



HLS-L



HLS-M



HLS-S

WIRE INCREMENTAL ENCODERS

Series HLS

- *Wire incremental encoders with return spring*
- *Measures: from 1 to 12 m*
- *Easy mounting*

| HLS-S | HLS-M | HLS-L |
|--|---|---|
| Stroke: 1000 mm Resolution: 1 – 0.5– 0.2 – 0.1 – 0.04 mm Dimensions: 60x66x81 mm | Strokes: 1000, 2000, 3000, 4000, 5000 mm Resolution: 1 – 0.5 – 0.2 – 0.1 – 0.05 mm Dimensions: 90x80x120 mm | Strokes: 6000, 7000, 8000, 9000, 10000, 11000, 12000 mm Resolution: 1 - 0,5 mm Dimensions: 162x164x144 mm |

| MECHANICAL & ENVIRONMENTAL SPECIFICATIONS | | | | |
|---|--|------------|------------|--|
| Series | HLS-S | HLS-M | HLS-L | |
| ▪ Dimensions | See the drawings | | | |
| ▪ Weight | < 450 g | < 1000 g | < 3500 g | |
| ▪ Materials | Aluminium housing Stainless steel wire SUS 304 with nylon coating | | | |
| ▪ Wire Ø | 0.6 mm | 0.7 mm | 1.0 mm | |
| ▪ Carico di rottura | 16 Kg | 23 Kg | 60 Kg | |
| ▪ Max. travel speed | 1000 m/sec | | | |
| ▪ Starting torque on spring | < 600 g | < 1000 g | ≤2200 g | |
| ▪ Vibration resistance (10-1500 Hz) | 10 g | 10 g | 10 g | |
| ▪ Shock resistance (11 ms) | 20 g | | | |
| ▪ Operating temperature | 0 ÷ 60°C | -10 ÷ 60°C | -10 ÷ 60°C | |
| ▪ Stacking temperature | -20 ÷ 70°C | -20 ÷ 80°C | -20 ÷ 80°C | |
| ▪ Protection degree | IP50 | IP64 | IP64 | |

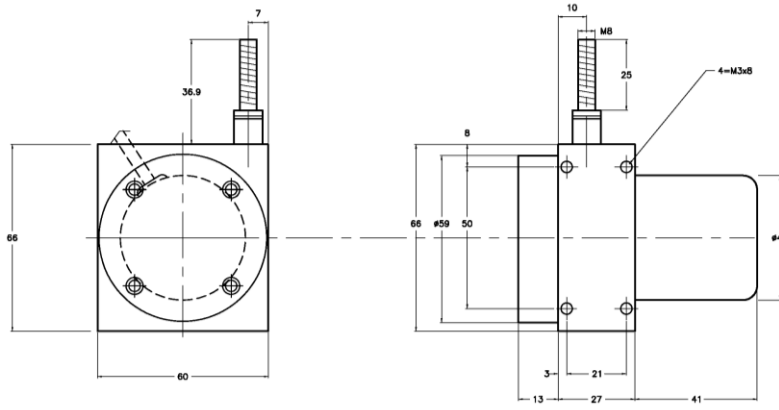
| ELECTRICAL & OPERATING SPECIFICATIONS | | | | |
|---------------------------------------|--|----------------------------|----------------|--|
| Series | HLS-S | HLS-M | HLS-L | |
| ▪ Strokes mm | 1000 | 1000/5000 | 6000/12000 | |
| ▪ Zero pulse | 1 for each encoder revolution | | | |
| ▪ Resolution mm | 1 - 0.5 – 0.2 – 0.1 – 0.04 | 1 - 0.5 – 0.2 – 0.1 – 0.05 | 1 - 0.5 mm | |
| ▪ Output signals | Push-pull – line driver 5V or 10/24Vdc | | | |
| ▪ Voltage supply | 10÷24 Vdc – 5 Vdc for line driver | | | |
| ▪ Power consumption | 60 mA | | | |
| ▪ Connections | Cable 50 cm long | Cable 1 m long | Cable 1 m long | |

ORDERING INFORMATION

| HLS-M | 10 | 1 | - | - |
|-------|--------------|-------------|----------------------|--------------------------|
| TYPE | STROKE | RESOLUTION | SUPPLY | ELECTRONIC OUTPUT |
| HLS-S | 10 1000 mm | 1 1 mm | - 10/24 Vdc | - Push-pull |
| HLS-M | 20 2000 mm | 05 0.5 mm | 5V 5 Vdc Line driver | LD Line-driver 10/24 Vdc |
| HLS-L | 30 3000 mm | 02 0.2 mm | | LD5V Line driver 5 Vdc |
| | 40 4000 mm | 01 0.1 mm | | |
| | 30 3000 mm | 005 0.05 mm | | |
| | 40 4000 mm | | | |
| | 50 5000 mm | | | |
| | 60 6000 mm | | | |
| | 70 7000 mm | | | |
| | 80 8000 mm | | | |
| | 90 9000 mm | | | |
| | 100 10000 mm | | | |
| | 110 11000 mm | | | |
| | 120 12000 mm | | | |

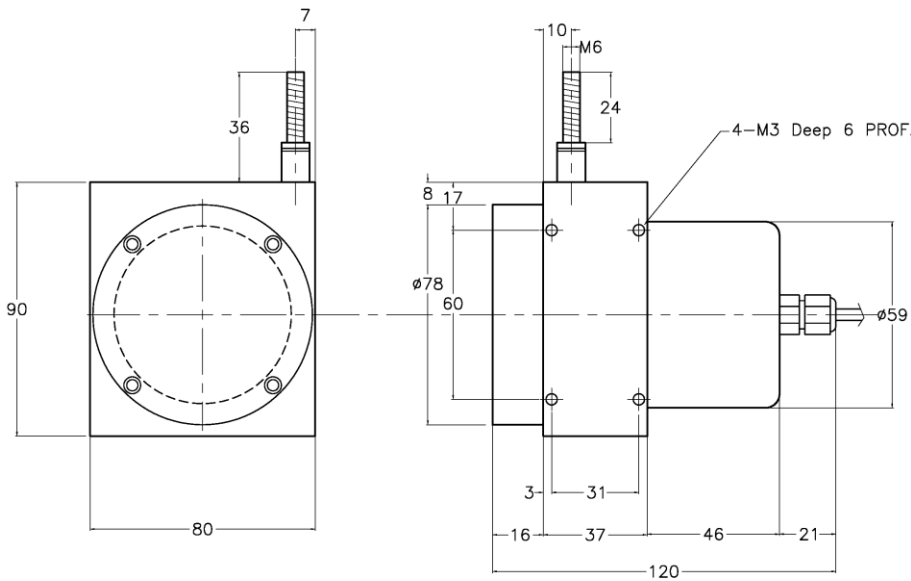
HLS-S

Ref. M2122



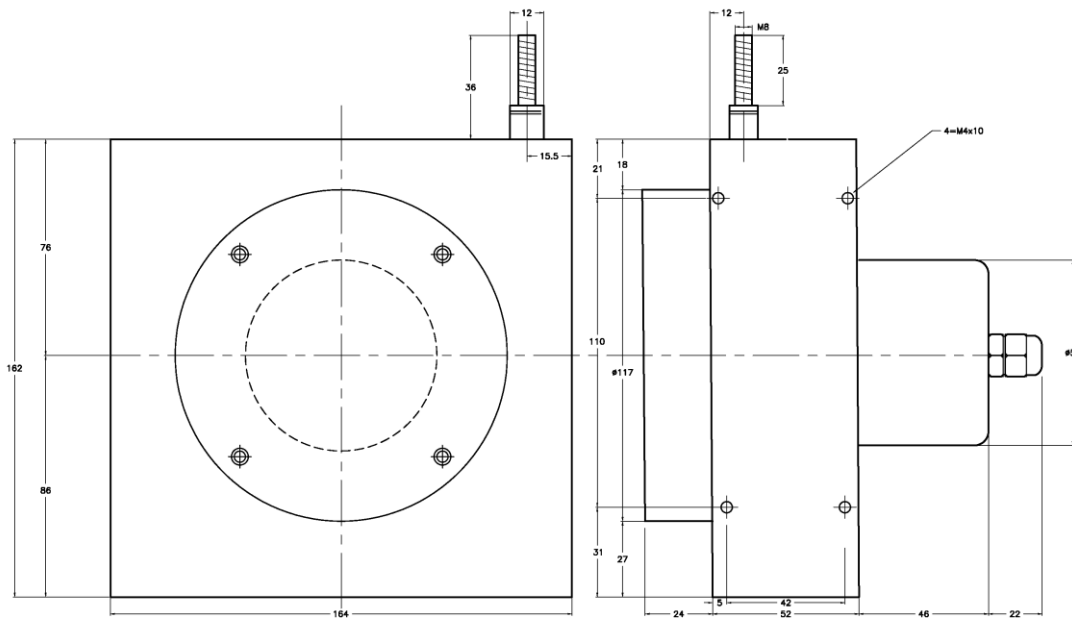
HLS-M

Ref. M1295



HLS-L

Ref. M2120



REFERENCES

Further information at URL: <https://www.elap.it/wire-transducers/wire-encoder-hls/>

