ISO 10100:2020 (E)

Hydraulic fluid power — Cylinders — Acceptance tests

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Symbols and units

5 Identity check and characteristic parameters

5.1 General
5.2 Double rod cylinder
5.3 Single rod cylinder

6 Test conditions

6.1 Test fluid
6.2 Test fluid conditioning
6.2.1 General
6.2.2 Contamination level
6.2.3 Fluid temperature
6.2.4 Rust inhibitors

7 Test modules

8 Module L — Basic tests for leakage

8.1 General
8.2 Test for leakage at low test pressure
8.2.1 Procedure
8.2.2 Sight test
8.3 Proof/external leakage test
8.3.1 Procedure
8.3.2 Sight test

9 Module P — Piston seal leakage test (optional)

9.1 General
9.2 Procedure
9.3 Sight test

10 Module F — Friction force test (optional)

10.1 General
10.2 Test setup
10.3 Test amplitude
10.4 Motion profile
10.4.1 Measurement with sinusoidal movement
10.4.2 Measurement at a constant speed
10.5 Determination of friction force
10.5.1 General
10.5.2 Double rod cylinders
10.5.3 Single rod cylinders
10.6 Statement of friction force
10.6.1 General

10.6.2 Static friction force
10.6.3 Friction force at test speed

11 Identification statement (Reference to this document)

Page count: 9