

PZ

Encoder incrementale albero passante  
*Incremental or absolute hollow shaft encoder*  
 $\phi 15\text{mm} \rightarrow \phi 150\text{mm}$

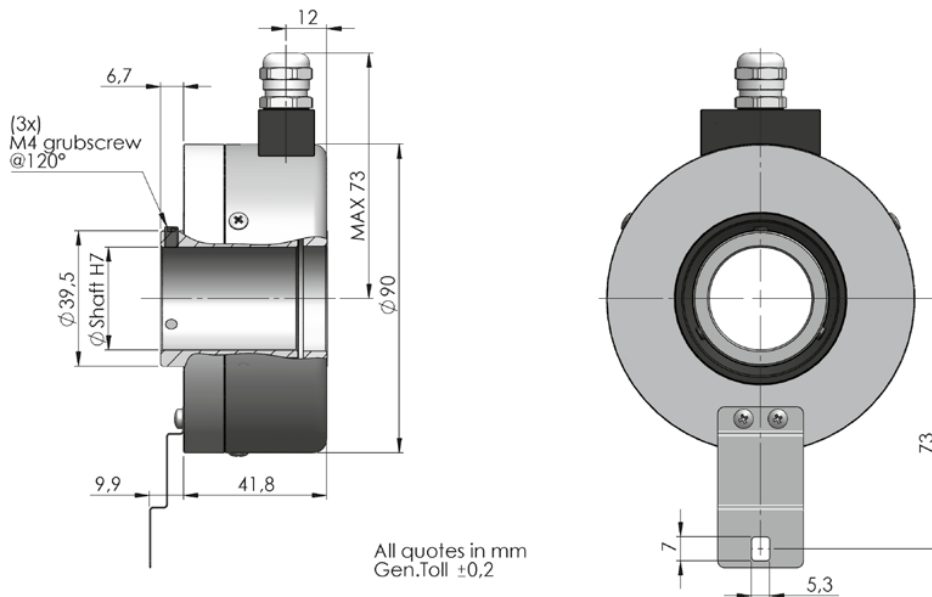
## Dati Meccanici / Mechanics Data

**Custodia / Cover :** Alluminio / Aluminium  
**Flangia / Body :** Alluminio / Aluminium  
**Albero / Shaft :** Acciaio INOX / Stainless steel  
**Cuscinetti / Bearings :** 2 a sfere / 2 ballraces  
**Classe protezione / Protection:** IP65  
**Giri al minuto / Rpm :** Alberi/Shaft  $\leq \phi 55\text{mm} \rightarrow 3000 \text{ Max}$   
 $\phi 110\text{mm} > \text{Alberi} > \phi 55\text{mm} \rightarrow 1500 \text{ Max}$   
 $\text{Alberi} > \phi 110\text{mm} \rightarrow 1000\text{Max}$   
**Coppia / Torque:** 19Ncm  $\rightarrow$  35Ncm  
**Momento inerzia / Inertia:** 350  $\rightarrow$  500 gcm<sup>2</sup>  
**Carico sull'albero / Shaft Loading:** Axi 100N - Rad 100N



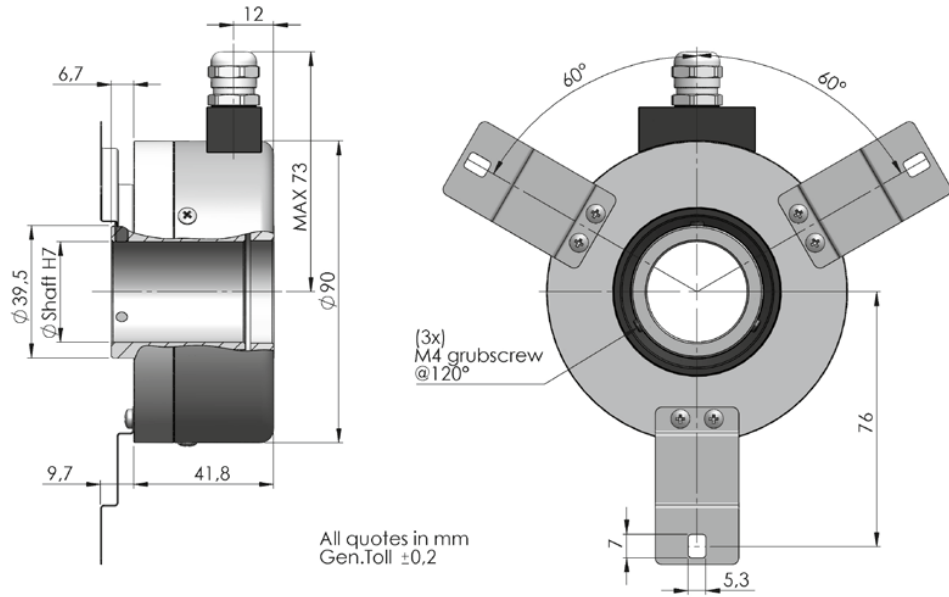
PZK :  $\phi 90\text{mm}$  · Shaft  $\leq \phi 42\text{mm}$

Flange 1

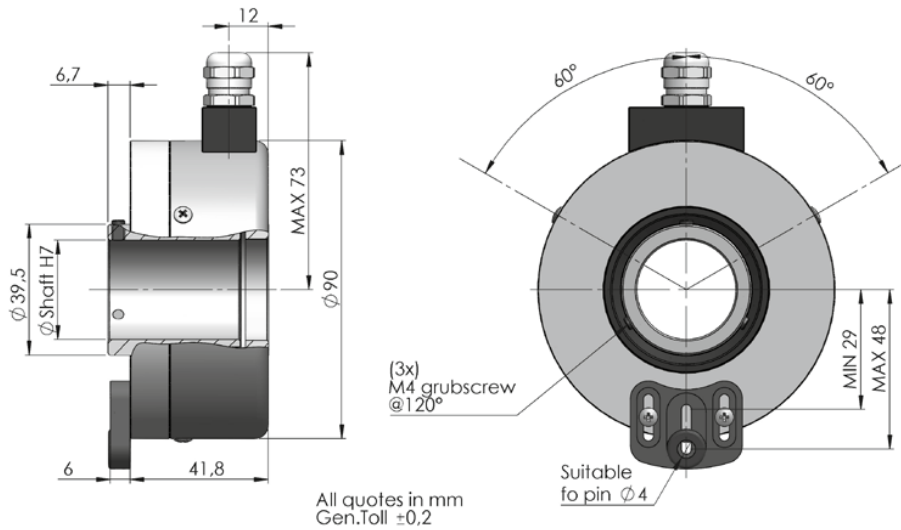


Nota: Tutte le immagini sono puramente indicative e non possono essere considerate vincolanti ai fini della fornitura  
 All images are indicative and can not be considered binding the purpose of supplying

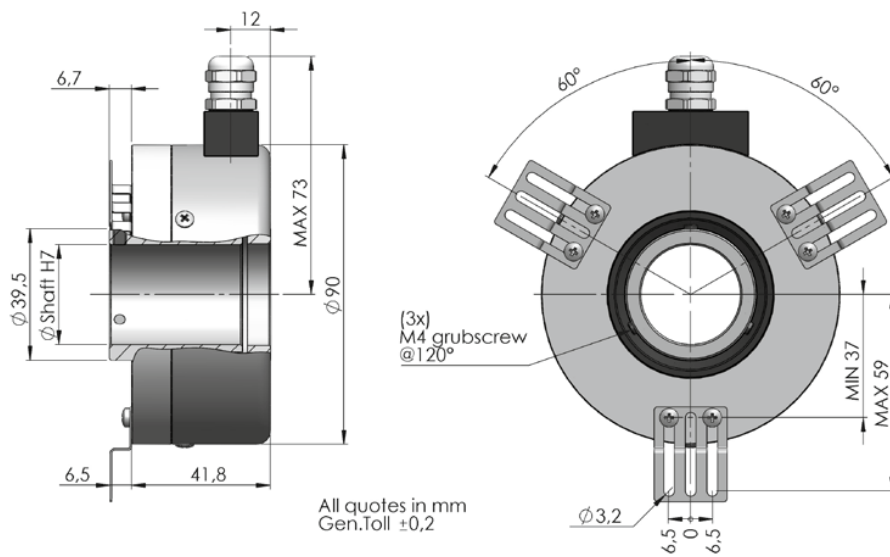
Flange 2



Flange 3



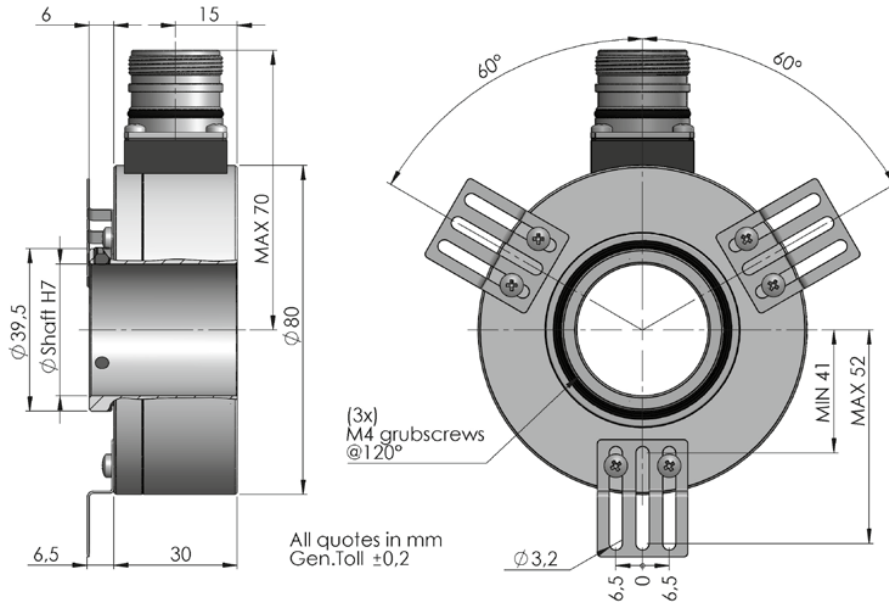
Flange 4



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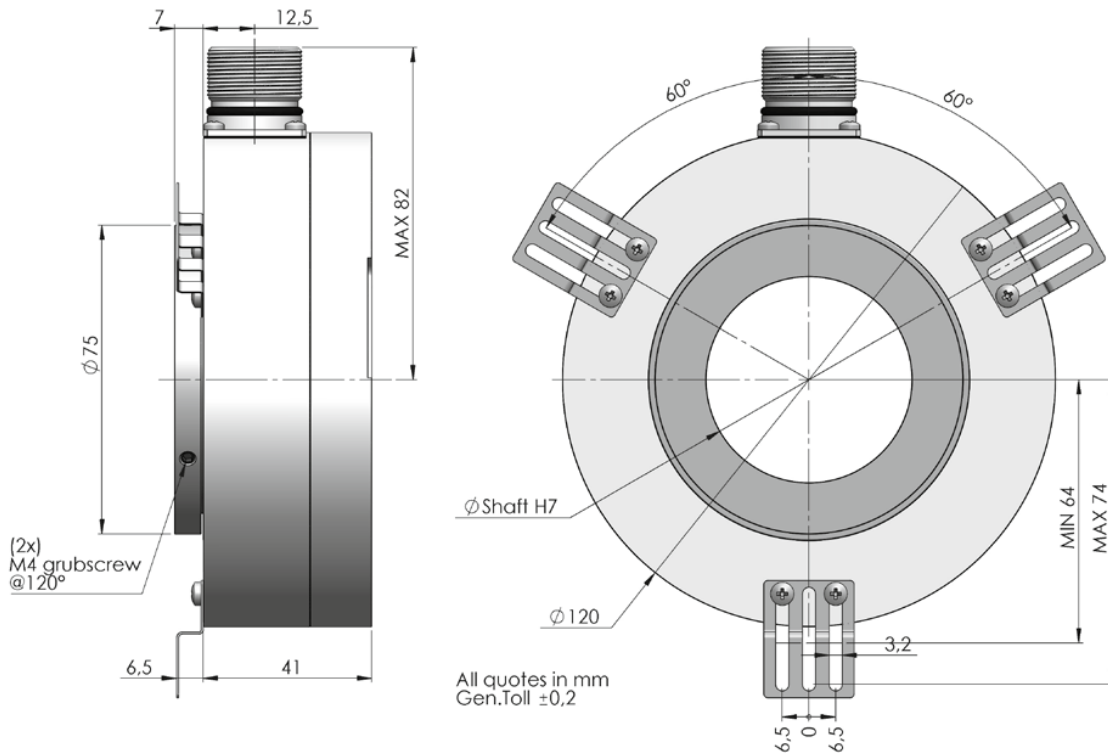
PZK :  $\phi 80\text{mm}$  · Shaft  $\leq \phi 30\text{mm}$

Flange 8



PZL :  $\phi 120\text{mm}$  · Shaft  $\leq \phi 50\text{mm}$

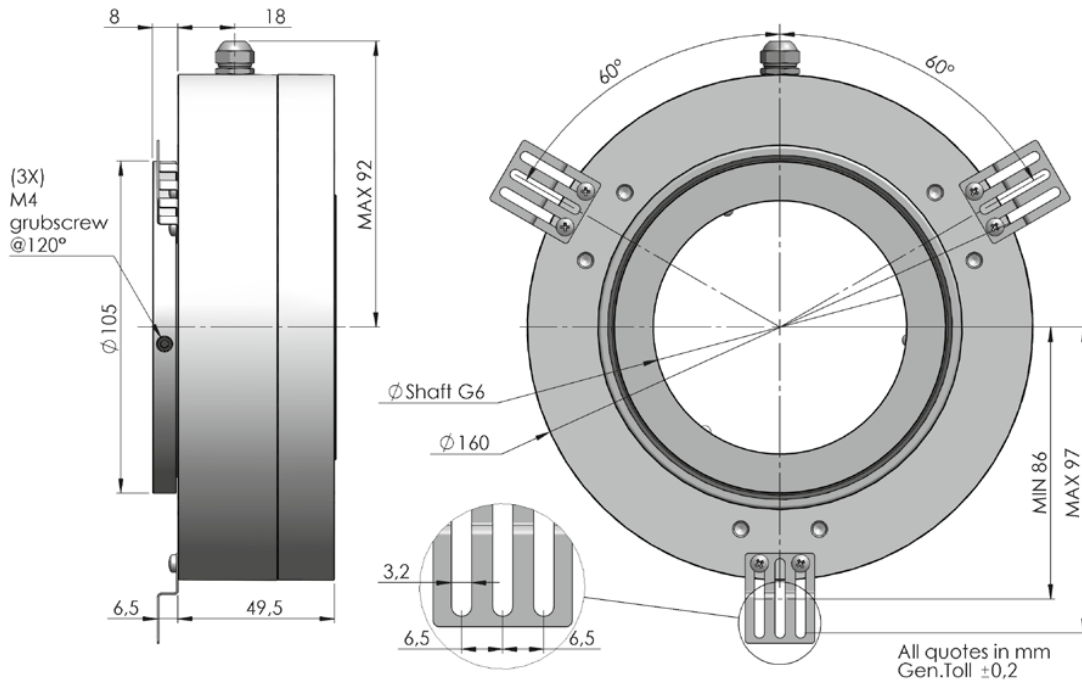
Flange 4



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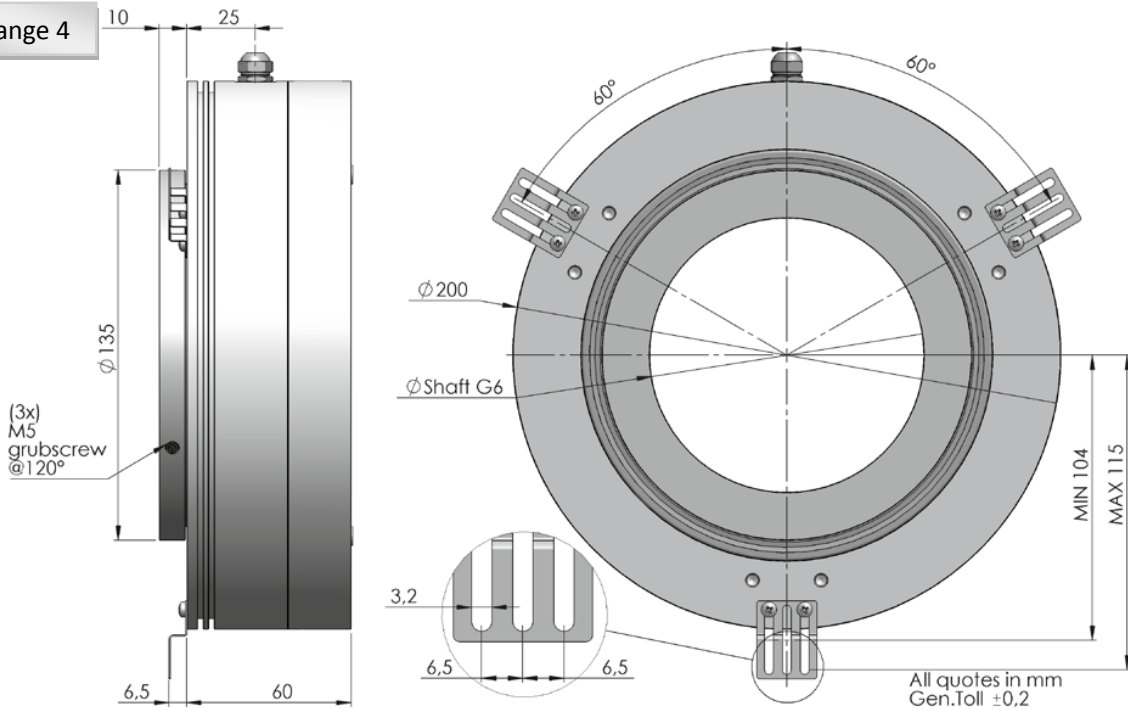
PZR :  $\varnothing 160\text{mm}$  · Shaft  $\leq \varnothing 80\text{mm}$

Flange 8



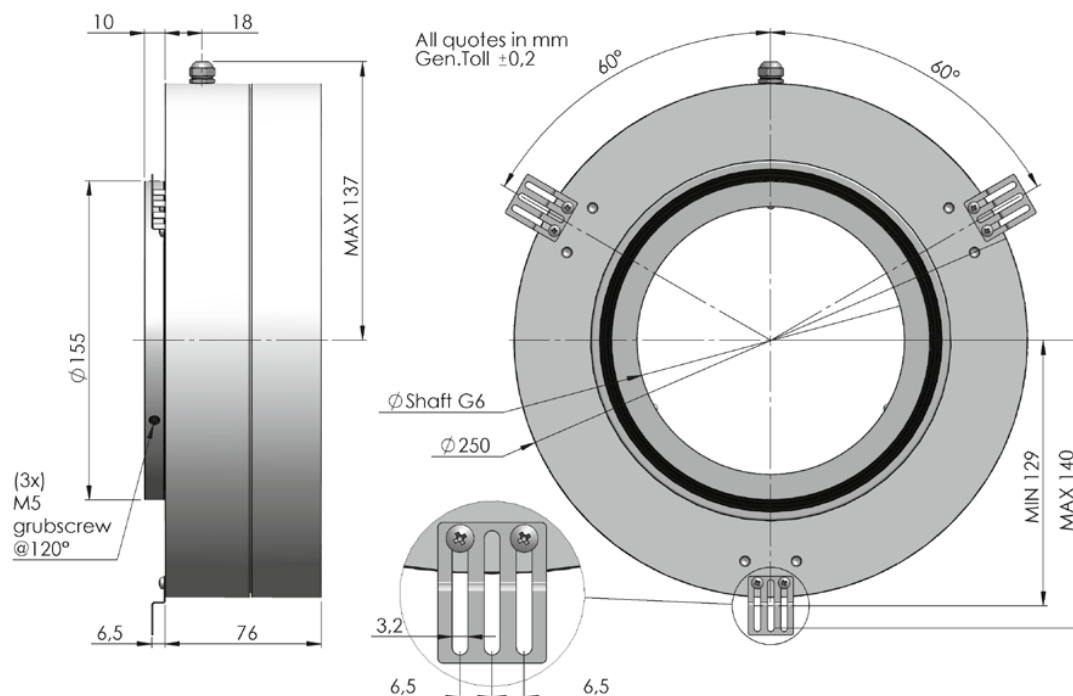
PZM :  $\varnothing 200\text{mm}$  · Shaft  $\leq \varnothing 110\text{mm}$

Flange 4



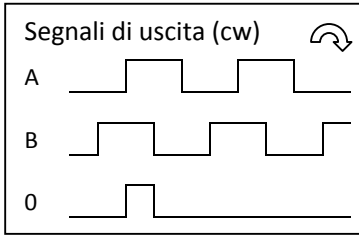
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PZU :  $\varnothing 250\text{mm}$  · Shaft  $\leq \varnothing 160\text{mm}$



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## Uscita Incrementale / Incremental Outputs



### Dati Elettronici / Electronics Data

- Alimentazione / Power Supply:** 5/28 Volt secondo il tipo di elettronica  
*depends on the electronics circuit*
- Assorbimento / Current consumption:** 40/80mA secondo il tipo di elettronica  
*depends on the electronics circuit*
- Carico ammesso / Load:** 40mA
- Frequenza / Frequency:** Max 300KHz
- Protezioni / Protections:** Contro corto circuito, inversione di polarità  
*Against short circuit, reversal polarity*
- Temp. di lavoro / Operating Temp:** -20/+70°C

### Connessioni / Connections

|                       | 0 Volt                 | + Volt                  | A                       | B                       | —<br>A                | —<br>B                  | 0                     | —<br>0                 |
|-----------------------|------------------------|-------------------------|-------------------------|-------------------------|-----------------------|-------------------------|-----------------------|------------------------|
| <b>Cable 5 Pole</b>   | Bianco<br><i>White</i> | Marrone<br><i>Brown</i> | Verde<br><i>Green</i>   | Giallo<br><i>Yellow</i> |                       |                         | Grigio<br><i>Gray</i> |                        |
| <b>Cable 8 Pole</b>   | Nero<br><i>Black</i>   | Blu<br><i>Blue</i>      | Marrone<br><i>Brown</i> | Beige<br><i>Beige</i>   | Verde<br><i>Green</i> | Giallo<br><i>Yellow</i> | Rosa<br><i>Pink</i>   | Viola<br><i>Violet</i> |
| <b>Connector 9416</b> | Pin1                   | Pin2                    | Pin3                    | Pin4                    | Pin5                  | Pin6                    | Pin7                  | Pin8                   |

## Uscita Assoluta SSI / SSI Absolute Output

### Dati Elettronici / Electronics Data

- Risoluzione/Resolution:** ST: Single turn max 13 Bit
- Alimentazione / Power Supply:** 10-28V +/- 5% (5V version in option)
- Assorbimento / Current consumption:** 160mA
- Interfaccia/ Interface:** SSI
- Tempo/ Time Monoflop:** 20usec
- Uscita / Output Data:** RS422
- Codice /Output Code:** Gray or Binary
- Temp. di lavoro / Operating Temp:** -20/+70°C

### Connessioni / Connections

|   | 0 Volt               | + Volt             | Data +                  | Data -                | Clock +               | Clock -                 | nc                  | U/D                    |
|---|----------------------|--------------------|-------------------------|-----------------------|-----------------------|-------------------------|---------------------|------------------------|
| <b>Cable 8 Pole</b>                     | Nero<br><i>Black</i> | Blu<br><i>Blue</i> | Marrone<br><i>Brown</i> | Beige<br><i>Beige</i> | Verde<br><i>Green</i> | Giallo<br><i>Yellow</i> | Rosa<br><i>Pink</i> | Viola<br><i>Violet</i> |
| <b>Connector 9416 (M23 12 Poles CW)</b> | 1                    | 2                  | 3                       | 4                     | 5                     | 6                       | 7                   | 8                      |

Esempio d'ordine/ Ordering code - PZK (ø90mm)

| Serie Series (mm) | Albero Shaft (mm)   | Flangia Flange   | Versione albero Shaft Version   | Uscite Outputs   | Connessioni Connections  | Opzioni Options | / | Risoluzione Resolution  |
|-------------------|---|------------------|---|--|--|-----------------|---|---|
| PZK               | 015 = ø15<br>020 = ø20<br>025 = ø25<br>L25 = ø25,4<br>030 = ø30<br>038 = ø38<br>040 = ø40 | 1<br>2<br>3<br>4 | G = Grani frontale<br><i>Frontal screw</i><br><br>M = Morsetto frontale<br><i>Frontal clamp</i> | <b>Incremental Outputs</b><br>3 = AB0 PP 5/28V *<br>P = AB0+AB0 PP 5/28V *<br>C = AB0 OC 11/28V<br>H = AB0 NPN 11/28V<br>6 = AB0+AB0 LD5V<br>9 = AB0+AB0 LD5/12V<br>K = AB0+AB0 LD15/24 (out 5V) | <b>Cavo / Cable</b><br>3 = Cable Rad<br><br><b>M23 12 P</b><br>5 = 9416Rad | 0 = None        |   | <b>Incremental</b><br>Ex:<br>512 = 512 pulses<br>1000 = 1000 pulses |
|                   | 015 = ø15<br>020 = ø20<br>025 = ø25<br>L25 = ø25,4<br>030 = ø30                           | 8                |   |  |  |                 |   |   |

Esempio d'ordine/ Ordering code - PZL (ø120mm)

| Serie Series (mm) | Albero Shaft (mm)      | Flangia Flange | Versione albero Shaft Version   | Uscite Outputs  | Connessioni Connections  | Opzioni Options                              | / | Risoluzione Resolution  |
|-------------------|------------------------|----------------|---|---|--|--|---|---|
| PZL               | 045 = ø45<br>050 = ø50 | 4              | G = Grani frontale<br><i>Frontal screw</i><br><br>M = Morsetto frontale<br><i>Frontal clamp</i> | <b>Incremental Outputs</b><br>3 = AB0 PP 5/28V *<br>P = AB0+AB0 PP 5/28V *<br>6 = AB0+AB0 LD5V<br>9 = AB0+AB0 LD5/12V<br>K = AB0+AB0 LD15/24 (out 5V)<br><br><b>Absolute Outputs</b><br>S = SSI 24Vdc<br>A = Parallel Single turn 24Vdc | <b>Cavo / Cable</b><br>3 = Cable Rad<br><br><b>M23 12 P</b><br>5 = 9416Rad | 0 = None<br>B = Bicoder<br>**<br>(Redundant) |   | <b>Incremental</b><br>Ex:<br>512 = 512 pulses<br><br><b>Absolute Singleturn (max13bit)</b><br>Ex:<br>10G = 10 bit Gray<br>12B = 12 bit Binary<br><br><i>Abs. Multiturn SSI</i><br>Ex:<br>24G = 24 Bit Gray<br>24B = 24 Bit Binary (High 50/60mm)<br>(working in progress) |

Esempio d'ordine/ Ordering code PZR(ø160mm) – PZM (ø200mm) - PZU(ø250mm)

| Serie Series (mm) | Albero Shaft (mm)                     | Flangia Flange | Versione albero Shaft Version                 | Uscite Outputs  | Connessioni Connections  | Opzioni Options                              | / | Risoluzione Resolution  |
|-------------------|---------------------------------------|----------------|---|---|--|--|---|---|
| PZR               | 060 = ø60<br>075 = ø75<br>080 = ø80   | 4              | G = Grani frontale<br><i>Frontal screw</i>    | <b>Incremental Outputs</b><br>3 = AB0 PP 5/28V *<br>P = AB0+AB0 PP 5/28V *<br>6 = AB0+AB0 LD5V<br>9 = AB0+AB0 LD5/12V<br>K = AB0+AB0 LD15/24 (out 5V) | <b>Cavo / Cable</b><br>3 = Cable Rad<br><br><b>M23 12 P</b><br>5 = 9416Rad | 0 = None<br>B = Bicoder<br>**<br>(Redundant) |   | <b>Incremental</b><br>Ex:<br>512 = 512 pulses<br>1000 = 1000 pulses |
| PZM               | 085 = ø85<br>100 = ø100<br>110 = ø110 |                | M = Morsetto frontale<br><i>Frontal clamp</i> |   |  |  |   |   |
| PZU               | 150 = ø150                            |                |   |   |  |  |   |   |

\* = **Outputs PP:** outputs levels compatible TTL · Low level output <0.5V · High level output > +VCC-1,9V  
 \*\* = **Bicoder** encoder has two separate electronics, due connectors or cables (located at 180°) and same number of pulses.

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