

> **Applications**

The DY4-20L family allows simple and economical monitoring of equipment, with the data transferred to a supervision PLC. There are two output variants available:

- Overall velocity Level for the low-frequency phenomena (imbalance, misalignment, etc.)
 - Overall Acceleration Level for the high-frequency phenomena (bearings, gearings, etc.)
- An output for the raw accelerometric signal is available as an option.

> **Main characteristics**

- AOL rms. or VOL rms output.
- Connection on 4-20mA loop current
- Connected directly onto PLCs and centralised ducts
- Optional raw accelerometric signal output

Connector: M12, glass sealing

Sensor fixing: Captive hexagon socket screws M6 x 1



> **Specifications**

Dynamics :

Full scale and range

- DY4-20LV10speed rms. 10mm/s (3-1000Hz ±10%)
- DY4-20LV20speed rms. 20mm/s (3-1000Hz ±10%)
- DY4-20LA10 acceleration rms. 10g (3-10 000Hz ±10%)
- 20LA50 acceleration rms. 50g (3-10 000Hz ±10%)

Output

- Nul vibration.....4 mA
- Maximum vibration..... 20mA+/-2%
- Rise resonance frequency 25 kHz rated
- Cross-sensitivity.....< 5 %
- Linearity ± 1 % max.

Start-up time

- Loop 4-20mA < 15 sec.

Optional raw dynamic acceleration output

- DY4-20LV10 } Sensitivity = 100 mV/g rms. ± 30%
- DY4-20LV20 } Sensitivity = 100 mV/g rms. ± 30%
- DY4-20LA10 } Sensitivity = 10 mV/g rms. ± 30%
- DY4-20LA50 } Sensitivity = 10 mV/g rms. ± 30%

Electrical:

- GroundingInsulated from the erection surface
- Insulation (housing and Faraday cage) 100MΩ min
- Supply voltage 10 to 30 VDC

Protection

- OvervoltageYes
- Polarity reversalYes

Optional raw dynamic signal output

- DC Bias 2.6V

Environment :

Temperature

- In continuous operation
- Loop current max. 10 mA-55 to 120°C
- Loop current max. 20 mA-55 to 90°C DY4-

Humidity / Housing

- Insensitive, hermetic glass sealing

Max. acceleration

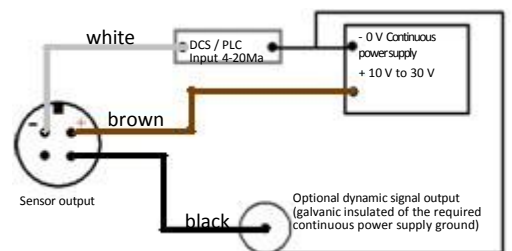
- Shock2500g peak
- Continuous vibration.....250g peak

Mean Time Between Failures (MTBF)..... 7 years

Electrostatic discharge protection > 40 V

Physical :

- Ground155 gr rated
- Connector M12 glass sealing
- Material.....AISI 316L, DIN 1.4435 (Stainless steel)
- Tightening torque (M6).....2.4 N.m



Subject to modification of the technical characteristics.

DYNAE

- > Vibratory analysis
- > Electrical analysis
- > Infrared thermography
- > Instrumentation and sensors
- > Software
- > Training

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