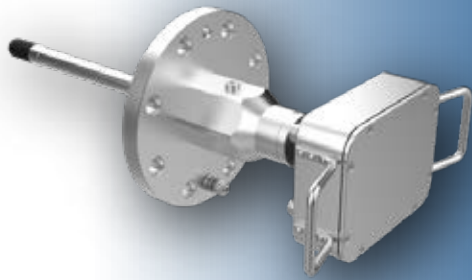


# USENS-V

Transformer UHF Internal Valve Sensor

# USENS-V

Reliable partial discharge monitoring in power transformers and oil-filled reactors



Our highly sensitive and broad frequency range UHF PD Sensor is designed to identify the most minor PD signals, even in extreme outdoor environments, ensuring enhanced monitoring and early fault detection.

The USENS-V is a cutting-edge Ultra-High-Frequency (UHF) Partial Discharge (PD) sensor designed to detect and accurately monitor PD activity within transformers and oil-filled reactors. It can identify even the smallest PD signals with high sensitivity, ensuring early fault detection and improved transformer reliability.

Engineered for installation on transformer drain valves, it is suitable for all transformer types and voltage levels. With a wide frequency response range of 200 MHz to 2000 MHz, the USENS-V ensures comprehensive coverage and delivers exceptional Return on Investment (ROI) for PD monitoring systems. Built to withstand harsh outdoor environments, it features an IP65-rated rugged design and integrated overvoltage protection for enhanced durability and safety.

The USENS-V is also highly customizable to fit diverse transformer valve designs and technical requirements, providing seamless integration with any UHF-based PD monitoring system, regardless of manufacturer. The USENS-V is the ultimate solution for proactive transformer health management, whether for new installations or retrofitting existing transformers.

## » Benefits

- Enhanced ROI
- Quick and Secure Installation
- Long-Term Safety
- Leak-Proof Assurance
- Durable and Reliable
- Weather Resistance

## » Features

- Shielded design for precise measurements.
- 100% pressure-tested up to 20 sweeps of 9G force in 6 degrees of freedom.
- IP65-rated for outdoor installations and extreme environments
- Customizable fit for transformer drain valves and customer-specific requirements
- High dielectric strength for robust insulation and operational reliability

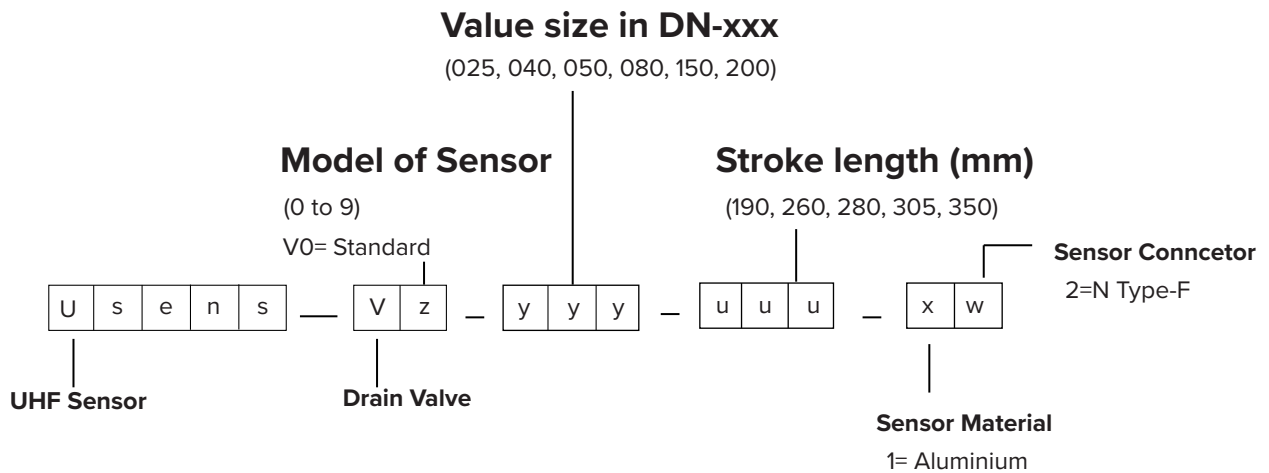
## » Applications

- Continuous Online PD Monitoring
- Periodic PD Testing and Measurements
- High Voltage Testing during Commissioning
- Power Transformer PD Testing and Monitoring
- Reactor PD Testing and Monitoring
- Distribution Transformer PD Testing and Monitoring

## » Technical Specifications

Frequency Response	Decoupling Range of 200 MHz-2000 MHz
Mean Effective Height over 500MHz-1500MHz (mm)	>4 mm
PD Output	N-Type Female Connector
Connector Circuit Impedence	50 Ω
Pressure Testing	Up to 8.0 bar (at 27°C)
Vibration Testing (IEC 60068-2-6)	20 sweeps of 9G force in 6 degrees of freedom
Ingress Protection (IP) (IEC 60529)	IP65
Ambient (Operating Temperature)	-40 °C to +110 °C
Storage Temperature	-40 °C to +110 °C
Operating Humidity	95% humidity at 50 °C
Standard Design for	DN 50/DN80/DN40/DN25 Options
Weight	app . 2.9 kg
Sensor Head dimensions	<70mm (with full retracted condition 18mm)
Total Length	<b>Total Length</b> = 232mm+stroke length <b>Stroke Length Options</b> stroke length= 190mm stroke length= 260mm stroke length= 280mm stroke length= 305mm stroke length= 350mm

## » Ordering Code



### CERTIFICATIONS



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