

AUTOMATIC VEHICLE BARRIER ARM



FGES-VBPAO, FGES-VBFAO, FGES-VBBAO



Key Features:

- **Adjustable Speed Drive (ASD) driven AC motor capable of delivering stable and smooth operation**
- **An adaptive angular controller that requires minimal-to-no calibration and maintenance**
- **AC motor integrated movement which boasts reliability while maintaining low friction**
- **Green, energy-efficient and environmentally-friendly design**
- **Multiple anti-collision features**

System Overview

ASD AC Motor

Traditional barriers use basic brake-clamping systems to stop the arm movement. Although simple and widely used, this type of system will likely decrease the lifespan of the product.

To counter such a flaw, FERN360's high quality, automatic vehicle barriers utilise an adjustable speed drive coupled with the AC motor, allowing them to control the motor speed at a frequency of 1Hz during acceleration and deceleration. This makes it possible to negate any unwanted 'stuttering' that affects the barrier's gears and components, giving our product a longer operating lifespan.

Adaptive Angular Control

An innovative feature in our products is an angle sensor, which boasts a lifespan of 10 million cycles. This sensor enables a stable deceleration of the barrier arm at 5 different positions. The software does not need user maintenance nor does it require calibration.

AC Motor Integrated Movement

By using an AC motor, we have successfully achieved a product that is easy to control, stable in movement, less noisy, lower in maintenance costs and highly economical. This is due to our unique and precise design in AC motor integration that has negated 'stuttering' effects that damage the integrity of the structure and gears, giving us a reliable and well-designed machine.

Certification

The product is fully compliant with CE and RoHS standards.

Normally Closed

Barrier arms will be lowered automatically if there is a power cut, thus preventing vehicles from passing through without consent. The arm can only be raised manually during shutdown.

Going Green

With an environmentally-friendly design, the adjustable speed drive has green, energy-efficient technology that reduces energy wastage caused by excessive friction and CPU heat. Compared to traditional barriers on the market, our products are capable of saving up to 80% or more on energy consumption during idle time, which is beneficial for any Uninterruptable Power Supply (UPS) system the user wishes to utilise.

Anti-Collision

Sensitive (HVD) Coil detectors in the controller module are designed to stop the arm from lowering when vehicles are passing through, and to automatically lower the arm after the vehicle has safely passed through. Users may choose to install infrared sensors to increase the level of safety between barriers and vehicles.

Weather-Resistant Structure

The barrier operator housing is constructed from galvanised steel plates, covered with a layer of superior quality paint which is guaranteed to last under exposure to sunlight. It is also made from material that is safe for the environment in accordance with RoHS standards. The components within are protected from electrostatics, allowing them to function in harsh conditions such as negative 40° Celsius.



Automatic Vehicle Barrier Arms - Parking | FGES-VBPAO, FGES-VBFAO, FGES-VBBAO

Barrier Fence Arm (1.4, 2 and 3 second arm speed options)



Barrier Bend Arm (1.4, 2 and 3 second arm speed options)



Barrier Arm Type: Pole, Fence, and Bend options

Technical Data

Technical Data	Unit	T14	T20	T30
Barrier Arm Length	mm	3000 - 4000	3000 - 4500	6000
Arm Movement Speed	seconds	1.4	2.0	3.0
Input Voltage	V	220 ± 20%	220 ± 20%	220 ± 20%
Frequency	Hz	50 - 60	50 - 60	50 - 60
Power	W (max)	120	120	70
Lifespan	cycle	10 million	10 million	10 million
Operating Temperature	°Celsius	-40 to 75	-40 to 75	-40 to 75
MTBF	cycle	> 5 million	> 5 million	> 5 million
MTTR	hours	< 0.5 hours	< 0.5 hours	< 0.5 hours
Pedestal Dimensions	361*325*1060mm			

Ordering Information

Arm Speed	Barrier Arm Length (mm)	Pole Arm: Part Number	Bend Arm: Part Number	Fence Arm: Part Number
T14 (1.4s)	3000	FGES-VBPAO-T14-30	FGES-VBBAO-T14-30	FGBESVBFAO-T14-30
T14 (1.4s)	3500	FGES-VBPAO-T14-35	FGES-VBBAO-T14-35	FGES-VBFAO-T14-35
T14 (1.4s)	4000	FGES-VBPAO-T14-40	FGES-VBBAO-T14-40	FGES-VBFAO-T14-40
T20 (2s)	3000	FGES-VBPAO-T20-30	FGES-VBBAO-T20-30	FGES-VBFAO-T20-30
T20 (2s)	3500	FGES-VBPAO-T20-35	FGES-VBBAO-T20-35	FGES-VBFAO-T20-35
T20 (2s)	4000	FGES-VBPAO-T20-40	FGES-VBBAO-T20-40	FGES-VBFAO-T20-40
T20 (2s)	4500	FGES-VBPAO-T20-45	FGES-VBBAO-T20-45	FGES-VBFAO-T20-45
T20 (3s)	6000	FGES-VBPAO-T30-60	FGES-VBBAO-T30-60	FGES-VBFAO-T30-60

© 2020 FERN360. All rights reserved. Design and specifications are subject to change without notice. Pictures in the document are for reference only, and the actual product shall prevail.

FERN360 Limited

International Head Office: 8A Triton Drive, Albany, Auckland, New Zealand.
 Phone: +64 508 337 6360 (+64 508 FERN360) Email: info@FERN360.com
 Website: www.FERN360.com

