

---

## MANSI™ TS Series Resistive Fuel Level Sensor for Tomasetto / Emer type Multivalves

---



into Tomasetto and Emer type multivalves. Manufactured under tight environmental conditions, these two wire sensors accurately output fuel level in the form of an output resistance. High quality, high gauss, nickel plated rare earth magnets ensure long life under harsh conditions. All contacts are gold plated and batch wise quality checked.

### Features

- Environmentally Sealed
- Manufactured under tight workplace conditions
- Choice of custom output resistance
- Mechanical sensor without resistance output available (TS-E model)
- Clear markings and printing
- High quality, high gauss magnets ensure long life
- High quality gold plated contacts
- 6m wiring cable included
- Low cost
- RoHS compliant

### Application

- LPG/CNG Vehicles
- OEM fitment and after market conversion kits
- For use with Tomasetto / Emer type multivalves

### Description

These are environmentally sealed resistive output fuel level sensors for LPG/CNG multivalves, designed to fit

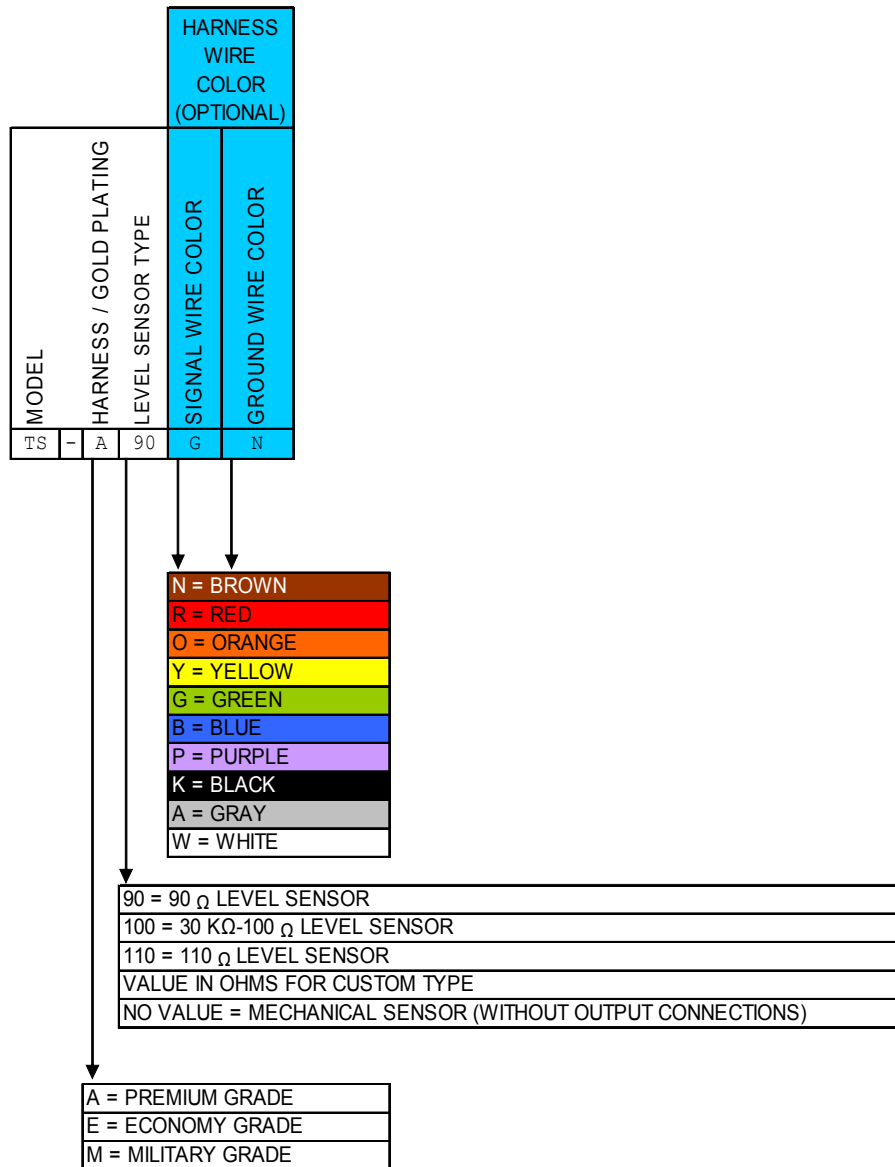
---

### Technical Overview

Operating Resistance Range: User Defined  
Resistance Step: Reserve + 8 Steps  
Operating Temperature Range: -40 °C to +125 °C  
Environmental Protection: IP67  
Vehicle Suitability: Any vehicle operating on 12V battery  
Harness length: 6m (Harness optional)  
Standards: Follows UNECE Regulations 67, 110 and 114

## Ordering Information

Shown below is ordering code chart with example: **TS-A90GN**. RoHS compliance certificate is available on request.



**Figure 1: TS Series Ordering Information**

## Technical Specifications

Available upon request

## Installation

- ⚠ Installation by trained personnel only.
- ⚠ Incorrect or loose connections can cause permanent damage to the device and voids all warranty.
- ⚠ Do not install the unit near sources of excessive heat.
- ⚠ Do not touch any electrical terminal on the device during installation. Harness plug must be inserted into the device only after all wiring connections are performed and double checked.
- ⚠ Follow common safety rules of automotive repair during installation.

### **Step 1: Open package**

Package contains

- one device
- one wiring harness
- two mounting screws
- one user's manual

### **Step 2: Perform wiring**

Connect the device to changeover switch's appropriate terminals, using the supplied harness. All connections should be double checked for correctness.

### **Notice**

It is best to connect the GND of the wiring harness as close as possible (preferably directly) to the changeover switch's ground because difference in ground at various places can cause erroneous results.

### **Step 3: Mount Device**

Mount device firmly on multivalve using the supplied mounting screws. The large mounting holes in the device enable angular adjustment at the time of mounting. This helps to adjust the output for a given fuel level in tank.

### **Step 4: Test**

Start the vehicle and put it in GAS mode. Manually swing multivalve fuel float slowly and observe change in level indicator lights of changeover switch.

## Warranty

Mansi Engineering guarantees its parts to be free from defects in workmanship and materials when operated under normal conditions and in accordance with nameplate characteristic limits. In case of electronic unit, this warranty shall be in effect for a period of 18 months from date of manufacture. However wiring cables or harnesses are not covered by any type of warranty. THIS WARRANTY SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Mansi Engineering will repair or replace, at its option, any device which has been found to be defective and is within the warranty period, provided that the device is shipped, with previous factory authorization, freight prepaid, to the nearest authorized service center. Mansi Engineering is not responsible for removal, installation, or any other incidental expenses incurred in shipping the device to or from Mansi Engineering.

Mansi Engineering's liability under this warranty shall be solely limited to repair or replacement of the device within the warranty period, and Mansi Engineering will not be liable under any circumstances, for consequential or incidental damages, including, but not limited to, personnel injury or labor costs.

Under no circumstances will Mansi Engineering be responsible for any expense in connection with any repairs made by anyone other than the factory or an authorized service center, unless such repairs have been specifically authorized in writing.

## Notes

Please Read Carefully:

Information in this document is provided solely in connection with Mansi Engineering products. Mansi Engineering reserves the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice. All MANSI™ products are sold pursuant to Mansi Engineering's terms and conditions of sale. Purchasers are solely responsible for the choice, selection and use of the MANSI™ products and services described herein, and Mansi Engineering assumes no liability whatsoever relating to the choice, selection or use of its products and services described herein.

No license, express or implied, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by Mansi Engineering for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN MANSI ENGINEERING'S TERMS AND CONDITIONS OF SALE MANSI ENGINEERING DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF MANSI™ PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY AN AUTHORIZED MANSI ENGINEERING REPRESENTATIVE, MANSI™ PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. MANSI™ PRODUCTS WHICH ARE NOT SPECIFIED AS "PREMIUM GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of MANSI™ products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by Mansi Engineering for the product or service described herein and shall not create or extend in any manner whatsoever, any liability of Mansi Engineering.

MANSI™, Mansi Engineering™, MANSI™ logo and Mansi Engineering logo are trademarks or registered trademarks of Mansi Engineering. All other names are the property of their respective owners. Information in this document supersedes and replaces all information previously supplied.

© 2008 Mansi Engineering™ - All rights reserved

---

## Contact Information

<b>Mansi Engineering</b>	<b>Phones</b>	<b>Emails</b>
B1 Sharad Complex,	+91-79-26307134	Sales: sales@mansi.ws
Opp Tubewell Stn,	+91-79-26302446	Support: support@mansi.ws
Gulbai Tekra,	<b>Fax</b>	Billing: billing@mansi.ws
Ahmedabad 380006.	+91-79-26300752	General Information: info@mansi.ws
Gujarat. INDIA.		