

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

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

\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

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

\esvector* kerning

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

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

Test of \esstrictvector and \esstrictvector* macros

\esstrictvector for different math styles

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

\esstrictvector kerning

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

\esstrictvector* kerning

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

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

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

$$\overleftrightarrow{u}$$

$$\overleftrightarrow{}$$

\testovertextarrow* kerning

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

$$\overleftrightarrow{u}$$

$$\overleftrightarrow{}$$

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

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

\picvector* kerning

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

6 Tests of type picture with options

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

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

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

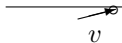


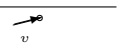




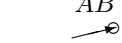
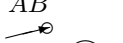


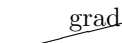


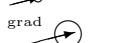
```

\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>
 v	 v	 v	 v
 AB	 AB	 AB	 AB
 grad	 grad	 grad	 grad
 my long vector	 my long vector	 my long vector	 my long vector

`\testoverpicarrow` kerning

 t
 u
 v
 i_0
 $v =$
 $v_x +$
 $v_y +$
 $v_z = v_x$
 $i +$
 v_y
 $j +$
 v_z
 k

`\testoverpicarrow*` kerning

 t
 u
 v
 i_0
 $v =$
 $v_x +$
 $v_y +$
 $v_z = v_x$
 $i +$
 v_y
 $j +$
 v_z
 k