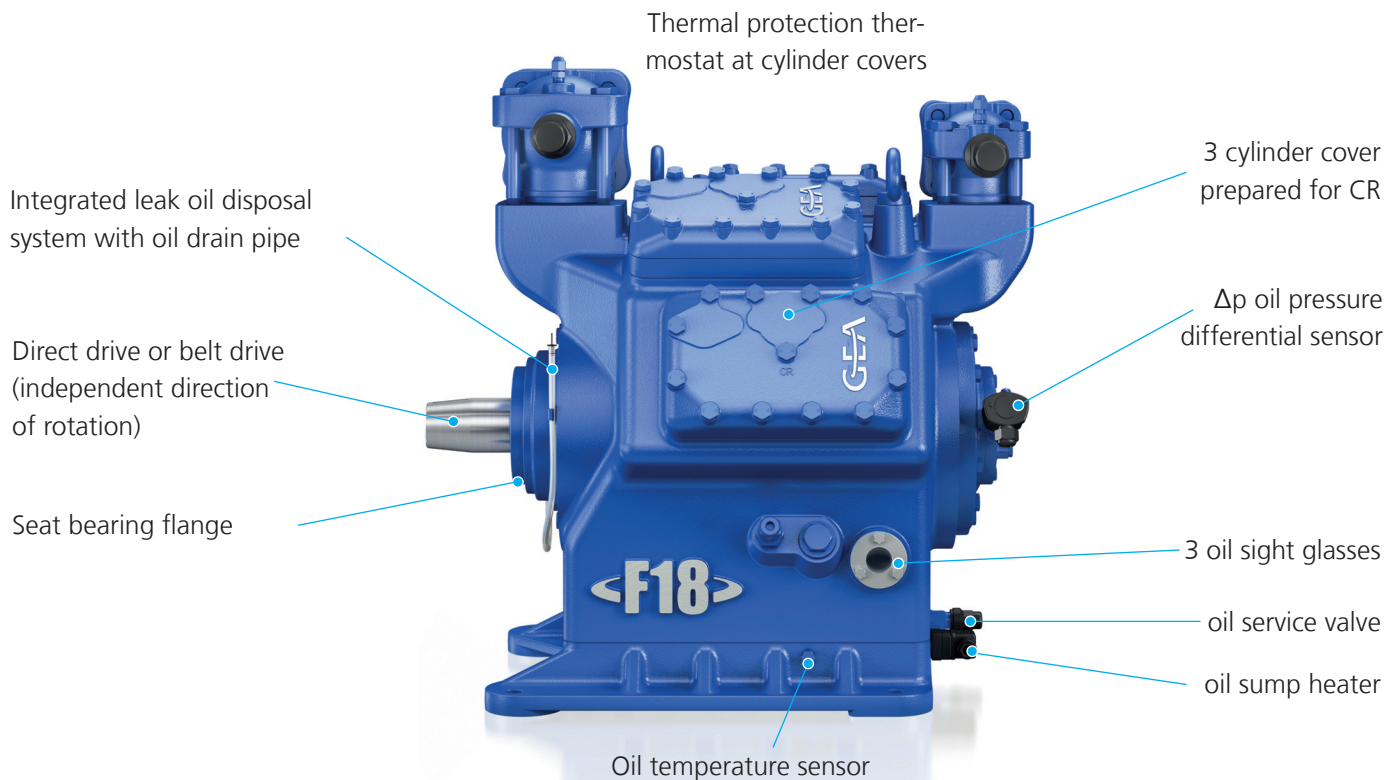




Bock open type compressors F18

Extended F Series



The new 8 cylinder compressor F18

Our solutions are customer-oriented and user-friendly, because they are low-priced, energy-efficient, long-lasting and tailored to your individual needs.

With the compressor models of the brands Bock and Grasso, GEA Refrigeration Technologies offers the broadest program of open type and semi-hermetic piston- and screw compressors.

With the new Bock F18 compressor GEA now closes the gap between the current open type Bock compressors in the small and medium output range and the Grasso compressor program in the higher output range.

By using proven components from the Bock compressor programme alongside the experience of GEA in the field of industrial refrigeration, complementary skills from both companies have been utilised in the design and engineering of this compressor.

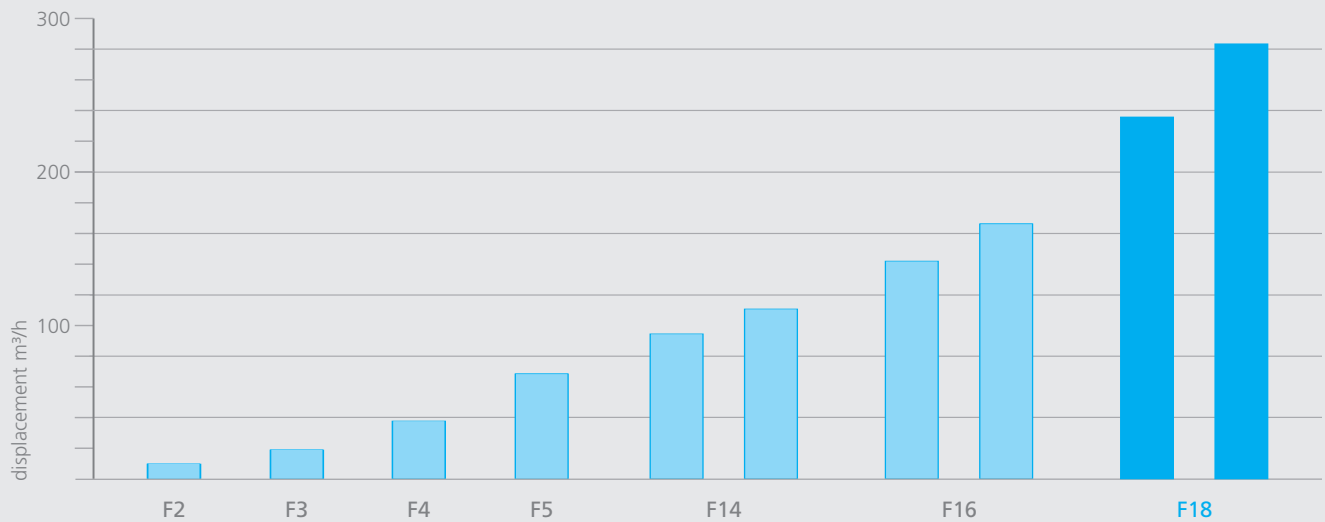
In maritime applications on the open sea, a great deal of quality and reliability is demanded from machines and systems.

This is why GEA Bock focuses on uncompromising quality when it comes to its new 8 cylinder compressors of the type F18. Whether it's the construction of a compressor, the selection of the right material or the assembly of the compressors - GEA Bock does not leave anything to chance.

A plasma-nitrocarburized crankshaft for example ensures highest stability of the drive, even under toughest conditions. At the same time, numerous constructive measures provide maximum efficiency along with minimum space requirements. All parts of the compressor were designed for an optimized refrigerant flow. Together with the new valve plate design in double ring fin version and an ideal bore/stroke ratio, the F18 therefore offers a high degree of efficiency.

When it comes to size and weight, the F18 also sets new benchmark standards. Compared to the currently available piston compressors with a comparable swept volume of 240-280 m³/h, the F18 has much smaller dimensions and a correspondingly lower weight. This makes the compressor much easier to handle, for instance when taking into a machine room.

The current program

...7 model sizes with 11 capacity stages from 10.5 to 281 m³/h (1450 rpm)

Available models	Displacement 1450 rpm
F2	10.5 m ³ /h
F3	20.3 m ³ /h
F4	40.5 m ³ /h
F5	73.7 m ³ /h
F14/1166	101.4 m ³ /h
F14/1366	119.0 m ³ /h
F16/1751	152.2 m ³ /h
F16/2051	178.4 m ³ /h
F18/2735	238.0 m ³ /h
F18/3235	281.0 m ³ /h

Type key

FX 18 / 2735

Swept volume ²⁾

Size

Ester oil filling ¹⁾

Series

¹⁾ Ester oil filling (HFC refrigerant, e.g. R134a, R407C)²⁾ Indication only at F14, F16, F18

F Type	Number of cylinders	Displacement (1450/1740 rpm)	Weight ②	Connections ①		Oil charge	Speed range
				Discharge line DV	Suction line SV		
				mm Zoll	mm Zoll		
F18/2735	8	238 / 285	273	54 2 1/8	76 3 1/8	10,0	700 - 1800
F18/3235	8	281 / 338	280	54 2 1/8	76 3 1/8	10,0	700 - 1800

① For soldering connections

② As standard

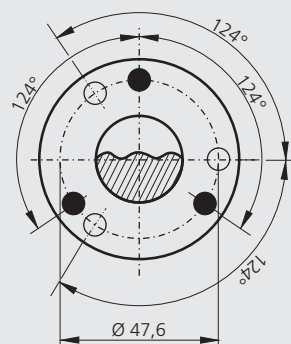
Connections

SV	Suction line	
DV	Discharge line	please refer to technical data above
A	Connection suction side, not lockable	1/8 " NPTF
A1	Connection suction side, lockable	7/16 " UNF
B	Connection suction side, not lockable	1/8 " NPTF
B1	Connection discharge side, lockable	7/16 " UNF
B2	Connection discharge side, not lockable	1/8 " NPTF
C	Connection oil pressure safety switch OIL	7/16 " UNF
D	Connection oil pressure safety switch LP	7/16 " UNF
D1	Connection oil return from oil separator	5/8 " UNF
E	Connection oil pressure gauge	7/16 " UNF
F	Oil drain	M 26 x 1,5
H	Oil charge plug	M 22 x 1,5
J1	Oil sump heater	M 22 x 1,5
K	Sight glass	3 Loch M 6
L1	Thermal protection thermostat	1/8 " NPTF
M	Oil filter	M 22 x 1,5
ÖV1	Oil service valve	7/16 " UNF
P1	Oil pressure differential sensor	M 22 x 1,5
Q1	Connection oil temperature sensor	1/8 " NPTF

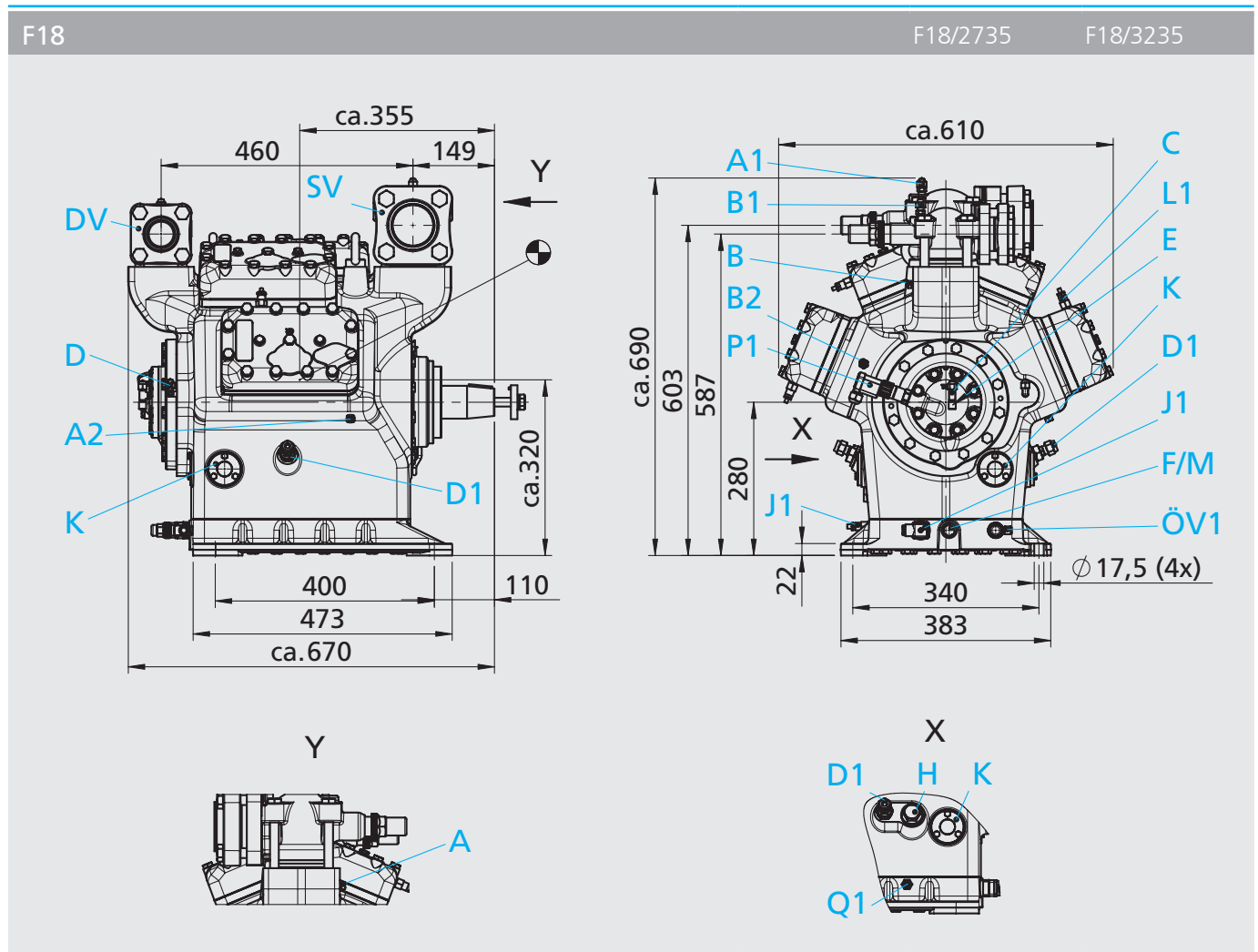
View X

Possibility to connect to oil level regulator

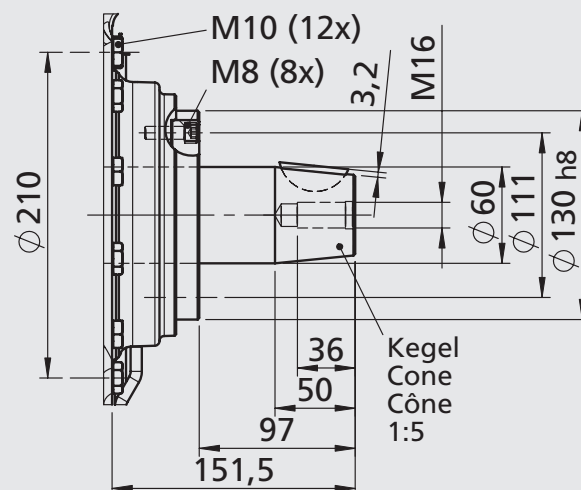
- Three-hole connection for oil level regulator make ESK, AC+R, CARLY (3x M6, 10 deep)
- Three-hole connection for oil level regulator make TRAXOIL (3 x M6 x 10 deep)



Dimensions in mm



Shaft end





Air-conditioning

The sometimes extreme temperature fluctuations make the air-conditioning of passenger and crew cabins on modern ships necessary.

Process cooling

Different other processes on a ship require the use of refrigeration technology.



Compressor solutions for the entire ship

Compressor solutions for the entire ship

Cooled provisions

To keep the provision for passengers and crew fresh, a reliable cooling system is needed.

Bock compressors by GEA Refrigeration Technologies fulfill the high maritime demands already for many years. They help to provide a comfortable climate in cabins, keep provisions cooled and are additionally used in many other applications.

Bock compressors also work reliably on container ships, passenger ships or fishing boats.

With a broad product range of open type and semi-hermetic compressors, the GEA Bock program has the right compressor for nearly all refrigeration and maritime applications.

Together with the program of industrial Grasso piston and screw compressors, GEA offers the broadest compressor program for maritime applications.



Excellence

Passion

Integrity

Responsibility

GEA-versity

GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX Europe 600 Index.



GEA Refrigeration Technologies

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