

Tuesday, September 13, 2022

Technical drawing of a mechanical assembly with six numbered components. The drawing includes various dimensions in mm and cross-sectional views.

Component 1: A large tapered body. Dimensions include a base recess of $\phi 96$ deep 3, a total width of 120, and a height of 100. It features a tapered section with a top diameter of $\phi 84$ and a bottom diameter of $\phi 48$. A section line AA is indicated.

Component 2: A long threaded rod. Dimensions include a total length of 140, a top diameter of $\phi 60$, and a bottom diameter of $\phi 36$. It has a 45° chamfer at the top and a TAP M12 section.

Component 3: A conical bush. Dimensions include a top diameter of $\phi 63$, a bottom diameter of $\phi 33$, and a height of 30. It has a central hole with a diameter of $\phi 9$.

Component 4: A small flange. Dimensions include a top diameter of $\phi 21$ and a bottom diameter of $\phi 33$.

Component 5: A small pin. Dimensions include a diameter of $\phi 9$ and a length of 24. It has a 45° chamfer and is labeled M12.

Component 6: A knurled sleeve. Dimensions include a total length of 249, a diameter of $\phi 18$, and a knurled section.

Assembly Details: The assembly shows the components fitted together. The tapered section of Component 1 has a diameter of $\phi 63$ where the side walls intersect the line AA. The top of Component 1 has a diameter of $\phi 69$ and a height of 33. The bottom of Component 1 has a diameter of $\phi 36$. The top of Component 2 has a diameter of $\phi 42$ and a height of 9. The top of Component 3 has a diameter of $\phi 48$ and a height of 9. The top of Component 4 has a diameter of $\phi 21$ and a height of 9. The top of Component 5 has a diameter of $\phi 9$ and a height of 9. The top of Component 6 has a diameter of $\phi 18$ and a height of 9.

All dimensions in mm

In the assembled view, three full threads of the screw will be visible outside the nut and should be shown in detail as shown in Fig. 3. In the sectioned portion of body, the internal threads should be shown in detail (refer Fig. 2). Show hidden lines only for the portion of the Tommy bar which is inside the screw. Dimension the total height of the assembly. Include bill of materials.

