

Rexroth Filter Elements Generation 5 with <u>PURE POWER</u>



Sustainable reduction in filtration costs.



Filters guarantee high reliability in hydraulic machines and equipement. As part of a holistic filtration concept Rexroth has completely revised the filter material design. The focus of the development was to increase the dirt holding capacity compared to previous versions. This increases the changing intervals and reduces the maintenance, material and disposal costs.



With Cyclone-Effect, the fluid entering the filter head is directed away from the element and downward imparting a helical flow around the element and the fluid is evenly distributed over the entire surface of the filter media. This helical flow causes heavier particles to move away from the filter element toward the filter bowl. These heavier particles are collected on the bottom of the filter bowl.



Filter elements with <u>PURE</u> PO<u>WER</u> capture up to 50 percent more particles at a comparable retention rate and low differential pressure. All filter elements are equipped with an additional conductive layer as a standard. It allows for charge exchange between oil and filter material thereby reducing the risk of electrostatic charge and discharge in the filter.

The Filter Element with PURE POWER

The filter element consists of six highly engineered layers so the fluid is filtered in three successively finer fiberglass layers. The layers are designed to work together to achieve a high retention rate and dirt holding capacity, combined with a low clean pressure drop. This increased performance is achieved by three effective micro glass layers as standard in combination with an electric conductive layer and a supporting mesh. The filter material is pleated and wrapped cylindrically round the

support tube and glued so it is impermeable to liquid along the material seam and top and bottom end caps.

The below cut away pattern shows the fan shaped structure of filter element.

1 Supporting mesh

Supporting mesh is used to protect filter material on the inlet flow



2 Pre-filter

Micro glass-pre filter to relieve the intermediate and main filter regarding of dirt holding capacity





③ Intermediate-filter Micro glass-intermediate filter for supporting the main filter



(4) Main-filter Micro glass-main filter for fine particle filtration and ensuring the nominal filter fineness



- (5) **Electrically conductive layer** Protective layer – antistatic finished, reduces the risk of electrostatically charge and discharge in the filter system
- (6) Supporting mesh Supporting mesh is used for filter material protection on the downstream side





The Drive & Control Company



Bosch Rexroth AG Hardtwaldstraße 43 68775 Ketsch/Germany Tel. +49 6202 603-0 Fax +49 6202 603-199 info-ket@boschrexroth.de www.boschrexroth.com

You can find your local contacts at: **www.boschrexroth.com/adressen**

R 999000193/2017-1 © Bosch Rexroth AG 2016 Änderungen vorbehalten! The information contained herein is intended to serve purely as a product description. Due to the ongoing development of our products, a statement of a particular aspect or of suitability for a particular purpose cannot be derived from the information provided. This information does not release the user from his responsibility to perform his own assessments and tests. Please note that our products are subject to the natural processes of aging and wear.