BEHRINGER®

Mahle Turbidity Sensor and Coalescer Filters

Efficiently Remove Water from Hydraulic Oils with

MAHLE

Turbidity Sensor and Coalescer Filters

Turbidity Sensor

PIT 400

The MAHLE Turbidity Sensor PIT 400 was developed to reliably identify turbidity in hydraulic fluids. Ingress of water into the hydraulic system causes the turbidity in the hydraulic fluid. Water in hydraulic fluids can harm the function of the entire system and reduce the life span of the pressure fluid and the system's components. Turbidity in the fluid is quickly recognized by the sensor. Ingress of water is registered immediately so that precautionary measures can be taken before the damage to the system becomes out of hand. Therefore the sensor offers great security for the entire system. The sensor should be built into all fluid-technical systems that are at risk of being contaminated by water, e.g. by defect coolers, broken seals or condensed water. The sensor should preferably be installed in the return line, the tank or the bypassing cooling circulation. It is easily calibrated to the normal condition of the fluid by the push of a button. The fading transmission of the IR - Light measures the turbidity in the fluid. The applications for the sensor range from all HLP-, HEES- and HETG - fluids.

Coalescer-Filter

PiW 1975

The Coalescer Filter was especially designed to separate water from hydraulic fluids. According to the VDMA Regulations 24 568, the amount of water in HE pressure fluids has to be kept under 1.000 ppm (0,1%). HLP fluids should not contain any water at all. Water always causes turbidity which can be seen by the human eye. Turbidity is physically an emulsion, whereby pressure fluids are contaminated with small droplets of water. This is the reason why a mechanical separation from these water droplets has to take place, which is called the coalescer-principle. The droplets are collected in various layers, the accumulated water then leaves the coalescer layer and is trapped in a special hydrophobic issue where the separation from the pressure fluid then takes place. The water is released from the system by sedimentation. It is important, that a certain differential pressure is not exceeded in the process. The viscosity needs to be taken into account for a perfect operation. The coalescer works best if the pressure fluids contain a minimal amount of emulsive additives. The consequence: Special expensive oils in systems that are in constant danger of water ingression can be replaced by simple, cost-efficient pressure fluids.

BEHRINGER CORP., 17 RIDGE ROAD, BRANCHVILLE, NEW JERSEY 07826

973*948*0226 fax: 973*948*2562 www.behringersystems.com cserv@behringersystems.com