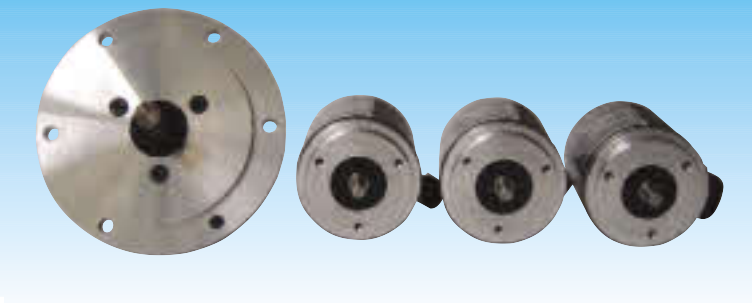


SERIES E520 / 521 ROTARY ENCODERS



Incremental rotary encoders with or without zero pulse, fit to servo-coupling, and compatible to the international standardized series SIZE23; a flange type RE0444 is also available (series RE530). The compact electronic circuitry joins perfectly with the reliable and thoroughly tested mechanical construction, allowing to keep a favourable price/performance relation.

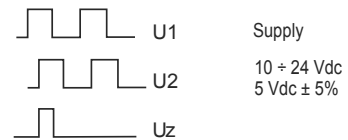


MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

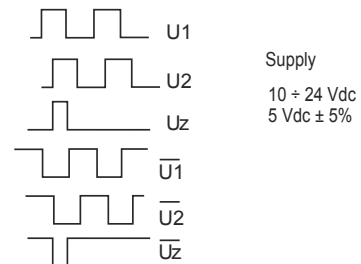
Dimensions	See the drawing
Weight	E520 280 g - RE520 320 g - RE530 600 g
Case material	E520 ABS self-extinguishing / RE520/RE530 aluminium Stainless steel AISI 303
Shaft diameter	6 or 8 or 10 mm / RE530 11 mm
Revolutions per minute	6000 continuous* / 10000 temporary * Max operating speed with IP65 sealing ring applied on the shaft: 3000 rpm
Starting torque	≤ 0.8 Ncm
Inertia	≤ 25 g cm ²
Max load	80 N axial - 100 N radial
Resistance to vibrations (10÷2000 Hz)	100 m/sec ²
Shock resistance (11ms)	50 G
Protection degree	IP64 (optional IP 65)
Operating temperature	-10 ÷ +70°C
Stocking temperature	-20 ÷ 80°C

ELECTRONICS

Open collector - pull-up resistor - push-pull



Line driver



With connection diagram 1-3-4: signal U2 lags signal U1 with clockwise rotation (seen from the shaft side).
With connection diagram 2: signal U2 lags signal U1 with anticlockwise rotation (seen from the shaft side).

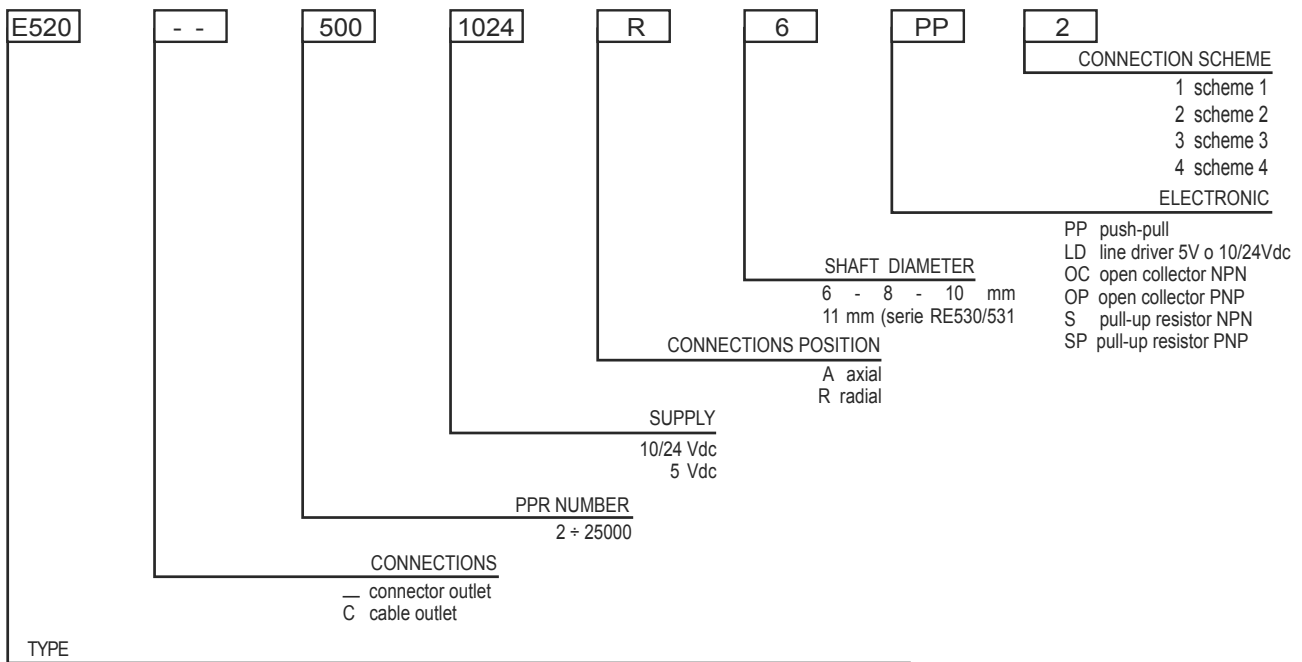
ELECTRICAL AND OPERATING SPECIFICATIONS

Pulse code	Incremental
Pulses-revolution	2 ÷ 25000
Zero reference pulse	1 pulse each revolution
Output Signals	Two square waves 90°±15° out of phase. Zero pulse 90°±15° wide
Electronic output	Push-pull, line-driver, open collector NPN or PNP, pull-up resistor NPN or PNP. Protection against short circuits
Supply	10÷24 Vdc or 5 Vdc±5%. Protection against polarity reversal
Current consumption	30÷80 mA
Max frequency	100 KHz
Connection outlets	Axial or radial connector type MS 7p (10p for line driver output) / Axial or radial cable 3 m long (1 m for line driver output)

CONNECTIONS

<p>• Open collector - pull-up resistor - push-pull</p>		
<p>• Scheme 1</p> <p>A = Signal 1 B = Signal 2 C = Signal Z (for types with zero pulse only) D = +Vdc E = Non connected F = 0 V G = Non connected</p>	<p>• Cable outlet</p> <p>White = Signal 1 Green = Signal 2 Brown = Signal Z (for types with zero pulse only) Red = +Vdc Blue = 0 V Shield = Earth</p>	<p>• Line driver • Scheme 3</p> <p>A = Signal 1 B = Signal 2 C = Signal 1 D = +Vdc E = Signal 2 F = 0 V G = Non connected</p>
<p>• Scheme 2</p> <p>A = 0 V B = Non connected C = Signal 1 D = Signal Z (for types with zero pulse only) E = Signal 2 F = +Vdc G = Non connected</p>	<p>• Scheme 4 (with zero pulse)</p> <p>A = Signal 1 B = Signal 2 C = Signal Z D = +Vdc E = +Vdc F = 0 V G = Signal 1 H = Signal 2 I = Signal Z J = Non connected</p>	

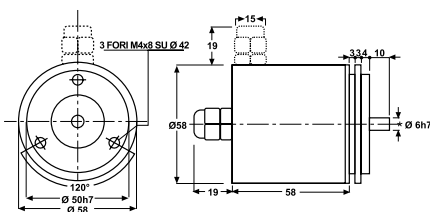
ORDERING INFORMATION



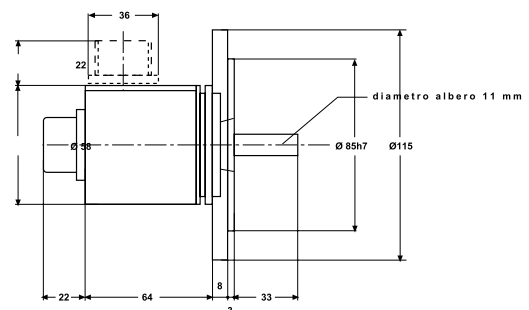
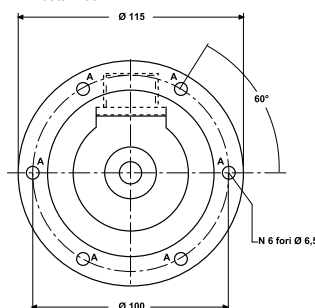
E520 , without zero pulse
E521 , with zero pulse
RE520, without zero pulse, aluminium case
RE521, with zero pulse, aluminium case
SERIES RE530/RE531 - aluminium case, flange RE0444

DIMENSIONS

E520 / E521
RE520 / RE521



RE530/RE531



* AVAILABLE SHAFT DIAMETERS 8 mm - 10 mm (length 20 mm)

variations admitted without notice

02/10