Technical Parameters of the Atmospheric Pressure Oil-Free Spray Single Screw Air Compressor

Model	Pressure MPa	Flow Rate m^3/min	Power kW/HP	Weight kg	Air Inlet	Length x Width x Height mm
(P)OGWFD-2.6/7	0.7	2.6	15/20	552	G1	1500×870×1245
(P)OGWFD-2.3/8	0.8	2.3				
(P)OGWFD-2.0/10	1.0	2.0				
(P)OGWFD-3.5/7	0.7	3.5	22/30	600	G1	1500×870×1245
(P)OGWFD-3.2/8	0.8	3.2				
(P)OGWFD-2.7/10	1.0	2.7				
(P)OGWFD-5.2/7	0.7	5.2	30/40	1030	G1½	1850×1178×1480
(P)OGWFD-5.0/8	0.8	5.0				
(P)OGWFD-3.6/10	1.0	3.6				
(P)OGWFD-6.1/7	0.7	6.1	37/50	1030	G1½	1850×1178×1480
(P)OGWFD-5.8/8	0.8	5.8				
(P)OGWFD-5.1/10	1.0	5.1				
(P)OGWD-7.6/7	0.7	7.6	45/60	1532	G2	2210×1360×1575
(P)OGWD-7.0/8	0.8	7.0				
(P)OGWD-6.0/10	1.0	6.0				
(P)OGWD-9.8/7	0.7	9.8	55/75	1630	G2	2210×1360×1575
(P)OGWD-9.1/8	0.8	9.1				
(P)OGWD-8.0/10	1.0	8.0				
(P)OGWFD-7.6/7	0.7	7.6	45/60	2200	G2	2210×1360×1700
(P)OGWFD-7.0/8	0.8	7.0				
(P)OGWFD-6.0/10	1.0	6.0				
(P)OGWFD-9.8/7	0.7	9.8	55/75	2280	G2	2210×1360×1700
(P)OGWFD-9.1/8	0.8	9.1				
(P)OGWFD-8.0/10	1.0	8.0				
(P)OGWD-13.0/7	0.7	13.0	75/100	2270	DN65	2160×1370×1705
(P)OGWD-12.0/8	0.8	12.0				
(P)OGWD-11.0/10	1.0	11.0				
(P)OGWD-16.0/7	0.7	16.0	90/125	2315	DN65	2160×1370×1705
(P)OGWD-15.8/8	0.8	15.8				
(P)OGWD-14.0/10	1.0	14.0				
(P)OGWFD-13.0/7	0.7	13.0	75/100	2510	DN65	2130x1370x2010
(P)OGWFD-12.0/8	0.8	12.0				
(P)OGWFD-11.0/10	1.0	11.0				
(P)OGWFD-16.0/7	0.7	16.0	90/125	Complete : 2315 Air-Cooling : 700	DN65	Complete : 2160×1370×1705 Air-Cooling :1670×1670×1835
(P)OGWFD-15.8/8	0.8	15.8				
(P)OGWFD-14.0/10	1.0	14.0				
(P)OGWD-19.6/7	0.7	19.6	110/150	2695	DN80	2600×1470×1680
(P)OGWD-18.9/8	0.8	18.9				
(P)OGWD-16.5/10	1.0	16.5				
(P)OGWD-23.3/7	0.7	23.3	132/180	2785	DN80	2600×1470×1680
(P)OGWD-21.6/8	0.8	21.6				
(P)OGWD-19.3/10	1.0	19.3				
(P)OGWFD-19.6/7	0.7	19.6	110/150	Complete : 2695 Air-Cooling : 700	DN80	Complete : 2600×1470×1680 Air-Cooling : 1670×1670×1835
(P)OGWFD-18.9/8	0.8	18.9				
(P)OGWFD-16.5/10	1.0	16.5				
(P)OGWFD-23.3/7	0.7	23.3	132/180	Complete : 2785 Air-Cooling : 700	DN80	Complete : 2600×1470×1680 Air-Cooling : 1670×1670×1835
(P)OGWFD-21.6/8	0.8	21.6				
(P)OGWFD-19.3/10	1.0	19.3				
(P)OGWD-29.0/7	0.7	29.0	160/215	2930	DN80	3410×1865×2190
(P)OGWD-28.0/8	0.8	28.0				
(P)OGWD-33.8/7	0.7	33.8	185/250	2960	DN80	3410×1865×2190
(P)OGWD-31.5/8	0.8	31.5				
(P)OGWD-28.8/10	1.0	28.8				
(P)OGWD-36.0/7	0.7	36.0	200/270	2960	DN80	3410×1865×2190
(P)OGWD-34.0/8	0.8	34.0				
(P)OGWD-30.0/10	1.0	30.0				
(P)OGWD-39.0/7	0.7	39.0	220/300	3320	DN80	3410×1865×2190
(P)OGWD-37.0/8	0.8	37.0				
(P)OGWD-33.0/10	1.0	33.0				
(P)OGWD-42.5/7	0.7	42.5	250/340	3620	DN80	3410×1865×2190
(P)OGWD-41.5/8	0.8	41.5				
(P)OGWD-39.0/10	1.0	39.0				

Note:
1. The "P" in the model indicates a permanent magnet variable frequency model, while the absence of "P" indicates a power frequency model.
2. The "F" in the model indicates an air-cooled model, while the absence of "F" indicates a water-cooled model.
3. The weight listed refers to the power frequency model; the permanent magnet model may have different weight.
4. This series of products can be customized. Please contact your local sales manager for more details.

KAISHAN

OIL-FREE

Oil-free Water-injection Single-Screw Air Compressor

15-250kW





Company Introduction

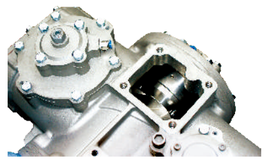
KAISHAN Air Compressor

Founded in 1956, KAISHAN Air Compressor has grown to become one of the leading enterprises in the field of air compression equipment in China. Headquartered in Hangzhou, Zhejiang Province, the company has multiple production bases and a global sales and service network. KAISHAN is dedicated to the research, development, and production of high-efficiency, energy-saving air compressor technology, committed to providing high-quality air compressor equipment and comprehensive solutions for customers worldwide.

KAISHAN Air Compressor offers a wide range of advanced products, including screw compressors, piston compressors, refrigerant dryers, oil filters, air storage tanks, and other pneumatic equipment. The company not only focuses on the performance and quality of its products but also actively promotes the application of green and environmentally friendly technologies, with a design philosophy centered on efficiency, energy conservation, and sustainability.

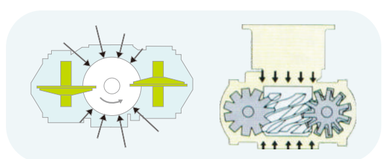
KAISHAN invests heavily in technology R&D and has established strong partnerships with renowned international technology institutions to ensure the advancement of its technology and the high performance of its products. The company emphasizes intelligent manufacturing and leverages digital technologies to achieve precise product control, further enhancing equipment reliability and service life.

Kaishan Oil-Free Water-Injection Advantages

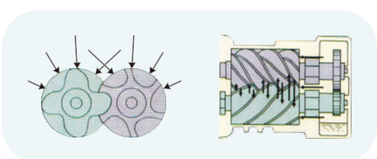


Kaishan Overcomes Three Major Technical Challenges

- **High reliability in solving mechanical seals between bearings and compression chambers.**
- **Compressor unit and entire system are resistant to corrosion.**
- **Overcomes the low viscosity of water to solve gear meshing gap sealing.**



Single-Screw Stress Diagram



Twin-Screw Stress Diagram



Water Filter

The casing is made of stainless steel, and the specially designed filter element offers high filtration precision and long lifespan, ensuring the system remains clean and free from impurities.



Removable Water-Cooled Heat Exchanger

Made from special stainless steel, it offers corrosion resistance and high heat transfer efficiency. The compact design uses less cooling water, has low pressure loss, and is durable and easy to maintain.

Human-Machine Interface System



Featuring a user-friendly design, advanced automatic control technology, easy operation, fault diagnosis, and reminder functions. It also provides an RS485 communication port for potential interlock control.



Diaphragm-type Minimum Pressure Valve

Patented invention with large diameter, oil-free, and long lifespan characteristics.



Water Level Controller

Accurately monitors the water level in the system, automatically controls water supply, drainage, and water replacement.



Air Filter

Equipped with a pre-filter function and a pleated filter element, it has low pressure loss, high dust-holding capacity, and is durable.



Intake Valve

Features large diameter, oil-free operation, and long lifespan; allows stepless adjustment of intake volume from 0 to 100%.





Water Softener

Uses ion exchange principles to remove scale-forming factors from water, effectively preventing the formation of scale in the system, thus reducing maintenance costs.



Solenoid Valve

A solenoid valve from a renowned brand is selected based on water quality conditions, offering compact structure, quick action, and features like water hammer resistance.

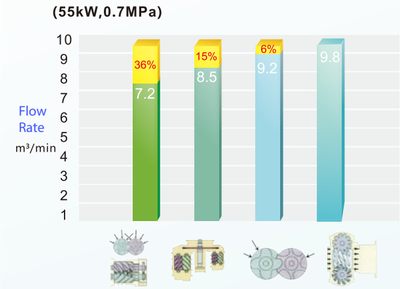


Compressor Unit

Made from special materials, using advanced global sealing systems that integrate mechanical seals, air curtain chambers, labyrinth seals, and bypass passages.

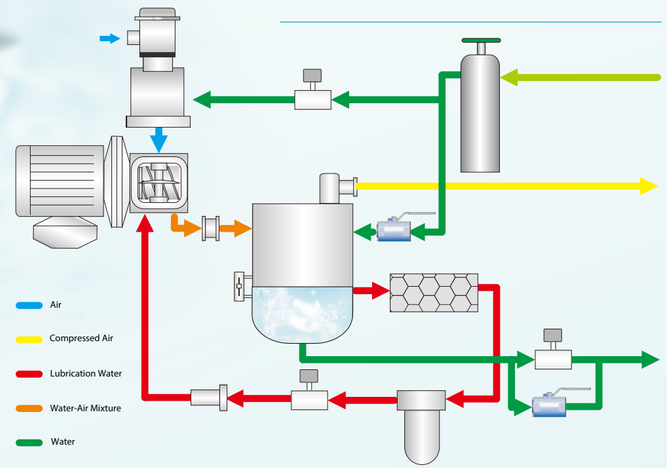
Kaishan Oil-Free Water-Injection Air Compressor Energy-Saving Advantages

(55kW,0.7MPa)

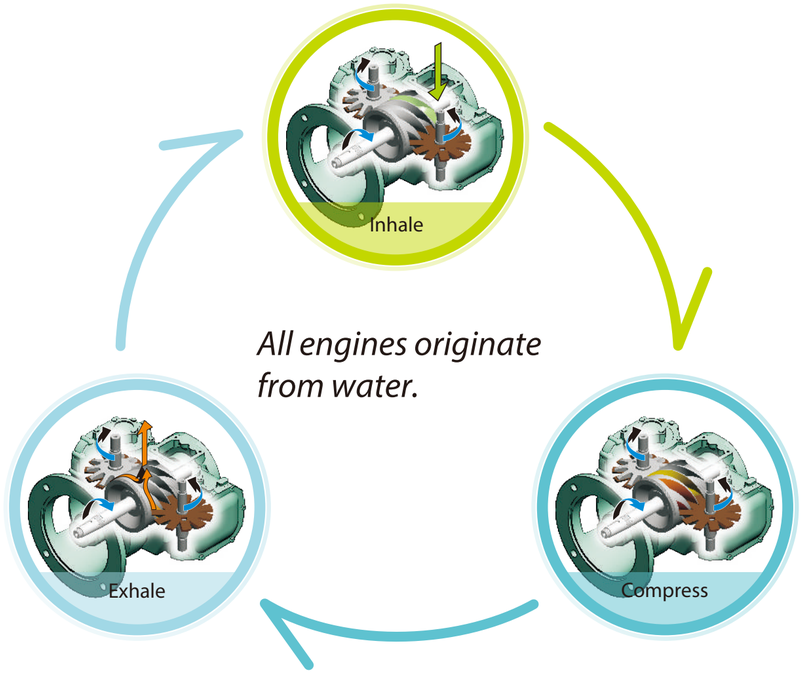


1.Dry Single-Stage Compression
2.Dry Two-Stage Compression
3.Water-Injection Twin-Screw
4.Kaishan Oil-Free Water-Injection

System Diagram



Energy-Efficient | *Oil-Free* | *Reliable* | *Low Noise*



All engines originate from water.

Super energy-saving

The unit applies Zhengli Precision's original three-line meshing and non-equal width tooth technology, utilizing proprietary processing techniques. This overcomes the low viscosity of water, maintaining high volumetric efficiency. Through spray atomization cooling, the system ensures nearly isothermal compression.

High reliability

The unit uses a stainless steel main engine, with main engine parts made of special stainless steel that offers excellent wear and corrosion resistance. This material is more durable than coated materials and eliminates the need for rust prevention maintenance.

Oil-free

The main engine uses water spray cooling and sealing, with an advanced patented sealing system between the compression chamber and bearings, ensuring the entire system is oil-free.

Low noise

The single screw is balanced in both axial and radial forces, with the star wheel freely rotating with the screw under water film lubrication. As a result, the main engine components operate smoothly under low load, ensuring low noise and durability.

3bar Low-Pressure Oil-Free Screw Air Compressor Technical Parameters

Model	Pressure MPa	Flow Rate m^3/min	Power kW/HP	Weight kg	Air Inlet	Length x Width x Height mm
(P)OGWD-21.6/3	0.3	21.6	75/100	2530	DN80	2600×1470×1680
(P)OGWFD-21.6/3	0.3	21.6	75/100	Complete : 2530 Air-Cooling : 700	DN80	Complete : 2600×1470×1680 Air-Cooling : 1670×1670×1835

3.5bar Low-Pressure Oil-Free Screw Air Compressor Technical Parameters

Model	Pressure MPa	Flow Rate m^3/min	Power kW/HP	Weight kg	Air Inlet	Length x Width x Height mm
(P)OGWD-23.3/3.5	0.35	23.3	90/125	2575	DN80	2600×1470×1680
(P)OGWFD-23.3/3.5	0.35	23.3	90/125	Complete : 2575 Air-Cooling : 700	DN80	Complete : 2600×1470×1680 Air-Cooling : 1670×1670×1835
(P)OGWD-36.0/3.5	0.35	36.0	132/180	2990	DN125	3410×1865×2190

4bar Low-Pressure Oil-Free Screw Air Compressor Technical Parameters

Model	Pressure MPa	Flow Rate m^3/min	Power kW/HP	Weight kg	Air Inlet	Length x Width x Height mm
(P)OGWD-9.8/4	0.4	9.8	45/60	1545	DN65	2210×1360×1575
(P)OGWFD-9.8/4	0.4	9.8	45/60	2195	DN65	2210×1360×1700
(P)OGWD-12.5/4	0.4	12.5	55/75	2155	DN65	2160×1370×1705
(P)OGWFD-12.5/4	0.4	12.5	55/75	2510	DN65	2130x1370x2010
(P)OGWD-19.3/4	0.4	19.3	75/100	2530	DN80	2600×1470×1680
(P)OGWFD-19.3/4	0.4	19.3	75/100	Complete : 2530 Air-cooled :700	DN80	Complete : 2600×1470×1680 Air-cooled :1670×1670×1835
(P)OGWD-23.3/4	0.4	23.3	90/125	2575	DN80	2600×1470×1680
(P)OGWFD-23.3/4	0.4	23.3	90/125	Complete : 2575 Air-cooled :700	DN80	Complete : 2600×1470×1680 Air-cooled :1670×1670×1835
(P)OGWD-28.0/4	0.4	28.0	110/150	2825	DN100	3410×1865×2190
(P)OGWD-32.0/4	0.4	32.0	132/180	2990	DN125	3410×1865×2190
(P)OGWD-39.0/4	0.4	39.0	160/215	3145	DN125	3410×1865×2190

5bar Low-Pressure Oil-Free Screw Air Compressor Technical Parameters

Model	Pressure MPa	Flow Rate m^3/min	Power kW/HP	Weight kg	Air Inlet	Length x Width x Height mm
(P)OGWD-9.8/5	0.5	9.8	45/60	1545	DN65	2210×1360×1575
(P)OGWFD-9.8/5	0.5	9.8	45/60	2195	DN65	2210×1360×1700
(P)OGWD-15.6/5	0.5	15.6	75/100	2530	DN80	2600×1470×1680
(P)OGWFD-15.6/5	0.5	15.6	75/100	Complete :2530 Air-cooled :700	DN80	Complete :2600×1470×1680 Air-cooled :1670×1670×1835
(P)OGWD-19.6/5	0.5	19.6	90/120	2575	DN80	2600×1470×1680
(P)OGWFD-19.6/5	0.5	19.6	90/120	Complete :2575 Air-cooled :700	DN80	Complete : 2600×1470×1680 Air-cooled:1670×1670×1835
(P)OGWD-23.3/5	0.5	23.3	110/150	2695	DN80	2600×1470×1680
(P)OGWFD-23.3/5	0.5	23.3	110/150	Complete : 2695 Air-cooled: 700	DN80	Complete : 2600×1470×1680 Air-cooled:1670×1670×1835
(P)OGWD-29.0/5	0.5	29.0	132/180	2920	DN100	3410×1865×2190
(P)OGWD-36.0/5	0.5	36.0	160/215	3145	DN125	3410×1865×2190
(P)OGWD-39.0/5	0.5	39.0	185/250	3215	DN125	3410×1865×2190
(P)OGWD-43.0/5	0.5	43.0	200/270	3285	DN125	3410×1865×2190

Note:
1. The presence of "P" in the model indicates a permanent magnet variable frequency model, while the absence of "P" indicates a standard frequency model.
2. The presence of "F" in the model indicates an air-cooled model, while the absence of "F" indicates a water-cooled model.
3. The weight parameter refers to the weight of the standard frequency model; the weight of the permanent magnet model may vary.
4. This series of products can be customized. For specifics, please contact the local sales manager.