

# VERSA-CAP

## Intelligent R.F. Capacitance Level Transmitter

### Liquid and Solid Level Measurement



**Versa-Cap 450**  
(Integral)



**Versa-Cap 460**  
(Remote)

#### FUNCTION

Versa-Cap is a versatile R.F. Capacitance Level Transmitter for liquids, slurries and bulk solid applications.

The sensing probe is energized with an R.F. (radio frequency) signal of approximately 2 MHz. When the process material level changes, a change in capacitance occurs resulting in a very small change in frequency, which is converted to an accurate level reading for measurement and control.

Dela-Cal, Delavan's unique auto calibration feature, offered only in the micro-processor-based Versa-Cap system, allows the unit to be calibrated to the process material with only one level change, 2% of span or greater.

A keypad and an 8-character display ease calibration and allow the user to modify relay control, dead-band, fail-safe, and time delay settings.

#### FEATURES

- Requires only one level change 2% or greater, for calibration
- Convenient analog and digital process display
- Keystroke set-up of analog, relay, deadband, time-delay, and fail-safe settings
- Universal Power Supply Accepts 115 Volts, 230 Volts AC or 24 Volts DC
- Independently adjustable relay set-points with differential
- Microprocessor controlled pump sequencing



## SPECIFICATIONS

Supply Voltage	115, 230 Volts AC @ 60 Hz 24 Volts DC
Power Consumption	□15 volt-amperes
Analog Display Type	12-segment LED bargraph
Digital Display Type	8-digit 0.5" LED
Output 4-20mA Optional	600 ohms max. with 24 Volts DC power
Other Available Analog Outputs	0-10 Volts DC, 0-5 Volts DC
Sensitivity	0.5 pf or less
Build-Up Tolerance	Up to 1,000 micro mho's
Optional Relays	4 Form C DP/PT
Time Delay	0-250 seconds
Fail-Safe	Selectable High or Low
Temperature Range (Electronic)	-40°F to +160°F
Integral/Pre-Amp Enclosure	Die-cast aluminum with fused polyester paint finish
Integral/Pre-Amp Enclosure Rating	NEMA 4, 5, 7, 9, 12
Remote Enclosure (Model 460 only)	Fiberglass with Plexi Window
Remote Enclosure Rating (Model 460 only)	NEMA 4X
Interconnect Cable Length (Model 460)	1,200' to Remote Unit
Interconnect Cable Length (Model 450)	1 mile to PLC or Control

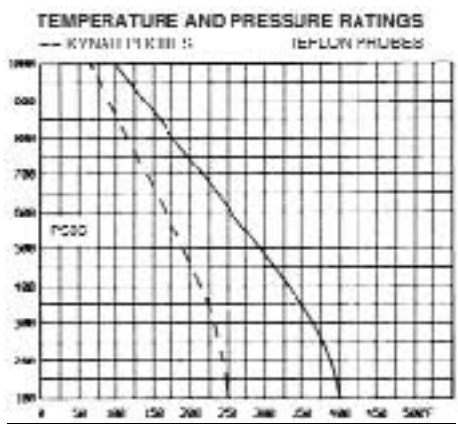
## ORDERING INFORMATION

### VERSA-CAP

						Special Features H = High Temperature 12" Lagging Extension (>200°F) 00 = None
						Interconnect Cable (460 Only) P50 = Standard 50 ft. (160°F max) P100 = Standard 100 ft. (160°F max) B = Bulk, PVC 4-conductor
						Process Mounting (Specify Size) NPT = Nat'l Pipe Thread 3A = Food-grade Fitting T3A = Teflon Food-grade Fitting K3A = Kynar Food-grade Fitting FSS = Flange, Stainless Steel
						Sensing Probe Type THD = Teflon Insulated Heavy Duty 1/2" KHD = Kynar Insulated Heavy Duty 1/2" TCP = Teflon Probe with Concentric Pipe and Flange TCT = Teflon Probe with Concentric Tube 3/4" N.P.T. BF = Bare Flexible Cable T = Teflon Insulate 1/4" BHT = Bare Probe - High Temperature Packing TF = Teflon Insulated, Flexible Stainless Steel Cable KF = Kynar Insulated Flexible Stainless Steel Cable DWW = Polypropylene Flex Probe, 1/8" Cable, 3/4" N.P.T. THDD = Teflon Insulated with Insulated Ground Reference 3" Flange KHDD = Kynar Insulated with Insulated Ground Reference 3" Flange BHS = Bare Probe - High Sensitivity
						Output Options A = Analog 4-20mA R = Relay Contacts - (4) SPDT Relays B = Both Options

Versa-Cap Level Transmitter Model  
460 Pre-Amp and Remote Transmitter  
450 Integral Transmitter

CSA Approvals (on request)  
CSA Approved for Class I — Groups C, D;  
Class II — Groups E, F, G;  
Divisions 1 & 2 when used with THD or KHD probe  
CSA approved for Ord. Loc.



**DEHAVAN** Process Instrumentation  
an [REDACTED] Company

Hillside, IL 60162  
Ph: (708) 236-6000  
Fax: (708) 236-6006  
Email: sales@ljtechnologies.com