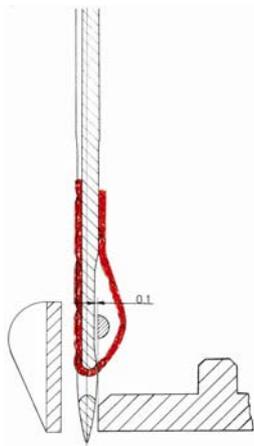


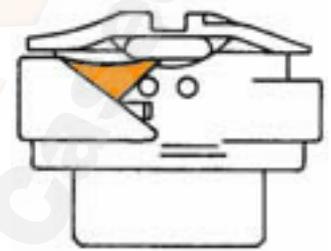
## The horizontal rotary hook can be of two executions:

The hook point is at the same level as the bottom of the needle passing window.



The FA execution is particularly suited for needles with thickness 70 through 100 (metric, corresponding to American Singer sizes 10 through 16) and is used for all generic stitching on normal fabrics that do not present particular problems for the hook point to enter into the needle thread loop, as it is instead the case with many elasticized fabrics. During the stitching, the fabrics and threads used allow a regular formation of the upper thread loop, which is caught safely by the hook point.

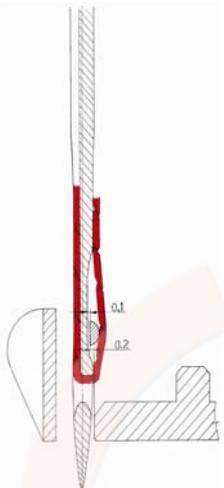
The drawing at the side shows the FA type hook in operation. The upper thread loop is well formed and the hook point is catching it without any problem. If the needle deflects during the stitch formation, the needle guard surface protects the hook point from a possible collision with it.



**FA**

The hook point is higher than the bottom of the needle passing windows.

Everybody is aware of the increasing difficulties to create a good stitching with the present materials, due to the use of specialty yarns and fabrics, which are continuously changing in their basic structure and used materials. This constant evolution forces those who are operating subsequently in the manufacturing cycle, as the sewing machine and components manufacturers like Cerliani, to find solutions to the problems when the new fabrics are already on the work-bench.



The hook in execution FB, if used with the right needle, solves the problem of skipping stitches with those material that due to their stretchy nature or to their structure, do not favor the formation of a good thread loop during the upwards run of the needle.

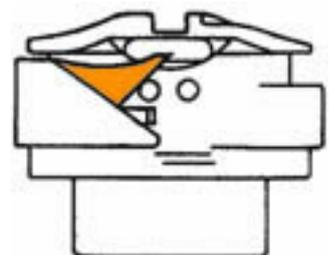
In some sewing conditions, using synthetic fabrics or other specialty fabrics such as elastics, the needle thread loop cannot form itself regularly. To solve this problem a needle with a very deep groove or with an offset point is used, along with the FB hook execution.

The FB execution is therefore particularly suited for needles with a very deep groove, such as Singer MR, Schmetz SERV 7 or Groz-Beckert SAN as well also for needles with thickness 120 through 160 (metric, corresponding to American Singer sizes 19 through 23).

The drawing shows the FB type hook in operation, where the needle thread has difficulties to form the loop. The problem is solved by using a needle with a deeper groove, along with the FB execution hook. This execution indeed allows to put the hook point closer to the bottom of the needle groove, to make sure that the hook point catches the loop, even if it is barely open.

Also with the FB type hooks, if the needle deflects during the stitch formation, the needle guard surface protects the hook point from a possible collision with it. However, since the needle guard surface is designed for the above described needles (with deep groove or sized 120 through 160 in the metric system), it would not be anymore effective with normal and thin needles (sized 70 through 100 in the metric system), for which it is necessary to adopt the FA execution.

All hooks are normally in the FA version. However, on request, all of them can be supplied in the FB version. The hooks already standard in the FB version are clearly indicated in the catalogue with these letters.



**FB**