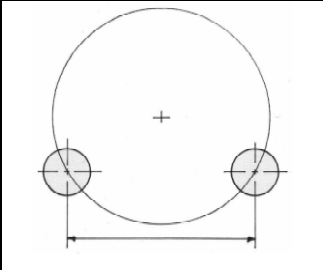


# Hole distance measurement (center to center)

## 1. Holes evenly spaced on a bolt circle diameter

No. of holes	Constant	No. of holes	Constant
3	0,866025	14	0,222520
4	0,707106	16	0,195090
5	0,587785	18	0,173648
6	0,500000	20	0,156434
8	0,382683	24	0,130526
10	0,309017	30	0,104528
12	0,258819	36	0,087155



**Hole distance = Constant x bolt circle diameter**

**e.g.** with 3 evenly spaced holes and a bolt circle diameter of 100 the hole distance is  
 $0,866025 \times 100 = \mathbf{86,60}$

**Bolt circle diameter = Hole distance / constant**

**e.g.** with 3 evenly spaced holes and a hole distance of 86,85 the bolt circle diameter is  
 $86,85 / 0,866025 = \mathbf{100,29}$

N.B. Where an even number of holes are closely spaced it might be an advantage to "jump" over a hole. i.e. 24 holes and calculate as 12 holes.

## 2. Two holes on a bolt circle diameter where the angle is given

**Hole distance = (sin angle/2) x bolt circle diameter**

**e.g.** with an angle of  $70^\circ$  and a bolt circle diameter of 100 the distance is  
 $(\sin 70^\circ / 2) \times 100 = \sin 35^\circ \times 100 = 0,573576 \times 100 = \mathbf{57,36}$

**Bolt circle diameter = Hole distance / (sin angle/2)**

**e.g.** with a hole distance of 57,15 and an angle of  $70^\circ$  the bolt circle diameter is  
 $57,15 / (\sin 70^\circ / 2) = 57,15 / \sin 35^\circ = 57,15 / 0,573576 = \mathbf{99,64}$

