

TEST RECORD No. 9

SAMPLES:

Representative production samples of the Industrial Control Equipment, Component - Motor Controllers, Float- and Pressure-operated, as indicated below and constructed as described herein, were submitted by the manufacturer for examination and tests.

GENERAL:

The test results relate only to the items tested.

Representative production samples of the "Open Type, Pressure Operated Switches":

"XP Series" -

- Model No. XP, may be followed by -L.
- Model No. XP1/XP2, followed by 0, 1, followed by 0, 1, 2, may be followed by R / A, may be followed by -L.

were submitted by the manufacturer and used for evaluation purposes.

The sample of "Pressure Switches - Mod. No. XP1x1xx and XP2x1xx" were found to be constructed as described in the preceding part of this report and they were considered representative of the entire "Pressure Operated Switches - XP Series".

This Test Record is related to a revision of the Description of this Report Section, about the "Operating Pressure Range", for updating's. Specifically the constructive changes are the following:

- "Operating Pressure": 10 bars (for 100,000 cycles).
- "Maximum Pressure": 12 bars.

RATINGS:

1) Electrical Ratings -

Pressure Switch Model Nos.	Electrical Ratings (covered by Micro-Switch ratings)
XP XP1xxx XP2xxx	15 A 125 / 250 Vac (100,000 cycles)
XP-L XP1xxx-L XP2xxx-L	0.1 A 125 / 250 Vac (100,000 cycles)

2) Operating Ambient Temperature - 125°C max

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3. Operating Pressure Ratings -

3a) Operating Pressure Range:

- Mod.Nos. XP1(2)x0(2)xx - 0.2 + 6.0 Bars (2.9 + 87.0 PSI)
- Mod.Nos. XP1(2)x1xx - 0.2 + 10.0 Bars (2.9 + 145.0 PSI)

3b) Fixed Differential Pressure: ≈ 0.2 + 0.8 Bars (≈ 2.9 + 11.6 PSI)

3c) Maximum Pressure:

- Mod.Nos. XP1(2)x0(2)xx - 6.0 Bars (87.0 PSI)
- Mod.Nos. XP1(2)x1xx - 12.0 Bars (174.0 PSI)

4) Hydraulic-Nipple - "Tightening Torque Value:

- Polymeric Nipple - 0.5 Nm (0.05 Kg m)
- Metal Nipple / Metal Adapter - 8.8 Nm (0.90 Kg m)

For this above "Operating Pressure Ratings", the following Test Program was performed with the results indicated:

1. ENDURANCE TEST (only Mechanical)	Sec. 111 (Clause 6.6)
2. PRESSURE TESTS - PARTS NOT CONTAINED IN AN ENCLOSURE	Sec. 112.3

Refer to the following attachment for details about all these above tests:
- Attachment No. 9-DataSheets-1.

The above "Test Program" has been conducted in the manufacturer's location in Pessano con Bornago (MI), Italy, and witnessed by a member of Underwriters Laboratories Engineering staff (under the UL witness test data program).

Due to the similarity of these Industrial Control Equipment, Component - Motor Controllers, Float- and Pressure-operated, "Open Type, Pressure Operated Switches - XP Series" to the other models previously evaluated, tested and covered under this Report, no additional tests were considered necessary.

However Engineering judgment that other changes do not negatively impact the performance of the product for the specific test waived.

The test methods and results of these above tests have been reviewed and found in accordance with the requirements in:

- UL 508, the Standard for Industrial Control Equipment, 17th Edition, last revision October 16th, 2013
- Canadian National Standard for Industrial Control Equipment, C22.2 No.14-13, 12th Edition, last revision March 2013.