ERMES
Incremental encoder HS

High speed incremental encoder which measures and converts mechanical rotations into scaled electrical signals, suitable for motion control systems to detect position and speed. It is used in a variety of industrial sectors.

FEATURES

- Based on magnetic sensing method.
- Extremely compact and light, it is designed for easy assembly and wiring.
- IP protection degree: Ermes is classified IP 42
- Extreme temperature resistance: from -25°C to +85°C.
- Aluminum enclosure and high quality materials and components guarantee maximum mechanical life, precision and repeatability even in extreme conditions.

OPTIONS

- Totally immune to interference in compliance with standard DIN EN 61000-6-2.
- Featuring protection against input/output over-current and over-voltage and against reverse polarity.
- Fitted with 6 or 10 mm diameter shaft.
- Suitable for assembly on limit switches to control multi-revolution rotors.

CERTIFICATIONS

- CE marking.

Fill in the "request form" to configure properly the product.

CERTIFICATIONS

Conformity to Community Directives	2014/35/UE Low Voltage Directive (LVD)
	2014/30/UE Electromagnetic Compatibility (EMC) Directive
	2006/42/CE Machinery Directive
Conformity to CE Standards	EN 60204-1 Safety of machinery - Electrical equipment of machines
	EN 60529 Degrees of protection provided by enclosures
	EN 61326-1 Electrical equipment for measurement, control and laboratory use - EMC requirements - General requirements
	EN 61326-2-3 Electrical equipment for measurement, control and laboratory use - EMC requirements - Particular requirements - Test configurations, operational conditions and performance criteria for transducers with integrated or remote signal conditioning
	EN 61326-3-1 Electrical equipment for measurement, control and laboratory use - EMC requirements – Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) – General industrial applications
Markings and homologations	CE

GENERAL TECHNICAL SPECIFICATIONS

Ambient temperature	Storage -25°C/+80°C
	Operational -25°C/+80°C
IP protection degree	IP 42
Maximum rotation speed	15000 rpm
Shaft diameter	6 mm
	10 mm
Connections	Cable

ELECTRICAL SPECIFICATIONS

Power supply	10...30 Vdc
Consumption	25 mA (24 Vdc, without load)
Pulses per revolution	10...1024
Revolution reference signal	Zero pulse, width 90°
Sensing method	Magnetic
Output signals	A 90° B, Z + inverted
Output stages	Linedriver/RS422
	Push-pull short-circuit proof
Output interface	5 VDC/5V (TTL compatible) normal output
	5 VDC/5V (TTL compatible) complementary output
	10..30 VDC/push-pull short-circuit proof normal output
	10..30 VDC/push-pull short-circuit proof complementary output
	10..30 VDC/5V normal output
	10..30 VDC/5V complementary output

NUMBER OF PULSES/REVOLUTION

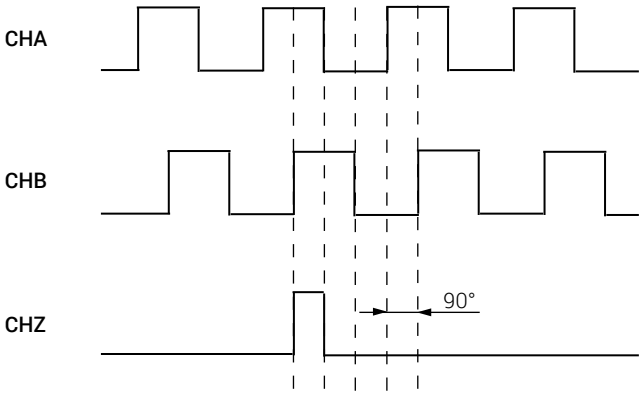
10	36	100	256	360	512	750	1024

TRIGGER LEVEL

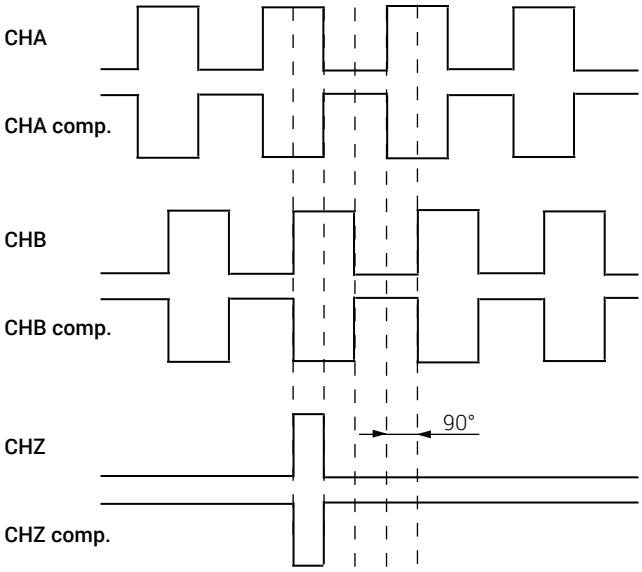
Outputs	5 VDC/5V (TTL compatible) normal/ complementary output 10..30 VDC/5V normal/complementary output	10..30 VDC/push-pull short-circuit proof normal/ complementary output
Output level High	>2.4 V (I = -20 mA)	>+Vs - 0.7 V (I = 30 mA)
Output level Low	<0.4 V (I = 20 mA)	<0.7 V (I = 30 mA)
Load High	<20 mA	<30 mA
Load Low	<20 mA	<30 mA

OUTPUT SIGNALS

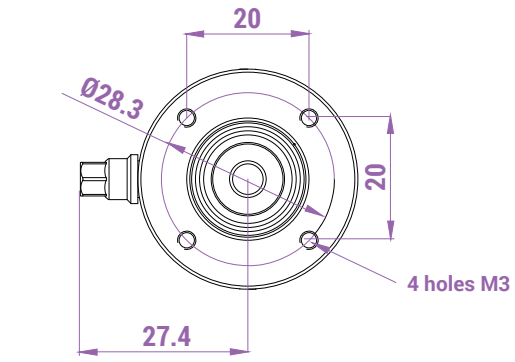
Normal output

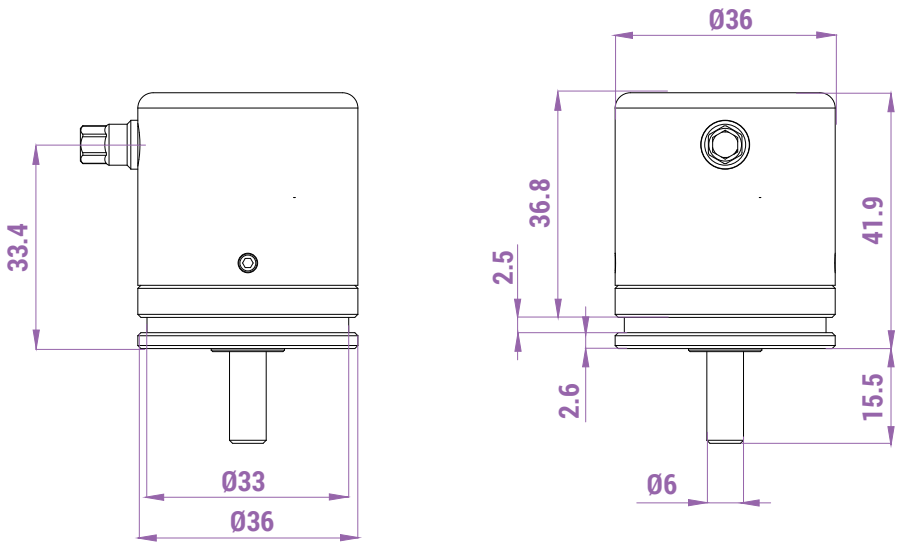


Complementary output

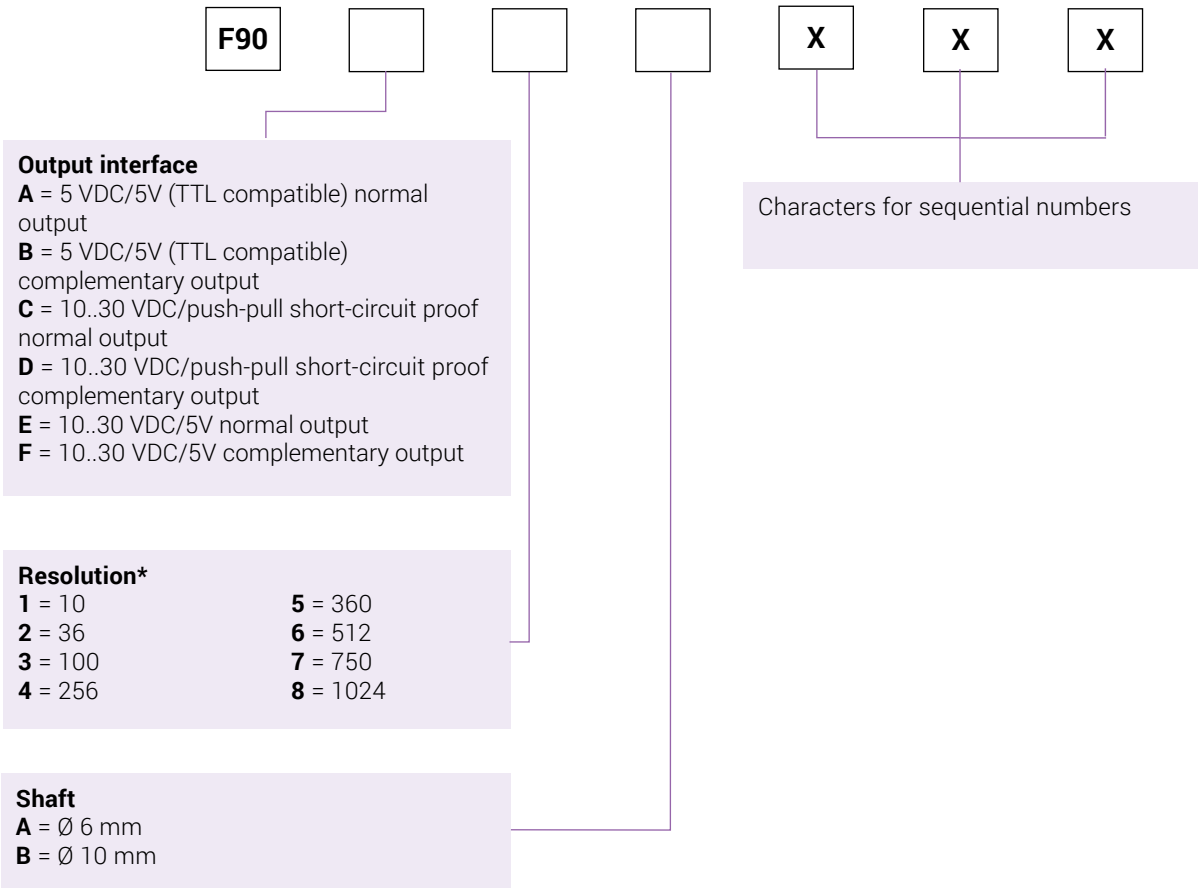


OVERALL DIMENSIONS (mm)





ERMES - REQUEST FORM FOR INCREMENTAL ENCODER HS



* To request customized resolutions, please contact the sales department (+39 0399911011 - info@ter.it).

Instructions

Fill in the boxes with the numbers/letters corresponding to the specifications required, thus obtaining the encoder code, as shown in the example below.

F90	A	8	A	X	X	X

The encoder is supplied with 1 m cable.
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