VIATRAN

Model 596

Detachable Level Transmitter

A submersible level transmitter with a twist!

💧 The DLT series allows for a quick sensor swap without the removal of your installed cable. No special tools are required. Simply pull up sensor, twist the sensor coupling sleeve till it is no longer engaged and then just separate the two halves!

💧 The Viatran Model 596 DLT is a submersible level transmitter specifically designed to meet the challenging demands of liquid measurement. The ability to detach the sensor can be an enormous time saver when or if it's ever needed.

💧 Ranges can be set from 0-30 Inches W.C. to 0-335 Feet W.C. or equivalent in Meters or PSI by Viatran at the time of manufacturing This capability allows Viatran to rapidly ship the transmitter within one or two days. A real cost and time saver!

💧 Polyurethane (PUR) cable is the most popular, Polyvinyl Chloride (PVC), Fluorinated Ethylene-Propylene (FEP) & Thermoplastic Elastomer (TPE) cables are also offered.

💧 Liquid Level & Depth, Water & Wastewater, Lift Stations, Reservoirs & Dams, Rivers, Holding Ponds, Wells, In-ground/Above Ground Tanks, and Inventory Tank Gauging.

CE

Performance

Standard Pressure Ranges From ....0-30" W.C. to 0-335 Feet W.C. or equivalent in Meters or PSI.

Accuracy ....≤ +/-0.1% FSO
[Combined Non-Linearity (BFSL), Hysteresis & Repeatability]

Compensated Temperature Range ....-4° to 176° F (-20 to 80° C)

Operating Temperature Range ....-13° to 185° F (-25 to 85° C) Note: Medium must not freeze near sensor

Storage Temperature Range ....-13° to 185° F (-25 to 85° C)
Long Term Stability (%FSO) ....≤ +/- 0.1% FSO / year at reference conditions
Thermal Effect on Zero ....≤ +/- 0.16% FSO per 100° F
Thermal Effect on Span ....≤ +/- 0.16% FSO per 100° F

Electrical

Output Signal ....4-20 mA
Supply Voltage ....12-36 Vdc
Power Supply Regulation ....< +/- .005% FSO per volt
Circuit Protection ....Reverse polarity protected, CE marked
RFI/EMI ....CE EMC compliant as per IEC EN 61326

Voltage Spike Protection ....Withstand 1000 volt spike per EN 61000
Response Time ....<380mSec

Mechanical

Pressure Connection ....Removable Protective POM cap
Ingress Protection ....IP 68
Overpressure Limit ....5x Minimum (≥ 167 Ft. range = 3.5x)

Weight ....1.4 lbs. (without cable)

Materials of Construction

Housing ....316L stainless steel
Sensor Diaphragm ....Ceramic Al_2O_3 96%
O-ring Seals ....FKM (Standard) or EPDM (Optional)
Removable Protective Cap ....POM (Polyoxymethylene)

RAPIDSHIP
2-Day Turnaround

How to Order

MODEL *596*	UNITS OF PRESSURE (1 digit)	PRESSURE RANGE (4 digits)	SEALS (2 digits)	CABLE FORMAT (2 digits)	CABLE LENGTH (3 digits)	OPTIONS (2 digits)

Units of Pressure

F	Feet of Water Column
I	Inches of Water Column
M	Meters of Water Column
P	PSI (Whole numbers only)

Pressure Range

Any Range from 0-30 Inches W.C. up to 335 Feet W.C.
or equivalent can be specified at no additional cost.

* Consult factory for range codes
** Please advise if specific gravity is other than 1

Examples of Four Digit Codes:

Range		Four Digit Codes for Range	
5	=	5 0 0 0	Insert Range Code 5000
10	=	1 0 0 1	Insert Range Code 1001
15	=	1 5 0 1	Insert Range Code 1501
50	=	5 0 0 1	Insert Range Code 5001
100	=	1 0 0 2	Insert Range Code 1002
250	=	2 5 0 2	Insert Range Code 2502
835	=	8 3 5 2	Insert Range Code 8352

Seals

GK	Fluoroelastomer (FKM) -Stocked
GD	Ethylene Propylene (EPDM)

Cable Format

PC	Polyvinyl Chloride (PVC)
TL	Polyurethane Cable (PUR) *Stocked in select lengths for fast delivery
PA	Fluorinated Ethylene-Propylene (FEP)
PB	Thermoplastic Elastomer (TPE)

Cable Length

XXX	Listed in Whole Meters Only (must be 3 digits - ex. 012 = 12 Meters)

Options

EA	Special Calibration Run
FA	Russian Metrology Certificate
PW	Calibrate item with meter/display
NSR	Non-Standard Range
ZB	1/2" NPT Conduit Adapter

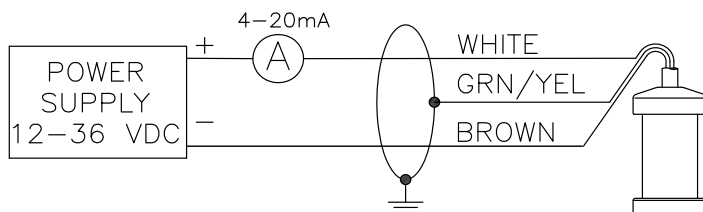**Example of "ZB" Conduit Connection Option on Model 596**

AS9100D
ISO 9001:2015

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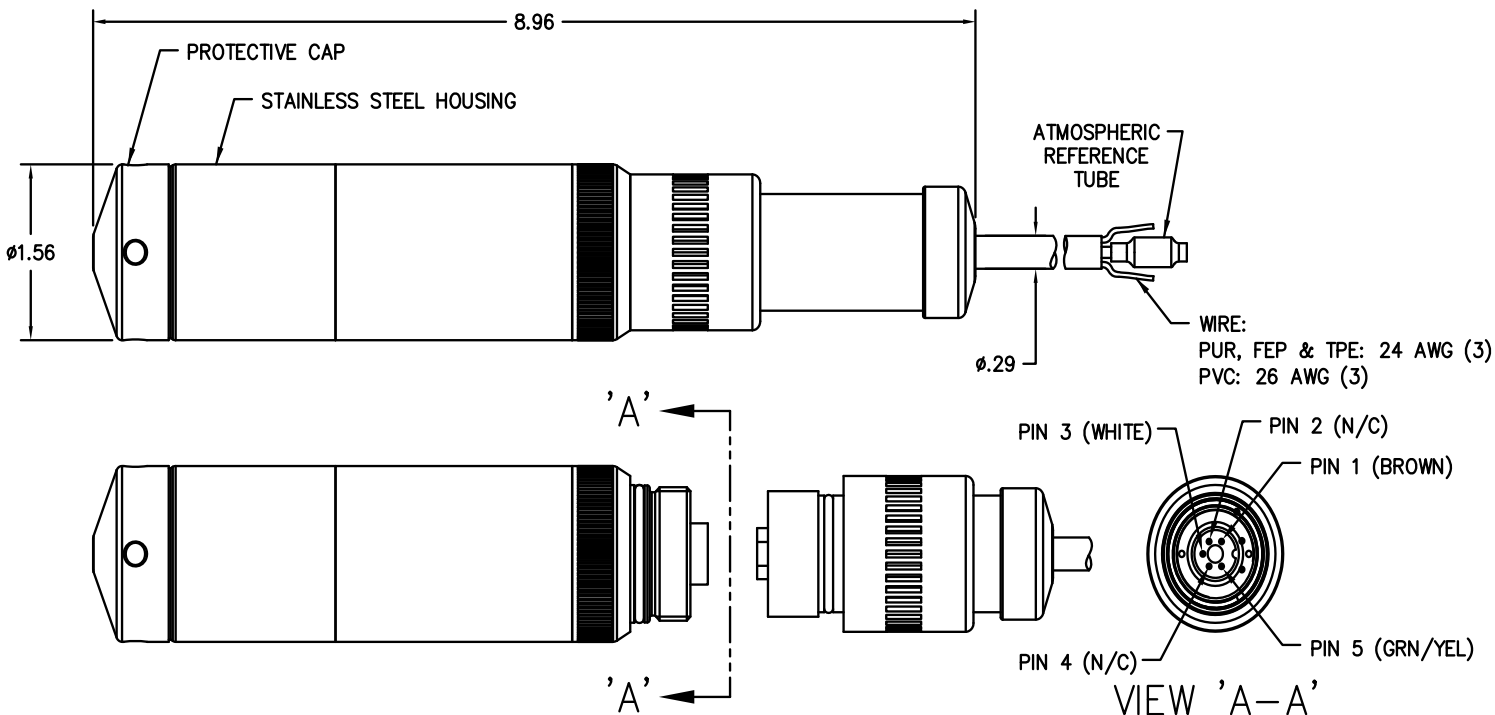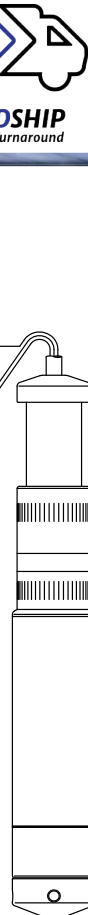
Connection Diagrams & Wiring

The standard wiring of your Viatran detachable level transmitter is outlined below. The wiring information is also marked on your unit.

The 596 detachable level transmitter can be powered by a DC power supply ranging from 12 to 36 volts.

See installation manual for more details.

POWER SUPPLY 12−36 VDC

4−20mA

WHITE
GRN/YEL
BROWN

WIRING		
WHITE	+SUPPLY	PIN 3
BROWN	−SUPPLY	PIN 1
GRN/YEL	SHIELD	PIN 5

PROTECTIVE CAP
STAINLESS STEEL HOUSING
8.96
Ø1.56
ATMOSPHERIC REFERENCE TUBE
Ø.29
WIRE: PUR, FEP & TPE: 24 AWG (3)
PVC: 26 AWG (3)

'A'
'A'

PIN 3 (WHITE)
PIN 2 (N/C)
PIN 1 (BROWN)
PIN 4 (N/C)
PIN 5 (GRN/YEL)
VIEW 'A−A'

98DS596 Rev C

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