

product solution

# NBC V-Screen Hybrid Super Fiber Mesh

V-Screen is a high performance mesh woven with *VECRY*, an innovative hybrid super fiber, and designed for high end applications requiring extreme resolution and superior dimensional accuracy. It is ideal for use in the production of solar cells, touch panels, capacitors (MLCC & LTCC), printed circuit boards, and other high-end industrial applications.



**VECRY** is a thermotropic liquid crystal polymer derived originally from VECTRAN materials used for the landing systems on NASA Mars missions, and most recently utilized on next generation semi-rigid airships. It combines a solid VECTRAN core with a sheath composed of VECTRAN fibers surrounded by a PEN polymer in an “island-in-a-sea” construction. This gives V-Screen a distinct performance advantage over stainless steel mesh.

## FEATURES

- Superior dimensional accuracy as a result of 2x the tensile strength of standard stainless steel wire
- Super high resolution as a result of the ultra smooth thread surface provided by VECRY
- A more durable stencil because of extreme light transparency

## ITEM DETAILS

MESH CODE	MESH COUNT /in (±3)	MESH COUNT /cm (±3)	WEAVE TYPE	THREAD DIAMETER μm	MESH THICKNESS μm (45-61")	MESH THICKNESS μm (65"+)	MESH OPENING μm	OPEN AREA (%)	THEORETICAL INK VOLUME cm <sup>3</sup> /m <sup>2</sup> (45-61")	THEORETICAL INK VOLUME cm <sup>3</sup> /m <sup>2</sup> (65"+)
V380-023	380	150	1 : 1 PW	23	43±3 μm	N/A	44	43	18.5	N/A
V330-023	330	130	1 : 1 PW	23	43±3 μm	N/A	54	49	21.1	N/A
V300-030	300	118	1 : 1 PW	30	53±3 μm	N/A	55	42	22.2	N/A
V280-030	280	110	1 : 1 PW	30	53±3 μm	N/A	61	45	23.8	N/A
V250-030	250	90	1 : 1 PW	30	53±3 μm	N/A	72	50	26.4	N/A
V220-036	220	87	1 : 1 PW	36	64±3 μm	N/A	79	47	30.2	N/A
V160-045	160	63	1 : 1 PW	45	76±3 μm	N/A	114	51	39.1	N/A
V100-070	100	39	1 : 1 PW	70	119±3 μm	N/A	184	52	62.4	N/A
V50-100	50	20	1 : 1 PW	100	175±3 μm	N/A	408	65	112.9	N/A