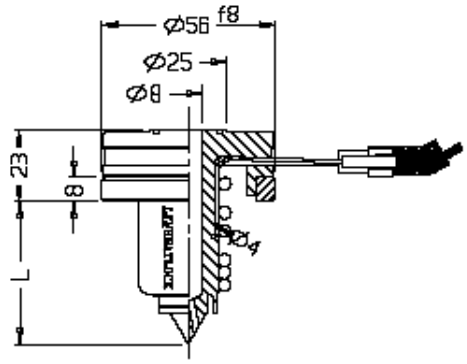
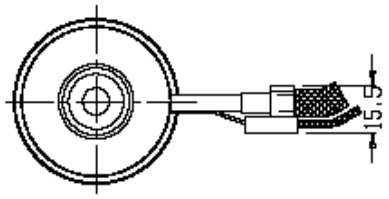
NPT-P3Assembly Instruction

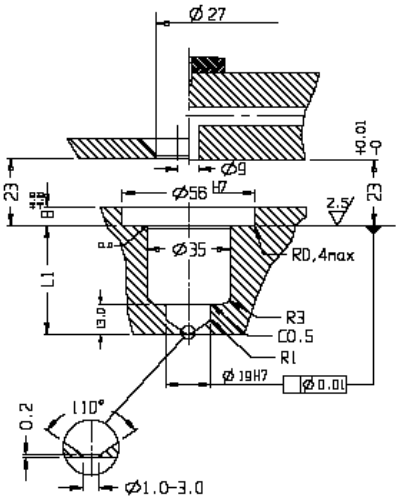
Max permitted contact force from machine nozzle: 40KN.

Single Cavity Assembly	Multi Cavity Assembly





(Figure 1)

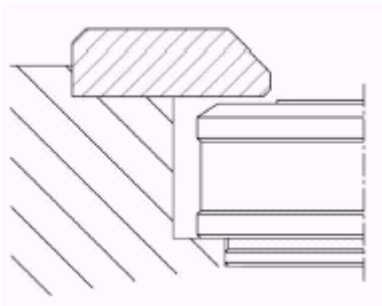


(Figure 2)

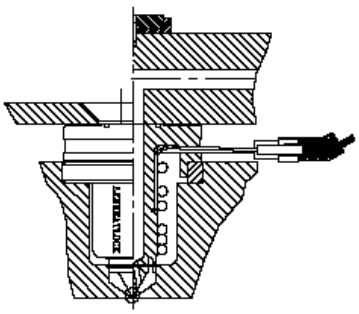
Installation:
Machine bore of nozzle according to dimension (refer to Figure2).

When using NPT-P3, make sure back of nozzle do not touch location ring, otherwise,a great deal of heat will dissipate.(refer Figure 3)

If the force at which the machine nozzle is pressed against the sprue bushing is greater than that caused by the injection force on the front area of the bushing, nothing is needed to keep bushing in place axially.

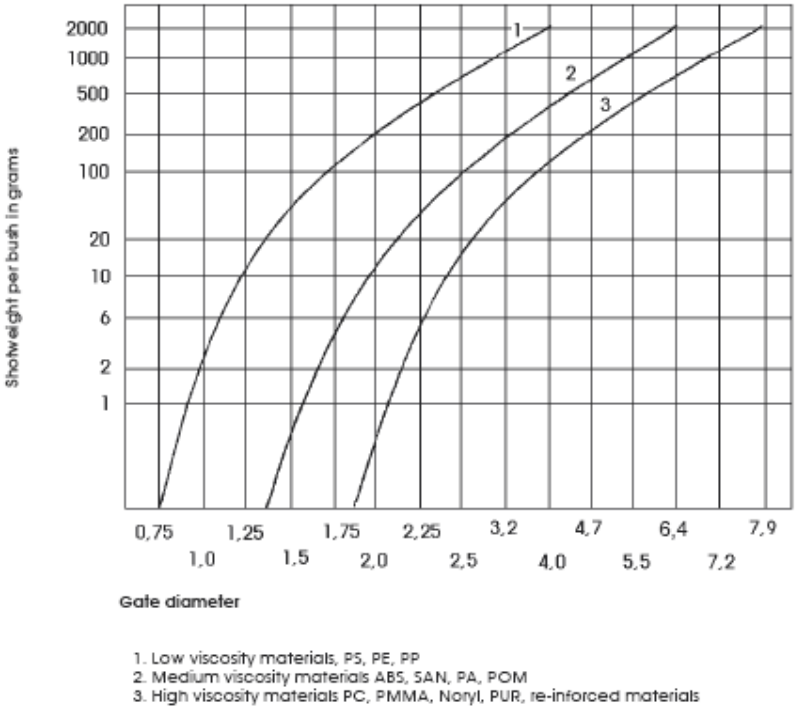


(Figure 3)



Length expansion at: L1=L+X.xx			
℃	60	80	100
200	0.14	0.19	0.23
250	0.17	0.23	0.29
300	0.21	0.28	0.35
350	0.25	0.33	0.41

To ensure minimum vestige on the part, measure the actual “L” measurement on each bush, add the length expansion according to the above table to get the hole depth (“L”+X.xx) to be drilled in the cavity plate.



1. Low viscosity materials, PS, PE, PP
2. Medium viscosity materials ABS, SAN, PA, POM
3. High viscosity materials PC, PMMA, Noryl, PUR, re-inforced materials

The diagram gives guideline figures for the gate diameter needed for different plastics and shot weights.

Note: If the gate diameter is too small, an unnecessarily high bushing temperature will have to be set for the gate not to freeze between shots.

The suggested figures are approximate, gate dimension may be influenced by the shape of the part and the design of the mould etc.

The balance between shot weight , injection rate, tool temperature, temperature pattern opposite gate, cooling around gate and injection pressure are all factors that affect gate size, a small gate freezes quicker than a large gate. On injection moulding with very short cycle times and short injection times, it may be necessary to design gate cooling so that it dose not overheat.

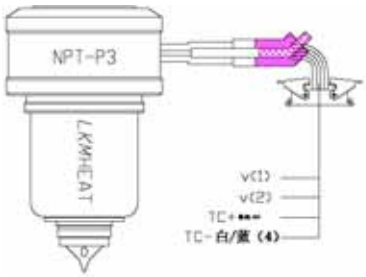
If the sprue bushing is feeding a runner which has a gate into a cavity, it may be suitable to make the bushing gate larger than actually necessary. This way pressure drop and shear will be reduced.

If an electric sprue bushing is used to feed a runner , this means that length of flow in cold steel has been reduced equivalent to the bushing length, due to this cross section, the runner can be made smaller than usual. This is important in order to get shortest possible cycle time.

Start with a smaller gate than indicated in the table.

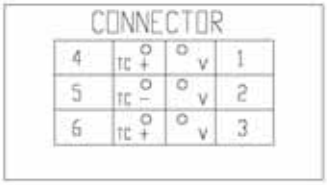
Wire instruction

Attention: the parts must connect with controller which match to parts, what's more, it's not allowed to connect with heater & T/C in parallel.



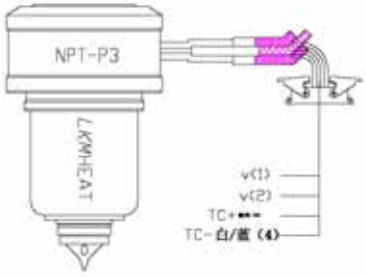
Connect with six pin connector, read wire instruction to the right.

1. Connect 6 pin insert (1) (2) with heater.
2. Connect T/C wire (black/red) with (4).
3. Connect T/C wire (white/blue) with (5).
4. Connect mould with ground wire & insert.

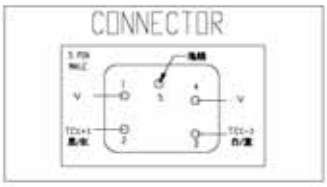


Connect with five pin connector, read wire instruction to the right.

1.Connect 5 pin insert (1) (4) with heater.
2.Connect T/C wire (black/red) with (2).
3.Connect T/C wire (white/blue) with (3).
4.Connect mould with ground wire & insert.



Instruction for replacement heater or T/C.
Attention: In order to avoid to affect normal function of nozzle, use LKMHEATLOCK original component .



Disassemble:

1.Open lock ring.
2.Take off reflector.
3.Take down adhesive plaster coiled outside of heater & T/C.
4.Carefully take out off the heater.

Assemble:

If need replace T/C, insert new T/C to small hole at the end of slot, make sure it's tip must touch the bottom of bore, then bend it along slot and bundle it together with heater with adhesive plaster that can endure high temperature.