



DEPARTMENT OF TRADE AND COMMERCE  
STANDARDS BRANCH

E-40-1

OTTAWA August 11 1967

NOTICE OF APPROVAL

FOR

LANDIS & GYR "LGM 1A10042" AND "LGM 1A10177"  
FILTER CONVERTERS

Apparatus

Input	$\pm 5$ milliamperes DC
Output	Ranges from 0 to $\pm 10$ millivolts to $0 \pm 100$ millivolts DC
Input Impedance	4000 ohms

Description

These filter converters were developed expressly for use with types "FF3w/FFD4.12", "MF3w/FFD4.12", "FF10w/FFD4.12" and "FF10w/FFD4.12" Torque Balance Telemeter Transmitters covered under circular "E39".

The output from these telemeter transmitters is 5 milliamperes with a superimposed complex ripple unsuitable for applying to any recorder approved to date.

These filter converters through a resistance-capacitance network, filter out the ripple and by means of a precision calibrated dropping resistor convert the milliamperes to ripple-free millivolts that can be applied to a recording potentiometer of the null balance type.

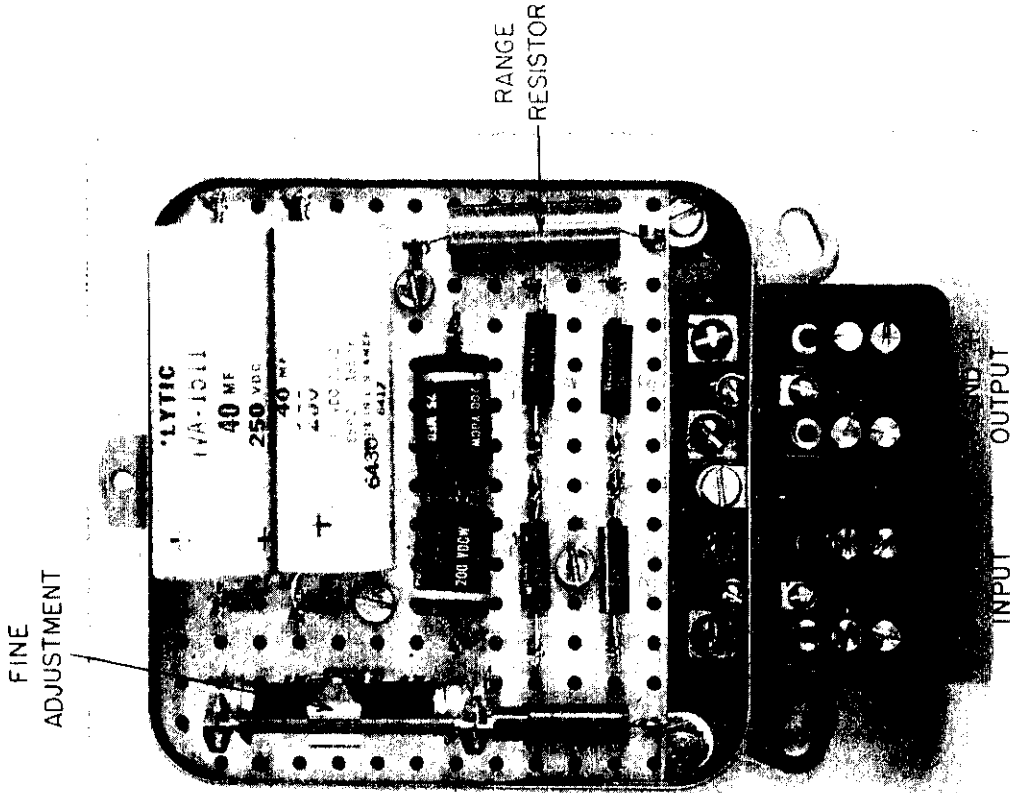
They are designed for a nominal input of 5 milliamperes, and to get various values of millivolt output within the approved range of 10 to 100 millivolts, various values of "range resistor" are available.

The location of this range resistor is shown in the illustration along with the fine adjustment resistor which is used for calibration.

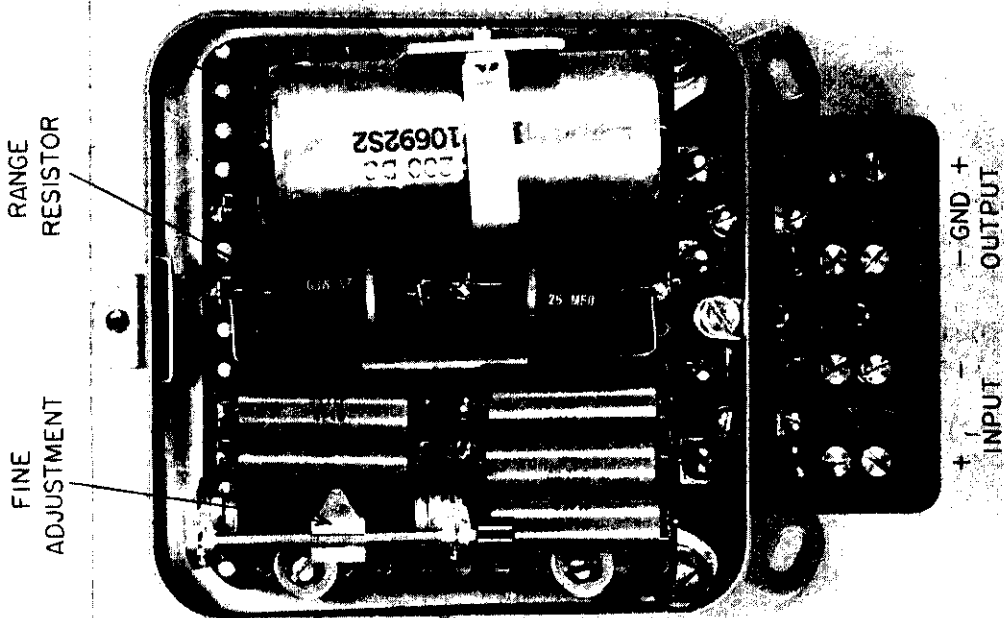
The output value of millivolts for the nominal input of 5 milliamperes will be shown on the nameplate.

LANDIS & GYR TYPES "LGM 1A10042" AND "LGM 1A10177"  
FILTER CONVERTERS

LGM 1A10177



LGM 1A10042



These filter converters and their associated torque balance telemeter transmitters must be verified as a unit as the output of the transmitter must be filtered and converted to millivolts before it can be applied to a potentiometer.


The polarity of the output millivolts is in accordance with the polarity of the input milliamperes, the instantaneous polarity is shown in the illustration.

This circular is a re-issue of circular "E-40" of December 2, 1966 with the addition of Type "LGM 1A10177" Filter Converters, which employs the same circuitry as the type "LGM 1A10042" but uses two polarized electrolytic capacitors connected "back-to-back" in place of the non-polarized capacitor used in the original approval.

NOTE: The type "LGM 1A10177" filter converter is to be added to circular E-39 along with the type "LGM 1A10042" already listed.

Approval granted to: Landis & Gyr Incorporated,  
725 Decarie Blvd.,  
St. Laurent 9, Quebec.

  
(for) Chief of Standards Laboratory  
Standards Branch.

  
W.J.S. Fraser,  
Chief, Electricity & Gas Division,  
Standards Branch.

Ref. SL-100-10A