

SW1000

DESCRIPTIVE SPECIFICATIONS



The SW1000 is a stylish motorized gate that provides single direction or bi-directional access control.

COMMON APPLICATIONS

- Employee / Visitor Access Control
- Wheelchair / Disabled Access Control
- Bulky Item Delivery

TYPICAL INSTALLATION SITES

- Corporate Lobbies
- Health Clubs / Recreation Centers
- Entertainment Venues

FUNCTION

The SW1000 provides single direction or bi-directional access control. The SW1000 is an ideal product to provide disabled or delivery access in conjunction with our waist high or optical turnstiles. In closed or home position, the barrier is held in place by motor force and an electromechanical locking device. Upon receipt of a dry contact input from an access control system or input device such as a push button, the locking device disengages and the motorized barrier will open 90 degrees away from the signal direction.

The SW1000 is microprocessor controlled. Programmable features are factory set at appropriate levels for most applications, but various features of the product are PC programmable (see Functionality - User Customizable Features, below).

Access control readers or push buttons for patron use attach to pedestals located on either side of the gate. Activation by attendant or guard personnel can be accomplished by installing a push button or key activation device at the guard or attendant station.

An input is available for fire alarm systems. When received, the gate opens in the exit direction and remains open until the input is removed.

In the event that power to the unit is removed, the barrier can be manually moved to the open position with less than 2 lbs. of force.

The SW1000 is available as a tandem gate set - the SW1000T.

AVAILABLE CONFIGURATIONS

SW1000

The SW1000 consists of a single gate.

SW1000T

The SW1000T consists of two gates that operate in tandem. Posts are on either end with panels facing inward. The SW1000T provides approximately double the passage opening as the single gate SW1000.

AVAILABLE FINISHES

SATIN CHROME & POWDER COATED

Post cladding has a satin chrome finish (similar in appearance to satin stainless steel). Powder coating and custom plated finishes are available - see Options.

MATERIALS

POST

The gate post is fabricated from plated steel.

MOVING BARRIER

The barrier is fabricated from 0.5" (13mm) thick acrylic with abrasion resistant coating.

CONTROL, OPERATIONAL MODES & FUNCTIONALITY

CONTROL

The precise movement of the SW1000's barrier is controlled through a DC brushless motor working in conjunction with a position encoder and motor controller. Motor control software provides closed loop position control for precise movement and operational control.

Third party access systems interface to the SW1000 using voltage free dry contacts. An I/O board for connection is located inside the gate.

PASSAGE MODES

The SW1000 offers the following passage modes:

Bi-Directional Controlled Passage - In this mode, the barrier is in the closed or home position. Upon receipt of an authorization signal from either an access system or dry contact emitting control device, the barrier moves away from the signal direction to the open position (approximately 90 degrees from home). The barrier remains open for a defined dwell time, then returns to the closed position.

If an authorization signal is received while the barrier is closing, the barrier stops and returns to the open position.

Single Direction Passage - In this mode, the barrier is in the closed or home position. Upon receipt of an authorization signal from either an access system or dry contact emitting control device, the barrier moves away from the signal direction to the open position (approximately 90 degrees from home). The barrier remains open for a defined dwell time, then returns to the closed position. In this mode, the barrier opens in one direction only.

FUNCTIONALITY - USER CUSTOMIZABLE FEATURES

Prior to shipping, gates are configured with settings that are appropriate for most facilities. A summary of software configurable features is listed below:

BARRIER BREAKAWAY

The SW1000 utilizes motor force and an electromechanical brake to provide resistance against a user pushing or pulling the barrier open. When the barrier is forced, an alarm sounds, the barrier "breaks away" and then can be moved manually. After a defined time the gate resets and resumes normal operation. The force it takes to push or pull the barrier open is adjustable, up to the product maximum.

BARRIER CYCLE AND DWELL TIME

This is an adjustable feature. Opening / closing speed and dwell time is factory set. Adjustments can be made within set limits appropriate for the installation application.

BARRIER IMPACT

Should the barrier encounter an obstruction while opening or closing, the barrier will stop moving and an alarm will sound. After a defined period, the barrier resets and the gate resumes normal operation.

EMERGENCY OVERRIDE / FIRE ALARM

Activation to open the barriers in conjunction with a fire alarm system is achieved by supplying a sustained dry contact to the appropriate input point. When received, the gate opens in the exit direction and remains open until the input is removed. Upon removal, normal operation resumes.

POWER FAILURE

When power is removed from the unit, the barrier of the SW1000 can be freely moved in either direction. When pushed or pulled to the open position, the barrier remains open. When power is restored, the gate resumes normal operation.

CARD READERS

Alvarado provides an optional pedestal to mount card readers and activation devices (see Options). Devices can also be installed on existing walls, cabinetry or equipment. There is no space to attach readers or activation devices directly to the gate.

INTERFACE TO ACCESS CONTROL SYSTEM

The SW1000 is activated (opened) by supplying an isolated, voltage free, momentary dry contact at the appropriate location on the product I/O control board. Two inputs, which signal the gate to open, are available for each direction of operation.

OPTIONS

ALTERNATE FINISHES

The Post can be plated with an alternate plated finish such as bright chrome or brass. Powder coating in one of Alvarado's many colors is also available.

ALTERNATE POWER SUPPLY

A 220-240VAC, 50 Hz power supply and appropriately rated key switch are utilized.

BARRIER HEIGHT

The standard barrier height is 39" from the floor. An optional "mid" barrier height, which is 46" from the floor, is available.

BARRIER ETCHING

Customer's choice of logo/artwork may be etched on the barrier. Contact Alvarado for artwork requirements.

CONDUIT REQUIREMENTS

SW1000

PRIMARY (AC) POWER CONDUIT

.5" conduit for primary power is run up and into the Post. 110-120VAC is standard.

ACTIVATION SIGNAL CONDUIT

.5" conduit for activation signal(s) and fire alarm input. Also used for outputs, if applicable.

SW1000T

PRIMARY (AC) POWER CONDUIT

.5" conduit for primary power is run up and into the Master Gate.

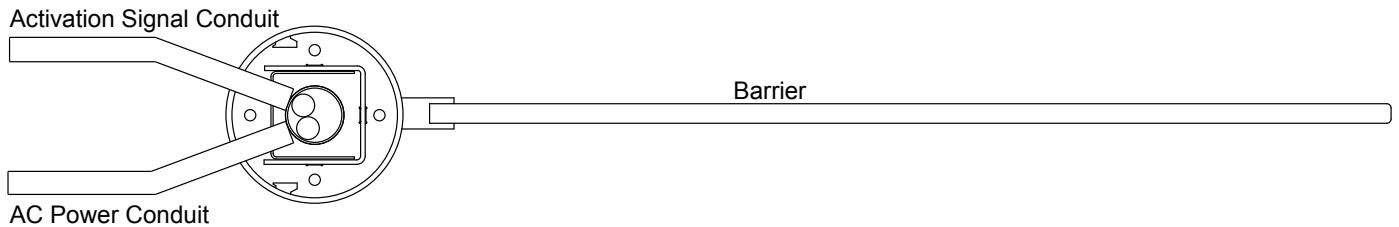
LOW VOLTAGE (DC) POWER CONDUIT

.5" conduit for DC power is run from the Master Gate to the Slave Gate.

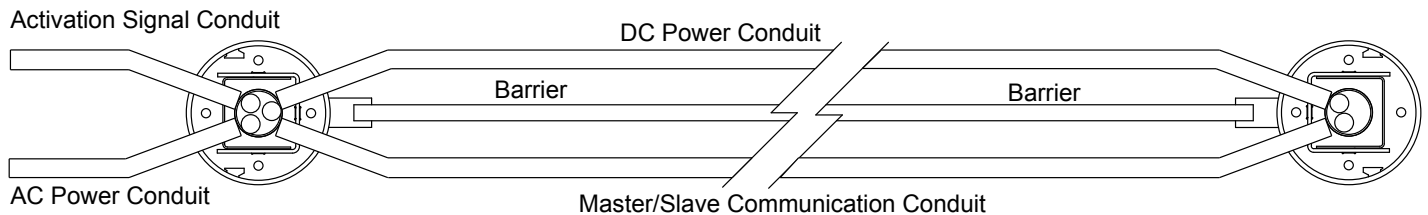
MASTER/SLAVE COMMUNICATION CONDUIT

.5" conduit that tee's off the Activation Signal Conduit at the Master Gate. This conduit is used to run communication signal wire between the Master Gate and Slave Gate. The communication signal wire synchronizes barrier opening and closing between the Master and Slave Gate.

SW1000 CONDUIT



SW1000T CONDUIT



SHIPPING & SITE PREPARATION

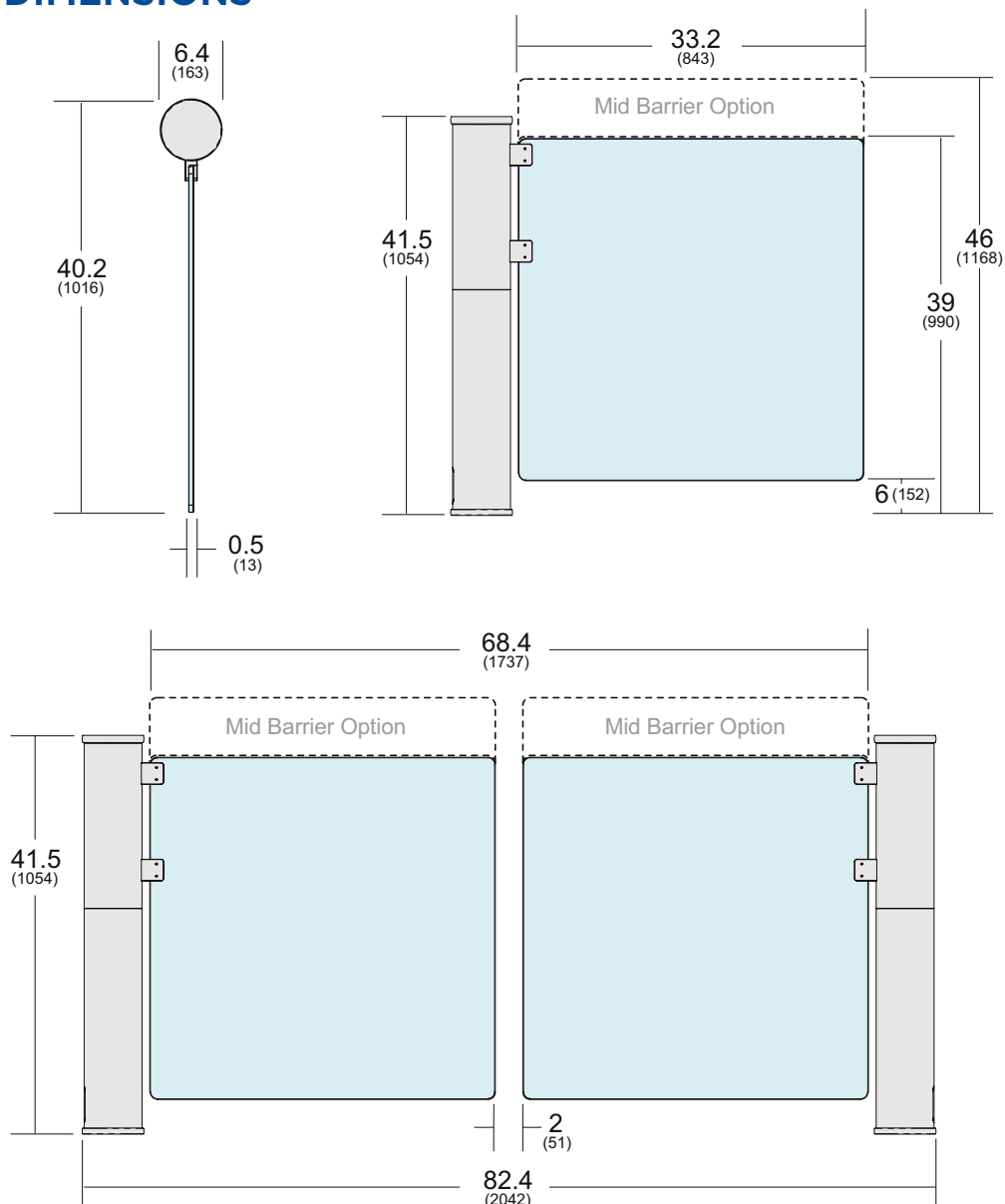
SHIPPING

The SW1000 is shipped with mounting hardware and assembly and operational instructions.

SITE PREPARATION

The SW1000 must be installed on a firm foundation in a manner that allows the required power and signal cabling to be pulled into the cylindrical tower. The slab platform should be a minimum of 4" deep, level concrete. Installation should be performed by a skilled installer following Alvarado's instructions. Drawings and installation manuals are available online.

TECHNICAL DIMENSIONS



| ELECTRICAL | | |
|---------------------------------|---|--|
| | DESCRIPTION | |
| POWER SUPPLY | 100 - 240 VAC, 6.0 A, 50/60 Hz | |
| OPERATIONAL VOLTAGE | Primary power is stepped down and rectified for low voltage 24 VDC, 12 VDC & 5 VDC operation | |
| ON/OFF KEY SWITCH | An on/off key switch is located on each gate | |
| FUSE PROTECTION | A 2.5 amp (slo-blo) fuse is installed on each gate | |
| SURGE PROTECTION | Alvarado suggests use of surge protection equipment in connection with the installation to protect electronics. | |
| DRIVE MOTOR | 24V BLDC | |
| WEIGHT, DIMENSIONS, ENVIRONMENT | | |
| | STANDARD | METRIC |
| PRODUCT WEIGHT* | 105 lbs | 48 kg <small>*Weight for a standard gate</small> |
| SHIPPING WEIGHT** | 280 lbs | 127 kg <small>**Includes weight of shipping crate(s)</small> |
| HEIGHT | 41.5" | 1054 mm |
| WIDTH | 40.4" | 1026 mm |
| DEPTH | 6.4" | 163 mm |
| OPERATING TEMP. RANGE | 14° F to 140° F | -10° C to 60° C |
| STORAGE TEMP. RANGE | 14° F to 140° F | -10° C to 60° C |
| RELATIVE HUMIDITY | 20% - 90% (non-condensing) | |

WARRANTY

For a period of 12 months from the date of purchase, Alvarado will replace or repair, at Alvarado's option, any products or parts which are defective in materials or workmanship, provided recommended installation and maintenance procedures are followed. This warranty is void if damage is due to improper installation, maintenance or use. This warranty is limited to parts only, and does not cover labor or shipping charges incurred in connection with the removal or replacement of warranted products or parts.

This warranty is expressly made in lieu of any and all other warranties, expressed or implied, including, but not limited to implied warranties of merchantability and fitness for a particular purpose. Alvarado shall not be liable for any loss or damage, directly or indirectly, arising from the use of purchased products. In no event shall Alvarado be liable to buyer for consequential damages, special damages, incidental damages, loss of use, business interruption, loss of profits, or damages of any kind arising out of the use or inability to use a purchased product. In no event shall Alvarado be liable for damages which exceed the purchase price of a covered product.