# CIRCLE

## PURPOSE

Draws a circle.

# DESCRIPTION

The 2 pairs of coordinates define the (x,y) values for the two ends of the diameter of the circle.

#### SYNTAX

CIRCLE < x1 > < y1 > < x2 > < y2 >

where  $\langle x1 \rangle$  is a number or parameter in the range 0 to 100 that specifies the x coordinate for one end of the diameter of the circle;  $\langle y1 \rangle$  is a number or parameter in the range 0 to 100 that specifies the y coordinate for one end of the diameter of the circle;  $\langle x2 \rangle$  is a number or parameter in the range 0 to 100 that specifies the x coordinate for the other end of the diameter of the circle;

and  $\langle y2 \rangle$  is a number or parameter in the range 0 to 100 that specifies the y coordinate for the other end of the diameter of the circle.

#### **EXAMPLES**

CIRCLE 50 50 60 60 CIRCLE 50 50 60 50 CIRCLE 50 20 60 20 CIRCLE X1 Y1 X2 Y2

#### NOTE 1

The line style (i.e., solid, dash), color, and thickness of the circle are controlled by the LINE, LINE COLOR, and LINE THICKNESS commands. The REGION FILL ON command can be used to generate a solid filled circle. Various REGION commands can be used to generate hatch filled patterns and the set the attributes of the hatch lines. These commands are documented in the Plot Control chapter.

## NOTE 2

If you use a software font, circles can be embedded in text (e.g., the LEGEND or TEXT commands) by entering the string CIRC(). To get filled circles, enter LEGEND <id> FILL SOLID (for legends) or FILL ON (for TEXT). Circles can also be used as plot characters (e.g., CHARACTERS CIRCLE), in which case the attributes are set with the various CHARACTER commands.

#### DEFAULT

None

#### **SYNONYMS**

None

#### **RELATED COMMANDS**

POINT	=	Draws a point.
ARROW	=	Draws an arrow.
TRIANGLE	=	Draws a triangle.
BOX	=	Draws a box.
HEXAGON	=	Draws a hexagon.
SEMI-CIRCLE	=	Draws a semi-circle.
ARC	=	Draws an arc.
ELLIPSE	=	Draws an ellipse.
OVAL	=	Draws an oval.
DIAMOND	=	Draws a diamond.
DRAW	=	Draws a line.
MOVE	=	Moves to a point.
LINE	=	Sets the line type for figures and plot lines.
LINE THICKNESS	=	Sets the line thickness for figures and plot lines.
LINE COLOR	=	Sets the line colors for figures and plot lines.
REGION FILL	=	Specifies whether a figure is filled or not.
CROSS-HAIR	=	Activates and reads the cross-hair.
TEXT	=	Writes a text string.

# APPLICATIONS

Presentation graphics

# IMPLEMENTATION DATE

Pre-1987 (the ability to do hatch filled patterns was added 93/12)

# PROGRAM

CIRCLE 10 10 20 20 CIRCLE 60 10 80 30 THICKNESS 0.7 CIRCLE 10 30 20 40 THICKNESS 0.2; LINE DASH CIRCLE 10 50 20 60 LINE SOLID; LINE COLOR G50 CIRCLE 10 80 20 90 LINE COLOR BLACK; REGION FILL ON CIRCLE 30 30 35 35 REGION FILL COLOR G50 CIRCLE 40 40 60 60 REGION FILL COLOR BLACK; REGION PATTERN D1D2 CIRCLE 75 60 90 72

FILL ON; FONT SIMPLEX; MOVE 40 80 TEXT CIRC() DRAW A CIRCLE WITH THE TEXT COMMAND

