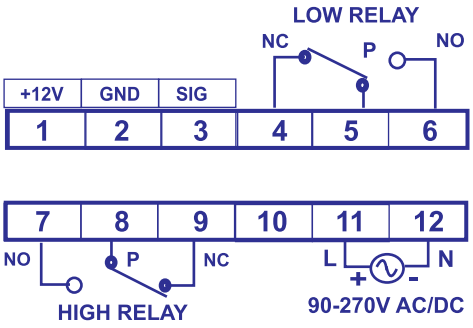
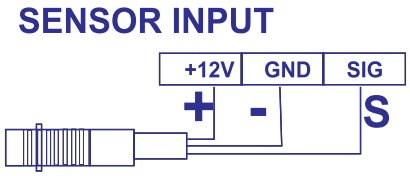
1. Specification

Range	0 - 9999 RPM,0 - 9999 RPS, 0 - 9999 RPH(SELECTABLE)
Relay Output	Two Relay or Buzzer O/P(optional)
Display	4 Digit 0.5" 7 Segment LED display RED
Power Supply	90 To 270V AC/DC
Frequency	50/60Hz
Operating Temperature	0 - 50 ° C (32 ° F TO 122 ° F)/ 5 - 95 % Rh
Over All Dimension	72(H) X 72(W) X 65(D) mm
Cut out Dimension	68(H) X 68(W) mm
Weight	200 grams (Approximately)

2. Terminal Arrangement



3. Connection Details



4. Changing The Set Value (SV)

1. LOW RELAY Set Point Setting

1. To change the Low Set , press LO ▶ KEY for 3 sec continuously.
2. After 3 Sec the Last Digit gets Blinking.

3. Use HI ▲ KEY to Change the Value, Then Use LO ▶ KEY to Move to Next Digit and roll over between last to first digit.

4. After Setting the Required LOW Set Value Press ENT ● KEY.
5. Now you confirm the LOW set point by pressing LO ▶ KEY one time the display shows the LOW set point and automatically come back to Online RPM Reading.

2. HIGH RELAY Set Point Setting

1. To change the High Set , press HI ▲ KEY for 3 sec continuously.
2. After 3 Sec the Last Digit gets Blinking.

3. Use HI ▲ KEY to Change the Value, Then Use LO ▶ KEY to Move to Next Digit and roll over between last to first digit.

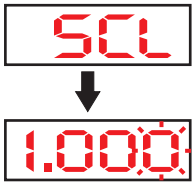
4. After Setting the Required HIGH Set Value Press ENT ● KEY.
5. Now you confirm the HIGH set point by pressing HI ▶ KEY one time the display shows the HIGH set point and automatically come back to Online RPM Reading.

5. Programming And Configuration

TO ENTER INTO CONFIGURATION SETTING PRESS ENT ● KEY FOR 10 SEC CONTINUOUSLY.

1. SCALE FACTOR (SCL)

1. Then the display shows " SCL "Scale Factor For Few Sec and display the Previously selected scale factor Value with the last digit blinking.



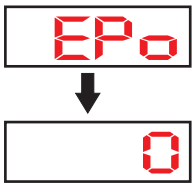
FOR FEW SEC

SET BETWEEN 0.001 TO 9.999 AS PER YOUR REQUIREMENT

2. To change the Scale Factor Value , press HI ▲ KEY to roll over between 0 - 9 and move to next Digit , Using LO ▶ KEY.

2. EXPONENT (EPo)

1. After Setting the required Scale Factor Value, Press ENT ● KEY to Save and Enter into the Exponent.
2. Then the display shows " EPo " Exponent For Few sec and display the Previously selected Exponent Value.



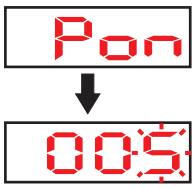
FOR FEW SEC

SET 0 for 10^0, 1 for 10^1, 2 for 10^2, -3 for 10^{-3} , -2 for 10^{-2} , -1 for 10^{-1} AS PER YOUR REQUIREMENT

3. To change the Exponent Value , press HI ▲ KEY to roll over between 0 to - 3

3. POWER ON DELAY FOR RELAY (Pon)

1. After Setting the required Exponent Value, Press ENT ● KEY to Save and Enter into the Power ON Delay For Low & High Relay.
2. Then the display shows " Pon " Power ON Delay For Few sec and display the Previously selected Power ON Delay Time with Blinking at last digit.



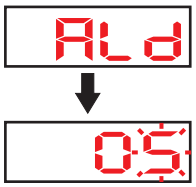
FOR FEW SEC

Power ON Delay : If Any Relay condition is ON at power ON, the Relay output will be activated only after the time set as, Power ON delay.(0 - 999 sec)

3. To change the Power ON Delay Time , press HI ▲ KEY to roll over between 0 to 9 and move to next Digit , Using LO ▶ KEY.

4. ALARM ON DELAY FOR RELAY (ALd)

1. After Setting the required Power ON Delay Time, Press ENT ● KEY to Save and Enter into the Alarm ON Delay For Low & High Relay.
2. Then the display shows " ALd " Alarm ON Delay For Few sec and display the Previously selected Alarm ON Delay Time with Blinking at last digit.



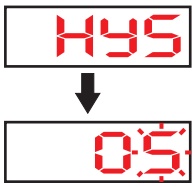
FOR FEW SEC

Alarm ON Delay : When Relay condition occurs, the Relay output will be activated only after the time set as Alarm Delay (0 - 99 Sec).

3. To change the Alarm ON Delay Time, press HI ▲ KEY to roll over between 0 to 9 and move to next Digit , Using LO ▶ KEY.

5. HYSTERISIS FOR RELAY (HYS)

1. After Setting the required Alarm Delay Time, Press ENT ● KEY to Save and Enter into the Hysterisis For Low & High Relay.
2. Then the display shows " HYS " Hysterisis For Few sec and display the Previously selected Hysterisis value with Blinking at last digit.



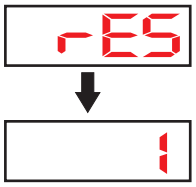
FOR FEW SEC

Hysterisis(0 - 99 Least Count) : Low Relay is ON when Read < = LO Set. It turns off when, Read > (LO Set + Hysterisis). High Relay is ON when Read > = HI Set. It turns off when, Read < (HI Set - Hysterisis).

3. To change the Hysterisis Value, press HI ▲ KEY to roll over between 0 to 9 and move to next Digit , Using LO ▶ KEY.

6. RESOLUTION FOR READ (rES)

1. After Setting the required Hysterisis Value, Press ENT ● KEY to Save and Enter into the Resolution Selection Mode.
2. Then the display shows " rES " Resolution For Few sec and display the Previously selected Resolution.



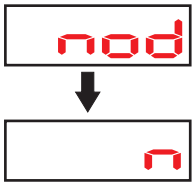
FOR FEW SEC

SELECT RESOLUTION BETWEEN 1, 0.1, 0.01, 0.001 AS PER YOUR REQUIREMENT.

3. To change the Resolution, press HI ▲ KEY to roll over between 1 to 0.001.

6. READ MODE SELECTION (nod)

1. After Selecting the required Resolution, Press ENT ● KEY to Save and Enter into the INPUT Mode Selection.
2. Then the display shows " nod " MODE For Few sec and display the Previously selected Input Mode.



FOR FEW SEC

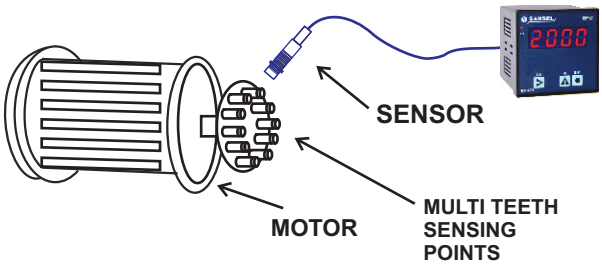
SELECT INPUT MODE " n " for RPM (Revolution Per Minute)
" H " for RPH (Revolution Per Hour)
" S " for RPS (Revolution Per Second).

3. To change the Input Mode, press HI ▲ KEY to roll over between n to S.
4. After Selecting the required Input Mode, Press ENT ● KEY to Save and Exit from Configuration Setting to Read Mode.
5. Now the Instrument is Ready for Your Required Application.

5. Sample Calculation

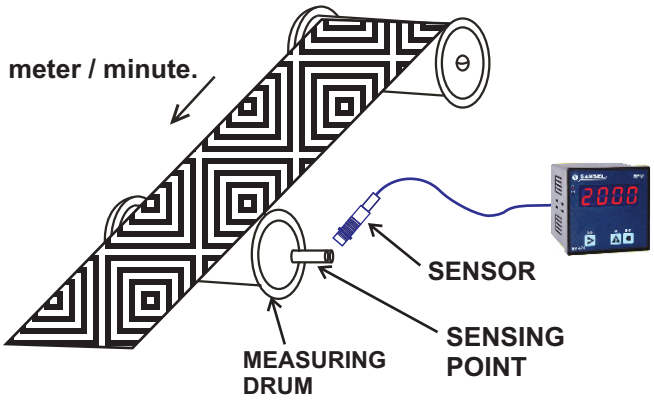
1. For RPM(Revolution Per Minute) Indicator

1. No. of teeth in sensing point = 10
2. To Calculate the RPM of the Motor = 1pulse / 10 teeth = 1 x 10^{-1} = 0.1 RPM / Pulse.
3. Here Scale factor = 1.000 x 10^{-1}
5. So set scale factor = 1.000 & exponent = - 1 (10^{-1})
6. Now our Instrument is work as RPM Indicator For Multi Teeth Sensing point Motor.



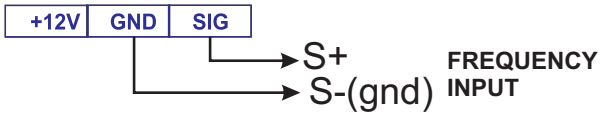
2. For Rate Indicator

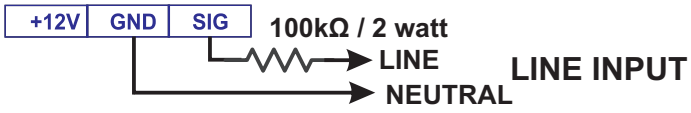
1. Diameter of the measuring drum = 10 m
2. Circumference of the measuring drum = r^2 = 3.143 x 10 m = 31.43 m.
3. So the length of the Item delivered per revolution of measuring drum is 31.43 m. Since our proximity sensor given 1 pulse per revolution, the display should increment by 31.43 for every pulse.
4. Here Scale factor = 3.143 x 10^{1}
5. So set scale factor = 3.143 & exponent = 1 (10^{1})
6. Now our Instrument is work as Rate Indicator in meter / minute.



3. For Frequency Indicator

1.Set Input Mode = RPS (S).(For Line Frequency Indication Put 100kΩ / 2 watt Resistor in series with Line to S+ of terminal as per following drawing)
2. Now our Instrument is work as Frequency Indicator in Hz.
3. Connect Frequency Input S+ in Connector 3 and Input -(gnd) in Connector 2.





For further clarification kindly contact us.

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