

RHN Series Top Running Double Girder Trolley Hoists



Harrington's RHN Top Running Double Girder Trolley Hoists combine our world class RHN wire rope hoists with a customized trolley. This configuration raises the position of the hoist hook up between the crane girders allowing for the highest vertical lift within a building. This trolley hoist is currently offered in 5, 7 ½, 10, 15 and 20 metric ton capacities and can be built to accommodate a variety of gauge sizes to suit every application.



Features and Benefits

Rubber Trolley Bumpers

Standard feature on all trolleys. Provides protection from collisions. Complies with ASME standards.

Trolley Motor and Brake

Cylindrical motor with standard brake provides smooth, low vibration acceleration and braking.

Premium Wire Rope

Provides high resistance to fatigue and wear.

Graphite Cast Iron Rope Guide

Provides low wear and keeps the rope securely in the groove on the drum.

Helical Gearing

Provides maintenance free, smooth & quiet operation.

Load Limiter

Reduces the potential for making hazardous, over-capacity lifts. Overloading the hoist electrically activates the load limiter sensor, making hoist lifting inoperable.

Easy Maintenance Control Panel

Components mounted on DIN rail. Equipped with main line contactor.

Heavy Duty Cylindrical Motor

Fan cooled (TEFC) with class F insulation and a ribbed frame for maximum cooling and durability. High protection class IP55 and positive temperature control (PTC) thermal sensors.

Bottom Block Sheaves

Cast iron for increased wire rope life.

Heavy Duty Electromagnetic Brake

Totally enclosed and fan cooled to ensure long life. Easy to inspect. 1 million cycles.

Rope Drum

Designed for durability and long service life.

RHN Protection Unit (RPU)

With motor management, overload cut-off and count hour meter.

Adjustable Geared Limit Switch

Operation of switch set for upper and lower block position and emergency limit.

Block Operated Limit Switch

Standard equipment. Secondary limit in the event the primary limit fails. Meets requirements of ASME B30.16, ASME HST-4, CMAA.

Standard Hoist/Trolley Specifications

Capacity Range

5 – 20 Ton

Standard Voltage

208 / 230 / 460 / 575-3-60
RHN top running double girder models are not reconnectable

Control Voltage

110V

Duty Cycle

30 / 10 min

Ratings

Hoist / Trolley – IP55

Classification

ASME H4
ISO M5 or M4
FEM 2M or 1Am

Conformance

ASME B30.16
CMAA
UL508A
CSA 22.2 NO.14

Operating Conditions

Recommended for -4° to +104° F and humidity of 85% or less

Mounting

Top running double girder trolley

Pendant & Pendant Cord

Optional

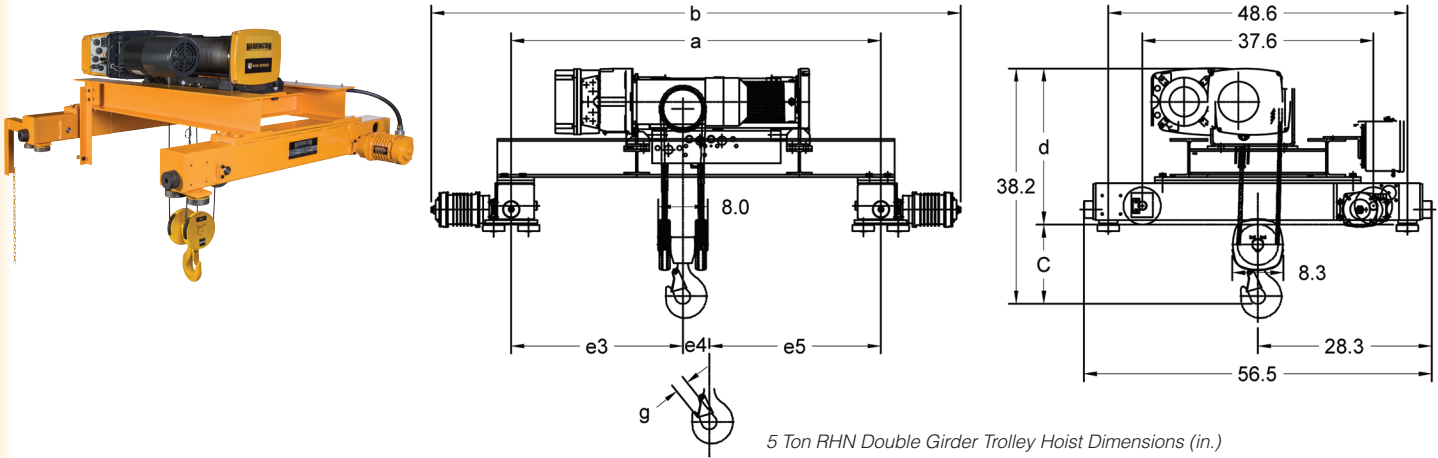
Wheels

Will operate on ASCE rail or square bar

Variable Frequency Drive (VFD)

Trolley – Standard 8 – 80 FPM

RHN Series Top Running Double Girder Trolley Hoists



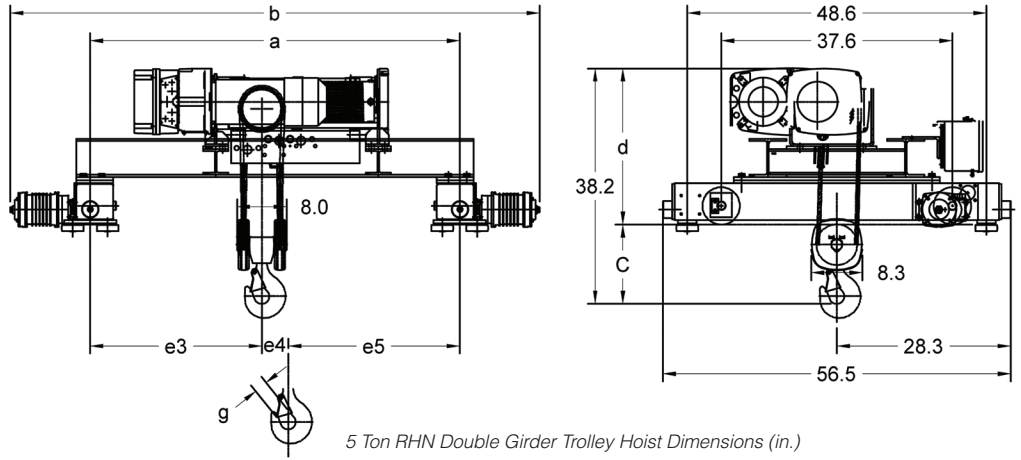
5 Ton RHN Double Girder Trolley Hoist Dimensions (in.)

RHN TOP RUNNING DOUBLE GIRDER TROLLEY HOISTS—SPECIFICATIONS

Cap. (Tons)	Product Code	Std. Lift (ft)	Trolley Gauge (in)	Reeving	Rope (mm)	Lifting Speed (ft/min) H/L	Traversing Speed (ft/min) VFD	Lifting Motor 3 Phase 60 Hz			Traversing Motor 3 Phase 60 Hz			Net Weight (lbs)	Max Wheel Load (lbs/wheel)
								Output (Hp) H/L	Rated Current (amps)		Output (Hp)	Rated Current (amps)			
									@208-230V H/L	@460V H/L		@208-230V	@460V		
5	RHN05M20B20DVⓐB	20	54	4/1	9	20/3.5	80/8	7.2/1.2	22.0/11.0	10.0/5.4	0.33	1.6	1.0	1295	3738
	RHN05M20B20DVⓐC		60											1315	3734
	RHN05M20B20DVⓐD		66											1335	3732
	RHN05M20B20DVⓐE		72											1355	3730
	RHN05M20B20DVⓐF		78											1375	3730
	RHN05M33B20DVⓐB	33	54	4/1	9	20/3.5	80/8	7.2/1.2	22.0/11.0	10.0/5.4	0.33	1.6	1.0	1328	3800
	RHN05M33B20DVⓐC		60											1348	3793
	RHN05M33B20DVⓐD		66											1368	3789
	RHN05M33B20DVⓐE		72											1388	3787
	RHN05M33B20DVⓐF		78											1408	3785

①
1 = 208V - 3ph - 60Hz
2 = 230V - 3ph - 60Hz
4 = 460V - 3ph - 60Hz

HARRINGTON RHN SERIES ELECTRIC WIRE ROPE HOISTS

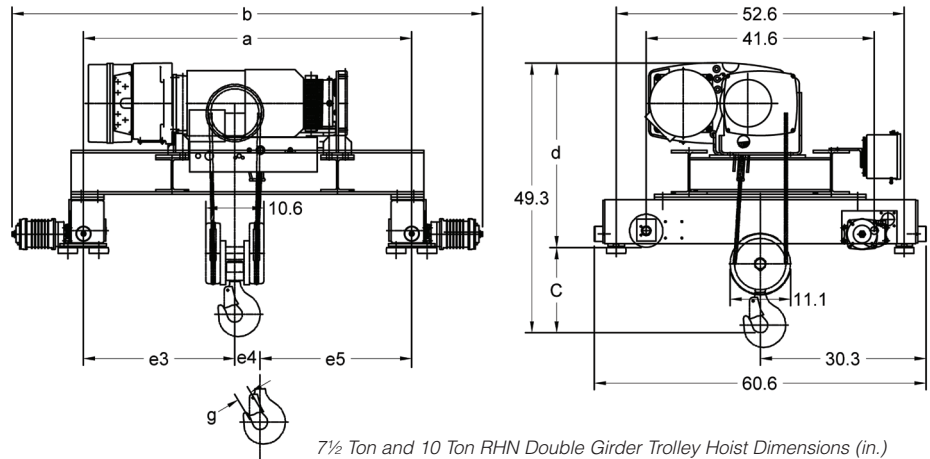


RHN TOP RUNNING DOUBLE GIRDER TROLLEY HOISTS—DIMENSIONS

Cap. (Tons)	Product Code	Std. Lift (ft)	Trolley Gauge a (in)	b (in)	Headroom C (in)	d (in)	e3 (in)	e4 (in)	e5 (in)	g (in)
5	RHN05M20B20DVⓄB	20	54	80	12.8	25.3	24.9	4.3	24.9	1.7
	RHN05M20B20DVⓄC		60	86			27.9		27.9	
	RHN05M20B20DVⓄD		66	92			30.9		30.9	
	RHN05M20B20DVⓄE		72	98			33.9		33.9	
	RHN05M20B20DVⓄF		78	104			36.9		36.9	
	RHN05M33B20DVⓄB	33	54	80	12.8	25.3	23.4	7.2	23.4	1.7
	RHN05M33B20DVⓄC		60	86			26.4		26.4	
	RHN05M33B20DVⓄD		66	92			29.4		29.4	
	RHN05M33B20DVⓄE		72	98			32.4		32.4	
	RHN05M33B20DVⓄF		78	104			35.4		35.4	

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RHN Series Top Running Double Girder Trolley Hoists



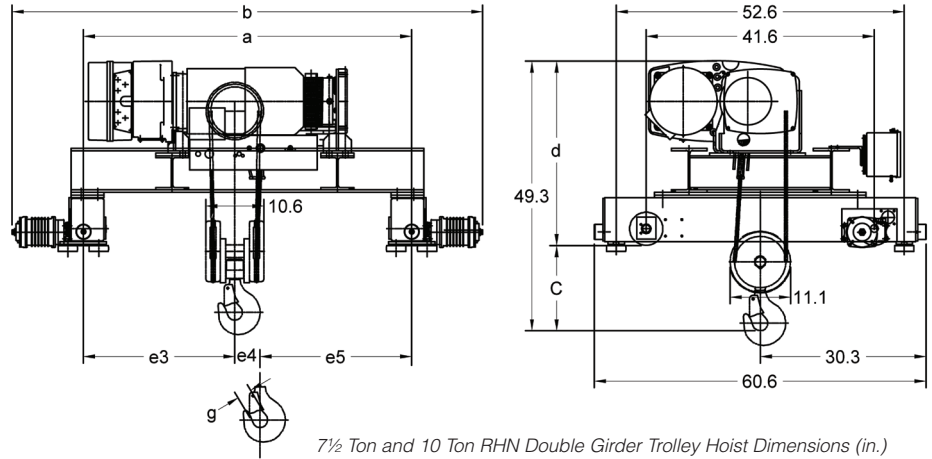
7½ Ton and 10 Ton RHN Double Girder Trolley Hoist Dimensions (in.)

RHN TOP RUNNING DOUBLE GIRDER TROLLEY HOISTS—SPECIFICATIONS

Cap. (Tons)	Product Code	Std. Lift (ft)	Trolley Gauge (in)	Reeving	Rope (mm)	Lifting Speed (ft/min) H/L	Traversing Speed (ft/min) VFD	Lifting Motor 3 Phase 60 Hz			Traversing Motor 3 Phase 60 Hz			Net Weight (lbs)	Max Wheel Load (lbs/wheel)
								Output (Hp) H/L	Rated Current (amps)		Output (Hp)	Rated Current (amps)			
									@208-230V H/L	@460V H/L		@208-230V	@460V		
7 1/2	RHN08M20C20DVⓐ	20	60	4/1	12.5	20/3.5	80/8	14.8/2.1	42.0/21.0	20.0/10.0	0.33	1.6	1.0	2153	5773
	RHN08M20C20DVⓑ		66											2181	5757
	RHN08M20C20DVⓐ		72											2209	5744
	RHN08M20C20DVⓑ		78											2237	5734
	RHN08M20C20DVⓐ		84											2265	5726
	RHN08M33C20DVⓐ	33	60	4/1	12.5	20/3.5	80/8	14.8/2.1	42.0/21.0	20.0/10.0	0.33	1.6	1.0	2230	5819
	RHN08M33C20DVⓑ		66											2258	5809
	RHN08M33C20DVⓐ		72											2286	5803
	RHN08M33C20DVⓑ		78											2314	5797
	RHN08M33C20DVⓐ		84											2342	5794
10	RHN10M20C20DVⓐ	20	60	4/1	12.5	20/3.5	80/8	14.8/2.1	42.0/21.0	20.0/10.0	0.33	1.6	1.0	2153	7461
	RHN10M20C20DVⓑ		66											2181	7437
	RHN10M20C20DVⓐ		72											2209	7422
	RHN10M20C20DVⓑ		78											2237	7408
	RHN10M20C20DVⓐ		84											2265	7397
	RHN10M33C20DVⓐ	33	60	4/1	12.5	20/3.5	80/8	14.8/2.1	42.0/21.0	20.0/10.0	0.33	1.6	1.0	2230	7519
	RHN10M33C20DVⓑ		66											2258	7506
	RHN10M33C20DVⓐ		72											2286	7495
	RHN10M33C20DVⓑ		78											2314	7488
	RHN10M33C20DVⓐ		84											2342	7482

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4 = 460V - 3ph - 60Hz

HARRINGTON RHN SERIES ELECTRIC WIRE ROPE HOISTS



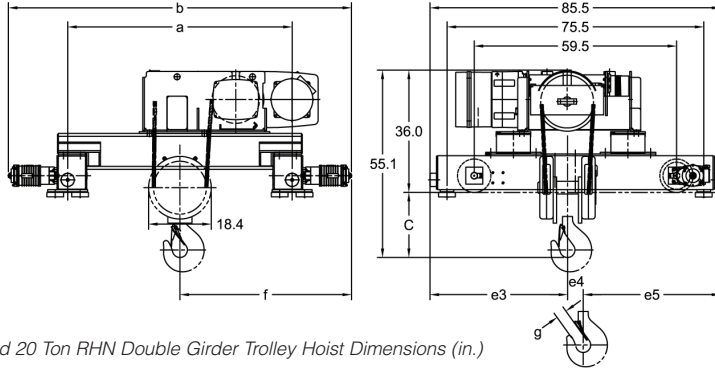
7½ Ton and 10 Ton RHN Double Girder Trolley Hoist Dimensions (in.)

RHN TOP RUNNING DOUBLE GIRDER TROLLEY HOISTS—DIMENSIONS

Cap. (Tons)	Product Code	Std. Lift (ft)	Trolley Gauge a (in)	b (in)	Headroom C (in)	d (in)	e3 (in)	e4 (in)	e5 (in)	g (in)
7 1/2	RHN08M20C20DVⓐC	20	60	86	15.6	33.7	27.7	4.6	27.7	1.9
	RHN08M20C20DVⓐD		66	92			30.7		30.7	
	RHN08M20C20DVⓐE		72	98			33.7		33.7	
	RHN08M20C20DVⓐF		78	104			36.7		36.7	
	RHN08M20C20DVⓐG		84	110			39.7		39.7	
	RHN08M33C20DVⓐC	33	60	86	15.6	33.7	26.1	7.8	26.1	1.9
	RHN08M33C20DVⓐD		66	92			29.1		29.1	
	RHN08M33C20DVⓐE		72	98			32.1		32.1	
	RHN08M33C20DVⓐF		78	104			35.1		35.1	
	RHN08M33C20DVⓐG		84	110			38.1		38.1	
10	RHN10M20C20DVⓐC	20	60	86	15.6	33.7	27.7	4.6	27.7	1.9
	RHN10M20C20DVⓐD		66	92			30.7		30.7	
	RHN10M20C20DVⓐE		72	98			33.7		33.7	
	RHN10M20C20DVⓐF		78	104			36.7		36.7	
	RHN10M20C20DVⓐG		84	110			39.7		39.7	
	RHN10M33C20DVⓐC	33	60	86	15.6	33.7	26.1	7.8	26.1	1.9
	RHN10M33C20DVⓐD		66	92			29.1		29.1	
	RHN10M33C20DVⓐE		72	98			32.1		32.1	
	RHN10M33C20DVⓐF		78	104			35.1		35.1	
	RHN10M33C20DVⓐG		84	110			38.1		38.1	

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 2 = 230V - 3ph - 60Hz
 4 = 460V - 3ph - 60Hz

RHN Series Top Running Double Girder Trolley Hoists



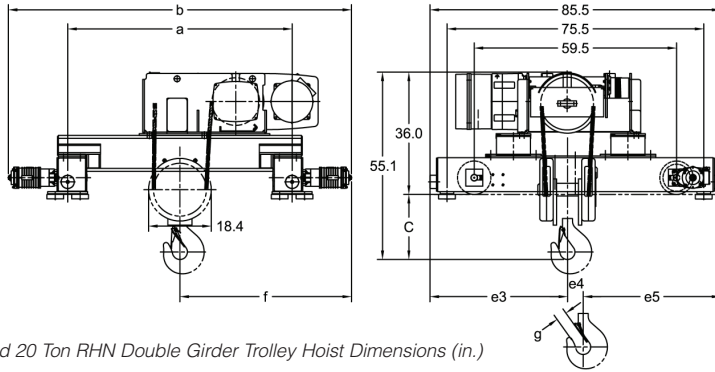
15 Ton and 20 Ton RHN Double Girder Trolley Hoist Dimensions (in.)

RHN TOP RUNNING DOUBLE GIRDER TROLLEY HOISTS—SPECIFICATIONS

Cap. (Tons)	Product Code	Std. Lift (ft)	Trolley Gauge (in)	Reeving	Rope (mm)	Lifting Speed (ft/min) H/L	Traversing Speed (ft/min) VFD	Lifting Motor 3 Phase 60 Hz			Traversing Motor 3 Phase 60 Hz			Net Weight (lbs)	Max Wheel Load (lbs/wheel)
								Output (Hp) H/L	Rated Current (amps)		Output (Hp)	Rated Current (amps)			
									@208-230V H/L	@460V H/L		@208-230V	@460V		
15	RHN15M20D16DV⓪D	20	66	4/1	20	16/2.5	80/8	24.1/4.0	67.0/27.0	32.0/13.0	2 x 1.0	2 x 3.3	2 x 2.0	5067	12856
	RHN15M20D16DV⓪E		72											5149	12851
	RHN15M20D16DV⓪F		78											5224	12846
	RHN15M20D16DV⓪G		84											5301	12845
	RHN15M20D16DV⓪H		90											5378	12846
	RHN15M20D16DV⓪J		96											5455	12846
	RHN15M33D16DV⓪D	33	66	4/1	20	16/2.5	80/8	24.1/4.0	67.0/27.0	32.0/13.0	2 x 1.0	2 x 3.3	2 x 2.0	5408	12838
	RHN15M33D16DV⓪E		72											5490	12827
	RHN15M33D16DV⓪F		78											5565	12818
	RHN15M33D16DV⓪G		84											5642	12812
	RHN15M33D16DV⓪H		90											5719	12808
	RHN15M33D16DV⓪J		96											5796	12804
20	RHN20M20D16DV⓪D	20	66	4/1	20	16/2.5	80/8	24.1/4.0	67.0/27.0	32.0/13.0	2 x 1.0	2 x 3.3	2 x 2.0	5067	15571
	RHN20M20D16DV⓪E		72											5149	15569
	RHN20M20D16DV⓪F		78											5224	15568
	RHN20M20D16DV⓪G		84											5301	15570
	RHN20M20D16DV⓪H		90											5378	15572
	RHN20M20D16DV⓪J		96											5455	15574
	RHN20M33D16DV⓪D	33	66	4/1	20	16/2.5	80/8	24.1/4.0	67.0/27.0	32.0/13.0	2 x 1.0	2 x 3.3	2 x 2.0	5408	15546
	RHN20M33D16DV⓪E		72											5490	15537
	RHN20M33D16DV⓪F		78											5565	15530
	RHN20M33D16DV⓪G		84											5642	15526
	RHN20M33D16DV⓪H		90											5719	15524
	RHN20M20D16DV⓪J		96											5796	15522

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2 = 230V - 3ph - 60Hz
4 = 460V - 3ph - 60Hz

HARRINGTON RHN SERIES ELECTRIC WIRE ROPE HOISTS



15 Ton and 20 Ton RHN Double Girder Trolley Hoist Dimensions (in.)

RHN TOP RUNNING DOUBLE GIRDER TROLLEY HOISTS—DIMENSIONS

Cap. (Tons)	Product Code	Std. Lift (ft)	Trolley Gauge a (in)	b (in)	Headroom C (in)	e3 (in)	e4 (in)	e5 (in)	f (in)	g (in)
15	RHN15M20D16DVⓄD	20	66	99.9	19.1	40.4	4.6	40.4	49.9	3.2
	RHN15M20D16DVⓄE		72	105.9					52.9	
	RHN15M20D16DVⓄF		78	111.9					55.9	
	RHN15M20D16DVⓄG		84	117.9					58.9	
	RHN15M20D16DVⓄH		90	123.9					61.9	
	RHN15M20D16DVⓄJ		96	129.9					64.9	
	RHN15M33D16DVⓄD	33	66	99.9	19.1	47.0	7.6	47.0	49.9	3.2
	RHN15M33D16DVⓄE		72	105.9					52.9	
	RHN15M33D16DVⓄF		78	111.9					55.9	
	RHN15M33D16DVⓄG		84	117.9					58.9	
	RHN15M33D16DVⓄH		90	123.9					61.9	
	RHN15M33D16DVⓄJ		96	129.9					64.9	
20	RHN20M20D16DVⓄD	20	66	99.9	19.1	40.4	4.6	40.4	49.9	3.2
	RHN20M20D16DVⓄE		72	105.9					52.9	
	RHN20M20D16DVⓄF		78	111.9					55.9	
	RHN20M20D16DVⓄG		84	117.9					58.9	
	RHN20M20D16DVⓄH		90	123.9					61.9	
	RHN20M20D16DVⓄJ		96	129.9					64.9	
	RHN20M33D16DVⓄD	33	66	99.9	19.1	47.0	7.6	47.0	49.9	3.2
	RHN20M33D16DVⓄE		72	105.9					52.9	
	RHN20M33D16DVⓄF		78	111.9					55.9	
	RHN20M33D16DVⓄG		84	117.9					58.9	
	RHN20M33D16DVⓄH		90	123.9					61.9	
	RHN20M33D16DVⓄJ		96	129.9					64.9	

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 2 = 230V - 3ph - 60Hz
 4 = 460V - 3ph - 60Hz