ADVANCED SYSTEMS
FOR AUTOMATION, DIAGNOSTIC
& LASER MEASURING

Velox.S

VLF 261

non-contact speed & length measurement

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VLF261

sets standards in highly accurate, non-contact speed and length measurement

Being capable to measure speed and length with a typical accuracy better +/-0.05% (1σ;length>5m), *VLF261* is the ideal gauge for replacing contact tachometers which tend to measurement errors caused by slippage, chatter or vibration, dirt build-up and day to day wear problems. The most compact and easy to handle in class *VLF261* uses proven laser doppler technology. Thus it has no moving parts, is maintenance free and permanently calibrated, resulting in significant time and money savings. Beeing designed for machine integration, the VLF261 does not use a external processing unit like the standard VLF260 system.

RANGE OF APPLICATIONS

VLF261 works at almost any moving objects, such as web, coils, tubes, rods, sheets, plates,… and is suited for a wide range of appli-cations, including continuous online control, cut-to-length control and differential speed measurement of:

- Textile, non-woven and leather
- Steel, aluminium, metal
- Wire, cable and fibre
- Plastic, film, foil and tape
- Paper and corrugated products
- Rubber and synthetic materials
- Wood, glass, ceramics

BENEFITS

- Direct replacement for tachometers
- Non-contact measurement
- Non-marking, no slippage
- Independent of mat., surface, colour
- High accuracy and repeatability
- No parametration necessary
- Permanently calibrated
- Compact package; easy to handle

SPECIFICATIONS

Speed Range
VLF261-S1 .. S80
2m/min to 4.800 m/min

Typical Accuracy
+/- 0,05 % (2σ;L>10m/3σ;L>20m)

Standoff Distance
120 mm +/- 5 mm (+/- 20 mm)
240 mm +/- 10 mm (+/- 40 mm)
480 mm +/- 20 mm (+/- 80 mm)

Interfaces
1x RS 485 bidirectional
alternatively: RS422, SSI, …

Outputs
Quadrature output
pulse 1 … 10.000 per meter
programmable

Inputs
Laser interlock

Degree of Protection
Sensor head IP 67

Dimensions (L x W x H)
Sensor head 150x100x40mm

Laser Diode
25 mW, 780 nm (Class 3B)

Voltage
24 VDC / 50-60 Hz

Optional Accessories

- SPEED box for fast and easy integration into switch boards
- Display and operator unit with additional monitoring and control functions
- Configuration- & Monitoring and PPS-compatible software
- Forward and reverse measurement
- */Lowest speed measurement
- Air conditioned housing for temperature and dirt protection
- Longterm memory (50000 files)
- Differential speed measurement
- Certified PTB version
- Customer specific adoptions
- Complete system solutions

► Specifications are subject to change without notice

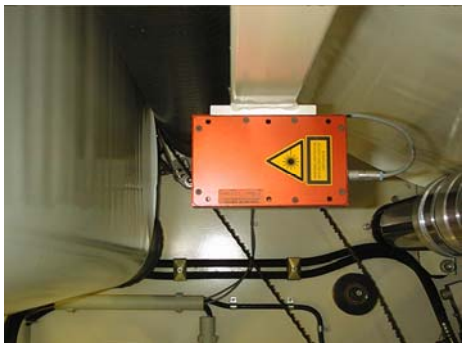


Figure 1: Cut-to-length control

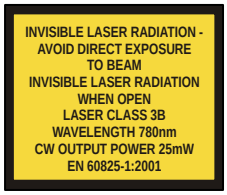
Length measurement for a precise cutting of web material. The material surface stays untouched, thus slippage, day to day wear problems and measurement traces are avoided.

Figure 2: Resulting length

Highly reliable measurement of metallic coated film to deliver as much material as required and as little as possible without waste.

Bild 3: Differential Speed

Feed rate optimization at a production machine for non woven material by means of differential speed measurement.



This unit is a class IIIB laser product and complies with EN60825-1:2001. Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.

The following safety features required to comply with the Bureau of Radiological Health Class IIB laser requirements are included:

- Key-operated power switch on controller
- Laser indicator light on controller and laser
- Delayed laser startup-laser indicator light on prior to laser radiation
- Laser beam blocking device
- Interlock capability for remote shut-off

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