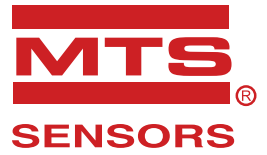


SERVOCONTROLS

 Save Energy with Feedback

Technical Alliance
Partner for



The leader in Magnetostrictive Technology.



TYPES OF LIQUID LEVEL SENSORS

- MR Model
- MC 420 Model
- MG Model
- USTD II Model

OUTPUTS

- Analog 4-20 mA with HART Enabled
- **Digital Outputs**
- Modbus RTU
- DDA
- Foundation Fieldbus

DIFFERENT TYPES OF FLOATS

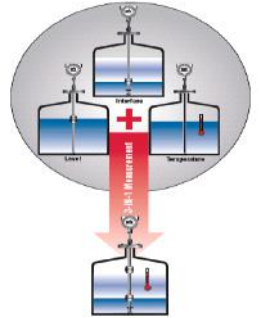


MATERIAL CHOICE OF FLOAT FOR CRITICAL APPLICATION:

- 316L Stainless Steel
- Teflon
 - Hastelloy C-275
 - Monel-500
 - Kynar
 - Nitrophyl
- Float size from 50 mm to 250mm
- Specific gravity from 0.36 up

3 IN 1 MEASUREMENT THROUGH ONE OPENING

- Product Level
- Interface Level
- Temperature



INDUSTRIES SERVED :

Pharmaceutical & Biotech



Chemical Industry



Specialty Chemicals



Oil & Gas Refineries



Food & Beverages



Ship Building & Marine Industry



COMPLETE SOLUTION FOR LEVEL MEASUREMENT



SERVOCONTROLS SPECIALTY

- MTS approved In house Service/Repair facility
- All types of Level Switches for Liquid & Solid application
- Ultrasonic/Guided Wave Radar, RF-Capacitance, By-pass Level Transmitter

TYPES OF MAGNETOSTRICTIVE TRANSMITTERS

1. MR Model With Analog Output



- 4 to 20 mA analog Output with HART communication
- Non linearity - 0.02% FS
- Repeatability - 0.01% FS
- Input Voltage - 10.5 to 36 Vdc
- Two Channel Output
- Measuring length up to 12200mm

2. MC 420 Model With Analog Output



- Input Voltage - 10.5 to 36 Vdc
- Non linearity - 0.02% FS
- Repeatability - 0.01% FS
- 4 – 20 mA output with HART communication
- Measuring length - 457 to 5486 mm
- Used in hazardous area applications

3. MG Model With Digital Output



- Digital output with Modbus RTU, DDA or FOUNDATION Fieldbus
- Non linearity – 0.008% FS
- Hysteresis – 0.002% FS
- Input Voltage – 9 to 32 Vdc
- Measuring Length –
Rigid pipe - 508 to 7620 mm
flexible hose - 3048 to 22000 mm

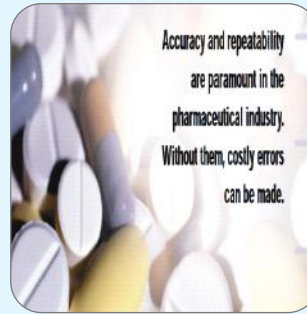
4. USTD II Model



- Input Voltage – 10.5 to 30.1 Vdc
- Output - Direct Digital Access (DDA)
- Repeatability – 0.001% FS
- Measuring Length – up to 3785 mm
- Used In fuels, solvents & sump
- It is designed for use in Underground Storage Tanks

INDUSTRIAL APPLICATIONS OF MAGNETOSTRICTIVE LEVEL SENSOR

• PHARMACEUTICAL & BIOTECH INDUSTRY



- Level Plus sensors are ideal for batch and continuous processing inherent in the pharmaceutical industry
- Unparalleled accuracy and reliable measurements
- Customization & faster start-up time compared to other technologies

• SPECIALTY CHEMICALS



Whether you're dealing with extreme temperatures, foaming liquids or caustic fluids, the specialty chemical industry presents a challenge to sensors that can not only withstand such environments - but can also deliver quality performance under those conditions.

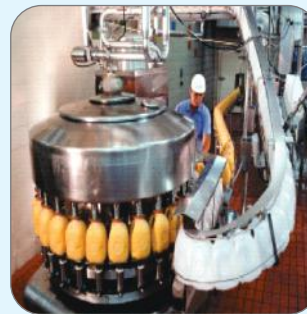
• OIL & GAS REFINERY



From bulk petroleum storage refined fuels to propane gas, Level sensors provide the most accurate level measurements in the industry.

- Not affected by changes in atmospheric conditions
- The most accurate and reliable measurements

• FOOD & BEVERAGE INDUSTRY



Everyone wants accurate inventory monitoring in order to know how much of a liquid is being produced or consumed. The need for distilleries is increased due to taxes. Distilleries are taxed on how much alcohol they produce and the more accurate the inventory level the less distilleries overpay in taxes.

WHY MAGNETOSTRICTION ?

There are several technologies in addition to Magnetostriction which are used for measuring liquid level. But why Magnetostriction is most preferred in critical application in industries? Please refer below table.

Technology	Repeatability	Non linearity	Level & Interface	Ruggedness
Magnetostriction	High	Low	Yes	High
Radar	High	Medium	No	High
Ultrasonic	Medium	Medium	No	Medium
Capacitance	Medium	Medium	No	Low
TDR	Medium	Medium	Yes	Medium
Diff Pressure	Medium	Medium	No	Medium

ACCURACY OF MEASURING :

- 0.1 mm for PRODUCT LEVEL
- 1 mm for INTERFACE LEVEL
- 1 Liter for PRODUCT VOLUME
- 0.1 Degree C for AVERAGE TEMP

CUSTOMER REFERENCE



SERVOCONTROLS ELECTROMECHANICAL LINEAR ACTUATOR FOR PROCESS CONTROL & LIQUID PACKAGING :

Servocontrols GSM40

- Precise air control to the ovens is needed in this conversion process
- It is being used to control the air that is going into the Zinc process furnace/oven.



Servocontrols GSM30

- 8 inch Samson valve
- 2 inch stroke
- Control of water
- 1 inch kammer valves
- GSM30 actuator with SV controllers



Servocontrols I/ER Series



Servocontrols EL30

- Very High Temperatures
- Explosion Proof - Class I Div I
- EL30 with customer mount/SV controller



Various applications Of Linear Actuator In Process Industries



Damper application



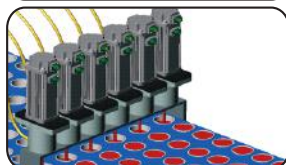
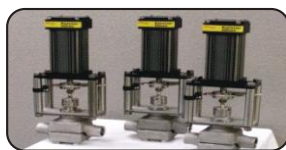
Specialty application



Valve application

Sample Valve Applications:

We can retrofits and valve from any manufacturer, including: Emerson (Fisher), Samson, Kammer, Badger, Flowserve, Woodward, Masonilan, Warren, Fox, Jordan, Leslie



SERVOCONTROLS ELECTROMECHANICAL Linear

Actuator Applications :

Milk, Juice, Yogurt, Pudding, Gelatin
Grease, Glue, Paint, Solvents, Dental Adhesive, Ink
Used as highly accurate piston pump

Advantages :

- Precise volume control
- Flexible flow rate and volume adj.
- Adapts to product variations

SERVOCONTROLS 100% EOU Unit in
12 acres of land near Hattargi Belgaum
Special Economy Zone



**SERVOCONTROLS Existing facility
Industrial Estate, Udyambag, Belgaum**



Address for Correspondence:

SERVOCONTROLS

(An ISO 9001-2008 Certified Company) &
AS 9100 Rev C Certified Company

Survey No. 683, Industrial Estate, Udyambag,
Belgaum 590008, Karnataka, INDIA.

Tel: 91-831-2407501/2/3, 2481734, 4201132

Fax: 91-831-2484496

E-Mail: sales@servocontrolsindia.com

Website: www.servocontrolsindia.com

Contact Persons:

Mr. Deepak V. Dhadoti

Mobile: +919448395734

Email : deepak@servocontrolsindia.com

Mr. Dinesh V. Dhadoti

Mobile: +919845109022

Email : dinesh@servocontrolsindia.com

Mr. Sudheendra P. Naik

Mobile: +919448395864

Email : levelsensor@servocontrolsindia.com

Mr. Deepak S. Reddy

Marketing Executive

Mobile : +919448395742



Servocontrol's
First servo Valve Test Setup at Home Garage
in July 2002 at Belgaum, Karantaka



Kaigarika Ratna Prashasti
(Industrial Jewel Award May-2011)



Inauguration of Brand New Facility by then
Chairman & CEO Mr. Sidney Emery of
MTS Systems Corporation, Minneapolis
USA on 24th Oct 2007



Servocontrols
State bank of India's Esteemed Customer



Various MTS awards to Servocontrols in USA & Germany



Various Technology Excellence Awards