TLT TANK LEVEL TRANSDUCER WITH TEMPERATURE - DATA SHEET

*Patented

The TLT series liquid level transducer has been specifically designed for tank level in the mobile market to withstand both physical abuse and exposure to dust, water, chemicals, etc. It is ideally suited for fuel, hydraulic, chemical, ADBlue lactic acid, and brine tanks of mobile machines. The inclusion of temperature indication allows the possibility of reduced overall cost when one sensor can now replace two, and sometimes three, sensors in a hydraulic tank application.

BENEFITS

- Reduces tank assembly and cabling costs
- Gain back I/O ports on controller if old version was analogue
- One sensor and installation is generally lower cost than two sensors (sometimes three sensors)
- Possible reduction on power budget, TL with temperature draws 0.25 W at 12VDC

PERFORMANCE

- Better performance: 0.3 mm resolution on level
- ±3°C on temperature indication
- Solid-state, zero wear, absolute signal
- Excellent shock and vibration resistance (including resonant frequencies)
- Operating temperature -40°C to 105°C (-40°F to 221°F)
- Excellent EMC approval

ENCLOSURE

- Welded 304 stainless steel as standard
- Tube OD 9.6 mm up to 730 mm stroke, 10 mm thereafter
- 16 mm OD TLH option
- Stroke of up to 6 metres available
- Aluminium option, tube OD 10 mm, max. stroke 730 mm

OUTPUTS

- CANbus SAE J1939 and CANopen

TERMINATION

- Deutsch DT & DTM
- M12
- AMP

Subject to reasonable modifications due to technical advances

HOW TO ORDER

TLT		E	N	0350	BW	0.3	JT		4RT	N	0.15	M8	L	1234

TLT Series Transducer

Tube Option
Blank = Standard 304/316 stainless steel, 9.6 mm OD <730 stroke, 10 mm OD ≥730 mm stroke
A = 10 mm OD Aluminium 6082 T6 (aluminium tubes require PM tube support)
H = 16 mm OD Stainless 304/316 (TLH tubes require PW float)

Mounting Configuration
Heads for 9.6 mm & 10 mm OD Tubes
Float needs other entry hole:
B = SAE #8
D = M18
G = 1/2" BSPP
P = Plain Tube

Float can utilise existing entry hole:
E = SAE #16 (304 Only)
F = Five-hole flange (304 Only)
M = M33 (304 Only)
Q = Four-hole flange (304 Only)

Heads for 16 mm OD Tubes
Float needs other entry hole:
A = 3/4" BSPP
E = SAE #12
F = Five-hole flange
M = M27

Gasket/O-rings
N = Nitrile
V = Viton

Stroke = Up to 730mm for Aluminium
Up to 6000mm for 304

Float
PW = Polypropylene
BW = Buna (not available for TLH)

Resolution
0.3 = 0.3 mm

Output Signal
JT = CANbus SAE J1939 with temperature indicator
CCJ Form to be completed*
Voltage input 9-32 volts
OT = CANopen with temperature indicator
CCO form to be completed*
Voltage input 9-32 volts

*Ask Rota for this form
(For CANbus Transducer Test Kit, order Rota part number LJ 2914)

Optional
R = Reversible Signal

Connectors

4RT/4RC	= Deutsch DT04-4P with Rota contacts
6RT/6RC	= Deutsch DT04-6P with Rota contacts
4RM/4RCM	= Deutsch DTM04-4P with Rota contacts
6RM/6RCM	= Deutsch DTM04-6P with Rota contacts
4UP/4UC	= AMP 282106-1
5UP/5UC	= AMP 282107-1
6UP/6UC	= AMP 282108-1
J	= M12 Integral connector (B/D/F/G Mounting Configurations only)(not available for TLH)
5MH	= Harness with M12 connector
5M9	= Harness with 90 °M12 connector

Electrical Termination
N = PVC Cable - Unscreened
U = PUR Cable - Unscreened

Cable Length (m)
standard lengths:
0.15, 0.3, 0.4, 0.5,1.0, 1.5, & 2.0 m

Optional Tube Support
Blank = no support (304 only - up to 730 mm for TL, TBD for TLH)
PM = Plain mounted support (not available for TLH)
M8 = M8 x 10 mount support (304 Only)

Optional Float Stopper
L = Float stopper at head end (304 only)

Unique Transducer Calibration Number

Patents
CNZL201580063891.8
EP 3198231
KR10-1960719
JP 6713457
US 10,222,238

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