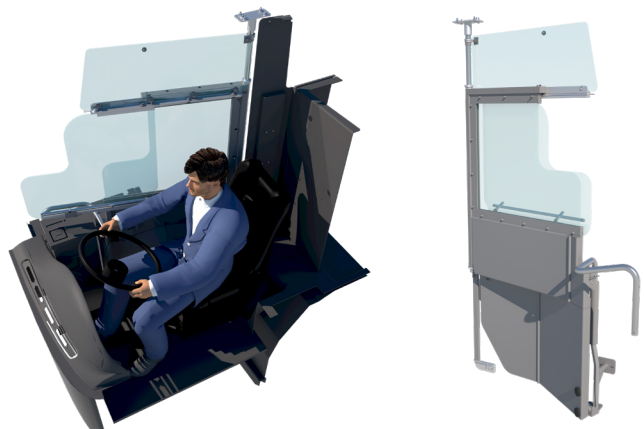


AROWGUARD MAX DRIVER PROTECTION SYSTEM (DPS): PRODUCT SPECIFICATION

Designed to provide the driver with maximum protection, the AROWGuard Max features an enhanced two-part sliding glass system that extends as far forward to the windshield as possible. This DPS design gives the driver total control by allowing them to slide the larger glass into various positions to achieve maximum protection. The new design also has a polycarbonate panel at the top of the door that provides even more protection and minimizes airborne pathogens from passing through to the driver by extending as close to the ceiling as possible.

Features:

- Extends as far forward and as close to the ceiling as possible.
- Easy to slide closed, offering the driver quick protection in routine service or in the event of an emergency.
- Utilizes the time-tested and robust AROW Global rocker latch with added ergonomic release bar.
- Low-friction track controls slide forces and provides long-lasting, reliable operation.
- Designed to attach securely to the vehicle chassis or carlines.
- In compliance with AS-2 regulations and ADA requirements.
- Primary glazing includes pyrolytic anti-glare coating, which reduces interior and exterior light reflectance to less than 2%.
- Tailored to work around existing bus equipment such as fare boxes, cameras, and stanchions.



MAX PRODUCT SPECIFICATION

General

- Manufacturer/model reference: AROW Global AROWGUARD Max Driver Protection System
- Driver Protection System (DPS) shall be easily operated.
- DPS shall prevent sudden intrusion into the bus operator's area.
- DPS shall have an upper closeout panel extending as close as possible to the ceiling.
- Forward most DPS glass shall extend as far as the forward/leading edge of the farebox at a minimum.
- DPS assembly shall not cause objectionable noise or vibration during normal road operation.
- DPS components shall not prevent access to fare box payment interface or vault door.
- DPS shall allow for a reasonable amount of verbal communication between the bus operator and passengers.
- DPS shall not obstruct the rearward view of operator to the standee line.
- All DPS parts shall be powder coated or anodized to complement the interior color of the bus.
- The DPS shall be designed with an upper glazing section and a non-transparent lower section.
- For maintenance purposes, the DPS shall take less than 30 minutes to remove and replace.
- All DPS parts shall be new and unused.

Operation

- Forward most DPS glass shall slide using a low friction track into multiple, operator selectable positions.
- Forward most DPS glass shall include a rocker latch mechanism to prevent the glass from moving during bus acceleration or braking.
- Forward most DPS glass shall operate with a force of less than 26lbf to initiate motion and a force of less than 13lbf to maintain motion and include an ergonomic latch release bar allowing for multiple touch points.
- The DPS shall not affect vehicle adherence to ADA or other international accessibility standards as pertaining to aisle clearance and conformance to the standardized "Box Test."
- The DPS shall include a stop mechanism to prevent the door from opening more than ninety-five (95) degrees or past the passenger standee line.
- The primary DPS latch mechanism release shall be inconspicuous to untrained personnel and be operated by means of a push out knob that actuates with a force of less than 5lbf.
- The DPS shall be designed to minimize glare and reflection from outside light sources during hours of darkness.
- No portion of the DPS latching mechanism or strike plate shall present a hazard during ingress or egress from the bus operator's area.
- The DPS door swing shall be accommodated by a rotary post hinge mechanism, free of pinch points.
- The DPS shall close by use of an ergonomically positioned pull handle, and latch with a force of less than 20lbf.

Materials

Glazing

- Glazing shall permit unobstructed view of the curb-side mirrors and to the bottom of the entrance door for operators included in the 95th percentile of the operator population in accordance with SAE J941.
- Glazing material shall be a minimum of 5/16" (8mm) thickness and be of a tempered / laminated construction with pyrolytic application of anti-glare coating on surfaces #1 and #4.
- Glazing material shall comply with American National Institute, Standard ANSI/SAE Z26.1-1996 S5.2, FMVSS 571.205 49CFR, and SAE J673 #1 edge standards for automotive glazing.
- Glazing material shall be properly marked indicating approved for automotive use in accordance with ANSI/SAE Z26.1-1996 S7 and FMVSS 205 S6.2 standards.
- All DPS glazing shall be easily serviceable and allow replacement in less than 5 minutes by a qualified technician.

Support Infrastructure and Overall Construction

- DPS stanchion framing shall be constructed of a minimum 11 gauge (0.120" wall) 304 stainless steel material.
- DPS stanchion mounts shall be structurally affixed to the vehicle undercarriage, chassis, or body framing.
- DPS shall be constructed with a sturdy metal frame supporting both upper and lower sections. No portion of the framing shall extend around the front edge of the glazing material.
- All DPS glazing shall be retained by 6063-T6 extruded aluminum framing and include mechanisms to provide vibration-dampening properties.
- All DPS glazing shall be retained without the use of holes, notches, or slots within 5" of the edge of the material.
- Non-transparent lower sections shall be constructed of a minimum 5/32" thickness aluminum sheet and include reinforcement members with welded construction.
- The primary DPS latching mechanism shall include a two-stage rotary slam close type latch and utilize a 9/16" diameter striker bar with fully captured engagement. The latch must be able to withstand a load of no less than 350lbf applied at the locking point, both inward (towards the driver seat) or outward (away from the driver seat).

Hardware

- DPS latch shall be serviceable and fully replaceable in less than 10 minutes by a qualified technician.
- All fasteners used on the DPS shall be of a safe design to prevent injury to the bus operator or passengers.
- DPS hinge shall be of a maintenance free rotary post design and incorporate UHMW bushings and bronze thrust washers.