

Product Data Sheet

SG 5000 LH U 42

Overhead Low-Headroom High-Performance Door with Insulated Curtain Panels



Speed-Guardian™ Low Headroom, high-speed doors provide excellent capability in low-clearance areas.

- 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.
- 1 5/8 in thick X 10 in high insulated slats with R-13.6 thermal performance
- Up to three (3) LED Lite-Advance™ visual traffic indicators per door (optional)
- Integral, non-contact light grid entrapment protection feature. Ensures safety of equipment, people, and vehicles
- Emergency operation via chain hoist and counterbalance springs
- Space-saving low headroom LH track application for limited clearance
- Enhanced 10 in high double-pane vision slats 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		Interior mounting only
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 0.5 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 overhead guides with Non-contact lintel seal		Standard
Door Construction	Overhead Rolling		
Size Range	Width 18 ft 0 in Height 21 ft 4 in	Width 5.49 m Height 6.50 m	Standard
Guide Track Profile	Chamfered Corners (Interior Side)		Standard
Distance Back Formula	W x D (in) 12 x 12 1/2		W x D (mm) 305 x 318
Distance Back Formula	DB = ((2 x DH) - (DH + HR)) + 39 1/2 in (1 m)		From interior host wall to end of OH tracks
Solid Slat (Panel) Profile	W x H (in) 9 7/8 x 1 3/8	W x H (mm) 251 x 41	
Visible Material Height (Window Size)	6 1/4 in		
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 visible area over previous SG models
Required Headroom	19 in Min., 29-1/2 in Max.	483 mm Min., 749 mm Max.	Headroom > Max. use SG 5000 H.
Drive Mechanics	Direct-drive Operator with Chain Lift Mechanism		
Counterbalance System	Belt mechanism and springs		
Braking	Control box activated 24 V DC brake		
Cycleability / Maintenance	High / Inspect per ea. 50,000 cycles or 6 mo. Windows replaceable independent of solid slats		Consult factory for details
Actuators	Manually Operated Push Button Stations Touchless Motion / Presence Sensors		NEMA Type 4, 4X Rated
Safety Features	Built-in light grid, chain hoist open / close		
Resistance to Wind Load (Max per Door Width)	Door Width ≤ 18 ft 0 in = 21 psf (93 mph)	Door Width ≤ 5.49 m = 102.5 kg/m ² 9 (41.5 m/s)	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 & 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/ft2)
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. per SF) Polyurethane foam density 11pcf
Vision Door Slats (Panels)	1 in (25.4 mm) 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 (25.4 mm) Double-walled, perforated clear anodized aluminum, ½ in (12.7 mm) square press-punched grid pattern		1 ½ in Thick Vision Panel frame, extruded anodized aluminum
Bottom Profile (Bar) Door Slat	22-ga. Interlocking flat-faced, hollow extruded aluminum panel, with weather seal loop		
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)	13.6 (ft² x °F x hr)/BTU	2.40 (m² x K)/W	Per test EN 717-1, DASMA TDS-163 (vision Slat)
Heat Transfer Coefficient (U-value)	0.18 BTU/(hr x ft² x °F)	1.04 W/(m² x K)	Per test EN 12667; 199997-11, DASMA TDS-105 (vision Slat)
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) RPr1; 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



Hörmann High Performance Doors | 117 Starpointe Blvd. | Burgettstown, PA 15021-9506
1-800-365-3667 | info2@hormann.us | hormann.us