


www.almig.de

ALMIG
since 1923

SPEED-CONTROLLED SCREW COMPRESSORS

Volumetric flow rate: 0.18 – 4.12 m³/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 ³ | 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

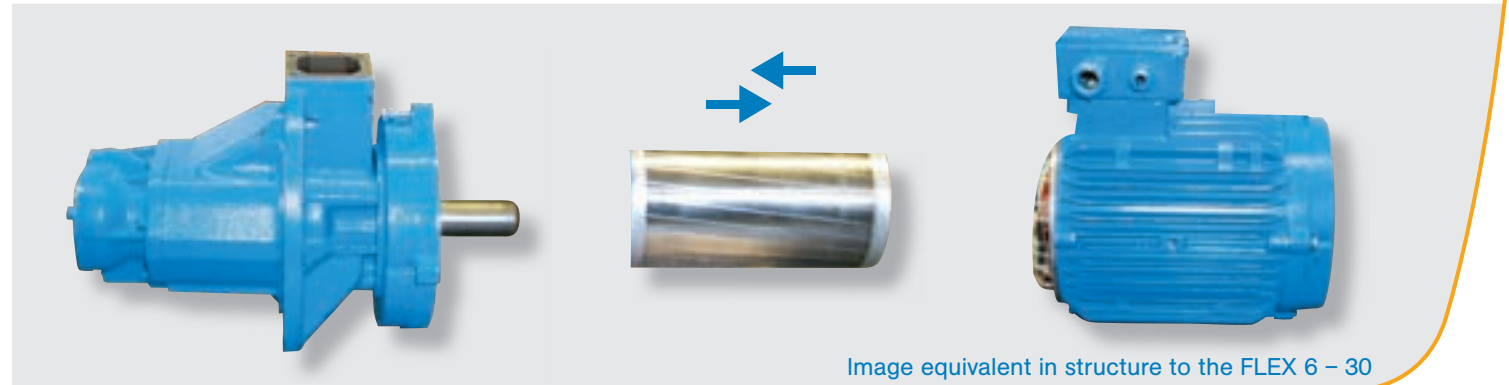


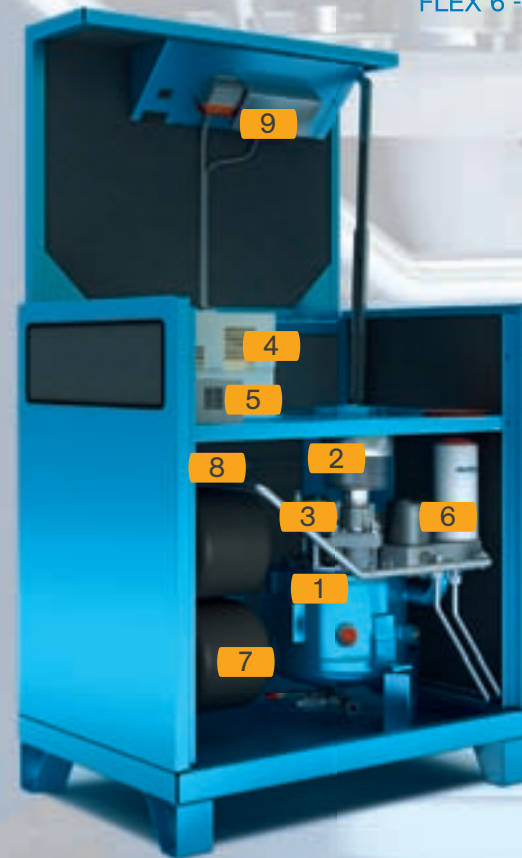
Image equivalent in structure to the FLEX 6 – 30

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.

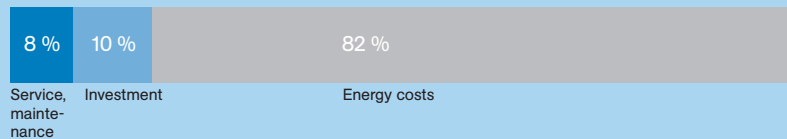
The reduced pressure thus achieves saves you money

- 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

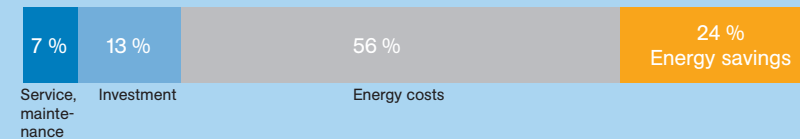
- a speed-controlled FLEX can increase the economic efficiency of up to eight large compressors immediately in the intelligent ALMiG „Master-Slave System“

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

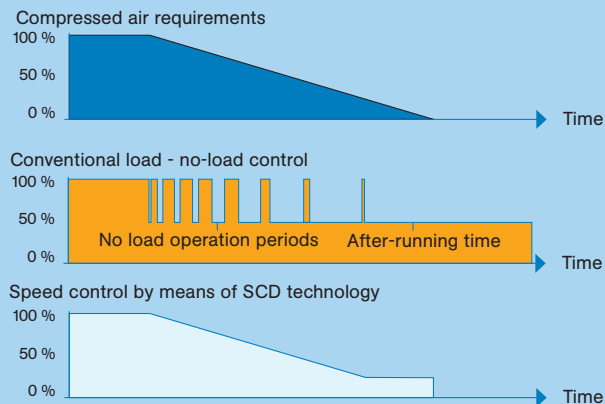
Standard screw compressor



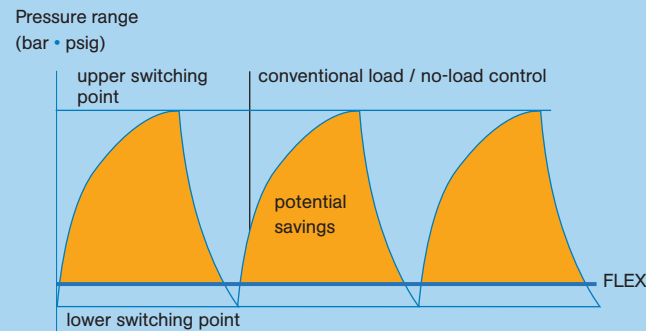
Series FLEX



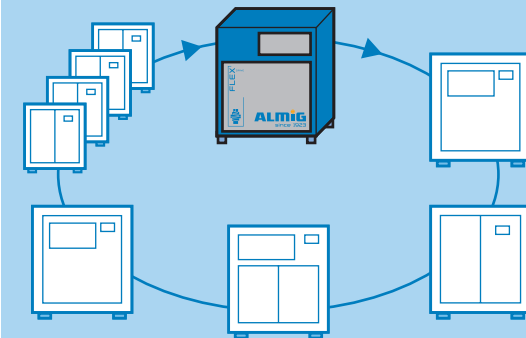
Adjusts volumetric flow rate exactly



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 ³ /min | m ³ /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"> constant speed 2.2 – 500 kW/5 – 13 bars variable speed-controlled and direct drive 2.2 – 355 kW/5 – 13 bars oil-free, with water injection 1.5 – 85 kW/5 – 13 bars | <ul style="list-style-type: none"> oil-free, up to 10 bars 1.1 – 4 kW for normal pressure up to 10 bars 1.5 – 15 kW for medium pressure up to 15 bars 1.5 – 15 kW for high pressure up to 40 bars 2.2 – 45 kW as a booster for an input pressure up to 15 bars and an output pressure up to 40 bars 2.2 – 30 kW | <ul style="list-style-type: none"> for oil-free compressed air 65 – 1000 kW two-stage up to 9 bars three-stage up to 10 bars | <ul style="list-style-type: none"> at constant speed 1.5 – 55 kW 300 – 1000 mbars with speed control and direct drive 3 – 55 kW 300 – 1000 mbars | <ul style="list-style-type: none"> refrigerant dryers 0.27 – 100 m³/min desiccant dryers 0.08 – 145 m³/min activated carbon adsorbers 0.08 – 145 m³/min filters, all particle sizes 0.5 – 225 m³/min complete condensate management up to 120 m³/min | <ul style="list-style-type: none"> base load changeover controls consumption-related controls visualisation (we bring your compressed air to the PC) tele-monitoring (the hotline of your compressed air station) |



Your expert advisor