VJ5.0
Material: Copper, S.S Tolerance: Diameter(+0.0,-0.05) Length,Breadth, Width ( $\pm 0.5$ )


## What is a Heat Pipe?

A heat pipe is an evacuated sealed tube with a capillary mechanism incorporated for the return of working fluid.

## How does a Heat Pipe work?

Basically, a Heat Pipe is a thermal energy absorbing and transferring system, which can carry about one thousand times more heat energy than all equivalent size of copper rod for the same temperature gradient. In other words, it has an effective thermal conductivity Several Hundred Times more than an equivalent size of copper.
When heat is added to the evaporator section, the working fluids boils and converts into vapor absorbing latent heat.

After reaching the condenser section, due to partial pressure build up , the vapor transforms back in to liquid, thus releasing latent heat. From the condenser section, heat is taken away by means of water cooling / air cooling with fins, etc. The liquid condensate returns to original position through the capillary return mechanism, completing the cycle. Due to very high latent heat of vaporization a large quantity of heat can be transferred.

## Reasons to use Heat Pipes:

The thread form follows the British Standard Whitworth standard:

- Reduce cycle time
- Eliminate hot spots
- Reduce wastage
- Improve product quality
- Increase mould life


## Temperature Range

Heat pipes are available in two temperature ranges. For injection moulds: Heat Pipes having temperature range from $+5^{\circ} \mathrm{C}$ to $+200^{\circ} \mathrm{C}$. The main application of these types of heat pipes are in injection moulding, compression/transfer moulding and rotationmoulding, spiral screws.


- Eliminate core clogging
- Cut Mould \& Moulding costs
- Upgrade old moulds
- Use damaged moulds


## For Die Casting

Heat pipes having temperature range from $+5^{\circ} \mathrm{C}$ to $+350^{\circ} \mathrm{C}$. The main application of these types of heat pipes are in die casting, spiral screws in plastic moulding.

It is advisable to order the heat pipes suitable to the applications and temperature range. If the heat pipe gets heated above its operating temperature, it releases a small amount of non-toxic gas and becomes in-operative. Material of Construction: Copper / Stainless Steel.


