

INCREMENTAL WIRE TRANSDUCER MODELS

EF1000 EF2000 EF3000 EF4000



Description

The EF1000, EF2000, EF3000 and EF4000 models are incremental wire transducers which convert linear displacements into coded digital pulses. They consist of an incremental optical encoder operated by the winding and unwinding of a stainless steel wire. Combined with a programmable electronic counter (e.g. F1X5), they constitute an excellent system for measuring positions on machine tools, marble, glass and wood working machinery, etc.

OUTPUT PUSH-PULL

Brown	+10÷25 VDC	
Yellow	signal A	
White	signal B	
Gray	signal Z	
Green	GND	
Shield	n.c.	

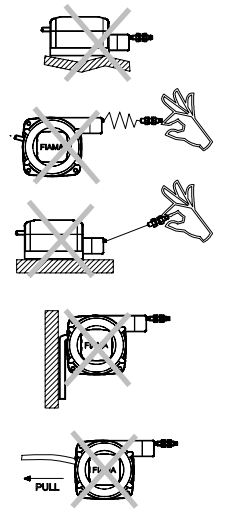
OUTPUT LINE DRIVER / TTL

Brown	+10÷25VDC / 5VDC	
Yellow	signal A	
Orange	signal /A	
White	signal B	
Purple	signal /B	
Gray	signal Z	
Black	signal /Z	
Green	GND	
Shield	n.c.	



Assembling precautions

- ◆ The incremental wire transducer must be mounted on a level surface.
- ◆ Do not release the wire of the transducer too rapidly.
- ◆ Do not over-tighten the fastening screws so as not to deform the housing.
- ◆ Avoid bending or distorting the wire.
- ◆ Always pull the wire along its own axis and avoid misalignments exceeding 2°.
- ◆ Do not exceed the maximum travel of the wire.
- ◆ Do not squeeze or pull the cable electrical.
- ◆ The power supply must fall within the admissible range, a value exceeding this range or an alternate current could damage the transducer.
- ◆ For electrical connections always use a shielded cable (with shield connected to GND), which must be kept separate from power lines or sources of electromagnetic interference.
- ◆ Make the electrical connections with due care and attention: a failure due to a connection error renders the guarantee null and void.



Technical Characteristics

	EF1000	EF2000	EF3000	EF4000
◆ Maximum stroke (mm)	1200	2200	3200	4200
◆ Precision (mm)	±0.15	±0.2	±0.3	±0.4
◆ Power supply	10÷30 Vdc, 5Vdc ±10%, max. 60mA, protection against polarity inversion			
◆ Resolution	600 pulses / 240 mm of wire unwound			
◆ Maximum speed	0.7 m/s			
◆ Output signals	signals A and B in quadrature, zero signal every 240 mm of wire unwound			
◆ Type of output	A, /A, B, /B, Z, /Z, Line Driver 5V TTL, Line Driver 10÷30Vdc			
◆ Maximum output current	20 mA			
◆ Technopolymer, blow-resistant, self-exting.housing resistant to petrol, oils & grease.				
◆ Degree of protection	IP54			
◆ Colour	RAL 7004 Grey			
◆ Temperature of operation	-5 - 50°C			
◆ Relative humidity	35-85%			
◆ Weight	400 gr.			
◆ Cable length	2 metres			
◆ Directive: 2014/30/EU Electromagnetic compatibility, 2011/65/EU RoHS				