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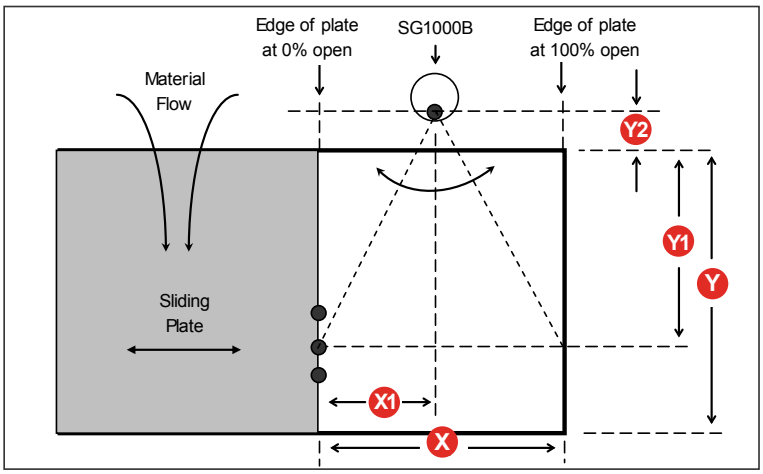
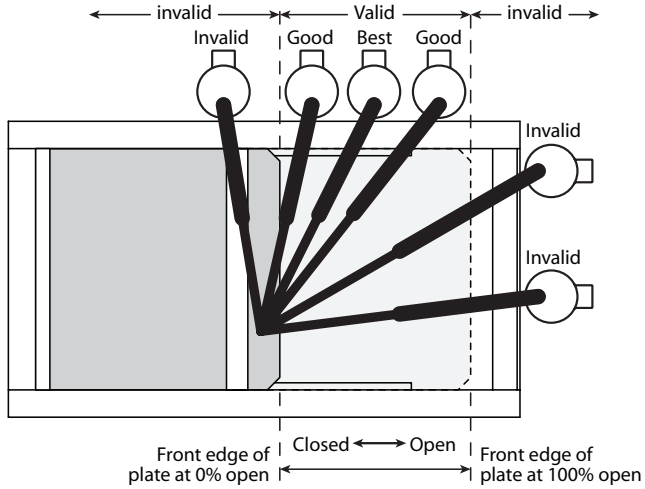
SG1000B Telescopic Arm
Arm Length Calculation Worksheet

Mathematical View



Physical view showing the valid (good) and invalid (bad) mounting locations for the SG1000B.



Use this worksheet to calculate the Telescopic Arm length you need to to accompany your SG1000B. Simply fill in the yellow areas with your slide gate information and send back to Electro-Sensors by fax (952-930-0130) or email (sales@electro-sensors.com). This will greatly help us determine the correct arm length you need for your application (10", 16", 18", 20").

X= _____ **X = The linear travel of the slide plate defined in inches.**

Y= _____ **Y = The width of the slidegate plate defined in inches**

The SG1000B mounts on the slidegate frame, but slightly outside the perimeter of the plate:

X1= _____ **X1 = This SG1000B location is at 'X1' inches away from the plate's edge when at 0% open.**

Note: The ideal value of 'X1' is ('X / 2') inches.
Best overall accuracy is with the SG1000B located at the mid-span value of X1 = 'X / 2' inches. However due to the limited available lengths of Telescopic-Arms, along with any physical restrictions on where the customer can connect the Telescopic-Arm to the slidegate plate, may result in the actual mounting location being different than the ideal location, while still providing functional operation.

Y2= _____ **Y2 = This SG1000B location is at 'Y2' inches outside of the slideplate's perimeter.**

Note: 'Y2' can range from 0 to (+ / -) a few inches, depending on any mounting restrictions.

Y1= _____ **Y1 = The narrow end of the Telescopic Arm attaches to the sliding plate at 'Y1' inches**

Concerns to keep in mind when choosing a Y1 dimension include the following:

a) Does the slideplate withdraw 'flush' into the slide gate frame when the gate is fully closed?

b) Is there clearance between the slide gate frame and slideplate when the gate is fully open?

c) If need be can the customer install a 'grab-bracket' onto the edge of the slideplate, so the narrow-end of the Telescopic-Arm can attach or grab onto it? If this be the case, at what 'Y1' location would the customer need to install a 'grab-bracket' ?