

RADEMACHER CLIM 50/12PZ

Rademacher RolloTube C-line Medium Tubular Motor (CLIM 50/12PZ) Instruction Manual

1. PRODUCT OVERVIEW

The Rademacher RolloTube C-line Medium (CLIM 50/12PZ) is a tubular motor designed for roller shutters. This motor features a self-learning function for automatic endpoint adjustment, a soft stop mechanism, and precise position and torque monitoring. It includes integrated blocking detection to protect the roller shutter system from damage.

Key features include:

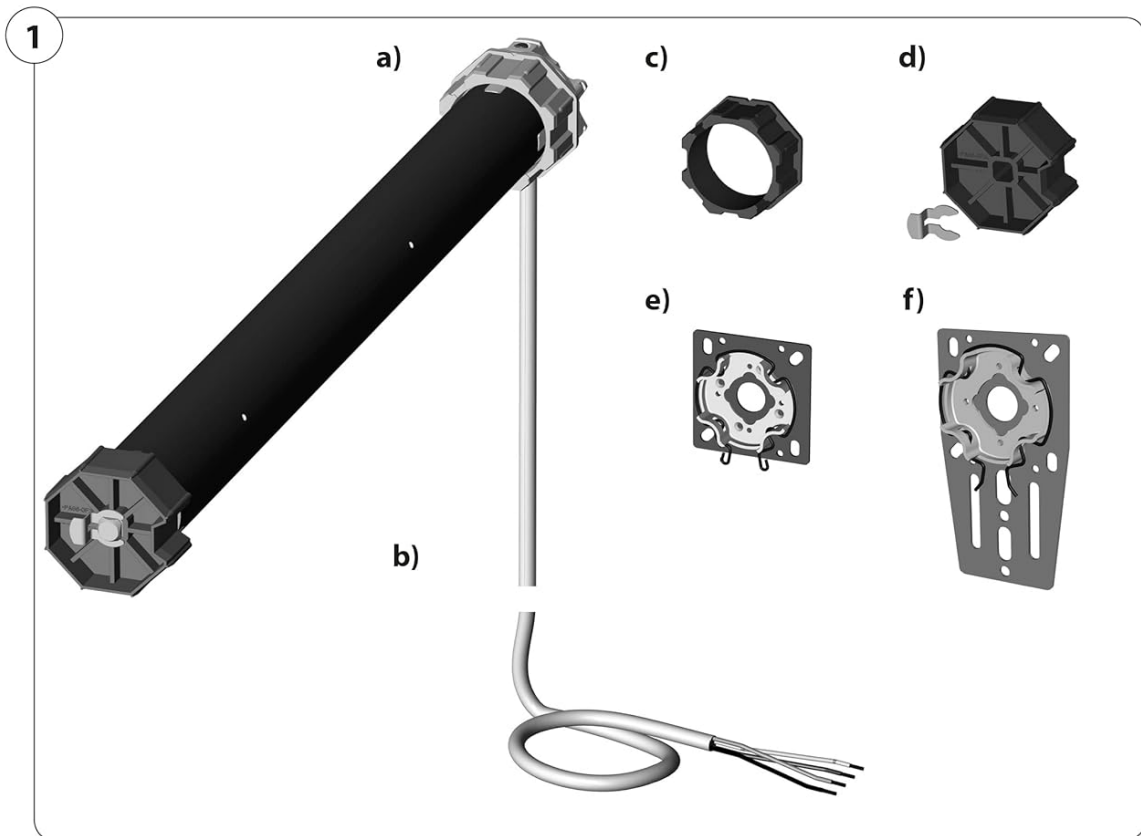
- **Self-Learning Setup:** Automatic endpoint adjustment when used with rigid shaft connectors and stoppers.
- **Manual Endpoint Adjustment:** Option to set endpoints manually via a setting button and supply cable.
- **System Protection:** Soft stop function and integrated blocking detection in both directions.
- **Parallel Switching:** The motor supports parallel switching for multiple units.
- **Tool-Free Installation:** Features a lockable universal motor head for easy, tool-free installation and high compatibility.
- **Pluggable Cable:** Equipped with a 2.5 m PVC connection cable; additional lengths (5 m, 10 m) are available separately.
- **Flexible Operation:** Compatible with timers, radio actuators, or standard roller shutter switches.



Image 1.1: Rademacher RolloTube C-line Medium Tubular Motor.

2. PACKAGE CONTENTS

Verify that all components listed below are included in your package. If any parts are missing or damaged, contact your supplier.



Lieferumfang

RolloTube C-line	Small	Medium
(a) Rohrmotor	1 x	1 x
(b) Anschlusskabel (2,5 m)	1 x	1 x
(c) Adapter	1 x	1 x
(d) Mitnehmer, inkl. Rastbügel	1 x	1 x
(e) Click Universalantriebslager	1 x	-
(f) Click-Fertigkastenlager	-	1 x

Image 2.1: Illustration of RolloTube C-line package contents.

Table 2.1: RolloTube C-line Package Contents

Component	Description	Quantity (Medium)
(a) Rohrmotor	Tubular Motor	1 x
(b) Anschlusskabel (2,5 m)	Connection Cable (2.5 m)	1 x
(c) Adapter	Adapter	1 x
(d) Mitnehmer, inkl. Rastbügel	Driver, incl. Locking Clip	1 x
(e) Click Universalantriebslager	Click Universal Drive Bearing	-
(f) Click-Fertigkastenlager	Click Ready-Box Bearing	1 x

3. SAFETY INSTRUCTIONS

- **Electrical Safety:** Installation and electrical connections must be performed by a qualified electrician in accordance with local regulations. Disconnect power before any installation or maintenance work.
- **Intended Use:** This motor is designed exclusively for driving roller shutters. Any other use is considered improper.
- **Children and Pets:** Keep children and pets away from the operating area of the roller shutter.
- **Obstructions:** Ensure the roller shutter path is clear of obstructions before operation. The integrated blocking detection helps prevent damage, but manual inspection is always recommended.
- **Damage:** Do not operate the motor if it or the power cable is visibly damaged.
- **Modifications:** Do not attempt to modify the motor or its components. Unauthorized modifications can lead to hazards and void the warranty.

4. INSTALLATION AND SETUP

4.1 Mounting the Motor

1. Insert the tubular motor into the roller shutter shaft. Ensure a secure fit using the provided adapter and driver components.
2. Mount the shaft with the motor into the roller shutter box using the Click Ready-Box Bearing and other necessary mounting hardware. The universal motor head allows for tool-free installation in many standard systems.
3. Connect the motor's pluggable connection cable to the electrical supply. Ensure the power supply is off during connection.

4.2 Endpoint Adjustment

The RolloTube C-line Medium offers both automatic and manual endpoint adjustment.

Automatic Endpoint Adjustment (Recommended)

For systems using rigid shaft connectors and stoppers/stopper strips, the motor can self-learn its endpoints:

1. Ensure the roller shutter is fully lowered and the stoppers are correctly installed.
2. Apply power to the motor. The motor will perform a series of movements to detect the upper and lower endpoints automatically.
3. Observe the motor's movement. Once the self-learning process is complete, the motor will stop at the detected endpoints.

Manual Endpoint Adjustment

If automatic adjustment is not suitable or preferred, endpoints can be set manually:

1. Refer to the detailed instructions provided with your specific control unit (timer, switch, or radio actuator) for manual setting procedures.
2. Typically, this involves pressing a setting button on the motor or control unit and moving the shutter to the desired upper and lower limits, then confirming the positions.

5. OPERATION

The RolloTube C-line Medium motor can be operated using various control devices:

- **Standard Roller Shutter Switches:** Use a conventional up/down switch to control the movement of the roller shutter.
- **Timers:** Program a compatible timer to automatically open and close your roller shutters at set times.
- **Radio Actuators:** Integrate the motor into a radio-controlled smart home system for remote operation via

a remote control or smartphone app (requires compatible radio actuator).

Always ensure the path of the roller shutter is clear before initiating movement.

6. MAINTENANCE

The Rademacher RolloTube C-line Medium motor is designed for long-term, maintenance-free operation. However, periodic checks are recommended:

- **Cleaning:** Keep the roller shutter and its guides clean from dirt and debris to ensure smooth operation. Do not use abrasive cleaners on the motor housing.
- **Inspection:** Periodically inspect the roller shutter system for any signs of wear, damage, or loose connections.
- **Cable Check:** Ensure the connection cable is not pinched, frayed, or damaged.
- **Professional Service:** For any internal motor issues or complex repairs, contact a qualified service technician. Do not attempt to open the motor housing.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Motor does not respond	No power supply	Check power connection and circuit breaker.
	Control unit malfunction	Verify the control unit (switch, timer, remote) is functioning correctly.
Shutter stops unexpectedly	Obstruction detected	Remove any obstructions in the roller shutter path. The motor's blocking detection has activated.
	Endpoint not set correctly	Re-perform endpoint adjustment (Section 4.2).
Shutter does not reach full up/down position	Endpoints incorrectly set	Re-adjust the endpoints (Section 4.2).
Unusual noises during operation	Mechanical issue or obstruction	Inspect the roller shutter system for loose parts or obstructions. If noise persists, contact service.

If troubleshooting steps do not resolve the issue, contact Rademacher customer support or a qualified technician.

8. TECHNICAL SPECIFICATIONS

The following table provides detailed technical data for the Rademacher RolloTube C-line Medium (CLIM 50/12PZ) motor:

Ausstattungsmerkmale Motore

Typ RolloTube	S-line	M-line	C-line	Basis	X-line	I-line Sun DuoFern	I-line Sun	X-line Sun	X-line Raffstore
Nennrehmoment Nm	Artikel-Nr.								
6 (für SW40)	2340 06 75	2640 06 55	2240 06 56	2140 06 96					2401 06 94 (kopfleiste nach oben offen) 2402 06 94 (kopfleiste nach unten offen)
10 (für SW40)	2340 10 75	2640 10 55	2240 10 56	2140 10 96					
10 (für SW60)	2360 10 75	2660 10 55	2260 10 56	2160 10 96 2160 10 26*	2460 10 45	2978 10 85	2978 10 06	2978 10 46	2401 10 94 (kopfleiste nach oben offen) 2402 20 94 (kopfleiste nach unten offen)
20 (für SW60)	2360 20 75	2660 20 55	2260 20 56	2160 20 96 2160 20 26*	2460 20 45	2978 20 85	2978 20 06	2978 20 46	2401 20 94 (kopfleiste nach oben offen) 2402 20 94 (kopfleiste nach unten offen)
30 (für SW60)	2360 30 75	2660 30 55	2260 30 56	2160 30 96 2160 30 95**	2460 30 45	2978 30 85	2978 30 06	2978 30 46	
40 (für SW60)	2360 40 75	2660 40 55	2260 40 56	2160 40 96	2460 40 45	2978 40 85	2978 40 06	2978 40 46	
50 (für SW60)	2360 50 75	2660 50 55	2260 50 56	2160 50 96 2160 50 96**	2460 50 45	2978 50 85	2978 50 06	2978 50 46	
80 (für SW70)				2170 80 96 2170 80 98					
120 (für SW70)				2170 92 96 2170 92 98**					
Einsetzbar für Rollläden	●	●	●	●	●				
Einsetzbar für Markisen						●	●	●	
Einsetzbar für Raffstore									●
Integrierter DuoFern Funk-Empfänger 434,5 MHz	●****					●****			
Selbstlernend mit Sanftanschlag (bei Verwendung von Stoppern und starren Wellenverbindern)	●***	●***	●***						
Selbstlernend mit Sanftanschlag (bei Verwendung von Stoppern und Befestigungsfedern)	●***	●***							
Selbstlernend mit vollautomatischer Endpunkteinstellung und Drehrichtungszuordnung					●				
Mechanische Endpunkteinstellung				●					
Halbautomatische Endpunkteinstellung und Drehrichtungszuordnung						●	●	●	●
Exakte Positionserfassung	●	●	●		●	●	●	●	●
Exakte Positionsanfahrt	●				●			●	●
Echte Positionsrückmeldung	●				●			●	●
Integrierte KNX-Intelligenz					●			●	●
Drehmomentüberwachung	●	●	●		●	●	●	●	
Blockiererkennung	●	●	●		●	●	●	●	●
Hinderniserkennung	●	●			●				
Reversierung (Freifahrt nach Hindernis)	●				●	●	●	●	
Reversierung (Freifahrt nach Blockade)	●								
Automatischer Behänglängenausgleich	●	●			●				●
Fliegengitterschutz	●								
Sanftanschlag und Tuchentlastung						●	●	●	
Automatischer Tuchstraffungs- und Spannimpuls						●	●	●	
Parallel schaltbar	●	●	●		●	●	●	●	●

Technische Daten	
Versorgungsspannung	230V / 50 Hz
Schutzklasse	IP44
Kurzzeitbetrieb	4 min.
	4 - 6 min.

* Short-Version

** Version, die Betrieb per Handkurbel unterstützt

*** Manuelles Einlernen der Endpunkte möglich

**** Umfangreiche Automatikfunktionen bei Integration in das HomePilot* Smart Home

Zubehör: Jeweils ein Adapter und ein Lager enthalten.

Für andere Wellentypen Zubehör bestellbar.

Image 8.1: Technical data for RolloTube C-line motors.

Table 8.1: Technical Data for CLIM 50/12PZ

Parameter	Unit	Value (CLIM 50/12PZ)
Nenn Drehmoment	Nm	50
Leerlaufdrehzahl	U/min	12
Nennspannung	V	230
Frequenz	Hz	50
Nennleistung	W	205
Stromaufnahme	A	0,89
Einschaltdauer (KB)	Min.	4
Anzahl der Adern		5
Aderquerschnitt	mm ²	0,75
Anschlusskabel (PVC)	m	2,5
Endschalterbereich (Anzahl der Umdrehungen)	U	48
Isolationsklasse		H
Schutzklasse		I
Schutzart n. VDE 700		IP 44
Motorlänge ohne Lager	mm	546
Rohrdurchmesser	mm	45
Schalldruckpegel (LpA)	dB(A)	≤ 70
Anzahl parallel schaltbarer Rohrmotoren (Bei Verwendung der RADEMACHER Steuerung, z.B. Troll Comfort)		2

- **Product Dimensions:** 54.6 x 4.5 x 4.5 cm
- **Weight:** 3.33 kg

9. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact your retailer. For technical support, spare parts, or service inquiries, please contact Rademacher customer service or visit the official Rademacher website.

Manufacturer: Rademacher

Model Number: CLIM 50/12PZ