

Position Transmitters

POSITION TRANSMITTERS

Two basic types of position transmitter are available:

- (i) Model S132, which when operated in conjunction with a suitable position indicator (See Section 7) will indicate rotational movement of a rod or lever.
- (ii) Model S194 Inductive Position Transmitter designed for use in conjunction with a short angle ratiometer primarily the Model S216 (Section 7) for the remote indication of linear movement.

MODEL S 132

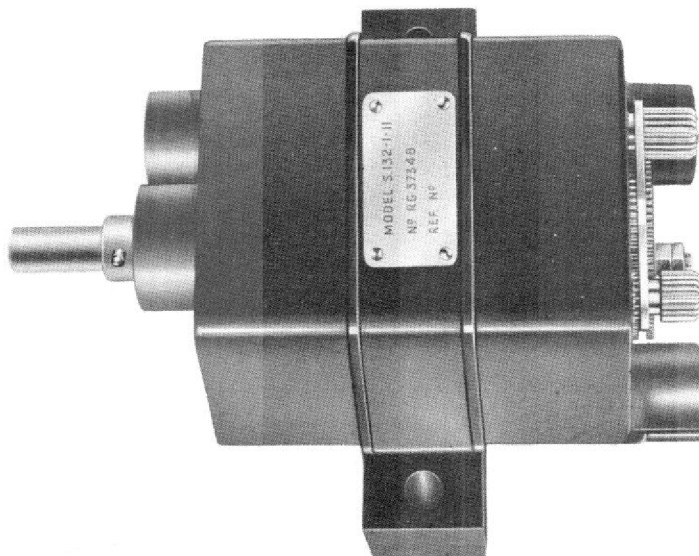
The Model S.132 has a working range of 30 degrees - 300 degrees and can be adjusted on installation to give full scale indicator deflection for any transmitter movement within this range. When gearing is necessary, it is recommended that angular movement should be between 180 degrees - 240 degrees total as this gives the best compromise between resolution accuracy and ease of adjustment.

The transmitter consists of a toroidal resistance winding (approx. 1600 ohms) housed in a splashproof, moulded bakelite case. A sliding contact arm is directly coupled to but insulated from a stainless steel shaft having an outside diameter of 1/4 in (6mm). The shaft can be connected to any moveable component through a suitable linkage, a force of 750 gm/cms being sufficient to actuate the arm.

The transmitter is adjusted in situ and errors are introduced only if there is incorrect adjustment. This adjustment is similar in effect to an infinitely variable gear between the transmitter shaft and the indicator pointer.

Linearity: $\pm 2\%$

Ambient Temperature Range: -20 to +40°C Functioning. -65 to +70°C
Weight: Approx 8 oz. (227 g). No derangements.



Model S 132

MODEL S 194

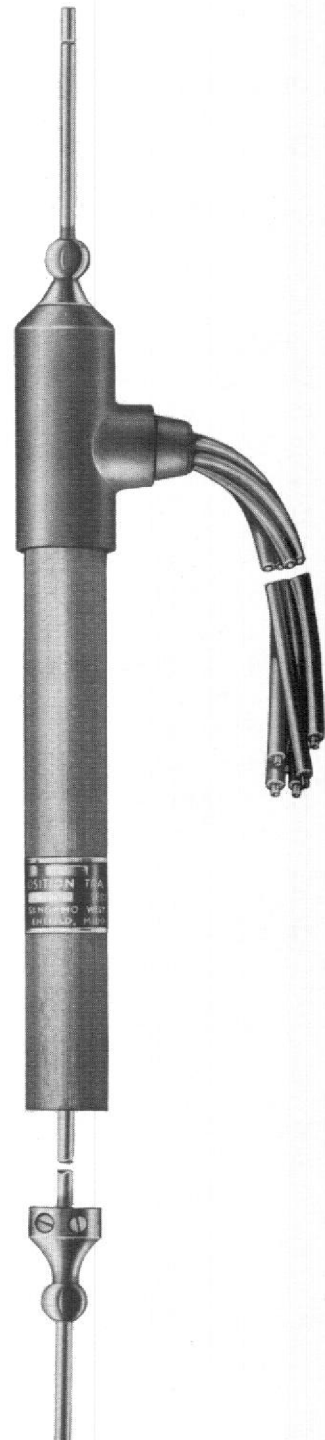
This transmitter is virtually a variable transformer, having no moving or sliding contacts. It consists of one primary and two secondary windings contained in a cylindrical housing through which there is a 3/16 in (5 mm) diameter, longitudinal hole. The supply is connected across the primary and the relative outputs of the secondaries are governed by the position of a rod which slides in the 3/16 in (5 mm) diameter hole. Connection with the windings is made via six, Uniflex Pren 3, leads. The leads are five feet long and are brought out through a rubber grommet towards one end of the transmitter. The transmitter is fitted with ball and socket joints and all exposed metal parts are made of stainless steel.

The transmitter together with its associated indicator operate from an A.C. supply of 115 volts 400 c.p.s. and the power consumption of the equipment is 3 V.A.

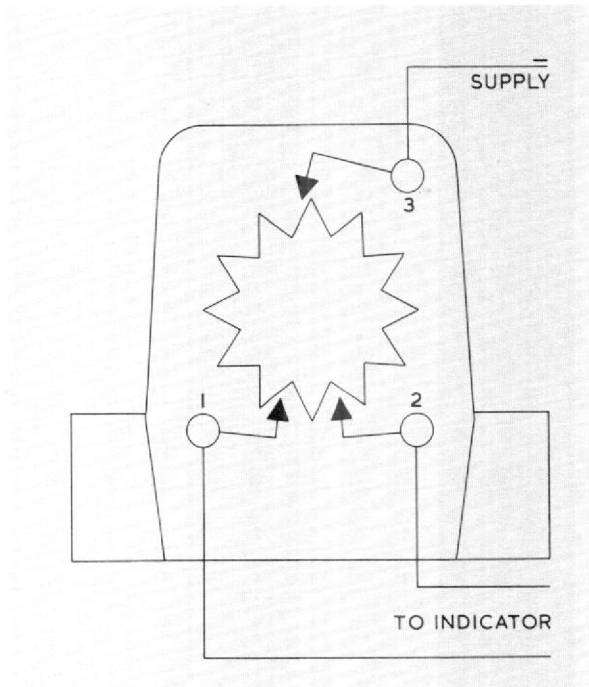
Weight of Transmitter 7 oz (198 g).

Ambient Temperature Range -40 °C + 100 °C.

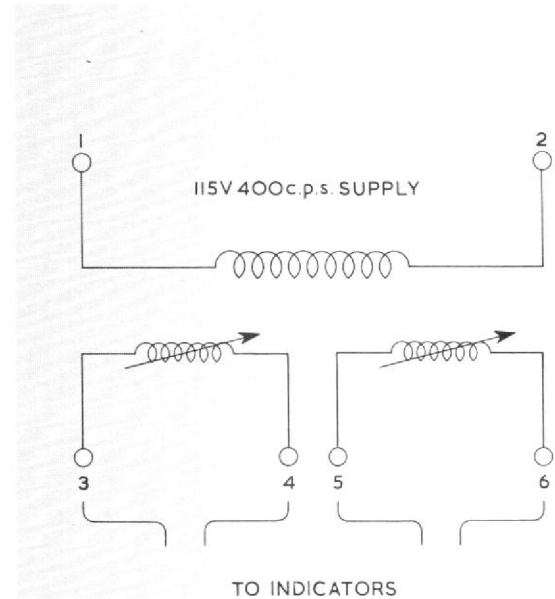
Model S 194



WIRING DIAGRAMS FOR POSITION TRANSMITTERS

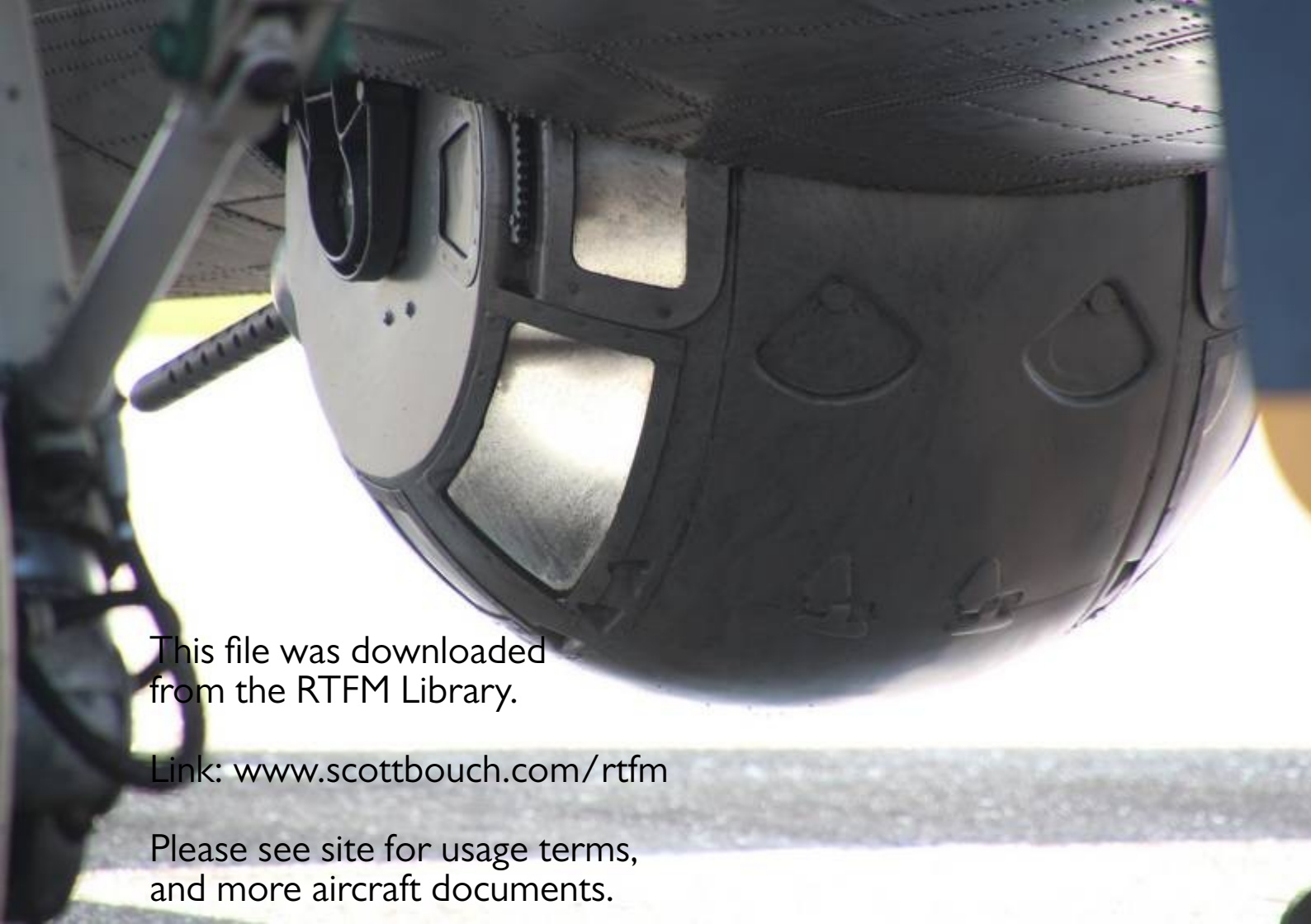


Model S 132



Model S 194

MODEL	FORM	DESCRIPTION	ELECTRICAL CONNECTIONS	F.D.
S132	2	Std. transmitter with 1/4 in dia. steel shaft	3 No.4BA Screws with captive washers	731
			3 No.6 UNC Screws with captive washers	1210
S132	2	Similar to standard type but fitted with a special threaded shaft	2 - No.4BA Screw Terminals 1 - No.2BA Screw Terminal with captive washers	1133
S194	1	Overall length 12 in (305 mm) Spindle dia. = .116 in (3 mm)	6 Leads Uniflex Pren 3 5 ft. (1.524 mm) long	967



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