Sitron

VTK R Tuning Fork Point Level Detection

Characteristics

- Explosion-proof housing (EX d)

- Robust with no moving parts

- Corrosion Resistant 316 SS Body

- Forks can be Halar coated for
  corrosive media

- Un-affected by either the dieletric
  or the conductivity of the medium

- Protection Class IP66 (IEC 60529)

- Signal Output.
  - Relay NO + NC

- Protection:
  - Reverse Polarity
  - Voltage Surge
  - Electromagnetic Interference

- Various types of process connections:
  Thread, Flange and Sanitary

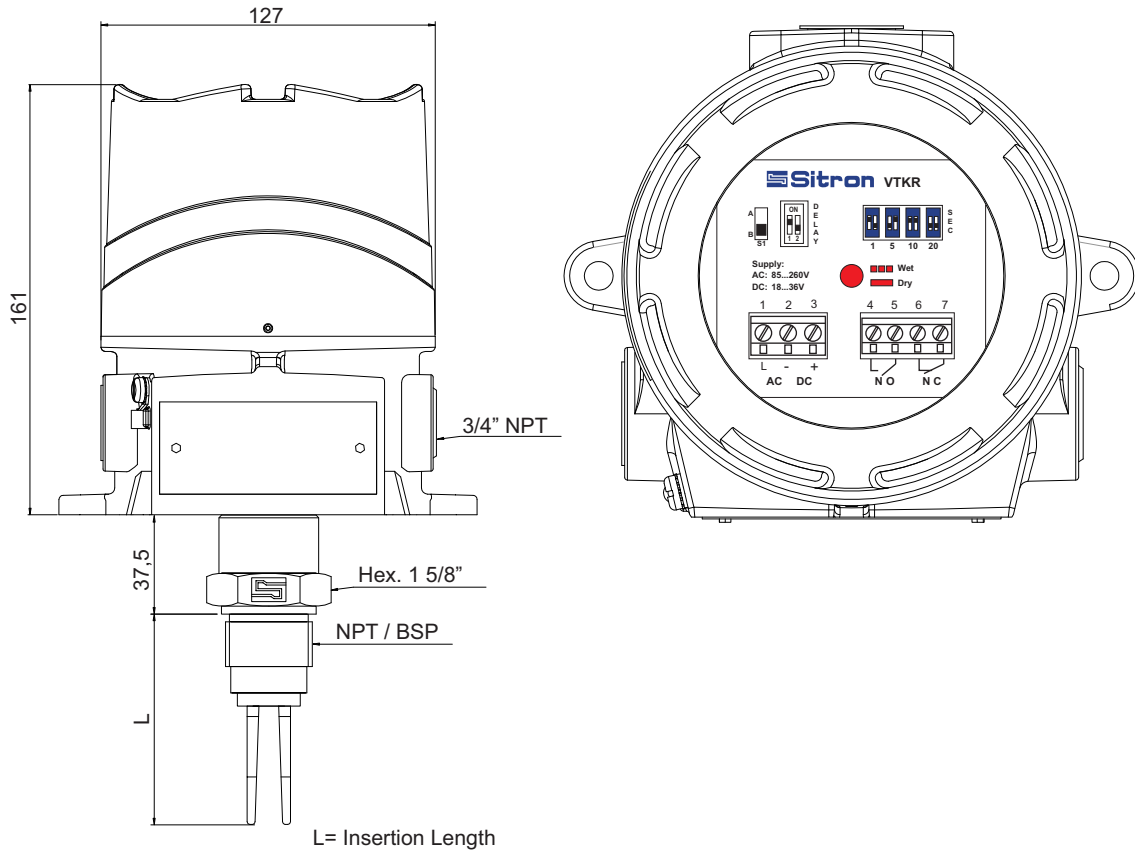- Viewing window for visual indication of LED status

Description

Sitron VTK R series of vibrating tuning forks are an ideal solution for many point level detection applications because they are unaffected by either the dielectric or the conductivity of the medium. When the tuning fork is submerged in the medium the frequency at which it vibrates changes. This change is detected by the unit's electronics and is converted into a switch output, relay. 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, are available with Halar or epoxy coatings. 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.

The GX comes standard with a glass window which enables visualization of LED switch status. The GX housing comes with the following certifications: UL, CUL, IECEX and ATEX for installation in hazardous environments.

Dimensions (mm)

127

161

37,5

L

3/4" NPT

Hex. 1 5/8"

NPT / BSP

L= Insertion Length

Sitron VTKR

Supply:
AC: 85...260V
DC: 18...36V

Wet
Dry

1   2   3   4   5   6   7
L   -   +   N O   N C
AC DC

Technical Specifications

Application: Level detection for Liquids
Supply: DC: 18...36Vdc (± 10%)
    AC: 85...264Vac (50/60hz)
Consumption: DC<20mA / AC < 35mA.
Output: Relay NO + NC (5A - 250Vac)
Accuracy: ± 0.1%
Repeatability: < 0.5mm
Delay: 1 to 20 sec (adjustable)
Set point: 13mm from tip
Housing: Aluminum GX with glass viewing window
Viscosity: 0.5...5000 cSt
Electrical Connection (cable entry): 2 x 3/4" NPT
Process Connection: BSP, NPT, Flange or Sanitary
Body material: 316 SS (Halar coating for corrosive medium upon request)
Work Temperature: -10 to + 80°C
Max Pressure: 50 Bar
Class Protection: IP66
Approvals EX proof Housing (Optional): ATEX, DEMKO 07 ATEX 0622294,
                0539 II 2 G EX d IIC Gb
                0539 II 2 D Ex tb IIIC Db
                IECEx
                IECx UL 08.0005U
                Ex d IIC Gb
                Ex tb IIIC Db
Classifications: Class I, Div. 1, Groups B, C, D
                Class II, Div. 1, Groups E, F, G
                Class III
NEMA Type 4X: Class I Zone 1 AEx d IIC
                Ex d IIC (canada)

Order Code

MODEL

VTKR

SIZE

4	3/4"
5	1"
6	1 1/2"
7	2"
9	3"
Q	4"
X	OTHER

PROCESS CONNECTION TYPE

B	BSP
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
E	EPOXY Coated
P	Polished
X	OTHER - SPECIFY

INSERTION LENGTH

L80	L=3 1/8" (80mm) - Standard
L64	L=64mm - Standard (Sanitary connection)
L	SPECIFY

HOUSING

GX	Ex proof

ELECTRICAL CONNECTION

9	3/4" NPT

ACCESSORIES

A	Clamp
B	Sanitary Nipple - 1"BSP
F	O'ring seal for clamp
S	Sanitary Nipple - TC Connections
0	NONE