

Holes on a Circle

The simplest programming method for this project, would be to use polar coordinates. However, many Fanuc and related control systems consider this feature an option. Without the polar coordinates option, rectangular coordinates have to be used - as XY coordinates.

In this project, the pattern is not a real bolt hole pattern, but the formula can still be used. The best way is to convert all incremental angles to absolute angles:

P1 = 0° P2 = 30° P3 = 59.5° P4 = 98° P5 = 133° P6 = 180° P7 = 223° P8 = 298° P9 = 331.7°

Then, the same formula can be used, just by changing the angle.

	X	27-07-A	Y	X	27-07-B	Y
P1	X26.600		Y0.000	X66.100		Y-45.200
P2	X23.036		Y13.300	X62.536		Y-31.900
P3	X13.501		Y22.919	X53.001		Y-22.281
P4	X-3.702		Y26.341	X35.798		Y-18.859
P5	X-18.141		Y19.454	X21.359		Y-25.746
P6	X-26.600		Y0.000	X12.900		Y-45.200
P7	X-19.454		Y-18.141	X20.046		Y-63.341
P8	X12.488		Y-23.486	X51.988		Y-68.686
P9	X23.421		Y-12.611	X62.921		Y-57.811