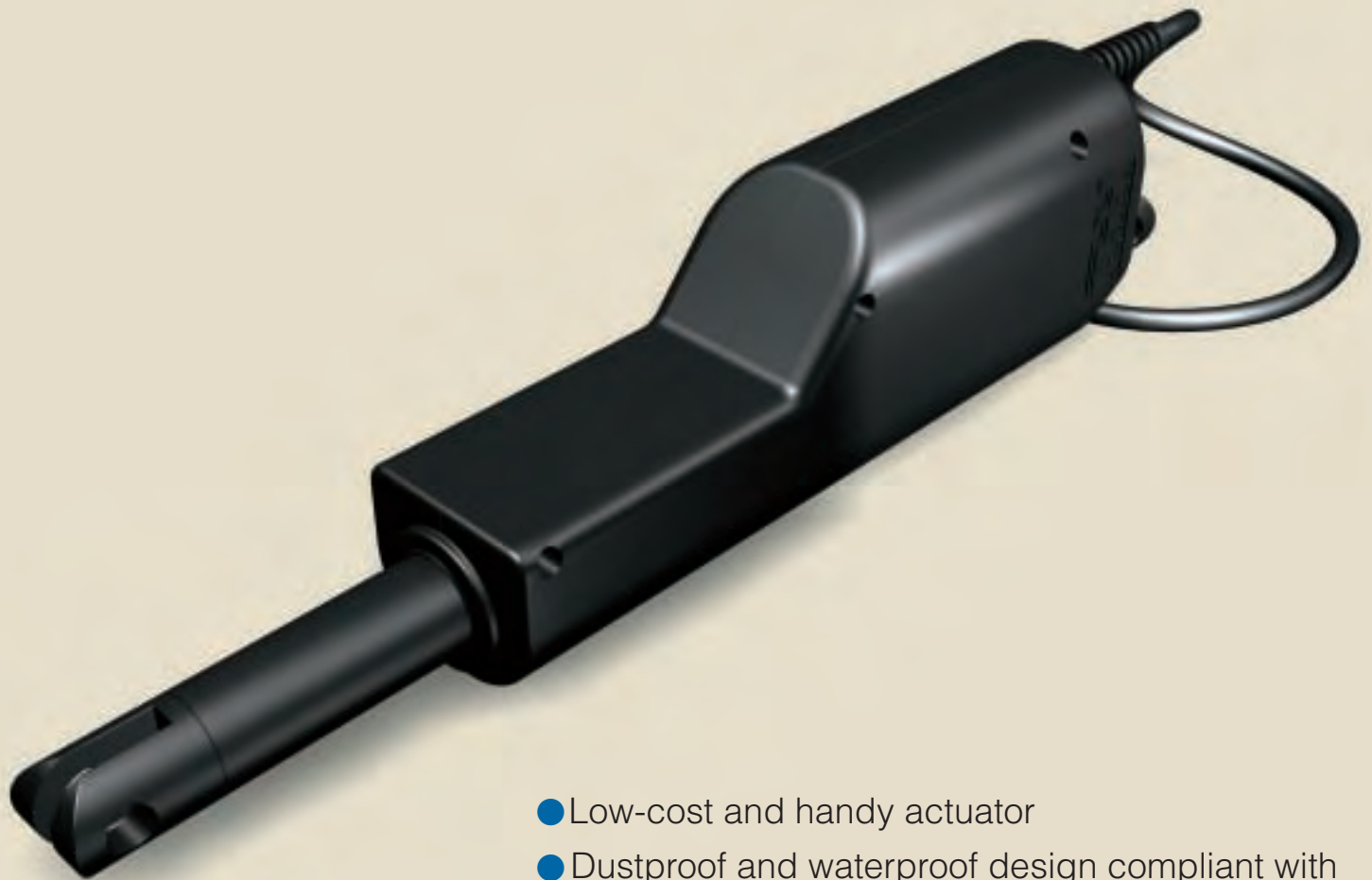




ROD ACTUATOR

# CRES



- Low-cost and handy actuator
- Dustproof and waterproof design compliant with IP55 standard
- Compliant with the RoHS Directives



# ROD ACTUATOR CRES

## COMPACT

All actuator components are concealed

## RIGID

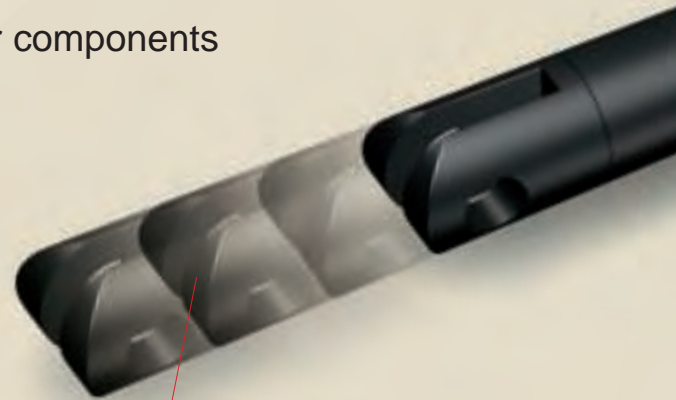
Splash-Proof construction, complies with IP55 standard

## ECONOMICAL

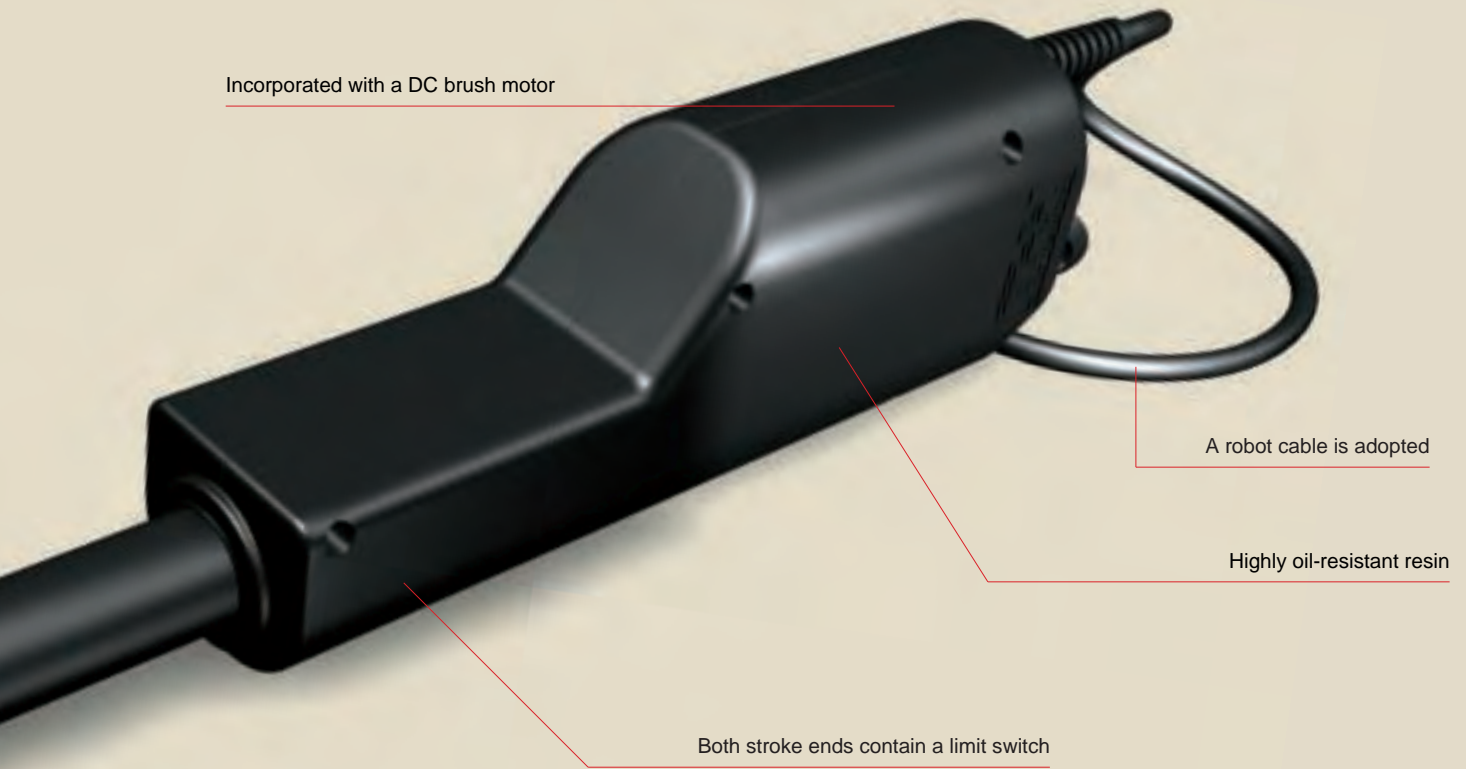
Low cost, simple structure due to the use fewer components

## STYLISH

A soft design that blends into various environments



Lightweight and sturdy resin rod



Incorporated with a DC brush motor

A robot cable is adopted

Highly oil-resistant resin

Both stroke ends contain a limit switch



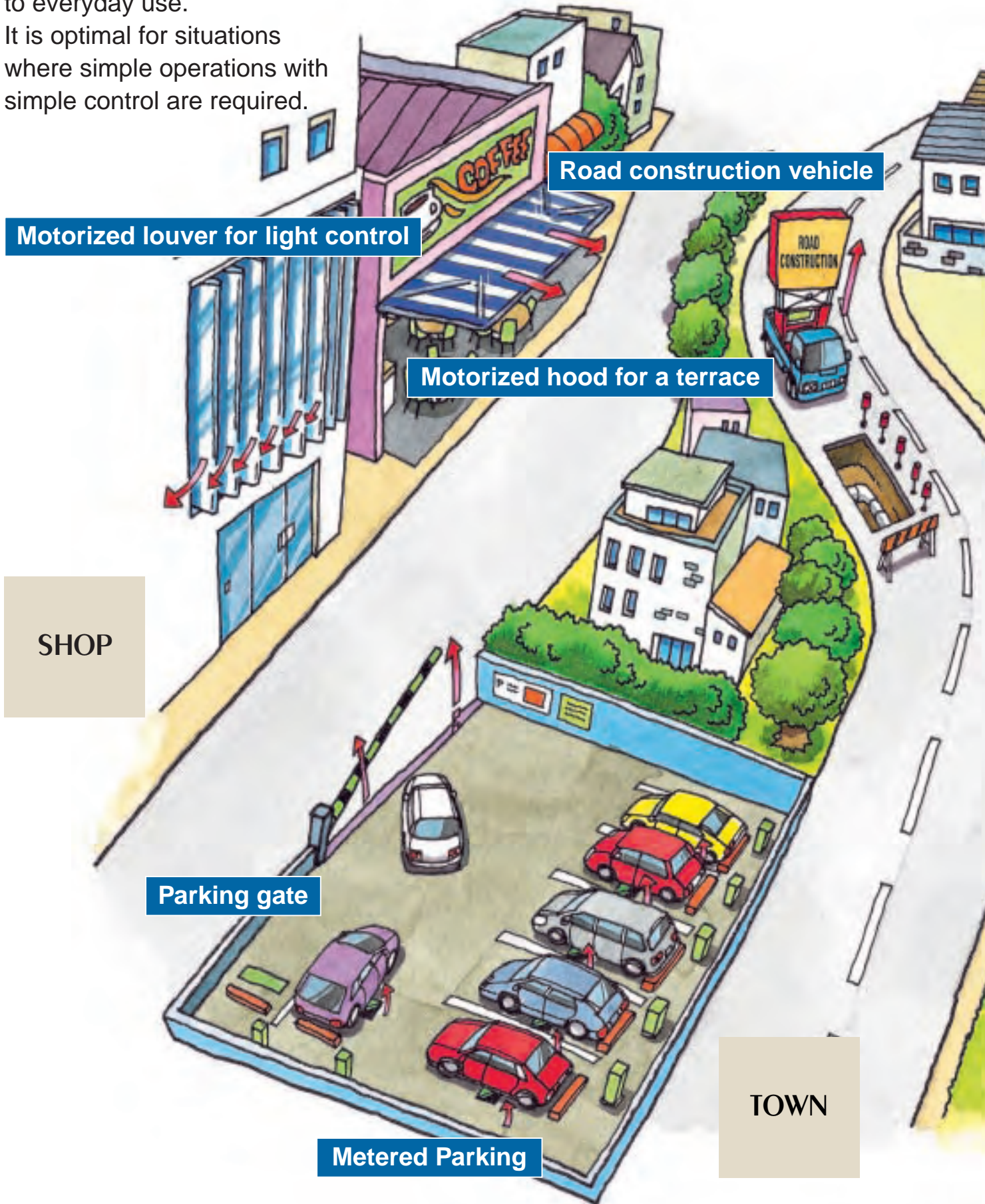
## CRES Lineup

● High-Speed Type: **CRES 200**  
Rated thrust: 196 N; rated speed: 55 mm/s

● High-Power Type: **CRES 500**  
Rated thrust: 490; rated speed: 15 mm/s

Rod Actuator CRES is used in many applications including equipment familiar to everyday use.

It is optimal for situations where simple operations with simple control are required.



Road construction vehicle

Motorized louver for light control

Motorized hood for a terrace

SHOP

Parking gate

Metered Parking

TOWN

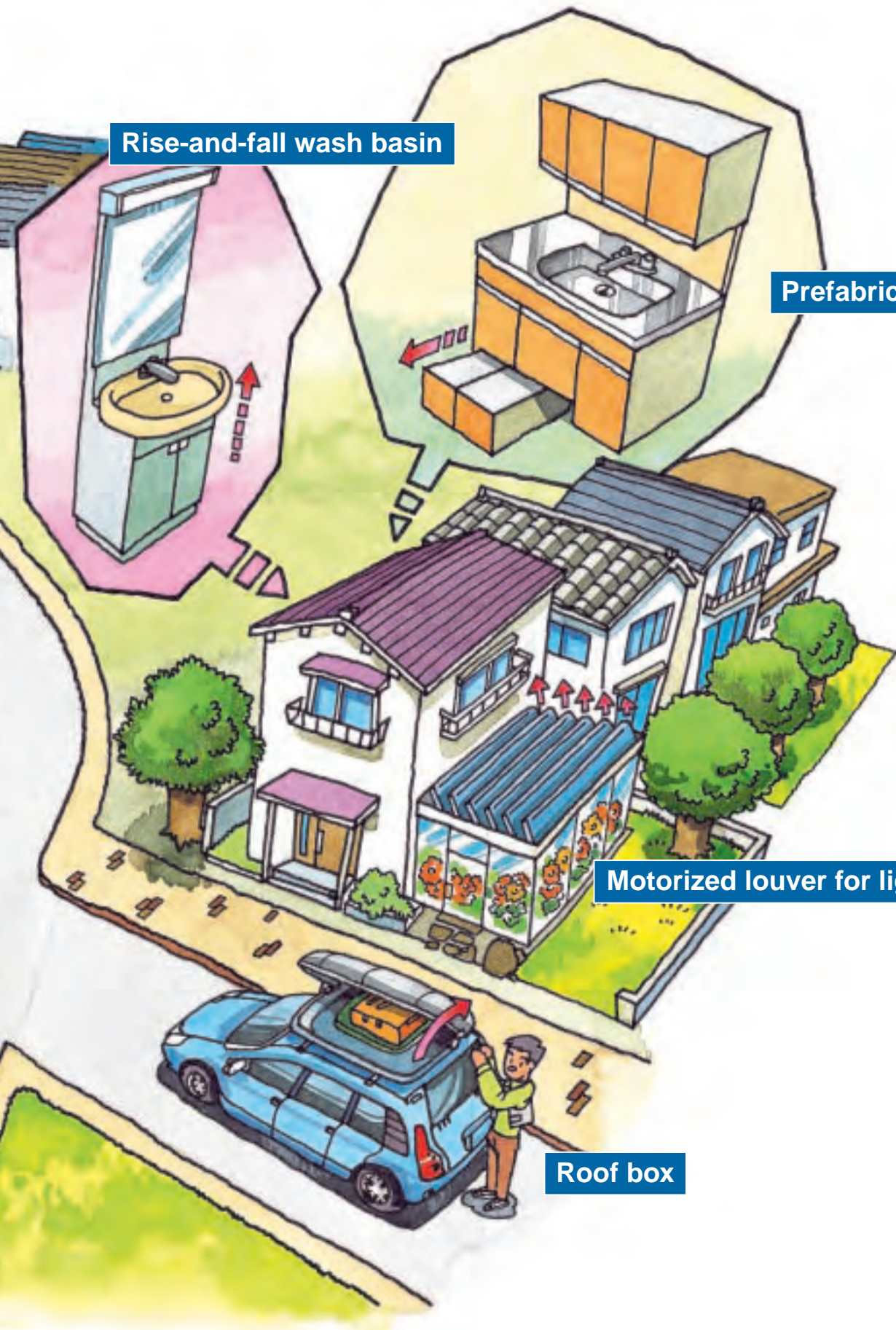
HOME

Rise-and-fall wash basin

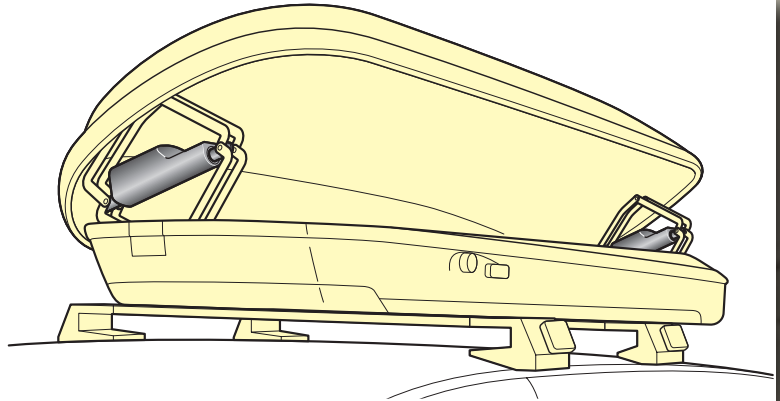
Prefabricated kitchen

Motorized louver for light control

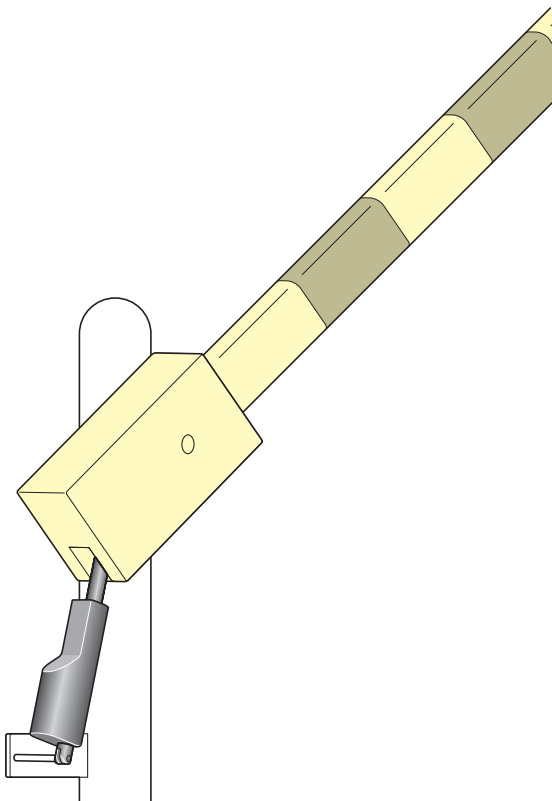
Roof box



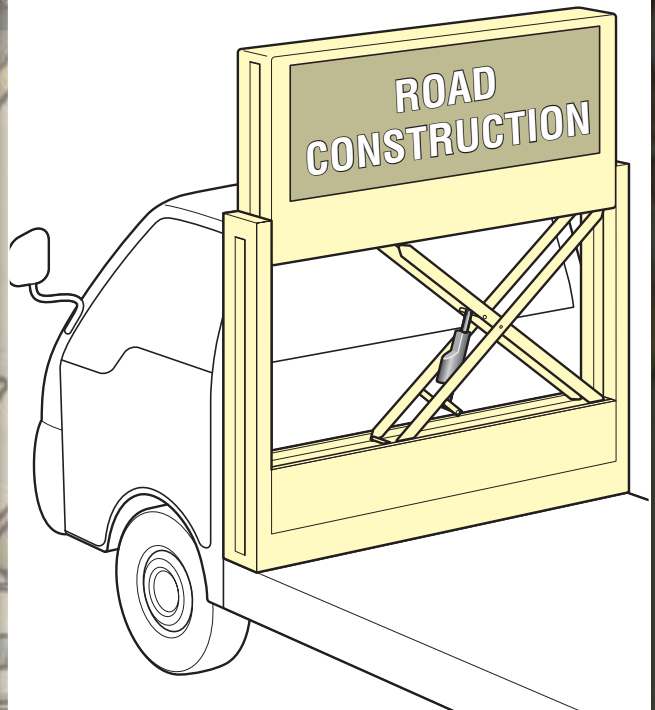
Roof box



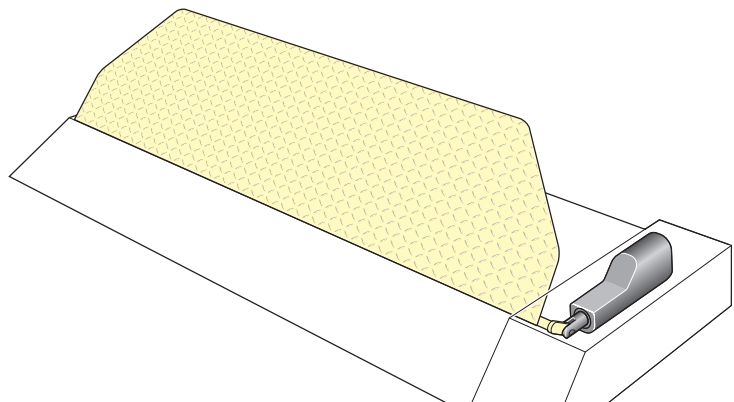
Parking gate



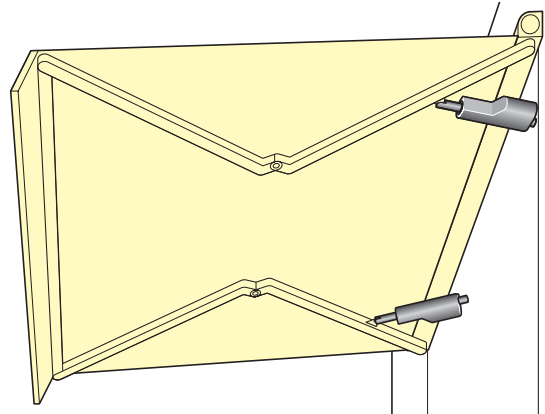
Road construction vehicle



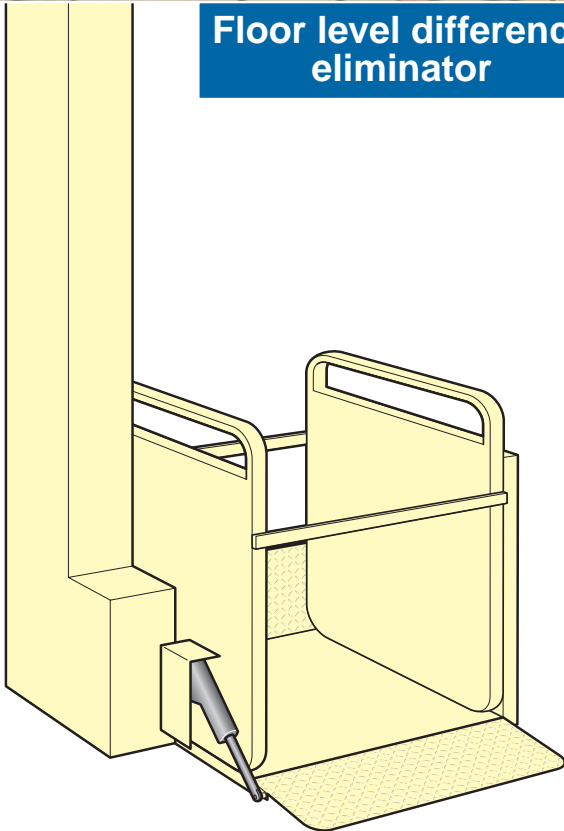
Metered Parking



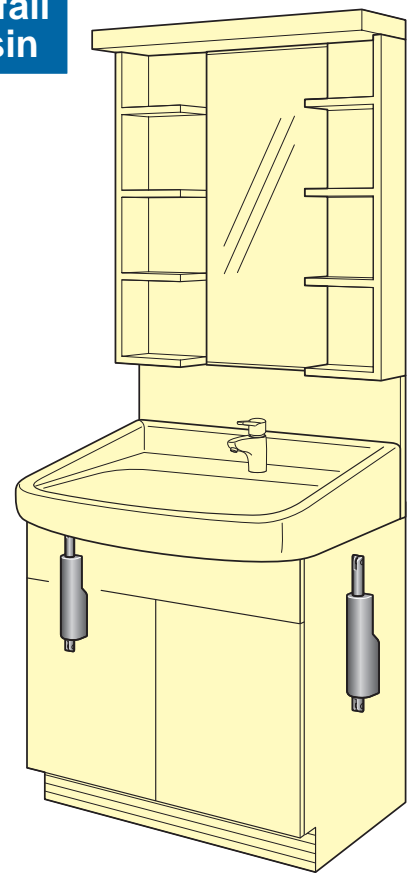
**Motorized hood for a terrace**



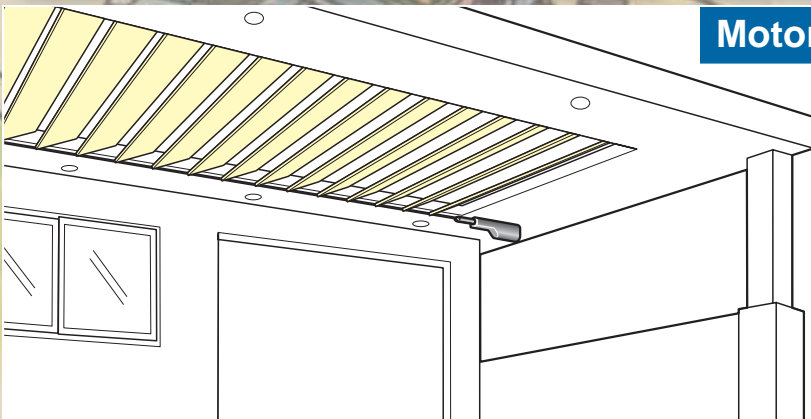
**Floor level difference eliminator**



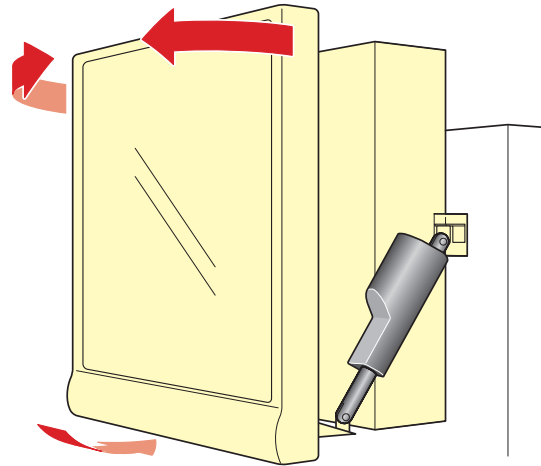
**Rise-and-fall wash basin**



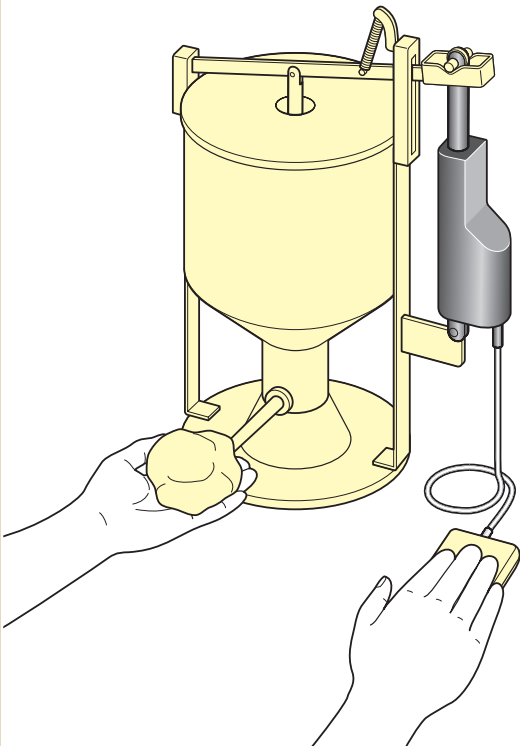
**Motorized louver for light control**



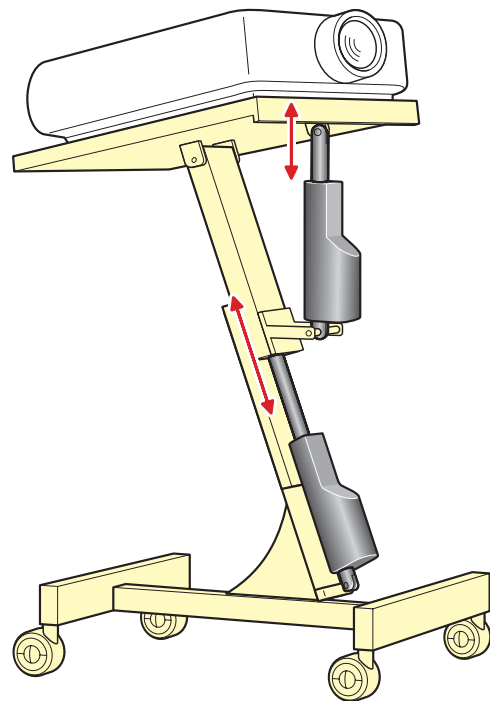
PDP pan, tilting unit



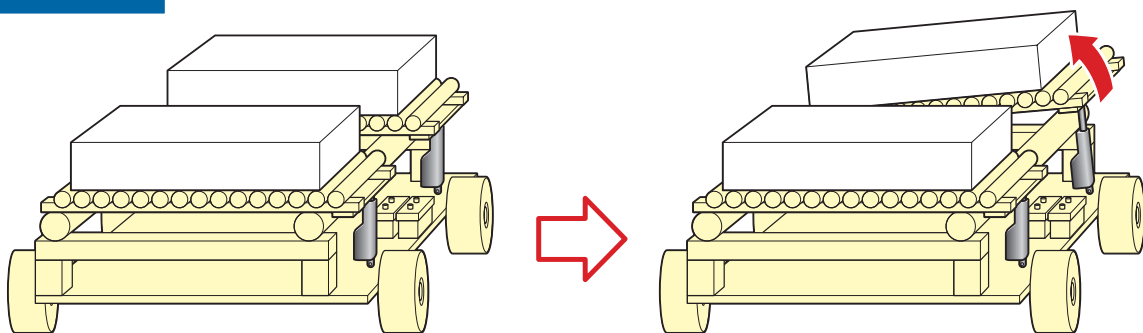
Dispenser / Injector



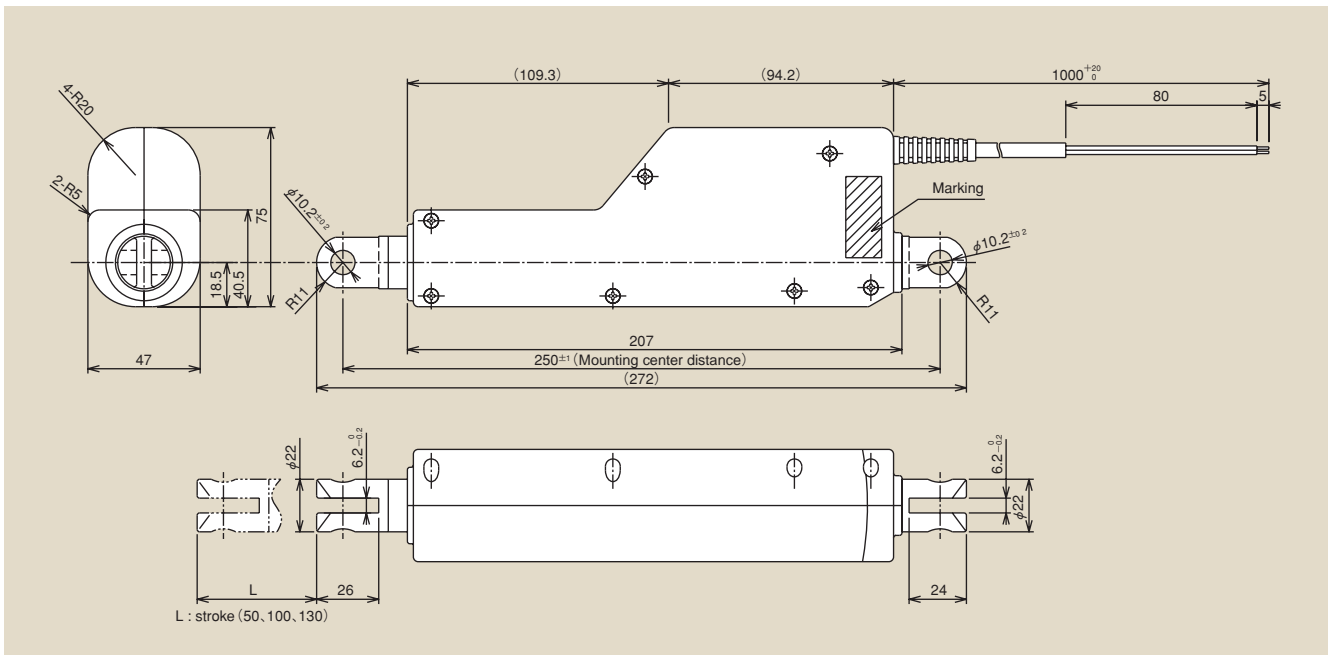
Projector stand



Carrier truck



## External Dimensions of CRES



## CRES Model Number Coding

**CRES 200 - 130 - 12 - E**

①      ②      ③      ④      ⑤

①	Model number	CRES
②	Representative thrust	200: 196 N (20 kgf) 500: 490 N (50 kgf)
③	Stroke length	50 mm, 100 mm, 130 mm
④	Motor voltage	12: 12 VDC 24: 24 VDC
⑤	Special option	No symbol: none E: Connector, etc. (mounted at THK) S: Contact THK for details.

\* Standard cable has a length of 1,000 mm (with wire end Pre-Soldered).

## CRES Lot Number Indication Details

Item	Year of manufacture	Month of manufacture	Date of manufacture	Type①	Type②	Type③
Indication	05: 2005	1: January	01: 1 <sup>st</sup>	1: CRES 500 - 12V	05: stroke 50	0: standard
	06: 2006	2: February	02: 2 <sup>nd</sup>	2: CRES 200 - 12V	10: stroke 100	E: special option
	07: 2007	.	.	3: CRES 500 - 24V	13: stroke 130	S: special option
	.	.	09: 9 <sup>th</sup>	4: CRES 200 - 24V		
	.	9: September	10: 10 <sup>th</sup>			
	.	X: October	11: 11 <sup>th</sup>			
	.	Y: November	.			
.	Z: December	.				

Example of lot number indication: CRES 200 - 130 - 12 - E (manufactured May 1, 2007)

Marking : **07501213E**

Year of manufacture      Date      Type②  
Month      Type①      Type③

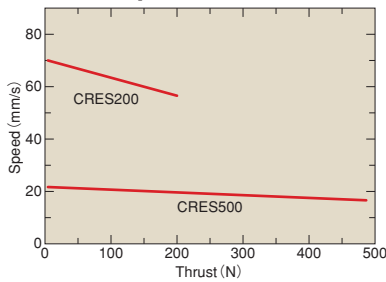
## Specifications of CRES

### Basic specifications

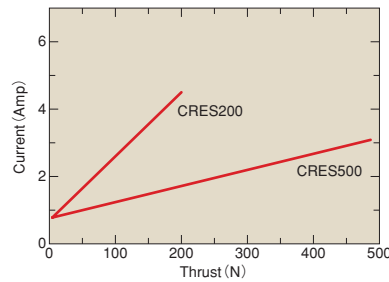
Item	Unit	CRES200	CRES500
Rated thrust	N	196±10%	490±10%
Average speed (at rated thrust)	mm/s	55±10%	15±10%
Screw lead	mm	6	2
Rated voltage	DCV	12±15% / 24±15%	
Rated current	A	4.3 (12V) / 2.2 (24V)	
Service temperature environment	-	-10 to 60°C (20 to 80% RH or less)	
Storage temperature environment	-	-20 to 70°C (20 to 80% RH or less)	
Maximum stroke (at point where the limit switch is activated)	mm	50 / 100 / 130	
Duty cycle	%	10	
Service life time (during operation at 10% duty and rated thrust)	h	400	
Mass	g	700 or less	

\* The axial holding thrust of CRES200 is 100 N (factory initial value).

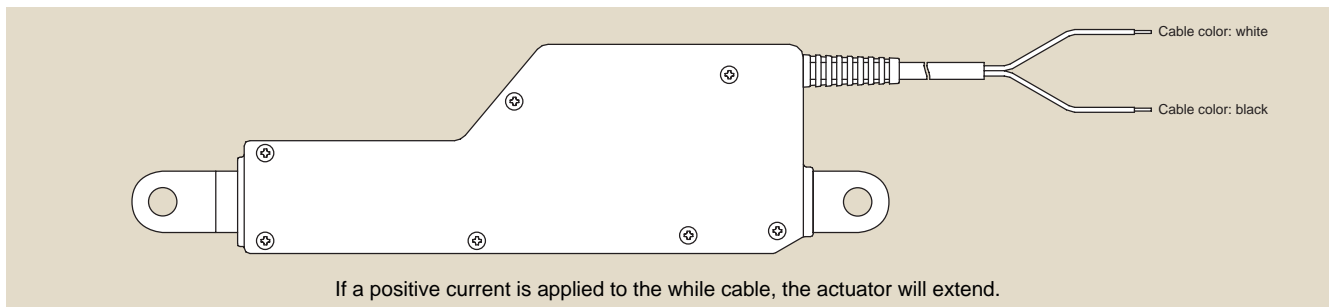
### Thrust-speed characteristic



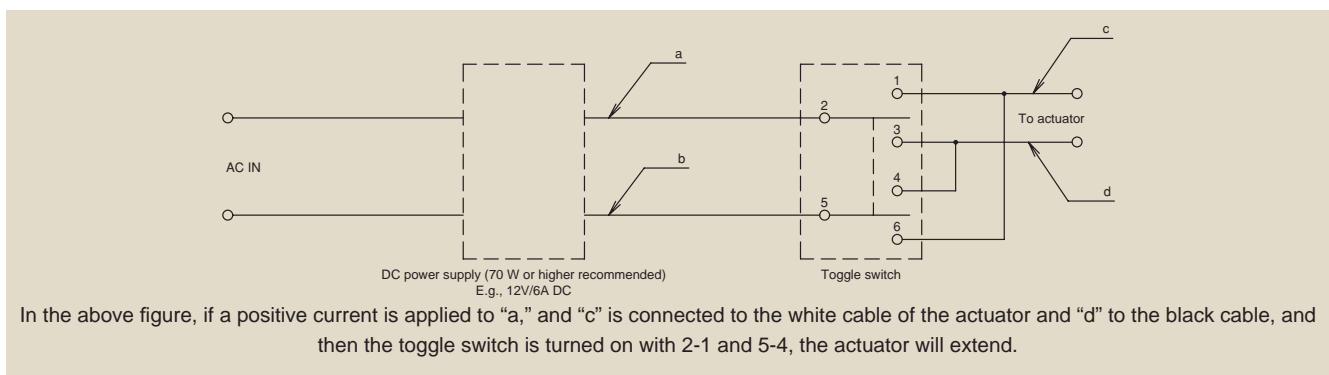
### Thrust-current characteristic



## Traveling Direction of CRES



## Example of Wiring CRES



## Other

For inquiries such as use of the actuator in a special environment, change of the motor's rated voltage and handling of the connector, contact THK.

## Precautions on Use

- Do not apply a moment load to the rod.
- The current of the power supply must not exceed 8 A in case of 12 V or 4 A in case of 24 V. Exceeding these values will generate heat or cause fire.
- The stroke is controlled end to end at 0 to 50, 100 and 130. If you desire to stop the actuator between the stroke ends, externally provide a switch.
- At the work site, do not damage CRES by applying external force to it, cause mechanical interference with it, hinder its operation, or apply external force to it other than in the load direction.
- Use a SELV power supply. In addition, observe the maximum power consumption indication.
- In case of emergency or an anomaly with the main body, an excessive current will temporarily flow in the motor, which may damage the actuator. To prevent such damage, attach a protective device such as a fuse to the actuator before using it.
- Equip the machine system with a protective device in case a load greater than the maximum permissible load is applied to the actuator.
- The actuator does not assume use in a special environment such as at high altitude exceeding 1,500 m above sea level, in a high temperature environment, in a corrosive gas environment and under the influence of radiation.
- When changing the travel direction of the actuator, be sure to secure down time and avoid instantaneous reverse rotation. Failure to do so may shorten the service life.
- The duty cycle of the actuator is set at 10% (e.g., the actuator can operate for up to 2 minutes during a 20 minute period).
- Be sure to store the instruction manual provided with CRES in a place where the user can easily find it.

**Be sure to observe the following instructions for safely using the product.**



### Warning

#### No impact to the product

Take care not to drop the product or cause impact to it when storing, transporting, installing or using it. Doing so may cause injury or product failure.

#### Prohibition of disassembly

Do not disassemble, alter or repair the product by yourself. Doing so may cause fire, electric shock or product failure. In addition, if you open the cover of the product, we will not provide warranty.

#### Do not use the product other than at the designated voltage

Do not use the product other than at the designated supply voltage. Doing so may cause fire or electric shock.

#### Unplug the power cable in case of anomaly

If you notice any abnormal state such as abnormal noise, smoke or unusual odor, unplug the power cable. Using the product in an abnormal state may cause fire, electric shock or product failure.

#### Do not touch the moving part

Do not touch the moving part during operation. Take particular care not to let children touch it. Failure to observe it may cause injury or product failure.

# ROD ACTUATOR

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# CRES

## THK CO., LTD.

HEAD OFFICE 3-11-6, NISHI-GOTANDA, SHINAGAWA-KU, TOKYO 141-8503 JAPAN  
INTERNATIONAL SALES DEPARTMENT PHONE:+81-3-5434-0351 FAX:+81-3-5434-0353

Global site : <http://www.thk.com/>

### NORTH AMERICA

THK America, Inc.

#### ●HEADQUARTERS

Phone:+1-847-310-1111 Fax:+1-847-310-1271

#### ●CHICAGO OFFICE

Phone:+1-847-310-1111 Fax:+1-847-310-1182

#### ●NEW YORK OFFICE

Phone:+1-845-369-4035 Fax:+1-845-369-4909

#### ●ATLANTA OFFICE

Phone:+1-770-840-7990 Fax:+1-770-840-7897

#### ●LOS ANGELES OFFICE

Phone:+1-949-955-3145 Fax:+1-949-955-3149

#### ●SAN FRANCISCO OFFICE

Phone:+1-925-455-8948 Fax:+1-925-455-8965

#### ●BOSTON OFFICE

Phone:+1-781-575-1151 Fax:+1-781-575-9295

#### ●DETROIT OFFICE

Phone:+1-248-858-9330 Fax:+1-248-858-9455

#### ●TORONTO OFFICE

Phone:+1-905-820-7800 Fax:+1-905-820-7811

### SOUTH AMERICA

THK Brasil LTDA

Phone:+55-11-3767-0100 Fax:+55-11-3767-0101

### EUROPE

THK GmbH

#### ●EUROPEAN HEADQUARTERS

Phone:+49-2102-7425-0 Fax:+49-2102-7425-217

#### ●DÜSSELDORF OFFICE

Phone:+49-2102-7425-0 Fax:+49-2102-7425-299

#### ●FRANKFURT OFFICE

Phone:+49-2102-7425-650 Fax:+49-2102-7425-699

#### ●STUTT GART OFFICE

Phone:+49-7150-9199-0 Fax:+49-7150-9199-888

#### ●MÜNCHEN OFFICE

Phone:+49-8937-0616-0 Fax:+49-8937-0616-26

#### ●U.K. OFFICE

Phone:+44-1908-30-3050 Fax:+44-1908-30-3070

#### ●ITALY MILANO OFFICE

Phone:+39-039-284-2079 Fax:+39-039-284-2527

#### ●ITALY BOLOGNA OFFICE

Phone:+39-051-641-2211 Fax:+39-051-641-2230

#### ●SWEDEN OFFICE

Phone:+46-8-445-7630 Fax:+46-8-445-7639

#### ●AUSTRIA OFFICE

Phone:+43-7229-51400 Fax:+43-7229-51400-79

#### ●SPAIN OFFICE

Phone:+34-93-652-5740 Fax:+34-93-652-5746

#### ●TURKEY OFFICE

Phone:+90-216-362-4050 Fax:+90-216-569-7150

THK France S.A.S.

Phone:+33-4-3749-1400 Fax:+33-4-3749-1401

### CHINA

THK (CHINA) CO.,LTD.

#### ●HEADQUARTERS

Phone:+86-411-8733-7111 Fax:+86-411-8733-7000

#### ●SHANGHAI OFFICE

Phone:+86-21-6219-3000 Fax:+86-21-6219-9890

#### ●BEIJING OFFICE

Phone:+86-10-8441-7277 Fax:+86-10-6590-3557

#### ●CHENGDU OFFICE

Phone:+86-28-8526-8025 Fax:+86-28-8525-6357

#### ●GUANGZHOU OFFICE

Phone:+86-20-8333-9770 Fax:+86-20-8333-9726

THK (SHANGHAI) CO.,LTD.

Phone:+86-21-6275-5280 Fax:+86-21-6219-9890

### TAIWAN

THK TAIWAN CO.,LTD.

#### ●TAIPEI HEAD OFFICE

Phone:+886-2-2888-3818 Fax:+886-2-2888-3819

#### ●TAICHUNG OFFICE

Phone:+886-4-2359-1505 Fax:+886-4-2359-1506

#### ●TAINAN OFFICE

Phone:+886-6-289-7668 Fax:+886-6-289-7669

### KOREA

SEOUL REPRESENTATIVE OFFICE

Phone:+82-2-3468-4351 Fax:+82-2-3468-4353

### SINGAPORE

THK LM SYSTEM Pte. Ltd.

Phone:+65-6884-5500 Fax:+65-6884-5550

### INDIA

BANGALORE REPRESENTATIVE OFFICE

Phone:+91-80-2330-1524 Fax:+91-80-2314-8226

