

# Life Cycle Management perfect down to the last detail





## Increase the service life and performance of your system

In a chain, the weakest link always determines the load-carrying capacity. This is also true for hydraulic systems. Why running great risks for the entire hydraulic system whereas savings are minimal?



We offer you a wide portfolio of hydraulic products that perfectly suit the high efficiency and long service life of hydraulic solutions.

#### Your advantage:

Components in proven large-series quality that are available worldwide and the certainty that our products, which perfectly match your system, reduce your life cycle cost lastingly.

At Rexroth all developments undergo the same strict quality assessment during the design process – complex power units just as seemingly simple components. For all components we always test the material strength under load, functions up to the limits and the service life in comprehensive test runs. In production, we apply large-series methods of quality assurance. In this way, we significantly increase the availability of your complete system. Be it filters for optimal fluid conditioning or low-noise oil/ air coolers, bladder and diaphragm accumulators, measuring and maintenance sensors – the Rexroth product range provides the preconditions for continuingly high performance and a long service life of your system.

In addition, you benefit from the experience of our worldwide service network. Our specialists in more than 80 countries are pleased to render advice in all questions around your hydraulic system – irrespective of the year of construction and the manufacturer. We are on your side, when it comes to a swift replacement of components, condition monitoring, the extension or adjustment of existing systems or also retrofitting or modernization. Increase the service life and performance of your hydraulic system methodically.

### Filter systems: State-of-the-art fluid management

Oil is the central component of every hydraulic system. Failures of systems can in most cases be traced back to oil contamination. Rexroth filters and cleaning systems for hydraulic oil and lubricant applications ensure optimum operating conditions over the entire life cycle.





With a wide spectrum of newly developed and revised filter systems we always come up with just the right solution for all pressure ranges and applications. Our filter media reliably remove particles from any hydraulic fluid and hence protect your system against damage. In addition, our filters reliably remove unbound water from the medium, thus preventing corrosion. Here, Rexroth offers more than standard: Specific process filters cover also special applications.

We prepared our modern filter systems for current and future requirements of condition-related maintenance strategies: Sensors integrated in the filter assemblies continuously measure contamination and signal required filter changes in due time at several levels – visually on the filter or by way of a message on the operator panel of the control. This helps you reduce your maintenance cost while ensuring optimal operating conditions for your system.





In-line filter
type 110 LE(N)



### Bladder and diaphragm accumulators: Reserves for energy efficiency

Store the high power density of hydraulics and utilize it specifically when required: In the case of cyclic movements, hydraulic accumulators can reduce the installed power, thus increasing energy efficiency.



The clearly structured range of our bladder and diaphragm accumulators meets the requirements of any system size and any application. They are convincing by their great pressure fluctuation width and thought-out details: For example, the changeable gas valve on our bladder accumulators enhances maintenance and repair friendliness. Moreover, due to the extreme resistance of the bladders in Rexroth accumulators, the change intervals can be extended. In plant construction and wind energy turbines, our hydraulic accumulators offer a decisive reserve for a safe shutdown in the event of a power failure.

#### Accumulator shut-off modules: Ready-to-install function – a complete system for setups in accordance with standards.

Only in conjunction with an accumulator safety block does a hydraulic accumulator comply with international regulations. We offer assemblies that are designed and optimized by the leading hydraulics specialists and allow you to comply with Pressure Equipment Directive 97/23/EC.

Our accumulator shut-off block with integrated shut-off, pressure relief and unloading valve comes readily mounted on a console for direct connection.

Our accumulator shut-off modules consist of proven standard components: CE-tested cartridge, shut-off and unloading valve, test and accumulator ports. On request, our service will connect the module to your system directly at your end.



 Diaphragm accumulator type HAD

- Accumulator assemblies of series ABSBG -
- of series ABSBG design to Pressure Equipment Directive 97/23/EC

 Bladder accumulator type HAB



#### Cooler systems: Optimum fluid temperature with low noise emission

The trend is clear: Regulations for machine building and plant construction stipulate increasingly lower limit values for the permitted average noise emission. Numerous industrial end users apply even stricter internal standards. We support this development with a systematic reduction of noise emission.



 Oil/air heat exchanger unit of series KOL and filter-cooler circulation unit of series KOLP

## Increase the service life of your hydraulic medium and spare your system

Our oil/air coolers always keep the hydraulic oil within the optimum temperature range – with lowest noise emissions down to 52 dB(A). We achieve this partly by solid and robust housings. In this way we reduce or even eliminate noise charges of the power unit within the entire cooling capacity spectrum of 3 kW to 120 kW.

Our oil/air coolers are available with electric motors for a wide range of supply voltages. Also here, you can select the perfect variant for your system from a multitude of variants on a modular basis: Oil/air heat exchanger units with filter/ cooler circulation units, by-pass valve and temperature switch are convincing by their high efficiency and optimal air routing. The special fin form retards contamination of the cooling element and relieves your maintenance personnel. Our oil/water heat exchanger units with low-noise circulation pumps perform filtering at the same time and electrically signal the degree of contamination.





 Oil/water heat exchanger unit of series ABUKG

#### Information advantage for a longer service life thanks to Rexroth sensorics

From the pressure gauge to the field-bus-capable online condition monitoring sensor: The right sensor at the right place provides you with a decisive information advantage for a longer service life of your system.





High-quality products from our comprehensive range of sensors monitor pressures in your hydraulic system and measure the level, temperature, particle load and water content of the fluid. With conventional switching contacts or analog technology for continuous sensing you have your hydraulic medium reliably under control.

 Online water content measuring device type WGM 07



Laser particle counter type MPC 4614

 Online particle monitor type OPM 4000





Rugged pressure sensors for pressure ranges up to 600 bar and pressure switches with high repeatability as well as definable switching hysteresis ensure high process stability.

Our online condition monitoring sensors continuously measure the particle load and the water content of your hydraulic oil. This helps you detect gradual deteriorations in quality at an early stage and you can take target-oriented countermeasures, for example with Rexroth filter systems. In the case of contamination that occurs suddenly, our oil measurement equipment warns you directly so that you can prevent expensive damage and a long standstill of your system. With the Rexroth Upgrading Program for all hydraulic systems you cut life cycle cost and extend the service life – with components thought out to the last detail.  Pressure gauge with liquid fill type ABZMM



 Pressure sensors type HM20

 Hydro-electrical pressure switch type HED8





 Float switch type ABZMS and electronic contact thermometer type ABZMT

## Lifelong partnership

Your guarantee for lowest total cost of ownership: Also after commissioning, we accompany you through the entire life cycle with comprehensive services and tailored solutions.



For more than fifty years we have looked after hydraulic systems worldwide with excellent service. With intelligent services we maintain your system fit over the entire service life and increase its availability. For this, we also rely on innovative condition monitoring strategies and efficient web-based services. Through an increased service life of the hydraulic medium you can significantly reduce your operating cost. We are pleased to assume the entire fluid management for you. Benefit from our experience that has been gained in many thousands of hydraulic applications. Also when it comes to conversion, modernization or retrofitting, we support you from planning through to the realization. We offer a lifelong partnership for lastingly low total cost of ownership.



#### **Bosch Rexroth AG**

Zum Eisengießer 1 97816 Lohr, Germany Phone +49 9352 18-0 Fax +49 9352 18-40 www.boschrexroth.com/hydraulics

Find your local contact person here: www.boschrexroth.com/addresses

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