







AH-300P



Main Features

- Range 16 tonne to 30 tonne
- Reliable, fast, efficient, quiet and lightweight
- Greater than 5:1 factor of safety
- Suitable for Fleeting/Oblique pulling
- Certified for ATEX Category 3 normal safety

EMM Corp industrial air hoists are designed for, and proven in, many industries including mining, shipyards, offshore construction and power stations. They are also used for industrial and general engineering applications such as automotive plants, foundries, and heat treatment plants. The hoists operate at air pressures of between 4 and 6 bar. They comply with the requirements of ASME B30.16 and EN14492-2. Our manufacturing facility is ISO9001 certified.

Advantages of Air Hoists

Air-powered hoists are ideal for tasks that require rapid lifting speeds and constant use. These hoists are powered by a compressed air feed, making them a great alternative to electric hoists when there are no power sources available. Another key benefit of air hoists is their 100% duty cycle – significantly higher than most electric hoists. For example, an electric chain hoist that has a 25% duty cycle can be operated continuously for a maximum of 15 minutes in a one-hour period. Hoists that are powered by a compressed air feed do not have this limitation; they can remain in constant use until the job is done.

Load Limiter

Integral differential pressure load limiting valve automatically prevents the operator lifting a load of more than 125% of the working load limit. Load limiter is 100% repeatable at all working pressures and does not wear or generate damaging heat. Load limiters are supplied on hoists of capacities of 1t and above.

Emergency Stop

Pendant control hoists are supplied with a mains emergency stop valve. This shuts off the main air supply to the hoist when activated.











Fleeting, Cross Hauling or Oblique Pulling

This type of application is when the load deviates from the vertical position with a force acting directly between load hook and suspension point. Our air hoists can be used for fleeting and oblique pulling operations with no de-ration of the hoist. Cross hauling can be done with a single hoist, two hoists operated independently or with two hoists operated off one dual hoist pendant control.

Temperature Range

Ambient temperature range -20°C to +70°C (for temperatures outside of this range please contact us for details).

Precise Control

Accurate and precise positioning of loads is standard for both toggle and pendant control models.

Fail Safe Disc Brake

Non-asbestos self-adjusting disc brake is applied automatically when the air supply to the hoist is shut off. The brake is self-adjusting for the life of the brake and can hold more than 125% of the working load limit.

Integral Silencer

The exhaust air silencer is built into the hoist gearbox housing and limits the noise level to below 85dB(A).

Load Chain

Grade 8 load chain ensures stringent high-speed duty cycles can be met. The load chain is in accordance with the requirements of EN818-7 Appendix B.

Vane Motor

Assisted vane lifting ensures maximum starting torque when starting under load.

Sealed Gearbox

The sealed planetary gearbox ensures that the most stringent duty cycles can be met. The gears are heat treated and mounted on high strength, low friction bearings.

Ease of Maintenance

The modular design of the hoist allows easy access to internal components such as the motor, gearbox, brake and load limiter. Common parts are used throughout the range.

Optional Chain Carrier

Designed to carry and hold the length of load chain required for the operation, our stainless steel chain bucket is available in different size options. These chain carriers prevent loose chain from getting snagged during lifting or lowering operations and protect any loose chain during transit to and from the operational site.

ATEX

Manufactured in accordance with ATEX Directive 2014/34/EU and Machinery Directive 2006/42/EC and suitable for ATEX Category 3 normal safety. Our products are assigned as follows: ATEX marking: : Ex II 3 GD c IIB T4 IIIB T135°C. Suitable for gas and dust hazardous areas: Zone 2 (gas) and Zone 22 (dust). Unlike electrically operated hoists, the air driving pneumatic air hoists doesn't produce any sparks making them suitable for application in explosion-hazardous areas.

Ex II 3 GD c IIB T4 IIIB T135°C

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II	3	GD .	c	IIB	T4	IIIB	T135°C		
								T135°C	Dust Temperature Class: Maximum external surface temperature 135°C
								IIIB	Groups of Dust: Protected for group IIIC which includes groups IIIA
								T4	Gas Temperature Class: Maximum external surface temperature 135°C
	<u>/ </u>							IIB	Gas Explosion Group: Protected for group IIB which includes group IIA
	\leftarrow							С	Protection type: Design safety
	<i>\</i>							GD	Ex Atmosphere: Gas and Dust
	_							3	Category: Normal Safety
								II	Equipment Group: surface industries

Also available for ATEX Category 2 – high safety – please contact us for more information.













Air Line Filter Regulator Lubricators (FRL)

Main Features

- Filters an air line from water and contaminants
- Regulates air pressure
- Lubricates the air line
- Body material: Aluminium die-cast
- Bowl material: Polycarbonate

Using a FRL with a Tiger Air Hoist

All Tiger pneumatic hoists and winches must operate with a FRL unit. Tiger industrial air hoists are designed for, and proven in, many industries including mining, shipyards, offshore construction and power stations. They are also used for industrial and general engineering applications such as automotive plants, foundries, and heat treatment plants. The hoists operate at air pressures of between 4 and 6 bar and they comply with the requirements of ASME B30.16 and EN14492-2.

The FRL unit should have inlet and outlet ports at least as large as the inlet on the hoist motor. Install the airline lubricator as close to the air inlet on the hoist motor as possible. The use of a pressure regulator is also recommended since it allows for constant pendant control sensitivity and hoist performance.

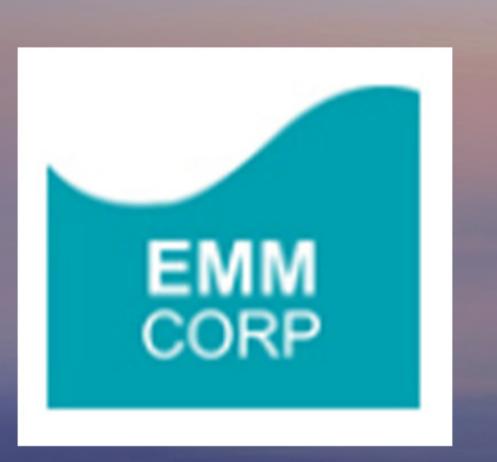


The air line lubricator must be installed no more than 3m from the hoist and should be set to deliver a minimum of 1 to 3 drops per minute when the hoist is running at full speed. The recommended lubricant is a light oil i.e. ISO VG10. Do not use automotive type detergent oil as these oils will delaminate the motor vanes and cause motor failure. The air supply must be shut off before filling airline lubricator.

Dirt or grit entering the hoist motor will cause severe damage to the internal components. Tiger recommend the installation of a 10-micron airline filter as close as possible to the hoist. The filter should be emptied and cleaned weekly to prevent excessive pressure drops due to constriction of the filter element.







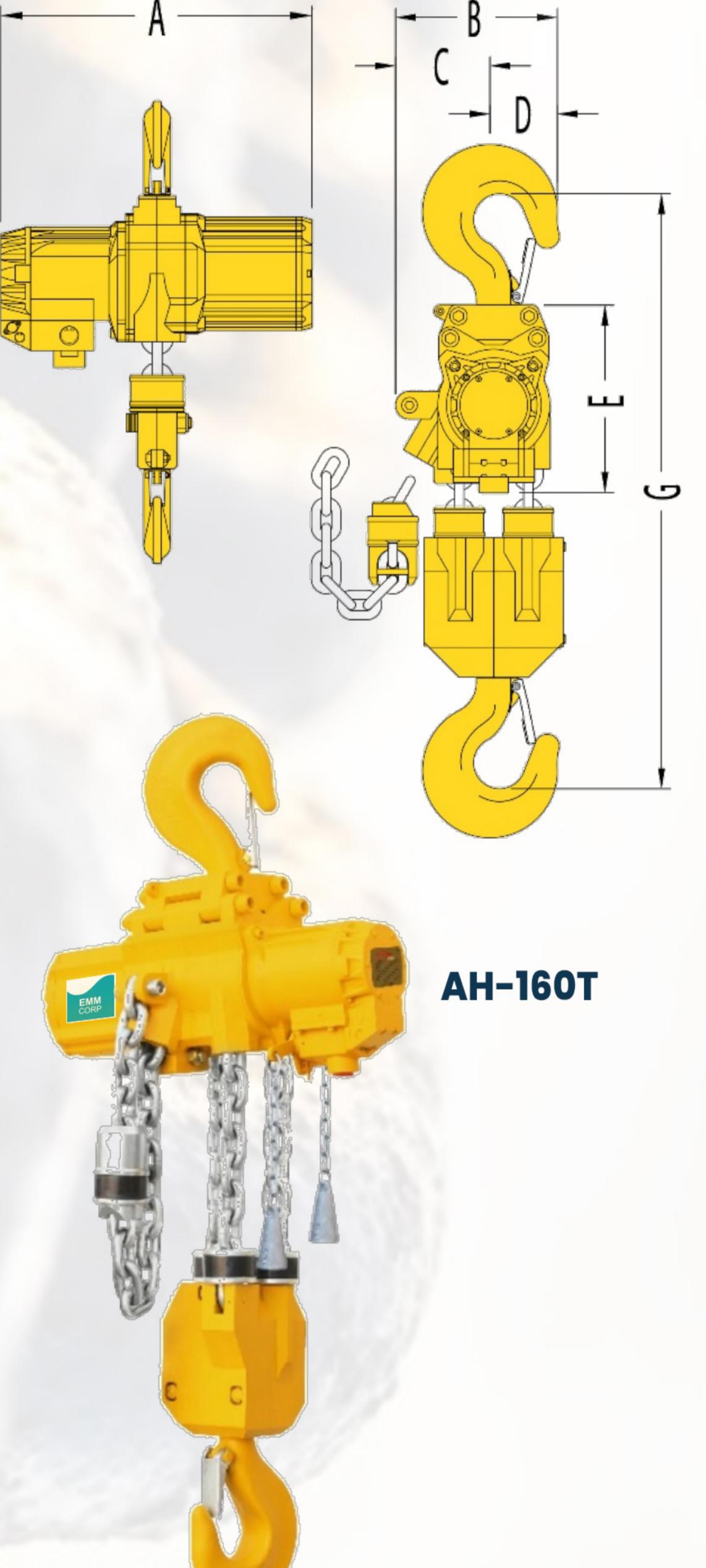




TAH52 - Technical Data

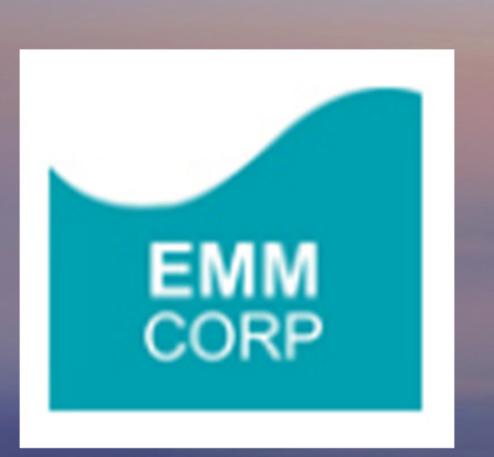
	AH-160
Lifting Capacity (tonne)	16.0
Falls of Chain	3
Chain Size (mm)	16 x 45
Total Weight (kg) *	245
Full Load Lifting Speed (m/m	in) @ 6 bar
Full Load Lifting Speed (m/m	in) @ 4 bar 0.6
No Load Lifting Speed (m/mir	n) @ 6 bar 1.1
Full Load Lowering Speed (m/	min) @ 6 bar 1.3
No Load Lowering Speed (m/	min) @ 6 bar 1.0
Air Consumption (m³/min) @ 6	bar 4.0
Air Consumption (m³/min) @ 4	bar 2.6
Air Connection	G 3/4
Supply Hose (Inside Ø) (mm)	25
Sound Level (dB(A)): Full Load Full Load Lowering @ 6 bar	Lifting @ 6 bar 82 83
Dimensions (mm) A	616
В	290
C	180
D	110
E	325
Min F	
Min G	905

^{*} Weight of TAH52 model includes 3m lift, 2m toggle control. For longer lifts add 5.7kg for the AH-050, 11.4kg for the AH-102, 17.1kg for the AH-160 and 22.8kg for the AH-200 per metre of lift. * For pendant control add 0.8kg.











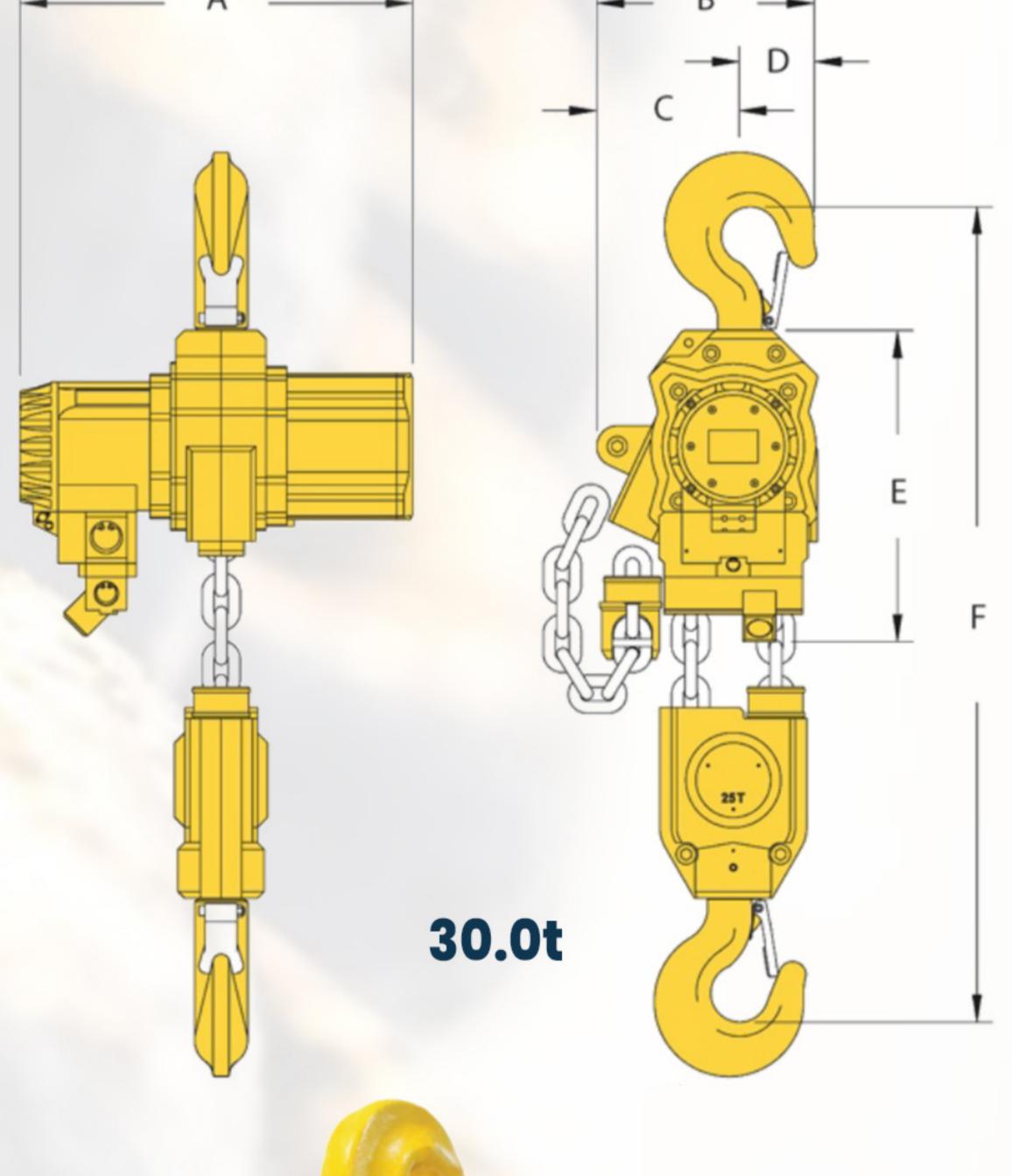


TAH250 - 30.0 tonne - Technical Data

	AH-300
Lifting Capacity (tonne)	30.0
Falls of Chain	2
Chain Size (mm)	23.5 x 66
Total Weight (kg) *	585
Full Load Lifting Speed (m/min) @ 6 bar 	1.2
Full Load Lifting Speed (m/min) @ 4 bar 	0.8
No Load Lifting Speed (m/min) @ 6 bar 	2.5
Full Load Lowering Speed (m/min) @ 6 bar ‡	2.9
Air Consumption (m³/min) @ 6 bar	6.5
Air Consumption (m³/min) @ 4 bar	4.4
Air Connection	G1 ½
Supply Hose (Inside Ø) (mm)	35
Sound Level (dB(A)): Full Load Lifting @ 6 bar Full Load Lowering @ 6 ba	82 ar 85
Dimensions (mm) A	762
В	422
C	277
D	145
E	605
Min F	1290

Due to our policy of continual product development, dimensions, weights and specifications may change without prior notice. Please check with your EMM Corp sales team when ordering.

Bespoke designs available on request – contact **info@emmcorp.com** for more information.













Tiger Air Line Filter Regulator Lubricators (FRL) Technical Data

Part code	A-08-B	
Combination	UF/R + L	
Description	Air filter/regulator lubricator	
Port connections	¾" BSP	
Max air flow @6Bar (ANR)	7940 L/min	
Mass	2145 g	
Pressure range	0.5 - 10 Bar	
Proof pressure	15 Bar	
Ambient temperature range	-10°C - 60°C	

