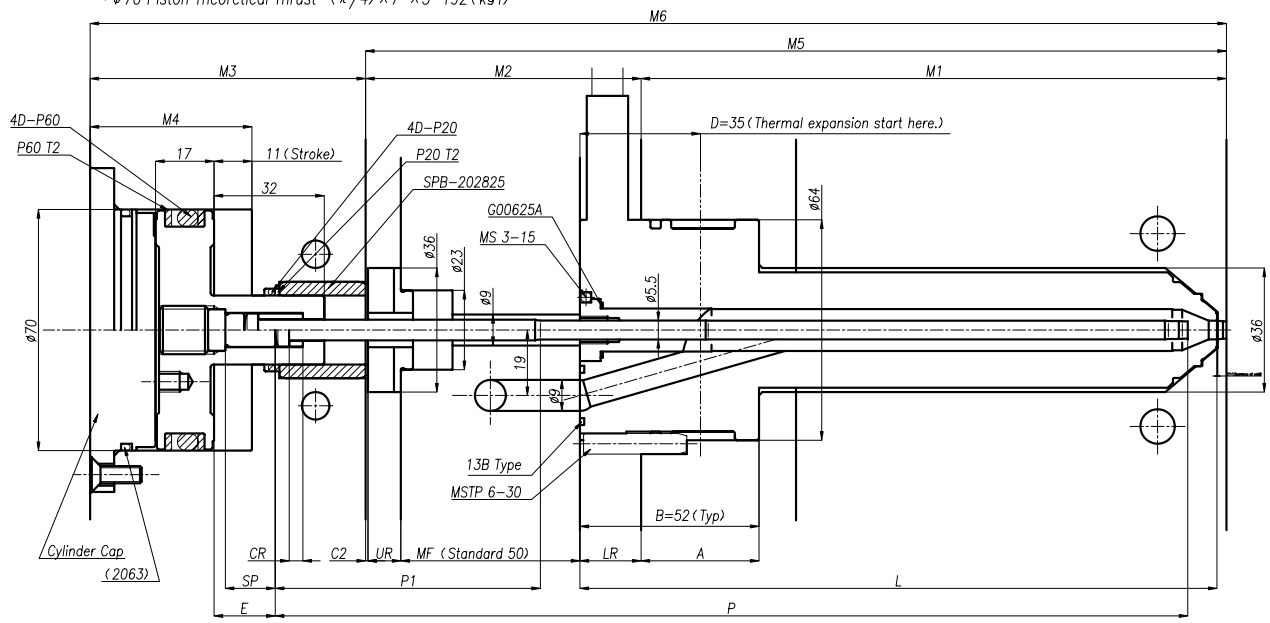
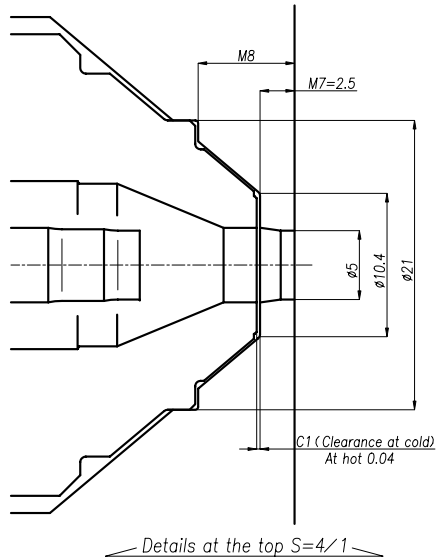
SVP–ϕ 5.0 Assembly drawing

S V P 5 – ϕ 5 Base dimension

Standard	L Dimension	P Dimension	(P1 Dimension)	E	SP	CR	M1	M2	M3	M5	M6
For SVP4F-125	125	205	(77)	17.77	14.5	4.0	110	80	80	190	270
For SVP4F-155	155	235	(77)				140			220	300
For SVP4F-185	185	265	(77)				170			250	330

- Cylinder caps and O-ring 2063 are tobe arranged by custmer.
- ϕ70 Piston Theoretical Thrust= (π/4) × 7^2 × 5= 192 (kgf)





<Formula for C1 Clearance> (D=35:Thermal expansion start here.)

Thermal expansion= (Body L Dimension–D) × (Body Temp.–Mold Temp.) × 1.2÷ 100000

C1 (Clearance) = Thermal expansion+0.04 (Clearance at hot)

<Formula for A (depth)> (M7=2.5: Gate land , B=52)

Lower Riserpad height=Body Length+C1 +M7 –M1

Formula for A (depth)= B–LR

<Formula for C2 Clearance>

Thermal expansion= (M2–LR+D) × (Manifold Temp. – Mold Temp.) × 1.2÷ 100000

※ Compression= (M2+A) × 10÷ (2.1× 10000)

C2 (Clearance) = Thermal expansion–Compression

UR (upper riser height)= M2–LR–MF–C2

<Formula for M4 (Cylinder depth)>

Thermal expansion of Valve Pin= { (L–D) × 0.95× (Body Temp.–Mold Temp.) + (MF+D) × 0.9 × (Manifold Temp.–Mold Temp.) }

M4 (Cylinder depth) = M6+0.1 (Pin stick out) – (P+Thermal expansion of Valve Pin+E)

M8=M7+4.5 (When Gate land 2.5mm,M8=7.0mm)

Manifold temp. = Melt temp. , Body temp.=Melt temperature+20℃

Ratio 0.95 and 0.6 in the formula of valve pin thermal expansion is based on experimental value.

※ 10Kgf/mm^2 is set value by Seiki. 2.1× 10^4 Kgf/mm^2 : Yong's modulus of elasticity

Select valve pin and spacer

1. Select valve pin (In case that the 1st digit of the standard pin dimension B, F and K is 5mm,)
   1) Round off decimals of M5 dim to 0. ··· (M5A)
   2) M5A+5=M5B
   3) Round off the number of units of the calculated M5 B value dim to 1.··· Valve pin length (P)
2. Select spacer
   1) E=M5A–P+32.77 32.77 is fixed number
   The spacer dimension to be selected accordingly to E dimension.

SEIKI VALVE & SPEAR SYSTEM