Track-guided, operable glass partition with automatic drive
Type: DORMA Hueppe VARITRANS ComfortDrive

Product description:
Fully automatic operable glass partition comprising individually electronically controlled powered elements mounted in an overhead track. Each element equipped with its own drive motor integrated in the track roller unit. The elements feature glass retaining glazing rails top and bottom manufactured from aluminium and finished in E6/EV1 (mill) with end-mounted caps. Functional elements to be integrated in the fittings.

Travel speed to offer dynamic response up to 250 mm/s.

Overhead track to have a maximum width of 98 mm.

Partition operator to be integrated in the track and encapsulated for dust protection.

Individual elements to be max. 250 kg in weight and be suitable for clear heights of up to 4,000 mm.

Floor guide track to be of stainless steel with a maximum internal width of 8 mm. Floor guide pin to be flexibly mounted at the bottom edge of the element.

The last element is equipped with an electromechanical bolting device against unauthorized moving of the wall, which can be opened manually mechanically when power failure.

Partition to be equipped with an electronic self-monitoring capability for all the control functions in order to ensure high system reliability. Valid TÜV-GS test certificate to be provided covering the complete partition.

Electric drive unit and control system
The entire partition opening and closing operation including parking the elements at the stacking track must be performed fully automatically by the electric drive system.
Elements are to be individually driven and electronically controlled. Power to be transmitted from a DC motor to the drive roller and track. Drive and control units integrated in the elements to be constantly supplied with power and command data via a three-pole busbar system with dual pick-up arrangement. Partition to be designed for a travel speed of up to 250 mm/s with dynamic response to ensure fast opening and closing of the partition.
Elements to approach end position at reduced speed. Entire partition to stop on contact with an obstruction, compliance with maximum closing forces to BGR 232 required.
One floating contact for connection of external equipment required.

Operation
Operation of the elements and their parking/stacking manoeuvres to be performed via a digital control panel. A configurable microprocessor control system is to be provided to monitor and control the motion sequences and also for monitoring the position of the elements. Open, Close and Stop pushbuttons to be provided allowing the partition to be opened, stopped or closed from any position. It must also be possible to implement partial-opening, personnel-access, gapped and alternative element arrangements.
In the event of a power failure, it must be possible to easily operate the partition by hand and slide the elements into any desired position. Emergency unlocking device to allow the closed and locked partition to be opened if required. Subsequent electrical restart to be possible from any partition position.

Element suspension
Each element must be hung at one or two points from a ceiling-mounted track of aluminium and operate on multi-roller carriers featuring track rollers mounted in ball bearings. Assemblies comprising ball-type carriers or sliding discs are not permissible. To allow for minor structural sag in the ceiling, the elements must be designed for easy height adjustment without the need to open up the ceiling.

Element interconnection
Last element to be equipped with an electromechanical locking device to protect against unauthorised manual operation of the partition; in the event of a power failure, said locking device must be easy to manually disengage by mechanical means. To protect them against jemmying/leverage, the elements shall be additionally connected to one another by end-face profiled spigots.

Floor and ceiling connections
The distance from the floor to the element shall be approx. 10 mm and the gap from the overhead track shall be approx. 20 mm.

Installation of electrical cabling
Installation of the control cabling and also the wiring of the central control unit and operating panel are to be included in the scope of supply of the bidder. Installation of the central control unit power cable to be performed by client. The work indicated is to be executed on the basis of a circuit diagram provided by the bidder.
All components of the electrically operated partition must correspond to German VDE codes of practice or equivalent relevant local electrical regulations.

Track installation
Track systems are to be secured by means of adjustable steel suspension assemblies to load-bearing structural components provided by others (e.g. steel substructures, concrete beams, etc.). The suspension assemblies are to be supplied by the bidder. Steel suspension assembly adjustability must be ensured to compensate for any subsequent slight ceiling sag. Rigid, non-adjustable suspension assemblies are not permitted.
The materials employed shall be provided with an anti-corrosion coating and the suspension assemblies shall comply with the definition of “simple steel structures” as per DIN 4100 (see also VOB [Construction Contract Procedures], Part C, DIN 18335). According to State Building Regulations, the bidder shall possess a certificate of welding competence (e.g. to DIN 18800-7 – Certificate of competence for the welding of simple steel structures subjected to predominantly static loading).

The legal requirements governing powered windows, doors, shutters and gates - in Germany: BGR 232, UVV or equivalent accident prevention regulations, and VDE or equivalent electrical safety regulations must be satisfied in full by the product offered.

Valid proof per GPSG § 7 (1) shall be provided in respect of the equipment and product safety of the operable partition, in accordance with EN 60335-1 and DIN 18032-3 or equivalent regulations. A valid TÜV GS test certificate is also required.

The manufacturer of the partition system must have introduced a quality management system to EN ISO 9001 and be registered to this standard. This must be verified by presentation of an appropriate certificate.