

Liftchain LCA Lube Free Air Hoist Series 1.5 to 25 metric ton lifting capacity

The Liftchain LCA series is the latest in air chain hoist design. Setting new standards by offering a new modular and compact design, the Liftchain LCA series is intended for tough industrial applications, offshore oil rigs, shipyard construction, petrochemical, refineries, foundries, steel mills, mining, etc....

The Liftchain LCA series offers new standard features with reduced maintenance, increased safety, rugged reliability, enhanced control and superior performance. The Liftchain LCA is designed in conformance with the requirements set by the FEM standard (classification 1Bm or ISO M3), ISO, and ASME B30.16. The CE marked versions include all the safety features required by the European Machinery Directive.

Standard features:

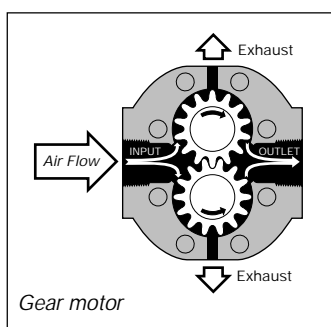
- Lube free gear type air motor provides long life, low maintenance and no environmental pollution (not effected by dust and humidity)
- Automatic fail safe, multi-disc oil bath disc brake (no adjustment required)
- Excellent spotting characteristics with the PHS progressive remote pilot pendent (2 meter control is standard)
- Built in overload protection and main air shut off valve means no loss of headroom. Efficiency and accuracy of the system are excellent
- Emergency stop and reset button on pendent (as per EN 418 standard)
- Top and bottom limit switches are integrated into the hoist body for a more compact design
- All steel/cast iron construction
- Zinc plated load chain for better corrosion resistance (3 meters standard)
- 5:1 design factor at rated load
- Bottom hook mounted on bearing with external lubrication point
- Integrated exhaust muffler for quieter operation
- Built in retractable handles for easy handling
- Working pressure range of 4 to 7 bar (60 – 100 psi)
- Low air consumption/Low maintenance
- Inherently flame and explosion proof design
- Available in hook, plain, geared and motorized trolleys (also lube free) with automatic disc brake
- Individually tested before shipment



Liftchain hook mounted air chain hoist



Liftchain trolley mounted air chain hoist



Options and accessories:

- Variable lengths of lift and control
- Chain containers
- Spark and corrosion resistant packages
- Marine paint (150 μ DFT)
- Offshore paint (290 μ DFT)
- Sandblast and primer
- Articulated trolley for BOP handling
- Special mining models
- Hydraulic versions

Liftchain LCA Lube Free Air Hoist Series

1.5 to 25 metric ton lifting capacity



Liftchain hook mounted hoist specifications at 6.3 bar (90 psi)

Model no. (1) (Hoist only)	Capacity metric tons	Chain falls	Lifting speed at rated load		Lifting speed at no load		Lowering speed at rated load		Free air consumption		Standard headroom		Net(1) weight		Wt of chain per m of lift	
			fpm	m/min	fpm	m/min	fpm	m/min	scfm	m ³ /min	in.	mm	lbs	kg	lbs	kg
LCA015SIP2C	1.5	1	13.12	4.0	24.6	7.5	21.3	6.5	74	2.1	17.12	435	110	50	3.3	1.5
LCA030DIP2C	3	2	6.56	2.0	12.0	3.7	10.5	3.2	74	2.1	22.05	570	132	60	6.6	3.0
LCA030SIP2C	3	1	10.5	3.2	19.7	6.0	23.0	7.0	124	3.5	22.04	560	176	80	8.4	3.8
LCA060DIP2C	6	2	5.2	1.6	9.8	3.0	11.5	3.5	124	3.5	28.66	728	220	100	16.7	7.6
LCA060SIP2C	6	1	5.9	1.8	11.8	3.6	9.8	3.0	124	3.5	28.93	735	286	130	12.5	5.7
LCA120DIP2C	12	2	2.95	0.9	5.9	1.8	4.9	1.5	124	3.5	38.81	986	396	180	25.3	11.4
LCA180TIP2C	18	3	1.64	0.5	3.28	1.0	3.28	1.0	124	3.5	42.72	1085	484	220	38.0	17.1
LCA250QIP2C	25	4	1.31	0.4	2.62	0.8	2.46	0.75	124	3.5	43.74	1111	506	230	50.6	23.0

(1) Net weights are given with standard lift of 10 ft (3 m) and standard control length of 6.6 ft (2 m).

Trolley specifications at 6.3 bar (90 psi)

Model no. (Hoist with trolley)	Trolley type	Capacity metric tons	Flange adjustment		Standard headroom		Min. inside curve radius		Max. traverse speed				Trolley free air consumption		Total weight w/std hoist	
			in.	mm	in.	mm	ft	m	with load fpm	no load m/min	no load fpm	no load m/min	scfm	m ³ /min	lbs	kg
LCA015SIP2P	Plain	1.5	3.2-7.9	82-200	17.8	452	3.28	1	-	-	-	-	-	-	187	85
LCA015SIP2G	Geared	1.5	3.2-7.9	82-200	17.8	452	3.28	1	-	-	-	-	-	-	191	87
LCA015SIP3R	Motor	1.5	3.2-7.9	82-200	17.8	452	3.28	1	59.0	18	75.4	23	46	1.3	198	90
LCA030DIP2P	Plain	3	3.2-12.2	82-310	24.1	612	6.56	2	-	-	-	-	-	-	253	115
LCA030DIP2G	Geared	3	3.2-12.2	82-310	24.1	612	6.56	2	-	-	-	-	-	-	257	117
LCA030DIP3R	Motor	3	3.2-12.2	82-310	24.1	612	6.56	2	56.0	17	69.0	21	46	1.3	264	120
LCA030SIP2P	Plain	3	3.2-12.2	82-310	23.8	604	6.56	2	-	-	-	-	-	-	341	155
LCA030SIP2G	Geared	3	3.2-12.2	82-310	23.8	604	6.56	2	-	-	-	-	-	-	345	157
LCA030SIP3R	Motor	3	3.2-12.2	82-310	23.8	604	6.56	2	56.0	17	69.0	21	46	1.3	352	160
LCA060DIP2P	Plain	6	3.7-12.2	98-310	30.7	781	9.84	3	-	-	-	-	-	-	446	203
LCA060DIP2G	Geared	6	3.7-12.2	98-310	30.7	781	9.84	3	-	-	-	-	-	-	462	210
LCA060DIP3R	Motor	6	3.7-12.2	98-310	30.7	781	9.84	3	39.4	12	49.2	15	67	1.9	484	220
LCA060SIP2P	Plain	6	3.7-12.2	98-310	34.8	883	9.84	3	-	-	-	-	-	-	557	253
LCA060SIP2G	Geared	6	3.7-12.2	98-310	34.8	883	9.84	3	-	-	-	-	-	-	572	260
LCA060SIP3R	Motor	6	3.7-12.2	98-310	34.8	883	9.84	3	39.4	12	49.2	15	67	1.9	594	270
LCA120DIP2P	Plain	12	5.1-12.2	131-310	39.4	1001	9.84	3	-	-	-	-	-	-	741	337
LCA120DIP2G	Geared	12	5.1-12.2	131-310	39.4	1001	9.84	3	-	-	-	-	-	-	759	345
LCA120DIP3R	Motor	12	5.1-12.2	131-310	39.4	1001	9.84	3	39.4	12	49.2	15	67	1.9	779	354
LCA180TIP2P	Plain	18	5.6-12.2	143-310	48.8	1240	16.4	5	-	-	-	-	-	-	920	418
LCA180TIP3R	Motor	18	5.6-12.2	143-310	48.8	1240	16.4	5	39.4	12	49.2	15	67	1.9	957	435
LCA250QIP2P	Plain	25	5.6-12.2	143-310	49.3	1253	16.4	5	-	-	-	-	-	-	953	433
LCA250QIP3R	Motor	25	5.6-12.2	143-310	49.3	1253	16.4	5	39.4	12	49.2	15	67	1.9	990	450

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Chain buckets

Hoist series	Option code	Canvas or metal	Capacity		Corresponding height of lift				Bucket part number
			ft	m	ft	m	ft	m	
LCA015S } LCA030D }	A	canvas	39.4	12	LCA015S		LCA030D		CB030D-12M CB030D-30M CB030D-60M
	B	canvas	98.4	30	39.4	12	19.7	6	
	C	canvas	196.8	60	98.4	30	49.2	15	
LCA030S } LCA060D }	A	canvas	39.4	12	LCA030S		LCA060D		CB060D-12M CB060D-25M
	B	canvas	98.4	25	39.4	12	19.7	6	
LCA060S } LCA120D }	A	canvas	39.4	12	LCA060S		LCA120D		CB120D-12M CB120D-26M
	B	metal	85.3	26	39.4	12	42.6	13	
LCA180T } LCA250Q }	A	canvas	39.4	12	LCA180T		LCA250Q		CB120D-12M CB120D-26M
	B	metal	85.3	26	13.1	4	9.8	3	
					27.9	8.5	21.3	6.5	

Link load chain

Hoist series	Chain type	Bulk part nbr	Chain size dia/pitch		Weight per lineal meter	
			in.	mm	lbs	kg
LCA015S } LCA030D }	Zinc plated	LC824-G8ZP	.3x.9	8x24	3.3	1.5
LCA030S } LCA060D }	Zinc plated	LC1336-G8ZP	.5x1.4	13x36	8.47	3.85
LCA060S } LCA120D } LCA180T } LCA250Q }	Zinc plated	LC1645-G8ZP	.63x1.8	16x45	12.65	5.75



Liftchain hook mounted air chain hoist

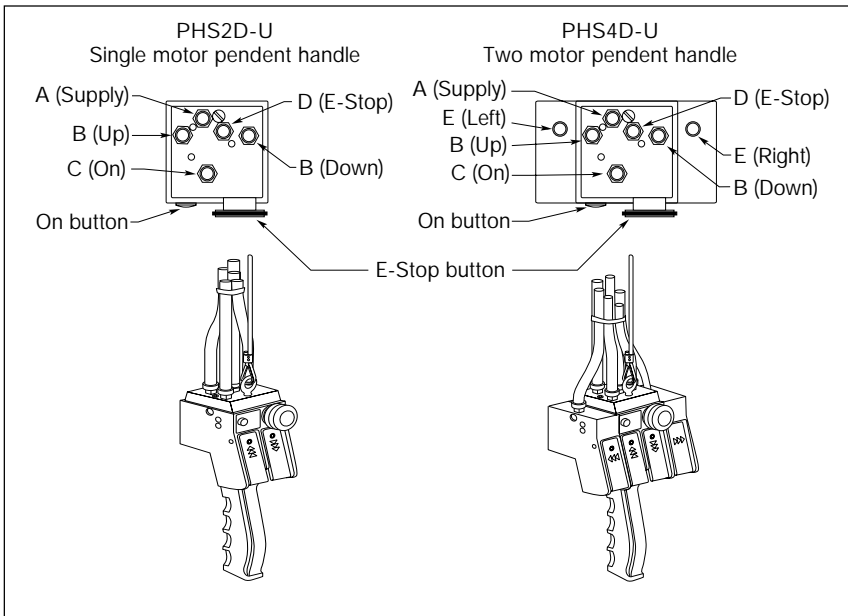
Air inlet sizes

Hoist series	Inlet
LCA015S & LCA030D	1/2" BSP
LCA030S, 060D, 060S 120D, 180T & 250Q	3/4" BSP

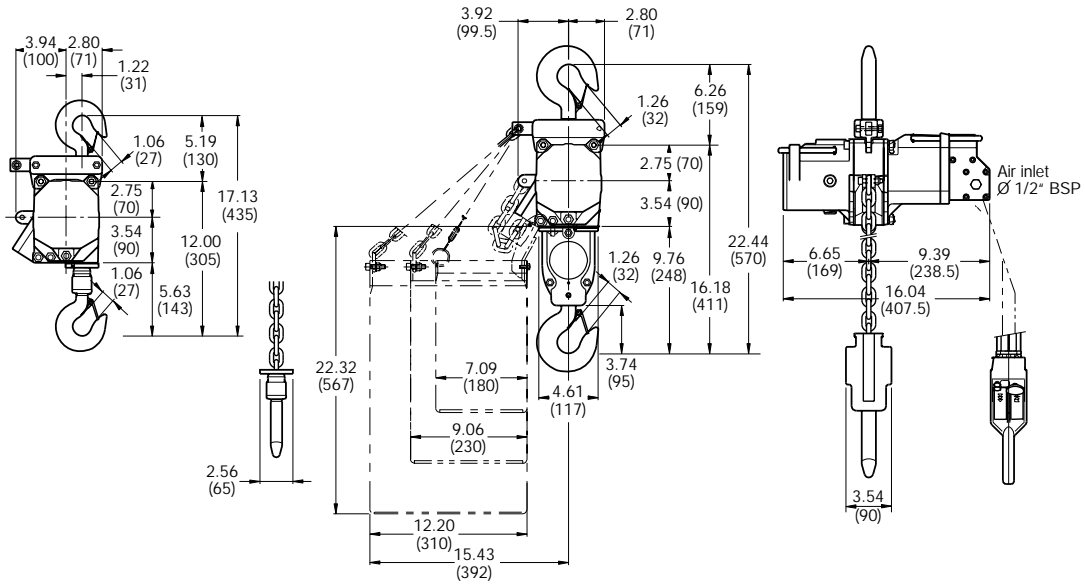
Warning: Before installation see maintenance and operations manual for additional warnings and precautions. This equipment is not to be used for lifting, supporting or transporting people, or lifting or supporting loads over people.

Pendent handles

Type	Part no.	Dimensions (in.) (BSP air inlet)				
		A	B	C	D	E
Single mtr	PHS2D-U	1/4	1/4	1/4	1/4	-
Two mtrs	PHS4D-U	1/4	1/4	1/4	1/4	1/4

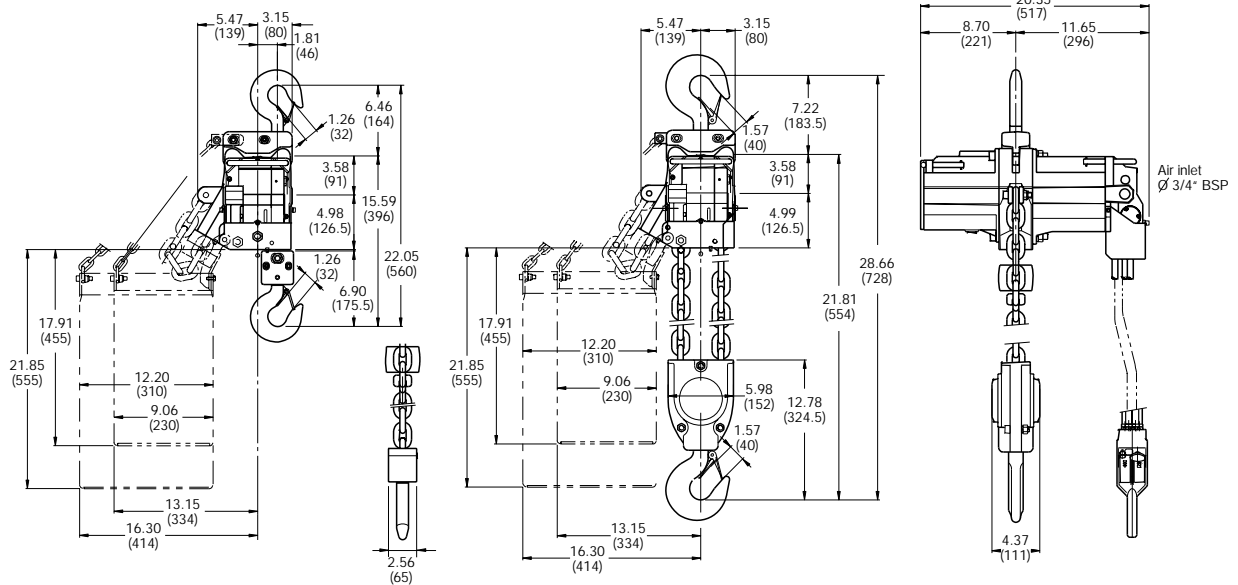


Hook mounted hoist dimensions – LCA015S (1.5 metric ton) and LCA030D (3 metric ton)



LCA015S and LCA030D
Hook mounted hoist

Hook mounted hoist dimensions – LCA030S (3 metric ton) and LCA060D (6 metric ton)



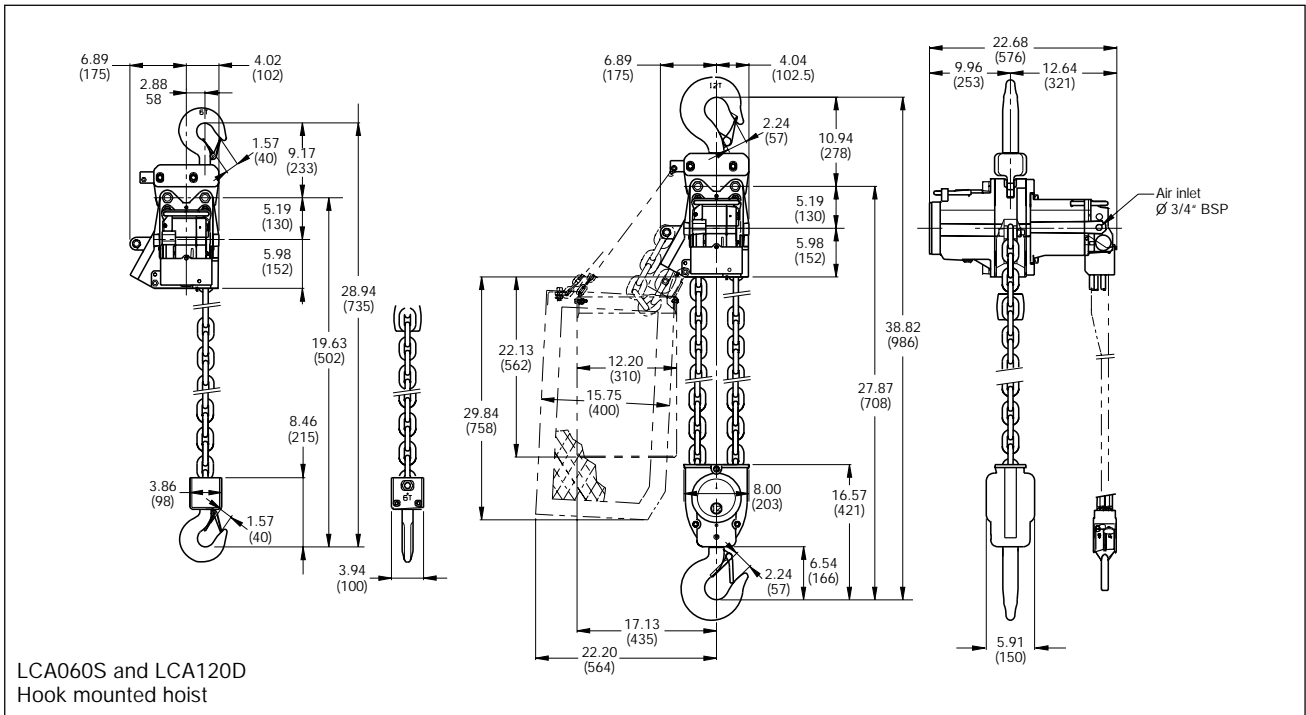
LCA030S and LCA060D
Hook mounted hoist

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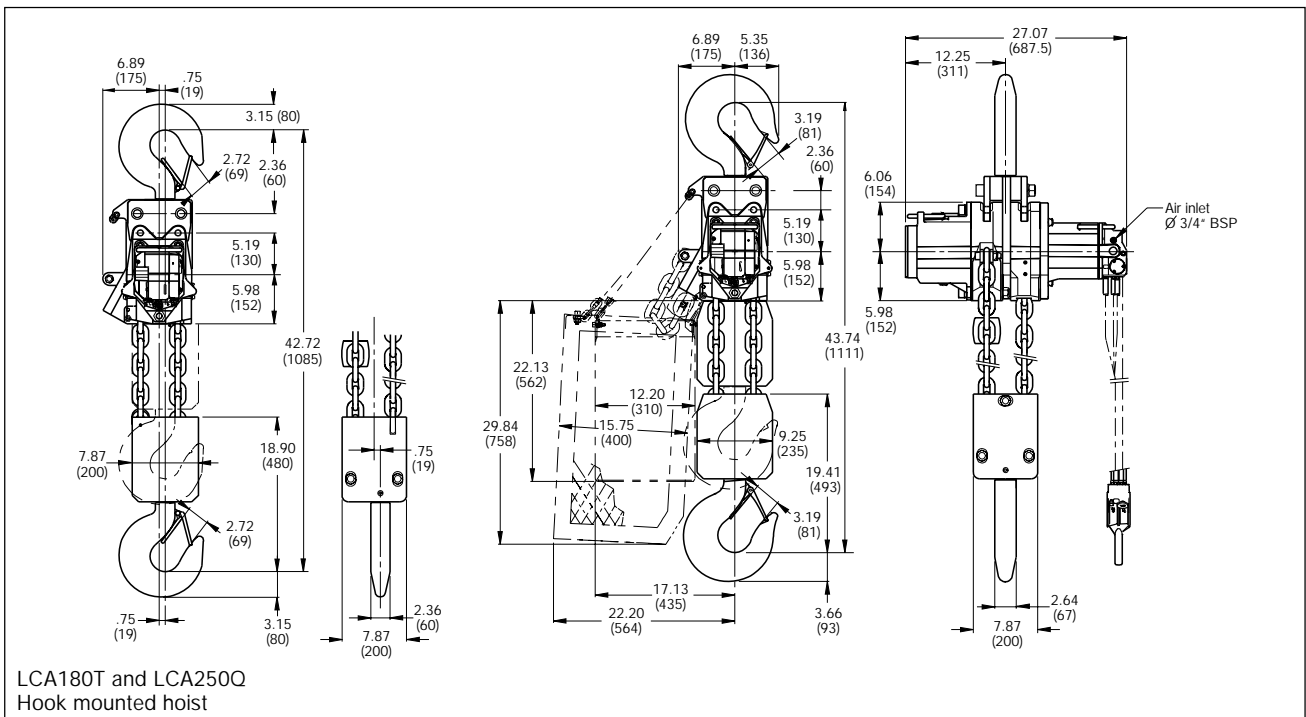
1.5 to 25 metric ton lifting capacity



Hook mounted hoist dimensions – LCA060S (6 metric ton) and LCA120D (12 metric ton)



Hook mounted hoist dimensions – LCA180T (18 metric ton) and LCA250Q (25 metric ton)

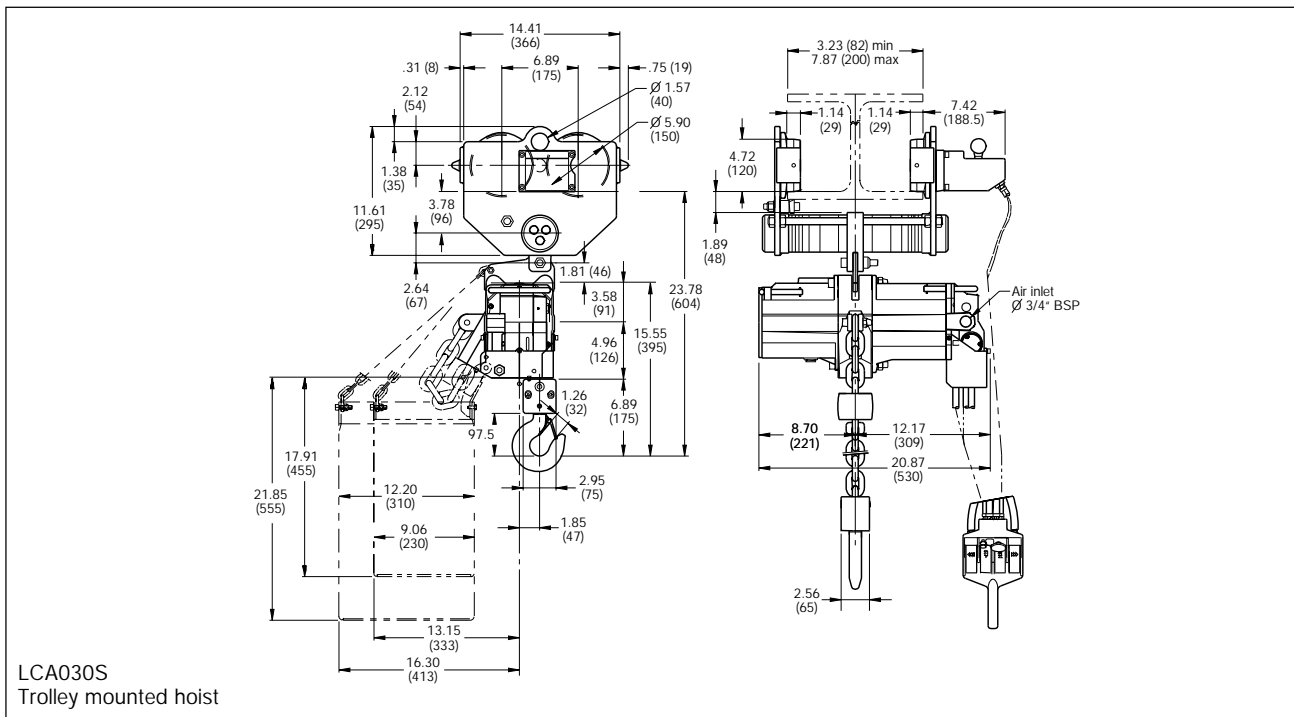


Liftchain LCA Lube Free Air Hoist Series

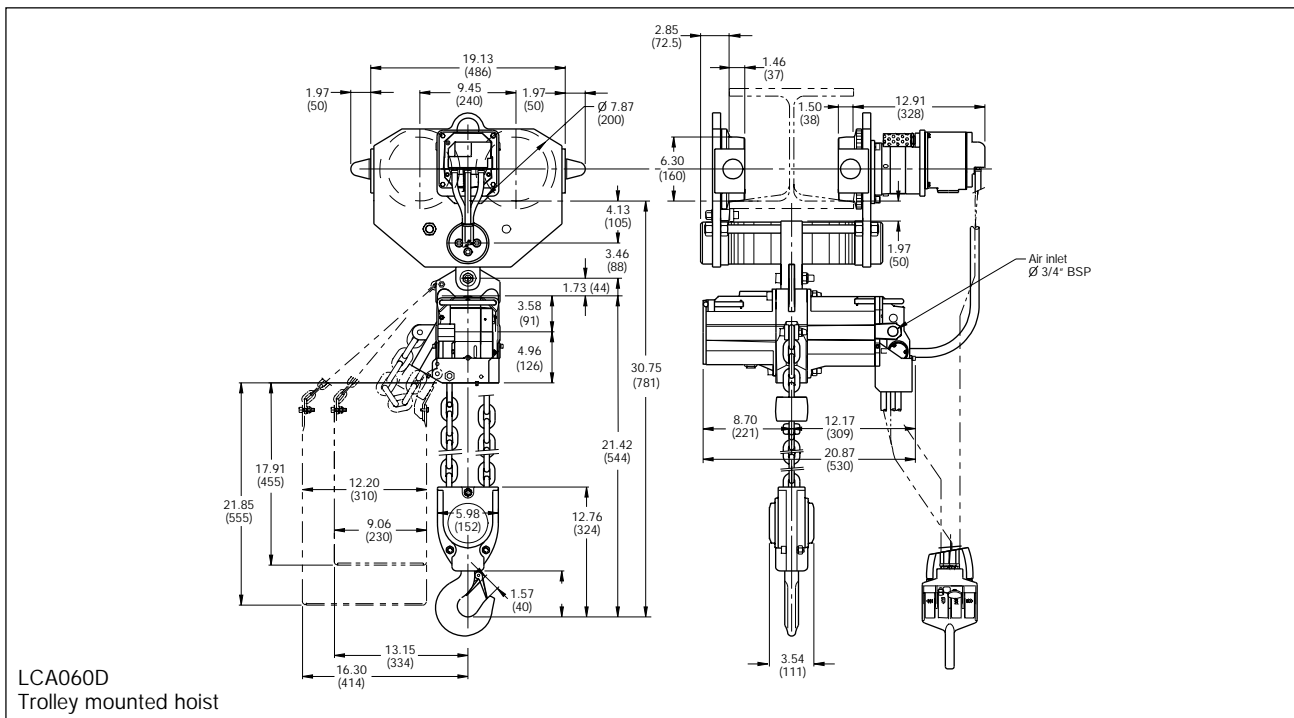
1.5 to 25 metric ton lifting capacity



Trolley mounted hoist dimensions – LCA030S (3 metric ton)



Trolley mounted hoist dimensions – LCA060D (6 metric ton)

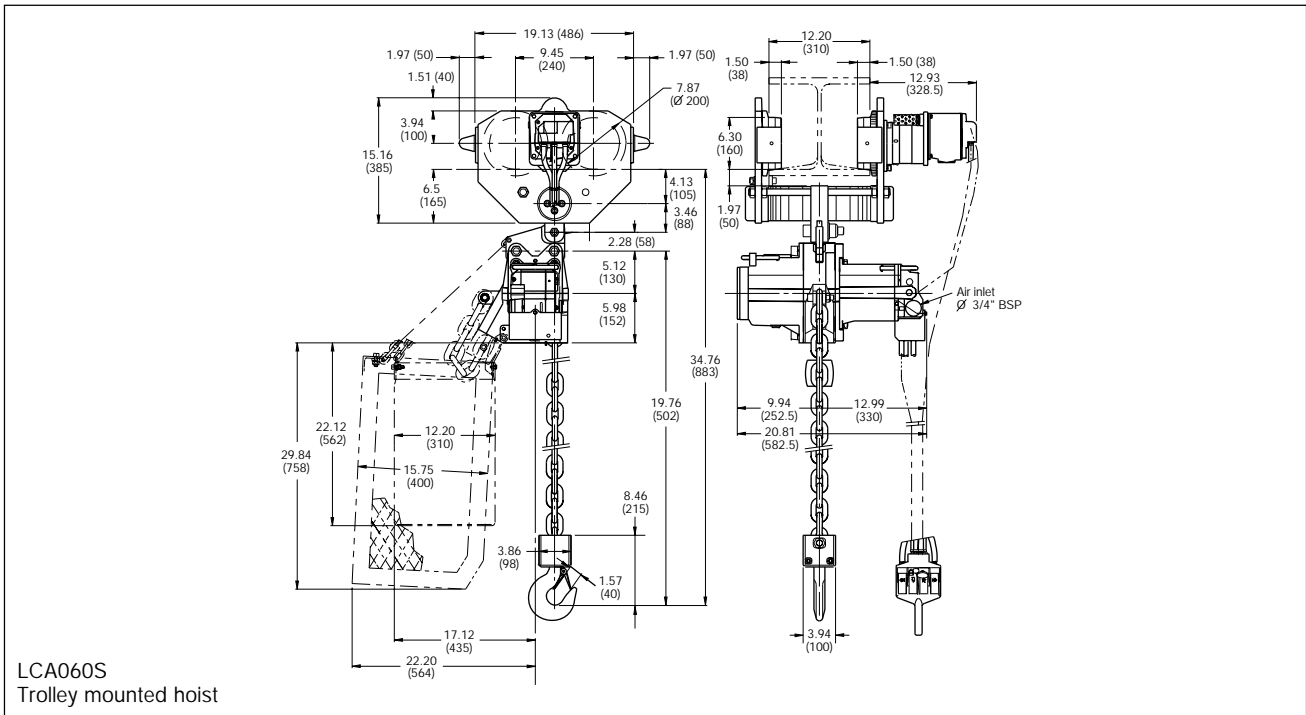


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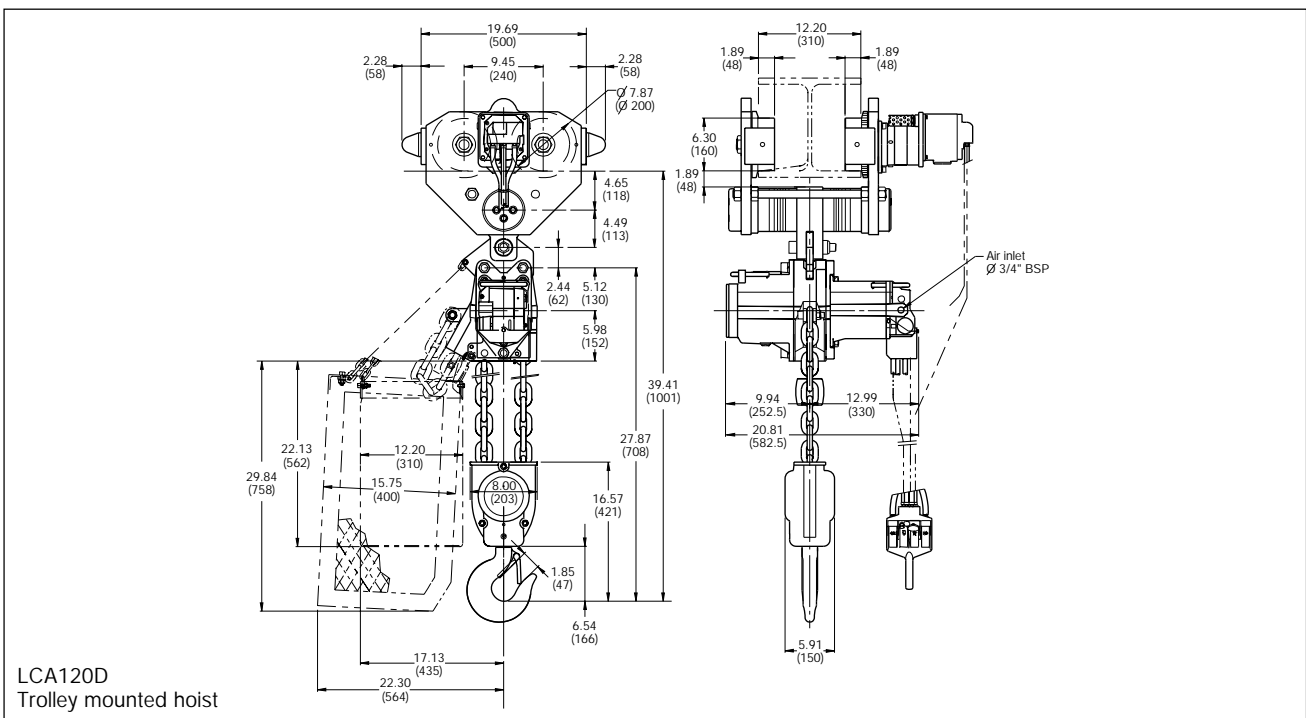
1.5 to 25 metric ton lifting capacity



Trolley mounted hoist dimensions – LCA060S (6 metric ton)



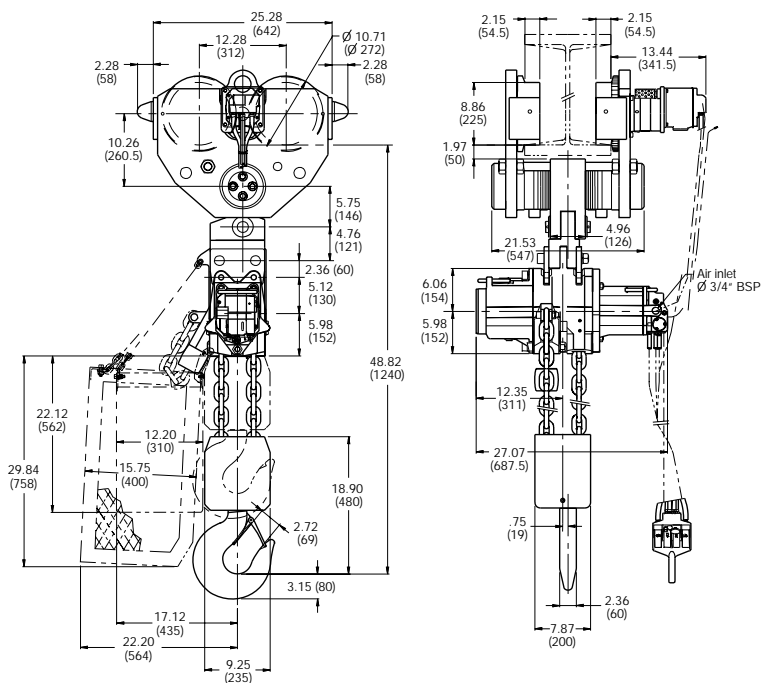
Trolley mounted hoist dimensions – LCA120D (12 metric ton)



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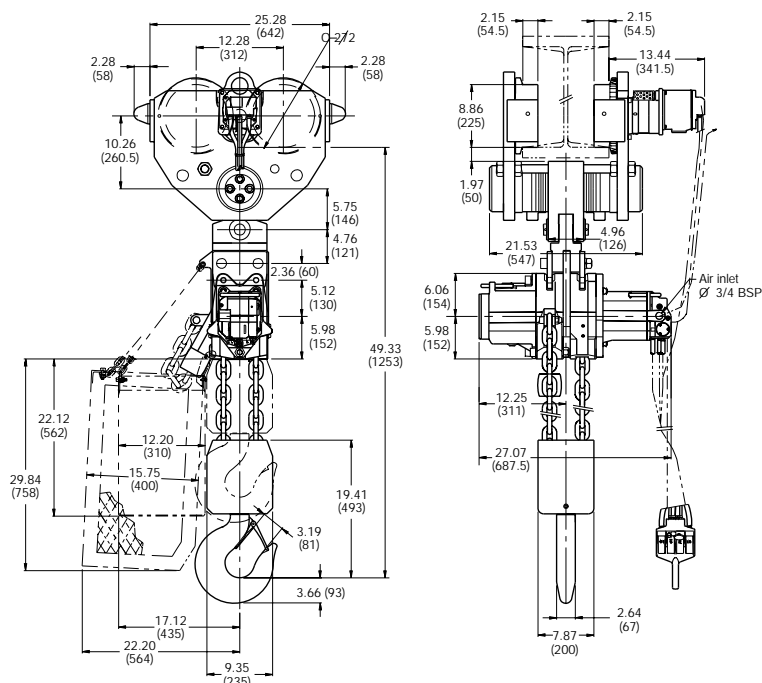
1.5 to 25 metric ton lifting capacity

Trolley mounted hoist dimensions – LCA180T (18 metric ton)



LCA180T
Trolley mounted hoist

Trolley mounted hoist dimensions – LCA250Q (25 metric ton)



LCA250Q
Trolley mounted hoist

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How to order standard equipment

Specify the complete model number as shown. Specify beam size, type and flange width. Note: that 0 (zero) is a number, not a letter in model part numbers.

Example: *LCA030DIP3RU3M2A-E*

Series type	Power type	Capacity and falls of chain	Range type	Body control type	Control type	Suspension	Lift	Control	Options	CE package
<i>LC</i>	<i>A</i>	<i>030D</i>	<i>I</i>	<i>P</i>	<i>3</i>	<i>RU</i>	<i>3M</i>	<i>2</i>	<i>A</i>	<i>- E</i>
<i>LC</i> = Liftchain series	<i>A</i> = Air <i>H</i> = Hydraulic (hydraulic models available upon request)		<i>I</i> = Industrial <i>M</i> = Mining (mining models available upon request)	<i>P</i> = Pendant	<i>2</i> = 1 motor pendant <i>3</i> = 2 motor pendant		<i>3M</i> = 3 m standard <i>XX</i> = Specify length in metres	<i>2</i> = 2 m standard <i>XX</i> = Specify length in metres		<i>E</i> = Compliance with the European Machinery Directive
		015S = 1.5t Single fall 030S = 3t Single fall 030D = 3t Double fall 060S = 6t Single fall 060D = 6t Double fall 120D = 12t Double fall 180T = 18t Triple fall 250Q = 25t Quadruple fall			<i>A</i> = fixed lug <i>C</i> = Swivel top hook <i>PU</i> = Plain rigid universal trolley (flat or tapered beam) 1500 to 6000 kg <i>PE</i> = Plain rigid trolley (flat beam) 12000 to 25000 kg <i>PN</i> = Plain rigid trolley (tapered beam) 12000 to 25000 kg <i>GU</i> = Geared rigid universal trolley (flat or tapered beam) 1500 to 6000 kg <i>GE</i> = Geared rigid trolley (flat beam) 12000 kg only <i>GN</i> = Geared rigid trolley (tapered beam) 12000 kg only <i>RU</i> = Motorized rigid universal trolley (flat or tapered beam) 1500 to 6000 kg <i>RE</i> = Motorized rigid trolley (flat beam) 12000 to 25000 kg <i>RN</i> = Motorized rigid trolley (tapered beam) 12000 to 25000 kg <i>RUA</i> = Motorized articulated universal trolley (flat or tapered beam) 1500 to 6000 kg <i>REA</i> = Motorized articulated trolley (flat beam) 12000 to 25000 kg <i>RNA</i> = Motorized articulated trolley (tapered beam) 12000 to 25000 kg		<i>A</i> = Standard chain bucket <i>B</i> = Large chain bucket <i>C</i> = Extra large chain bucket <i>P</i> = Marine paint, 150 µ <i>Q</i> = Offshore paint, 290 µ <i>Z</i> = Sandblast and primer Corrosion and spark-resistant packages S•COR•E <i>R</i> = Zinc plated package <i>T</i> = Bronze/copper plated package			

S.COR.E option R includes the following:

For the hoist:

- Stainless steel pins and fasteners 10 mm and smaller
- 20 µ zinc plated fasteners 11 mm and larger
- Zinc plated top and bottom hook assemblies
- Zinc plated bottom hook sprocket wheel

For the trolley:

- Stainless steel pins and fasteners 10 mm and smaller
- 20 µ zinc plated fasteners 11 mm and larger
- Solid bronze wheels
- Rubber bumpers

S.COR.E option T includes the following:

For the hoist:

- Stainless steel pins and fasteners 10 mm and smaller
- 20 µ zinc plated fasteners 11 mm and larger
- Brass or steel pendant
- Bronze coated central part, driving sprocket wheels, chain release arm
- Bronze coated top and bottom hook assemblies
- Zinc plated bottom hook sprocket wheel

For the trolley:

- Stainless steel pins and fasteners 10 mm and smaller
- 20 µ zinc plated fasteners 11 mm and larger
- Brass or steel pendant
- Solid bronze wheels
- Rubber bumpers