MBI Monzon Brothers, Inc

MBI Crane & Hoist

Material Handling Products and Services

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Generation II
Air Chain Hoist

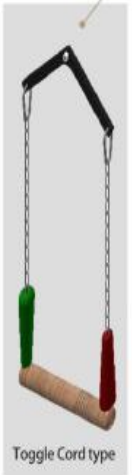
Black Bear®

CE

Black Bear Hoist

Black Bear Hoist
We Support Our Troops

"WHEN YOUR JOB IS A BEAR, YOU NEED A BLACK BEAR"



Toggle Cord type

❶ Gearbox

Sealed planetary gearbox complies with heavy duty cycles, gears are heat treated and mounted on high strength low friction bearings to extend its life span.

❷ Load Chain & Chain Guide

G80 load chain applied. The chain guide leads load chain working rapidly and smoothly on sprocket without twisting.

❸ Controller

Toggle Cord (TC) & Pendant Control (PC) for users choice. They can offer variable speed control with accurate & precise positioning of loads.

❹ Brake

Non-asbestos disc brake is applied automatically when the air is shut-off.

❺ Main Air Supply Shut - Off Type Overload Limiter System

Two overload limiter devices for extra safety- a Mechanical Clutch type [MCT] & a Main Air Supply Shut-off [MASSO] valve type.

These devices are pre -set at the factory to an overload limit capacity value of the hoist rated WLL x 125% and are adjustable.

Notes:

■ Air Flow System

- ■ **Compressor** : above 30hp to match air storage supplement.
- ■ **Air Filter** : need to clean & replace regularly.
- ■ **Pressure Regulator** : 8kg / cm² at least.
- ■ **Lubricator** : 6 drops / min or more adjusted according to operating status.
- ■ Connect the main air supply hose to the main air inlet of the hoist. Supply hose i.d. sizes : 0.25 ton ~ 2 ton : i.d. 1/2" ; 3.2 ton ~ 20 ton : i.d. 3/4".
- ■ Air supply pressure range needs to be Working Air Pressure 4~6 Kg / cm ². The hoist performance and lifting / lowering speed is affected by the W.A.P. 90 Psi.
- ■ Use a dedicated air supply line to the hoist to prevent air starvation to the hoist which can occur if used on the same air supply line as other pneumatic equipment.

1 Kg force/Sq cm(kg/cm2)=14.23 PSI

The main air supply shut - off overload limiter device MASSO valve which is integrated into the air motor monitors the air pressure differential between the incoming air pressure and the exhaust air pressure.

When the overload limit capacity is reached the reduced exhaust air pressure is sensed and the higher incoming air pressure overcomes the valve spring tension and closes the valve thereby closing the supply of air to the brake which then engages. However the hoist can still function in the DOWN direction to allow the load to be lowered.

❻ Upper and Lower Load Chain Travel Limit Switch System (LSS)

To ensure that the load chain and hoist body are not damaged which can compromise safety, it is essential to limit the maximum up/down travel limits of the load chain and load hook.

Chain stops are attached to the load chain at the UP/DOWN travel limit points on either end of the load chain.
Such Chain Stops activate the limit switch when the UP/DOWN chain travel points are reached.
When activated the limit switch mechanically closes the main air supply control piston to stop the air supply to the air motor.
When the hoist is operated in the reverse direction from the limit point the pressure on the limit switch is released which allows the main air supply control piston spring to open the main air valve and the hoist to operate.

Such LSS is incorporated into both the pendant control and toggle cord operating control types of YSA hoists.

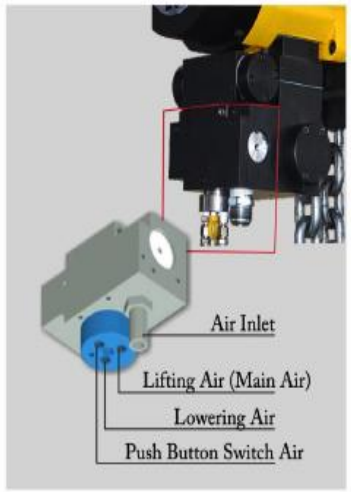
❼ Hoist Housing

High strength FCD cast-iron housing ensures shocks, bumps and corrosion resistance.

❽ Air-Lift Motor

Air inlet to make vanes work, through the power of centrifugal force and air-in, the motor makes maximum torque. High quality material of vanes without O-rings inside special design to ensure powerful loading and less maintenance.

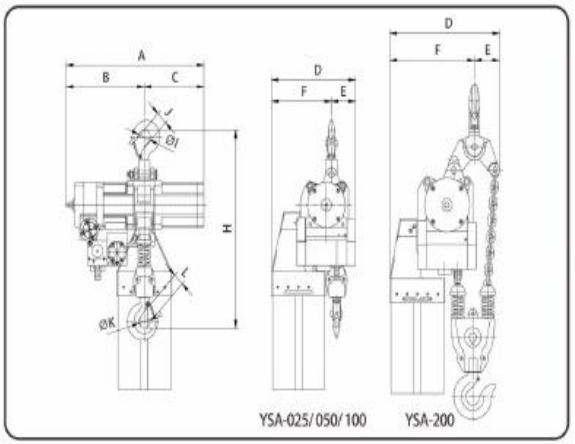
❾ Emergency Stop Device



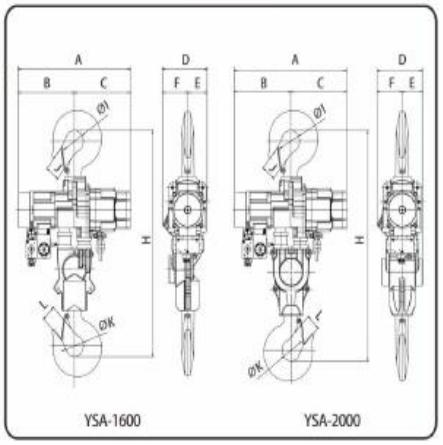
The air stream from either the Red or Blue hose ports, as indicated above, operate and activate the Emergency Stop Valve when the Emergency Stop Button on the Pendant Control Handle is depressed.

On activation the Emergency Stop Valve located on the air motor housing shuts-off the incoming main air supply to the air motor.

YSA Series



YSA Series



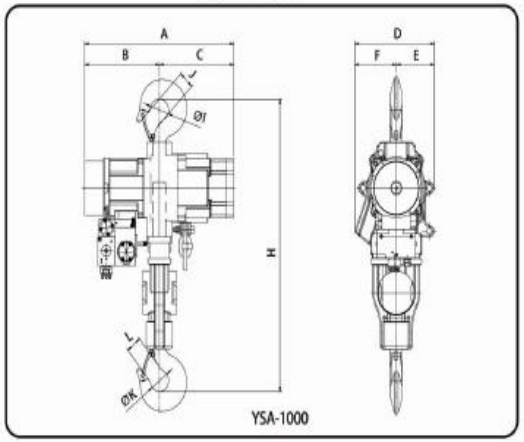
Model	Capacity (ton)	Dimensions (IN)											N.W (LB)
		H	A	B	C	D	E	F	I	J	K	L	
YSA-025	0.25	19.09	14.61	7.76	6.85	9.61	2.76	6.85	1.57	1.26	1.57	1.26	70.48
YSA-050	0.5	19.09	15.83	8.98	6.85	9.61	2.76	6.85	1.57	1.26	1.57	1.26	79.30
YSA-100	1	19.53	18.11	10.04	8.07	9.88	2.56	7.32	1.57	1.26	1.57	1.26	112.33
YSA-200	2	28.35	18.11	10.04	8.07	12.56	2.87	9.69	1.81	1.57	1.57	1.57	132.16

Air Consumption (CFM)	Brake type	Limit switch	Air inlet (in)	Level of noise (dB)	Main line Air supply (in)
141.2	Disc	U/L switch	1	90	2

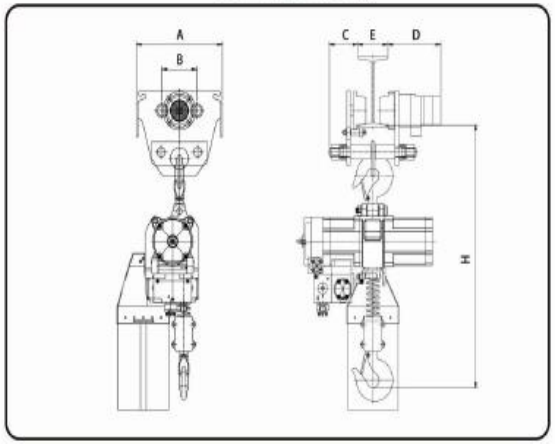
Model	Lift (Ft)	Motor (HP)	Air supply pressure (PSI)	Fall no.	Load chain
YSA-025	10	2	90	1	ϕ6.3*19.1
YSA-050				1	
YSA-100		2.7		1	ϕ7.1*20.2
YSA-200				2	

(IN)						N.W (LB)
E	F	I	J	K	L	
6.14	6.69	2.95	2.72	2.95	2.72	409.7
5.08	6.54	4.72	4.29	4.72	4.29	720.26
5.31	6.54	4.72	4.29	4.72	4.29	843.61

YSA Series



Hoist with trolley



Model	Lift (Ft)	Motor (HP)	Air supply pressure (PSI)	Fall no.	Load chain
YSA-1000	10	4.7	90	2	ϕ16*45
YSA-1600				3	
YSA-2000				4	

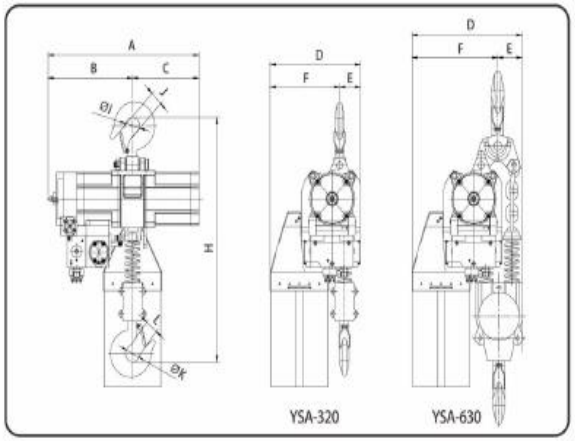
Model	Capacity (ton)	Motor (HP)	Air supply pressure (PSI)	Trolley Speed (ft/min)	Air Consumption (CFM)	Brake type	Air inlet (in)
AT-100	1	0.27	90	65.61	21.2	Disk Type	0.5
AT-200	2	0.27		65.61	21.2	Disk Type	0.5

Model	Capacity (ton)	Dimensions (IN)					
		H	A	B	C	D	E
YSA-025+PT-050	0.25	23.23	7.64	3.50	1.38		2-6
YSA-050+PT-050	0.5	23.23	7.64	3.50	1.38		2-6
YSA-100+AT-100	1	24.45	11.57	4.57	3.74	8.19	3-5
YSA-200+AT-200	2	29.57	12.68	5.31	3.94	8.25	4-6

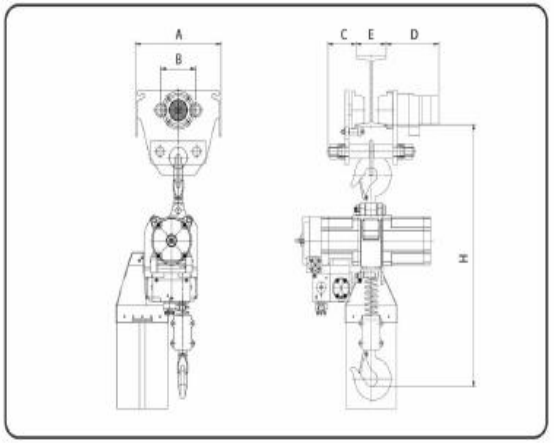
Model	Capacity (ton)	Dimensions				
		H	A	B	C	D
YSA-1000	10	39.96	24.17	12.13	12.13	12.83
YSA-1600	16	49.61	29.37	14.72	14.65	11.61
YSA-2000	20	50.59	29.37	14.72	14.65	11.85

Speed (ft/min)	Air Consumption (CFM)	Brake type	Limit switch	Air inlet (in)	Level of noise (dB)	Main line Air supply (in)
59	70.6	Disk type brake	Upper/lower limit	0.5	85	0.75
36						
24.9	70.6			0.5	85	0.75
12.4						

YSA Series



Hoist with trolley



Model	Capacity (ton)	Dimensions (IN)											N.W (LB)
		H	A	B	C	D	E	F	I	J	K	L	
YSA-320	3.2	30.08	22.01	12.32	9.69	13.15	3.03	10.12	2.05	1.85	2.05	1.85	237.89
YSA-630	6.3	38.66	22.01	12.32	9.69	13.15	3.03	10.12	2.44	2.05	2.44	2.05	303.96

Model	Capacity (ton)	Motor (HP)	Air supply pressure (PSI)	Trolley Speed (ft/min)	Air Consumption (CFM)	Brake type	Air inlet (in)
AT-320	3.2	0.27	90	65.61	21.2	Disc	0.5
AT-630	6.3	0.27		65.61	21.2	Disc	0.5

Model	Capacity (ton)	Dimensions (IN)					
		H	A	B	C	D	E
YSA-320+AT-320	1	35.51	14.02	5.67	4.63	8.54	5-7
YSA-630+AT-630	2	44.29	15.20	7.20	5.22	8.62	5-7

Model	Lift (Ft)	Motor (HP)	Air supply pressure (PSI)	Fall no.	Load chain	Speed (ft/min)	Air Consumption (CFM)	Brake type	Limit switch	Air inlet (in)	Level of noise (dB)	Main line Air supply (in)
YSA-320	10	4.7	90	1	ϕ13*36	15.7	141.2	Disc	U/L switch	0.75	90	2
YSA-630				2		7.8						