

## KV11 Direct roving series

### Roving nomenclature.

*Example:* BCF 13-150-KV11 Direct  
BCF - basalt continuous filaments.  
13 - monofilament diameter [ $\mu\text{m}$ ].  
150 - linear density [tex].  
KV11 – type of sizing.



### Processing.

Basalt roving of this series is mainly recommended for processing into woven fabrics, UD tapes and multiaxial fabrics, filament winding, pultrusion, prepregs and other products based on polyester, vinyl ester and epoxy resins.

### Product description.

Property	Description
Type of fiber	basalt
Monofilament diameter [ $\mu\text{m}$ ]	10-20
Linear density [tex]	68-350 ( $\pm 5\%$ )
Type of sizing	silane
Sizing content (% wt.)	$\geq 0.4$
Resin compatibility	Polyester, vinyl ester
Moisture content (% wt.)	$< 0.1$

## Mechanical properties.

<b>Properties in epoxy impregnated strand (ASTM D2343)</b>	
Tensile strength, MPa	2900-3200
Tensile modulus, GPa	
for 10 $\mu\text{m}$	90-94
for 13 $\mu\text{m}$	88-92
for 17 $\mu\text{m}$	86-90
for 20 $\mu\text{m}$	84-88

<b>Tensile strength of dry fiber (ASTM D3822)</b>	
Tensile strength, mN/tex	
for 9-10 $\mu\text{m}$	$\geq 750$
for 13 $\mu\text{m}$	$\geq 700$
for 17 $\mu\text{m}$	$\geq 650$

## Applications.

High pressure vessels, CNG cylinders, boat building, bridge profiles, concrete reinforcing bars, fabrics for sound and heat insulation and for corrosion applications.

## Packaging information.

Type of bobbins	Amount of roving, kg
Direct roving bobbin, internal diameter 200 mm, height – 255 mm	
68 tex	3-4
90 tex	4
105-350 tex	5

Direct roving is supplied on a 120x80 cm pallet with 2-4 layers, each bobbin is wrapped in thermo retractable film.

On a 4-layered pallet 60 bobbins of 3 kg and 56 bobbins of 5 kg direct rovings could be supplied.