



Description:

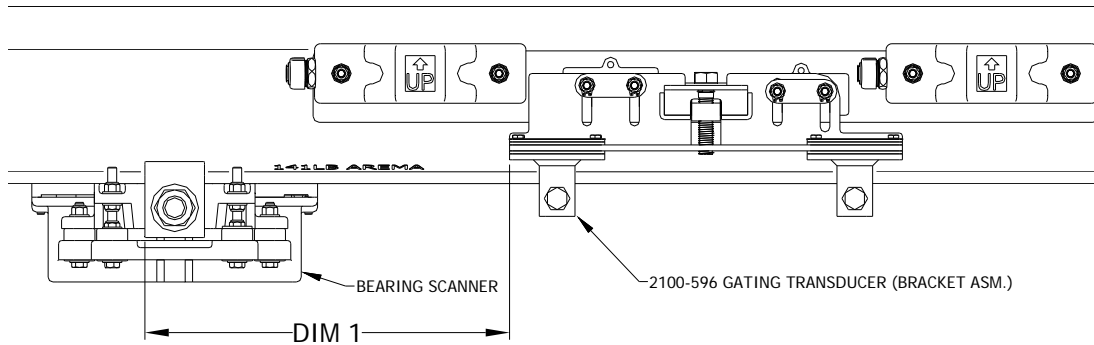
The Model 2100-596 Dual Gating Transducer with Clamp Assembly is a rail-mounted device that generates timing signals that allow an STC defect detector system to:

- Coordinate bearing and wheel temperature measurements
- Determine a train's direction
- Calculate a train's exit speed
- Calculate a train's length
- Identify individual railcars and locomotives based on axle spacing patterns

STC transducers consist of a horseshoe magnet with a tightly wound coil, encapsulated in a rigid epoxy potting compound. Each transducer is mounted 1 9/16 inches (3.97 centimeters) below the top of the rail. As the wheels of a railcar pass over the transducer, the wheel flange disturbs the flux field of the magnet, causing the output of a sinusoidal type waveform of varying amplitude. The depth of the flange and the speed at which the wheel is moving determines amplitude.

The 2100-596 mechanically clamps two gating transducers to the rail, thus eliminating the need to drill mounting holes. Its bracket is fully adjustable and allows for proper transducer alignment over a wide range of rail sizes. For optimum performance, the gating transducers must be precisely positioned in relation to the bearing scanner and mounted 1-9/16 inches (3.97 centimeters) below the top of the rail.

Installation:



Loosely mount the bracket on the rail then slide horizontally as necessary so that DIM1 is the correct distance for your rail size. DIM1 (see above) is the distance from the far edge of the track clamp on the bearing scanner to the near edge of the bracket assembly. Using the tables below, note the distance for your rail size. Tighten the nuts to 35 ft lbs.

When using with **Type III** bearing scanners:

Rail Size pounds/yard	Rail Size kilograms/meter	Distance (DIM1)
115	57.05	14-1/2 inches (36.83 centimeters)
122	60.52	14-11/16 inches (37.31 centimeters)
127	63.00	14-7/8 inches (37.78 centimeters)
132	65.48	15 inches (38.10 centimeters)
136	67.46	15-3/16 inches (38.58 centimeters)
141	69.94	15-5/16 inches (40.48 centimeters)

For example, if your rail size is 132 pounds per yard (65.48 kilograms per meter), the distance is 15 inches (38.10 centimeters). This distance is **DIM1**.

When using with **Type II** bearing scanners:

Rail Size pounds/yard	Rail Size kilograms/meter	Distance (DIM1)
115	57.05	16-5/8 inches (42.23 centimeters)
122	60.52	16-13/16 inches (42.70 centimeters)
127	63.00	17 inches (43.18 centimeters)
132	65.48	17-1/8 inches (43.50 centimeters)
136	67.46	17-5/16 inches (43.97 centimeters)
141	69.94	17-7/16 inches (44.29 centimeters)

For example, if your rail size is 132 pounds per yard (65.48 kilograms per meter), the distance is 17-1/8 inches (43.50 centimeters). This distance is **DIM1**.

General Specifications

Transducers	Two 2100-551 Potted Transducer Modules
Clamp Dimensions	33.00"L x 10.00"W x 6.50"H
Temperature Spec. - Industrial	-40°F to +158°F (-40°C to +70°C)
Weight	45.25 lbs