

Powered by piston, innovated for professionals

For continuous demanding operation



www.abacaircompressors.com



100% Duty cycle

The ABAC Tech compressor range of air compressors has been developed to maximise efficiency and minimise downtime in your workplace by providing air on demand, whenever you need it.

What is a 'duty cycle'?

Air compressor duty cycles are easy to understand but often difficult to read because there are no universal characters to represent these values among compressor manufacturers.

Simply put, an air compressor duty cycle is the amount of time a compressor will deliver pressurised air within a total cycle time. If listed as a percentage, you can simply take the number of seconds or minutes the figure represents and subtract that from the total cycle time.

When listed as a percentage, the duty cycle is equal to the compressor's run time divided by the total cycle time. So, this percentage equates to the amount of time you can keep the compressor on, plus the corresponding cool-down duration.

For example, a compressor with a 50% duty cycle will need 30 minutes off for every 30 minutes on.

In general, the duty cycle formula often used for calculation is expressed as **Compressor time on /** (time on + time off) = Duty Cycle percentage.



Operating fin

Continuous duty cycles

Continuous duty cycles provide constant power to machinery and tools without any downtime, which improves productivity. Particularly in manufacturing environments, this is a major benefit. However, in some industries, air compressors with intermittent duty cycles are sufficient, as air is not needed continuously. It all depends on the application and size of the tools being used and our experts can advise on the most suitable products.

How often should an air compressor cycle?

The number of times an air compressor cycles significantly impacts the air compression system's efficiency. Allowing a compressor to cycle more often than the recommended duty cycle can cause it to wear out faster.



Two main methods of increasing cycle time to deliver more air without affecting efficiency or increasing component wear:



Introducing the ABAC Tech ATF-S for PRO Users

Whatever your profession, our **PRO** User range of air compressors is designed to deliver performance, efficiency and reliability to your business. The innovative, patented technology ensures a smooth start-up and low motor loads, delivering powerful and uninterrupted compressed air, which saves you time and money.

The ATF-S delivers market-leading reliability and performance. This new range features oil free single cast double pistons, sliding along the single axis inside the ceramic-coated aluminium cylinder, which reduces wear and increases durability.

Traditional movement







- 1 62mm ball bearing. Max temp. 200°C. Max dynamic load 22.5kN
- 2 Double PTFE guide rings (14+14mm)
- 3 Roller bearing. Max temp 200°C. Max dynamic load 28kN
- 4 Enlarged con-rod for non-stop operation at 10 Bar
- **5** Improved piston head for higher efficiency





ABAC Tech Pro ATF-S

Performance data	ATE-S 3		ATE-S (
V-Hz	230/1/50	400/3/50	230/1/50	400/3/50
Air-end type	Oil free piston	Oil free piston	Oil free piston	Oil free piston
Construction	Industrial	Industrial	Industrial	Industrial
kW (hp)	2.2 (3.00)	2.2 (3.00)	3.2 (4.30)	3.2 (4.30)
RPM	1400	1400	1400	1400
Cylinders	2	2	4	4
Air intake, L/min	330	330	430	480
FAD L/min (@5Bar)	200	200	260	310
Max pressure (Bar)	10	10	10	10
Noise dB(A)	68	68	72	74
Duty cycle	S1 100%(*)	S1 100%(*)	S1 100%(*)	S1 100%(*)
Maintenance Overhaul	3000hrs	3000hrs	3000hrs	3000hrs
Dimensions (LxWxH) cm	44 × 39 × 24	44 × 39 × 24	67 × 39 × 24	67 × 39 × 24
Weight Kg	24	24	47	47

(*) The duty cycle is generally calculated by dividing the compressor run time by the full cycle time. This formula is almost always expressed as compressor run time / (run time + rest time) = duty cycle percentage. In few words: the "Duty cycle" is the amount of time a compressor is providing consistent pressure and flow.



Compressor package







Applications

Compressed air is fundamental not only to the manufacture of vehicles but also in aftermarket garages and body repair workshops. From applications such as tyre inflation, spray painting and cleaning, every automotive business will utilise compressed air in some capacity, to ensure safe, speedy and high quality results.



The construction sector needs air compressors for a range of pneumatic tools and equipment. Variable flow streams are required for jackhammers, nail guns, drills, handling, compactors and lifting operations, for example.

Agriculture

Machinery used in arable and livestock farming and commercial greenhouses all depend on reliable, clean air. From dairy farms to irrigation systems, compressed air is essential to the safe and efficient operation of agricultural businesses. From tractor-mounted equipment such as crop sprayers, as well as pumps and crop conveyors, compressed air powers a variety of heavy and expensive machinery.



High tech compressors are integral to the safe and effective operation of air braking systems, suspension and automatic doors for underground and overground rolling stock, that need powerful and reliable compressed air. Without it, locomotives and subway systems across the world would not be able to function.



Dedicated to professional craftspeople who use pneumatic tools with high duty cycles, our Pro User range is the perfect choice for carpentry, furniture manufacture and other woodworking applications. Offering a solution for different pressurisation needs, our air compressors have been designed to support every type of pneumatic tool and equipment, from nail guns to sandblasters and air sanders.



Fast, user-friendly and labour-saving, industrial and domestic pressure washers are perfect for cleaning vehicles, buildings, pavements, decking, patios and fencing in a commercial and residential environment. From 300-litre industrial units to home power washers, compressed air pressure washers make these jobs as easy as pressing the "on" button. OIL FREE units are strongly preferred to ensure clean air delivery.

CAD/CAM for Medical Segment

CAD/CAM technology has revolutionised therapeutic solutions across fields such as dental repair and prosthesis, implantology, oral surgery, and orthodontics. The majority of machines making use of this technology are installed in laboratories or small offices where space is limited; thus the need for compressed air systems that operate with low pressure and flow, yet are low noise and oil-free. This is why ABAC TECH could be an ideal partner.

Sandblasting

Is the operation of forcibly propelling a stream of abrasive material against a surface under high pressure. Compressed air is used to propel the blasting material (often called the media). Blast facilities come in many sizes, some of which are big enough to accommodate very large or uniquely shaped objects. Equipped with a material recycling or media reclamation system to collect abrasive blasting media so it can be used again; these can be automated by a pneumatic system installed on the floor of the blast room.



Air. Anytime. Anywhere.

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