GAIRS

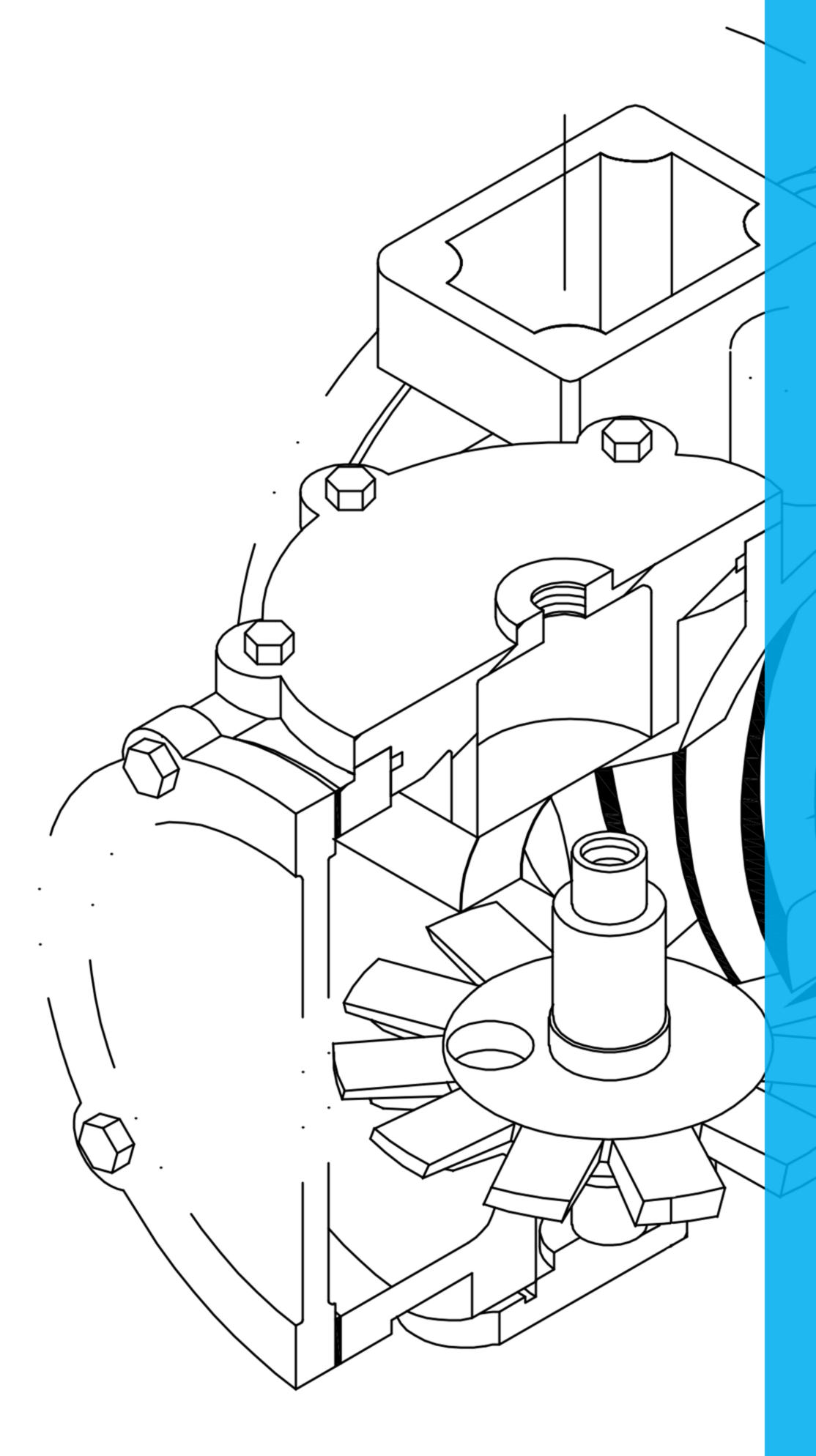
Water-lubricated Oil-free Single Screw Compressor







WHY SINGLE SCREW?



Structural Efficiency

The symmetrical position of the two star wheels of the single screw compressor on both sides of the screw makes it not only free of unbalanced inertial forces, but also allows the axial and radial forces acting on the screw to cancel each other out as well, which is the most notable feature of the advanced design of the single screw compressor.

Quiet Performance

Since the star wheels, the meshing pairs of single screw compressor, are made of polymer material, and the motor and screw are directly connected without intermediate transmission gears, plus the sound-absorbing padding on the cover of the machine, which makes the noise of the compressor operation extremely low.

Reduced Vibration

Thanks to the structural design of the single screw airend, the air compressor has a superior power balancing system, which can effectively choke the source of vibration and make the machine run extremely balanced.

WHAT'S INSIDE?

Model displayed: OGWY15F

Plate-fin heat exchanger

Centrifugal fan

IP55 Permanent magnet motor

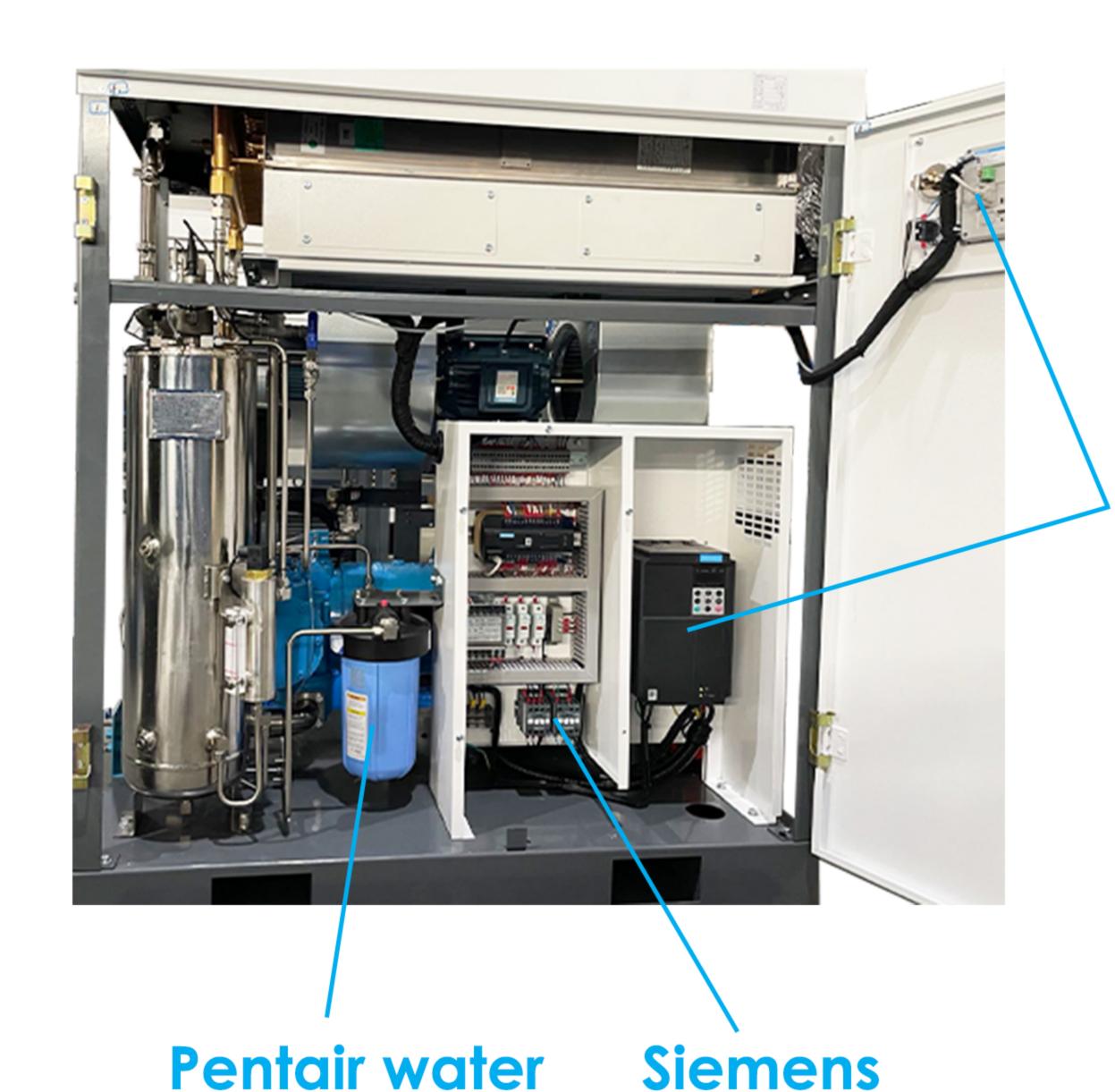
Air filter

softener



Water-air separator tank

Gairs single screw airend

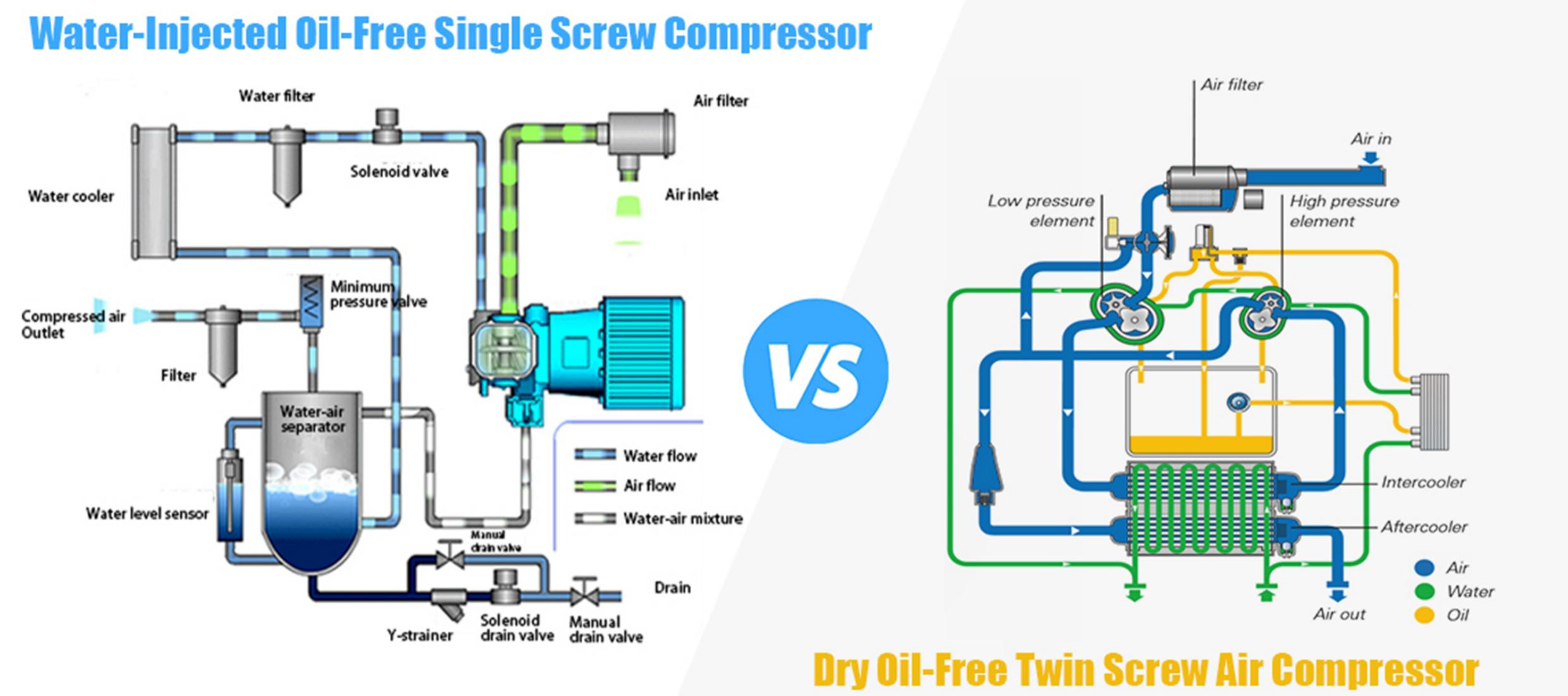


contactor

Innovance inverter and PLC controller

WHY WATER LUBRICATED?

	Water-Iubricated Oil-free Single Screw Compressor	Dry Oil-free Twin Screw Compressor
Air Quality	100% oil free due to water lubrication	Potential oil contamination due to oil in the gear box
Discharge Temperature	Up to 55°C	180-200°C
Cooling Method	No internal cooling system	Requires interstage and after- cooling systems
Airend Structure	High efficiency, no clearance volume	Lower efficiency, has clearance volume
Rotational Speed	3000 r/min	18000 r/min
Regular Maintenance	Air filter, water filter, and water softener resin elements	Air, oil filt er elements, seal kits, o-rings, separator element, etc.



OGWY MODELS AND TECHNICAL DATA

Model	FAD Capacity	Discharge Pressure	Motor Rating	Lubricant Water/Cycle	Discharge Connection	Nois e Level	Dimensions	Weight	Cooling Water Capacity	Cooling Method
	m³/min	MPa	kW	litter	inch	dB(A)	LxWxH(mm)	kg	Ton/h	
OGWY08F	0.5-1.3	0.7	7.5	20	3/4"		1100 x 750 x 1320	430		Air
	0.4-1.1	0.8				57				
	0.3-0.9	1.0								
OGWY11F	0.7-1.7	0.7	11	20	3/4"	57	1100 x 750 x 1320	450		
	0.6-1.5	0.8								
	0.5-1.3	1.0								
OGWY15F	1.0-2.5	0.7	15	25			1370 x 820 x 1450	570		
	0.9-2.2	8.0			1"	57				
	0.8-2.0	1.0								
OGWY18F	1.3-3.2	0.7	18.5	30	1"	58	1370 x 820 x 1450	620		
	1.1-2.8	0.8								
	1.0-2.5	1.0								
	1.5-3.7	0.7	22	30			1590 x 870 x 1500	690	5	Air or Water
OGWY22F(S)	1.4-3.4	8.0			1"	60				
	1.2-3.0	1.0								
	2.1-5.3	0.7	30	40			1690 x 1000 x 1600	980	6	Air or Water
OGWY30F(S)	1.9-4.7	0.8			1 1/2"	61	1000 X 1000 X 1000			
	1.7-4.3	1.0					1590 x 950 x 1500			
	2.5-6.2	0.7	37	60			1690 x 1000 x 1600		8	Air or Water
OGWY37F(S)	2.2-5.6	0.8			1 1/2"	61	1030 X 1000 X 1000	1010		
	2.0-5.0	1.0					1590 x 950 x 1500			
	3.0-7.6	0.7	45	60	1 1/2"		2000 x 1300 x 1650	1110	9	Air or Water
OGWY45F(S)	2.7-6.8	0.8				65	2000 X 1000 X 1000			
	2.4-6.0	1.0					1590 x 950 x 1500			
	4.0-10.0	0.7	55	80	2**	67	2450 x 1550 x 1850	1200 (5)	10	Air or Water
OGWY55F(S)	3.6-9.0	8.0								
	3.1-7.8	1.0					2300 x 1250 x 1600			
OGWY75F(S)	5.2-13.0	0.7	75	100	2"		2700 x 1650 x 2020	2000 (F) 1550 (S)	15	Air or Water
	4.8-12.0	0.8				71				
	4.0-10.0	1.0					2300 x 1250 x 1600			
OGWY90F(S)	6.7-16.8	0.7	90	100	2 1/2"	72	3100 x 1600 x 2000	2250 (5)	1 1/	Air or Water
	6.0-15.0	0.8								
	5.6-14.0	1.0					2450 x 1450 x 1700			
OGWY110F(S)	8.0-20.0	0.7	110	120	0.7		3500 x 1650 x 2100	2800 (F) 2450 (S)		Air or Water
	7.4-18.5	0.8			3"	74	0450 4450 4700		20	
	6.4-16.0	1.0					2450 x 1450 x 1700			
OGWY132F(S)	10.0-25.0	0.7	132	120	3"	77	3500 x 1650 x 2100	2450 (S)	25	Air or Water
	9.2-23.0	0.8								
	8.0-20.0	1.0					2450 x 1450 x 1700			
OGWY160F(S)	10.8-27.0	0.7	160	150	3"	78	4000 x 1700 x 2350	4500 (F)	28	Air or Water
	10.2-25.5	0.8					2000 4500 4000	2600 (S)		
OGWY185S	9.6-24.0	1.0	185	150	3"	78	2800 x 1500 x 1900		35	
	13.5-33.8	0.7					2000 4500 4000			
	12.4-31.0	0.8					2800 x 1500 x 1900			
	11.2-28.8	1.0								Water
0011110555	17.2-43.0	0.7	250	200	4"	79	3600 x 1700 x 2030	4500	45	
OGWY250S	16.4-41.0	0.8								

Please note:

- 1. OWGY30F means an air-cooled unit, OWGY30S means a water-cooled unit.
- 2. For Lubricant Water/Cycle, "Per cycle" typically refers to 500 running hours.
- Cooling water capacity is only available with water-cooled units, and the water used should be reverse osmosis (RO) water.
- * Design and specifications are subject to change without prior notice or obligation.
- * We accept orders with special specifications and voltage, please get in touch with your local agent or our company.

INDUSTRY THAT USES OIL FREE WATER LUBRICATED SCREW COMPRESSOR



Oil-free compressors are quite versatile and can be applied in a variety of industries like food and beverage, pharmaceuticals, medical, electronics where maintaining clean and contaminant-free air is crucial.

