VTK Vibrating Point Level Switch

Equipped with the highly reliable vibrating tuning fork technology, the VTK level switch becomes indispensable in the detection of a wide variety of liquids, fine solids and even liquid/solid interface applications.

Applications

- Water Treatment Plants
- Food and Beverage Industry
- PetroChemical Industry
- Pharmaceutical Industry
- Pulp and Paper Manufacturers

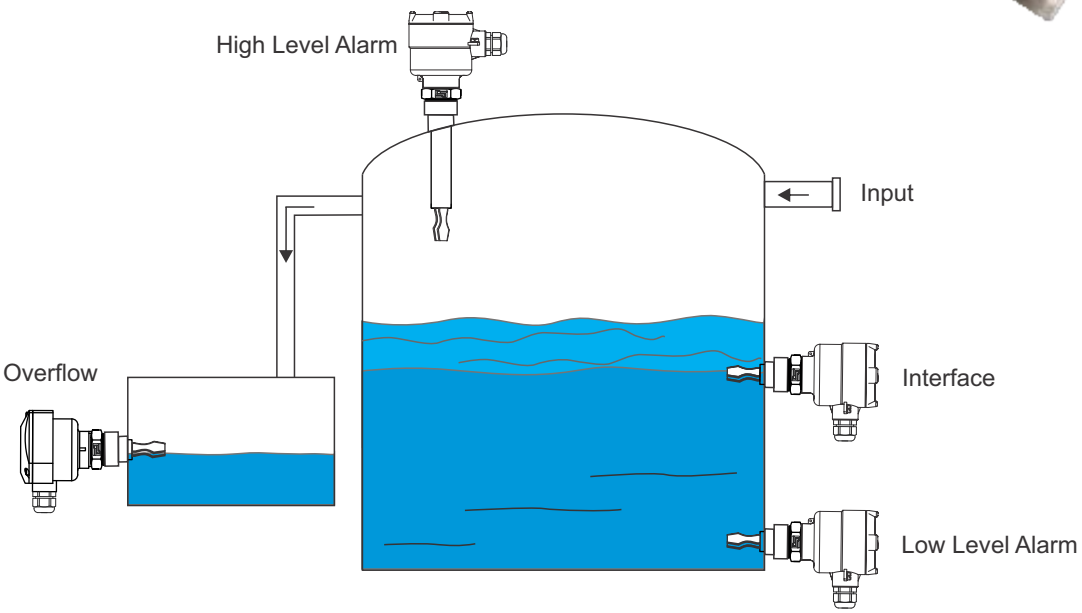
BESTOBELL AQUATRONIX
www.bestobell.com
SINCE / DEPUIS 1953

VTK

Vibrating Point Level Switch for liquids

Characteristics

- **All 316SS body and wetted parts (Halar coating available)**
- **Unaffected by variations in conductivity or dieletric constant**
- **IP65 class protection (IEC 60529)**
- **Output SPDT Relay**
- **Customized length options to best suit your application**
- **Available in Threaded, Sanitary and Flanged connections**



Description

Sitron´s VTK series of vibrating tuning forks are an ideal solution for many point level detection applications because they are un-affected by either the dielectric or the conductivity of the medium.

When the tuning fork is submerged in the medium the frequency at which at which it vibrates changes. This change is detected by the unit's electronics and is converted into a switch output, either relay (SPDT).

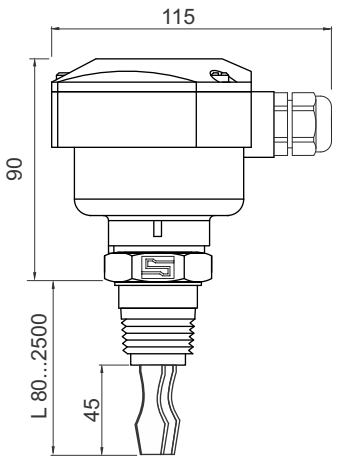
Users around the world have come to depend on this technology as one that is easy to apply and very reliable. All models are made in 316 Stainless Steel, can be ordered with a great variety of threaded, flange, or hygienic fittings, and are available with Halar coating.

All models (except the mini-versions) have a time delay adjustment of 1, 5, 10 or 20 seconds as well as a Wet/Dry selection for both High and Low level application requirements.

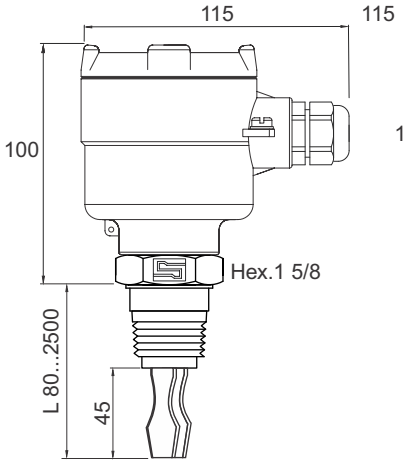
Dimensions (mm) / Models

BSP / NPT Threaded Connections

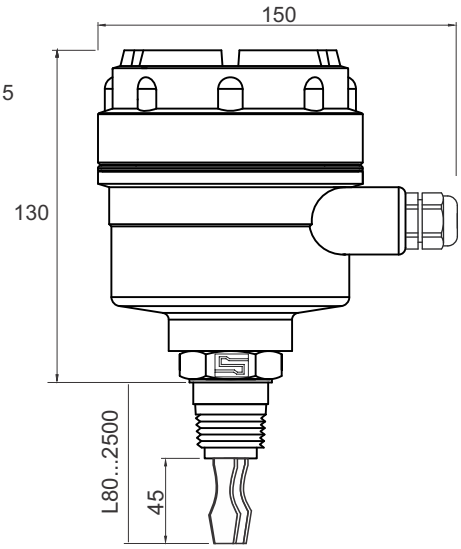
N1 - Nylon Housing



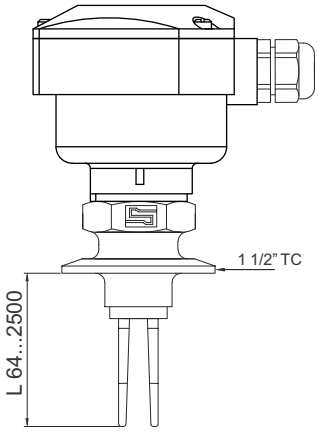
G1 - Aluminum Housing

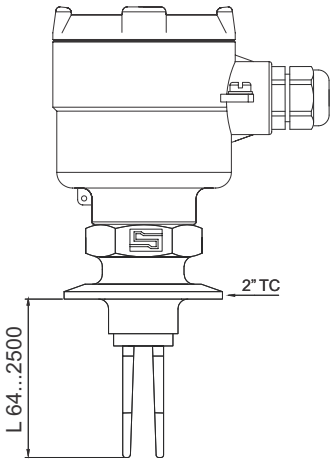


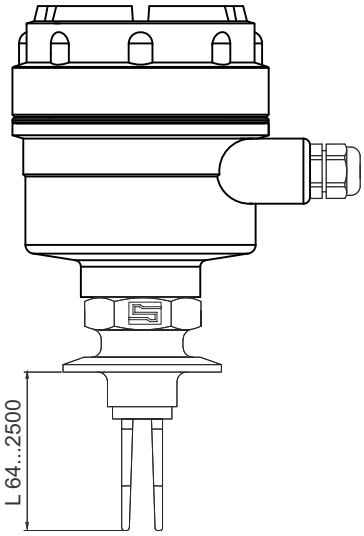
G1 - Aluminum Housing



Sanitary Connection

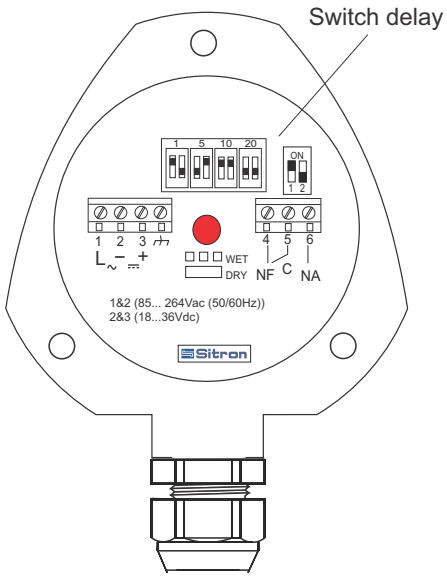


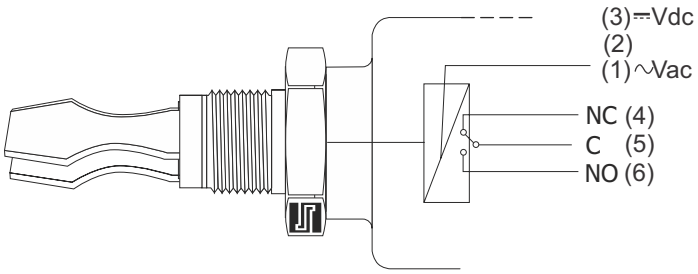




Electrical Connections

VTKR - N1/G1





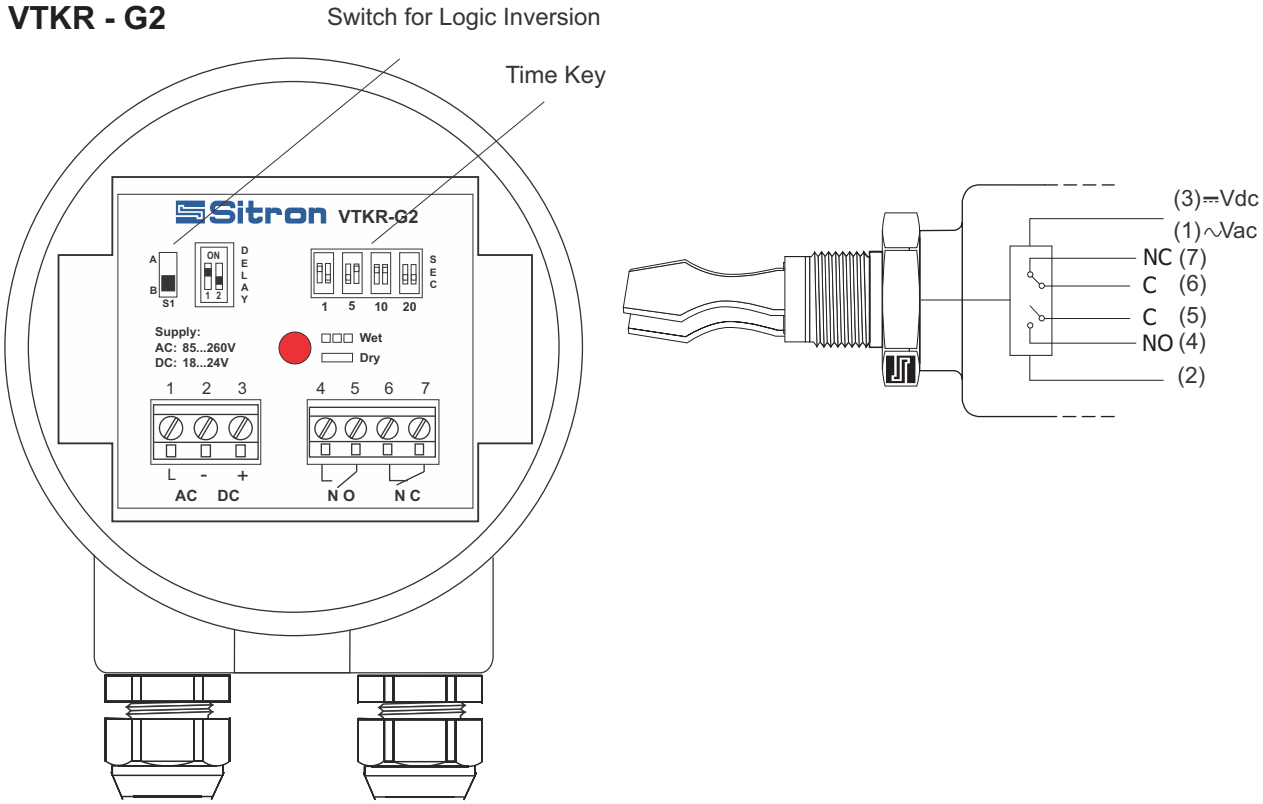
Technical Specifications

VTKR_-X-X-X-X-X

Application: Level Switch for Liquids
Power Supply: 18...36Vdc & 85...264Vac (50/60 Hz)
Consumption: DC:<20mA / AC: <35mA
Output: Relay (SPDT), 5A-250Vac
Housing: N1 Nylon Fiberglass / G1 - Aluminum
Switching Point: 13 mm from tip
Time Delay: 1 to 20 seconds.
Medium Viscosity: 0.5...5000 cSt
Electrical Connection: 1/2" NPT, M12, (others)
Process Connections: BSP, NPT, Sanitary or Flanged
Body Material: 316 SS
Operating Temp.: -14 to 176º F (-10 to 80ºC) /
Extended Neck to 212°F (100°C)
Max Pressure: 50 Bar
Class Protection: N1 - Ip65
G1 - IP66

Electrical Connections

VTKR - G2

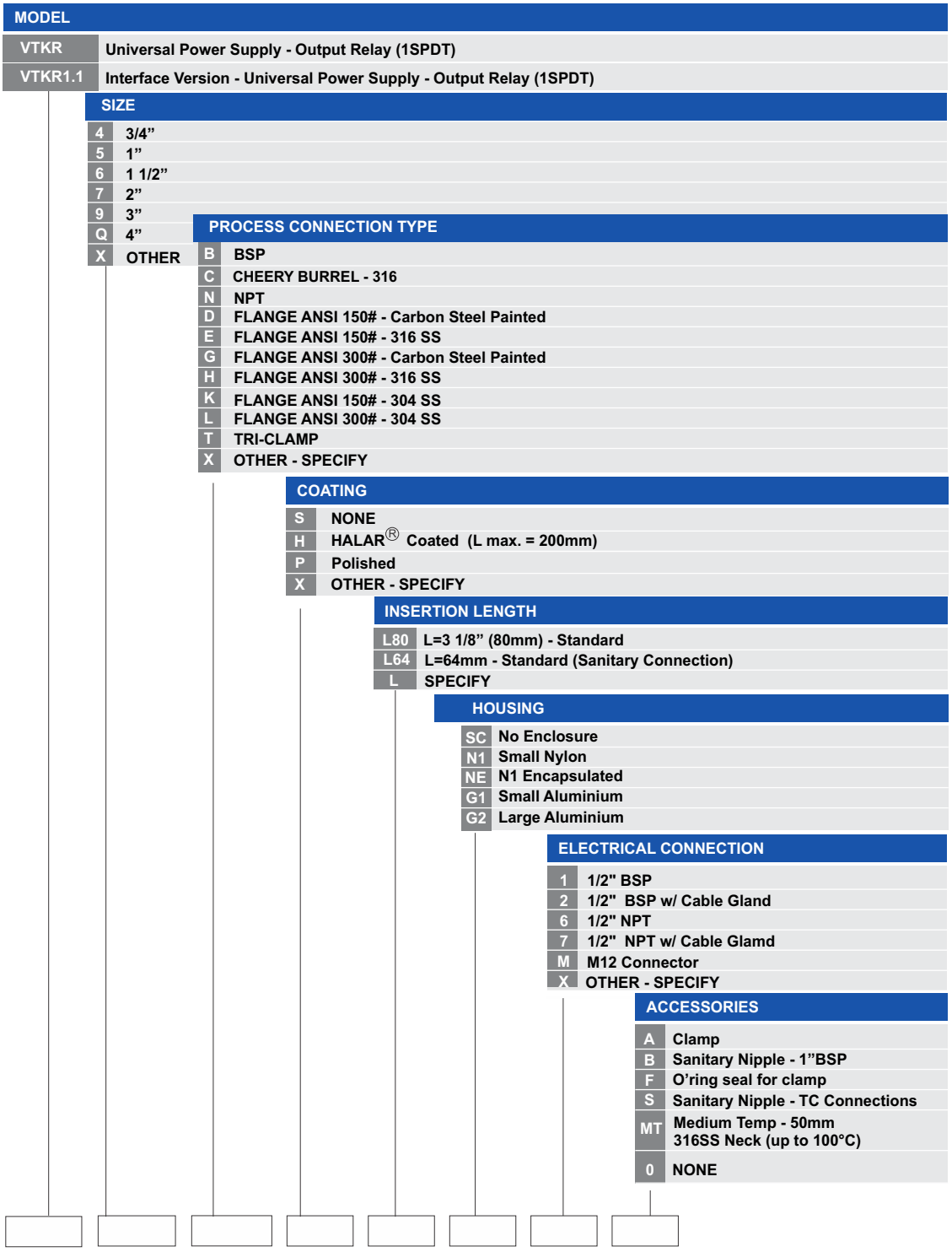


Technical Specifications

VTKR_-X-X-X-X-X

Application: Level Detection for Liquids
Power VTKR: 18...36Vdc and 85...264Vac (50/60 Hz)
Consumption VTKR: DC: <20mA / AC: <35mA
Output VTKR: Relay (NO + NC), 5A-250Vac
Enclosure: Aluminum (Epoxy Painted)
Action Point: 13 mm from the tip
Time Adjustment: 1 to 20 seconds.
Hysteresis: +/- 1mm
Approximate Viscosity: 0.5...5000 cSt
Electrical Connection (input): 2x 1/2” NPT entries
Connection to the Process: BSP, NPT, Flange or Sanitary
Body Material: 316 Stainless Steel
Work Temperature: -10 to + 80°C / up to 100°C with Neck Extended
Maximum Pressure: 50Bar
Protection Class: IP66

Order Codes


MODEL
VTKR
Universal Power Supply - Output Relay (1SPDT)
VTKR1.1
Interface Version - Universal Power Supply - Output Relay (1SPDT)
SIZE
4 3/4”
5 1”
6 1 1/2”
7 2”
9 3”
Q 4”
X OTHER
PROCESS CONNECTION TYPE
B BSP
C CHEERY BURREL - 316
N NPT
D FLANGE ANSI 150# - Carbon Steel Painted
E FLANGE ANSI 150# - 316 SS
G FLANGE ANSI 300# - Carbon Steel Painted
H FLANGE ANSI 300# - 316 SS
K FLANGE ANSI 150# - 304 SS
L FLANGE ANSI 300# - 304 SS
T TRI-CLAMP
X OTHER - SPECIFY
COATING
S NONE
H HALAR® Coated (L max. = 200mm)
P Polished
X OTHER - SPECIFY
INSERTION LENGTH
L80 L=3 1/8” (80mm) - Standard
L64 L=64mm - Standard (Sanitary Connection)
L SPECIFY
HOUSING
SC No Enclosure
N1 Small Nylon
NE N1 Encapsulated
G1 Small Aluminium
G2 Large Aluminium
ELECTRICAL CONNECTION
1 1/2" BSP
2 1/2" BSP w/ Cable Gland
6 1/2" NPT
7 1/2" NPT w/ Cable Glamd
M M12 Connector
X OTHER - SPECIFY
ACCESSORIES
A Clamp
B Sanitary Nipple - 1”BSP
F O’ring seal for clamp
S Sanitary Nipple - TC Connections
MT Medium Temp - 50mm 316SS Neck (up to 100°C)
0 NONE

How to Order?

Inform the application conditions below:

1) What is the application? What is the product?
ex. LSH/water Level Detection

2) Application in the food industry?
(polishing on wet parts required)

3) Viscous or fouling fluid?
(fouling fluids can cause false detections due to the accumulation of residue on the forks
In this case we recommend another type of technology (HFS sitron model)

4) What is the electrical connection (cable entry)?
(Standard 1/2' NPT cable gland)

5) What type of output?
Relay

6) What type of connection?
ex (BSP, NPT, Flange, Tri-Camp TC, etc..)

7) What is the insertion length (L)?

8) Fluid aggressive to 316 stainless steel? Apply Halar Coating?

9) Process with CIP (tank cleaning)? What temperature and product?
Processes with CIP and high temperature require encapsulation in the head to avoid condensation (GE)

10) What is the process temperature?
Above 80° apply MT neck for heat dissipation

Using this information, create the order code and send us these answered questions in your email request **info@sitron.com**

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