

Square Mesh Wire Cloth - Technical Data

| Clear-mesh w μm | Wire-diameter d mm | Cloth-Designation | Elastic Limit warp/fill Rp N/cm | AsK mm ² /cm | AsS mm ² /cm | Porosity % | A _{0rel} % | Weight kg / m ² | Cloth Thickness mm | Eu |
|-------------------------------|-----------------------|-------------------------|---------------------------------------|----------------------------|----------------------------|---------------|------------------------|-------------------------------|--------------------------|-----|
| 20 | 0,020 | w 0,020 mm - d 0,020 mm | 25 / 25 | 0,08 | 0,08 | 63 | 25 | 0,13 | 0,04 | 136 |
| 25 | 0,025 | w 0,025 mm - d 0,025 mm | 35 / 35 | 0,10 | 0,10 | 63 | 25 | 0,16 | 0,05 | 111 |
| 32 | 0,025 | w 0,032 mm - d 0,025 mm | 30 / 30 | 0,09 | 0,09 | 68 | 32 | 0,14 | 0,05 | 65 |
| 42 | 0,036 | w 0,042 mm - d 0,036 mm | 45 / 45 | 0,13 | 0,13 | 66 | 29 | 0,21 | 0,08 | 57 |
| 50 | 0,040 | w 0,050 mm - d 0,040 mm | 45 / 45 | 0,14 | 0,14 | 67 | 31 | 0,23 | 0,09 | 45 |
| 63 | 0,040 | w 0,063 mm - d 0,040 mm | 40 / 40 | 0,12 | 0,12 | 71 | 37 | 0,20 | 0,09 | 28 |
| 71 | 0,050 | w 0,071 mm - d 0,050 mm | 55 / 55 | 0,16 | 0,16 | 70 | 34 | 0,26 | 0,11 | 29 |
| 80 | 0,050 | w 0,080 mm - d 0,050 mm | 50 / 50 | 0,15 | 0,15 | 72 | 38 | 0,24 | 0,11 | 23 |
| 100 | 0,065 | w 0,100 mm - d 0,065 mm | 70 / 70 | 0,20 | 0,20 | 71 | 37 | 0,33 | 0,14 | 20 |

A_{0rel}: = theoretical free flow are, through which the filtrate can flow relative to the area subject to the flow.

AsK and AsS: the effective cross section of the cutting edges, which run perpendicular to the wires to absorb drag. AsK = warp direction. AsS = fill direction.

Rp = maximum permissible stress on the cloth in the warp or fill direction without causing lasting and significant deformation.

The **porosity, weight and thickness** are approximate values. These depend largely on the tolerance of the wires.

Eu: The non-dimensional Euler number describes the ratio of pressure forces to inertial forces for the different weave specifications at similar flow conditions. The higher the Euler number of a weave specification, the higher the pressure loss of this weave specification will be. The Euler number allows comparison of differing weave specifications in terms of pressure loss.

The geometric pore size defines the diameter of the largest sphere passing through the weave.

The values given are typical values for the filter cloths. They should not be used to infer any warranted qualities.

Spoerl reserves the right to make technical changes and improvements at any time.

