

Service Manual

Instrument Scales - IN Series

A. Description:

The Model IN series is available in different capacities as follows:

Model	Capacity x graduation	Weight
IN-2	2 lb x 0.5 oz 1 kg x 20 g	1 lb (0.45 kg)
IN-4	4 lb x 1 oz 2 kg x 50 g	1 lb (0.45 kg)
IN-6	6 lb x 1 oz 3 kg x 25 g	2 lb (0.9 kg)
IN-10	10 lb x 4 oz 5 kg x 100 g	1 lb (0.45 kg)
IN-12	12 lb x 2 oz 6 kg x 50 g	2 lb (0.9 kg)
IN-15	15 lb x 4 oz 7.5 kg x 100 g	1 lb (0.45 kg)
IN-25	25 lb x 4 oz 12.5 kg x 100 g	2 lb (0.9 kg)
IN-30	30 lb x 8 oz 15 kg x 250 g	1 lb (0.45kg)
IN-50	50 lb x 8 oz 25 kg x 250 g	2 lb (0.9kg)
IN-60	60 lb x 8 oz -	2 lb (0.9kg)
IN-100	100 lb x 1 lb 50 kg x 500 g	2 lb (0.9kg)

Precision springs individually calibrated and checked with dead weights are used in all models. Graduations are deeply embossed in black with high-contrast against a polished lacquered brass housing. Readings are presented in both avoirdupois and metric using a high-visibility red point with exception of IN-60.

These popular scales have been adapted for a variety of uses, such as surveyor's tape tensioning, automobile generator brush and distributor contact tension, steering wheel and gear lash adjustment, etc.

A knurled knob alters spring zero adjustment and permits using instrument in any position.

The scales may be equipped with maximum reading pointers at additional cost. (Add MRP to model number.)

Accuracy: ± 1 graduation.
Tare adjustment: 2 % of full capacity.

B. Calibration Procedure:

1. Tare & Zero Adjust:

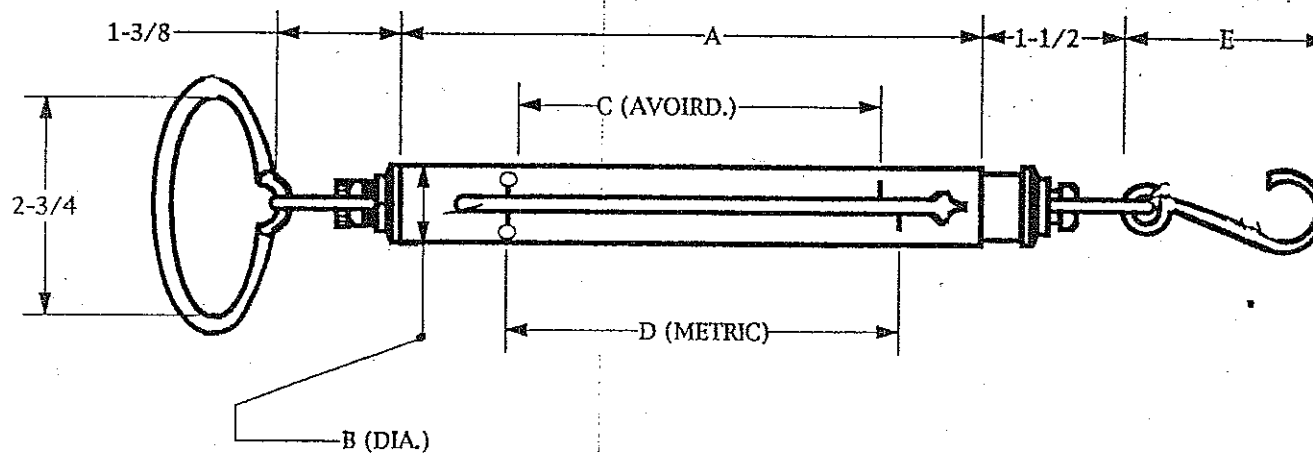
The zero adjustment knurled knob is located at the top of the gauge. Rotating the knurled knob clockwise or counter-clockwise will move the pointer up or down. Adjustment up to 2% of full capacity is possible, and this can be used to compensate the tare.

2. Span checking :

Apply full range dead weight and check that the reading within tolerance.

If scale is out of the tolerance, it should be sent to factory for calibration.

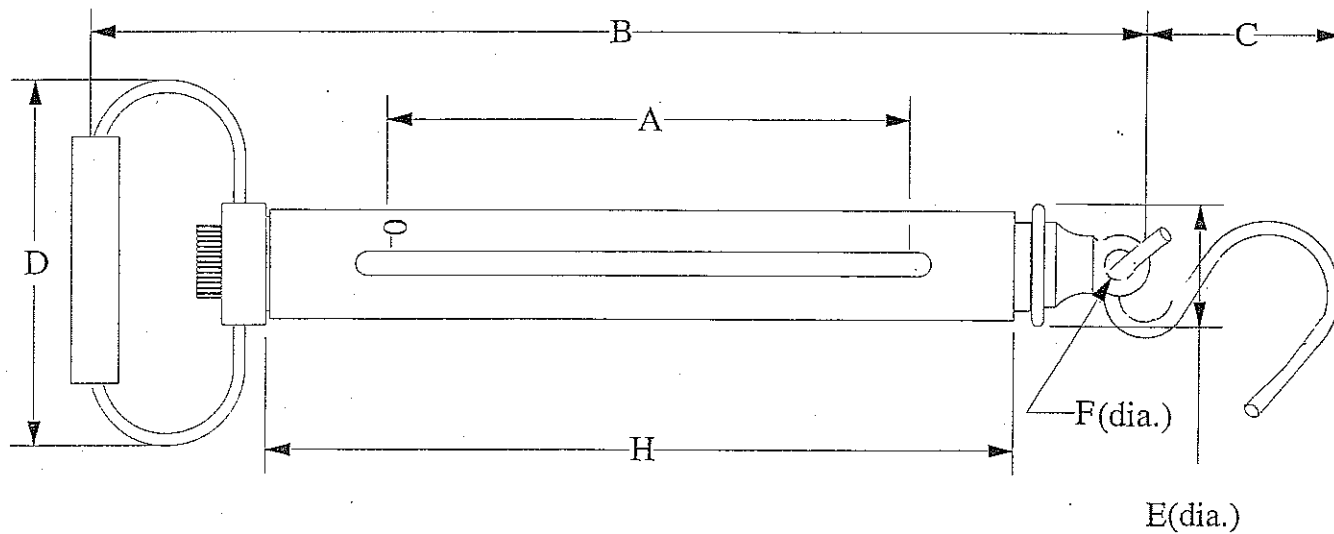
C. Outline Drawing.



MODEL	AVOIRD. CAP.	METRIC CAP.	A	B	C	D	E
IN-2	2 lb x 1/2 oz.	1 kg x 20g	4-7/16	3/4	2.56	2.82	2-1/8
IN-4	4 lb x 1 oz	2 kg x 50g	"	"	"	"	"
IN-10	10 lb x 4 oz	5 kg x 100g	"	"	"	"	"
IN-15	15 lb x 4 oz	7.5 kg x 100g	"	"	"	"	"
IN-30	30 lb x 8 oz	15 kg x 250g	"	"	"	"	3-1/4
IN-6	6 lb x 1 oz	3 kg x 25g	6-11/16	7/8	4.54	5.00	2-1/8
IN-12	12 lb x 2 oz	6 kg x 50g	"	"	"	"	2-1/8
IN-25	25 lb x 4 oz	12.5 kg x 100g	"	"	"	"	3-1/4"
IN-50	50 lb x 8 oz	25 kg x 250g	"	"	"	"	"

ALL DIMENSIONS IN INCHES

DRAWN BY	DATE	JOHN CHATILLON & SONS NEW YORK, USA	OUTLINE DRAWING
M.P.	6-18-96	IN-2 to IN-50 SERIES	XA-89



CAPACITY	A	B	C	D	E	F	G	H
60 lb X 8 oz.	6	11-1/2	4	4	1-1/4	5/16	2-1/4	7-3/4
100 lb x 1 lb. 50 kg x 500 g	4-1/4	11-1/2	4	4	1-1/4	5/16	2-1/4	7-3/4

All Dimensions in Inches

DRAWN BY	DATE	JOHN CHATILLON & SONS NEW YORK, USA	OUTLINE DRAWING
M.P.	6-18-96	IN-60 & -100	XA-90