Challenging sewing processes require the use of special needles. Conventional needles often do not correspond to the requirements, for instance in the processing of especially fine or elastic materials, with use of heavy sewing threads or in multidirectional sewing. For special uses, SCHMETZ offers a range of needles of special geometry including the SCHMETZ SERV 7, KN, SF and GO.

- Highly elastic materials
- Sewing a varying number of material layers in one operation
- Thick and strong material layers
- Material combinations
- Cross seams
- Multidirectional seams
- Use of elastic sewing threads
- Very fine and extremely fine knitwear
- Use of heavy sewing threads even for sensitive materials
Increased needle stability and reliable seams

Advantages:
- Effective prevention of skipped stitches
- Extremely high needle stability prevents the needle from deflection
- Less needle breakage
- Compared to a standard needle a smaller needle size possible without loss of stability
- Precise stitches and therefore neat seam appearance
- High productivity
- Reduced wear on machine parts (hook, needle plate, etc.) and therefore reduced costs

Features:
- The hump scarf (raised collar between eye and scarf) produces a larger needle thread loop which can easily be picked up by the hook
- The extra reinforcement of the blade increases the needle stability and prevents the needle from deflection

Application:
- Highly elastic materials
- Sewing a varying number of material layers in one operation
- Thick and strong material layers
- Material combinations
- Cross seams
- Use of elastic sewing threads
- Multidirectional seams
**Slim needle against knitwear damage**

**Advantages:**
- Smaller stitch holes than with standard needles
- Minimizes knitwear damage due to the slim shape
- Reduced penetration force in comparison to standard needles

**Features:**
- Slim, continuous cylindrical blade without any reinforcement
- Reduced cross-section of eye area
- Slim shape from eye area to point
- Ball point

**Application:**
- Very fine knitwear
- Reduction of seam puckering

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**Extra slim point and eye area for finest knitwear**

**Advantages:**
- Smaller stitch holes than with standard needles
- Minimizes knitwear damage due to the very slim shape
- Reduced penetration force in comparison to standard needles

**Features:**
- Slim, continuous cylindrical blade without any reinforcement
- Reduced, very slim cross-section of eye area
- Very slim shape from eye area to point
- Ball point

**Application:**
- Extremely fine knitwear, e.g. 40 to 42 gauge
Large eye for heavy sewing threads

**Advantages:**
- Thread guidance optimized by lowered friction, smooth passage of the sewing thread
- Minimization of damage to the sewing thread
- Reduced machine downtime
- Allows the use of thinner needles without changing the thread size
- Allows the use of a thicker sewing thread without changing the needle size

**Features:**
- Eye enlarged by 2 NM in relation to needle size
- Enlarged groove

**Application:**
- Use of heavy threads or effect threads
- Decorative seams
- For achieving smaller stitch holes by using thinner needles, without getting thread problems

For further information on needles of special geometry, please contact:
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