

ENGINEERING PUBLICATION
MOTION CONTROL DIVISION

PRODUCT: SIGMA II SUBJECT: OFFSET ADJUST RANGE

CATEGORY: PRODUCT NOTES

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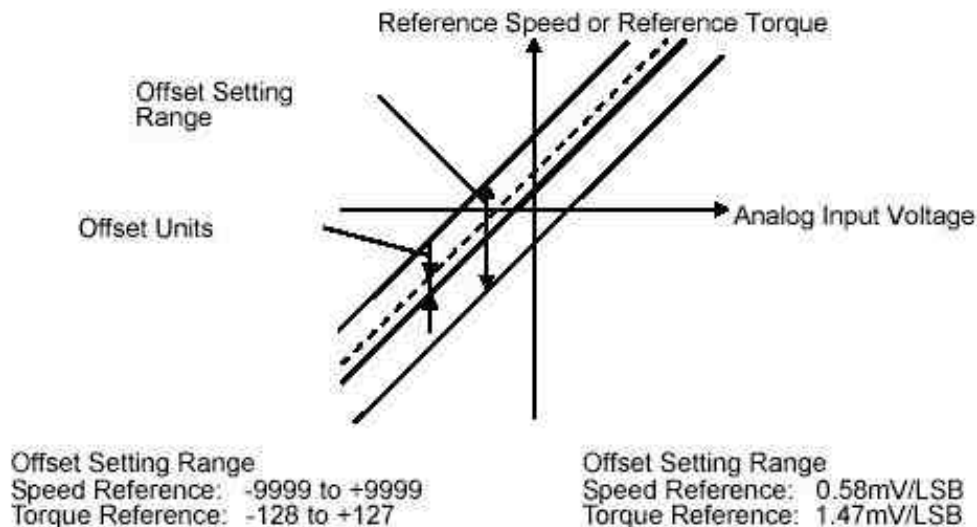
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Summary: The speed reference input and torque reference input offset adjustment ranges for the new Sigma II amplifiers (version # 33xxx or higher) have finer resolution than the standard Sigma II amplifiers. The new amplifier's ranges are: +15000 to –15000 for speed reference, +9999 to –9999 for torque reference.

When in speed or torque control, the motor may rotate slowly even when 0V is applied as the analog reference signal. This occurs when the host controller or external circuit has a small offset (measured in mV) in the reference signal. This offset can be nullified by using the offset adjustment procedure outlined in section 7.2.3 of the *Sigma II Series Servo System User's Manual*.

The speed reference input and torque reference input offset adjustment ranges for the new Sigma II amplifiers (version # 33xxx or higher) have finer resolution than the standard Sigma II amplifiers. The figure below shows the offset adjustment ranges and resolutions for the standard and the new Sigma II amplifiers:

Standard Sigma II amplifier:



Sigma II amplifier with version # 33xxx or higher:

