



DECUS

PROGRAM LIBRARY

DECUS NO.	FOCAL8-194
TITLE	RECTANGULAR TO POLAR COORDINATION (GERMAN)
AUTHOR	Frank Dieter Lehmann
COMPANY	Hauni-Werke Hamburg, Germany
DATE	August 23, 1971
SOURCE LANGUAGE	FOCAL '69

RECTANGULAR TO POLAR COORDINATION (GERMAN)

DECUS Program Library Write-up

DECUS NO. FOCAL8-194

ABSTRACT

In the original Rectangular to Polar Conversion program (DECUS NO. FOCAL8-39) the polar to rectangular program works very well, but the rectangular to polar conversion works only if $-90^\circ < \text{angle} \leq +90^\circ$ which restricts it; this program works for $0^\circ \leq \text{angle} < 360^\circ$.

oooooooooooooooooooo

C-FOCAL, 1969

01.10 T "RECHTWINKLICHE KOORDINATEN IN POLARKOORDINATEN"!!!
01.20 A "X" X; A "Y" Y
01.30 T %6.03 "RADIUS" FSQ(X²+Y²),!

02.10 I (X)2.4,2.3,2.5
02.30 I (Y)3.4,4.2,3.2
02.40 I (Y)3.6,3.3,3.6
02.50 I (Y)3.7,3.1,3.5

03.10 S W= 0 ;COTO 4.1
03.20 S W= 90 ;COTO 4.1
03.30 S W=180 ;GOTO 4.1
03.40 S W=270 ;COTO 4.1
03.50 S W= 57.2958*FATN(Y/X) ; COTO 4.1
03.60 S W=180+57.2958*FATN(Y/X) ; COTO 4.1
03.70 S W=360+57.2958*FATN(Y/X) ; COTO 4.1

04.10 T %6.03"WINKEL" W, " GRAD", !!;COTO 1.2
04.20 T "KOORDINATENURSPRUNG" !!;COTO 1.2
*oooooooooooooooooooo

