

## Robusta - Technical Data

Geometrical pore size $\mu\text{m}$	Cloth-Designation	Elastic Limit warp/fill Rp N/cm	Number of Pores N Poren/cm <sup>2</sup>	AsK mm <sup>2</sup> /cm	AsS mm <sup>2</sup> /cm	Porosity %	A <sub>0rel</sub> %	Weight kg / m <sup>2</sup>	Cloth Thickness mm	Eu
17	720 x 150	95 / 205	33.500	0,27	0,58	52	14	0,69	0,18	1.122
19	625 x 130	100 / 250	25.188	0,34	0,68	50	12	0,82	0,21	1.071
21	600 x 125	100 / 220	23.300	0,34	0,60	53	17	0,75	0,20	747
31	600 x 100	100 / 220	18.600	0,33	0,61	57	30	0,75	0,22	517
40	280 x 70	210 / 330	6.100	0,71	0,95	56	23	1,34	0,39	326
53	175 x 50	400 / 480	2.700	1,23	1,39	55	15	2,11	0,60	254
65	140 x 40	600 / 550	1.700	1,55	1,79	55	32	2,80	0,76	221
83	130 x 35	520 / 600	1.400	1,63	1,73	57	17	2,70	0,80	154
151	108 x 24	600 / 330	804	2,09	0,96	63	24	2,50	0,86	59
175	86 x 21	690 / 360	560	2,39	1,04	64	22	2,80	1,00	45
*75	*400 x 125	160 / 135	3.900	0,55	0,39	58	16	0,75	0,23	119

\*Robusta twill. Pore sizes are determined using the glass bead test.

**A<sub>0rel</sub>**: = theoretical free flow area, 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.