Ultrasonic Level Transmitter Model-MS0410

Introduction:

This is microprocessor based Ultrasonic level transmitter. It has Multifunction Instruments It is capable of monitoring Virtually Any Short Or Medium Range of Non-Contact Ultrasonic Level Measurements of Liquids, Solids Or Slurries. In this Instrument User can take measurements of Roller Lift of mills, water level and select the range in the range parameter and set Reverse action in Action parameter. It has One Analog Output 4-20mA and two digital control output (we can also define these two digital control output as relay1and 2).

NOTE – To measure the level t of the tank ,the sensor has to be placed 22cm above the level as it is defined as the dead zone of the sensor .

SPESCIFICATION

Measuring Range	: 0-5 Meters
Main (auxiliary supply)	**: 24V DC**
O/P (Analog)	**: 4-20mA**
Digital (RL1&2)	**: +24v common**
Display LCD	**: 16 x2**
Display value	**: In CM And MM(Millimeter)**
Revers Action	**: User can be take 4-20mA in revers action**

Wire's colure code

Power supply	**: +24v Red Wire**
	: -24v Black Wire
Analog o/p (4-20mA)	**: + mA White Wire**
	: - mA Green Wire
Digital o/p	**: +24v common Brown Wire**
	: Digital o/p1 Blue Wire
	: Digital o/p2 Yellow Wire

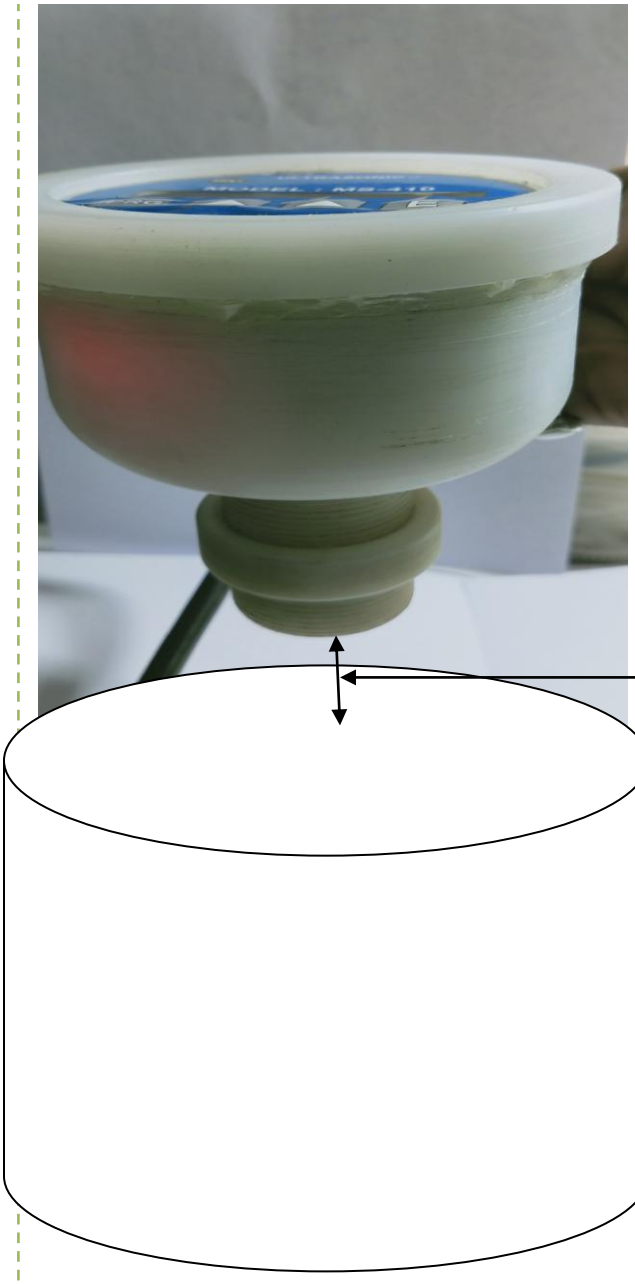
ACTION PARAMETER - if we mention the value of action parameter as 1 then it will work in reverse order and if value is mentioned as 0 it will work in forward order.

RANGE PARAMETER – in range parameter we have to define that value which gives the output of 420mA.

WORKING OF TRANSMITTER- (REVERSE ACTION) if we mention the value of action parameter as 1 , suppose the object is placed 1 m (value of range parameter) from the transmitter then this value will be considered zero and as the object will move closer to it ,it will begin to sense the distance and will give the output as soon as when the object will be at 22cm it will display maximum range i.e 420 mA.

FORWARD ACTION – if we mention the value of action parameter as 0 and the object is placed closer to the transmitter ie 22cm from it or less than that ,it will consider it as zero and show dead zone and at this time the range will be 3.8 mA .when the object will move farther from 22cm it will sense the value and display the output.

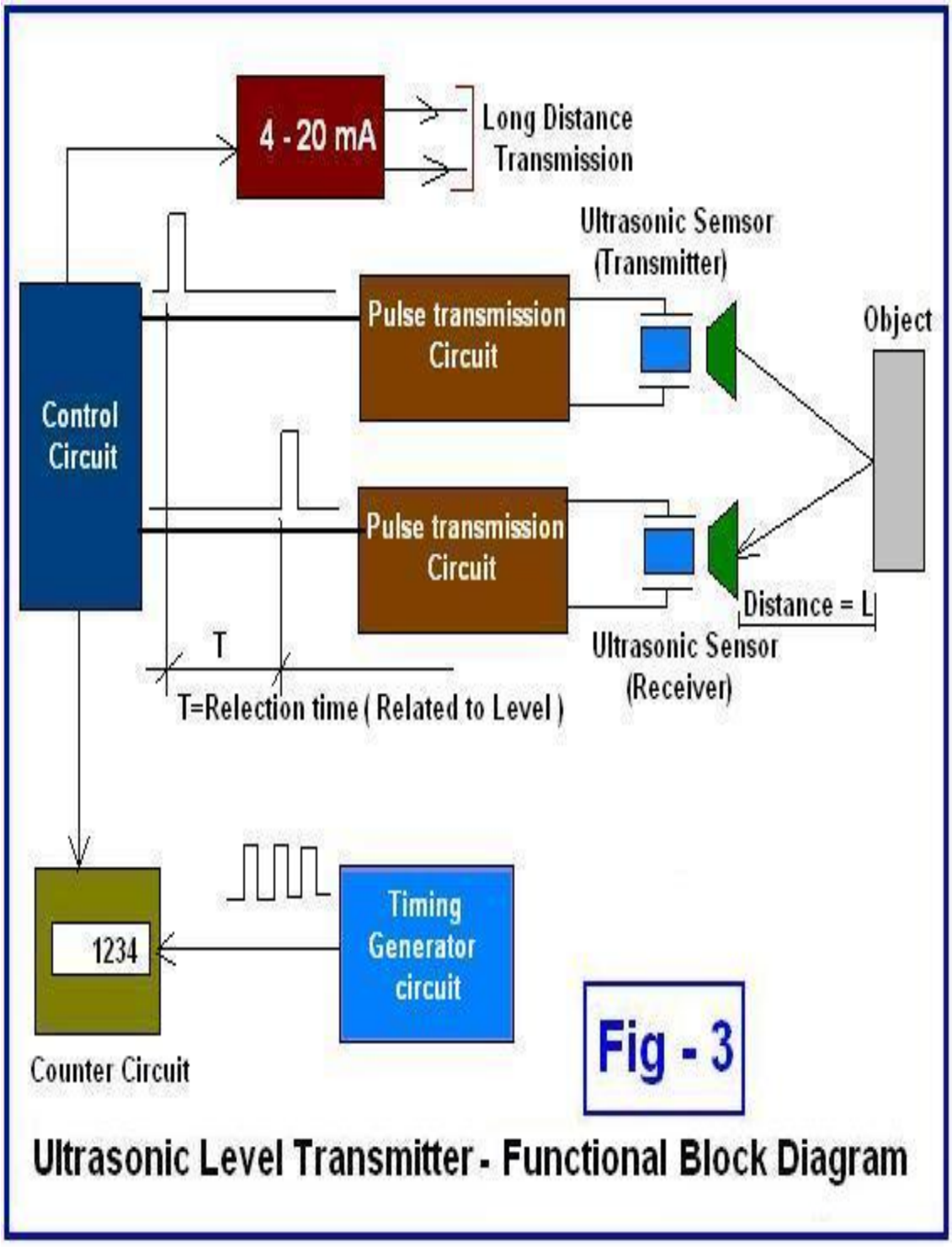
Tank Level Measurement



22 cm dead zone

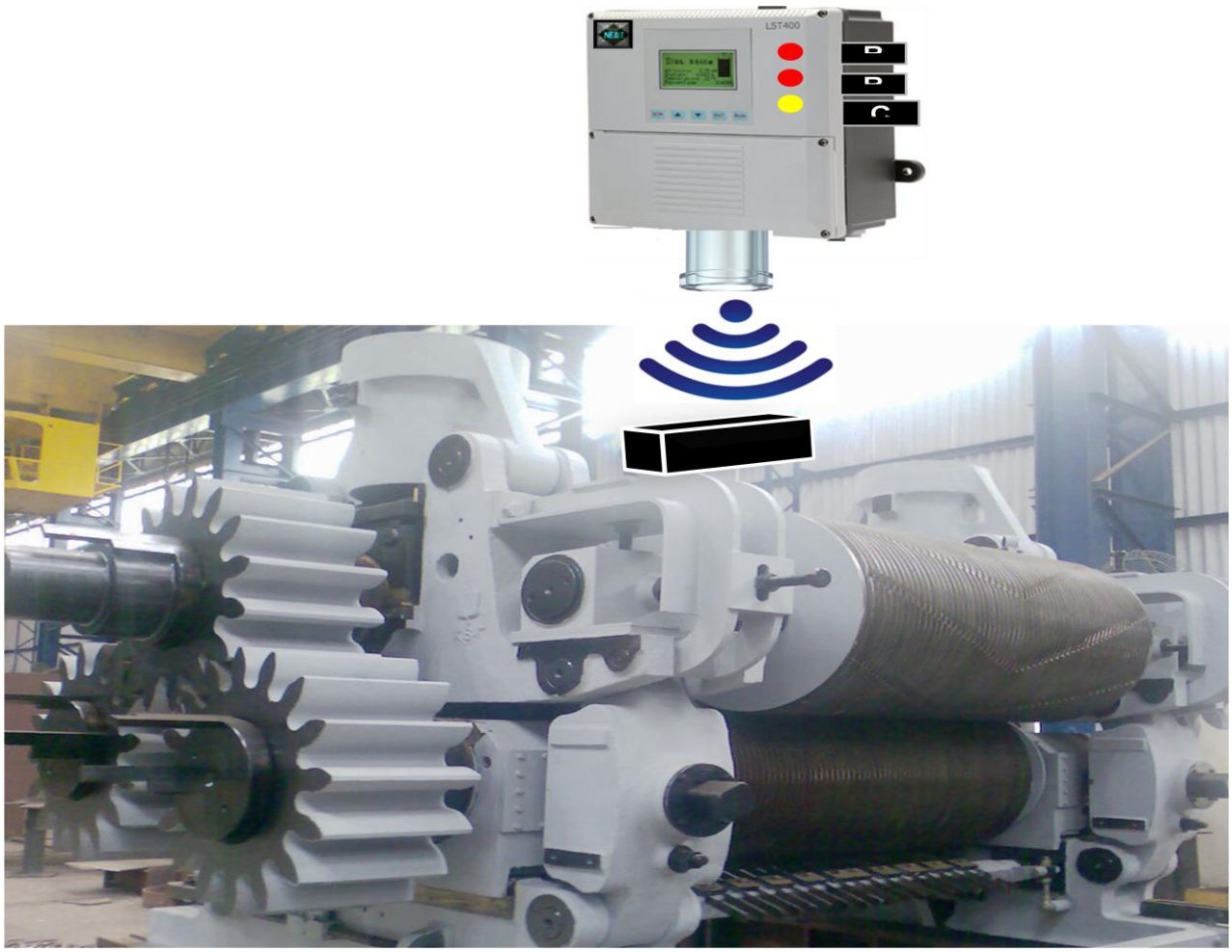
NOTE - TO MEASURE THE LEVEL OF THE TANK, THE SENSOR HAS TO BE PLACED 22C M ABOVE THE LEVEL OF TANK, AS IT IS DEFINED AS THE DEAD ZONE OF SENSOR.


ULTRASONIC TX
NE&T
MODEL : MS-410
Distance:049.1cm
Action-R:00491mm
PRG
E



Ultrasonic Level Transmitter - Functional Block Diagram

Measurement of Roller Lift at mills



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