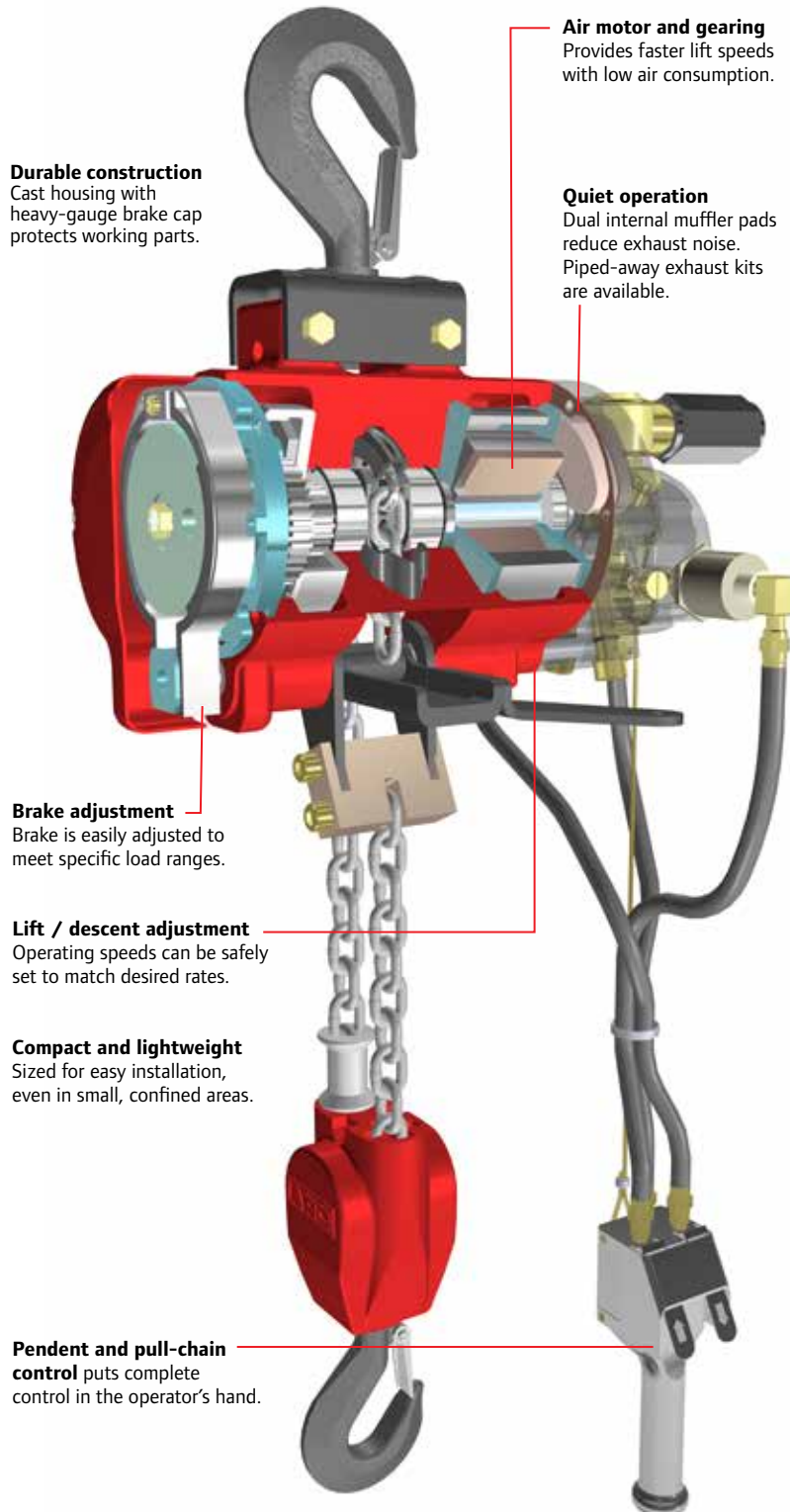


7700 Series and 7790 Series link chain hoists



Durable construction

Cast housing with heavy-gauge brake cap protects working parts.

Air motor and gearing

Provides faster lift speeds with low air consumption.

Quiet operation

Dual internal muffer pads reduce exhaust noise. Piped-away exhaust kits are available.

Brake adjustment

Brake is easily adjusted to meet specific load ranges.

Lift / descent adjustment

Operating speeds can be safely set to match desired rates.

Compact and lightweight

Sized for easy installation, even in small, confined areas.

Pendent and pull-chain control

puts complete control in the operator's hand.

Quality and performance

Ingersoll Rand hoists can be equipped with a variety of optional features that can be matched to the specifications of almost any job. Their long operating life, cost-effective service and maintenance, and dependable performance are supported by a host of standard features.

Rotary-vane air motors

These powerful, self-cooling rotary motors keep Ingersoll Rand hoists at peak performance in high-temperature situations. And, because they are air-powered, they further reduce the chance of causing sparks in a volatile environment.

Complete operator control

A pressure pendent or pull chain puts complete control of the hoist in the operator's hand. These hoists respond immediately to an operator's "inching" commands.

External brake adjustment

Easily customizes the sensitivity of the hoist to the load range for any application. This results in ease of operation with better spotting, feathering, and overall control.

Fast, efficient load handling

Rotary-vane air motors and efficient gearing combine to deliver one of the fastest lift speeds available. Gear ratios have been calculated to yield the lowest possible air consumption.

Job-matched performance

Numerous options allow Ingersoll Rand hoists to be matched to specific application requirements, including link or roller load chains, hook types, manual and power trolleys, pull chain or pendent control, standard and spark-resistant, and 300-lb to 2-ton capacities.

Clean and quiet

For applications and environments that require clean air, exhaust can be piped away. A two-stage filtration system removes foreign matter from air supplies so motors can operate at peak performance with longer operating lives.

Easy installation

Lightweight and convenient, Ingersoll Rand hoists are easier to install than any other model. Even in small, confined areas, they can be installed and removed with minimal effort.

7700 Series and 7790 Series link chain hoists

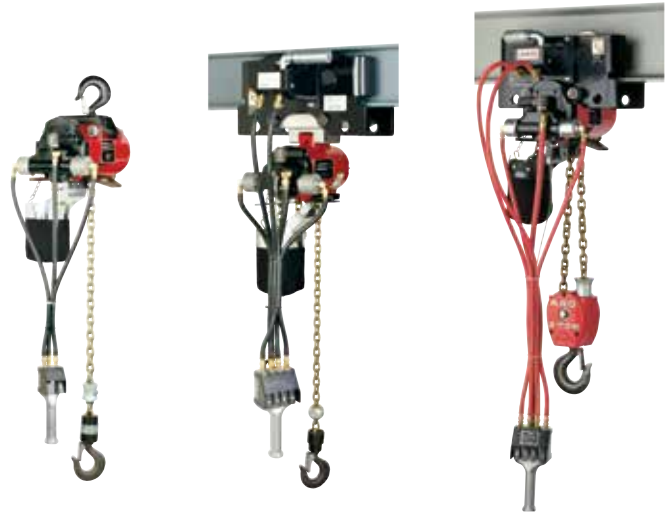
0.125 to 2 metric ton lifting capacities

Continuous heavy-duty applications

The 7700 and 7790 Series has been designed specifically for heavy-duty industrial applications where loads vary between 275 and 4,400 lb. Simple, rugged, and reliable, these hoists are constructed with few moving parts for easy repair and less downtime. These hoists come complete with 10 feet of standard lift and 6 feet of either pendent control or pull-chain control.

Features

- Exceptional slow-speed control provides superior “spotting” characteristics
- Powerful, self-cooling rotary motors keep hoists at peak performance in high temperatures
- Brake control easily adjusts to meet specific load ranges
- Motor and gearing provide faster lift speeds with low air consumption



7700 Series and 7790 Series Specifications

Model	Capacity		# Falls	Hook Mount Headroom		Trolley Mount Headroom		Lifting Speed			Lowering Speed			Chain Size	Chain Weight (per foot of lift)		Net Weight w/10 ft of Lift			
	lb	metric tons		in	mm	in	mm	Rated Load	No Load	ft/min	m/min	ft/min	m/min		ft/min	m/min	lb	kg	lb	kg
7770E	275	0.125	1	17	431.8	16.9	429.3	110	33.5	192	58.5	275	83.8	159	48.5	0.25 x 0.75	0.6	0.3	41	18.6
7718E	550	0.25	1	17	431.8	16.9	429.3	82	25	184	56.1	224	68.3	153	46.6	0.25 x 0.75	0.6	0.3	41	18.6
7756E	1,100	0.50	1	17	431.8	16.9	429.3	41	12.5	72	22	112	34.1	60	18.3	0.25 x 0.75	0.6	0.3	41	18.6
7776E	2,200	1	2	21.7	551.2	20.5	520.7	21	6.4	36	11	56	17.1	30	9.1	0.25 x 0.75	1.7	0.5	53	24
7790A	2,200	1	1	18.9	480.1	15	381	26	7.9	37	11.3	44	13.4	31	9.5	0.312 x 0.858	0.9	0.4	62	28.1
7792A	4,400	2	2	22.4	569	18	457.2	12	3.7	20	6.1	24	7.3	17	5.2	0.312 x 0.858	1.8	0.8	81	36.7

Working pressure from 5 to 7 bar (70 to 100 psi). Air consumption @ rated load - all models 1.98 m (70 cfm). Air inlet 1/2" NPT. Sound level 85 dBA.

Trolley Mount Specifications

Model	Trolley type	Capacity metric tons	Minimum Headroom		Trolley Speed at Rated Load		Air Consumption @ Rated Load		Trolley Flange Adjustment		Minimum Curve Radius		Air Inlet	Net Weight w/10 ft of Lift	
			in	mm	ft/min	m/min	ft ³ /min	m ³ /min	in	mm	ft	m		lb	kg
7770E	Plain	0.125	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	88	40
	Geared	0.125	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	91	41
	Motor	0.125	17	432	96	30	35	1	2.66-12	68-305	3.5	1.1	1/4	94	13
7718E	Plain	0.25	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	88	40
	Geared	0.25	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	91	41
	Motor	0.25	17	432	95	29	35	1	2.66-12	68-305	3.5	1.1	1/4	94	43
7756E	Plain	0.50	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	88	40
	Geared	0.50	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	91	41
	Motor	0.50	17	432	95	29	35	1	2.66-12	68-305	3.5	1.1	1/4	94	43
7776E	Plain	1	22	559	-	-	-	-	3.25-12	82-305	3.5	1.1	-	100	45
	Geared	1	22	559	-	-	-	-	3.25-12	82-305	3.5	1.1	-	103	47
	Motor	1	22	559	93	28	35	1	3.25-12	82-305	3.5	1.1	1/4	106	48
7790A	Plain	1	15	381	-	-	-	-	3.00-12	76-305	3.5	1.1	-	104	47
	Geared	1	15	381	-	-	-	-	3.00-12	76-305	3.5	1.1	-	107	49
	Motor	1	15	381	93	28	35	1	3.00-12	76-305	3.5	1.1	1/4	110	50
7792A	Plain	2	20	508	-	-	-	-	3.00-12	76-305	3.5	1.1	-	123	56
	Geared	2	20	508	-	-	-	-	3.00-12	76-305	3.5	1.1	-	126	57
	Motor	2	20	508	80	24	35	1	3.00-12	76-305	3.5	1.1	1/4	129	59

Working pressure from 5 to 7 bar (70 to 100 psi).

7700 Series and 7790 Series link chain hoists

Spark-resistant models

Continuous heavy-duty applications

7700 Series — 500 to 1,500 lb capacities

7790 Series — 1,500 to 3,000 lb capacities

7700 Series and 7790 Series spark-resistant hoists are designed for Division 1 applications where, under normal operating conditions, the atmosphere contains hazardous concentrations of flammable gases, dust, or other materials.

Specifically engineered for continuous heavy-duty industrial applications — between 500 and 3,000 lb — Ingersoll Rand 7700 Series and 7790 Series spark-resistant hoists are available with bronze top-hook or trolley adapter suspension. These hoists come complete with 10 feet of standard lift and 6 feet of either pendent control or pull-chain control.

Features

- Stainless steel load chain and solid bronze hooks prevent accidental sparking
- Pendent control handles, when ordered, are covered with an industrial-grade vinyl grip; pull-chain controls come standard with zinc-plated pull chain
- Hoist capacities are reduced and speed adjustments are locked into place to maximize chain life
- Trolley models are supplied with bronze wheels

Division 1 and 2 applications

The following definitions may be used as a guide. The actual division distinction for each application must be determined by your local inspecting authority.

Division 1 (spark-resistant air hoists are required)

Atmospheres containing hazardous concentrations of flammable gases, dusts, or fibers; continuously, frequently, or periodically; under normal operating conditions.

Division 2 (standard air hoists are required)

Normally non-hazardous atmospheres in which a hazardous concentration of flammable gases, dusts, or fibers occurs when a container or handling system fails or the ventilating system that normally keeps the concentration non-hazardous fails.



Air Chain Hoists

7700 Series and 7790 Series Spark-resistant Specifications

Model	Capacity			Hook Mount Headroom		Trolley Mount Headroom		Lifting Speed				Lowering Speed				Chain Weight (per foot of lift)	Net Weight w/10 ft of Lift			
	lb	metric tons	# Falls	in	mm	in	mm	Rated Load	No Load	Rated Load	No Load	Rated Load	No Load	Chain Size	lb		kg	lb	kg	
7712EL	550	0.25	1	17	431.8	17.1	434.3	50	15.2	80	24.4	70	21.3	53	16.2	0.25 x 0.75	0.6	0.3	41	18.6
7714EL	1,500	0.68	2	22.7	576.6	21.3	541	16	4.9	26	7.6	16	4.9	12	3.7	0.25 x 0.75	1.2	0.6	48	21.8
7796AL	1,500	0.68	1	18.9	480.1	15	381	16	4.9	26	7.6	16	4.9	12	3.7	0.312 x 0.858	0.9	0.4	62	28.1
7798AL	2,400	1.1	2	22.4	569	18	457.2	12	3.7	19	5.8	12	3.7	9	2.7	0.312 x 0.858	1.9	0.9	81	36.7
7799AL	3,000	1.36	2	22.4	569	18	457.2	7	2.1	11	3.4	7	2.1	5	1.5	0.312 x 0.858	1.9	0.9	81	36.7

Working pressure from 5 to 7 bar (70 to 100 psi). Air consumption @ rated load - all models 1.98 m (70 cfm). Air inlet 1/2" NPT. Sound level 85 dBA.

Trolley Mount Specifications

Model	Trolley type	Capacity metric tons	Minimum Headroom		Trolley Speed at Rated Load		Air Consumption @ Rated Load		Trolley Flange Adjustment		Minimum Curve Radius		Air Inlet	Net Weight w/10 ft of Lift	
			in	mm	ft/min	m/min	ft ³ /min	m ³ /min	in	mm	ft	m		lb	kg
7712-EL	Plain	0.25	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	88	40
	Geared	0.25	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	91	41
	Motor	0.25	17	432	96	30	35	1	2.66-12	68-305	3.5	1.1	1/4	94	43
7714EL	Plain	0.68	22	559	-	-	-	-	3.25-12	82-305	3.5	1.1	-	95	43
	Geared	0.68	22	559	-	-	-	-	3.25-12	82-305	3.5	1.1	-	98	45
	Motor	0.68	22	559	93	28	35	1	3.25-12	82-305	3.5	1.1	1/4	101	46
7796AL	Plain	0.68	15	381	-	-	-	-	3.00-12	76-305	3.5	1.1	-	104	47
	Geared	0.68	15	381	-	-	-	-	3.00-12	76-305	3.5	1.1	-	107	49
	Motor	0.68	15	381	93	28	35	1	3.00-12	76-305	3.5	1.1	1/4	110	50
7798AL	Plain	1.1	20	508	-	-	-	-	3.00-12	76-305	3.5	1.1	-	123	56
	Geared	1.1	20	508	-	-	-	-	3.00-12	76-305	3.5	1.1	-	126	57
	Motor	1.1	20	508	93	28	35	1	3.00-12	76-305	3.5	1.1	1/4	129	59
7799AL	Plain	1.4	20	508	-	-	-	-	3.00-12	76-305	3.5	1.1	-	123	56
	Geared	1.4	20	508	-	-	-	-	3.00-12	76-305	3.5	1.1	-	126	57
	Motor	1.4	20	508	84	25	35	1	3.00-12	76-305	3.5	1.1	1/4	129	59

Working pressure from 5 to 7 bar (70 to 100 psi).

Hoist accessories for 7700 and 7790 Series

Load chain

Ingersoll Rand hoists are offered with several different load chains. Standard hoists come complete with steel load chains. Spark-resistant hoists come with stainless-steel link load chain.

Chain length 7700 Series (0.25-, 0.50-ton), 7790 Series (1-ton)
Length of lift desired + 1 foot = load chain length

Chain length 7700 Series (1-ton), 7790 Series (2-ton)
2 x length of lift desired + 2 feet = load chain length



Link chain

Hoist Used On	Capacity lb	Chain Part No.	Chain Size Dia./Pitch	Weight lb/ft	Feet in Package
ZINC PLATED LINK					
7700 Series	275, 550, 1,100, 2,200	37708	.25 / .75	.6	250
7790 Series	2,200 & 4,400	42988	.312 / .858	.9	250
STAINLESS STEEL LINK					
7700 Series	500, 1,500	39489	.25 / .75	.6	250
7790 Series	1,500, 2,400, 3,000	43095	.312 / .858	.9	250

Hose Carrier Trolley

Easily tracks along same beam that hoist is mounted on. Keeps air hose suspended and out of operator's way. Use one for each 8 feet of hose length.

Part No.	Max Hose O.D. in	Min/Max Beam Height (in)	Min/Max Beam Flange Width (in)
7703	1 1/4	3-10	2-3/8 - 5
D10-8888			5 - 8-3/4



7703

Restraining Cable

For use as an added safety precaution in hoist suspension. Cable inserts through hole in hoist housing and around I-beam or other structure capable of safely supporting hoist and hoist load weight. Order based upon hoist used.

Hoist Used On	Part No.	Cable Dia. in	Cable Length ft
7700 Series	43231	1/4	2
7790 Series	43059	5/16	3-1/2



43231

Hoist accessories for 7700 and 7790 Series

Chain Baskets

Catches and stores load chain as load is lifted. Mounts directly to side of hoist. Order based upon load chain length and hoist being used. Load chain length on 1-ton 7700 Series hoists and 2-ton 7790 Series hoists is twice the lift distance.

Load Chain Max Lineal Feet	Link Chain (metal basket)		Link Chain (canvas basket ¹)	
	7700	7790	7700	7790
10	-	49800 - 10	-	43441 - 1
12	-	-	-	-
16	37653 - 16	-	-	-
20	-	49800 - 20	43554 - 1	43441 - 2
30	-	49800 - 30	-	-
32	37653 - 32	-	43554 - 2	-
40	-	49800 - 40	-	43554 - 3
56	37653 - 64	-	-	-
60	-	49800 - 60	-	-
64	-	-	43554 - 3	-
80	37653 - 80	49800 - 80	-	-
59	37653 - 100	49800 - 100	-	-

(1) Canvas baskets are made of specially treated oil-resistant material.



Link Chain
Metal
Basket

Link Chain
Canvas
Basket

Exhausts

Piped exhaust¹

Allows exhaust to be piped to a remote area. This is particularly desirable for applications in food processing, chemicals, and processes where atmospheric purity must be maintained.

How to order: specify as option in Ordering Guide.

20308-4 exhaust muffler

Threads into exhaust port to minimize sound level. Can be used on 7700 and 7790 Series hoists ordered with piped exhaust option.

For field conversion

All 7700 Series hoists may be converted to a piped-away exhaust by ordering 46098-1 Head Assembly.

All 7790 Series hoists (except power trolley models) may be converted to a piped-away exhaust by ordering 43029 Piped Exhaust Adapter.

(1) Hose not included. Exhaust port is 1/2" NPTF.

Hoist Controls

To convert from pull chain to pendent control: Either nylon braid (standard) or steel braid control hose is available. Steel braid hose is recommended to resist heat or abrasion. Specify the model shown, inserting the pendent length in feet for the *. Maximum 20 feet.

To convert from pendent control to pull chain: Specify 40004-*, where the * is pull chain length desired. Also required are two 34026 valve caps; two Y325-116 O-rings; two 38966 springs and one Y227-3 pipe plug per hoist.

Hoist Used On	Model	Type of Control	Standard Length ft
All 7700E Series	46094-*	Pendent - nylon braid hose	6
All 7700E Series	46369-*	Pendent - steel braid hose	6
All 7790 Series	43106-*	Pendent - nylon braid hose	6
All 7790 Series	46364-*	Pendent - steel braid hose	6
All 7700 & 7790 Series	40004-*	Pull chain	5



Hoist accessories for 7700 and 7790 Series

Hooks

Ingersoll Rand offers three different hook configurations designed to meet the needs of any material handling application. All hooks must be ordered separately by specifying model required according to hoist and beam configurations.

Steel snap-hooks

Steel snap-hooks have a spring-loaded latch to prevent a lifting eye from popping out of the hook while the load is "grounded." This style of self-closing hooks is the most popular as they are easy and inexpensive to replace.

Bullard hooks

Ideal for rough, high-speed, repetitive applications, these hooks employ a swinging gate latch. Far superior in strength to snap-hooks, the gate latch locks into place to minimize any chance of the "end effector" or "below-the-hook" attachment leaving the hook.

Self-Closing latch hooks

Self-closing latch hooks have the benefits of both spring-loaded snap hooks, and Bullard hooks by combining a spring-loaded latch with the strength and durability of the heavier gage Bullard gate.



Hoist Series	Capacity (lb)	Upper Hook	Hooks For Link Chain Hook Opening (in)	Lower Hook	Hook Opening (in)	Upper Hook	Hooks For Roller Chain Hook Opening (in)	Lower Hook	Hook Opening (in)
STEEL SNAP HOOKS									
7700 Series 0.125, 0.25 and 0.50 ton	275/550/1,100	34921	1-1/8	35014	1	34921	1-1/8	33381-1	1
7700 Series 0.25 ton spark res.	500	35113	1-1/8	46565	1	35113	1-1/8	34655-1	1
7700 Series 1 ton	2,200	34921	1-1/8	45707 ¹	1-1/8	34921	1-1/8	45708 ¹	1-1/8
7700 Series 0.50 ton spark res.	1,000	N/A	-	N/A	-	35113	1-1/8	45710 ¹	1-1/8
7700 Series 0.75 ton spark res.	1,500	35113	1-1/8	45709 ¹	1-1/8	N/A	-	N/A	-
7790 Series 1 ton	2,200	43002	1-1/8	43000	1-1/8	N/A	-	N/A	-
7790 Series 0.75 ton spark res.	1,500	43097	1-1/8	43110	1	N/A	-	N/A	-
7790 Series 2 ton	4,400	43049	1-1/4	43048 ¹	1-1/4	N/A	-	N/A	-
7790 Series 1 ton spark res.	2,400	43096	1-1/4	43101	1-1/4	N/A	-	N/A	-
7790 Series 1.50 ton spark res.	3,000	43096	1-1/4	43101	1-1/4	N/A	-	N/A	-
BULLARD HOOKS									
7700 Series 0.25 and 0.50 ton	550/1,100	35203	1-3/16	35206	1-1/16	35203	1-3/16	35205	1-1/16
7700 Series 1 ton	2,200	35203	1-3/16	45934 ¹	1-3/16	35203	1-3/16	45935 ¹	1-3/16
7790 Series 1 ton	2,200	43458	1-3/16	43456	1-3/16	N/A	-	N/A	-
7790 Series 2 ton	4,400	43459	1-7/16	43460	1-7/16	N/A	-	N/A	-
SELF-CLOSING LATCH HOOKS									
7700 Series 0.125, 0.25 and 0.50 ton	275/550/1100	N/A	-	42799	1-1/2	N/A	-	N/A	-

(1) Includes Sheave Block

Air Hose



N12-12B

Vinyl Grip



47469

EZ Grip Ergo Handle



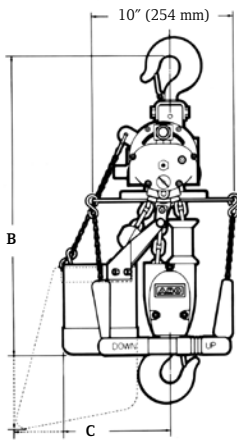
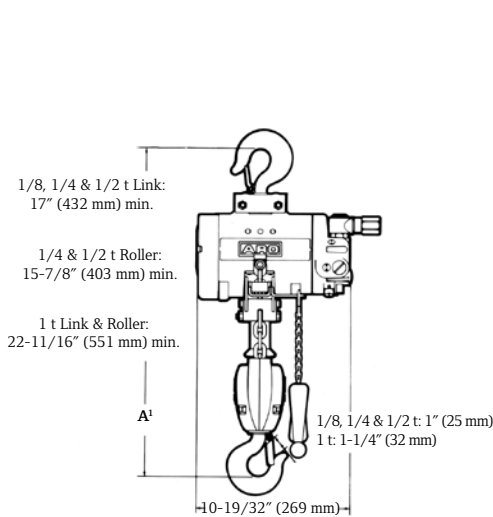
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Dimensional drawings

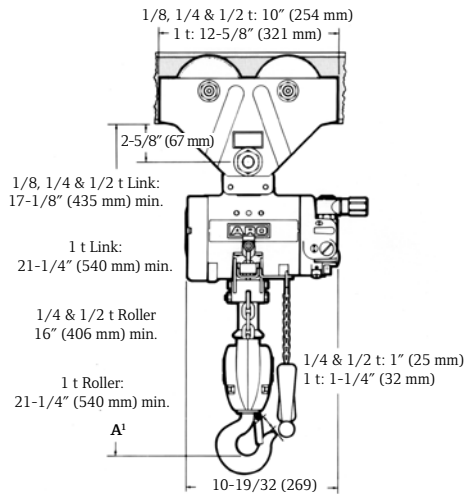
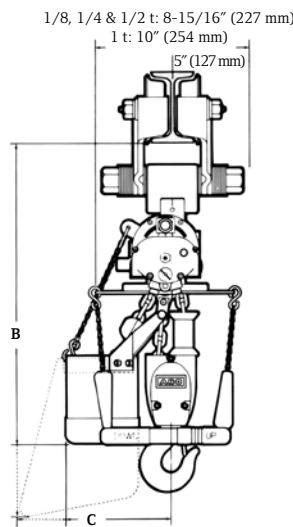
7700 Series Air Chain Hoists

Typical headroom dimensions (A) are indicated in dimensional drawings.

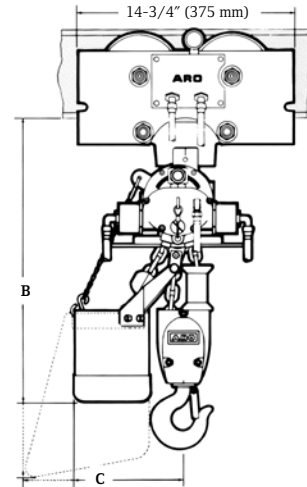
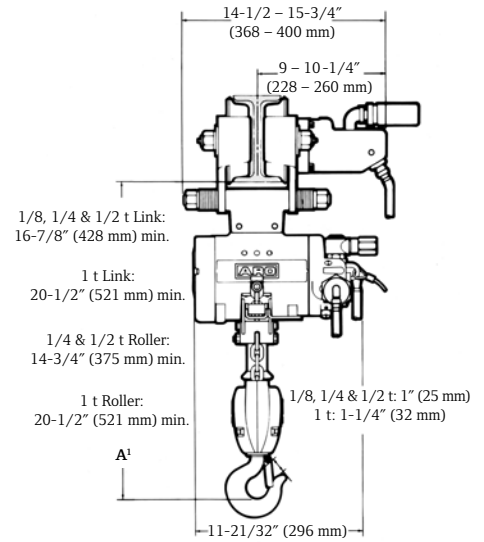
Hook Mounted



Trolley Mounted



Motorized Trolley Mounted



Note:

(1) Dimension "A" for the 7700 Series 0.125-, 0.25- and 0.50-ton hoists increases 1 inch for each Bullard hook used.

Basket Capacity (ft)	Hook Mt (in)		Trolley Mt (in)		Motorized Trly (in)	
	B	C	B	C	B	C
LINK TYPE						
20	21	7.8	21.5	7.8	20.2	7.8
32	25.5	7.8	26	7.8	24.7	7.8
56	31.5	7.8	32	7.8	30.7	7.8

Basket Capacity (ft)	Hook Mt (in)		Trolley Mt (in)		Motorized Trly (in)	
	B	C	B	C	B	C
ROLLER TYPE						
10	25.4	11.2	25.9	11.2	24.9	11.2
16	29.3	14.4	29.8	14.4	28.7	14.4
40	39.9	20.6	40.4	20.6	39.4	20.6

Air Chain Hoists