

Assembly Instruction

Check the following before the manifold is finally assembled (see overview on the left side):

1. Adjust all the ceramics, insulation for each bushing so that they are all at the same level as Plane "B".
2. Put in the bushings and check that the bushings/torpedoes rear plane is at the same height, 0.01 mm, according to the measurement level "C". Use three measuring points in each bushing.
3. Assemble the ceramic KEM03001017 with the support DSP0353010, measure the total height (approx.24mm). Measure and reduce this height by the pre-bored depth of the ceramic in the manifold. (approx.2mm) and the measured distance between plane "C" and plane"B"(approx.15.5 or 20mm depending on the bushing), the remaining 6.5 or 2mm is countersunk in the form plate . It is important that the manifold is at the same level as the bushings and don't have too much play or "roll" under the central support.
4. If the manifold is to be bolted check that the shape of the hole in the manifold matches the hole shape in the cavity plate.
5. Assemble the back support KEM02500305 with the support DSP0300306/DSP0300312, make sure that the ceramic reaches the bottom of the support. Measure and check the height of all the units. If there are any discrepancies , adjust all to the same height within 0.005mm, work with the underside of the support. Fix this with dowel DW03x12 in the pre-bored holes in the manifold. Correct here for the air gap which there shall be in cold condition to allow for heat expansion according to table1. Plane"D".

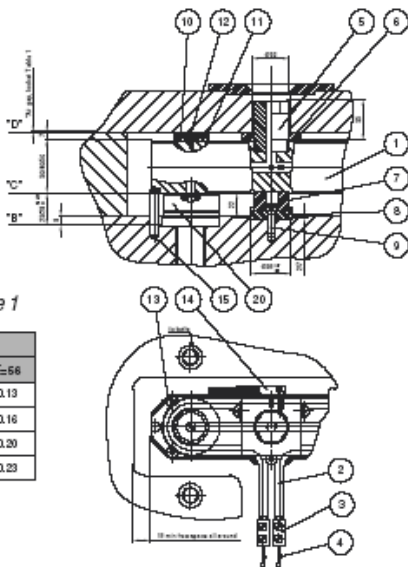


Table 1 / tabell 1 / Tabelle 1

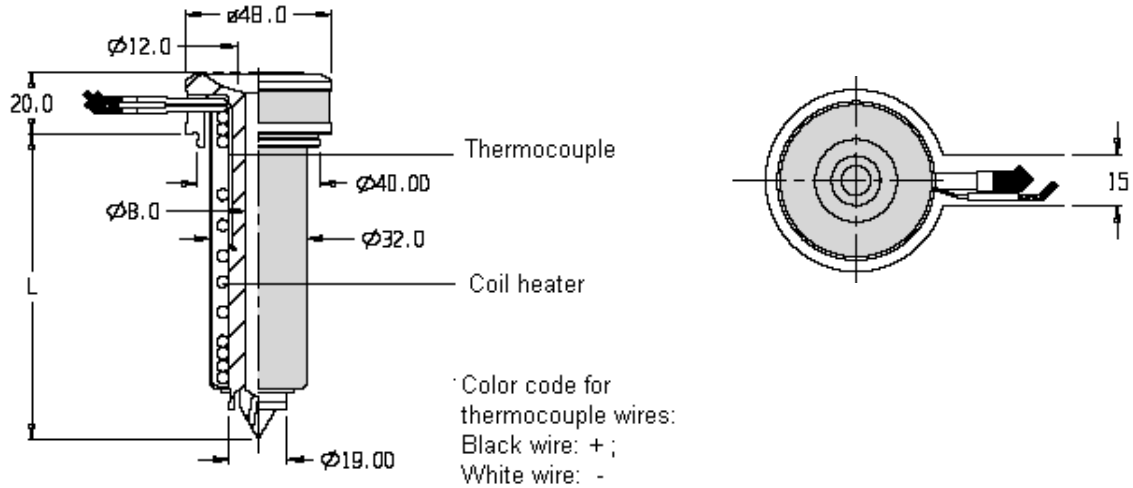
| Heat expansion | | | |
|----------------|------|------|------|
| °C | T=36 | T=46 | T=56 |
| 200 | 0.08 | 0.10 | 0.13 |
| 250 | 0.10 | 0.13 | 0.16 |
| 300 | 0.12 | 0.16 | 0.20 |
| 350 | 0.14 | 0.18 | 0.23 |

| | | | |
|----|----|---------------|----------------------------|
| 20 | 2 | ESB2046102 | Sprue Bush, L=46mm |
| 15 | 1 | DW08x40 | Dowel ,dia 8 x 40 |
| 14 | 1 | TC0040180 | Thermocouple, L=12mm |
| 13 | 14 | MF6S08x008 | Screw M5x8 |
| 12 | 2 | DW03x 12 | Dowel, dia 3x 12 |
| 11 | 2 | DSP0300306 | Back Spacer |
| 10 | 2 | KE02500305 | Ceramic Back Support |
| 9 | 1 | CS06020 | Screw M6x 20 |
| 8 | 1 | DSP0353010 | Center Location spacer |
| 7 | 1 | KEM03001017 | Ceramic Center Spacer |
| 6 | 1 | DSPP503107 | Purge Guard |
| 5 | 1 | DSP4503008 | Feedbush |
| 4 | 4 | MHWIRE050 | Wire |
| 3 | 4 | MHCONN001 | Ceramic connector |
| 2 | 2 | MHI02400925 | Tubular heater |
| 1 | 1 | MHI2400004608 | Standard manifold,CC=240mm |

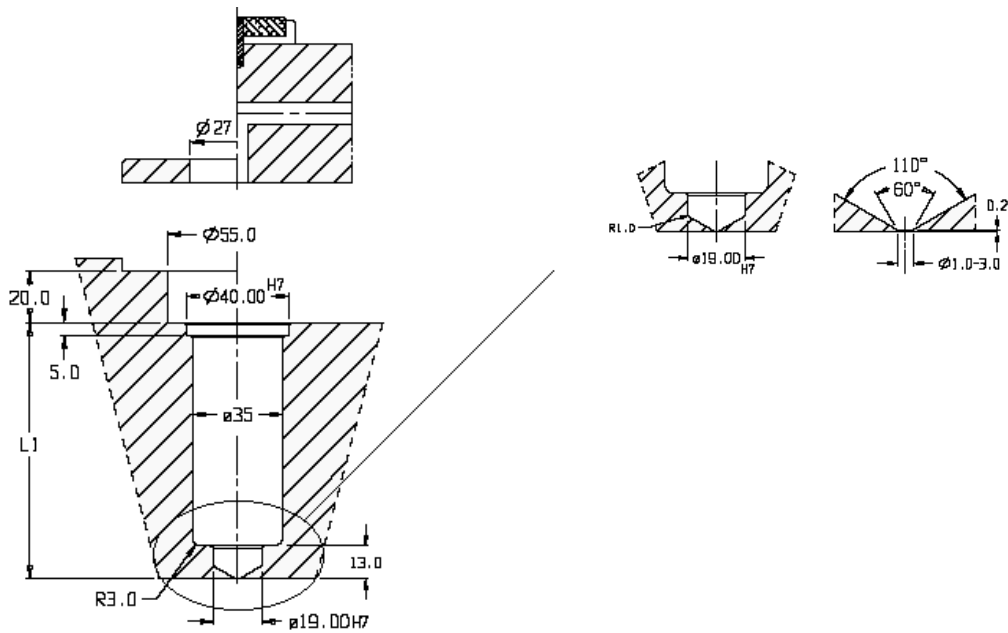
6. Put the manifold on the bushings, which is centered using the ceramic center support KEM03001017. Torsion fixing is done with the help of dowels which are placed in the pre-milled slot in the manifold. This is done without the O- rings mounted.
7. Tighten the manifold with the screws provided if the manifold is to be bolted, check that all the cables are free.
8. Check the level of the upper part of the rear support plane "D", they shall all be within 0.005mm.
9. Take off the manifold , assemble all the O-rings, re-assemble and check that there are no trapped cables or cables laying against the manifold.
10. Check that the manifold is back at the right level/height from the measurement level "D". If the manifold isn't fixed the fixing plate is mounted and tightened so that the O-rings are pressed together before the control is carried out. Heat up to running temperature before the clamp plate is removed for the final check .

Instructions for S/MNN3 installations. Max permitted contact force from machine nozzle: 40KN.

| | |
|------------------------|-----------------------|
| Single Cavity Assembly | Multi Cavity Assembly |
|------------------------|-----------------------|



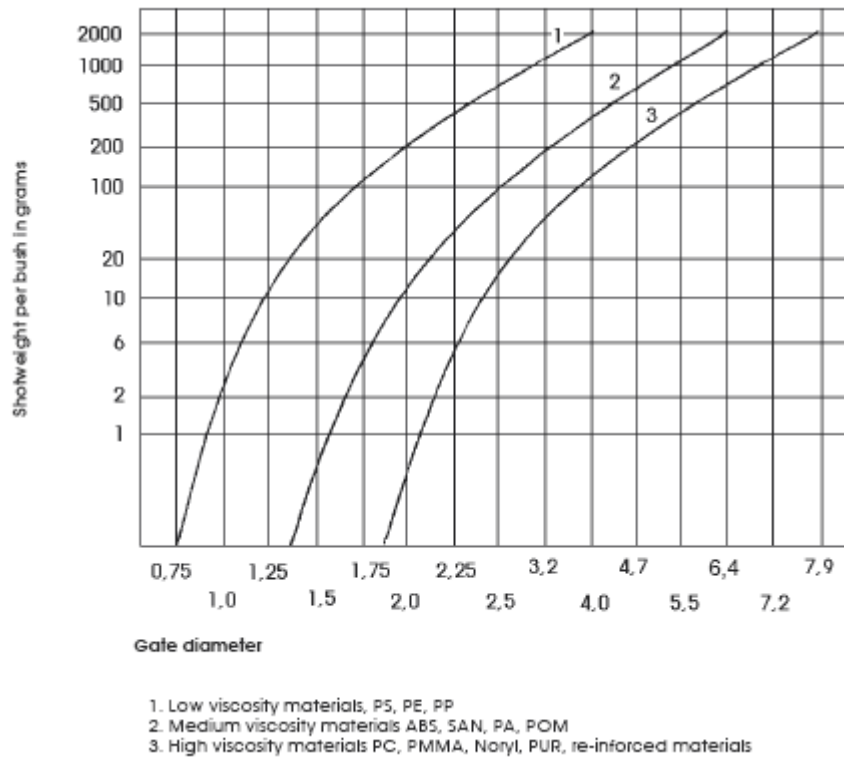
Boring in the clamp plate



Length expansion at: $L1=L+X.xx$

| °C | 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 | 0.24 | 0.33 | 0.40 |

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.



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.

1. Low viscosity material (PS, PE, PP)
2. Medium-viscosity material (ABS, SAN, PA, POM)
3. High-viscosity material (PC, PMMA, Noryl)