



RE620



E650



RE620

INCREMENTAL ROTARY ENCODERS

Square Flange

- *Incremental rotary encoders with or without zero pulse*
- *Pulses per revolution: 2 to 36000*
- *ABS or aluminium case (series RE - REV)*
- *Several configurations available*

MECHANICAL VERSIONS

E620/E521

Body Ø: 58 mm
 Flange mm 63.5x63.5
 Centering mask Ø 31.75 mm
 Shaft Ø 6, 8, 9.52, 10 mm

E650/651

Body Ø: 58 mm
 Flange mm 63.5x63.5
 Centering mask Ø 50 mm
 Shaft Ø 6, 8, 9.52, 10 mm

Encoder series **E**: **ABS** plastic case
 Encoder series **RE**: **Aluminium** case
Pulses per revolution range: 2 to 12500
 Encoder series **REV**: **aluminium** case, **glass** disk
Pulses per revolution range: 1000 to 36000

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

| | |
|-------------------------------------|---|
| • Materials: case shaft | ABS / aluminium (RE/REV) AISI 303 steel |
| • Weight | 280 g ca / series RE/REV 400 g ca |
| • Shaft Ø | 6, 8, 9.52, 10 mm |
| • Revolutions/minute | 6000 continuos/10000 temporary* |
| • Starting torque | ≤0,8 Ncm |
| • Inertia | ≤25 g cm ² |
| • Max load | 80 N axial/100 N radial |
| • Vibration resistance (10÷2000 Hz) | 100 m/sec ² |
| • Shock resistance (11 ms) | 50 G |
| • Protection degree | IP64 / optional IP65 with sealing ring* |
| • Operating temperature | -10 ÷ 70°C |
| • Stacking temperature | -20 ÷ 80°C |

ELECTRICAL & OPERATING SPECIFICATIONS

| | |
|-------------------------|--|
| • Pulse code | Incremental |
| • Pulses per revolution | 2 ÷ 12500 series REV : 1000 ÷ 36000 |
| • Zero reference pulse | one pulse/revolution |
| • Output signals | Two square waves 90° ±15° out of phase – Zero pulse width: 90°±15° |
| • Electronic outputs | push-pull, NPN open collector, 5Vdc or 8/24Vdc line driver signals protected against short circuits |
| • Supply voltage | 5Vdc or 8/24Vdc - protection against polarity reversal |
| • Absorption | 30÷80 mA max |
| • Max frequency | 100/200 KHz |
| • Connections | Axial or radial cable 3 m long /1 m for line driver output Axial or radial MS connector, 7-pin/10-pin for line driver output* |

*Max operating speed with IP65 sealing ring applied on the shaft: 3000 rpm

*The encoder configuration: *zero pulse + line drive output +radial connector outlet* can only be supplied with *aluminium case (series RE)*





RE620



E650



E620

CONNECTIONS

| SIGNALS | Push Pull – Open Collector NPN | | | SIGNALS | Line Driver | | | |
|---------------|--------------------------------|------------------|--------|--------------------|------------------|---------------|------------------|--------|
| | 7-pin connector | Cable colours | | | 7-pin connector | Cable colours | | |
| | <i>DIAGRAM 1</i> | <i>DIAGRAM 2</i> | | | <i>DIAGRAM 3</i> | | <i>DIAGRAM 4</i> | |
| | | | | | without 0 pulse | | with 0 pulse | |
| Out 1 | A | C | White | Out 1 | A | White | A | White |
| Out 2 | B | E | Green | Out 2 | B | Green | B | Green |
| Out Z | C | D | Brown | Out Z | | | C | Grey |
| + Vdc | D | F | Red | + Vdc | D | Red | D | Red |
| 0V | F | A | Blue | 0V | F | Blue | E | Red |
| Non-connected | E | B | | Out 1 ₋ | C | Brown | F | Blue |
| Non-connected | G | G | | Out 2 ₋ | E | Yellow | G | Brown |
| Earth | | | Shield | Out Z ₋ | | | H | Yellow |
| | | | | Non-connected | G | | I | Pink |
| | | | | Non-connected | | | J | Shield |

ORDERING INFORMATION

| | | | | | | | |
|-------------|---|------|------|---|---|----|--|
| E620 | C | 1000 | 8/24 | R | 6 | PP | 2 |
| | | | | | | | CONNECTION DIAGRAM 2 – 4 |
| | | | | | | | OUTPUT SIGNALS PP Push-pull OC NPN Open Collector LD Line-driver |
| | | | | | | | SHAFT Ø 6 - 8 - 9.52 - 10 |
| | | | | | | | CONNECTIONS POSITIONS A Axial R Radial |
| | | | | | | | SUPPLY VOLTAGE 8/24 Vdc 5 Vdc |
| | | | | | | | PPR 2 ÷ 12500 series E/RE 1000 ÷ 36000 series REV |
| | | | | | | | CONNECTION OUTLET - Connector C Cable |
| TIPO | | | | | | | |

- E620 – E650 Plastic case, no zero pulse, 2÷12500 ppr
- E621 – E651 Plastic case, zero pulse, 2÷12500 ppr
- RE620 – RE650 Aluminium case, no zero pulse, 2÷12500 ppr
- RE621 – RE651 Aluminium case, zero pulse, 2÷12500 pp
- REV620 – REV650 Custodia in alluminio, senza impulso zero, 1000÷36000 i/g
- REV621 – REV651 Aluminium case, zero pulse, 1000÷36000 ppr

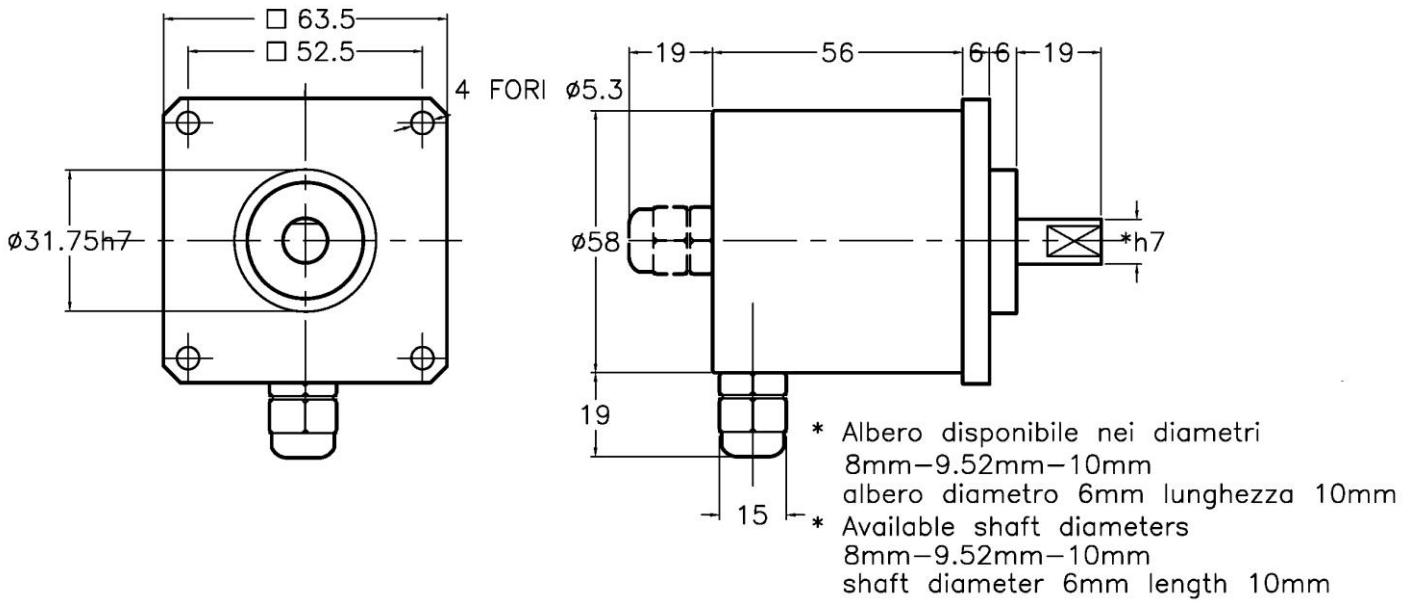
VARIATIONS ADMITTED WITHOUT NOTICE

Dimensional drawings available at
www.elap.it/eng/incremental-encoders/encoder-e620.html

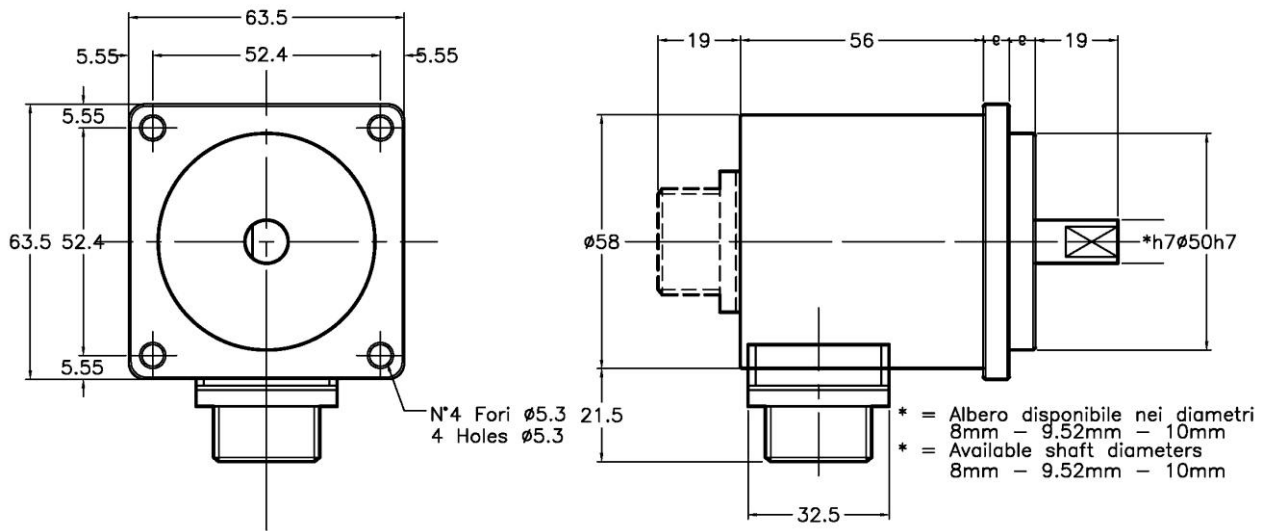


ELAP VIA VITTORIO VENETO, 4 – I-20094 CORSICO (MI) – TEL. ++39.02.4519561
 FAX ++39.02.45103406 E-MAIL: INFO@ELAP.IT URL: WWW.ELAP.IT

E620 uscita serracavo
E620 cable outlet

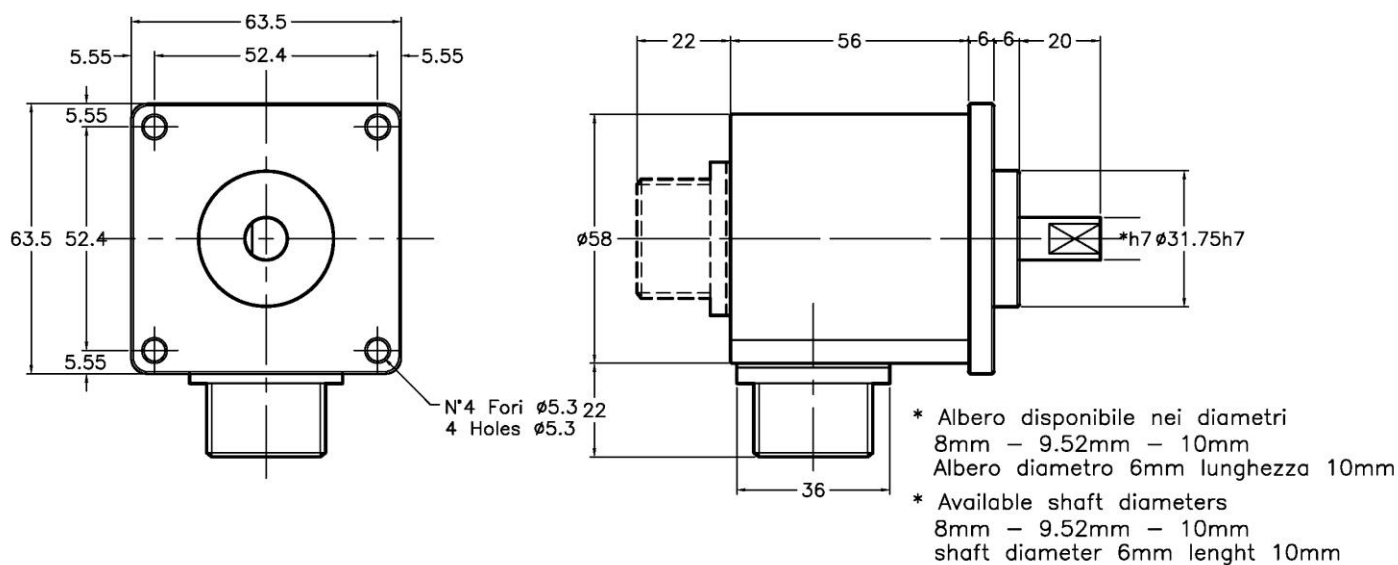


E650 uscita connettore 7p
E650 10pin output connector



DIMENSIONS

RE620 uscita connettore 10p
RE620 10pin output connector



Further dimensional drawings available at
www.elap.it/eng/incremental-encoders/encoder-e620.html

elap

ELAP VIA VITTORIO VENETO, 4 - I-20094 CORSICO (MI) TEL. ++39.02.4519561
FAX ++39.02.45103406 E-MAIL: INFO@ELAP.IT URL: WWW.ELAP.IT