

Gold Label™ Liquid Line Filter-Driers

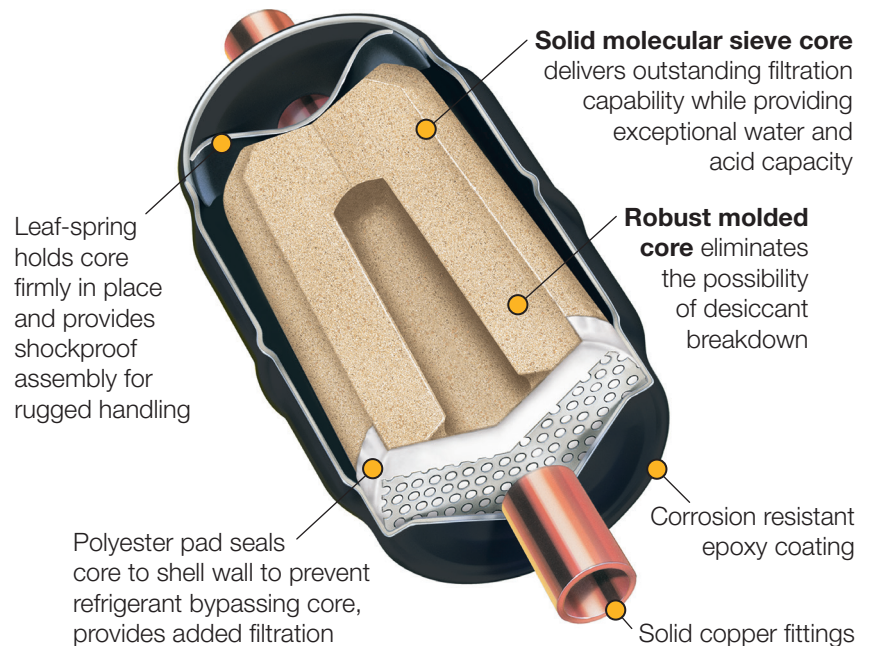
LLD Series

Improved
with a
**SOLID
CORE!**



The improved Gold Label™ Liquid Line Filter-Drier (LLD) provides superior solid contaminant and water removal capacity to ensure the proper performance of polyolester (POE) lubricants in air-conditioning systems.

The **new solid core** provides excellent debris holding capacity and first pass capture rate compared to common filter-driers. This is extremely important since POE oil suspends particles, keeping them in circulation with the lubricant. The LLD maintains low pressure drop while protecting the expansion device and compressor from the wear or plugging caused by solid debris.



Product Features:

- Superior moisture adsorption utilizing molecular sieve specially suited for R-410A
- Robust solid core for enhanced filtration capacity, efficiency, and reliability
- Suitable for use with HFC, HCFC, and HFO based refrigerant blends and MO, POE, and PVE (polyvinyl ether) lubricants
- Solid copper ODF, SAE Flare and ZoomLock® compatible fittings
- Powder paint finish surpasses 500 hour ASTM B117 salt spray requirements
- 650 psig maximum rated pressure



ENGINEERING YOUR SUCCESS.



Gold Label™ Liquid Line Filter-Driers

LLD Series

The basic function of a liquid line filter-drier is to remove moisture, acids, and filter harmfully sized particles from a refrigeration system. Experience has shown this to be especially important in systems that employ R-410A and POE lubricants.

POE lubricants are manufactured by reacting organic acid with alcohol to form the ester chains and water. This reaction is reversible when excess moisture and heat, which is always present in a compressor, exists in the system. The end result is the formation of the original acids and alcohol used in the formulation of the POE lubricant. This was not an issue with the earlier HCFC/CFC/mineral oil system chemistry. By removing water from the system, this reaction can be avoided.

Maintaining moisture level as low as possible is key to long term POE oil health. POE lubricants are hygroscopic, meaning they have the ability to absorb a significant amount of moisture from the atmosphere if

Gold Label Liquid Line Filter-Drier Models

SERIES	ODF CONNECTION MODELS	SAE FLARE CONNECTION MODELS	ZOOMLOCK® CONNECTION MODELS
LLD-030	2S	2, 2MF	-
LLD-050	2S, 3S	2, 3	-
LLD-080	2S, 3S, 4S	2, 3, 4	3-PZK
LLD-160	3S, 4S, 5S	3, 4, 5	3-PZK
LLD-300	3S, 4S, 5S, 7S	3, 4, 5	-
LLD-410	4S, 5S, 7S	3, 4, 5	-
LLD-600	7S, 9S	-	-

the can is left opened or punctured. Along with wet makeup lubricant, moisture can enter the system via leaks, improper cleaning, and improper evacuation which does not remove the moisture on the internal surfaces of the system. However, water can be introduced into a system from other sources as well. The Gold Label LLD Series is formulated to provide a dry system when properly sized and selected.

Solid contaminants such as copper oxide, carbon, and metallic fines can affect component operation

by clogging metering devices and causing undesired wear within the operating compressor. These particles became more problematic due to the chemistry of R-410A/POE lubricants and will continue to be problematic with the new HFC/HFO blends that also use POE lubricants. POE lubricant readily suspends solid debris and must be removed with an excellent filter-drier like the redesigned Gold Label LLD.

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