HYDRAULIC PRESSURE SWITCHES

1. INTRODUCTION:

The Hydraulic Pressure Switch converts pressure input to electrical signal at a set value of pressure & it is used for health monitoring of hydraulic system as well as for activating the emergency hydraulic power. The pressure switch is a electromechanical device to sense any pressure drop below safe operating threshold allowing the switching ON of the warning lamp in the aircraft cockpit.

It consists of a piston mechanism that responds to changes in Hydraulic pressure. When the pressure exceeds or falls below the predetermined range, the hydraulic pressure switch triggers a response, and corresponding electrical signals are fed to health monitoring system for displaying failure indication in cockpit.

2. TECHNICAL DETAILS

2.1. Pressure Switch: 1

Sl No.	Parameter	Value
4.11	Rated Working Pressure	280 bar
4.12	Proof Pressure	420 bar
4.13	Burst Pressure	700 bar
4.14	Pressure Settings to change status of the switch:	…….
4.14.a	Actuating Increasing Pressure	265 bar ± 14 bar
4.14.b	De-Actuating Decreasing Pressure	217 bar ± 14 bar

2.2. Pressure Switch: 2

Sl No.	Parameter	Value
4.21	Rated Working Pressure	260 bar
4.22	Proof Pressure	390 bar
4.23	Burst Pressure	650 bar
4.24	Pressure Settings to change status of the switch:	…….
4.24.a	Actuating Increasing Pressure	245 bar ± 14 bar
4.24.b	De-Actuating Decreasing Pressure	200 bar ± 14 bar

2.3. Pressure Switch: 3

Sl No.	Parameter	Value
4.31	Rated Working Pressure	280 bar
4.32	Proof Pressure	420 bar
4.33	Burst Pressure	700 bar
4.34	Pressure Settings to change status of the switch:	…….
4.34.a	Actuating Increasing Pressure	200 bar ± 14 bar
4.34.b	De-Actuating Decreasing Pressure	160 bar ± 14 bar