

# MS-WASHER

The MS washer is the new washer designed by Sapim. As opposed to the MG washer the MS washer is pressed and not CNC made. The height is a bit lower as well and the V-shape ensures a perfect match with many different nipple shapes. This washer is not working with the Holland mechanic lacing machine, like the MG washer does, but is perfect for hand mounting. This washer will be added as a standard to the new Trace rims provided by Ryde.

**The advantages of the MS washer are multiple.**

▶ **Carbon Rims**

The stainless steel grade of the washer is 18/8 preventing corrosion between the contact points of the carbon rim and aluminum nipple.

▶ **Thin-walled Rims**

The washer increases the contact area significantly. As a result the strength around the nipple increases by about 30%. Broken nipple holes will be a problem of the past.

▶ **Low Friction**

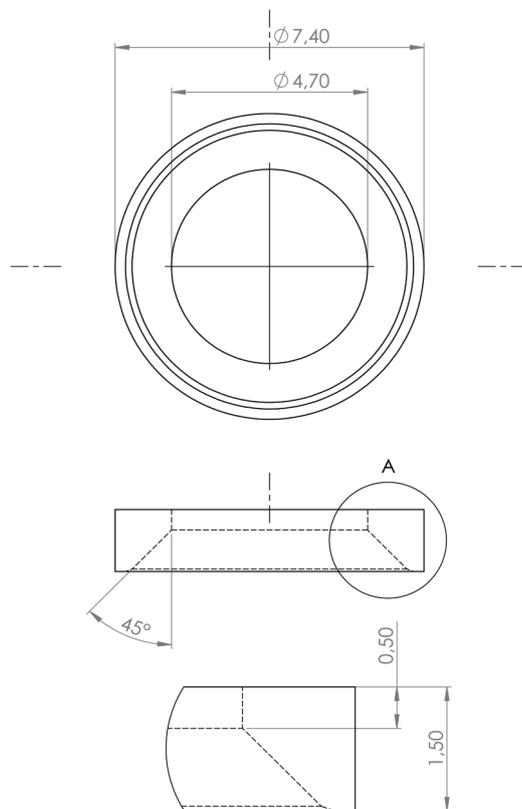
There is a reduction in friction when used with a Polyax head R3 due to the adapted washer nipple surface, resulting in controlled buildup of tension. Higher tension can also be achieved without damaging the nipple. The use of grease is advised.

▶ **Unmatched Spoke / Nipple Line**

The adapted nipple contact surface of the washers helps the nipple to work better as a ball joint. The result is a perfect alignment of spoke and nipple. The washer can move on the rim bottom and will bring the turning point of the nipple to the center of rim wall.

## The solution for many problems!

weight 10pcs	2,53 g
hight	1,5 mm
outside diameter	7,4 mm
inside diameter	4,7 mm
material stainless	18/8



When using the MS washer the spoke length needs to be adapted by 1mm. Please make sure the washer lays flat in the rim bed. If the rim bed is round shaped or very narrow (less than 7,5mm flat area) we advise to use our HM washer instead of the MS washer.

