SUPERIOR
QUALITY
INTELLIGENT
FUTURE

GESO SYSTEMS

Oil-free
Air Compressor

Installed motor power
3.7-355 kW/ 5-475 hp

Shanghai Geso Systems Industrial PLC

ISO9001

GESO SYSTEMS

Shanghai Geso Systems Industrial PLC
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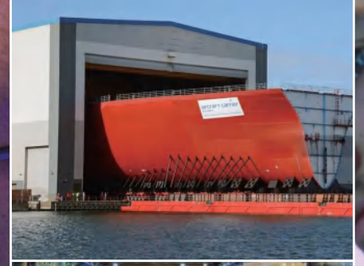
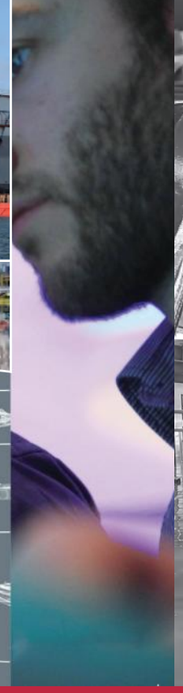
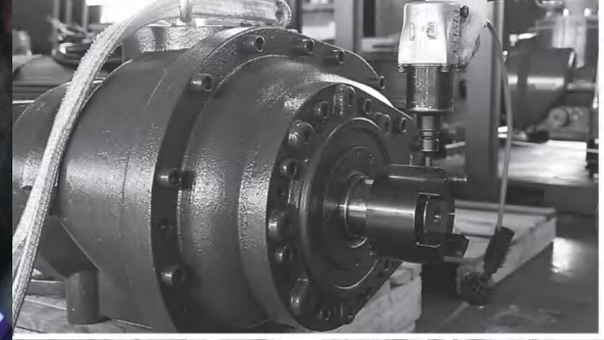






Company Profile

Superior Quality and Intelligent Future

Geso is a global aerodynamic systems group of companies,wholly owned by BAE GESO SYSTEMS,headquartered in London,United Kingdom,and a leader in the European gases sector.

BAE Systems,the parent company of Geso Group,was founded in 1871 and is committed to the research,development and production of industrial gases.In 2002,BAE Systems set up a representative office in China,importing products from the United Kingdom to China and deploying after-sales service offices in China. in 2018 BAE Systems established a wholly-owned company "Shanghai Geso systems Industrial PLC and invested 11 million U.S.dollars to build an intelligent production and manufacturing center.committed to R&D,production and market expansion.Our products include energy-saving screw air compressors,nitrogen/oxygen generators,dry oil-free air compressors,water-injected oil-free air compressors,mobile air compressors,process gas compressors,medium and high pressure screw air ompressors,centrifugal air compressors,etc,which are widely used in various industrial production.The group has three companies, "Shanghai Geso systems Industry PLC","Jiangsu Geso Equipment Co.Ltd.","Shangahi Geso Energy Equipment Co.Ltd."with over 30 branches and offices and more than 200 distributors nationwide,providing high-quality intelligent and energy-saving air compressor system solutions for various industries energy-saving programs to reduce users'cost to ensure their satisfaction with our energy-saving effect.We have been selected as one of the top ten brands for three consecutive years by third-party organizations such as China Brand Network.As a global aerodynamic system provider, we continue to lead the industry.

GESO SYSTEMS

Inheriting the advanced technology and production management mode of BAE Systems and combining the demands of the Chinese market to ensure users' production safety, Geso Group strictly Geso Group adhere to the group's product development process, with each new product undergoing 40 test projects and 3,000 hours of durability test to ensure quality from the source. Selecting IE5 energy-saving motors, ABB electronic control system, and threestage frequengy conversion energy-saving system to reduce energy consumption and CO2 emissions, meanwhile, through the optimized design and lowering the speed of the machine, it saves the cost for the customers and realizes small investment and big power. Self-developed intelligent technology(IoT) enables convenient interconnection and management of air compressors via computers, smartphones, and iPads, achieving automatic precise supply and meeting the demand for an unattended automation experience.

As a wholly foreign-owned enterprise, it is also the base authorized by British BAE Systems to produce and assemble screw compressors. We have obtained 1SO9001 quality system certification, ISO45001 occupational health and safety management system certification, ISO14001 environmental management system certification, certificate 0 oil-free certification, EU CE certification, energy efficiency certification of air compressors, 3A integrity system certification and other certificates, which fully guarantee the safety of users.

Through years of high-speed development, Geso Group has service outlets in more than 200 cities across the country, 24-hour service hotline response and internet warranty service, and thirteen direct spare parts warehouses to provide customers with repair services in a more rapid and timely manner. After-sales service is not limited to the

product itself, but also includs compressed air system testing and optimization, air compressor intelligent air supply control, waste heat recovery, frequency conversion, energy-saving piping, cables, construction of turnkey projects and a series of complete set of systematic services. Based on our service concept,

we promise lifelong exemption from labor charges, providing free training services for customers, regularly testing the data of users' energy efficiency reports, and developing energy-saving plans to reduce users' costs. As a group of companies, we carry the mission of innovation, quality, and service. Whether it is energy saving and environmental protection or intelligence, we always adhere to customer experience and the recognition of hardworking individuals as our core focus. Geso aims to build a globally recognized brand of fluid machinery and continue to be the industry leader in high-end energy-saving products.

Milestones

1871

The British head office was established as “BAE Marconi Electronic Systems” ,located in London, United Kingdom. In the same year, the first reciprocating compressor product was developed and produced, dedicated to research and development in the field of industrial gases.

1910

The company's main business has expanded to multiple fields: air compressors, nitrogen/oxygen air separation equipment, and integrated electronic products, while focusing on the research and development of its core product, the single-cylinder reciprocating air compressor, and mass production.

1999

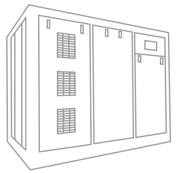
"BAE GESO SYSTEMS LTD." was established and developed the first twin-screw air compressor. Geso Systems became the brand name for shrinking machines. In 2000, the company developed and produced the first dry oil-free screw air compressor to the market, widely used in the medical, food, and electronics industries in Europe.

2000

The company developed and produced the first dry oil-free screw air compressor into the market,and is widely used in the European medical,food and electronics industries.

2002

BAE Group established a representative office in China, importing complete machine equipment originally produced in the United Kingdom for the Chinese market expansion. We have successfully entered the Chinese aerospace and high-precision manufacturing sectors.



2006

A total of 26 after-sales service operation networks have been established in China's provincial capital cities, fully deploying an after-sales service system to ensure rapid response and protect the user's experience and production safety.

2016

A warehousing and logistics center was established in Shanghai, China, to ensure the timely supply of complete machines and spare parts for the Chinese market.

2018

The British BAE Group registered and established "Shanghai Geso Systems Industrial PLC" in China and simultaneously set up a compressor assembly plant in Shanghai, China, with a registered capital of 11 million US dollars.

2021

Shanghai Geso Systems Industrial PLC. invested in and established "Jiangsu Geso Equipment Co., Ltd." and set up a nitrogen/oxygen air separation equipment sales company in Suzhou. In the same year, the second phase of the project to produce 300 sets of nitrogen/oxygen equipment was initiated at the Shanghai factory, along with the R&D and production of nitrogen/oxygen control equipment.

2022

Investment was made to establish "Shanghai Geso Energy Equipment Co., Ltd." and register some of the original offices in provincial capitals as branches, completing the separation of production and sales, and achieving efficient and convenient national market development and service.

Certificates

CE certfiate-EMC

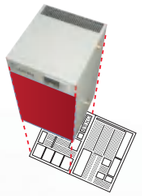
CERT IND-PC-C2108017

CE certfiate-MD

CERTIFICATES

01 Integrated Design

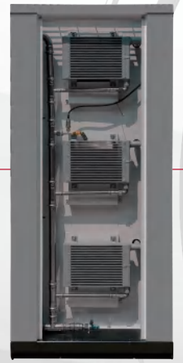
The simple case is small, quiet, clean, and beautiful, and it can be placed anywhere.



It can be moved easily after installing casters. The photo shows the condition with OCX-813 casters installed.

02 Separate Cooling System

Ensure the exhaust temperature: ≤ ambient temperature +15 ℃. The block-type frame structure makes maintenance checks easy.



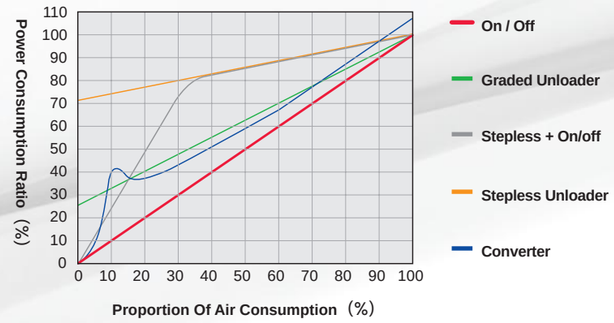
03 Automatic belt adjustment

The belt tension is adjusted by the motor's self-weight adjustment method, eliminating the need for human adjustment.

04 Multi-level Intelligent Control

By placing multiple compression air ends in one chassis, free-running multi-stage control is carried out according to the actual demand for compressed air volume, thus eliminating unnecessary operation and achieving energy-saving results.

In the unlikely event of a failure, the multiple compression air ends housed in the chassis will back up the switchover without causing concerns about stopping the compressed air supply.



05 No Oil Lubrication Required, Clean Air Is Discharged.

A clean environment can be maintained because the drainage water is also clean, thanks to the standard option of a rust-proof gas storage.

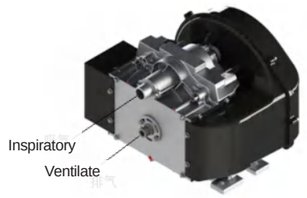
Stainless Steel Tank For Compressor Option

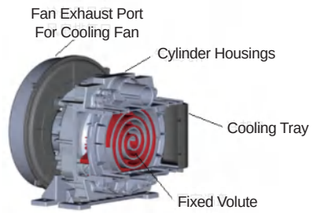
Oil-free
scroll air compressor

The oil-free scroll compressor from Geso is small and quiet and does not require oil lubrication,so the air is clean.

Providing You With Oil And Water Free, High Quality Compressed Air.

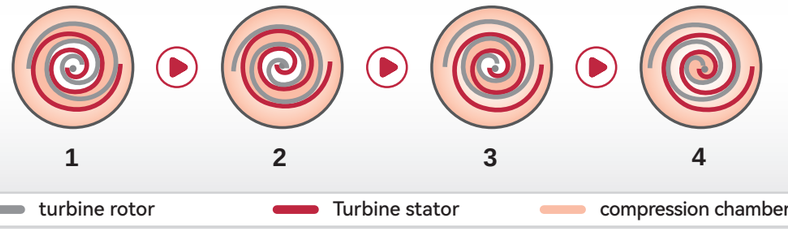
The main parts are made of original British Geso components, ensuring low running costs while prolonging the service life.





Working Principle

The turbine rotor rotates in the order shown in Figure 1→2→3→4. Air is sucked into the space between the turbine stator and the turbine rotor. The volume of the crescent-shaped (point-symmetric) compression chamber gradually becomes smaller, compressing the air, which is then discharged from the exhaust port in the center part.



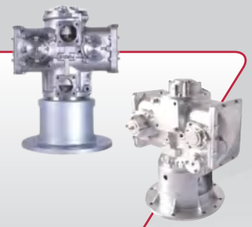
Technical Parameter

Model	Working Pressure (Mpa)	Air Delivery (m³/min)	Power (kW)	Dimensions (L*W*H) mm			Weight (kg)	Outlet Pipe Diameter	Pcs	Remark
BAE-4WS	0.8	0.40	3.7	610	730	930	200	G3/4"(F)	1*0.4	
	1.0	0.33								
BAE-4WS-ND	0.8	0.40		1750	820	1700	350	G3/4"(M)	1*0.4	Built-in integrated 200L
	1.0	0.33								
BAE-4WS-WD	0.8	0.40		1300	840	1555	300	G3/4"	1*0.4	External integrated 200L
	1.0	0.33								
BAE-5.5WS	0.8	0.60	5.5	610	730	930	220	G3/4"(F)	1*0.6	
	1.0	0.49								
BAE-5.5WS-ND	0.8	0.60		1750	820	1700	380	G3/4"(M)	1*0.6	Built-in integrated 200L
	1.0	0.49								
BAE-5.5WS-WD	0.8	0.60		1300	840	1555	320	G3/4"	1*0.6	External integrated 200L
	1.0	0.49								
BAE-7.5WS	0.8	0.80	7.5	1140	700	1100	350	G1"(F)	2*0.4	
	1.0	0.66								
BAE-11WS	0.8	1.20	11	1140	700	1100	400	G1"(F)	2*0.6	
	1.0	0.98								
BAE-16.5WS	0.8	1.80	16.5	1140	700	1575	500	G1"(F)	3*0.6	
	1.0	1.50								
BAE-22WS	0.8	2.40	22	1550	1140	1100	800	G1"(F)	4*0.6	
	1.0	2.00								
BAE-27WS	0.8	3.00	27.5	1550	1140	1575	1080	G1"(F)	5*0.6	
	1.0	2.40								
BAE-33WS	0.8	3.60	33	1550	1140	1575	1200	G1"(F)	6*0.6	
	1.0	3.00								
BAE-38.5WS	0.8	4.20	38.5	2150	1450	1630	1400	G2"(F)	7*0.6	
	1.0	3.60								
BAE-44WS	0.8	4.80	44	2150	1450	1630	1520	G2"(F)	8*0.6	
	1.0	4.00								
BAE-49WS	0.8	5.40	49.5	2150	1450	1630	1650	G2"(F)	9*0.6	
	1.0	4.50								

The Company Has The Right To Change The Design For The Continuous Improvement Of The Products,and The Parameters Will Be Changed Without Prior Notice.

Water-lubricated
oil-free air compressor

1 Geso customized oil-free single screw air end



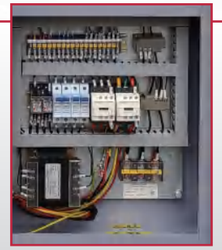
■ Symmetrical structure and return hole setting balance the radial and axial forces generated during the operation of the single screw compressor. The star wheel in the water film lubrication rotates freely with the screw, ensuring smooth operation under low load and prolonging the service life.

■ Using water as the medium for compression sealing and cooling effectively reduces operational costs.

2 Water filter

Filters lubrication water to ensure clean lubrication water for compression sealing and cooling.

3 Electronic control system



■ Intelligent control system with good human-machine communication interface.

■ Uses multi-channel pressure sensors and multi-channel temperature sensors to comprehensively detect the unit's running state and control the machine's operation intelligently.

■ Configuration of the Internet of Things allows real-time viewing of the operating status of the unit on a cell phone, eliminating the need for on-site supervision.

4 Motor

■ Selection of high-quality cast iron and optimized structural design make the motor more efficient.

■ Brand bearings, IP54 protection grade, F class insulation grade, suitable for severe working conditions such as big dust and high temperature. IE3 high energy motor uses less electricity, saving costs.

■ The motor's large margin design and large starting torque meet various working condition environments.

5 Plate coolers (water-cooled)

■ Made of corrugated-shaped metal sheets stacked together, the material is corrosion-resistant, easy to clean, and has a high service life.

■ Has a large heat transfer area for higher efficiency.

6 Specialized valves

Inlet valve

The valve body is made of corrosion-resistant material with a heavy hammer structure, providing accurate and rapid air volume control, low pressure loss, high integration, no wearing parts, simple maintenance, and easy adjustment.

Minimum pressure maintaining valve

The body is made of corrosion-resistant material, with low pressure loss, fast return to the seat, and no reflux with gas.

Relief valve

The direct-acting relief valve has a reliable structure. When the oil pressure exceeds the set value, the oil is directed to the oil storage tank, stabilizing the oil pressure.

7 Ion exchange water softener

■ Fully automatic control of operation and regeneration processes, eliminating the need for manual operation.

■ Uses ion exchange resin to reduce the hardness of raw water, softening hard water to avoid scaling and protect the system.

■ The ion exchange resin is renewable, reducing operational costs.

Technical Parameter

Model	Working Pressure (Mpa)	Air Delivery (m³/min)	Moter Power (kW)	Dimensions (mm)			Weight (kg)	Lubricating water(L)	Outlet Pipe Diameter
				L	W	H			
BAEW-7A	0.7	1.2	7.5	1100	760	1060	297	25	G3/4"
	0.8	1.1							
	1.0	0.9							
BAEW-11A	0.7	1.7	11	1156	845	1250	353	25	G3/4"
	0.8	1.6							
	1.0	1.4							
BAEW-15A	0.7	2.6	15	1306	945	1219	510	30	G1"
	0.8	2.5							
	1.0	2.0							
BAEW-18A	0.7	3.2	18.5	1520	1060	1323	600	35	G1"
	0.8	3.0							
	1.0	2.5							
BAEW-22A	0.7	3.9	22	1520	1060	1323	650	35	G1"
	0.8	3.6							
	1.0	3.0							
BAEW-30A	0.7	5.2	30	1760	1160	1412	800	70	G1 1/4"
	0.8	5.0							
	1.0	4.4							
BAEW-37A	0.7	6.4	37	1760	1160	1412	853	70	G1 1/4"
	0.8	6.1							
	1.0	5.7							
BAEW-45A	0.7	8.1	45	1760	1160	1412	878	90	G1 1/4"
	0.8	7.5							
	1.0	6.8							
BAEW-55W	0.7	11.0	55	1900	1250	1361	1017	90	G2"
	0.8	10.2							
	1.0	9.0							

Note: BAEW: oil-free water lubrication,
A: air-cooled,
W: water-cooled.

Technical Parameter

Model	Working Pressure (Mpa)	Air Delivery (m³/min)	Moter Power (kW)	Dimensions (mm)			Weight (kg)	Lubricating water(L)	Outlet Pipe Diameter
				L	W	H			
BAEW-75W	0.7	13.2	75	1900	1250	1361	1333	110	G2"
	0.8	12.8							
	1.0	10.0							
BAEW-90W	0.7	16.0	90	1900	1250	1361	1264	110	G2"
	0.8	14.9							
	1.0	13.0							
BAEW-110W	0.7	20.5	110	2200	1600	1735	1785	130	DN65
	0.8	19.5							
	1.0	17.6							
BAEW-132W	0.7	25.8	132	2200	1600	1735	2069	130	DN65
	0.8	23.5							
	1.0	20.6							
BAEW-160W	0.7	28.0	160	2200	1600	1735	2900	165	DN65
	0.8	26.0							
	1.0	24.6							
BAEW-185W	0.7	30.5	185	2860	1800	1945	3000	180	DN100
	0.8	29.5							
	1.0	25.0							
BAEW-200W	0.7	37.0	200	2900	1800	1950	3005	180	DN100
	0.8	34.0							
	1.0	28.0							
BAEW-220W	0.7	38.0	220	2860	2000	2300	4500	180	DN100
	0.8	36.0							
	1.0	30.0							
BAEW-250W	0.7	43.0	250	2860	2000	2300	4700	180	DN100
	0.8	41.0							
	1.0	38.0							

Note: BAEW: oil-free water lubrication,
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Technical Parameter

Model	Working Pressure (Mpa)	Air Delivery (m³/min)	Moter Power (kW)	Dimensions (mm) L	W	H	Weight (kg)	Lubricating water(L)	Outlet Pipe Diameter
BAEW-5APM	0.7	0.6	5.5	1100	760	1060	297	20	G3/4"
	0.8	0.5							
	1.0	0.4							
BAEW-7APM	0.7	1.2	7.5	1100	760	1060	297	25	G3/4"
	0.8	1.0							
	1.0	0.8							
BAEW-11APM	0.7	1.6	11	1156	845	1250	353	25	G3/4"
	0.8	1.4							
	1.0	1.2							
BAEW-15APM	0.7	2.2	15	1306	945	1219	510	30	G1"
	0.8	2.0							
	1.0	1.8							
BAEW-18APM	0.7	3.2	18.5	1520	1060	1323	600	35	G1"
	0.8	2.8							
	1.0	2.5							
BAEW-22APM	0.7	3.6	22	1520	1060	1323	650	35	G1"
	0.8	3.3							
	1.0	2.9							
BAEW-30APM	0.7	5.3	30	1760	1160	1412	800	65	G1 1/4"
	0.8	4.7							
	1.0	4.3							
BAEW-37APM	0.7	6.0	37	1760	1160	1412	853	65	G1 1/4"
	0.8	5.6							
	1.0	5.0							
BAEW-45APM	0.7	7.7	45	1760	1160	1412	878	90	G1 1/4"
	0.8	7.3							
	1.0	5.8							
BAEW-45WPM	0.7	7.7	45	1760	1160	1412	878	90	G1 1/2"
	0.8	7.3							
	1.0	5.8							
BAEW-55WPM	0.7	10.0	55	1900	1250	1361	1017	110	G2"
	0.8	9.0							
	1.0	7.8							
BAEW-75WPM	0.7	13.0	75	1900	1250	1361	1333	110	G2"
	0.8	12.0							
	1.0	10.0							
BAEW-90WPM	0.7	16.8	90	1900	1250	1361	1264	110	G2"
	0.8	15.0							
	1.0	14.0							
BAEW-110WPM	0.7	20.0	110	2200	1600	1735	1785	130	DN65
	0.8	18.5							
	1.0	17.0							

Note: BAEW: oil-free water lubrication,
A: air-cooled, W: water-cooled
PM: permanent magnet frequency converter.

Technical Parameter

Model	Working Pressure (Mpa)	Air Delivery (m³/min)	Moter Power (kW)	Dimensions (mm) L	W	H	Weight (kg)	Lubricating water(L)	Outlet Pipe Diameter
BAEW-132WPM	0.7	25.0	132	2200	1600	1735	2069	130	DN65
	0.8	23.0							
	1.0	20.0							
BAEW-160WPM	0.7	27.0	160	2200	1600	1735	2900	165	DN65
	0.8	25.5							
	1.0	24.0							
BAEW-185WPM	0.7	30.0	185	2860	1800	1945	3000	180	DN100
	0.8	28.5							
	1.0	26.0							
BAEW-200WPM	0.7	32.0	200	2900	1800	1950	3005	180	DN100
	0.8	30.0							
	1.0	28.0							
BAEW-220WPM	0.7	36.0	220	2860	2000	2300	4500	180	DN100
	0.8	34.0							
	1.0	31.0							
BAEW-250WPM	0.7	40.0	250	2860	2000	2300	4700	180	DN100
	0.8	38.0							
	1.0	36.0							
BAEW-315WPM	0.7	50.0	315	2860	2000	2300	5000	180	DN100
	0.8	46.0							
	1.0	43.0							

Note: BAEW: oil-free water lubrication, A: air-cooled, W: water-cooled, PM: permanent magnet frequency converter.

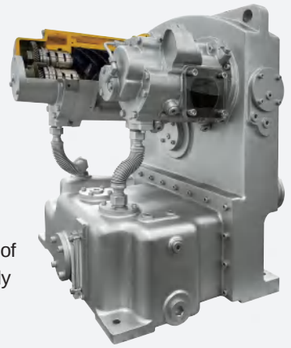
Technical Parameter

Model	Working Pressure (Mpa)	Air Delivery (m³/min)	Moter Power (kW)	Dimensions (mm) L	W	H	Weight (kg)	Outlet Pipe Diameter
BAEW-7LA	0.4	1.6	7.5	1156	845	1250	353	Rp3/4"
BAEW-11LA	0.4	2.2	11	1306	945	1219	510	Rp1"
BAEW-22LA	0.4	5.0	22	1760	1160	1412	800	Rp1 1/4"
BAEW-37LW	0.4	8.1	37	2220	1250	1880	1400	Rp2"
BAEW-45LW	0.4	10.0	45	2220	1250	1880	1427	Rp2"
BAEW-55LW	0.4	13.0	55	2520	1460	1880	1642	Rp2"
BAEW-75LW	0.4	15.0	75	2520	1460	1880	1620	Rp2"
BAEW-90LW	0.4	20.0	90	2200	1600	1735	2318	DN65
BAEW-110LW	0.4	26.0	110	2200	1600	1735	2900	DN65
BAEW-132LW	0.4	30.0	132	2860	1800	1945	3000	DN100
BAEW-160LW	0.4	33.0	160	2860	1800	1945	3005	DN100
BAEW-185LW	0.4	40.0	185	2860	1800	1945	4700	DN100
BAEW-200LW	0.4	45.0	200	2860	1800	1945	5000	DN100

Note: A: air-cooled, W: water-cooled, L: low pressure

Dry Oil-free
screw air compressor

01 Dry Two-stage Air End



- Original GESO/GHH air end, with the first stage of the air end casing adopting air cooling method, and the second stage casing compartment adopting filtered lubricating oil cooling, avoiding the generation of scale and ensuring reliable operation.
- The secondary rotor is specially coated for corrosion resistance. The rotor and the inner wall of the compression chamber are coated with a sturdy layer to prevent corrosion and coating peeling, extending the service life of the main unit.

Separation of air and oil chambers.
Wear-free sealing system with a stainless steel spring-loaded metal ring on the air side and a copper labyrinth seal on the lubricant side, both operating without contact.

02 Motors

Asynchronous motor

- Brand bearings, IP54 protection level, F class insulation level, suitable for large dust, high temperature and other harsh working conditions.
- IE3 high energy motor, use less electricity, save cost.
- Motor large margin design, large starting torque, to meet a variety of working conditions.

Permanent magnet synchronous motor

- Adoption of 180℃ high temperature resistant permanent magnet material effectively ensures the effective operation of the permanent magnet unit.
- Protection class IP54 fully enclosed structure.
- IE4 energy efficiency reaches the latest international class I energy efficiency.

04 Intelligent Electronic Control System

- Intelligent control system with good human-machine communication inter face.
- Comprehensive detection of the operating status of the unit by multi-channel pressure sensors and multi-channel temperature sensors, intelligent program control of machine operation.
- Configuration of the Internet of Things, cell phone can be real-time view of the operating status of the unit, without the need for a person on-site supervision.

05 Silent Centrifugal Fans

- Adopting centrifugal fan, new design of separated radial cooling fan, high air pressure, low noise, with special cooler, better effect.
- Adopting frequency conversion fan control, the oil temperature is constant and unchanged, prolonging the service life of lubricating oil.
- Due to high wind pressure, coolers and filters are not easily blocked.

06 Couplings

- Torsionally flexible couplings with fail-safe function can effectively reduce vibration and shock generated during operation.
- The elastomer is subjected to pressure only and can withstand greater loads, and the elastomer's drum-shaped teeth avoid stress concentrations.

Technical Parameter

Model	Power (kW)	Working Pressure (Mpa)	Air Delivery (m³/min)	Dimensions (L*W*H) mm	Weight (kg)	Outlet Pipe Diameter
BAEO-37	37	0.75	6.30	2150*1370*1910	2080	DN50
		0.85	5.50			
		1.00	4.20			
BAEO-45	45	0.75	7.98	2150*1370*1910	2170	DN50
		0.85	7.20			
		1.00	6.21			
BAEO-55	55	0.75	9.85	2150*1370*1910	2200	DN50
		0.85	8.97			
		1.00	7.88			
BAEO-75	75	0.75	12.85	2150*1370*1910	2290	DN50
		0.85	12.11			
		1.00	11.05			
BAEO-90	90	0.75	16.01	2150*1370*1910	2330	DN65
		0.85	14.59			
		1.00	12.86			
BAEO-110	110	0.75	20.00	2700*1590*2360	3080	DN65
		0.85	18.98			
		1.00	17.33			
BAEO-132	132	0.75	24.10	2700*1590*2360	3170	DN65
		0.85	23.09			
		1.00	22.09			
BAEO-160	160	0.75	28.40	2700*1590*2360	3210	DN65
		0.85	26.20			
		1.00	24.10			
BAEO-185	185	0.75	34.80	2700*1590*2360	3430	DN65
		0.85	29.30			
		1.00	28.40			
BAEO-200W	200	0.75	37.40	3050*1932*2060	4400	DN100
		0.85	35.30			
		1.00	31.20			
BAEO-220W	220	0.75	42.50	3050*1932*2060	4400	DN100
		0.85	38.30			
		1.00	33.50			
BAEO-250W	250	0.75	46.08	3050*1932*2060	4580	DN100
		0.85	43.04			
		1.00	38.30			
BAEO-280W	280	0.75	49.60	3050*1932*2060	4580	DN100
		0.85	46.65			
		1.00	42.64			
BAEO-315W	315	0.75	53.40	3350*2130*2200	6350	DN125
		0.85	51.23			
		1.00	48.50			
BAEO-355W	355	0.75	65.30	3350*2130*2200	6750	DN125
		0.85	59.40			
		1.00	55.20			

Note: BAEO：dry type without oil, W： indicates water-cooled type, no suffix indicates air-cooled type.

The Company Has The Right To Change The Design For The Continuous Improvement Of The Products,and The Parameters Will Be Changed Without Prior Notice.

Technical Parameter

Model	Power (kW)	Working Pressure (Mpa)	Air Delivery (m³/min)	Dimensions (L*W*H) mm	Weight (kg)	Outlet Pipe Diameter
BAEO-37V	37	0.75	4.41-6.30	2150*1370*1910	2080	DN50
		0.85	3.85-5.50			
		1.00	2.94-4.20			
BAEO-45V	45	0.75	4.71-7.71	2150*1370*1910	2170	DN50
		0.85	4.62-7.31			
		1.00	3.85-6.32			
BAEO-55V	55	0.75	5.55-9.92	2150*1370*1910	2200	DN50
		0.85	5.05-8.94			
		1.00	4.60-7.88			
BAEO-75V	75	0.75	7.52-12.87	2150*1370*1910	2290	DN50
		0.85	7.23-12.51			
		1.00	6.47-11.22			
BAEO-90V	90	0.75	9.37-16.05	2150*1370*1910	2330	DN65
		0.85	8.66-14.52			
		1.00	7.58-12.92			
BAEO-110V	110	0.75	11.63-19.94	2700*1590*2360	3080	DN65
		0.85	11.36-19.12			
		1.00	11.65-17.31			
BAEO-132V	132	0.75	13.56-24.10	2700*1590*2360	3170	DN65
		0.85	13.54-22.76			
		1.00	11.55-19.83			
BAEO-160V	160	0.75	15.42-28.40	2700*1590*2360	3210	DN65
		0.85	15.03-26.20			
		1.00	13.83-23.66			
BAEO-185V	185	0.75	17.93-32.80	2700*1590*2360	3430	DN65
		0.85	17.53-28.55			
		1.00	15.53-26.85			
BAEO-200WV	200	0.75	21.03-36.40	3050*1932*2060	4400	DN100
		0.85	20.53-33.44			
		1.00	17.93-29.82			
BAEO-220WV	220	0.75	24.90-42.00	3050*1932*2060	4400	DN100
		0.85	22.40-37.50			
		1.00	19.80-33.20			
BAEO-250WV	250	0.75	28.05-46.20	3050*1932*2060	4580	DN100
		0.85	25.55-43.63			
		1.00	22.57-38.32			
BAEO-280WV	280	0.75	32.20-48.80	3050*1932*2060	4580	DN100
		0.85	30.45-47.50			
		1.00	29.05-45.00			
BAEO-315WV	315	0.75	35.07-52.50	3350*2130*2200	6350	DN125
		0.85	33.25-50.60			
		1.00	31.15-48.50			
BAEO-355WV	355	0.75	42.91-65.20	3350*2130*2200	6750	DN125
		0.85	40.95-59.30			
		1.00	38.64-55.20			

Note: BAEO：dry type without oil,
V：air-cooled and inverter,
WV：water-cooled and inverter.

The Company Has The Right To Change The Design For The Continuous Improvement Of The Products,and The Parameters Will Be Changed Without Prior Notice.

Dry Oil-free
screw air compressor

Technical Parameter

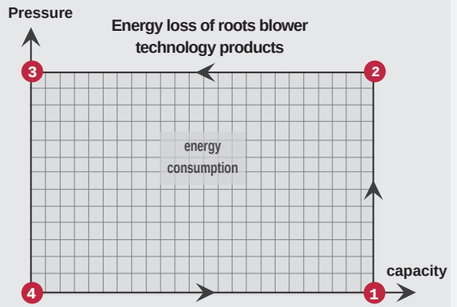
Model	Power (kW)	Working Pressure (bar)	Air Delivery (m^3/min)	Dimensions (L*W*H) mm	Weight (kg)	Outlet Pipe Diameter
BAEO-37LSPM	37	1.5	13.5	2150*1370*1910	2200	DN65
		2.0	12.6			
		2.5	10.5			
		3.0	9.0			
		3.5	7.5			
BAEO-45LSPM	45	1.5	16.5	2150*1370*1910	2300	DN65
		2.0	14.8			
		2.5	13.0			
		3.0	10.5			
		3.5	8.5			
BAEO-55LSPM	55	1.5	20.5	2700*1590*1840	2800	DN100
		2.0	18.5			
		2.5	16.0			
		3.0	13.5			
		3.5	10.5			
BAEO-75LSPM	75	1.5	26.5	2700*1590*1840	2900	DN100
		2.0	22.8			
		2.5	20.5			
		3.0	19.2			
		3.5	15.5			
BAEO-90LSPM	90	1.5	32.8	2700*1590*1840	3100	DN100
		2.0	29.0			
		2.5	26.0			
		3.0	22.5			
		3.5	20.2			
BAEO-110LSPM	110	1.5	43.6	2820*2052*1876	3300	DN125
		2.0	40.5			
		2.5	33.3			
		3.0	30.8			
		3.5	26.8			
BAEO-132LSPM	132	1.5	55.0	2820*2052*1876	3500	DN125
		2.0	50.5			
		2.5	43.5			
		3.0	40.8			
		3.5	33.8			
BAEO-160LSPM	160	1.5	65.5	2820*2052*1876	3800	DN125
		2.0	60.5			
		2.5	52.5			
		3.0	46.5			
		3.5	40.8			
BAEO-200LSPM	200	1.5	85.0	2820*2052*1876	4000	DN125
		2.0	72.5			
		2.5	60.5			
		3.0	55.0			
		3.5	50.5			

Note: BAEO: dry type without oil,
L: Low Pressure,
SPM: Model of Super High Energy Efficiency

Oil-free *Screw Blower*

Geso Oil-Free Screw Blowers
Better than conventional Roots fans Energy saving
25%~35%
Investment pays for itself in **1-2 years**

Roots Blower Pressure/Volume Chart



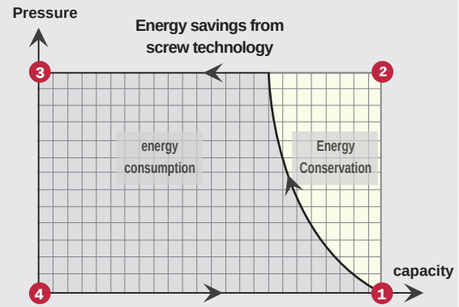
The gray area indicates the compression work, which is proportional to the energy consumed

4→1: Intake:
Air enters the compression chamber and the volume remains stable as the Roots fan rotates.

1→2: External compression:
The air is compressed externally by the back pressure of the connected pipes.

2→3: Exhaust:
Air is expelled from the pipe.

Screw Blower Pressure/Volume Chart



The gray area: indicates the compression work, which is proportional to the energy consumed.

The white areas: indicate the energy savings of a screw blower compared to a conventional Roots blower. These savings are generated by internal compression.

4→1: Intake:
Air enters the compression chamber.

1→2: internal compression:
Since the rotors are toothed to each other, the air volume will be reduced.

2→3: Exhaust:
Air is expelled from the pipe.

Oil-free *Screw Blower*

Oil-free Screw Blower

High Efficiency **Stable** **Highly Efficient**

At present, roots blowers are widely used in all walks of life, but its inherent characteristics of high energy consumption and high noise are inconsistent with the current environment of green environmental protection, energy saving and emission reduction. Oil-free screw blowers are designed and manufactured using oil-free screw compressor technology experience, making oil-free screw blowers with high efficiency, low noise and 100% oil-free, and inefficient roots blowers will be phased out.

Energy Efficient Compressor Element

- Adoption of Geso high-efficiency type profile creates high-efficiency and energy-saving compressor element, and advanced coating technology improves the volumetric efficiency while effectively protecting the rotor.
- SKF branded bearings for reliability.
- Adoption of high-grade precision synchronous gears ensures reliability and prolongs service life.
- Spiral seal assembly ensures oil-free air to reach higher levels Unique lubrication and oil drainage channels allow bearings and gears to be well lubricated and cooled, while enhancing the efficiency of the compressor element.

Low Noise

- Roots blowers do not have internal compression, resulting in the exhaust network of higher pressure air back to the compression chamber, the formation of gas impact, resulting in high low-frequency air noise, and equipment vibration is also very large.
- The screw blower has internal compression, its compression chamber exhaust pressure is close to the pipe network pressure, exhaust smooth, greatly reducing the vibration and noise of the unit.
- The noise of the screw fan is concentrated in the high-frequency section, which in turn can be dealt with by silencers as well as acoustic noise reduction measures.
- The noise of the screw blower is about 30db(A) lower than that of the Roots blower.
- After analyzing the sound source spectrum, the professionally designed and customized intake silencer and exhaust silencer greatly reduce the transmission of noise from the oil-free screw compressor to the outside world.
- The whole oil-free screw blower is closed with soundproof cover. The inlet air is processed through a specially designed noise reduction inlet channel before entering the chassis. The noise inside the chassis is minimized and transmitted to the outside world.

Large Flow

- The Geso blower was measured according to the latest version of the ISO1217 appendix, which specifies that the FAD flow rate should be measured at the outlet of the unit, with all losses deducted.
- There is a significant difference between the flow and pressure stated in Geso's blower specifications as what is available to the customer and not the intake of the blower.

Oil-free Air

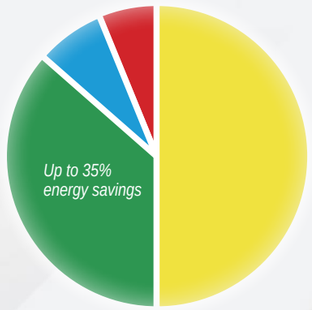
Precision-designed labyrinth seal and screw seal assembly ensure that the compression chamber is completely oil-free, providing users with clean and pollution-free low-pressure air.

The sealing assembly has no mechanical friction and is more reliable while consuming less power.

Oil-free *Screw Blower*

Frequency conversion control leads to a significant reduction in energy consumption

Energy consumption accounts for more than 80% of the life cycle cost of compressors and blowers. The actual air demand of most users is variable, and in almost any environment where air demand fluctuates with different factors (daily weekly or even monthly), inverter technology not only means energy savings, but also protects the environment.

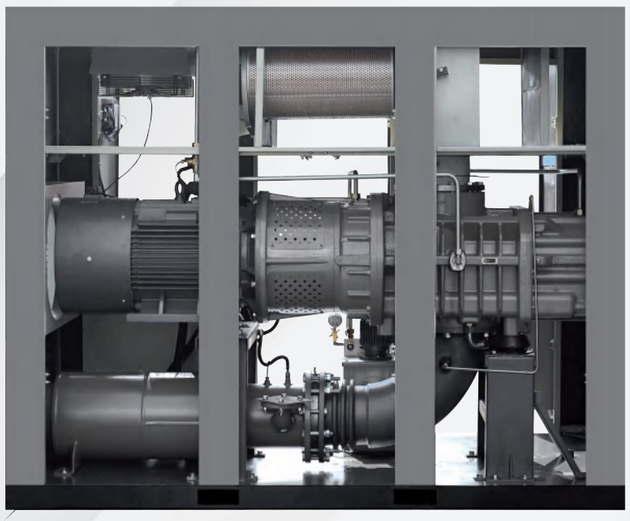


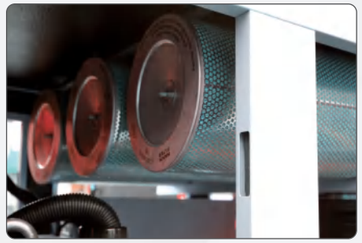
Up to 35% energy savings

Geso technology saves up to 35% of energy by automatically adjusting motor speeds in close response to changes in air demand. Blower life cycle costs are reduced by an average of 22% Additionally, Geso reduces the pressure in the system, dramatically minimizing your overall production energy consumption.

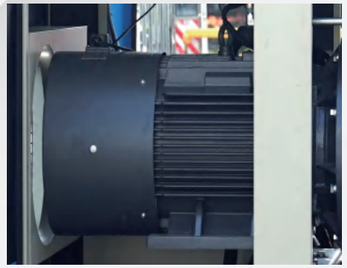
Total life cycle cost of compressor and blower

●Energy consumption ●Energy savings ●Investment ●Maintenance





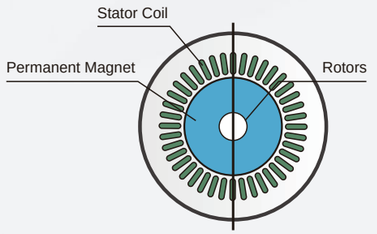
Permanent magnet motor drive



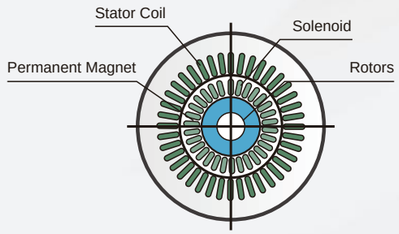
■ **High efficiency:** The excitation system loss is canceled, which improves the efficiency by 5-12%. High power factor, large torque-to-inertia ratio, reduced stator current and stator resistance loss, and measurable rotor parameters and good control performance. No matter light load or heavy load, it always maintains high efficiency. Geso adopts permanent magnet motor with national class 1 energy efficiency standard.

■ **Not full load, still high efficiency:** Permanent magnet motor energy efficiency in full load operation than the conventional asynchronous motor is generally higher than 9%, with the speed down, its energy efficiency basically remains unchanged, while asynchronous motor speed with the reduction of its energy efficiency will be greatly reduced, or even reduced to less than 50%.

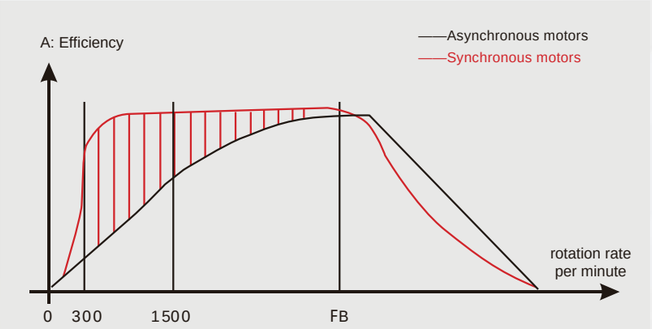
■ **Stability:** Synchronous motors respond quickly and excel in exhaust responsiveness.



Permanent Magnet Synchronous Motor



ordinary asynchronous motor



Energy Efficiency Curves for Synchronous and Asynchronous Motors

Technical Parameter

Model	Power (kW)	Working Pressure (bar)	Air Delivery (m³/min)	Dimensions (L*W*H) mm	Weight (kg)
BAOG-22APM	22	0.4	20.0	1900*1350*1650	1450
		0.6	16.0		
		0.8	13.0		
BAOG-30APM	30	0.4	28.0	1900*1350*1650	1450
		0.6	24.0		
		0.8	17.6		
		1.0	14.4		
BAOG-37APM	37	0.4	38.0	1900*1350*1650	1500
		0.6	30.0		
		0.8	26.5		
		1.0	21.0		
		1.2	16.8		
		1.5	13.0		
BAOG-45APM	45	0.4	46.0	1900*1350*1650	1600
		0.6	37.0		
		0.8	31.5		
		1.0	25.5		
		1.2	21.0		
		1.5	16.0		
BAOG-55APM	55	0.4	58.0	1900*1350*1650	1800
		0.6	46.0		
		0.8	40.0		
		1.0	34.0		
		1.2	26.5		
		1.5	20.0		
BAOG-75APM	75	0.4	74.0	2600*1450*2000	2100
		0.6	69.5		
		0.8	54.0		
		1.0	46.0		
		1.2	40.0		
		1.5	30.0		
BAOG-90APM	90	0.4	95.0	2600*1450*2000	2300
		0.6	80.0		
		0.8	67.0		
		1.0	58.0		
		1.2	50.0		
		1.5	40.0		

Note: BAOG: oil-free air blower,
A: indicates air-cooled type,
PM: indicates permanent magnet frequency conversion.

Technical Parameter

Model	Power (kW)	Working Pressure (bar)	Air Delivery (m³/min)	Dimensions (L*W*H) mm	Weight (kg)
BAOG-110APM	110	0.4	100.0	2600*1450*2000	2500
		0.6	96.0		
		0.8	75.0		
		1.0	68.0		
		1.2	60.0		
		1.5	50.0		
BAOG-132APM	132	0.4	173.0	2903*1450*2000	2800
		0.6	140.0		
		0.8	100.0	2600*1450*2000	2600
		1.0	80.0		
		1.2	68.0		
		1.5	60.0		
BAOG-160APM	160	0.6	160.0	2900*1650*2100	3000
		0.8	125.0		
		1.0	100.0		
		1.2	85.0		
		1.5	68.0		
BAOG-185APM	185	0.6	172.0	2900*1650*2100	3200
		0.8	140.0		
		1.0	124.0		
		1.2	98.0		
		1.5	88.0		
BAOG-200APM	200	0.8	160.0	3500*2050*2300	4500
		1.0	146.0		
		1.2	124.0		
		1.5	98.0	2900*1650*2100	3300
BAOG-220APM	220	0.8	172.0	3500*2050*2300	4800
		1.0	146.0		
		1.2	124.0		
		1.5	112.0		
BAOG-250APM	250	1.0	172.0	3500*2050*2300	5000
		1.2	160.0		
		1.5	135.0		
BAOG-280APM	280	1.2	171.0	3500*2050*2300	5300
		1.5	150.0		
BAOG-315APM	315	1.5	169.0	3500*2050*2300	5800

Note: BAOG: oil-free air blower,
A: indicates air-cooled type,
PM: indicates permanent magnet frequency conversion.

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