Castel®
Italian technology

POLYHEDRA

OIL SEPARATOR SUITABLE FOR A2L & A3 REFRIGERANTS



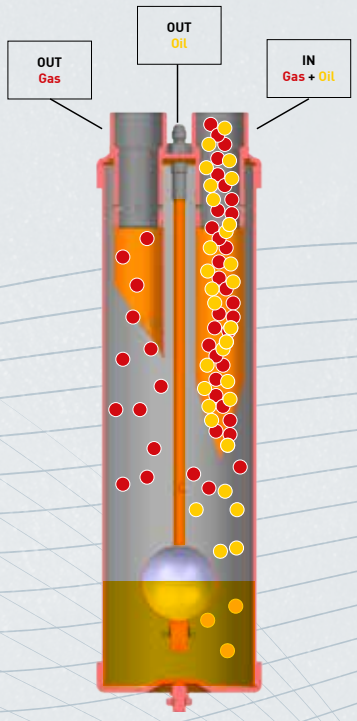


READY FOR THE NEXT GENERATION OF REFRIGERANTS

Correct lubrication is one of the fundamental aspects to ensure **long life of the compressor.**

WHY INSTALL AN OIL SEPARATOR?

Oil separators ensure that the compressor lubricating oil is fed back directly to the crankcase.
This prevents the oil circulating with the refrigerant throughout the circuit, improving the performance of the system.



HOW DOES IT WORK?

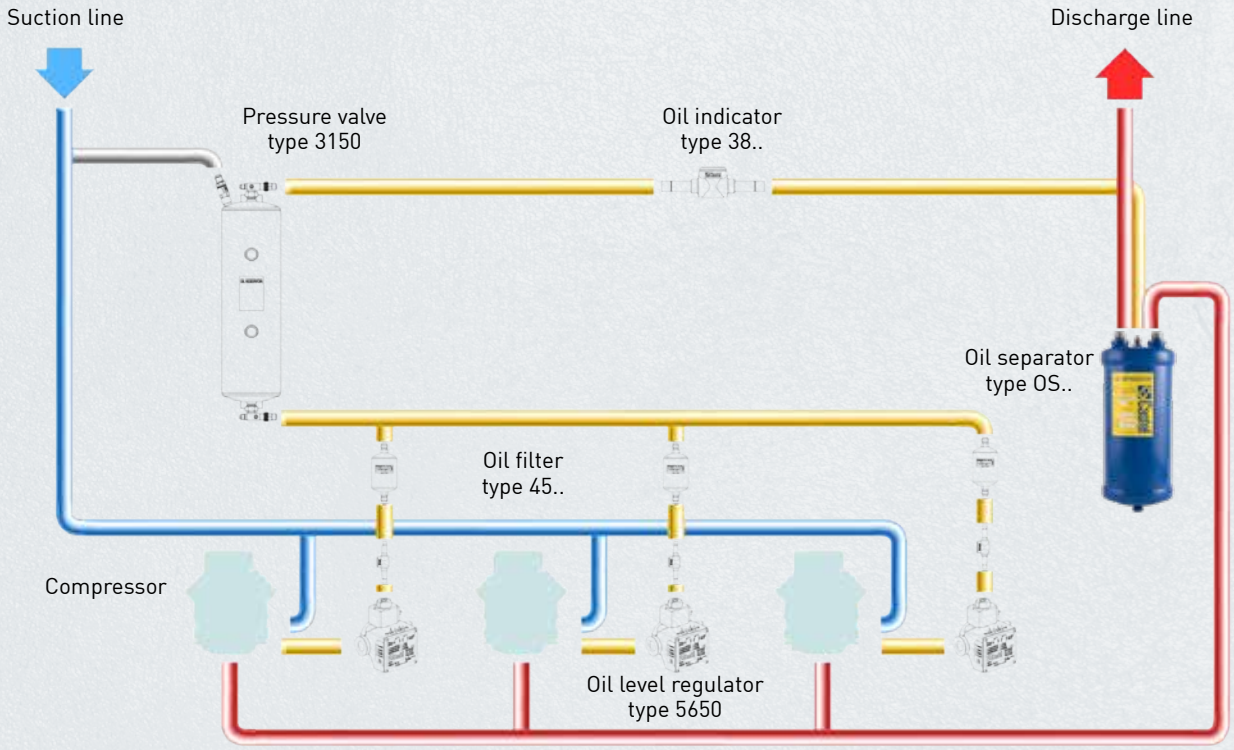
The refrigerant fluid (mixed with oil) enters in the separator. Due to the expansion the fluid separates from the oil that falls towards the bottom of the tank. The lighter fluid rises towards the outlet connection. The oil accumulated at the bottom of the tank is drawn from the dedicated connection. A ball float regulates the flow. A permanent magnet attracts any metal particles that could obstruct the oil passage.

CASTEL OIL SEPARATOR RANGE

- HFC, HFO, HFO+HFC+HC
  (A1- A2L - A3, ASHRAE STANDARD 34-2019)
- ODS CONNECTION RANGE:
  FROM 1/2" TO 1.5/8"
- STEEL CONNECTIONS
- MAXIMUM WORKING PRESSURE:
  UP TO 50 BAR
- VOLUME: UP TO 3,5 LITERS

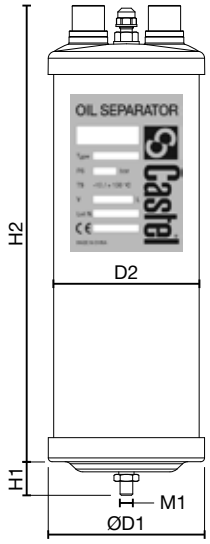
APPLICATION

The oil that leaves the compressor through the discharge line can be recovered immediately through the installation of an oil separator, which allows the oil to be separated from the refrigerant and returned to the compressor crankcase.



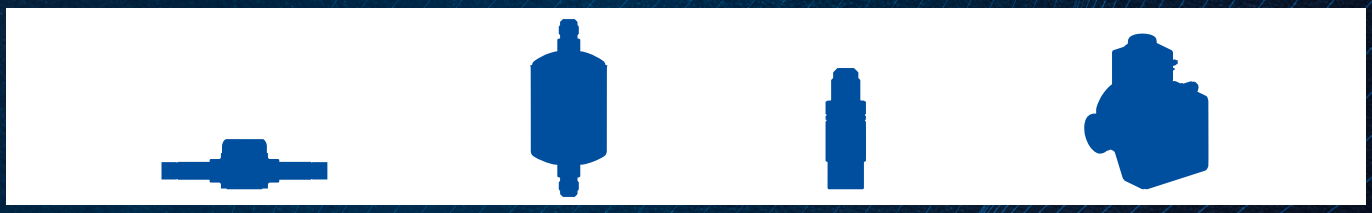
TIPS & TRICKS

- The oil separators must be installed in a **vertical position.**
- Insert a **check valve** to prevent liquid refrigerant flowing back into the separator.
- The inlet diameter of the separator must not be smaller than the discharge diameter of the compressor, this **avoids turbulence and noise.**
- To check it's functioning, install a **liquid passage indicator** on the oil return line to the compressor.
- Install a **strainers** in order to protect the system against impurities.
- The installation of an **oil level regulator** guarantees the correct supply of oil to the compressor crankcase.

Drawing	Part number	Connections				PS [bar]	MWP [psi]	TS [°C]	
		ODS		ODM					
		Ø [in.]	Ø [mm]	Ø [in.]	Ø [mm]			Min	Max
	5540N/3	3/8"	-	5/8"	16	50	725	-40	150
	5540N/4	1/2"							
	5540N/5	5/8"	16	3/4"	-				
	5540N/7	7/8"	-	1"					
	5540N/9	1.1/8"		1.3/8"	35				
	5540N/11	1.3/8"		1.5/8"	-				

*UL homologation ongoing

CASTEL PROPOSES A WIDE RANGE OF PRODUCTS SUITABLE FOR THE OIL LINE.
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ISO 14001

Castel has always been aware of environmental sustainability issues and gives its contribution to a cleaner environment, supplying the refrigeration and air conditioning industry with state-of-the-art and environment-friendly technology. With its commitment and steady research in its laboratories, Castel has developed a whole range of products using natural refrigerants, which reduce emissions to the minimum. The large range of products belonging to the Castel "GoGreen" line has been developed to be used in CO_2 (R744) filled systems.

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