

## Betamesh - Technical Data

Geometrical pore size $\mu\text{m}$	Cloth-Designation	Elastic Limit warp/fill $R_p \text{ N/cm}$	Number of Pores $N \text{ Poren/cm}^2$	AsK $\text{mm}^2/\text{cm}$	AsS $\text{mm}^2/\text{cm}$	Porosity %	$A_{0rel}$ %	Weight $\text{kg} / \text{m}^2$	Cloth Thickness $\text{mm}$	Eu
15	Betamesh 15	55 / 70	75.300	0,14	0,17	65	22	0,25	0,09	556
20	Betamesh 20	70 / 90	52.200	0,17	0,21	64	27	0,32	0,11	520
25	Betamesh 25	95 / 100	38.000	0,22	0,23	64	31	0,37	0,13	431
30	Betamesh 30	110 / 110	28.200	0,27	0,27	64	33	0,45	0,15	410
35	Betamesh 35	130 / 120	21.200	0,32	0,30	64	33	0,51	0,17	353
40	Betamesh 40	140 / 140	16.300	0,35	0,33	65	34	0,57	0,20	299
50	Betamesh 50	190 / 190	10.900	0,45	0,42	64	35	0,72	0,25	244
60	Betamesh 60	210 / 230	7.400	0,53	0,50	65	34	0,86	0,30	209
75	Betamesh 75	280 / 240	4.600	0,69	0,63	64	34	1,11	0,38	176
90	Betamesh 90	330 / 320	3.200	0,82	0,75	65	33	1,31	0,46	139
125	Betamesh 125	400 / 400	1.700	1,22	1,19	63	34	1,90	0,66	99
150	Betamesh 150	450 / 450	1.000	1,45	1,29	65	28	2,20	0,82	65
180	Betamesh 180	700 / 600	700	1,91	1,53	65	28	2,80	1,00	61

**$A_{0rel}$ :** = 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.

**$R_p$**  = 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.