

Product Data Sheet

HD-SD 3050

HD SERIES Sprung Drive High-Speed Rubber Door



Features



The typically harsh environments of heavy industrial applications are where these extremely reliable doors are most valuable.

- The HD-SD 3050 high-speed, chain drive, spring counterbalanced door is equipped with a high-performance helical gearhead operator to open the door at up to 48 inches per second.
- The HD-SD 3050 operator is controlled by a custom programmable PLC with a variable frequency drive (VFD) in a NEMA 4 enclosure for precision control and durability.
- Counterbalanced by standard springs rated for 100,000 or 50,000 cycles, depending on the size of the door.
- Upgrades for 200,000 cycles in higher traffic applications are available

Technical Data		Remark	
Application		Interior / exterior	
Speed	Opening	Closing	
	48 in/s (1.2 m/s)	32 in/s (0.8 m/s)	
Control Box (W x H x D)		20" x 24" x 11" (510 mm x 610 mm x 280 mm)	
Roll-up Technology		Roll tube with precision-welded axles	
Door Construction	Size Range	6'-0" (1830 mm) up to 30'-0" (9144 mm) wide 6'-0" (1830 mm) up to 30'-0" (9144 mm) high	
	Mounting angle / guide track assembly profile (W x D)	5.25" x 9" (140 mm x 230 mm) 9.25" x 9" (230 mm x 230 mm)	
	Roll Tube Diameter	8.625" (219 mm) x 0.322" (8.2 mm) thick wall	
	Window Size	16" x 16" (406 mm x 406 mm), 1/8" (3 mm) thick	
Required Headroom		32.5" (825 mm) 37" (940 mm)	
Drive Mechanism		Chain drive operator with manual chain hoist	
Counterbalance System		50K or 100K cycle counterbalance spring (depending on door size)	
Braking		Control box activated DC disc brake	
Cycleability / Maintenance		100 per day / Inspection every three months	
Safety Features		Integrated in-line light grid, manual chain hoist	
Resistance to Wind Load		20 pounds per square foot (1.0 kPa) windclass 5	
Fire resistance rating		Non-rated, Non-conforming exit	
Warranty		Curtain - Limited lifetime Operator - 5 years or 1 million cycles / General - 2 years	
		ANSI / DASMA 108-2002	
		Optional BMH brake rectifier for cold temperatures	
		Steel mount / Concrete mount	
		Opening height up to 17' 0" (5185 mm) Opening height over 17' 0" (5185 mm)	
		Curtain - 10 years in Europe	

Product Data Sheet (Continued)

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Materials and Finishes		
Curtain	Standard 1/4" (6 mm) / Black SBR (Styrene-Butadiene Rubber)	Optional: 1/4" (6 mm) Blue or Grey EPDM (Ethylene Propylene Diene Monomer), Black Nitrile, Black MSHA (Mine Safety and Health Administration)
Curtain Temperature Rating	SBR: -40°F (-40°C) to 185°F (85°C)	Grey EPDM: -63°F (-53°C) to 185°F (85°C) Blue EPDM: -56°F (-49°C) to 185°F (85°C)
Guides	5" (127 mm) aluminum extrusion	
Mounting Angles	Rollformed high strength galvanized steel, 10 gauge with gussets	
Guide Guards	Rollformed high strength galvanized steel, 10 gauge	
Bottom Bar	Extruded aluminum weighted bottom bar with patented pivoting arms	
Endplates	Zinc dichormate plated steel	
Truss	Fabricated steel construction, painted	
Roll Tube	Galvanized steel	
Idler Barrel	Galvanized steel 6.25 in (159 mm) diameter x (4 mm) thick wall	
Weather Seals	Self sealing rubber curtain/guides, EPDM loop seal on bottom bar, brush seal at lintel	
Electric Door Operator	HG helical gear high efficiency chain drive operator	Optional stainless steel motor
Control Box	Standard separate control box with VFD and PLC	Optional NEMA Type 4 or 4X (IP66) separate control panel, contactors with relay logic or PLC
Hood and Motor Cover (Optional)	18 gauge galvanized steel	
Energy Analysis		
Visible Transmittance (Tvis)	N/A	
Solar Heat Gain Coefficient (SHGC)	N/A	
Thermal Resistance (R-value)	0.73 hr·ft²·°F/BTU (0.13 m²·K/W)	ASTM C518 – 10
Heat Transfer Coefficient (U-value)	1.36 BTU/hr·ft²·°F (7.74 W/m²·K)	ASTM C518 – 10
Acoustic Insulation	Sound transmission Class (STC) 28 dB Outdoor-Indoor transmission class (OITC) 23 dB	ASTM E 90-09 / E 413-10 / E1332 - 10a
LEED Credit (Potential)	N/A	
Electrical		
Electric Door Operator (Motor)	Manaras Pro FDGH 2 to 3 hp (1.5 to 2.25 kW) varies by door size	NEMA Type 4 (4X Optional) / IP66
Operating Voltage	230-600 VAC, 3 PH, 60 Hz	Operator voltage dependant on control panel configuration and supply power voltage
Control Box	2-3 hp (1.5-2.25 kW) variable frequency drive rated for operator voltage	NEMA Type 4 (4X Optional) / IP66 CSA Listed (Canada/US)
Standard Power Requirement	208-600 VAC, 1 or 3 PH, 60 Hz	
Full Load Amps	2.82 to 12.0 A	Operator
Disconnect	Fuse: 20 A, Class K	Service to control box supplied by others



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