



# LTS Twin-bearing actuating rod Magnetic Linear Encoder



- Stroke up to 750 mm
- Encoder Signal Outputs
- A , B Signals
- Non Contacting Incremental System
- Resolution 0,005mm - 0,010 mm – 0,025mm or 0,080mm
- Protection Class IP 65
- High operating speed 5 m/s
- Max. angular movement up to  $\pm 30^\circ$
- Mechanical fixing and self-aligning linkage using 2 ball-joints

LTS is a high precision Magnetic Linear Encoder LTS System operates incremental principle. It consist of a sensing head and a magnetically encoded tape. Magnetic tapes are commonly made from a magnetic tape itself made from Strontium ferrite bonded into a plastic or rubber (elastomer) matrix which is then bonded onto a steel support.

The sensing head glides over the tape, which is magnetized with alternating polarity, with a gap of up to 2,5 mm. Thus, since the system works on the principle of magnetism, unlike optical systems it is highly immune to contamination from oils, dust etc

The magnetic tape system is mounted on the actuating rod and is coupled free of backlash; this guaranteeing the highest accuracy and the longest lifetime.

**Applications:** LTS Series can be used in a wide range of applications in mechanical and vehicle engineering industries as well as in automation and robotics technologies, combining remarkable robustness with high

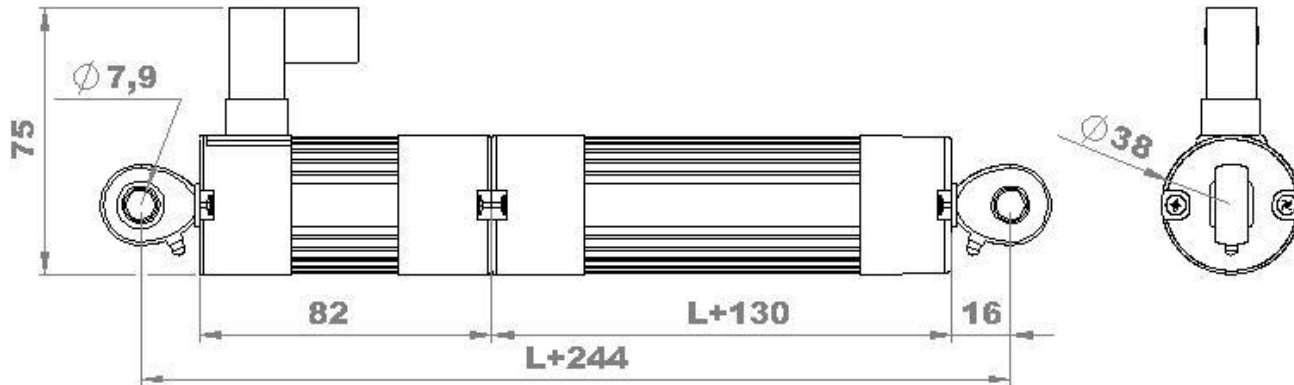
## LTS Series Linear Encoders are mainly used in :

- Press Brake Machines
- Horizontal Band Saw Machines
- Transfer Machines
- Hydraulic Machines
- Sheet metal working machines
- Bending presses
- Plastic & Metal Injection Machines
- Textile Machines
- Robotics/materials handling
- Profile Cutting Machines
- CNC Pipe Twisting Machines
- Plastic Extrusion Machines

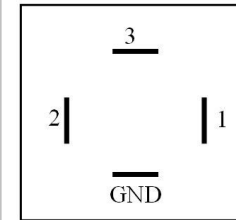
Mechanical Specifications	
Stroke	50mm between 750mm
Temperature range	-30...+100 ° C
Operating speed	5 m/s max.
Mechanical Life	Infinite
Protection class	IP 65
Mechanical fixing	Twin bearing 2 ball-joints

Electrical Specifications	
Resolution	Standart 80 micron Optional 5 , 10 , 25 , 62,5 micron
Power Supply	5VDC or 24 VDC
Signal Output	Standart A , B
Signal Output Type	Push Pull ( PPL ) or TLL RS 422 Line Driver
Repeatability %	<0.01

**DIMENSIONS :**



**ELECTRICAL CONNECTIONS**



1. B Channel
2. A Channel
3. Vcc Power Supply for PUSH PULL ....24VDC for TTL ....5VDC
4. GND

**ORDER SPECIFICATIONS**

**Model No  
LTS**

**Mechanical Strokes**

- 50 = 50 mm
- 300 = 300 mm
- 750 = 750 mm

**Signal Output Type**

2 = A, B

**L T S - 8 0 - 1 0 0 - P P L - 2**

**Resolution**

- 80 = 80 µm ( Standart )
- 5 = 5 µm
- 10 = 10 µm
- 25 = 25 µm
- 62,5 = 62,5 µm

**Power Supply and Output**

- PPL : 24 VDC ±%20 Power Supply  
: 24 VDC Push-Pull Output
- TTL : 5 VDC ±%5 Power Supply  
: 5 VDC TTL RS422 Line Driver Output
- Option : 24 VDC ±%20 Power Supply  
: 5 VDC TTL RS422 Line Driver Output  
Please on request !