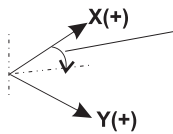


## Bolt Hole Circle

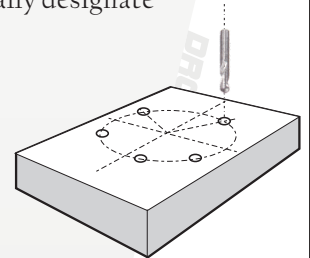
The Bolt Hole Circle function allows the operator to set a desired number of holes in a circular pattern. While most projects will most likely consist of holes evenly spaced around a complete circle, Bolt Hole Circle further allows the operator to designate a starting and stopping angle, such that if the holes were desired to be evenly spaced only along an arc of only 60 degrees then this too would be quite possible. Aside from a less than complete circle, choosing the starting and stopping angles allows the operator to very specifically designate at which angle the “bolt hole” pattern starts and ends.

The parameters required to be entered for Bolt Hole Circle are the following:

Center	CENTER
Diameter	DIA
Number of Holes	NO. HOLE
Starting Angle	ST. ANGLE
Ending Angle	END. ANG

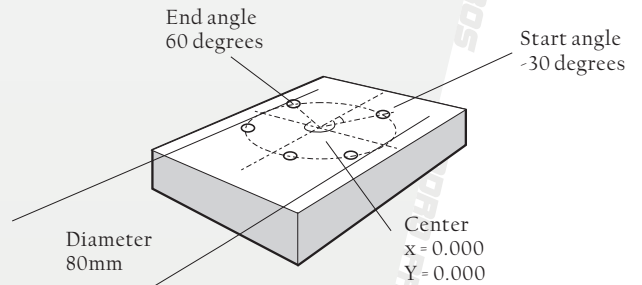


Angular Direction:  
 Clockwise = Negative angle  
 Counter clockwise = Positive angle

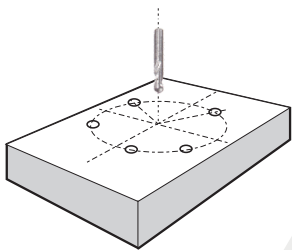


## Bolt Hole Circle - Setup

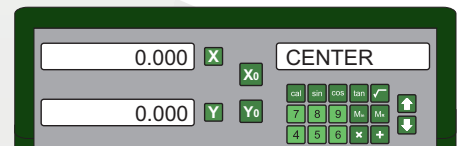
Center coordinates (CENTRE).....X = 0.000  
 Diameter (DIA).....80.000  
 Number Holes (NO HOLE).....5  
 Starting angle (ST ANG).....-30 degrees  
 End angle (END ANG).....60 degrees



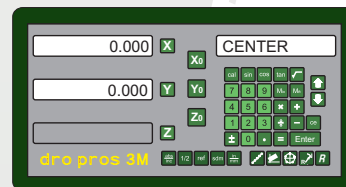
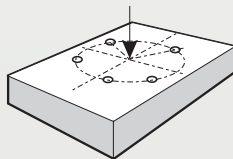
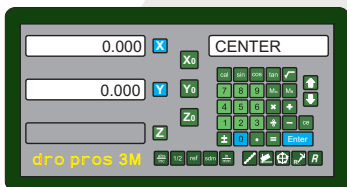
Step 1: Locate your hole center and press the  Bolt Hole Circle function key



Press the Bolt Hole Circle function key



Step 2: Enter the Center coordinates

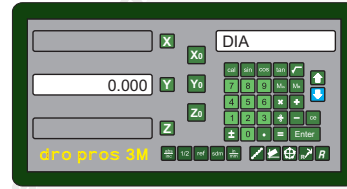


# DRO PROS 3M

Step 3: Enter the Diameter (DIA)



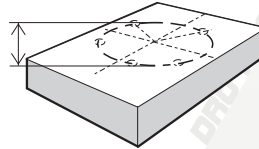
8 0 Enter



next step



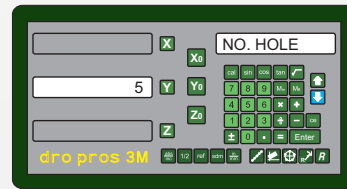
Diameter = 80mm



Step 4: Enter the number of holes (NO HOLE)



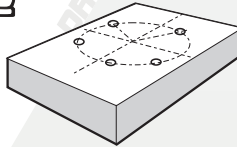
5 Enter



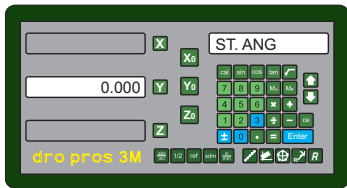
next step



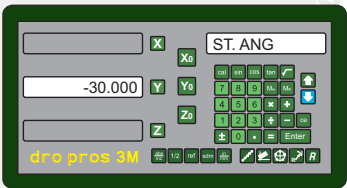
Number of holes = 5



Step 5: Enter the start angle (ST ANG)



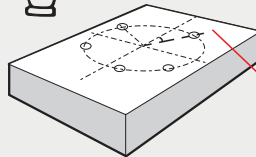
± 3 0 Enter



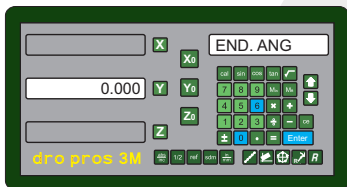
next step



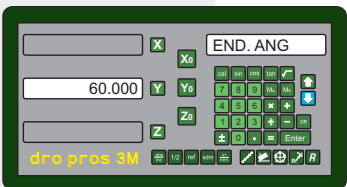
Start angle = -30 degrees



Step 6: Enter the end angle (END ANG)



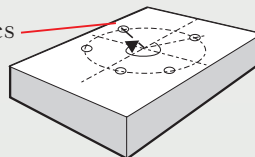
6 0 Enter



next step



End angle = 60 degrees



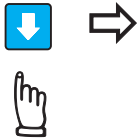
At this point, all parameters for the Bolt Hole Circle function have been programmed

# DRO PROS 3M

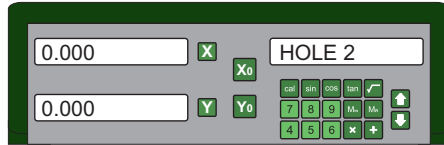
## Bolt Hole Circle - Example

The Operator can now  or  to select which hole to move to, then simply move the machine to zero the display, which means the target hole has been reached.

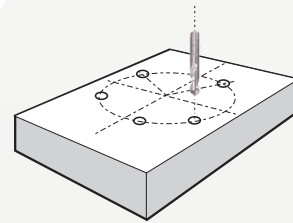
To move to the next hole



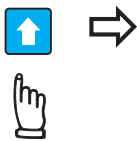
Move the machine to zero the display



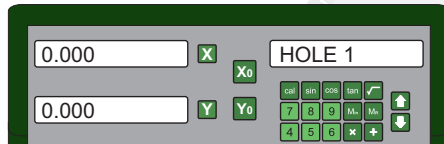
Once the display has zeroed, this means target hole #2 is centered



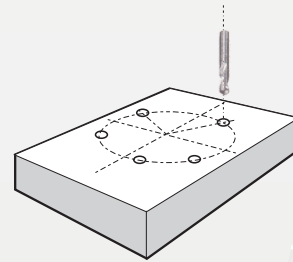
To move to the previous hole



Move the machine to zero the display

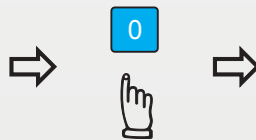
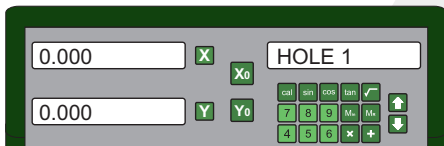


Once the display has zeroed, this means target hole #1 is centered

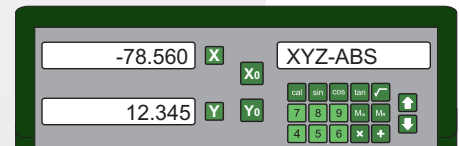


To temporarily return to the ABS coordinate system, press the "0" key.

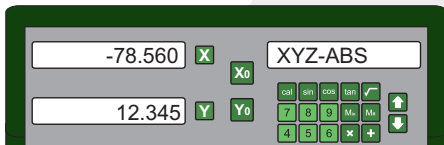
Presently in Bolt Hole Circle function



Temporarily in ABS coordinate system



To return to the Bolt Hole Circle function, press the "0" key.

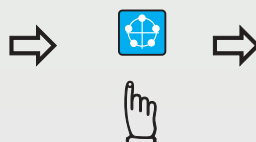
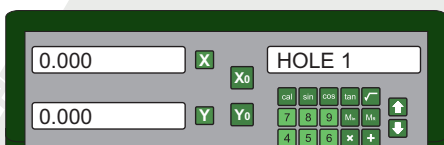


Back in Bolt Hole Circle function



To exit Bolt Hole Circle function and permanently return to the ABS coordinate system, press the Bolt Hole Circle function key.

Presently in Bolt Hole Circle function



Permanently back in ABS coordinate system

