

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

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

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

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

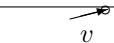
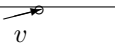



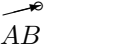
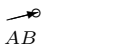

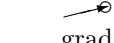
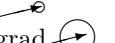
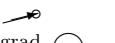

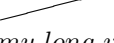
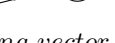
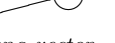

```

\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

