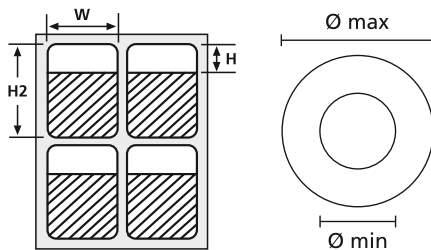## Instructions for using labels with protective laminate

Labels with protective laminate (also known as cable laminators) have a white or coloured label field which can be written on either manually using a marker pen (see RiteOn and HELASIGN) or using a matrix, laser or thermal transfer printer (see Helatag). Depending on the design for the respective type of printing, the title block has a special surface finish to achieve the optimum print anchorage to the label substrate. This results in long-lasting, clear, sharp writing with text, graphics or barcode. A special feature is that most of the HellermannTyton protective laminate labels come with rounded corners. This achieves greater final adhesion of the protective laminate and counteracts any undesirable removal of the label, especially with cables of small diameter and in heavy-duty applications.

When calculating the minimum and maximum diameters, the following formula has been used:

$$\text{Diameter} = \frac{\text{Length of laminate}}{\pi}$$

Pi (π) is the constant 3.14.

Helatag self-laminating labels.

Minimum diameter:

To save time, when wrapping the cable with the cable laminator, a limit of max. 2 windings has been set. The protective laminate length is calculated from: Height H2 – height H

By applying the "diameter" formula this produces the approx. minimum diameter:

$$\text{Diameter}_{min} = \frac{H2 - H}{2*\pi}$$

Example: TAG136LA4 (H = 19.05 mm; H2 = 67.7 mm)

$$\text{Diameter}_{min} = \frac{67.7 - 19.05}{2*3.14}$$

Maximum diameter:

In this case the minimum requirement is complete coverage of the label field with the protective laminate with a single winding. The length of the protective laminate is again obtained from the formula: H2 – H.

By applying the "diameter" formula this produces the approx. maximum diameter, which also corresponds to double the minimum diameter:

$$\text{Diameter}_{max} = \frac{H2 - H}{\pi} = 2*\text{Diameter}_{min}$$

Example: TAG136LA4 (H = 19.05 mm; H2 = 67.7 mm)

$$\text{Diameter}_{max} = \frac{67.7 - 19.05}{3.14} = 2*\text{Diameter}_{min}$$