

# PHILIPP GROUP

## PHILIPP Wire protection pulley



for Cast-in lifting hoops

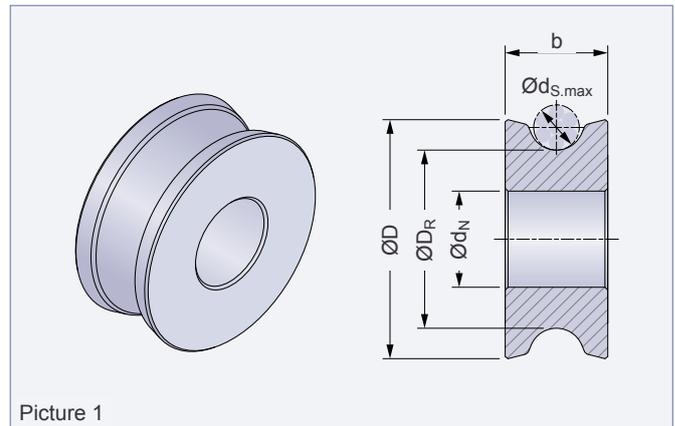
**Application Instruction**

## 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. It is available as a steel or plastic (POM) version.

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.

The Wire protection pulley is also available as a complete set for the different load classes. The system consists of a Wire protection pulley, a high strength shackle with eye bolt and a master link (see table 2).



Picture 1

**Table 1: Dimensions**

Ref.-No.	Type	ØD [mm]	ØDR (ØDR ≥ 3,5 × Øds) [mm]	Øds,max [mm]	ØdN [mm]	b [mm]	Weight [kg/pc.]	for Cast-in lifting hoop [Type]
<b>Version: steel</b>								
44SR008020	2.0	43	31.5	9.0	17.0	18.0	0.12	AS 0.8 - AS 2.0
44SR025063	6.3	75	56.0	16.0	28.0	32.0	0.75	AS 2.5 - AS 6.3
44SR080160	16.0	112	84.0	24.0	44.0	56.0	2.90	AS 8.0 - AS 16.0
44SR200250	25.0	148	112.0	32.0	53.0	68.0	6.25	AS 20.0 - AS 25.0
44SR280520	52.0	202	154.0	44.0	73.0	95.0	16.40	AS 28.0 - AS 52.0
44SR570990	99.0	256	196.0	56.0	98.0	140.0	29.00	AS 57.0 - AS 95.0
<b>Version: plastic (POM)</b>								
44SR008020POM	2.0	43	31.5	9.0	17.0	18.0	0.02	AS 0.8 - AS 2.0
44SR025063POM	6.3	75	56.0	16.0	28.0	32.0	0.13	AS 2.5 - AS 6.3
44SR080160POM	16.0	112	84.0	24.0	44.0	56.0	0.52	AS 8.0 - AS 16.0
44SR200250POM	25.0	148	112.0	32.0	53.0	68.0	1.12	AS 20.0 - AS 25.0
44SR280520POM	52.0	202	154.0	44.0	73.0	95.0	2.95	AS 28.0 - AS 52.0
44SR570990POM	99.0	256	196.0	56.0	98.0	140.0	5.23	AS 57.0 - AS 95.0

**Table 2: Wire protection pulley in a set / set components**

Ref.-No.			①	②	③
Steel	Plastic (POM)		Wire protection pulley	Shackle (acc. to DIN EN 13889)	Master link (acc. to DIN EN 1677-4)
			[Type]	[Nominal size]	[Nominal size]
44SR008020K	44SR008020POMK		2.0	2.0	A13
44SR025063K	44SR025063POMK		6.3	6.5	A22
44SR080160K	44SR080160POMK		16.0	17.0	A36
44SR200250K	44SR200250POMK		25.0	25.0	A45
44SR280520K	44SR280520POMK		52.0	55.0	A56
44SR570990K	44SR570990POMK		99.0	120.0	A90

## Technical Information / Application

### Technical information

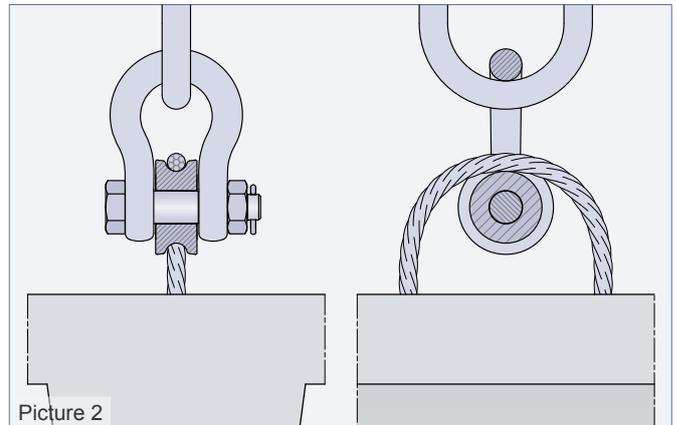
If wire ropes are bent round a bolt or hook the lateral pressure under tensile load might cause a reduction of the minimum breaking load of the wire rope. Based on an investigation of the accredited laboratory for wire ropes in Bochum, Germany, and results determined empirically it is advantageous not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



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

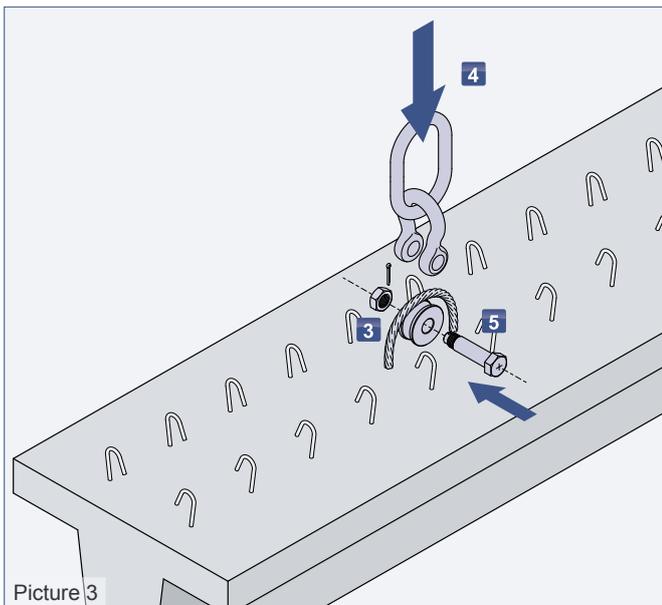
### Application

- 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.*

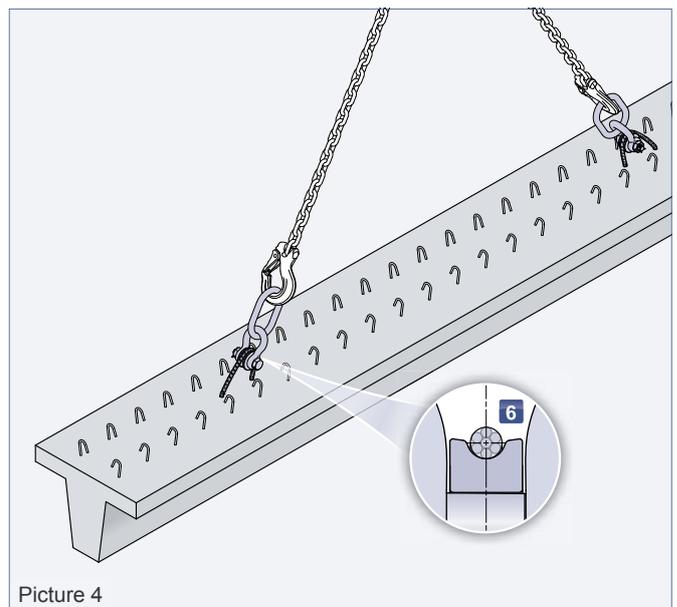


Picture 2

- 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

