



Tiger Industrial Air Hoists

Main Features

- Range - 0.25 tonne to 60 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

0.25t - 30.0t
now in stock



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. 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.

Pendant control options

Our air hoists are supplied with either aluminium hard anodised controls which offer excellent corrosion protection or our Nickel plated SG iron option (for higher impact resistance combined with greater tensile strength and superior corrosion protection). Twist grip pendants are available as an option. **Our new dual control pendant will operate two hoists with one pendant control. We also have a new remote control option available.**



Aluminium Hard Anodised Pendant



Nickel Plated SG Iron Pendant



Optional Twist Grip Anodised Pendant



New Dual Hoist Pendant



New Remote Control

New

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.

Twin Hook Hoists

Twin hook hoists are also available for both pulling and lifting operations. Now deployed globally in various marine and industrial applications. See our separate twin hoist technical details for more information.

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

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
								IIB	Gas Explosion Group: Protected for group IIB which includes group IIA
								c	Protection type: Design safety
								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.

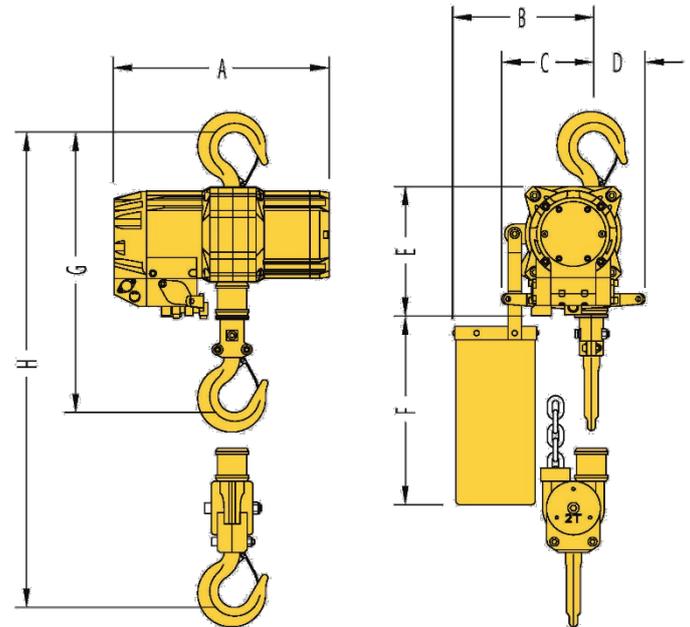
The air line lubricator must be installed no more than 3m from the hoist and should be set to deliver a minimum of 1 to 3 drops per minute when the hoist is running at full speed. The recommended lubricant is a light oil i.e. ISO VG10. Do not use automotive type detergent oil as these oils will delaminate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



**TAHS Range – 0.25, 0.5, 1.0, 2.0 tonne
Technical Data (at 6 bar)**

	AH-002	AH-005	AH-010	AH-020
Lifting Capacity (tonne)	0.25	0.5	1.0	2.0
Falls of Chain	1	1	1	2
Chain Size (mm)	7.1 x 21.2	7.1 x 21.2	7.1 x 21.2	7.1 x 21.2
Total Weight (kg) *	25.0	25.0	25.0	32.8
Full Load Lifting Speed (m/min)	22.5	15.0	7.5	3.8
No Load Lifting Speed (m/min)	32.0	29.5	16.0	8.0
Full Load Lowering Speed (m/min)	31.0	36.0	20.4	10.2
No Load Lowering Speed (m/min)	25.0	23.0	13.0	6.5
Air Consumption (m ³ /min)	2.1	2.1	2.1	2.1
Air Connection	G½	G½	G½	G½
Supply Hose (Inside Ø) (mm)	16.0	16.0	16.0	16.0
Sound Level (dB(A))	76	76	76	76
Group Classification	1Am/M4	1Am/M4	1Am/M4	1Am/M4
Dimensions (mm)	A	312	312	312
	B	216	216	216
	C	135	135	135
	D	85	85	85
	E	196	196	196
	Min F	370	370	370
	Min G	420	420	420
	Min H	-	-	-

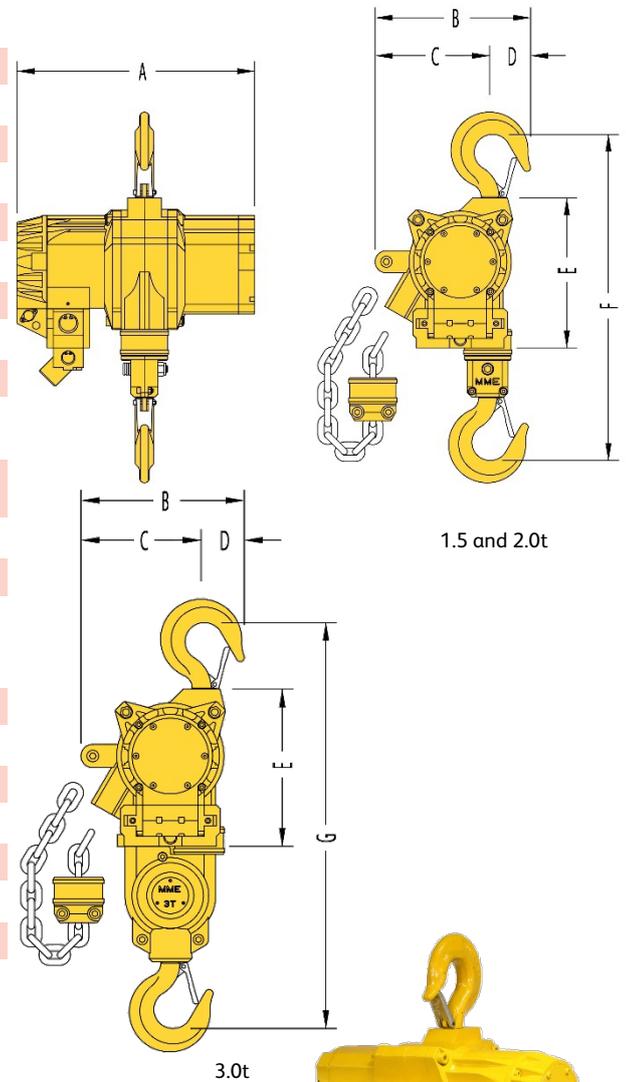


AH-002T

* Weight of TAHS model includes 3m lift, 2m toggle control. For longer lifts add 1.1kg for AH-002, AH-005 and AH-010 models and 2.2kg for AH-020 per metre of lift. For pendant control add 0.8kg.

**TAH21 Range – 1.5, 2.0, 3.0 tonne
Technical Data**

	AH-015	AH-021	AH-032	
Lifting Capacity (tonne)	1.5	2.0	3.0	
Falls of Chain	1	1	2	
Chain Size (mm)	10 x 28	10 x 28	10 x 28	
Total Weight (kg) *	55	55	67	
Full Load Lifting Speed (m/min) @ 6 bar	6.2	5.3	3.1	
Full Load Lifting Speed (m/min) @ 4 bar	4.2	3.0	2.1	
No Load Lifting Speed (m/min) @ 6 bar	8.7	8.7	4.3	
Full Load Lowering Speed (m/min) @ 6 bar	8.6	9.0	4.3	
No Load Lowering Speed (m/min) @ 6 bar	7.5	7.5	3.7	
Air Consumption (m ³ /min) @ 6 bar	2.6	2.6	2.6	
Air Consumption (m ³ /min) @ 4 bar	1.7	1.7	1.7	
Air Connection	G ¾	G ¾	G ¾	
Supply Hose (Inside Ø) (mm)	19	19	19	
Sound Level (dB(A)):				
Full Load Lifting @ 6 bar	81	81	81	
Full Load Lowering @ 6 bar	83	83	83	
Group Classification	1Am/M4	1Bm/M3	1Am/M4	
Dimensions (mm)	A	382	382	382
	B	250	250	250
	C	184	184	184
	D	66	66	66
	E	213	213	213
	Min F	515	515	-
	Min G	-	-	610



1.5 and 2.0t

3.0t



AH-021P

* Weight of TAH21 model includes 3m lift, 2m toggle. For longer lifts add 2.2kg per metre of lift for AH-015 and AH-021 and 4.4kg for the AH-032 per metre of lift. For pendant control add 0.4kg, for E/Stop pendant add 2.1kg.

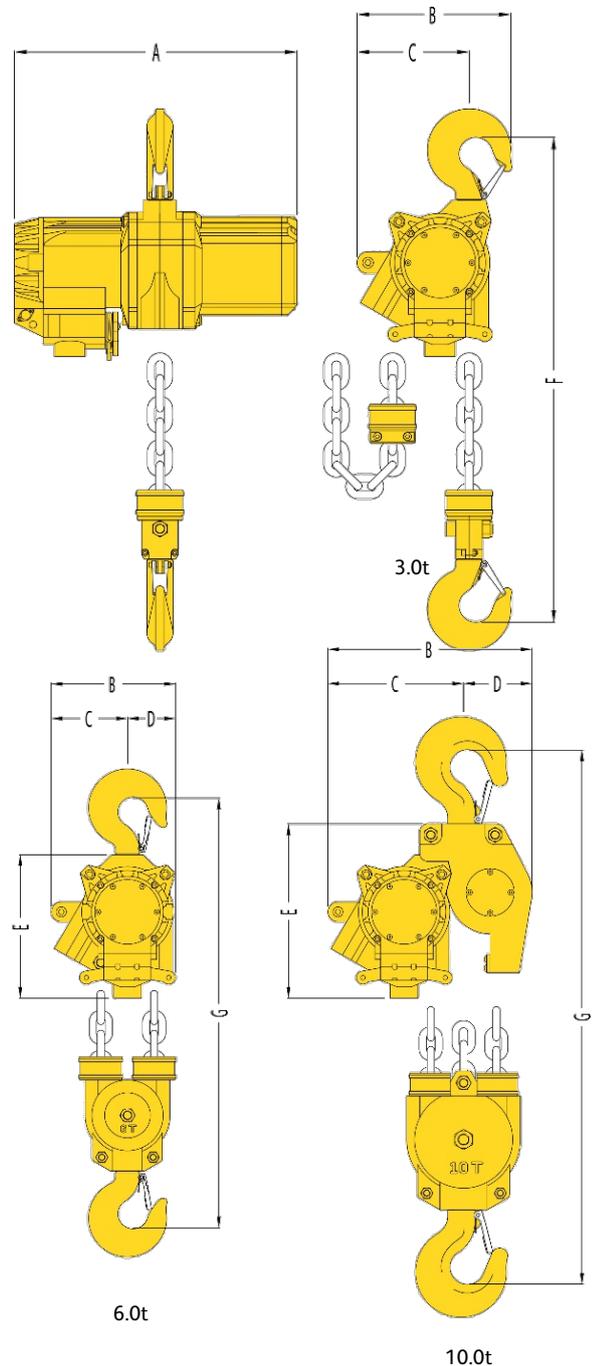
TAH33 Range – 3.0, 6.0, 10.0 tonne Technical Data

	AH-030	AH-060	AH-103	
Lifting Capacity (tonne)	3.0	6.0	10.0	
Falls of Chain	1	2	3	
Chain Size (mm)	13 x 36	13 x 36	13 x 36	
Total Weight (kg) *	76.5	99.5	139.5	
Full Load Lifting Speed (m/min) @ 6 bar	5.3	2.6	1.6	
Full Load Lifting Speed (m/min) @ 4 bar	3.8	1.9	1.1	
No Load Lifting Speed (m/min) @ 6 bar	7.5	3.7	2.4	
Full Load Lowering Speed (m/min) @ 6 bar	8.3	4.1	2.6	
No Load Lowering Speed (m/min) @ 6 bar	6.8	3.4	2.2	
Air Consumption (m ³ /min) @ 6 bar	4.0	4.0	4.0	
Air Consumption (m ³ /min) @ 4 bar	2.6	2.6	2.6	
Air Connection	G ¾	G ¾	G ¾	
Supply Hose (Inside Ø) (mm)	25	25	25	
Sound Level (dB(A)):				
Full Load Lifting @ 6 bar	81	81	81	
Full Load Lowering @ 6 bar	83	83	83	
Group Classification	1Am/M4	1Am/M4	1Am/M4	
Dimensions (mm)				
	A	466	466	466
	B	254	223	366
	C	185	137	243
	D	-	86	123
	E	-	259	315
	Min F	538	-	-
	Min G	-	630	786

* Weight of TAH33 model includes 3m lift, 2m toggle control. For longer lifts add 3.8kg per metre of lift for AH-030, 7.6kg for the AH-060 and 11.4kg for the AH-103 per metre of lift. For pendant control add 0.8kg.

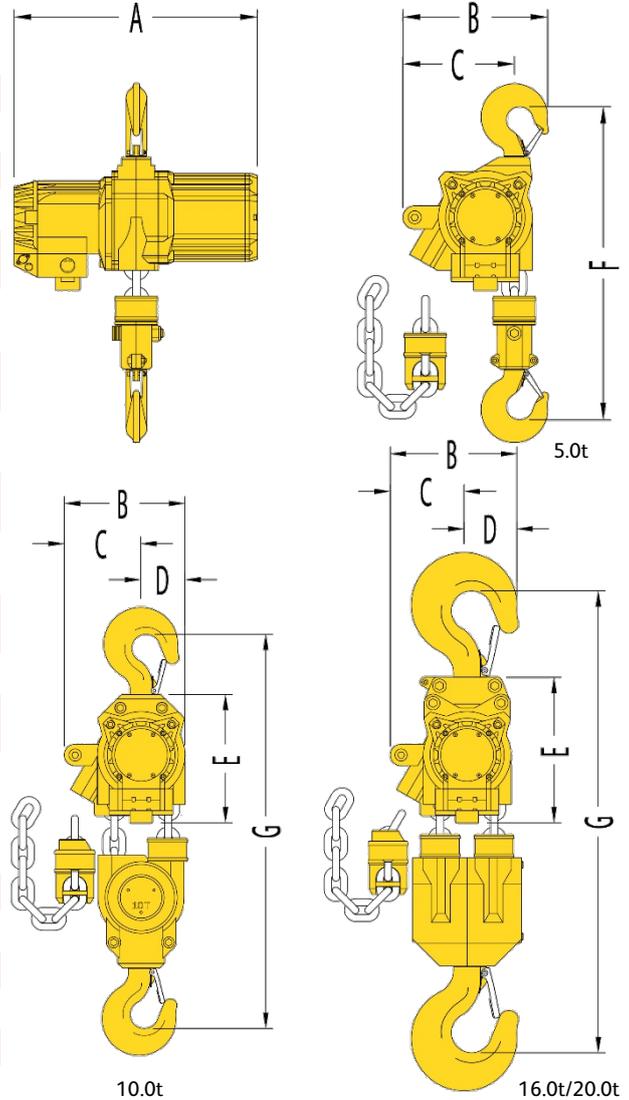


AH-060P



TAH52 Range – 5.0, 10.0, 16.0, 20.0 tonne Technical Data

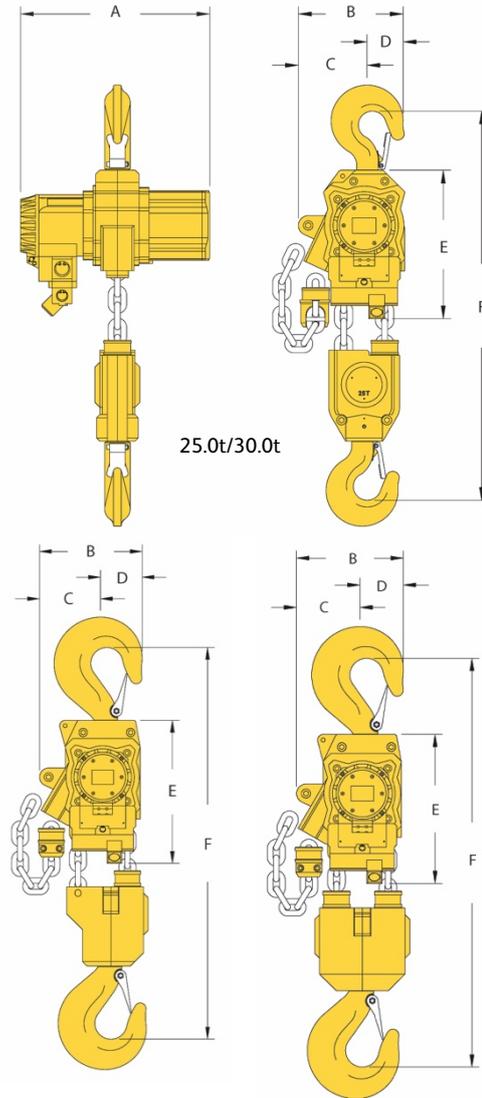
	AH-050	AH-102	AH-160	AH-200
Lifting Capacity (tonne)	5.0	10.0	16.0	20.0
Falls of Chain	1	2	3	4
Chain Size (mm)	16 x 45	16 x 45	16 x 45	16 x 45
Total Weight (kg) *	106	152	245	288
Full Load Lifting Speed (m/min) @ 6 bar †	3.0	1.5	0.9	0.7
Full Load Lifting Speed (m/min) @ 4 bar †	1.9	0.9	0.6	0.4
No Load Lifting Speed (m/min) @ 6 bar †	4.0	2.0	1.1	0.9
Full Load Lowering Speed (m/min) @ 6 bar †	4.4	2.2	1.3	1.0
No Load Lowering Speed (m/min) @ 6 bar †	3.3	1.7	1.0	0.8
Air Consumption (m ³ /min) @ 6 bar	4.0	4.0	4.0	4.0
Air Consumption (m ³ /min) @ 4 bar	2.6	2.6	2.6	2.6
Air Connection	G ¾	G ¾	G ¾	G ¾
Supply Hose (Inside Ø) (mm)	25	25	25	25
Sound Level (dB(A)):				
Full Load Lifting @ 6 bar	82	82	82	82
Full Load Lowering @ 6 bar	83	83	83	83
Group Classification	1Bm/M3	1Bm/M3	1Bm/M3	1Bm/M3
Dimensions (mm)				
A	503	503	616	616
B	300	270	290	280
C	230	170	180	165
D	-	100	110	115
E	-	286	325	325
Min F	600	-	-	-
Min G	-	790	905	920



* 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 Range – 25.0, 30.0, 37.5, 40.0, 50.0, 60.0 tonne Technical Data

	AH-250	AH-300	AH-375	AH-400	AH-500	AH-600
Lifting Capacity (tonne)	25.0	30.0	37.5	40.0	50.0	60.0
Falls of Chain	2	2	3	3	4	4
Chain Size (mm)	23.5 x 66					
Total Weight (kg) *	585	585	885	885	985	985
Full Load Lifting Speed (m/min) @ 6 bar †	1.4	1.2	0.9	0.8	0.7	0.6
Full Load Lifting Speed (m/min) @ 4 bar †	0.9	0.8	0.6	0.5	0.45	0.4
No Load Lifting Speed (m/min) @ 6 bar †	2.5	2.5	1.6	1.6	1.25	1.25
Full Load Lowering Speed (m/min) @ 6 bar †	2.7	2.9	1.8	1.9	1.35	1.45
Air Consumption (m ³ /min) @ 6 bar	6.5	6.5	6.5	6.5	6.5	6.5
Air Consumption (m ³ /min) @ 4 bar	4.4	4.4	4.4	4.4	4.4	4.4
Air Connection	G1 ½					
Supply Hose (Inside Ø) (mm)	35	35	35	35	35	35
Sound Level (dB(A)):						
Full Load Lifting @ 6 bar	82	82	82	82	82	82
Full Load Lowering @ 6 bar	85	85	85	85	85	85
Group Classification	1Bm/M3	1Bm/M3	1Bm/M3	1Bm/M3	1Bm/M3	1Bm/M3
Dimensions (mm)						
	A	762	762	937	937	937
	B	422	422	450	450	450
	C	277	277	266	266	266
	D	145	145	184	184	184
	E	605	605	630	630	630
Min	F	1290	1290	1455	1455	1475



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

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



AH-300P

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	3/4" 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

37.5t/40.0t

50.0t/60.0t

