

Product Data Sheet

SG 5000 V U 42

Vertical-Opening High-Performance Door with Insulated Curtain Panels



The Speed-Guardian™ Vertical Complete View high speed doors provide fast and quiet opening speeds.

- Vertical guide application reduces wear and noise
- Smart Start™ NXT, plug & play, programmable control box
- Speeds: Up to 100 in/sec. open, 20 in/sec. close
- Optional LED Lite-Advance™ visual traffic indicators for improved safety
- An integrated light curtain ensures safety of equipment, pedestrians, and vehicles
- Light-weight and strong, insulated curtain construction
- Optional 10 in tall double-pane vision panels with Duratec® synthetic glazing.
- Optional tinted vision slats, Obscured White, Smoke Gray
- Optional perforated metal slats with a 56.3% ventilation cross-section
- 5, 2, & 7 year warranty protection plan. 5 yrs. motor/gearbox and panels. 2 yrs. other mech./elec., 7 yrs. vision slats

Technical Data	Imperial	Metric	Remark
Application	Interior and Exterior		Hood Enclosure not provided on Vertical Doors
Speed	Opening 60 in/s up to 100 in/s Closing 20 in/s	Opening 1.52 m/s up to 2.54 m/s Closing 0.51 m/s	Variable based on opening height
Control Panel	Smart Start™ NXT W x H x D (in) 11 ½ x 15 ¾ x 8 ⅞	W x H x D (mm) 295 x 400 x 208	Standard, NEMA Type 4X / IP66
Roll-up Technology	Full Vertical Guides with Panel Rollers		
Door Construction	Vertical Opening		
Size Range	Width 21 ft 4 in Height 21 ft 4 in	Width 6.50 m Height 6.50 m	Standard
Guide Track Profile	W x D (in) 13 x 12	W x D (mm) 330 x 305	
Solid Slat (Panel) Profile	W x H (in) 9 ⅞ x 1 ⅞	W x H (mm) 251 mm x 41 mm	
Visible Material Height (Window Size)	6 ¼ in	159 mm	42 mm panel, 67 mm panel
Mullions	Door Width < 10 ft = None ≥ 10 ft ≤ 16 ft 5 in = 1 Centered > 16 ft 5 in = 2 Eq Thirds	Door Width < 3.1 m = None ≥ 3.1 m ≤ 5 m = 1 Centered > 5 m = 2 Eq Thirds	15% Enhanced visibility than SG 4000 U
Drive Mechanism	Direct Drive Operator		
Required Headroom	Door Opening Height + 23 in		
Counterbalance System	Counter Weights		Springless - Low maintenance
Braking	Control box activated 24V DC brake		Built-in, anti-fallback safety brake device integrated with operator worm gear
Cycleability / Maintenance	High Cycleability - Inspect at 6 mo. intervals Windows replacable independent of solid slats		Consult factory for details
Safety Features	Built-in Light grid, Chain hoist open/close		Counter weight compensation assist
Resistance to Wind Load (Max per Door Width)	DW ≤ 16 ft 4 in, Class 5 max. 93mph (21psf; 115mph max.) DW >16 ft 4 in, ≤ 20 ft 0 in, Class 4 max. 83mph (15psf; 100mph max.)		DW = Door Width Per standard EN 12424, DASMA 108 Exposure B
Fire Resistance Rating (Behavior)	Non-rated, Non-conforming exit		Per 2012 IBC Section 1008
Manufacturer Warranty	5, 2, & 7 years. Motor/gearbox and Panels (5), all other mech./elec. (2), vision slats (7)		Standrd

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Materials & Finishes	Description		Remark
Guide Tracks, Covers & Guards (Guides)	11-ga. HDG steel tracks, 16-ga HDG steel covers		Zinc, Class G90 (0.9 oz/ft2)
Door Headers, Spiral Guides, Drive Shaft Support	11-ga. Hot-dipped galvanized steel		Zinc, Class G90 (Panel Wheel Guides, Aluminum)
Counterbalance Assemblies	Steel Counter Weight Assembly		
Weather Seals	Twin rubber, non-contact lintel		
Solid Door Slats (Panels)	22-ga. Hot-dipped galvanized steel, with foamed-in-place polyurethane insulation core. MicroGrain™ texture exterior, Stucco texture interior. Color RAL 9006		Zinc, Class G40 (0.4 oz. per SF) Polyurethane foam density 11pcf
Vision Door Slats (Panels)	1 in Double-pane, acrylic, clear or tinted (Obscured White, Smoke Gray) and Duratec® abrasion-resistive coating		1 ½ in Thick Vision Panel frame, extruded anodized aluminum
Ventilated Door Slats (Panels) (Screen)	1 in Double-walled, perforated clear anodized aluminum, ½ in square press-punched grid pattern		1 ½ in Thick Ventilation Panel frame, extruded anodized aluminum Open area 56.3%
Bottom Profile (Bar) Door Slat	22-ga. Interlocking flat-faced, insulated steel panel, with weather seal loop		Zinc, Class G40 (0.4 oz. per SF) Polyurethane foam density 11pcf
Electric Door Operator	Cast aluminum		
Control Panel	Stainless steel, or baked on polyester powder coat painted. Color RAL 7035 Light Gray		Powder Coat Painted, Standard
Energy Analysis	Imperial	Metric	Remark
Air Leakage	0.6 cfm/ft2 , Class 2	12 m3h/m2 , Class 2	Per test EN 12427, (ASTM E283, ANSI / NFRC 400)
Water Penetration	Class 2, 15 min at 55 Pa		Per test EN 12489, (ASTM E547)
Visible Transmittance	0.91%		Per calc ANSI/NFRC 200-2014 (Clear Vision Slats)
Solar Heat Gain Coefficient (G-value)	0.75%		Per calc ANSI/NFRC 200-2014 (Clear Vision Slats)
Thermal Resistance (R-value)	16.5 (ft² x°F x hr)/BTU, or 2.90 (m² x K)/W		Per test EN 717-1, DASMA TDS-163 (Without Visions)
Heat Transfer Coefficient (U-value)	0.06 BTU/(hr x ft² x°F), or 0.34 W/(m² x K)		Per test EN 12667: 199997-11, DASMA TDS-105
Acoustic Insulation	STC 30, Rw 26 dB		Per test EN 717-2, ASTM E90 (Without Visions)
LEED Credit (Potential)	EAc2; Optimize Energy Performance (20 pts) MRc2; Environmental Product Declarations (2 pts) IEQc2; Low-Emitting Materials (3 pts) IEQc4; Thermal Comfort (1 pt) INc1; Innovation (5 pts) RPC1; Regional Priority Specific Credit (1 pt)		USGBC® LEED v4.1
Electrical	Description		Remark
Electric Door Operator	2.0 HP GfA Elektromaten F18		NEMA Type 3 / IP54
Operating Voltage (Motor)	3 PH. 132v		From Control Box to Motor
Control Panel	5 kW variable frequency drive rated for operating voltage		NEMA Type 4X, IP66, UL/CUL Listed
Standard Power Requirement (to Control Box)	208vAC* - 230vAC - 480vAC - 600vAC*, 3 PH, 60Hz		*Transformer may be required. Consult Factory
Full Load Amps	13.3 A		Operator
Disconnect	Fuse: 20 Amp, Class CC		Supplied by Others



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