

# Nuclear Qualified

## Analog Switchboard Instruments

- 1E Safety Rating for use in nuclear power plants
- Proven Westinghouse designs
- Fit standard ANSI panel cutouts
- 1% or 1.5% accuracy
- Direct upgrade from commercial meters
- Rugged taut band movement



▲ KX-241

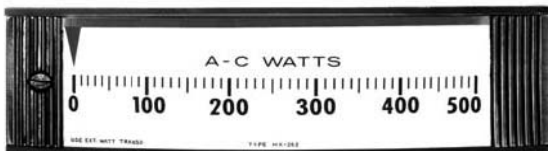


▲ KC-241



◀ VX-252

▼ HX-252



Weschler Nuclear Qualified Analog Switchboard Meters are intended for use in applications where accurate and reliable measurement of a process value is of paramount importance. This series is designed to meet or exceed all national nuclear standards for environmental, temperature and humidity extremes, seismic vibration and human factors.

These qualified meters are available for direct measurement of standard electrical quantities, including signals from transducers for measuring any other electrical or mechanical quantity that can be converted into a proportional electrical quantity.

Type 241 circular instruments are built with a permanent-magnet moving coil mechanism and taut-band suspension. This construction provides top performance and long life under adverse conditions of shock and vibration. Case material is steel with a shatter-proof poly-carbonate window. The window is flat to reduce light reflections. The beveled dial scale reduces shadows and provides a 60 degree viewing angle.

Type 252 edgewise instruments were designed specifically for the nuclear power industry. Their ruggedness and reliability make them an excellent choice for any control panel. These instruments incorporate the same taut-band suspension system that is used in Weschler K-241 meters. The case and lens are high impact, flame retardant polycarbonate.

### Types Available

Function	Ranges	Type	Method
DC Microammeter	50µA to 1mA	KX-241, VX-252, HX-252	Self-contained
DC Ammeter	1A to 50A	KX-241, VX-252, HX-252	Self-Contained
DC Millivoltmeter	50mV to 1V	KX-241, VX-252, HX-252	Self-contained
DC Milliammeter	1mA to 1A	KX-241, VX-252, HX-252	Self-contained
DC Voltmeter	1V to 800V	KX-241, VX-252, HX-252	Self-contained
Rectifier AC Milliammeter	1mA to 1A	KC-241, VC-252, HC-252	Self-contained
Rectifier AC Ammeter	1A to 17A	KC-241, VC-252, HC-252	Self-contained
Rectifier AC Voltmeter	5V to 600V	KC-241, VC-252, HC-252	Self-contained

See more information online at [weschler.com/nuclear](http://weschler.com/nuclear)

Made in USA



**WESCHLER**  
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# Nuclear Qualified Analog Switchboard Instruments

## Specifications

Accuracy	K-241:	1% accuracy class
	V-252:	1.5% of full scale deflection, 1% on special order
Scale Length	K-241:	7.1" (180mm) for 250° deflection
	V-252:	4.8" (122mm)
Waveform Compensation:	to 15% of third harmonic content	
Instantaneous Overload:	35x AC rating, 100x DC rating	
Working Voltage to Ground:	1200V dc or peak ac, 800V ac rms (V-252), 800 V (K-241)	
Shielding:	Magnetically shielded	
Net Weight	K-241:	3 to 5 lbs (1.4 to 2.2 kg)
	V-252:	1.5 lbs (0.7 kg)

## Standards:

ANSI C39.1-1981
IEEE 323: 2003
IEEE 344: 2004
Reg Guide 1.100
EPRI TR-107330

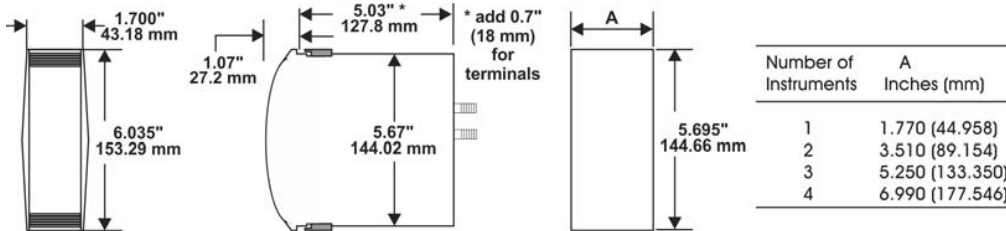
## Popular Styles (specify scale & legend)

Input	K-241	V-252	H-252
0-5 V DC	691N672A10	606N413A10	606N454A10
0-10 VDC	691N672A38	606N413A12	606N454A12
0-150 V DC	691N672A15	606N413A18	606N454A18
0-1 mA DC	691N687A09	606N419A09	606N432A09
4-20 mA DC	691N687A20	606N419A27	606N432A34
10-50 mA DC	691N687A21	606N419A25	606N432A33
0-50 mV (shunt rated)	691N671A09	606N623A38	606N624A38
0-150 V AC	291N460A09	606N618A09	606N619A09
0-5 A AC	291N460A21	606N424A11	606N458A11
0-5 A AC (transformer rated)	291N460A26	644N014A08	644N015A08

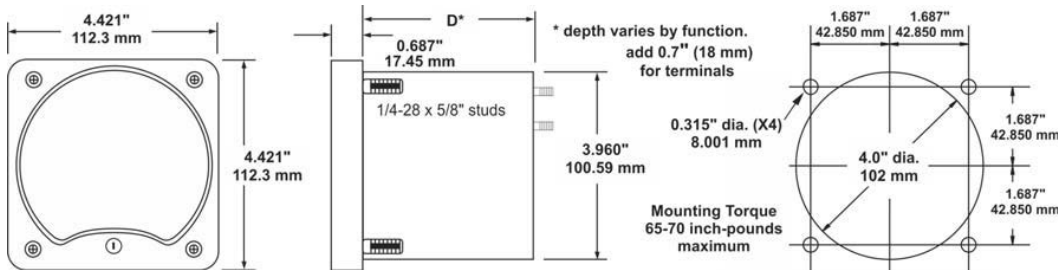
## Options

- Custom Scales
- Custom legends
- Red pointer
- Color zones
- Black dial
- Non-glare window
- Dual scale or rating
- Straight fine tubular pointer
- Offset, center, or suppressed zero
- Weather resistant cover (K-241)
- Special calibration

## Case Dimensions



**Terminal Connections**  
(VP840 Transducer shown)



Function	D Inches (mm)
DC	2.813 (71)
AC	3.750 (95)

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