

COMPRAG®

positive displacement



CATALOG
#2.0

STATIONARY
Screw Compressors
F-series

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Design features of screw compressors



version (FRD)

built on a horizontal receiver and equipped with a refrigeration dryer

The pressure in the network is kept stable by the air receiver: prevents pulsation in compressed air line when number of appliances is increased; reduces cyclicality in change of operating modes of compressors; reduces wear on air-end, electric motor and drive system; considerable electrical energy efficiency.

The refrigeration dryer removes most of the humidity from the compressed air; prevents water in the compressed air line; extends the service life of the compressed air lines; the compressed air operated devices are protected.

Since all components are already connected, you save installation effort and costs.



version (FR)

built on a horizontal receiver

The pressure in the network is kept stable by the air receiver: prevents pulsation in compressed air line when number of appliances is increased; reduces cyclicality in change of operating modes of compressors; reduces wear on air-end, electric motor and drive system; considerable electrical energy efficiency.

Since all components are already connected, you save installation effort and costs.



version (F)

standard version on base frame

Space-saving design.

All other components of the compressed air system can be selected as required.

This Catalogue is valid from 01.08.2022.

All previous catalogues lose their validity with the publication of the new catalogue. Technical characteristics, specifications and details published in this catalogue are subject to change without notice. The latest catalogue version is available for download on our web page www.comprag.com

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Screw Compressors with drive power 5,5-15 kW, capacity up to 2,3 m³/min

F-Series are oil filled screw compressors designed for smooth and economical production of compressed air in industrial plants. They feature a compact, logically laid-out design and are simple to use.



version (FRD)

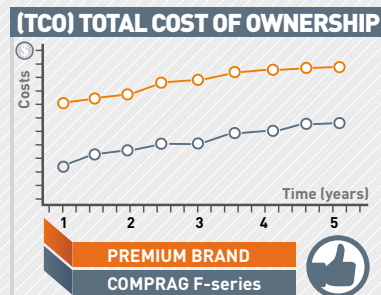
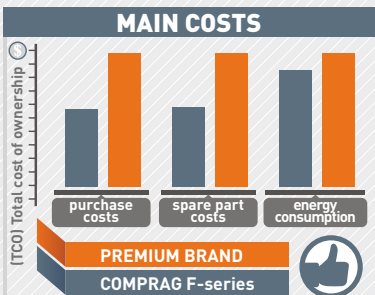


version (FR)



version (F)

Features:



- Modern, energy-efficient air-end.
- Microprocessor controlled for optimal cost-effective compressor operation.
- Through intelligent design of all key components, internal pressure losses are kept to a minimum, resulting in noticeable savings in total energy consumption.

- Through the use of an effective oil separation system, a residual oil content in compressed air of maximum 3 mg/m³ is attained.
- All filters and separators are easy to reach for economical service.

Design and technical characteristics

F-Series screw oil-filled compressors produce industrial compressed air, optionally with refrigerated dryer, up to class 4-4-4 to ISO 8573-1:2010.

New compressor design: Professional controller (A), Reliable electric motor (B), Oil separator tank (C), Screw air-end (D) and Comprag made control valves (E).

Professional controller t-Log (A)

The controller **t-Log** controls operation of the compressor in automatic mode, and also provides the user with necessary information on the working pressure, temperature of the air oil mixture, compressor operation time, etc.



Reliable electric motor (B)

Screw air-end (D)

Control valve (E)



F-Series compressors are fitted with quality electric motors with a high efficiency coefficient and world-class bearings from leading manufacturers.

The motors are not overloaded, but have a power reserve and overheat protection for windings.

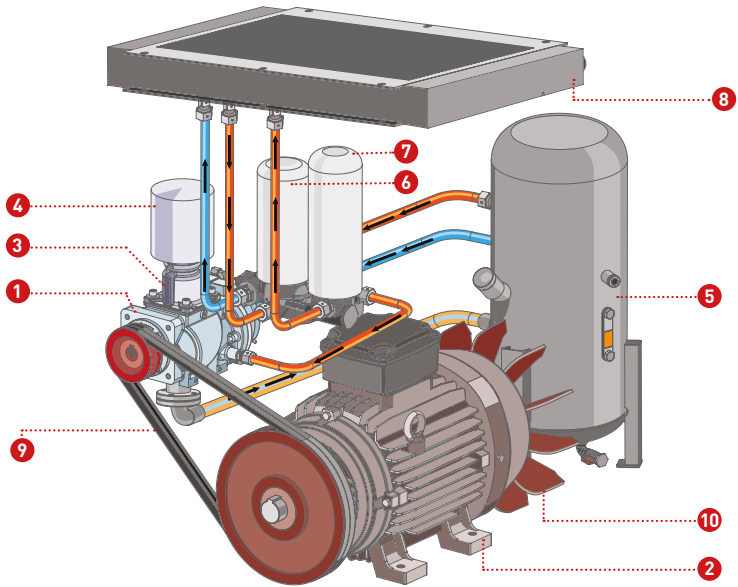
The air-end has a contemporary energy-efficient screw shape.

This increases compressor efficiency and reduces maintenance and replacement costs.

Comprag made control valves. Minimum pressure loss, improved unloading time adjustment.

Flow chart of compressor

- -OIL
- -OIL+AIR
- -AIR



- | | | | | |
|-------------------|---------------------|-----------------------|-----------------------|-----------------|
| 1. Screw air-end | 3. Air intake valve | 5. Separation vessel | 7. Internal separator | 9. Belt drive |
| 2. Electric motor | 4. Air filter | 6. Spin-On oil filter | 8. Heat exchanger | 10. Cooling fan |

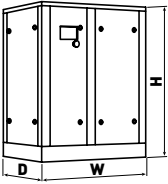
Table of models F-Series

Article	Model	Drive power (kW)	Max. working pressure (bar)	Capacity* (m ³ /min)	Rated voltage (phase/V/Hz)	Sound pressure level** (dB(A))	Air receiver capacity (liter)	Refrigerated dryer, RDX-Series	Screw connection
11410101	F0508	5,5	8	0,75	3/380-420/50	62	-	-	1/2"
11410102	F0510		10	0,65					
11410103	F0513		13	0,55					
11410104	FR0508-270	5,5	8	0,75	3/380-420/50	62	270	-	1/2"
11410106	FR0508-500						500		
11410105	FR0510-270	5,5	10	0,65	3/380-420/50	62	270	-	1/2"
11410107	FR0510-500						500		
11410108	FRD0508-270	5,5	8	0,75	3/380-420/50	62	270	X	1/2"
11410110	FRD0508-500						500		
11410109	FRD0510-270	5,5	10	0,65	3/380-420/50	62	270	X	1/2"
11410111	FRD0510-500						500		

Article	Model	Drive power (kW)	Max. working pressure (bar)	Capacity* (m ³ /min)	Rated voltage (phase/V/Hz)	Sound pressure level** (dB(A))	Air receiver capacity (liter)	Refrigerated dryer, RDX-Series	Screw connection
11410201	F0708	7,5	8	1,1	3/380-420/50	65	-	-	1/2"
11410202	F0710		10	0,9					
11410203	F0713		13	0,6					
11410204	FR0708-270	7,5	8	1,1	3/380-420/50	65	270	-	1/2"
11410206	FR0708-500						500		
11410205	FR0710-270	7,5	10	0,9	3/380-420/50	65	270	-	1/2"
11410207	FR0710-500						500		
11410208	FRD0708-270	7,5	8	1,1	3/380-420/50	65	270	X	1/2"
11410210	FRD0708-500						500		
11410209	FRD0710-270	7,5	10	0,9	3/380-420/50	65	270	X	1/2"
11410211	FRD0710-500						500		
11410301	F1108	11	8	1,6	3/380-420/50	67	-	-	1/2"
11410302	F1110		10	1,4					
11410303	F1113		13	1,3					
11410304	FR1108-270	11	8	1,6	3/380-420/50	67	270	-	1/2"
11410306	FR1108-500						500		
11410305	FR1110-270	11	10	1,4	3/380-420/50	67	270	-	1/2"
11410307	FR1110-500						500		
11410308	FRD1108-270	11	8	1,6	3/380-420/50	67	270	X	3/4"
11410310	FRD1108-500						500		
11410309	FRD1110-270	11	10	1,4	3/380-420/50	67	270	X	3/4"
11410311	FRD1110-500						500		
11410401	F1508	15	8	2,3	3/380-420/50	69	-	-	1/2"
11410402	F1510		10	1,9					
11410403	F1513		13	1,5					
11410404	FR1508-270	15	8	2,3	3/380-420/50	69	270	-	1/2"
11410406	FR1508-500						500		
11410405	FR1510-270	15	10	1,9	3/380-420/50	69	270	-	1/2"
11410407	FR1510-500						500		
11410408	FRD1508-270	15	8	2,3	3/380-420/50	69	270	X	3/4"
11410410	FRD1508-500						500		
11410409	FRD1510-270	15	10	1,9	3/380-420/50	69	270	X	3/4"
11410411	FRD1510-500						500		

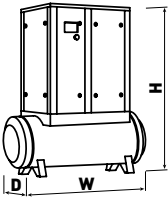
* Measured according to ISO 1217; ** Measured according to ISO 3744

Dimensions F-Series



Dimensions F version

Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
F05	1170	900	700	285
F07	1170	900	700	285
F11	1170	900	700	293
F15	1170	900	700	315



Dimensions FR / FRD version

Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
FR05..-270/ FRD05.. -270	1500	1370	700	405/440
FR05..-500/ FRD05.. -500	1650	1900	800	447/ 482
FR07..-270/ FRD07.. -270	1500	1370	700	405/440
FR07..-500/ FRD07.. -500	1650	1900	800	447/ 482
FR11..-270/ FRD11.. -270	1650	1470	700	413/450
FR11..-500/ FRD11.. -500	1650	1900	800	455/ 492
FR15..-270/ FRD15.. -270	1650	1470	700	420/460
FR15..-500/ FRD15.. -500	1650	1900	800	462/ 502

Screw Compressors with drive power 18.5-22 kW, capacity up to 3,6 m³/min

F-Series are oil filled screw compressors designed for smooth and economical production of compressed air in industrial plants. They feature a compact, logically laid-out design and are simple to use.



version (FRD)

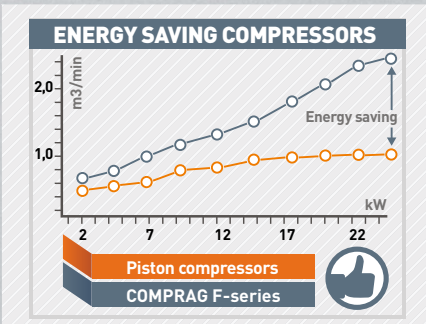


version (FR)



version (F)

Features:



- Modern, energy-efficient air-end.
- Microprocessor controlled for optimal cost-effective compressor operation.
- Through intelligent design of all key components, internal pressure losses are kept to a minimum, resulting in noticeable savings in total energy consumption.
- Through the use of an effective oil separation system, a residual oil content in compressed air of maximum 3 mg/m³ is attained.
- All filters and separators are easy to reach for economical service.

Screw compressors offer significant energy savings in the 5.5 kW to 22 kW motor power range of compressors when compared to piston compressors. For the same electrical power consumption, the specific cost per cubic meter of compressed air is significantly lower when using F-Series compressors.

Design and technical characteristics

F-Series screw oil-filled compressors produce industrial compressed air, optionally with refrigerated dryer, up to class 4-4-4 to ISO 8573-1:2010.

New compressor design: Professional controller (A), Reliable electric motor (B), Oil separator tank (C), Screw air-end (D) and Comprag made control valves (E).

Professional controller t-Log (A)

The controller **t-Log** controls operation of the compressor in automatic mode, and also provides the user with necessary information on the working pressure, temperature of the air oil mixture, compressor operation time, etc.



Reliable electric motor (B)

Screw air-end (D)

Control valve (E)



F-Series compressors are fitted with quality electric motors with a high efficiency coefficient and world-class bearings from leading manufacturers.

The motors are not overloaded, but have a power reserve and overheat protection for windings.

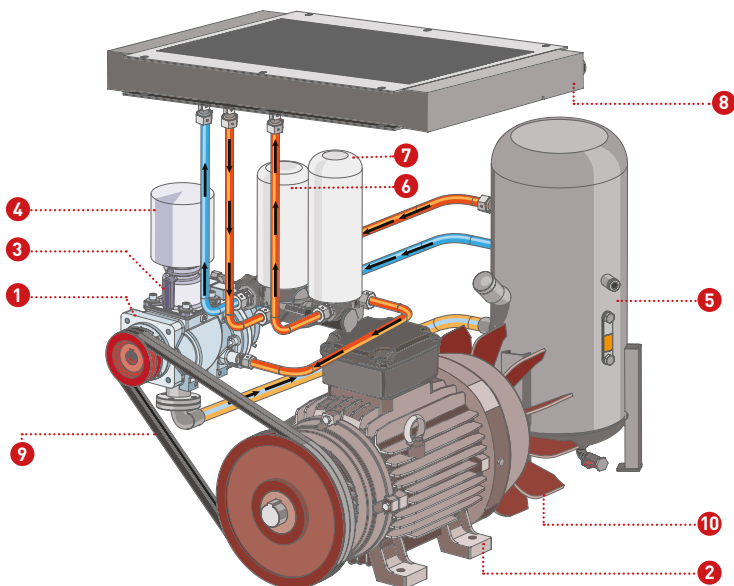
The air-end has a contemporary energy-efficient screw shape.

This increases compressor efficiency and reduces maintenance and replacement costs.

Comprag made control valves. Minimum pressure loss, improved unloading time adjustment.

Flow chart of compressor

- -OIL
- -OIL+AIR
- -AIR



- | | | | | |
|-------------------|---------------------|-----------------------|-----------------------|-----------------|
| 1. Screw air-end | 3. Air intake valve | 5. Separation vessel | 7. Internal separator | 9. Belt drive |
| 2. Electric motor | 4. Air filter | 6. Spin-On oil filter | 8. Heat exchanger | 10. Cooling fan |

Table of models F-Series

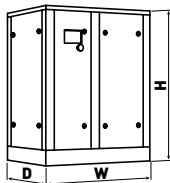
Article	Model	Drive power (kW)	Max. working pressure (bar)	Capacity* (m ³ /min)	Rated voltage (phase/V/Hz)	Sound pressure level** (dB(A))	Air receiver capacity (liter)	Refrigerated dryer, RDX-Series	Screw connection
11410501	F1808	18,5	8	3,1	3/380-420/50	70	-	-	3/4"
11410502	F1810		10	2,5					
11410503	F1813		13	2,2					
11410504	FR1808-500	18,5	8	3,1	3/380-420/50	70	500	-	3/4"
11410505	FR1810-500		10	2,5					
11410506	FRD1808-500	18,5	8	3,1	3/380-420/50	70	500	X	1"
11410507	FRD1810-500		10	2,5					

Article	Model	Drive power (kW)	Max. working pressure (bar)	Capacity* (m ³ /min)	Rated voltage (phase/V/Hz)	Sound pressure level** dB(A)	Air receiver capacity (liter)	Refrigerated dryer, RDX-Series	Screw connection
11410601	F2208	22	8	3,6	3/380-420/50	70	-	-	3/4"
11410602	F2210		10	3,0					
11410603	F2213		13	2,6					
11410604	FR2208-500	22	8	3,6	3/380-420/50	70	500	-	3/4"
11410605	FR2210-500		10	3,0					
11410606	FRD2208-500	22	8	3,6	3/380-420/50	70	500	X	1"
11410607	FRD2210-500		10	3,0					

* Measured according to ISO 1217; ** Measured according to ISO 3744

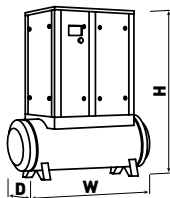
Dimensions F-Series

Dimensions F version



Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
F18	1270	1000	800	415
F22	1270	1000	800	435

Dimensions FR / FRD version



Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
FR18..-500/FRD18..-500	1860	1900	860	570/635
FR22..-500/FRD22..-500	1860	1900	860	590/655

Screw Compressors with drive power 30-37 kW, capacity up to 6,5 m³/min

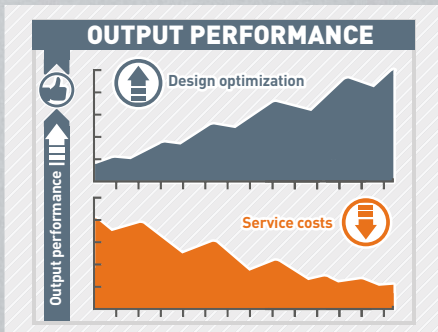
F-Series are oil filled screw compressors designed for smooth and economical production of compressed air in industrial plants. They feature a compact, logically laid-out design and are simple to use.



version (F)

Features:

F-Series compressors have been developed to offer an optimal balance between performance, energy saving solutions, and offer increased servicing intervals to reduce your running costs. F-Series compressors are most efficient in class.



- Modern, energy-efficient air-end.
- Microprocessor controlled for optimal cost-effective compressor operation.
- Through intelligent design of all key components, internal pressure losses are kept to a minimum, resulting in noticeable savings in total energy consumption.
- Through the use of an effective oil separation system, a residual oil content in compressed air of maximum 3 mg/m³ is attained.
- i-Log controller for more setting and control options a group mode control via several i-Log controllers and connection to a higher-level master controller or a control room via MODBUS.
- All filters and separators are easy to reach for economical service.

Design and technical characteristics

F-Series screw oil-filled compressors produce industrial compressed air, optionally with refrigerated dryer, up to class 4-4-4 to ISO 8573-1:2010.

Features screw compressors F-Series: professional controller (A), effective and reliable electric motor (B), screw air-end (C), effective separation system (D).

Professional controller i-Log (A)

The professional controller **i-Log** controls operation of the compressor in automatic mode, and also provides the user with necessary information on the working pressure, temperature of the air oil mixture, compressor's operation time, need for servicing, etc.

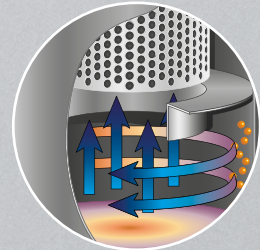
The professional controller allows a group mode control via several **i-Log** controllers and connection to a higher-level master controller or a control room via MODBUS.



Reliable electric motor (B)

Screw air-end (C)

Separation system (D)



F-Series compressors are fitted with quality electric motors with a high efficiency coefficient and world-class bearings from leading manufacturers.

The motors are not overloaded, but have a power reserve and overheat protection for windings.

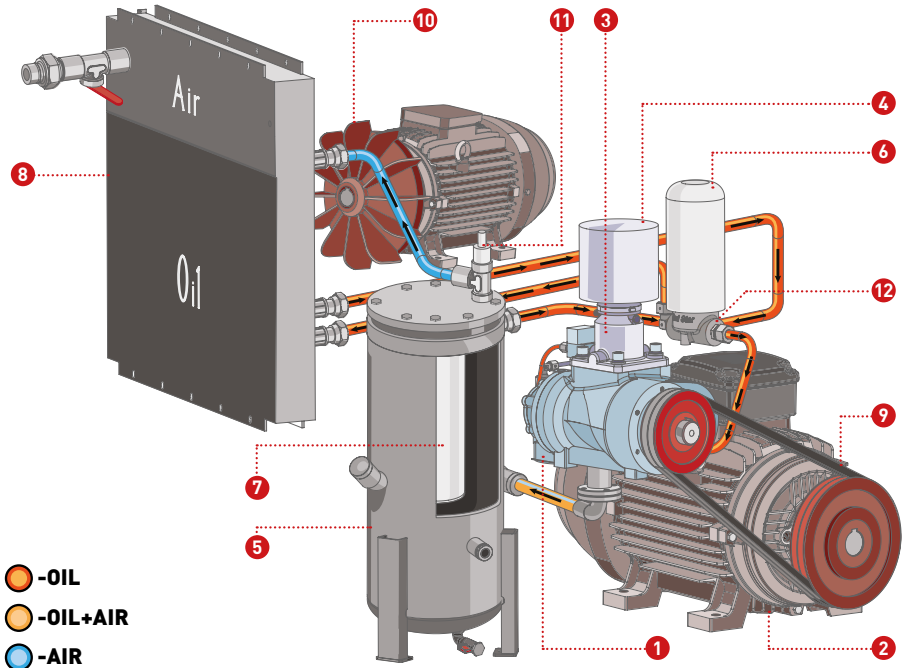
The air-end has a contemporary energy-efficient screw shape.

This increases compressor efficiency and reduces maintenance and replacement costs.

F-Series compressors are fitted with an effective three-phase separation system. Most of the oil is separated under centrifugal force in the separator tank. Some of the oil is separated by gravitational force during movement of oil inside the separator.

The remaining amount of oil is separated by a quality separation element. The total amount of oil in compressed air at the outlet of the compressor does not exceed 3 mg/m³.

Flow chart of compressor



- 1. Screw air-end
- 2. Electric motor
- 3. Air intake valve
- 4. Air filter

- 5. Separation vessel
- 6. Spin-On oil filter
- 7. Internal separator
- 8. Heat exchanger

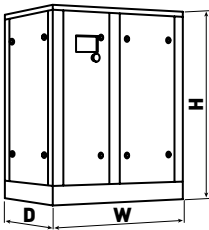
- 9. Belt drive
- 10. Cooling Fan
- 11. Minimum pressure valve
- 12. Thermostatic valve

Table of models F-Series

Article	Model	Drive power (kW)	Max. working pressure (bar)	Capacity* (m ³ /min)	Rated voltage (phase/V/Hz)	Sound pressure level** dB(A)	Screw connection
11410701	F3008	30	8	5,0	3/380-420/50	72	1 1/4"
11410702	F3010		10	4,5		72	
11410703	F3013		13	3,7		72	
11410711	F3708	37	8	6,5	3/380-420/50	72	1 1/4"
11410712	F3710		10	5,5		72	
11410713	F3713		13	4,6		72	

* Measured according to ISO 1217; ** Measured according to ISO 3744

Dimensions F-Series



Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
F30	1500	1400	1000	725
F37	1500	1400	1000	765

Screw Compressors with drive power 45-55 kW, capacity up to 9,0 m³/min

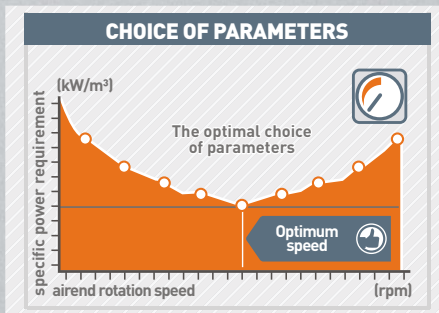
F-Series are oil filled screw compressors designed for smooth and economical production of compressed air in industrial plants. They feature a compact, logically laid-out design and are simple to use.



version (F)

Features:

The rotation speed of the helical screw rotor unit is selected on the basis of the specific optimal performance. All compressor components have been designed according to parameters chosen for optimal performance and low operating costs. Comprag F-Series offer some of the lowest specific production costs of compressed air.



- Modern, energy-efficient air-end.
- Microprocessor controlled for optimal cost-effective compressor operation.
- Through intelligent design of all key components, internal pressure losses are kept to a minimum, resulting in noticeable savings in total energy consumption.
- Through the use of an effective oil separation system, a residual oil content in compressed air of maximum 3 mg/m³ is attained.
- i-Log controller for more setting and control options a group mode control via several i-Log controllers and connection to a higher-level master controller or a control room via MODBUS.
- All filters and separators are easy to reach for economical service.

Design and technical characteristics

F-Series screw oil-filled compressors produce industrial compressed air, optionally with refrigerated dryer, up to class 4-4-4 to ISO 8573-1:2010.

Features screw compressors F-Series: professional controller (A), effective and reliable electric motor (B), screw air-end (C), effective separation system (D).

Professional controller i-Log (A)

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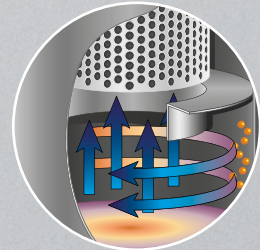
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Reliable electric motor (B)

Screw air-end (C)

Separation system (D)



F-Series compressors are fitted with quality electric motors with a high efficiency coefficient and world-class bearings from leading manufacturers.

The motors are not overloaded, but have a power reserve and overheat protection for windings.

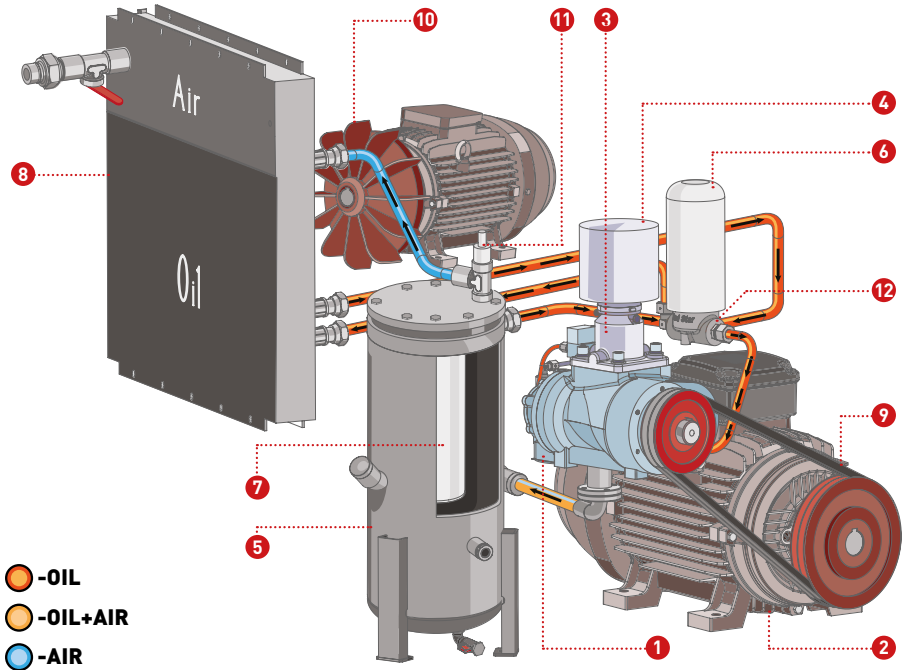
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Flow chart of compressor



- 1. Screw air-end
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- 3. Air intake valve
- 4. Air filter

- 5. Separation vessel
- 6. Spin-On oil filter
- 7. Internal separator
- 8. Heat exchanger

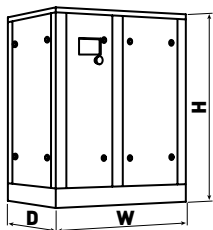
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Table of models F-Series

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11410801	F4508	45	8	7,5	3/380-420/50	75	1 1/2"
11410802	F4510		10	6,5		75	
11410803	F4513		13	5,7		75	
11410811	F5508	55	8	9,0	3/380-420/50	75	1 1/2"
11410812	F5510		10	7,9		75	
11410813	F5513		13	6,9		75	

* Measured according to ISO 1217; ** Measured according to ISO 3744

Dimensions F-Series



Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
F45	1720	1650	1250	1015
F55	1720	1650	1250	1190

Screw Compressors with drive power 75-90 kW, capacity up to 14,7 m³/min

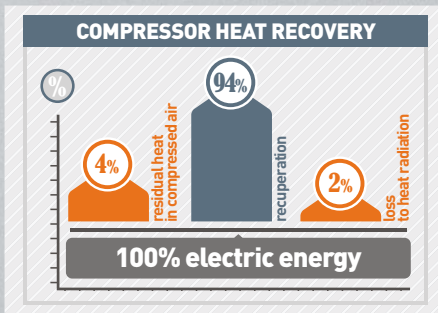
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version (F)

Features:

Up to **94%** of the electric energy expended in driving a compressor may be used again in the form of recuperated heat. F-Series compressors allow heated air to be used efficiently by recovering it for production or storage facilities.



100% - electric energy consumed by compressor

4% - residual heat in compressed air

2% - loss to heat radiation

- Modern, energy-efficient air-end.
- Microprocessor controlled for optimal cost-effective compressor operation.
- Through intelligent design of all key components, internal pressure losses are kept to a minimum, resulting in noticeable savings in total energy consumption.
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Professional controller i-Log (A)

The professional controller **i-Log** controls operation of the compressor in automatic mode, and also provides the user with necessary information on the working pressure, temperature of the air oil mixture, compressor's operation time, need for servicing, etc.

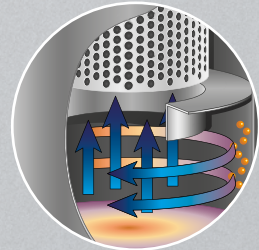
The professional controller allows a group mode control via several **i-Log** controllers and connection to a higher-level master controller or a control room via MODBUS.



Reliable electric motor (B)

Screw air-end (C)

Separation system (D)



F-Series compressors are fitted with quality electric motors with a high efficiency coefficient and world-class bearings from leading manufacturers.

The motors are not overloaded, but have a power reserve and overheat protection for windings.

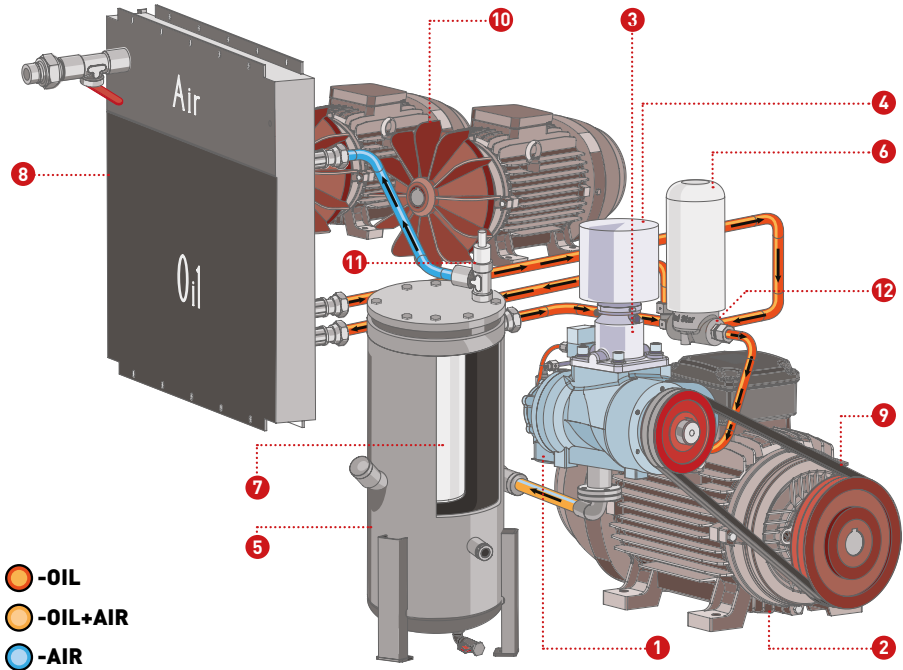
The air-end has a contemporary energy-efficient screw shape.

This increases compressor efficiency and reduces maintenance and replacement costs.

F-Series compressors are fitted with an effective three-phase separation system. Most of the oil is separated under centrifugal force in the separator tank. Some of the oil is separated by gravitational force during movement of oil inside the separator.

The remaining amount of oil is separated by a quality separation element. The total amount of oil in compressed air at the outlet of the compressor does not exceed 3 mg/m³.

Flow chart of compressor



- 1. Screw air-end
- 2. Electric motor
- 3. Air intake valve
- 4. Air filter

- 5. Separation vessel
- 6. Spin-On oil filter
- 7. Internal separator
- 8. Heat exchanger

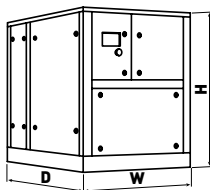
- 9. Belt drive
- 10. Cooling Fan
- 11. Minimum pressure valve
- 12. Thermostatic valve

Table of models F-Series

Article	Model	Drive power (kW)	Max. working pressure (bar)	Capacity* (m ³ /min)	Rated voltage (phase/V/Hz)	Sound pressure level** dB(A)	Screw connection
11410901	F7508	75	8	12,4	3/380-420/50	75	2"
11410902	F7510		10	10,8		75	
11410903	F7513		13	9,2		75	
11410911	F9008	90	8	14,7	3/380-420/50	75	2"
11410912	F9010		10	12,8		75	
11410913	F9013		13	11,1		75	

* Measured according to ISO 1217; ** Measured according to ISO 3744

Dimensions F-Series



Model	Height H (mm)	Width W (mm)	Depth D (mm)	Weight (kg)
F75	1790	1490	1790	1580
F90	1790	1490	1790	1690



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