In a body-centered cubic cell, the only direction along which there is no empty space is a major diagonal. Along a major diagonal, there are two atomic diameters (the atom in the middle of the body, and half of each one at opposite corners of the cell). So the major diagonal of the molybdenum cell is 0.572 nm.

Now we need geometry:

If the lattice constant "a" is one edge of the cell,then a face-diagonal is a times sqrt(2),and by the Pythagorean Theorem, the body-diagonal is sqrt($a^2 + 2a^2$) = a times sqrt(3).

So the "a" in this case is 0.572 nm / sqrt (3) = 0.330 nm