Booster System - MINIMUM DESIGN FLOW WORKSHEET

Booster Flows: Hydrotherapy Drain Velocity Calculations

1. Booster pump model # _____ HP_____TDH___circle 0ne 40 tdh, 50tdh, 60tdh (the higher the head the lower the flow and the lower he head the higher the flow from the pump curve)
2. Number of Booster Outlet Covers _____(number of drains on booster system)
3. Flow of booster pump_____@ _____TDH_____

 CALCULATION OF BOOSTER VELOCITY THROUGH BOOSTER OUTLET COVER:

   Velocity = .32 X GPM (of booster pump at approx. TDH)
              -:- opening in square inches (booster outlet cover)   Velocity_____

 CALCULATION OF BOOSTER OUTLET COVER TO DETERMINE SQUARE INCHES

   Area (sq in) = (Pi R2) or (½ the diameter) X itself X 3.14 (pi) for circular covers or (r2xpi)
              OR (l x w for square covers)

4. Pool capacity in gallons   = _____

4. Booster main drain (suction outlet) gpm per outlet (anti-vortex drain cover) = _____ -:- _____ =_____GPM
5. Booster outlet velocity (suction outlet) per outlet (anti-vortex cover) =_____-:-_____=_____Velocity

NOTES: pi= 3.14
        R or r represents the radius of a circle (half of the diameter)
        D represents the diameter of a circle

Show math here if needed (Use TDH & GPM from pump curve)

Velocity = .32X GPM_____(flow from pump curve)@_____TDH
 Divided   sq. ft of booster outlet covers (2 required)

Velocity =_____ft/sec