

Linghein®



**LSW SERIES**

**100% OIL-FREE  
WATER LUBRICATION  
SCREW AIR COMPRESSOR**

7.5KW -250KW

# PURE OIL-FREE COMPRESSED AIR

LSW series oil-free water lubrication compressor provides you with 100% oil-free compressed air.

Suitable for medical, pharmaceutical, precision electronics and food & beverage industries with strict air quality and production process requirements.



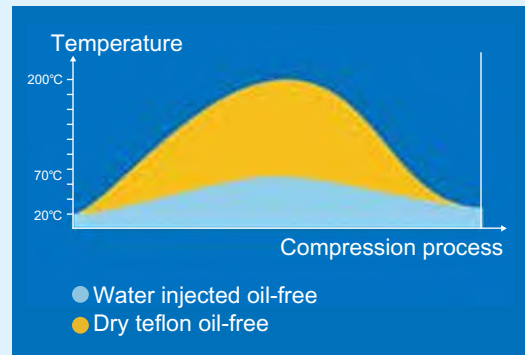
## 100% Oil-free No oil guarantee

The compressed air does not contain lubricating oil, and the whole compressor has passed the grade 0 oil-free certification of German Rhine TUV test.



## Lower energy costs

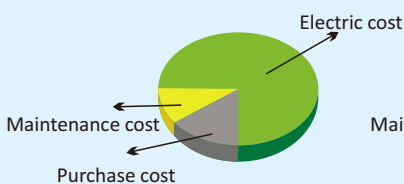
Water has excellent cooling capacity to eliminate the heat of the whole compressor. The running temperature of the air-end is lower than 50 °C, which is close to the ideal isothermal compression process, to avoid energy waste caused by heating and prolong the service life of the compressor.



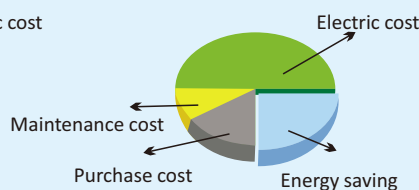
## Very low maintenance costs

Water instead of lubricating oil, without lubricating oil and oil filter and other consumables.

**FIXED SPEED COMPRESSOR OVERALL COST**



**VARIABLE SPEED COMPRESSOR OVERALL COST**



## Mute design

The compressor adopts low speed, big capacity fan and large plate cooler to reduce air convection friction and provide comfortable and quiet environment. The minimum operating noise just 57db(A)



## Danfoss Solenoid Valve

- ✓ More sensitive
- ✓ Safe
- ✓ Reliable



## Donaldson filter element

- ✓ One of the leaders in the filtration industry
- ✓ Longer service life
- ✓ Filtration efficiency of 99.9%



## Stainless steel alloy air-end

- ✓ high utilization rate
- ✓ isothermal compression process



## Electrical Components

- ✓ Schneider or Siemens electrical components
- ✓ Standardized design
- ✓ Safe use



## Special Unloading Valve

- ✓ No lossy spring
- ✓ Convenient adjustment
- ✓ More smooth loading and unloading adjustment



## Stainless Steel Parts

- ✓ Water separator tank, water filter tank and pipeline are made of stainless steel alloy

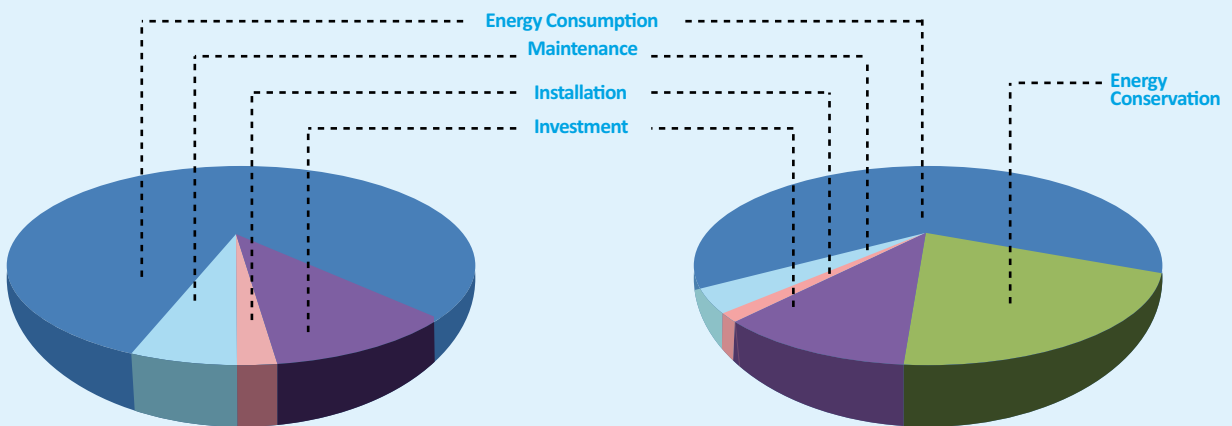
# Variable Speed Drive : Energy Saving Control

The energy consumption cost is about 82% of the overall cost of the whole compressor. The electricity cost for the compressor is more than 40% of the whole factory electricity cost. But normally the air demand has 40-80% large fluctuation in difference time for the same factory.

Linghein VSD compressors can accurately offer the compressed air according with the user's machine's demands. If the demands come less, Linghein VSD compressor will reduce the motor speed thus to reduce the free air delivery. Meanwhile, the energy consumption is also reduced. Through the advanced variable speed technology, the unloading and the energy consumption of air compressor is greatly reduced. With the advanced inverter technology, Linghein VSD compressor can reduce the energy consumption when unloading, means reduce the electricity cost of factory.

Cost of Fixed Speed Screw Air Compressor

Cost of linghein VSD Screw Air Compressor

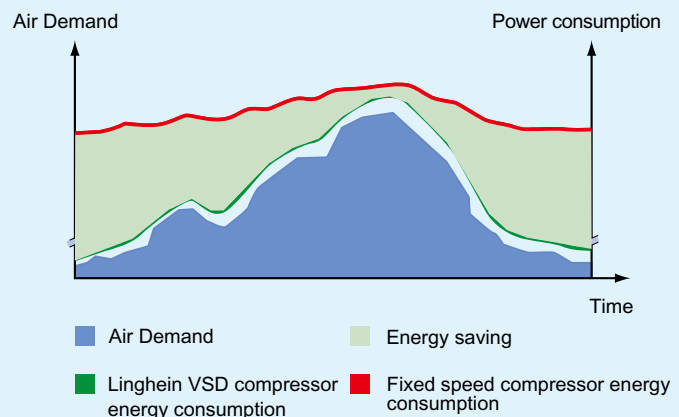
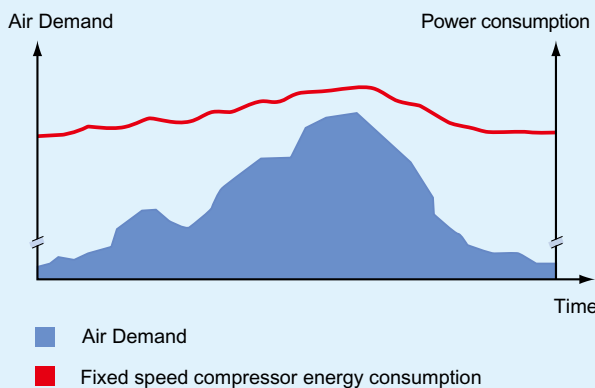


## Average energy saving can reach to 30% or more

Linghein VSD compressor automatically offer the compressed air through adjust the motor speed according the demands. Average energy saving can reach to 30% or more. The additional investment cost can be recovered within a half year to 2 years.

Fixed Speed Screw Air Compressor:  
Air Demand Fluctuates, High Cost

Linghein VSD Screw Air Compressor:  
Variable Free Air Delivery, Energy Saving Control



The fixed speed screw air compressor should be set in the wide pressure to match with the fluctuation of air demand. It will be loading when large air required, and it will be unloading when less air required. So the system pressure will be higher and the energy cost also is higher.

Because of the fluctuation of air demand, the compressor will be in unloading mode for long time, that cause the energy waste.

The working pressure setting of the VSD compressor is according with the user demands, so the whole system pressure will be less. Because of the variable speed, it can satisfy with the demands when low loading. Even that without the unloading, means no energy waste.

# LINGHEIN OIL-FREE SCREW AIR COMPRESSOR

## LSW series- Fixed Speed



Model	Max Working Pressure		CAPACITY (F.A.D) m <sup>3</sup> /min	Motor Power		Net Weight kgs	Cooling Type	Transmission	Noise dB(A)	Air Inlet/Outlet Connection	Water Inlet/Outlet Connection	Water Capacity L	Diameter (L x W x H)
	bar	psig		inch	inch					mm			
LSW-8A-8	8	116	1.10	10	7.5	470	Air Cooled	Belt Driven	57	G3/4"	--	--	800*800*1200
LSW-8A-10	10	145	0.90										
LSW-11A-8	8	116	1.70	15	11	580	Air Cooled	Direct Driven	60	G3/4"	--	--	1200*855*1335
LSW-11A-10	10	145	1.40										
LSW-15A-8	8	116	2.30	20	15	620	Air Cooled	Direct Driven	60	G3/4"	--	--	1200*855*1335
LSW-15A-10	10	145	2.00										
LSW-18.5A-8	8	116	3.00	25	18.5	680	Air Cooled	Direct Driven	63	G1"	--	--	1400*1010*1340
LSW-18.5A-10	10	145	2.60										
LSW-22A-8	8	116	3.60	30	22	730	Air Cooled	Direct Driven	63	G1"	--	--	1400*1010*1340
LSW-22A-10	10	145	3.00										
LSW-30A-8	8	116	5.10	40	30	1100	Air Cooled	Direct Driven	66	G1-1/4"	--	--	1650*1180*1505
LSW-30A-10	10	145	4.30										
LSW-37A-8	8	116	6.40	50	37	1150	Air Cooled	Direct Driven	66	G1-1/4"	--	--	1650*1180*1505
LSW-37A-10	10	145	5.40										
LSW-45W-8	8	116	8.20	60	45	1390	Water Cooled	Direct Driven	68	G2"	G1-1/2"	10	1800*1360*1390
LSW-45W-10	10	145	7.00										
LSW-55W-8	8	116	10.00	75	55	1470	Water Cooled	Direct Driven	69	G2"	G1-1/2"	12	1800*1360*1390
LSW-55W-10	10	145	8.50										

- ◆ According to standard ISO1217(F.A.D) appendix ISO2151:2004(NOISE)
- ◆ Cooling method:Air cooled/Water cooled
- ◆ Exhaust temperature:Ambient temperature +10°C
- ◆ Please contact us for any specification that is not within the above mentions standard
- ◆ Compressor Stage:Single stage
- ◆ Standard power supply:380v/50hz/3ph
- ◆ Start-up:direct start or Y-△ start

# LSW PM series - Variable Speed, Permanent Magnet Motor

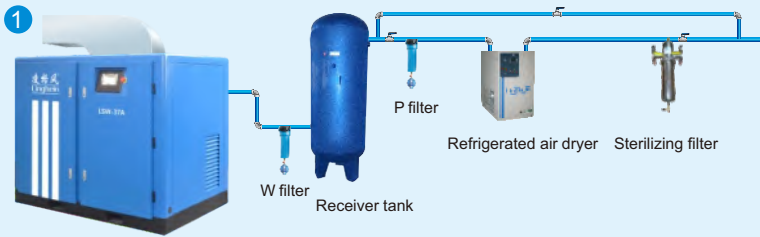
Model	Max Working Pressure		CAPACITY (F.A.D) m <sup>3</sup> /min	Motor Power		Net Weight kgs	Cooling Type	Transmission	Noise dB(A)	Air Inlet/Outlet Connection inch	Water Inlet/Outlet Connection inch	Water Capacity L	Diameter (L x W x H) mm
	bar	psig		hp	kw								
LSW-8A PM-8	8	116	0.5~1.1	10	7.5	510	Air Cooled	Belt Driven	57	G3/4"	--	--	800*800*1200
LSW-8A PM-10	10	145	0.4~0.9										
LSW-11A PM-8	8	116	0.7~1.7	15	11	620	Air Cooled	Direct Driven	60	G3/4"	--	--	1200*855*1335
LSW-11A PM-10	10	145	0.6~1.4										
LSW-15A PM-8	8	116	1.0~2.3	20	15	670	Air Cooled	Direct Driven	60	G3/4"	--	--	1200*855*1335
LSW-15A PM-10	10	145	0.9~2.0										
LSW-18.5A PM-8	8	116	1.2~3.0	25	18.5	730	Air Cooled	Direct Driven	63	G1"	--	--	1400*1010*1340
LSW-18.5A PM-10	10	145	1.0~2.6										
LSW-22A PM-8	8	116	1.5~3.6	30	22	780	Air Cooled	Direct Driven	63	G1"	--	--	1400*1010*1340
LSW-22A PM-10	10	145	1.3~3.0										
LSW-30A PM-8	8	116	2.1~5.1	40	30	1150	Air Cooled	Direct Driven	66	G1-1/4"	--	--	1650*1180*1505
LSW-30A PM-10	10	145	1.8~4.3										
LSW-37A PM-8	8	116	2.6~6.4	50	37	1200	Air Cooled	Direct Driven	66	G1-1/4"	--	--	1650*1180*1505
LSW-37A PM-10	10	145	2.2~5.4										
LSW-45W PM-8	8	116	3.3~8.2	60	45	1490	Water Cooled	Direct Driven	68	G2"	G1-1/2"	10	1800*1360*1390
LSW-45W PM-10	10	145	2.8~7.0										
LSW-55W PM-8	8	116	4.0~10	75	55	1570	Water Cooled	Direct Driven	69	G2"	G1-1/2"	12	1800*1360*1390
LSW-55W PM-10	10	145	3.4~8.5										
LSW-75W PM-8	8	116	5.2~13.0	100	75	1750	Water Cooled	Direct Driven	69	G2"	G1-1/2"	18	2200*1550*1800
LSW-75W PM-10	10	145	4.4~11.1										
LSW-90W PM-8	8	116	6.9~17.2	120	90	2450	Water Cooled	Direct Driven	G2"	G2-1/2"	G1-1/2"	20	2200*1550*1800
LSW-90W PM-10	10	145	5.9~14.6										
LSW-110W PM-8	8	116	8.2~20.3	150	110	2580	Water Cooled	Direct Driven	G2"	G2-1/2"	G2"	24	2200*1550*1800
LSW-110W PM-10	10	145	7.0~17.3										
LSW-132W PM-8	8	116	9.7~24.1	180	132	2700	Water Cooled	Direct Driven	G2"	G2-1/2"	G2"	30	2700*1830*1850
LSW-132W PM-10	10	145	8.2~20.5										
LSW-160W PM-8	8	116	11.3~28.2	210	160	3900	Water Cooled	Direct Driven	DN80	G3"	G3"	35	2700*1830*1850
LSW-160W PM-10	10	145	9.6~24.0										
LSW-185W PM-8	8	116	12.9~32.1	240	185	4050	Water Cooled	Direct Driven	DN80	G3"	G3"	38	2700*1830*1850
LSW180W PM-10	10	145	11.0~27.3										
LSW-200W PM-8	8	116	13.8~34.5	270	200	4200	Water Cooled	Direct Driven	DN100	G4"	G4"	42	2700*1830*1850
LSW-200W PM-10	10	145	11.7~29.3										
LSW-220W PM-8	8	116	15.5~38.6	295	220	4400	Water Cooled	Direct Driven	DN100	G4"	G4"	47	2700*1830*1850
LSW-220W PM-10	10	145	13.2~32.8										
LSW-250W PM-8	8	116	17.1~42.6	340	250	4800	Water Cooled	Direct Driven	DN100	G4"	G4"	53	2700*1830*1850
LSW-250W PM-10	10	145	14.5~36.2										

- ◆ According to standard ISO1217(F.A.D) appendix ISO2151:2004(NOISE)
- ◆ Cooling method: Air cooled/Water cooled
- ◆ Exhaust temperature: Ambient temperature +10°C
- ◆ Please contact us for any specification that is not within the above mentions standard
- ◆ Compressor Stage: Single stage
- ◆ Standard power supply: 380v/50hz/3ph
- ◆ Start-up: VSD soft start

## Flow chart

## Efficacy

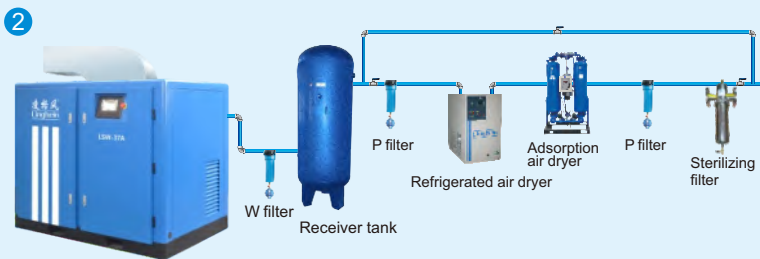
## Range of application



Screw air compressor

Pressure dew point: 2~10° C  
Dust content: <0.01µm

For hospital, breathing, cosmetics, medical, textile, food & beverage, package material



Screw air compressor

Pressure dew point: -20~-40° C  
Dust content: <0.01µm

For printing, electronic, bioengineering, fermentating food, aseptic laboratory, nuclear, aerospace





**Linghein**<sup>®</sup>