wireSENSOR WPS-K140-M

Draw-wire mechanisms for encoder mounting

- Robust and compact sensor design
- Large temperature range from -40 to +85 °C
- Easy encoder mounting



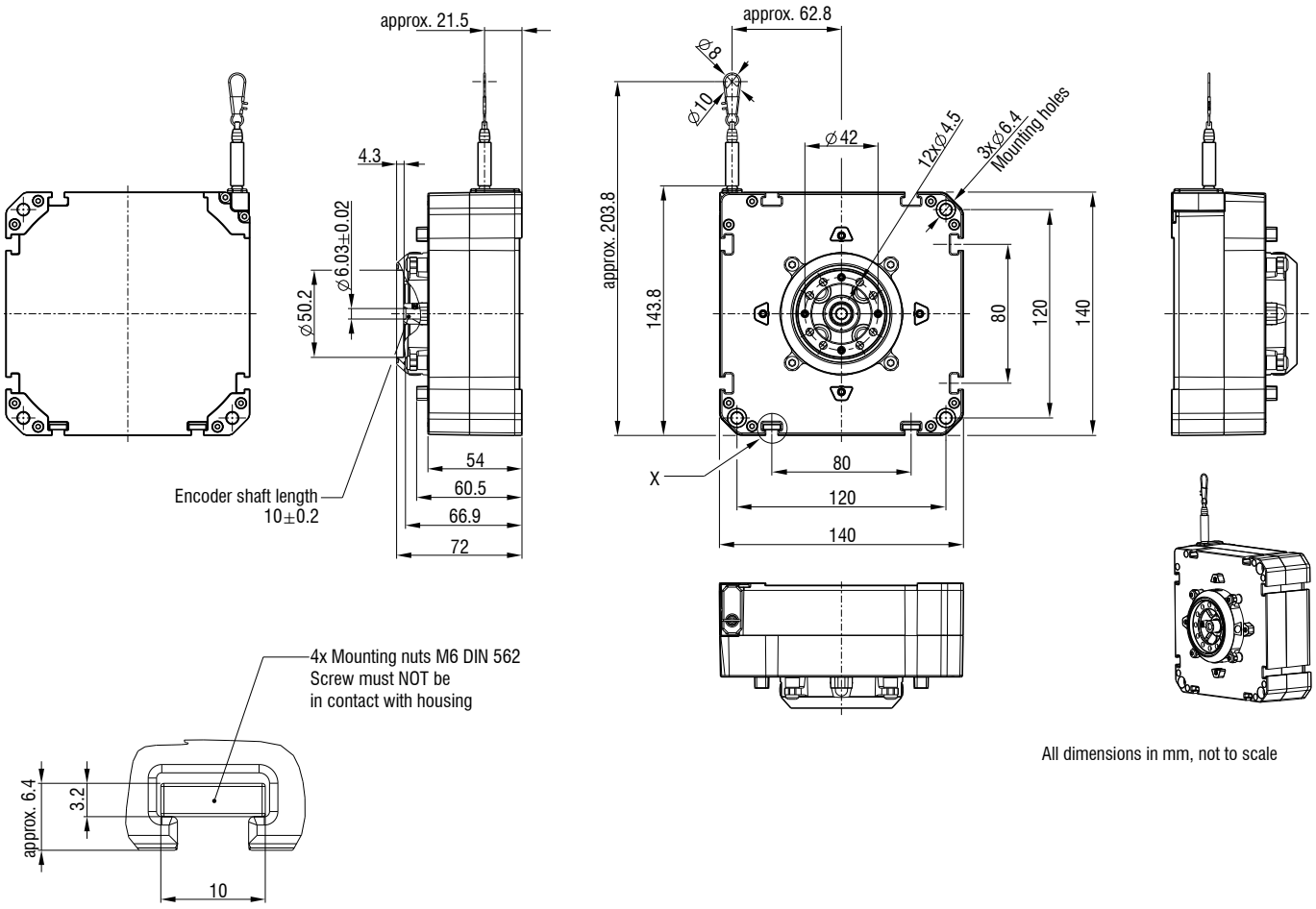
The wireSENSOR WPS-12000-K140-M is a mechanical version for displacement measurements up to 12,000 mm, designed for use with a customer-supplied rotary encoder. The supplied synchro flange enables easy connection of a flange-mounted rotary encoder with a 6 mm shaft. The freely selectable encoder allows the model to be flexibly adapted to customer-specific requirements in terms of interface, resolution, and protection class. These characteristics depend on the encoder used.

Model		WPS-12000-K140-M
Measuring range		12000 mm
Output type		depending on the encoder
Resolution		depending on the encoder
Linearity [1]	≤ ±0.5 % FSO [2]	≤ ±60 mm
Mean distance per rotation		approx. 388 mm
Suitable rotary encoder		Flange type Ø 58 mm: synchro flange Ø 6 mm shaft
Flange type Ø 58 mm: synchro flange Ø 6 mm shaft	Synchro flange	Included in delivery
Wire extension force (max.)		ca. 10 N
Wire retraction force (min.)		ca. 2 N
Wire acceleration (max.)		ca. 5g
Material	Housing	Glass-fiber reinforced plastic
	Measuring wire	Polyamide-coated stainless steel (ø 0.45 mm)
Wire mounting		Wire clip
Mounting		through bores ø 6.4 mm and mounting nuts (for M6) on the sensor housing
Temperature range	Storage	-40 … +85 °C
	Operation	-40 … +85 °C
Shock (DIN EN 60068-2-27)		50g / 8 ms in 3 axes, 2 directions and 1000 shocks each
Vibration (DIN EN 60068-2-6)		5g / 10 … 150 Hz in 3 axes and 20 cycles each
Protection class (DIN EN 60529)		depending on the encoder
Weight		approx. 1.1 kg

[1] Versions with improved linearity are available upon request
[2] FSO = Full Scale Output

Dimensions:

WPS-1200-K140-M



All dimensions in mm, not to scale