Aldon® Stringline

Installation & Instructions

4024-03



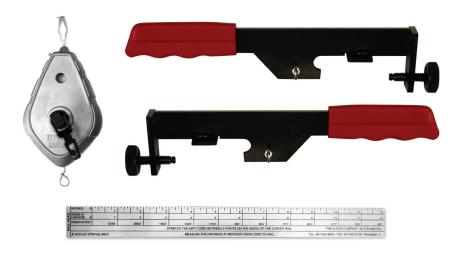
			ST	RETCH THE 62F	T. CORD BETWEE	EN 2 POINTS ON	THE INSIDE OF T	HE CURVED RAIL		THE ALDON 0 7-623-8800 - FAX: 8	COMPANY 3410	
RADIUS IN PEET	5766	2883	1922	1442	1153	961	824	721	641	577	525	43
DEGREE OF CURNITURE O	1	. 2	3	4	5	6	7	. 8	. 9	10	11	
INCHES 0		2	3	4	. 1 . 1 . 5	6	7	8	9	10	11	1.



Aldon Company, Inc. | 3410 Sunset Avenue | Waukegan, Illinois 60087

Included Equipment

Your 4024-03 Stringline should include four major components. A string reel, right-hand paddle, left-hand paddle, and a scale.



The scale is double-sided, inches on one side and metric (written in Spanish) on the other. The standard Stringline is designed to be used with the 12-inch side of the ruler.

The metric side is designed to be used with a 20m cord while the standard model uses a 62ft (18.9m) cord.

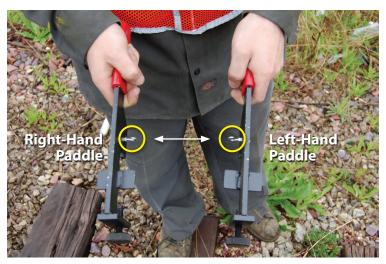


Installation Instructions

1. Securely clamp one paddle to the rail at the desired point. The hand grip of the paddle should be facing the inside of the curve.







Note that the paddles have a right and left-hand version. When installed, the paddles' hooks should face each other.

Installation Instructions

2. Attach free end of string onto the paddle's hook installed on the rail.



3. Attach the spool to the other paddle's hook and walk the paddle down the rail until the reel stops.

Do not force the reel once it stops.





4. Pull the rope taut and clamp the paddle to the rail as in step 1.



Installation Instructions

5. Find the red mark in the middle of the string. Place the scale against the rail. Note the scale indicates "RAIL HEAD".





Note that the scale does not start with the edge being zero.

The start of the readings are offset from the edge to compensate for the how the string is mounted to the paddle. If you are using a tape measure against the rail instead of the included ruler; subtract one inch (the ruler's offset) from your measurement.

RAIL HEAD	RAIL HEAD				
RADIO GRADO MINUTOS UNIDADES LITTITITI	# 4024-03 STRINGLINER	RADIUS IN FEET	DEGREE OF CURVATURE 0	INCHES 0	
10-%	RINGLINER	5766'	-		
1145.9 10 20 11111111111111111111111111111111		2883'	2		

6. Read the rail's curvature directly off the scale.

In the example below, the curve measures 8°, which has a radius of curvature of 721ft.

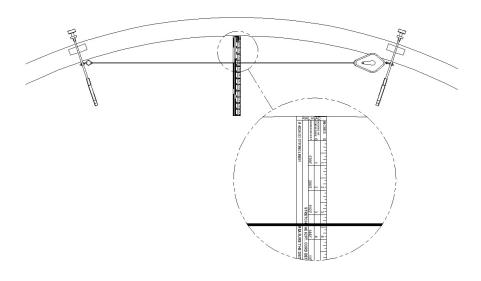


How it Works

The Stringline uses a method called "cords" to determine the curvature of the rail. Mathematically, a known fixed length of cord and a ruler can be used to determine the radius of a constant radius curve.

As the curve becomes tighter the distance from the string's center point becomes further from the rail. This distance can be related to the curve's radius by trigonometry.

The special ruler supplied with the ALDON® Stringline automatically does the radius calculation for you.



The length of the Stringline's cord (62ft) is used to make the mathematics between the rail's curve and the ruler measurement (in inches) simple.

One inch of the ruler's length equates to approximately 1 degree of curvature. In the sample above, the ruler measures approximately 3-7/16". This would equate to approximately 3.44° of curve.

Related Items

#23-A Adjustable Level & Gauge

Designed to check track gauge, guard check, flangeway and track elevation. Insulated to prevent disruption to track circuits.



4022-07

Roadmaster Rolling Gauge Reader

Rolls through switches and rail crossings without stopping. Continuous gauging with 2" clearance above rail.

Easy rolling thanks to 24 steel roller bearings which ride on the top and on the gauge side of the rail.



4022-14

Spot Check Laser Gauge

Aluminum bracket with two rare-earth magnets holds Spot-Check on rail.

Two adjusting screws raise or lower laser beam 20° with laser range of 135 feet. Screen displays current and previous readings.



4022-26

Track Inspector Tape Measure

Magnetic tip allows one worker to quickly check track gauge.

Color coded overlay scale gives tolerance for out-of-gauge track and cross-checking guard rail and frog spacing for Class 1 through Class 5 track.





4124-316



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