Title

symbolstyle — Choices for the shape of markers

Syntax   Description   Remarks and examples   Also see

Syntax

symbolstyle	Synonym (if any)	Description
circle	O	solid
diamond	D	solid
triangle	T	solid
square	S	solid
plus	+	
X	X	
smcircle	o	solid
smdiamond	d	solid
smsquare	s	solid
smtriangle	t	solid
smplus		
smx	x	
circle_hollow	Oh	hollow
diamond_hollow	Dh	hollow
triangle_hollow	Th	hollow
square_hollow	Sh	hollow
smcircle_hollow	oh	hollow
smdiamond_hollow	dh	hollow
smtriangle_hollow	th	hollow
smsquare_hollow	sh	hollow
point	p	a small dot
none	i	a symbol that is invisible

For a symbol palette displaying each of the above symbols, type

   palette symbolpalette [, <u>sch</u>eme(*schemename*)]

Other *symbolstyles* may be available; type

   . graph query symbolstyle

to obtain the complete list of *symbolstyles* installed on your computer.

Description

Markers are the ink used to mark where points are on a plot; see [G-3] *marker_options*. *symbolstyle* specifies the shape of the marker.

You specify the *symbolstyle* inside the msymbol() option allowed with many of the graph commands:

```
. graph twoway ..., msymbol(symbolstyle) ...
```

Sometimes you will see that a *symbolstylelist* is allowed:

```
. scatter ..., msymbol(symbolstylelist) ...
```

A *symbolstylelist* is a sequence of *symbolstyles* separated by spaces. Shorthands are allowed to make specifying the list easier; see [G-4] *stylelists*.

Remarks and examples

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Remarks are presented under the following headings:

> *Typical use*
> *Filled and hollow symbols*
> *Size of symbols*

Typical use

msymbol(*symbolstyle*) is one of the more commonly specified options. For instance, you may not be satisfied with the default rendition of

```
. scatter mpg weight if foreign ||
  scatter mpg weight if !foreign
```

and prefer

```
. scatter mpg weight if foreign, msymbol(oh) ||
  scatter mpg weight if !foreign, msymbol(x)
```

When you are graphing multiple y variables in the same plot, you can specify a list of *symbolstyles* inside the msymbol() option:

```
. scatter mpg1 mpg2 weight, msymbol(oh x)
```

The result is the same as typing

```
. scatter mpg1 weight, msymbol(oh) ||
  scatter mpg2 weight, msymbol(x)
```

Also, in the above, we specified the symbol-style synonyms. Whether you type

```
. scatter mpg1 weight, msymbol(oh) ||
  scatter mpg2 weight, msymbol(x)
```

or

```
. scatter mpg1 weight, msymbol(smcircle_hollow) ||
  scatter mpg2 weight, msymbol(smx)
```

makes no difference.

Filled and hollow symbols

The *symbolstyle* specifies the *shape* of the symbol, and in that sense, one of the styles `circle` and `hcircle`—and `diamond` and `hdiamond`, etc.—is unnecessary in that each is a different rendition of the same shape. The option `mfcolor(`*colorstyle*`)` (see [G-3] *marker_options*) specifies how the inside of the symbol is to be filled. `hcircle()`, `hdiamond`, etc., are included for convenience and are equivalent to specifying

`msymbol(Oh): msymbol(O) mfcolor(none)`

`msymbol(dh): msymbol(d) mfcolor(none)`

etc.

Using `mfcolor()` to fill the inside of a symbol with different colors sometimes creates what are effectively new symbols. For instance, if you take `msymbol(O)` and fill its interior with a lighter shade of the same color used to outline the shape, you obtain a pleasing result. For instance, you might try
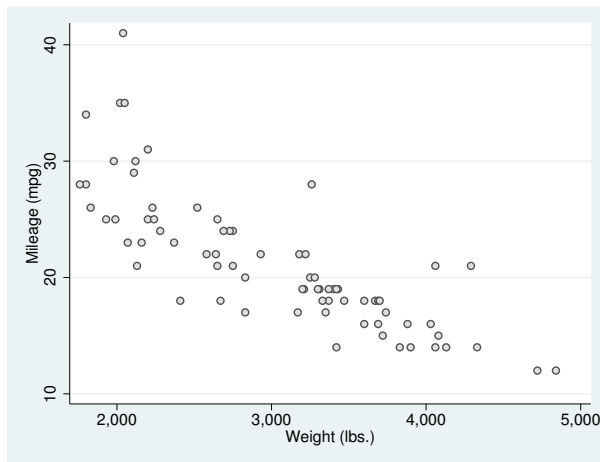
`msymbol(O) mlcolor(yellow) mfcolor(.5*yellow)`

or

`msymbol(O) mlcolor(gs5) mfcolor(gs12)`

as in

```
. scatter mpg weight, msymbol(O) mlcolor(gs5) mfcolor(gs14)
```


Size of symbols

Just as `msymbol(O)` and `msymbol(Oh)` differ only in `mfcolor()`, `msymbol(O)` and `msymbol(o)`—symbols `circle` and `smcircle`—differ only in `msize()`. In particular,

`msymbol(O): msymbol(O) msize(medium)`

`msymbol(o): msymbol(O) msize(small)`

and the same is true for all the other large and small symbol pairs.

msize() is interpreted as being relative to the size of the graph region (see [G-3] *region_options*), so the same symbol size will in fact be a little different in

        . scatter mpg weight

and

        . scatter mpg weight, by(foreign total)

Also see

[G-3] *marker_options* — Options for specifying markers

[G-4] *colorstyle* — Choices for color

[G-4] *linepatternstyle* — Choices for whether lines are solid, dashed, etc.

[G-4] *linestyle* — Choices for overall look of lines

[G-4] *linewidthstyle* — Choices for thickness of lines

[G-4] *markersizestyle* — Choices for the size of markers

[G-4] *markerstyle* — Choices for overall look of markers