Accessories

KISTLER

measure. analyze. innovate.

Wire Potentiometer

Wiring Mechanics with Analog Sensor

Type KCD16251, KCD16252, KCD16253

For measuring linear motions.

- High traverse speed
- High acceleration
- High-resistance stainless steel wire
- Nonwearing wire exit by diamond-polished ceramic guide
- Insensitive to environmental impact by titanium-anodized aluminum housing
- Easy mounting with two screws
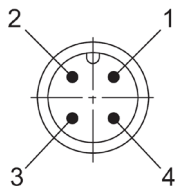
Technical Data

Mechanical Specifications

Specifications		KCD16251	KCD16252	KCD16253
Measurement range	mm	250	500	1 250
Extension force				
F_{min}	N	5,2	5,2	3,8
F_{max}	N	6,3	7,3	5,4
Speed max.	m/s	8	8	10
Acceleration max.	m/s^2	85	85	100
Linearity	%	0,1 of measurement range		
Materials				
Housing		titanium-anodized aluminum		
Wire		stainless steel ø0,5 mm		
Weight	grams	330		
Lifetime	cycles	>2 Mio		

Electrical Specifications

Output	V	0 ... 10 galvanically separated
Power supply	VDC	12 ... 30
Power consumption max.	mA	22,5 (no load)
Operating temperature range	°C	–20 ... 60

Pin Assignment

Pin	Cable Color	Signal
Pin 1	brown	V+
Pin 2	white	Signal
Pin 3	blue	GND
Pin 4	black	GND Signal

Important Notes

⚠ **WARNING** It is imperative to pay attention to a controlled return travel of the wire. The wire must not snap back out of control! Danger of injury; danger of damage or destruction of the sensor.

⚠ **CAUTION** Exceeding the maximum extension length of the draw wire will cause damage to the wire and the mechanics.

It is imperative to pull out the wire perpendicular to the wire exit to avoid damage and reduction of the lifetime.
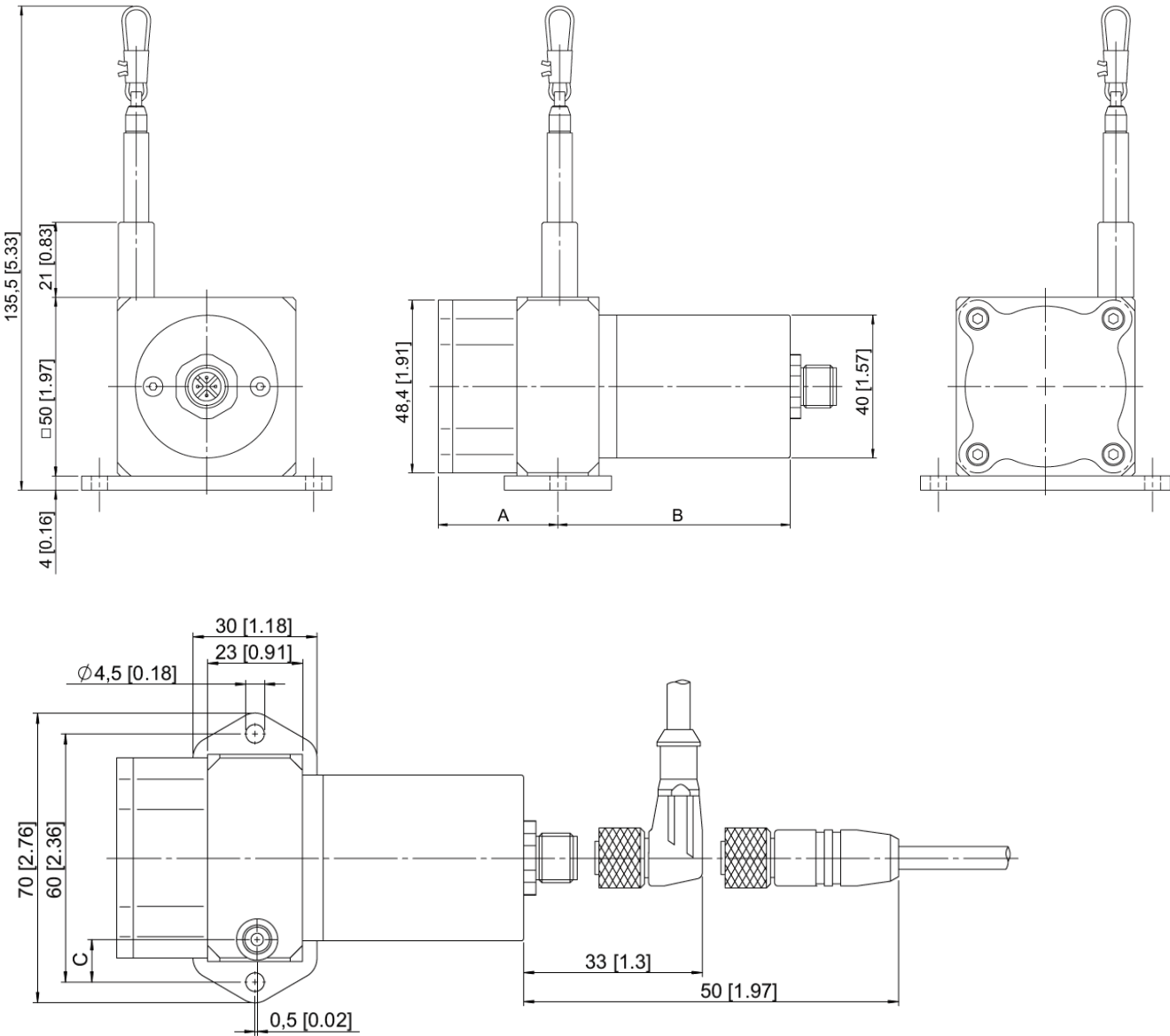
Do not crimp or bend the wire to ensure correct function.

⚠ **NOTE** Defects due to improper operation are not covered by warranty/guaranty.

Delivered without cable; please order separately. Art. No. standard cable = 55065209; other cables on request.

Dimensions

Sensor type	Measuring length	A	B	C
Potentiometer	250 mm	26,5	65	21,3
	500 mm	26,5	65	21,3
	1 250 mm	33,5	65	10,3

Ordering Code
- Wire potentiometer 250 mm   **Type KCD16251**
- Wire potentiometer 500 mm   **Type KCD16252**
- Wire potentiometer 1 250 mm   **Type KCD16253**