

### MAIN FEATURES

Cost effective series for asynchronous motors.

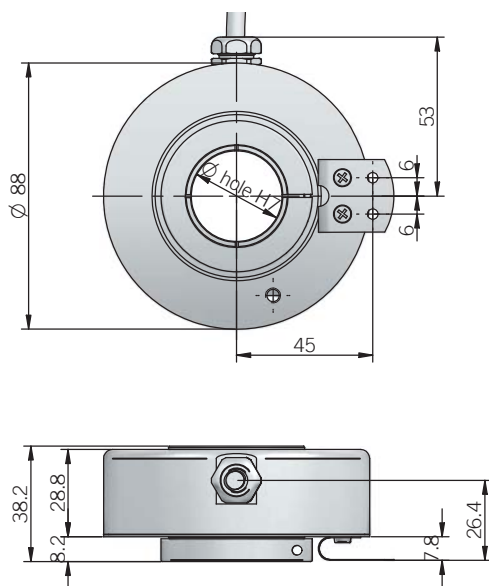
- Suitable for elevators and stage machinery
- Sturdy frame
- Up to  $\varnothing$  40 mm bore size
- Resolution up to 2500 ppr with Z reference signal
- Torque arm fixing available up to  $\varnothing$  30mm through hollow shaft



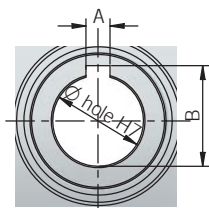
### ORDERING CODE

| EH 88 PE 1024 Z 5/28 P 30 X 3 PR . XXX                                    |  |                                                                                         |  |                                                                                                                                                                    |  |                                                                                                                                                                         |  |                                                                                                                                                                     |  |
|---------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>SERIES</b>                                                             |  | <b>SIZE</b>                                                                             |  | <b>TYPE</b>                                                                                                                                                        |  | <b>RESOLUTION</b>                                                                                                                                                       |  | <b>ZERO PULSE</b>                                                                                                                                                   |  |
| incremental encoder series <b>EH</b>                                      |  | mm <b>88</b>                                                                            |  | through hollow shaft with tether <b>PE</b><br>through hollow shaft with torque arm <b>PET</b><br><i>N.B.: please see accessories for torque arm ordering codes</i> |  | ppr <b>500 / 512 / 720 / 1000 / 1024 / 1440 / 2500</b><br><i>N.B.: please directly contact our offices for pulses availability</i>                                      |  | without zero pulse <b>S</b><br>with zero pulse <b>Z</b>                                                                                                             |  |
| <b>OUTPUT TYPE</b>                                                        |  | <b>MAX ROTATION SPEED</b>                                                               |  | <b>ENCLOSURE RATING</b>                                                                                                                                            |  | <b>BORE DIAMETER</b>                                                                                                                                                    |  | <b>POWER SUPPLY</b>                                                                                                                                                 |  |
| <b>PR</b> cable output radial with cable gland<br>(standard length 0.5 m) |  | <b>3</b> 3000 rpm                                                                       |  | <b>X</b> IP 54                                                                                                                                                     |  | 25 mm<br>30 mm<br>35 mm<br>38 mm<br>40 mm<br>K25 mm with key<br>K30 mm with key<br>K35 mm with key<br><i>N.B.: torque arm fixing available up to 30mm bore diameter</i> |  | (available only with L electronic output) 5 V DC <b>5</b><br>(available only with L or PC electronic output) 8 ... 24 V DC <b>8/24</b><br>5 ... 28 V DC <b>5/28</b> |  |
| <b>VARIANT</b>                                                            |  | <b>ELECTRONIC INTERFACE</b>                                                             |  |                                                                                                                                                                    |  |                                                                                                                                                                         |  |                                                                                                                                                                     |  |
| <b>XXX</b> custom version                                                 |  | <b>P</b> push-pull<br><b>PC</b> protected push-pull (AEIC-7272)<br><b>L</b> line driver |  |                                                                                                                                                                    |  |                                                                                                                                                                         |  |                                                                                                                                                                     |  |

## EH 88 PE



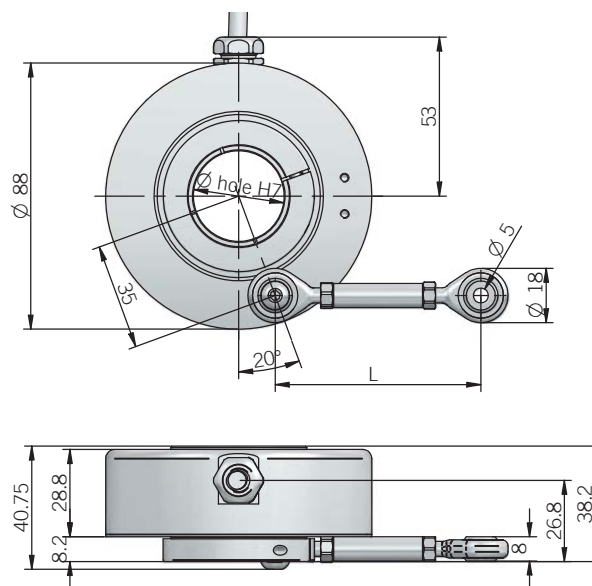
## Hollow shaft with key



| D     | A  | B              |
|-------|----|----------------|
| 25 H7 | 8  | 28.3 $\pm 0.2$ |
| 30 H7 | 8  | 33.3 $\pm 0.2$ |
| 35 H7 | 10 | 38.3 $\pm 0.2$ |

Key according to UNI 6604 / DIN 6885

## EH 88 PET



## Accessories - Torque arm

| Lenght              | Ordering code |
|---------------------|---------------|
| L = 80 $\pm 10$ mm  | SN5A30        |
| L = 110 $\pm 10$ mm | SN5A60        |
| L = 140 $\pm 10$ mm | SN5A90        |

*Torque arm MUST be ordered separately, n° 2 M5 x 12 UNI ISO 7380 are included*

## Electrical specifications

|                                         |                                                                                                       |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Resolution</b>                       | 500 / 512 / 720 / 1000 / 1024 / 1440 / 2500 ppr                                                       |
| <b>Power supply</b>                     | 5 V DC $\pm 10\%$<br>5 ... 28 V DC $\pm 5\%$<br>8 ... 24 V DC $\pm 5\%$ (reverse polarity protection) |
| <b>Current consumption without load</b> | 100 mA max                                                                                            |
| <b>Max load current</b>                 | 20 mA for channel                                                                                     |
| <b>Output type</b>                      | push-pull<br>line driver                                                                              |
| <b>Max output frequency</b>             | 100 kHz                                                                                               |
| <b>Counting direction</b>               | A leads B clockwise (shaft view)                                                                      |
| <b>Electromagnetic compatibility</b>    | IEC 61000-6-2<br>IEC 61000-6-3                                                                        |

## Connections and standard colours

| Function | Push pull | Line driver |
|----------|-----------|-------------|
| +V DC    | red       | red         |
| 0 V      | black     | black       |
| Ch. A    | green     | green       |
| Ch. A-   | /         | brown       |
| Ch. B    | yellow    | yellow      |
| Ch. B-   | /         | orange      |
| Ch. Z    | blue      | blue        |
| Ch. Z-   | /         | white       |
| ⏏        | shield    | shield      |

## Mechanical specifications

|                              |                                                                                          |
|------------------------------|------------------------------------------------------------------------------------------|
| <b>Bore diameter</b>         | 25 / 30 / 35 / 38 / 40 mm<br>25 / 30 / 35 mm with key<br>PET maximum 30 mm bore diameter |
| <b>Enclosure rating</b>      | IP 54 (IEC 60529)                                                                        |
| <b>Shock</b>                 | 50 G, 11 ms (IEC 60068-2-27)                                                             |
| <b>Vibration</b>             | 10 G, 10÷2000 Hz (IEC 60068-2-6)                                                         |
| <b>Max rotation speed</b>    | 3000 rpm                                                                                 |
| <b>Body material</b>         | EN-AW 2011 aluminum                                                                      |
| <b>Shaft material</b>        | up to 38 mm: EN-AW 2011 aluminum<br>K35 and 40 mm: 1.4305/AISI 303 stainless steel       |
| <b>Housing material</b>      | EN-AW 2011 aluminum                                                                      |
| <b>Bearings</b>              | 2 ball bearings                                                                          |
| <b>Bearings life</b>         | 10 <sup>9</sup> revolutions                                                              |
| <b>Operating temperature</b> | -30° ... +85 °C                                                                          |
| <b>Storage temperature</b>   | -30° ... +85 °C                                                                          |
| <b>Weight</b>                | 300 g                                                                                    |