

Electronic - Non Contact

Shaft Run Out Monitor

Series SR 1051 - up to 70°C
SR 2051 - up to 200°C

Introduction :

The Jayashree 'D'MON' shaft run out monitor is a reliable and accurate unit for measuring shaft Roundness or vibrations, by non-contact method.

The unit consists of a highly stable Eddy current linear output type position Sensor and a controller unit with digital display.

The unit senses the position of shaft by non-contact method and displays the same.

The unit is very useful for monitoring shaft distortion precisely during rotation.

Application :

- Monitors shaft run out due to bearing wear & tear.
- Useful for checking Roundness / Ovality of shafts up to 0.01 mm accuracy
- Useful for testing wobble / Run out of big Wheels / Rims
- Can measure at shaft RPM of 10,000
- Air gap monitoring for Rotor / Stator gaps in generator structural condition
- Shaft misalignment monitor

Construction

A) Controller Unit :

Supply voltage	: 24 V DC / 110 V / 240 V AC
Enclosure	: 96 x 96 x 160, MS / Plastic Box
Input Signal	: Max. 10 V DC from Eddy current probe
Output (Optional)	: 1 NO + 1NC potential free
Setting Range (Optional)	: 0.1 to 3 mm
Zero Set	: The unit is provided with a zero set knob to set the display at zero at any given position of shaft
Operating Temp.	: 0° to 70°C

B) Sensor Probe : The sensor probe is available in 3 standard diameter with specs as below.

Sensor Dia(mm)	Length(mm)	Measuring Range
8	65	0.5 to 2mm
12	65	1m to 5 mm
18	65	3mm to 8mm

Operating temp : SR. 1051 - 0° to 70° C
SR 2051 - 0° to 200° C

The probe is made of a brass / SS tube with a built in 2 meter long 3 core shielded cable. For units working at high temp. the probe is provided with a special Teflon shielded cable.

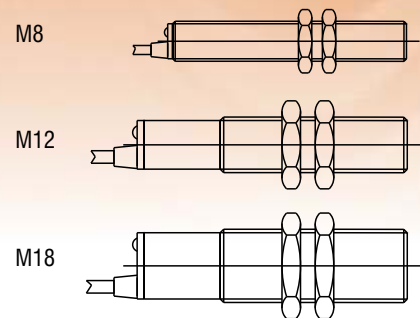
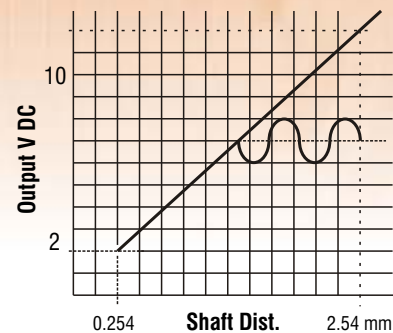
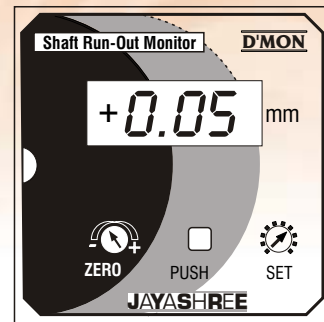
Operation

The non-contact sensor probe is to be mounted at a appropriate distance from the shaft. The display unit will show some reading (+ve or -ve), which can be adjusted / set to zero by a front control knob. Now when the shaft rotates the change in gap due to runout, with reference to the set zero point, is sensed and displayed by the unit.

For unit with built in control relay a setting knob is provided.

D'MON

High Precision,
Simple Analysis,
Accurate Diagnostic



Special models

We can offer special probes like Optical Analog Output, Capacitive Analog Output for monitoring Run-outs/eccentricity of non-metallic objects, such as tyres, Plastic & other parts, from larger distances.

COMPLETE RANGE OF PROXIMITY SWITCHES

INDUCTIVE PROXIMITY SWITCHES

For sensing all types of metallic objects.

Wide range of inductive Proximity Switches for position sensing and counting applications. Models equivalent to all International make. Sizes available from smallest M4 to largest 140 mm diameter. Sensing range from 0.5 mm to 100 mm. Switches are available for working voltage from 5 VDC to 240 VAC / VDC.

Series SW 405 : These sensors are with built in 2 / 3 / 4 core cable to meet different types of output logic requirements. Models with built in relay available.

Series SW 415 : These sensors are provided with built in circular connectors equivalent to International M8 / M12 size.

Special models to withstand high operating Temperatures / Multi-head sensing / Large sensing areas / Custom built shapes / Intrinsically Safe Linear position sensing.



CAPACITIVE PROXIMITY SWITCHES

For sensing Non-metallic and metallic objects.

Available from M12 and above sizes. Designed to sense non-metallic objects such as Wood, Plastic, Rubber, Paper, Liquids, Grains, Plastic granules etc. Available for working voltage from 10 VDC to 240 VAC / VDC.

Series SW 505 : These switches are with built in 2 / 3 core cable to meet various types of output logic requirements.

Series SW 515 : These sensors are provided with built in circular connectors equivalent to International M8 / M12 size.

Special models available to withstand high operating Temperatures / Custom built shapes / Intrinsically Safe for Flame-proof applications.



OPTICAL PROXIMITY SWITCHES

For sensing Non-metallic and metallic objects.

Available from M8 and above sizes, the optical proximity switches are a reliable solution for automation applications where higher sensing range is the requirement. These switches are available in three distinct types viz. *Diffuse Scan, Retro Reflective and Through Beam.*

Series SW 605 : These switches are with built in 2 / 3 core cable to meet various types of output logic requirements.

Series SW 615 : These sensors are provided with built in circular connectors equivalent to International M8 / M12 size.

Special colour mark Sensors for sensing a specific colour band are available. Special colour discriminator / analyzer sensors available for sensing based on colour shade.



MAGNETIC PROXIMITY SWITCHES

For sensing Ferrous objects.

Magnetic proximity switches are available in different shapes and sizes in two broad categories Position sensing switches and Pick up sensors for high speed counting applications. Tubular models are available in SS / Brass enclosures in sizes M12, M18 & M30. 2 wire pick up sensors are available with special controller / amplifier unit. Typical frequency response of pick up sensors is of the order of 50 kHz.

Series SW 705 : These switches are with built in 2 / 3 core cable to meet various types of output logic requirements.

Series SW 715 : These sensors are provided with built in circular connectors equivalent to International M8 / M12 size.



Complementary Products

Optical Safety Barriers

- Microcontroller based high speed scanning for fast response
- Available from 3 beams to 16 beams
- Immune to ambient light
- Sensing gaps up to 5 meters
- For human safety at heavy machines like Presses, Cutters etc.



Web Edge Controller

- Special linear output optical fork sensors to give precise analog signal based on material edge position.
- Controller with display of actual width of material and deviation.
- Programmable at site / Zero position selection
- Useful in Textile / Paper / Pouch Packing machine.



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