

Hercu-Link™ Air Chain Hoist **5 to 100 metric ton lifting capacity**



IR's uniquely modular, compact design Hercu-Link™ air chain hoist brings strength and durability to maintenance and operations, rigging, construction and shipyard applications with enhanced safety, space, and time savings in mind.

■ **Standard features and equipment**

- Compact design can easily replace older manual chain hoists in many industrial applications
- All steel construction
- True vertical lift in all applications
- Radial piston air motor provides superior spotting control
- Limit switches standard on all Frame 2 models
- Automatic, multi-disc oil bath motor brake
- Compact planetary gearing
- Alloy steel hooks with safety latches and roller thrust bearings
- Alloy steel zinc plated load chain
- Stainless steel pins and fasteners; 3/8" (9.5 mm) and smaller
- Corrosion resistant fasteners; 1/2" (13 mm) and larger
- Water drains provided in enclosed bottom load block
- Lifting lugs for easy installation
- Pendant or pull rope control
- All non-oil bath bearings are regreasable
- Muffler

■ **Additional standard equipment for trolley models:**

- Self locking worm gear drive
- Rail sweeps (safety lugs)
- 4 push button pendant control
- Trolley bumpers and guide rollers for Frame 2 models
- Zinc plated hand chain/geared trolleys
- Zinc plated trolley shafts/spacers

■ **Options:**

- Hook mounted, plain, geared, and motorized trolley suspensions
- Chain containers
- Accu-Trol pendant (see Accu-Trol section for specifications and ordering information)
- Variable lengths of lift
- 60 psi (4 bar) applications packages
- Main air shut-off (emergency stop)
- Pull rope control
- Limit switches, trolley bumpers, and trolley guide rollers for Frame 1 models
- Spark and corrosion resistant packages
- Rubber hull bumpers
- Hydraulic models
- Underwater models
- Trolley drive disc brake – secondary to worm gear braking action



HA2-025M,
Frame 2

HA2-050H,
Frame 2

**For BOP handling systems:
Please refer to brochure
MHD55148**

-E = Compliance with the European Machinery Directive. Hercu-link series hoists will be fitted with the following:

- 1 Overload protection device
- 2 Emergency stop on pendant
- 3 Main air shut-off valve on air inlet
- 4 Exhaust muffler
- 5 Upper and lower limit switches

Specifications: performance is based on 105 psi (7 bar) air inlet pressure with motor running

Model no.	Capacity tons	Standard lift ft	m	Hoist lift ^{(1) (2)} ft/min m/min		Hoist lower ft/min m/min		Hoist hp	Avg. air cons. cfm	m ³ /min	Chain falls	Std headroom ⁽³⁾ in. mm		Unit weight lbs kg		Ship weight lbs kg	
Frame 1/hook mounted hoist (16 mm chain)																	
HA1-005H	5	10	3	10	3	15	4.6	3.8	165	4.7	1	27.63	702	520	236	670	304
HA1-010H	10	10	3	5	1.5	7.5	2.3	3.8	165	4.7	2	35.50	902	610	277	760	345
HA1-015H	15	10	3	3.25	1	5	1.5	3.8	165	4.7	3	41.88	1064	875	398	1125	511
HA1-020H	20	10	3	2.5	.76	3.75	1.1	3.8	165	4.7	4	42.50	1080	975	443	1275	580
Frame 2/hook mounted hoist (22 mm chain)																	
HA2-012H	12.5	10	3	8	2.4	12	3.7	9.4	280	8	1	38.50	978	965	439	1215	552
HA2-025H	25	10	3	4	1.2	6	1.8	9.4	280	8	2	51.13	1299	1235	561	1685	766
HA2-037H	37.5	10	3	2.5	.76	3.75	1.1	9.4	280	8	3	66.50	1689	2230	1014	2680	1218
HA2-050H	50	10	3	2	.61	3	0.9	9.4	280	8	4	75.06	1907	2955	1343	3330	1514
Frame 3/hook mounted hoist (32 mm chain)																	
HA3-075H	75	10	3	2.5	0.76	2.5	0.76	25	500	14.3	3	83	2108	7600	3453	8450	3839
HA3-100H	100	10	3	2	0.61	2	0.61	25	500	14.3	4	96	2432	8000	3635	8850	4021
Frame 1/trolley mounted hoist (16 mm chain)																	
HA1-005M (or V)	5	10	3	10	3	15	4.6	3.8	165	4.7	1	23.56	598	905	411	1055	480
HA1-010M (or V)	10	10	3	5	1.5	7.5	2.3	3.8	165	4.7	2	30.50	775	1105	502	1305	593
HA1-015M (or V)	15	10	3	3.25	1	5	1.5	3.8	165	4.7	3	35.25	895	1315	598	1565	711
HA1-020M (or V)	20	10	3	2.5	.76	3.75	1.1	3.8	165	4.7	4	34.96	878	1425	648	1725	784
Frame 2/trolley mounted hoist (22 mm chain)																	
HA2-012M (or V)	12.5	10	3	8	2.4	12	3.7	9.4	280	8	1	24.69	627	1415	643	1665	757
HA2-025M (or V)	25	10	3	4	1.2	6	1.8	9.4	280	8	2	40.94	1040	1660	755	2110	959
HA2-037M (or V)	37.5	10	3	2.5	.76	3.75	1.1	9.4	280	8	3	48.94	1243	3700	1682	4150	1886
HA2-050M (or V)	50	10	3	2	.61	3	0.9	9.4	280	8	4	53.00	1346	4665	2120	5440	2473
Frame 3/trolley mounted hoist (32 mm chain)																	
HA3-075M	75	10	3	2.5	0.76	2.5	0.76	25	500	14.3	3	(4)	(4)	(4)	(4)	(4)	(4)
HA3-100M	100	10	3	2	0.61	2	0.61	25	500	14.3	4	(4)	(4)	(4)	(4)	(4)	(4)

- (1) Chain bucket dimensions vary per length of lift. Contact technical sales for specific requirements.
- (2) Lifting speed will be reduced when 4-bar gearing (option **Q**) is ordered.
- (3) Headroom for plain and geared trolleys are the same as motorized trolley.
- (4) Contact factory for specific trolley configuration.
- (5) Air Inlet Sizes: Frame 1, 3/4"
Frame 2, 1"
Frame 3, 1-1/2"

Hercu-Link Frame 2 operating data at 105 psi/7 bar (dynamic)

Series	at rated load				at half load				at no load			
	Up		Down		Up		Down		Up		Down	
	fpm	m/min	fpm	m/min	fpm	m/min	fpm	m/min	fpm	m/min	fpm	m/min
HA2-012H	7	2.1	16	4.9	13	4.0	11.5	3.5	19	5.8	7	2.1
HA2-025H	3.5	1.1	8	2.4	6.5	2.0	5.7	1.7	9.5	2.9	3.5	1.1
HA2-037H	2.3	.07	5.3	1.6	4.3	1.3	3.8	1.2	6.3	1.9	2.3	0.7
HA2-050H	1.7	.05	4	1.2	3.2	1.0	2.9	0.9	4.75	1.4	1.75	0.5

Performance figures are based on 1-1/4 inch (32 mm) I.D. air hose. Air consumption at no load is 280 cfm (7.84 m³/min); at half load is 215 cfm (6.02 m³/min) and at rated load is 150 cfm (4.2 m³/min);

Hercu-Link™ Air Chain Hoist

5 to 100 metric ton lifting capacity



Dimensions: hook mounted hoist

Frame 1	A ⁽¹⁾		B		C		F		G		H		J ⁽¹⁾		K	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
HA1-005H	27.63	702	13.00	330	—	—	1.81	46	19.00	483	14.88	378	31.25	794	7.75	197
HA1-010H	35.50	902	13.00	330	—	—	2.63	67	19.00	483	14.88	378	40.06	1018	7.75	197
HA1-015H	41.88	1064	19.00	483	—	—	3.00	76	19.00	483	14.88	378	47.88	1216	7.75	197
HA1-020H	42.50	1080	13.00	330	—	—	3.63	92	21.25	540	16.75	425	49.75	1264	7.75	197

	L		M		N		P		Y	
HA1-005H	5.00	127	3.50	89	3.50	89	7.88	48	6.50	165
HA1-010H	5.00	127	6.00	152	8.50	216	2.50	64	8.69	221
HA1-015H	5.00	127	5.25	133	10.00	254	3.38	86	11.00	279
HA1-020H	5.00	127	9.38	238	8.50	216	4.00	102	13.63	346

(1) For Frame 1 models w/limit switch option, add approx. 1.5" to dimensions A and J.

Frame 2	A		B		C		F		G		H		J		K	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
HA2-012H	38.50	978	18.75	476	24.50	622	2.63	67	19.50	495	14.25	362	43.75	1111	9.63	244
HA2-025H	51.13	1299	18.75	476	24.50	622	3.63	92	19.50	495	14.25	362	58.38	1482	9.63	244
HA2-037H	66.50	1689	18.75	476	24.50	622	5.06	129	22.50	572	14.25	362	76.63	1946	9.63	244
HA2-050H	75.06	1907	18.75	476	24.50	622	6.69	170	22.50	572	14.25	362	88.44	2246	9.63	244

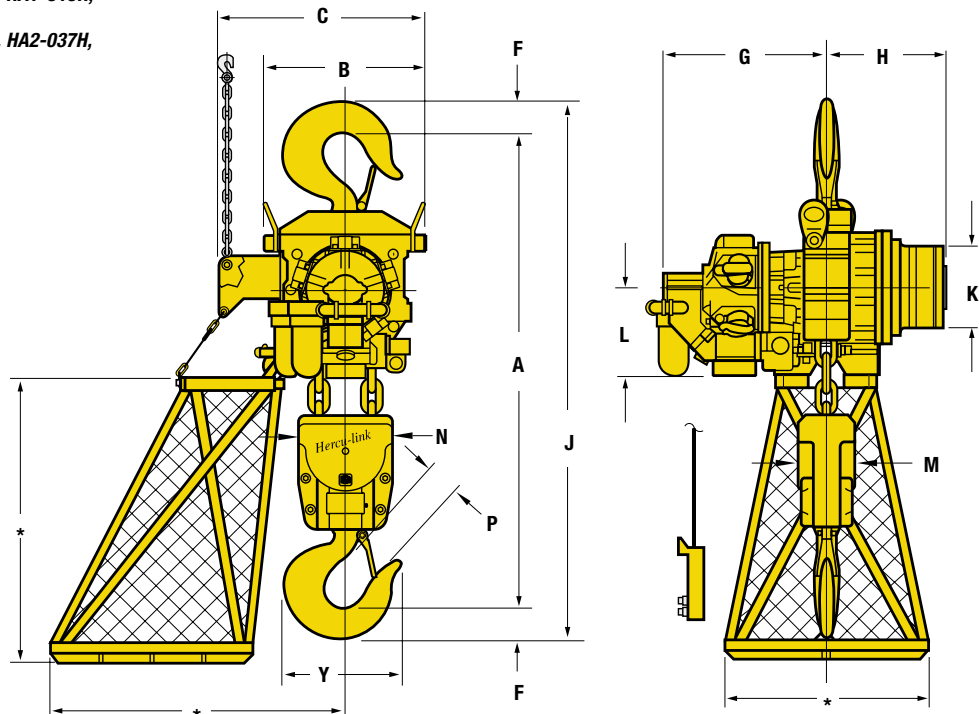
	L		M		N		P		Y	
HA2-012H	9.88	251	4.50	114	4.50	114	2.50	64	8.69	221
HA2-025H	9.88	251	6.88	175	11.25	286	3.25	83	13.63	346
HA2-037H	9.88	251	11.13	283	11.25	286	4.25	108	15.06	383
HA2-050H	9.88	251	12.63	321	11.25	286	6.50	165	20.63	524

Frame 3	A		B		C		F		G		H		J		K	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
HA3-075H	94.43	2398	26.00	660	29.75	756	6.69	170	36.21	920	28.69	729	107.81	2738	12.68	322
HA3-100H	96.00	2438	26.00	660	29.75	756	6.69	190	36.21	920	28.69	729	110.96	2818	12.68	322

Hook mounted hoist with optional filter-lubricator

Frame 1: HA1-005H, HA1-010H, HA1-015H, HA1-020H

Frame 2: HA2-012H, HA2-025H, HA2-037H, HA2-050H



Dimensions are subject to change. Contact factory for certified prints

Trolley specifications

Model no.	Capacity tons	Speed		Flange adj		Wheel tread dia		Wheel loading/pair		Min inside curve radius ⁽¹⁾		Air cons. ⁽²⁾	
		fpm	m/min	in	mm	in.	mm	lbs	kg	in.	mm	cfm	m ³ /min
Frame 1 (16 mm chain)													
HA1-005M (or V)	5	40 ⁽⁴⁾ (20) ⁽⁵⁾	12.2 (6.1)	6-8	152-203	6.13	156	5953	2706	60 ⁽³⁾	1524 ⁽³⁾	See note 2	
HA1-010M (or V)	10	40 (20)	12.2 (6.1)	6-8	152-203	6.13	156	11553	5251	60 ⁽³⁾	1524 ⁽³⁾	See note 2	
HA1-015M (or V)	15	40 (20)	12.2 (6.1)	6-8	152-203	6.88	175	17153	7797	84 ⁽³⁾	2134 ⁽³⁾	See note 2	
HA1-020M (or V)	20	40 (20)	12.2 (6.1)	6-8	152-203	9.00	229	22713	10324	72 ⁽³⁾	1829 ⁽³⁾	See note 2	

(1) Minimum curve radius is for frame 1 trolley model without guide rollers. Contact technical sales for trolley with guide rollers.

(2) 180 cfm (5.1 m³/min) for vane motor trolley; 75 cfm (2.1 m³/min) for piston motor trolley

(3) Without trailing trolley or with articulated trailing trolley

(4) Piston motor trolley

(5) Vane motor trolley

Dimensions: trolley mounted hoist

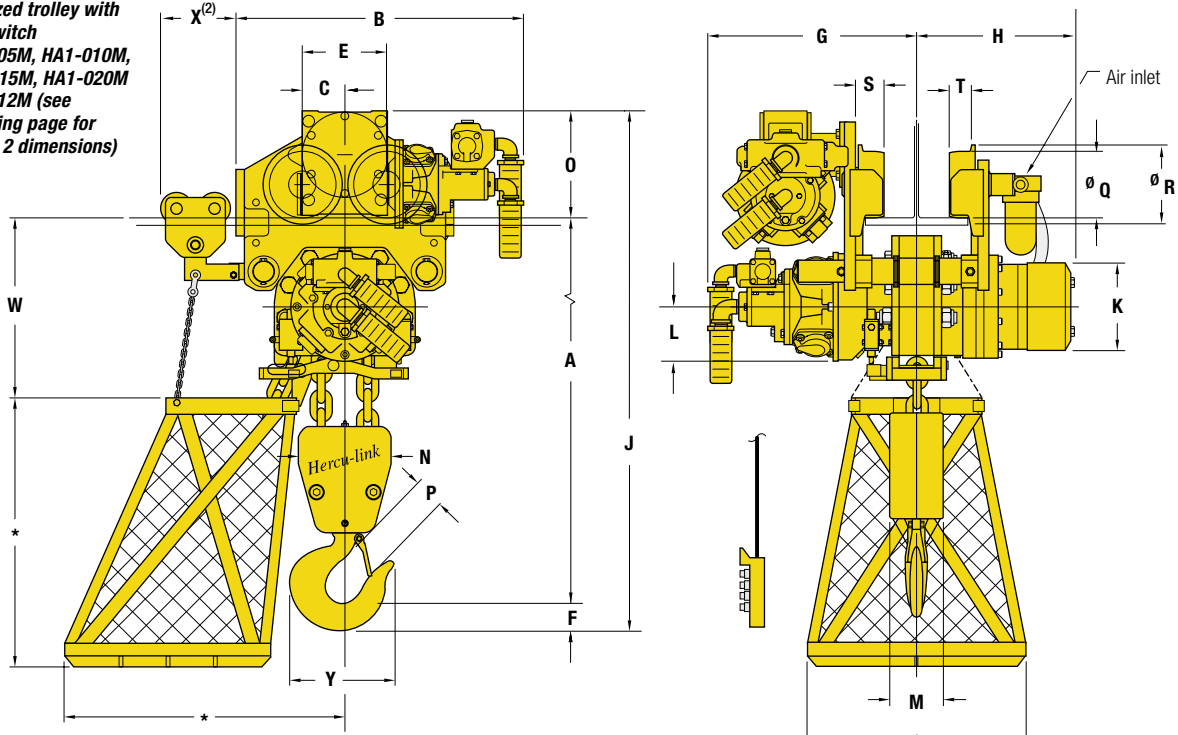
Frame 1	A ⁽¹⁾		B		C		D		E		F		G		H	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
HA1-005M	23.56	598	26.44	672	3.88	98	-	-	7.75	197	1.81	46	19.00	483	14.88	378
HA1-010M	30.50	775	26.44	672	3.88	98	-	-	7.75	197	2.59	66	19.00	483	14.88	378
HA1-015M	35.25	895	27.50	699	4.50	114	-	-	9.00	229	3.00	76	19.00	483	14.88	378
HA1-020M	34.56	878	32.00	813	5.88	149	-	-	11.75	298	3.63	92	21.25	540	16.75	425
	J ⁽¹⁾		K		L		M		N		O		P		Q	
HA1-005M	36.00	914	7.75	197	5.00	127	3.50	89	3.50	89	10.06	256	1.88	48	6.13	156
HA1-010M	43.75	1111	7.75	197	5.00	127	6.00	152	8.50	216	10.06	256	2.50	64	6.13	156
HA1-015M	48.75	1238	7.75	197	5.00	127	5.25	133	10.00	254	10.75	273	3.38	86	6.13	156
HA1-020M	50.19	1275	7.75	197	5.00	127	9.44	238	8.50	216	12.19	310	4.00	102	9.00	229
	R		S		T		W		X ⁽²⁾		Y		Z			
HA1-005M	7.25	184	2.63	67	1.94	49	19.81	503	8.75	222	6.50	165	-	-		
HA1-010M	7.25	184	2.63	67	1.94	49	19.81	503	8.75	222	8.69	221	-	-		
HA1-015M	8.63	219	3.25	83	2.56	65	20.00	508	8.88	225	11.00	279	-	-		
HA1-020M	11.63	295	3.06	78	2.19	56	19.50	495	6.00	152	13.63	346	-	-		

(1) For Frame 1 models with the limit switch option, add approximately 1.5" to dimensions A and J.

(2) Chain bucket includes trailing trolley on HA1-015M and any other model with 35 feet (10.7 m) of lift or more.

Important:
It is the user's responsibility to specify proper beam size for the maximum wheel loading. Consult with a qualified engineer.

4-wheel motorized trolley with optional limit switch
Frame 1: HA1-005M, HA1-010M, HA1-015M, HA1-020M
Frame 2: HA2-012M (see following page for Frame 2 dimensions)



Dimensions are subject to change. Contact factory for certified prints

Hercu-Link™ Air Chain Hoist

5 to 100 metric ton lifting capacity



Trolley specifications

Model no.	Capacity tons	Speed		Flange adj		Wheel tread dia		Wheel loading/pair		Min inside curve radius		Air cons. (1)	
		fpm	m/min	in	mm	in.	mm	lbs	kg	in.	mm	cfm	m ³ /min
Frame 2 (22 mm chain)													
HA2-012M (or V)	12.5	40 ² (20) ³	12.2 (6.1)	6 – 8	152 – 203	6.88	175	14458	6572	72	1829	See note 1	
HA2-025M (or V)	25	40 (20)	12.2 (6.1)	6 – 8	152 – 203	6.88	175	14165	6439	n/a	n/a	See note 1	
HA2-037M (or V)	37.5	40 (20)	12.2 (6.1)	8 – 10	203 – 254	9.00	229	21550	9795	n/a	n/a	See note 1	
HA2-050M (or V)	50	40 (20)	12.2 (6.1)	8 – 10	203 – 254	9.00	229	28666	13030	n/a	n/a	See note 1	

(1) 180 cfm (5.1 m³/min) for vane motor trolley; 75 cfm (2.1 m³/min) for piston motor trolley

(2) Piston motor trolley

(3) Vane motor trolley

Dimensions: trolley mounted hoist

Frame 2	A		B		C		D		E		F		G		H	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
HA2-012M	35.88	911	29.50	749	4.50	114	–	–	9.00	229	2.56	65	19.50	495	14.25	362
HA2-025M	40.94	1040	61.75	1568	22.75	578	24.25	616	9.00	229	3.63	92	19.50	495	14.25	362
HA2-037M	48.94	1243	64.88	1648	24.00	610	26.50	673	11.75	298	5.06	129	22.50	572	17.25	438
HA2-050M	53.00	1346	64.88	1648	18.13	460	27.13	689	11.75	298	6.50	165	22.50	572	17.25	438
	J		K		L		M		N		O		P		Q	
HA2-012M	49.25	1251	9.63	244	9.88	251	4.50	114	4.50	114	10.75	273	2.50	64	6.88	175
HA2-025M	56.00	1422	9.63	244	9.88	251	6.88	175	11.25	286	11.44	291	4.00	102	6.88	175
HA2-037M	67.00	1702	9.63	244	9.88	251	11.13	283	11.25	286	13.00	330	4.75	121	9.00	229
HA2-050M	72.50	1842	9.63	244	9.88	251	12.63	321	11.25	286	13.00	330	6.50	165	9.00	229
	R		S		T		W		X (1)		Y		Z			
HA2-012M	8.63	219	3.25	83	2.56	65	24.44	697	8.75	222	8.69	221	–	–		
HA2-025M	8.63	219	3.19	81	2.56	65	19.06	484	–	–	13.63	346	27.50	699		
HA2-037M	11.38	289	3.06	78	2.56	56	19.19	487	–	–	15.44	392	24.50	622		
HA2-050M	11.38	289	3.06	78	2.56	56	19.19	487	–	–	20.63	524	24.50	622		

Important:
It is the user's responsibility to specify proper beam size for the maximum wheel loading. Consult with a qualified engineer.

Frame 3

HA3-075M

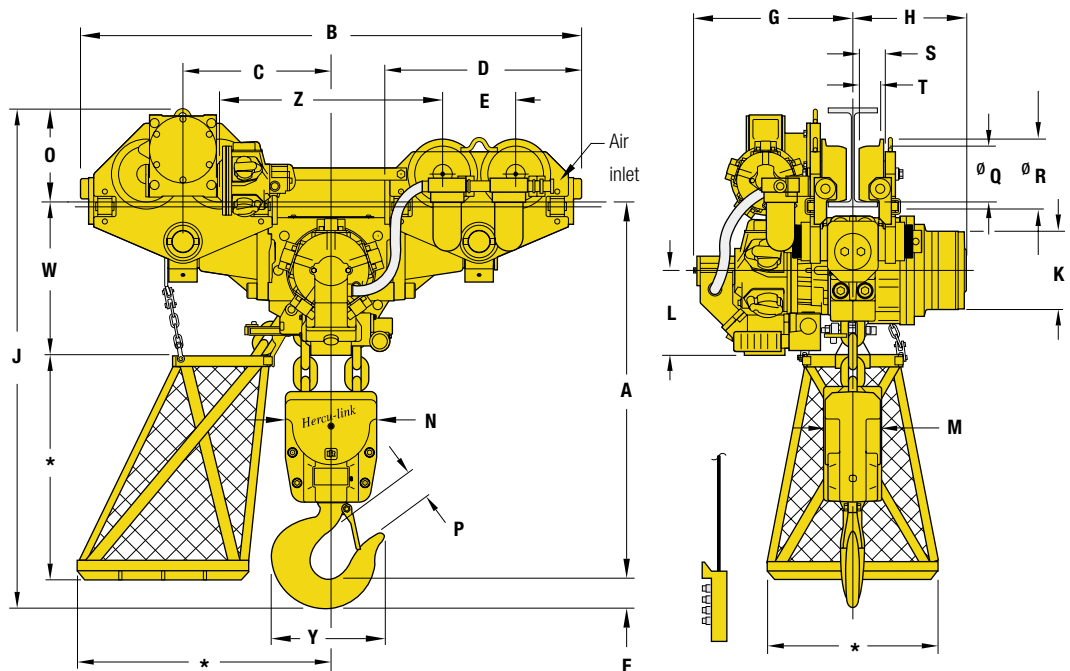
HA3-100M

Contact Technical Sales for product specifications for 75 and 100 ton models.

(1) Chain bucket includes trailing trolley on HA2-012M and any other model with 35 feet (10.7 m) of lift or more.

8-wheel motorized trolley

Frame 2: HA2-025M,
HA2-037M,
HA2-050M



Dimensions are subject to change. Contact factory for certified prints

Hercu-Link™ Air Chain Hoist

5 to 100 metric ton lifting capacity



How to order standard equipment:

Specify the complete model as shown. Specify beam size, type and flange width. **Example: HA1-005MA3-30-27L**

Series	Frame size	-	Capacity	Suspension	Trolley flange adj.	Control	-	Lift	-	Control drop	Options																																				
HA	1	-	005	M	A	3	-	30	-	27	L																																				
<p>H = Hercu-Link series</p> <p>A = Air powered</p> <p>H = Hydraulically powered available on request</p> <p>Note: See Electric Hercu-Link section for electric models.</p>			<p>H = Hook mount</p> <p>C = Clevis mount**</p> <p>D = Deck mount**</p> <p>P = Plain trolley</p> <p>G = Geared trolley</p> <p>V = Vane motor trolley</p> <p>M = Piston motor trolley</p> <p>R = Rack/pinion drive</p> <p>** Mounting information must be supplied.</p>			<p>XX = Length of lift</p> <p>XX = Control drop pendent (6 ft/2m standard)</p>			<p>A = Standard</p> <p>B = 2" (50.8 mm) extension</p> <p>C = 4" (101.6 mm) extension</p> <p>D = 6" (152.4 mm) extension</p> <p>M = No trolley used with hook, clevis and deck mount</p>			<p>A = Accu-Trol pendent</p> <p>B = Trolley bumpers (Frame 1 only; standard on Frame 2)</p> <p>C = Low temperature; please specify in text: -10° C or -20° C</p> <p>D = Trolley drive disc brake</p> <p>G = Trolley guide rollers (Frame 1 only; standard on Frame 2)</p> <p>L = Upper and lower limit switch (Frame 1 only; standard on Frame 2)</p> <p>M1 = Per DIN 50049/En10204 Para 2.2 "Typicals"</p> <p>M2 = Per DIN 50049/En10204 Para 3.1b actual per product as purchased</p> <p>M3 = Per DIN 50049/En10204 Para 3.1b actual per product as delivered in final condition</p> <p>N = Special paint; add code option and specify in text</p> <p>P = Marine 812 finish</p> <p>Q = 60 psi (4 bar) application package</p> <p>R = Copper plate S•COR•E package (see description below)</p> <p>S = Solid bronze S•COR•E package (see description below)</p> <p>T = Galvanized chain container</p> <p>Y = Hull bumper (for hook mounted shipyard hoist)</p> <p>Z = Sandblast and carbozinc primer only</p>																																			
<table border="1"> <thead> <tr> <th></th> <th>tons</th> <th>lbs.</th> </tr> </thead> <tbody> <tr> <td>1 005</td> <td>= 5</td> <td>= 11,000</td> </tr> <tr> <td>010</td> <td>= 10</td> <td>= 22,000</td> </tr> <tr> <td>015</td> <td>= 15</td> <td>= 33,000</td> </tr> <tr> <td>020</td> <td>= 20</td> <td>= 44,000</td> </tr> <tr> <td colspan="3"><hr/></td> </tr> <tr> <td>2 012</td> <td>= 12.5</td> <td>= 27,500</td> </tr> <tr> <td>025</td> <td>= 25</td> <td>= 55,000</td> </tr> <tr> <td>037</td> <td>= 37.5</td> <td>= 82,500</td> </tr> <tr> <td>050</td> <td>= 50</td> <td>= 110,000</td> </tr> <tr> <td colspan="3"><hr/></td> </tr> <tr> <td>3 075</td> <td>= 75</td> <td>= 165,000</td> </tr> <tr> <td>100</td> <td>= 100</td> <td>= 220,000</td> </tr> </tbody> </table>				tons	lbs.	1 005	= 5	= 11,000	010	= 10	= 22,000	015	= 15	= 33,000	020	= 20	= 44,000	<hr/>			2 012	= 12.5	= 27,500	025	= 25	= 55,000	037	= 37.5	= 82,500	050	= 50	= 110,000	<hr/>			3 075	= 75	= 165,000	100	= 100	= 220,000	<p>1 = Pull rope</p> <p>2 = 1 motor pendent (2 button)</p> <p>3 = 2 motor pendent (4 button)</p> <p>4 = 3 motor pendent (6 button)</p> <p>5 = 1 motor pendent with on/off</p> <p>6 = 2 motor pendent with on/off</p> <p>7 = 3 motor pendent with on/off</p>					
	tons	lbs.																																													
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Accessories

Series	Air inlet size	Filter	Lubricator	Regulator
HA1	¾ in. (19 mm) NPT	F28-06-SK00	L28-06-LK00	R28-06-F0G0-28
HA2	1 in. (25 mm) NPT	F30-08-000	L30-08-000	R30-08-G00

n S•COR•E (Option codes R and S)

- R** = The product will be equipped with zinc plated load chain, copper plated load hook(s) and trolley wheels. Zinc plated hand chain if applicable.
- S** = Up to 20 ton units will be equipped with zinc plated load chain, solid bronze load hook(s) and trolley wheels. Zinc plated hand chain if applicable.