

# **Atlas Copco piston compressors**

## **Proven durability**

Atlas Copco introduced the first piston compressor in 1904. Since then, we have continuously advanced the technology. Today, Atlas Copco piston compressors and boosters offer you the powerful combination of reliability, flexibility and low operating costs.

#### **RELIABILITY**

- Dependable flow of compressed air directly to the point of use.
- High-quality materials for premium performance and a long life.
- Limited number of working parts ensures performance in extreme conditions.

#### **LOW OPERATING COSTS**

- Simple maintenance thanks to easily accessible parts.
- One-bearing motor reduces mechanical friction on the compressors.
- IE3 motors for high efficiency.

#### **FLEXIBILITY**

- Very wide range of working pressures with a maximum of 300 bar (4353 psi).
- · Compact installation.
- Available in oil-free as well as lubricated versions.
- Stand-alone use or easy integration in your process.



# A complete & flexible range

Count on Atlas Copco piston technology to drive your production reliably and efficiently. We can meet your exact requirements with the broadest compressor portfolio, whether you work in a large industrial plant, a smaller workshop, a clean technology lab or if you

need higher pressures. We even offer customized piston solutions for industries with specific demands (transportation, snow making, etc.) as well as for our OEM customers.

#### LOW-PRESSURE



**LFx:** Single-stage oil-free reciprocating compressor with a maximum working pressure of 10 bar (145 psi).



LT 10: Single-stage oillubricated reciprocating compressor with a maximum pressure of 10 bar (145 psi).



**LF 10:** Single-stage oil-free reciprocating compressor with a maximum working pressure of 10 bar (145 psi).



LFs & LTs 10: Elektronikon® Touch controlled single-stage reciprocating compressor, silenced, with a maximum working pressure of 10 bar (145 psi).

#### MEDIUM/HIGH-PRESSURE



LT 15/20/30/40: Two- or three-stage reciprocating compressor with a maximum pressure of 15, 20, 30 or 40 bar (218, 290, 435 or 580 psi).



LTB 25/40: Single-stage lubricated air and nitrogen booster for pressures up 25 or 40 bar (363 or 580 psi).

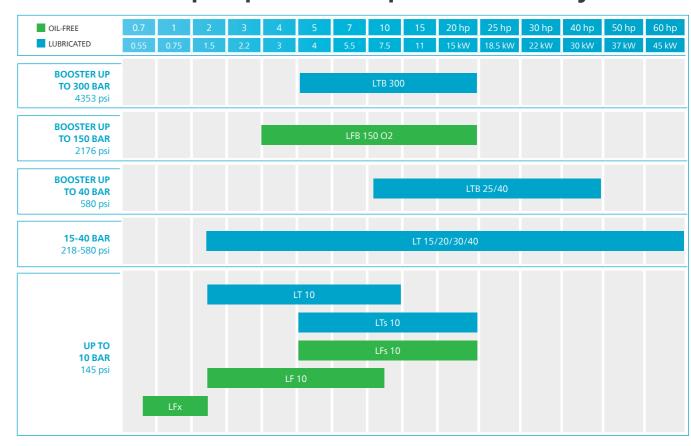


LTB 300: Two- or three-stage air and nitrogen booster for pressures up to 300 bar (4353 psi).



**LFB 150 O2:** Two- or three-stage oxygen booster for pressures up to 150 bar (2176 psi).

# Your Atlas Copco piston compressor: an easy choice



# Low-pressure piston compressors LT & LF 10 series

If you are in the market for an industrial compressor up to 10 bar, the oil-lubricated LT and oil-free LF series tick all the boxes, from superior reliability, high air quality to low cost of ownership. Choose from different power (2-10 hp) and pressure (2-10 bar) models to meet your exact needs. Block, power pack and full feature versions, base or tank-mounted, and a range of options are available for further customization.

#### **Premium reliability**

- A unique, robust design and quality materials ensure an extended product life.
- The fan designed for optimal cooling of the air flow also balances the compressor for reduced vibration.
- Patented stainless steel inlet/outlet pump valves.
- Long lifetime of 20,000 hours for oil-lubricated, 16,000 hours for oil-free units.
- Extremely low maintenance costs.

#### Low running costs

- Use of highly durable components for improved performance.
- Start-stop system instead of load-unload.

#### **Easy maintenance**

• All components and service points are easily accessible.

#### Compact

The LT and LF 10 compressor block is directly coupled to the motor and is built with lightweight materials. This provides excellent cooling and smooth integration in small spaces.



#### **OIL-FREE AIR**

Clean compressed air is a prerequisite for many critical manufacturing processes. Over the past sixty years, Atlas Copco has pioneered the development of oil-free air technology. We even became the first to achieve ISO 8573-1 (2010) Class zero TÜV certification, showing no traces of oil at all in the output air stream.

#### State-of-the-art engineering



Automotive style cylinders made of aluminum alloy with low tolerance finishing for extremely low clearance and minimized friction.



**Direct drive** eliminates transmission losses.



#### Industrial unloader valve:

- Designed to withstand extreme conditions and high working pressures.
- The unloader valve reduces starting torque for a longer compressor and motor lifetime as well as limited strain on the electricity net.



Single electrical connection for easy, plug-and-play installation.



#### Highest quality components:

- Heavy-duty sealed-for-life ball bearings selected for continuous duty and long lifetime.
- Die-cast aluminum crankcase and finned cylinder heads with high cooling characteristics, for long lifetime and efficient operation.



traditional piston benefits of robustness, low maintenance and energy efficiency. Simply the most complete industrial piston compressors on the market today,



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# Medium-pressure piston compressors and boosters

LT 15/20/30/40 & LTB 25/40 series

An Atlas Copco medium-pressure compressor is your high-performance industrial air solution. The 15/20/30 or 40-bar LT and LTB 25/40 series generate quality air at the lowest operating temperatures in the industry and with minimal oil carryover. Their proven design and quality materials deliver premium operation and an extra-long life.



#### LT 15/20/30/40

Atlas Copco's medium-pressure compressor is designed with superior reliability, a compact footprint and optimal performance. It fits easily in all installations and applications without compromising on efficiency and dependable operation.

#### LTB 25/40 air and nitrogen booster

The LTB 25/40 gives you the benefits of producing medium-pressure air with a booster and adds Atlas Copco reliability, efficiency, and ease of use. It is designed for consistent operation, ensuring minimal downtime, maximum productivity and low operational costs. Its user-friendly interface makes the LTB 25/40 straightforward to operate, while its advanced connectivity allows for remote monitoring, data analysis, and enhanced control.

#### State-of-the-art booster performance

- Same machine can be used for air and nitrogen.
- 100% duty cycle allows for continuous operation.
- IE3 motor and premium design reduce operational costs.
- Touchscreen controller offers intuitive operation and engaging user experience.
- SMARTLINK app with remote monitoring of operational parameters and detailed performance reports.



#### WHAT IS A BOOSTER?

A booster is a specific type of compressor designed to compress air or gas from a lower to a significantly higher pressure. Unlike a standard compressor, a booster's suction pressure starts above ambient pressure. While a normal compressor typically reaches pressures up to 13 bar, a booster can increase the pressure to 300 bar or even higher to meet specific application requirements, such as PET bottle manufacturing, gas storage, and testing. Since boosters always work with primary compressors, this combined solution enhances energy efficiency and provides greater flexibility compared to using a high-pressure compressor.

# High-pressure piston boosters

LFB 150 O2 & LTB 300 series

When you need the best in booster performance and reliability, the Atlas Copco LFB O2 and LTB series deliver. They are the ideal solution for any air, nitrogen or oxygen application where higher pressures are required. Their piston technology with blocks specifically designed for medium and high pressure offers industry-leading efficiency and performance.

#### LFB 150 O2 oxygen booster

When you generate your own oxygen and store it for use or back-up, you need an O<sub>2</sub> booster. The Atlas Copco LFB 150 O2 oil-free oxygen booster gives you safe, reliable and durable operation as well as premium performance.

#### Safe, reliable & efficient

- Oil-less design
- Extra quality features
- Vertical inline cylinder
- IE3 motor
- Non-metal piston ring
- Stainless steel cylinder with coating

#### LTB 300 air and nitrogen booster

High-pressure air and industrial gas applications require strong, dependable compression. The Atlas Copco LTB 300 booster will reliably meet and exceed your performance requirements. Built to Atlas Copco standards with quality components, this heavy-duty booster is available in different power sizes with a capacity from 3.3-12.5 l/s.

# Quiet, efficient & reliable • Silent from the core; ontimal ha

- Silent from the core: optimal balancing and use of special vibration dampers.
- Energy-efficient IE3 motors.
- Plug-and-play with pre-programmed controller.
- Innovative oil lubrication system with oil ring and crankshaft channels ensures better lubrication of the cast iron cylinders.
- Efficient cooling of the unit and the compressed gas by fan, flywheel inter- and aftercoolers.





#### **ONE-STOP-SHOP SOLUTION**

Atlas Copco boosters are an ideal fit with our screw compressors or nitrogen generators. Atlas Copco can provide you with a plug-and-play all-in-one nitrogen skid for on-site nitrogen generation. Both the LTB 25/40 and LTB 300 easily fit on our skids for direct use or bottling.

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# **OEM** applications

#### **Versatile & sustainable solutions**

Tailored to perform non-stop in a wide variety of environments, Atlas Copco's piston compressors are the premium OEM air solution. What is more, our dedicated European Piston Competence Center allows us to maintain a collaborative relationship with our OEM customers, working on both current projects and long-term solutions.



It all starts with what we know best: our core piston technology and its proven reliability. Next, we optimize their performance within your original equipment by developing a tailored solution together. Our working relationship extends beyond yes/no answers to basic choices such as belt or direct driven, extreme temperatures, clean or harsh environments, single units or custom duplex built, ... The customization possibilities are almost endless.

#### Global service

Atlas Copco is a truly global organization with support available 24/7 in more than 180 countries.

#### **Industry-specific solutions**

- Transportation
- Snow making
- Solar fields
- Printing
- Box folding
- Beer production
- ... and many more

# **Technical specifications**

#### Premium: LFs and LTs series

Available for different supplies and models: BM, TM and FF

Compressor type	Motor power		Max. working pressure		FAD @ 50 Hz			FAD @ 60 Hz			Noise level
	kW	hp	bar	psig	l/min	m³/h	cfm	l/min	m³/h	cfm	dB(A)
LFs 5-10	4	5.5	10	145	492	29.52	17.4	546	32.76	19.3	70
LFs 7-10	5.5	7.5	10	145	660	39.6	23.3	720	43.2	25.4	71
LFs 10-10	7.5	10	10	145	930	55.8	32.8	1092	65.52	38.6	73
LFs 15-10	11	15	10	145	1320	79.2	46.6	1440	86.4	50.8	74
LFs 20-10	15	20	10	145	1860	111.6	65.7	2184	131.04	77.2	76
LTs 5-10	4	5.5	10	145	504	30.2	17.8	582	34.8	20.6	70
LTs 7-10	5.5	7.5	10	145	702	42.1	24.8	816	49.2	28.2	71
LTs 10-10	7.5	10	10	145	942	56.5	33.3	1092	62.4	38.6	73
LTs 15-10	11	15	10	145	1404	84.2	49.6	1632	98.4	56.4	74
LTs 20-10	15	20	10	145	1884	113	66.6	2184	124.8	77.2	76

Unit performance measured according to ISO 1217, Ed.4, Annex C-2009.

Mean noise level measured according to ISO 2151/Pneurop/Cagi PN8NTC2 test code; tolerance 3 dB(A).

BM: Base mounted, TM: Tank mounted, FF: Full Feature

#### Oil-free: LF 10 series

Available for different supplies and models: B, PP, BM, TM and FF

Compressor type	Motor power		Max. working pressure		FAD @ 50 Hz			FAD @ 60 Hz			Noise level
	kW	hp	bar	psig	l/min	m³/h	cfm	l/min	m³/h	cfm	dB(A)
LF 2-10	1.5	2	10	145	186	11.16	6.6	216	12.96	7.6	82
LF 3-10	2.2	3	10	145	240	14.4	8.5	276	16.56	9.7	83
LF 5-10	4	5.5	10	145	492	29.52	17.4	546	32.76	19.3	83
LF 7-10	5.5	7.5	10	145	660	39.6	23.3	720	43.2	25.4	84
LF 10-10	7.5	10	10	145	930	55.8	32.8	1092	65.52	38.6	86

Comes with a choice of refrigerant, desiccant or membrane dryer technology and appropriate filters B: Block, PP: Power Pack, BM: Base mounted, TM: Tank mounted, FF: Full Feature

#### Lubricated: LT 10 series

Available for different supplies and models: B, PP, BM, TM and FF

Compressor type	Motor power		Max. working pressure		FAD @ 50 Hz			FAD @ 60 Hz			Noise level
	kW	hp	bar	psig	l/min	m³/h	cfm	l/min	m³/h	cfm	dB(A)
LT 2-10	1.5	2	10	145	204	12.2	7.2	234	13.8	8.3	78
LT 3-10	2.2	3	10	145	264	15.8	9.3	306	18.6	10.8	79
LT 4-10	3	4	10	145	354	21.2	12.5	407	24.4	14.4	79
LT 5-10	4	5.5	10	145	504	30.2	17.8	582	34.8	20.6	79
LT 7-10	5.5	7.5	10	145	702	42.1	24.8	816	49.2	28.2	80
LT 10-10	7.5	10	10	145	942	56.5	33.3	1092	62.4	38.6	81

Comes with a choice of refrigerant, desiccant or membrane dryer technology and appropriate filters.

B: Block. PP: Power Pack. BM: Base mounted. TM: Tank mounted. FF: Full Feature



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#### Lubricated: LT 15/20/30 series

Available for different supplies and models: PP, BM, TM and FF

Compressor type	Motor power		Max. working pressure		FAD @ 50 Hz			FAD @ 60 Hz			Noise level dB(A)	
	kW	hp	bar	psig	l/min	m³/h	cfm	l/min	m³/h	cfm	Open	Silent
LT 2-15	1.5	2	15	218	186	11.16	6.6	216	12.96	7.6	78	63
LT 3-15	2.2	3	15	218	240	14.4	8.5	282	16.92	10.0	79	64
LT 5-15	4	5.5	15	218	408	24.48	14.4	474	28.44	16.7	79	64
LT 7-15	5.5	7.5	15	218	558	33.48	19.7	654	39.24	23.1	80	68
LT 10-15	7.5	10	15	218	708	42.48	25.0	840	50.4	29.6	81	68
LT 15-15	11	15	15	218	942	56.52	33.3	1086	65.16	38.4	86	75
LT 20-15	15	20	15	218	1128	67.68	39.9	1284	77.0	45.3	86	78
LT 2-20	1.5	2	20	290	126	7.6	4.5	162	9.72	5.7	78	63
LT 3-20	2.2	3	20	290	174	10.4	6.1	216	12.96	7.6	79	64
LT 5-20	4	5.5	20	290	300	18.0	10.6	378	22.68	13.4	79	64
LT 7-20	5.5	7.5	20	290	402	24.1	14.2	504	30.24	17.8	80	68
LT 10-20	7.5	10	20	290	546	32.8	19.3	816	48.96	28.8	81	68
LT 15-20	11	15	20	290	906	54.4	32.0	1062	63.72	37.5	86	75
LT 20-20	15	20	20	290	1080	64.8	38.1	1254	75.74	44.3	86	78
LT 3-30	2.2	3	30	435	150	9.0	5.3	186	11.16	6.6	79	64
LT 5-30	4	5.5	30	435	264	15.8	9.3	330	19.8	11.7	79	64
LT 7-30	5.5	7.5	30	435	384	23.0	13.6	480	28.8	17.0	80	68
LT 10-30	7.5	10	30	435	510	30.6	18.0	612	36.72	21.6	81	68
LT 15-30	11	15	30	435	558	33.5	19.7	666	39.96	23.5	85	76
LT 20-30	15	20	30	435	1020	61.2	36.0	1182	70.92	41.7	86	80

PP: Power Pack, BM: Base mounted, TM: Tank mounted, FF: Full Feature

#### **Lubricated: LT 40 series**

Compressor type	Motor power		Max. working pressure		FAD @ 50 Hz			FAD @ 60 Hz			Noise level dB(A)	
Compressor type	kW	hp	bar	psig	l/s	m³/min	cfm	l/s	m³/min	cfm	Standard	Silenced
LT 20-40	15	20			16.1	1.0	34	19.4	1.2	41	91	
LT 25-40	18.5	25			19.4	1.2	41	23.1	1.4	49	91	-
LT 30-40	22	30	40	580	27.2	1.6	58	32.7	2.0	69	91	-
LT 40-40	30	40	40	380	32.8	2.0	70	/	/	/	91	-
LT 50-40	37	50			40.8	2.4	86	47.8	2.9	101	95	-
LT 60-40	45	60			50	3.0	106	59.7	3.6	127	95	-

#### Oil-free: LFx series

Available for different supplies and models: PB, PP, TM, and FF

Compressor tupe	Motor power		Max. working pressure		FAD @ 50 Hz			FAD @ 60 Hz			Noise level dB(A)
Compressor type	kW	hp	bar	psig	l/s	m³/min	cfm	l/s	m³/min	cfm	dB(A)
LFx 0.7	0.55	0.7	10	145	1.02	3.6	2.16	1.35	4.8	2.86	64
LFx 1.0	0.75	1	10	145	1.38	4.8	2.92	1.46	5.2	3.09	64
LFx 1.5	1.1	1.5	10	145	2.07	7.5	4.38	2.39	8.6	5.06	67
LFx 2.0	1.5	2	10	145	2.53	9.1	5.36	-	-	-	67

Comes with a choice of desiccant or membrane dryer technology and appropriate filters. Available with 24, 50 and 90L vessels or as Powerbox. PB: Powerbox, PP: Power Pack, BM: Base mounted, TM: Tank mounted, FF: Full Feature

#### LFB 150 O2 booster

Model	Motor power		Inlet pressure		Outlet <sub>l</sub>	pressure	Maximum FAD @ 50 & 60 Hz										
Wodel	hp	kW	bar	psig	bar	psig	l/s	cfm	m³/h								
LFB 4A-150 O2	4	2					0.8	1.8	3								
LFB 4B-150 O2	4	3 5.5					1.7	3.5	6								
LFB 7A-150 O2	7.5						2.2	4.7	8								
LFB 7B-150 O2	7.5	5.5					3.3	7.1	12								
LFB 15A-150 O2											3-4	43.5-58	80-150	1160-2176	4.2	8.8	15
LFB 15B-150 O2	15	11					5.6	11.8	20								
LFB 15C-150 O2	15	11					7	14.7	25								
LFB 15D-150 O2							11.1	23.5	40								
LFB 20-150 O2	20	15					13.9	29.4	50								

Notes:
FAD is based on maximum inlet pressure & maximum outlet pressure.
FAD is tested based on ISO 1217 Ed4 2009 (ambient temperature 20°C and relative humidity 0%).

#### LTB 25/40 booster

Model	Motor power		Inlet pressure		Outlet p	oressure	Maximum FAD @ 50 & 60 Hz			
Model	hp	kW	bar	psig	bar	psig	l/s	cfm	m³/hr	
LTB 10-25	10	7.5					28.5	60	102	
LTB 15-25	15	11	2.5	29-72.5	10-25	145-362.5	35.3*	75*	127*	
LTB 20-25	20	15	2-5				49.8	105	179	
LTB 25-25	25	18.5					64.2	136	231	
LTB 10-40	10	7.5					34.7	73	125	
LTB 15-40	15	11					48.5	103	174	
LTB 20-40	20	15	6-10	87-145	25-40		63.8	135	229	
LTB 25-40	25	18.5	6-10	87-145	25-40	290-580	77.5	164	278	
LTB 30-40	30	22					94.2	199	338	
LTB 40-40	40	30					124.8	264	448	

Notes:

\* FAD is 30 I/s, 63 CFM and 108 m³/hr @60 Hz.

FAD is based on maximum inlet pressure & maximum outlet pressure.

FAD is tested based on ISO 1217 Ed4 2009 (ambient temperature 20°C and relative humidity 0%).

#### LTB 300 booster

Model	Motor power		Inlet pressure		Outlet p	oressure	Maximum FAD @ 50 & 60 Hz			
Wodei	hp	kW	bar	psig	bar	psig	l/s	cfm	m³/hr	
LTB 5-300*	5	3.7	5-9	72.5-130.5			5.0	10	18	
LTB 7-300	7	5.5	5-11	72.5-159.5	90-300	1305-4351	7.9	17	28	
LTB 10-300	10	7.5	7-10	101.5-145			10.8	23	39	
LTB 15-300	15	11	7-10	101.5-145			12.5	26	45	
LTB 20-300**	15	11	2-4	29-58			13.8	29	50	

Notes:

\* Only for North America.

\*\* Not available for North America.

FAD is based on maximum inlet pressure & maximum outlet pressure.

FAD is tested based on ISO 1217 Ed4 2009 (ambient temperature 20°C and relative humidity 0%).

# **Options**

## **Tailor your Atlas Copco piston compressor**

✓ = standard O = optional

	LFx	LF 10	LT 10	LT 15/20/30/40	LTB 25/40	LTB 300	LFB 150 O2
Silenced hood	V	o	o	0		V	
Receiver upgrade	0	О	o	О			
Vertical receiver		o	О				
Timer drain	0	О	О	О		V	
Hour meter	0	V	V	<b>V</b>	<b>V</b>	V	
Anti-condensation heater		O	О	О			
Oil-level switch			O	О	<b>V</b>		
CD dryer	0	o	o	О			
Heavy-duty inlet filter		0	О	О			
Wheel set	0	o	o				
Low duty cycle option		O	О				
HP filter					О	O	
HP vessel/bottles				0	O	o	0

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