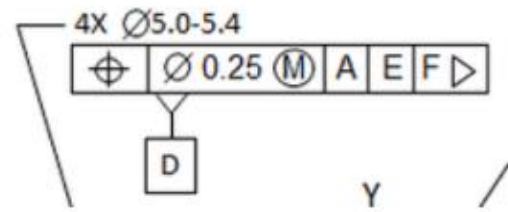
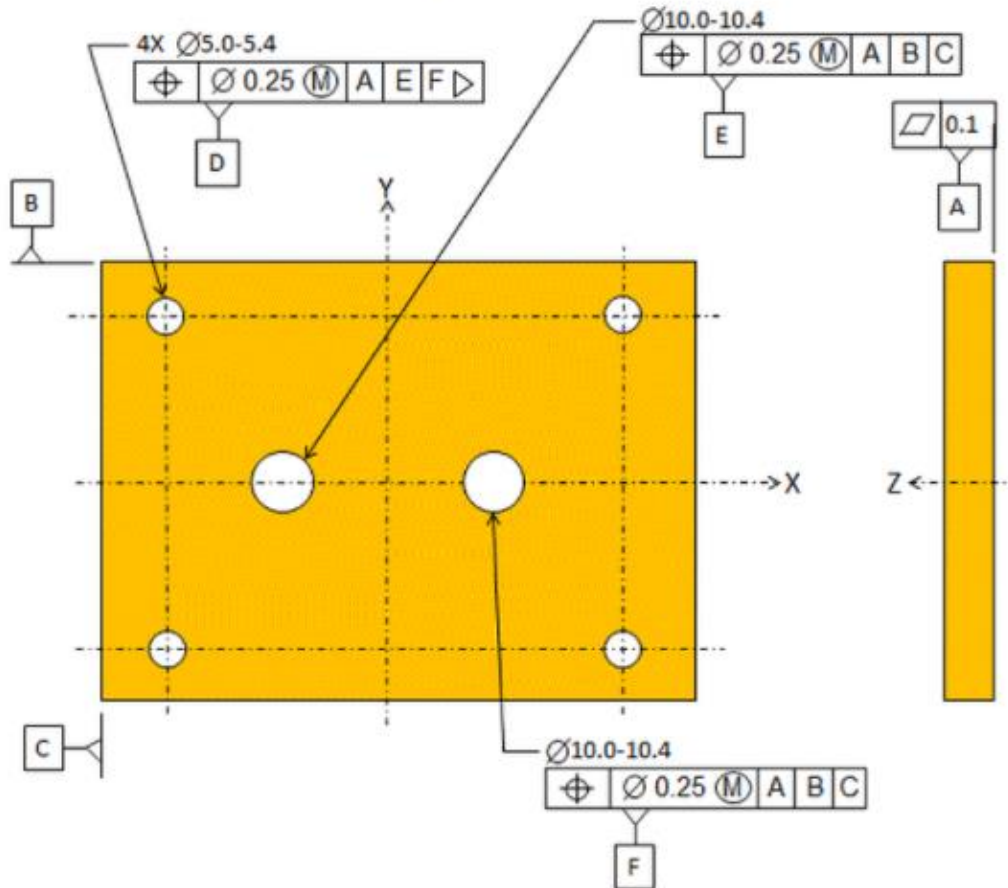


Datum Translation Symbol



The datum translation symbol is the triangle shown in the far right box of the feature control frame above. It indicates that the datum feature simulator for the [F] datum is free to translate.



Consider the figure above. When gaging the pattern of four holes, the part is intended to be constrained at [A], [E], and [F]. Datum [A] is intended to take out the translation in the Z direction and the rotations about the X and Y axis. Datum [E] is intended to take out the translations in the X and Y directions. Datum [F] is intended to take out only the rotation around the Z axis.

If the part is gaged with two round pins at [E] and [F], then the gage will treat these two holes equally. Both holes together will take out the translations in the X and Y and the rotation around the Z.

The datum translation symbol allows a gage to be used that has pins for both holes [E] and [F] with the pin for hole [F] being free to translate. With [F] free to translate, hole [E] will take out the translations in the X and Y directions and hole [F] will take out only the rotation about the Z axis. Thus the part will be constrained exactly as intended by the feature control frame.