

Test of the **overarrows** package compatibility with L^AT_EX engines

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Predefined commands

```
\begin{align*}
\vv{AB} & \quad \& \quad \& \quad \vec{v} & \quad \\
\overrightarrow{AB} & \quad \& \quad \& \quad \underrightarrow{AB} & \quad \\
\overleftarrow{AB} & \quad \& \quad \& \quad \underleftarrow{AB} & \quad \\
\overleftrightharrow{AB} & \quad \& \quad \& \quad \underleftrightharrow{AB} & \quad \\
\overrightarrow{\hspace{0.5em}}\hspace{0.5em} \uparrow & \quad \& \quad \& \quad \underrightharpoonup{AB} & \quad \\
\overrightarrow{\hspace{0.5em}}\hspace{0.5em} \downarrow & \quad \& \quad \& \quad \underrightharpoonupdown{AB} & \quad \\
\overleftarrow{\hspace{0.5em}}\hspace{0.5em} \uparrow & \quad \& \quad \& \quad \underleftharpoonup{AB} & \quad \\
\overleftarrow{\hspace{0.5em}}\hspace{0.5em} \downarrow & \quad \& \quad \& \quad \underleftharpoonupdown{AB} & \quad \\
\overbar{AB} & \quad \& \quad \& \quad \underbar{AB} & \quad \\
\end{align*}
```

\overrightarrow{AB}	\vec{v}
\overrightarrow{AB}	\overrightarrow{AB}
\overleftarrow{AB}	\overleftarrow{AB}
\overleftrightharrow{AB}	\overleftrightharrow{AB}
$\overrightarrow{\hspace{0.5em}}\hspace{0.5em} \uparrow$	$\overrightarrow{\hspace{0.5em}}\hspace{0.5em} \uparrow$
$\overrightarrow{\hspace{0.5em}}\hspace{0.5em} \downarrow$	$\overrightarrow{\hspace{0.5em}}\hspace{0.5em} \downarrow$
$\overleftarrow{\hspace{0.5em}}\hspace{0.5em} \uparrow$	$\overleftarrow{\hspace{0.5em}}\hspace{0.5em} \uparrow$
$\overleftarrow{\hspace{0.5em}}\hspace{0.5em} \downarrow$	$\overleftarrow{\hspace{0.5em}}\hspace{0.5em} \downarrow$
\overbar{AB}	\overbar{AB}
\overbar{AB}	\overbar{AB}

harrowextender

```

\begin{align*}
\mathtt{-} & \sim\sim & & \& - & & \backslash\backslash
\mathtt{\backslash relbar} & \sim\sim & & \& \backslash relbar & & \backslash\backslash
\mathtt{\backslash relbareda} & \sim\sim & & \& \backslash relbareda & & \backslash\backslash
\mathtt{\backslash mathrel \backslash harrowextender} & \sim\sim & & \& \backslash mathrel{\backslash harrowextender} & & \backslash\backslash
\mathtt{\backslash ovar@auto@middle} & \sim\sim & & \& \backslash UseName{ovar@auto@middle} & & \backslash\backslash
\end{align*}

```

```

- = -
\relbar = -
\relbareda = -
\mathrel\harrowextender = -
\ovar@auto@middle = -

```

```

\NewOverArrowCommand{\testharrowextender}{%
  middle config=auto
}
\TestOverArrow{\testharrowextender}

```

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

```

\NewOverArrowCommand{\useharrowextender}{%
  middle config=harrowextender
}
\TestOverArrow{\useharrowextender}

```

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

TikZ arrows

```
\NewOverArrowCommand[tikz]{\tikzstandardthickness}{%
  path options={
    x=\overarrowlength, line width=\overarrowthickness
  },
  path={(0,0) -- (1,0)}, arrows={->}
}
\NewOverArrowCommand[tikz]{\tikzsmallerthickness}{%
  path options={
    x=\overarrowlength, line width=\overarrowsmallerthickness,
  },
  path={(0,0) -- (1,0)}, arrows={->}
}
\begin{align*}
  \tikzstandardthickness{ABCD} & \& \\
  \scriptscriptstyle \tikzstandardthickness{ABCD} & \& \\
  \tikzsmallerthickness{ABCD} & \& \\
  \scriptscriptstyle \tikzsmallerthickness{ABCD} & \\
\end{align*}
```

$$\overrightarrow{ABCD}$$

$$\overrightarrow{ABCD}$$

$$\overrightarrow{ABCD}$$

$$\overrightarrow{ABCD}$$