The **Model 750 DC Tachometer-Generator** embodies a permanent magnet field surrounding a rotating armature. The commutator segments are made from a special non-corrosive alloy which has an exceptionally long life. The brushes are of a self-lubricating material and are carried in a self-aligning holder which equalizes the pressure of both brushes. The armature shaft rotates on ball bearings which under normal operation do not need lubrication for 15,000 hours running time or approximately 3 years, whichever comes first. Maximum recommended speed is 5,000 rpm. Brush life is greatest at the lower speeds.

Dust-proof aluminum alloy housing. S.A.E. 7/8" screw type steel mounting with 3/16" drive dog. Used on Diesel and gas engines where a standard S.A.E. screw type tachometer outlet is available. Two binding posts for electrical connection.

Approximate torque: 3.0 oz.-in. starting, 4.0 oz.-in. running (1000 RPM).

Screw Mounted Tachometer-Generator

SPECIFICATIONS

VOLTAGE OUTPUT AT 1000 RPM	6 Volts ±1% Per 1000 RPM	
ACCURACY	±1%	
EMF LINEARITY 1	±0.15%	
PERMISSIBLE CURRENT DRAIN	50 mA	
MAX RMS VALUE OF AC RIPPLE	2%	
ALLOWABLE END PLAY	.005"	
MAX OPERATING TEMPERATURE	250°F	
INTERNAL RESISTANCE AT 25°C	20 Ω ±2% J2R: 200 Ω ±2%	
NUMBER OF BRUSHES	2 Per Set	
COMPOSITION OF BRUSHES	Palladium Silver Alloy	
ARMATURE	12 Bars, 12 Slots	
INSULATION	Insulation Class 105	
HI-POT TEST	500 Volts for 1 Min.	
BEARINGS	Ball	
TEMPERATURE COMPENSATION	0.1% Per 10°C Change	
NORMAL CONTINUOUS SPEED	2000 RPM	
MIN TOP SPEED	100 RPM	
MAX SPEED 2	5000 RPM	
STARTING TORQUE	J2, J2R	3.0 oz. ins.
	M2	1.0 oz. ins.
RUNNING TORQUE AT 1000 RPM	J2, J2R	4.0 oz. ins.
	M2	1.0 oz. ins.
SHAFT DIAMETER	3/16"	
SHAFT CONNECTION	Direct	
SHAFT LENGTH	.47"	
ADJUSTABLE MAGNETIC SHUNT RANGE	±4%	
DIRECTION OF ROTATION EFFECT	±0.6%	
MOUNTING	SAE 7/8" Screw	
ENCLOSURE	Dust Resistant	
MEASUREMENTS	5.61"L x 2.91"H x 3"W	
WEIGHT	1.8 lbs. (.82 kg.). Approximate	

Type J2R: Same as Type J2, except internal resistance is 200W.

Type M2: Same as Type J2, except front bearing seal has been eliminated to reduce torque burden. Recommended for use with a low-torque gear box. Approximate torque: 1.0 oz.-in. starting, 1.0 oz.-in. running (1000 RPM).

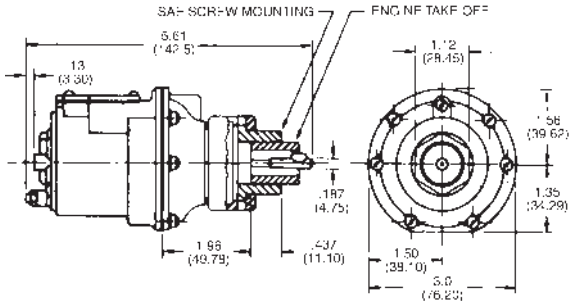
Binding Post Cover Box: Provides protection for the terminals, and has a 1/2" NPT connection for conduit.

Replacement Brush Kit: Metallic leaf brushes are of an alloy which will wear before the commutator bars. Brush replacement is a simple field operation.

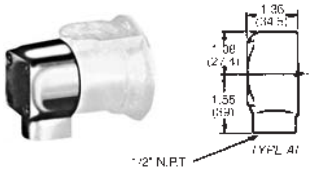
ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
750-9906000	750 Type J2 Tachometer-Generator
750-9906002	750 Type J2R Tachometer-Generator
750-9906001	750 Type M2 Tachometer-Generator
ACCESSORIES	
9933-0143156	Binding Post Cover Box
249302.901	Replacement Brush Kit

DIMENSIONS (INCHES/MILLIMETERS)

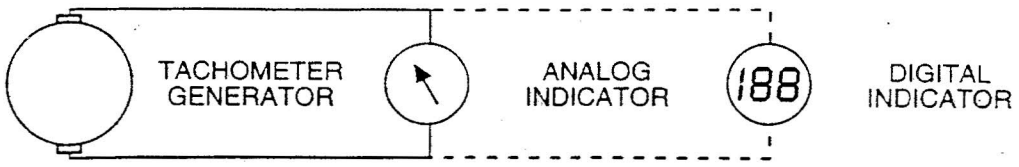


BINDING POST COVER BOX



atc WESTCON DIVISION

RT 2, P.O. Box 305 Newell, WV 26050 304-387-1200



PRINCIPLE

The Westcon DC Tachometer consists of a generator connected by means of a pair of leads to a suitable indicating instrument. When readings are desired in more than one location, several indicators may be used with one generator.

The generator consists essentially of a permanent magnet and a wound armature with commutator and brushes. It is especially designed to maintain a stable output proportional to shaft speed. When connected by means of a pair of leads to a suitable DC indicator, speed will be accurately measured.

The indicator is basically a voltmeter with a scale calibrated in the units to be measured, for example: R.P.M., feet per minute, miles per hour, gallons per hour and minutes baking time.

INSTALLATION

Tachometer Generator Model 750 Type A - Mount securely on steel or iron mounting base free from excessive vibration. It is recommended that the generator be mounted with the armature in the horizontal position; other methods of mounting should have factory approval.

When the drive shafts are used for gears or pulleys, over tight belts or sprocket chains and bottoming gears should be avoided.

Non-metallic gearing is preferred over metallic gearing for quiet operation. Slippage of driving belts or frictional couplings must be avoided so that the generator speed will be truly representative of the speed to be measured.

When direct drive is used, a suitable type of loose coupling of the universal variety should be used in order to reduce thrusts and strains and to make allowance for any slight misalignment of the shaft.

Tachometer Generator Model 750 Types J and M - These generators are provided with standard SAE screw-type couplings for direct drive. It is important that the hex mounting nut be tightened firmly to avoid loosening due to possible vibration.

Tachometer Generator Model 750 Type K - This generator has a square pad for mounting on an engine by means of four 1/4 inch studs. Nuts and lock washers or lock nuts should be used to hold generator firmly in place.

CONNECTIONS

The preferred size of wire for connecting the generator to the indicator is No. 14 AWG. All connections should be clean and tight. CAUTION: Avoid shorting binding posts of generator while in operation. If the wires run in conduit, the conduit should be grounded to avoid static charges, which may affect the overall accuracy. For the same reason, ground the instrument and generator cases.