

ARGUS

SWINGING BARRIER OPTICAL TURNSTILE

With a focus on European design and engineering, the architecturally inspired features and materials of the ARGUS make it a centerpiece for premium lobbies worldwide.



COMMON APPLICATIONS

- Employee and Visitor Access Control
- Pedestrian traffic flow control
- Time and Attendance Integration

TYPICAL INSTALLATION SITES

- Government Facilities
- Corporate Lobbies
- Health Care Facilities
- Recreation Centers

FUNCTION

The Argus 40, 60 and 80 provide bi-directional access control and other operational and passage modes (described below). In controlled passage mode, moving barriers are securely locked deterring unauthorized entry. Upon receipt of a valid card signal from an access control system, the motorized moving barriers of the turnstile open away from the user, and integrated sensors allow a single user to pass through the turnstile in the requested direction. If an unauthorized user attempts to tailgate on the entry, the unit will recognize the illegal passage, a violation alarm will sound and red notification lights will flash. Tailgate detection does not come standard with the Argus 40, but is available as an option.

The Argus utilizes tandem motorized moving barriers, distributed processing and integrated optical sensors to control access. The optical sensors detect patrons, determine the direction of patron movement and (in conjunction with the facility access system) detect unauthorized users. In addition to detecting "piggybacking" or "tailgating" on allowed entries, the Argus' sensors prevent the moving barriers from closing on users. If the moving barriers do encounter an obstruction on either opening or closing, the Argus' sensor detects the obstruction and the unit takes corrective action, precisely controlling the motors to minimize impact.

While access control throughput will depend on the access control system and readers used, the Argus supports extremely rapid throughput. It will "stack" valid scans and process patrons as fast as they can walk through the turnstile.

Alvarado dormakaba Group™ also offers a web-based monitoring and scheduling application (optional) called GateKeeper. This application provides a virtual desktop of installed turnstiles, providing an attendant a convenient method to view and control day-to-day operational functions such as alarm notifications, implementing one-time passages, and changing turnstile operational modes.

GateKeeper also includes a scheduling function that allows a facility to automate changes in turnstile operational modes. This convenient functionality allows facilities to automatically implement desired turnstile operational changes at preset times such as at the beginning and end of shifts, lunch times, weekends, holidays, etc. GateKeeper provides a complete log of turnstile activity, for such items as activations, alarm conditions, and operational mode changes. Activities of attendants using GateKeeper are tracked as well.

More information about GateKeeper is available in the Available Related Applications section of this document.

AVAILABLE MODELS

ARGUS 40

Argus 40 is a compact model suitable for limited space installation where the length of the cabinet needs to be considered, such as elevator banks or certain reception desk areas. The lane is just 47-1/4" (1200 mm) in length, but still offers full functionality to meet safety requirements without compromise.



Argus 40 with standard Deep Black finish.

ARGUS 60

Argus 60 is a longer model. The lane is 64-15/16" (1650 mm) in length and offers an increased safety level with a vertical strip installed as an additional scanner. Optional full height moving barriers offer increased security. An easy-to-understand user guidance system with optional intuitive cueing lights in the inlay and colored light signals directly on the scan plate ensures a high level of convenience. Adjustable ambient lighting is integrated for aesthetics.



Argus 60 with standard Corporate Satin finish.

ARGUS 80

Argus 80 is the longest available model. The lane is 65-3/8" (1660 mm) in length and offers a high-quality, solid, and elegant design that provides security in all directions and in all situations. The one-piece Full Cast Layer design of the frame sections projects a refined look with the appearance of an endless hand rail. As with the Argus 60, the options are variable—different security modules, color combinations and moving barrier heights, as well as ambient cue lighting and ambience lighting are available.



Argus 80 with standard Deep Black finish.

MATERIALS

PROFILE AND INLAY

The profile and inlay elements in the hand rails and in the front of the side panels are made of aluminum.

DRIVE UNIT

The low energy drive units are made of aluminum.

SIDE PANES AND SCAN PLATE

The side panels on the inside and outside of the passage lane as well as the scan plates are made of tempered glass. The Argus 40 and 60 are available without side panes.

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MOVING BARRIER PANELS

The two moving barrier panels are made of 3/8" (10mm) tempered laminated glass. Clear Polycarbonate moving barriers are available.

AVAILABLE STANDARD FINISHES

CORPORATE SATIN

Aluminum Profile and Drive Unit: Niro N 700 | Aluminum Inlay: White P 100 | Glass Side Panes: White G 810 (Clear G 800 for Argus 40) | Glass Scan Unit: Black G 880 | Glass Moving barrier Panels: Clear G 800

DEEP BLACK

Aluminum Profile and Drive Unit: Black P 190 | Aluminum Inlay: Silver N 190 | Glass Side Panes: Black G 880 (Clear G 800 for Argus 40) | Glass Scan Unit: Black G 880 | Glass Moving barrier Panels: Clear G 800

For additional finish options see page 10.

AVAILABLE CONFIGURATIONS

ARGUS / ARGUS-E

The Argus consists of a pair of end cabinets with moving barriers that create a single 25-9/16" (650 mm) wide passageway. The Argus-E is an extension center cabinet, with the same dimensions as an end cabinet, used to create additional turnstile passage lanes with the addition of a single cabinet. For example, one Argus and one Argus-E would be used to create two lanes. Additional extension center cabinets are used to create additional lanes; e.g., one Argus and two Argus-Es create three lanes. An unlimited number of center cabinets can be added.



25-9/16" passage width - low-height moving barriers

ARGUS-A / ARGUS-E-A

The Argus-A consists of a pair of end cabinets with moving barriers that create a single 36" (915 mm) wide passageway. The Argus-E-A is an extension center cabinet with wider moving barriers to allow an additional 36" passage lane to be created with the addition of a single cabinet as described in the section above. An unlimited number of center cabinets can be added.



Multi-lane configuration with 36" passage width on left; 25-9/16" passage width on right - low-height moving barriers

USING TURNSTILE LANES WITH DIFFERENT SIZED MOVING BARRIERS

Center cabinets that have a 25-9/16" (650 mm)" passage barrier on one side and 36" (915 mm) wide barrier, or different height barrier, on the other side are available.

CONTROLS, OPERATIONAL MODES AND FUNCTIONALITY

CONTROL MECHANISMS

The precise movement of the Argus's motorized moving barriers is accomplished through a low energy 24V brushless motor. A main turnstile control board runs the operational application and interfaces to the motor control board and LED board over an internal, high-speed serial bus. The main turnstile control board also interfaces to the configuration and administrative applications, Pavis 3 and/or GateKeeper – see Available Related Applications.

OPERATING MODES

The Argus offers the following user-configurable operator modes:

- | | | |
|---|---------------------------------|---|
|  | Block | Passage blocked. The moving barriers block immediately or when they are in home position (depending on the parameter setting). |
|  | General Release | Authorization signal is not required for a user to pass through the turnstile. Moving barriers can be moved by hand and they remain open. |
|  | Continuous Release Entry | Moving barriers are closed, securing the turnstile. Upon receipt of an authorization signal from an access control system, the moving barriers move away from the user to the open position in the entry direction and the moving barriers close after each passage. This operating mode can be set to permanently open in the entry direction. |
|  | Continuous Release Exit | Moving barriers are closed, securing the turnstile. Upon receipt of an authorization signal from an access control system, the moving barriers move away from the user to the open position in the exit direction and the moving barriers close after each passage. This operating mode can be set to permanently open in the exit direction. |
|  | Single Release Entry | Moving barriers are closed, securing the turnstile. Upon receipt of an authorization signal from an access control system, the moving barriers move away from the user to the open position in the entry direction, allowing a single passage. The moving barriers return to the closed position after the user has passed through the turnstile or the time frame allowed for an entry to occur has expired. |
|  | Single Release Exit | Moving barriers are closed, securing the turnstile. Upon receipt of an authorization signal from an access control system, the moving barriers move away from the user to the open position in the exit direction, allowing a single passage. The moving barriers return to the closed position after the user has passed through the turnstile or the time frame allowed for an entry to occur has expired. |
|  | Permanently Open Entry | The moving barriers are permanently open in the entry direction. |
|  | Permanently Open Exit | The moving barriers are permanently open in the exit direction. |

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CARD CUE DISPLAY LIGHTS

An illuminated user status display is incorporated into the scan plate cue display of the Argus. The lights notify users of the status of a scan attempt. The card cue display lights are configured in the following manner:

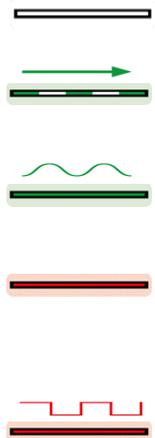
- White Reader Light** An illuminated white light means the turnstile lane is ready for card presentation.
- Green Reader Light** An illuminated green light indicates passage is allowed and/or a valid credential has been presented.
- Red Reader Light** An illuminated red light indicates passage is prohibited in the turnstile lane and the lane remains locked.



LANE STATUS LIGHTS

A light strip is visible on the top of the inlay above the card cue display light to inform the user of the lane's current status. This light can appear as a chasing light that moves in the direction of passage, a pulsing light that fades in and out, a flashing light or a static light. The lane status lights are configured in the following manner:

- White Static Light** A static white light indicates the turnstile lane is ready for operation.
- Green Chasing Light** A chasing green light indicates the lane has received an authorized credential and the moving barriers are moving to the open position.
- Green Pulsing Light** A pulsing green light indicates the lane is set for continuous release or set as permanently open.
- Red Static Light** A static red light indicates the lane is permanently closed or temporarily closed while it performs functions for a user in the opposite passage direction.
- Red Flashing Light** A flashing red light indicates the lane is blocked or has entered into an alarm condition.



FUNCTIONALITY - USER CUSTOMIZABLE FEATURES AND AVAILABLE TOOLS

Operational Adjustments	Description
Barrier Impact	Controls moving barrier operation if barriers encounter an object during operational cycle
Access Timeout	When a valid credential presented but a user does not pass through turnstile; controls time before moving barriers close and turnstile resets
Object	Controls object detection size
Tailgating	Controls tailgating sensitivity
Unauthorized Entry	Controls number of entry sensors a user can block before triggering an alarm
Blocked Sensor	Controls time before alarm is generated if sensors are blocked

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Operational Sounds / Alarms	Description	Configurable Sounds
Access Granted*	Good credential	√
Access Denied*	Bad credential	√
Unauthorized Presence*	User enters turnstile without presenting a credential	√
Tailgating/Unauthorized Passage*	Tailgating/unauthorized passage detected	√
Blocked Sensor	Sensors are not cleared	√
Unsafe to Open/Close*	Moving barriers are not opening/closing due to an unsafe condition	√
Moving barrier Impact	Moving barriers have encountered an object while moving	√

*Configurable for both entry and exit direction

Setup / Diagnostic Tools	Description	Configurable Sounds
Moving barrier Position (Home)	Moving barriers home position setting	N/A
Moving barrier Position (Open)	Moving barriers opening position setting	N/A
Startup	Appropriate startup is engaged	√
Moving barrier Lingers	Moving barriers have stayed open past the allotted time to close	√
Emergency Override Direction	Allows the installer to set the emergency override direction	N/A

In addition to the available operating modes, the Argus has a number of additional user-customizable features. These features allow turnstiles to be “tuned” to the operational requirements of an application (Pavis 3) and allow users to associate individual audio sounds with operational states and alarm conditions. Argus turnstiles also come with tools to assist service personnel with setup, diagnostics and troubleshooting.

Customizable features and custom sounds are downloaded to turnstiles via a USB C connection using the Pavis 3 application. Users may create and install their own audio sounds in the form of .wav files.

Prior to shipping, turnstiles are configured with settings and default sounds that are appropriate for most facilities. A summary of configurable features and setup/diagnostic tools is listed below.

ALARM CONDITIONS

In the event of an alarm condition, the designated alarm sound is played (see chart on previous page) and both the card cue display lights and lane status lights will illuminate red. An I/O output is also provided for most alarm conditions - see Turnstile Interface to Access Control System section.

BARRIER CYCLE TIME

This is an adjustable feature. Recommended opening speeds are 1.0 seconds for low- and mid-moving barriers and 1.5 seconds for high-moving barriers.

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MOVING BARRIER IMPACT

In the event that the moving barriers encounter resistance while opening or closing, the moving barriers will stop moving, an alarm will sound, and the card cue display lights and lane status lights will illuminate red to indicate an alarm condition. The moving barriers will automatically reset once the obstruction is cleared. The barrier impact setting is adjustable.

EMERGENCY OVERRIDE / FIRE ALARM

Activation to open the moving barriers in conjunction with a fire alarm or other life safety system is achieved by supplying a sustained dry contact to the Argus. During emergencies the Argus' moving barriers will open in the exit direction and remain open. Status lights and alarm notifications will turn off.

POWER FAILURE

In the event of a loss of power to the unit, the moving barriers of the Argus can be freely moved in either direction. When pushed or pulled to the open position the moving barriers will remain open. As an available option, the moving barriers can automatically open in the exit direction on power loss. See 'Automatic Opening of Barrier on Loss of Power' in Options section.

CARD READERS

SPACE FOR INTERNAL INSTALLATION OF CARD READERS

Proximity readers can be mounted on either side of the turnstile underneath the cabinet lid. The internal space available is 5.9"D x 3.5"W x 1.2"H (150 mm x 90 mm x 30 mm). Larger readers are typically mounted on an Adjustable Reader Mounting Attachment (see Options). Alvarado can also provide other custom mounting options.

TURNSTILE INTERFACE TO ACCESS CONTROL SYSTEM

Dry Contact

Single passage activation, and other functionality, is achieved by supplying an isolated, voltage-free, momentary dry contact at the appropriate location on the I/O control board. Various outputs are also available to provide information on turnstile operational status and activity. A description of available input and output signals is provided below.

Input Signal	Entry / Exit
Direction Closed	√
Good Credential (Activation)	√
Bad Credential	√
Passage - Free Pass Mode	√
Single Entry Override	√
Emergency Override / Fire Alarm	√

Output Signal	Entry / Exit
Authorized Passage	√
Unauthorized Passage	√
Unauthorized Presence	√
Sensor Blocked	√
Lingering Barrier	√

AVAILABLE RELATED APPLICATIONS

There are two additional applications that are available with the Argus.

PAVIS 3

Pavis 3 is a licensed application for integrators and service technicians.

The application allows configurable features of the Argus, provides firmware updates, changes settings, also helps to commission the unit. It is an excellent tool for service technicians to troubleshoot and maintain the product.

GATEKEEPER

GateKeeper is an optional web-based application that allows all Alvarado optical turnstiles installed at a site to be monitored and controlled from any PC that has access to the software's website, which is hosted on your local server. GateKeeper allows control of virtually all day-to-day operating functions, including designating a turnstile as entry or exit, opening or closing a turnstile, and allowing single passage overrides for guests or personnel that have forgotten their access card. The application also includes various other functions. These include an emergency "open all turnstiles" capability that is in addition to the emergency override/fire alarm capabilities described earlier in this document. The application has tiered login levels with three levels of security (User, Supervisor and Administrator). The higher permission levels enable various additional features and settings.

GateKeeper has an intuitive web interface that gives desk attendants a current "status" of all installed turnstiles. In addition, when alarm conditions occur, the application provides both visual and audio notification of what happened. All actions (such as passage overrides), and turnstile alarms, are logged. Logs may be printed or saved for record keeping or diagnostic purposes.

GateKeeper also includes a built in Event Scheduler feature. This extremely useful tool allows day-to-day operational changes that are often implemented at sites to be scheduled and automatically implemented without the need for a guard or attendant to "remember" to change settings. Event Scheduler allows operation templates to be saved and then automatically implemented at user-defined times. Examples include changing the entry status of turnstiles (entry, exit, bi-directional control or free passage) at set times of the day. Similarly, a facility may want moving barriers activated or disabled at select times and/or only specific lanes operational on weekends and holidays. This flexibility allows turnstiles to be used more efficiently, can decrease the number of turnstiles that may be needed and allows Alvarado's optical turnstiles to seamlessly integrate into a customer's operational requirements.

A single license of GateKeeper allows users to control all turnstiles installed at a single licensed site.

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OPTIONS

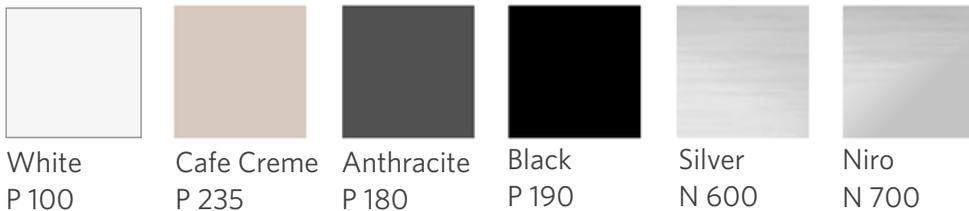
ALTERNATE FINISH OPTIONS

The finishes listed below can be applied separately to the Profile, Drive Unit, Inlay, Moving barriers and Side Panels of the Argus to create hundreds of unique color combinations.

Profile Argus 40/60/80



Drive Unit Argus 40/60/80



Inlay Argus 40/60 | Full Cast Layer Argus 80



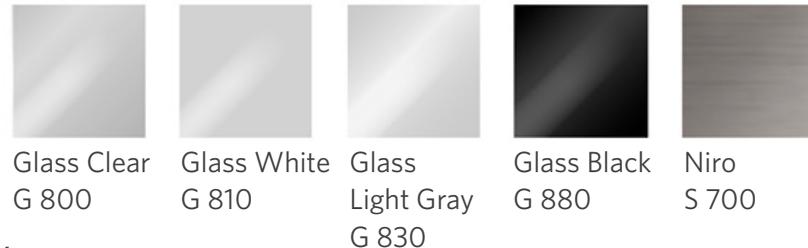
Moving barriers Argus 40/60/80



Side Panel Argus 40



Side Panel Argus 60/80



ALTERNATE POWER SUPPLY

A 220-240 VAC, 50 Hz power supply and EU wiring scheme.

ADJUSTABLE CARD READER MOUNTING ATTACHMENT

A custom made adjustable arm for an external card reader attachment.

AUTOMATIC BARRIER OPENING ON LOSS OF POWER

An enclosure houses the turnstile UL listed power supply and power buffer. On loss of power, the power buffer

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retains power to automatically open the moving barriers in the exit direction.

BARCODE IMAGER FOR VISITOR IDENTIFICATION

A 1D/2D barcode imager can be installed on either or both sides of the turnstile. The imager is installed within the top of the inlay above the standard card reader.

This option is generally used to scan visitor identification credentials. If barcodes are the primary identification credential used at the installation, discuss other barcode reader options with Alvarado.

BARRIER HEIGHTS

Moving barriers are available in low 39", mid 47.25" and high 71" heights.

BARRIER ETCHING

Customer's choice of logo/artwork may be etched on the moving barriers. Contact Alvarado for space and material limitations. This option is only available on polycarbonate moving barriers

BARRIER WIDTHS

Moving barrier widths may be customized to meet unique installation requirements.

PLATFORM

A platform for either single turnstile or multi-turnstile configurations is available. The passageway area of the platform is powder coated with a highly-textured black coating. The platform includes enclosed cable runs and eliminates the need for trenching or stubbing up conduit from floor.

CLIMB OVER DETECTION

A laser sensor is installed underneath the middle of the inlay to detect an unauthorized user attempting to climb over the lane to gain entry.

LONGER INTERCONNECT BETWEEN CABINET CABLES

Longer interconnect cables are available to accommodate installations where standard conduit runs are not available.

AMBIENT LIGHTING (DYNAMIC)

Dynamic side panel illumination combines changes to the ambient lighting of the side panel in coordination with the card cue display light. The Dynamic Side Panel Illumination option allows users and attendants to visually identify the status of each lane. Colors used with Dynamic Side Panel Illumination are white, green and red. The white color can be replaced with any color on the RGB color spectrum (standard with Pavis 3, optional app control).

White Ambient Light Unit is ready for operation

Green Ambient Light Unit is ready for passage

Red Ambient Light Unit is locked

Red Flashing Light An alarm condition has been triggered

AMBIENT LIGHTING (STATIC)

Side panels may be illuminated using any color on the RGB color spectrum. Color can be changed easily by the owner through the use of a smart phone application called Door Pilot (Bluetooth interface starter kit needed). In this state, the panels are constantly illuminated with the selected color when the turnstile is powered (standard with Pavis 3, optional app control).

CONDUIT REQUIREMENTS

PRIMARY POWER CONDUIT

The maximum diameter for primary power conduit is 1.77" (45 mm). The product standard is 110-120 VAC (use of 220-240 VAC is an option).

LOW-VOLTAGE AND COMMUNICATION CONDUIT

The maximum diameter for low voltage and communication conduit is 1.77" (45 mm). 8' (244 cm) interconnect cables are included. 20' (610 cm) and 40' (1220 cm) interconnect cables are available options.

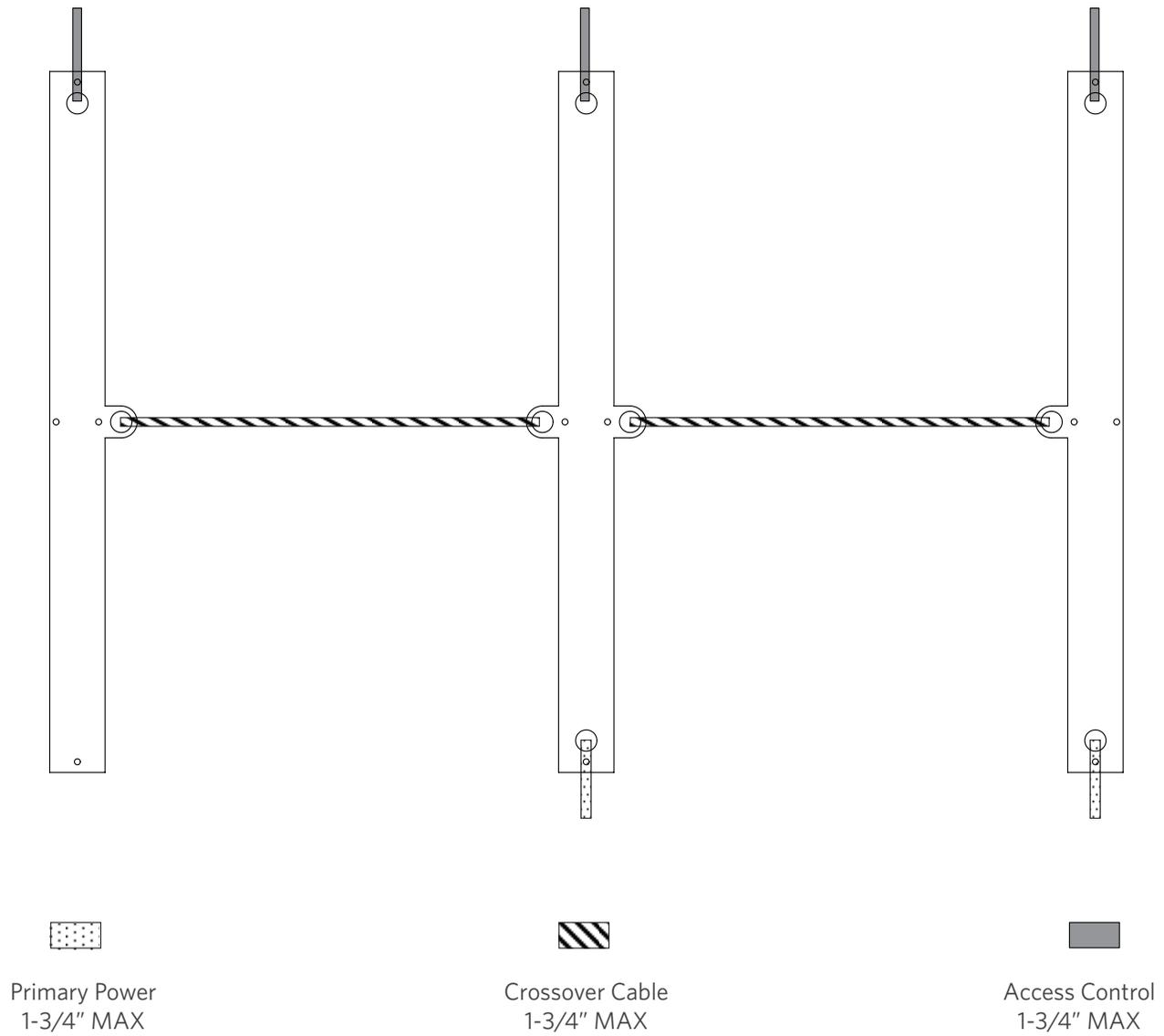
ACCESS CONTROL SYSTEM AND READER CONDUIT

The maximum diameter for the access control system conduit is 1.77" (45 mm). Alvarado does not provide cables for access control systems.

CONDUIT DIAGRAM (NEXT PAGE)

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CONDUIT DIAGRAM



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SHIPPING AND SITE PREPARATION

SHIPPING

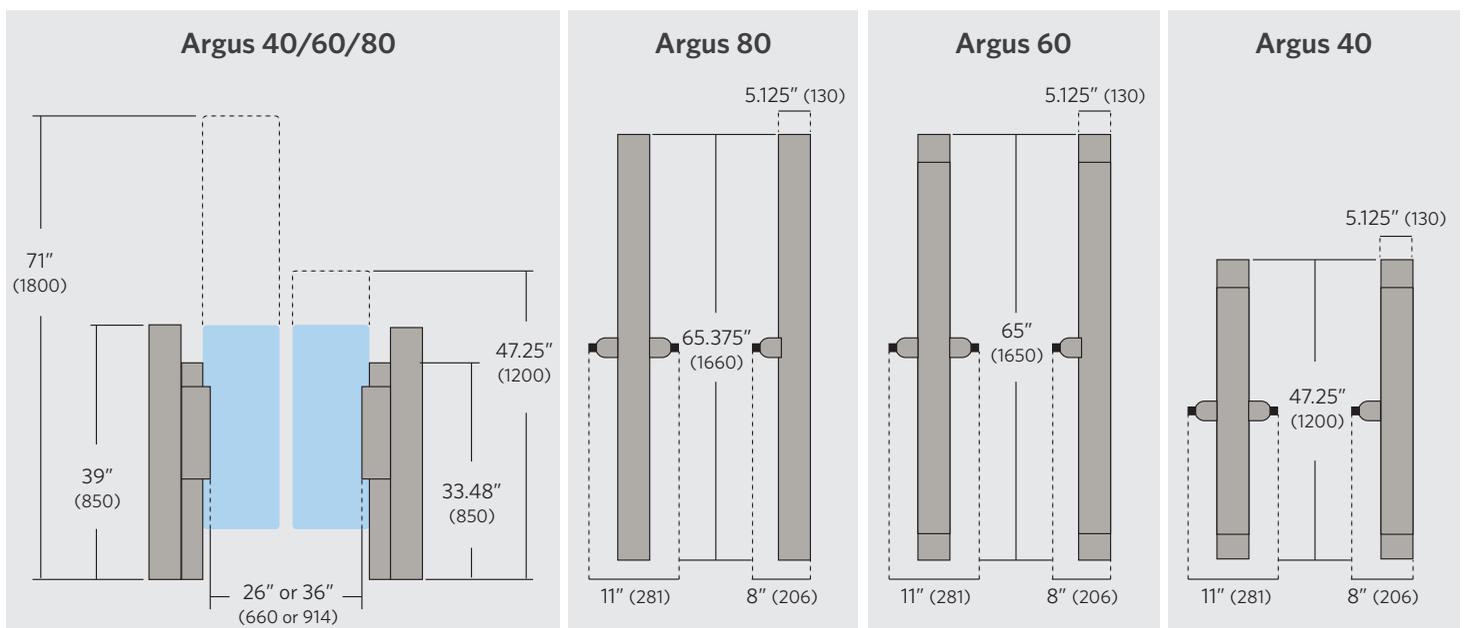
Turnstiles shipped assembled for easy installation. Each cabinet includes mounting hardware and floor templates (anchors, bolts, washers, etc.) to mount the unit to a standard, level concrete floor. Moving barriers are shipped unattached

SITE PREPARATION

Turnstiles must be installed on a firm foundation in a manner that allows the required power and access control cabling to be pulled into the turnstile cabinet. The slab platform should be a minimum of 4" (102 mm) deep, level concrete. Installation should be performed by a skilled installer following Alvarado's instructions. Detailed drawings and installation manuals are available online. Installation template (aluminum) ships with the unit.

TECHNICAL DIMENSIONS

Dimensions are shown in inches (mm). All measurements are approximate.



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Approximate Throughput Rates

Card Reader Type*	Users per minute
Proximity	30

*Access control system response is assumed to be instantaneous

Electrical	Description
UL Rated Power Supply	110-120 VAC, 60 Hz or 220-240 VAC, 50 Hz (optional)
Power Consumption	Peak: 75W / Operating: 50W / Idle: 25W
Operational Voltage	Primary power is 24VDC
Fuse Protection	A 3.5 amp fuse (slo-blo) is installed in each main cabinet.
Surge Protection	Alvarado suggests use of surge protection equipment in connection with the installation to protect electronics

Weights and Environmental

Product weight includes a standard width lane (two cabinets). Shipping weight include product with crate(s)

	Argus 40	Argus 60	Argus 80	Argus 40	Argus 60	Argus 80
Product Model	Argus 40	Argus 60	Argus 80	Argus 40	Argus 60	Argus 80
Product Weight	337 lbs.	542 lbs.	542 lbs	152 kg	246 kg	246 kg
Shipping Weight	390 lbs.	602 lbs.	602 lbs.	176 kg	273 kg	273 kg
Operating Temperature	50° to 90° F			10 to 32° C		
Storage Temperature	32° to 104° F			0 to 40° C		
Relative Humidity	15-85% (non-condensing)			--		

WARRANTY

For a period of 18 months from the date of purchase, Alvarado dormakaba Group™ 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.