

HYDRAULICS

Hydraulic Pump Loading System

>HPLS300<



Connector Plate Operation Rack Console

This equipment is developed for controlled hydraulic loading of the Engine Driven Pump during testing of the Rolls-Royce development engine "BR725" and is designed for use with skydrol.

It is possible to adapt it for other engine types.

- Supply of the Engine Driven Pump (EDP) with hydraulic oil.
- Regulating the flow to simulate pump loading.
- > Cooling of the hydraulic oil. Measurement of all relevant EDP pump parameters.
- The supply pressure to the EDP can be regulated.
- > The system pressure can be easily switched between 3,000 or 5,000psi from a switch mounted on the 19in Operation Rack Console.

safety in test > safety in flight 7/17/71/71/7

GENERAL INFORMATION

- > The operation and control of the system can be performed from the 19in Operation Rack Console or externally from the connector plate fitted on the back of the unit.
- > The temperature control is carried out from the test stand.
- > 2 fixed and 2 braked swiveling castors with brakes are fitted to provide mobility and manoeuvrability.
- > It is provided with openings for transportation with a forklift truck and hoisting points for a crane.
- > An external drip tray is provided to catch oil leaks.
- > External measurements can be carried out using the connector plate.
- > An EX-protection version can be provided.
- > Air transport is possible.

TECHNICAL DATA

> Electrical parameters:

Mains connection: 3/N/PE AC 50Hz 400V

Nominal current: 25A
Power: 17.3kVA
Back-up fuse: 32A

> Hydraulic parameter:

Input pressure: 207bar (3,000psi)

or oi

345bar (5,000psi) Flow: max. 250lpm (66USgpm) Main tank: 120l (31.7USgal)

Filter level: 3µ filter

> Compressed air supply:

Pressure: 4.5 to 10bar (65.3 to 145psi)

Nominal diameter: 1/4"

> Cooling water supply:

Pressure: 3 to 16bar (43.5 to 232psi)

Nominal diameter: 11/4"

> Medium:

SKYDROL Type IV and V

> Control range:

Temperature: 40 to 100°C (104 to 212°F)

(manual internal or external set value

import)

Flow: 1 to 250lpm (2.6 to 66USgpm)

(manual internal or external flow

control)

Pressure: 0 to 345bar (0 to 5,000psi)

(manual internal or external pressure

control)

> Measurement range:

Pressure: 0 to 16bar (0 to 232psi)

±0.5% o.f.s.

0 to 400bar (0 to 5,800psi)

±0.5% o.f.s.

Flow: 1 to 200lpm (0.5 to 53USgpm)

±1lpm (±0.3USgpm)

Temperature: 0 to 100°C (32 to 212°F)

±1.5°C (±2.7°F)

o.f.s. ... of full scale

> Dimensions and weight:

 Width:
 1,970mm
 (6.5ft)

 Depth:
 1,130mm
 (3.7ft)

 Height:
 1,500mm
 (4.9ft)

 Weight:
 995kg
 (2,194lb)

Technical data are subject to change!