

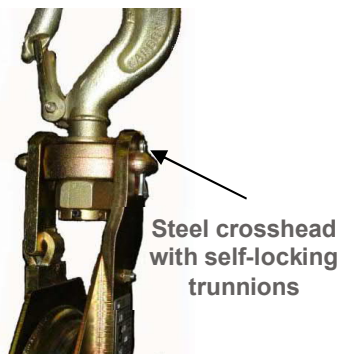
## APPLICATIONS

The single sheave snatch blocks of the EGZ's range are mainly used for temporary applications for pulling and lifting, when quick assemblies and/or dismantling are required. They can be suspended to a fixed or mobile anchorage point with the right strength corresponding to the required load.

Thanks to an easy instalment and availability of a ring becket, these snatch blocks are most often used for blocks assemblies or wire rope direction changes.

EGZ's snatch blocks are fitted with a swivel hook which ensure good positioning of the pulley regarding the cable.

Some EGZ pulleys are compatible with standard tirfor® and tirak® wire rope cable, and some are also in conformity with the main requirements of EN 13157 Standard.



## DESCRIPTION

A hook with safety latch is installed on the EGZ's snatch blocks model to ensure a quick and safe attachment.

Once the snatch block is not under tension, the opening, operated by turning  $\frac{1}{4}$  turn the snatch block body around the steel crosshead, makes the introducing of the wire rope in the groove possible, while the block remains suspended. All the parts stay interdependent during the flange opening and the wire rope introduction.

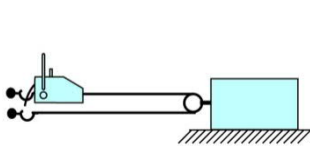
The locking axle is secured by a safety pin, which prevents from any unscrewing or uncontrolled movement.

Steel crosshead with self-locking trunnions avoids any opening of the loaded snatch block. This locking system is easy and efficient.

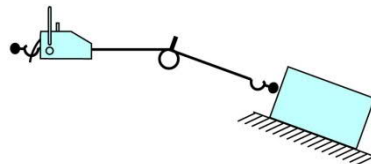
The ring becket allows a block sheaving 3 times thanks to a shackle, hook etc.

### Installation examples

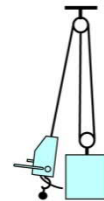
Traction block assembly



Change of wire rope direction



Lifting block assembly



Examples :

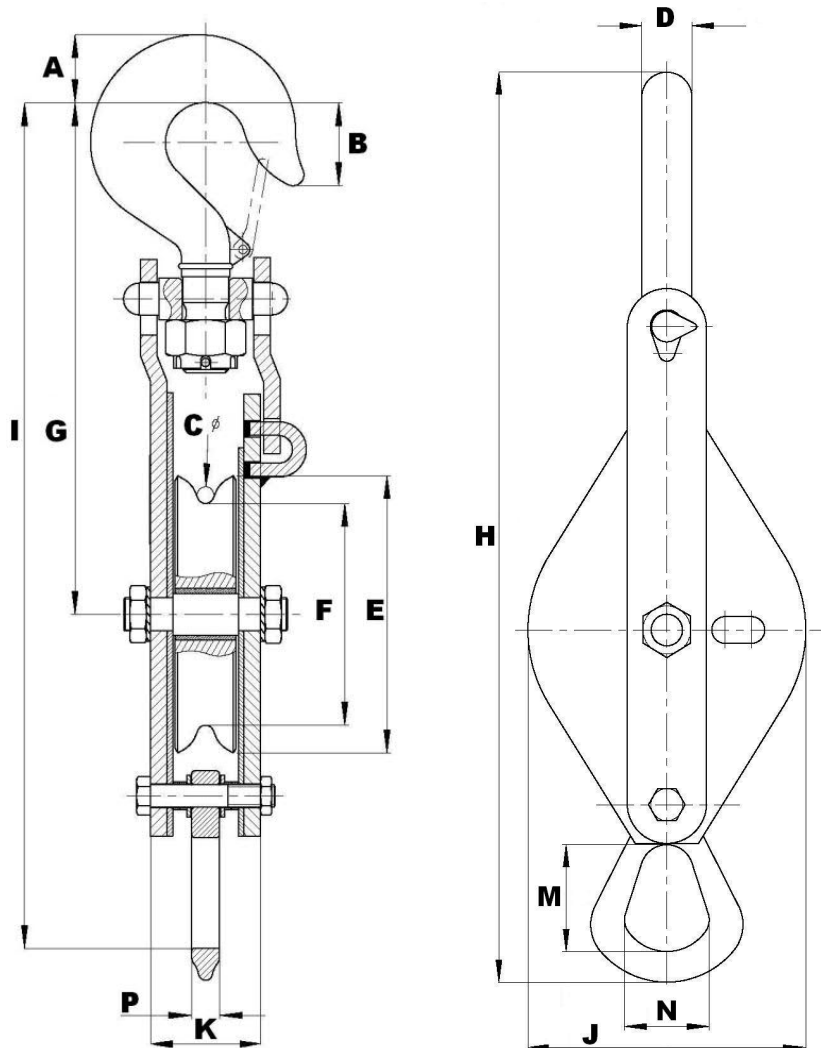
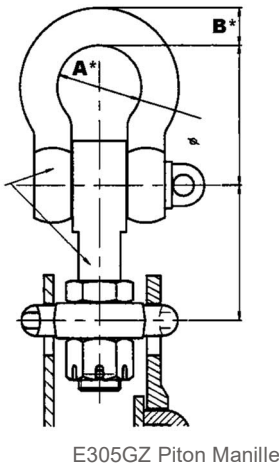
- 2-fall reeving with tirfor 800 kg: lifting capacity  $2 \times 800 = 1600$  kg
- 3-fall reeving with tirfor 800 kg: lifting capacity  $3 \times 800 = 2400$  kg

## TECHNICAL CHARACTERISTICS

- Ultimate load is 4 times the working load limit (WLL).
- Zinc bichromated coating.
- The sheaves are fitted either on bronze bush or on ball or roller bearing (Please refer to the below table)
- Some pulleys (listed below), are in conformity with EN13157 requirements

**DIMENSIONAL CHARACTERISTICS**

| Ref.                | Group code | WLL <sup>1</sup><br>(t) | EN<br>13157 | Bushing <sup>2</sup> | Dimensions in mm           |               |                   |    |    |    |     |     |     |     |    |     |    |    |    |    |      | Weight<br>(kg) |
|---------------------|------------|-------------------------|-------------|----------------------|----------------------------|---------------|-------------------|----|----|----|-----|-----|-----|-----|----|-----|----|----|----|----|------|----------------|
|                     |            |                         |             |                      | Sheave Ø                   |               | Rope Ø            |    | A  | B  | D   | G   | H   | I   | J  | K   | L  | M  | N  | O  | P    |                |
|                     |            |                         |             |                      | F<br>Ø<br>BoG <sup>3</sup> | E<br>Ø<br>Ext | C<br>Ø<br>min/max |    |    |    |     |     |     |     |    |     |    |    |    |    |      |                |
| E303GZ              | 101829     | 1                       |             | Bb&Gr                | 80                         | 100           | 8/9               | 33 | 43 | 24 | 225 | 440 | 389 | 106 | 38 | 50  | 50 | 69 | 52 | 18 | 3    |                |
| E460GZ <sup>4</sup> | 101839     | 2.4                     | Yes         | Bb&Gr                | 132                        | 160           | 7,5/8,3           | 41 | 59 | 30 | 315 | 594 | 530 | 170 | 58 | 77  | 80 | 64 | 23 | 20 | 7    |                |
| E313GZ              | 105629     | 2                       |             | Bb&Gr                | 132                        | 160           | 10/12             | 41 | 59 | 30 | 315 | 594 | 530 | 170 | 58 | 77  | 80 | 64 | 23 | 20 | 7    |                |
| E323GZ              | 192859     | 3,2                     |             | Bb&Gr                | 160                        | 200           | 13/15             | 49 | 60 | 38 | 369 | 682 | 610 | 210 | 80 | 94  | 80 | 64 | 23 | 20 | 15,5 |                |
| E470GZ <sup>4</sup> | 101849     | 4.8                     | Yes         | Bb&Gr                | 160                        | 200           | 10/11,5           | 49 | 60 | 38 | 369 | 682 | 610 | 210 | 80 | 94  | 80 | 64 | 23 | 20 | 15,5 |                |
| E490GZ              | 192869     | 5                       |             | Bb&Gr                | 160                        | 200           | 13/15             | 49 | 60 | 38 | 368 | 696 | 617 | 210 | 80 | 94  | 80 | 64 | 23 | 20 | 17   |                |
| E333GZ              | 192879     | 5                       |             | Bb&Gr                | 210                        | 250           | 16/18             | 49 | 60 | 38 | 405 | 769 | 690 | 260 | 88 | 94  | 80 | 64 | 23 | 20 | 20,2 |                |
| E480GZ <sup>4</sup> | 101859     | 6,4                     |             | Ro                   | 275                        | 336           | 14/16,3           | 68 | 80 | 48 | 510 | 982 | 878 | 343 | 92 | 110 | 92 | 74 | 36 | 25 | 34   |                |
| E347GZ              | 192889     | 8                       |             | Ro                   | 275                        | 336           | 21/23             | 68 | 80 | 48 | 510 | 982 | 878 | 343 | 92 | 110 | 92 | 74 | 36 | 25 | 34   |                |
| E305GZ              | 252119     | 1                       |             | Bb&Gr                | 80                         | 100           | 8/9               | 36 | 16 | /  | 235 | 433 | 399 | 106 | 38 | 50  | 69 | 52 | 18 | 16 | 3    |                |



<sup>1</sup> WLL : Working load limit  
<sup>2</sup> Bb & Gr : bronze bush & axial lubricator - Ro : roller bearing  
<sup>3</sup> BoG : Bottom of groove  
<sup>4</sup> For tirfor® ropes

## NON-CONFORM USES

- **NEVER USE FOR PERSONNEL LIFTING.**
- Strictly forbidden to either be under or to walk under the load.
- The block should be regularly inspected (priority checking: parts correctly assembled, no excessive movement, no excessive wearing or corrosion, no deformation, no weld corrosion or cracking, free rotating sheave).
- Prior to using the block, check for proper position and locking of the snatch block.
- Never use a block with a hook as head fitting without ensuring that the safety latch is correctly operated and free from deformation.
- For lifting operations, the user must refer to the safety rules and regulations applicable to this issue.
- When using a block sheaving 3 times, ensure that the block on which the becket is loaded is not over-loaded (see here after).

## WIRE ROPE STRENGTH REDUCTION

**Pitch  $\varnothing$  (=  $\varnothing$  BoG + rope  $\varnothing$ )**

The ratio **Rope  $\varnothing$**  between the pitch diameter of the sheave and the wire rope diameter, called the winding ratio, alters the tensile strength in the wire rope as hereafter:

| Winding ratio | Reduction |
|---------------|-----------|
| 6             | 21%       |
| 8             | 17%       |
| 10            | 14%       |
| 15            | 11%       |
| 20            | 9%        |

Above values are given for information only, up to the construction of the wire rope.

For more information, please ask your wire rope supplier.

## MAXIMAL EFFORT APPLIED ON THE HEAD FITTING OF THE BLOCK

The maximal effort applied on the suspension is depending on the load and on the  $\alpha$  angle formed between the fall of the load and the fall on which this effort is applied.

The resultant value must be strictly lower to the working load limit (WLL) of the block and the resistance of the anchorage point where the block is fitted.

| Angle $\alpha$ | Suspension load  |
|----------------|------------------|
| 0°             | Hoist WLL x 2    |
| 15°            | Hoist WLL x 1.98 |
| 30°            | Hoist WLL x 1.95 |
| 45°            | Hoist WLL x 1.85 |
| 60°            | Hoist WLL x 1.73 |
| 90°            | Hoist WLL x 1.41 |
| 120°           | Hoist WLL x 1    |
| 150°           | Hoist WLL x 0.52 |
| 180°           | 0                |



Important remark : In case on a 3 legs block assembly, add to the above calculated effort the load applied on the becket. The total value of the calculated effort must be strictly lower to the working load limit (WLL) of the block and the resistance of the anchorage point where the block is fitted.