

**Technical data**  
**ESW<sup>®</sup>-small-Transmitter 10-04**

operating voltage	10V to 30V DC, $\pm 10\%$ , reverse polarity protected
current input	4 to 20mA, max. 27mA
temperature range	-55°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 <sup>2</sup> , shielded cover material: FEP, min. bending radius: 57,60mm
screw-type conduit fitting	HSK-M-Ex-d, M12x1,5, Brass CuZn39Pb3, galvanized nickel-plated, O-ring: FPM, sealing insert: FPM
sensor	integrated acceleration sensor
measured value	vibration velocity in mm/s
Measurement range	0 to 10mm/s
signal assessment	arith. average, aligned to RMS
frequency range	5Hz to 1kHz (-3dB)
filter	Butterworth, 40dB/dec
analog output	4mA to 20mA (complies 0 to 10mm/s)
dynamic range	4 to 22mA linear (up to 25mA -1dB)
supply	supply with constant voltage modulation of the supply current in the range of 4 to 20mA measurement of the current consumption or extraction as a voltage over the load resistance
max. load resistance	depends on the supply voltage
sizing	$U_{\text{int-min}} = 10\text{V}$ , $I_{\text{out-max}} = 27\text{mA}$ $\text{Supply} = U_{\text{int-min}} + (R_{\text{load}} \times I_{\text{out-max}})$
example	specification: $R_{\text{load}} = 500\text{Ohm} \gg \text{output: } 0,5\text{V/mA}$ $U_{\text{load-max}} = 27\text{mA} \times 500\text{Ohm} = 13,5\text{V}$ $U_{\text{B-min}} = U_{\text{load-max}} + U_{\text{int-min}} = 13,5\text{V} + 10\text{V} = 23,5\text{V}$
cable connection	white 4 to 20mA current loop brown 4 to 20mA reference potential
optional	grub screw, M10x25mm, V4A