

INCREMENTAL WIRE TRANSDUCER

EF500 EF700 EF900



Description

The EF500 and EF700 are incremental wire transducers which convert a linear displacement into coded digital pulses.

They consist of incremental optical encoder operated by the winding and unwinding of a stainless steel wire with a maximum stroke of 500mm (EF500) and 700mm (EF700).

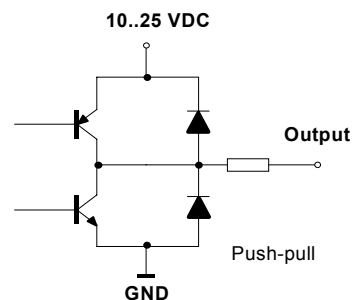
Combined with a programmable electronic counter (e.g. a 5-digit F1X, or a 6-digit F2X), they constitute an excellent system for measuring positions on machine tools, marble, glass and wood working machinery, etc. to a precision degree of $\pm 0.1\text{mm}$.

CONNECTION:

Brown	10..25 VDC	
Yellow	segnale A	
White	segnale B	
Green	GND	
Shield	n.c.	

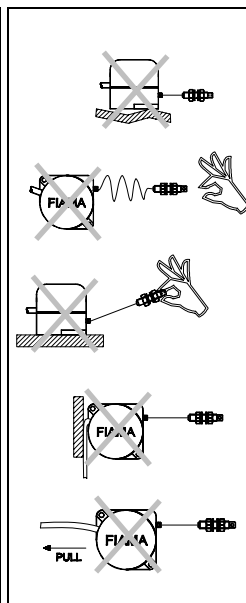
Output signals during wire extraction

OUTPUT CIRCUIT:



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.
- ◆ 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 screened cable, keeping it separate from power lines or sources of electromagnetic interference.
- ◆ Do not squeeze or pull the feed cable.
- ◆ Make the electrical connections with due care and attention: a failure due to a connection error renders the guarantee null and void.



Technical Characteristics

Power supply	10 ÷ 25 Vdc $\pm 10\%$, max 60 mA protection against polarity inversion
Resolution	256 pulses / 102 mm of wire unwound
Maximum travel	EF500: 500 mm, EF700: 700mm; EF900 900mm
Number of cycles	150000
Maximum speed	2 m/s
Output signals	signals A and B with push-pull output; a open NPN or PNP collector on request
Maximum output current	20 mA
Degree of protection	IP54
Colour	RAL 7004 Grey
Temperature of operation	-10 ÷ 70 °C
Relative humidity	10 ÷ 90 %
Weight	80 gr

Technopolymer, blow-resistant, self-exting. housing resistant to solvents, petrol, oils & grease.
 Output with 4-pole 2-metre-long screened cable.
 Directive: 2014/30/EU Electromagnetic compatibility, 2011/65/EU RoHS