

Type UOV Under Oil Voltage Sensor

Type UOV sensors are voltage sensors with either 0.5% or 0.3% accuracy for use in medium voltage, oil-filled electrical equipment including transformers and switchgear. Sensors are required to be immersed in one of the listed insulating fluids to achieve their electrical ratings.

Available Styles:

Standard 0.5% Voltage Accuracy		
15kV	25kV	35kV
✓	✓	✓

Metering 0.3% Voltage Accuracy		
15kV	25kV	35kV
✓	✓	✓



All sensors are provided with cast-in pig-tail end cables.

Applications
<ul style="list-style-type: none"> Oil-filled overhead, pad-mount, or submersible transformers, circuit breakers, or switchgear where integral voltage sensing is required. OEM or retrofit applications where the sensor’s form factor may make it more convenient and cost effective to install than other forms of voltage sensing. Applications requiring high accuracy (0.5%) or metering accuracy (0.3%) voltage monitoring.

Sensor Construction and Output
<ul style="list-style-type: none"> Solid epoxy body sensor with integral cast-in cable fully compatible with the following insulating fluids: <ul style="list-style-type: none"> FR3® – natural ester based dielectric fluid Envirotemp® 200 – synthetic ester based dielectric fluid HyVolt® II – petroleum/mineral based oil dielectric fluid <p>NOTE: Sensors must be immersed in one of the listed fluids listed above during operation.</p> <ul style="list-style-type: none"> Embedded stainless steel stud connectors provide for direct bus work connections and allow the sensor to be used as a standoff. Very high accuracy internal resistor voltage divider network intended to interface with high input impedance ($\geq 1\text{ M}\Omega$) meters, relays, controls, RTUs, or other IEDs.

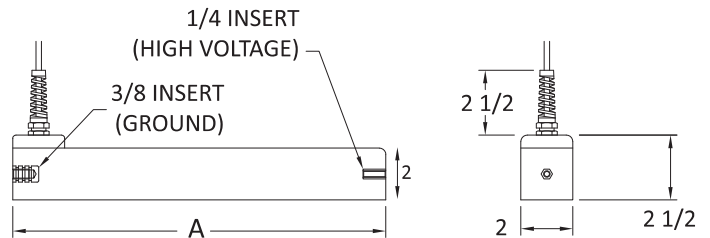
Under Oil Voltage Sensors

Type UOV Under Oil Voltage Sensor Ordering Table

Part Number Sequence: **A B / 0 C 2 D**

A	B	/ 0	C	2	D
Family	Voltage Class		Ratio		Cast-in Pigtail Cable Length
958 - 0.5% accuracy	2-15kV		1-1400:1		X= cable length in 10 ft. increments
95M8 - 0.3% accuracy	3-25kV		2-2200:1		
	4-35kV		3-3300:1		
			4-10,00:1		
			X- Special		
EXAMPLE					
↓					
958	2	/ 0	1	2	1

EXAMPLE: 9582/0121 is a 15kV, 0.5% accuracy under-oil voltage sensor with a 1400:1 ratio output with a cast-in 10-foot pigtail cable.



Specification Table			
Insulation Class	15kV	25kV	35kV
Voltage Accuracy	0.3% or 0.5%		
Ratio	By Catalog Number		
Operating Temperature Range*	-40°C / 60°C (with excursions ≤ 80°C)		
Stated Accuracy Temperature**	-40°C / 60°C (with excursions ≤ 80°C)		
Operating Environment	Immersed in one of the listed compatible insulating fluids		
Compatible Insulating Fluids	FR3, Envirotemp 200, HyVolt II		
Impulse (BIL)	95kV	125kV	125kV
60Hz Withstand (1 minute)	30kV	60kV	60kV
Minimum Electrical Load	1 M-Ohm		
Length (A)	10.375" (265mm)	14.375" (365mm)	14.375" (365mm)
Weight	4 lbs. (1.8 kg)	6 lbs. (2.7 kg)	6 lbs. (2.7 kg)

*Stated range is for the sensor. Insulating fluids may have lower ranges.

**Accuracy from +55 to +80C may approach 1%.

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