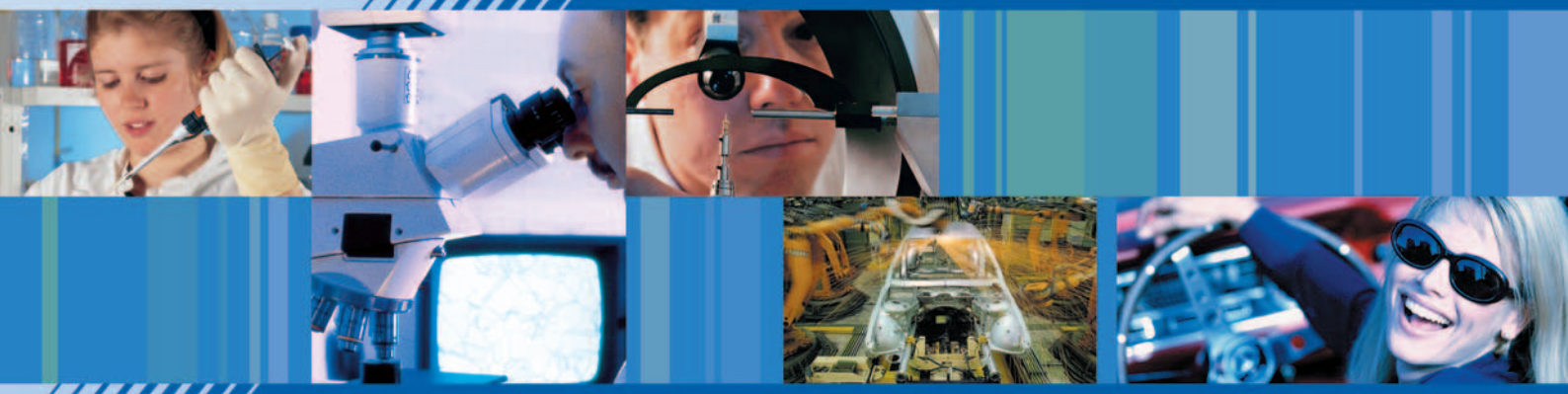
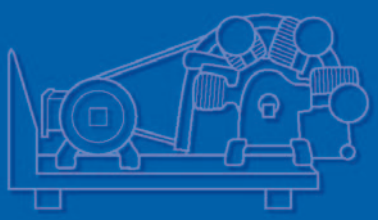
ALUP Kompressoren

Piston Compressors

Volume range:
235 – 10900 l/min





Intelligence, innovation, reliability

variable modular system

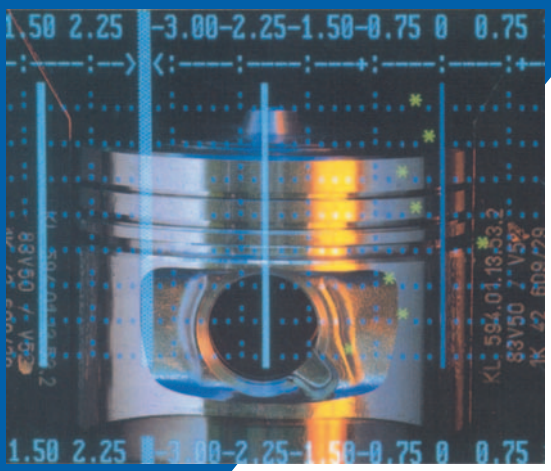
operationally reliable

low speeds

long operating life of valves

low noise emission

robust and durable



State-of-the-art compressed air technology

ALUP stands for a century of experience in compressor development and production.

This comprehensive know-how is particularly reflected in our piston compressor series, a compressor system for use under the toughest conditions in skilled trades applications as well as high-tech industries.

This piston compressor program from ALUP offers you the ultimate in robust reliability, oil-free and oil-lubricated. Regardless of whether you work in low-pressure, mid-pressure, or high-pressure ranges.

Our products reflect state-of-the-art technology according to the latest research applicable in the field; it goes without saying that they are all manufactured according to the ISO 9001 norms and conform to CE Directives.

The ideal entry into piston compressor technology

PRACTIC 2.2 / 50

PRACTIC 2.2 / 100

Further advantages of the PRACTIC series are:

- Small, compact, easy to handle for any application
- Ready for operation with oil fill and connecting cable
- Complete valves and safety equipment
- Maintenance-free transmission of forces due to direct drive of electric motor and compressor block
- Extended service life of the compressor due to highly efficient cooling, use of high-quality materials and careful assembly
- Experience with more than 1,000,000 piston compressors produced per year

The field of applications of modern piston compressors is versatile – from crafts through to industry.

The PRACTIC series was developed specifically for professional applications and meets all the demands that can be made in the exacting everyday operation in this area.

In addition, it offers a flexible, mobile and reliable supply of compressed air – and is extremely efficient and economical.

PRACTIC 1.8 / 2.5

PRACTIC 1.5 / 24

Type	*Tank volumes*	*Max. discharge pressure*	*Suction volume*	*Motor power*	*Speed*	*Length*	*Width*	*Height*	*Weight*	*Compressed air connection*
	l	*bar*	*l/min*	*kW*	*1/min*	*mm*	*mm*	*mm*	*kg*	*G"*
PRACTIC 1.5 / 24	24	10	265	1.5	1450	480	640	740	47	quick
PRACTIC 1.8 / 2.5	2.5	10	250	1.8	2850	455	320	500	17	quick
PRACTIC 2.2 / 50	50	10	350	2.2	1450	830	420	770	54	1 / 2
PRACTIC 2.2 / 100	100	10	350	2.2	1450	785	610	1320	80	quick

The ideal solution for handcraft and commercial applications

The HLE compressors from ALUP offer the optimal entry-level model for reliable compressed air supply.

They can be used everywhere to supply small amounts of compressed air either centrally or locally.

The top HLE-S series also gives you a super sound-insulated system with a sound pressure level of only 68 dB(A).

The "HLE package" includes:

- ready for operation, filled with oil, connecting cable
- complete fittings and safety devices
- dry air filter with air-intake grid
- robust metal V-belt protection screen
- high-quality pressure switch for automatic operation
- tank drain
- cylinder of grey cast iron as well as specially designed steel valves for long compressor operating life
- from 5.5 kW delivery possible with mounted delta-star starter (incl. main switch and running-time meter)

HLE on tank

HLE-S sound-insulated

HLE on tank (9/11 bar)

Type	Tank volumes l	Max. discharge pressure bar	Suction volume l/min	Motor power kW	Speed 1/min	Length mm	Width mm	Height mm	Weight kg	Compressed air connection G"
HLE 040912-50 R[1]	50	9	367	2,2	1200	860	380	710	50	1/2
HLE 040912-90 R[1]	90	9	367	2,2	1200	1070	390	800	69	1/2
HLE 040912-150	150	9	367	2.2	1050	1380	430	1050	85	1/2
HLE 050912-200	200	9	424	3.0	1450	1500	450	1100	125	1/2
HLE 041122-270	270	11	436	4.0	1250	1520	590	1150	157	1/2
HLE 071122-500	500	11	653	4.0	1370	2030	680	1400	275	1/2
HLE 081122-270	270	11	827	5.5	1450	1520	590	1260	210	1/2
HLE 081122-500	500	11	827	5.5	1450	2030	680	1400	275	1/2
HLE 081122-270[2]	270	11	827	5.5	1450	1520	590	1260	220	1/2
HLE 081122-500[2]	500	11	827	5.5	1450	2030	680	1400	285	1/2
HLE 121122-270[2]	270	11	1002	7.5	1300	1520	590	1260	210	1/2
HLE 121122-500[2]	500	11	1002	7.5	1300	2030	680	1400	325	1/2

HLE-S sound-insulated (11 bar)

Type	Max. discharge pressure bar	Suction volume l/min	Motor power kW	Speed 1/min	Length mm	Width mm	Height mm	Sound pressure dB(A)	Weight kg	Compressed air connection G"
HLE 07122 S	11	653	4.0	1370	1380	700	820	68	220	3/4
HLE 08122 S	11	827	5.5	1450	1380	700	820	68	265	3/4
HLE 08122 S[2]	11	827	5.5	1450	1380	700	820	68	270	3/4
HLE 12122 S[2]	11	1002	7.5	1300	1380	700	820	68	275	3/4

Air flow as per ISO 1217 annex C
Sound pressure level as per DIN 45 635 T13, 1m distance
[1] on wheels displaceable
[2] Compressor with star-delta switch cabinet

Full speed ahead to highest pressure

The Booster series in the power range 2.2 – 30 kW represents a comprehensive product mix of piston compressors whose main area of application is the post-compression of compressed air.

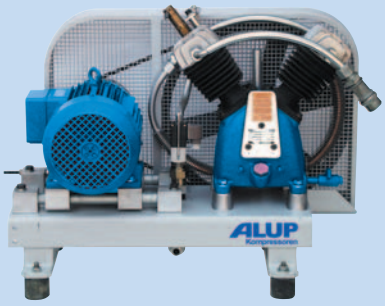
Boosters are employed wherever already pre-compressed air of up to 13 bar is available, or they are fed by a normal compressor on the intake side, and compress the air to the desired higher discharge pressure of maximal 40 bar in a second compression procedure – and this in a manner which is simple, safe, and without having to invest in a seperate highpressure network.

ALUP Boosters feature a compact design and a clear, service-friendly construction.

They are known for their efficient production of compressed air and long service life, also in 3-shift continuous operation.

The slowly running (speeds of up to 600 to 1450 min-1) air-cooled compressors can be adapted to almost any kind of operating conditions due to their modular construction. The standard version is designed for pre-pressures between 5 and 13 bar. Other pre-pressures upon request.

Booster-base unit



Booster on base frame

Booster (20/35/40 bar)

Type	*Min. pre-pressure bar*	*Max. discharge pressure bar*	*Air flow as per ISO 1217 at discharge pressure…*						*Motor nominal power in kW at discharge pressure…*						*Length Width Height mm*	*Compressed air connection G“*
			15 bar	*20 bar*	*25 bar*	*30 bar*	*35 bar*	*40 bar*	*15 bar*	*20 bar*	*25 bar*	*30 bar*	*35 bar*	*40 bar*		
Booster 2-42-55	5.00	**35**	440	420	410	400	390	–	2.2	2.2	2.2	3.0	3.0	–	1110 480 720	1/2
Booster 2-42-70	5.00	**20**	560	540	–	–	–	–	2.2	3.0	–	–	–	–	1110 480 720	1/2
Booster 2-42-74	5.00 7.50 10.00	**40**	720 1122 1470	689 1085 1440	671 1050 1405	646 1025 1385	634 995 1349	585 958 1305	3.0 3.0 3.0	3.0 3.0 4.0	3.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 5.5	4.0 5.5 5.5	1110 480 720	1/2
Booster 3-42-74	5.00 7.50 10.00	**40**	1300 1980 2590	1230 1910 2530	1190 1840 2480	1140 1800 2440	1110 1755 2330	1060 1700 2300	4.0 4.0 4.0	5.5 5.5 5.5	5.5 7.5 7.5	7.5 7.5 11.0	7.5 11.0 11.0	7.5 11.0 11.0	1110 590 720	3/4
Booster 2-50-72	7.50 10.00 13.00	**40**	2830 3570 –	2810 3550 4460	2790 3530 4440	2765 3515 4425	2750 3500 4410	2735 3485 4400	18.5 18.5 –	18.5 18.5 18.5	18.5 22.0 22.0	22.0 22.0 22.0	22.0 22.0 22.0	22.0 22.0 22.0	1380 1020 910	28 mm
Booster 2-60-72	7.50 10.00 13.00	**35**	4150 5290 –	4130 5270 6610	4110 5250 6590	4095 5235 6575	4080 5220 6560	– – –	18.5 18.5 –	18.5 18.5 22.0	18.5 22.0 22.0	22.0 22.0 22.0	22.0 22.0 22.0	– – –	1380 820 910	28 mm
Booster 3-60-72	7.50 10.00 13.00	**35**	6195 7900 –	6175 7880 9895	6155 7860 9875	6140 7845 9860	6125 7830 9845	– – –	22.0 22.0 –	22.0 22.0 30.0	22.0 30.0 30.0	30.0 30.0 30.0	30.0 30.0 30.0	– – –	1510 920 910	35 mm
Booster 3-50-72	7.50 10.00 13.00	**40**	4235 5390 –	4215 5370 6760	4195 5350 6745	4180 5335 6730	4165 5320 6715	4150 5305 6700	22.0 22.0 –	22.0 22.0 30.0	30.0 30.0 30.0	30.0 30.0 30.0	30.0 30.0 30.0	30.0 30.0 30.0	1510 1020 910	35 mm

Quality consciousness for commercial and industrial applications ... as built-in compressor ... on base frame ... on tank

The well-conceived modular HL series offers the solution to all kinds of applications even under the toughest industrial conditions up to 40 bar.

This equipment sets new standards with regard to quality, operational reliability, service life and operator convenience.

ALUP-HL pistons are renown for their efficient production of compressed air, also in 3-shift continuous operation.

The freestanding cylinders of grey cast iron have large cooling vanes and a powerful ventilator V-belt pulley, providing a highly effective cooling system for the lowest system temperatures and highest compressed air quality.

HL on base frame (10/15/35/40 bar)

Type	*Max. discharge pressure bar*	*Suction volume l/min*	*Air flow l/min*	*Number of cylinders*	*Motor power kW*	*Speed 1/min*	*Length mm*	*Width mm*	*Height mm*	*Weight kg*	*Compressed air connection G"*
HL 081012	**10**	693	512	2	4.0	660	1110	480	720	130	1/2
HL 091012	**10**	909	665	2	5.5	866	1110	480	720	160	1/2
HL 131013	**10**	1346	985	3	7.5	985	1360	500	720	210	3/4
HL 181013	**10**	1790	1338	3	11.0	1135	1360	590	720	230	3/4
HL 211014	**10**	1941	1456	4	11.0	815	1560	640	740	320	1
HL 221014	**10**	2227	1640	4	15.0	925	1620	640	740	330	1
HL 051522	**15**	515	420	2	4.0	975	1110	480	720	135	1/2
HL 081523	**15**	810	675	3	5.5	770	1110	480	720	165	3/4
HL 101523	**15**	1020	845	3	7.5	960	1360	500	720	165	3/4
HL 131523	**15**	1296	1075	3	11.0	1220	1360	590	720	185	3/4
HL 151524	**15**	1625	1360	4	11.0	910	1560	640	740	320	1
HL 201524	**15**	2090	1695	4	15.0	1170	1620	640	740	340	1
HL 221524	**15**	2335	1960	4	15.0	765	1870	650	800	410	1 1/2
HL 023522	**35**	210	160	2	2.2	675	1110	480	720	90	1/2
HL 033522	**35**	280	225	2	3.0	900	1110	480	720	95	1/2
HL 043522	**35**	400	292	2	4,0	780	1110	480	720	145	1/2
HL 053522	**35**	500	380	2	5.5	975	1110	480	720	155	1/2
HL 083523	**35**	800	525	3	7.5	765	1360	500	720	220	1/2
HL 103523	**35**	1050	710	3	11.0	1000	1360	590	720	220	1/2
HL 144033	**40**	1385	1100	3	18.5	1450	1300	900	950	410	18 mm
HL 284034	**40**	2809	2400	4	30.0	1500	1460	1080	1085	590	22 mm
HL 354034	**40**	3512	3020	4	45.0	1500	1570	1120	1085	670	22 mm

HL on tank (10/15/35 bar)

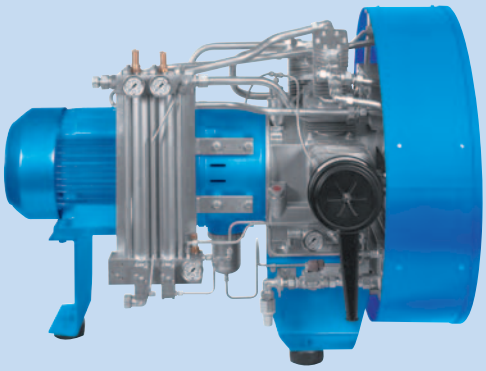
Typ	Tank volumes l	Max. discharge pressure bar	Suction volume l/min	Air flow l/min	Number of cylinders	Motor power kW	Speed 1/min	Length mm	Width mm	Height mm	Weight kg	Compressed air connection G"
HL 081012-270	270	**10**	693	512	2	4.0	660	1210	530	1380	290	1/2
HL 091012-270	270	**10**	909	665	2	5.5	866	1210	530	1380	290	1/2
HL 131013-500	500	**10**	1346	985	3	7.5	985	2010	530	1380	350	3/4
HL 181013-500	500	**10**	1790	1338	3	11.0	1135	2010	530	1380	370	3/4
HL 051522-270	270	**15**	515	420	2	4.0	975	1210	530	1380	280	1/2
HL 081523-500	500	**15**	810	675	3	5.5	770	2010	530	1380	350	3/4
HL 101523-500	500	**15**	1020	845	3	7.5	960	2010	530	1380	360	3/4
HL 131523-500	500	**15**	1296	1075	3	11.0	1220	2010	530	1380	380	3/4
HL 023522-250	250	**35**	210	160	2	2.2	675	1140	670	1390	310	1/2
HL 043522-500	500	**35**	400	292	2	4.0	780	2010	670	1390	445	3/4
HL 053522-500	500	**35**	500	380	2	5.5	975	2010	670	1390	455	3/4
HL 083523-500	500	**35**	800	525	3	7.5	765	2010	670	1390	520	3/4
HL 103523-500	500	**35**	1050	710	3	11.0	1000	2010	670	1390	545	3/4

Air flow as per ISO 1217 at 8 bar operating pressure for systems with 10 bar
at 12 bar operating pressure for systems with 15 bar
at 30 bar operating pressure for systems with 35 bar

Further significant advantages of the HL concept are:

- low speed and piston speed
- large intake and pressure valves
- large intake and pressure lines

for high total system efficiency.



HL-base unit

HL on base frame

HL on tank

The direct-drive industrial solution

The AKK, AEK and AGK ranges are air-cooled, single or two-stage, direct drive compressors.

In sum, they offer quality, operating safety, a long working life and operating convenience to the same standard as large systems and guarantee highest reliability and high efficiency.

A well thought-out modular system of proven design

Their compact construction and a well thought-out modular system make these compressors very flexible in application – they are capable of being adapted individually and reliably to all operating conditions.

The modular system includes:

- units on base plate for free-standing operation
- compressed air systems with diverse horizontal or vertical tanks (also with coupled refrigeration dryer)
- with or without sound insulation box

These modules and the power classes allow efficient use of the compressors, aligned with the requirement of the moment round the clock.

Innovative engineering, optimum design

The ranges set the technical tone by:

- good driving and emergency running characteristics through the use of special cylinder materials
- optimum oil supply by operationally safe immersion pin lubrication, which even supplies the drive with the required volume of oil when operating at an angle
- optimum balancing and low piston speeds provide silent running
- optimum cooling, as cylinders, cylinder heads and valves are favourably placed in the cooling air current from the axial fan and thus the heat of compression is drawn off to best effect, which significantly enhances the working life and the servicing interval
- standard production models are fitted with generously dimensioned coolers

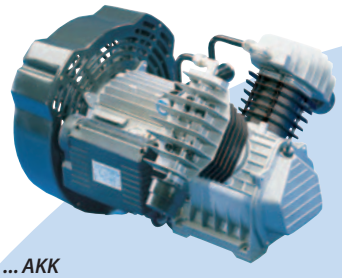
... equipment assembly on base frame

... on tank with coupled refrigeration dryer

... sound-insulated on tank

AKK (10 bar)

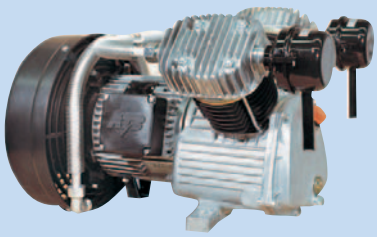
Type	Max. discharge pressure bar	Suction volume l/min	Air flow l/min	Motor power kW	Speed 1/min
AKK 301-D	**10**	301	185	1.5	1400



... AKK

AEK (10 bar)

Type	Max. discharge pressure bar	Suction volume l/min	Air flow l/min	Motor power kW	Speed 1/min
AEK 461	**10**	460	302	2.2	1400
AEK 601	**10**	600	410	3.0	1400
AEK 851	**10**	740	600	3.8	1400



... AEK

AGK-N (10 bar)

Type	Max. discharge pressure bar	Suction volume l/min	Air flow l/min	Motor power kW	Speed 1/min
AGK-N 271	**10**	270	210	1.5	1400
AGK-N 551	**10**	545	446	3.0	1400
AGK-N 751	**10**	740	594	4.0	1400

... AGK-N

AGK-H (15 bar)

Type	Max. discharge pressure bar	Suction volume l/min	Air flow l/mina	Motor power kW	Speed 1/min
AGK-H 271	**15**	270	196	1.5	1400
AGK-H 551	**15**	545	389	3.0	1400
AGK-H 751	**15**	740	510	4.0	1400

AKK / AEK / AGK series: effective output measured as per ISO 1217
at 8 bar for 10 bar systems
at 12 bar for 15 bar systems
Nominal voltage: 230/400 V ~ 3/50 Hz,
Dimensions and weights differ depending on the selected variant.

... AGK-H

The direct-driven industrial solution ... also oil-free

Oil-free pistons of the AKK-O and AGK-O series are used wherever absolutely no residual oil is permissible in the compressed air.

The following features distinguish the ALUP run-dry compressors and guarantee high efficiency and long service life:

- all pressure tanks galvanized
- good mass balance
- low piston speed
- excellent cooling
- compressor directly flanged with motor
- frictionless, noncorroding valves
- no-maintenance storage with synthetic high-temperature fat
- compression rings and piston guide made of filled Teflon
- cylinder made of special AL alloy with wear resistant finish

This series is available in the well-conceived modular structural principle as:

- compressor equipment assembly to be built in
- as equipment assembly on base frame for freestanding installation
- as compressed air system with diverse horizontal or vertical tanks (also with coupled refrigeration dryer)
- as dual system
- with or without sound-insulation box

AKK-O (7 bar)

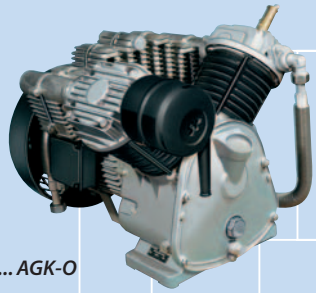
Type	Max. discharge pressure bar	Suction volume l/min	Air flow l/min	Motor power kW	Speed 1/min
AKK-O 236-D	**7**	230	144	1.1	1400

... AKK-O

AGK-O (10 bar)

Type	Max. discharge pressure bar	Suction volume l/min	Air flow l/min	Motor power kW	Speed 1/min
AGK-O 271	**10**	270	205	1.5	1400
AGK-O 551	**10**	545	441	3.0	1400
AGK-O 751	**10**	740	568	4.0	1400

AKK-O / AGK-O series: effective output measured as per ISO 1217
Nominal voltage: 230/400 V ~ 3/50 Hz,
Dimensions and weights differ depending on the selected variant.



... AGK-O

Total flexibility
You have the choice!

The A-Tower series offers you the chance to configure your piston compressor to individually fit your own internal needs yourself. Whether

- oil-free or oil-lubricated,
- with a single equipment assembly or up to 3 assemblies for generating compressed air,

you can decide whether to cover your air flow needs

- in increments, thus optimally adapting to the actual current compressed air requirement, or
- maintain redundant capacity with the provision of further compressors/emergency compressors.

The advantages of the A-Tower lie in its modular design. The sound-insulated housing provides space for plug-in modules for up to 3 piston equipment assemblies of the AGK/AGK-O series.

No matter which design variant you select, you get ALUP piston compressors of top-notch quality, engineered for 100 % active running time and hence totally geared to the hard demands of the industry. Make use of the opportunity to configure your compressor yourself.
Upgrades (up to max. 3 equipment assemblies) can naturally be implemented later upon request.

Purchased today, completed tomorrow – individually according to your needs.

The standard scope of delivery for this series comprises:

- Base load selective switching
- Safety valves per equipment assembly
- Running-time meter per equipment assembly
- Non-return valve per equipment assembly
- On/Off switch per equipment assembly
- Pressure gauge
- Zero-voltage contact

Additional options also available.

Type		Max. discharge pressure	Intake power l/min Number of equipment assemblies			Air flow l/min Number of equipment assemblies			Nominal motor power kW Number of equipment assemblies			Speed per equipment assembly	Length Width Height	Weight kg Number of equipment assemblies			Compressed air connection
A-Tower fitted with …		bar	1	2	3	1	2	3	1	2	3	1/min	mm	1	2	3	G"
AGK-N-271	oil-lubricated	10	270	540	810	210	420	630	1.5	3.0	4.5	1400	1600	352	394	436	1"
AGK-N-551	oil-lubricated	10	545	1090	1635	446	892	1338	3.0	6.0	9.0	1400	790	378	446	514	1"
AGK-N-751	oil-lubricated	10	740	1480	2220	594	1188	1780	4.0	8.0	12.0	1400	1800	388	466	544	1"
AGK-H-271	oil-lubricated	15	270	540	810	196	392	588	1.5	3.0	4.5	1400	1600	352	394	436	1"
AGK-H-551	oil-lubricated	15	545	1090	1635	389	778	1167	3.0	6.0	9.0	1400	790	378	446	514	1"
AGK-H-751	oil-lubricated	15	740	1480	2220	510	1020	1530	4.0	8.0	12.0	1400	1800	388	466	544	1"
AGK-O-271	oil-free	10	270	540	810	205	410	615	1.5	3.0	4.5	1400	1600	350	390	430	1"
AGK-O-551	oil-free	10	545	1090	1635	441	882	1323	3.0	6.0	9.0	1400	790	378	446	514	1"
AGK-O-751	oil-free	10	740	1480	2220	568	1136	1704	4.0	8.0	12.0	1400	1800	386	462	538	1"

effective output measured according to ISO 1217 annex C; at 8 bar for 10 bar systems, at 12 bar for 15 bar systems

Products, Concepts, Solutions

Built on the needs of the customer

For almost 100 years, we at ALUP have produced quality air compressors.

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 solutions to all users of compressed air.

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

Challenge us!

Screw compressors

- constant speed
  2.2 – 400 kW/
  5 – 13 bar
- variable speed controlled and direct drive
  5.5 – 260 kW/
  5 – 13 bar
- oil-free, with water injection
  15 – 55 kW/
  5 – 10 bar

Piston compressors

- oil-free,
  up to 10 bar
  1.1 – 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 40 bar
  2.2 – 45 kW
- as a booster for an input pressure up to 15 bar and an output pressure up to 40 bar
  2.2 – 30 kW

Blower

- at constant speed
  1.5 – 55 kW
  300 – 1000 mbar
- with speed regulator and direct drive
  3.0 – 55 kW
  300 – 1000 mbar

Turbo compressors

- oil-free,
  up to 9 bar
  65 – 370 kW

Complete accessories

- refrigeration dryers
  0.27 – 100 m^3/min
- desiccant dryers
  0.08 – 145 m^3/min
- activated carbon adsorbers
  0.08 – 145 m^3/min
- filters,
  all particle sizes
  0.5 – 225 m^3/min
- complete condensate management up to
  120 m^3/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

BELPneumatic doo
Preduzeće za trgovinu i usluge
Pirandelova 13
148355 Beograd
Srbija
tel./fax. + 381 11 347 25 46
mob. + 381 64 111 08 47
eMail. office@alup.rs
web. www.alup.rs

BELPneumatic

ALUP Kompressoren

www.alup.com

Leaflet_PISTON_gb_03_2007