



Caliper Bench Test Report

Link Test Report #: 113497-5-1
Test Description: Link Caliper Benchmarking Template

Purpose of Test: CALIPER BENCHMARKING

Customer Reference: 10-12K
Program #: Link Caliper Benchmarking
Platform: Single Piston Floating
Lining Material: NA
Test Date: 08/17/26 - 08/25/26

Requested By:

DeeMaxx Components, Inc.
Bryce Deegear
212 S. Front Street
Aledo, Texas 76008
United States

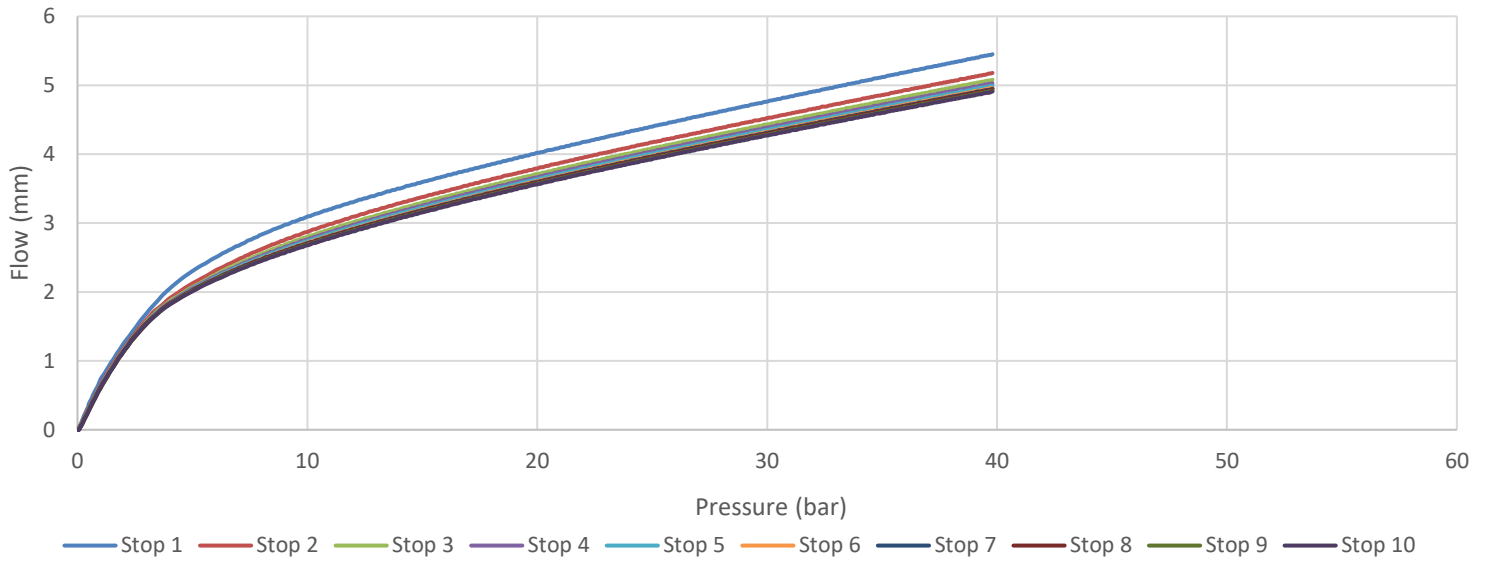
Tested By:

Link Engineering Company
Dearborn Technical Center
401 Southfield Rd
Dearborn, MI 48120
www.linkeng.com
(313) 625-4000



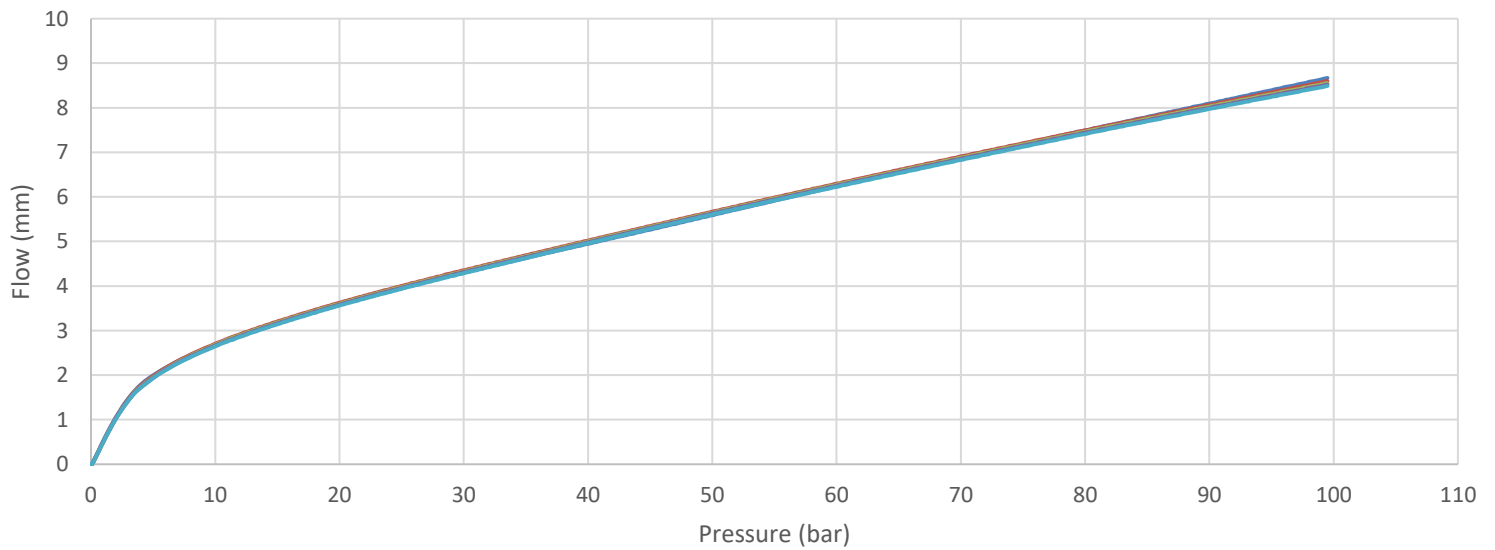
Sect. 4 Fluid Displacement with Pads

40 Bar Hydraulic Apply



Max Volume Consumption at 40 bar: 5.45 cm³ Stop: 1

100 Bar Hydraulic Apply



Max Volume Consumption at 100 bar: 8.67 cm³ Stop: 1

Test Description

Link Caliper Benchmarking Template

Caliper Bracket Number

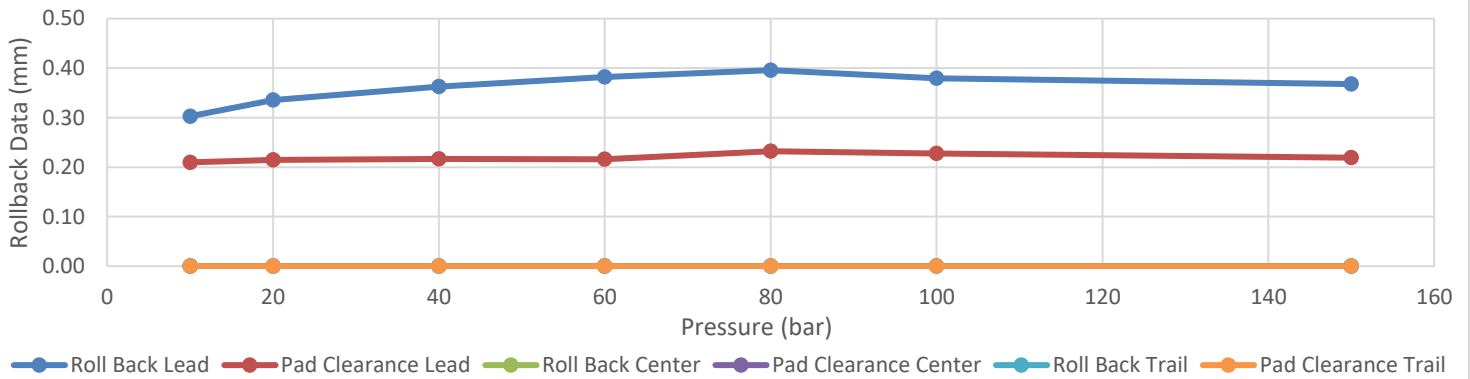
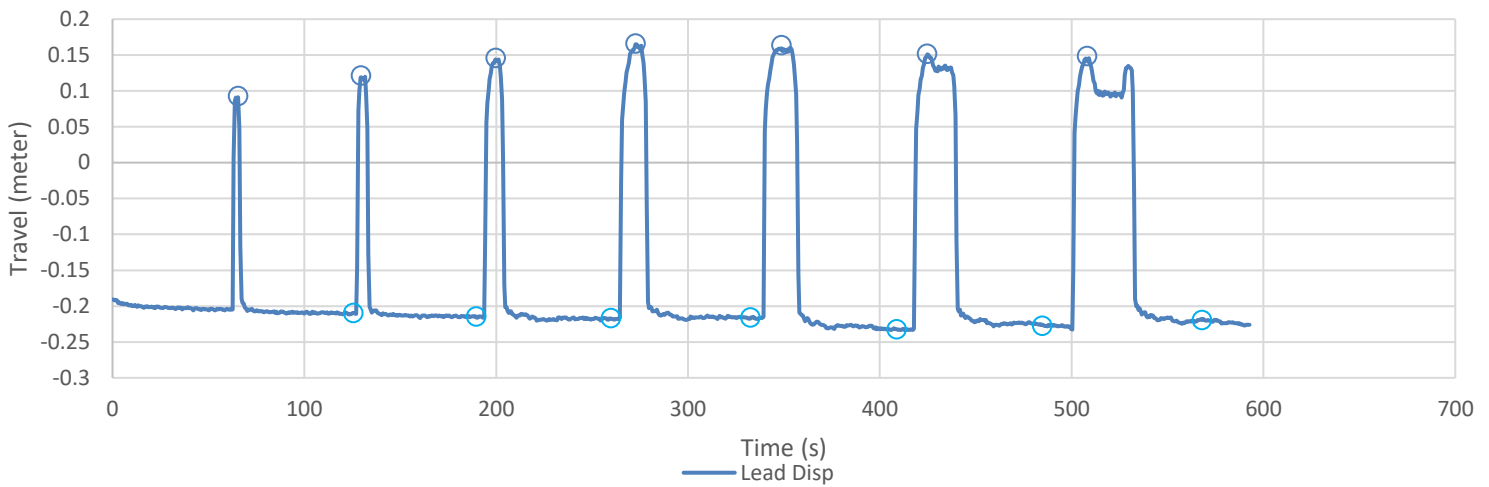
10-12K

Test Procedure

Link Caliper Benchmarking



Inboard Pistons with Pads



Sect 4.2 Roll-back

	Unit	Lead	Center	Trail
Roll-back 1 (10.0 bar)	mm	0.30	---	---
Roll-back 2 (20.0 bar)	mm	0.34	---	---
Roll-back 3 (40.0 bar)	mm	0.36	---	---
Roll-back 4 (60.0 bar)	mm	0.38	---	---
Roll-back 5 (80.0 bar)	mm	0.40	---	---
Roll-back 6 (100.0 bar)	mm	0.38	---	---
Roll-back 7 (150.0 bar)	mm	0.37	---	---
Pad/disc clearance 1 (10.0 bar)	mm	0.21	---	---
Pad/disc clearance 2 (20.0 bar)	mm	0.21	---	---
Pad/disc clearance 3 (40.0 bar)	mm	0.22	---	---
Pad/disc clearance 4 (60.0 bar)	mm	0.22	---	---
Pad/disc clearance 5 (80.0 bar)	mm	0.23	---	---
Pad/disc clearance 6 (100.0 bar)	mm	0.23	---	---
Pad/disc clearance 7 (150.0 bar)	mm	0.22	---	---

Room Temperature	°C	24
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Test Description

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Caliper Bracket Number

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Test Procedure

Link Caliper Benchmarking

Air Gap Roll Back

Setup

View #1



Setup

View #2



Test Description

Link Caliper Benchmarking Template

Caliper Bracket Number

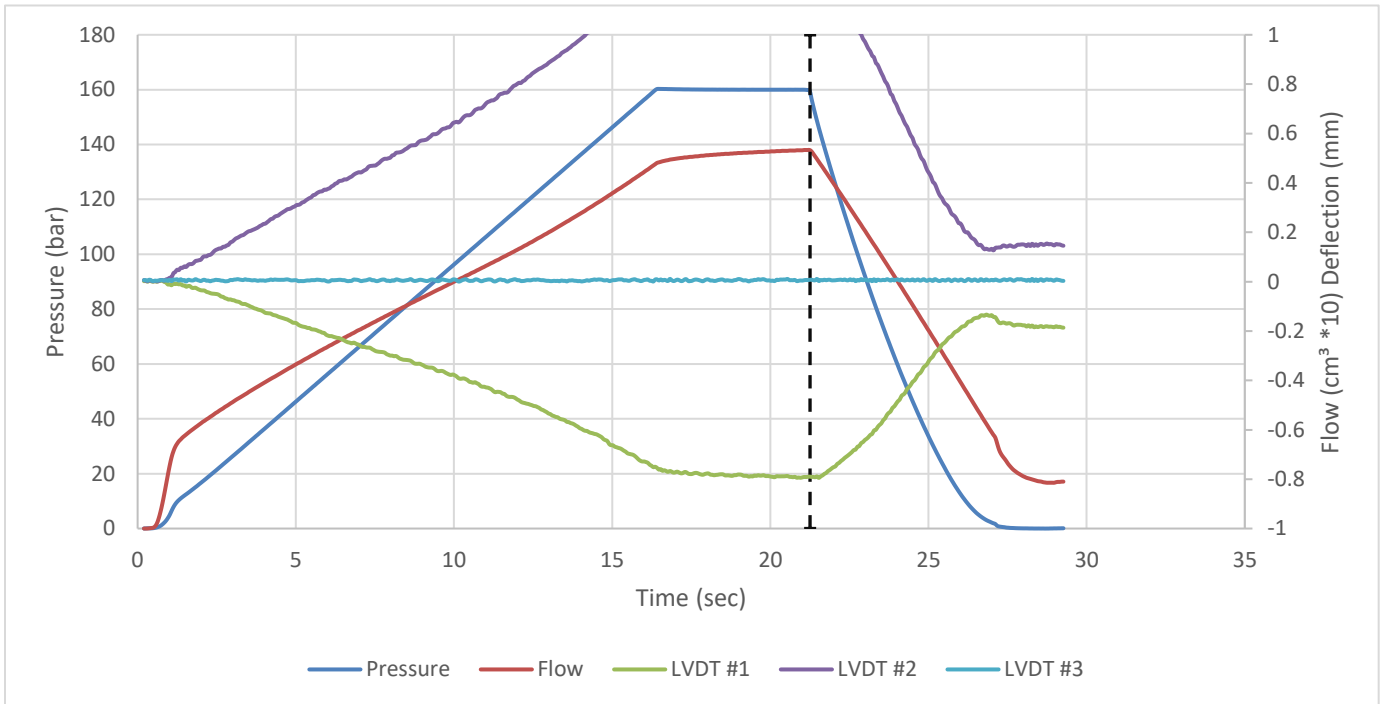
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Test Procedure

Link Caliper Benchmarking



Sect 4.3 Housing Deflection with Pads



Section: 62 Stop: 1

@ Pressure (bar)	LVDT #1	LVDT #2	LVDT #3	Deflection of LVDT 1 & 2
160	-0.79 (mm)	1.308 (mm)	0.009 (mm)	-2.098 (mm)

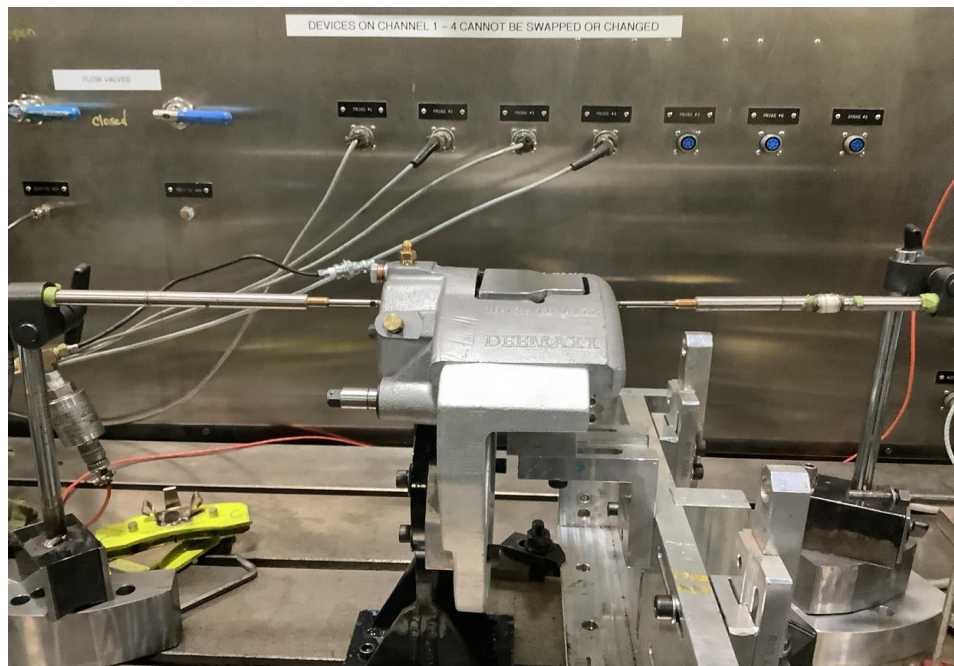
Test Comments:

Room Temperature	°C	24
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Test Description	Caliper Bracket Number	Test Procedure
Link Caliper Benchmarking Template	10-12K	Link Caliper Benchmarking

Housing Deflection**Setup**

View #1

**Setup**

View #2

Test Description

Link Caliper Benchmarking Template

Caliper Bracket Number

10-12K

Test Procedure

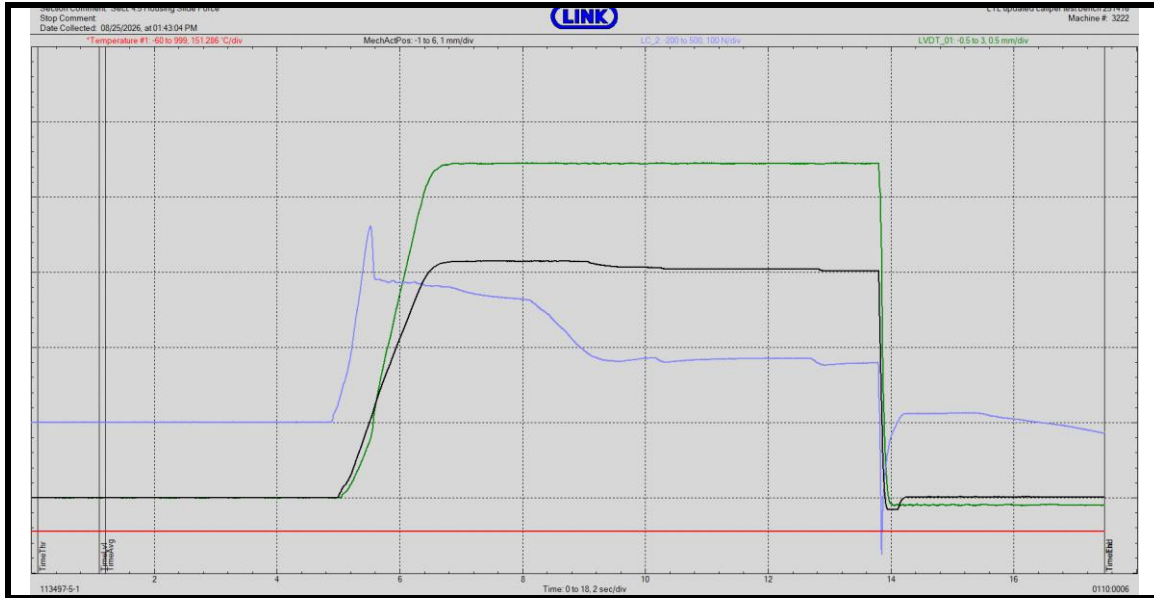
Link Caliper Benchmarking



Housing Slide Force

Force Gauge Reading at 0.02 mm movement					
Stop 1	Stop 2	Stop 3	Stop 4	Stop 5	Average
44.6	41.4	43.3	40.8	56.2	45.3

Max Force Gauge Reading					
Stop 1	Stop 2	Stop 3	Stop 4	Stop 5	Average
261.8	245.3	256.9	242.4	235.0	248.3



Test Description

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Test Procedure

Link Caliper Benchmarking

Housing Slide Force

Setup

View #1



Setup

View #2



Test Description

Link Caliper Benchmarking Template

Caliper Bracket Number

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Test Procedure

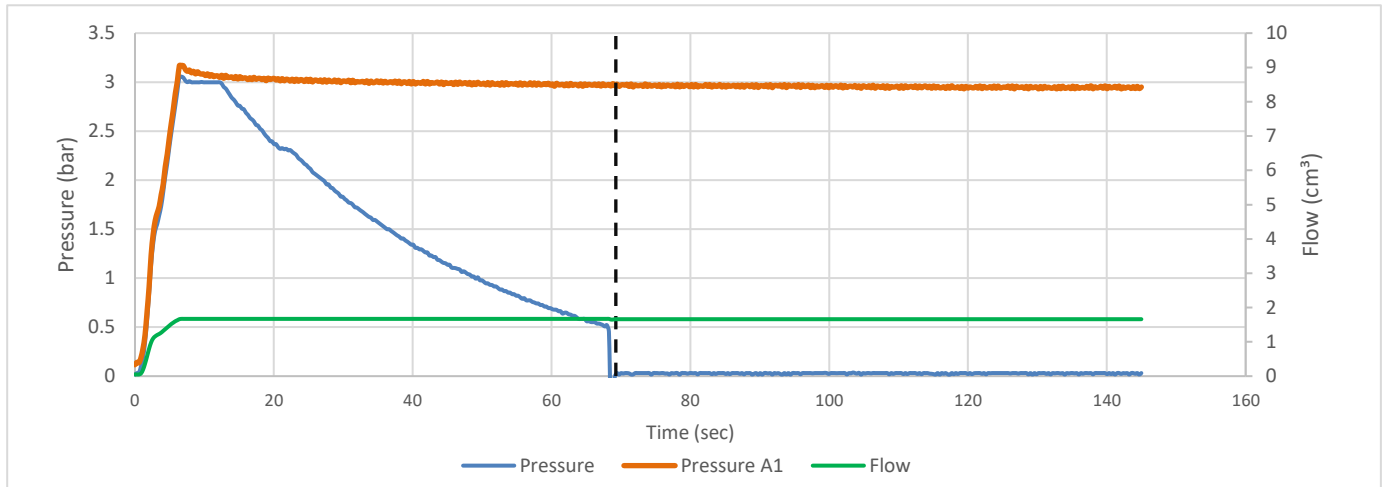
Link Caliper Benchmarking



Sect 4.7 Leakage with Pads

S.1.b Low Pressure Test Execution

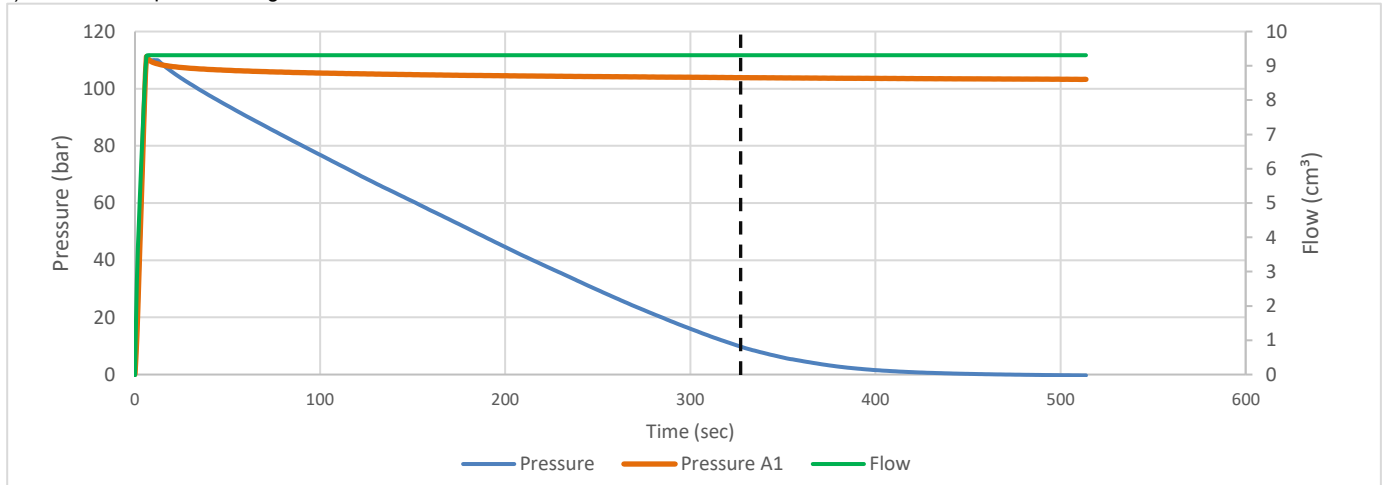
- 1) Perform 2 hydraulic applies from 0 bar to 10 bar at 5 bar/s to settle the hydraulic system and hold the pressure for 10 seconds before releasing;
- 2) Begin recording data for hydraulic pressure verses time;
- 3) Perform a hydraulic apply from 0 bar to 3 ± 1 bar at a rate of 0.5 bar/s;
- 4) Wait 10 seconds for pressure to stabilize and isolate the caliper from the hydraulic circuit by closing the valve;
- 5) Measure the pressure degradation curve for 60 seconds



Section	Stop	Target Pressure	Initial Pressure	Final Pressure @ 60 sec	Pressure Degradation @ 60 sec
82	1	3 bar	2.99 bar	2.93 bar	0.06 bar

S.1.c High Pressure Test Execution

- 1) Perform 2 hydraulic applies from 0 bar to 100 bar at 20 bar/s to settle the hydraulic system and hold the pressure for 10 seconds before releasing;
- 2) Begin recording data for hydraulic pressure verses time;
- 3) Perform a hydraulic apply from 0 bar to 100 ± 10 bar at a rate of 20 bar/s;
- 4) Wait 10 seconds for pressure to stabilize and isolate the caliper from the hydraulic circuit by closing the valve;
- 5) Measure the pressure degradation curve for 60 seconds



Section	Stop	Target Pressure	Initial Pressure	Final Pressure @ 60 sec	Pressure Degradation @ 60 sec
84	1	100 bar	103.87 bar	103.65 bar	0.23 bar

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Test Procedure

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Fluid Displacement and Leakage

Setup

View #1



Setup

View #2



Test Description

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Test Procedure

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