

LARGE PRISM TECHNOLOGY

SWARCO TRAFFIC SYSTEMS GmbH is a member of the internationally active SWARCO group, the one-stopshop for road markings, signage, signalisation, and traffic management – your reliable partner for traffic solutions. Variable message signs with Large Prism Technology ensure additional traffic safety and optimum traffic flow.

Message variation is accomplished by large triangular bodies (prisms), which can be rotated individually or in groups by wear-free drives. The variable surfaces lie flush against the front of the housing, so that for a stationary image, a smooth front surface is created, similar to a static traffic signpost. Prismatic technology allows changing individual message rows, or the entire sign aspect at once. SWARCO Prism Signs are extremely robust and require outstandingly little maintenance. All components are either corrosion free or permanently protected against corrosion.

SWARCO prisms are seamlessly drawn from raw aluminum, which makes them extremely shock resistant and also ensures that ball bearings are always perfectly centered.



SINUSOIDAL DRIVE:

A specialty of SWARCO large prismatic technology is the sinusoidal drive: it starts with a high momentum, increases its speed during the process, and slows down at the end of the motion phase, ensuring an exact prism alignment. The drive then locks the prisms so that external influences (such as wind) have no effect on the prisms. Besides extra security against freezing, this sinusoidal release of momentum considerably helps reducing the mechanical wear and tear, and maximizes the sign's life span.

LINEAR DRIVE:

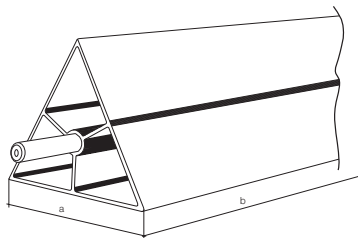
For smaller variable surfaces, linear drives are used. Here, the prisms are driven by means of a wear-free worm gear, directly on the prism.

PRISMS:

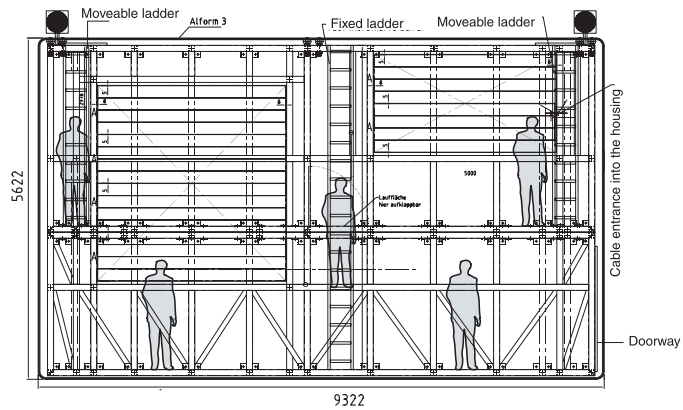
The prisms are designed as triangular rollers with side lengths of 100 to 200 mm. As an option, prisms can be foreseen for individual field removal/replacement without dismantling the sign.



TECHNICAL DETAILS: LARGE PRISMS



a: 100/200 mm
b: to 6000 mm



SIGN HOUSING:

Depending on the design, the sign housing consists of an aluminum-lined frame or a surrounding aluminum tray. Large-area service doors allow easy access to all service-relevant parts.

STATIC SIGN SECTION:

The static sections of the variable message sign are realized in SWARCO Alform technology, ensuring the visual impression for the driver is identical with that of a static signpost.

As with static traffic signs, the messages are made of reflective foils with the reflection classes RA1, RA2, RA3A, and RA3B.

CONTROL VARIANTS:

- ◆ Commands and feedback via switching contacts
- ◆ RS 485 serial protocol
- ◆ Without controller (end switch and motor wired to terminals)
- ◆ Motor protection and timing element

ANTI-FROST CONTROL:

If equipped with proven SWARCO controllers and temperature sensors, a de-icing procedure is possible: for temperatures below 2°C, prisms are rotated by about 10° in a forward and reverse direction at a programmable time interval (normally, every 60 minutes). This prevents prism bearing freezing and the formation of continuous ice layers on the prism surfaces.

Your local partner:



SWARCO TRAFFIC SYSTEMS GMBH

SWARCO TRAFFIC SYSTEMS is one of the leading suppliers of intelligent traffic systems in Germany. Drawing on decades of experience, the company offers a broad range of innovative solutions in urban and inter-urban traffic management, including applications in parking and detection. A large network of service outlets ensures maximum possible system availability and traffic safety. With cost-effective, sustainable, and environmentally friendly technologies, we see to it that traffic flows smoothly and everyone arrives safely.

