CARDEV®

HDFC-N

Depth Filter Element

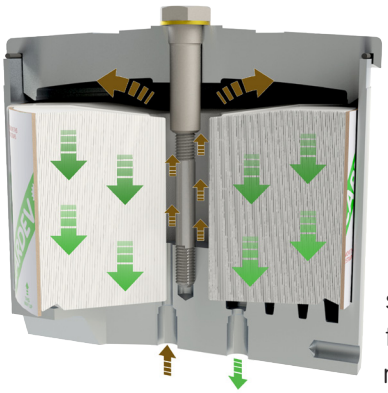
Product Datasheet

- Removes microparticles
- Removes free and dissolved water contamination
- Increases system reliability
- Prevents system corrosion
- Reduces component wear
- Extends oil life and generates CO_2 savings
- Reduces operating costs
- High dirt and water retention capacity

The CARDEV HDFC-N is a depth filter element made of long fibre cellulose, with a full diameter polyester protection disc. The element can be used on all oil-based fluids such as hydraulic, engine, gearbox oils and diesel fuels.

Action of Filter Element

The filter element acts by absorbing water and adsorbing particles in a continuous recycling process. The long cellulose fibres absorb water (both free and dissolved) formed either through the combustion process or by condensation / contamination. Larger oil molecules are forced to pass between the tight windings of the element.



By removing up to 99.9% water contamination, the production of acids (hydrolysis) is inhibited. As the oil passes through the element, minute particles of carbon, wear metals and silicon are extracted from the oil by adhering to the many surfaces of the filter.

By continuously removing water and particle contamination the ageing effect of such catalysts is minimised. This enables the oil life to be extended whilst maintaining the oil within the specification laid down by the OEM.

Oil life extension is dependent on the operating conditions and maintenance programme applicable to the machine. We recommend regular oil analysis during extended drain intervals.

The CARDEV HDFC-N has a 4 micron absolute rating (ISO 16889, 1999). In use particles of 1 micron or less in size are removed, achieving oil cleanliness levels which are "better than new" – as low as 13/11/8 (ISO 4406); NAS Class 2.

IMPORTANT NOTE-ADDITIVES

In modern lubricants additives are dissolved in the base oil. Additive levels will therefore not be reduced by the CARDEV filter element. By removing contaminants that could otherwise act as catalysts, additive and oil life is extended.

Filter Element Change Intervals

Taking into consideration the high dirt and water retention capacity, the filter change intervals can be individually determined according to the contamination and volume of the oil.

With a normal machine installation the recommended element change frequency is 500 operating hours / 30,000km or 6 months (whichever comes first). Where the machine operates in adverse conditions this change frequency should be reduced to 250 operating hours / 15,000km. Regardless of operating conditions a maximum filter change interval of 6 months should be observed.

Disposal

Used filter elements should be disposed of in accordance with local regulations and are made from fully combustible materials.

Type	Cleanliness Class	Dimensions (mm)		Retention capacity (per filter)		Maximum operating Temperature °C	Weight (kg)	Shipping quantities
		Height	Diameter	Dirt (kg)	Water (l)			
HDFC-N	≥ 13/11/8 (ISO 4406); NAS Class 2	112	143	≤ 1	≤ 0.37	95	0.5 ±5%	x 12

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