

Oil-free, water-injected
screw compressors

LENTO Series

Capacity:
0.68 – 8.10 m³/min



Intelligence, Innovation, Reliability

clean compressed air, economically produced:

100% oil-free compressed air

maximum flexibility through variable and fixed speed

enormous energy saving potential

robust and quiet

safe in operation through proven design

clear, simple layout for ease of service

flexible operating pressure 5 – 10 bar, continuously variable



Maximum benefits for our customers:

This premise is the defining characteristic of everyone at ALUP.

Our products benefit from the latest techniques in research and development and are manufactured according to ISO 9001.

They fulfil all acceptance conditions according to ISO 1217 – 3 annex C – 1996 and agree with the CE-guidelines.

Even the most stringent conditions, such as DET NORSKE VERITAS, GERMANISCHER LLOYDS, BUREAU VERITAS LLOYD'S REGISTER OF SHIPPING, ABS among others, are for us from ALUP a matter of course.



intelligent compressed air ... everywhere ■ ■ ■ *intelligent compressed air ... everywhere* ■ ■ ■ *intelligent compressed air ... everywhere* ■ ■ ■

Construction, Technology, Highlights



1 Compressor

- single stage, water-injected airend
- Bronze alloy stator
- Plastic compound rotors
- lowest compression temperatures less than 60 °C
- Computer-designed compressor with 35,000 hours between bearing change

2 SCD motor

- highly efficient drive motor
- IP 55 protection class F
- compact, powerful and safe in operation designed for maximum cooling

3 Integrated drier with triple tasking

- a) producing fresh water for the permanent generation and circulation of the coolant required
- b) for optimum biological and chemical water quality
- c) provides dry compressed air at the input to the compressed air network



4 Water circuit

- closed water circuit with independent, integrated water feed
- multi-stage separation for dry compressed air

5 SCD direct drive

- loss-free power transmission
- optimum performance

6 SCD frequency converter

- fully integrated system
- conforms to EMC directives

7 Air Control

- the compressor's intelligence
- thinks, monitors and records

The "LENTO concept" from ALUP: oil-free, direct drive and speed controlled



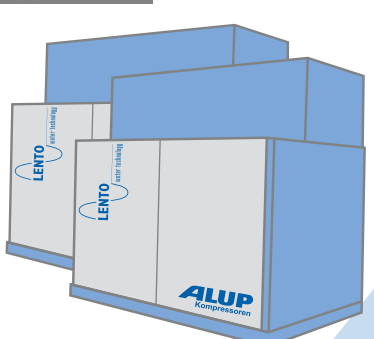
Data, Facts, Analyses

	Type	Operating overpressure bar	Flow* to ISO 1217 (Appendix C-1996)		Motor-rated output kW	Length mm	Width mm	Height mm	Weight kg
			min. (m ³ /min)	max. (m ³ /min)					
variable speed	15	5 – 10	0.74	2.12	15	1925	795	1865	870
	18	5 – 10	0.74	2.70	18.5	1925	795	1865	880
	22	5 – 10	0.74	3.19	22	1925	795	1865	890
	30	5 – 10	0.74	4.11	30	1925	795	1865	940
	31	5 – 10	1.98	4.92	30	2270	1370	2135	1560
	37	5 – 10	1.98	5.92	37	2270	1370	2135	1620
	45	5 – 10	1.98	6.86	45	2270	1370	2135	1625
	55	5 – 10	1.98	7.88	55	2270	1370	2135	1690
	fixed speed	18 D	5 – 7		2.55	18.5	1925	795	1865
22 D		5 – 10		2.55	22	1925	795	1865	890
31 D		5 – 8		4.84	30	2270	1370	2135	1560
37 D		5 – 10		4.84	37	2270	1370	2135	1620

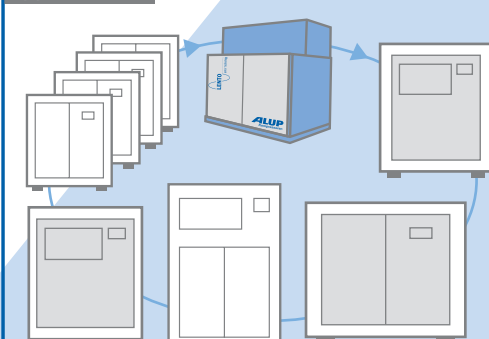
* V referred to operating overpressure of 7 bar

LENTO, the system solution for:

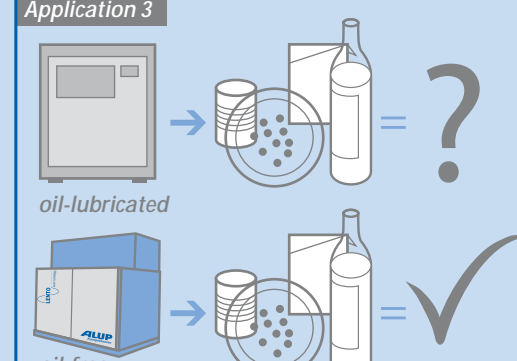
Application 1



Application 2



Application 3



LENTO, the oil-free compressed air provider as a free-standing system or as a multi-unit solution for economical, oil-free compressed air production in the medium output range.
The benefits for you: cost-effective, operationally safe with low maintenance compressed air production

LENTO, the oil-free, speed-controlled compressed air provider is best suited to take over in existing oil-free compressed air stations as the master "Command" system.
The benefits for you: The entire station becomes more economical immediately, and peaks in consumption can be buffered by "governing".

LENTO, the oil-free compressed air producer, as safe alternative to replace oil-lubricated with oil-free compressed air cost-effectively in critical sectors (such as foodstuffs, chemicals and pharmaceuticals).
The benefits for you: High security for your products (no oil present) and fewer waste disposal problems.



Intelligent technology at the point of delivery!

The LENTO concept offers technological advantages with no compromise:

HIGHLIGHT

High quality, 100% oil-free compressed air is demanded not only in the pharmacy, foodstuffs, electrical engineering and medical industries, but is very important in all applications where products of the highest quality are produced.

HIGHLIGHT

Only water, the most natural of all raw materials, is used in the compression process. The result is:

- clean, environmentally friendly compressed air with no oil; Dirt and other dust particles drawn in are being cleaned by the water treatment system
- clean condensate (pure water) can be fed directly into the drains system
- lowest temperatures during compression through optimum heat transfer via the water and this with minimum energy consumption

HIGHLIGHT

The LENTO range of speed controlled direct drive compressors provide optimum economy through:

- exactly matching the flow from the compressor to the compressed air requirements at any time
- Avoidance of switching cycles and the consequent costly no-load periods
- Energy-saving start-up, with no current surge
- freely selectable operating pressure from 5 – 10 bar in 0.1 bar increments

The reduced pressure produced saves you money!

HIGHLIGHT

The combination of the “Energy-saving duo” is unbeatable:

- the LENTO with “sixed speed” covers the basic load for a compressor station
- the LENTO with “variable” takes up any additional requirement, e.g. peaks in consumption

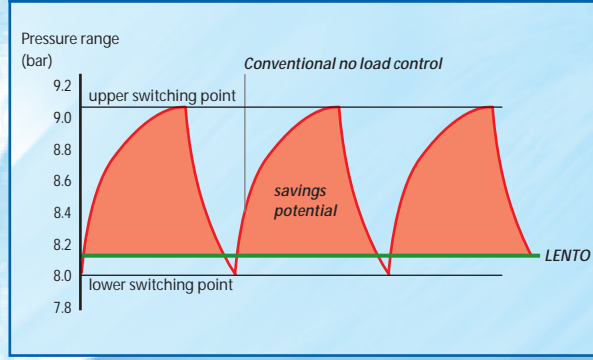
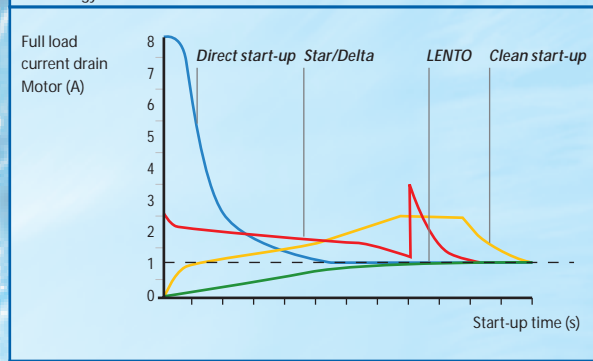
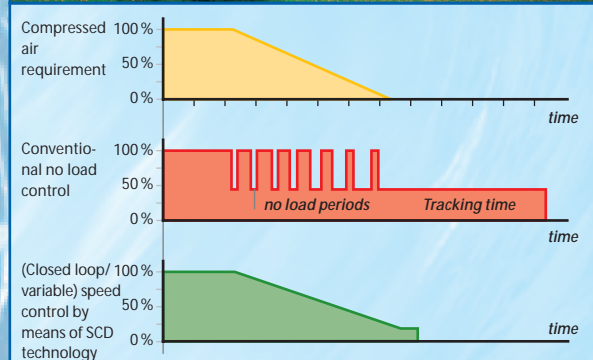
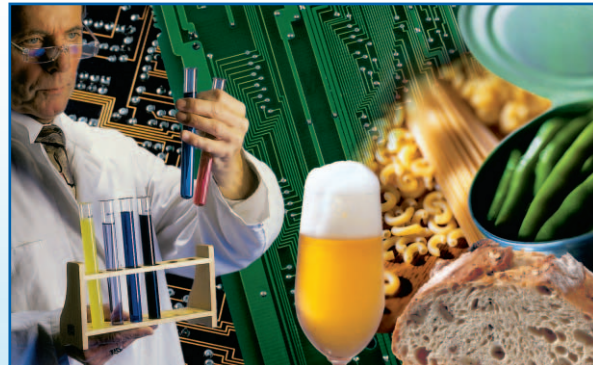
HIGHLIGHT

The integrated drier:

- ensures minimum compressed air output temperatures, i.e. a separate drier may not be required
- no additional water is required, reducing costs and simplifying installation

HIGHLIGHT

Minimised service and maintenance costs compared with other oil-free compression systems with fewer service items



Products, Concepts and Solutions

Built on the needs of the customer

At ALUP we have produced quality compressors for almost 100 years.

With our innovative system concepts we offer customised solutions for almost all applications.

Our endeavour lies not only in supplying compressors, we offer ourselves as a competent system provider, who is able

to offer a cost effective and attractive solutions to all users of compressed air.

That does not only apply in the consultation and installation phase of your new compressor(s), but continues in all areas of service, maintenance and support.

Challenge us!



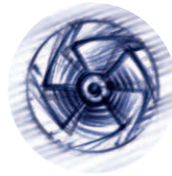
Screw compressors

- Constant speed
4 – 400 kW/
5 – 13 bar
- Variable speed controlled and direct drive
5.5 – 260 kW/
5 – 13 bar
- Oil-free, with water injection
4 – 250 kW/
5 – 10 bar



Piston compressors

- Oil-free, up to 10 bar
0.75 – 12 kW
- For normal pressure up to 10 bar
1.5 – 15 kW
- For medium pressure up to 15 bar
1.5 – 15 kW
- For high pressure up to 35 bar
2.2 – 11 kW
- As a Booster for an input pressure up to 15 bar and an output pressure up to 40 bar
2.2 – 15 kW



Turbo compressors

- Oil-free, up to 9 bar
65 – 370 kW



Complete Accessories

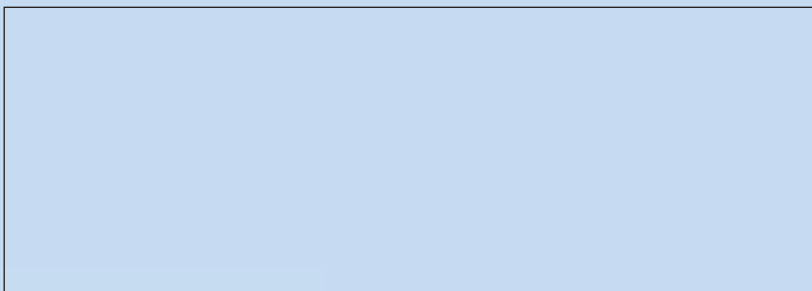
- Refrigeration dryers
0.16 – 145 m³/min
- Desiccant dryers
0.08 – 145 m³/min
- Activated carbon adsorbers
0.08 – 145 m³/min
- Filters, all particle sizes
0.08 – 380 m³/min
- Complete Condensate management
up to 120 m³/min



Control, regulate, monitor

- Lead-lag control
- Consumption-dependant control
- Visualisation (we bring your compressed air to the PC)
- Tele-monitoring (the Hotline of your compressed air station)

Your specialist



www.alup.com

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