



Thompson Scale Company

Weighing Systems & Industrial Controls

The following speed charts are used to determine the appropriate conveyor length and speed for a specific package size and production rate. The first chart is used to determine the maximum (or minimum) conveyor speed and conveyor length for a given package size. The formula used is as follows:

With "L" equal to conveyor length, and "V" equal to conveyor speed, and "B" equal to bag length, use the formula shown on page 2 determine the correct conveyor length.

$$L - .14(V) = B$$

Example:

A given bag length of 28" at a conveyor speed of 140 fpm, will require a conveyor length of "L".

1. $L - .14(140) = 28$
2. $L - 19.6 = 28$
3. $L - 19.6 + 19.6 = 28 + 19.6$
4. $L = 47.6$ or a 48" conveyor

The second chart is used to determine the maximum production rate at a given speed and conveyor length. With "V" equal to conveyor speed, "L" equal to conveyor length, and "R" equal to production rate, use the formula on page 3 to determine the maximum production rate.

$$12(V) / L = R$$

Example:

At 140 feet per minute on a conveyor length of 48", the maximum rate is "R".

1. $12(140) / 48 = R$
2. $1680 / 48 = R$
3. 35 (bags per minute) = R

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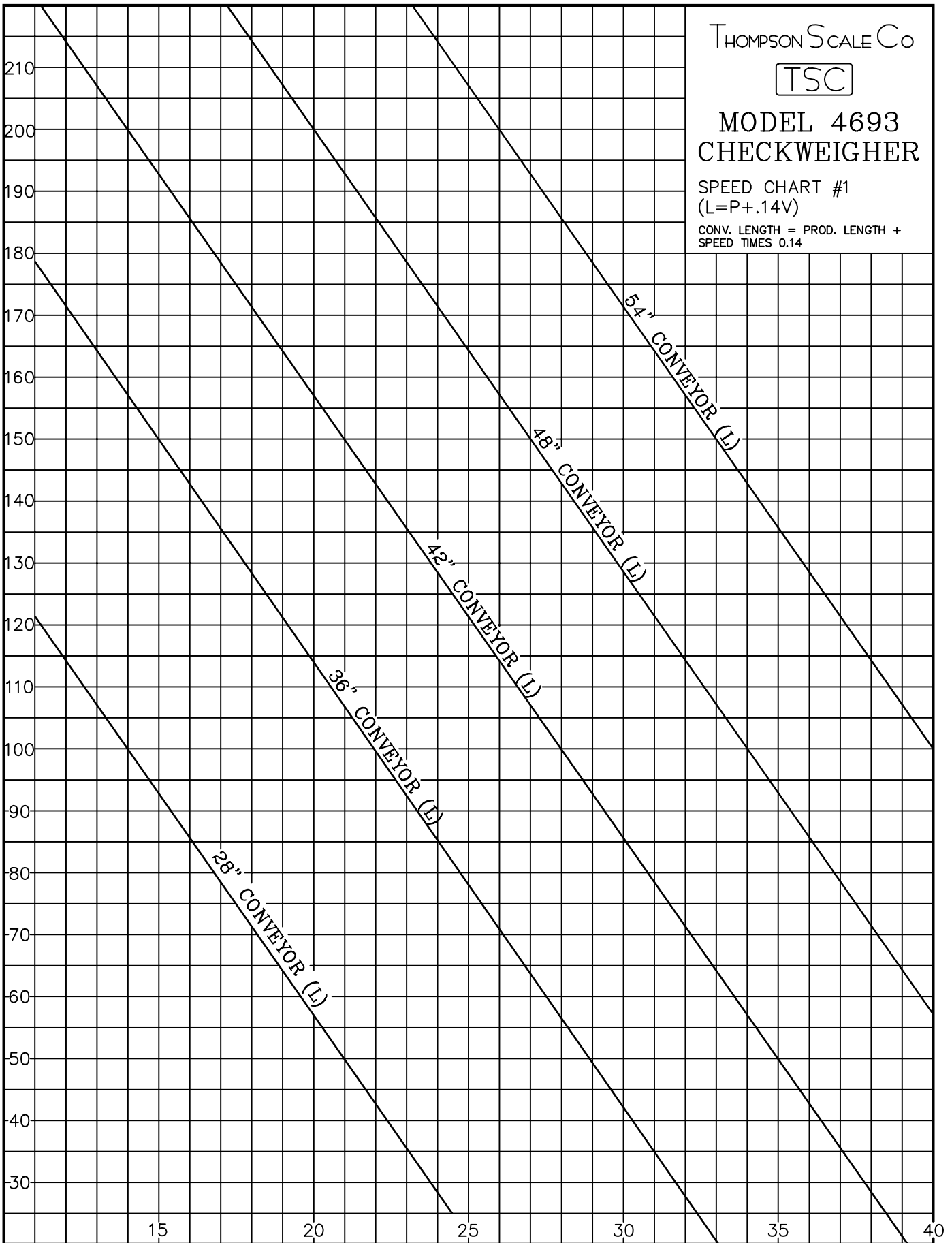


MODEL 4693
CHECKWEIGHER

SPEED CHART #1
(L=P+.14V)

CONV. LENGTH = PROD. LENGTH +
SPEED TIMES 0.14

MAXIMUM CONVEYOR SPEED IN FEET PER MINUTE (V)



PRODUCT LENGTH IN INCHES (P)

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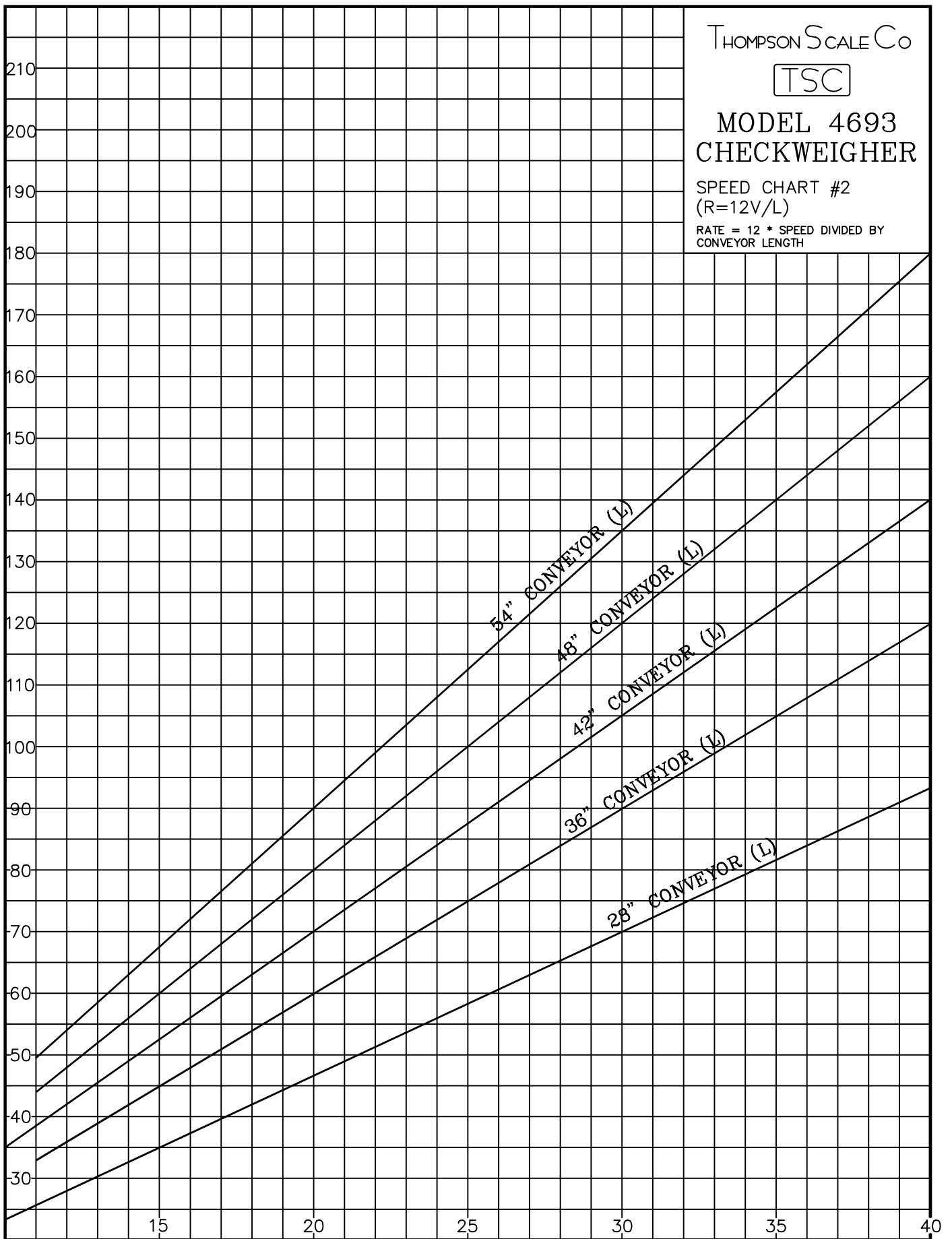


MODEL 4693
CHECKWEIGHER

SPEED CHART #2
($R=12V/L$)

RATE = 12 * SPEED DIVIDED BY
CONVEYOR LENGTH

CONVEYOR SPEED IN FEET PER MINUTE (V)



MAXIMUM PRODUCTION RATE IN UNITS PER MINUTE (R)