

Technical data

ESW[®]-small-Transmitter 10-12

operating voltage	10V to 30V DC, reverse polarity protected
current input	4 to 20 mA, max. 27 mA
temperature range	-40°C to +65°C
type of protection	IP 68
case	high grade steel V2A (1.4305)
case dimensions	108 x 55mm (h x Ø), Fixing hole M10x1.5 ; see manual
weight	approx. 1,2kg (without cable), approx. 1,3kg (with cable)
connection cable	3m data-line, 2 x 0.34mm ² , with shield cover material: PUR, temperature range: -40°C - +80°C min. bending radius: 38,25mm
screw-type conduit fitting	MSBF 12, M12x1,5, Brass CuZn39Pb3, galvanized nickel-plated, sealing ring: Elastomer/nitrile
sensor	integrated acceleration sensor
measured value	vibration velocity in mm/s
measurement range	0 to 20mm/s
frequency range	2Hz .. 1,5kHz (-3dB)
filter	Butterworth, 40dB/dek
signal assessment	Average aligned to RMS
analog output	4mA - 20mA (correspond to 0 – 20mm/s)
dynamic range	4 - 22mA linear (up to 25mA -1dB)
supply	Constant voltage 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
Dimensioning	$U_{\text{int-min}} = 10\text{V}$, $I_{\text{out-max}} = 27\text{mA}$ $\text{supply} = U_{\text{int-min}} + (R_{\text{load}} \times I_{\text{out-max}})$
example	Default:: $R_{\text{load}} = 500\text{Ohm} \gg \text{output: } 0.5\text{V/mA}$ $U_{\text{load-max}} = 27\text{mA} \times 500\text{Ohm} = 13.5\text{V}$ $U_{\text{B-min}} = U_{\text{load-max}} + U_{\text{int-min}} = 13.5\text{V} + 10\text{V} = 23.5\text{V}$
cable connection	white 4 to 20mA current loop brown 4 to 20mA reference potential
optional	threaded pin, M10x25mm, V4A