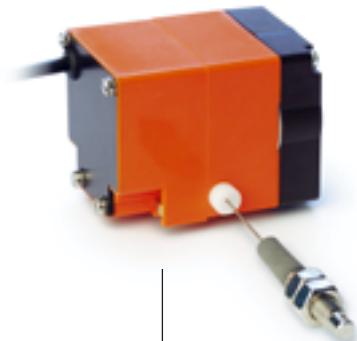


# Wire-actuated encoder SG10

Compact miniature wire-actuated encoder for recording linear distances with a maximum measurement length of 2 000 mm. Robust and universally usable owing to standardised interfaces.

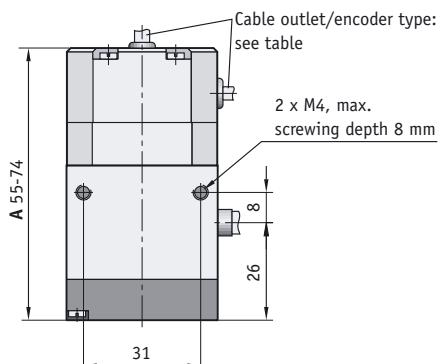
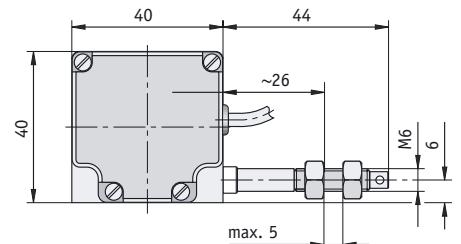


## Features:

- easy mounting
- max. measurement length 2000 mm
- potentiometric or incremental output

## Options

- incremental encoder output 10 pulses/mm
- transducer interface 4 ... 20 mA (potentiometric)
- transducer interface 0 ... 10 V (potentiometric)



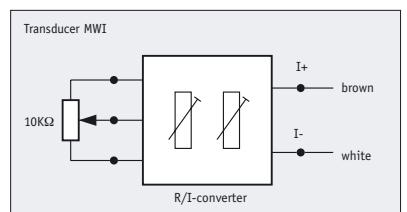
Encoder type	meas. A	cable outlet
IGV28-0004	74	axial
P10, MWI, MWU: measurement range ≤ 1000 mm	55	axial
P10, MWI, MWU: measurement range > 1000 mm	72	radial

# Output circuits/interfaces

## Encoder type MWI: Power source (transducer)



Output current	4 ... 20 mA
Potentiometer	10 kΩ
Operating voltage	15 ... 28 V DC
Load resistance	< 500 Ω
Cable length (connection)	max. 30 m



## Transducers...

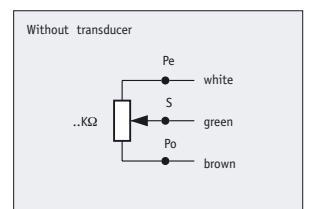
... permit optimum adjustment of the output current to the measurement range. The transducer is factory-preset to provide an output signal of 4 ... 20 mA between start and end points of the measurement range.



## Encoder type P10: Potentiometer

Resistance value	10 kΩ
Potentiometer linearity	0,25 %
Resistance tolerance	±5 %
Power rating	1 W
Extension length	0 mm : 0 Ω
Cable length (connection)	max. 30 m

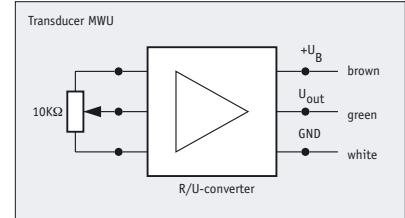
other potentiometer values on request





### Encoder type MWU: Voltage source 0 ... 10 V DC (transducer)

Output current	0 ... 10 V DC @ 3 mA without load
Max. load	15 mA
Operating voltage	15 ... 28 V DC
Cable length (connection)	max. 20 m



### Transducers...

... permit optimum adjustment of the output current to the measurement range. The transducer is factory-preset to provide an output signal of 0 ... 10 V DC between start and end points of the measurement range.

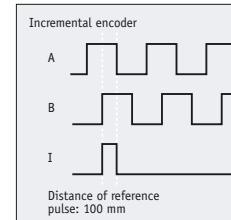


### Encoder type: Incremental

Operating voltage	24 V DC ±20 % @ 70 mA
Output circuit	PP
Output signals	ABO
Resolution	0.1 mm
Cable length (connection)	2 m

Cable	Pin assignment
black	GND
red	UB
blue	A
white	B
yellow	0
screen	N.C.

Pin assignment IGV28-0004



Feature	Ordering data	Technical data	Additional information
Travel speed		max. 800 mm/s	
Required cable extension force		min. 2 N	
Repeat accuracy		± 0.15 mm	
Working temperature		-10 ... +80 °C without transducer	0 ... 50 °C with transducer
Housing		reinforced plastic	
Cable version		steel cable, stainless, diameter 0.45 mm	
Encoder type of protection		IP50 (potentiometer), IP54 (incremental)	according to DIN VDE 0470
Weight		approx. 200 g	
Test sign/interference protect. class		CE	3 according to IEC 801
Measurement range	500 A	measurement range [mm]	encoder type* Ω, I, U (potentiometer and transducer)
	1000	...	...
	1250	...	...
	1500	...	...
	1750	...	...
	2000	...	...
	2000 I	...	incremental output (IGV28)
Encoder type	P10 B	potentiometer with 10 kΩ	others on request
	MWI B	transducer 4 ... 20 mA	current output
	MWU	transducer 0 ... 10 V	voltage output
	IGV28-0004	incremental encoder (only 2000 mm version)	output circuit PP, resolution 0.1 mm, output signals ABO, 2 m cable with flying leads, supply 24 V DC
Cable length	e.g., 0.5 C	0.5 ... 30 m for encoder type P10 or MWI/MWU	<b>0.5 m standard</b> , see output circuit data
	IG	specified for encoder type "IGV28- ... "	<b>2 m standard</b> , other cable lengths on request

Your order: SG10 - A - B - C