FdSymbol: A Math Symbol Font

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1 Introduction

FdSymbol is a font of mathematical symbols designed as a companion to Typotheque's Fedra family[1], but it might also fit well to other contemporary typefaces. To use this font in a LaTeX document, add the command

```
\usepackage[⟨options⟩]{fdsymbol}
```

[1] http://www.typotheque.com/fonts

Key	Values
`normalweight`	`Book`*, `Demi`, `auto`
`boldweight`	`Medium`*, `Bold`, `auto`
`scale`	⟨*factor*⟩
`largedelims`	`true`, `false`*
`opstyle`	`serif`*, `sans`

Table 1: Summary of options

to the preamble of your document. This redefines most of the standard mathematical symbols and makes available many new ones (see Section 5). For the available options see Section 3.

Acknowledgements

The FdSymbol font is derived from MnSymbol[2], another math symbol font, designed by Achim Blumensath.

2 Interferences with other packages

The fdsymbol package is incompatible with the amssymb and amsfonts packages. It automatically loads the amsmath and textcomp packages. If you want to pass options to these packages, you can either load these packages before fdsymbol or you can include the options in the `\documentclass` command.

3 Options

All package options are set using a ⟨*key*⟩=⟨*value*⟩ syntax. Boolean options accept `true` and `false` as values, and setting a Boolean key without a value is equivalent to setting it to `true`. Table 1 lists all option keys of the fdsymbol package with their possible values; values that are marked with an asterisk correspond to the default behaviour of the package.

4 Font selection

4.1 Weights

FdSymbol comes in four weights, which are (in increasing order) Book, Demi, Medium and Bold. Of these, Book and Demi are suitable for normal math typesetting, while Medium and Bold can be used for bold math typesetting. Using the options `normalweight` and `boldweight`, you can select which weights are

[2] `http://www.ctan.org/pkg/mnsymbol/`

used. For example, to use the Medium weight as the normal weight in math, add `normalweight=Medium` to the package options. Analogously, to use the Bold weight with `\boldmath` or `\boldsymbol`, add `boldweight=Bold` to the package options. By default, Book and Medium are used. Additionally, it is possible to use a suitable weight automatically depending on the font size by selecting `auto`. For example, if you use the option `normalweight=auto`, the Book weight will be used for normal and large sizes, but the Demi weight will be used for small sizes (e.g. in sub- and superscripts).

4.2 Size

In order to use FdSymbol with different text fonts, it is possible to scale the fonts by an arbitrary factor. This can be achieved with the option `scale`. For example, to use the fonts at 90 % of their original size, you can add `scale=0.9` to the package options. Finally, it is possible to increase the height of delimiters slightly (by 20 % in text size and by 25 % in `\big` size). This can be achieved by activating the option `largedelims`. Use this option if you want to combine FdSymbol with a text font that has rather tall delimiters, such as Fedra Serif B. In fact, the height of normal delimiters will match the height of text delimiters in Fedra Serif B if you select this option.

4.3 Stylistic variants

In order to use FdSymbol with sans-serif text fonts, there are sans-serif variants of glyphs that contain a product or summation sign. These can be accessed by the commands `\varprod`, `\varcoprod`, `\varsum`, etc. To access these glyphs using the standard commands `\prod`, `\coprod`, `\sum`, etc., use the option `opstyle=sans`. If this option is active, the serif variants of these glyphs can be accessed by the `\var...` commands instead.

5 Symbols

The fdsymbol package provides the following symbols.

5.1 Ordinary symbols

⋯	`\hdots`	::	`\squaredots`
⋮	`\vdots`	¬	`\neg`, `\lnot`
⋰	`\udots`, `\adots`	⌐	`\backneg`, `\invnot`, `\invneg`
⋱	`\ddots`	⌐	`\turnedneg`, `\turnednot`
∶·	`\righttherefore`	⌙	`\turnedbackneg`
∴	`\uptherefore`, `\therefore`	△	`\largetriangleup`
·∶	`\lefttherefore`	▽	`\largetriangledown`
∵	`\downtherefore`, `\because`	∅	`\emptyset`, `\diameter`,

\varnothing
⦸ \revemptyset
◯ \largecircle, \lgwhtcircle
● \largeblackcircle
□ \largesquare, \lgwhtsquare
■ \largeblacksquare, \lgblksquare
⋄ \smalllozenge, \smwhtlozenge
⧫ \smallblacklozenge, \smblklozenge
◊ \medlozenge, \lozenge, \mdlgwhtlozenge, \mdwhtlozenge
⧫ \medblacklozenge, \blacklozenge, \mdlgblklozenge, \mdblklozenge
⧫ \lozengeminus
☆ \largewhitestar
★ \largeblackstar, \bigstar
∞ \infty
∠ \angle
⦣ \revangle
∡ \measuredangle
⦥ \revmeasuredangle, \measuredangleleft
⦟ \sphericalangle
⦡ \sphericalangleup
⦠ \sphericalangleleft, \revsphericalangle, \gtlpar
⦢ \sphericalangledown
∟ \rightangle
⊾ \measuredrightangle
⊾ \rightanglesquare, \rightanglesqr
⊾ \measuredrightangledot, \rightanglemdot
′ \prime
‵ \backprime
✓ \checkmark
↯ \lightning, \downzigzagarrow
♢ \diamondsuit
♦ \vardiamondsuit
♡ \heartsuit
♥ \varheartsuit
♠ \spadesuit
♣ \clubsuit
✠ \maltese
✡ \starofdavid
▽ \sector
∀ \forall
∃ \exists
∄ \nexists
⅁ \Finv
⅁ \Game
∁ \complement
♭ \flat
♮ \natural
♯ \sharp
ℵ \aleph
ℶ \beth
ℷ \gimel
ℸ \daleth
℘ \wp
⊤ \top
⊥ \bot
/ /, \mathslash
\ \backslash
| |, \vert
‖ \Vert
||| \Vvert

5.2 Binary operators

· \cdot
. \centerdot
‥ \hdotdot
: \vdotdot
∴ \udotdot
⋱ \ddotdot
− −, \minus
⁄ \medslash, \smalldivslash
∖ \medbackslash, \smallsetminus
+ +, \plus
× \times
∸ \dotminus

∸ \minusdot
÷ \div
∹ \minusfdots
∺ \minusrdots
± \pm
∓ \mp
∔ \dotplus
∔ \plusdot
⋇ \dottimes
⨴ \timesbar
⋇ \divideontimes
⨍ \intprod
⨎ \intprodr
⋋ \leftthreetimes
⋌ \rightthreetimes
⧢ \dtimes, \btimes
⋊ \rtimes
⨰ \utimes, \ttimes
⋉ \ltimes
⋈ \lrtimes
⧓ \upbowtie, \hourglass
≻ \rightY
≽ \upY
≺ \leftY
≾ \downY
∧ \wedge, \land
∨ \vee, \lor
⩓ \wedgedot
⩔ \veedot
⩚ \doublewedge, \wedgeonwedge
⩛ \doublevee, \veeonwee
⋏ \curlywedge
⋎ \curlyvee
⊼ \barwedge
⊻ \veebar
⩞ \doublebarwedge
≝ \veedoublebar
∪ \cup
∩ \cap
⋓ \doublecup, \Cup
⋒ \doublecap, \Cap
⊍ \cupdot
⩀ \capdot
⊎ \cupplus, \uplus
⩁ \capplus
⊔ \sqcup
⊓ \sqcap
⩏ \doublesqcup, \Sqcup
⩎ \doublesqcap, \Sqcap
⊔ \sqcupdot
⩐ \sqcapdot
⊔ \sqcupplus
⊓ \sqcapplus
⌟ \pullback
⌜ \pushout
▹ \smalltriangleright
▵ \smalltriangleup
◃ \smalltriangleleft
▿ \smalltriangledown
▸ \smallblacktriangleright
▴ \smallblacktriangleup
◂ \smallblacktriangleleft
▾ \smallblacktriangledown
▷ \medtriangleright, \triangleright
△ \medtriangleup, \triangle, \vartriangle
◁ \medtriangleleft, \triangleleft
▽ \medtriangledown, \triangledown
▶ \medblacktriangleright, \blacktriangleright
▲ \medblacktriangleup, \blacktriangle
◀ \medblacktriangleleft, \blacktriangleleft
▼ \medblacktriangledown, \blacktriangledown
△ \bigtriangleup
▽ \bigtriangledown
∘ \smallcircle, \circ, \smwhtcircle
• \smallblackcircle, \bullet, \smblkcircle
○ \medcircle, \mdlgwhtcircle, \mdwhtcircle
● \medblackcircle, \mdlgblkcircle, \mdblkcircle
⊖ \ominus

⦶	\overt, \circledvert
⊘	\oslash
⦸	\obackslash, \obslash
⊕	\oplus
⊗	\otimes
⊙	\odot
⊚	\ocirc, \circledcirc
⊛	\oast, \circledast
⊖	\odash, \circleddash
⊜	\oequal, \circledequal
◯	\bigcirc
▫	\smallsquare, \smwhtsquare
▪	\smallblacksquare, \smblksquare
□	\medsquare, \square, \Box, \mdlgwhtsquare, \mdwhtsquare
■	\medblacksquare, \mdlgblksquare, \mdblksquare
⊟	\boxminus
◫	\boxvert, \boxbar
⧄	\boxslash, \boxdiag
⧅	\boxbackslash, \boxbslash
⊞	\boxplus
⊠	\boxtimes
⊡	\boxdot
⧈	\boxbox
⋄	\smalldiamond, \diamond, \smwhtdiamond
◆	\smallblackdiamond, \blackdiamond, \smblkdiamond
◇	\meddiamond, \Diamond, \mdlgwhtdiamond, \mdwhtdiamond
◆	\medblackdiamond, \mdlgblkdiamond, \mdblkdiamond
⟐	\diamondminus
⟡	\diamondvert
⟢	\diamondslash
⟣	\diamondbackslash, \diamondbslash
⟤	\diamondplus
⟥	\diamondtimes
⟦	\diamonddot, \diamondcdot
⟧	\diamonddiamond
☆	\smallwhitestar, \smwhitestar
⋆	\smallblackstar, \star
☆	\medwhitestar
★	\medblackstar, \medstar
∗	*, \ast
⊤	\intercal
≀	\wreath, \wr
⊔	\amalg
⊔	\varamalg
◁	\lhd
▷	\rhd
⊴	\unlhd
⊵	\unrhd
/	\divslash
\	\setminus

5.3 Relations

=	=, \equal, \Relbar
≡	\equiv
~	\sim
∽	\backsim
≈	\approx
≋	\triplesim, \approxident
≃	\simeq
≌	\backsimeq
≂	\eqsim
≅	\cong
≌	\backcong
≐	\dotcong
≊	\approxeq
≏	\bumpeq
≎	\bumpeqq
≎	\Bumpeq
≐	\doteq
≑	\eqdot
≑	\Doteq
≒	\fallingdotseq
≓	\risingdotseq
≔	\coloneq, \coloneqq
≕	\eqcolon, \eqqcolon
⌣	\smile, \smallsmile

$\frown$	\frown, \smallfrown
$\asymp$	\smilefrown, \asymp
$\frown$	\frownsmile, \closure
$\cong$	\smileeq
$\cong$	\frowneq, \arceq
$\eqcirc$	\eqcirc
$\circeq$	\circeq
$\wedgeq$	\wedgeq, \hateq
$\veeeq$	\veeeq
$\stareq$	\stareq
$\triangleq$	\triangleeq, \triangleq
$\in$	\in
$\ni$	\owns, \ni
$<$	<, \less
$>$	>, \gtr
$\leq$	\leq, \le
$\geq$	\geq, \ge
$\leqslant$	\leqslant
$\geqslant$	\geqslant
$\leqq$	\leqq
$\geqq$	\geqq
$\lesssim$	\lesssim
$\gtrsim$	\gtrsim
$\lessapprox$	\lessapprox
$\gtrapprox$	\gtrapprox
$\lessgtr$	\lessgtr
$\gtrless$	\gtrless
$\lesseqgtr$	\lesseqgtr
$\gtreqless$	\gtreqless
$\lesseqqgtr$	\lesseqqgtr
$\gtreqqless$	\gtreqqless
$\lesseqslantgtr$	\lesseqslantgtr, \lesq
$\gtreqslantless$	\gtreqslantless, \gesl
$\ll$	\ll
$\gg$	\gg
$\lll$	\lll, \llless
$\ggg$	\ggg, \gggtr
$\lessclosed$	\lessclosed, \vartriangleleft
$\gtrclosed$	\gtrclosed, \vartriangleright
$\leqclosed$	\leqclosed, \triangleleftеq
$\geqclosed$	\geqclosed, \trianglerighteq
$\lesscc$	\lesscc, \ltcc
$\gtrcc$	\gtrcc, \gtcc
$\leqslcc$	\leqslcc, \lescc
$\geqslcc$	\geqslcc, \gescc
$\sqsubset$	\sqsubset
$\sqsupset$	\sqsupset
$\sqsubseteq$	\sqsubseteq
$\sqsupseteq$	\sqsupseteq
$\sqsubseteqq$	\sqsubseteqq
$\sqsupseteqq$	\sqsupseteqq
$\Sqsubset$	\Sqsubset
$\Sqsupset$	\Sqsupset
$\subset$	\subset
$\supset$	\supset
$\subseteq$	\subseteq
$\supseteq$	\supseteq
$\subseteqq$	\subseteqq
$\supseteqq$	\supseteqq
$\Subset$	\Subset
$\Supset$	\Supset
$\prec$	\prec
$\succ$	\succ
$\preceq$	\preceq
$\succeq$	\succeq
$\preccurlyeq$	\preccurlyeq
$\succcurlyeq$	\succcurlyeq
$\preceqq$	\preceqq
$\succeqq$	\succeqq
$\precsim$	\precsim
$\succsim$	\succsim
$\precapprox$	\precapprox
$\succapprox$	\succapprox
$\lessdot$	\lessdot
$\gtrdot$	\gtrdot
$\leqdot$	\leqdot
$\geqdot$	\geqdot
$\leqslantdot$	\leqslantdot, \lesdot
$\geqslantdot$	\geqslantdot, \gesdot
$\eqslantless$	\eqslantless
$\eqslantgtr$	\eqslantgtr
$\curlyeqprec$	\curlyeqprec
$\curlyeqsucc$	\curlyeqsucc
$\thicksim$	\thicksim
$\thickapprox$	\thickapprox
$\rightarrow$	\rightarrow, \to
$\uparrow$	\uparrow
$\leftarrow$	\leftarrow, \gets
$\downarrow$	\downarrow
$\nearrow$	\nearrow

↖ \nwarrow
↙ \swarrow
↘ \searrow
⇒ \Rightarrow
⇑ \Uparrow
⇐ \Leftarrow
⇓ \Downarrow
⇗ \Nearrow
⇖ \Nwarrow
⇙ \Swarrow
⇘ \Searrow
↔ \leftrightarrow
↕ \updownarrow
⤢ \neswarrow
⤡ \nwsearrow
⇔ \Leftrightarrow
⇕ \Updownarrow
⇗ \Neswarrow
⇖ \Nwsearrow
↠ \twoheadrightarrow
↟ \twoheaduparrow
↞ \twoheadleftarrow
↡ \twoheaddownarrow
↗ \twoheadnearrow
↖ \twoheadnwarrow
↙ \twoheadswarrow
↘ \twoheadsearrow
↣ \rightarrowtail
↥ \uparrowtail
↢ \leftarrowtail
↧ \downarrowtail
⤤ \nearrowtail
⤣ \nwarrowtail
⤥ \swarrowtail
⤡ \searrowtail
↦ \rightmapsto, \mapsto
↥ \upmapsto, \mapsup
↤ \leftmapsto, \mapsfrom
↧ \downmapsto, \mapsdown
⇨ \Rightmapsto, \Mapsto
⇧ \Upmapsto, \Mapsup
⇦ \Leftmapsto, \Mapsfrom
⇩ \Downmapsto, \Mapsdown
↪ \hookrightarrow
↱ \hookuparrow
↩ \varhookleftarrow
↧ \varhookdownarrow
⤤ \varhooknearrow
⤣ \hooknwarrow, \hknwarrow
⤥ \varhookswarrow
⤡ \hooksearrow, \hksearrow
↪ \varhookrightarrow
↥ \varhookuparrow
↩ \hookleftarrow
↴ \hookdownarrow
⤤ \hooknearrow, \hknearrow
⤣ \varhooknwarrow
⤥ \hookswarrow, \hkswarrow
⤡ \varhooksearrow
⇀ \rightharpoonup
↿ \upharpoonleft
↽ \leftharpoondown
⇂ \downharpoonright
↗ \neharpoonnw
↖ \nwharpoonsw
↙ \swharpoonse
↘ \seharpoonne
⇁ \rightharpoondown
↾ \upharpoonright, \restriction
↼ \leftharpoonup
⇃ \downharpoonleft
↗ \neharpoonse
↖ \nwharpoonne
↙ \swharpoonnw
↘ \seharpoonsw
⇋ \leftrightharpoonupdown
⥮ \updownharpoonleftright
⤢ \neswharpoonnwse
⤡ \nwseharpoonnesw
⇋ \leftrightharpoondownup
⥯ \updownharpoonrightleft
⤢ \neswharpoonsenw
⤡ \nwseharpoonswne
⇌ \rightleftharpoons
⥮ \updownharpoons, \updownharpoonsleftright
⤢ \neswharpoons
⤡ \senwharpoons
⇋ \leftrightharpoons

⇅ \downupharpoons, \downupharpoonsleftright
⇗ \swneharpoons
⇖ \nwseharpoons
⇢ \rightbkarrow, \dashrightarrow, \dasharrow
⇡ \upbkarrow
⇠ \leftbkarrow, \dashleftarrow
⇣ \downbkarrow
⇗ \nebkarrow
⇖ \nwbkarrow
⇙ \swbkarrow
⇘ \sebkarrow
⊸ \rightspoon, \multimap
⍰ \upspoon, \cirmid
⊶ \leftspoon, \multimapinv
⍮ \downspoon, \midcir
⊸ \rightblackspoon
⍰ \upblackspoon
⊶ \leftblackspoon
⍮ \downblackspoon
⊶ \leftrightspoon, \dualmap
⊶ \leftrightblackspoon
⊶ \blackwhitespoon, \imageof
⊶ \whiteblackspoon, \origof
⊱ \rightpitchfork
⋔ \uppitchfork, \pitchfork
⋲ \leftpitchfork
⋎ \downpitchfork
⇉ \rightrightarrows
⇈ \upuparrows
⇇ \leftleftarrows
⇊ \downdownarrows
⇗ \nenearrows
⇖ \nwnwarrows
⇙ \swswarrows
⇘ \sesearrows
⇄ \rightleftarrows
⇅ \updownarrows
⇗ \neswarrows
⇖ \nwsearrows
⇆ \leftrightarrows
⇅ \downuparrows
⇗ \swnearrows
⇖ \senwarrows
⇝ \rightwavearrow, \leadsto, \rightsquigarrow, \rightcurvedarrow
⇡ \varupwavearrow
⇜ \varleftwavearrow
⇣ \downwavearrow
⇝ \varrightwavearrow
⇡ \upwavearrow
⇜ \leftwavearrow, \leftsquigarrow, \leftcurvedarrow
⇣ \vardownwavearrow
⇔ \leftrightwavearrow, \leftrightsquigarrow
⇕ \updownwavearrow
⇔ \varleftrightwavearrow
⇕ \varupdownwavearrow
⇝ \cwoverarcarrow, \curvearrowright
⇜ \cwleftarcarrow
⇜ \cwunderarcarrow
⇝ \cwrightarcarrow
⇝ \cwnwarcarrow, \rightupcurvedarrow
⇜ \cwswarcarrow, \upleftcurvedarrow
⇝ \cwsearcarrow, \leftdowncurvedarrow
⇝ \cwnearcarrow, \downrightcurvedarrow
⇝ \acwunderarcarrow
⇝ \acwrightarcarrow
⇜ \acwoverarcarrow, \curvearrowleft
⇜ \acwleftarcarrow
⇝ \acwsearcarrow, \uprightcurvearrow
⇜ \acwnearcarrow, \leftupcurvedarrow
⇜ \acwnwarcarrow, \downleftcurvedarrow
⇝ \acwswarcarrow, \rightdowncurvedarrow
⇜ \bdoverarcarrow
⇜ \bdleftarcarrow

⤻ \bdunderarcarrow
⤷ \bdrightarcarrow
⤾ \bdnwarcarrow
⤹ \bdswarcarrow
⤿ \bdsearcarrow
⤺ \bdnearcarrow
⊢ \leftfootline
⊣ \rightfootline
↻ \acwcirclearrowup
↺ \acwcirclearrowleft,
\circlearrowleft,
\acwopencirclearrow
⟲ \acwcirclearrowdown,
\acwgapcirclearrow
⟳ \acwcirclearrowright
↻ \cwcirclearrowdown,
\cwgapcirclearrow
⟲ \cwcirclearrowright,
\circlearrowright,
\cwopencirclearrow
⟳ \cwcirclearrowup
↺ \cwcirclearrowleft
⇛ \Rrightarrow
⤊ \Uuparrow
⇚ \Lleftarrow
⤋ \Ddownarrow
⟶ \longrightarrow
⟵ \longleftarrow
⟹ \Longrightarrow
⟸ \Longleftarrow
⟷ \longleftrightarrow
⟺ \Longleftrightarrow
⟼ \longmapsto
⟻ \longmapsfrom
⟾ \Longmapsto
⟽ \Longmapsfrom
⇝ \longrightwavearrow,
\longleadsto,
\longrightsquigarrow
⇜ \longleftwavearrow,
\longleftsquigarrow
⟝ \longleftfootline, \vlongdash
⟞ \longrightfootline, \longdashv
↰ \Lsh
↱ \Rsh
↲ \Ldsh
↳ \Rdsh
↬ \looparrowright
↫ \looparrowleft
⊢ \rightvdash, \vdash
⊥ \upvdash, \perp
⊣ \leftvdash, \dashv
⊤ \downvdash
⊢ \rightassert, \assert,
\shortrighttack
⊥ \upassert, \shortuptack
⊣ \leftassert, \shortlefttack
⊤ \downassert, \shortdowntack
⊨ \rightvDash, \vDash
⫫ \upvDash, \Vbar
⫤ \leftvDash, \Dashv
⫪ \downvDash, \barV
⊨ \rightmodels, \models
⫫ \upmodels
⫤ \leftmodels
⫪ \downmodels
⊩ \rightVdash, \Vdash
⫠ \upVdash
⫣ \leftVdash, \dashV
⫧ \downVdash
⊩ \rightAssert, \Assert
⫠ \upAssert, \vBar
⫣ \leftAssert
⫧ \downAssert, \Barv
⊫ \rightVDash, \VDash
⫢ \upVDash
⫤ \leftVDash, \DashV
⫨ \downVDash
⊪ \Vvdash
⫣ \dashVv
⊨ \vDdash
⫤ \Ddashv
≠ \nequal, \neq, \ne
≢ \nequiv
≁ \nsim
≁ \nbacksim
≉ \napprox
≉ \ntriplesim, \napproxident
≄ \nsimeq, \nsime
≄ \nbacksimeq

≠ \neqsim
≇ \ncong
≉ \nbackcong
≉ \napproxeq
≠ \nbumpeq
≉ \nbumpeqq
≠ \nBumpeq
≠ \ndoteq
≠ \neqdot
≠ \nDoteq
≒ \nfallingdotseq
≠ \nrisingdotseq
⌿ \nsmile
⌿ \nfrown
≭ \nsmilefrown, \nasymp
⊄ \nfrownsmile, \nclosure
≨ \nsmileeq
≨ \nfrowneq, \narceq
≠ \neqcirc
≠ \ncirceq
≠ \nwedgeq, \nhateq
≠ \nveeeq
≠ \nstareq
≠ \ntriangleeq
∉ \nin, \notin
∌ \nowns, \nni
≮ \nless
≯ \ngtr
≰ \nleq
≱ \ngeq
≰ \nleqslant
≱ \ngeqslant
≰ \nleqq
≱ \ngeqq
≴ \nlesssim
≵ \ngtrsim
≴ \nlessapprox
≵ \ngtrapprox
≸ \nlessgtr
≵ \ngtrless
≨ \nlesseqgtr
≩ \ngtreqless
≨ \nlesseqqgtr
≩ \ngtreqqless
≨ \nlesseqslantgtr, \nlesg
≩ \ngtreqslantless, \ngesl
≮ \nll
≯ \ngg
⋘̸ \nlll
⋙̸ \nggg
⋪ \nlessclosed, \ntriangleleft
⋫ \ngtrclosed, \ntriangleright
⋬ \nleqclosed, \ntrianglelefteq
⋭ \ngeqclosed, \ntrianglerighteq
≪̸ \nlesscc, \nltcc
≫̸ \ngtrcc, \ngtcc
⩽̸ \nleqslcc, \nlescc
⩾̸ \ngeqslcc, \ngescc
⊄ \nsqsubset
⊅ \nsqsupset
⋢ \nsqsubseteq
⋣ \nsqsupseteq
⫋̸ \nsqsubseteqq
⫌̸ \nsqsupseteqq
⫅̸ \nSqsubset
⫆̸ \nSqsupset
⊄ \nsubset
⊅ \nsupset
⊈ \nsubseteq
⊉ \nsupseteq
⫋̸ \nsubseteqq
⫌̸ \nsupseteqq
⫅̸ \nSubset
⫆̸ \nSupset
⊀ \nprec
⊁ \nsucc
⋠ \npreceq
⋡ \nsucceq
⋨ \npreccurlyeq
⋩ \nsucccurlyeq
⪵̸ \npreceqq
⪶̸ \nsucceqq
⋨ \nprecsim
⋩ \nsuccsim
⪵̸ \nprecapprox
⪶̸ \nsuccapprox
⋪ \nlessdot
⋫ \ngtrdot
⋦ \nleqdot
⋧ \ngeqdot

$\nleqslant$ \nleqslantdot, \nlesdot
$\ngeqslant$ \ngeqslantdot, \ngesdot
$\lneqq$ \neqslantless
$\gneqq$ \neqslantgtr
$\npreceq$ \ncurlyeqprec
$\nsucceq$ \ncurlyeqssucc
$\nsim$ \simneqq
$\nbacksim$ \backsimneqq
$\lneq$ \lneq
$\gneq$ \gneq
$\lneqq$ \lneqq, \lvertneqq
$\gneqq$ \gneqq, \gvertneqq
$\lnsim$ \lnsim
$\gnsim$ \gnsim
$\lnapprox$ \lnapprox
$\gnapprox$ \gnapprox
$\not\sqsubset$ \sqsubsetneq
$\not\sqsupset$ \sqsupsetneq
$\not\sqsubseteq$ \sqsubsetneqq
$\not\sqsupseteq$ \sqsupsetneqq
$\not\subset$ \subsetneq, \varsubsetneq
$\not\supset$ \supsetneq, \varsupsetneq
$\not\subseteq$ \subsetneqq, \varsubsetneqq
$\not\supseteq$ \supsetneqq, \varsupsetneqq
$\precneq$ \precneq
$\succneq$ \succneq
$\precneqq$ \precneqq
$\succneqq$ \succneqq
$\precnsim$ \precnsim
$\succnsim$ \succnsim
$\precnapprox$ \precnapprox
$\succnapprox$ \succnapprox
$\not\rightarrow$ \nrightarrow, \nto
$\not\uparrow$ \nuparrow
$\not\leftarrow$ \nleftarrow, \ngets
$\not\downarrow$ \ndownarrow
$\not\nearrow$ \nnearrow
$\not\nwarrow$ \nnwarrow
$\not\swarrow$ \nswarrow
$\not\searrow$ \nsearrow
$\not\Rightarrow$ \nRightarrow
$\not\Uparrow$ \nUparrow
$\not\Leftarrow$ \nLeftarrow
$\not\Downarrow$ \nDownarrow
$\not\nearrow$ \nNearrow
$\not\nwarrow$ \nNwarrow
$\not\swarrow$ \nSwarrow
$\not\searrow$ \nSearrow
$\not\leftrightarrow$ \nleftrightarrow
$\not\updownarrow$ \nupdownarrow
$\not\nearrow$ \nneswarrow
$\not\searrow$ \nnwsearrow
$\not\Leftrightarrow$ \nLeftrightarrow
$\not\Updownarrow$ \nUpdownarrow
$\not\nearrow$ \nNeswarrow
$\not\nwarrow$ \nNwsearrow
$\not\twoheadrightarrow$ \ntwoheadrightarrow
$\not\twoheaduparrow$ \ntwoheaduparrow
$\not\twoheadleftarrow$ \ntwoheadleftarrow
$\not\twoheaddownarrow$ \ntwoheaddownarrow
$\not\twoheadnearrow$ \ntwoheadnearrow
$\not\twoheadnwarrow$ \ntwoheadnwarrow
$\not\twoheadswarrow$ \ntwoheadswarrow
$\not\twoheadsearrow$ \ntwoheadsearrow
$\not\rightarrowtail$ \nrightarrowtail
$\not\uparrowtail$ \nuparrowtail
$\not\leftarrowtail$ \nleftarrowtail
$\not\downarrowtail$ \ndownarrowtail
$\not\nearrowtail$ \nnearrowtail
$\not\nwarrowtail$ \nnwarrowtail
$\not\swarrowtail$ \nswarrowtail
$\not\searrowtail$ \nsearrowtail
$\not\mapsto$ \nrightmapsto, \nmapsto
$\not\updownarrow$ \nupmapsto, \nmapsup
$\not\leftrightarrow$ \nleftmapsto, \nmapsfrom
$\not\updownarrow$ \ndownmapsto, \nmapsdown
$\not\Rightarrow$ \nRightmapsto, \nMapsto
$\not\Updownarrow$ \nUpmapsto, \nMapsup
$\not\Leftrightarrow$ \nLeftmapsto, \nMapsfrom
$\not\Updownarrow$ \nDownmapsto, \nMapsdown
$\not\hookrightarrow$ \nhookrightarrow
$\not\updownarrow$ \nhookuparrow
$\not\leftrightarrow$ \nvarhookleftarrow
$\not\updownarrow$ \nvarhookdownarrow
$\not\nearrow$ \nvarhooknearrow
$\not\nwarrow$ \nhooknwarrow, \nhknwarrow
$\not\swarrow$ \nvarhookswarrow
$\not\searrow$ \nhooksearrow, \nhksearrow
$\not\rightarrow$ \nvarhookrightarrow
$\not\updownarrow$ \nvarhookuparrow

↫ \nhookleftarrow
↬ \nhookdownarrow
↗ \nhooknearrow, \nhknearrow
↖ \nvarhooknwarrow
↙ \nhookswarrow, \nhkswarrow
↘ \nvarhooksearrow
⇀ \nrightharpoonup
↿ \nupharpoonleft
↽ \nleftharpoondown
⇂ \ndownharpoonright
↛ \nneharpoonnw
↚ \nnwharpoonsw
↛ \nswharpoonse
↚ \nseharpoonne
⇁ \nrightharpoondown
↾ \nupharpoonright, \nrestriction
↼ \nleftharpoonup
⇃ \ndownharpoonleft
↛ \nneharpoonse
↚ \nnwharpoonne
↛ \nswharpoonnw
↚ \nseharpoonsw
↮ \nleftrightharpoonupdown
↾ \nupdownharpoonleftright
↛ \nneswharpoonnwse
↚ \nnwseharpoonnesw
↮ \nleftrightharpoondownup
↾ \nupdownharpoonrightleft
↛ \nneswharpoonsenw
↚ \nnwseharpoonswne
⇌ \nrightleftharpoons
↿ \nupdownharpoons, \nupdownharpoonsleftright
↛ \nneswharpoons
↚ \nsenwharpoons
⇋ \nleftrightharpoons
↾ \ndownupharpoons, \ndownupharpoonsleftright
↛ \nswneharpoons
↚ \nnwseharpoons
⇢ \nrightbkarrow, \ndasharrow, \ndashrightarrow
⇡ \nupbkarrow
⇠ \nleftbkarrow, \ndashleftarrow
⇣ \ndownbkarrow
↛ \nnebkarrow
↖ \nnwbkarrow
↙ \nswbkarrow
↘ \nsebkarrow
⇸ \nrightspoon, \nmultimap
⇞ \nupspoon, \ncirmid
⇷ \nleftspoon, \nmultimapinv
⇟ \ndownspoon, \nmidcir
⇸ \nrightblackspoon
⇞ \nupblackspoon
⇷ \nleftblackspoon
⇟ \ndownblackspoon
⇷ \nleftrightspoon, \ndualmap
⇷ \nleftrightblackspoon
⇸ \nblackwhitespoon, \nimageof
⇷ \nwhiteblackspoon, \norigof
⇹ \nrightpitchfork
⇵ \nuppitchfork, \npitchfork
⇺ \nleftpitchfork
⇵ \ndownpitchfork
⇉ \nrightrightarrows
⇈ \nupuparrows
⇇ \nleftleftarrows
⇊ \ndowndownarrows
↛ \nnenearrows
↚ \nnwnwarrows
↙ \nswswarrows
↘ \nsesearrows
⇄ \nrightleftarrows
⇅ \nupdownarrows
↛ \nneswarrows
↚ \nnwsearrows
↮ \nleftrightarrows
⇵ \ndownuparrows
↛ \nswnearrows
↚ \nsenwarrows
↛ \nrightwavearrow, \nleadsto, \nrightsquigarrow, \nrightcurvedarrow
↝ \nvarupwavearrow
↜ \nvarleftwavearrow
↭ \ndownwavearrow
↛ \nvarrightwavearrow
↭ \nupwavearrow

$\nleftwavearrow$, $\nleftsquigarrow$, $\nleftcurvedarrow$
$\nvardownwavearrow$
$\nleftrightwavearrow$, $\nleftrightsquigarrow$
$\nupdownwavearrow$
$\nvarleftrightwavearrow$
$\nvarupdownwavearrow$
$\ncwoverarcarrow$, $\ncurvearrowright$
$\ncwleftarcarrow$
$\ncwunderarcarrow$
$\ncwrightarcarrow$
$\ncwnwarcarrow$, $\nrightupcurvedarrow$
$\ncwswarcarrow$, $\nupleftcurvedarrow$
$\ncwsearcarrow$, $\nleftdowncurvedarrow$
$\ncwnearcarrow$, $\ndownrightcurvedarrow$
$\nacwunderarcarrow$
$\nacwrightarcarrow$
$\nacwoverarcarrow$, $\ncurvearrowleft$
$\nacwleftarcarrow$
$\nacwsearcarrow$, $\nuprightcurvearrow$
$\nacwnearcarrow$, $\nleftupcurvedarrow$
$\nacwnwarcarrow$, $\ndownleftcurvedarrow$
$\nacwswarcarrow$, $\nrightdowncurvedarrow$
$\nbdoverarcarrow$
$\nbdleftarcarrow$
$\nbdunderarcarrow$
$\nbdrightarcarrow$
$\nbdnwarcarrow$
$\nbdswarcarrow$
$\nbdsearcarrow$
$\nbdnearcarrow$
$\nleftfootline$
$\nrightfootline$
$\nacwcirclearrowup$
$\nacwcirclearrowleft$, $\ncirclearrowleft$, $\nacwopencirclearrow$
$\nacwcirclearrowdown$, $\nacwgapcirclearrow$
$\nacwcirclearrowright$
$\ncwcirclearrowdown$, $\ncwgapcirclearrow$
$\ncwcirclearrowright$, $\ncirclearrowright$, $\ncwopencirclearrow$
$\ncwcirclearrowup$
$\ncwcirclearrowleft$
$\nRrightarrow$
$\nUuparrow$
$\nLleftarrow$
$\nDdownarrow$
$\nlongrightarrow$
$\nlongleftarrow$
$\nLongrightarrow$
$\nLongleftarrow$
$\nlongleftrightarrow$
$\nLongleftrightarrow$
$\nlongmapsto$
$\nlongmapsfrom$
$\nLongmapsto$
$\nLongmapsfrom$
$\nlongrightwavearrow$, $\nlongleadsto$, $\nlongrightsquigarrow$
$\nlongleftwavearrow$, $\nlongleftsquigarrow$
$\nlongleftfootline$, $\nvlongdash$
$\nlongrightfootline$, $\nlongdashv$
$\nrightvdash$, $\nvdash$
$\nupvdash$, $\nperp$
$\nleftvdash$, $\ndashv$
$\ndownvdash$
$\nrightassert$, $\nassert$, $\nshortrighttack$
$\nupassert$, $\nshortuptack$
$\nleftassert$, $\nshortlefttack$

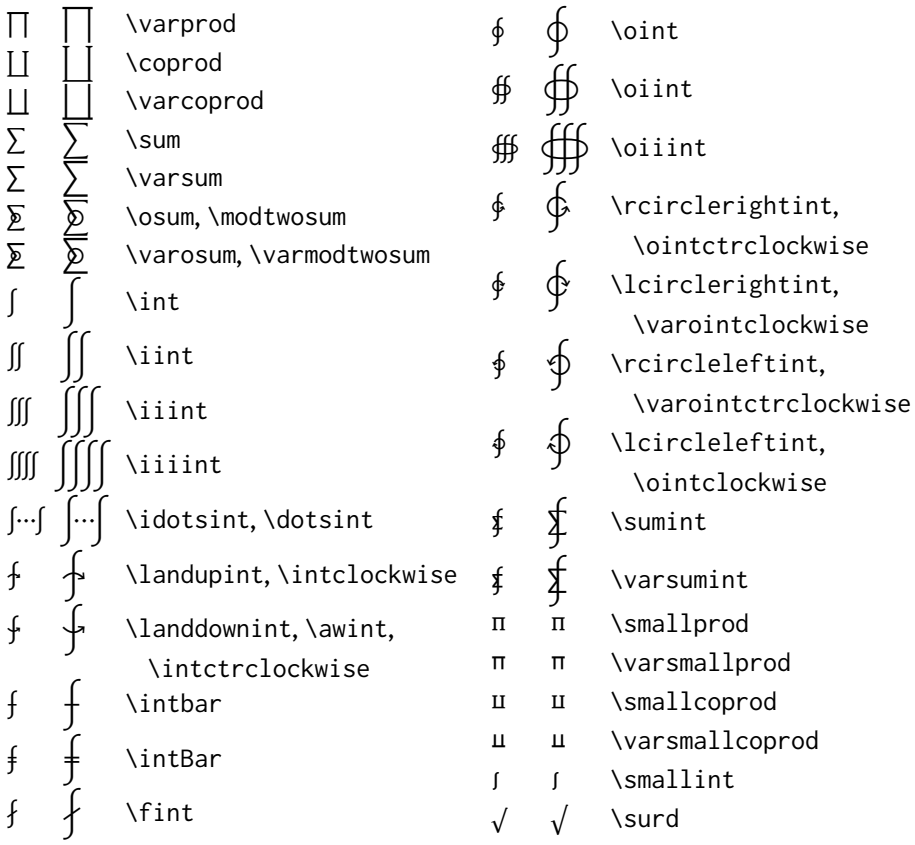
⫟	\ndownassert, \nshortdowntack	⫳	\ndashVv
⊭	\nrightvDash, \nvDash	⫅̸	\nvDdash
⫫	\nupvDash, \nVbar	⫉	\nDdashv
⫤	\nleftvDash, \nDashv	∶	:, \mathratio
⫡	\ndownvDash, \nbarV	∷	\Colon
⊧	\nrightmodels, \nmodels	−	\relbar
⫬	\nupmodels	≒	\dotsminusdots
⫣	\nleftmodels	⤑	\rJoin
⫠	\ndownmodels	⋉	\lJoin
⊮	\nrightVdash, \nVdash	⋈	\bowtie, \Join
⫪	\nupVdash	∝	\propto, \varpropto
⫥	\nleftVdash, \ndashV	∽	\backpropto, \propfrom
⫢	\ndownVdash	≍	\crossing
⊯	\nrightAssert, \nAssert	≬	\between
⫭	\nupAssert, \nvBar	∣	\shortmid
⫤	\nleftAssert	|	\mid, \divides
⫢	\ndownAssert, \nBarv	∤	\nshortmid
⊮	\nrightVDash, \nVDash	∤	\nmid, \ndivides
⫫	\nupVDash	∥	\shortparallel
⫤	\nleftVDash, \nDashV	∥	\parallel
⫢	\ndownVDash	∦	\nshortparallel
⊯	\nVvdash	∦	\nparallel

5.4 Punctuation symbols

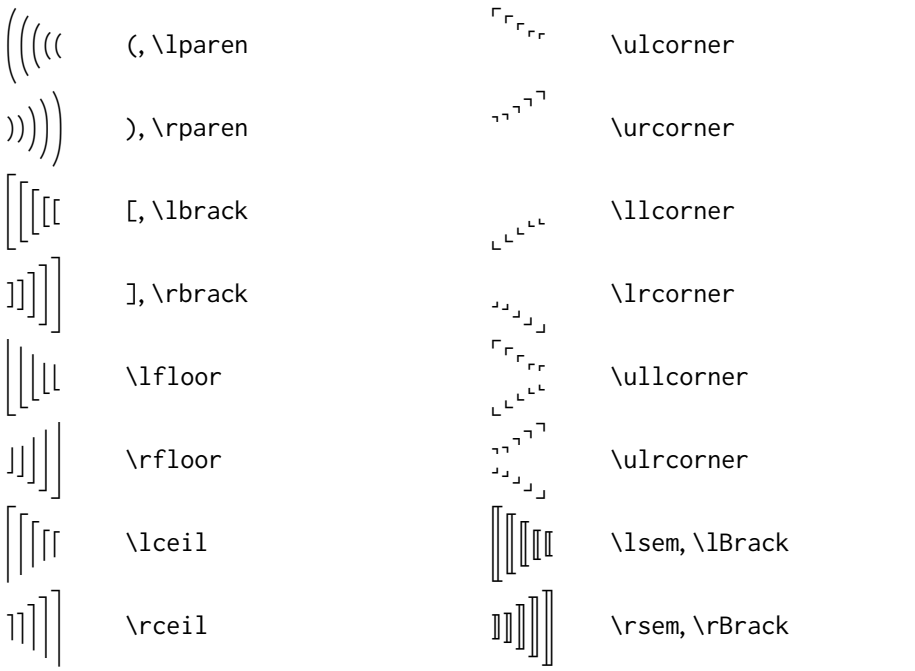
·	\cdotp	∶	\colon, \mathcolon

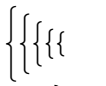
5.5 Large operators

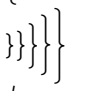
⨦		\bigplus	⨃		\bigcupdot
⨉		\bigtimes	⨇		\bigcapplus
⋀		\bigwedge	⨄		\bigcupplus, \biguplus
⋁		\bigvee	⨅		\bigsqcap
⟑		\bigwedgedot	⨆		\bigsqcup
⟇		\bigveedot	⨅		\bigsqcapdot
⩓		\bigdoublewedge, \conjquant	⨆		\bigsqcupdot
⩔		\bigdoublevee, \disjquant	⨅		\bigsqcapplus
⩛		\bigcurlywedge	⨆		\bigsqcupplus
⩚		\bigcurlyvee	⨁		\bigoplus
⋂		\bigcap	⨂		\bigotimes
⋃		\bigcup	⨀		\bigodot
⩀		\bigcapdot	⨂		\bigoast
			∏		\prod



5.6 Delimiters and accents




\lbrace, \{


\rbrace, \}

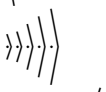
\langle

\rangle

\lAngle

\rAngle

\langledot

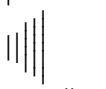

\rangledot

/, \mathslash

\backslash

|, \vert

\lvert


\rvert

\Vert, \|

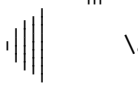
\lVert

\rVert

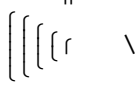
\Vvert

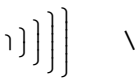
\lVvert

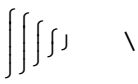
\rVvert

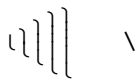

\arrowvert

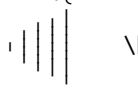
\Arrowvert


\lgroup


\rgroup


\lmoustache


\rmoustache

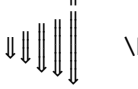

\bracevert

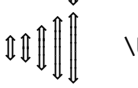
\uparrow

\downarrow

\updownarrow

\Uparrow


\Downarrow


\Updownarrow

$\overbrace{xxx}$ \overbrace
$\underbrace{xxx}$ \underbrace
$\overgroup{xxx}$ \overgroup
$\undergroup{xxx}$ \undergroup

$\sqrt{b}$ \sqrt
$\widehat{xxx}$ \widehat
$\widetilde{xxx}$ \widetilde
$\wideparen{xxx}$ \wideparen

$\overline{xxx}$ \overlinesegment
$\overleftharpoon{xxx}$ \overleftharpoon
$\overrightharpoon{xxx}$ \overrightharpoon
$\underline{xxx}$ \underlinesegment

$\vec{b}$ \vec
$b\!\!-$ \middlebar
$b\!\!/$ \middleslash
$b\!\!\not{}$ \strokethrough

5.7 Faked symbols

The following symbols are taken from the text font or another math font (in case of \Bbbk, \Re and \Im).

†	\dagger	𝕜	\Bbbk
‡	\ddagger	ℜ	\Re
¶	\mathparagraph	ℑ	\Im
§	\mathsection	ℏ	\hbar
$	\mathdollar	ℏ	\hslash
£	\mathsterling	®	\circledR
¥	\yen	Ⓢ	\circledS

5.8 Missing symbols

The following symbols from Computer Modern or the AMS fonts are missing in FdSymbol. If available, they should be taken from the text font.

\mho	\varkappa	\rhook
\nabla	\backepsilon	\diagup
\eth	\mapstochar	\diagdown
\digamma	\lhook	

6 Implementation

```
⟨*style⟩
\RequirePackage{xkeyval}
\newcommand*\fdsy@choicekey[3]{%
  \define@choicekey*{fdsymbol.sty}{#1}[\@tempa\@tempb]{#2}{#3}%
}
```

We use xkeyval's key mechanism to declare all options. The first options determines the size of delimiters.

```
\define@boolkey{fdsymbol.sty}[fdsy@]{largedelims}[true]{}
```

The next option allows to scale the fonts by an arbitrary factor.

```
\newcommand{\fdsy@scale}{1.0}
\define@key{fdsymbol.sty}{scale}{\renewcommand\fdsy@scale{#1}}
```

The following two options control which weights are used for which math version and font size.

```
\newcommand\fdsy@mweight@normal{Book}
\newcommand\fdsy@mweight@small{Book}
\newcommand\fdsy@bweight@normal{Medium}
\newcommand\fdsy@bweight@small{Medium}
\fdsy@choicekey{normalweight}{book,regular,auto}{%
  \ifcase\@tempb\relax
    \renewcommand\fdsy@mweight@normal{Book}%
    \renewcommand\fdsy@mweight@small{Book}%
```

```
  \or
    \renewcommand\fdsy@mweight@normal{Demi}%
    \renewcommand\fdsy@mweight@small{Demi}%
  \or
    \renewcommand\fdsy@mweight@normal{Book}%
    \renewcommand\fdsy@mweight@small{Demi}%
  \fi
}
\fdsy@choicekey{boldweight}{medium,bold,auto}{%
  \ifcase\@tempb\relax
    \renewcommand\fdsy@bweight@normal{Medium}%
    \renewcommand\fdsy@bweight@small{Medium}%
  \or
    \renewcommand\fdsy@bweight@normal{Bold}%
    \renewcommand\fdsy@bweight@small{Bold}%
  \or
    \renewcommand\fdsy@bweight@normal{Medium}%
    \renewcommand\fdsy@bweight@small{Bold}%
  \fi
}
```

Finally, the following option controls the style of large operators.

```
\newif\iffdsy@sfop
\fdsy@choicekey{opstyle}{serif,sans}{%
  \ifcase\@tempb\relax
    \fdsy@sfopfalse
  \or
    \fdsy@sfoptrue
  \fi
}
\ExecuteOptionsX{largedelims=false,opstyle=serif}
\ProcessOptionsX
```

Load external packages, but only if they are not already loaded in order to avoid warning messages about loading a package twice with different options.

```
\@ifpackageloaded{amsmath}{}{\RequirePackage{amsmath}}
\@ifpackageloaded{textcomp}{}{\RequirePackage{textcomp}}
```

If the option largedelims has been selected, we readjust the scaling factors of big delimiters, so that \Big, \bigg and \Bigg do not change their size.

```
\iffdsy@largedelims
  \renewcommand{\Big}{\bBigg@{1.25}}
  \renewcommand{\bigg}{\bBigg@{1.66}}
  \renewcommand{\Bigg}{\bBigg@{2.08}}
\fi
```

Some symbols missing from FdSymbol can be obtained from other fonts or by combining several other symbols.

```
\DeclareRobustCommand{\dagger}{\fdsy@text{\textdagger}}
\DeclareRobustCommand{\ddagger}{\fdsy@text{\textdaggerdbl}}
\DeclareRobustCommand{\mathparagraph}{\fdsy@text{\textparagraph}}
\DeclareRobustCommand{\mathsection}{\fdsy@text{\textsection}}
```

```
\DeclareRobustCommand{\mathdollar}{\fdsy@text{\textdollar}}
\DeclareRobustCommand{\mathsterling}{\fdsy@text{\textsterling}}
\DeclareRobustCommand{\yen}{\fdsy@text{\textyen}}
\DeclareRobustCommand{\circledR}{\fdsy@text{\textcircled{%
  \check@mathfonts\fontsize\sf@size\z@\math@fontsfalse\selectfont R}}}
\DeclareRobustCommand{\circledS}{\fdsy@text{\textcircled{%
  \check@mathfonts\fontsize\sf@size\z@\math@fontsfalse\selectfont S}}}
\DeclareRobustCommand{\Re}{\mathfrak{R}}
\DeclareRobustCommand{\Im}{\mathfrak{I}}
\DeclareRobustCommand{\dotcong}{\mathrel{\dot{\cong}}}
\DeclareRobustCommand{\thicksim}{\mathrel{\text{\boldmath$\m@th\sim$}}}
\DeclareRobustCommand{\thickapprox}{\mathrel{\text{\boldmath$\m@th\approx$}}}
\let\hbar\undefined
\let\hslash\undefined
\DeclareRobustCommand{\hbar}{\middlebar h}
\DeclareRobustCommand{\hslash}{\middleslash h}
\DeclareRobustCommand{\centerdot}{\mathbin{\rule{0.15em}{0.15em}}}
```

Unneeded partial symbols.

```
\let\mapstochar\undefined
\let\lhook\undefined
\let\rhook\undefined
```

Shorthands to simplify the definitions below.

```
\newcommand\fdsy@setslot[1]{\@tempcnta #1\relax}
\newcommand\fdsy@nextslot{\advance\@tempcnta 1\relax}
\newcommand\fdsy@prevslot{\advance\@tempcnta-1\relax}

\newcommand\fdsy@@DeclareSymbol[4]{\DeclareMathSymbol{#2}{#3}{#4}{#1}}
\newcommand\fdsy@DeclareSymbol[3]{%
  \if\relax\noexpand#1\let#1\undefined\fi
 \expandafter\fdsy@@DeclareSymbol\expandafter{\the\@tempcnta}{#1}{#3}{#2}%
  \fdsy@nextslot
}
\newcommand\fdsy@DeclareAlias[3]{\fdsy@prevslot\fdsy@DeclareSymbol{#1}{#2}{#3}}
\newcommand\fdsy@DeclareOperator[3]{\def#1{\DOTSB#3\slimits@}}
\newcommand\fdsy@DeclareIntegral[3]{\def#1{\DOTSI#3\ilimits@}}
\newcommand\fdsy@DeclareDelimiter[4]{%
  \if\relax\noexpand#1\let#1\undefined\fi
  \DeclareMathDelimiter{#1}{#2}{#3}{#4}{#3}{#4}%
}
\newcommand\fdsy@DeclareOpen[3]{\fdsy@DeclareDelimiter{#1}{\mathopen}{#2}{#3}}
\newcommand\fdsy@DeclareClose[3]{\fdsy@DeclareDelimiter{#1}{\mathclose}{#2}{#3}}
```

Font definitions.

```
\DeclareFontFamily{U}{FdSymbolA}{}
\DeclareFontFamily{U}{FdSymbolB}{}
\DeclareFontFamily{U}{FdSymbolC}{}
\DeclareFontFamily{U}{FdSymbolD}{}
\DeclareFontFamily{U}{FdSymbolE}{}
\DeclareFontFamily{U}{FdSymbolF}{}
```

```
\DeclareFontShape{U}{FdSymbolA}{m}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolA-\fdsy@mweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolA-\fdsy@mweight@normal
}{}
\DeclareFontShape{U}{FdSymbolA}{b}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolA-\fdsy@bweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolA-\fdsy@bweight@normal
}{}
\DeclareFontShape{U}{FdSymbolB}{m}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolB-\fdsy@mweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolB-\fdsy@mweight@normal
}{}
\DeclareFontShape{U}{FdSymbolB}{b}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolB-\fdsy@bweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolB-\fdsy@bweight@normal
}{}
\DeclareFontShape{U}{FdSymbolC}{m}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolC-\fdsy@mweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolC-\fdsy@mweight@normal
}{}
\DeclareFontShape{U}{FdSymbolC}{b}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolC-\fdsy@bweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolC-\fdsy@bweight@normal
}{}
\DeclareFontShape{U}{FdSymbolD}{m}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolD-\fdsy@mweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolD-\fdsy@mweight@normal
}{}
\DeclareFontShape{U}{FdSymbolD}{b}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolD-\fdsy@bweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolD-\fdsy@bweight@normal
}{}
\DeclareFontShape{U}{FdSymbolE}{m}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolE-\fdsy@mweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolE-\fdsy@mweight@normal
}{}
\DeclareFontShape{U}{FdSymbolE}{b}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolE-\fdsy@bweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolE-\fdsy@bweight@normal
}{}
\DeclareFontShape{U}{FdSymbolF}{m}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolF-\fdsy@mweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolF-\fdsy@mweight@normal
}{}
\DeclareFontShape{U}{FdSymbolF}{b}{n}{
    <-7.1> s * [\fdsy@scale] FdSymbolF-\fdsy@bweight@small
    <7.1-> s * [\fdsy@scale] FdSymbolF-\fdsy@bweight@normal
}{}
```

```
\DeclareSymbolFont{symbols}{U}{FdSymbolA}{m}{n}
\DeclareSymbolFont{relations}{U}{FdSymbolB}{m}{n}
\DeclareSymbolFont{arrows}{U}{FdSymbolC}{m}{n}
\DeclareSymbolFont{narrows}{U}{FdSymbolD}{m}{n}
\DeclareSymbolFont{largesymbols}{U}{FdSymbolE}{m}{n}
\DeclareSymbolFont{delimiters}{U}{FdSymbolF}{m}{n}
\SetSymbolFont{symbols}{bold}{U}{FdSymbolA}{b}{n}
\SetSymbolFont{relations}{bold}{U}{FdSymbolB}{b}{n}
\SetSymbolFont{arrows}{bold}{U}{FdSymbolC}{b}{n}
\SetSymbolFont{narrows}{bold}{U}{FdSymbolD}{b}{n}
\SetSymbolFont{largesymbols}{bold}{U}{FdSymbolE}{b}{n}
\SetSymbolFont{delimiters}{bold}{U}{FdSymbolF}{b}{n}
```

At the moment, we still use cmsy for the calligraphic alphabet, msb for the blackboard bold alphabet, and euf for the Fraktur alphabet.

```
\DeclareMathAlphabet{\mathcal}{OMS}{cmsy}{m}{n}
\SetMathAlphabet{\mathcal}{bold}{OMS}{cmsy}{b}{n}
\DeclareMathAlphabet{\mathbb}{U}{msb}{m}{n}
\DeclareMathAlphabet{\mathfrak}{U}{euf}{m}{n}
\SetMathAlphabet{\mathfrak}{bold}{U}{euf}{b}{n}
\let\Bbbk\undefined
\newcommand{\Bbbk}{\mathbb{\mathchar"717C}}
```

A command for taking math symbols from the text font.

```
\def\fdsy@bold{bold}
\newcommand*\fdsy@text[1]{%
  \ifx\fdsy@bold\math@version
    \text{\normalfont\bfseries#1}%
  \else
    \text{\normalfont\mdseries#1}%
  \fi
}
```

FdSymbolA: binary operators and ordinary symbols

```
\fdsy@setslot{0}
\fdsy@DeclareSymbol{\cdot}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\cdotp}{symbols}{\mathpunct}
\fdsy@DeclareSymbol{\hdotdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\vdotdot}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\colon}{symbols}{\mathpunct}
  \fdsy@DeclareAlias{\mathcolon}{symbols}{\mathpunct}
  \fdsy@DeclareAlias{\mathratio}{symbols}{\mathrel}
\fdsy@DeclareSymbol{\udotdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\ddotdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\hdots}{symbols}{\mathord}
  \fdsy@DeclareAlias{\@cdots}{symbols}{\mathinner}
  \let\cdots\@cdots
\fdsy@DeclareSymbol{\@vdots}{symbols}{\mathord}
\DeclareRobustCommand{\vdots}{\ifmmode\@vdots\else\hbox{$\@vdots$}\fi}
\fdsy@DeclareSymbol{\udots}{symbols}{\mathord}
```

```
  \fdsy@DeclareAlias{\adots}{symbols}{\mathord}
\fdsy@DeclareSymbol{\ddots}{symbols}{\mathord}
\fdsy@DeclareSymbol{\righttherefore}{symbols}{\mathord}
\fdsy@DeclareSymbol{\uptherefore}{symbols}{\mathord}
  \fdsy@DeclareAlias{\therefore}{symbols}{\mathord}
\fdsy@DeclareSymbol{\leftttherefore}{symbols}{\mathord}
\fdsy@DeclareSymbol{\downtherefore}{symbols}{\mathord}
  \fdsy@DeclareAlias{\because}{symbols}{\mathord}
\fdsy@DeclareSymbol{\squaredots}{symbols}{\mathord}
  \fdsy@DeclareAlias{\Colon}{symbols}{\mathrel}
\fdsy@DeclareSymbol{\minus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medslash}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\smalldivslash}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medbackslash}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\smallsetminus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\plus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\times}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\dotminus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\minusdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\div}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\minusfdots}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\minusrdots}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\dotsminusdots}{symbols}{\mathrel}
\fdsy@DeclareSymbol{\pm}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\mp}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\dotplus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\plusdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\dottimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\timesbar}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\divideontimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\neg}{symbols}{\mathord}
  \fdsy@DeclareAlias{\lnot}{symbols}{\mathord}
  \fdsy@DeclareAlias{\minushookdown}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\backneg}{symbols}{\mathord}
  \fdsy@DeclareAlias{\hookdownminus}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\invneg}{symbols}{\mathord}
  \fdsy@DeclareAlias{\invnot}{symbols}{\mathord}
\fdsy@DeclareSymbol{\intprod}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\minushookup}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\turnedneg}{symbols}{\mathord}
  \fdsy@DeclareAlias{\turnednot}{symbols}{\mathord}
\fdsy@DeclareSymbol{\intprodr}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\hookupminus}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\turnedbackneg}{symbols}{\mathord}
\fdsy@DeclareSymbol{\leftthreetimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\rightthreetimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\dtimes}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\btimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\rtimes}{symbols}{\mathbin}
```

```
  \fdsy@DeclareAlias{\rJoin}{symbols}{\mathrel}
\fdsy@DeclareSymbol{\utimes}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\ttimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\ltimes}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\lJoin}{symbols}{\mathrel}
\fdsy@DeclareSymbol{\bowtie}{symbols}{\mathrel}
  \fdsy@DeclareAlias{\Join}{symbols}{\mathrel}
  \fdsy@DeclareAlias{\lrtimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\upbowtie}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\hourglass}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\rightY}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\upY}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\leftY}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\downY}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\wedge}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\land}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\vee}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\lor}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\wedgedot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\veedot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\doublewedge}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\wedgeonwedge}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\doublevee}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\veeonvee}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\curlywedge}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\curlyvee}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\barwedge}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\veebar}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\doublebarwedge}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\veedoublebar}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\cup}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\cap}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\doublecup}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\Cup}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\doublecap}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\Cap}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\cupdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\capdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\cupplus}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\uplus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\capplus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\sqcup}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\sqcap}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\doublesqcup}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\Sqcup}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\doublesqcap}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\Sqcap}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\sqcupdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\sqcapdot}{symbols}{\mathbin}
```

```
\fdsy@DeclareSymbol{\sqcupplus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\sqcapplus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\pullback}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\pushout}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smalltriangleright}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smalltriangleup}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smalltriangleleft}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smalltriangledown}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smallblacktriangleright}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smallblacktriangleup}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smallblacktriangleleft}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smallblacktriangledown}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medtriangleright}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\triangleright}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medtriangleup}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\triangle}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\vartriangle}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medtriangleleft}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\triangleleft}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medtriangledown}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\triangledown}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medblacktriangleright}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\blacktriangleright}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medblacktriangleup}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\blacktriangle}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medblacktriangleleft}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\blacktriangleleft}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medblacktriangledown}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\blacktriangledown}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\largetriangleup}{symbols}{\mathord}
  \fdsy@DeclareAlias{\bigtriangleup}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\largetriangledown}{symbols}{\mathord}
  \fdsy@DeclareAlias{\bigtriangledown}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smallcircle}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\circ}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\smwhtcircle}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smallblackcircle}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\bullet}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\smblkcircle}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medcircle}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdlgwhtcircle}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medblackcircle}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdlgblkcircle}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\ominus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\overt}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\circledvert}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\oslash}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\obackslash}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\obslash}{symbols}{\mathbin}
```

```
\fdsy@DeclareSymbol{\oplus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\otimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\odot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\ocirc}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\circledcirc}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\oast}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\circledast}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\odash}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\circleddash}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\oequal}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\circledequal}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\emptyset}{symbols}{\mathord}
  \fdsy@DeclareAlias{\diameter}{symbols}{\mathord}
  \fdsy@DeclareAlias{\varnothing}{symbols}{\mathord}
\fdsy@DeclareSymbol{\revemptyset}{symbols}{\mathord}
\fdsy@DeclareSymbol{\largecircle}{symbols}{\mathord}
  \fdsy@DeclareAlias{\bigcirc}{symbols}{\mathord}
  \fdsy@DeclareAlias{\lgwhtcircle}{symbols}{\mathord}
\fdsy@DeclareSymbol{\largeblackcircle}{symbols}{\mathord}
  \fdsy@DeclareAlias{\lgblkcircle}{symbols}{\mathord}
\fdsy@DeclareSymbol{\smallsquare}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\smwhtsquare}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smallblacksquare}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\smblksquare}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medsquare}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\square}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\Box}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdlgwhtsquare}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdwhtsquare}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medblacksquare}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdlgblksquare}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdblksquare}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\boxminus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\boxvert}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\boxbar}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\boxslash}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\boxdiag}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\boxbackslash}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\boxbslash}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\boxplus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\boxtimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\boxdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\boxbox}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\largesquare}{symbols}{\mathord}
  \fdsy@DeclareAlias{\lgwhtsquare}{symbols}{\mathord}
\fdsy@DeclareSymbol{\largeblacksquare}{symbols}{\mathord}
  \fdsy@DeclareAlias{\lgblksquare}{symbols}{\mathord}
\fdsy@DeclareSymbol{\smalldiamond}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\diamond}{symbols}{\mathbin}
```

```
  \fdsy@DeclareAlias{\smwhtdiamond}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smallblackdiamond}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\blackdiamond}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\smblkdiamond}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\meddiamond}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\Diamond}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdlgwhtdiamond}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdwhtdiamond}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medblackdiamond}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdlgblkdiamond}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\mdblkdiamond}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\diamondminus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\diamondvert}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\diamondslash}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\diamondbackslash}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\diamondbslash}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\diamondplus}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\diamondtimes}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\diamonddot}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\diamondcdot}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\diamonddiamond}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smalllozenge}{symbols}{\mathord}
  \fdsy@DeclareAlias{\smwhtlozenge}{symbols}{\mathord}
\fdsy@DeclareSymbol{\smallblacklozenge}{symbols}{\mathord}
  \fdsy@DeclareAlias{\smblklozenge}{symbols}{\mathord}
\fdsy@DeclareSymbol{\medlozenge}{symbols}{\mathord}
  \fdsy@DeclareAlias{\lozenge}{symbols}{\mathord}
  \fdsy@DeclareAlias{\mdlgwhtlozenge}{symbols}{\mathord}
  \fdsy@DeclareAlias{\mdwhtlozenge}{symbols}{\mathord}
\fdsy@DeclareSymbol{\medblacklozenge}{symbols}{\mathord}
  \fdsy@DeclareAlias{\blacklozenge}{symbols}{\mathord}
  \fdsy@DeclareAlias{\mdlgblklozenge}{symbols}{\mathord}
  \fdsy@DeclareAlias{\mdblklozenge}{symbols}{\mathord}
\fdsy@DeclareSymbol{\lozengeminus}{symbols}{\mathord}
\fdsy@DeclareSymbol{\smallwhitestar}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\smwhitestar}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\smallblackstar}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\star}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medwhitestar}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\medblackstar}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\medstar}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\largewhitestar}{symbols}{\mathord}
\fdsy@DeclareSymbol{\largeblackstar}{symbols}{\mathord}
  \fdsy@DeclareAlias{\bigstar}{symbols}{\mathord}
\fdsy@DeclareSymbol{\ast}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\infty}{symbols}{\mathord}
\fdsy@DeclareSymbol{\propto}{symbols}{\mathrel}
  \fdsy@DeclareAlias{\varpropto}{symbols}{\mathrel}
\fdsy@DeclareSymbol{\backpropto}{symbols}{\mathrel}
```

```
  \fdsy@DeclareAlias{\propfrom}{symbols}{\mathrel}
\fdsy@DeclareSymbol{\crossing}{symbols}{\mathrel}
\fdsy@DeclareSymbol{\between}{symbols}{\mathrel}
\fdsy@DeclareSymbol{\intercal}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\wreath}{symbols}{\mathbin}
  \fdsy@DeclareAlias{\wr}{symbols}{\mathbin}
\fdsy@DeclareSymbol{\angle}{symbols}{\mathord}
\fdsy@DeclareSymbol{\revangle}{symbols}{\mathord}
\fdsy@DeclareSymbol{\measuredangle}{symbols}{\mathord}
\fdsy@DeclareSymbol{\revmeasuredangle}{symbols}{\mathord}
  \fdsy@DeclareAlias{\measuredangleleft}{symbols}{\mathord}
\fdsy@DeclareSymbol{\sphericalangle}{symbols}{\mathord}
\fdsy@DeclareSymbol{\sphericalangleup}{symbols}{\mathord}
\fdsy@DeclareSymbol{\sphericalangleleft}{symbols}{\mathord}
  \fdsy@DeclareAlias{\revsphericalangle}{symbols}{\mathord}
  \fdsy@DeclareAlias{\gtlpar}{symbols}{\mathord}
\fdsy@DeclareSymbol{\sphericalangledown}{symbols}{\mathord}
\fdsy@DeclareSymbol{\rightangle}{symbols}{\mathord}
\fdsy@DeclareSymbol{\measuredrightangle}{symbols}{\mathord}
\fdsy@DeclareSymbol{\rightanglesquare}{symbols}{\mathord}
  \fdsy@DeclareAlias{\rightanglesqr}{symbols}{\mathord}
\fdsy@DeclareSymbol{\measuredrightangledot}{symbols}{\mathord}
  \fdsy@DeclareAlias{\rightanglemdot}{symbols}{\mathord}
\fdsy@DeclareSymbol{\prime}{symbols}{\mathord}
\fdsy@DeclareSymbol{\backprime}{symbols}{\mathord}
\iffdsy@sfop
  \fdsy@DeclareSymbol{\varsmallprod}{symbols}{\mathop}
  \fdsy@DeclareSymbol{\smallprod}{symbols}{\mathop}
  \fdsy@DeclareSymbol{\varsmallcoprod}{symbols}{\mathop}
    \fdsy@DeclareAlias{\varamalg}{symbols}{\mathbin}
  \fdsy@DeclareSymbol{\smallcoprod}{symbols}{\mathop}
    \fdsy@DeclareAlias{\amalg}{symbols}{\mathbin}
\else
  \fdsy@DeclareSymbol{\smallprod}{symbols}{\mathop}
  \fdsy@DeclareSymbol{\varsmallprod}{symbols}{\mathop}
  \fdsy@DeclareSymbol{\smallcoprod}{symbols}{\mathop}
    \fdsy@DeclareAlias{\amalg}{symbols}{\mathbin}
  \fdsy@DeclareSymbol{\varsmallcoprod}{symbols}{\mathop}
    \fdsy@DeclareAlias{\varamalg}{symbols}{\mathbin}
\fi
\fdsy@DeclareSymbol{\smallint}{symbols}{\mathop}
\fdsy@DeclareSymbol{\checkmark}{symbols}{\mathord}
\fdsy@DeclareSymbol{\lightning}{symbols}{\mathord}
  \fdsy@DeclareAlias{\downzigzagarrow}{symbols}{\mathord}
\fdsy@DeclareSymbol{\diamondsuit}{symbols}{\mathord}
\fdsy@DeclareSymbol{\vardiamondsuit}{symbols}{\mathord}
\fdsy@DeclareSymbol{\heartsuit}{symbols}{\mathord}
\fdsy@DeclareSymbol{\varheartsuit}{symbols}{\mathord}
\fdsy@DeclareSymbol{\spadesuit}{symbols}{\mathord}
```

```
\fdsy@DeclareSymbol{\clubsuit}{symbols}{\mathord}
\fdsy@DeclareSymbol{\maltese}{symbols}{\mathord}
\fdsy@DeclareSymbol{\starofdavid}{symbols}{\mathord}
\fdsy@DeclareSymbol{\sector}{symbols}{\mathord}
\fdsy@DeclareSymbol{\forall}{symbols}{\mathord}
\fdsy@DeclareSymbol{\exists}{symbols}{\mathord}
\fdsy@DeclareSymbol{\nexists}{symbols}{\mathord}
\fdsy@DeclareSymbol{\Finv}{symbols}{\mathord}
\fdsy@DeclareSymbol{\Game}{symbols}{\mathord}
\fdsy@DeclareSymbol{\complement}{symbols}{\mathord}
\fdsy@DeclareSymbol{\flat}{symbols}{\mathord}
\fdsy@DeclareSymbol{\natural}{symbols}{\mathord}
\fdsy@DeclareSymbol{\sharp}{symbols}{\mathord}
\fdsy@DeclareSymbol{\aleph}{symbols}{\mathord}
\fdsy@DeclareSymbol{\beth}{symbols}{\mathord}
\fdsy@DeclareSymbol{\gimel}{symbols}{\mathord}
\fdsy@DeclareSymbol{\daleth}{symbols}{\mathord}
\fdsy@DeclareSymbol{\wp}{symbols}{\mathord}
```

FdSymbolB: relations

```
\fdsy@setslot{0}
\fdsy@DeclareSymbol{\equal}{relations}{\mathrel}
\fdsy@DeclareSymbol{\equiv}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\backsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\approx}{relations}{\mathrel}
\fdsy@DeclareSymbol{\triplesim}{relations}{\mathrel}
  \fdsy@DeclareAlias{\approxident}{relations}{\mathrel}
\fdsy@DeclareSymbol{\simeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\backsimeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\eqsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\cong}{relations}{\mathrel}
\fdsy@DeclareSymbol{\backcong}{relations}{\mathrel}
\fdsy@DeclareSymbol{\approxeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\bumpeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\bumpeqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\Bumpeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\doteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\eqdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\Doteq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\doteqdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\fallingdotseq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\risingdotseq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\coloneq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\coloneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\eqcolon}{relations}{\mathrel}
  \fdsy@DeclareAlias{\eqqcolon}{relations}{\mathrel}
\fdsy@DeclareSymbol{\smile}{relations}{\mathrel}
  \fdsy@DeclareAlias{\smallsmile}{relations}{\mathrel}
\fdsy@DeclareSymbol{\frown}{relations}{\mathrel}
```

```
  \fdsy@DeclareAlias{\smallfrown}{relations}{\mathrel}
\fdsy@DeclareSymbol{\smilefrown}{relations}{\mathrel}
  \fdsy@DeclareAlias{\asymp}{relations}{\mathrel}
\fdsy@DeclareSymbol{\frownsmile}{relations}{\mathrel}
  \fdsy@DeclareAlias{\closure}{relations}{\mathrel}
\fdsy@DeclareSymbol{\smileeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\frowneq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\arceq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\eqcirc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\circeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\wedgeq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\hateq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\veeeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\stareq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\triangleeq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\triangleq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\in}{relations}{\mathrel}
\fdsy@DeclareSymbol{\owns}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ni}{relations}{\mathrel}
\fdsy@DeclareSymbol{\less}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\leq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\le}{relations}{\mathrel}
\fdsy@DeclareSymbol{\geq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ge}{relations}{\mathrel}
\fdsy@DeclareSymbol{\leqslant}{relations}{\mathrel}
\fdsy@DeclareSymbol{\geqslant}{relations}{\mathrel}
\fdsy@DeclareSymbol{\leqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\geqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lesssim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtrsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lessapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtrapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lessgtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtrless}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lesseqgtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtreqless}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lesseqqgtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtreqqless}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lesseqslantgtr}{relations}{\mathrel}
  \fdsy@DeclareAlias{\lesg}{relations}{\mathrel}
  \fdsy@DeclareAlias{\lesseqgtrslant}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtreqslantless}{relations}{\mathrel}
  \fdsy@DeclareAlias{\gesl}{relations}{\mathrel}
  \fdsy@DeclareAlias{\gtreqlessslant}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ll}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gg}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lll}{relations}{\mathrel}
  \fdsy@DeclareAlias{\llless}{relations}{\mathrel}
```

```
\fdsy@DeclareSymbol{\ggg}{relations}{\mathrel}
  \fdsy@DeclareAlias{\gggtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lessclosed}{relations}{\mathrel}
  \fdsy@DeclareAlias{\lhd}{relations}{\mathbin}
  \fdsy@DeclareAlias{\vartriangleleft}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtrclosed}{relations}{\mathrel}
  \fdsy@DeclareAlias{\rhd}{relations}{\mathbin}
  \fdsy@DeclareAlias{\vartriangleright}{relations}{\mathrel}
\fdsy@DeclareSymbol{\leqclosed}{relations}{\mathrel}
  \fdsy@DeclareAlias{\unlhd}{relations}{\mathbin}
  \fdsy@DeclareAlias{\trianglelefteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\geqclosed}{relations}{\mathrel}
  \fdsy@DeclareAlias{\unrhd}{relations}{\mathbin}
  \fdsy@DeclareAlias{\trianglerighteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lesscc}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ltcc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtrcc}{relations}{\mathrel}
  \fdsy@DeclareAlias{\gtcc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\leqslcc}{relations}{\mathrel}
  \fdsy@DeclareAlias{\lescc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\geqslcc}{relations}{\mathrel}
  \fdsy@DeclareAlias{\gescc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsubset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsupset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsubseteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsupseteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsubseteqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsupseteqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\Sqsubset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\Sqsupset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\subset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\supset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\subseteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\supseteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\subseteqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\supseteqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\Subset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\Supset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\prec}{relations}{\mathrel}
\fdsy@DeclareSymbol{\succ}{relations}{\mathrel}
\fdsy@DeclareSymbol{\preceq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\succeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\preccurlyeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\succcurlyeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\preceqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\succeqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\precsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\succsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\precapprox}{relations}{\mathrel}
```

```
\fdsy@DeclareSymbol{\succapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lessdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gtrdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\leqdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\geqdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\leqslantdot}{relations}{\mathrel}
  \fdsy@DeclareAlias{\lesdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\geqslantdot}{relations}{\mathrel}
  \fdsy@DeclareAlias{\gesdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\eqslantless}{relations}{\mathrel}
\fdsy@DeclareSymbol{\eqslantgtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\curlyeqprec}{relations}{\mathrel}
\fdsy@DeclareSymbol{\curlyeqsucc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nequal}{relations}{\mathrel}
  \fdsy@DeclareAlias{\neq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ne}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nequiv}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nbacksim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\napprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ntriplesim}{relations}{\mathrel}
  \fdsy@DeclareAlias{\napproxident}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsimeq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\nsime}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nbacksimeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\neqsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ncong}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nbackcong}{relations}{\mathrel}
\fdsy@DeclareSymbol{\napproxeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nbumpeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nbumpeqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nBumpeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ndoteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\neqdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nDoteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nfallingdotseq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nrisingdotseq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsmile}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nfrown}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsmilefrown}{relations}{\mathrel}
  \fdsy@DeclareAlias{\nasymp}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nfrownsmile}{relations}{\mathrel}
  \fdsy@DeclareAlias{\nclosure}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsmileeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nfrowneq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\narceq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\neqcirc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ncirceq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nwedgeq}{relations}{\mathrel}
```

```
  \fdsy@DeclareAlias{\nhateq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nveeeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nstareq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ntriangleeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nin}{relations}{\mathrel}
  \fdsy@DeclareAlias{\notin}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nowns}{relations}{\mathrel}
  \fdsy@DeclareAlias{\nni}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nless}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nleq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nleqslant}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngeqslant}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nleqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngeqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlesssim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtrsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlessapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtrapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlessgtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtrless}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlesseqgtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtreqless}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlesseqqgtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtreqqless}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlesseqslantgtr}{relations}{\mathrel}
  \fdsy@DeclareAlias{\nlesg}{relations}{\mathrel}
  \fdsy@DeclareAlias{\nlesseqgtrslant}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtreqslantless}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ngesl}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ngtreqlessslant}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nll}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngg}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlll}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nggg}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlessclosed}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ntriangleleft}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtrclosed}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ntriangleright}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nleqclosed}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ntrianglelefteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngeqclosed}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ntrianglerighteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlesscc}{relations}{\mathrel}
  \fdsy@DeclareAlias{\nltcc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtrcc}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ngtcc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nleqslcc}{relations}{\mathrel}
```

```
  \fdsy@DeclareAlias{\nlescc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngeqslcc}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ngescc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsqsubset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsqsupset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsqsubseteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsqsupseteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsqsubseteqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsqsupseteqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nSqsubset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nSqsupset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsubset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsupset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsubseteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsupseteq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsubseteqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsupseteqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nSubset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nSupset}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nprec}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsucc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\npreceq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsucceq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\npreccurlyeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsucccurlyeq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\npreceqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsucceqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nprecsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsuccsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nprecapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nsuccapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nlessdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngtrdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nleqdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngeqdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\nleqslantdot}{relations}{\mathrel}
  \fdsy@DeclareAlias{\nlesdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ngeqslantdot}{relations}{\mathrel}
  \fdsy@DeclareAlias{\ngesdot}{relations}{\mathrel}
\fdsy@DeclareSymbol{\neqslantless}{relations}{\mathrel}
\fdsy@DeclareSymbol{\neqslantgtr}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ncurlyeqprec}{relations}{\mathrel}
\fdsy@DeclareSymbol{\ncurlyeqsucc}{relations}{\mathrel}
\fdsy@DeclareSymbol{\simneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\backsimneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lneq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gneq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lneqq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\lvertneqq}{relations}{\mathrel}
```

```
\fdsy@DeclareSymbol{\gneqq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\gvertneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lnsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gnsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\lnapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\gnapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsubsetneq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsupsetneq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsubsetneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\sqsupsetneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\subsetneq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\varsubsetneq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\supsetneq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\varsupsetneq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\subsetneqq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\varsubsetneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\supsetneqq}{relations}{\mathrel}
  \fdsy@DeclareAlias{\varsupsetneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\precneq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\succneq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\precneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\succneqq}{relations}{\mathrel}
\fdsy@DeclareSymbol{\precnsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\succnsim}{relations}{\mathrel}
\fdsy@DeclareSymbol{\precnapprox}{relations}{\mathrel}
\fdsy@DeclareSymbol{\succnapprox}{relations}{\mathrel}
```

FdSymbolC: arrows and turnstile symbols

```
\fdsy@setslot{0}
\fdsy@DeclareSymbol{\rightarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\to}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\uparrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftarrow}{arrows}{\mathrel}
\fdsy@DeclareAlias{\gets}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\swarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\searrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Rightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Uparrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Leftarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Downarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Nearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Nwarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Swarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Searrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\updownarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\neswarrow}{arrows}{\mathrel}
```

```
\fdsy@DeclareSymbol{\nwsearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Leftrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Updownarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Neswarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Nwsearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\twoheadrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\twoheaduparrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\twoheadleftarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\twoheaddownarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\twoheadnearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\twoheadnwarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\twoheadswarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\twoheadsearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightarrowtail}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\uparrowtail}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftarrowtail}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downarrowtail}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nearrowtail}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwarrowtail}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\swarrowtail}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\searrowtail}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightmapsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\mapsto}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upmapsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\mapsup}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftmapsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\mapsfrom}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downmapsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\mapsdown}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Rightmapsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\Mapsto}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Upmapsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\Mapsup}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Leftmapsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\Mapsfrom}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Downmapsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\Mapsdown}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\hookrightarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\lhookrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\hookuparrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\lhookuparrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varhookleftarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\lhookleftarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varhookdownarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\lhookdownarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varhooknearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\lhooknearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\hooknwarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\hknwarrow}{arrows}{\mathrel}
```

```
  \fdsy@DeclareAlias{\lhooknwarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varhookswarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\lhookswarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\hooksearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\hksearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\lhooksearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varhookrightarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rhookrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varhookuparrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rhookuparrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\hookleftarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rhookleftarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\hookdownarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rhookdownarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\hooknearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\hknearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rhooknearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varhooknwarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rhooknwarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\hookswarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\hkswarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rhookswarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varhooksearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rhooksearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightharpoonup}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upharpoonleft}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftharpoondown}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downharpoonright}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\neharpoonnw}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwharpoonsw}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\swharpoonse}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\seharpoonne}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightharpoondown}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upharpoonright}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\restriction}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftharpoonup}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downharpoonleft}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\neharpoonse}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwharpoonne}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\swharpoonnw}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\seharpoonsw}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftrightharpoonupdown}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\updownharpoonleftright}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\neswharpoonnwse}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwseharpoonnesw}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftrightharpoondownup}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\updownharpoonrightleft}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\neswharpoonsenw}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwseharpoonswne}{arrows}{\mathrel}
```

```
\fdsy@DeclareSymbol{\rightleftharpoons}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\updownharpoons}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\updownharpoonsleftright}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\neswharpoons}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\senwharpoons}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftrightharpoons}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downupharpoons}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\downupharpoonsleftright}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\swneharpoons}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwseharpoons}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightbkarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\dasharrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\dashrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upbkarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftbkarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\dashleftarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downbkarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nebkarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwbkarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\swbkarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\sebkarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightspoon}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\multimap}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upspoon}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\cirmid}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftspoon}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\multimapinv}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downspoon}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\midcir}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightblackspoon}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upblackspoon}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftblackspoon}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downblackspoon}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftrightspoon}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\dualmap}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftrightblackspoon}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\blackwhitespoon}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\imageof}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\whiteblackspoon}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\origof}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightpitchfork}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\uppitchfork}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\pitchfork}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftpitchfork}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downpitchfork}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightrightarrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upuparrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftleftarrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downdownarrows}{arrows}{\mathrel}
```

```
\fdsy@DeclareSymbol{\nenearrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwnwarrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\swswarrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\sesearrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightleftarrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\updownarrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\neswarrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\nwsearrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftrightarrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downuparrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\swnearrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\senwarrows}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leadsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightsquigarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightcurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightlsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varupwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\uplsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varleftwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftlsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\downlsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varrightwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightrsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\uprsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftsquigarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftcurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftrsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\vardownwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\downrsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftrightwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftrightsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\updownwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\updownsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varleftrightwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightleftsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\varupdownwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\downupsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwoverarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\curvearrowright}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightlcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwleftarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\uplcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwunderarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftlcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwrightarcarrow}{arrows}{\mathrel}
```

```
  \fdsy@DeclareAlias{\downlcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwnwarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightupcurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\nelcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwswarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\upleftcurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\nwlcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwsearcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftdowncurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\swlcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwnearcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\downrightcurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\selcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwunderarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightrcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwrightarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\uprcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwoverarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\curvearrowleft}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftrcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwleftarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\downrcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwsearcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\uprightcurvearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\nercurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwnearcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftupcurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\nwrcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwnwarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\downleftcurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\swrcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwswarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightdowncurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\sercurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\bdoverarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\leftrightcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\bdleftarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\updowncurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\bdunderarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\rightleftcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\bdrightarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\downupcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\bdnwarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\neswcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\bdswarcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\nwsecurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\bdsearcarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\swnecurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\bdnearcarrow}{arrows}{\mathrel}
```

```
  \fdsy@DeclareAlias{\senwcurvearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftfootline}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightfootline}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwcirclearrowup}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwcirclearrowleft}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\circlearrowleft}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\acwopencirclearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwcirclearrowdown}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\acwgapcirclearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\acwcirclearrowright}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwcirclearrowdown}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\cwgapcirclearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwcirclearrowright}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\circlearrowright}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\cwopencirclearrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwcirclearrowup}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\cwcirclearrowleft}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Rrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Uuparrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Lleftarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Ddownarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\longrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\longleftarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Longrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Longleftarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\longleftrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Longleftrightarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\longmapsto}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\longmapsfrom}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Longmapsto}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Longmapsfrom}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\longrightwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\longleadsto}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\longrightsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\longleftwavearrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\longleftsquigarrow}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\longleftfootline}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\vlongdash}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\longrightfootline}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\longdashv}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Lsh}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Rsh}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Ldsh}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Rdsh}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\looparrowright}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\looparrowleft}{arrows}{\mathrel}
\fdsy@setslot{224}
\fdsy@DeclareSymbol{\rightvdash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\vdash}{arrows}{\mathrel}
```

```
\fdsy@DeclareSymbol{\upvdash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\perp}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\bot}{arrows}{\mathord}
\fdsy@DeclareSymbol{\leftvdash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\dashv}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downvdash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\top}{arrows}{\mathord}
\fdsy@DeclareSymbol{\rightassert}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\assert}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\shortrighttack}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upassert}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\shortuptack}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftassert}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\shortlefttack}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downassert}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\shortdowntack}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightvDash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\vDash}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upvDash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\Vbar}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftvDash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\Dashv}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downvDash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\barV}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightmodels}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\models}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upmodels}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftmodels}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downmodels}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightVdash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\Vdash}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upVdash}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftVdash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\dashV}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downVdash}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightAssert}{arrows}{\mathrel}
 \fdsy@DeclareAlias{\Assert}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upAssert}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\vBar}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftAssert}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downAssert}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\Barv}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\rightVDash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\VDash}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\upVDash}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\leftVDash}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\DashV}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\downVDash}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Vvdash}{arrows}{\mathrel}
```

```
\fdsy@DeclareSymbol{\dashVv}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\vDdash}{arrows}{\mathrel}
\fdsy@DeclareSymbol{\Ddashv}{arrows}{\mathrel}

\DeclareRobustCommand{\relbar}{\mathrel{\smash-}}
\DeclareRobustCommand{\Relbar}{\mathrel=}
\let\joinrel\undefined
\DeclareRobustCommand\joinrel{\mathrel{\mkern-4mu}}
```

FdSymbolD: stroked arrows

```
\fdsy@setslot{0}
\fdsy@DeclareSymbol{\nrightarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nto}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nuparrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ngets}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nswarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nsearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nRightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nUparrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nLeftarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nDownarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nNearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nNwarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nSwarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nSearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupdownarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nneswarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwsearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nLeftrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nUpdownarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nNeswarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nNwsearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ntwoheadrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ntwoheaduparrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ntwoheadleftarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ntwoheaddownarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ntwoheadnearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ntwoheadnwarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ntwoheadswarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ntwoheadsearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightarrowtail}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nuparrowtail}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftarrowtail}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownarrowtail}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnearrowtail}{narrows}{\mathrel}
```

```
\fdsy@DeclareSymbol{\nnwarrowtail}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nswarrowtail}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nsearrowtail}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightmapsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nmapsto}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupmapsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nmapsup}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftmapsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nmapsfrom}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownmapsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nmapsdown}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nRightmapsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nMapsto}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nUpmapsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nMapsup}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nLeftmapsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nMapsfrom}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nDownmapsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nMapsdown}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nhookrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nhookuparrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarhookleftarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarhookdownarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarhooknearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nhooknwarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nhknwarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarhookswarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nhooksearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nhksearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarhookrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarhookuparrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nhookleftarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nhookdownarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nhooknearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nhknearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarhooknwarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nhookswarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nhkswarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarhooksearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightharpoonup}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupharpoonleft}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftharpoondown}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownharpoonright}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nneharpoonnw}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwharpoonsw}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nswharpoonse}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nseharpoonne}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightharpoondown}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupharpoonright}{narrows}{\mathrel}
```

```
  \fdsy@DeclareAlias{\nrestriction}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftharpoonup}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownharpoonleft}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nneharpoonse}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwharpoonne}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nswharpoonnw}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nseharpoonsw}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftrightharpoonupdown}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupdownharpoonleftright}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nneswharpoonnwse}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwseharpoonnesw}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftrightharpoondownup}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupdownharpoonrightleft}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nneswharpoonsenw}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwseharpoonswne}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightleftharpoons}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupdownharpoons}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nupdownharpoonsleftright}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nneswharpoons}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nsenwharpoons}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftrightharpoons}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownupharpoons}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndownupharpoonsleftright}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nswneharpoons}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwseharpoons}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightbkarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndasharrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndashrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupbkarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftbkarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndashleftarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownbkarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnebkarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwbkarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nswbkarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nsebkarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightspoon}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nmultimap}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupspoon}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ncirmid}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftspoon}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nmultimapinv}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownspoon}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nmidcir}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightblackspoon}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupblackspoon}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftblackspoon}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownblackspoon}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftrightspoon}{narrows}{\mathrel}
```

```
  \fdsy@DeclareAlias{\ndualmap}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftrightblackspoon}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nblackwhitespoon}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nimageof}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nwhiteblackspoon}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\norigof}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightpitchfork}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nuppitchfork}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\npitchfork}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftpitchfork}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownpitchfork}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightrightarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupuparrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftleftarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndowndownarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnenearrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwnwarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nswswarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nsesearrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightleftarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupdownarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nneswarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nnwsearrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftrightarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownuparrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nswnearrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nsenwarrows}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nleadsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightsquigarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightcurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightlsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarupwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nuplsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarleftwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nleftlsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndownlsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarrightwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightrsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nuprsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nleftsquigarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nleftcurvedarrow}{arrows}{\mathrel}
  \fdsy@DeclareAlias{\nleftrsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvardownwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndownrsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftrightwavearrow}{narrows}{\mathrel}
```

```
  \fdsy@DeclareAlias{\nleftrightsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupdownwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nupdownsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarleftrightwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightleftsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvarupdownwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndownupsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwoverarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ncurvearrowright}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightlcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwleftarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nuplcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwunderarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nleftlcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwrightarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndownlcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwnwarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightupcurvedarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nnelcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwswarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nupleftcurvedarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nnwlcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwsearcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nleftdowncurvedarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nswlcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwnearcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndownrightcurvedarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nselcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwunderarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwrightarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nuprcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwoverarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ncurvearrowleft}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nleftrcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwleftarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndownrcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwsearcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nuprightcurvearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nnercurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwnearcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nleftupcurvedarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nnwrcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwnwarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndownleftcurvedarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nswrcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwswarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightdowncurvedarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nsercurvearrow}{narrows}{\mathrel}
```

```
\fdsy@DeclareSymbol{\nbdoverarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nleftrightcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nbdleftarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nupdowncurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nbdunderarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nrightleftcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nbdrightarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndownupcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nbdnwarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nneswcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nbdswarcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nnwsecurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nbdsearcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nswnecurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nbdnearcarrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nsenwcurvearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftfootline}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightfootline}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwcirclearrowup}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwcirclearrowleft}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ncirclearrowleft}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nacwopencirclearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwcirclearrowdown}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nacwgapcirclearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nacwcirclearrowright}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwcirclearrowdown}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ncwgapcirclearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwcirclearrowright}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ncirclearrowright}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ncwopencirclearrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwcirclearrowup}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ncwcirclearrowleft}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nRrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nUuparrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nLleftarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nDdownarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nlongrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nlongleftarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nLongrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nLongleftarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nlongleftrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nLongleftrightarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nlongmapsto}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nlongmapsfrom}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nLongmapsto}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nLongmapsfrom}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nlongrightwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nlongleadsto}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nlongrightsquigarrow}{narrows}{\mathrel}
```

```
\fdsy@DeclareSymbol{\nlongleftwavearrow}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nlongleftsquigarrow}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nlongleftfootline}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nvlongdash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nlongrightfootline}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nlongdashv}{narrows}{\mathrel}
\fdsy@setslot{224}
\fdsy@DeclareSymbol{\nrightvdash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nvdash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupvdash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nperp}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftvdash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndashv}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownvdash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightassert}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nassert}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nshortrighttack}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupassert}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nshortuptack}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftassert}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nshortlefttack}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownassert}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nshortdowntack}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightvDash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nvDash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupvDash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nVbar}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftvDash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nDashv}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownvDash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nbarV}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightmodels}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nmodels}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupmodels}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftmodels}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownmodels}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightVdash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nVdash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupVdash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftVdash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\ndashV}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownVdash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nrightAssert}{narrows}{\mathrel}
 \fdsy@DeclareAlias{\nAssert}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupAssert}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nvBar}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftAssert}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownAssert}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nBarv}{narrows}{\mathrel}
```

```
\fdsy@DeclareSymbol{\nrightVDash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nVDash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nupVDash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nleftVDash}{narrows}{\mathrel}
  \fdsy@DeclareAlias{\nDashV}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndownVDash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nVvdash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\ndashVv}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nvDdash}{narrows}{\mathrel}
\fdsy@DeclareSymbol{\nDdashv}{narrows}{\mathrel}
```

FdSymbolE: large operators

```
\fdsy@setslot{0}
\fdsy@DeclareSymbol{\tbigplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigtimes}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigtimes}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigwedge}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigwedge}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigvee}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigvee}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigwedgedot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigwedgedot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigveedot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigveedot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigdoublewedge}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tconjquant}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigdoublewedge}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\dconjquant}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigdoublevee}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tdisjquant}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigdoublevee}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\ddisjquant}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigcurlywedge}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigcurlywedge}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigcurlyvee}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigcurlyvee}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigcap}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigcap}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigcup}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigcup}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigcapdot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigcapdot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigcupdot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigcupdot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigcapplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigcapplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigcupplus}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tbiguplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigcupplus}{largesymbols}{\mathop}
```

```
  \fdsy@DeclareAlias{\dbiguplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigsqcap}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigsqcap}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigsqcup}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigsqcup}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigsqcapdot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigsqcapdot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigsqcupdot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigsqcupdot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigsqcapplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigsqcapplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigsqcupplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigsqcupplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigoplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigoplus}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigotimes}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigotimes}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigodot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigodot}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tbigoast}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dbigoast}{largesymbols}{\mathop}
\iffdsy@sfop
  \fdsy@DeclareSymbol{\tvarprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tvarcoprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarcoprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tcoprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dcoprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tvarsum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarsum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tsum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dsum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tvarosum}{largesymbols}{\mathop}
    \fdsy@DeclareAlias{\tvarmodtwosum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarosum}{largesymbols}{\mathop}
    \fdsy@DeclareAlias{\dvarmodtwosum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tosum}{largesymbols}{\mathop}
    \fdsy@DeclareAlias{\tmodtwosum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dosum}{largesymbols}{\mathop}
    \fdsy@DeclareAlias{\dmodtwosum}{largesymbols}{\mathop}
\else
  \fdsy@DeclareSymbol{\tprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tvarprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tcoprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dcoprod}{largesymbols}{\mathop}
```

```
  \fdsy@DeclareSymbol{\tvarcoprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarcoprod}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tsum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dsum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tvarsum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarsum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tosum}{largesymbols}{\mathop}
    \fdsy@DeclareAlias{\tmodtwosum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dosum}{largesymbols}{\mathop}
    \fdsy@DeclareAlias{\dmodtwosum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tvarosum}{largesymbols}{\mathop}
    \fdsy@DeclareAlias{\tvarmodtwosum}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarosum}{largesymbols}{\mathop}
    \fdsy@DeclareAlias{\dvarmodtwosum}{largesymbols}{\mathop}
\fi
\fdsy@DeclareSymbol{\tint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tiint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\diint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tiiint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\diiint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tiiiint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\diiiint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tidotsint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tdotsint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\didotsint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\ddotsint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tlandupint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tintclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dlandupint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\dintclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tlanddownint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tawint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tintctrclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dlanddownint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\dawint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\dintctrclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tintbar}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dintbar}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tintBar}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dintBar}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tfint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dfint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\toint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\doint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\toiint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\doiint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\toiiint}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\doiiint}{largesymbols}{\mathop}
```

```
\fdsy@DeclareSymbol{\trcirclerightint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tointctrclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\drcirclerightint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\dointctrclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tlcirclerightint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tvarointclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dlcirclerightint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\dvarointclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\trcircleleftint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tvarointctrclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\drcircleleftint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\dvarointctrclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\tlcircleleftint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\tointclockwise}{largesymbols}{\mathop}
\fdsy@DeclareSymbol{\dlcircleleftint}{largesymbols}{\mathop}
  \fdsy@DeclareAlias{\dointclockwise}{largesymbols}{\mathop}
\iffdsy@sfop
  \fdsy@DeclareSymbol{\tvarsumint}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarsumint}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tsumint}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dsumint}{largesymbols}{\mathop}
\else
  \fdsy@DeclareSymbol{\tsumint}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dsumint}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\tvarsumint}{largesymbols}{\mathop}
  \fdsy@DeclareSymbol{\dvarsumint}{largesymbols}{\mathop}
\fi
\let\intop\tint
\let\ointop\toint

\fdsy@DeclareOperator{\bigplus}{\dbigplus}{\tbigplus}
\fdsy@DeclareOperator{\bigtimes}{\dbigtimes}{\tbigtimes}
\fdsy@DeclareOperator{\bigwedge}{\dbigwedge}{\tbigwedge}
\fdsy@DeclareOperator{\bigvee}{\dbigvee}{\tbigvee}
\fdsy@DeclareOperator{\bigwedgedot}{\dbigwedgedot}{\tbigwedgedot}
\fdsy@DeclareOperator{\bigveedot}{\dbigveedot}{\tbigveedot}
\fdsy@DeclareOperator{\bigdoublewedge}{\dbigdoublewedge}{\tbigdoublewedge}
\fdsy@DeclareOperator{\conjquant}{\dconjquant}{\tconjquant}
\fdsy@DeclareOperator{\bigdoublevee}{\dbigdoublevee}{\tbigdoublevee}
\fdsy@DeclareOperator{\disjquant}{\ddisjquant}{\tdisjquant}
\fdsy@DeclareOperator{\bigcurlywedge}{\dbigcurlywedge}{\tbigcurlywedge}
\fdsy@DeclareOperator{\bigcurlyvee}{\dbigcurlyvee}{\tbigcurlyvee}
\fdsy@DeclareOperator{\bigcurlywedgedot}{\dbigcurlywedgedot}{\tbigcurlywedgedot}
\fdsy@DeclareOperator{\bigcurlyveedot}{\dbigcurlyveedot}{\tbigcurlyveedot}
\fdsy@DeclareOperator{\bigdoublecurlywedge}{\dbigdoublecurlywedge}{\tbigdoublecurlywedge}
\fdsy@DeclareOperator{\bigdoublecurlyvee}{\dbigdoublecurlyvee}{\tbigdoublecurlyvee}
\fdsy@DeclareOperator{\bigcap}{\dbigcap}{\tbigcap}
\fdsy@DeclareOperator{\bigcup}{\dbigcup}{\tbigcup}
\fdsy@DeclareOperator{\bigcapdot}{\dbigcapdot}{\tbigcapdot}
```

```
\fdsy@DeclareOperator{\bigcupdot}{\dbigcupdot}{\tbigcupdot}
\fdsy@DeclareOperator{\bigcapplus}{\dbigcapplus}{\tbigcapplus}
\fdsy@DeclareOperator{\bigcupplus}{\dbigcupplus}{\tbigcupplus}
\fdsy@DeclareOperator{\biguplus}{\dbiguplus}{\tbiguplus}
\fdsy@DeclareOperator{\bigsqcap}{\dbigsqcap}{\tbigsqcap}
\fdsy@DeclareOperator{\bigsqcup}{\dbigsqcup}{\tbigsqcup}
\fdsy@DeclareOperator{\bigsqcapdot}{\dbigsqcapdot}{\tbigsqcapdot}
\fdsy@DeclareOperator{\bigsqcupdot}{\dbigsqcupdot}{\tbigsqcupdot}
\fdsy@DeclareOperator{\bigsqcapplus}{\dbigsqcapplus}{\tbigsqcapplus}
\fdsy@DeclareOperator{\bigsqcupplus}{\dbigsqcupplus}{\tbigsqcupplus}
\fdsy@DeclareOperator{\bigoplus}{\dbigoplus}{\tbigoplus}
\fdsy@DeclareOperator{\bigotimes}{\dbigotimes}{\tbigotimes}
\fdsy@DeclareOperator{\bigodot}{\dbigodot}{\tbigodot}
\fdsy@DeclareOperator{\bigoast}{\dbigoast}{\tbigoast}
\fdsy@DeclareOperator{\prod}{\dprod}{\tprod}
\fdsy@DeclareOperator{\varprod}{\dvarprod}{\tvarprod}
\fdsy@DeclareOperator{\coprod}{\dcoprod}{\tcoprod}
\fdsy@DeclareOperator{\varcoprod}{\dvarcoprod}{\tvarcoprod}
\fdsy@DeclareOperator{\sum}{\dsum}{\tsum}
\fdsy@DeclareOperator{\varsum}{\dvarsum}{\tvarsum}
\fdsy@DeclareOperator{\osum}{\dosum}{\tosum}
\fdsy@DeclareOperator{\varosum}{\dvarosum}{\tvarosum}
\fdsy@DeclareOperator{\modtwosum}{\dmodtwosum}{\tmodtwosum}
\fdsy@DeclareOperator{\varmodtwosum}{\dvarmodtwosum}{\tvarmodtwosum}
\fdsy@DeclareIntegral{\iint}{\diint}{\tiint}
\fdsy@DeclareIntegral{\iiint}{\diiint}{\tiiint}
\fdsy@DeclareIntegral{\iiiint}{\diiiint}{\tiiiint}
\fdsy@DeclareIntegral{\idotsint}{\didotsint}{\tidotsint}
\fdsy@DeclareIntegral{\dotsint}{\ddotsint}{\tdotsint}
\fdsy@DeclareIntegral{\landupint}{\dlandupint}{\tlandupint}
\fdsy@DeclareIntegral{\intclockwise}{\dintclockwise}{\tintclockwise}
\fdsy@DeclareIntegral{\landdownint}{\dlanddownint}{\tlanddownint}
\fdsy@DeclareIntegral{\awint}{\dawint}{\tawint}
\fdsy@DeclareIntegral{\intctrclockwise}{\dintctrclockwise}{\tintctrclockwise}
\fdsy@DeclareIntegral{\landdownint}{\dlanddownint}{\tlanddownint}
\fdsy@DeclareIntegral{\intbar}{\dintbar}{\tintbar}
\fdsy@DeclareIntegral{\intBar}{\dintBar}{\tintBar}
\fdsy@DeclareIntegral{\fint}{\dfint}{\tfint}
\fdsy@DeclareIntegral{\oiint}{\doiint}{\toiint}
\fdsy@DeclareIntegral{\oiiint}{\doiiint}{\toiiint}
\fdsy@DeclareIntegral{\rcirclerightint}{\drcirclerightint}{\trcirclerightint}
\fdsy@DeclareIntegral{\ointctrclockwise}{\dointctrclockwise}{\tointctrclockwise}
\fdsy@DeclareIntegral{\lcirclerightint}{\dlcirclerightint}{\tlcirclerightint}
\fdsy@DeclareIntegral{\varointclockwise}{\dvarointclockwise}{\tvarointclockwise}
\fdsy@DeclareIntegral{\rcircleleftint}{\drcircleleftint}{\trcircleleftint}
\fdsy@DeclareIntegral{\varointctrclockwise}{\dvarointctrclockwise}{\tvarointctrclockwise}
\fdsy@DeclareIntegral{\lcircleleftint}{\dlcircleleftint}{\tlcircleleftint}
\fdsy@DeclareIntegral{\ointclockwise}{\dointclockwise}{\tointclockwise}
\fdsy@DeclareIntegral{\sumint}{\dsumint}{\tsumint}
```

```
\fdsy@DeclareIntegral{\varsumint}{\dvarsumint}{\tvarsumint}

\def\intkern@{\mkern-8.5mu\mathchoice{\mkern-1mu}{}{}{}}
\def\intdots@{\mkern-6mu%
  \mathchoice{\@cdots}%
  {{\cdotp}\mkern0.5mu{\cdotp}\mkern0.5mu{\cdotp}}%
  {{\cdotp}{\cdotp}{\cdotp}}%
  {{\cdotp}{\cdotp}{\cdotp}}%
  \mkern-6mu}
```

Math accents.

```
\DeclareMathAccent{\widehat}{\mathord}{largesymbols}{"72}
\DeclareMathAccent{\widetilde}{\mathord}{largesymbols}{"78}
\DeclareMathAccent{\wideparen}{\mathord}{largesymbols}{"7E}
\DeclareMathAccent{\vec}{\mathord}{largesymbols}{"84}
\DeclareMathAccent{\middlebar}{\mathord}{largesymbols}{"85}
\DeclareMathAccent{\middleslash}{\mathord}{largesymbols}{"86}
\DeclareMathAccent{\strokethrough}{\mathord}{largesymbols}{"87}
```

FdSymbolF: delimiters

```
\let\lfloor\undefined
\let\rfloor\undefined
\let\lceil\undefined
\let\rceil\undefined
\let\langle\undefined
\let\rangle\undefined
\iffdsy@largedelims
  \fdsy@DeclareOpen{(}{delimiters}{"01}
  \fdsy@DeclareClose{)}{delimiters}{"07}
  \fdsy@DeclareOpen{\lparen}{delimiters}{"01}
  \fdsy@DeclareClose{\rparen}{delimiters}{"07}
  \fdsy@DeclareOpen{[}{delimiters}{"13}
  \fdsy@DeclareClose{]}{delimiters}{"19}
  \fdsy@DeclareOpen{\lbrack}{delimiters}{"13}
  \fdsy@DeclareClose{\rbrack}{delimiters}{"19}
  \fdsy@DeclareOpen{\lfloor}{delimiters}{"1F}
  \fdsy@DeclareClose{\rfloor}{delimiters}{"25}
  \fdsy@DeclareOpen{\lceil}{delimiters}{"2B}
  \fdsy@DeclareClose{\rceil}{delimiters}{"31}
  \fdsy@DeclareOpen{\ulcorner}{delimiters}{"37}
  \fdsy@DeclareClose{\urcorner}{delimiters}{"3D}
  \fdsy@DeclareOpen{\llcorner}{delimiters}{"43}
  \fdsy@DeclareClose{\lrcorner}{delimiters}{"49}
  \fdsy@DeclareOpen{\ullcorner}{delimiters}{"4F}
  \fdsy@DeclareClose{\ulrcorner}{delimiters}{"55}
  \fdsy@DeclareOpen{\lsem}{delimiters}{"61}
  \fdsy@DeclareClose{\rsem}{delimiters}{"67}
  \fdsy@DeclareOpen{\lBrack}{delimiters}{"61}
  \fdsy@DeclareClose{\rBrack}{delimiters}{"67}
  \fdsy@DeclareOpen{\lbrace}{delimiters}{"73}
  \fdsy@DeclareClose{\rbrace}{delimiters}{"79}
```

```
  \fdsy@DeclareOpen{<}{delimiters}{"86}
  \fdsy@DeclareClose{>}{delimiters}{"8C}
  \fdsy@DeclareOpen{\langle}{delimiters}{"86}
  \fdsy@DeclareClose{\rangle}{delimiters}{"8C}
  \fdsy@DeclareOpen{\lAngle}{delimiters}{"92}
  \fdsy@DeclareClose{\rAngle}{delimiters}{"98}
  \fdsy@DeclareOpen{\langledot}{delimiters}{"9E}
  \fdsy@DeclareClose{\rangledot}{delimiters}{"A4}
  \fdsy@DeclareDelimiter{/}{\mathord}{delimiters}{"AA}
  \fdsy@DeclareDelimiter{\mathslash}{\mathord}{delimiters}{"AA}
  \DeclareMathSymbol{\divslash}{\mathbin}{delimiters}{"AA}
  \fdsy@DeclareDelimiter{\backslash}{\mathord}{delimiters}{"B0}
  \expandafter\DeclareMathDelimiter\@backslashchar%
    {\mathord}{delimiters}{"B0}{delimiters}{"B0}
  \DeclareMathSymbol{\setminus}{\mathbin}{delimiters}{"B0}
  \fdsy@DeclareDelimiter{|}{\mathord}{delimiters}{"B7}
  \fdsy@DeclareDelimiter{\vert}{\mathord}{delimiters}{"B7}
  \fdsy@DeclareOpen{\lvert}{delimiters}{"B7}
  \fdsy@DeclareClose{\rvert}{delimiters}{"B7}
  \DeclareMathSymbol{\mid}{\mathrel}{delimiters}{"B7}
  \DeclareMathSymbol{\nmid}{\mathrel}{delimiters}{"BA}
  \fdsy@DeclareDelimiter{\Vert}{\mathord}{delimiters}{"BE}
  \fdsy@DeclareOpen{\lVert}{delimiters}{"BE}
  \fdsy@DeclareClose{\rVert}{delimiters}{"BE}
  \DeclareMathSymbol{\parallel}{\mathrel}{delimiters}{"BE}
  \DeclareMathSymbol{\nparallel}{\mathrel}{delimiters}{"C1}
  \fdsy@DeclareDelimiter{\Vvert}{\mathord}{delimiters}{"C4}
  \fdsy@DeclareOpen{\lVvert}{delimiters}{"C4}
  \fdsy@DeclareClose{\rVvert}{delimiters}{"C4}
\else
  \fdsy@DeclareOpen{(}{delimiters}{"00}
  \fdsy@DeclareClose{)}{delimiters}{"06}
  \fdsy@DeclareOpen{\lparen}{delimiters}{"00}
  \fdsy@DeclareClose{\rparen}{delimiters}{"06}
  \fdsy@DeclareOpen{[}{delimiters}{"12}
  \fdsy@DeclareClose{]}{delimiters}{"18}
  \fdsy@DeclareOpen{\lbrack}{delimiters}{"12}
  \fdsy@DeclareClose{\rbrack}{delimiters}{"18}
  \fdsy@DeclareOpen{\lfloor}{delimiters}{"1E}
  \fdsy@DeclareClose{\rfloor}{delimiters}{"24}
  \fdsy@DeclareOpen{\lceil}{delimiters}{"2A}
  \fdsy@DeclareClose{\rceil}{delimiters}{"30}
  \fdsy@DeclareOpen{\ulcorner}{delimiters}{"36}
  \fdsy@DeclareClose{\urcorner}{delimiters}{"3C}
  \fdsy@DeclareOpen{\llcorner}{delimiters}{"42}
  \fdsy@DeclareClose{\lrcorner}{delimiters}{"48}
  \fdsy@DeclareOpen{\ullcorner}{delimiters}{"4E}
  \fdsy@DeclareClose{\ulrcorner}{delimiters}{"54}
  \fdsy@DeclareOpen{\lsem}{delimiters}{"60}
```

```
  \fdsy@DeclareClose{\rsem}{delimiters}{"66}
  \fdsy@DeclareOpen{\lBrack}{delimiters}{"60}
  \fdsy@DeclareClose{\rBrack}{delimiters}{"66}
  \fdsy@DeclareOpen{\lbrace}{delimiters}{"72}
  \fdsy@DeclareClose{\rbrace}{delimiters}{"78}
  \fdsy@DeclareOpen{<}{delimiters}{"85}
  \fdsy@DeclareClose{>}{delimiters}{"8B}
  \fdsy@DeclareOpen{\langle}{delimiters}{"85}
  \fdsy@DeclareClose{\rangle}{delimiters}{"8B}
  \fdsy@DeclareOpen{\lAngle}{delimiters}{"91}
  \fdsy@DeclareClose{\rAngle}{delimiters}{"97}
  \fdsy@DeclareOpen{\langledot}{delimiters}{"9D}
  \fdsy@DeclareClose{\rangledot}{delimiters}{"A3}
  \fdsy@DeclareDelimiter{/}{\mathord}{delimiters}{"A9}
  \fdsy@DeclareDelimiter{\mathslash}{\mathord}{delimiters}{"A9}
  \DeclareMathSymbol{\divslash}{\mathbin}{delimiters}{"A9}
  \fdsy@DeclareDelimiter{\backslash}{\mathord}{delimiters}{"AF}
  \expandafter\DeclareMathDelimiter\@backslashchar%
    {\mathord}{delimiters}{"AF}{delimiters}{"AF}
  \DeclareMathSymbol{\setminus}{\mathbin}{delimiters}{"AF}
  \fdsy@DeclareDelimiter{|}{\mathord}{delimiters}{"B6}
  \fdsy@DeclareDelimiter{\vert}{\mathord}{delimiters}{"B6}
  \fdsy@DeclareOpen{\lvert}{delimiters}{"B6}
  \fdsy@DeclareClose{\rvert}{delimiters}{"B6}
  \DeclareMathSymbol{\mid}{\mathrel}{delimiters}{"B6}
  \DeclareMathSymbol{\nmid}{\mathrel}{delimiters}{"B9}
  \fdsy@DeclareDelimiter{\Vert}{\mathord}{delimiters}{"BD}
  \fdsy@DeclareOpen{\lVert}{delimiters}{"BD}
  \fdsy@DeclareClose{\rVert}{delimiters}{"BD}
  \DeclareMathSymbol{\parallel}{\mathrel}{delimiters}{"BD}
  \DeclareMathSymbol{\nparallel}{\mathrel}{delimiters}{"C0}
  \fdsy@DeclareDelimiter{\Vvert}{\mathord}{delimiters}{"C3}
  \fdsy@DeclareOpen{\lVvert}{delimiters}{"C3}
  \fdsy@DeclareClose{\rVvert}{delimiters}{"C3}
\fi
\let\|\Vert
\let\divides\mid
\let\ndivides\nmid
\DeclareMathSymbol{\shortmid}{\mathrel}{delimiters}{"B5}
\DeclareMathSymbol{\nshortmid}{\mathrel}{delimiters}{"B8}
\DeclareMathSymbol{\shortparallel}{\mathrel}{delimiters}{"BC}
\DeclareMathSymbol{\nshortparallel}{\mathrel}{delimiters}{"BF}
\fdsy@DeclareDelimiter{\arrowvert}{\mathord}{delimiters}{"BB}
\fdsy@DeclareDelimiter{\Arrowvert}{\mathord}{delimiters}{"C2}
\fdsy@DeclareClose{\lgroup}{delimiters}{"7E}
\fdsy@DeclareOpen{\rgroup}{delimiters}{"7F}
\fdsy@DeclareClose{\rmoustache}{delimiters}{"80}
\fdsy@DeclareOpen{\lmoustache}{delimiters}{"81}
\fdsy@DeclareDelimiter{\bracevert}{\mathord}{delimiters}{"84}
```

```
\let\uparrow\undefined
\let\downarrow\undefined
\let\updownarrow\undefined
\let\Uparrow\undefined
\let\Downarrow\undefined
\let\Updownarrow\undefined
\DeclareMathDelimiter{\uparrow}{\mathrel}{arrows}{"01}{delimiters}{"C6}
\DeclareMathDelimiter{\downarrow}{\mathrel}{arrows}{"03}{delimiters}{"C7}
\DeclareMathDelimiter{\updownarrow}{\mathrel}{arrows}{"11}{delimiters}{"C8}
\DeclareMathDelimiter{\Uparrow}{\mathrel}{arrows}{"09}{delimiters}{"C9}
\DeclareMathDelimiter{\Downarrow}{\mathrel}{arrows}{"0B}{delimiters}{"CA}
\DeclareMathDelimiter{\Updownarrow}{\mathrel}{arrows}{"15}{delimiters}{"CB}
```

Horizontal braces.

```
\DeclareMathSymbol{\braceld}{\mathord}{delimiters}{"CC}
\DeclareMathSymbol{\bracelu}{\mathord}{delimiters}{"CD}
\DeclareMathSymbol{\bracerd}{\mathord}{delimiters}{"CE}
\DeclareMathSymbol{\braceru}{\mathord}{delimiters}{"CF}
\DeclareMathSymbol{\bracemd}{\mathord}{delimiters}{"D0}
\DeclareMathSymbol{\bracemu}{\mathord}{delimiters}{"D1}
\DeclareMathSymbol{\bracemid}{\mathord}{delimiters}{"D2}

\def\bracefill@#1#2#3#4#5{%
  $\m@th#5#1\leaders\hbox{$#4$}\hfill#2\leaders\hbox{$#4$}\hfill#3$%
}
\def\downbracefill@{\bracefill@\braceld\bracemd\bracerd\bracemid}
\def\upbracefill@{\bracefill@\bracelu\bracemu\braceru\bracemid}
\def\downgroupfill@{\bracefill@\braceld{}\bracerd\bracemid}
\def\upgroupfill@{\bracefill@\bracelu{}\braceru\bracemid}
\def\linesegmentfill@{\arrowfill@\leftfootline\relbar\rightfootline}
\def\leftharpoonfill@{\arrowfill@\leftharpoondown\relbar\relbar}
\def\rightharpoonfill@{\arrowfill@\relbar\relbar\rightharpoonup}

\DeclareRobustCommand{\overbrace}[1]{%
  \mathop{\mathpalette{\overarrow@\downbracefill@}{#1}}\limits%
}
\DeclareRobustCommand{\underbrace}[1]{%
  \mathop{\mathpalette{\underarrow@\upbracefill@}{#1}}\limits%
}
\DeclareRobustCommand{\overgroup}{\mathpalette{\overarrow@\downgroupfill@}}
\DeclareRobustCommand{\undergroup}{\mathpalette{\underarrow@\upgroupfill@}}
\DeclareRobustCommand{\overlinesegment}{\mathpalette{\overarrow@\linesegmentfill@}}
\DeclareRobustCommand{\overleftharpoon}{\mathpalette{\overarrow@\leftharpoonfill@}}
\DeclareRobustCommand{\overrightharpoon}{\mathpalette{\overarrow@\rightharpoonfill@}}
\DeclareRobustCommand{\underlinesegment}{\mathpalette{\underarrow@\linesegmentfill@}}
```

Radical symbols.

```
\iffdsy@largedelims
  \DeclareMathRadical{\sqrtsign}{delimiters}{"D4}{delimiters}{"D4}
  \DeclareMathSymbol{\surd}{\mathop}{delimiters}{"D4}
\else
```

```
  \DeclareMathRadical{\sqrtsign}{delimiters}{"D3}{delimiters}{"D3}
  \DeclareMathSymbol{\surd}{\mathop}{delimiters}{"D3}
\fi
```

In the *n*-th root, we don't want the *n* to come too close to the radical (adopted from package lucimatx).

```
\def\r@@t#1#2{\setbox\z@\hbox{$\m@th#1\sqrt{#2}$}%
  \dimen@\ht\z@ \advance\dimen@-\dp\z@
  \mkern5mu\raise.6\dimen@\copy\rootbox \mkern-8mu\box\z@}
```

Mathchars.

```
\DeclareMathSymbol{+}{\mathbin}{symbols}{"11}
\DeclareMathSymbol{-}{\mathbin}{symbols}{"0E}
\DeclareMathSymbol{*}{\mathbin}{symbols}{"98}
\DeclareMathSymbol{:}{\mathrel}{symbols}{"02}
\DeclareMathSymbol{=}{\mathrel}{relations}{"00}
\DeclareMathSymbol{<}{\mathrel}{relations}{"24}
\DeclareMathSymbol{>}{\mathrel}{relations}{"25}
\iffdsy@largedelims
  \DeclareMathSymbol{|}{\mathord}{delimiters}{"B7}
  \DeclareMathSymbol{(}{\mathopen}{delimiters}{"01}
  \DeclareMathSymbol{)}{\mathclose}{delimiters}{"07}
  \DeclareMathSymbol{[}{\mathopen}{delimiters}{"13}
  \DeclareMathSymbol{]}{\mathclose}{delimiters}{"19}
  \DeclareMathSymbol{/}{\mathord}{delimiters}{"AA}
\else
  \DeclareMathSymbol{|}{\mathord}{delimiters}{"B6}
  \DeclareMathSymbol{(}{\mathopen}{delimiters}{"00}
  \DeclareMathSymbol{)}{\mathclose}{delimiters}{"06}
  \DeclareMathSymbol{[}{\mathopen}{delimiters}{"12}
  \DeclareMathSymbol{]}{\mathclose}{delimiters}{"18}
  \DeclareMathSymbol{/}{\mathord}{delimiters}{"A9}
\fi
```

There is no \not symbol in FdSymbol since all relational symbols come with a stroked companion. For compatibility we define a \not command that places a virgule over the following symbol.

```
\def\c@ncel#1#2{\m@th\ooalign{$\hfil#1/\hfil$\crcr$#1#2$}}
\def\not#1{\mathrel{\m@th\mathpalette\c@ncel{#1}}}
```

⟨/style⟩