

## Title: Position Deviation, Position Amplifier Deviation, and Motor-Load Position Deviation

Product(s): Sigma-5 and Sigma-7 Products

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### Difference between Position Deviation, Position Amplifier Deviation, and Motor-Load Position Deviation

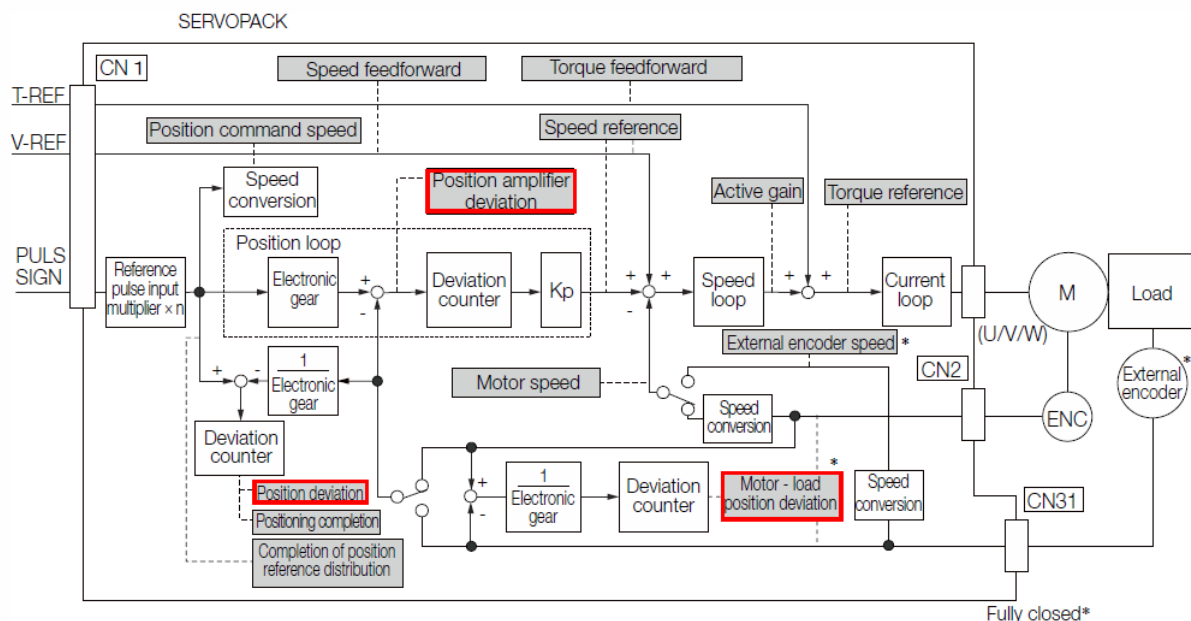
The **position deviation** is the difference between the position reference value and the actual position.

The **position amplifier deviation** is the difference between the position reference value and the actual position after electronic gear conversion.

The **motor-load position deviation** is the difference between the feedback position of the motor encoder and the feedback load position of the external encoder for fully-closed loop control.

The following diagram applies to Sigma-7 SERVOPACKS. For example, an excerpt from the Sigma-7 Analog/Pulse SERVOPACKs, Yaskawa.com document number SIEPS80000126 is shown below. The shaded parts in the diagram below can be monitored through SigmaWin+ or a measuring instrument.

- Rotary Servomotors



\* This speed is available when fully-closed loop control is being used.

This also applies to Sigma-5 SERVOPACKs, even though the signal names use the word error instead of deviation, i.e. position error instead of position deviation.