Quality Management System, Environment and Safety



# **SERIES T7W**

T7W is an online water determination transmitter in crude oil pipes. It is suitable for extreme pressure and temperature process conditions and it is equipped with microcontroller digital electronic which allows a very accurate and reliable management of the capacitive sensor, also giving diagnostic information about the transmitter functioning. It has a standard 4-20mA analog output and is fully managed remotely through the standard HART® communication protocol ("Highway Addressable Remote Transducer"). Temperature compensated.

#### SOME APPLICATION FIELDS

Oil production, Oil/water separators, Aviation fuel. Chemical and petrochemical industry,.

#### **TECHNICAL FEATURES**

- Supply: 12÷35Vdc
- Output: 4÷20mA 2 wire system (max 21.5mA)
- HART® protocol communication Revision 6.0
- Max Load:  $R_L$ max=(Vdc-12V)/21.5mA; with HART® 220ohm <  $R_L$  < 600ohm
- Sensor: capacitive validated through fluidodinamic models
- Galvanically isolated probe input
- 10 points calibration
- Measuring range: 0:45% concentration of water in oil depending on gas concentration
- Total Accuracy < 1%FS
- Response time: <256ms (Std Hart®)
- Measured value update frequency: ~1s
- Rangeability: 5:1
- Process temperature: -10÷150°C
- Ambient temperature: -40÷85°C
- Temperature compensated: standard 10 to 70°C
- Maximum pressure: 1000bar@150°C
- Process operative pressure: 700bar@150°C
- Pressure coefficient: +1%/100 bar
- Protection degree: IP67















**IEC 61508** 





#### SCIGATE AUTOMATION (S) PTE LTD

Tel: (65) 6561 0488 Email: sales@scigate.com.sg

No.1 Bukit Batok Street 22 #01-01 Singapore 659592 Fax: (65) 6562 0588 Web: www.scigate.com.sg

Business Hours: Monday - Friday 8.30am - 6.15pm

VALCOM® - www.valcom.it - valcom@terranova-instruments.com a TERRANOVA® Srl brand - www.terranova-instruments.com Factory & Sales: Via Gramsci, 1 - 26827 Terranova Passerini (LO) - Italy Legal Office: Via Rosso Medardo, 16 - 20159 Milano (MI) - Italy





Rev. 3

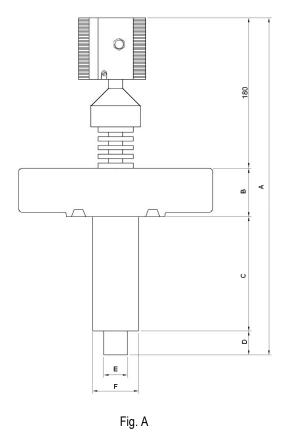


Pag. 1

Ph: +39 0377 911066 - Fax: +39 0377 919156 VAT IT07848810151



## **DIMENSIONAL DRAWINGS**



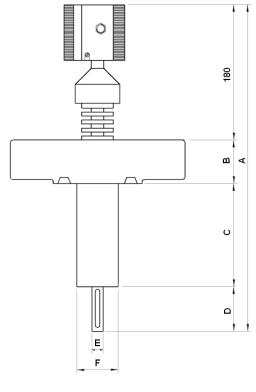


Fig. B





Pag. 2

## SCIGATE AUTOMATION (S) PTE LTD

No.1 Bukit Batok Street 22 #01-01 Singapore 659592 Tel: (65) 6561 0488 Email: sales@scigate.com.sg

Fax: (65) 6562 0588 Web: www.scigate.com.sg

Business Hours: Monday - Friday 8.30am - 6.15pm

Ph: +39 0377 911066 - Fax: +39 0377 919156 VAT IT07848810151