

Optical Meter-Relays - L Series.



Black Panelist (Phenolic)

Models:

303-L (3 1/2"),

503-L (4 1/2"),

603-L (5 1/2") (shown)

See page 3 for dimensions.



Clear Panelist

Models:

302-L (3 1/2")

502-L (4 1/2")

602-L (5 1/2") (shown)

See page 3 for dimensions.

Features

- ▲ High, Low or Double setpoints
- ▲ Continuous indication
- ▲ Requires minimum depth behind panel
- ▲ For use with separate control module or user supplied circuit
- ▲ Smooth vernier control of setpoints
- ▲ Available with either Taut Band or Pivot-and-Jewel

LFE/api Optical "L" Meter-Relays provide the most comprehensive range of non-contacting control and display instruments available today. This meter-relay uses the same meter and setpoint components supplied in the "K" Series Meter-Relays except that the meter and the corresponding control module may be separately mounted allowing the meter portion to fit in control boxes with shallower depth.

Optical Meter-Relays provide one or two visible setpoints as well as precise meter indication of the control variable over the entire scale. Velvet-drive control knobs provide vernier reduction for precise setpoint adjustment (except on Model 371-L). Double setpoints are controlled by two separate knobs, eliminating operator confusion.

The low torque instruments are all supplied with taut band mechanisms standard while the high torque instruments are normally pivot-and-jewel mechanisms with taut band optional.

Optical Meter-Relays - L Series Specifications					
Specifications	DC Ranges		AC Ranges (Rectifier Type)		Pyrometer
	Current	Voltage	Current	Voltage	
Accuracy	±2%	±2%	±3%	±3%	±2%
Tracking	Optional	Optional	Optional	Optional	N/A
Balance	±1%	±1%	±1%	±1%	±1%
Repeatability	Taut band	< 1/4%	< 1/4%	< 1/4%	< 1/4%
	Pivot-and-Jewel	2%	2%	2%	2%
Resistance Tolerance	±20%	±5%	—	< 10V ±20% ≥ 10V ±5%	N/A
Overload Capacity	1 Second	1000%	≤ 100V 1000% > 100V 200%	150%	150%
	Continuous	150%	120%	150%	150%
Calibration Frequency	—	—	60 Hz	60 Hz	N/A
Overshoot (maximum)	20%	20%	20%	20%	N/A
Response Time (maximum)	Sensitivity ≥50µa	1.5 sec	1.5 sec	1.5 sec	1.5 sec
	Sensitivity <50µa	3 sec	3 sec	3 sec	3 sec

Effects of shock, vibration, humidity and temperature are equal to or better than ANSI C39.1-1981.
 Safety (dielectric test, leakage and other hazards): instruments are equal to or better than ANSI C39.5-1974.
 The above tolerance limits apply to the standard ranges listed in this bulletin. Special instruments may vary from these limits.
 Rated circuit to ground voltage = 500 Vrms (700 Peak).



DC Ranges	
DC Microamperes	5 to 1000
DC Milliamperes	1 to 1000
DC Amperes	1 to 50
DC Millivolts	5 to 1000
DC Volts	1 to 500

Process Ranges	
DC Milliamperes	1-5 4-20 10-50
DC Volts	1-5 0-10

AC Ranges (Rectifier Type)	
AC Microamperes	100 to 1000
AC Milliamperes	1 to 1000
AC Amperes	1 to 50
AC Millivolts	250 & 500
AC Volts	1 to 500

Thermocouple Pyrometers	
Contact Factory	