

# Test of the **overarrows** package without options

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## 1 Loading the package without options

```
\usepackage{overarrows}
```

## 2 Tests of type **symbol** with **amsmath** config

```
\NewOverArrowCommand{\amsvector}{\amsmath}  
\TestOverArrow*{\amsvector}
```

### Test of **\amsvector** and **\amsvector\*** macros

#### **\amsvector** for different math styles

<b>\displaystyle</b>	<b>\textstyle</b>	<b>\scriptstyle</b>	<b>\scriptscriptstyle</b>
$\vec{v}$	$\vec{v}$	$\vec{v}$	$\vec{v}$
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

#### **\amsvector** kerning

$$\vec{t} \vec{u} \vec{v} \quad \vec{v}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

#### **\amsvector\*** kerning

$$\vec{t} \vec{u} \vec{v} \quad \vec{v}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

```
\NewOverArrowCommand{\amsstrictvector}{\amsmath=strict}
\TestOverArrow*{\amsstrictvector}
```

## Test of `\amsstrictvector` and `\amsstrictvector*` macros

### `\amsstrictvector` for different math styles

<code>\displaystyle</code>	<code>\textstyle</code>	<code>\scriptstyle</code>	<code>\scriptscriptstyle</code>
$\vec{v}$	$\vec{v}$	$\vec{v}$	$\vec{v}$
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

### `\amsstrictvector` kerning

$$\vec{t}_{\vec{u}\vec{v}} \quad \vec{v}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

### `\amsstrictvector*` kerning

$$\vec{t}_{\vec{u}\vec{v}} \quad \vec{v}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

### 3 Tests of type symb with esvect config

```
\NewOverArrowCommand{\esvector}{\esvect}
\TestOverArrow*{\esvector}
```

#### Test of \esvector and \esvector\* macros

##### \esvector for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\vec{v}$	$\vec{v}$	$\vec{v}$	$\vec{v}$
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

##### \esvector kerning

$$\vec{t}_{\vec{u}\vec{v}} \quad \vec{i}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

##### \esvector\* kerning

$$\vec{t}_{\vec{u}\vec{v}} \quad \vec{i}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

```
\NewOverArrowCommand{\esstrictvector}{esvect=strict}
\TestOverArrow*{\esstrictvector}
```

### Test of `\esstrictvector` and `\esstrictvector*` macros

#### `\esstrictvector` for different math styles

<code>\displaystyle</code>	<code>\textstyle</code>	<code>\scriptstyle</code>	<code>\scriptscriptstyle</code>
$\vec{v}$	$\vec{v}$	$\vec{v}$	$\vec{v}$
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

#### `\esstrictvector` kerning

$$\vec{t} \vec{u} \vec{v} \quad \vec{i}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

#### `\esstrictvector*` kerning

$$\vec{t}_{\vec{u} \vec{v}} \quad \vec{i}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$



## 4 Tests of type symb with options

```
\NewOverArrowCommand{\testovertextarrow}{%
  min length = 30,
  space before arrow=5ex,
  space after arrow=-.5ex,
  shift left = -5,
  shift right = -5,
  start={\Leftarrow},
  trim start=5,
  middle={\Relbar},
  trim middle=5,
  end={\Rightarrow},
  trim end=5,
  detect subscripts,
}
\TestOverArrow*{\testovertextarrow}
```

### Test of \testovertextarrow and \testovertextarrow\* macros

#### \testovertextarrow for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\overleftrightarrow{v}$	$\overleftrightarrow{v}$	$\overleftrightarrow{v}$	$\overleftrightarrow{v}$
$\overleftrightarrow{AB}$	$\overleftrightarrow{AB}$	$\overleftrightarrow{AB}$	$\overleftrightarrow{AB}$
$\overleftrightarrow{\text{grad}}$	$\overleftrightarrow{\text{grad}}$	$\overleftrightarrow{\text{grad}}$	$\overleftrightarrow{\text{grad}}$
$\overleftrightarrow{\text{my long vector}}$	$\overleftrightarrow{\text{my long vector}}$	$\overleftrightarrow{\text{my long vector}}$	$\overleftrightarrow{\text{my long vector}}$

#### \testovertextarrow kerning

$$\overleftrightarrow{t} \quad \overleftrightarrow{t_0} \quad \overleftrightarrow{v} = \overleftrightarrow{v_x} + \overleftrightarrow{v_y} + \overleftrightarrow{v_z} = v_x \overleftrightarrow{t} + v_y \overleftrightarrow{j} + v_z \overleftrightarrow{k}$$

$$\overleftrightarrow{u}$$

$$\overleftrightarrow{v}$$

#### \testovertextarrow\* kerning

$$\overleftrightarrow{t} \quad \overleftrightarrow{t_0} \quad \overleftrightarrow{v} = \overleftrightarrow{v_x} + \overleftrightarrow{v_y} + \overleftrightarrow{v_z} = v_x \overleftrightarrow{t} + v_y \overleftrightarrow{j} + v_z \overleftrightarrow{k}$$

$$\overleftrightarrow{u}$$

$$\overleftrightarrow{v}$$

## 5 Tests of type picture without options

```
\NewOverArrowCommand[picture]{\picvector}{%
\TestOverArrow*{\picvector}
```

### Test of \picvector and \picvector\* macros

#### \picvector for different math styles

\displaystyle	\textstyle	\scriptstyle	\scriptscriptstyle
$\vec{v}$	$\vec{v}$	$\vec{v}$	$\vec{v}$
$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$	$\overrightarrow{AB}$
$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$	$\overrightarrow{\text{grad}}$
$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$	$\overrightarrow{\text{my long vector}}$

#### \picvector kerning

$$\vec{t} \vec{u} \vec{v} \quad \vec{t}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

#### \picvector\* kerning

$$\vec{t} \vec{u} \vec{v} \quad \vec{t}_0 \quad \vec{v} = \vec{v}_x + \vec{v}_y + \vec{v}_z = v_x \vec{i} + v_y \vec{j} + v_z \vec{k}$$

## 6 Tests of type picture with options

```
\NewOverArrowCommand[picture]{\thinnerpicvector}{%
  thinner,
}
\NewOverArrowCommand[picture]{\thickerpicvector}{%
  line thickness=2\overarrowthickness,
}
```

```
$$ \thinnerpicvector{v} \quad \quad \quad \picvector{v} \quad \quad \quad \thickerpicvector{v} $$
```

$$\vec{v} \quad \vec{v} \quad \vec{v}$$

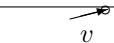
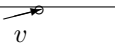



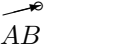
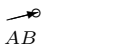

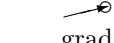
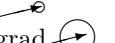
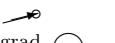

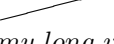
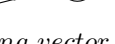
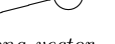

```

\NewOverArrowCommand[picture]{\testoverpicarrow}{%
  shift left=2,
  shift right=-5,
  min length=30,
  geometry={(\overarrowlength,2ex)(0,-1ex)},
  picture command={%
    \put(0.8\overarrowlength,0.2\overarrowlength){%
      \circle{0.2\overarrowlength}
    }%
    \put(0,0){\vector(4,1){0.85\overarrowlength}}},%
}
\TestOverArrow*{\testoverpicarrow}















```

### Test of `\testoverpicarrow` and `\testoverpicarrow*` macros

#### `\testoverpicarrow` for different math styles

<code>\displaystyle</code>	<code>\textstyle</code>	<code>\scriptstyle</code>	<code>\scriptscriptstyle</code>
			
			
			
			

#### `\testoverpicarrow` kerning

#### `\testoverpicarrow*` kerning

