable.



For a smart application with the focus on privacy and sun protection, Centero Home NXT is a user-friendly and market-driven solution.



## Yubii Home

The smart home system fully automates your house or flat and is a genuine all-in-one system offering a world full of possibilitiep.

**Yubii Home** will make your home smart and your life easier. The versatile gateway integrates products and radio protocols from elero and Nice. Countless devices from other brands can be incorporated into the system thanks to its compatibility with the Z-Wave® protocol.



### Automation and intelligent links allow the user to benefit from more:

- · Living comfort and quality of life
- Safety
- Sustainability and energy saving
- Cost saving

**Yubii Home** is the heart of the new smart home. The smart hub manages all smart devices and communicates with them. It receives the data from the Z-Wave sensors, processes them and has suitable operations carried out. The Amazon Alexa, Google Assistant and Siri Shortcuts voice assistants allow all applications to be controlled with ease by voice. Even from anywhere in the world – with the Yubii app on your smartphone or tablet.

Almost all bidirectional elero radio drives and radio



receivers can be integrated into the Yubii Home smart home environment.

and up to fifteen devices by means of app plug-inp.

works with

Indicated with this logo: Yubii Home

In addition, Yubii Home is compatible with more than 4,600 devices from other well-known manufacturerp. Furthermore, the gateway can support an IP camera

## **CENTERO HOME NXT**

For a smart application with the focus on privacy and sun protection, Centero Home is a user-friendly and market-driven solution. A modular system, which also permits contemporary extensions with home technology equipment from other manufacturerp.

#### Two different apps for specialists and users:

- Centero Connect the installation app for your specialist partner
- Centero Home NXT the application app for convenient operation

Centero Home NXT is an ideal introduction to the smart home world. The monitoring, control and automation of home automation products is possible by radio control (868 MHz, 433 MHz), IP and infrared. Centero Home NXT can be used both in the cloud and locally in a WLAN. All functions related to sun protection and roller shutter control are covered. In addition, home automation and security components as well as lifestyle products from other manufacturers can be integrated.





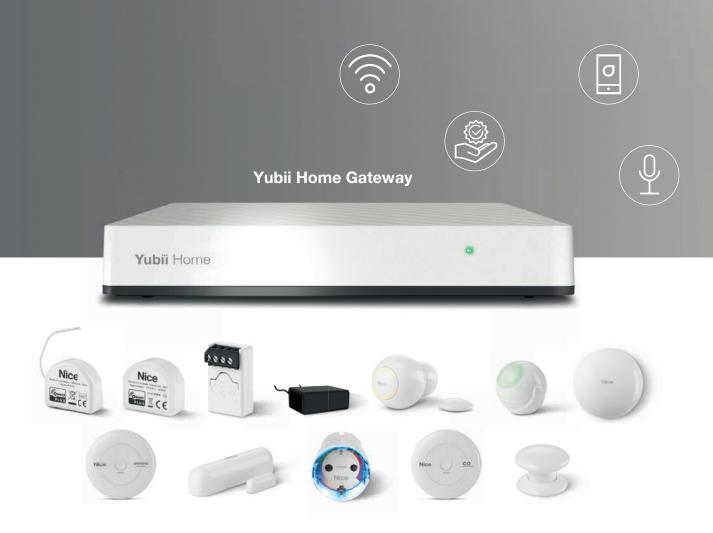
## Your life gets better.

Yubii Home is the heart of a new smart home. A system that takes care of the comfort and safety of the whole family and can also reduce energy consumption. One of these value propositions is at the forefront of the mind of all consumers when purchasing a smart home system. That is why we have put together starter kits based on these needs, starting on page 149.



Your home will become smart and your life easier.





Yubii Home makes your home smart. The gateway enables automation that is tailored to people's lifestyles and provides living comfort, safety and sustainability. It manages all smart devices and communicates with them. It receives the data from the Z-Wave sensors, processes them and has suitable operations carried out.

The Amazon Alexa, Google Assistant and Siri Shortcuts voice assistants allow all applications to be controlled with ease by voice. With the Yubii app on your smartphone or tablet, you always have your home in view – within your own four walls and wherever you might be.

#### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standardp. At the heart of the technology (868 MHz) are bidirectional radio components (transceivers) that are capable not only of receiving, but also of confirming and relaying the signalp. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.

#### **Z-Wave wireless network**



The Z-Wave wireless network is a wireless communication standard developed for home automation, which is used in sensors, modules, switches and other smart devicep. It enables convenient remote control of devicep. The radio communication has been optimised for low energy consumption and high communication security. With Z-Wave Plus, a new generation has been developed for even more functionality and compatibility.

# **Communication with Yubii Home**

works with

Radio drives and receivers – indicated in the catalogue by the **Yubii** Home symbol – communicate directly with the gateway, and the same applies to sensorp. Radio control units, such as the VarioCom-868 hand-held radio transmitter, are taught into the drive or receiver and are not connected to the gateway.

# Areas of application and top functions

Your home in a single device: roller shutters, venetian blinds, awnings, interior sun protection, gates, windows and doors, lighting, electrical household appliances, heating and irrigation systems as well as the entire home entertainment system can be controlled and integrated into automatic processes with a simple command. Appropriate sensors detect water leaks, carbon monoxide, fires, temperature, lighting conditions, motion and any tampering.

	Yubii Home Gateway	Living comfort kit	Sustain- ability kit	Safety kit	Roll- Control	On/Off- Control	Dimmer- Control	LED Adaptor	Smart- Control
Page	146	149	151	153	154	155	156	157	158
Roller shutters / interior shading	•				•				
Awnings / ZIP / exterior shading	•				•				
Venetian blinds	•				•				
Lighting	•		•			•	•	•	
Heating	•		•						
Sensor control	•	•	•	•					•
Bidirectional-capable transmitter/receiver	•								
Z-Wave(Plus)- capable transmitter/ receiver	•	•	•	•	•	•	•	•	•

	RGBW- Control	Heat- Control Kit	Motion- Control	Flood- Control	Smoke- Control	CO Alarm- Control	D/W- Control	Plug- Control	Push- Control
Page	159	160	161	162	163	164	165	166	167
Lighting	•							•	
Heating		•							
Motion sensor			•						
Temperature sensor		•	•	•	•	•	•		
Light sensor			•						
Flood sensor				•					
Smoke sensor					•				
CO Sensor						•			
Magnetic contact sensor							•		
Z-Wave(Plus)- capable transmitter/ receiver	•	•	•	•	•	•	•	•	(Transmitter only)
Colour variants available							•		•
(Rechargeable) battery operated		(Rechargeable battery cannot be replaced)	•	•	•	•	•		•
LED indicator		•	•	•	•	•	•	•	
Audible alarm				•	•	•			
Open/closed detection							•		
Further devices can be switched								•	

# **Yubii**® Home

# Modern home automation from elero





































Smart control for increased living comfort.

	Yubii Home Gateway
Item number	3016 1604 0301

#### Technical data

Processor	Single-Core Arm Cortex A 7 (900 MHz)
Operating memory	512 MB DDR3L
Hard disk	4 GB eMMC
Power supply	5 V DC max. 1 A (adapter included in scope of delivery)
Network interface	WLAN
Ambient operating temperature (°C)	0 to 40
Conformity with EU standards	RED 2014/53/EU RoHS 2011/65/EU
Radio protocol (MHz)	433 (433.05 – 434.04) 868 (868.0 – 869.65) Z-Wave (700 series) (868.0 – 868.6 and 869.7 – 870.0) WLAN (2400 – 2483)
WLAN connection	802.11 b/g/n/a/ac
Operating humidity	max. 75% relative humidity (non-condensing)
Power connection	USB Micro B
Dimensions (mm)	178 x 110 x 31

For a complete list of the control units and devices compatible with Yubii Home, visit www.elero.com/yubiihome

- Thank Z-Wave vompatible with more than 4,600 devices from other manufacturers
- Fast configuration process
- Simple and complex automation systems such as block scenes, LUA events, quick apps (programmable via Browser)
- Future-proof system
- Zukunftssicheres System
- Ingenious and sophisticated design
- Number of integrable devices: 40 elero, 40 Nice, 40 Z-Wave, 1 IP camera, 20 szenes, 10 quick-apps, 5 plug-ins
- Voice control (language version depends on the provider of the voice interface)







- IP video camera support
- Yubii app available for Android and iOS





# That says a lot about Yubii Home

Yubii Home is one of the most advanced smart home management units in the world. Components with morn technology ensure a stable, high-performance smart home system. The Z-Wave technology enables the integration of more than 4,600 products from other manufacturerp. Control your privacy and sun protection, electronics and household appliances, lighting, HVAC, alarm, monitoring and irrigation systems at the touch of a button or with a gesture or word.





Modern home automation makes a decisive contribution to improving living comfort. For users who want to save time and fully enjoy their home, the living comfort kit is the first choice:

Installed in a socket or wall switch, **On/Off control** can switch on or monitor electrical appliances and lights and control most household appliancep. With **Plug-Control**, you can integrate lights, music systems and other consumers into the smart home system and activate them with it. **Motion-Control** provides even more living comfort. In addition to motion detection, this sensor can be used to measure the temperature and light intensity. The devices integrated into the system can be activated in relation to the time or sensor signals and, of course, at the touch of a button. Further-more, it is possible to integrate them into scenep.

**Push-Control** excels with an innovative design and makes the feel-good experience perfect. Placed next to the bed, one press is enough, for example, to trigger a "morning scene": soft lighting, soft music while the coffee machine is switched on.

**Enjoying life at home** 

# Living comfort kit





On/Off-Control

Motion-Control





Plug-Control

Push-Control (white)

	Living comfort kit
Item number	28 981 0001

Product contents	On/Off-Control (p. 155) Motion-Control (p. 161) Plug-Control (p. 166) Push-Control (p. 167)

#### works with

# Yubii<sup>®</sup> Home

## Highlights On/Off-Control (p. 155)

- To control two electrical consumers
- Active power and energy measurement
- Z-Wave signal repeater
- Works with different types of switches push-buttons, toggle switches, three-way switches etc.

## **Highlights Motion-Control (p. 161)**

- Detects even the slightest changes in motion and temperature
- Unique earthquake detection function
- Easy to attach to surfaces, ceilings or walls thanks to innovative mounting bracket
- Motion notification on your smart phone or tablet
- LED indicator (motion, operating mode, temperature level)

# Highlights Plug-Control (p. 166)

- For lamps, fans, household appliances, home entertainment and other devices
- Useful if the socket is difficult to access
- Visualisation of the power consumption by coloured crystal LED ring
- Power consumption can be displayed via Yubii Home
- Can be used as a night light

## Highlights Push-Control (p. 167)

- Can be installed anywhere in your house
- Extremely easy to install simply add to the system and place on the surface of your choice
- Only available in white in the living comfort kit

The highlights on this page focus only on the most important product features. A full description of the items included in the kit can be found on the following pages.



With our sustainability kit, you can save a great deal of energy without any effort and enjoy an ideal indoor climate in your smart home:

**Motion-Control** detects movements in the room and also measures the temperature and light intensity. Installed in a socket or wall switch, **On/Off-Control** can switch on or monitor electrical appliances and lights and can control most household appliances.

**Heat-Control** regulates the room temperature for smart heating management and **D/W-Control** knows whether windows or doors are open, among other things. Together, the four of them are unbeatable. Ventilation and heating can thus be managed remotely and automatically adapted to the needs of your family. In addition, users consequently consume less energy and protect the environment.

**Everything for our environment** 

# Sustainability kit







Motion-Control

D/W-Control (white)

	Sustainability kit
Item number	28 985 0001

Product contents	On/Off-Control (p. 155) Heat-Control Kit (p. 160) Motion-Control (p. 161) D/W-Control (p. 165)

#### works with

# Yubii<sup>®</sup> Home

# Highlights On/Off-Control (p. 155)

- To control two electrical consumers
- Active power and energy measurement
- Z-Wave signal repeater
- Works with different types of switches push-buttons, toggle switches, three-way switches etc.

## Highlights Heat-Control Kit (p. 160)

- For various heating valves
- Easy to install no tools required
- Efficient heating management
- External temperature sensor for placement anywhere in the room
- Schedule mode: heating schedule for the entire week
- Temperature is indicated by the light colour in the ring
- Automatic calibration
- Frost protection and descaling function

# **Highlights Motion-Control (p. 161)**

- Detects even the slightest changes in motion and temperature
- Unique earthquake detection function
- Easy to attach to surfaces, ceilings or walls thanks to innovative mounting bracket
- Motion notification on your smart phone or tablet
- LED indicator (motion, operating mode, temperature level)

## Highlights D/W-Control (p. 165)

- For windows, doors, gates, roller shutters
- Built-in temperature sensor
- Turns down the heating when the window is open
- Detects any tampering when removing or opening
- Easy to install
- Visual LED indicator of the device status
- Available only in white in the sustainability kit

The highlights on this page focus only on the most important product features. A full description of the items included in the kit can be found on the following pages.



# Give your customers a good feeling by protecting their home. They will feel comfortable there with the safety kit.

**Motion-Control** detects movements in the room and also measures the temperature and light intensity. **Smoke-Control** is an intelligent smoke and fire detector and **Flood-Control** alerts to flooding and any tampering, among other things.

Together, the three form a powerful team. Potential dangers are predicted, people are warned and automatic sequences can be stored as a scene or condition in Yubii Home, for example to allow all motorised roller shutters to open if **Smoke-Control** detects smoke.

To protect the house and residents

# Safety kit



Motion-Control





Smoke-Control

Flood-Control

	Safety kit
Item number	28 983 0001

Product contents	Motion-Control (p. 161) Flood-Control (p. 162) Smoke-Control (p. 163)
------------------	---

## works with

# **Yubii** Home

## **Highlights Motion-Control (p. 161)**

- Detects even the slightest changes in motion and temperature
- Unique earthquake detection function
- Easy to attach to surfaces, ceilings or walls thanks to innovative mounting bracket
- Motion notification on your smart phone or tablet
- LED indicator (motion, operating mode, temperature level)

## Highlights Flood-Control (p. 162)

- Detects water leaks, floods and fires
- Built-in LED and audible alarm
- Compact design, floatable sensor
- Placement on the floor or wall mounting with extended flood sensor probe
- Can communicate with wired alarm systems
- Compact design

# Highlights Smoke-Control (p. 163)

- Optical smoke detection (at the earliest stage of the fire, often before flame formation and a significant increase in temperature)
- Integrated temperature sensor (signals when the defined temperature threshold is exceeded)
- Alarm is signalled by loud noises, visual display and sending of control commands
- Alarm scenes can be displayed: e.g. open roller shutter, switch on light, message to smart phone
- Compact, attractive design
- Three sensitivity levels of the sensors according to EN 14604:2005
- Built-in detector for housing opening

The highlights on this page focus only on the most important product features.

A full description of the items included in the kit can be found on the following pages.

# **Roll-Control**

# Flush-mounted control unit for privacy and sun protection



Roll-Control is a device used to control motorised roller shutters, venetian blinds, awnings, roller blinds and gates and enables their precise positioning. The product is also equipped with a power and energy monitoring function. Roller shutters, etc. can be integrated into automatic sequences and scenes and/or controlled as a group via the Z-Wave network in connection with Yubii Home. It is also possible to manually control the blinds with a conventional wall switch/push-button to which Roll-Control is directly connected.

	Roll-Control
Item number	3016 1823 0301

#### Technical data

100 – 240 V ~ 50/60 Hz		
1.7 (Resistive loads) for motors with compensated power factor (inductive loads)		
0 to +35		
Single-phase AC motors		
Electronic and mechanical		
up to 0.8		
Ø ≥ 50 Depth ≥ 60		
868.4 or 869.8 (EU)		
RoHS 2011/65/EU RED 2014/53/EU		
up to 30 (in buildings)		
42.5 x 38.25 x 20.3		

#### works with

# Yubii<sup>®</sup> Home

- For integration into Yubii Home: automatic sequences, scenes, control by app on your smart phone and tablet
- Use with single-phase AC motors with electronic or mechanical limit switches
- Works with different types of switches push-buttons, toggle switches, three-way switches etc.
- Function for active power and energy measurement
- Z-Wave signal repeater
- Supports the following Z-Wave network security modes:
  - S0 with AES-128 encryption
  - S2 with PRNG-based encryption



Roller shutters



Venetian



Roller blinds



**Awnings** 





Wireless communication consumption with various



Energy meter



Compatible wall switches

# **On/Off-Control**

# Flush-mounted switch control



On/Off-Control is used to switch up to two electrical appliances and lights on and off and to measure the current and energy consumption. Electrical appliances can be integrated into automatic sequences and scenes and/or controlled as a group via the Z-Wave network in connection with Yubii Home. The compact size of the unit makes it the smallest of its kind and allows the product to be installed in wall switches or enclosures. On/Off-Control can be controlled with a directly connected wall switch or push-button.

	On/Off-Control
Item number	3016 1803 0301

#### Technical data

recnnical data	
Power supply	100 – 240 V ~50/60 Hz
Rated load current (A) nach IEC-Norm	6.5 per channel 10 in total
Ambient operating temperature (°C)	0 to +35
For installation in wall switch boxes (mm)	Ø ≥ 50 Depth ≥ 60
Radio protocol	Z-Wave (500 series chip)
Radio frequency (MHz)	868.4 or 869.8 (EU)
Radio transmission power (dBm)	up to 6 (EIRP)
Conformity with EU directives	RED 2014/53/EU RoHS 2011/65/EU
Range (m)	Up to 50 outdoors and up to 40 indoors (depending on terrain and building structure)
External dimensions L x W x H (mm)	42.5 x 38.25 x 20.3

# Included in these kits:





#### works with

# Yubii<sup>®</sup> Home

## **Properties**

- To control two electrical consumers
- For integration into Yubii Home: automatic sequences, scenes, control by app on your smart phone and tablet
- Active power and energy measurement
- Z-Wave signal repeater
- Works with different types of switches push-buttons, toggle switches, three-way switches etc.
- Supports the following Z-Wave network security modes:
  - S0 with AES-128 encryption
  - S2 with PRNG-based encryption









On/off switch

Light Device management management

Energy consumption meter



Compatible with various wall switches

# **Dimmer-Control**

# Flush-mounted light switch control



Dimmer-Control is used to control different types of light sources. The lighting can be integrated into automatic sequences and scenes and/or controlled as a group via the Z-Wave network in connection with Yubii Home. It can also be operated with the directly connected wall switch. The Dimmer-Control algorithm for intelligent light source detection facilitates configuration and ensures high compatibility of the device. It has an automatic overload protection cut-off and soft-start function (can be combined with LED Adaptor, p. 157).

	Dimmer-Control
Item number	3016 1813 0301

#### Technical data

100 – 240 V ~ 50/60 Hz
< 1.3 W
0 to +35
0.25 – 1.1
Ø ≥ 50 Depth ≥ 60
Z-Wave
868.4 or 869.8 (EU)
up to 6 (EIRP)
ROT 2014/53/EU RoHS 2011/65/EU
Up to 50 outdoors Up to 30 in buildings (depen- ding on the terrain and building structure)
42.5 x 38.25 x 20.3

#### works with

# **Yubii** Home

## **Properties**

- Intelligent light source detection
- For integration into Yubii Home: automatic sequences, scenes, control by app on your smart phone and tablet
- Active power and energy measurement function
- Works with different types of switches push-buttons, toggle switches, three-way switches etc.
- Soft start function
- LED diode signalling for different statuses: inclusion, calibration and device menu position
- Advanced configuration options
- Z-Wave signal repeater
- Can be operated without a neutral conductor
- Dimmable control of:
  - 230 V-operated conventional incandescent lamps and halogen light sources
  - 12V-operated ELV halogen lamps and dimmable LED lamps (with electronic transformers)
  - 12V-operated MLV halogen lamps (with ferromagnetic transformers)
  - Dimmable LED lamps and dimmable compact fluorescent lamps CFL
- Non-dimmable control of:
  - Compact fluorescent lamps CFL with electronic ballast
  - · Fluorescent lamps CFL with electronic ballast
  - LED lamps (power factor > 0.7)



control





index





Energy consumption

Fade In Function

# **LED Adaptor**

# Flush-mounted light dimmer



The LED adaptor is a device that has been developed to expand the Dimmer-Control. It enables light sources to be dimmed with minimum power consumption and prevents flickering of LED lamps or afterglow of energy-saving lamps. It is only possible to dim light sources that are clearly marked as dimmable.

	LED Adaptor
Item number	3012 0751 0101

## Technical data

Power supply	100 – 240 V ~ 50/60 Hz
Ambient operating temperature (°C)	0 to +35
Power consumption (W)	< 1.4
External dimensions L x W x H (mm)	31 x 21.6 x 13
Conformity with EU directives	RoHS 2011/65/EU LVD 2014/35/EU EMC 2014/30/EU



## **Properties**

- Dimming of light sources
- Minimum power consumption of the light sources
- Prevents flickering and afterglow of LED equipment (in combination with Dimmer-Control, p.156)



Brightness control

# **Smart-Control**

# Intelligent radio receiver



Smart-Control extends the functionality of wired sensors and other devices and makes them "smart". They can be integrated into automatic sequences and scenes and/or controlled as a group via the Z-Wave network in connection with Yubii Home. In addition to wireless communication, devices, for example, can be switched on/off and data from sensors can be read out. The original functions of the device/sensor are not impaired by Smart-Control. The intelligent radio receiver can therefore also be used with alarm systems.

	Smart-Control
Item number	3016 1704 0301

#### Technical data

Power supply (V DC)	9 - 30 (±10 %)
Inputs	Two 0-10 V or digital inputs One serial single-wire input
Outputs	Two potential-free outputs (for controlling external circuits)
Supported digital sensors	6 x DS18B20 or 1 x DHT22
Maximum output current (mA)	150
Maximum output voltage	30 V DC / 20 V AC (±5 %)
Ambient operating temperature (°C)	0 to +40
Radio protocol	Z-Wave (500 series chip)
Radio transmission power (dBm)	max. 7 (EIRP)
Radio frequency (MHz)	868.4 or 869.8 (EU)
Conformity with EU directives	RoHS 2011/65/EU RED 2014/53/EU
Range (m)	Up to 50 outdoors Up to 40 in buildings (depending on the terrain and building structure)
Dimensions L x W x H (mm)	29 x 18 x 13

#### works with

# Yubii<sup>®</sup> Home

## **Properties**

- Enables the connection of sensors:
   up to six DS18B20 sensors, one DHT sensor,
   two dual-wire analogue sensors, two triple-wire analogue sensors, two binary sensors
- Built-in temperature sensor
- Z-Wave signal repeater
- Supports the following Z-Wave network security modes:
  - S0 with AES-128 encryption
  - S2 with PRNG-based encryption







Reading out data from sensors



Wireless communication



Switching devices on and off

# **RGBW-Control**

# Flush-mounted light and sensor control



RGBW-Control is used to control light sources, such as LED strips and coloured LEDs, and allows the light intensity and light colour to be changed. They can be integrated into automatic sequences and scenes and/or controlled conveniently by the Yubii app on your smart phone or tablet via the Z-Wave network in connection with Yubii Home. In addition, the device supports up to four analogue sensors and has a function for power and light measurement.

	RGBW-Control
Item number	3016 1713 0301

#### Technical data

recillical data	
Power supply (V DC)	12 / 24 (± 10%)
Rated load current (A)	6 per channel 12 in total for all outputs
Power (W)	144 combined at 12 V 288 combined at 24 V
Ambient operating temperature (°C)	0 to +40
Radio protocol	Z-Wave (500 series chip)
Radio frequency (MHz)	868.4 or 869.8 (EU)
Radio transmission power (dBm)	up to -1 (EIRP)
Conformity with EU directives	RoHS 2011/65/EU EMC 2004/108/EC R& TTE 1999/5/EC
Recommended cable cross-section	0.2 – 2.0 mm2 (24–14 AWG) (depending on the load current)
Range (m)	up to 50 outdoors up to 30 in buildings (depending on the terrain and building structure)
External dimensions L x W x H (mm)	42 x 37 x 17

#### works with

# Yubii<sup>®</sup> Home

## **Properties**

- For LED strips, RGB/RGBW LEDs and 12V-operated or 24V-operated light sources
- Control of light intensity and light colour, on/off
- For integration into Yubii Home: automatic sequences, scenes, control by app on your smart phone and tablet
- In addition, up to four 0 10V analogue sensors are supported (e.g. temperature sensors, humidity sensors, wind sensors, air quality sensors, light sensors)
- All IN and OUT connections can be configured by the user for LED control or 0 – 10V signal output
- Can be used as a dimmer in combination with halogen lamps
- Measurement of the current and historical power consumption starting at the installation
- Control via any Z-Wave controller possible
- Microprocessor-controlled
- For installation in standard wall switch boxes
- Z-Wave signal repeater







)



Luminous intensity management



Energy consumption meter

# **Heat-Control Kit**

# Intelligent radiator control



A smart radiator thermostat and a temperature sensor are included in the Heat-Control kit. The temperature measurement sensor can be placed anywhere in the room. The heat level is automatically adjusted. An innovative room analysis algorithm calculates the time needed to reach the desired temperature based on the room volume. Heat-Control can be controlled manually, by voice command and app at any time. A schedule mode enables temperature management for the whole week. The heating can be integrated into automatic sequences and scenes via the Z-Wave network in connection with Yubii Home.

	Heat-Control Kit
Item number	6125

## **Technical data of Heat-Control**

Power supply (V)	3.7 Li-poly rechargeable battery (not replaceable)
Charging connection	Micro-USB
Charger voltage (V DC) (charger not included in scope of delivery)	5
Minimum charging current (A)	0.5
Ambient operating temperature (°C)	0 to 40
Supported valves	M30 x 1.5, Danfoss RTD-N, Danfoss RA-N
Maximum water temperature (°C)	90
Accuracy of the temperature	0.5
measurement (°C)	(within a range of 0 to 40)
Radio protocol	Z-Wave (500 series chip) (S2-capable)
Radio frequency (MHz)	868.0 – 868.6
Conformity to standards	RoHS 2011/65/EU, RED 2014/53/EU
Range (m)	up to 40 (depending on building structure)
Dimensions Ø x H (mm)	56x74 (without adapter), 56x87 (with adapter)

#### Technical data of temperature sensor

Power supply (V)	3.0 CR2032 battery (included in scope of delivery)	
Radio frequency (MHz)	2402 – 2480	
Max. transmission power (dBm)	max. 1	
Ambient operating temperature (°C)	0 to +40	
Conformity to standards	RoHS 2011/65/EU, RED 2014/53/EU	
Dimensions Ø x H (mm)	38 x 12	

# Included in this kit:



#### works with

# **Yubii** Home

## **Properties**

- For three different heating valves:
   M30 x 1.5, Danfoss RTD-N and Danfoss RA-N
- Easy to install no tools required
- Efficient heating management
- For integration into Yubii Home: automatic sequences, scenes, control by app on your smart phone and tablet
- Built-in battery rechargeable via standard micro USB port
- External temperature sensor for placement anywhere in the room
- Schedule mode: heating schedule for the entire week
- Temperature is indicated by the light colour in the ring
- Automatic calibration
- Frost protection and descaling function
- Supports the following Z-Wave network security modes:
  - S0 with AES-128 encryption
  - S2 with PRNG-based encryption
- Scope of delivery: Heat-Control and temperature sensor



Precise temperature measurement

Algorithms for

adaptive self-

programming



Schedule mode



Innovative heating zone management



Convenient and cost-effective battery charging



Significant reduction in heating costs

# **Motion-Control**

# Motion, light and temperature sensor



The multi-sensor detects motion and measures the ambient temperature and light intensity. Any tampering of the device is detected by the integrated accelerometer. Motion-Control is battery operated and can be quickly and easily mounted on walls and ceilings or simply set up. Sensor signals can be integrated into automatic sequences via the Z-Wave network in connection with Yubii Home. Motion-Control can also be used for lighting scenes and security monitoring systems. Motion signals to the smartphone are also possible. The LED indicator is used to signal motion and the temperature level and operating mode.

	Motion-Control
Item number	3016 1774 0301

#### Technical data

Power supply	CR123 A battery, 3.0 V DC (battery included in scope of delivery)	
Rechargeable battery life	Approx. 2 years (with default settings)	
Recommended installation height (m)	2.4	
Ambient operating temperature (°C)	0 to +40	
Measured temperature range (°C)	-20 to +100	
Accuracy of the temperature measurement (°C)	0.5 (within range of 0 to +40)	
Accuracy of the temperature measurement (LUX)	0 to 32.000	
Radio protocol	Z-Wave	
Radio frequency (MHz)	868.4 Mhz or 869.8 MHz (EU)	
EU directive conformity	RED 2014/53/EU RoHS 2011/65/EU	
Range (m)	up to 50 outdoors up to 40 in buildings (depending on the terrain and building structure)	
Dimensions H x W x Ø (mm)	46 x 46 (mounting bracket +2 mm)	

# Included in these kits:





#### works with

# Yubii<sup>®</sup> Home

## **Properties**

- Detects even the slightest changes in motion and temperature
- Unique earthquake detection function
- For integration into Yubii Home: automatic sequences and lighting scenes
- Easy to attach to surfaces, ceilings or walls thanks to innovative mounting bracket
- Used indoors
- Motion notification on your smart phone (can be deactivated)
- LED indicator (motion, operating mode, temperature level) that can be switched off
- Battery operated
- Wireless communication via Z-Wave protocol
- Wireless software update
- Supports the following Z-Wave network security mode:
  - S0 with AES-128 encryption









Motion

Light sensor

Temperature A

Acceleration sensor



notification

# **Flood-Control**

# Flood and temperature sensor



The multifunctional sensor is more than an ordinary water detector – it detects the smallest water leaks and the integrated temperature sensor monitors the temperature of the floor, for example, or issues an alert in the event of a fire. Flooding is signalled by the integrated LED and audible alarm. Sensor signals can be integrated into automatic sequences via the Z-Wave network in connection with Yubii Home. Due to its compact size, Flood-Control can be positioned anywhere – this is possible on walls due to an extended flood sensor probe.

	Flood-Control
Item number	3016 1723 1201

#### Technical data

i common data		
Battery type	CR 123A (included in scope of delivery)	
Power supply (V DC) (optional)	12 – 24	
Maximum voltage at the output terminals (V)	24 DC / 20 AC	
Measured temperature range (°C)	0 to +40 (battery operation) -20 to +100 (VDC operation)	
Accuracy of the temperature measurement (°C)	0.5 (within a range of 0 to 40)	
Ambient operating temperature (°C)	0 to +40 (battery operation) -20 to +70 (VDC operation)	
Radio protocol	Z-Wave	
Radio frequency (MHz)	868.4 or 869.8 (EU)	
Conformity with EU directives	RoHS 2011/65/EU RED 2014/53/EU	
Range (m)	up to 50 outdoors up to 40 indoors (depending on the terrain and building structure)	
Dimensions Ø x H (mm)	72 x 28	

## Included in this kit:



#### works with

# Yubii<sup>®</sup> Home

- Detects water leaks, floods and fires
- Flood-Control can be integrated into automatic sequences via the Z-Wave network in connection with Yubii Home
- Built-in LED and audible alarm
- Compact design, floatable sensor
- Placement on the floor
- Wall mounting with extended flood sensor probe (wired)
- Can communicate with wired alarm systems via a Z-Wave network
- Battery operated or VDC operated
- Wireless software update



Flood sensor



Acoustic / visual alarm



Temperature sensor



Tamper protection

# **Smoke-Control**

# Smoke sensor



Smoke-Control signals an alarm by sound and visual flashing and by sending Z-Wave control commands. The optical sensor already detects smoke at an early stage of the fire. In addition, the device has a built-in, programmable temperature sensor. Smoke-Control can be mounted on a wall or ceiling. The LED indicator signals fires and the operating mode and can be used to see if the device is within a Z-Wave network.

	Smoke-Control
Item number	3016 1734 0301

#### Technical data

Battery type (V DC)  CR123A 3.0 (included in scope of delivery demonstrating temperature (°C)  Operating humidity (%)  Measured temperature range (°C)  Accuracy of the temperature measurement (°C)  Sensitivity to smoke  Noise level of the alarm siren (dBA)  Radio transmission power (dBm)  Radio protocol  Radio frequency (MHz)  Conformity with  CR123A 3.0 (included in scope of delivery delivery)  0 to +55  (within 0 to +55)  First level - 1.20 +/- 0.5% obsoleted in the second level - 1.80 +/- 0.5% obsoleted in the second le
temperature (°C)  Operating humidity (%)  Measured temperature range (°C)  Accuracy of the temperature measurement (°C)  Sensitivity to smoke  Noise level of the alarm siren (dBA)  Radio transmission power (dBm)  Radio protocol  Radio frequency (MHz)  Conformity with  No to 93  -20 to +100  -20 to +100  Second level - 1.20 +/- 0.5% obs Second level - 1.20 +/- 0.5% obs Second level - 1.80 +/- 0.5% obs Second level - 2.80 +/- 0.5% obs Second level - 3.80 +/- 0
Measured temperature range (°C)  Accuracy of the temperature measurement (°C)  Sensitivity to smoke  Noise level of the alarm siren (dBA)  Radio transmission power (dBm)  Radio protocol  Radio frequency (MHz)  Conformity with  -20 to +100  0.5  (within 0 to +55)  First level - 1.20 +/- 0.5% obs Second level - 1.80 +/- 0.5% obs Third level - 2.80 +/- 0.5% obs (at 3 metres)  Up to -5 (EIRP)  EN 14604:2005  EN 14604:2005
range (°C)  Accuracy of the temperature measurement (°C)  Sensitivity to smoke  Noise level of the alarm siren (dBA)  Radio transmission power (dBm)  Radio protocol  Radio frequency (MHz)  Conformity with  -20 to +100  0.5  (within 0 to +55)  First level - 1.20 +/- 0.5% obs Second level - 1.80 +/- 0.5% obs Third level - 2.80 +/- 0.5% obs (at 3 metres)  up to -5 (EIRP)  EN 14604:2005
temperature measurement (°C)  Sensitivity to smoke  Second level – 1.20 +/- 0.5% obs Second level – 1.80 +/- 0.5% obs Third level – 2.80 +/- 0.5% obs Noise level of the alarm siren (dBA)  Radio transmission power (dBm)  Radio protocol  Radio frequency (MHz)  Conformity with  Second level – 1.80 +/- 0.5% obs Second level – 1.80 +
Sensitivity to smoke  Second level – 1.80 +/- 0.5% obsomble Third level – 2.80 +/- 0.5% obsomble Noise level of the alarm siren (dBA)  Radio transmission power (dBm)  Radio protocol  Radio frequency (MHz)  Conformity with  Second level – 1.80 +/- 0.5% obsomble Noise level – 1.80 +/- 0.5% obsomble Noise No
alarm siren (dBA)         (at 3 metres)           Radio transmission power (dBm)         up to -5 (EIRP)           Radio protocol         Z-Wave           Radio frequency (MHz)         868.4 or 869.8 (EU)           Conformity with         EN 14604:2005           PED 2014/53/ELI         PED 2014/53/ELI
Description
Radio frequency (MHz)         868.4 or 869.8 (EU)           Conformity with         EN 14604:2005           EN 2014/53/EU         EN 2014/53/EU
Conformity with EN 14604:2005
Conformity with
EU directives  RoHS 2011/65/EU
Range (m)  up to 50 outdoors up to 30 in buildings (depending on the terrain and building structure)
Dimensions Ø x H (mm) 65 x 28

# Included in this kit:



#### works with

# Yubii<sup>®</sup> Home

- Optical smoke detection (already at a very early stage of the fire)
- Integrated temperature sensor (signals when a defined temperature threshold is exceeded)
- Alarm is signalled by loud noises, visual display and the transmission of Z-Wave control commands
- Smoke-Control can be integrated into automatic processes via the Z-Wave network in connection with Yubii Home – alarm scene: e.g. opening roller shutters, switching on light, message on the smart phone
- Battery operated
- Compact, attractive design
- Three sensitivity levels of the sensors according to EN 14604:2005
- Built-in detector for housing opening
- Built-in Z-Wave range tester
- Wireless software update
- Self-test function, which can also be performed manually to test the operation of the Smoke-Control
- Efficiency test is automatically carried out every ten seconds to detect potential malfunctions
- Supports the following Z-Wave network security mode:
  - S0 with AES-128 encryption
- Not suitable for installation near moisture or dust









Smoke sensor

Temperature sensor

Acoustic / visual alarm





Effective protection

Excellent monitoring

# **CO Alarm-Control**

# Compact carbon monoxide detector



Thanks to its high sensitivity, CO Alarm-Control detects the presence of carbon monoxide (CO) gas at an early stage to prevent carbon monoxide poisoning. The alarm is signalled with a built-in siren, a flashing LED indicator and by sending information to Z-Wave network devices. In addition, the device is equipped with a temperature sensor. In connection with Yubii Home, the carbon monoxide concentration is displayed in a graph and stored in the system memory. This allows the amount of CO in rooms to be monitored to prevent health restrictions in the long term. Only suitable for wall mounting.

	CO Alarm-Control
Item number	3016 1643 0301

## Technical data

r common data		
Battery type	CR123A 3.0 V (battery included in scope of delivery)	
Service life under typical conditions	8 years	
Measurement range of CO concentration (ppm)	0 to 450	
Measurement accuracy	±10 ppm / ±5 %	
Ambient operating temperature (°C)	0 to +50	
Alarm response times with default settings	50 ppm 60 – 90 min 100 ppm 10 – 40 min 300 ppm <1.5 min	
Noise level of the alarm siren (dBA)	85 (at 3 metres)	
Radio transmission power (dBm)	up to -5 (EIRP)	
Radio protocol	Z-Wave (500 series chip)	
Radio frequency (MHz)	868.4; 868.42 or 869.8 (EU)	
EU directive conformity	RED 2014/53/EU RoHS 2011/65/EU EN 50291-1:2010	
Range (m)	Up to 40 in buildings (depending on the terrain and building structure)	
Dimensions Ø x H (mm)	65 x 28	

#### works with

# **Yubii** Home

- Carbon monoxide (CO) detection
- Integrated temperature sensor
- Detects even low CO concentration levels
- Alarm is signalled with a built-in siren and LED diode
- Alarm-Control can be integrated into automatic sequences via the Z-Wave network in connection with Yubii Home – for example as a message on your smart phone
- Can be used as a stand-alone carbon monoxide detector
- Supports the following Z-Wave network security mode:
  - S0 with AES-128 encryption
- Battery operated
- Only suitable for wall mounting











Carbon monoxide sensor

LED light display

Temperature sensor

Audible alarm

# RevoLine S + M

# RevoLine RH / L NHK

# Venetian Blind drives

# **D/W-Control**

# Contact sensor with temperature measurement



D/W-Control is a wireless, battery-operated magnetic contact sensor. The opening is detected by separating the sensor body and the magnet. The sensor can be used in connection with Yubii Home to trigger scenes and wherever information about the opening or closing of doors, windows, garage doors etc. is required. In addition, D/W-Control is equipped with a built-in temperature sensor.

D/W-Control	white	brown	black
Item number	3016 1743 0301	3016 1783 0301	3016 1793 0301

# Technical data

Battery type	ER14250 ½AA, 3.6V DC (battery included in scope of delivery)		
Rechargeable battery life	Approx. 2 years (with default settings)		
Ambient operating temperature (°C)		0 to +40	
Measured temperature range (°C)	0 to +60		
Accuracy of the temperature measurement (°C)	± 0.5		
Radio protocol	Z-Wave (500 series chip)		
Radio frequency (MHz)	868.4 (EU)		
EU directive conformity	RED 2014/53/EU RoHS 2011/65/EU		
Colour	white	brown	black
Range (m)	Up to 50 outdoors Up to 40 in buildings (depending on the terrain and building structure)		
Dimensions H x W x H (mm)	71 x 18 x 18		

# Included in this kit1:



#### works with

# Yubii<sup>®</sup> Home

## **Properties**

- For windows, doors, gates, roller shutters
- The opening is detected by separating the sensor body and the magnet
- Built-in temperature sensor
- D/W-Control can be integrated into automatic sequences via the Z-Wave network in connection with Yubii Home – for example to turn down the heating when the window is open
- Battery operated
- Detects any tampering when removing or opening
- Easy to install
- Visual LED indicator for visualisation of the device status
- For use inside buildings only
- Supports the following Z-Wave network security mode:
- S0 with AES-128 encryption









Contact sensor

Tamper protection

Temperature sensor

Safety system component

# Available in these colours



# **Plug-Control**

# Plug & Play



Plug-Control is an intelligent plug & play socket adapter with current measuring function. It can be used wherever electrical appliances with a maximum power of 2.5 kW need to be controlled, while monitoring the power consumption conveniently and maintenance-free. The crystal LED ring informs about the current load of the connected device by changing its colour visually. In connection with Yubii Home, the plugged-in device can become part of scenes or sequences and be operated with the Yubii app or a voice command.

	Plug-Control
Item number	3094 0383 0301

#### Technical data

Power supply (V AC)	230V AC 50/60 Hz		
Rated operating output voltage (A)	11		
Power consumption (W)	up to 1.6		
Output power for resistive loads (kW)	2.5		
Conformity to standards	RED 2014/53/EU RoHS 2011/65/EU		
Ambient operating temperature (°C)	0 to +40		
Compatible with type F sockets (Schuko)	CEE 7/16 (max. load of 2.5 A) CEE 7/17 (max. load of 11 A) Double plug F		
Radio transmission power (dBm)	up to -10 (EIRP)		
Radio protocol	Z-Wave		
Radio frequency (MHz)	868.4 or 869.8 (EU)		
Range (m)	Up to 50 outdoors Up to 30 in buildings (depending on the terrain and building structure)		
Dimensions Ø x H(mm)	43 x 65		

For loads other than resistive loads, please observe  $\cos \phi$  and use a lower load than the nominal load if necessary. It is not recommended to exceed 3 A for 250 V AC,  $\cos \phi$ =0,4.

## Included in this kit:



works with

# Yubii<sup>®</sup> Home

## **Properties**

- For lamps, fans, household appliances, coffee machines, home entertainment and other devices
- Can be used also as a night light
- Thanks to Plug-Control, the devices can be integrated into scenes and automatic sequences and switched on and off via Yubii Home
- Also useful if the socket is difficult to access (switched on and off with the app)
- Visualisation of the power consumption by coloured crystal LED ring (microprocessor-controlled)
- History and statistics on power consumption can be visualised via Yubii Home
- Extremely compact and can be remote controlled
- Supports the following Z-Wave network security mode:
  - S0 with AES-128 encryption



switch









Power measurement

Protection against fluctuations

# **Push-Control**

# Switches for electrical appliances and scenes



The practical scene switch Push-Control switches electrical appliances on and off and, in connection with Yubii Home, is able to trigger scenes. Up to six different actions or scenes can be carried out with Push-Control. In panic mode, each press of the button triggers the emergency scene. Thanks to its small design and wireless communication, the Push-Control can be conveniently placed on any surface and mounted in any position, e.g. next to the bed or under the desk.

Push-Control	white	black	red
Item number	3016 1684 0301	3016 1674 0301	3016 1664 0301

## Technical data

Battery type	ER14250 ½ AA, 3.6 V DC (included in scope of delivery)				
Rechargeable battery life	Approx. 2 years (with default settings and max. 10 operations/day)				
Ambient operating temperature (°C)	0 to +40				
Radio protocol	Z-Wave (500 series chip)				
Radio transmission power (dBm)	up to 1 (EIRP)				
Radio frequency	868.4 or 869.8 (EU)				
Conformity to standards	RED 2014/53/EU RoHS 2011/65/EU				
Range (m)	Up to 50 outdoors Up to 40 in buildings (depending on the terrain and building structure)				
Dimensions Ø x H (mm)		46 x 34			
Colour	white black red				

# Included in this kit1:



#### works with

# Yubiii Home

## **Properties**

- Switch for six actions (one to five clicks and hold)
- Integrated in Yubii Home, scenes can be triggered and messages sent to a smart phone, for example
- Can be used as a panic button
- Supports the following Z-Wave network security mode:
  - S0 with AES-128 encryption
- Wireless, battery-operated Z-Wave communication
- Can be installed in any position in your house
- Can be placed on surfaces without mounting
- Easy start-up via Yubii Home
- Three colour variants (white, black, red)



Several clicks activate different created scenes.

#### Available in these colours



# The home becomes smart

Centero Home NXT is the ideal introduction to the Smart Home world. The monitoring, control and automation of home automation products is possible by radio control (868 MHz, 433 MHz), IP and infrared. Centero Home NXT can be used both in the cloud and locally in a WLAN. All functions related to sun protection and roller shutter control are covered. In addition, home automation and security components as well as lifestyle products from other manufacturers can be integrated.



# **Centero Home NXT**

Central home automation from elero – Smart control for increased living comfort.



All functions relating to sun shading and roller shutter control are covered. In addition, home technology and security components as well as various lifestyle products from other manufacturers can also be integrated.

Centero Home NXT	
Item no.	28 806.0001

Technical data			
Rated voltage (V)	5 DC / 1,5 A		
Power consumption (W)	1.3		
Ambient operating temperature (°C)	0 to +40		
Radio frequency (MHz)	433 / 868		
Dimensions LxBxH (mm)	110 x 110 x 32		
Network	WLAN IEEE 802.11 /b/g/n, 2.4 GHz		
Radio transmission range (m)	> 100 (free field)		
Radio transceiver	1 x transceiver for 433 MHz & 1 x transceiver for 868 MHz &		
Infra red (IR)	Integrated 38 KHz IR receiver and transmitter unit (36 – 455 KHz)		
Connections for External IR transmitter	2 x 3.5 mm jack socket, addressable (rear)		
IR to radio connector	Triggering a radio command by means of IR remote control		
RGB LED Indicator (top side)	Programmable, for device status display		
Bidirectional radio (868 MHz)	•		
Learning functionality	Radio and IR		
Product contents	Centero Home Gateway, mains plug		

For a complete list of Centero Home NXT compatible control systems and devices, visit www.elero.com/centerohome































- Simple and intuitive operation of home technology by smartphone or tablet
- Locally in the WLAN and remotely via the cloud
- Für mehr Sicherheit und Energieeffizienz
- Controllable with Centero Home NXT:
  - Complete privacy and sun protection with elero radio drives and receivers
  - Radio-controlled socket outlets, lighting and heating elements with elero radio receivers
  - Motion and smoke detectors, window contacts, radiator thermostats and temperature sensors from Homematic
  - Lighting systems from Philips Hue
  - Simple commissioning by specialised tradesman possible without access to the customer's WLAN
  - Calendar function, daily schedules, manual/automatic switchover, scene control, display of critical devices, favourites, action lists, use of different configurations per user, optional cloud backup
  - In-app upgrade to the Centero Home Plus version:
    - Amazon Alexa voice control
    - Integration of Sonos sound systems
    - Integration of Netatmo weather stations
    - Visitor management with Doorbird door intercoms



# elero

# Hand-held radio transmitters

VarioSon-868 Slide	174.
LumeroSon-868 / Slide	174.
LumeroSon-868 Mini	175.
MonoSon-868 Mini	175.
VarioCom / Slide	176.
LumeroCom	176.
MonoCom / Slide	176.
TempoTel 2	178.
MultiTel 2	178.
VarioTel 2	178.
LumeroTel 2	179.
MonoTel 2	179.

# Hand-held radio transmitters



Radio technology for roller shutters, awnings, roller blinds and venetian blinds bring more convenience to your own four walls. With a hand-held radio transmitter from elero, roller shutters, awnings and much more can be controlled very conveniently, for example from your sofa, bed or anywhere else in your house.

The hand-held radio transmitters impress with their modern design and their ergonomic, user-friendly construction.

Your specialist can carry out the installation of the control components at any time without any dirt and time-consuming assembly.

# **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.

# **Application areas**

The hand-held radio transmitters from elero offer an ideal control solution for dedicated drive technology, such as roller shutters, sun protection systems and doors, as well as for heating systems, lighting installations or other electrical consumers. Operation of one or more applications is carried out simply at the touch of a button or is completely automated.

	Vario- Son-868 Slide		Lumero- Son-868 Mini		Vario- Com / Slide	Lumero- Com	Mono- Com / Slide		MultiTel 2 VarioTel 2		Mono- Tel 2
Page	174	174	175	176	176	176	178	178	178	179	179
Roller shutters / interior shading	•	•	•	•	•	•	0	•	•	•	•
Awnings / ZIP / exterior shading	0	•	•	0	•	•	0	0	•	•	0
Venetian blinds	•	•	•	0	•	•	0	•	•	•	0
Lighting	•	•	•	•	•	•	•	•	•	•	•
Heating	0	•	•	•	•	•	•	0	•	•	•

o Partial fulfilment

Complete fulfilment

# **TOP functions**

With elero control systems, roller shutters, venetian blinds or patio awnings can be operated easily and conveniently. And with ProLine 2, the bidirectional radio system from elero, this can be done even more reliably, efficiently and transparently.

	Vario- Son-868 Slide	Lumero- Son-868 / Slide	Lumero- Son-868 Mini	VarioCom / Slide	Lumero Com	MonoCom / Slide	Tempo- Tel 2	Multi- Tel 2	Vario- Tel 2	Lumero- Tel 2	Mono- Tel 2
Page	174	174	175	176	176	176	178	178	178	179	179
Radio transmit- ter, number of channels	6	1	1	6	1	1	10	15	5	1	1
Central channel	•3			•3			•	•	•		
Group channels	•3			•3			2	5			
Manual/auto switchover/ display	•	•	•	•	•		•	•	•	•	
Integrated buttons	•	•	•	•	•	•	•	•	•	•	•
Integrated slider 1	•	•		•4		•4					
Colour variants available	•	•	•				•	•	•	•	•
LCD display							•	•			
LED channel display	•			•					•		
Position display							•	•			
Astro functionality <sup>2</sup>							•				
Multiple langua- ges selectable							•	•			
Intermediate/ ventilation position	•	•	•	•	•	•	•	•	•	•	•
Turning position / fabric tautening	•	•	•	•	•	•	•	•	•	•	•
Bidirectional transmitter/ receiver*	•	•	•	•	•	•	•	•	•	•	•
Unidirectional transmitter/ receiver							•		•	•	•
Incl. wall bracket and batteries	•	•	•	•	•	•	•	•	•	•	•

o Partial fulfilment

Complete fulfilment

<sup>\*</sup> incl. autom. routing function

<sup>&</sup>lt;sup>1</sup> Slider function allows easy dimming or slow travel with compatible devices

<sup>&</sup>lt;sup>2</sup> Astro, sunrise and sunset (or weekly switching time), Astro shift (adjustable), city selection (156), longitude/latitude setting, time zone, weekly switching time (1x UP and 1x DOWN per day) and second weekly switching time (when using the Astro function, only one switching time per day; group and central channel also both offer one or two switching times), holiday programme, assignment of position downward/upward approach, automatic summer/winter time switchover

 $<sup>\</sup>ensuremath{^3}$  Groups can be put together according to need

<sup>&</sup>lt;sup>4</sup> Only Slider versions

# VarioSon-868 Slide / LumeroSon-868 (Slide)

# ProLine 2 hand-held radio transmitter

















## VarioSon-868 Slide

- 6-channel hand-held transmitter with slider
- Manual/automatic mode switchover

#### LumeroSon Slide

- 1-channel hand-held transmitter with slider
- Manual/automatic mode switchover

#### LumeroSon

- 1-channel hand-held transmitter
- Manual/automatic mode switchover

	VarioSon-868 Slide silver	LumeroSon-868 Slide silver	LumeroSon-868 silver
Item no.	28 703.0001	28 702.0001	28 701.0001

	VarioSon-868 Slide white	LumeroSon-868 Slide white	LumeroSon-868 white
Item no.	28 713.0001	28 712.0001	28 711.0001

#### **Technical data**

Rated voltage (V DC)	1.5	1.5	1.5		
Battery type	2 x Micro LR03 (AAA)	2 x Micro LR03 (AAA)	2 x Micro LR03 (AAA)		
Ingress protection (IP)	20	20	20		
Ambient operating temperature (°C)	0 to +50	0 to +50	0 to +50		
Radio frequency (MHz)	868	868	868		
Dimensions LxBxH (mm) hand-held	155 x 43 x 21	155 x 43 x 21	155 x 43 x 21		
Weight (g) incl. battery	81	81	81		
Single channels	6	1	1		
Group channels	1	-	-		
Central channel	1	1	-		
Manual/auto switching	•	•	•		
Slider function	•	•	_		
Bidirectional radio	•	•	•		
Standard scope of delivery	incl. wall bracket, mounting set, 2 inserted batteries, operating instructions				

# LumeroSon-868 Mini / MonoSon-868 Mini

ProLine 2 hand-held radio transmitter compact



	LumeroSon-868 Mini silver	MonoSon-868 Mini silver
Item no.	28 722.0001	28 721.0001

	LumeroSon-868 Mini white	MonoSon-868 Mini white	
Item no.	28 732.0001	28 731.0001	

## Technical data

Rated voltage (V DC)	3	3	
Battery type	1 x CR2450 Lithium	1 x CR2450 Lithium	
Ingress protection (IP)	20	20	
Ambient operating temperature (°C)	0 to +50	0 to +50	
Radio frequency (MHz)	868	868	
Dimensions LxBxH (mm) hand-held	40 x 71 x 10	40 x 71 x 10	
Weight (g) incl. battery	27	27	
Single channels	1	1	
Group channels	1	1	
Central channel	1	1	
Manual/auto switching	•	_	
Bidirectional radio	•	•	
Standard scope of delivery	incl. wall bracket, mounting set, 2 inserted batteries, operating instructions		















## LumeroSon-868 Mini

- 1-channel hand-held transmitter in compact form
- Manual/automatic mode switchover

## MonoSon-868 Mini

 1-channel hand-held transmitter in compact form

# VarioCom (Slide) / LumeroCom / MonoCom (Slide)

# ProLine 2 radio hand-held transmitter















# VarioCom Slide

- 6-channel hand-held transmitter with slider
- Manual/automatic mode switchover

## **VarioCom**

- 6-channel hand-held transmitter
- Manual/automatic mode switchover

#### LumeroCom

- Single-channel hand-held transmitter
- Manual/automatic mode switchover

#### MonoCom Slide

- Single-channel hand-held transmitter with slider

# MonoCom

- Single-channel hand-held transmitter

	VarioCom Slide	VarioCom	LumeroCom	MonoCom Slide	MonoCom
Item no.	28 455.0002	28 445.0002	28 425.0002	28 435.0002	28 405.0002

# Technical data

Rated voltage (V DC)	3	3	3	3	3
Battery type	2 x Micro LR03 (AAA)	2 x Micro LR03 (AAA)	2 x Micro LR03 (AAA)	2 x Micro LR03 (AAA)	2 x Micro LR03 (AAA)
Ingress protection (IP)	20	20	20	20	20
Ambient operating temperature (°C)	0 to +50	0 to +50	0 to +50	0 to +50	0 to +50
Radio frequency (MHz)	868	868	868	868	868
Dimensions LxWxH (mm) of hand-held transmitter	151 x 49 x 15	151 x 49 x 15	151 x 49 x 15	151 x 49 x 15	151 x 49 x 15
Weight (g) incl. battery	90	90	90	90	90
Individual channels	6	6	1	1	1
Group channels	1	1	-	-	-
Central channel	1	1	-	-	-
Manual/automatic switchover	•	•	•	-	-
Slider function	•	-	-	•	-
Bidirectional radio control	•	•	•	•	•
Standard scope of delivery		Incl. wall bracket, mour	nting set, 2 batteries inserted	d, operating instructions	





The bidirectional COM hand-held transmitters impress with their modern design and their ergonomic, user-friendly construction. Reliable feedback and reliable routing function with ProLine 2.

# TempoTel 2 / MultiTel 2 / VarioTel 2

# ProLine 2 radio hand-held transmitter



Multi-channel hand-held transmitter, uni and bidirectional (except MultiTel 2)<sup>1</sup>, reliable radio transmission frequency of 868 MHz, available in 3 colours (pure white, silver, titanium grey).















#### TempoTel 2

- 10 individual channels, 2 group channels + 1 central channel
- Integrated timer (bidirectional per channel, group, central)
- Individual, Astro evening or Astro switching times, adjustable
- Visualisation of transmission and feedback commands

#### MultiTel 2

- 15 individual channels, 5 group channels + 1 central channel
- Can be used only bidirectionally
- Positions and commands displayed on multi-line display

## VarioTel 2

- 5 individual channels and 1 central channel
- Visualisation of transmission and feedback commands

	TempoTel 2 (language version 1*)			MultiTel 2		VarioTel 2			
	pure white	silver	titanium grey	pure white	silver	titanium grey	pure white	silver	titanium grey
Item no.	28 265.0002	28 266.0002	28 267.0002	28 255.0001	28 256.0001	28 257.0001	28 245.0001	28 246.0001	28 247.0001

## TempoTel 2 (language version 2\*)

	pure white	silver	titanium grey
Item no.	28 465.0002	28 466.0002	28 467.0002

#### Technical data

Rated voltage (V DC)	3	3	3
Battery type	2 x LR06 (AA Mignon)	2 x LR06 (AA Mignon)	2 x LR06 (AA Mignon)
Ingress protection (IP)	20	20	20
Ambient operating temperature (°C)	0 to +50	0 to +50	0 to +50
Radio frequency (MHz)	868	868	868
Dimensions LxWxH (mm) of hand-held transmitter	150 x 51 x 26	150 x 51 x 26	120 x 51 x 26
Weight (g) incl. battery	140	140	120
Individual channels	10	15	5
Group channels	2	5	-
Central channels	1	1	1
Manual/automatic switchover	•	•	•
Unidirectional radio control	•	-	•
Bidirectional radio control	•	•	•
Standard scope of	Incl. batteries, magnetic wall I	oracket and mounting material (packed ready f	or installation in the sales box)

<sup>\*</sup>Language version 1: German, English, French, Spanish, Italian, Portuguese, Dutch, Swedish, Danish, Polish \*Language version 2: German, English, Hungarian, Czech, Slovenian, Turkish

<sup>&</sup>lt;sup>1</sup>TempoTel 2 and VarioTel 2 can be set to either uni or bidirectional mode; both modes at the same time is not possible on one channel

# LumeroTel 2 / MonoTel 2

# **ProLine 2-Funkhandsender**













# LumeroTel 2

- Can be used as individual, group or central transmitter
- Manual/automatic switchover
- Visualisation of transmission and feedback commands

## MonoTel 2

- Can be used as individual, group or central transmitter
- Visualisation of transmission and feedback commands

Single-channel hand-held transmitter, uni or bidirectional<sup>1</sup>, available in 3 colours, reliable radio transmission frequency of 868 MHz.

	LumeroTel 2				MonoTel 2	
	pure white	silver	titanium grey	pure white	silver	titanium grey
Item no.	28 225.0001	28 226.0001	28 227.0001	28 205.0001	28 206.0001	28 207.0001

#### Technical data

Rated voltage (V DC)	3	3		
Battery type	2 x LR06 (AA Mignon)	2 x LR06 (AA Mignon)		
Ingress protection (IP)	20	20		
Ambient operating temperature (°C)	0 to +55	0 to +50		
Radio frequency (MHz)	868	868		
Dimensions LxWxH (mm) of hand-held transmitter	120 x 51 x 26	120 x 51 x 26		
Weight (g), incl. battery	120	120		
Channels	1	1		
Manual/automatic switchover	•	-		
Unidirectional radio control	•	•		
Bidirectional radio control	•	•		
Standard scope of delivery		Incl. batteries, magnetic wall bracket and mounting material (packed ready for installation in the sales box)		

<sup>&</sup>lt;sup>1</sup> LumeroTel 2 und MonoTel 2 can be set to either uni or bidirectional mode; both modes is not possible at the same time on one channel

# elero

# Radio transmitters

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187.	
187.	
188.	
189.	
	185. 185. 186. 187. 187. 188.

# Radio transmitters







Increase your living comfort with radio transmitters from elero, which can be installed at the desired location independently of the mains supply. The range includes single-channel and multi-channel radio wall transmitters as well as modules for subsequent automation.

This allows, among other things, sun protection systems to be operated either manually, on demand or automatically by means of e.g. time and Astro programmes.

### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.

### **Application areas**

elero offer a wide range of radio transmitters that can be used in a variety of applications. In addition to controlling roller shutters, sun protection systems and doors, it is also possible to integrate heating systems, lighting installations and many other electrical applications.

	VarioSon W-868	LumeroSon W-868	MonoSon W-868	AstroTec -868 /bidi	MonoTec -868	QuinTec -868	Invio-868	UniTec-868 UniClic-868
Page	184	185	185	186	187	187	188	189
Roller shutters / interior shading	•	•	•	•	•	•	•	•
Awnings / ZIP / exterior shading	•	•	0	0	0	•	0	•
Venetian blinds	•	•	0	•	0	•	0	•
Lighting	•	•	•	•	•	•	•	•
Heating	•	•	•	0	•	•	•	•

o Partial fulfilment

### **TOP functions**

Wall transmitters and timers with manual/automatic switchover as well as built-in radio transmitters for subsequent automation simplify the operation of domestic sun protection systems.

	VarioSon W-868	LumeroSon W-868	MonoSon W-868	AstroTec -868 /bidi	MonoTec -868	QuinTec -868	Invio-868	UniTec-868 UniClic-868
Page	184	185	185	186	187	187	188	189
Radio transmitter, number of channels	6	1	1	1	1	5	1	1
230V connection required							•	
Ext. inputs / building management system / integration of audiovisual systems (230 V)							•	
Manual/automatic switchover	•	•		•		•		•
Integrated buttons	•	•	•	•	•	•		•
Astro, sunset (or weekly switching time)				•				
Astro, sunrise (or weekly switching time)				•				
Astro shift (adjustable)				•				
City selection (156)				•				
Longitude / latitude setting				•				
Weekly switching time (1x UP and 1x DOWN per day)				•				
2nd weekly switching time (1x UP and 1x DOWN per day)				•				
Offset (subsequent closing command)				•				
Light sensor that can be connected / twilight function				•				
Light sensor function				•				
Multiple languages selectable				•				
Intermediate/ventilation position				•	•	•	•	•
Turning position/fabric tautening				•	•	•	•	•
Holiday program				•				
Assignment of downward position approach				•				
Autom. summer/winter time changeover				•				
Run time setting				•				
Non-erasable memory for date of initial commissioning, relay switching frequency, total runtime				•				
Bidirectional transmitter	•	•	•	• +	•	•	•	•
Unidirectional transmitter				• "			•	•

o Partial fulfilment

<sup>•</sup> Complete fulfilment

<sup>•</sup> Complete fulfilment

# VarioSon W-868

# 6-channel wall-mounted radio transmitter with manual-automatic switchover



Elegant 6-channel radio wall transmitter.

VarioSon W-868	silver	white
Item number	28 663.0001	28 673.0001

### Technical data

roomnour data			
Rated voltage (V DC)	3	3	
Battery type	1 x CR2450 Lithium 1 x CR2450 Lit		
Protection class (IP)	20 20		
Ambient operating temperature (°C)	0 to +50 0 to +50		
Radio frequency (MHz)	868 868		
Dimensions LxWxD (mm) without frame	50 x 50 x 10	50 x 50 x 10	
Type of mounting	Wall mounting (surface mounting)		
Bidirectional radio control			
Colour selection	silver white		
Standard scope of delivery	incl. frame + mounting plate		

Compatible accessories	Frame silver
Item number	28 661.0101

	Frame white
Item number	28 671.0101

	Mounting plate black (5 Pcs.)
Item number	28 599.0001















### VarioSon W-868

- 6-channel wall-mounted radio transmitter
- Transmission and feedback commands are visualised
- Switchover between automatic and manual operation possible
- Only bidirectional
- Suitable for standard device inserts 50 x 50 mm and can be combined with standard switch programs
- Transmission-safe radio frequency 868 MHz
- Available in white and silver versions
- Frame and mounting bracket included in the scope of delivery

# LumeroSon W-868 / MonoSon W-868

Single-channel wall-mounted radio transmitter



1-channel wall-mounted radio transmitter.

	LumeroS	on W-868	MonoSo	n W-868
	silver	white	silver	white
Item number	28 662.0001	28 672.0001	28 661.0001	28 671.0001

### Technical data

Rated voltage (V DC)	3		3	3
Battery type	1 x CR2450 Lithium		1 x CR2450 Lithium	
Protection class (IP)	2	0	20	
Ambient operating temperature (°C)	0 to +50		0 to +50	
Radio frequency (MHz)	86	68	868	
Dimensions LxWxD (mm) without frame	50 x 50 x 10		50 x 50 x 10	
Type of mounting	Wall mounting (surface mounting)			g)
Bidirectional radio control	•		•	•
Colour selection	silver	white	silver	white
Standard scope of delivery	incl. frame + mounting plate			

Compatible accessories	Frame silver

	Frame white
Item number	28 671.0101

Mounting	plate	black	(5	Pcs.)
	b.c.c	~	١-	,

Description of the second of t	00 500 0004
Item number	28 599.0001













### LumeroSon W-868

- 1-channel radio wall transmitter
- Visualization of transmission and feedback commands
- Manual/automatic switching possible
- Bidirectional only
- Suitable for standard device insert 50 x 50 mm and can be combined with standard switch programs
- Transmission-safe radio frequency 868 MHz
- Available in white and silver versions
- Frame and mounting bracket included in the scope of delivery

### MonoSon W-868

- 1-channel radio wall transmitter
- Visualization of transmission and feedback commands
- Bidirectional only
- Suitable for standard device insert 50 x 50 mm and can be combined with standard switch programs
- Transmission-safe radio frequency 868 MHz
- Available in white and silver versions
- Frame and mounting bracket included in the scope of delivery

# AstroTec-868 / AstroTec-868 bidi

### **Radio timers**



Convenient single-channel timer with Astro programme, radio frequency of 868 MHz for reliable transmission.

	AstroTec-868	AstroTec-868 bidi
Item number	28 320.0001	28 320.0006

#### **Technical data**

Rated voltage (V DC)	3	3
Battery type	2 x LR 03 (AAA)	2 x LR 03 (AAA)
Protection class (IP)	rotection class (IP) 20	
Ambient operating temperature (°C)	0 to +55	0 to +55
Radio frequency (MHz)	868	868
Dimensions LxWxD (mm)	85 x 85 x 28	85 x 85 x 28
Type of mounting	Wall mounting (surface mounting)	
Unidirectional radio control	- I	
Bidirectional radio control	_	•
Colour selection	alpine white	alpine white
Standard scope of delivery	Batteries, wall bracket, 2 wall plugs (Ø 6 mm), 2 screws (Spax 4 x 35)	

Compatible accessories	Lumo 2.0 m (p. 228)
Item number	28 080.0001

	Lumo 10.0 m (p. 228)	
Item number	28 090.0001	





















### AstroTec-868/AstroTec-868 bidi

- Integrated timer
- Individual, group or central control unit
- Uni or bidirectional (depending on version)
- Individual, Astro evening or Astro switching times adjustable
- Connectable light sensor
- 868 MHz radio frequency for reliable transmission
- Manual/automatic switchover possible

#### Note

<sup>1</sup> The AstroTec-868 bidi is a radio wall transmitter for exclusive use with bidirectional receivers (it is not possible to use the AstroTec-868 bidi with unidirectional receivers; in this case, the AstroTec-868 (item no.: 28 320.0001) must be used!

### **Accessories and components**



Lumo light and twilight sensor Page 228

# MonoTec-868

## Single-channel radio wall transmitter

















1 channel for the operation of roller shutters, venetian blinds and awnings. For 50 x 50 standard switch ranges.

### **Properties**

- Single-channel wall transmitter
- 868 MHz radio frequency for reliable transmission
- Suitable for standard device deployment 50 x 50 mm
- UP, STOP, DOWN/CLOSED push button, P programming button (rear)
- Status LED for indication of system statuses

MonoTec-868	
Item number	28 650.0002

### Technical data

rechnical data	
Power supply (V)	3 V Battery CR 2032
Radio frequency (MHz)	868
Number of channels	1 (bidirectional)
Ambient operating temperature [°C]	0 to +50
Protection class (IP)	20
Protection class (following professional assembly)	II
Type of mounting	Wall mounting

# QuinTec-868

## 5-channel radio wall transmitter















5 single channels and 1 central channel for the operation of roller shutters, venetian blinds and awnings. For 50 x 50 standard switch ranges.

### **Properties**

- 5 individual channels and 1 central channel
- 868 MHz radio frequency for reliable transmission
- Suitable for standard device deployment, 50 x 50 mm
- Manual/automatic mode switchover
- Status LED for indication of system statuses

QuinTec-868	
Item number	28 655.0002

Power supply (V)	3 V Battery CR 2032
Radio frequency (MHz)	868
Number of channels	5 + 1 (bidirectional)
Ambient operating temperature [°C]	0 to +50
Protection class (IP)	20
Protection class (following professional assembly)	II
Type of mounting	Wall mounting

# Invio-868

### **Built-in radio transmitter**

























The radio transmitter for all elero radio receivers of the ProLine series.

Invio-868	
Item number	28 380.0006

#### **Technical data**

Rated voltage (V)	1 ~ 230 – 240
Rated frequency (Hz)	50 – 60
Protection class (IP)	20
Channels	1
Ambient operating temperature (°C)	0 to +55
Radio frequency (MHz)	868
Dimensions LxWxH (mm)	52 x 48 x 27
Weight	43
Type of mounting	Flush mounted, Ø 58 mm wall installation, surface mounted in corres- ponding housing
Unidirectional radio control	•
Bidirectional radio control	•

### **Properties**

- Suitable for the subsequent automation of roller shutters, awnings or venetian blinds
- Suitable for all elero radio receivers of the ProLine series
- Forwarding of higher-level, wired control commands
- Can be controlled by conventional venetian blind push buttons
- 868 MHz radio frequency for reliable transmission
- Uni and bidirectional
- Potential-free input for Up/Down

# UniTec-868 / UniClic-868

### Radio wall transmitter with manual/automatic switchover



Convenient single-channel wall transmitter for controlling one or more receivers.

	UniTec-868	UniClic-868
Item number	28 330.0007	28 882.0006

#### Technical data

Rated voltage (V DC)	3	3
Battery type	CR 2032	CR 2032
Protection class (IP)	20	20
Ambient operating temperature (°C)	0 to +50	0 to +50
Radio frequency (MHz)	868	868
Dimensions LxWxD (mm)	54 x 54 x 22 (without frame) 81 x 81 x 22 (with frame)	215 x 64 x 49 (with frame)
Type of mounting	Wall construction	Belt case
Channels	1	1
Manual/automatic switchover	•	•
Unidirectional radio control	•	•
Bidirectional radio control	•	•
Colour selection	alpine white	alpine white
Standard scope of delivery	ProLine frame, wall bracket, battery, 2 wall plugs (Ø 6 mm) and 2 screws (4 x 35)	UniClic frame and battery





















### **Properties UniTec-868**

- Single-channel wall transmitter
- Uni or bidirectional
- For controlling one or more receivers
- Manual/automatic switchover
- 868 MHz radio frequency for reliable transmission

### **Properties UniClic-868**

- Single-channel wall transmitter
- Uni or bidirectional
- For controlling one or more receivers
- Manual/automatic switchover
- 868 MHz radio frequency for reliable transmission
- Frame height of 215 mm
- Suitable for existing, conventional belt winding boxes

#### Accessories and components



Adapter frame Page 220



Surface-mounted boxes and frames Page 221 elero

# Radio receivers

VarioTec-868	194.	
Unio-868	195.	
Revio-868 /P /SW	196.	
AeroControl-868	197.	
Combio-868 JA /Pulse /RM	198.	
Combio-868 HE /LI	199.	
Combio-868 LI-D	201.	
	·	

# Radio receivers







Radio receivers enable flexible and automatic control of numerous devices. The extensive range from elero offers the right solution for everyone – whether integrated in the radio transmitter or for retrofitting a wired wall transmitter. Increase your living comfort and security and use the full possibilities of an automated home.

### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.

## **Application areas**

elero offer numerous control solutions. Both for dedicated drive technology, such as roller shutters, sun protection systems and doors, as well as for heating systems, lighting installations or other electrical consumers. Regardless of whether wired or radio-controlled – operation is very simple at the touch of a button or completely automated.

						Aero-			Comb	io-868		
	VarioTec -868	Unio -868	Revio -868	Revio -868 P	Revio -868 SW	Control -868	JA	JA Pulse	RM	HE	LI	LI-D
Page	194	195	196	196	196	197	198	198	198	199	199	201
Roller shutters / interior shading	•		•	•	•				•			
Awnings / exterior shading	•		•	•	•	•			•			
Venetian blinds	•		•	•	•	•	•	•				
Lighting		•			•						•	•
Heating		•								•		

### **TOP functions**

Radio receivers from elero enable flexible automation while ensuring a high level of transmission reliability. With the appropriate components, floor lamps, radiant heaters, lighting and much more can be conveniently integrated into your home automation system and their devices can be controlled conveniently and reliably.

	Vario-				Revio	Aero-		C	8-oidmo	68		
	Tec -868	Unio -868	Revio -868	Revio -868 P	-868 SW	Control -868	JA	JA Pulse	RM	HE	LI	LI-D
Page	194	195	196	196	196	197	198	198	198	199	199	201
Switching of mains voltage (230 V)	•	•	•	•	•	•	•	•	•	•	•	
Switching of low voltage (< 6 V)	•			•	•							
230 V connection necessary	•	•	•	•	•	•	•	•	•	•	•	
Running modes <sup>1</sup>	RM, JA	SW	RM, JA, PU	RM, JA, PU, GR	RM, JA, SW	RM	JA	PU	RM	HE	LI/SW	
External entrances / building management system/ integration of audiovisual systems	•		•		•	•						
Manual/automatic switchover	•											
Integrated buttons	•	•										
Connectable push button	•		•		•	•						
Connectable light sensor / twilight function						•						
Light sensor function						•						
Connectable wind sensor / wind sensor function						•						
Re-extension after wind						•						
Intermediate & ventilation position	•		•	•	•	•	•	•	•			
Tilting position / fabric tautening	•		•	•	•	•	•	•	•			
Dimmer value can be stored											•	
Bidirectional transmit- ter/receiver incl. auto- matic routing function	•	•	•	•	•		•	•	•	•	•	•
Unidirectional transmitter/receiver	•	•	•	•	•	•	•	•	•	•	•	

#### 1 Running modes: RM (tubular drives)

- Immediate maintained mode, runtime of two minutes (Revio-SW: five minutes); 2 intermediate positions can be stored and approached by double-clicking (up/down button). If no positions are stored, the end positions are approached

#### JA (venetian blind drives)

- Dead man's mode, maintained mode after two seconds of pressing the button, runtime of three minutes (Revio SW 5 minutes); 2 intermediate positions can be stored.
Double-click on the down button to move to the down position and then to the distance time for the up intermediate position. If you double-click on the up button, only the distance time is run in upward direction. If no positions are stored, the end positions are approached.

### PU (pulsable drives)

- Defined, adjustable pulse time, maintained mode after two seconds of pressing the button, runtime of three minutes

#### GY

- Short pulse signals for controlling ProLine devices at low-voltage input
- Retrofitting of existing ProLine or WKS control systems to the current elero radio standard without removing the devices

### SW (light control)

- Light switch function, runtime unlimited, until opposite direction or stop is activated

#### HE (heating function)

Dimmability of 0, 33, 66 and 100% for radiant heaters; intermediate positions/stages are programmed to fixed values and can be deactivated; intermediate positions/stages can be approached or activated by double-clicking (up/down).

### LI (light function)

 Dimmability from 0 to 100%; lowest level can be limited; two intermediate positions/stages can be freely programmed and approached or activated by double-clicking (up/down button). Intermediate positions/stages can be deactivated to maintain the device functionality as in SW mode

# VarioTec-868

## Motor, group or central control unit



Integrated radio receiver; can be used as individual, group or central control unit with manual/automatic switchover. Suitable for roller shutters, awnings, venetian blinds, interior roller blinds and ZipScreens. Dedicated mains unit available.

VarioTec-868	alpine white	Set alpine white		
Item number	28 341.0006	28 340.0006		

### Technical data

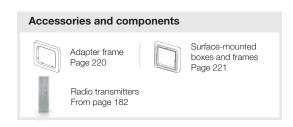
	0 – 240				
50.					
50 – 60					
5 (ohmic load)					
RM, JA					
2	20				
II					
0 to +55					
868					
•					
•					
- •					
alpine white Set alpine v					
Flush mounted Ø 58 mm, surface-mounted wall installation in corresponding surface-mounted housing					
	0 to 80 alpine white Flush mounted Ø 58 wall installation i				



### Yubii Home

#### **Features**

- Bidirectional radio system with automatic routing function
- Bidirectional or unidirectional
- Also available without radio control as VarioTec (p. 218)
- At least one transmitter must be programmed before a sensor system can be taught



# **Unio-868**

### Radio-controlled socket





**Features** 

- Visual display of the current switching status
- Manual operation possible
- Can be integrated into existing ProLine radio systems
- Expandable with light sensors for automatic control
- Bidirectional radio system with automatic routing function

For wireless switching of electrical, mains-operated devices.

Unio-868	
Item number	28 980.0007

i common data	
Rated voltage (V)	1 ~ 230-240
Rated frequency (Hz)	50
Switching capacity (VA)	max. 2.300
Running mode	SW
Protection class (IP)	20
Ambient operating temperature (°C)	0 to +35
Radio frequency (MHz)	868
Unidirectional radio control	•
Bidirectional radio control	•
Dimensions LxWxH (mm)	110 x 60 x 40
Weight (g)	165



# Revio-868 /P /SW

# Built-in radio receiver for tubular and venetian blind drives and electrical consumers



Flush-mounted radio receiver for uni and bidirectional radio systems.

















### Yubii<sup>®</sup> Home

### Revio-868

- Control of AC drives
- Can be controlled with all ProLine transmitters
- Venetian blind push button can be connected

#### Revio-868 P

- Relaying of signals to other automation systems
- Control of DC drives possible
- Potential-free output

### Revio-868 SW

- Can be used with switchable, electrical consumers with 230 V AC supply voltage (e.g. light)
- Connectable venetian blind push button
- Potential-free output
- 5 minutes runtime for extra-high systems in RM and JA mode

	Revio-868	Revio-868 P	Revio-868 SW			
Item number	28 400.0006	28 410.0006	28 415.0006			
Technical data						
Rated voltage (V)	1 ~ 230 – 240	1 ~ 230 – 240	1 ~ 230 – 240			
Rated frequency (Hz)	50 - 60	50 – 60	50 – 60			
Switching current (A)	3 (ohmic load)	3 (ohmic load)	3 (ohmic load)			
Running modes	JA, PU, RM	JA, PU, RM, GR	JA, RM, SW			
Protection class (IP)	20	20	20			
Ambient operating temperature (°C)	0 to +55	0 to +55	0 to +55			
Radio frequency (MHz)	868	868	868			
Dimensions LxWxH (mm)	50 x 48 x 27	50 x 48 x 27	50 x 48 x 27			
Weight (g)	52	52	52			
Type of mounting	Flush mounted, Ø 58 mm, depth of 60 mm, surface mounted in corresponding surface-mounted housing					
Potential-free output	_	•	•			
Unidirectional radio control	•	•	•			
Bidirectional radio control	•	•	•			
Group control	-	•	-			
End position detection	•	-	_			



# **AeroControl-868**

## Control system for awnings and venetian blinds



Surface-mounted control system for sun protection systems with integrated radio receiver.



### Technical data

Rated voltage (V DC)	1 ~ 230
Rated frequency (Hz)	50 – 60
Switching current (A)	5 (ohmic load)
Running modes	RM, JA
Protection class (IP)	55
Ambient operating temperature (°C)	-25 to +50
Radio frequency (MHz)	868
Unidirectional radio control	•
Bidirectional radio control	-
Dimensions LxWxH (mm)	108 x 108 x 58
Weight (g)	272
Runtime (Min.)	2







#### **Features**

- 868 MHz radio receiver module
- Robust and simple design for easy retrofitting
- 868 MHz radio frequency for reliable transmission
- Operation with separate venetian blind push buttons or hand-held transmitter
- Connection options:Aero, Ventero, Lumero, mains supply cable,1 AC drive, venetian blind push button



# Combio-868 JA /Pulse /RM

# Radio receivers for venetian blinds, roller shutters and textile sun protection



All Combio-868s can be used in uni and bidirectional radio systems.















### Yubii Home

### Combio-868 JA /Pulse

- For venetian blind drives
- Jog mode
- Adjustable intermediate and turning position
- Exact adjustment of the slats by pulse operation, pulse duration adjustable (only Combio-868 JA Pulse)

#### Combio-868 RevoLine RM

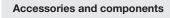
- For tubular drives
- Receiver immediately switches to maintained mode
- Intermediate position and ventilation position or fabric tautening can be set

	Combio-868 JA		Combio-868 RM (für NHK)	Combio-868 RevoLine	Combio-868 RM/STAK3	Combio-868 RM-K STAS3/STAK3
Item number	28 500.0006	28 505.0006	28 520.0006	28 525.0006	28 580.0006	28 585.0006

### Technical data

Rated voltage (V)	1 ~ 230-240	1 ~ 230-240	1 ~ 230-240	1 ~ 230-240	1 ~ 230-240	1 ~ 230-240
Rated frequency (Hz)	50	50	50	50	50	50
Max. connected load (W)	450	450	450	450	450	450
Running modes	JA	PU	RM	RM	RM	RM
Protection class (IP)	56	56	56	56	56	56
Ambient operating temperature (°C)	-20 to +70	-20 to +70	-20 to +70	-20 to +70	-20 to +70	-20 to +70
Radio frequency (MHz)	868	868	868	868	868	868
Mains cable (m)	0.5 with Hirschm	nann plug STAS3	3	3	3	0.085 with Hirschmann plug STAS3
Motor cable (m)	0.25 with Hirschmann coupling STAK3		0.25 with Type 9 device connector	0.25 with RevoLine plug	0.25 with Hirschmann coupling STAK 3	0.095 with Hirschmann coupling STAK3
Dimensions LxWxH (mm)	100 x 40 x 15	100 x 40 x 15	100 x 40 x 15	100 x 40 x 15	100 x 40 x 15	100 x 40 x 15
Installation space L x W x H (mm)	104 x 44 x 19	104 x 44 x 19	104 x 44 x 19	104 x 44 x 19	104 x 44 x 19	104 x 44 x 19
Weight (g)	260	260	306	302	302	302
Standard pulse time (ms)	-	87.5	-	-	_	_

Compatible accessories		Fastening spring	
Item number		16 302.3701	
	4		
		Cable feedthrough	
Item number	11	16 101.0101	
	11		
		Cable fixing clip	
Item number		13 707.5701	
	-		





Radio transmitters From page 182



Wireless sensors From page 204

<sup>1</sup>Combio-868 JA in packaging of 10 is pre-programmed with end position detection and a turning position that can be overwritten.

# Combio-868 HE /LI

### Radio receiver for heating and lighting systems



Combio-868 HE	5	
		1
Combio-868 LI		

пппп
ШШ







Yubii<sup>®</sup> Home

### Combio-868 HE

- Electric heating systems up to 2 kW
- Power can be switched on and off by radio control
- Heating system can be switched to 66 % power
- Bidirectional radio system (868 MHz)

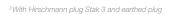
### Combio-868 LI

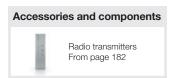
- Illuminant can be switched on and off by radio control
- Dimmability of illuminants
- 2 brightness levels selectable
- Lower dimming value can be set
- Can be set in SW mode to switch electrical consumers on and off by radio control
- Bidirectional radio system (868 MHz)
- Use of LEDs possible (after checking for compatibility)

	Combio-868 HE 2 kW	Combio-868 LI
Item number	28 594.0006	28 563.0006

Rated voltage (V)	1 ~ 230-240	1 ~ 230-240
Rated frequency (Hz)	50	50
Maximum connected load (W)	2,000	100
Operating modes	HE	LI, SW
Protection class (IP)	56 (IP 54 plug connection)	56
Ambient operating temperature (°C)	-20 to +45	-20 to +65
Radio frequency (MHz)	868	868
Unidirectional radio control	•	•
Bidirectional radio control	•	•
Bidirectional radio control  Mains cable (m)	0.49 with Hirschmann plug STAS 3	3
		• 3 0.9
Mains cable (m)	plug STAS 3 0.25 with Hirschmann	
Mains cable (m)  Motor cable (m)	plug STAS 3 0.25 with Hirschmann coupling STAK 3	0.9
Mains cable (m)  Motor cable (m)  Dimensions LxWxH (mm)  Installation space	plug STAS 3  0.25 with Hirschmann coupling STAK 3  147 x 48 x 29	0.9 100 x 40 x 15

Compatible accessories	Connection cable set for Combio-868 HE 2 (6.5 m)
Item number	23 285.0901







# Combio-868 LI-D W Combio-868 LI-D RGBW

Dimmer with radio receiver for white LED strips, for a variety of installation situations













### **Features**

- Light source(s) can be switched on and dimmed with any elero radio control with 868 MHz
- A power supply unit and plug are required in addition to the Combio-868 LI-D RGBW
- Up to 30 transmitters can be taught in for each receiver
- Outputs can be controlled independently of each other
- Programming the Combio-868 LI-D radio receivers via radio transmitter

#### Combio-868 LI-D W

 Control of as many as 4 dimmable and cold/warm white adjustable LED strips via two channels

#### Combio-868 LI-D RGBW

 Control of as many as 4 LED strips via one channel as well as the adjustment of their brightness and light colour

	Combio-868 LI-D W	Combio-868 LI-D RGBW
Item number	28 574.0001	28 575.0001

### Technical data

Voltage input (V DC)	24	24	
Voltage output (V DC)	24	24	
Connected load (W)	maximum load 100 per channel, maximum load 24		
Rated current light terminals (A)	max. 10	max. 10	
Ingress protection (IP)	55	55	
Protection class	II	II	
Transmitter power (dBm)	≤ 10	≤ 10	
Radio frequency (MHz)	868	868	
Radio range (m)	up to 90 outdoors (depending on terrain structure)		
Ambient operating temperature (°C)	-20 to +45	-20 to +45	
Weight (Kg)	0.15	0.15	
Dimensions L x W x H (mm)	98 x 26 x 20	98 x 26 x 20	
Type of mounting	loose	loose	
Conformity	C € EŘ		

Accessories such as power supply units, LED strips, splitters and connectors can be found from the page 202.



### Accessories for the Combio-868 LI-D radio receivers

### Mains adapters

Suitable devices with compact dimensions are available to supply the Combio-868 LI-D dimmers with a 24V power supply. The current is suited to the needs of the applications.



Item no.	Description	Quantity
590.010000	Mean Well mains adapter 100 W 24 V constant power	1
590.015000	Mean Well mains adapter 150W 24V constant power	1
590.032000	Mean Well mains adapter 320 W 24 V constant power	1

#### Technical data

Item no.	590.010000	590.015000	590.032000
Output power (W)	100	150	312
Output voltage (V)	24	24	24
Output current (A)	4	6,3	13
Input voltage (V)	100 – 305 110/230 universal input	90 – 295 110/230 universal input	100 – 305 110/230 universal input
Protection class (IP)	67	65	67
Dimensions L x W x H (mm)	140×63×32	180×63×35,5	246x77x39,5
Dimming technology	Potentiometer	Potentiometer	Potentiometer
Casing type	Metal	Metal	Metal
RoHS	Compliant	Compliant	Compliant
Technology	AC/DC Constant current C.C. Constant power C.P.	AC/DC Constant current C.C. Constant power C.P.	AC/DC Constant current C.C. Constant power C.P.
Norm	LED EN 61347	LED EN 61347	LED EN 61347
Weight (kg)	0.58	0.8	1.87
Ambient operating temperature (°C)	-40 to +90	-40 to +85	-40 to +85
Conformity	(€	(€	(€

### Plug connector

A plug connector is required to connect a Combio-868 LI-D device quickly and securely with a device for voltage supply.



Item no.	Description	Quantity
593.101001	KIT Mini Plug & Socket Connector 4p Screw D6-13.5 IP66/IP68 xDRY®	1

### Accessories for the Combio-868 LI-D radio receivers

### **LED** strips

Suitable LED strips are available for the various applications with adjustable white or RGBW and may be made up to meet your needs.



Artikelnummer	Description	Quantity
28 967.0001	LED strip RGBW IP67, 19.2 W/m, 5 m strip	1
28 968.0001	LED strip adjustable white, 17.3 W/m, 5 m strip	1

#### Technical data

Item no.	28 967.0001	28 968.0001
Operating voltage (V)	24	24
Operating current (A)	0.7 (1m) - 2.91 (5m)	0.625 (1m) - 2.5 (5m)
Power consumption (W)	16.8 (1m) - 69.84 (5m)	15.0 (1m) - 60.0 (5m)
Ingress protection (IP)	20/65	20/65
Ambient operating temperature (°C)	-25 to 40	-25 to 40
Size (mm)	5,000×14×4.8	5,000×10×1.5
Beam angle (°)	120	120
Number of LEDs per metre	60	140
Conformity	(€	(€

### **Splitter**

The corresponding splitter is required to adapt LED strips for the Combio-868 LI devices. In addition, a splitter offers the possibility to connect as many as four LED strips to a Combio-868 LI device.



Item no.	Description	Quantity
28 976.0001	Cable splitter for RGBW LED strip	1
28 977.0001	Cable splitter for adjustable white LED strip	1

## **End caps**

End caps seal the unused end connections of a splitter.



Item no.	Description	Quantity
593.102000	End cap for RGBW LED strip	1
28 979.0001	End cap for adjustable white LED strip	1

elero

# Wireless sensors

Sensero-868 AC /Plus	208.
Aero-868 /Z /Plus /AC	209.
Protero-868	210.
Lumero-868	210.
Lumo-868	211.



Wireless sensors from elero enable weather-dependent operation of a wide range of applications in your home. No matter whether it is sunny, windy or rainy by

checking ambient values such as brightness, wind strength and humidity, your home reacts to changes in the weather at any time without you having to intervene.

### **Bidirectional routing with ProLine 2**



ProLine 2, the bidirectional radio system from elero, is more reliable, powerful and transparent than unidirectional radio standards.

At the heart of the technology (868 MHz) are bidirectional radio components

(transceivers) that are capable not only of receiving, but also of confirming and relaying the signals. As soon as a command has been executed on the drive, the user receives feedback and can be sure that the commands are being executed correctly.

### **Application areas**

Wireless sensors from elero make your home even more comfortable. The range of applications includes both the control of privacy and sun protection elements as well as the control of many other applications. Wireless sensors are also suitable for retrofitting existing applications. For example, awnings with a built-in radio receiver can be automated at a later date.

	Sensero -868 AC/ Plus	Aero/Z-868 Plus	Aero-868 Plus	Aero-868 AC	Aero -868	Protero -868	Lumero -868	Lumo -868
Page	208	209	209	209	209	210	210	211
Roller shutters / interior shading	0	0					•	0
Awnings / exterior shading	•	•	•	•	•	•	•	0
Venetian blinds	•	•	•	•			•	0
ZIP systems		•	0	0	0			

o Partial fulfilment

### **TOP functions**

With the help of wireless sensors, your applications react automatically to changes in the environment – without you having to intervene, even when you are not at home.

	Sensero -868 AC/ Plus	Aero/Z -868 Plus <sup>1</sup>	Aero-868 Plus	Aero-868 AC	Aero -868	Protero -868	Lumero -868	Lumo -868
Page	208	209	209	209	209	210	210	211
Radio transmitter, number of channels	1	1	1	1	1	1	1	1
230 V connection required	•			•				
Manual/automatic switchover								0
Integrated buttons	•	•	•	•	•	•	•	•
Twilight function	•							
Light sensor function	•	•	•	•	•		•	•
Glass breakage sensor function								•
Wind sensor function	•	•	•	•	•	•		
Bidirectional transmitter/ receiver incl. automatic routing function	•	•	•	•	•	•	•	•
Unidirectional transmitter/receiver	•	•	•	•	•	•	•	•

o Partial fulfilment

<sup>•</sup> Complete fulfilment

<sup>•</sup> Complete fulfilment

<sup>&</sup>lt;sup>1</sup> Extended wind range for wind-stable systems such as ZIP screens and stable venetian blinds

# Sensero-868 AC /Plus

# Wireless sensors for light, wind and rain





















### Sensero-868 AC

- Weather sensor with light, wind and twilight function
- Adjustable target values
- Pivoting wall bracket or mast support possible

### Sensero-868 AC Plus

- With additional rain sensor

Targeted monitoring of sun protection systems.

	Sensero-868 AC	Sensero-868 AC Plus
Item number	28 890.0006	28 900.0006

### Technical data

Rated voltage (V)	1 ~ 230-240	1 ~ 230-240
Rated frequency (Hz)	50 – 60	50 – 60
Protection class (IP)	44	44
Ambient operating temperature (°C)	-20 to +60	-20 to +60
Radio frequency (MHz)	868	868
Dimensions LxWxH (mm)	205 x 125 x 105	205 x 125 x 105
Weight (g)	600	610
Wind, light sensor	•	•
Rain sensor	-	•
Unidirectional radio control	•	•
Bidirectional radio control	•	•
Detection angle (°) of light or twilight sensor	150	150
Connection cable incl. (m)	5	5

Compatible accessories	Mast and corner mounting set (Ø 50 – 60 mm)
Item number	24 269.0202

230 V/50 Hz mains connection required. Can only be used in conjunction with compatible radio receivers from elero radio system. Manual operation of system with hand-held/wall transmitter.

# Aero-868 /Z /Plus /AC

## Solar and mains-powered wireless sensors for light and wind

















### Aero-868 /Plus /AC

- Aero-868: light and wind sensor for awnings
- Aero-868 Plus: light and wind sensor for awnings, venetian blinds and roller blinds. Additional solar and storage elements for extended standby time
- Aero-868 AC: light and wind sensor for awnings, venetian blinds and roller blinds with mains connection
- Aero-868 Z: for zip systems with higher set value for wind (km/h)

Wireless sensors for every situation.

	Aero/Z-868 Plus	Aero-868 Plus	Aero-868	Aero-868 AC
Item number	28 480.0016	28 480.0006	28 440.0006	28 460.0006

Technical data				
Power supply	solar	solar	solar	1 ~ 230-240
Protection class (IP)	43	43	43	43
Ambient operating temperature (°C)	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Radio frequency (MHz)	868	868	868	868
Dimensions LxWxH (mm)	280 x 130 x 130			
Detection angle (°) (light or twilight sensor)	150	150	150	150
Power reserve (h)	~24	~24	~12	-
Unidirectional radio control	•	•	•	•
Bidirectional radio control	•	•	•	•
Weight	380	380	380	360

Compatible accessories	Mast and corner mounting set (Ø 50 – 60 mm)
Item number	24 269.0202

Only in conjunction with compatible radio receivers from elero radio system. Manual operation of receivers with hand-held/wall transmitter possible. Radio frequency of 868 MHz for reliable transmission. Due to their limited power reserve, the Aero-868 is not suitable for sun protection systems with night-time privacy function!



# Protero-868

### Wireless vibration sensor











Lumero-868

## Solar-powered wireless light sensor





















# collection detection.

### **Features**

- Automatic retraction of the awning in the event of vibrations or severe inclination

Battery-powered, wireless vibration and inclination sensor for

retractable arm awnings, adjustable wind sensitivity, water

- Manual operation of the awning by hand-held/wall transmitter
- Can be combined only with receiver at the same awning
- Can be used only with radio receiver from the elero radio system ProLine 2 and ProLine-868
- In bidirectional radio operation, compatible with SunTop-868 radio tubular drives from vers. V25 and VariEco-868 from vers. V20 and the external radio receivers Combio-868 RM/ Combio-868 RM Stak 3 from vers. V79 and Revio-868 from vers. V12

### **Features**

- Automatic travel to intermediate position or end position in automatic mode

Wireless sun sensor with integrated solar cells.

- Manual operation of the system with hand-held/ wall transmitter
- Can be used only with radio receiver from the elero radio system ProLine 2 and ProLine-868
- Uni and bidirectional. Bidi operation only possible for receivers from version 75 (Combio-868) or from version 21 (RolTop-868, SunTop-868) or from model year 05/12

Protero	Traffic white	Traffic grey
Item number	28 965.0001	28 966.0001

Lumero-868	
Item number	28 680.0006

### **Technical data**

Operating voltage (V)	3		
Battery type	2 x LR03 (AAA)		
Protection class (IP)	54		
Ambient operating temperature (°C)	-20 to +60		
Radio frequency (MHz)	868		
Dimensions LxWxH (mm)	133,3 x 46,5 x 26,7		
Colour selection	Traffic white	Traffic grey	
Weight inkl. Batterie (g)	186		

Power supply	solar
Protection class (IP)	54
Ambient operating temperature (°C)	-20 to +60
Radio frequency (MHz)	868
Detection angle (°)	190
Dimensions LxWxH (mm)	149,7 x 42 x 28
Weight inkl. Batterie (g)	75
Power reserve (h)	~1
Unidirectional radio control	•
Bidirectional radio control	•

# **Lumo-868**

### Wireless sensor















For light, twilight and glass breakage.

### Features

- Automatic travel to bottom end position in the event of vibrations (glass breakage)
- Automatic travel to intermediate position or end position (automatic mode) in the event of intense solar radiation
- Wireless light, twilight and glass breakage sensor
- Adheres to glass with suction cup
- Manual operation with buttons possible
- UP, STOP/P, DOWN buttons
- Adjustable threshold values
- Uni and bidirectional: Bidi operation possible only with receivers from version 75 (Combio-868) or from version 21 (RolTop-868, SunTop-868) or from model year 05/12

Lumo-868	
Item number	28 420.0006

3
CR 2032
20
0 to +55
48 x 15
22
868
•
•
Battery, small screwdriver for adjusting both threshold controllers



AstroTec	216.	
TempoTec	217.	
AstroClic	217.	
AeroTec	218.	
VarioTec	218.	
TimeTec	219.	
Adapter frames	220.	
Frame and sockets	221.	

# Wired control units – Wall-mounted units





The control units of the ProLine generation open and close roller shutters and sun protection systems automatically by means of suitable wind and sun sensors (from page 226) or over time and offer you perfect living comfort. Technical perfection, high standards of quality and innovative design characterise these control systems.

They also offer straightforward operation, large push buttons and a clear display. A modular design of the individual control components allows for a wide variety of control options. Needless to say that the wall-mounted units are easy to connect and compatible with many standard switch ranges with the aid of an adapter frame.

# **Application areas**

In addition to interior and exterior shading, the wall-mounted devices from elero can also be used to control lighting. With both wired and radio-controlled wall-mounted devices, a wide range of applications can thus be operated at the touch of a button or even completely automatically.

	AstroTec	TempoTec	AeroTec	VarioTec	TimeTec
Page	216	217	218	218	219
Roller shutters / interior shading	•	•	0	•	•
Awnings / exterior shading	0	0	•	•	
Venetian blinds	•	•	•	•	
Lighting	•				

Partial fulfilment

With numerous functions, the wired control systems for roller shutters and sun protection from elero offer the right solution for everyone.

	AstroTec	TempoTec	AeroTec	VarioTec	TimeTec
Page	216	217	218	218	219
Switching of mains voltage (230 V)	•	•	•	•	•
Switching of low voltage (< 6 V)	•		•	•	
230 V connection necessary	•	•	•	•	•
Running modes <sup>1</sup>	RM, JA, SW, GR	RM, JA	RM, JA, GR	RM, JA, GR	RM
External inputs / building management system / integration of audiovisual systems	•		•	•	
Manual/automatic switchover	•	•	•	•	•
Integrated buttons	•	•	•	•	•
Connectable sun sensor	•		•		
Connectable wind sensor			•		
Astro, sunset (or weekly switching time)	•	•			
Astro, sunrise (or weekly switching time)	•				
Astro shift (adjustable)	•	•			
City selection (156)	•	•			
Longitude / latitude setting	•	•			
Time zone	•	•			
Weekly switching time (1x UP and 1x DOWN per day)	•	•	•		•
Second weekly switching time (1x UP and 1x DOWN per day)	•				
Offset (subsequent closing command)	•				
Connectable light sensor / twilight function	•		0		
Light sensor function	•		•		
Connectable wind sensor / wind sensor function			•		
Multiple languages selectable	•	•	•		
Intermediate position & ventilation position	•	•	•	•	
Tilting position / fabric tautening	•	•	•	•	
Holiday program	•	•			
Assignment of downward position approach	•	•	•		
Automatic summer/winter time switchover	•	•	•		
Run time setting	•		•		
Deactivation of group/central inputs	•		•		
Deactivation of the emergency signal (wind)	•			•	
Non-erasable memory for date of initial commissioning, relay switching frequency, total runtime	•	•	•		

<sup>&</sup>lt;sup>1</sup> Running modes: see page 193

<sup>•</sup> Complete fulfilment

# **AstroTec**

# Timer with astro, astro evening and individual switching times



















### **AstroTec**

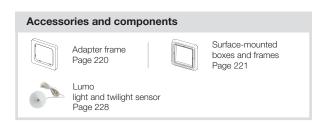
- Can be used as an individual, group or central control unit
- Adjustable individual, Astro evening or Astro switching times
- In combination with the Lumo (p. 228), the roller shutter becomes the perfect sunshade
- Can be integrated with adapter frame into common switch ranges

AstroTec	Set alpine white
Item number	28 060.0001

Rated voltage (V)	1 ~ 230 – 240
Rated frequency (Hz)	50 – 60
Switching current (A)	5 (ohmic load)
Protection class (IP)	20
Protection class (following professional assembly)	II
Ambient operating temperature (°C)	0 to +55
Including ProLine frame	• (Set)
Colour selection	alpine white
Type of mounting	Flush mounted, Ø 58 mm, wall installation, surface mounted in corresponding surface-mounted housing

Accessories	AstroTec operating unit, alpine white (for UniClic frame)
Item number	28 061.2001

	138	UniClic frame, alpine white (with integrated mains unit)
Item number	40	28 880.0001



# TempoTec

# **Timer**





**AstroClic** 

**Convenient timer** 

















# **Features**

- Simple timer
- Adjustable individual and Astro evening switching times
- Can be integrated with adapter frames into common switch ranges

	I
TempoTec	white
Item number	28 041.0011

#### **Technical data**

Rated voltage (V)	1 ~ 230 – 240	
Rated frequency (Hz)	50 – 60	
Switching current (A)	5 (ohmsche Last)	
Protection class (IP)	20	
Protection class (following professional assembly)	II	
Ambient operating temperature (°C)	0 to +55	
Including ProLine frame	-	
Colour selection	white	
Type of mounting	Flush mounted, Ø 58 mm, wall installation Surface-mounted in corresponding housing	

AstroClic	
Item number	28 881 0001

# Technical data

**Features** 

- In the UniClic frame

- Astro programme like AstroTec

- Connection of the Lumo (p. 228) possible

- Can be used as individual control unit

100mmour data		
Rated voltage (V)	1 ~ 230 – 240	
Rated frequency (Hz)	50 – 60	
Switching current (A)	5 (ohmic load)	
Protection class (IP)	20	
Protection class (following professional assembly)	П	
Ambient operating temperature (°C)	0 to +55	
Colour selection	alpine white	
Type of mounting	Flush-mounted installation in the belt winding box	

# **Accessories and components**



Adapter frames Page 220



Surface-mounted boxes and frames Page 221

# **Accessories and components**



Lumo light and twilight sensor Page 228

# **AeroTec**

# Control unit for sun protection systems



Can be used as individual or group/central control unit with preset date and time; manual operation possible.

#### **Features**

- Control depending on solar radiation, wind value and rain
- With operating unit removed; programming possible with battery operation
- Can be integrated with adapter frame into common switch ranges



Technical data		
Rated voltage (V)	1 ~ 230 – 240	
Rated frequency (Hz)	50 -	- 60
Switching current (A)	5 (ohmic load)	
Battery type	1 x CR 2032	
Protection class (IP)	20	
Protection class (following professional assembly)	П	
Type of mounting	Flush-mounted, Ø 58 mm, wall installation Surface-mounted in corresponding housing	
Colour selection	white	alpine white
Including ProLine frame	-	• Set

Accessories and components			
	Adapter frame Page 220		Surface-mounted boxes and frames Page 221
â	Lumero Page 228	27.0	Aero Page 230

# **VarioTec**

# Motor or group/central control unit















Suitable as a control unit for the development of comfort control systems. Can be integrated with an adapter frame into common switch ranges

### **Features**

- Can be used as an individual, group or central control unit
- Manual/automatic switchover
- Also available with built-in radio receiver as VarioTec-868 (p. 194)

VarioTec	white	Set alpine white
Item number	28 121.0011	28 120.0001

### Technical data

Rated voltage (V)	1 ~ 230 – 240	
Rated frequency (Hz)	50 – 60	
Switching current (A)	5 (ohmsche Last)	
Protection class (IP)	20	
Protection class (following professional assembly)	II	
Permitted ambient temperature (°C)	0 to + 55	
Display size (mm)	145 x 90 (inkl. Rahmen)	
Type of mounting	Flush-mounted, Ø 58 mm, wall installation Surface-mounted in corresponding housing	
Colour selection	white	alpine white
Including ProLine frame	-	• Set

Compatible Accessories	•	VarioTec operating unit, alpine white (for UniClic frame)	UniClic frame, alpine white (with integrated mains unit)
Item number		28 121.2001	28 880.0001



# **TimeTec**

# Daily and weekly timer



Electric roller shutter control system with weekly timer.

<b>U</b>	

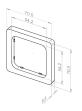
# **Features**

- Individual control unit
- Automatic, manual and random mode
- No adapter frames available

TimeTec	
Item number	28 670.0001

Technical data		
Rated voltage (V)	230, ±10%	
Rated frequency (Hz)	50	
Ausgänge	2 relay NC contacts (potential-bound)	
Switching current (A)	5 (with $\cos \varphi = 1$ )	
Runtime (s)	150	
Ambient operating temperature (°)	-5 to +45	
Type of mounting	Ø 58 mm (flush-mounted)	
Switching delay (s)	mind. 0,5	
Operating modes	Auto, manual, random	
Power reserve (h)	ca. 24 (at 20 °C)	
Memory locations	7 x UP / 7 x DOWN	
Colour selection	alpine white	

# Adapter frame for **ProLine control units**



#### 14 303.0501

Alpine white, suitable for:

- Jung-topline - Jung LS 990 - Jung LS 990 surface-mounted box



## 14 303.8601

White, suitable for\*: - Jung A 500 and AS 500



### 14 303.0601

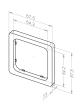
White, suitable for:

- Jung-topline - Jung LS 990 - Jung LS 990 surface-mounted box



#### 14 303.0101

- suitable for:
   Jung CD 500
   Jung ST 550



#### 14 303.0201

White, suitable for: – Jung CD 500

– Jung ST 550





#### 14 303.7601

Alpine white, suitable for\*:
- Jung A 500 and AS 500

- AS Universal Jung A Plus





### 14 303.1101

Alpine white, suitable for: Gira surface (before 2007)



## 14 303.1201

White, suitable for: Gira surface (before 2007)



### 14 303.1301

Alpine white, suitable for:

- Gira Standard Gira S-Color
- Gira surface (after 2007)



## 14 303.1401

White, suitable for:

- Gira Standard
- Gira surface (after 2007)



Alpine white, suitable for: - Berker Arsys





## 14 303.1601

White, suitable for: Berker Arsys



## 14 303.0701

Alpine white, suitable for

- Merten Octocolor



### 14 303.0801

White, suitable for: - Merten Octocolor



#### 14 303.0901

Alpine white, suitable for: - Busch-Jaeger alpha-nea



## 14 306,7601

Adapter frame BJ Solo, Future, Davos, Karat



## 14 303.1701

Alpine white, suitable for:

- Peha Tangenta

- Peha Dialog



## 14 303.7401

Alpine white, suitable for:

Legrand Sagane

# No adapter frame is required for the following switch ranges:

- Busch-Jaeger Duro 2000 SI
- Busch-Jaeger Reflex SI

With system-inherent variations concerning the fit:

- Merten M1

Slight variations of the colour and surface structure are possible.

# \* also suitable for:

- Gira Standard 55
- Gira E2 and E3
- Gira Event
- Gira Esprit
- Berker S1 and B1 - Jung A Flow - Jung A Creation
- Merten M-Plan - Merten M-Smart
- Merten M
- Busch-Jaeger Balance SI

# Frame and sockets for ProLine control units







# Jung CD 500 frame

18 100.0001

Item number	Frame, 1x	Frame, 2x	Frame, 3x	alpine white	white
14 803.3901	•			•	
14 803.4001	•				•
14 803.4201		•		•	
14 803.4301		•			•
14 803.4401			•	•	
14 803.4501			•		•

# Surface-mounted and flush-mounted boxes for ProLine control units

Item number	Type/Item Description
13 701.5101	Flush-mounted box, deep version
14 305.7401	Flush-mounted box for cavity walls and control panels with mounting brackets Suitable for all ProLine flush-mounted control systems
14 305.7501	Flush-mounted box for cavity walls and control panels with mounting brackets.  Deep design for more space. Suitable for all ProLine flush-mounted control systems
13 702.6201	Flush-mounted junction box, suitable for two control units, dimensions: 100 x 100 mm
13 302.5601	Surface-mounted box (85 x 85 x 37 mm) for sequecing relay or central control unit for 2 AC motors
13 702.6301	Surface-mounted junction box, suitable for two 2-control units (23 994.0002); dimensions: 104 x 120 x 40 mm



13 701.5101 14 3



14 305.7401 14 305.7501



13 702.6201 13



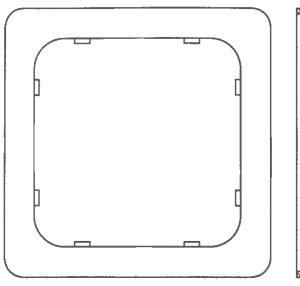
13 302.5601



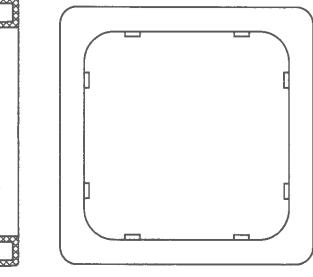
13 702.6301

# Adapter frame for ProLine control units

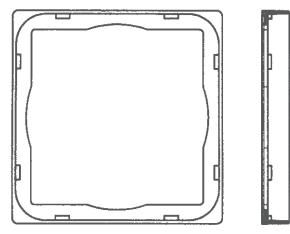
# Scale 1:1



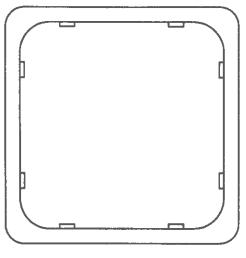
14 303.0501 alpine white 14 303.0601 white



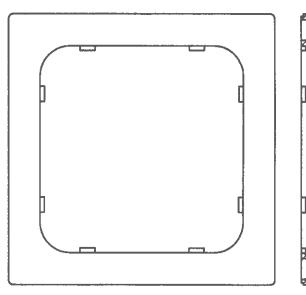
14 303.0101 alpine white 14 303.0201 white



14 303.7601 alpine white 14 303.8601 white



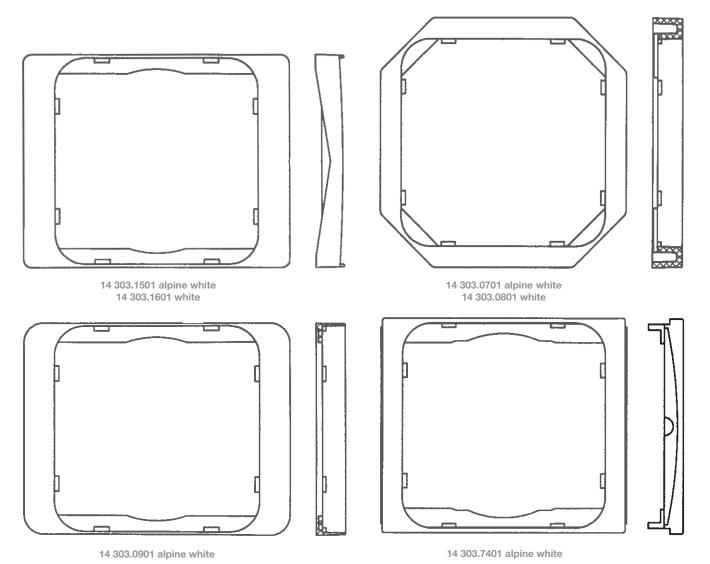
14 303.1101 alpine white 14 303.1201 white

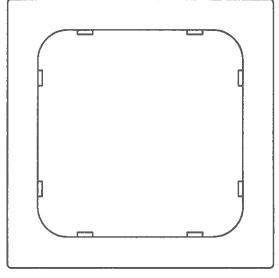


14 303.1301 alpine white 14 303.1401 white

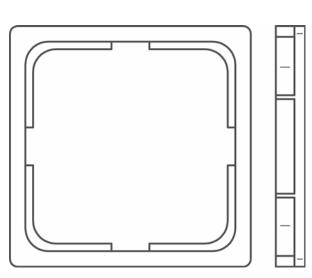
# Adapter frame for ProLine control units

# Scale 1:1





14 303.1701 alpine white



14 306.7601 alpine white

elero

Sensors

Lumo	228.
Lumero	228.
Thermostat	229.
Aquero	229.
Aero	230.

# Sensors







Drives and control systems are the central automation elements - but only with the right accessories can specialist trades and the industry develop solutions for complex requirements. That is why elero offer a number of sensors ranging from simple sun sensors to sophisticated weather monitors. Solar radiation, wind strength and precipitation

are monitored in this way. In addition to wired sensors, which are mainly in demand for new buildings, the product range also includes radio variants:

They are characterised by quick and uncomplicated installation and are therefore often used for retrofitting.

# **Application areas**

Sensors from elero make your everyday life easier in many situations. Roller shutters as well as awnings and venetian blinds can be controlled very easily. Your shading systems respond automatically to changes in the environment without you having to intervene.

	Lumo	Lumero	Thermostat	Aquero	Aero
Page	228	228	229	229	230
Roller shutters / interior shading	•	•	•		
Awnings / exterior shading		•	•	•	•
Venetian blinds		•	•	•	•

# **TOP functions**

elero offer the corresponding components, for example to integrate light, wind and rain sensors conveniently in your home automation system. These devices can be operated easily and reliably in combination with suitable control systems.

	Lumo	Lumero	Thermostat	Aquero	Aero
Page	228	228	229	229	230
Light sensor	•	•			•
Twilight sensor	•	•			
Wind sensor					•
Rain sensor				•	
Thermostat (external connection)			•		
In conjunction with AstroTec/AstroTec-868	•	•			
In conjunction with AeroTec		•	•	•	•
In conjunction with AeroControl-868		•			•
Permanent measurement of the light values	•	•			•
Permanent measurement of the wind values					•
Precipitation measurement at intervals by sensor surfaces				•	
Response threshold preset at the factory				•	
Potential-free changeover contact				•	
Accessories: mast and corner mounting set (Ø 50 – 60 mm)					•
Compatibility with					
AeroTec Page 218	0	•	• 1	•	•
AstroTec Page 216	•	0	• 1	•	
AstroTec-868 Page 186	•	0			
VarioTec Page 218			•	•	
VarioTec-868 Page 194			•	•	
<b>Revio-868</b> Page 196			•	•	
Revio-868 SW Page 196			•	•	
Invio-868 Page 188				0	
AeroControl-868 Page 197	0	•	• 1	•	•

o Partial fulfilment

Complete fulfilment

<sup>&</sup>lt;sup>1</sup> Thermostat controls both directly and with sun sensor

# Lumo

# Light and twilight sensor













# **Properties**

- Only in conjunction with AstroTec/AstroTec-868
- For indoor installation, on the window pane

Lumo	2.0 m	10.0 m
Item number	28 080.0001	28 090.0001

## Technical data

Protection class (IP)	20		
Ambient operating temperature (C°)	0 to +55		
Dimensions Ø (mm)	46 x 22		
Weight (g)	17		
Cable length (m)	2	10	

# Lumero

# Light and twilight sensor













# **Properties**

- For outdoor installation
- Only in conjunction with AstroTec/AstroTec-868, AeroContro-868 or AeroTec



Lumero	
Item number	28 180.0001

#### Technical data

Protection class (IP)	43
Ambient operating temperature (C°)	-25 to +60
Dimensions HxBxT (mm)	82 x 27 x 38
Weight (g)	58

Rain sensor

# **Thermostat**

# **Room thermostat**



**Properties** 

- For external connection











- Precipitation measurement at intervals by sensor surfaces
- Response threshold preset at factory
- Potential-free changeover contact

Thermostat	
Item number	13 803.4801

Technical data	
Protection class (IP)	20
Ambient operating temperature (C°)	-0 to +55
Dimensions HxBxT (mm)	75 x 75 x 25
Weight (a)	76



Technical data	
Rated voltage (V)	1 ~ 110 – 230
Supply voltage (Hz)	50 – 60
Protection class (IP)	44
Ambient operating temperature (C°)	-20 to +50
Output	1 potential-free changeover contact 5 A/250V
Dimensions HxBxT (mm)	300 x 170 x 65
Weight (g)	408







# Aero

# Light and wind sensor















# **Properties**

- Permanent measurement of light and wind values
- In conjunction with AeroTec (p. 218)

	Aero (white)	Aero (transparent)		
Item number	28 160.0001	28 161.0001		

# Technical data

Protection class (IP)	43
Ambient operating temperature (C°)	-25 to +60
Mast support	Ø 50 – 60 mm (optional accessory)
Dimensions HxBxT (mm)	280 x 130 x 130
Detection angle (°)	150
Weight (g)	286
Colour selection	alpine white

Compatible accessories	Mast and corner mounting set (Ø 50 – 60 mm)
Item number	24 269.0202





# elero

# Relay and special control systems

ExitSafe	236.
VarioTec-868 DC	237.
Central control units for up to 4 AC motors	238.
Central control unit for 1 AC motor without continuous phase	239.
Control Unit DC	240.
Switches and push buttons	241.

# Relay and special control systems





For some applications, it is necessary to control several drives together with a single switching point. This is easy to implement with appropriate relay or control units.

The prescribed second escape route is often via patio doors. If an automatic privacy and sun protection screen is there, it must quickly clear the escape route in an emergency. elero have suitable control systems for this purpose too.

# **Application areas**

Relay and special control systems from elero can be used individually for interior and exterior shading. The solutions for the second escape route enable your applications to be moved even in the event of a blackout so that you can safely leave your home at any time.

			Central control unit for			
	ExitSafe	VarioTec-868 DC	1 or 2 AC motors	Up to 4 AC motors	1 AC motor without conti- nuous phase	Control Unit DC
Page	236	237	238	238	239	240
Roller shutters / interior shading	•	•	•	•	•	•
Textile sun protection	•	•	•	•	•	•
Solutions for the second escape route	•	•				
Control of 12 V DC drives	•	•				
Control of 24 V DC drives						•

o Partial fulfilment

# **TOP functions**

With the respective special control systems from elero, your own four walls can be made even more convenient and safe by, for example, connecting a smoke detector to the escape route module.

			Central control unit for			
	ExitSafe	VarioTec-868 DC	1 or 2 AC motors	Up to 4 AC motors	1 AC motor without conti- nuous phase	Control Unit DC
Page	236	237	238	238	239	240
Operation with venetian blind push button or switch possible	•	•	•	•	•	•
Individual operation with venetian blind push button	•		•	•	•	•
Integrated buttons		•				
Motor or central / group control unit	•	•	•	•	•	0
In conjunction with ProLine devices <sup>1</sup>		•	•	•	•	•
Smoke detector that can be connected	•					
Control priority that can be set	•					
Manual / automatic switchover		•				
Integrated radio receiver		•				
ProLine low-voltage inputs		•				
ProLine 230 V output			•	•	O 2	
ProLine potential-free output		•				
Several devices can be switched in parallel <sup>2</sup>			•	•	•	•
Connectable elero motors						
JA motors, AC 230 V			2	4	1	
JA motors, DC 12 V (JA 04 Soft DC)	•					
AC 230 V tubular motors			2	4	1	
DC 12 V tubular motors (VariEco M10 DC / M12 DC)	•					1
DC 24 V third-party motors						

o Partial fulfilment

<sup>•</sup> Complete fulfilment

<sup>•</sup> Complete fulfilment

<sup>&</sup>lt;sup>1</sup> With DC control unit only: VarioTec-868, AstroTec, AeroTec, VarioTec, Revio-868 P

<sup>&</sup>lt;sup>2</sup> Observe the maximum current consumption of all motors

# **ExitSafe**

# Solutions for the second escape route



Push button or maintained mode operation, single or central operation priority, roller shutter or venetian blind operation, warning signal at low charge level, automatic upward travel at low charge level (can be deactivated), warning signal after 2 years or 500 charging cycles (can be deactivated), control units with automatic commands can be integrated.

ExitSafe	
Item number	28 388.0001

# Technical data

Rated voltage (V AC)	230 / 50 Hz
Output voltage (V DC) motor terminals	8.412
Motor terminals / maximum current (A)	4
Output voltage for control elements (V DC) / nominal current (mA)	8.412 / 50
Battery type	Li-lon
Nominal battery capacity (mAh)	3.400
Max. control factor (sec./h)	1,200/8
Operating mode	Jog mode, maintained mode, delayed maintained mode
Protection class (IP)	20
Control module dimensions (mm)	67 × 40 × 22
Battery module dimensions (mm)	70×55×20
Type of mounting	In double electronic flush-mounted box
Bidirectional radio control (extendable)	•
Ambient operating temperature (°C)	±0 to +60
Standard scope of delivery	ExitSafe control module, battery module, connection cable for operating elements, operating instructions

Compatible accessories	Spare battery for ExitSafe module
Item number	28 388.1201









## **Properties**

- Smoke detector with NO or NC contact (NC contact with wire break detection) can be connected
- Individual operating input for push button or control system
- Central operating input for e.g. smoke detector or control system
- Priority can be configured
- Can be controlled directly with bidirectional radio transmitter in conjunction with VarioTec-868 DC (p. 237)

# Can also be controlled by bidirectional radio control

When using the VarioTec-868 DC as a control unit, the existing privacy and sun protection can be operated by radio control even in the event of a blackout. Time and sun protection commands for the blinds can be activated or deactivated with the slide switch.







# VarioTec-868 DC

# Motor or central/group control unit



For comfort control systems.

VarioTec-868 DC	Alpine white set
Item number	28 345.0006

# **Technical data**

Rated voltage (V)	12 (DC)
Switching current (A)	5 (cos φ= 1)
Protection class (IP)	20
Protection class (following professional assembly)	Ш
Ambient operating temperature (°C)	0 to +55
Radio frequency (MHz)	868
Unidirectional radio control	•
Bidirectional radio control	•
Includes ProLine frame	•
Colour selection	Alpine white set
Type of mounting	Flush mounted, Ø 58 mm wall installation, surface mounted in corresponding housing

















## **Properties**

- Integrated radio receiver
- Can be used as a motor, central or group control unit
- Manual/automatic switchover
- Suitable for roller shutters, venetian blinds, awnings and roller blinds
- 868 MHz radio frequency for reliable transmission
- Separate mains unit (12 V DC)



# **Central control units**

# For 1 or 2 AC motors

# For up to 4 AC motors





















# **Properties**

- Operation of several drives from one switching point with a venetian blind push button or switch is possible, as is automatic switching with ProLine control units and individual operation with a venetian blind push button.
- Observe the overall phase load when designing the complete system. The number of sequencing relays that can be switched sequentially depends on the current consumption of the motors used. The back-up fuse must not exceed a max. value of 10 A.

## Central control unit (sequencing relay) for 1 or 2 single-phase motors

Item number			23 994.0002

Centra	control	unit fo	or up	to 4	AC	motors

Item number 24 816,0002		
	Item number	24 816.0002

### **Technical data**

Rated voltage (V)	1 ~ 230 – 240
Rated frequency (Hz)	50 – 60
Current consumption (mA)	10 in relay mode
Switching capacity	Max. 2 x 3 A, 250 V AC, max. motor load 2 x 690 VA, only for 230 V motors with end position switches
Protection class (IP)	20
Ambient operating temperature (°C)	0 to +60
Back-up fuse (A)	max. 10
Dimensions HxWxD (mm)	47 x 52 x 21
Maximum number of drives	2
Weight (g)	57

### Technical data

Rated voltage (V)	1 ~ 230 – 240
Rated frequency (Hz)	50 – 60
Current consumption (mA)	20
Switching capacity	max. 4 x 6 A, 250VAC
Protection class (IP)	20
Ambient operating temperature (°C)	-10 to +40
Back-up fuse (A)	10 slow-acting
Dimensions HxWxD (mm)	115 x 65 x 190
Maximum number of drives	4
Weight (g)	863

## Accessories and components



Switches and push buttons Page 241



Surface-mounted box for sequencing relay Page 221



Switches and push buttons Page 253



Switches and push buttons Page 253

## **Accessories and components**



Switches and push buttons Page 241



Switches and push buttons Page 253



Switches and push buttons Page 253

# **Central control unit**

# For 1 AC motor without continuous phase











## **Properties**

- Operation of several drives from one switching point with a venetian blind push button or switch is possible, as is automatic switching with ProLine control units and individual operation with a venetian blind push button
- Observe the overall phase load when designing the complete system. The number of sequencing relays that can be switched sequentially depends on the current consumption of the motors used. The back-up fuse must not exceed a max. value of 10 A
- Also suitable as a light change switch / multi-point control

# Central control unit for 1 AC motor without continuous phase

|--|

### **Technical data**

Rated voltage (V)	1 ~ 230 – 240
Rated frequency (Hz)	50 – 60
Current consumption (mA)	10 in relay mode
Switching capacity	8 A AC1, 4 A cos phi 0.6
Protection class (IP)	20
Ambient operating temperature (°C)	
Back-up fuse (A)	
Dimensions HxWxD (mm)	49 x 53 x 22
Maximum number of drives	1
Weight (g)	59

## Accessories and components



Switches and push buttons Page 241



Switches and push buttons



Switches and push buttons Page 253

# **Control Unit DC**

# Control of 24 V DC drives















# **Properties**

In conjunction with the following ProLine devices

- AstroTec (p. 216) AeroTec (p. 218)
- VarioTec-868 (p. 194) - VarioTec (p. 218) - Revio-868 P (p. 196) - VarioTec-868 DC (p. 237)
- Instead of a ProLine device, a venetian blind push button (p. 241) can be connected to actuate the DC control unit

Control Unit DC	
Item number	28 855.0001

### Technical data

24V DC, ± 10%
24V DC, ± 10%
25
3
20
0 to +55
52 x 49 x 29
Suitable for flush-mounted boxes Ø 60 mm

# Accessories and components



ProLine controllers: From page 214

 $<sup>^{11}</sup>$  In conjunction with AstroTec and AeroTec  $^{12}$  In conjunction with AstroTec  $^{13}$  In conjunction with AeroTec

# Switches and push buttons



Flush-mounted venetian blind switch



Rotary switch



Surface-mounted venetian blind switch

# Venetian blind switch / push button for flush-mounted AC drives

Item number	Type/Item Description
24 051.0001	Jung CD 500 venetian blind switch, alpine white
24 222.0001	Jung CD 500 venetian blind push button, alpine white

# Rotary switch, 2-pin, flush-mounted

Item number	Type/Item Description
13 701.3401	Rotary switch, 2-pin, flush mounted for connecting 2 motors (can be used as a switch / push button)

# Venetian blind switch / push button for surface-mounted AC drives

Item number	Type/Item Description
14 701.1701	Switch (with latched position), surface-mounted, water-proof
14 701.2101	Push button (without latched position), surface-mounted, water-proof

elero

# Door drives Door control systems

Type 15 W	244.
Type 15 W NMA	245.
Accessories door drives	246.
DoorControl	251.

# Type 15 W

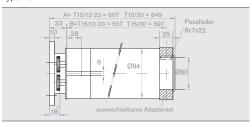
# **Tubular drives for doors**





Interchangeable couplings (adapters) for tubes from  $\emptyset$  98 x 2.0 mm to 168 x 4.0 mm or size 114 (octagonal), long service life, quiet running of the drive thanks to optimum toothing. The mounting plates of the Type 15 W... drives must be mounted at a right angle to the mounting surface. It is imperative to use the wall anchor pocket item no. 23 100.0001 in the event of unevenness.

Type 15 W



1) Lateral space requirement when overwinding the limit switch

Type 15 W	Type 15/12 W	Type 15/15 W	Type 15/18 W	Type 15/23 W	Type 15/30 W
Item number	32 301.0002	32 281.0002	32 321.0002	32 361.0002	32 381.0002

## Technical data

Rated torque (Nm)	120	150	180	230	300
Rated speed (rpm)	12	12	12	12	12
Rated voltage (V)	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Rated current (A)	3.4	3.5	3.6	3.9	5.5
Rated power consumption (W)	700	740	780	810	1,250
Operating time (min S2)	6	6	6	4	4
Min. shaft diameter (mm)	98	98	98	98	98
Protection class (IP)	44	44	44	44	44
Limit switch range (rev.)	36	36	36	36	36
Door cycles per hour <u>₹</u> ħ-¹*	6	6	6	6	6
Length A (mm)	610	610	610	610	650
Length B (mm)	560	560	560	560	600
Weight (kg)	11.4	11.4	11.4	11.4	13.0
Ambient operating temperature (°C)	-20 to +60				

 $<sup>^{\</sup>star}$  One door cycle is 5 revolutions OPEN – 30 sec. pause - CLOSED

Compatible accessories	Wall anchor pocket for Type 15 W (with axial safety)	
Item number	23 100.0001	

	Wall anchor plate for Type 15 W
Item number	13 301.4901

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "Type 15 accessories" on page 246. Suitable control systems as well as radio transmitters and sensors can be found in the section "Radio controls" from page 180.

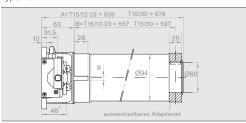
# Type 15 W NMA

# Tubular drives with emergency manual operation for doors



Emergency manual operation possible during blackout, interchangeable couplings (adapters) for tubes from  $\emptyset$  98 x 2.0 mm to 168 x 4.0 mm or size 114 (octagonal), long service life, quiet running of the drive thanks to optimum toothing. The mounting plates of Type 15 W... drives must be mounted at a right angle to the mounting surface. It is imperative to use the wall anchor pocket item no. 23 100.0001 in case of unevenness.

## Type 15 W NMA



1) Lateral space requirement when overwinding the limit switch

Type 15 W NMA	Type 15/12 W NMA	Type 15/15 W NMA	Type 15/18 W NMA	Type 15/23 W NMA	Type 15/30 W NMA	
Item number	32 312.0002	32 292.0002	32 332.0002	32 362.0002	32 382.0002	

## Technical data

120	150	180	230	300
12	12	12	12	12
1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
3.4	3.5	3.6	3.9	5.5
700	740	780	810	1,250
6	6	6	4	4
98	98	98	98	98
44	44	44	44	44
36	36	36	36	36
6	6	6	6	6
243:1	243:1	243:1	243:1	243:1
640	640	640	640	680
590	590	590	590	630
12.1	12.1	12.1	12.1	13.8
-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60
	12 1 ~ 230 3.4 700 6 98 44 36 6 243:1 640 590 12.1	12     12       1 ~ 230     1 ~ 230       3.4     3.5       700     740       6     6       98     98       44     44       36     36       6     6       243:1     243:1       640     640       590     590       12.1     12.1	12     12     12       1 ~ 230     1 ~ 230     1 ~ 230       3.4     3.5     3.6       700     740     780       6     6     6       98     98     98       44     44     44       36     36     36       6     6     6       243:1     243:1     243:1       640     640     640       590     590     590       12.1     12.1     12.1	12     12     12     12       1 ~ 230     1 ~ 230     1 ~ 230     1 ~ 230       3.4     3.5     3.6     3.9       700     740     780     810       6     6     6     4       98     98     98     98       44     44     44     44       36     36     36     36       6     6     6     6       243:1     243:1     243:1     243:1       640     640     640     640       590     590     590     590       12.1     12.1     12.1     12.1

 $<sup>^{\</sup>star}$  One door cycle is 5 revolutions OPEN – 30 sec. pause - CLOSED.

Compatible accessories	Wall anchor pocket for Type 15 W (with axial safety)
Item number	23 100.0001

	Wall anchor plate for Type 15 W
Item number	13 301.4901

Accessories, such as connection and assembly cables, adapter sets and motor bearings, can be found in the section "Type 15 accessories" on page 246. Suitable control systems as well as radio transmitters and sensors can be found in the section "Radio controls" from page 180.

# **Drive adapters**

Profiles of the adapter sets in 1:1 scale can be found on page 270.









Item number	Type/Item Description	Notch tubes	M8 thread
13 103.5701	Ø 98 x 2.0 mm	•	•
23 584.0001	Ø 102 x 2.0 mm	•	•
23 475.0001	Ø 108 x 3.6 mm	•	
23 527.0001	Ø 108 x 3.6 mm drilled	•	•
23 494.0002	Ø 133 x 2.0 mm	•	•
23 325.0001	Ø 133 x 2.5 mm	•	•
23 495.0002	Ø 133 x 4.0 mm	•	
23 495.0101	Ø 133 x 4.0 mm	•	•
23 309.0001	Ø 159 x 2.6 mm	•	•
23 310.0001	Ø 159 x 4.5 mm	•	•
23 027.0001	Ø 168.3 x 4.5 mm and Ø 168 x 4 mm	•	•
23 456.0001	114 mm WAF, octagonal (side-to-side dimension of 125 mm)		
23 311.0001	Ø 120 mm, Alukon	•	•

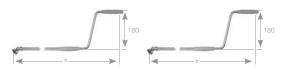
# **Assembly accessories**



Item number	Type/Item Description
23 100.0001	Wall anchor pocket (with axial safety)
13 301.4901	Wall anchor plate
13 305.9201	Angle bracket

# **Manual operation**

Crank handles



24 050.0001 Crank with ball joint, x = 1.35 m



12 300.0901 Crank with awning hook, length of 1.40 m



23 398.9801 Awning eyelet for type 15/... NMA

# NMA basic set

24 049.0001

Crank with ball joint, x = 0.85 m



23 199.9501 Consisting of angle drive / drive shaft / crank



**23 081.0001**Drive shaft, extensible 1.70 – 3.00 m



23 030.0001 Angle drive



13 305.8001 Crank for angle drive, length of 0.20 m

# Cables and accessories



23 395.8502

Item number	Type/Item Description		
23 395.8502	Assembly cable		
13 710.5101	D.5101 Fast clamp as replacement for assembly cable 23 395.8501		

# Delivery time on request

# Safety brakes

With electrical cut-out, degree of protection: IP 65, tested by TÜV Süd





## 24 541.0002

TA 1/2 RD with bracket for wall mounting, Ø 30 mm

Max. torque: 332 Nm Max. operating speed: 22 rpm Test number: 02165

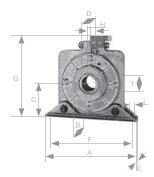
#### Pedestal bearing



#### 24 552.0003

TA 1/2 RD Ø 30 mm

Max. torque: 332 Nm Max. operating speed: 22 rpm, test number: 02165



# Choice of safety brake

	24 541.0002 TA 1/2 RD	24 552.0003 TA 1/2 RD		
Door size h x b mm	3,000	x 3,000		
108.0 x 4.0	4	75		
133.0 x 4.0	4	50		
168.3 x 4.5	370			
193.7 x 5.4	325			
219.1 x 5.9	282			
244.5 x 5.9	246			
298.5 x 8.0	190			
323.9 x 8.0				
355.6 x 8.0				

These data relate to the complete door weight in kg.

Item number	Α	В	С	D <sup>H7</sup>	E	F	G	H <sup>J9</sup>	- 1	Т	kg
24 552.0003	210	44	80	30	38	180	185	8	12	33.3	4.5

# Welding shafts

Item number	m number Shaft Ø (mm)		Length (mm)	
24 045.0001	30	8 x 7 x 50	500	

- a) Safety brake TA ½
- b) Chain wheel with boss



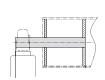


# Welding shafts, bearing side

Item number	Shaft Ø (mm)	Key (mm)	Length (mm)
14 110.8001	30	8 x 7 x 50	500

- c) For pedestal/flange bearing
- d) Sprocket wheel









# Ronden



for the welding shafts and counterpart supports

Item number	For shaft Ø (mm)	Blank Ø (mm)	Thickness (mm)	Bore Ø (mm)
13 117.6001	98 x 2.0; 100 x 3.0; 101.6 x 3.6	93	4	30
14 110.3301	108.0 x 3.6	99	4	30
14 110.3201	133.0 x 4.0	124	6	30
13 117.6101	133.0 x 2.0	128,5	6	30
13 117.6201	159.0 x 4.5	149	6	30
13 119.7601	159.0 x 2.6	153	6	30
14 110.5401	168.3 x 4.5	158,5	6	30
14 110.6001	168.3 x 3.0	161,5	6	30
14 110.9501	193.7 x 5.4	181,5	6	30
14 110.9601	193.7 x 3.0	187	6	30

# **Brackets**

#### Wall brackets



Max. load: 3,000 N

#### 24 399.0001

3 kN, right with 2 hexagonal screwss, M12 x 50 and nuts, for DFM/WFM 100 - 350, safety brake TA 1/2 RD



Max. load: 3,000 N

#### 24 313.0001

3 kN, left with 2 hexagonal screws, M 12 x 50 and nuts, for DFM/WFM 100 – 350, safety brake TA 1/2 RD

#### Screw-on angle



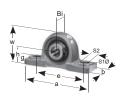
Max. load: 5,300 N

#### 24 553.0101

 $5.3~\rm kN$  for pedestal bearing, safety brake TA 1/2 RD and TA 2/3 RD

# Pedestal and flange bearings

## Pedestal bearing



**13 300.7701** With grub screw fastening Ø 30 mm



**13 300.3701** Ø 20 mm

#### Plate bearing



13 300.3101

#### Flange bearing



**13 300.3201** Ø 30 mm

 Item number
 a
 b
 e
 g
 h
 w
 \$1Ø
 \$2
 Bi
 kg

 13 300.7701
 165
 48
 121
 15
 42,9
 84
 17
 21
 38.1
 1.3

Item number	а	е	g	SØ	Bi	kg
13 300.3201	108	83	13	12	38.1	1.1

# Screws for pedestal bearings and safety brakes



#### 14 300.5501

T-head screws (M10  $\times$  40) with M10 nut for fastening the pedestal bearing to the screw-on angle (2 required)



#### 14 300.5601

T-head screws (M12 x 50) with M12 nut (for pedestal bearing with Ø 30 and Ø 40 and TA 1/2 RD / TA 2/3 RD safety brake on the screw-on angle, item no. 24 553.0101)

# Intelligent door control systems

The DoorControl system for motorised roller garage doors, roller grilles or smal industrial roller doors has been developed specifically for AC tubular drives with mechanical limit switches.

It complies with the European standards "Safety in use of power operated doors" EN 12453 and EN 12445. It is also naturally CE compliant and certified by the TÜV.

# **Control system selection table for DoorControl**

		DoorControl	
	for rollin	g doors	For roller grilles *2)
Control system selection	Without radio control	868.8 MHz	Without radio control
*1) Recommendations for doors shown below			
Doors for commercial and industrial use etc. Pulse control with or without sight of the door (maintained mode), automatic control with traffic lights	•	•	•
Rolling doors or roller grilles for underground garages etc.  Automatic control / two-way traffic with red/ green traffic lights	•	-	-
Features			
Automatic closing with traffic light function	•	•	•
Test of the opto-electronic door-edge security system for 8.2 KΩ resistance evaluation	•	•	•
*2) Test of the ingress protection system integrated	_	_	-
Automatic drive cut-out at the end positions	•	•	•
"CLOSED" light barrier connection	•	•	•
Connection of pre-end switch	•	•	•
Garage light connection	•	•	-
Integrated radio receiver FM 868.8 MHz	-	•	-
Connection of timer possible	•	•	•

<sup>\*1)</sup> Please be sure to follow EN 12453!

§ 5.5. Table 1 – Observe "Minimum protection levels for security of main door-edge"! Maintained mode only if this represents no risk of injury or damage. Connection of protection systems is essential.

<sup>\*2)</sup> Ingress protection unit with testing for roller grille can be connected Item no. 17 700.5401 light barrier test unit for 2 one-way light barriers, item no. 24 961.0001 or 24 960.0301 or requirements for the light barriers: 24 V DC voltage; power consumption </= 1.5 VA; ready delay 250 ms

# **DoorControl**

# Door control system for tubular drives



For type 15 W NHK and NMA with mechanical limit switch 1 x 230 V / 50 Hz.





## **DoorControl**

- Closing edge evaluation
- Dynamic motor runtime monitoring
- Output for interior light or also warning lights
- Automatic operation of door systems with 230 V AC drives

#### DoorControl RG

- Suitable for roller grilles
- Draw-in protection testing possible by light barrier test unit

	DoorCo	ntrol for rollin	g doors	DoorControl for roller grilles
Item number	24 180.0001	24 180.0301	24 180.0101	24 080.0101

# Technical data

recillical data						
Supply voltage (V)	230			230		
Rated frequency (Hz)		50–60		50–60		
Power consumption (W)		max. 6		max. 6		
On-site fuse protection (A)		max. 10		max. 10		
Switching current (A)		max. 6		max. 6		
Switching capacity (VA)		max. 1,300		max. 1,300		
Protection class IP		54		54		
Ambient operating temperature (°C)		-10 to +50		-10 to +50		
Dimensions L x W x H (mm)		180 x 130 x 60		180 x 130 x 60		
Conformity	PL c / cat. 2 according to			2453 to EN ISO 13849-1:2008 door-edge security system		
Radio version	•	•	_	-		
Incl. radio receiver	•	•	-	-		
Incl. hand-held radio transmitter	•		-	-		
Incl. slot for radio module	-	-	•	•		
Standard scope of delivery		, , , , ,		connection cable with earthing contact plug -down) built into the housing cover.		

## Radio receiver in housing, 2-command 868 MHz for downstream control systems

Item number	_	17 700.4201
-------------	---	-------------

# Radio remote controls, 868.8 MHz

2-command radio receiver, 868.8 MHz in

housing, 230 V AC



17 700.4201 For downstream control systems: push-button, on/ 50 ohms - coaxial cable (10.0 m) off switching operation, timer

17 700.4901 For radio receiver 17 700.4201

Rod antenna FM 868.8 MHz

4-command radio hand-held

17 700.3701 Up to 50 m, environment-dependent, secure "SOMLOQ" rolling code system, 3 V battery, CR 2032, housing can be pulled out

Wall mount holder

17 700.3901 For hand-held radio transmitter 17 700.3701

# Safety for crushing, shearing and ingress points

Door-edge security system (opto-electronic safety edge)

mode, switch-off delay up to



14 705.9002 Evaluation unit for 230 V/50 Hz mains voltage, switching contact potential-free (in plastic housing IP 66)



24 275.0001 Transmitter, cable length of 1.0 m + receiver, cable length of 10.5 m, approx. range of 1.0 m - max. 8.0 m, Ø 11 mm



Line connection box

23 173.0002 With strain relief for spiral cable, integrated plug-in/screw terminals incl. screwdriver



14 705.2801 Spiral cable 3 x 0.5 mm<sup>2</sup> Extensible, 0.9 - 3.0 m



14 706.2601 Safety edge rubber, double chamber with lip



14 701.0602 Aluminium C-rail for safety edge rubber, 1.5 m long



23 255.0002 Stoppers (pair) Reflection light barrier with polarizer IP 67



The reflectors for the reflection light barrier can fog up outdoors due to weather effects, frost etc., thus drastically reducing their range. Recommendation: oneway light barriers are suitable outdoors even in tough conditions.

Note:

24 960.0201

Accessories: reflector, angle bracket, screw fitting and fixing screws on the holding bracket. Range: 0.50 ... 15.0 m; rated voltage: 15 - 45 V DC or 24 V AC; ready for operation: < 100 ms; rated current: max. 30 mA/24 V

One-way light barrier **IP 67** 



24 961.0001 Set: transmitter, receiver and fastening part. Plastic housing. Range: max. 50.0 m; rated voltage: 20 - 230 V AC/DC. Output: relay

One way "Twin-Safe" light barrier



24 960.0301 For ingress protection accessories: angle bracket

Range: 1.0 - 20 m, rated voltage: 10 - 30 V DC Opening angle: < 4°, rated current: 70 mA Light barrier test unit



17 700.5401 Function only with BoxCard premium and DoorControl for roller grilles for 2 one-way light barriers, item no. 24 960.0301 or 24 961.0001

Weather protection bonnets suitable for the angle brackets



14 306.8501 For reflection light barrier



14 306.8601

### **Timers and traffic lights**

LED Lamp E27 25 mA; 1 x 230V 50/60 Hz



**14 700.3801** Traffic light red



14 700.3901 Traffic light green

### Switches and push buttons

Surface-mounted push-button switch



**14 701.1701**Switch (with latched position), water-proof



**14 701.2101**Push button (without latched position), water-proof



IP 54

14 701.3301 With latched position on both sides and cover lock

Surface-mounted key switch



14 701.3601 Without latched position, momentary on both sides and cover lock



14 701.3801 Momentary on one side and cover lock

Flush-mounted key switch IP 54



14 701.3901 With latched position on both sides and cover lock



**14 701.4201**Without latched position, momentary on both sides and cover lock

Key push button switch,

surface-mounted IP55



14 701.4401 Momentary on one side and cover lock





14 701.2401

Surface-mounted push button, water-proof IP 54



**14 701.2501** "Up-Down"



**14 701.2901**"Up-Stop-Down"

Key push button switch, surface-mounted IP55



14 701.4501
"UP -DOWN" key switch,
momentary on both sides
and "STOP" push button



14 701.4801
"UP -DOWN" key switch, momentary on both sides and "STOP" push button



14 703.1301 Surface-mounted pull switch, aluminium housing



14 703.2601 Main switch, lockable, surface mounted, 4-pin, 400 V, 4 kW

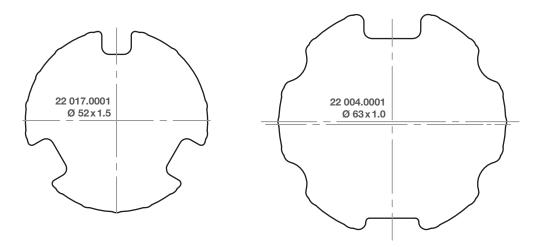


14 703.2701 EMERGENCY-STOP impact button, surface mounted

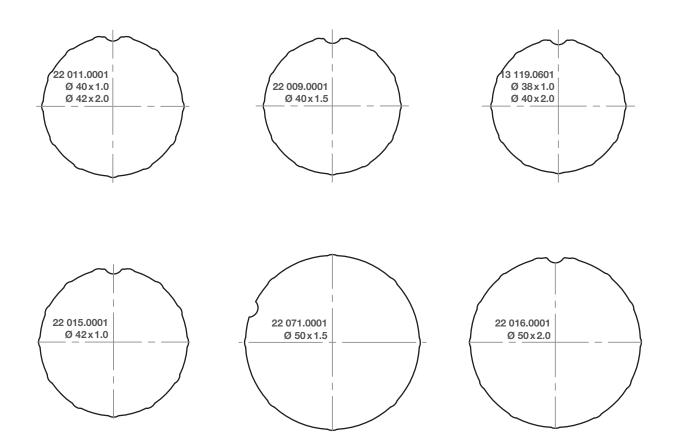
### RevoLine S

Notch tubes

Scale 1:1 / Dimensions in millimetres



#### **Round tubes**

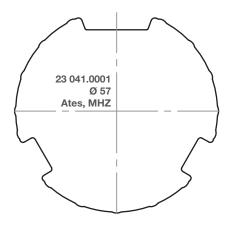


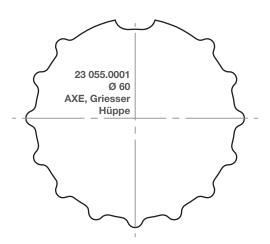
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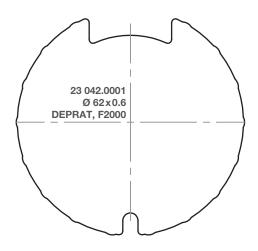
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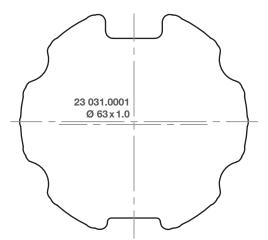
### RevoLine M

Notch tubes





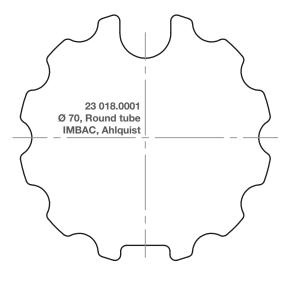


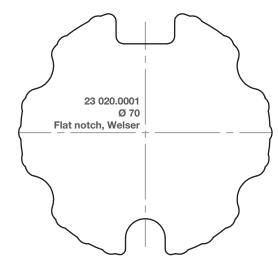


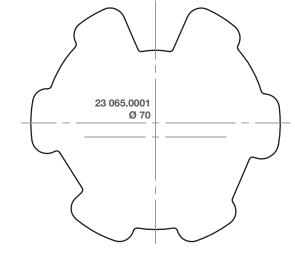
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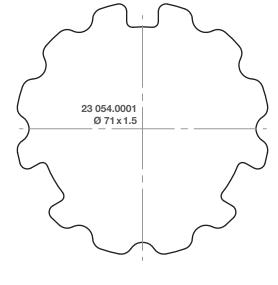
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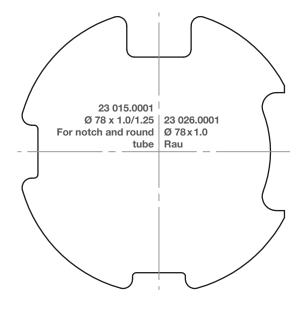
Notch tubes

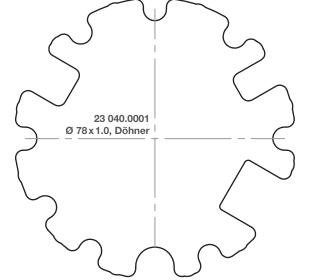






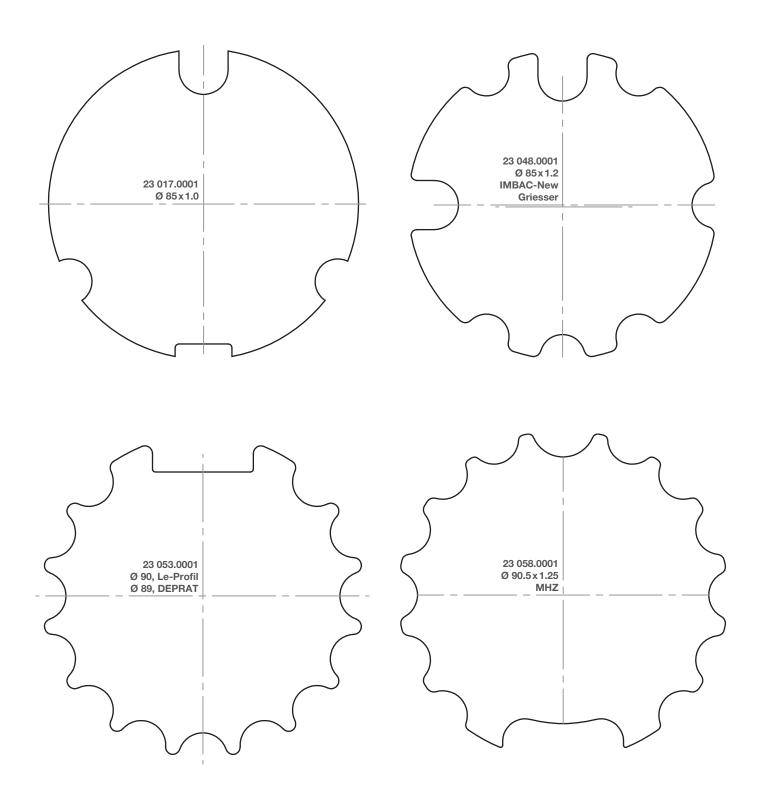






### RevoLine M

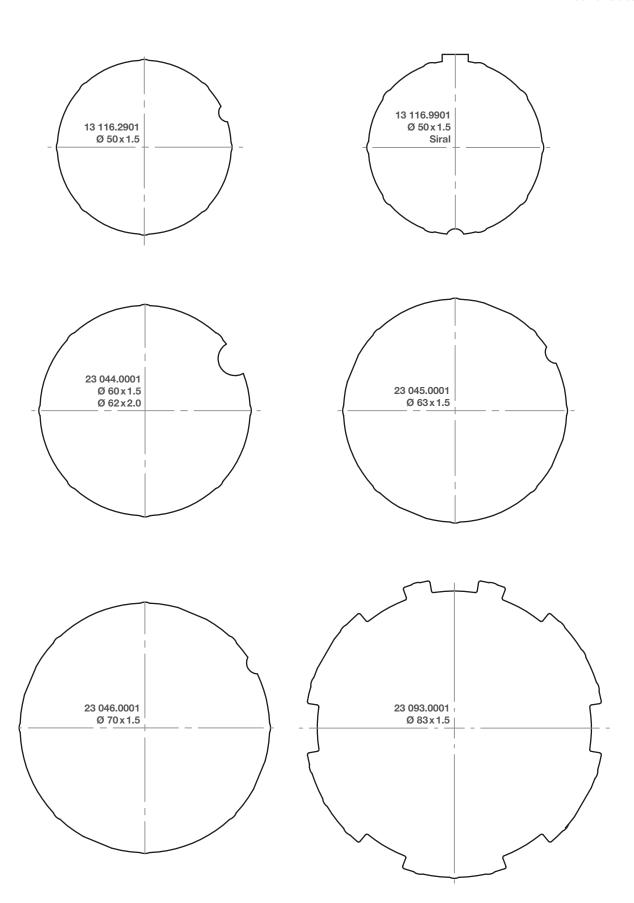
Notch tubes



### **RevoLine M**

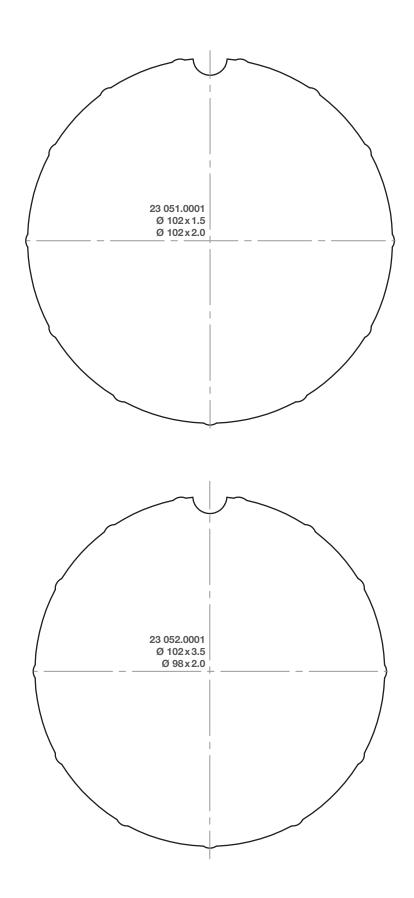
Scale 1:1 / Dimensions in millimetres

Round tubes



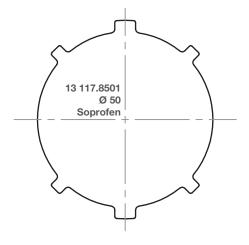
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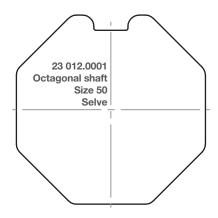
Round tubes

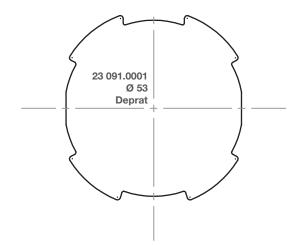


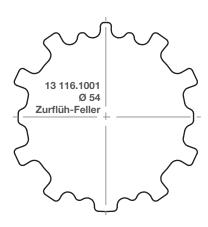
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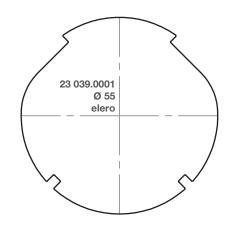
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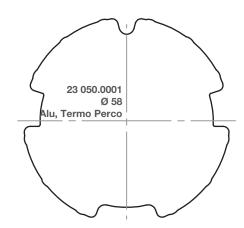






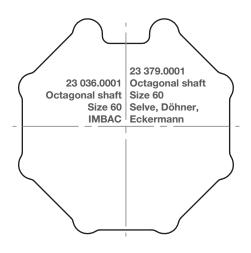


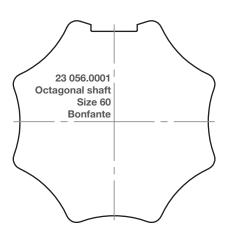


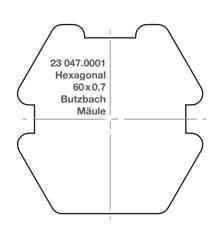


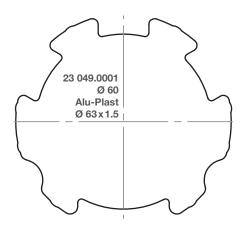
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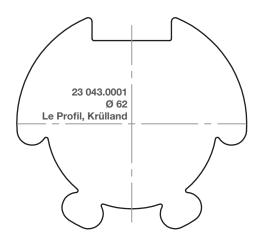
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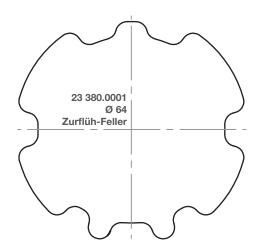






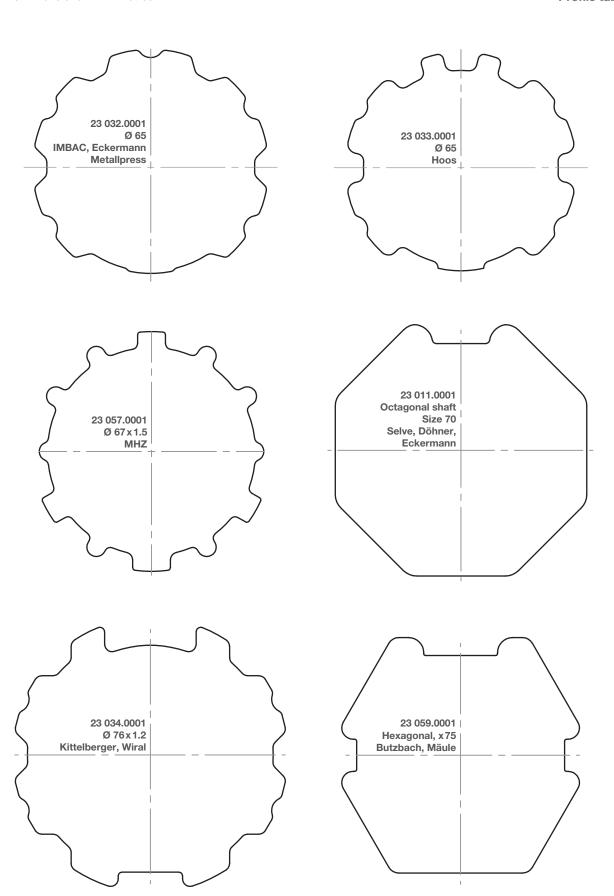






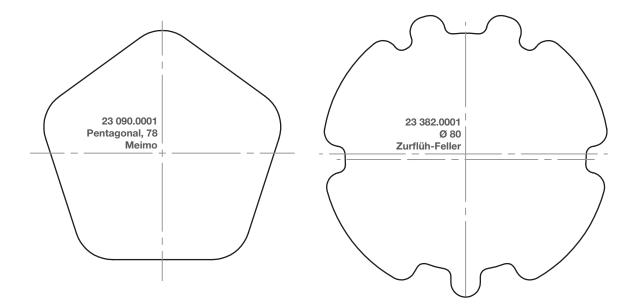
### **RevoLine M**

Scale 1:1 / Dimensions in millimetres



### RevoLine M

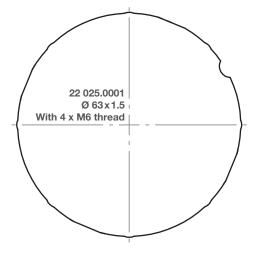
Profile tubes

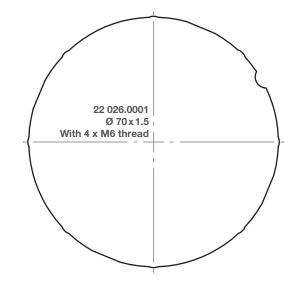


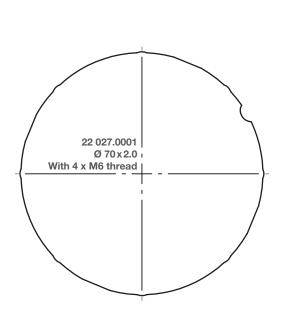
Revoline L RH / NHK

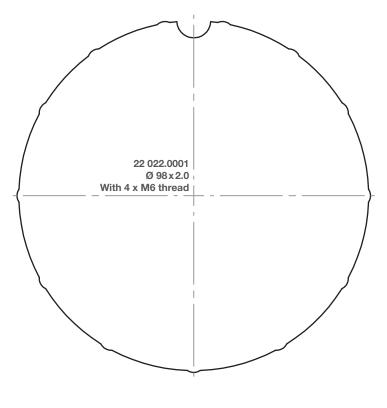
Scale 1:1 / Dimensions in millimetres

Round tubes



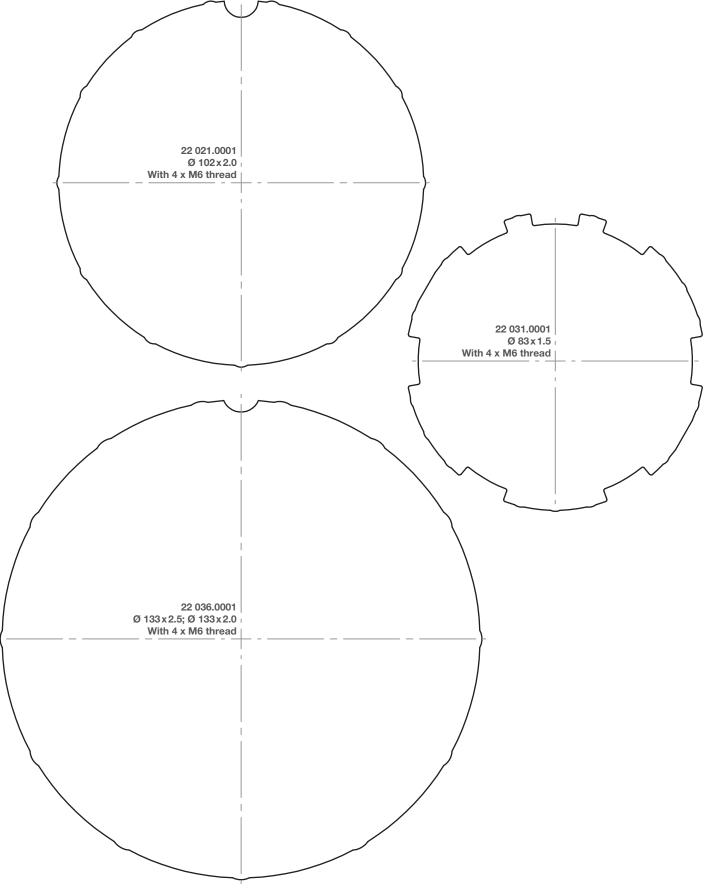






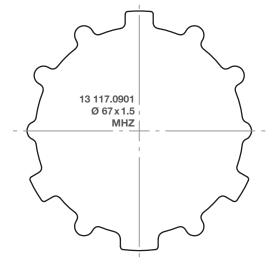
Revoline L RH / NHK

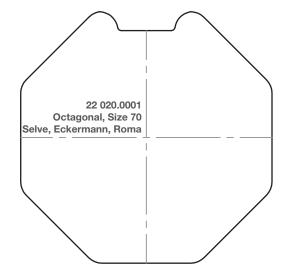
Round tubes

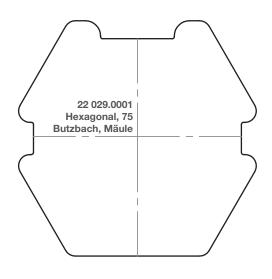


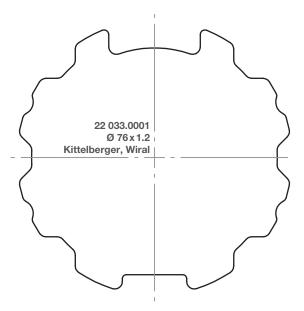
## Revoline L RH / NHK

Scale 1:1 / Dimensions in millimetres



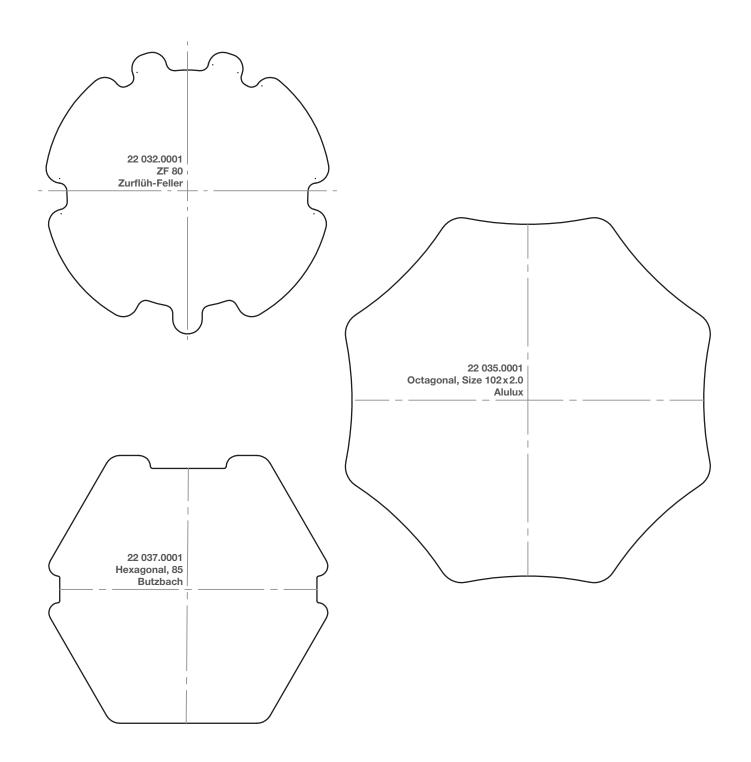






Revoline L RH / NHK

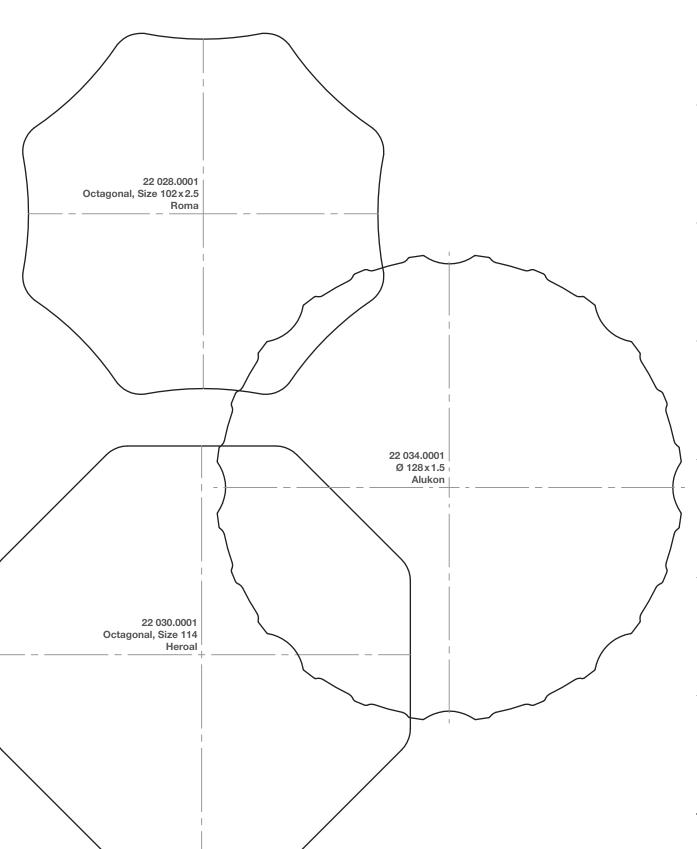
Profile tubes



# Adapterprofiles Revoline L RH / NHK

Scale 1:1 / Dimensions in millimetres

**Profile tubes** 



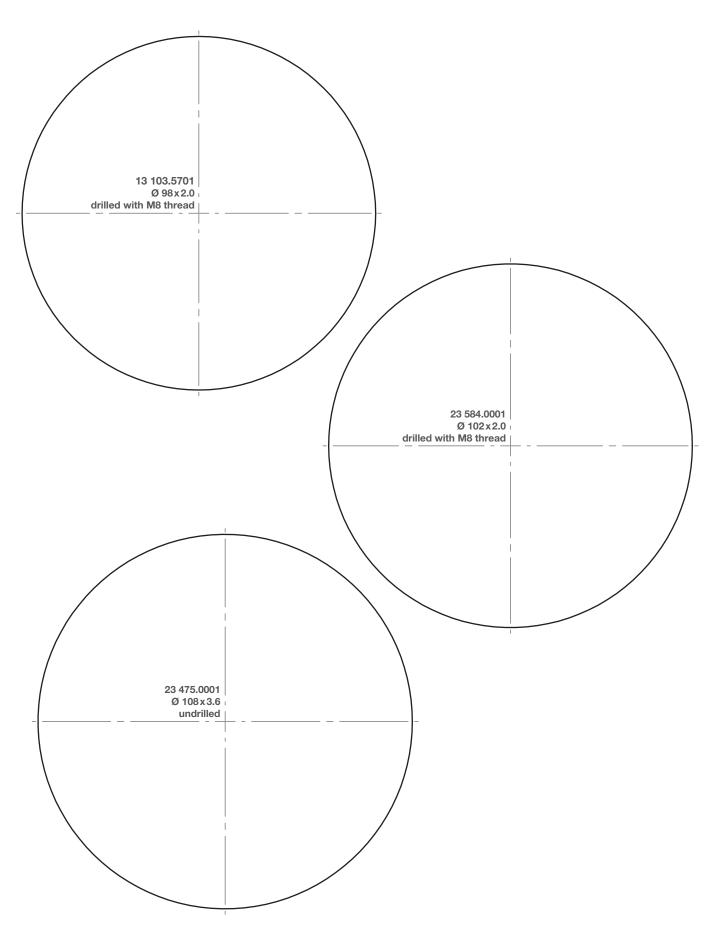
Venetian Blind drives

Wired control units Radio control systems Solar drives systems Sensors Radio sensors Speciality drives

## Type 15

Round tubes

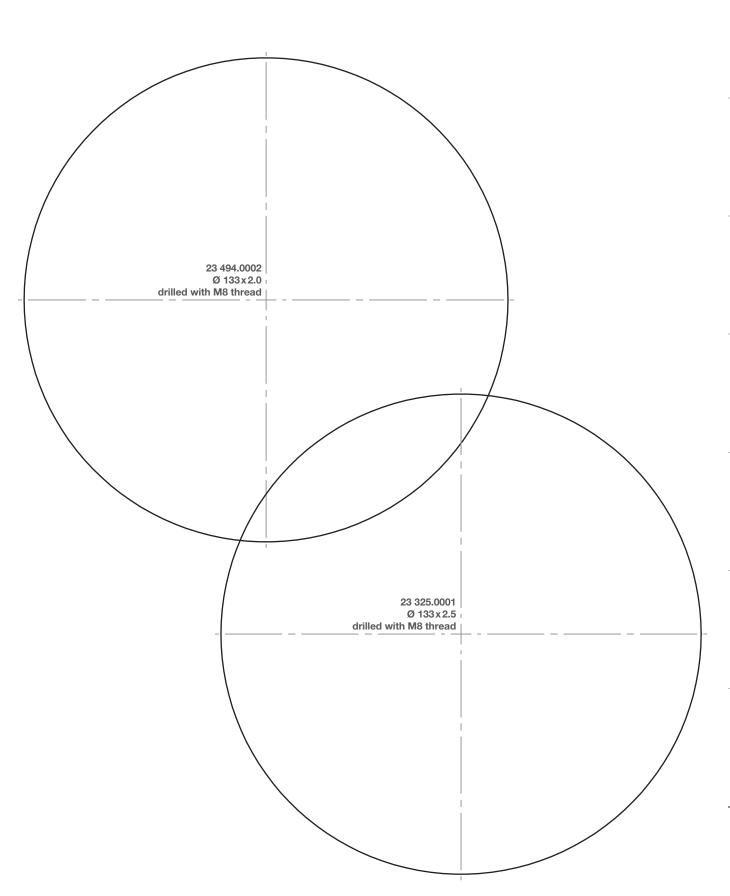
Scale 1:1 / Dimensions in millimetres



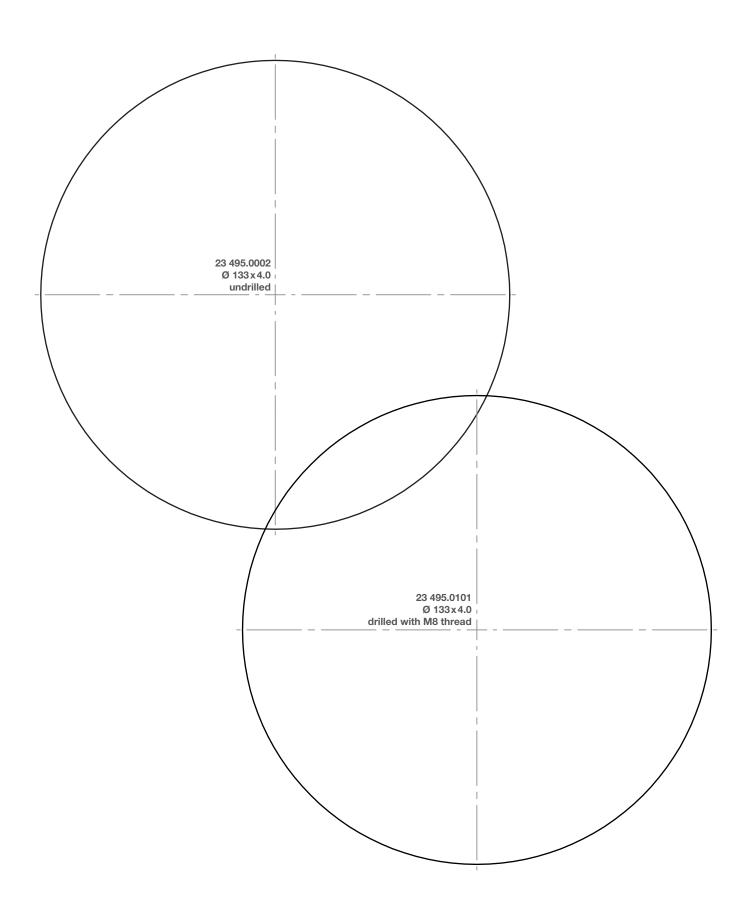
Type 15

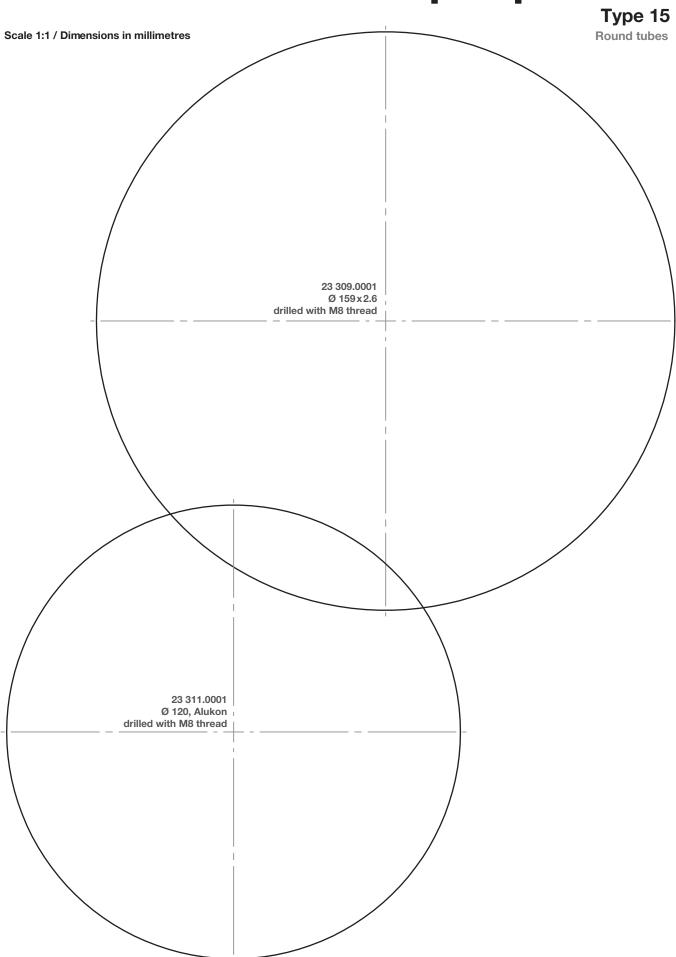
Scale 1:1 / Dimensions in millimetres

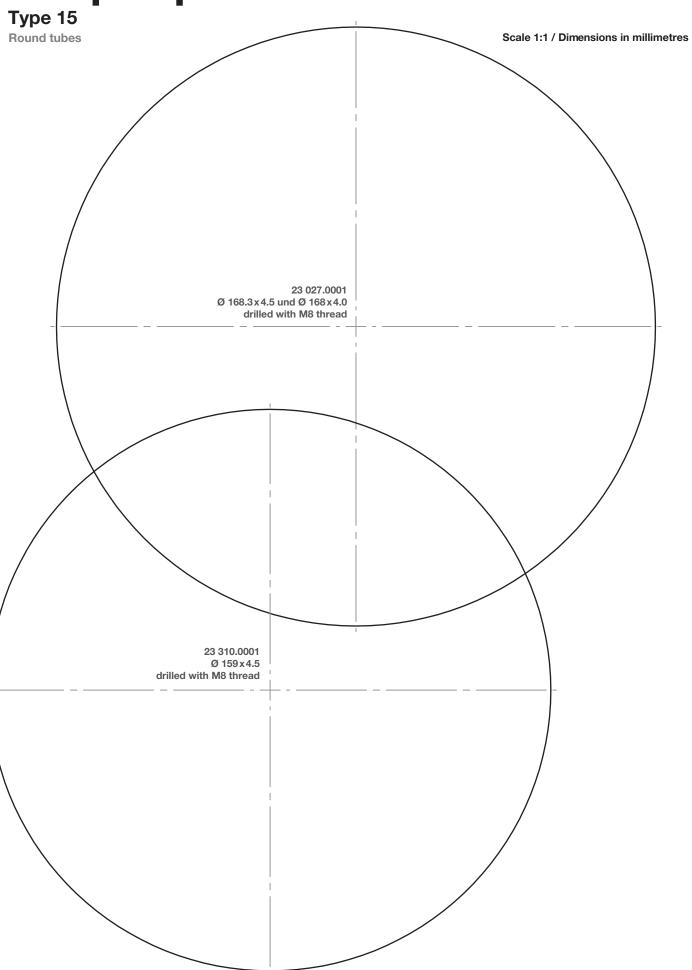
Round tubes



Type 15
Round tubes

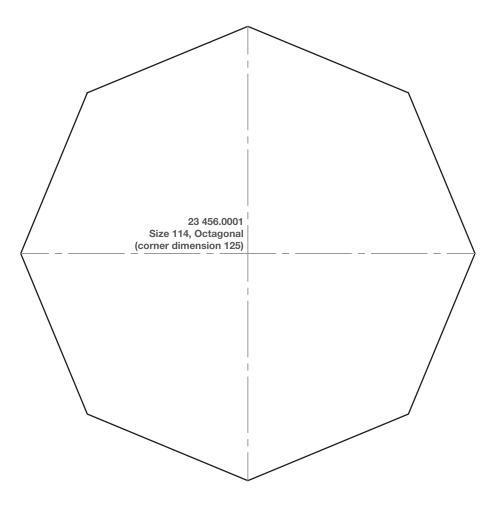






Type 15

Scale 1:1 / Dimensions in millimetres



# Selection table for determining the suitable drive by the rated torque

Determine the required rated torque of the drive based on the system data!

#### **Roller shutters**

### RolTop / RolTop-868 VariEco / VariEco-868

Rated torque	Winding shaft,	Roller shutter height / rod thickness (mm)						
of drive	octagonal		1.5 m		2.5 m			
		8	11	14	8	11	14	
(Nm)	(mm)			(k	g)			
5	40	14	-	-	12	-	-	
8	40	22	-	-	19	-	-	
12	40	33	-	-	28	-	-	
6	60	-	13	12	-	11	10	
7	60	-	16	14	-	13	12	
10	60	-	22	20	-	19	17	
12	60	-	25	24	-	22	20	
20	60	-	43	40	-	37	34	
30	60	-	65	60	-	56	51	
40	60	-	86	80	-	75	68	
50	60	-	108	100	-	93	85	
40	70	-	-	74	-	-	64	
60	70	-	-	110	-		97	
80	70	-	-	147	-	-	129	
100	70	-	-	184	-	-	161	
120	70	-	-	221	-	-	193	

The specified values take into account 15% friction.

### **Textile sun protection**

### SunTop / SunTop-868 VariEco / VariEco-868

Rated torque of drive	Round/ Notch shaft Ø			ction for		
(Nm)		(mm)			(kg)	
1.5		42			7	
3		42			14	
5		42			24	
8		42		38		
12		42		57		
6	50	78	85	24	15	14
7	50	78	85	28	18	16
10	50	78	85	40	26	24
12	50	78	85	48	30	28
20	50	78	85	80	51	47
30	-	78	85	-	77	71
40	-	78	85	_	103	94
50	-	78	85	-	128	118
40	-	78	85	-	103	94
60	_	78	85	_	154	141
80	-	78	85	-	205	188
100	-	78	85	-	256	235
120	_	78	85	_	308	282

### **Roller shutters**

#### VariEco M NHK Winding Roller shutter height / rod thickness (mm) Rated torque shaft, octagonal 11 14 11 14 (Nm) (mm) (kg) 60 20 43 40 37 34 60 30 65 60 56 51 40 60 86 75 80 68

100

93

85

The specified values take into account 15% friction.

108

60

#### **Awnings and roller blinds**

#### VariEco M NHK

Torque	Torque Speed		Tensile force at the shaft
(Nm)	(Upm)	(mm)	(kg)
20	14	78	51
20	14	85	47
30	14	78	77
30	14	85	71
40	14	78	103
40	14	85	94
50	14	78	128
30	14	85	118

Important note:

50

Observe the permissible load of the winding shaft and the permissible size of the blind. These values are guide values! No liability can be accepted! You can obtain the data from the respective manufacturer. For an individual drive calculation, we recommend our drive calculation programme at www.elero.com.

Drives for marquisolettes, conservatory awnings, fabric tension systems etc. must be determined separately for each individual system.

### Selection table for determining the suitable drive by the rated torque

Determine the required rated torque of the drive based on the system data!

#### Roller shutters and doors

### Type 15 W / Type 15 W NMA

Torque	Shaft Ø	Nominal rod thickness	Maximum blind weight for a rolling door/shutter height in m up to			
			2.5	3.5	5.0	
(Nm)	(mm)			(kg)		
	133	19	138	130	117	
400	133	23	131	123	109	
120	168	19	115	113	117	
	168	23	114	108	101	
	133	19	172	162	146	
450	133	23	164	154	137	
150	168	19	144	141	133	
	168	23	142	135	126	
	133	19	206	194	176	
400	133	23	196	185	164	
180	168	19	172	169	160	
	168	23	170	162	151	
	133	19	264	248	224	
000	133	23	251	236	203	
230	168	19	220	216	204	
	168	23	218	207	193	
	133	19	344	324	293	
200	133	23	327	308	273	
300	168	19	287	281	266	
	168	23	284	270	252	

This data refer to the complete roller shutter/door in kg, with 15%  $\,$ allowance for friction. The friction can be greater due to additional door seals, wind loads etc. Please make any necessary corrections.

Calculation of the average stroke speed in cm/sec.:

$$Vm = D + d \cdot 3.14 \cdot n$$
$$2 \cdot 60$$

Vm = average stroke speed in cm/sec.

- D = bale diameter in cm.
- d = tube diameter in cm.
- n = revolutions per min.

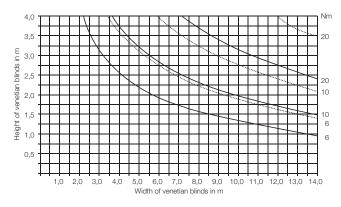
These values are guide values. No liability can be accepted!

### Venetian blinds



\_ Slat flanged; ..... Slat without edging

### JAe/JAdk/JA NHK/JARdk



Slat flanged; ...... Slat without edging

Calculation basis	Slat with edging	Slat without edging	
Width per slat (mm)	60 – 90	50	
Winding pulley diameter (mm)	22		
Lift belt thickness (mm)	0.34		
Weight incl. bottom rail (kg/m2)	2,0	1.2	

These values are guide values. No liability can be accepted!

#### Example for determining the rated torque and drive for a roller shutter:

#### 1. Determining the roller shutter data (example)

- Winding shaft 60, octagonal
- Rod thickness: 14 mm
   Armour data: H 2.20 m x W 2.00 m = 4.4 m²
- Armour weight:  $5 \text{ kg/m}^2 \times 4.4 \text{ m}^2 = 22 \text{ kg}$

#### 2. Determining the rated torque of the drive

A rated torque of 20 Nm is determined from the table column 2.50 m/14 mm.

#### 3. Selecting the drive

Now select the corresponding drive type with the determined torque from the example: RolTop M20-868

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耐氏中国

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#### Nice UK Ltd.

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Tel. +44 16 2355 8086

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By phone:

**Orders** 

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By phone	:			
Sales				+49 7021 9539-567

Outside our business hours, you can reach us as follows:

Mail box	+49 7021 9539-0
By e-mail:	
Enquiries	Anfrage@elero.de

You can reach our technical service during German business hours as follows:

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English-speaking	+49 7021 9539-550
German-speaking	+49 7021 9539-555
By e-mail:	Technik@elero.de

Visit us at our

website elero.com

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### **Information**

The information in the catalogue refers to the current production status of the devices. We reserve the right to make changes to the technology and design; colour deviations are possible and due to printing technology. No liability is accepted for printing errors and mistakes. elero also reserves the right to change both the product-related technical and business documents as well as their products at any time.

The dimensions listed are in millimetres unless otherwise stated. For further information on our products, please also refer to the technical documentation and instructions for use enclosed with them. Our products may be processed only by authorised specialists; dangers and risks that are not insignificant may otherwise arise in the event of improper installation.



#### Terms and conditions of sale

#### § 1 Scope of validity

- Our terms and conditions of sale shall apply exclusively. They shall apply to this and all
  future transactions with the customer, unless expressly agreed otherwise between the parties. We do not accept any conflicting or deviating terms and conditions of the customer. The terms and conditions of business of the customer or third parties shall not apply even if their validity is not objected to in individual cases or if reference is made to a letter that contains or refers to the terms and conditions of business of the customer or a third party Exceptions must be agreed in writing between the parties.
- Unless otherwise stated in the terms of the contract, the terms and definitions of INCOTERMS 2010 shall apply. Þ

#### § 2 Conclusion of contract

- 1. Our quotations are not binding. Likewise, technical descriptions and other details in brochures and other information are not binding unless they are expressly indicated as binding.
- 2. We reserve the copyright and proprietary rights to all samples, brochures, technical descriptions, calculations and other documents. They may be made accessible to third parties only with prior written consent.
- 3. The acceptance declaration and all confirmations must be in writing in order to be valid.
- 4. If the order is to be qualified as a quotation in accordance with § 145 BGB, we can accept this within 12 working days.
- 5. Information in samples, brochures, technical descriptions as well as in public statements on our part, by the manufacturer and their assistants (§ 434, para. 1, p. 3 BGB) is only part of the performance description if it is expressly referred to in the contract.
- 6. With the exception of the managing director and sales management, our (sales) employees are not authorised to make verbal ancillary agreements, make verbal agreements that deviate from these GTC or give verbal assurances that go beyond the content of the written contract.

#### § 3 Prices and payment terms

- 1. The agreed prices shall apply. They are "ex works" plus packaging, statutory value added tax, customs duty for export deliveries as well as fees and other public charges including additional expenses such as those for the conclusion of insurance policies. The statutory value added tax shall be disclosed separately in the invoice at the statutory rate on the day of invoicing.
- 2. If the main cost components change before the delivery is supplied, there may be a price increase if the delivery or performance is provided more than four months after signing the contract. The price increase shall take into account the mutual interests of the contracting parties
- 3. Invoice amounts are due immediately, as net amounts without deduction.
- Any other forms of payment require a special written agreement. Any costs incurred by either side shall be borne by the customer. Payment by bill of exchange is excluded.
- 5. The customer shall have a right of set-off or a right of retention only with respect to undisputed or legally established claims or entitlements

#### § 4 Delivery and cooperation pledges ß

- 1. The scope of our delivery obligation results exclusively from the respective contract. We reserve the right to make changes to the design, shape and colour based on technological improvements or the requirements of the legislator insofar as the changes are not substantial or otherwise unreasonable for the customer.

  2. We are entitled to make partial deliveries if:
- The partial delivery is usable for the customer within the scope of the contractual intended
- The delivery of the remaining ordered goods is ensured and
- The customer does not incur any significant additional expenses or costs as a result.
   Deliveries shall be made "ex works" unless otherwise agreed in writing between the parties.
- 4. The specified delivery deadlines are always subject to the contractual cooperation of the
- customer. Prospective deadlines and dates for deliveries and services are always only approximate unless they are promised as "definite". Compliance with our obligation to deliver pre-supposes that the customer fulfils their obligations in a timely and proper manner.
- 5. If we ourselves are not supplied correctly and/or on time although we have placed at leas congruent orders with reliable suppliers, we shall be released from our obligation to perform and may withdraw from the contract, provided that the delay in delivery is not only of temporary nature.
- 6. If, after the conclusion of the contract, it becomes apparent that the customer does not offer sufficient guarantee for their ability to pay and that our claim for payment is at risk, we shall be entitled to refuse delivery until the customer has effected the payment or provided security for it. If the payment or provision of security is not made within 12 working days after a request to that effect, we shall be entitled to withdraw from the contract.
- 7. If the customer is in default with acceptance or collection or responsible for a delay in dispatch or delivery, we are entitled - without prejudice to further claims - to demand a lump sum for costs in the amount of the usual local storage costs, irrespective of whether we store the goods on our or a third party's premises. The customer reserves the right to prove that no or less damage has been incurred.

- § 5 Delay in delivery, force majeure, reservation of self-delivery

   elero GmbH shall not be liable for delays or other non-fulfilled contractual obligations if the
  failures are due to force majeure, i.e. factors beyond our control.
- 2. We are entitled to withdraw from the contract insofar as we do not receive the delivery item despite the prior conclusion of a corresponding purchase contract on our part; our responsibility for intent or gross negligence shall remain unaffected. We shall inform the customer without delay of the unavailability of the delivery item and, if we wish to withdraw, exercise the right of withdrawal without delay; in the event of withdrawal, we shall reimburse the customer for the corresponding withdrawal without delay.
- 3. If the delivery deadline agreed with the customer cannot be met as a result of circumsta beyond our control (in particular operational disruptions of any kind, difficulties in the procurement of materials or energy, transport delays, strikes, lawful lockouts, shortage of manpower, shortage of energy or raw materials, difficulties in obtaining the necessary official permits and/or official measures in our sphere or in the sphere of our suppliers), the delivery period shall be extended by the period of the hindrance plus a reasonable resumption period.
- 4. If the circumstances impeding the delivery still persist one month after expiry of the agreed delivery period, either side may withdraw from the contract. Any further claims due to exceeding the delivery deadline not caused by us intentionally or by gross negligence are excluded; claims for damages shall be limited to the foreseeable damage specific to the

#### § 6 Place of performance and transfer of risk

The place of performance for all obligations arising from the contractual relationship is our registered office in 73278 Schlierbach for orders in the field of drive technology and our registered office in 07381 Pößneck for orders in the field of linear technology

#### § 7 Packaging

We shall pack the goods appropriately. The costs for the disposal of transport and sales packaging shall be borne by the customer.

#### § 8 Shipment

- 1. If shipment is agreed between the parties, the risk of loss of the delivery item shall be passed on to the customer at the latest when the delivery item is handed over to the forwarding agent, carrier or other third party designated to carry out the shipment. This also applies if partial deliveries have been made. and we have provided also other services.
- 2. If the shipment or handover is delayed due to circumstances caused by the customer, the risk shall be issed on to the customer on the day on which the delivery item is ready for shipment and we
- 3. Any storage costs after the transfer of risk shall be borne by the customer. In the event of storage by us, the storage costs shall amount to 0.5% of the invoice amount of the delivery items to be stored per expired week. We reserve the right to claim and verify further or lower storage costs.
- 4. We shall insure the consignment against theft, breakage, transport, fire and water damage or other risks only at the express request of the customer and at their expense.

#### § 9 Material defects

- 1. The customer shall be subject to the statutory obligation to inspect the goods and to give notice of defects in accordance with § 377 of the German Commercial Code (HGB).
- 2. The wear and tear or consumption of batteries (including rechargeable batteries) and other wear products does not constitute a material defect. The legal warranty for the usual, generally expected condition and intended use of these articles is not affected by this. Insofar as we provide a warranty or guarantee for certain products/product groups that goes beyond the statutory liability for defects, in particular by granting an extended period for material replacement free of charge due to defects, this shall not apply to wear and tear or consumable items used.
- 3. The customer cannot derive any rights from material defects that do not or only insignificantly impair the value or the suitability for the use recognisable to us.
- 4. If the goods exhibit any material defects when the risk is transferred, we shall be entitled and obliged to rectify the defects. The defects shall be rectified at our discretion by repair or replacement delivery
- 5 If the rectification of defects fails, does not take place within a reasonable period set by the customer or is refused, the customer shall be entitled to decide whether to withdraw from the contract, demand a reduction of the purchase price corresponding to the defect and value or - within the limits of the following paragraphs - demand damages instead of performance.
- 6. If a material defect leads to damage, we shall be liable in accordance with the statutory provisions insofar as this concerns personal injury or the damage falls under the product liability law or is based on intent or gross negligence.
- 7. If the damage is based on a culpable breach of an essential contractual obligation or a "cardinal obligation", we shall only be liable for the foreseeable damage specific to the contract, with the exception of the cases cited in para. 3.
- 8. Any further contractual and tortious claims of the customer are excluded. With the exception of the cases cited in para, 6, we shall not be liable in particular for damage that has not occurred to the delivery item itself or for the loss of profit or any other financial losses of the customer.

#### § 10 Other liability for damages

- 1. The provisions in § 9, para. 6 8 shall also apply to claims for damages due to other breaches of duty. In the event of a breach of a pre-contractual obligation or an impediment to performance already existing at the time of conclusion of the contract (§§ 311, para. 2, 311a of the BGB), our compensation obligation shall be limited to the negative interest.

  2. The provisions of § 9, para. 6-8 shall apply accordingly to our liability in tort.
- 3. Insofar as our liability is excluded or limited, this shall also apply to the personal liability of our employees, workers, staff, representatives and vicarious agents.

#### § 11 Retention of title

- 1. Ownership of the delivered goods shall remain reserved until all our claims against the customer arising from the business relationship including future claims arising from contracts concluded at the same time or later have been settled. This also applies if claims are included in a current invoice and the balance has been struck and accepted. Ownership shall not be passed on to the customer until they have repaid all of their liabilities to us, irrespective of the legal basis of the liability. We are obligated to release our securities should their value exceed our claims by more than 10 percent
- 2. The purchaser is entitled to sell or process the goods in the orderly course of business. This right shall expire upon cessation of payments or the application for or opening of insolvency proceedings. Any processing shall be carried out by the customer on our behalf without any obligation on our part. Any processing sname carried out by the customer of our behalf willout any obligation of our part. In the event of processing, combining or mixing the reserved goods with other goods, a co-ownership share in the new item shall always arise for us, notably in relation of the value (= gross invoice value including ancillary costs and taxes) of the reserved goods to the value of the new item in the event of processing or in relation of the value of the reserved goods to the value of the other goods in the event of combining or mixing.
- 3. The customer hereby assigns all claims to us accrued from the resale of the goods. The customer shall remain authorised to collect these claims even after the assignment.

  Our right to collect the claims ourselves shall remain unaffected; however, we shall not make use of this right as long as the customer duly fulfils their payments and other obligations. Upon request, the customer shall inform us of the assigned claims and their debtors, provide all information necessary for collection, hand over the relevant documents and inform the debtors of the assignment.
- 4. In the event of conduct in breach of contract on the part of the customer in particular in the event of default in payment we shall be entitled to withdraw from the contract and to take back the goods. To this end, the customer hereby irrevocably permits us to enter its business and storage premises vithout hindrance and to take the goods with us.
- 5. Insofar as and for as long as the reservation of title exists, the customer may neither assign by way of security nor pledge goods or items manufactured from them without our consent.6. The customer shall immediately inform us in writing of any seizures or other interventions by third
- parties. The customer is prohibited from entering into any agreements with their own customers
- which may affect our rights.

  7. We undertake to release the security to which we are entitled at the request of the customer and at the request of the request of the request of the customer and at the request of the requ our discretion to the extent that the realisable value of the security exceeds the claim to be secured by more than 10% or its nominal amount by more than 50%.

- 1. Any invalidity of individual provisions shall not affect the validity of the remaining provisions.
- If the customer is a merchant, the place of jurisdiction for all disputes with them shall be the registered office of elero GmbH in 73278 Schlierbach. The place of jurisdiction is not exclusive.
- 3. German law shall apply exclusively to the exclusion of the UN Convention on Contracts for the International Sale of Goods (CISG).

  4. In accordance with the provisions of the Federal Data Protection Act, we would like to point out
- that we store personal data (name, address) of the customer by EDP technology for internal purposes only.

#### elero

elero GmbH Antriebstechnik, Maybachstr, 30, 73278 Schlierbach, Germany

Managing Director: Davide Campagnari, Ulm District Court HRB 735858. As of 07/25/2023

# Excellent control in action.

