

# Frog



BELOW-GROUND  
OPERATOR FOR SWING  
GATES UP TO  
3.5 M (11.5 FT)  
PER GATE LEAF



**CAME**

# It's out-of-sight.

Frog is the buried solution suggest for all swing gates measuring up to 3.5 m (11.5 ft) in length, per gate leaf.

The concealed operator makes it ideal for modern elegantly designed gates. Its electromechanical movement is regular in all working situations, even the most extreme.



Outside photocells

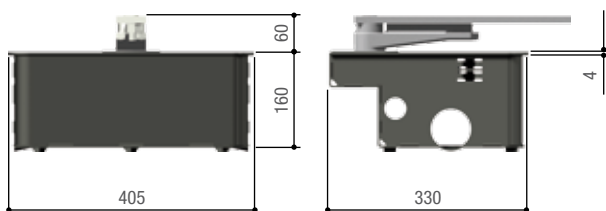
Outside selector switch



Low consumption LED flashing light

Inside photocell

## Dimensions (mm)



# Benefits become solutions.



## DESIGNED TO WITHSTAND ANYTHING

The rust-proofed stainless-steel foundation box, and cataphoresis treatment, give this product a high degree of durability over time (it is also available in AISI 304).

The IP67 protection rating makes it extremely functional, thanks to its impermeability, even the worst of conditions.

## BEFORE IS BETTER

Installing Frog is simple and the foundation box is set up so that, in newly installed systems, the gate can be automated at a later date.

So, choosing the buried solution ahead of time is advisable, so that you can apply a gearmotor at your leisure.

## TOTAL CONTROL

The encoder electronics ensure safe movement of the gate leaf even during slow downs, as it detects any obstructions during movement. The control panel runs regular self-diagnosing checks of the safety devices (that is, photocells and sensitive safety edges) before the gate even moves (only for the ZM3E).

## SPECIAL OPENINGS

To better exploit entry and exit areas, our catalog also offers special levers so the gate can rotate 180°.



## EN TESTED safety

An electromechanical EN TESTED branded system always ensures safe controlled operation of moving gates, in compliance with current legislative standards in terms of impact forces.



## Guaranteed by 24 Volts

Systems running at 24 Volts are super safe to use and very reliable under intense working conditions, such as those found at residential apartment complexes and industrial facilities. Moreover, 24 Volt systems work even during power outages, thanks to the optional batteries.



## Read up at [came.com](http://came.com) about the full range of Came products!

Came is a market leading home, industrial, and special technological projects automation manufacturing company.

A full range of household solutions: from operators for gates and garage doors, to shutter and awning winding motors, and even home automation control, to burglar proof and video entry systems. Technology and reliability to serve your business, thanks to solutions designed for powering large industrial doors, automatic doors, street barriers, turnstiles, access control systems and parking facilities.





## CUSTOMIZED ELECTRONICS FOR YOUR NEEDS!

Frog is available in the 230 V AC and 24 V DC versions.

The table shows the main characteristics of the control panels, matched to the gearmotors.



GARANZIA QUALITÀ ORIGINALE

Came products are entirely designed and made in ITALY



Came S.p.A. is Quality and Environmentally certified by  
**UNI EN ISO 9001**  
**UNI EN ISO 14001**

### CONTROL PANEL

	FROG-A FROG-AV	FROG-AE FROG-A FROG-AV	FROG-A24E	FROG-A24E	FROG-A24	FROG-A24
	ZA3N	ZM3E	ZLJ24	ZLJ14	ZL170N	ZL19N
<b>SAFETY FEATURES</b>						
SELF-DIAGNOSING safety devices		●	●	●		●
WAIT obstruction		●	●	●		
PARTIAL STOP	●	●	●	●	●	●
OBSTRUCTION DETECTED in front of photocells	●	●	●	●	●	●
Device for CONTROLLING MOVEMENT and DETECTING ANY OBSTRUCTIONS			●	●		
<b>CONTROL FEATURES</b>						
PEDESTRIAN OPENING one gate leaf		●	●	●		●
PARTIAL OPENING one gate leaf	●	●	●	●		
OPEN ONLY from transmitter and/or button	●	●	●	●	●	●
OPEN ONLY or CLOSE ONLY button connection	●	●	●	●	●	●
OPEN-STOP-CLOSE-STOP from transmitter and/or from button	●	●	●	●	●	●
OPEN-CLOSE-INVERSION from transmitter and/or from button	●	●	●	●	●	●
MAINTAINED ACTION	●	●	●	●	●	●
1ST GATE LEAF OPENING DELAY	●	●	●	●	●	●
2nd GATE LEAF OPENING DELAY	●	●	●	●	●	●
<b>CHARACTERISTICS AND ADJUSTMENTS</b>						
CYCLE LAMP connection	●	●	●	●	●	●
COURTESY LAMP connection		●	●	●		
ELECTROLOCK/ELECTROBLOCK and/or ANTI RAMMING connection	●	●	●	●	●	●
Adjustable AUTOMATIC RECLOSING TIME	●	●	●	●	●	●
OPENING and/or CLOSING slow down		●	●	●	●	●
EMERGENCY BATTERY operation (optional)			●	●	●	●
Adjustable GATE TRAVEL and SLOW DOWN Speeds*		●*	●	●	●	●

\* NOTES: only slow down speed

● 230 V AC ● 24 V DC

### MODEL

	FROG-A • FROG-AE	FROG-AV	FROG-A24 • FROG-A24E
Protection rating (IP)	67	67	67
Power supply (V - 50/60 Hz)	230 AC	230 AC	230 AC
Power supply to motor (V - 50/60 Hz)	230 AC	230 AC	24 DC
Draw (A)	1.9	2.5	15 Max.
Power (W)	200	300	180
Opening time at 90° (s)	18	9	ADJUSTABLE
Duty cycle (%)	30	30	INTENSIVE USE
Torque (Nm)	320	240	320
Operating temperature (°C / °F)	-20 ÷ +55 / -4 ÷ +131	-20 ÷ +55 / -4 ÷ +131	-20 ÷ +55 / -4 ÷ +131
Motor's heat protection (°C / °F)	150 / 302	150 / 302	-

● 230 V AC ● 24 V DC

### LIMITS TO USE (MAXIMUM LEAF LENGTH)

Leaf Length	FROG-AV 300 Kg 660 lb	FROG-A 800 Kg 1,770 lb	FROG-AE 800 Kg 1,770 lb	FROG-A24 800 Kg 1,770 lb	FROG-A24E 800 Kg 1,770 lb
1.3 m 4.2 ft					
2 m 6.6 ft					
* 2.5 m 8.2 ft					
* 3.5 m 11.5 ft					

\*NOTES: it's advisable to fit an electric lock onto the gate leaf.  
 Maximum opening: 110°

● 230 V AC ● 24 V DC

SOME VERSION MAY NOT BE AVAILABLE IN YOUR COUNTRY.  
 FOR MORE INFORMATION PLEASE CHECK WITH YOUR  
 LOCAL AUTHORIZED DEALER.



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