Electronic Vibration Monitoring Unit ESW®-small-Transmitter 10-**



Technical data ESW®-small-Transmitter 10-25

operating voltage 10V to 30V DC, reverse polarity protected

current input 4 to 20 mA, max. 27 mA

-20°C to +85°C temperature range

IP 68 type of protection

high grade steel V2A (1.4305) case

case dimensions 108 x 55mm (h x Ø), Fixing hole M10x1.5; see manual approx. 1,2kg (without cable), approx. 1,9kg (with cable) weight

20m, 2 x 0.34mm², with shield connection cable

cover material: PUR, temperature range: -40°C to +90°C,

min. bending radius: 37,50mm

screw-type conduit fitting MSBF 12, M12x1,5, Brass CuZn39Pb3, galvanized nickel-

plated, O-ring: Nitrilkautschuk NBR, sealing insert:

Polychloropren-Nitrilkautschuk CR/NBR

integrated acceleration sensor sensor measured value vibration acceleration in mm/s2

measurement range $0...10g (1g = 9.81m/s^2)$ 2Hz .. 2kHz (-3dB) frequency range filter Butterworth, 40dB/dek

peak, decay time 0.08s; averaging over low-pass 0.36Hz signal assessment

analog output 4mA - 20mA (correspond to 0 - 10g) dynamic range 4 - 22mA linear (up to 25mA -1dB)

Constant voltage supply supply

> Modulation of the supply current within the range 4 - 20mA Measurement of current consumption or extraction as voltage

across load resistance

max. load resistance dependant on supply voltage $U_{int-min} = 10V$, $I_{out-max} = 27mA$ Dimensioning

supply = $U_{int-min} + (R_{load} \times I_{out-max})$

Default:: R_{load} =500Ohm >> output: 0.5V/mA example

 $U_{load-max} = 27mA \times 500Ohm = 13.5V$

 $U_{B-min} = U_{load-max} + U_{int-min} = 13.5V + 10V = 23.5V$

white 4 to 20mA cable connection current loop

> 4 to 20mA reference potential brown

optional threaded pin, M10x25mm, V4A

optional adaptor screw, 31.9mm length, M10 thread on 1/2-14NPTF,

according to WN 1102