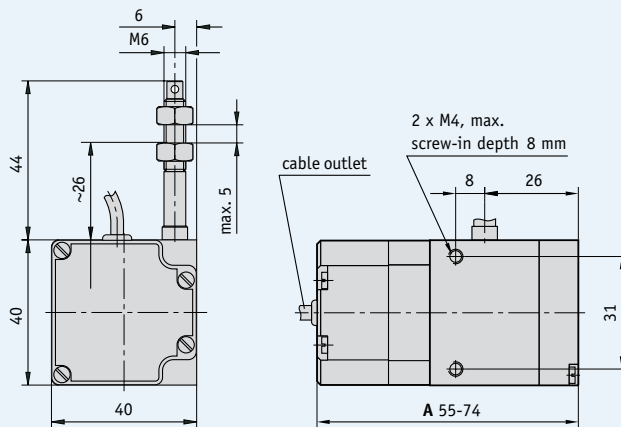


Profile

- Compact design
- Universally usable thanks to standardized interfaces
- Easy mounting
- Measurement lengths up to max. 2000 mm
- Potentiometer, voltage, power output or incremental encoder
- Housing made of reinforced plastic



Encoder type	Measure A
IV28M/1-0007	74
P10, MWI, MWU: measuring range ≤ 1000 mm	55

3.1

Mechanical data

Feature	Technical data	Additional information
Travel speed	max. 800 mm/s	
Pull-out force required	min. 2 N	
Drum circumference	100 mm	
Repeat accuracy	±0.15 mm	
Operating temperature	-10 ... +80 °C	without transducer
	0 ... 50 °C	with transducer
Wire design	stainless steel wire, Ø 0.45 mm	plastic-coated
Encoder portion protection categ.	IP50 (potentiometer)	according to DIN VDE 0470
	IP54 (incremental encoder)	according to DIN VDE 0470
Weight	approx. 200 g	
Housing	reinforced plastic	

Electrical data

■ P10 encoder type, potentiometer

Feature	Technical data	Additional information
Value of resistance	10 kΩ	
Linearity of potentiometer	0.25 %	
Resistance tolerance	±5 %	
Power rating	1 W	
Pull-out length	0 mm : 0 Ω	
Cable length (connection)	max. 30 m	

Additional potentiometer values on request

■ MWI encoder type, current source (transducer*)

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

■ MWU encoder type, voltage source 0 ... 10 V DC (transducer*)

Feature	Technical data	Additional information
Output current	0 ... 10 V DC	
Recomm. load resistance	2 ... 10 kΩ to GND	
Max. load	15 mA	
Operating voltage	15 ... 28 V DC with 3 mA without load	
Cable length (connection)	max. 20 m	

***Transducers** allow optimum adaptation of output current or output voltage to the measurement range. The transducer is preset at delivery to provide an output signal of 4 ... 20 mA (MWI) or 0 ... 10 V DC (MWU) between the starting point and the end point of the measurement range..

■ IV28M/1-0007 encoder type, incremental

Feature	Technical data	Additional information
Operating voltage	0 ... 30 V DC at 25 mA without load	
Output circuit	PP	
Output signals	AB0	
Steps per revolution	1000	
Resolution	0.1 mm (10 pulses per mm)	
Cable length (connection)	1 m	

Pin assignment

■ Potentiometric outputs P10

Signal	E1 (terminal)
Po	brown
Pe	white
S	green

■ MWI transducer

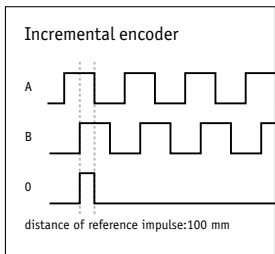
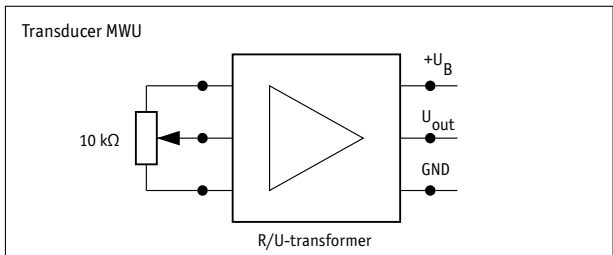
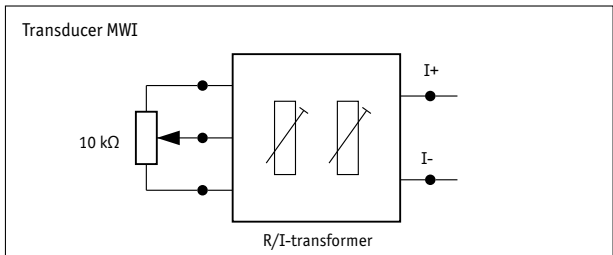
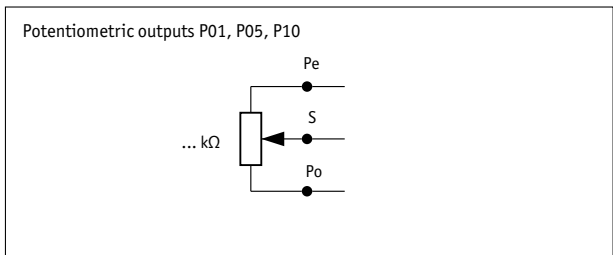
Signal	Cable color
I+	brown
I-	white

■ MWU transducer

Signal	Cable color
+24 V DC	brown
GND	white
U _{out}	green

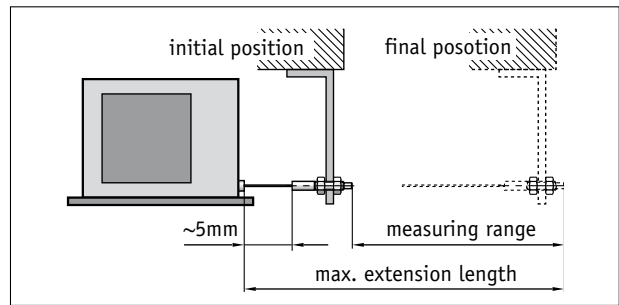
■ IV28M/1-0007 encoder type, incremental

Signal	E1 (terminal)
B	white
+24 V DC	brown
O/I	green
A	yellow
GND	gray



Mounting note

When you attach the wire, it should be pulled out straight in line with the wire outlet. **Recommendation:** A 5 mm wire extension is recommended before the measurement starting point. This prevents the wire snapping back to the stop on rewinding.



Symbolic representation

Order

■ **Order table**

Feature	Order data	Specifications	Additional information
Measurement range (mm)	...	300, 500, 1000	with encoder type Ω, I, U (potentiometer and transducer)
	2000	A incremental output (IV28M/1)	
Encoder type	P10	B potentiometer with 10 kΩ	only with measuring range 2000
	MWI	transducer 4 ... 20 mA	
	MWU	transducer 0 ... 10 V	
	IV28M/1	incremental encoder others on request	
Cable length (m)	0.5	C 0.5 m	for P10 encoder type or MWI/MWU
	...	1 ... 30 m in steps of 1 m	for P10 encoder type or MWI/MWU
	IG	specified with "IV28M-0004" encoder type	

■ **Order code**

SG10 - - -

Scope of delivery: SG10, User information

Accessories:

Guide roller
Electronic displays MA50 or MA10/4

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Catalog 6 DisplayLine

Additional information:

General information and areas of application

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