



# **GGS VERTICALLY MOVING FIRE DOOR**

# **Trouble-free service and convenience**

Vertically moving steel fire doors are custom-made according to the customer's dimensional requirements. They are tested according to European standards (ČSN EN) and can be supplied in various versions.

The individual door segments, securely combined into a compact door leaf, are manufactured from thin-walled steel profiles with an interrupted thermal bridge. The doorjamb and header are lined with an insulation profile produced from an intumescent material.

# **TYPES OF VERTICALLY MOVING DOORS**



### With vertical segments

EI 30 to 120 DP1-C3, EW 30 to 180 DP1-C3

- individual leaf moving vertically with vertical segments
  - optional installation of a hinged transit leaf in the following variants:
    - EI 30 transit door with doorsill
    - EI 60/EI 120 escape door without doorsill
    - EI 60/EI 120 special panic door without doorsill
- door can be optionally manufactured as S<sub>a</sub> and S<sub>m</sub> smoke-proof, tested according to EN 1634-3
- door can also be manufactured in the following variants: with counterweight or
   without counterweight (motor and a)

without counterweight (motor only)



#### With horizontal segments

#### EI 30 to 120 DP1-C3, EW 30 to 180 DP1-C3

- individual leaf moving vertically with horizontal segments
- door can be optionally manufactured as  $S_a\,\text{and}\,S_m$  smoke-proof, tested according to EN 1634-3
- door can also be manufactured in the following variants: with counterweight or without counterweight (motor only)

Člen 🚺 PKPC

DATA SHEE



# **GRAVITY CONTROL**



- **Electromagnetic brake** (for a leaf balanced by a counterweight)
- the integrated electromagnetic brake system consists of an electromagnet with braking allowing for easy setup of a constant closing speed
- makes it possible to stop the door in any position
- in case of an alarm, the door closes by gravity via a release of the electromagnetic brake



- **Electromagnet** (for a leaf of smaller dimensions balanced by a counterweight)
- the device consists of an electromagnet without the possibility to regulate closing speed
- the door leaf can only be stopped in the end positions open or closed
- in case of an alarm, the door is closed by gravity via a release of the electromagnet

# **CONTROL UNITS**

### Slidetronic

- this unit, with a 230 V/6 A supply, serves for controlling an electromagnetic brake or electromagnet
- it can receive signals from controlling devices and send signals to the controlled devices
  - optional installation of a 24 V reserve battery, preventing immediate closing of a door leaf under normal operation in the event of a standard power outage
- can be connected to an autonomous detection system

### Blocktronic

- interrupter button with a 24 V/10 W DC supply which interrupts the power supply when pressed and unblocks the door leaf for a period of 130 s; reblocks when pressed again
- can be used to control an electromagnetic brake

# MOTOR CONTROL



- EPO motor with 1RM1 control unit (for a leaf balanced by a counterweight)
- motor control ensures smooth gate opening and closing thanks to the frequency inverter
- the system contains control buttons on either side of the door, including photodetector
- in case of an alarm, the motor closes the gate either by a signal from the EFS (electronic fire . signalization) or from an autonomous detection system
- it is possible to set up partial opening for transit of persons and the emergency door opening function
- this control unit, with a frequency inverter and 230 V/20 A supply, serves exclusively to control the EFS motor
- it has a UPS emergency power supply as standard equipment, allowing for safe door closing even during a power outage
- high overload sensitivity due to its unique control system
- optional installation of a local autonomous detection system ("detector reset" module necessary)

### **FDF motor with FSTronic 24 control**

- industrial motor with long cycle life up to 100,000 cycles with 3x400 V/10 A supply
- under normal operation, the motor opens and closes the gate
- in case of an alarm, the gate is closed by means of a 24 V DC battery powered reserve motor
- the gate can be opened mechanically

### SI motor with 6RM4 control

- industrial motor with long cycle life up to 100,000 cycles with 1x230 V/20 A supply
- under normal operation, the motor opens and closes the gate
- smooth operation thanks to the frequency inverter increases the life of the gate
- speed can be easily regulated on the frequency inverter
- in case of an alarm, the motor closes the gate by means of the UPS emergency power supply
- the gate can be opened mechanically
- optionally, the gate can be opened electronically from the UPS emergency power supply

If this option is required, it is necessary to contact the manufacturer to determine the size of the UPS (standard UPS sized only for closing).

www.somati-system.cz



DATA SHEE



# SURFACE FINISHING





#### Zinc-plated

- plating with high-quality galvanized zinc-plated sheets, which need no further surface treatment
- standard surface finishing which is fully suitable for final use due to the unique manufacturing method without welding surface sheets

#### Color coating

- standard RAL 7035, 9002, 9006 Individual door sections are delivered already painted. During installation, they are protected with a film which is then removed (side labyrinth profiles are supplied as zinc-plated sheets with no color coating as standard; painting these components is optionally available for an extra charge)
- RAL according to the purchaser's selection Individual door sections are supplied as zincplated sheets, which are then coated according to the purchaser's choice directly on site (for door height up to 3 m, possible to be supplied already painted during manufacturing)

# ELECTRONIC ACCESSORIES



#### Siren with warning light

FLASHNI low-consumption light and sound signalization of door motion

#### Autonomous detection system

- control device for closing doors in locations not equipped with EFS
- requires concurrent installation of a control unit (1RM1 switchboard, FSTronic, Slidetronic)
- two detectors are supplied as standard, with one installed on either side of the door
  - detectors are supplied in these variants: smoke, temperature and combined

### Motion detector (only for EPO, FS, FDF and SI motors)

- infrared motion sensor responding to movement in front of the door
- after the door opens, it then automatically closes after a set time
- requires concurrent installation of a switchboard



#### **Remote control** (only for EPO, FS, FDF and SI motors)

- single- or multi-channel mobile remote control device in industrial configuration allowing remote door opening
- a receiver, which is not a standard part of the control unit, must be installed in order to use the remote control

#### Pull switch (only for EPO, FS, FDF and SI motors)

a pull switch ensures automatic opening for transit of materials handling machinery



#### **Photodetector** (only for EPO, FS, FDF and SI motors)

- safety optical sensing strip emits multiple beams for motion detection
- prevents collision of closing doors with a passing person or object

# MECHANICAL ACCESSORIES

#### Door leaf locking

- mechanical bolt for locking the door leaf
- requires concurrent installation of a microswitch for blocking operation of the motor

#### Glazing

observation window with standard dimensions of 500x300 mm with fire proofing according to the door leaf

#### Floor brush

floor brush with a straight aluminum strip and polypropylene fibers restricts air circulation and prevents penetration of large dirt particles



DATA SHEET



# **INTEGRATED HINGED LEAF** (only for gate with vertical segments)

### Transit door with doorsill

- transit opening with standard dimensions of 800x1970 mm located in the gate leaf
- a smooth single-leaf steel door with the rabbet and doorsill is set in the opening to allow for emergency transit of persons



#### Escape door without doorsill

- transit opening with standard dimensions of 900x1970 mm located in the gate leaf
- a single-leaf steel door flush with the rabbet and with no doorsill connector is set in the opening
  - due to the absence of a doorsill connector, they can be designed for escape routes of civic and industrial buildings
  - fittings: handle on both sides

#### Panic door

- transit opening with standard dimensions of 1100x1970 mm located in the gate leaf
- a smooth single-leaf steel door with the rabbet and with no doorsill connector is set in the opening; it cannot be locked and has a rounded bolt without upper fittings, and thus the passage profile contains no elements that could catch one's clothing
- special use for assembly areas

# **HINGED LEAF FIXTURES**



- mortise latchbolt inset into the core of the door allowing opening and closing of a transit or escape door
- a cylinder set controlled by a key can be installed to allow for locking the door leaf

#### Mortise panic lock

- mortise panic bolt allows for opening the door by hand or automatically without the use of any
  instruments after an alarm has sounded or after other emergency, even if the door is normally locked
- a cylinder set controlled by a key can be installed to allow for locking the door leaf

### Mortise rounded lock

- mortise rounded bolt inset into the core of the door allowing opening and closing primarily of a panic door
- door leaf cannot be locked
  - Escutcheon or round fittings (handle handle, handle escutcheon)
    - outer fittings for a mortise bolt and panic lock

#### **Embedded handle**

a universal and comfortable handle which minimizes the total thickness of the leaf



#### **Door closer**

- FAB SMART door closer for maximum leaf weight of 80 kg
- FAB DC 335 door closer for maximum leaf weight of 100 kg
- DORMA concealed door closer installed into the top edge of the leaf

### Would you like to know more? Contact us.

### Somati system s.r.o.

Jihlavská 510/2c, 664 41 Troubsko E-mail: export@somati-system.cz www.somati-system.cz www.facebook.com/somatisystem



