technical sheet

EC

Swing blocks for wire rope

ref.: rev.: T 6055 GB

date:

June 05

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Applications

The swing blocks of EC type are mainly used for temporary applications for lifting or pulling. 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 a light weight, this is the most current block used for repairing operations. These swing blocks are most often used as winch accessory on 4WD cars.

Description

The large holes in the bearing flanges offer several anchorage alternatives means of shackles, axles, chains, hooks, slings. The holes can also be used as handles for an easy transportation. Once the swing blocks are attached, locking the two flanges, the opening is impossible making the pulling or lifting operation in full security.



Technical characteristics

- Ultimate load 4 times the Working Load Limit (WLL).
- Zinc bichromated coating as finishing.
- The sheaves are fitted on tempered and cemented pins with a full covered lubricating nipple.

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Dimensional characteristics

WLL*	wire rop e Ø		outside Ø of the roller					weight	type
	mini	maxi	E	Н	K	Α	В		
t	mm	mm	mm	mm	mm	mm	mm	kg	
1.6	8	9	100	180	60	66	40	2.2	EC1.6-100E9
3.2	10	12	160	260	80	86	50	4.8	EC3.2-160E12
5	13	15	200	330	100	106	60	9.3	EC5-200E15
8	16	18	250	410	120	138	80	19.4	EC8-250E18

Working Load Limit



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Non-conform uses

- DO NOT USE FOR PERSONNEL LIFTING.
- Strictly forbidden to either be under or walk under the load.
- Do not use as a lifting block (holes profile not suitable).
- Never use the block without priory checking:
 - parts correctly assembled,
 - excessive movement,
 - excessive wearing or corrosion,
 - deformation,
 - no weld corrosion or cracking,
 - free rotating sheave.
- Prior to using the block, check for proper position and locking of the axles. Threaded axle head should be visible after applications of nuts.

Wire rope strength reduction

Pitch Ø (= BOG Ø + 1 w/r Ø)

The ratio Wire rope Ø 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, depending on the construction of the wire rope.

For more information, please ask your wire rope supplier.

Maximal effort applied on the headfitting of the block

The maximal effort applied on the suspension must be strictly lower to the resistance of the anchorage point where the block is fitted. This suspension depends on the load and on the α angle formed between the fall of the load and the fall on which this effort is applied. The resultant value should never exceed the working load limit of the block.

Please refer to the table and sketch hereunder indicated:

α angle	Swing block WLL
0°	Winch WLL x 2
15°	Winch WLL x 1.98
30°	Winch WLL x 1.95
45°	Winch WLL x 1.85
60°	Winch WLL x 1.73
90°	Winch WLL x 1.41
120°	Winch WLL x 1
150°	Winch WLL x 0.52
180°	Winch WLL x 0





