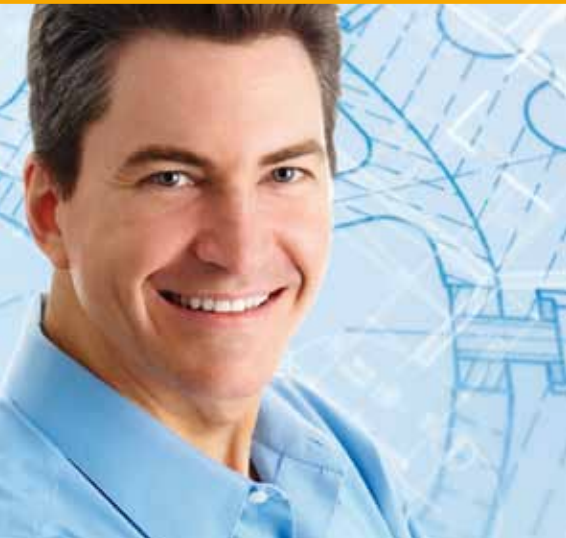


www.almig.de

**ALMIG**  
since 1923

# OIL-FREE, WATER-INJECTED SCREW COMPRESSORS

Volumetric flow rate: 0.86 – 19.62 m<sup>3</sup>/min • 36 – 693 acfm



**LENTO** WATER TECHNOLOGY

A graphic element of the LENTO logo, featuring a stylized blue wave or pulse line above a white vertical bar with a blue pulse line.

# INTELLIGENTE DRUCKLUFT MADE IN GERMANY

## ALMiG Kompressoren GmbH

A name that guarantees top-grade technology in the compressed air sector. ALMiG has emerged from a company with a long tradition whose products in the compressed air industry have always stood for quality, innovation and consideration of its customers.

Today ALMiG is an extremely flexible company which can react fast to special customer requests. It stands by its customers as a competent partner, giving advice and practical support.

It goes without saying that as one of the leading suppliers of advanced compressed air systems, our commitment to continuous research and development forms the basis for all the plants we manufacture.

They meet the acceptance criteria in compliance with:

- ISO 1217-3 Annex C-1996
- ASME
- OSHA

and comply with the CE guidelines.

Even the most stringent acceptance criteria such as:

- DET NORSKE VERITAS
- GERMANISCHER LLOYD
- BUREAU VERITAS
- LLOYD' s REGISTER OF SHIPPING
- ABS

is a matter of course for us.

The company ALMiG is certified in compliance with:

- IRIS 02
- ISO 9001: 2008
- ISO 14001: 2004

**Our motto is:**

If you have stopped improving, you have stopped being good!

## Clean compressed air, economically produced:

- 100 % oil-free compressed air by means of the unique water-injection technology

- certified in compliance with ISO 8573-1 class 0; therefore top quality compressed air guaranteed

- enormous potential energy savings by combining speed control with fixed speed

- totally reliable thanks to the advanced basic components
- flexible operating pressure, infinitely adjustable





# INTELLIGENT WATER INJECTION TECHNOLOGY

## LENTO -

super compressed air quality owing to multiple-stage treatment

- the injected water is „recovered“ by the integrated refrigerant dryer in the form of condensate (=water of the highest quality)
- the condensate/water „washes“ out the dust particles contained in the intake air
- furthermore, the germs, spores and bacteria sucked in are removed from the compressed air down to a value below the detection limit
- several reputable, independent institutes have confirmed this in various elaborate test series



LENTO  
15 - 30

LENTO  
31 - 110



## The “LENTO concept” from ALMiG:

oil-free, direct drive and speed-controlled

### Airend 1

single-stage, water-injected • the housing made from stainless alloy encompasses the two rotors for economical compression (male and female rotors) • minimal final compression temperatures below 60°C (hence close to the isotherm - i.e. economically efficient compression)

### SCD motor 2

highly efficient drive motor • IP 55 protection class ISO F • compact, powerful and reliable in operation

### Integrated refrigerant dryer 3

with triple tasking: produces fresh water for the permanent generation and circulation of the coolant required • for optimum biological and chemical water quality • provides dry compressed air on entering the compressed air network

### Water circuit 4

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

### SCD direct drive 5

loss-free power transmission, optimal cost savings

### SCD frequency converter 6

the integrated power pack, conforms to EMC ordinances, of course

### Air Control 7

the compressor's intelligence; thinks, monitors and records





# INTELLIGENT COMPRESSOR ARRANGEMENT



LENTO 15 - 30



# INTELLIGENT TECHNOLOGY AT THE POINT OF DELIVERY!

## The LENTO concept offers technological advantages with no compromises:

1

High quality, 100 % oil-free compressed air is demanded not only in the pharmaceuticals, food, electrical engineering and medical industries, but is very important in all applications where top grade products are manufactured

2

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 washed out by the water
- clean condensate (pure water) can be fed directly into the sewage system

- lowest temperatures during compression thanks to optimal heat removal via the water and hence extremely low energy consumption for compressed air production

3

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

- adjusting the volumetric flow rate exactly to the respective compressed air requirements
- avoids switching operations and the consequent costly no-load running periods
- energy-saving start-up, with no current peaks
- operating pressure can be selected freely in 0.1-bar (1.5 psig) stages.

The consequent reduction in pressure saves you money!

4

The „Energy-Saving Duo“ is an unbeatable combination:

- the LENTO with “fixed speed” covers the base load for a compressor station
- the LENTO with “variable speed” takes care of any additional requirement

5

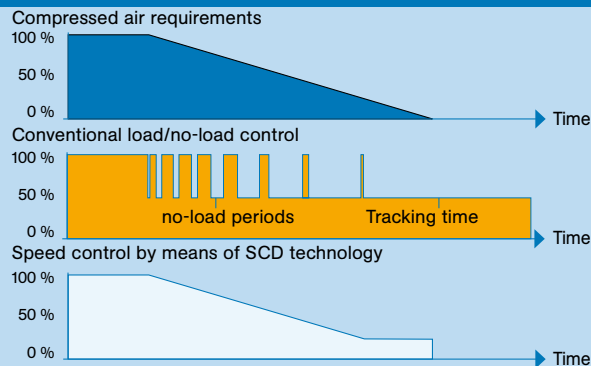
The integrated refrigerant dryer:

- ensures minimum compressed air outlet temperatures, i. e. a separate dryer is not required
- cuts out the costs for fresh water and water treatment

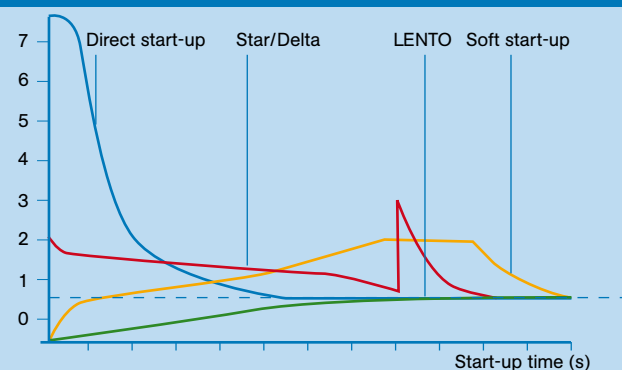
6

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

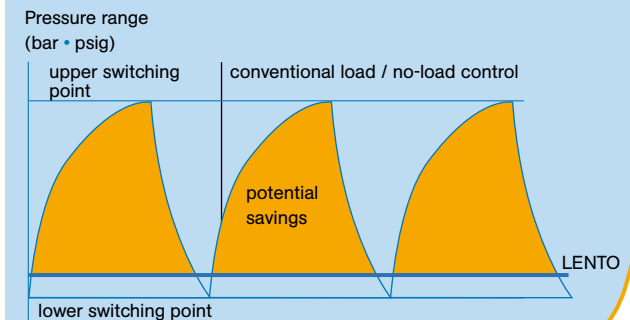
### Adjusts volumetric flow rate exactly



### Full-load current consumption, motor (A)



### Prevents switching operations



# FACTS AND FIGURES

50 Hz									60 Hz								
LENTO	Operating over-pressure	Vol. flow rate* according to ISO 1217 (annex C-1996)		Rated motor output	Length	Width	Height	Weight	LENTO	Operating over-pressure	Vol. flow rate* according to ISO 1217 (annex C-1996)		Rated motor output	Length	Width	Height	Weight
		min.	max.								min.	max.					
	bar	m <sup>3</sup> /min	m <sup>3</sup> /min	kW	mm	mm	mm	kg		psig	acfm	acfm	HP	inch	inch	inch	lbs
Speed-controlled									Speed-controlled								
15	5 - 10	1.01	2.34	15	1880	850	1660	850	15 / 20	75 - 145	36	83	20	74	33.5	65.4	1875
18	5 - 10	1.01	2.87	18	1880	850	1660	860	18 / 25	75 - 145	36	103	25	74	33.5	65.4	1895
22	5 - 10	1.01	3.38	22	1880	850	1660	870	22 / 30	75 - 145	36	120	30	74	33.5	65.4	1920
30	5 - 10	1.01	4.30	30	1880	850	1660	920	30 / 40	75 - 145	36	153	40	74	33.5	65.4	2030
31	5 - 10	2.04	5.08	30	2300	1400	1560	1470	31 / 41	75 - 145	72	179	40	90.6	55.1	61.4	3240
37	5 - 10	2.04	6.14	37	2300	1400	1560	1520	37 / 50	75 - 145	72	220	50	90.6	55.1	61.4	3350
45	5 - 10	2.04	7.13	45	2300	1400	1560	1550	45 / 60	75 - 145	72	255	60	90.6	55.1	61.4	3420
55	5 - 10	2.04	8.19	55	2300	1400	1560	1590	55 / 75	75 - 145	72	289	75	90.6	55.1	61.4	3510
46	5 - 13	2.51	8.58	45	2300	1400	1560	1700	46 / 61	75 - 190	88	306	60	90.6	55.1	61.4	3750
56	5 - 13	2.51	9.97	55	2300	1400	1560	1750	56 / 76	75 - 190	88	355	75	90.6	55.1	61.4	3860
70	5 - 13	2.51	11.56	70	2300	1400	1560	1800	70 / 95	75 - 190	88	412	95	90.6	55.1	61.4	3970
80	5 - 13	2.51	12.28	80	2300	1400	1560	1850	80 / 105	75 - 190	88	430	105	90.6	55.1	61.4	4080
81	5 - 13	4.57	15.5	80	2800	1400	1910	2150	81 / 106	75 - 190	161	547	105	110	55.1	75.2	4740
90	5 - 13	4.57	17.2	90	2800	1400	1910	2280	90 / 125	75 - 190	161	607	125	110	55.1	75.2	5030
110	5 - 13	4.57	19.5	110	2800	1400	1910	2280	110 / 150	75 - 190	161	689	150	110	55.1	75.2	5030
Fixed speed									Fixed speed								
18 D	5 - 7	2.68		18	1880	850	1660	840									
22 D	5 - 10	2.53		22	1880	850	1660	850	22 / 30 D	75 - 100	108		30	74	33.5	65.4	1870
31 D	5 - 8	4.84		30	2300	1400	1560	1450									
37 D	5 - 10	4.72		37	2300	1400	1560	1500	37 / 50 D	75 - 100	201		50	90.6	55.1	61.4	3300
38 D	5 - 10	5.47		37	2300	1400	1560	1500	38 / 51 D	75 - 145	193		50	90.6	55.1	61.4	3300
46 D	5 - 13	5.41		45	2300	1400	1560	1500	46 / 61 D	75 - 190	191		60	90.6	55.1	61.4	3300
75 D	5 - 11	11.35		75	2800	1400	1910	2080	75 / 100 D	75 - 160	401		100	110	55.1	75.2	5952

\* V in relation to the operating overpressure: 7 bars at 50 Hz / 100 psig at 60 Hz

LENTO 15 - 70 (15 / 20 - 70 / 95) water-cooled as standard, air-cooled as an option

LENTO 75 D (75 / 100 D) and LENTO 80 - 110 (LENTO 80 / 105 - 110 / 150) only water-cooled version available.

# INTELLIGENTE DRUCKLUFT MADE IN GERMANY

## In line with the customer's needs

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 capable of offering solutions to all users of compressed air. That does not only apply to the consultation and installa-

tion phase of your new compressor(s), but naturally continues in all areas of service, maintenance and visualisation.  
**Challenge us!**

Screw compressors 2,2 – 500 kW	Piston compressors 1,5 – 55 kW	Turbocompressors 200 – 2000 kW	Blower 1,5 – 55 kW	Complete accessories	Control, regulate, monitor
<ul style="list-style-type: none"> <li>• Fixed speed</li> <li>• With energy-saving speed control</li> <li>• Oil-free, with water injection</li> <li>• Oil-free, 2-stage</li> </ul> <p>Available drive types:</p> <ul style="list-style-type: none"> <li>• V-belt</li> <li>• Gearbox</li> <li>• Direct</li> </ul>	<ul style="list-style-type: none"> <li>• Oil-lubricated</li> <li>• Oil-free</li> <li>• Normal pressure, medium pressure, high-pressure</li> <li>• Booster</li> <li>• Mobile / stationary</li> </ul> <p>Available drive types:</p> <ul style="list-style-type: none"> <li>• V-belt</li> <li>• Direct</li> </ul>	<ul style="list-style-type: none"> <li>• Oil-free</li> <li>• Radial, 3-stage compression</li> <li>• With / without sound-absorbing housing</li> </ul> <p>Available drive types:</p> <ul style="list-style-type: none"> <li>• Gearbox</li> </ul>	<ul style="list-style-type: none"> <li>• Fixed speed</li> <li>• With energy-saving speed control</li> </ul> <p>Available drive types:</p> <ul style="list-style-type: none"> <li>• V-belt</li> <li>• Direct</li> </ul>	<ul style="list-style-type: none"> <li>• Refrigerant dryers</li> <li>• Desiccant dryers, heatless and heat-regenerative</li> <li>• HOC (heat of compression)</li> <li>• Activated carbon adsorbers</li> <li>• Filters, all particle sizes</li> <li>• Condensate management</li> <li>• Heat recovery systems</li> <li>• Pipework Systems</li> </ul> <p>All components are optimally matched to the compressors</p>	<ul style="list-style-type: none"> <li>• Base load changeover controls</li> <li>• Consumption-related controls</li> <li>• Visualisation (we display your compressed airstation on the PC)</li> <li>• Telemonitoring (the hotline of your compressed air station)</li> </ul>

## Our quality standards mean you can rely on our machines



ISO 9001



ISO 14001



IRIS



Your expert advisor