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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17488-2008

Replacing GB/T 17488-1998

**Hydraulic fluid power -- Filter elements -- Determination of
resistance to flow fatigue using particulate contaminant**

液压滤芯 利用颗粒污染物测定 抗流动疲劳特性

(English Translation)

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Foreword

This standard is identical with ISO 3724:2007 "Hydraulic filters use particle pollutants measured resistance to flow fatigue" (English Chinese Version).

This standard is equivalent translation ISO 3724:2007.

For ease of use, this standard does the following editorial changes.

--- "2 Normative references" chapter, instead of the corresponding national standards with international standards;

--- Delete ISO 3724:2007 Annex A and references.

This standard is GB/T 17488-1998 "hydraulic filter verification of flow fatigue characteristics," the amendment.

This standard replaces GB/T 17488-1998.

This standard compared with GB/T 17488-1998, has the following changes.

--- Change the standard name;

--- Increase pollutants addition method;

--- Of filter pressure - time waveform make provisions;

--- On the viscosity of the test liquid make provisions;

--- Removal of the test liquid temperature range specified;

--- Flow pulsation frequency of the test to make more precise provision.

The standard proposed by China Machinery Industry Federation.

This standard by the National Standardization Technical Committee of hydraulic and pneumatic (SAC/TC3) centralized.

Introduction

In the hydraulic drive system, the power is by pressure fluid in a closed loop to transfer and control. This is both a liquid lubricant and the power transfer medium. Filter to maintain clean fluid filtered through the insoluble contaminants. From the actual filter is in the filtering process Effect of porous devices.

In addition to the efficiency of removal of contaminants the filter depends on its design itself, but also depends on its sensitivity to unstable operating conditions, such Unstable operating conditions often cause fatigue and damage filter.

GB/T 17488-2008/ISO 3724:2007 Determination of particulate contamination of hydraulic filters use Resistance to flow fatigue

1 Scope

This standard specifies the test method for determining hydraulic transmission filter resistance to flow fatigue characteristics. By adding a specific particle pollution to the test system Pollutants, so that the filter reaches a predetermined maximum pressure, and the filter in a consistent alternating flow fatigue tests carried out.

This standard establishes a uniform method for determining the filter against the flow fluctuations caused by changes in the pressure is alternately damage caused ability.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 786.1 hydropneumatic graphic symbols (GB/T 786.1-1993, eqv ISO 1219-1:1991) OK
GB/T 14041.1 hydraulic filter and verify the structural integrity of the initial bubble point (GB/T 14041.1-2007, ISO 2942:2004, IDT) GB/T 14041.2 hydraulic filter material compatibility with fluid test method (GB/T 14041.2-2007, ISO 2943.

1998, IDT)

GB/T 14041.3 hydraulic filter resistance to cracking test method (GB/T 14041.3-1993, neq ISO 2941. 1974) GB/T 17446 Fluid power systems and components Terminology (GB/T 17446-1998, idt ISO 5598. 1985) ISO 1219-2 hydraulic systems and components - Graphic symbols and circuit diagram - Part 2. Circuit diagram

3 Terms and Definitions

GB/T 17446 and established the following terms and definitions apply to this standard.

Because the filter system resilience periodic flow changes caused structural damage.

The filter housing and filter pressure and the maximum pressure.

Cartridge is not installed into the filter housing, the pressure difference between the oil port.

The filter specified by the manufacturer of the filter element by the maximum differential pressure, the differential pressure in this range, the filter element can maintain effective performance.

4 graphic symbols and system of FIG.

This standard graphical symbols in accordance with the provisions of GB/T 786.1, the circuit diagram of the system in accordance with the specified test of ISO 1219-2.

GB/T 17488-2008/ISO 3724:2007