

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 to see our high-capacity chain hoists (up to 200 metric tons) and other products.

## Air chain hoists selection guide

	Lifting Capacity metric				Speed Load		ig Speed I Load		Mount Iroom		/ Mount droom		g Weight Hook		
Model	lb	tons	# Falls	ft/min	m/min	ft/min	m/min	in	mm	in	mm	lb	kg	Page No.	
CLK SERIES															
CL125K	275	0.125	1	43	13.1	37	11.3	11.5	292.1	14.1	358.1	34	15.4	6	
CL250K	550	0.25	1	32	9.8	45	13.7	11.5	292.1	14.1	358.1	34	15.4	6	
CL500K	1100	0.50	2	15	4.6	22	6.7	12.75	323.9	15.35	389.9	38	17.2	6	
MLK SERIES	AND HLK	SERIES													
ML250K	550	0.25	1	101	30.8	117	35.7	18	457.2	18	457.2	48	21.8	10	
ML250KS	550	0.25	1	40	12.2	90	27.4	18	457.2	18	457.2	48	21.8	10	
ML250KR	550	0.25	1	26	7.9	38	11.6	18	457.2	18	457.2	48	21.8	10	
ML500K	1,100	0.5	1	55	16.8	97	29.6	18	457.2	18	457.2	48	21.8	10	
ML500KS	1,100	0.5	1	22	6.7	66	20.1	18	457.2	18	457.2	48	21.8	10	
ML500KR	1,100	0.5	2	13	4	20	6.1	18	457.2	18	457.2	61	27.7	10	
ML1000K	2,200	1	2	28	8.5	49	14.9	18	457.2	18	457.2	61	27.7	10	
ML1000KS	2,200	1	2	11	3.4	33	10.1	18	457.2	18	457.2	61	27.7	10	
HL1000K	2,200	1	1	26	7.9	37	11.3	18.5	469.9	18.1	460.5	84	38.1	10	
HL1000KR	2,200	1	1	26	7.9	37	11.3	18.5	469.9	18.1	460.5	84	38.1	10	
HL1500K	3,300	1.5	1	16	4.9	26	7.9	18.8	477.5	18.9	479.5	84	38.1	10	
HL2000K	4,400	2	2	13	4	18	5.5	23	584.2	21.6	549.4	125	56.7	10	
HL3000K	6,600	3	2	8	2.4	13	4	25	635	22.6	574.8	125	56.7	10	
HL4500K	10,000	4.5	3	4.6	1.4	10	3.1	30.9	784.4	28	711.2	193	87.5	10	
HL6000K	13,200	6	4	3.5	1.1	7.6	2.3	36.2	919.2	32.2	817.6	248	112.5	10	
ARO SERIES															
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.

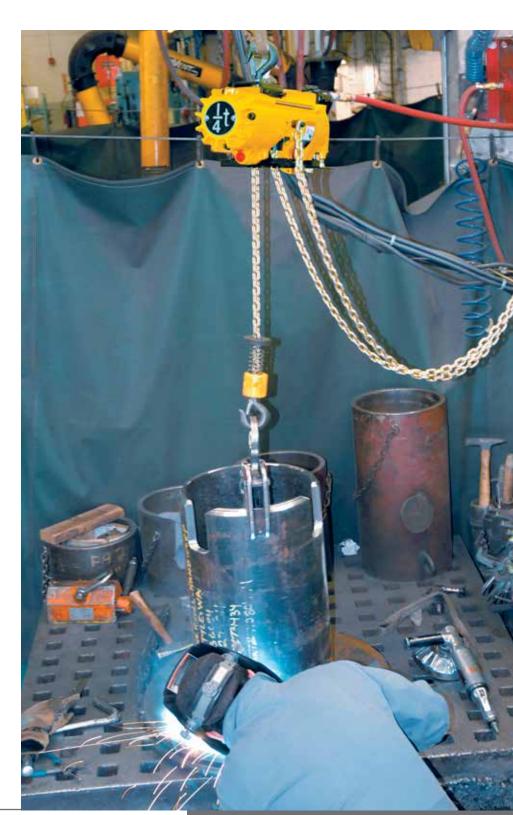
#### Air supply

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



## **CLK Series**

Pneumatic hoists: 125-, 250-, and 500-kg models

**Disc brake** is non-asbestos and spring-engaged with an air release that offers significant control while minimizing air consumption.

#### A two-stage differential transmission

multiplies motor torque and reduces speed.
Oil lubrication helps create maximum durability.
Gearing components are made from high-strength, heat-treated steel alloy.

**Forged five-pocket pocket wheel** provides for smooth lifts and enhanced chain life.

**Specially designed slack chain opening prevents dangerous cross-linking** by guiding chain to the drive wheels.

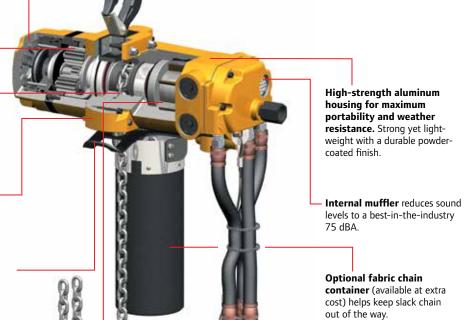
**Upper and lower limit stops prevent dangerous over-travel of the hook** in either direction, reducing possible damage to hoist and load.

100% duty cycle multi-vane (6) air motor offers a high-torque and low-maintenance design.

Air porting under the vanes creates smooth operation, positive starting, and long life.

**Double reeving** is used on 500-kilogram units only.

**Bottom latch-type swivel hooks meet OSHA requirements** and are supported by anti-friction needle type thrust bearings.



Full flow pendent for maximum control and enhanced load

positioning capabilities.

**Standard link load chain** is zinc-plated steel DAT grade 80.

Ergonomic pendent handle (shown with optional E-stop) is rugged and durable. Guard covers both levers and can be used with or without gloves. Optional E-stop (available at extra cost) makes this hoist CE-compliant.

## **CLK Series**

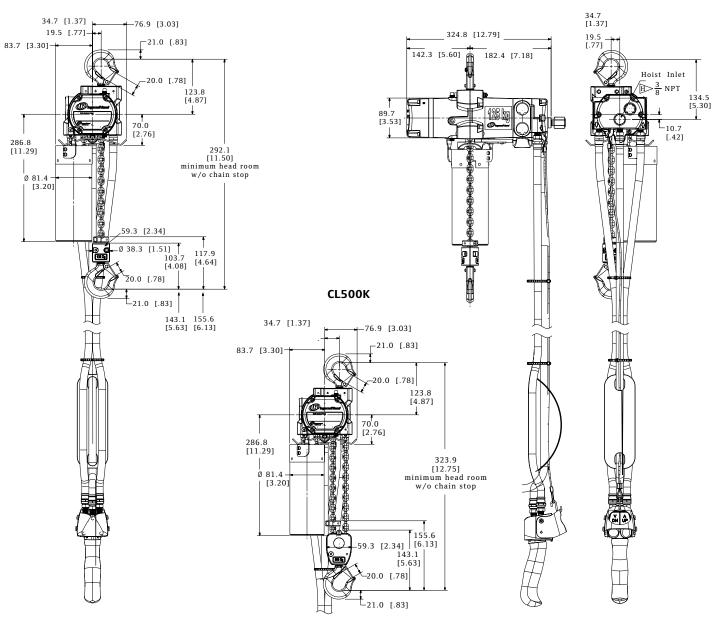
Pneumatic hoists: 125-, 250-, and 500-kg models

#### **CLK Series Specifications**

Capacity		Hook Mount Trolley Mount Headroom Headroom		Lifting Speed Rated Load No Load			Lowering Speed Rated Load No Load			Chain		Weight t of lift)	Net Weight w/10 ft of Lift							
Model	lb	kg	# Falls	in	mm	in	mm	ft/min	m/min	ft/min	m/min	ft/min	m/min	ft/min	m/min	Size	lb	kg	lb	kg
CL125K	275	125	1	11.5	292.1	14.1	358.1	43	13.1	56	17.1	37	11.3	27	8.2	4 x 12	0.24	0.11	34	15.4
CL250K	550	250	1	11.5	292.1	14.1	358.1	32	9.8	56	17.1	45	13.7	27	8.2	4 x 12	0.24	0.11	34	15.4
CL500K	1100	500	2	12.75	323.9	15.35	389.9	15	4.6	26	7.9	22	6.7	13	4.0	4 x 12	0.48	0.22	38	17.2

Working pressure from 5 to 7 bar (70 to 100 psi). Air consumption @ rated load — all models 0.9 m (32 cfm). Air inlet 3/8" NPT. Sound level 75 dBA.

#### CL125K and CL250K CL125K and CL250K



## **Accessories**

Pneumatic hoists: 125-, 250-, and 500-kg models

#### **PT Series Hook-on Trolley**

Model	lb	Capacity metric tons	Flange Adjustment in		Min. Curve Radius in	Weight Ib	Kit no. (order separate)	Flange Adjustment in	Weight lb
STANDARD SERIES									
PT005-8	1,100	0.50	2.6 – 8	4	36	19.7	PT005-WFK	8 - 13	5.5



Wheels are cast iron and the universal tread fits either flat or tapered beams.

Cousin to the PT Series trolley, the twin suspension shaft RT Series trolley offers a rigid connection for the CLK Series of air chain hoists. Lug adapter CL250K-425 is required for use with the RT trolley.

#### **RT010 Series Trolley**

Trolley Part Number	Capacity metric tons	Fits Beam Flange Width in	Minimum Turning Radius in
RT010	0.25 - 1	2.7 - 6	36



Wheels have universal tread for use on flat or tapered beams.

#### Filters - Regulators - Lubricators

Part No. TRIO UNITS: FILTI	Size (in) NPTF ERS, REGULATORS,	Flow Rate scfm LUBRICATORS	Adj. Pressure Range psig	Bowl Capacity oz	Height x Width in
C38341-810	1/2	150	5 – 250	4	6 x 8.7
C38451-810	3/4	200	5 – 250	4	8.6 x 11.1
C38461-810	1	215	5 – 250	4	8.6 x 11.1



#### **Quick Exhaust Valves**

Part	For Use	Control	Style	Pendent Length
Number	With	Type		ft
MR-939	All CLK Series	Full-flow	3/8" NPT	15 – 40

The first pair of full-flow valves will be installed between 7 and 8 ft from the pendent handle after pendent hose length reaches 16 ft. Any additional valves will equally divide the remaining hose length.

#### **E-Stop Pendent Handle**

Part Number	Description
45667359	Pendent handle assembly with E-stop function



#### **Link Chain Canvas Basket**

Part No.	Capacity ft
CL250K-749-20	20
CL250K-749-40	40

Link Chain Canvas Basket



# Industry-leading durability, precision, and flexibility

Ingersoll Rand, the most trusted name for quality, high-value hoists, introduces the CLK Series, including 125-, 250- and 500-kilogram models.

#### The CLK Series is the smart choice for:

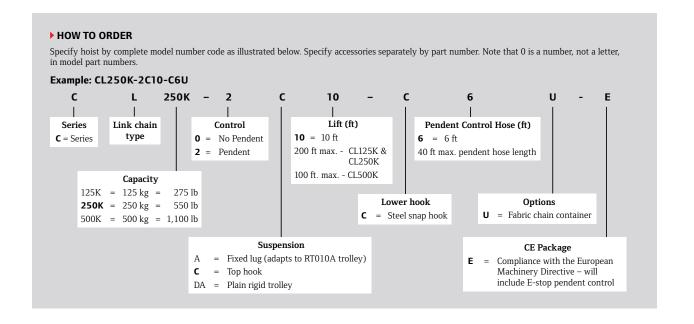
- ▶ Durability that delivers more uptime With a FEM/ISO mechanism classification of 1Am/M4 (ASME HST-5 rating of A5), CLK Series hoists are duty-rated to go an incredible 800 full-load hours between overhauls.
- ▶ Lifting speed and precision control for enhanced ease of use Lifting speed of 43 fpm (13.1m/min) for the 125 kg models and 32 fpm (9.8m/min) for the 250 kg models is the **best in its class**. Enhanced load "positioning" capabilities and an outstanding combination of motor control and brake release make this hoist ideal for precision applications.
- ► "Best-in-the-industry" quiet operation enhances safety and decreases operator fatigue Sound levels of just 75 dBA make CLK Series hoists easy on operators, while also minimizing the overall ambient noise of the work site.
- ▶ Highly efficient air motor saves money For hoists in its class, CLK Series gets the most performance from your compressed air output. The CLK Series consumes only 32 cfm (0.9 m³/min) of air lifting rated load and less then 16 cfm (0.5 m³/min) while lowering load.

For more information on how the CLK Series hoists can generate high return on your equipment investment:

See your local distributor

Call 866-207-6923

VISIT ingersollrandproducts.com



## **MLK and HLK Series**

#### 0.25 to 6 metric ton lifting capacities

#### **Benefits**

- 100 percent duty cycle enables continuous operation
- Dust, dirt, moisture, and corrosive gases kept out of the motor by air pressure — ideal for foundries and electro-plating applications
- Minimum chance of electrical shock makes air hoists ideal for highly flammable environments such as chemical plants and refineries; spark-resistant models also available
- Simple pull-chain speed and directional controls provide precise load-spotting capabilities; easy-to-operate pendent air valves provide a variable control signal with adjustable response by a variable orifice. For more precise control, MLKS slow-speed models are available.
- Motor, brake, and throttle parts are interchangeable with all current Ingersoll Rand air chain hoists
- Ingersoll Rand air chain hoists are designed and constructed for trouble-free maintenance

**Top and bottom latch-type swivel hooks** meet OSHA requirements and are supported by anti-friction roller bearings (Bullard Burnham hooks are available for all models,

except spark-resistant)

Manual brake release kit allows operators to safely lower a suspended load in a power failure

Air-operated, non-asbestos, selfadjusting disc brake balances effort to motor torque by sensing air pressure in the valve chest, providing precise control and eliminating back-drop encountered with some mechanical brakes; if air supply is interrupted, pressure release causes instantaneous, automatic braking

**Heat-treated planetary gearing system**provides high-torque capability by splitting the torque path, thereby dividing and balancing the load over more teeth, assuring longer life and reduced maintenance

A small amount of exhaust air flows over chain and drive wheel to help lubricate chain from spent in-line lubrication of motor

**Slack chain** is guided into drive wheels by a specially designed opening that prevents dangerous cross-linking

**Upper and lower limit stops** prevent dangerous over-travel of the hook in either direction, reducing possible damage to hoist or load

**Fabric or metal container** keeps slack chain out of the way

**Standard link load chain** is zinc-plated steel; stainless steel chain available for 0.25-ton through 1-ton spark-resistant models

Two-piece, single-line hook block entraps chain links and hook bearing without using small load-bearing pins or fasteners



 All bearings are either ball- or rollertype to minimize friction

 An internal muffler reduces sound levels to 85 dBA; woven to prevent corrosion and clogging

Inlet swivel and strainer are combined for easy hookup from any direction — swivel reduces hose fatigue, especially on hook-mounted units; strainer nipple provides extra assurance of clean air for maximum wear protection

**Precision throttle valves** for smooth operation and metering of air; valves are poppet-type for ease of maintenance

**High-strength aluminum housing** is strong yet lightweight for maximum portability and weather resistance

**Control adjustment screws** provide sensitivity and maximum speed control for pendent models

**100 percent duty-cycle multi**vane motor with high torque, low maintenance design, and air porting under vanes for smooth operation, positive starting, and long life

Pilot pendent control provides a variable pressure signal to the valve chest, where flow to hoist is metered accordingly; air does not travel through pendent, thus pendent length does not affect performance; control hoses are small, flexible, and easily converted to different lengths

One-piece, cast-aluminum guarded pendent handle for maximum durability; guards on either side of levers are cast-in for protection against accidental operation; all functional parts are corrosion- and spark-resistant

## **MLK Series and HLK Series**

0.25 to 6 metric ton lifting capacities

#### **Features**

#### **MLK Series**

The Ingersoll Rand MLK family of hoists is suitable for A5 / H5 severe-duty use in the 0.25 to 1 metric ton range. The MLK Series is designed to be used as a high-speed production hoist; the MLKS\* is better suited for slow-speed spotting.

#### **HLK Series**

The HLK Series incorporates a larger chain wheel to accommodate 3/8" diameter chain and a lower gear ratio to handle increased load capacities. HLK Series hoist capacities range from 1 to 6 metric tons and are severe-duty rated. Refer to the trolley section on page 61 for plain, geared, and motorized trolleys.

#### **Spark-resistant features**

MLKR and HLKR spark-resistant hoists have been designed to give maximum protection in explosive and other hazardous environments.

#### Components for spark-resistance include:

- · Bronze hooks
- · Bronze trolley wheels
- Stainless-steel (one part reeving) or aluminum (two parts reeving) lower hook blocks
- · Aluminum stop ring (1/4-ton models)
- · Stainless-steel load chain
- Stainless-steel pendent levers and bronze valve caps

The load capacity and speeds of MLKR and HLKR Series units are reduced. A restricted motor is used to accomplish this, as stainless-steel chain is not hardened and strength is less than standard alloy chain.





## **MLK and HLK Series**

0.25 to 6 metric ton lifting capacities

#### MLK and HLK Specifications (performance at 90 psi, 6.3 bar)

	Сара	acity		Hook	Mount	Trolley	Mount		Lifting	Speed			Lowerin	ng Speed			Chair	ı Weight	Net V	Veight
		metric		Head	droom	Head	Iroom	Rate	d Load ¯	No	Load	Rated	Load	No I	_oad	Chain	(per fo	ot of lift)	w/10 f	t of Lift
Model	lb	tons	# Falls	in	mm	in	mm	ft/mir	m/min	ft/min	m/min	ft/min	m/min	ft/min	m/min	Size	lb	kg	lb	kg
ML250K	550	0.25	1	18	457.2	18	457.2	101	30.8	171	52.1	117	35.7	99	30.2	6.4 x 19.5	0.6	0.3	48	21.8
ML250KS	550	0.25	1	18	457.2	18	457.2	40	12.2	71	21.6	90	27.4	53	16.2	6.4 x 19.5	0.6	0.3	48	21.8
ML250KR	550	0.25	1	18	457.2	18	457.2	26	7.9	42	12.8	38	11.6	30	9.1	6.4 x 19.5	0.6	0.3	48	21.8
ML500K	1,100	0.50	1	18	457.2	18	457.2	55	16.8	106	32.3	97	29.6	59	18	6.4 x 19.5	0.6	0.3	48	21.8
ML500KS	1,100	0.50	1	18	457.2	18	457.2	22	6.7	44	13.4	66	20.1	32	9.8	6.4 x 19.5	0.6	0.3	48	21.8
ML500KR	1,100	0.50	2	18	457.2	18	457.2	13	4	21	6.4	20	6.1	15	4.6	6.4 x 19.5	1.1	0.5	61	27.7
ML1000K	2,200	1	2	18	457.2	18	457.2	28	8.5	53	16.2	49	14.9	30	9.1	6.4 x 19.5	1.1	0.5	61	27.7
ML1000KS	2,200	1	2	18	457.2	18	457.2	11	3.4	22	6.7	33	10.1	16	4.9	6.4 x 19.5	1.1	0.5	61	27.7
HL1000K	2,200	1	1	18.5	469.9	18.1	459.7	26	7.9	40	12.2	37	11.3	26	7.9	9.5 x 25.7	1.3	0.6	84	38.1
HL1000KR	2,200	1	1	18.5	469.9	18.1	459.7	26	7.9	40	12.2	37	11.3	26	7.9	9.5 x 25.7	1.3	0.6	84	38.1
HL1500K	3,300	1.50	1	18.8	477.5	18.9	480.1	16	4.9	28	8.5	26	7.9	16	4.9	9.5 x 25.7	1.3	0.6	84	38.1
HL2000K	4,400	2	2	23	584.2	21.6	548.6	13	4	20	6.1	18	5.5	13	4	9.5 x 25.7	2.6	1.2	125	56.7
HL3000K	6,600	3	2	25	635	22.6	574	8	2.4	14	4.3	13	4	8	2.4	9.5 x 25.7	2.6	1.2	125	56.7
HL4500K	9,900	4.50	3	30.9	784.9	28	711.2	4.6	1.4	10.5	3.2	10	3.1	6.6	2	9.5 x 25.7	3.9	1.8	193	87.5
HL6000K	13,200	6	4	36.2	919.5	32.2	817.9	3.5	1.1	8.4	2.6	7.6	2.3	4.8	1.5	9.5 x 25.7	5.2	2.4	248	112.5

Working pressure from 5 to 7 bar (70 to 100 psi). Air Consumption @ rated load - ML250KS, ML250KR, ML500KS, ML500KR, ML1000KS = 1.27m³ (45 cfm) all other models = 1.98m³ (70 cfm). Air inlet 1/2" NPT. Sound level 85 dBA.

#### **Trolley Mount Specifications**

	Trolley			imum Iroom		Speed at I Load	Air Consu Rated	mption @ I Load	Trolley Adjus	Flange tment		m Curve dius	Air Inlet	Net Weight w/10 ft of Lift	
Model	type	Capacity metric tons	in	mm	ft/min	m/min	ft³/min	m³/min	in	mm	ft	m		lb	kg
ML250K, KS, KR	Plain	0.25	18	457	-	-	-	-	2.66-12	68-305	3.5	1.1	-	68	31
	Geared	0.25	18	457	-	-	-	-	2.66-12	68-305	3.5	1.1	-	71	32
	Motor	0.25	18	457	95	29	35	1	2.66-12	68-305	3.5	1.1	1/4	78	35
ML500K, KS, KR	Plain	0.50	18	457	-	-	-	-	2.66-12	68-305	3.5	1.1	-	68	31
	Geared	0.50	18	457	-	-	-	-	2.66-12	68-305	3.5	1.1	-	71	32
	Motor	0.50	18	457	95	29	35	1	2.66-12	68-305	3.5	1.1	1/4	78	35
ML1000K, KS	Plain	1	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	81	37
	Geared	1	17	432	-	-	-	-	2.66-12	68-305	3.5	1.1	-	84	38
	Motor	1	17	432	93	28	35	1	2.66-12	68-305	3.5	1.1	1/4	91	41
HL1000K, KR	Plain	1	18	457	-	-	-	-	3.25-12	83-304	3.5	1.1	-	106	48
	Geared	1	18	457	-	-	-	-	3.25-12	83-304	3.5	1.1	-	109	50
	Motor	1	18	457	93	28	35	1	3.25-12	83-304	3.5	1.1	1/4	116	53
HL1500K	Plain	1.50	18	457	-	-	-		3.25-12	83-304	3.5	1.1	-	106	48
	Geared	1.50	18	457	-	-	-		3.25-12	83-304	3.5	1.1	-	109	50
	Motor	1.50	18	457	84	25	35	1	3.25-12	83-304	3.5	1.1	1/4	116	53
HL2000K	Plain	2	22	559	-	_	-	-	3.25-12	83-304	3.5	1.1	-	203	92
	Geared	2	22	559	-		-	-	3.25-12	83-304	3.5	1.1	-	206	94
	Motor	2	22	559	80	24	35	1	3.25-12	83-304	3.5	1.1	1/4	213	97
HL3000K	Plain	3	23	584	-			-	3.25-12	83-304	3.5	1.1	-	203	92
	Geared	3	23	584	-		-	-	3.25-12	83-304	3.5	1.1	-	206	94
	Motor	3	23	584	71	22	35	1	3.25-12	83-304	3.5	1.1	1/4	213	97
HL4500K	Plain	4.50	27	686	-	-	-	-	4.25-7.25	108-184	5	1.5	-	392	178
	Geared	4.50	27	686	-	_	-	-	4.25-7.25	108-184	5	1.5	-	395	180
	Motor	4.50	27	686	60	18	35	1	4.25-7.25	108-184	5	1.5	1/4	402	182
HL6000K	Plain	6	29	737	-	-	-	-	4.25-7.25	108-184	5	1.5	-	442	201
	Geared	6	29	737	-	-	-	-	4.25-7.25	108-184	5	1.5	-	445	202
	Motor	6	29	737	45	14	35	1	4.25-7.25	108-184	5	1.5	1/4	452	205

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

## Hoist accessories for MLK and HLK Series

#### **Chain Container**

Series	Chain Capacity* ft	Metal Container Part Number	Fabric Container Part Number
MLK	13	ML10-K749	N/A
MLK	17	N/A	ML50K-K749-17
MLK	26	ML20-K749A	N/A
MLK	40	ML20-K749-20	N/A
MLK	45	N/A	ML50K-K749-45
MLK	80	MLK-K750-80	N/A
HLK	20	HLK-K750-20	HLK-K749-20
HLK	40	HLK-K750-40	HLK-K749-40
HLK	85	HLK-K750-80	N/A

<sup>\*</sup>Chain containers are for one-part single lines. For two-part lines, divide capacity by two; for three-part lines by three, etc.





**Fabric Container** 

#### Hooks

	_		
Series	Capacity metric tons	Bullard-Burnham Top Or Bottom Part Number	Bronze Latch Type* Top Or Bottom Part Number
MLK	0.25	CE110-KBB377	MLK-KRS304
MLK	0.50	CE110-KBB377	ML500KR-K377
MLK	1	CE120-KBB377	N/A
HLK	1	HLK-ABB377	HLK-SR377
HLK	1.50	HLK-ABB377	HL1500K-SR377
HLK	2	HL2000K-ABB377	HL2000K-SR377
HLK	3	HL3000K-ABB377	HL3000K-SR377
HLK	4.50	HL4500K-ABB377	HL4500K-SR377
HLK	6	HL6000K-ABB377	HL6000K-SR377

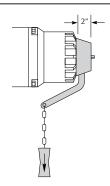


ullard-Burnham hook

 $Bullard\hbox{-}Burnham\ hooks\ are\ not\ available\ for\ spark\hbox{-}resistant\ models.$ 

#### Manual Brake Release Kit (M)

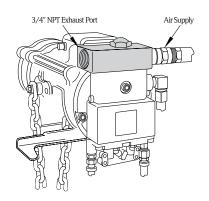
For all MLK Series and HLK Series hoists. Part number MLK-K390.



## Piped-away Exhaust Kits for MLK Series and HLK Series Hoists

#### Part Number MHLK-KEXH

This two-piece kit replaces swivel air inlet on hoist. Noise is reduced with addition of piped-away exhaust hose. Use  $1^{\prime\prime}$  diameter exhaust hose to minimize reduction in lift speed.



#### **Hose Trolleys**

Part Number	Flange Width in	
7703	2.33 to 5	
D10-8888	5 to 8.75	

Maximum hanging weight per unit is 35 lb; each can be adjusted to fit 1/2'' to 1-1/4'' 0.D. hoses.



<sup>\*</sup>Not pictured.

## Hoist accessories for MLK and HLK Series

#### **Pendent Handles**

		NPT A	ir Inlet	
Time / Best Number	A in	B	C in	D in
Type / Part Number	ın	in		ın
SINGLE-MOTOR				
MLK-A269C	1/8	1/8	N/A	N/A
EZG-A269	3/8	1/8	N/A	N/A
MR-269C	3/8	3/8	N/A	N/A
C6H20A-A169B	1/2	1/2	N/A	N/A
TWO-MOTOR				
PILOT-A122B	3/8	1/8	1/8	N/A
MLK-K122B	3/8	1/8	3/8	N/A
MR-A122C	3/8	3/8	3/8	N/A
C6H20A-A122B	1/2	1/2	3/8	N/A
THREE-MOTOR				
PILOT-A132B	3/8	1/8	1/8	1/8
MLK-K132B	3/8	1/8	3/8	3/8
MR-A132C	3/8	3/8	3/8	3/8
C6H20A-A132B	1/2	1/2	3/8	3/8

When a pendent-controlled hoist is purchased with a pendent-controlled power trolley or tractor, the required two- or three-motor pendent is furnished at no extra cost in place of an individual pendent, when specified.

#### **Link Load Chain**

Series	Туре	Bulk Part Number	Chain Size Diameter / Pitch mm	
MLK	Zinc-plated*	M745Z	6.4 x 19.5	
MLK	Stainless steel**	M745S	6.4 x 19.5	
HLK	Zinc-plated*	H745Z	9.5 x 25.7	
HLK	Stainless steel**	H745S	9.5 x 25.7	

<sup>\*</sup>Standard.

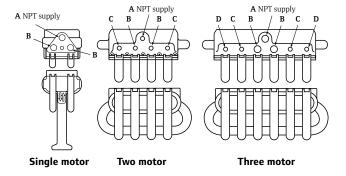
#### **Pull Chain Conversion**

Part Number	Description
MLK-K415A	Wooden directional and crossbar handles only
CA110-B240	Standard chain; specify total length of both chains
D02-1413	Aluminum spark-resistant chain; specify total length of both chains

#### **Pendent Conversion Kit**

Part Number	Description
MLK-AL269C	MLK Series, HLK Series, and HLKR Series hoists; specify length

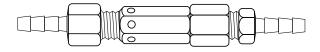




#### **Quick Exhaust Valves**

Part Number	For Use With	Control Type	Style	Pendent Length ft	Quantity Recommended*
20417	All MLK Series	Pilot	Push-on	21 – 50	2
20417	HLK Series hoists		1/4" NPT hose	51 – 75	4
MR-939-6	TIR Series trolleys	Full-flow	Push-on	21 – 50	2
MR-939-6	MTK Series tractors		3/8" NPT hose	51 – 75	4

<sup>\*</sup>The first pair of full-flow valves will be installed between 5' and 7' from the pendent handle. Any additional valves will equally divide the remaining hose length.



Part number 20417. Part number MR-939-6 not shown.

#### **Drawbar Hitch Kits for Use with MTK Series Tractors**

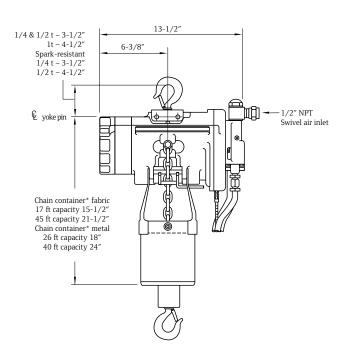
Series	Part Number
HL1000K, HL1500K, HL2000K and HL3000K with rigid trolley	No kit required; standard drawbar kit included with MTK Series tractors fits these hoists
MLK with rigid trolley	MR-K1

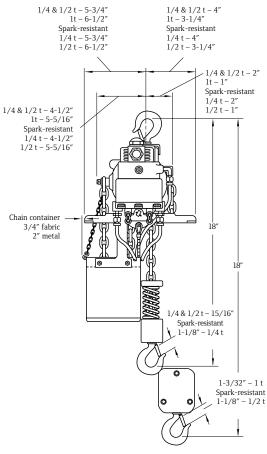
 $<sup>**</sup>For spark-resistant \ models \ only.$ 

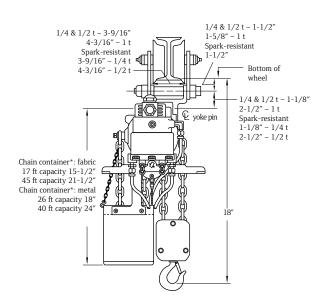
## MLK, MLKS and MLKR Series

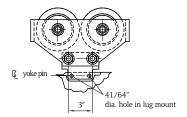
0.25 to 1 metric ton lifting capacities

#### **Dimensions**









<sup>\*</sup>Chain container capacities are for one-part single lines. For two-part lines, divide capacity by two.

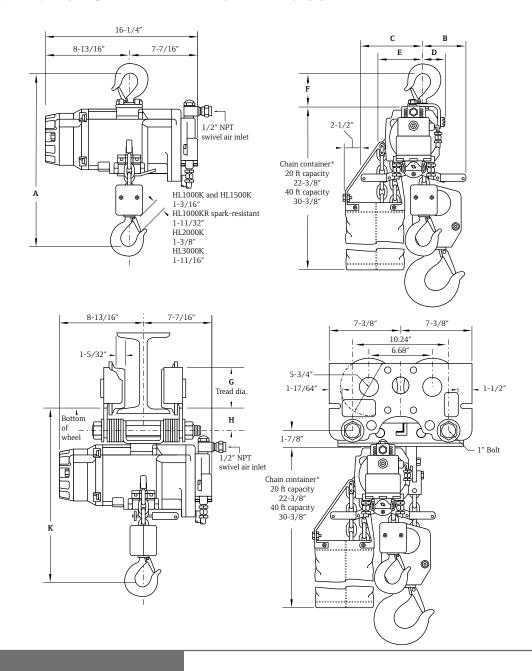
## **HLK and HLKR Series**

1 to 3 metric ton lifting capacities

#### **Dimensions**

					Min				
Cutto	A	B	C 	D 	E	F.	G	H	K
Series	in	in	in	in	in	in	in	in	in
HL1000K/R	18.5	4.8	7.3	2.4	5.4	3.5	4.5	2.4	18.1
HL1500K	18.5	4.8	7.3	2.4	5.4	3.5	4.5	2.4	18.9
HL2000K	23	3.6	8.4	2.4	6.6	5.8	4.5	2.4	21.6
HL3000K	23	3.6	8.4	2.4	6.6	6.3	4.5	2.4	22.6

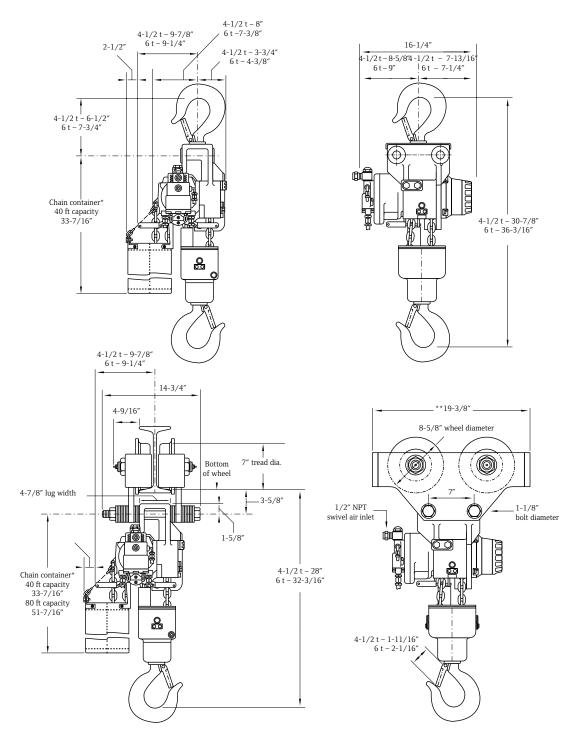
<sup>\*</sup>Chain container capacities are for one-part single lines (1- and 1.50-ton). For two-part lines, divide capacity by two.



## **HLK Series**

4.50 to 6 metric ton lifting capacities

#### **Dimensions**



<sup>\*</sup>Chain container capacities are for single-line. For three-part 4.50-ton units, divide capacity by three. For four-part 6-ton units, divide capacity by four.

\*\*For additional geared and motorized trolley dimensions refer to dimensions in the TIR Series trolley section.

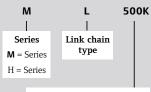
## **MLK and HLK Series**

0.25 to 6 metric ton lifting capacities

#### HOW TO ORDER

Specify hoist by complete model number code as illustrated below. If a trolley is required, specify beam size, type and flange width. Specify accessories separately by part number. Note that 0 is a number, not a letter, in model part numbers.

#### Example: ML500KR-2R10R6U

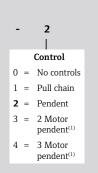


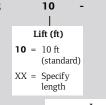
# Capacity 250K = 250 kg = 550 lb 500K = 500 kg = 1,100 lb 1000K = 1,000 kg = 2,200 lb 1500K = 1,500 kg = 3,300 lb 2000K = 2,000 kg = 4,400 lb 3000K = 3,000 kg = 6,600 lb 4500K = 4,500 kg = 10,000 lb

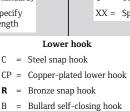
6000K =6,000 kg = 13,200 lb

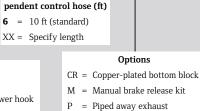
#### Spark-resistant

- R = Add for spark-resistant (0.25, 0.50 t MLKR and 1 t HLKR)
- S = Add for slow speed spotting (0.25, 0.50, 1 t MLKS)









= Steel chain container

= Fabric chain container

Length of pull/chain or

U

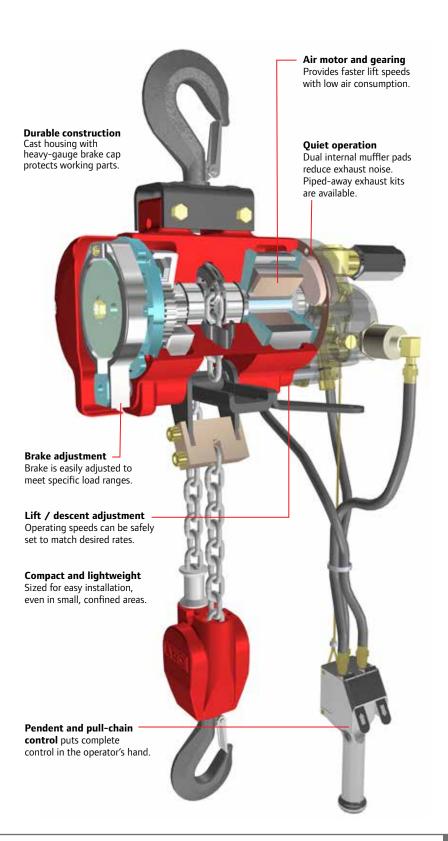
## Suspension = Fixed lug

- B = Bullard hook (self closing)
- **R** = Bronze snap hook
- C = Swivel top hook CP = Copper-plated top hook
- DA<sup>(3)</sup> = Plain rigid trolley (universal wheels "A" flange)
- $DD^{(3)}$  = Plain rigid trolley (universal wheels "D" flange)
- FXXA<sup>(2)(3)</sup> = Hand geared trolley (universal wheels "A" flange)
- FXXD<sup>(2)(3)</sup> = Hand geared trolley (universal wheels "D" flange)
- $HA^{(3)}$  = Vane mtr. powered trolley (universal wheels "A" flange)
- HD<sup>(3)</sup> = Vane mtr. powered trolley (universal wheels "D" flange)

#### NOTE:

- (1) Required with "H" suspension.
- (2) XX = specify hand chain length if other than standard "08" (8 ft) required.
- (3) For solid bronze wheels on non-spark resistant models, add "R" to the end of the trolley suspension code. (See pages 20 and 21 for price.)

## 7700 Series and 7790 Series link chain hoists



#### 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

		Capacity Hook Mount Trolley metric Headroom Head									Lowering Speed Rated Load No Load					Weight ot of lift)		Veight ft of Lift		
Model	lb	tons	# Falls	in	mm	in	mm	ft/min	m/min	ft/min	m/min	ft/min	m/min	ft/min	m/min	Size	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**

	Trollev	Capacity		imum droom		Speed at d Load		umption @ d Load		Flange tment		m Curve dius	Air Inlet		Veight t of Lift
Model	type	metric tons	in	mm	ft/min	m/min	ft³/min	m³/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.



#### 7700 Series and 7790 Series Spark-resistant Specifications

	Capacity metric			Hook Mount Trolley Mount Headroom Headroom			Rateo	Lifting Speed Rated Load No Load			Lowering Speed Rated Load No Load			Chain		Weight ot of lift)		Veight ft of Lift		
Model	lb	tons	# Falls	in	mm	in	mm	ft/min	m/min	ft/min	m/min	ft/min	m/min	ft/min	m/min	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**

	Trolley	Capacity		imum droom		Speed at I Load		ımption @ d Load		Flange tment		m Curve dius			Veight t of Lift
Model	type	metric tons	in	mm	ft/min	m/min	ft³/min	m³/min	in	mm	ft	m	Air Inlet	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)

 $2 \times length$  of lift desired +  $2 \cdot length$  end chain length



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 LIF	NK .				
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	11/4	3-10	2-3/8 - 5				
D10-8888			5 - 8-3/4				



#### **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



## 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 (ı 7700	netal basket) 7790	Link Chain (ca 7700	nvas basket¹) 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	-	-	





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



<sup>(1)</sup> Canvas baskets are made of specially treated oil-resistant material.

## 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 snaphooks, 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.



34921

35203

			Hooks For Link Chain				Hooks For R			
Hoist Series	Capacity (lb)	Upper Hook	Hook Opening (in)	Lower Hook	Hook Opening (in)	Upper Hook	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	457071	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	45710¹	1-1/8	
7700 Series 0.75 ton spark res.	1,500	35113	1-1/8	45709¹	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	430481	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	45934¹	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	-	
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	-	

43002

(1) Includes Sheave Block







## **Dimensional drawings**

#### 7700 Series Air Chain Hoists

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

#### **Hook Mounted Trolley Mounted Motorized Trolley Mounted** 14-1/2 - 15-3/4" (368 - 400 mm) 1/8, 1/4 & 1/2 t: 8-15/16" (227 mm) \_ 1 t: 10" (254 mm) \_9 - 10-1/4" \_ |5" (127 mm) 1/8, 1/4 & 1/2 t Link: 1/8, 1/4 & 1/2 t Link: 17" (432 mm) min. 16-7/8" (428 mm) min. 1/4 & 1/2 t Roller: 1 t Link: 15-7/8" (403 mm) min. 20-1/2" (521 mm) min 1/4 & 1/2 t Roller: 1 t Link & Roller: 14-3/4" (375 mm) min. 22-11/16" (551 mm) min. 1/8, 1/4 & 1/2 t: 1" (25 mm) 1 t Roller: 1 t: 1-1/4" (32 mm) 20-1/2" (521 mm) min. $A^1$ 1/8, 1/4 & 1/2 t: 1" (25 mm) 1 t: 1-1/4" (32 mm) 10-19/32" (269 mm) 1/8, 1/4 & 1/2 t: 10" (254 mm) 14-3/4" (375 mm) - 1 t: 12-5/8" (321 mm) - 10" (254 mm) -2-5/8" (67 mm) 1/8, 1/4 & 1/2 t Link: 17-1/8" (435 mm) min. 1 t Link: 21-1/4" (540 mm) min. 1/4 & 1/2 t Roller 16" (406 mm) min. 1/4 & 1/2 t: 1" (25 mm) 1 t: 1-1/4" (32 mm) 1 t Roller: 21-1/4" (540 mm) min.

#### 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) B C		Trolley B	Mt (in) C	Motorized Trly ( 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			Trolley	Mt (in)	Motorized Trly (in)			
Capacity (ft)	В	С	В	С	В	С		
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		

## **Dimensional drawings**

#### 7790 Series Air Chain Hoists

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

#### **Hook Mounted Trolley Mounted Motorized Trolley Mounted** 16-1/2 - 17-3/4" (418 - 450 mm) 14-7/32" (361 mm) -9 - 10-1/4" 18-7/8" (479 mm) min. 2 t: 22-3/8" (568 mm) min. 15" (381 mm) min. 1 t: 15" (381 mm) min. 18" (457 mm) min. 2 t: 18" (457 mm) min. 1 t: 1-1/8" (28 mm) 2 t: 1-1/4" (32 mm) t: 1-1/8" (28 mm) 1 t: 1-1/8" (28 mm) 2 t: 1-1/4" (32 mm) 2 t: 1-1/4" (32 mm) 15-5/8" (397 mm) 14-3/4" (375 mm) -14-3/4" (375 mm) 1' (3 m) cap: 20-1/4" (514 mm) 20' (6m) cap: 24-1/4" (616 mm) 10' (3 m) cap: 10' (3 m) cap: 13-27/32" (352 mm) 40' (12m) cap: 15-5/8" (397 mm 32-1/4" (819 mm) 20' (6m) cap: 20' (6 m) cap: 19-5/8" (499 m 17-27/32" (453 mm) 40' (12m) cap: 27-5/8" (702 mm) 40' (12 m) cap: 25-27/32" (682 mm) 8-3/16" (208 mm 7-29/32" (201 mm 2 t: 7-5/8" (194 mm) 7-5/8" (194 mm) 7-5/8" (194 mm)

#### 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 (fe	et) Opti	ons
Zinc plated steel link chain models: 7770E = 0.125 ton 7718E = 0.25 ton 7756E = 0.50 ton 7776E = 1 ton 7790A = 1 ton	0 = No controls 1 = Pull chain 2 = Pendent control 3 = 2 motor pendent 4 = 3 motor	A = Lug / adapter C = Steel snap hook E = Eye bolt (7740 only) K = Bullard hook, manual close (3) R = Bronze snap hook (2) DA = Rigid RT or TIR push	10 = Standard XXX = Specify length	C = Steel :	snap hool	XXX = Sp lei	andard pecify ngth	
7792A = 2 ton  Spark resistant stainless steel link chain models:	pendent	trolley A flange DD = Rigid TIR push trolley D flange FxxA = Hand geared trolley A flange		K = Bullar manu G = Self la hook R = Bronz	al close (3) atching		U = Canvas o containe S = Steel cha containe	er ain
7712EL = 550 lb 7714EL = 1,500 lb 7796AL = 1,500 lb 7798AL = 2,400 lb 7790AL = 3,000 lb		FxxD = Hand geared trolley D flange HA = Powered trolley A flange HD = Powered trolley D flange				-resistant mo oark-resistan		

#### 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.

## Liftchain® Series Air Chain Hoists 1.5 - 100 t Load Capacity

#### "Miner" Series

The Mining models are designed for the heavy duty conditions found in the underground mining and tunneling industries.

Their construction is based on the standard LC2A models.

#### Main differences compared to the standard LC2A models:

- Suitable to operate at 4 bar.
- Top hook mounted on chain links for increased flexibility. 1 extra bottom hook (optional) for alternate pulling operation.
- Top and bottom limit switches through resistant buffer stops which comes against the hoist central part.
- Cast iron pendant control.



**Specifications** at 4 and 6.3 bar dynamic pressure (when hoist is running) — Working pressure 4 to 7 bar. **As per European standard EN range 14492-2** — Group of mechanism as per FEM 1Bm / ISO M3.

				PERFORMAN	CES AT 4 E	BAR (58 PSI)	PERFORMANO	ES AT 6.3	bar (90 PSI)
Model number	Number of load hooks	Rated capacity on each hook (t)	Min. headroom (mm)	Pulling speed at rated load (m/min)	Speed no load (m/min)	Air cons. at rated load (m³/min)	Pulling speed at rated load (m/min)	Speed no load (m/min)	Air cons. at rated load (m3/min)
LC2A Mining S	eries								
LC2A015SM	1	1.5 (simple hook)	608	3.2	9	2.2	6.2	11	4.0
LC2A015SSM	2	1.5 (simple hook) 1.5 (simple hook)	608 608	3.2 3.2	9 9	2.2	6.2 6.2	11 11	4.0
LC2A030DM	1	3 (double hook)	675	1.5	4.5	2.2	3	5.5	4.0
LC2A030DSM	2	<ul><li>1.5 (simple hook)</li><li>3 (double hook)</li></ul>	608 675	3.2 1.5	9 4.5	2.2	6.2 3	11 5.5	4.0
LC2A040SM	1	4 (simple hook)	757	1.7	4	3.0	3.9	7	4.5
LC2A040SSM	2	<ul><li>4 (simple hook)</li><li>4 (simple hook)</li></ul>	757 757	1.7 1.7	4 4	3.0	3.9 3.9	7 7	4.5
LC2A060SM	1	<b>6</b> (simple hook)	952	1.4	2	2.5	2.2	3.6	5.2
LC2A060SSM	2	<ul><li>6 (simple hook)</li><li>6 (simple hook)</li></ul>	952 952	1.4 1.4	2 2	2.5	2.2 2.2	3.6 3.6	5.2
LC2A080DM	1	8 (double hook)	940	0.9	2	3.0	1.8	3.5	4.5
LC2A080DSM	2	4 (simple hook) 8 (double hook)	757 940	1.7 0.9	4 2	3.0	3.9 1.8	7 3.5	4.5
LC2A120DM	1	12 (double hook)	1148	0.7	1	2.5	1.1	1.8	5.2
LC2A120DSM	2	6 (simple hook) 12 (double hook)	952 1148	1.4 0.7	2 1	2.5	2.2 1.1	3.6 1.8	5.2

Model number	Sound level <sup>(1)</sup> (dbA)	Hoist weight <sup>(2)</sup> (kg)	Chain size (mm)	Chain weight/ 1m extra lift (kg)
LC2A015SM	79	41	8 x 24	1.4
LC2A015SSM	79	42	8 x 24	1.4
LC2A030DM	79	48	8 x 24	2.8
LC2A030DSM	79	50	8 x24	2.8
LC2A040SM	76	90	13 x 36	3.8
LC2A040SSM	76	92	13 x 36	3.8
LC2A060SM	79	125	16 x 45	5.7
LC2A060SSM	79	127	16 x 45	5.7
LC2A080DM	76	118	13 x 36	7.6
LC2A080DSM	76	120	13 x 36	7.6
LC2A120DM	79	171	16 x 45	11.4
LC2A120DSM	79	179	16 x 45	11.4

<sup>(1)</sup> Sound pressure levels are measured per European standard EN 14492-2

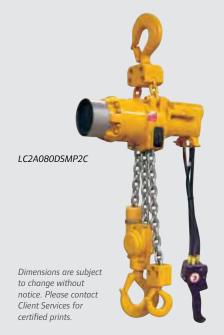
**Note:** It is strongly recommended to use a lubricating and a filtration system on the compressed airline. The compressed air temperature must not exceed 65°C at the motor air inlet. For higher temperature, please consult us.

See dimensions on page 46.



<sup>(2)</sup> Weight measured with standard height of lift (3 m) and standard length of control (2 m).

## Liftchain® Series Air Chain Hoists 1.5 - 100 t Load Capacity

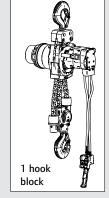


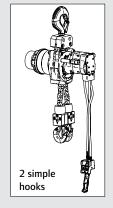
## "Miner" Series – 1.5 to 12 t capacity

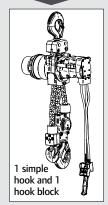
LC2A015SM LC2A040SM LC2A060SM

LC2A030DM LC2A080DM LC2A120DM LC2A015SSM LC2A040SSM LC2A060SSM LC2A030DSM LC2A080DSM LC2A120DSM

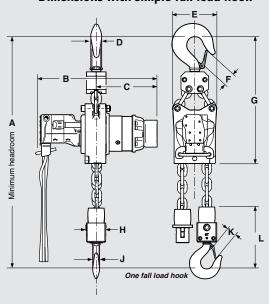




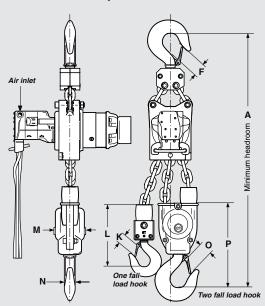




#### Dimensions with simple fall load hook



#### Dimensions with simple and double fall load hooks



#### Hoist dimensions in mm (CE models)

Model number	Α	В	C	D	E	F	G	Н	J	K	L	M	N	0	P	Air Inlet Ø
LC2A015SM	610	418	210	29	154	35	377	62	29	35	233	_	_	_	_	3/4" BSP
LC2A015SSM	610/610	418	210	29	154	35	377	62	29	35	233	_	_	_	_	3/4" BSP
LC2A030DM	685	418	210	29	154	35	377	-	_	_	_	94	29	35	307	3/4" BSP
LC2A030DSM	610/685	418	210	29	154	35	375	62	29	35	233	94	29	35	307	3/4" BSP
LC2A040SM	793	620	306	43	210	53	533	77	29	35	260	_	_	_	_	1" BSP
LC2A040SSM	793 / 793	620	306	43	210	53	533	77	29	35	260	_	_	_	_	1" BSP
LC2A060SM	964	642	317	52	227	58	644	97	37	43	320	_	_	_	_	1" BSP
LC2A060SSM	964/964	642	317	52	227	58	644	97	37	43	320	_	_	_	_	1" BSP
LC2A080DM	976	620	306	43	210	53	533	_	_	_	_	113	43	53	443	1" BSP
LC2A080DSM	793 / 976	520	306	43	210	53	533	77	29	35	260	113	43	53	443	1" BSP
LC2A120DM	1160	642	317	52	227	58	644	_	_	_	_	156	52	58	516	1" BSP
LC2A120DSM	952/1160	642	317	52	227	58	644	97	37	43	320	156	52	58	516	1" BSP



Ingersoll Rand offers a wide variety of plain, geared, or powered trolleys for use with all Ingersoll Rand hoists. We also offer the MTK air-powered tractor to push and pull a trolley-mounted hoist or other suspended or supported rolling load. Ingersoll Rand trolleys are available in either hook-on or rigid-mount styles.

For maximum convenience and lifting system integrity, we recommended ordering the trolley at the same time as the hoist by using the appropriate model-driver suspension code. Information relating to the various trolleys and MTK Series tractor can be found on the following pages.

## **Trolley selection guide** 0.50 to 20 metric ton lifting capacities

The chart below cross-references all air chain hoist models and sizes with recommended trolleys. Always follow safe installation and operating procedures with any overhead system. Please call an authorized Ingersoll Rand distributor or representative for assistance with application and selection.

#### **Hoist / Trolley Selection Guide**

For Use With Hoist Series	Plain Hook-on	Plain Rigid	Geared Hook-on	Geared Rigid	Motorized Rigid
STANDARD TROLLEYS (SUSPENSION CODE)*					
ML250 / 500K / KS	PT005-8	RT010S-P00AN	GT010-8-10	RT010S-G08AN	RT010S-307AN
ML1000K / S	PT010-8	RT010S-P00AM	GT010-8-10	RT010S-G08AM	RT010S-307AM
ML250KR	PT005-8SB	RT010B-P00AN	GT010-8-10SB	RT010S-G08AN	RT010S-307AN
ML500KR	PT005-8SB	RT010B-P00AM	GT010-8-10SB	RT010S-G08AM	RT010S-307AM
HL1000K	PT010-8	TIR6600S-P00AJ	GT010-8-10	TIR6600S-G08AJ	TIR6600S-307AJ
HL1000KR	PT010-8SB	TIR6600B-P00AJ	GT010-8-10SB	TIR6600B-G08AJ	TIR6600B-307AJ
HL1500K	PT020-8	TIR6600S-P00AJ	GT020-8-10	TIR6600S-G08AJ	TIR6600S-307AJ
HL2000K	PT020-8	TIR6600S-P00AK	GT020-8-10	TIR6600S-G08AK	TIR6600S-307AK
HL3000K	PT030-8	TRI6600S-P00AK	GT030-8-10	TIR6600S-G08AK	TIR6600S-307AK
HL4500K	PT050-8	TIR132S-P00AP	GT050-8-10	TIR132S-G08AP	TIR132S-307AP
HL6000K	TIR132S-P00H	TIR132S-P00AP	GT050-8-10	TRI132S-G08AP	TIR132S-307AP
7700 Series <1 ton	PT005-8	RT010S-P00AR	GT010-8-10	RT010S-G08AR	RT010S-307AR
7700 Series 1 ton	PT010-8	RT010S-P00AR	GT010-8-10	RT010S-G08AR	RT010S-307AR
7790 Series 1 ton	PT010-8	TIR6600S-P00AA	GT010-8-10	TIR6600S-G08AA	TIR6600S-307AA
7792 Series	PT020-8	TIR6600S-P00AA	GT020-8-10	TIR6600S-G08AA	TIR6600S-307AA
7700 Series Spark Resistant	PT005-8SB	RT010B-P00AR	GT010-8-10SB	RT010S-G08AR	RT010S-307AR
7796AL Spark Resistant	PT010-8SB	TIR6600B-P00AA	GT010-8-10SB	TIR6600B-G08AA	TIR6600B-307AA
7798AL / 7799AL Spark Resistant	PT020-8SB	TIR6600B-P00AA	GT020-8-10SB	TIR6600B-G08AA	TIR6600B-307AA
Quantum QCH50-1	PT005-8	N/A	GT010-8-10	N/A	QMT50
Quantum QCH50-2	PT010-8	N/A	GT010-8-10	N/A	QMT50
Quantum QCH100-1	PT010-8	N/A	GT010-8-10	N/A	QMT150
Quantum QCH100-2	PT020-8	N/A	GT020-8-10	N/A	QMT150
Quantum QCH200-2	PT030-8	N/A	GT030-8-10	N/A	QMT300
Quantum QCH300-1	PT020-8	N/A	GT020-8-10	N/A	QMT300
Quantum QCH300-2	PT050-8	N/A	GT050-8-10	N/A	QMT300
Quantum QCH500-2	PT050-8	N/A	GT050-8-10	N/A	QMT300





**GT Series** 



TIR Series



TIR Series



**RT Series** 



## PT and GT Series trolley

0.50 to 20 metric ton capacities

#### **Features**

PT plain and GT hand-geared hook-on style trolley rated for manual or powered hoists having the versatility to fit most types of beams with compatibility to all hoist brands.

- The 5:1 design factor allows use with both manual or powered hoists. Meets pertinent U.S. (ASME/ANSI and CMAA), Canadian and European standards
- The side plates, including the rail sweeps/drop stops, are made of cold-formed steel for strength, durability, and even load distribution
- The wheels are cast iron and the universal tread fits either flat or tapered beams
- Wheels run on sealed, "Lube-for-Life" ball bearings. Smoother rolling with less effort and maintenance
- · Additional gearing in the 20-ton trolley allows operation by one hand chain
- · Painted black for coordination with hoists of all colors

#### **Options**

- $\bullet$  FDA-approved nickel composite plated finish for corrosion resistance available on PT005 and PT010 only
- · Solid bronze alloy wheels for maximum spark resistance
- Wider hanger shaft capabilities allow standard trolleys to fit almost any S-beam or patented track beam, extension shaft kits are stocked

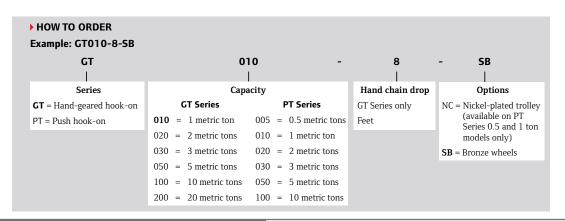
# PT010-8





#### PT and GT Series Hook-on Trolley Specifications

	Capacity		Flange Adjustment	Min. Beam Height	Min. Curve Radius	Weight	Wide Flange Kit no.	Flange Adjustment	Weight	
Model	lb	metric tons	in	in	in	lb	(order separate)	in	lb	
STANDARD SERIES										
PT005-8	1,100	0.50	2.6 - 8	4	36	19.7	PT005-WFK	8 - 13	5.5	
PT010-8	2,200	1	3 - 8	5	36	30.7	PT010-WFK	8 - 13	9.5	
PT020-8	4,400	2	3.3 - 8	6	48	60.5	PT020-WFK	8 - 13	10	
PT030-8	6,600	3	3.9 - 8	7	42	73.2	PT030-WFK	8 - 13	16.3	
PT050-8	11,000	5	4.6 - 8	8	60	110.3	PT050-WFK	8 - 13	24.8	
PT100-12	22,000	10	7 - 13	10	83	205	NA	NA	NA	
GT010-8-10	2,200	1	3 - 8	5	36	43.7	PT010-WFK	8 - 13	9.5	
GT020-8-10	4,400	2	3.3 - 8	6	48	73.5	PT020-WFK	8 - 13	10	
GT030-8-10	6,600	3	3.9 - 8	7	42	86.2	PT030-WFK	8 - 13	16.3	
GT-050-8-10	11,000	5	4.6 - 8	8	60	123.3	PT050-WFK	8 - 13	24.8	
GT100-12-10	22,000	10	7 - 13	10	83	227	NA	NA	NA	
GT200-12	44,000	20	7 - 13	12	138	540	NA	NA	NA	



## **PT and GT Series trolley**

0.50 to 20 metric ton capacities

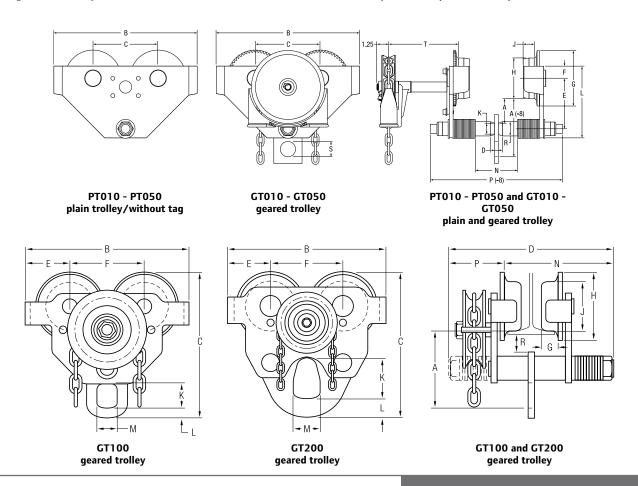
#### PT and GT Series Hook-on Trolley Dimensions (in)

Model	Α	A(-8)	В	С	D	E	F	G	Н	J	K	L	М	N	Р	P(-8)	R	S	Т
STANDARD SEF	RIES																		
PT005-8	2.6	5.9	10	4.5	1	4	1.1	3.5	2.1	0.8	.1	6.6	-	3.9	-	12.3	1.3	1.6	-
PT010-8	2.5	5.9	13	5.2	1.3	4.4	1.6	4.2	2.8	0.8	1	6.9	-	4.3	-	12.9	1.5	1.6	-
PT020-8	2.6	6.1	14.6	6.8	1.3	5.3	1.3	5.8	4.3	1.1	1.2	7.5	-	4.3	-	13.8	1.5	1.6	-
PT030-8	2.6	7.9	14	6.4	1.6	5.5	1.6	5.8	4.5	1.1	1.4	8.6	-	5.4	-	14.1	1.9	2.6	-
PT050-8	2.8	8.1	15.5	7.1	1.6	5.8	2.2	6.2	4.5	1.6	1.4	9.8	-	6.6	-	15.6	2.5	2.6	-
PT100-12	11.8	-	17.9	19.3	20.8	5	7.9	2	7.4	5.9	4.2	1.8	3.2	17.1	3.7	-	1	-	-
GT010-8-10	2.5	5.9	13	5.2	1.3	4.4	1.6	4.2	2.8	0.8	1	6.9	-	4.3	-	12.9	1.5	1.6	7.8
GT020-8-10	2.6	6.1	14.9	6.8	1.3	5.3	1.3	5.8	4.3	1.1	1.2	7.5	-	4.3	-	13.8	1.5	1.6	7.8
GT030-8-10	2.6	7.9	14	6.4	1.6	5.5	1.6	5.8	4.5	1.1	1.4	8.6	-	5.4	-	14.1	1.9	2.6	8.1
GT050-8-10	2.8	8.1	15.5	7.1	1.6	5.8	2.2	6.2	4.5	1.6	1.4	9.8	-	6.6	-	15.6	2.5	2.6	8.5
GT100-12-10	11.8	-	17.9	19.3	20.8	5	7.9	2	7.4	5.9	4.2	1.8	3.2	17.1	3.7	_	1	-	-
GT200-12-10	10.5	-	25.3	24.5	22.5	6.7	11.8	2.6	10.8	7.9	5.9	2.8	4.3	18	4.5	_	4.9	-	-

#### **PT Trolley Adapters**

#### Stationar

Adapter comes with any 7700 Series hoist ordered as a trolley-suspended model. Adapter can be ordered separately to convert existing hook-suspended 7700 Series hoists for stationary mounting to a PT Series trolley. Order 47717 (shown) for 0.25- and 0.50-ton models; 47716 for 1-ton models. Spacer kits are required. Refer to the price list for details.



## **TIR Series**

#### 0.25 to 6 metric ton capacities

#### **Features**

TIR Series trolleys are supplied as standard equipment for MLK Series, and HLK Series hoists when specified. The TIR trolley may also be used as a hook-on trolley with any hoist.

- Meets ANSI B30.16 for hoisting requirements 5:1 minimum safety factor
- · All-steel construction
- · Universal wheels fit both flat and tapered beam flanges
- · Rail sweeps are integral with the side plates
- Cast-iron wheels roll easily on permanently greased sealed bearings
- $\cdot$  7' pendent control or 8' hand chain length other lengths available
- · Tight turning radius
- Standard 3-ton trolley fits 3.25" 6" flange width, 6-ton fits 4.25" 7.25"

- Modular trolley frame allows hook-on, plain rigid, geared, and motorized configurations in the field
- · Motorized trolley has automatic disc brake
- Low air consumption at only 35 scfm on motorized versions

#### **Options**

- · Solid bronze wheels for maximum spark resistance
- Wide flange kit for 3-ton fits 6" 12"
- · Hook-on adapters
- · Lug adapters for rigid-mounting Ingersoll Rand hoist

#### **TIR Series Trolley Specifications**

Trolley Type	Сар	acity	Min. Curve Radius	Standard Flange Adj.	Hand Chain/Pendent Drop	Trolley Weight
	lb	metric tons	in	in	ft	lb
TIR6600 TROLLEY SERIES						
Plain hook-on	550 - 6,600	0.25 - 3	42	3.3 - 6	N/A	31
Plain rigid	550 - 6,600	0.25 - 3	42	3.3 - 6	N/A	34
Geared hook-on	550 - 6,600	0.25 - 3	42	3.3 - 6	7	34
Geared rigid	550 - 6,600	0.25 - 3	42	3.3 - 6	7	37
Motorized	550 - 6,600	0.25 - 3	42	3.3 - 6	7	35
Plain	550 - 6,600	0.25 - 3	42	3.3 - 6	N/A	25
TIR132 TROLLEY SERIES						
Plain hook-on	9,900 - 13,200	4.5 - 6	60	4.3 - 7.3	N/A	154
Plain rigid	9,900 - 13,200	4.5 - 6	60	4.3 - 7.3	N/A	150
Geared hook-on	9,900 - 13,200	4.5 - 6	60	4.3 - 7.3	7	157
Geared rigid	9,900 - 13,200	4.5 - 6	60	4.3 - 7.3	7	153
Motorized	9,900 - 13,200	4.5 - 6	60	4.3 - 7.3	7	155



TIR6600 plain trolley



TIR6600 motorized trolley

## **TIR Series**

#### 0.25 to 6 metric ton capacities

#### **TIR Series Flange and Adapters Kits**

Flange Kits	Flange Width (in)	Part Number	
Standard	3.3 – 6	49558	
Wide	6 – 12	49559	
Adapter Kits	Option Code	Part Number	
Adapter Kits Hook-on	Option Code H	Part Number TIR-426	

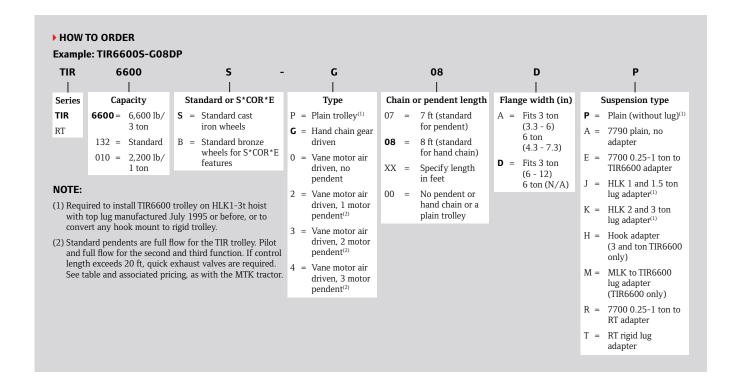
<sup>\*</sup>Used to mount any 7790 Series hoist parallel to suspension beam. Adapter increases headroom dimension by 1.625 inches.

#### **Motorized Trolley Specifications**

Hoist lb	Capacity metric tons	Trolley Speed On Beam* fpm
550	0.25	95
1,100	0.50	93
2,200	1	88
3,300	1.50	84
4,400	2	80
6,600	3	71
9,900	4.50	60
12,000	6	45

Note:

<sup>\*</sup>Beam in good condition.

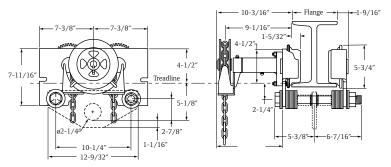


## **TIR Series**

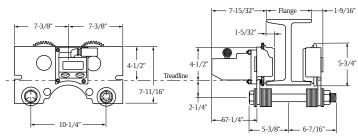
0.25 to 6 metric ton capacities

#### TIR6600, TIR132, and RT010 dimensions

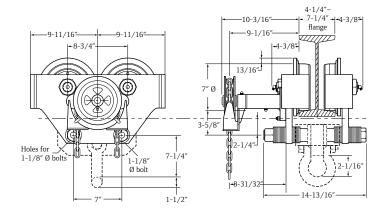
## TIR6600 plain, geared, and lug-mounted trolley



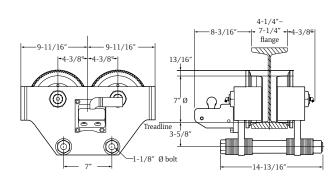
#### TIR6600 motorized trolley



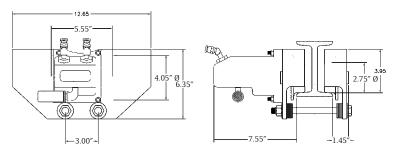
TIR132 plain, geared, and hook-mounted trolley



#### TIR132 motorized trolley



#### RT010 motorized trolley



## **RT Series trolley**

1 metric ton capacity

#### Plain and rigid

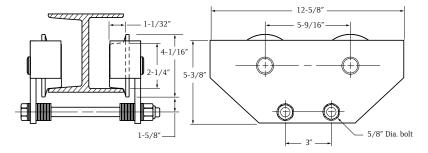
Cousin to the PT Series trolley, the twin suspension shaft RT Series trolley offers a rigid connection for the MLK, MLKS, and MLKR Series of air chain hoists. Like the PT Series, the RT Series uses universal tread wheels for use on flat or tapered flange beams.

#### **RT010 Series Trolley Specifications**

Trolley	Capacity	Fits Beam	Minimum Turning
Part	metric	Flange Width	Radius
Number	tons	in	in
RT010	0.25 - 1	2.7 - 6	36

Wheels have universal tread for use on flat or tapered beams.





### **BC Series**

1 to 10 metric ton capacities

#### Beam clamp features

Ingersoll Rand beam clamps provide temporary or permanent mounting options for a wide range of tapered or flat beams. These units have been designed and verified — by actual pull testing — to achieve a minimum design factor of 5:1 for vertical lifting with a powered or manual hoist, which meets ASME B30.16.

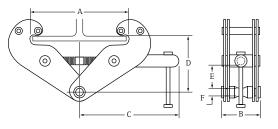
These beam clamps offer quick and simple one-handed installation without requiring any tools. Units accommodate hook-mounted hoist or load blocks with minimal loss of headroom. The clamp jaws are designed to reduce beam stress by applying the load inside of the flange edge.

- · Quick installation by hand and with no required tools
- Low headroom design adjusts to fit a wide range of flat or tapered beams
- Meets ASME B30.16 for use with powered or manual hoists
- Each unit is serialized and supplied with a test certificate and manual
- Metric rated for vertical lifting at 2,200 lb per ton

#### **BC Series Beam Clamp Specifications and Dimensions**

Model	Weight lb	Capacity metric tons	Beam Width A in	B in	C in	D in	E in	F in
BC-1	9.9	1	3 - 10.2	3.1	9.6	4 - 5.9	1.2	0.9
BC-2	11	2	3 - 10.2	3.5	9.6	4 5.9	1.2	0.9
BC-3	23.1	3	3.2 - 13.9	4.7	11.2	6 - 8.9	2	0.9
BC-5	24.2	5	3.2 - 13.9	4.9	11.2	6 - 8.9	1.9	1.1
BC-10	35.2	10	3.5 - 14.4	5.7	11.3	6.9 - 9.3	2.2	1.6





## **MTK Series**

#### 6 metric ton towing capacity

#### **Features**

MTK Series tractors require less air, making them less expensive to operate. They're designed for use with any hoist, or even alone to push, pull, or position loads on beams.

- Up to 6 metric ton towing capacity
- Interchangeability with MLK Series and HLK Series parts
- Balanced gear package and air motor provide speeds from slow creep to 165 fpm
- Million-cycle performance tested air motor with spring-loaded vanes provides instant starting and slow speed control
- Heat-treated planetary gearing assures longer life and reduced maintenance
- Self-adjusting, spring-applied, non-asbestos disc brake is air-released for smooth starts and stops
- Drive tire is made from extremely durable polyurethane material with a temperature rating of 185° F for excellent adjustable gripping characteristics

- Tight turning radius of 30"
- Universal solid cast-iron wheels fit both flat and tapered beams
- · Wheels can be greased for longer life
- Standard tractor fits 2.7" 6.3" beam flange widths
- Roller guides made from high alloy steel keep tractor running smoothly
- Tractor operates with a full-flow pendent, enhancing load-spotting control
- · Standard 7' pendent length
- · Tow bar included with tractor



#### **Options**

- Free wheel kit that permits moving of tractor without supplying air; attaches directly to tractor without modification
- · Wide flange kit fits 6.27 12" beam flange widths
- · Pull chain operation

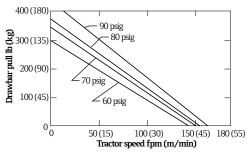
- · Bronze wheels for spark-resistant applications
- · Gasket repair and manual brake release kits
- · Drawbar hitch kit
- External brake release kit relieves auto disc brake without running tractor

#### MTK Series Tractor Specifications\*

Drawbar	Сар	acity	Max	Pendent	Turning	Beam Flan	Beam Flange Width	
Pull lb	Flat, Dry Good metric tons	Curved, Slick, Poor metric tons	Speed fpm	Length ft	Radius in	Standard in	Optional in	
0	0	0	165	7	30	2.7 - 6.3	6.3 - 12	
100	1.50	0.75	117	7	30	2.7 - 6.3	6.3 - 12	
200	3	1.50	86	7	30	2.7 - 6.3	6.3 - 12	
300	4.25	2.25	57	7	30	2.7 - 6.3	6.3 - 12	
400	6	3	21	7	30	2.7 - 6.3	6.3 - 12	

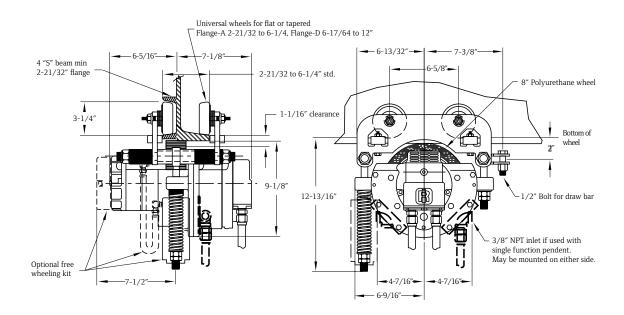
<sup>\*</sup>At 90 psi inlet pressure. Average air consumption is 35 scfm; range is 25 to 45 scfm, depending on load and air pressure.

#### **Draw Bar Load vs. Tractor Speed**



## **MTK Series**

#### 6 metric ton towing capacity



#### **HOW TO ORDER**

Specify complete model number as shown. This model code includes: Series, Standard or S\*COR\*E, type of Trolley, length of chain or pendent drop, flange width, and options Some accessories may be ordered by specifying them as an option code or by ordering separately by part number. See the Accessories and Options charts above.

## Example: MTKS-307AM MTK S

Series MTK

## Standard or S\*COR\*E S = Standard cast iron wheels

B = Standard bronze wheels for S\*COR\*E features

## R\*E Type of control/trolley

- 0 = No pendent<sup>(1)</sup>
- 1 = Pull chain
- 2 = Single motor pendent<sup>(1)</sup>

3

- 3 = Two motor pendent<sup>(2)</sup>
- 4 = Three motor pendent

#### 07 | Chain or pendent length

- **07** = 7 ft (standard)
- XX = Specify length in feet
  - No pendent hose or pull chain

#### A | Flange width (in)

- **A** = Fits 2.66 6.25
- D = Fits 6.26 12.00

#### M | Options

- E = External brake release kitF = Free wheel
- M = Manual brake releaseP = Piped away exhaust

- (1) Specify when used in combination with hoist on the same order. Specify multiple pendent control function on the hoist only.
- (2) Do not specify if tractor is ordered with a hoist.

## **I-beam specifications**

The following table shows the standard size (H), flange widths (W), and weights for both American, Standard I-beams, and Wide Flange H-beams. I-beams designated with an asterisk (\*) denote New Series applications which conform to ASTM A6 standards, effective September 1, 1978.

**American Standard** 

Wide Flange

					<b>,</b> -						
н	w	Weight per ft	H	w	Weight per ft	H	w	Weight per ft	н	w	Weight per ft
in	in	lb.	in	in	lb	in	in	lb	in	in	Ĭb.
6	3.94	8.5	10	10.117	66.0	16*	6.985	36	4	2.663	7.7
6*	4.0	9.0	10*	10.130	68.0	16	7.0	40	4	2.796	9.5
6	4.0	12.0	10	10.170	72.0	16*	6.995	40	5	3.004	10.0
6*	4.0	12.0	10	10.190	77.0	16	7.039	45	5	3.284	14.75
6	4.030	16.0	10*	10.190	77.0	16*	7.035	45	6	3.332	12.5
6*	4.030	16.0	10*	10.625	88.0	16	7.073	50	6	3.565	17.25
6*	5.990	15.0	10	10.275	89.0	16*	7.07	50	7	3.662	15.3
6	5.995	15.5	10	10.340	100.0	16*	7.12	57	7	3.860	20.0
6	6.020	20.0	10*	10.340	100.0	16	8.464	58	8	4.001	18.4
6	6.018	20.0	10	10.415	112.0	16*	10.235	67	8	4.171	23.0
6	6.080	25.0	10*	10.415	112.0	16*	10.295	77	10	4.661	25.4
6*	6.080	25.0	12	3.968	14.0	16*	10.365	89	10	4.944	35.0
-8	3.940	10.0	12*	3.970	14.0	16*	10.425	100	12	5.0	31.8
8*	3.940	10.0	12*	3.990	16.0	16	11.502	88	12	5.078	35.0
8	4.0	13.0	12	4.0	16.5	16	11.5	96	12	5.252	40.8
8*	4.0	13.0	12	4.005	19.0	18	6.0	35	12	5,477	50.0
8	4.015	15.0	12*	4.003	19.0	18*	6.0	35	15		42.9
										5.501	
8*	4.015	15.0	12	4.030	22.0	18	6.015	40	15	5.640	50.0
8	5.250	17.0	12*	4.030	22.0	18*	6.015	40	18	6.001	54.7
8*	5.250	18.0	12*	6.490	26.0	18*	6.060	46	18	6.251	70.0
8	5.268	20.0	12	6.497	27.0	18	7.477	45	20	6.25	65.4
8*	5.270	21.0	12*	6.520	30.0	18	7.5	50	20	6.385	75.0
8	6.495	24.0	12	6.525	31.0	18*	7.5	50	20	7.060	86.0
8*	6.5	24.0	12*	6.560	35.0	18	7.532	55	20	7.200	96.0
8	6.535	28.0	12	6.565	36.0	18*	7.530	55	24	7.001	79.9
8*	6.535	28.0	12	8.0	40.0	18	7.558	60	24	7.125	90.0
8	7.995	31.0	12*	8.005	40.0	18*	7.555	60	24	7.245	100.0
8*	7.995	31.0	12	8.042	45.0	18*	7.635	71	24	7.875	105.9
8	8.020	35.0	12*	8.045	45.0	18	8.715	64	24	8.050	121.0
8*	8.020	35.0	12	8.077	50.0	18	8.75	70			
8	8.070	40.0	12*	8.080	50.0	18	8.787	77	1		
8*	8.070	40.0	12	10.0	53.0	18*	11.035	76	An	nerican Stand	ard
8	8.110	48.0	12*	9.995	53.0	18*	11.090	86	1		
8*	8.110	48.0	12	10.014	58.0	18*	11.145	97	1 6	<i></i>	771 <del>*</del>
8	8.220	58.0	12*	10.010	58.0	18*	11.200	106	1 ~		
8*	8.220	58.0	14	5.0	22.0	18*	11.265	119	1	<b>1</b>	
	8.280		14*			18		96	4		
8		67.0	14	5.0 5.025	22.0	21	11.75		4	Ø	H
8	8.280	67.0			26.0		6.5	44	-	Ø	(Nom.)
10	3.950	11.5	14*	5.025	26.0	21*	6.5	44	4		1
10*	3.960	12.0	14	6.730	30.0	21*	6.530	50	4	A	
10	4.0	15.0	14*	6.730	30.0	21*	6.555	57			<b>∞</b> _ <b>↓</b>
10*	4.0	15.0	14	6.75	34.0	21	8.215	55	1		
10	4.010	17.0	14*	6.745	34.0	21	8.240	62	_	— W —	<b>→</b>
10*	4.010	17.0	14	6.770	38.0	21*	8.240	62	Ta	oered " S " Bea	m
10	4.020	19.0	14*	6.770	38.0	21	8.270	68		a 5 Dea	
10*	4.020	19.0	14	8.0	43.0	21*	8.270	68			
10	5.75	21.0	14*	7.995	43.0	21	8.295	73			
10*	5.75	22.0	14	8.031	48.0	21	8.295	73			
10	5.762	25.0	14*	8.030	48.0	21*	8.355	83		147: J. El	
10*	5.770	26.0	14	8.062	53.0	21*	8.420	93		Wide Flange	
10	5.799	29.0	14*	8.060	53.0	21	8.962	82	1 _		
10*	5.810	30.0	14	10.0	61.0	24	7.005	55	1 💆		<b></b>
10	7.960	33.0	14*	9.995	61.0	24*	7.005	55	1		
10*	7.960	33.0	14	10.035	68.0	24*	7.040	62	1		
10	7.985	39.0	14	10.035	68.0	24	8.961	68	1	Ø	
10*	7.985	39.0	14	10.072	74.0	24*	8.965	68	1	Ø	(Nom.)
10	8.020	45.0	14*	10.072	74.0	24	8.965	76	1	Ø	(Nom.)
10*	8.020	45.0	14	12.0	78.0	24*	8.990	76	1	Ø	
10	10.0	49.0	14	14.5	87.0	24	9.015	84	┨ _	X	
10*			14*						┨	//////////////////////////////////////	
	10.0	49.0		10.130	82.0	24*	9.020	84	┨	W	<b>→</b>
10	10.030	54.0	16	5.5	26.0	24	9.065	94			ı
10*	10.030	54.0	16	5.525	31.0	24*	9.065	94	Ta	pered " S " Bea	m
10	10.080	60.0	16*	5.625	31.0	-	_	_	4		
10*	10.080	60.0	16	6.692	36.0	-	_	-			

## **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 $100  ^{\circ} F$ and aniline point of $217  ^{\circ} F$ .	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 $100^{\circ}$ 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



C38341-810

C38451-810



33153

1/2

3/4





L36341-110

L36451-110

L36461-110



Filters - Regulators - Lubricators

	Size (in)	Flow Rate	Adj. Pressure	Bowl	Height x Width
Part No.	NPTF	scfm	Range psig	Capacity	(in)
TRIO UNITS: FILTERS, RE	GULATORS, LUBRICATORS				
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
Part No.		СОМЕ	PONENTS		
TRIO #		FILTER	REGULATOR	LUBRICATOR	

R37341-600

R37451-600

R37461-600





F35341-410

F35451-410

F35461-410



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WARNING: This equipment is not designed for transporting people or lifting loads above people. It is the user's responsibility to determine the suitability of this product for any particular use and to check compliance with applicable regulations. Before installation, see maintenance and operations manual for additional warnings and precautions

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