PHILIPPGROUP

PHILIPP Wire protection pulley

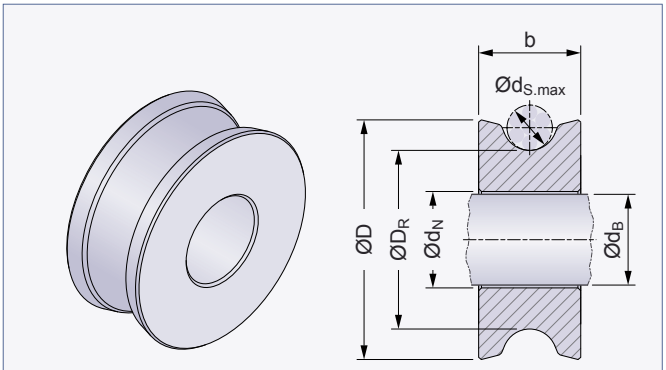
for Cast-in lifting hoops

Application Instruction

VB3-T-063-en - 03/17

PHILIPP Wire protection pulley

The Wire protection pulley is an accessory for the PHILIPP Cast-in lifting hoop and is used to protect the wire respectively to ensure the capacity of the Cast-in lifting hoop. When the Wire protection pulley is used a strong deformation of the wire rope caused by too small radii at the loading point is avoided.



Picture 1

Table 1: Dimensions

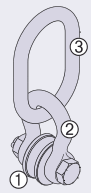
Ref.-No. Wire protection pulley	Type	ØD [mm]	$ØD_R$ ($ØD_R \geq 3.5 \times Ød_S$) [mm]	$Ød_{S.max}$ [mm]	$Ød_N$ [mm]	$Ød_B$ [mm]	b [mm]	Weight [kg/pc.]	for Cast-in lifting hoop Type	Colour code
44SR008020	2.0	43	31.5	9.0	17.0	16.0	18.0	0.12	0.8	Pure white
									1.2	Flame red
									1.6	Light pink
									2.0	Pastel green
44SR025063	6.3	75	56.0	16.0	26.0	25.0	32.0	0.75	2.5	Jet black
									4.0	Emerald green
									5.2	Curry
									6.3	Light blue
44SR080160	16.0	112	84.0	24.0	42.0	41.0	56.0	2.90	8.0	Silver grey
									10.0	Claret violet
									12.5	Sulfur yellow
									16.0	Blue lilac
44SR200250	25.0	148	112.0	32.0	53.0	52.0	68.0	6.25	20.0	Beige
									25.0	Clay brown
44SR280520	52.0	202	154.0	44.0	70.0	73.0	95.0	16.40	28.0	Pure white
									32.0	Jet black
									37.0	Salmon orange
									42.0	Salmon orange
									47.0	Salmon orange
									52.0	Salmon orange
44SR570990	99.0	256	196.0	56.0	95.0	98.0	140.0	29.00	57.0	Salmon orange
									65.0	Salmon orange
									75.0	Salmon orange
									85.0	Salmon orange
									99.0	Salmon orange

Wire protection pulley as a system

For different bearing capacities the Wire protection pulley is also available as a complete set. This consists of:

① a Wire protection pulley (Table 1)
② a high strength shackle with eye bolt (acc. to DIN EN 13889)
③ a master link (acc. to DIN EN 1677-4)

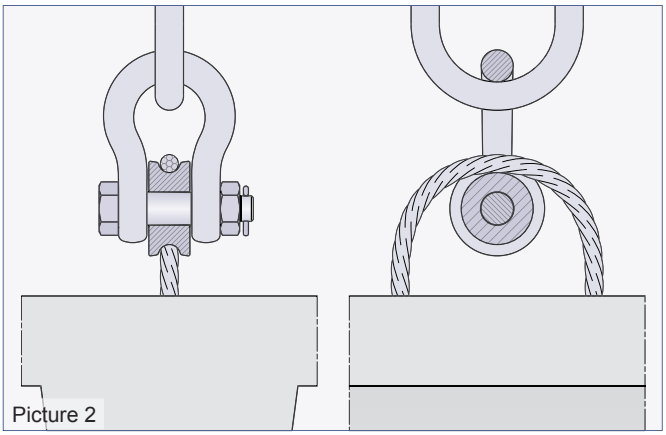
Table 2: System components

Ref.-No. System-complete		① Wire protection pulley [Type]	② Shackle [Nominal size]	③ Master link [Nominal size]
44SR008020K		2.0	2.0	A13
44SR025063K		6.3	6.5	A22
44SR080160K		16.0	17.0	A36
44SR200250K		25.0	25.0	A40
44SR280520K		52.0	55.0	-
44SR570990K		99.0	120.0	-

Technical Information / Application

Technical information

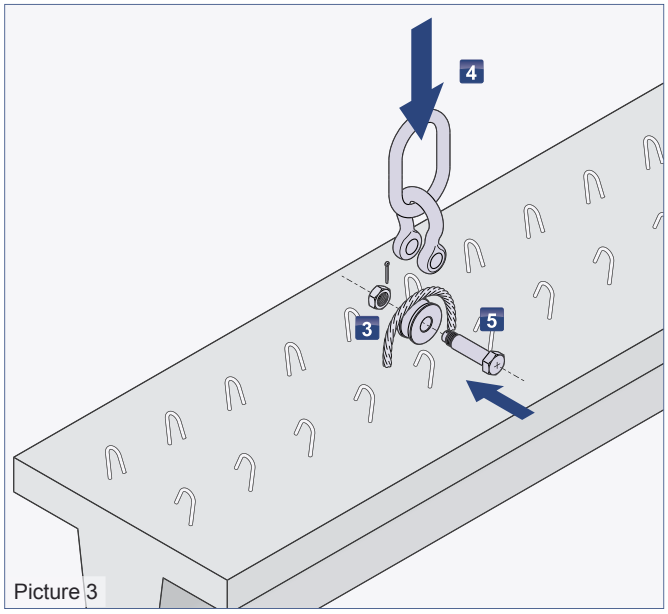
If wire ropes are bent round a bolt or hook the lateral pressure under tensile load might cause a reduction of the minimal breaking load of the wire rope. Based on an investigation of the accredited laboratory for wire ropes in Bochum, Germany, and results determined empirically it is advantageous not to fall below a special proportion between deviation radius and wire rope diameter.


Picture 2

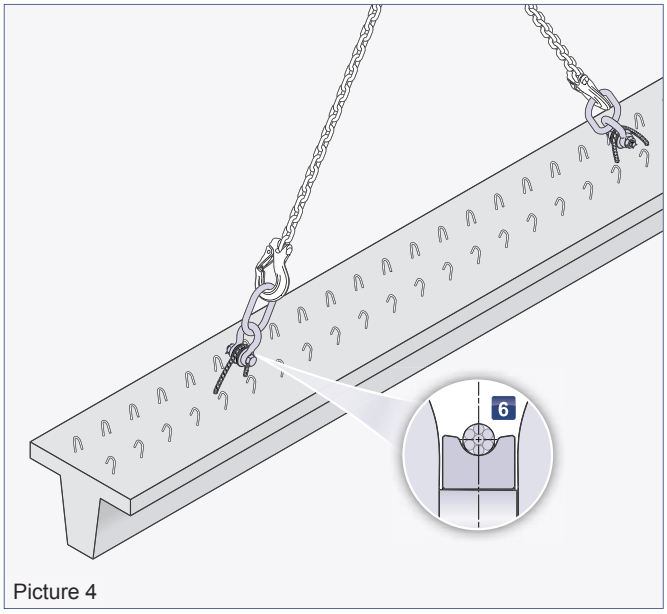
By using the Wire protection pulley the given radii of the Installation and Application Instruction for Cast-in lifting hoops are met.

Application

1. Dismantling of the Wire protection pulley and the bolt from the shackle (delivered pre-assembled).
2. Supply of the components at production site.
   Attention: Cleaning of the components and visual inspection for damages and inadmissible wear! If such impairments are detected the components must be marked as inoperative and must not be used anymore.
3. Positioning of the Wire protection pulley parallel to the wire rope of the Cast-in lifting hoop.
   Attention: If the elements' surface is sloped the Wire protection pulley must be prevented from inadvertent rolling.
4. Conduct the jaw of the shackle above the wire rope and the Wire protection pulley.
   Advice: Preferably, this step runs from the side, as the master link can be put down here on the concrete surface.
5. Positioning of shackle eyes axial to the Wire protection pulley centre and lock of the position by mounting the shackle bolt. After this, securing the shackle bolt by a nut screwed on and a split pin.
6. Lifting of the master link and fixation to the hook. Visual inspection of centric position of the Cast-in lifting hoop in the groove of the Wire protection pulley.



Picture 3



Picture 4

Notes: