


[www.almig.de](http://www.almig.de)

**ALMIG**  
since 1923

## SPEED-CONTROLLED SCREW COMPRESSORS

Volumetric flow rate: 0.18 – 4.12 m<sup>3</sup>/min • 6 – 145 acfm



**FLEX** DRIVE  


# 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 for its customers.

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

As one of the leading suppliers of advanced compressed air systems, our commitment to continuous research and development forms the basis for all our products. ALMiG compressors are all manufactured in accordance with

- IRIS
- ISO 9001: 2000
- ISO 14001: 2004

They meet the conditions for acceptance in compliance with:

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

and conform to the CE guidelines.

Compliance with the most stringent acceptance conditions, such as

- DET NORSE VERITAS
- GERMANISCHER LLOYD
- BUREAU VERITAS
- LLOYD'S REGISTER OF SHIPPING
- ABS

is a matter of course for us.

### Our motto is:

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

## Simple, silent and smooth whilst saving energy

■ energy-saving speed control  
by means of direct drive

■ powerful, extremely quiet and  
requiring very little space  
~ 60 dB(A)

■ flexible operating pressure,  
infinitely adjustable

■ clear, maintenance-friendly  
design



# INTELLIGENT CONCEPT, MODULAR DESIGN



as a "PLUS" version with underslung refrigerant dryer for PDP at 3°C/37 F



as a standard compressor



as an "O" version with underslung refrigerant dryer and filter system for the production of "oil-free" compressed air



as a receiver-mounted version



as a receiver-mounted "PLUS" version\*



as a receiver-mounted "O" version\*

\* Important: versions not available for FLEX 16 – 30

"O" version meaning - according to DIN ISO 8573 - 1: 

Residual constituents in compressed air	Volume	Class
Oil	0.003 mg/m <sup>3</sup>	1
Particles	< 0.01 µm	1
Water	PDP + 3°C/37 F	4





**Airend** 1 newly developed rotor profile for maximum efficiency • wide control range • very good overall efficiency

**SCD motor** 2 robust drive motor with speed control

**SCD direct drive** 3 compressor shaft and the motor rotor are a single piece • loss-free power transmission and no coupling element • no motor bearing required, therefore increased operating reliability

**SCD frequency converter** 4 the integrated power pack, conforms to stringent EMC directives

**Mains screening** 5 100 % safety against harmonic interference

**Separator system** 6 optimal compressed air quality thanks to a proven multi-stage separation system

**Radial fan** 7 powerful, efficient and smooth running • high residual pressure for subsequent connection to a duct duct ventilation system

**System cooler** 8 efficient cooler for low temperature level

**Air Control** 9 the compressor's intelligence; thinks, monitors and records

#### Air Control f

#### The "integrated single shaft solution" from ALMiG

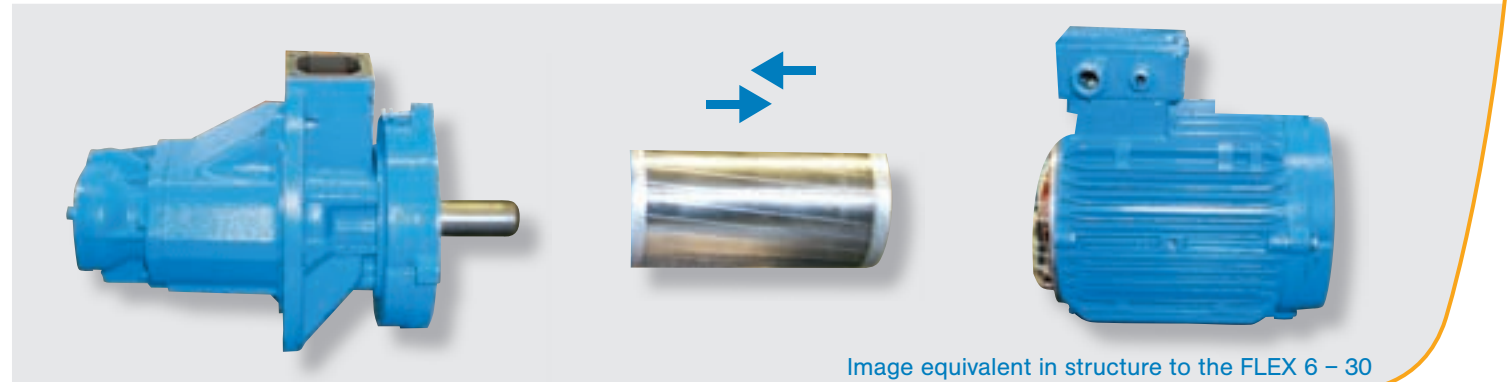


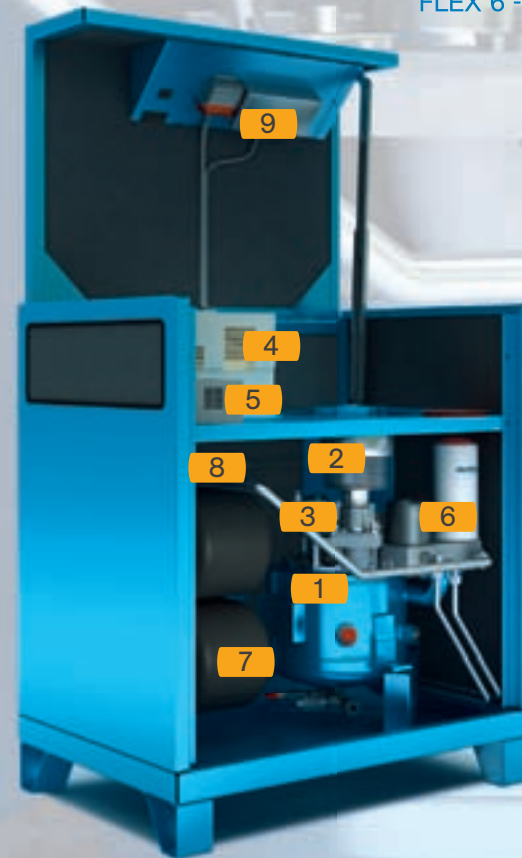
Image equivalent in structure to the FLEX 6 – 30

## INTELLIGENT COMPONENT ARRANGEMENT

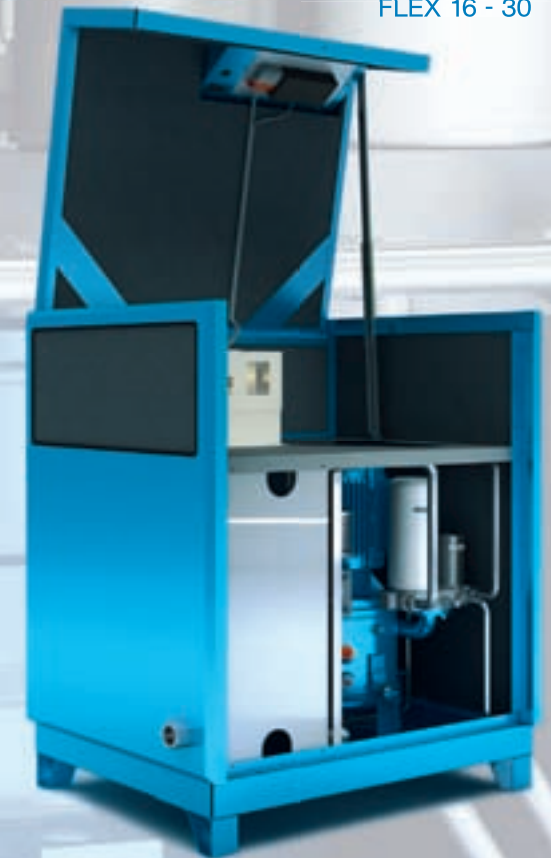
FLEX 2S - 8S



FLEX 6 - 15



FLEX 16 - 30



# INTELLIGENT TECHNIQUE

## The integrated single shaft solution in a speed-controlled design offers top technology without any compromises:

- exact adjustment of the volumetric flow rate to the respective current compressed air requirements
- avoids switching operations and the consequent costly no-load running periods
- energy-saving start-up eliminating current peaks
- operating pressure can be selected freely between  $p_{min} - p_{max}$  in 0,1 bar (1,5 psig) stages.

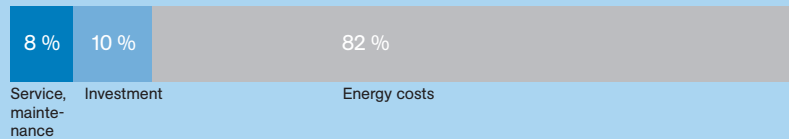
The reduced pressure thus achieves saves you money

- it is impossible to improve on the design in terms of compactness and space-saving - yet it is still very accessible for service and maintenance

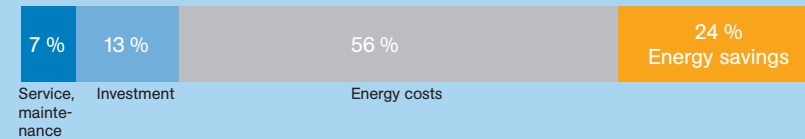
- a speed-controlled FLEX can increase the economic efficiency of up to eight large compressors immediately in the intelligent ALMiG „Master-Slave System“

### Average total cost comparison of a screw compressor, averaged over 5 years

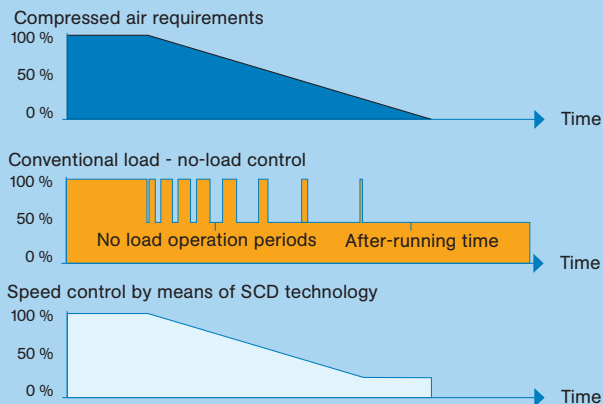
#### Standard screw compressor



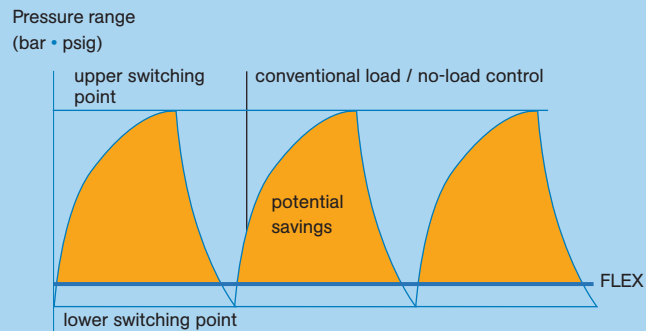
#### Series FLEX



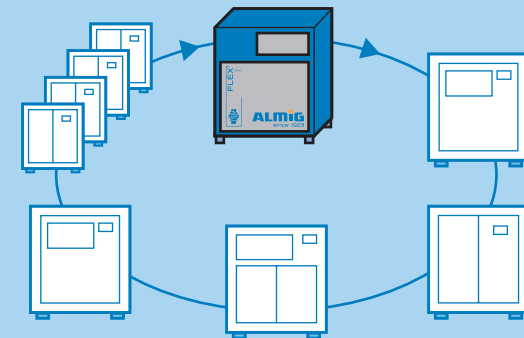
### Adjusts volumetric flow rate exactly



### Prevents switching operations



### ALMiG „Master-Slave system“



## FACTS AND FIGURES

50 Hz									60 Hz								
FLEX	Operating over-pressure	Vol. flow rate* according to ISO 1217 (annex C-1996)		Rated motor output	Length	Width	Height	Weight	FLEX	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
2S	5 - 10	0.19	0.34	2.2	590	590	995	123	2 / 3 S	75 - 145	7	13	3	23.2	23.2	39.2	273
3S	5 - 10	0.19	0.43	3	590	590	995	123	3 / 4 S	75 - 145	7	17	4	23.2	23.2	39.2	273
4S	5 - 10	0.19	0.65	4	590	590	995	123	4 / 5 S	75 - 145	7	23	5.5	23.2	23.2	39.2	273
6S	5 - 14	0.34	1	5.5	590	590	995	136	6 / 7 S	75 - 203	12	36	7.5	23.2	23.2	39.2	300
8S	5 - 14	0.32	1.07	7.5	590	590	995	136	8 / 10 S	75 - 203	11	38	10	23.2	23.2	39.2	300
6	5 - 13	0.40	0.79	5.5	870	590	990	165	6 / 7	75 - 190	14	31	7.5	34.3	23.2	39	364
7	5 - 13	0.40	1.13	7.5	870	590	990	165	7 / 10	75 - 190	14	42	10	34.3	23.2	39	364
11	5 - 13	0.40	1.62	11	870	590	990	180	11 / 15	75 - 190	14	60	15	34.3	23.2	39	397
15	5 - 13	0.40	2.11	15	870	590	990	190	15 / 20	75 - 190	14	76	20	34.3	23.2	39	419
16	5 - 13	1.16	2.55	15	1140	890	1315	285	16 / 21	75 - 190	41	97	20	44.9	35	51.8	628
18	5 - 13	1.16	3.02	18.5	1140	890	1315	295	18 / 25	75 - 190	41	114	25	44.9	35	51.8	650
22	5 - 13	1.16	3.31	22	1140	890	1315	325	22 / 30	75 - 190	41	125	30	44.9	35	51.8	716
30	5 - 13	1.16	3.98	30	1140	890	1315	365	30 / 40	75 - 190	41	143	40	44.9	35	51.8	805

\* V in relation to 8-bar operating overpressure at 50 Hz / 100 psi at 60 Hz  
heat recovery systems available from FLEX 6 model upwards (FLEX 6 / 7)

## 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	Piston compressors	Turbocompressors	Blower	Complete accessories	Control, regulate, monitor
<ul style="list-style-type: none"> <li>constant speed 2.2 – 500 kW/5 – 13 bars</li> <li>variable speed-controlled and direct drive 2.2 – 355 kW/5 – 13 bars</li> <li>oil-free, with water injection 1.5 – 85 kW/5 – 13 bars</li> </ul>	<ul style="list-style-type: none"> <li>oil-free, up to 10 bars 1.1 – 4 kW</li> <li>for normal pressure up to 10 bars 1.5 – 15 kW</li> <li>for medium pressure up to 15 bars 1.5 – 15 kW</li> <li>for high pressure up to 40 bars 2.2 – 45 kW</li> <li>as a booster for an input pressure up to 15 bars and an output pressure up to 40 bars 2.2 – 30 kW</li> </ul>	<ul style="list-style-type: none"> <li>for oil-free compressed air 65 – 1000 kW</li> <li>two-stage up to 9 bars</li> <li>three-stage up to 10 bars</li> </ul>	<ul style="list-style-type: none"> <li>at constant speed 1.5 – 55 kW 300 – 1000 mbars</li> <li>with speed control and direct drive 3 – 55 kW 300 – 1000 mbars</li> </ul>	<ul style="list-style-type: none"> <li>refrigerant dryers 0.27 – 100 m<sup>3</sup>/min</li> <li>desiccant dryers 0.08 – 145 m<sup>3</sup>/min</li> <li>activated carbon adsorbers 0.08 – 145 m<sup>3</sup>/min</li> <li>filters, all particle sizes 0.5 – 225 m<sup>3</sup>/min</li> <li>complete condensate management up to 120 m<sup>3</sup>/min</li> </ul>	<ul style="list-style-type: none"> <li>base load changeover controls</li> <li>consumption-related controls</li> <li>visualisation (we bring your compressed air to the PC)</li> <li>tele-monitoring (the hotline of your compressed air station)</li> </ul>



Your expert advisor