surpassing the sensitivity of rf technology, vrf™ provides superior level detection. the vrf™ series uses variable radio frequency to detect the presence or absence of material in a vessel by compensating for the load of the probe, as well as the load induced by vessel environment, and automatically determining the optimal operating frequency for the greatest sensitivity and stability. at initial startup the sensor detects the characteristics of air (no load) and calibrates to it. if installed in material, when the load is reduced (material leaves probe), the vrf™ senses this change and automatically recalibrates to its new condition without the need of an operator or technician. the vrf-2000 remote is ideal for high temperature and vibration applications.

bindicator® manufactures an array of vrf™ probes, each tailored for specific applications. when combined with our large selection of probes, we have a vrf™ sensor for virtually every application. please consult one of our representatives or call the factory for application assistance.

features and benefits

opti-sense™
uses variable radio frequency (vrf™) technology to determine the optimal operating frequency for greatest sensitivity and stability

wide variety of probe options
unequaled application versatility

test in place

test by using a magnetic fob without removing the cover

pro-guard™
probe design ignores material build-up on probe

ez-cal® ii
no initial manual calibration required

explosion proof & stainless steel enclosures available
provides more options for a wide range of applications

calibration status and alarm lights

green led indicates calibration status; red led indicates alarm status

captive screws
no lost screws

how to order

vrf2r · e · 1 · a ·
enclosure type

v = general purpose nema 4x
x = explosion proof nema 4x/7/9 fm and cs
a = atex approved explosion proof

t = round, with screw on cover

vrf2000 series · remote

note 1: sensor cannot be more than 25 feet (8m) from electronics.

vrf2 · p · a ·
enclusion type

a = ¾" s.s. & 1¼" aluminum & flush probes
b = pipe extended, s.s. coupling & connection
q = pipe extended, plated coupling & aluminum connection
d = lagged probe s.s. connector/plated coupling
s = sanitary connection 1" or 1½" tri-clamp size (see note 1)
h = ¾" hastelloy c (for teflon® probes only)

enclosure style

t = round

dual conduit

electronics assembly

vrf-2000 series · remote

note 1: for 3a sanitary certification add “3a” at end of the model code. configuration “s” must be used and either “type 2” food grade probe or “type 4” stub probe.

note 2: thickness of probe must be specified: ¼", ½", 3⁄8" or ¾" wall thickness.
**Specifications**

**Universal Input Power:** 8.5 VAC - 265 VAC  
DC input power: 9 VDC - 36 VDC

**Power:** 5 watts

**Output Relay:** DPDT 6 amps @ 240 VAC, 6 amps @ 30 VDC, Minimum load 12V/100mA

**Temperature Range:** -40° F to 158° F (-40° C to 70° C)

**Sensitivity:** Rotary-switch selectable for 0.5pF, 1pF, 2pF, 3pF, 5pF, 8pF, 10pF, or 15pF

**Time Delay:** Rotary-switch selectable for 200 milliseconds, 1, 2, 5, 10, 20, 30, or 60

**Time Delay Mode:** Time delay for activating/deactivating the alarm or both

**Fail Safe:** High-Low level failsafe dip-switch

**Calibration:** Push-button, intelligent recalibration, external magnetic fob

**Remote Distance:** Sensor can be installed up to 25 feet (8m) from electronics

**Approvals:** FM and CSA listed for non-hazardous and hazardous locations Class I, Groups C, D; Class II, Groups E,F, G (pending) - enclosure types NEMA 4X/7/9

**Dimensions**