# Rotary and position limit switches for Hazardous Areas Manufactured by Limitex, Milan, Italy

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**Cincinnati, Ohio** – Motion Technologies, Inc. announces Rotary and position limit switches for Hazardous Areas manufactured by Limitex, Milan, Italy.

Limitex has created both rotary and position limit switches to control the motion or positioning in Hazardous Location Areas. Both designs are built with a strong cast iron case and are completely enclosed with an IP66 protection.

## **Limitex Rotary Limit Switch**

The Limitex Rotary Limit Switch is used to control the positioning in Hazardous Location Areas. A worm gear and a helical toothed gear combined with one or more pairs of straight toothed gears are used for the transmission of the movement from the input shaft to the internal sensor. Revolution ratios ranging from 1:15 to 1:150 result from the use of different combinations of gear wheels between the input and output shafts which is connected to the cams operating the switches.

The transmission and gear driving shafts are mode of stainless steel to prevent oxidation and wear. The gear wheels and the driving bushes are made of self-lubricating techno-polymer material, suitably chosen to reduce the wear to a minimum and to maintain the accuracy of the couplings over time.

### **Specifications:**

- Zone 1, 2, 21 and 22
- Ambient temperature : -50 to +50 C°
- IP66 IIC
- Rated operational current : 3ARated operational voltage : 250V
- Rated thermal current : 10A
- Rated insulation voltage: 300 V~
- Mechanical life: 1x10<sup>6</sup> operations
- Connections : 6.3mm Faston taps
- Available Ratios: 1:15 1:20 1:25 1:50 1:75 1:100 1:150 ( others on request )
- 2 or 4 contacts versions
- EX, IEC and IECEx ratings. US ratings are in process

The Limitex rotary limit switches are a reliable solution for any positioning control requirement in Hazardous Location Areas.

#### **Limitex Position Limit Switch**

The Limitex Position Limit Switch are used to control the motion in Hazardous Location Areas. This is accomplished by using a cross bar system. They are suitable for applications in Hazardous Areas and aggressive environments.

## **Specifications:**

- Zone 1, 2, 21 and 22
- Ambient temperature : -50 to +50 C°
- IP66 IIC
- Rated operational current : 3A
- Rated operational voltage: 250V
- Rated thermal current: 10A
- Rated insulation voltage: 500 V~
- Mechanical life: 1x10<sup>6</sup> operations
- Connections : Screw type terminals
- Wires: 1x2.5 mm2, 2x1.5 mm2
- EX, IEC and IECEx ratings. US ratings are in process.

## Cross rod with 4 maintained positions

- Pre-travel angle for rotation contact operation: 49°
- Maximum rotation angle for each maintained position: 90°
- Average angle for the mechanical tripping: 48°
- Maintained positions each: 90°
- Maximum impact speed: 1.35 m/s

The Limitex Position Limit Switches are a reliable solution for controlling the motion in a Hazardous Location Area.

For further details visit: www.limitex.eu

#### Contact:

To learn more about the Limitex Rotary and Position Limit Switches, please contact

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