

Product Data Sheet

SG 5000 C U 42

Coiling High-Performance Door with Insulated Curtain Panels



The Speed-Guardian™ High speed, security line of doors provide excellent thermal insulation and fast opening speeds.

- Smart Start™ NXT, NEMA 4X programmable control box
- Thermally isolated design for reduced energy transfer and optimal efficiency
- Speed: Up to 100 in/sec. open, 20 in/sec. close
- Compact, non-contact spiral guides eliminate wear and noise
- Up to three (3) LED Lite-Advance™ visual traffic indicators per door (optional)
- An integrated light curtain ensures safety of equipment, pedestrians, and vehicles
- Emergency operation via chain hoist and counterbalance springs
- 1 5/8 in thick X 10 in high insulated slats with R-13.6 thermal performance
- Enhanced 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	Exterior or Interior		Hood required for exterior mounted doors
Speed	Opening 60 in/s up to 100 in/s Closing 20 in/s	Opening 1.52 m/s upto 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 3/4 x 15 3/4 x 8 3/16	W x H x D (mm) 295 x 400 x 208	Standard, NEMA Type 4X / IP66
Roll-up Technology	Non-contact coiling guides with Non-contact lintel seal		Standard
Door Construction	Overhead coiling		
Size Range	*Width 6 ft 0 in up to 24 ft 0 in Height 8 ft 0 in up to 21 ft 4 in Chamfered Corners (Interior Side)	*Width 1.83 m up to 7.32 m Height 2.44 m up to 6.5 m	*Max height = 16 ft 0 in (4.88 m) if width > 21 ft 4 in (6.5 m) 5 vision panels max
Guide Track Profile	W x D (in) 12 x 12 1/2	W x D (mm) 305 x 318	Standard
Spiral Configurations	Three (3)		Selected per door height
Solid Slat (Panel) Profile	W x H (in) 1 3/8 x 9 3/4	W x H (mm) 42 x 250	
Visible Material Height (Window Size)	6 1/4 in		Glazing height
Mullions	Door Width < 10 ft = None ≥ 10 ft ≤ 16 ft 5 in = 1 Centered > 16 ft 5 in = 2 Eq Thirds Four if ≥ 21 ft 4 in wide	Door Width < 3.1 m = None ≥ 3.1 m ≤ 5 m = 1 Centered > 5 m = 2 Eq Thirds Four if ≥ 6.5 m wide	15% Enhanced visible area over previous SG models
Required Headroom	Door Height < 14 ft 9 in = 36 1/4 in ≥ 14 ft 9 in < 18 ft = 37 3/8 in ≥ 18 ft = 41 1/2 in	Door Height < 4.5 m = 921 mm ≥ 4.5 m < 5.49 m = 956 mm ≥ 5.49 m = 1.1 m	Per coiling configuration size
Drive Mechanics	Direct-drive Operator with Chain Lift Mechanism		
Counterbalance System	Belt mechanism and Springs		
Braking	Control box activated 24 V DC brake		Built-in, anti-fallback safety brake device integrated with operator worm gear
Cycleability / Maintenance	High / Inspect per ea. 50,000 cycles or 6 mo. Windows replaceable independent of solid slats		Consult factory for details
Safety Features	Built-in light grid, chain hoist open / close		Spring compensation assist
Resistance to Wind Load (Max per Door Width)	Door Width < 16 ft 4 in = 21 psf (91 mph) > 16 ft 4 in ≤ 19 ft 8 in = 15 psf (77 mph) > 19 ft 8 in = 7 psf (52 mph)	Door Width < 4.98 m = 1,006 N/m2 (146 km/h) ≥ 4.98 m ≤ 6 m = 718 N/m2 (123 km/h) > 6 m = 335 N/m2 (84 km/h)	Per standard EN 12424, DASMA TDS 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 & Panels (5), all other mech. / electrical (2), Vision Slats (7)		Standard

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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/ft ²)
Door Headers, Spiral Guides, Drive Shaft Support	11-ga. Hot Dipped Galvanized Steel		Zinc, Class G90 Panel Guide Wheels guides, Aluminum
Counterbalance Assemblies	Oil temp. Steel helical extension springs		Available up-to 8 springs per door
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/sf) Polyurethane foam density 11 pcf
Vision Door Slats (Panels)	1 in (25.4 mm) Double-pane, acrylic, clear or tinted (Obscured White, Smoke Gray) and Duratec® abrasion-resistive coating		Vision panel frame, extruded anodized aluminum
Ventilated Door Slats (Panels) (Screen)	1 in (25.4 mm) Double-walled, perforated clear anodized aluminum, ½ in (12.7 mm) square press-punched grid pattern		Ventilation panel frame, extruded anod. Aluminum Open area 56.3%
Bottom Profile (Bar) Door Slat	22-ga HDG Interlocking flat-faced, insulated steel panel, with extruded black rubber weather seal loop		Zinc, Class G40 (0.4 oz/sf) Polyurethane foam density 11 pcf
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
Hood & Motor Cover (Optional)	16-ga Hot-dipped galvanized steel		Zinc, Class G90 (0.9 oz/ft ²)
Energy Analysis	Imperial	Metric	Remark
Air Leakage	0.6 cfm/ft ² , Class 2	12 m ³ /h/m ² , 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 (ft ² x °F x h)/BTU	2.9 (m ² x K)/W	Per test EN 717-1, DASMA TDS-163 (Insulated Slat)
Heat Transfer Coefficient (U-value)	0.06 BTU/(h x ft ² x F)	0.34 W/(m ² x K)	Per test EN 12667; 199997-11, DASMA TDS-105 (Insulated Slat)
Acoustic Insulation	STC 30, Rw 26 dBA		Per test EN717-2, ASTM E90 (Insulated Slat)
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 or 230v		From Control Panel to Motor only
Control Panel	5 kW Variable Frequency Drive rated for Spec Operating Voltage		Enclosure: NEMA Type 4X, IP66, UL/ CUL Listed
Standard Power Requirement (to Control Box)	*208 vAC 230 vAC or 480 vAC - *600 vAC, 3 PH, 60 Hz		*Transformer may be required. Consult Factory
Full Load Amps	13.3 A		Operator
Disconnect	Fuse: 20 A, Class K		Supplied by Others



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