

APPROVAL REPORT

TWO-WIRE TRANSMITTERS FOR HAZARDOUS (CLASSIFIED) LOCATIONS

Prepared For:

**Moore Industries, Inc.
16650 Schoenborn Street
Sepulveda, CA 91343-6196**

**J.I. 1Q7A8.AE
(3615)
September 19, 1990**



Factory Mutual Research

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I INTRODUCTION

1.1 Moore Industries, Inc. requested Factory Mutual Research Corporation (FMRC) Approval of their Two-Wire Transmitters as explosionproof for Class I, Division 1, Groups B, C and D; Dust Ignitionproof for Class II, Division 1, Groups E, F and G; suitable for Class III, Division 1 hazardous (classified) locations, indoors.

1.2 The specific Two-Wire Transmitters as described by this report will appear in the FMRC Approval Guide as follows:

EXP/I/1/BCD; DI/II/1/EFG; S/III/1.

Two-Wire Transmitter. Models, ACX, ALX, DVX, DSX-HP, FDX, EP-FDX, FFX, ITX, MVX, PTX, RBX, EP-RBX, RIX-HP, RIX-DT, SCX, SRX, TCX, EP-TCX, when used with Explosionproof Enclosure, consisting of a base, P/N 800-821-18 or 800-822-18, and cover, P/N 800-823-18, 800-824-18, 800-825-18 or 800-826-18.

1.3 Approval of the Two-Wire Transmitters is based on the applicable requirements of the following standards.

TITLE	AUTHOR-NUMBER	DATE
Electrical Equipment for Use in Hazardous (Classified) Locations General Requirements.	FM-3600	1989

FACTORY MUTUAL RESEARCH CORPORATION

JOB IDENTIFICATION 1Q7A8.AE

Explosionproof Electrical Equipment General Requirements.	FM-3615	1989
*Electrical and Electronic Test, Measuring, and Process Control Equipment.	FM-3810	1989

* This standard is based in large part on the ANSI/ISA-S82 standard.

1.4 As described by this report, the design and construction of the Two-Wire Transmitters provide for the required degree of protection against electrical shock, fire, and injury required for hazardous (classified) locations. Installation shall be in accordance with the manufacturer's instructions and applicable code requirements.

II DESCRIPTION

2.1 The Two-Wire Transmitters use Adalet-PLM enclosures which are made of Cast 359 aluminum material. These enclosures consist of a base, having two 1/2 inch NPT conduit openings (an optional base with an additional one 3/4 inch NPT conduit opening is available), and a thread-on shallow or deep cover. The covers are available with an optional window assembly.

2.2 The Two-Wire Transmitters are used in a wide variety of applications, such as, converting thermocouple, resistance, millivolt or varying frequency input signals to a standard 4-20 or 10-50 mA current.

2.3 For more information on the Two-Wire Transmitters, refer to the attached Sales Literature. Models PIX, PSA-HP and TIX-HP were not included in this program as requested by the manufacturer. Model PIX is being investigated for possible Approval as Intrinsically Safe under J.I. 0R0H7.AX. Upon satisfactory completion of the PIX program, this model will only be FM listed when used with a safety barrier, since the flame arrestor is not qualified for use with the transmitter enclosure as explosionproof without additional testing.

III MARKING

Each Two-Wire Transmitter is provided with two labels that are permanently attached. These label markings are reproduced from drawing numbers 200-251-525 and 200-236-111, and are included as attachments to this report.