

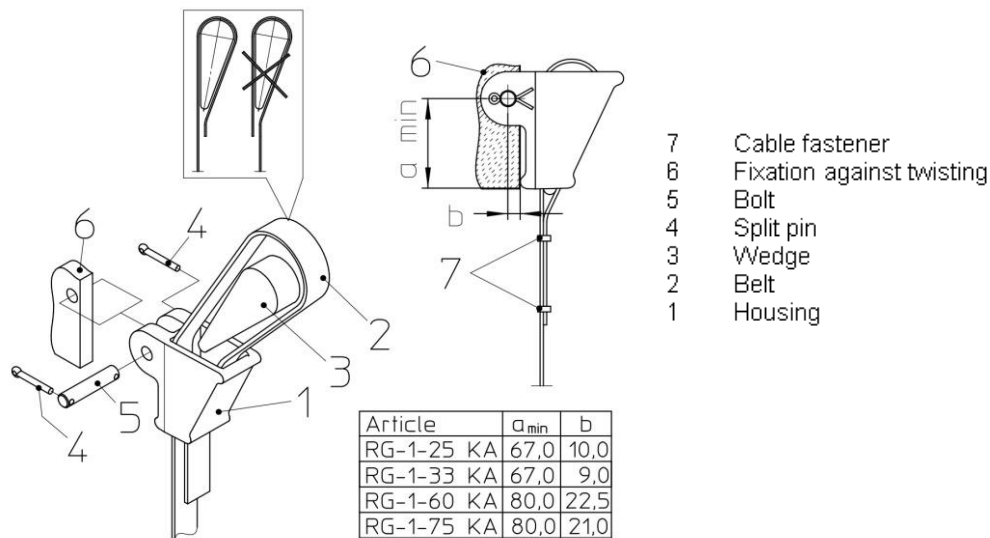
## **Instruction for the use of short wedge sockets for fixation of belt (e.g. type Conti Polyflat and Polyrope)**

### Method of assembly:

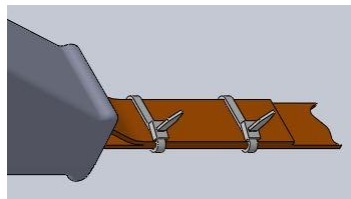
1. Prior to assembly the wedge socket housing and the wedge should be examined to ensure they are free from any defect that would affect the effectivity and performance of the assembly.
2. The housing, wedge and belt must be free of grease, oil, graphite and other substances that reduce friction.
3. It is essential to use only a wedge and a housing of the correct dimensions and strength for the particular belt. Failure to do so may result in the belt slipping out of the housing, or in failure of the belt or the termination. No attempt must be made to do modifications to the housing and/or the wedge in any way.
4. Housings and wedges from different manufacturers should not be assembled together, even though they may be designed for the same belt size. Components of different designs must not be mixed, and the manufacturer's marks and the fit of the wedge (with the belt) in the housing should always be checked upon assembly.  
An oversize wedge, or a wedge of wrong taper will not fit sufficiently into the housing to assure a secure connection; a too small wedge will protrude too far out of the housing, which could effect high local loads that may cause the housing to rupture and crack, allowing the wedge to pull through.  
To reduce the risk of housing and a wedge of different size or manufacture, the housing, the pin and the wedge should be secured together during storage and transportation of the termination.
5. When a belt is to be modified in a belt-end connection, this can only be achieved by shortening the belt and brought into another position within the housing.  
No part of any previous flattening and/or damaged belt should be within the area of the bearing part of the belt or within the clamping area between either side of the housing and the wedge.
6. The belt should be fitted into the housing, so that the bearing part is not kinked where it leaves the housing. Incorrect fitting will result in premature failure of the belt.
7. When the termination is made up, the tail-end of the belt left protruding should be long enough for the securing method according to fig.2.  
For particular uses, other methods for securing the tail-end could be applicable. It should be checked, whether these are allowed for whatever use.
8. After termination has been made, it is essential to check that the wedge and the belt are properly seated into the housing before the equipment is put into service. Failure to do so may allow the belt to pull through the housing or, particularly using a new belt, the wedge may slip out of the housing.

9. Tension should be applied to both sides of the belt, in order to pull the belt and the wedge safely into the housing. The wedge can / should be hammered home using a wooden packer to protect the housing and the belt against damage. A load should be applied and maintained under attention, to seat the wedge and the belt firmly into the housing. The wedge must be seated properly before the assembly is put into service.

It is absolutely essential that the housing is fixed against rotation. (see drawing point 6)



10. In order to prevent a possible pulling through of the belt while assembling or a possible loosening of the wedge while operating, the dead end side of the belt has to be secured. Upon securing the dead end side of the belt, different operating conditions have to be considered. Depending on these conditions, different methods are proposed for treatment of the non bearing end of the belt.



For certain applications there are even further possibilities of securing the non-bearing end of the belt.

Special care must become necessary, when tension should be completely removed from the belt and the wedge may become loosened.

11. The pin should be secured in such manner, that it cannot change position during operation.
12. If the belt-end connection within this wedge-socket is exposed to raised temperatures (e.g. by fire), all parts of the belt-end connection have to be replaced by completely new parts.

### **Inspection in use:**

1. Belt-end connections must always be examined at the time of belt inspection.
2. Particular attention should be paid to the following:
  - a. Belt-damages, e.g. broken wires or deformation of the belt where it emerges from the housing
  - b. The condition of the housing, e.g. cracks, particularly if the wedge is seen to protrude excessively. The lugs of the housing should be examined for possible deformation, cracks or other defects
  - c. The security and tightness of the wedge fitting
  - d. Condition of the pin including any screw thread and the presence of the split pin being correctly positioned and fit into.
  - e. Security of the non-bearing end of the belt is existing
  - f. Cable tie (Pos. 9) is existing
3. Each time the connection is removed for whatever reason, the housing and the wedge, as well as the area of the belt positioned within the housing have to be examined. Damaged wedges and housings have to be exchanged.