



# *Industrial Lifting Equipment*







# Air Chain Hoists

Air chain hoists are the ideal choice when high speed, high duty-cycle, precision spotting, and the ability to operate in harsh environments are the determining factors. No one knows air chain hoists like Ingersoll Rand.

We offer the broadest range of air chain hoists in the world. This section highlights our offering of production hoists ranging in capacity from 0.125 to 6 metric tons.

The MLK and HLK Series hoists have proven themselves for years in the most difficult environments. The 7700 and 7790 Series hoists are renowned for exceptional speed and load control. The CLK Series hoist offer superior load control and low air consumption.

Our sales team and channel partners are available to help with selection, related accessories, and options to provide the optimal solution to your lifting and positioning challenges. Spare parts and our authorized service centers are there to keep them running in peak condition.

Visit our website at [www.ingersollrandproducts.com](http://www.ingersollrandproducts.com) to see our high-capacity chain hoists (up to 200 metric tons) and other products.

# Air chain hoists selection guide

Model	Lifting Capacity		# Falls	Lifting Speed Rated Load		Lowering Speed Rated Load		Hook Mount Headroom		Trolley Mount Headroom		Shipping Weight Top Hook		Page No.
	lb	metric tons		ft/min	m/min	ft/min	m/min	in	mm	in	mm	lb	kg	
<b>ARO SERIES</b>														
7770E	275	0.125	1	110	33.5	275	83.8	17	432	16.9	428	41	18.6	19
7718E	550	0.25	1	82	25	224	68.3	17	432	16.9	428	41	18.6	19
7756E	1,100	0.5	1	41	12.5	112	34.1	17	432	16.9	428	41	18.6	19
7776E	2,200	1	2	21	6.4	56	17.1	21.7	551	20.5	521	53	24	19
7790A	2,200	1	1	26	7.9	44	13.4	18.9	479	15	381	62	28.1	19
7792A	4,400	2	2	12	3.7	24	7.3	22.4	568	18	457	81	36.7	19
7712EL	550	0.25	1	50	15.2	70	21.3	17	432	17.1	435	41	18.6	19
7714EL	1,500	0.68	2	16	4.9	16	4.9	17	432	17.1	435	41	18.6	19
7796AL	1,500	0.68	1	16	4.9	16	4.9	18.9	479	15	381	62	28.1	19
7798AL	2,400	1.1	2	12	3.7	12	3.7	22.4	568	18	457	81	36.7	19
7799AL	3,000	1.36	2	7	2.1	7	2.1	22.4	568	18	457	81	36.7	19

All Ingersoll Rand Series hoists meet or exceed ASME/ANSI B30.16 standards. Please consult factory for hoists that meet the European machinery directive (EC) and carry the CE mark.



## Choosing the right hoist

Material handling needs differ from application to application. Ingersoll Rand offers numerous hoist types with a range of options that can be matched to meet your specific requirements. When the time comes to select the appropriate hoist for your needs, consider the following criteria:

### Maximum load

Consider the maximum load the hoist will need to accommodate. Ingersoll Rand hoists have weight ratings from 275 lb to 6 tons. Consider hoist speed. The speed requirement of a hoist is dependent on the corresponding cycle time of the task to be performed – lift, transport, lower, return, start again.

### Installation requirements

Ingersoll Rand hoists, whether hook or trolley, can be mounted on several beam configurations. Compact for low headroom requirements, these hoists can be mounted in areas where others can't.

### Air supply

To ensure maximum operating performance, Ingersoll Rand rotary-vane air hoists require air supplies that continually provide clean, lubricated air at sufficient pressure and volume. Ingersoll Rand hoists require 90 psig at 32 to 70 scfm.

### Control method

Our rotary-vane air hoists control lift and descent by admitting proportional amounts of air to the motor through a valve. Ingersoll Rand offers two control systems:

1. Pendant control system — a 3-hose pilot pressure / bleed system opens and throttles the valve.
2. Pull-chain system — operator-controlled pull chains attached to arm open and close the valve.



# 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 muffler 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

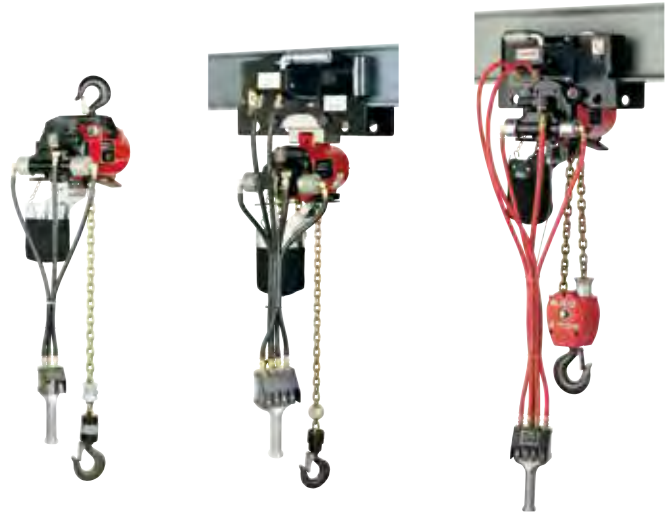
0.125 to 2 metric ton lifting capacities

## 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		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	# Falls	in	mm	in	mm	Rated Load	No Load	Rated Load	No Load	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 <sup>3</sup> /min	m <sup>3</sup> /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 <sup>3</sup> /min	m <sup>3</sup> /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
<b>ZINC PLATED LINK</b>					
7700 Series	275, 550, 1,100, 2,200	37708	.25 / .75	.6	250
7790 Series	2,200 & 4,400	42988	.312 / .858	.9	250
<b>STAINLESS STEEL LINK</b>					
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 <sup>1</sup> )	
	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

Air Chain  
Hoists

## Exhausts

### Piped exhaust<sup>1</sup>

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)
<b>STEEL SNAP HOOKS</b>									
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 <sup>1</sup>	1-1/8	34921	1-1/8	45708 <sup>1</sup>	1-1/8
7700 Series 0.50 ton spark res.	1,000	N/A	-	N/A	-	35113	1-1/8	45710 <sup>1</sup>	1-1/8
7700 Series 0.75 ton spark res.	1,500	35113	1-1/8	45709 <sup>1</sup>	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 <sup>1</sup>	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	-
<b>BULLARD HOOKS</b>									
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 <sup>1</sup>	1-3/16	35203	1-3/16	45935 <sup>1</sup>	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	-
<b>SELF-CLOSING LATCH HOOKS</b>									
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



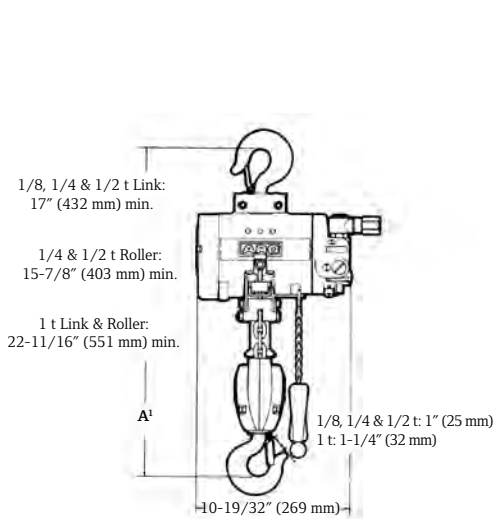
EZG-A269

# Dimensional drawings

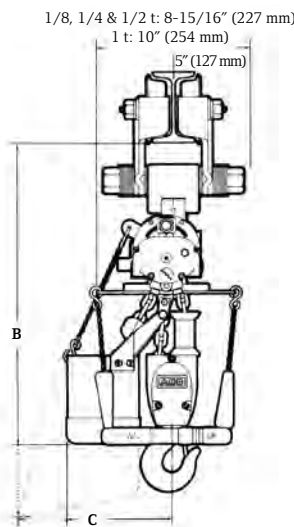
## 7700 Series Air Chain Hoists

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

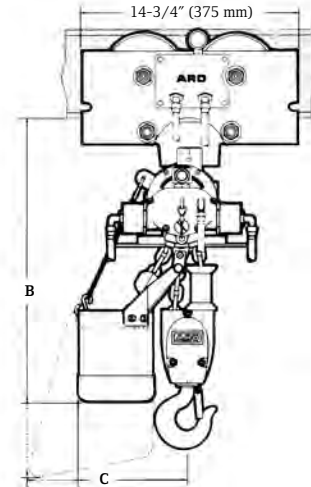
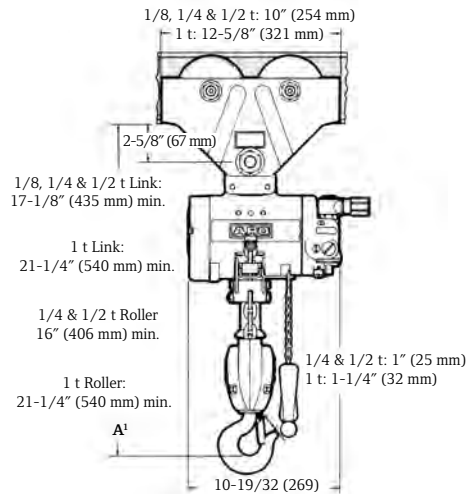
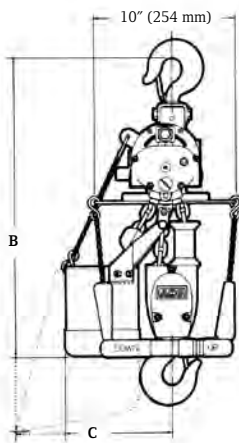
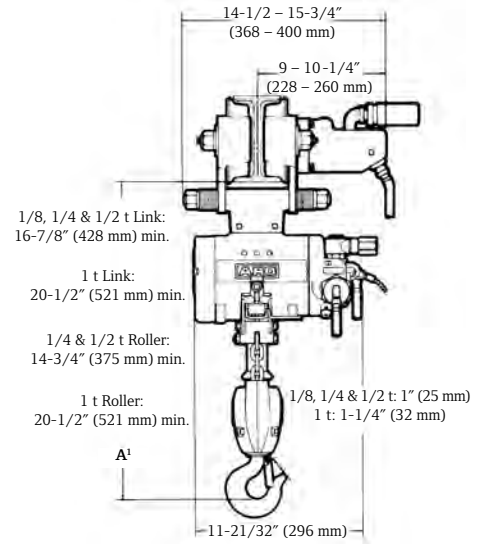
**Hook Mounted**



**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
<b>LINK TYPE</b>						
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
<b>ROLLER TYPE</b>						
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

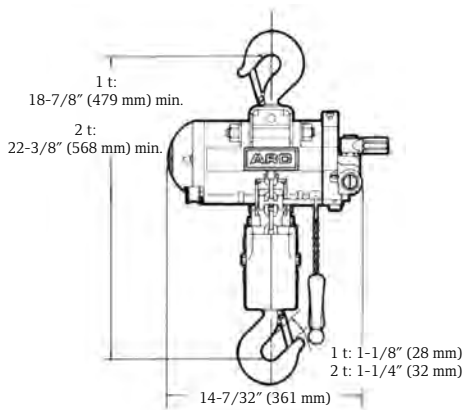


# Dimensional drawings

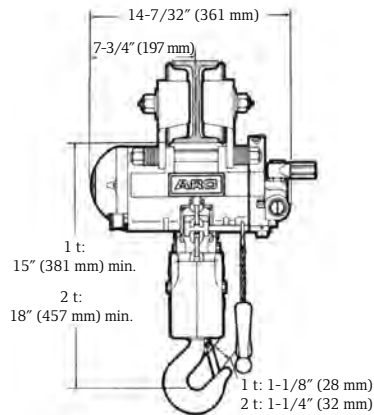
## 7790 Series Air Chain Hoists

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

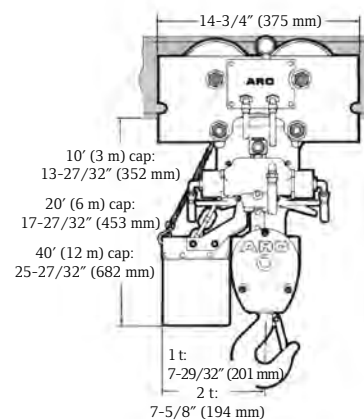
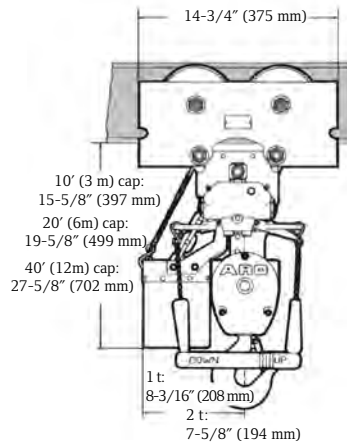
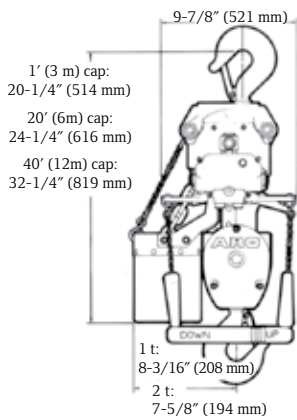
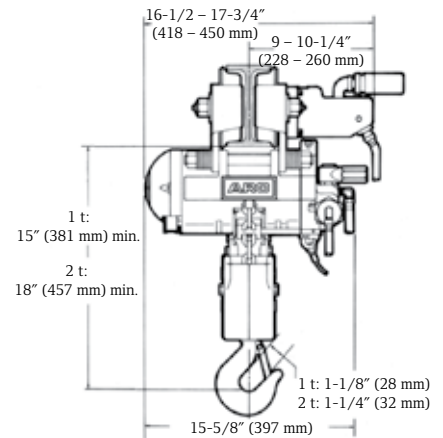
**Hook Mounted**



**Trolley Mounted**



**Motorized Trolley Mounted**



**Note:**

Headroom dimension for the 7790 Series 1-ton hoist increases 1.25" for each Bullard hook used.  
Headroom dimension for the 7790 Series 2-ton hoist increases 1.50" for each Bullard hook used.

# 7700 Series and 7790 Series

0.125 to 2 metric ton lifting capacities

## ► HOW TO ORDER

Specify complete model number as shown. This model code includes: Base Model - Control Option, Upper Suspension, Lift - Lower Suspension, Control Length, and Options.

Base	Control Option	Upper Suspension	Lift (feet)	Lower Hook	Lift (feet)	Options
<b>Zinc plated steel link chain models:</b> 7770E = 0.125 ton 7718E = 0.25 ton 7756E = 0.50 ton 7776E = 1 ton 7790A = 1 ton 7792A = 2 ton  <b>Spark resistant stainless steel link chain models:</b> 7712EL = 550 lb 7714EL = 1,500 lb 7796AL = 1,500 lb 7798AL = 2,400 lb 7790AL = 3,000 lb	0 = No controls 1 = Pull chain 2 = Pendent control 3 = 2 motor pendent 4 = 3 motor pendent	A = Lug / adapter C = Steel snap hook E = Eye bolt (7740 only) K = Bullard hook, manual close <sup>(3)</sup> R = Bronze snap hook <sup>(2)</sup> DA = Rigid RT or TIR push trolley A flange DD = Rigid TIR push trolley D flange FxxA = Hand geared trolley A flange FxxD = Hand geared trolley D flange HA = Powered trolley A flange HD = Powered trolley D flange	10 = Standard XXX = Specify length	C = Steel snap hook K = Bullard hook, manual close <sup>(3)</sup> G = Self latching hook <sup>(1)(3)</sup> R = Bronze hook <sup>(2)</sup>	6 = Standard XXX = Specify length	P = Piped exhaust kit <sup>(1)</sup> U = Canvas chain container S = Steel chain container <sup>(1)(3)</sup>

NOTES:  
 (2) Standard on spark-resistant models  
 (3) Not available on spark-resistant models

### Pricing example: 7712EL-3HA20 -R16U

Spark-resistant, 550 lb capacity, stainless link chain, 1 chain fall, 50 fpm lifting speed. Unit is specified with two motor pendent control, power trolley suspension (A flange), 20 ft of lift, bronze lower hook, 16 ft of pendent length and a canvas basket.

# Lubricants

These approved lubricants are suggested for either routine preventive maintenance procedures or for total hoist overhaul.

Part No.	Amount	Product Description	Where Used
29665	1 qt (0.9 L)	Detergent-free spindle oil with viscosity of 155-165 S.U.S. at 100°F and aniline point of 217°F.	In airline lubricator to provide lubrication to hoist air motor.
33153	5 lb (2.3 kg)	EP (extreme pressure) bearing and gear grease, NLGI No. 1 with viscosity of 750 S.U.S. at 100°F.	Pocket wheel, sheave block
50P	1 pt (0.5 L)	Class II lubricant, #50	Hoist and winches
40164	1 qt (0.9 L)	Gear oil	Hoist gearing
50G	1 gal (3.8 L)	Class II lubricant, #50	Hoist and winches
62 1 Gal	1 gal (3.8 L)	Class II #62 oil	Hoist and winch gear boxes
36460	4 oz (118 ml)	Stringy lubricant for rubber seals Triple protection, USDA approved lubricant Extreme pressure formula and corrosion inhibitors, penetrating oils.	"O" rings Load chain or wherever penetrating lubricating oils are used
Lubri-Link Green	16 oz spray bottle	Stringy lubricant for rubber seals Triple protection, USDA approved lubricant Extreme pressure formula and corrosion inhibitors, penetrating oils.	"O" rings Load chain or wherever penetrating lubricating oils are used
LLG-5	5 gal bulk container	Stringy lubricant for rubber seals Triple protection, USDA approved lubricant Extreme pressure formula and corrosion inhibitors, penetrating oils.	"O" rings Load chain or wherever penetrating lubricating oils are used



29665



33153



40164



36460



Lubri-Link Green

## Filters - Regulators - Lubricators

Part No.	Size (in) NPTF	Flow Rate scfm	Adj. Pressure Range psig	Bowl Capacity	Height x Width (in)
<b>TRIO UNITS: FILTERS, REGULATORS, LUBRICATORS</b>					
C38341-810	1/2	150	5-250	4 oz	6 x 8.7
C38451-810	3/4	200	5-250	4 oz	8.6 x 11.1
C38461-810	1	215	5-250	4 oz	8.6 x 11.1
<b>COMPONENTS</b>					
Part No.		FILTER	REGULATOR	LUBRICATOR	
TRIO #					
C38341-810	1/2	F35341-410	R37341-600	L36341-110	
C38451-810	3/4	F35451-410	R37451-600	L36451-110	
C38461-810	1	F35461-410	R37461-600	L36461-110	



C38451-810



C38341-810



# Material Handling Solutions

## Case study

Ingersoll Rand routinely provides custom solutions for lifting and pulling applications all over the world. Please contact an authorized Ingersoll Rand distributor or representative for assistance with your application's requirements.

### Model

HL2000K/04014E

### Application

Nuclear weapon handling hoist and motorized trolley system

### Solution

Customer required hoists to be built to ASME NUM-1, *Rules for Construction of Cranes, Monorails, and Hoists*, a design standard for hoists and cranes used in nuclear facilities. Hoists are to be used for the assembly and maintenance of nuclear weapons.



### Product Specifications

Model	Capacity	Design Factor	Headroom	Lifting and Lowering Speed	Trolley Travel Speed
HL2000K/04014E	2,000 lb (909 kg)	10:1	22 in (558.8 mm) maximum	Not to exceed 10 fpm (3 m/min)	Not to exceed 16 fpm (4.9 m/min)

### Options

- Special quick disconnect pendent manifold
- Positive sealed motor and gearbox — zero tolerance for leakage for “clean room” environment
- Pendent designed to survive a 150 psi overpressure condition
- Custom chain container with drain plug
- Unpainted bare steel bottom hook
- Overload limiter on hoist
- Ecology air preparation package for hoist and trolley
- Custom operation and maintenance manuals and special documentation
- Special customer defined NDE, sound, and load testing requirements
- Long-term storage packaging requirements
- Lightning arrest modifications



# Limited Warranty

## Industrial Lifting Equipment Limited Warranty

Ingersoll Rand Company (IR) warrants to the original user its industrial lifting equipment (Hoists) to be free of defects in material and workmanship for a period one year from the date of purchase. Ingersoll Rand will repair, without cost, any Hoist found to be defective, including parts and labor charges, or at its option, will replace such Hoist or refund the purchase price less a reasonable allowance for depreciation, in exchange for the hoist. Repairs or replacements are warranted for the remainder of the original warranty period.

If any Hoist proves defective within its original one year warranty period, it should be returned to an appropriate Ingersoll Rand Service Distributor, transportation prepaid with proof of purchase or warranty card.

This warranty does not apply to Hoist that Ingersoll Rand has determined to have been misused or abused, improperly maintained by the purchaser, or where the malfunction or defect can be attributed to the use of non-genuine Ingersoll Rand parts.

Ingersoll Rand makes no other warranty, and all implied warranties including any warranty of merchantability or fitness for a particular purpose are limited to the duration of the expressed warranty period as set for the above. Ingersoll Rand's maximum liability is limited to the purchase price of the Hoist and in no event shall Ingersoll Rand be liable for any consequential, indirect, or special damages of any nature arising from the sale or use of the Hoist, whether based on contract, tort, or otherwise.

Note: Some states do not allow limitations on incidental or consequential damages so that the above limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights that may vary from state to state.

**Product, Parts, Maintenance, Operation, and Safety manuals can be downloaded from [irtechpubs.com](http://irtechpubs.com)**