

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.

Rigid, die-cast, dust-proof aluminum housing and mounting base. 3/8" diameter shaft extension for direct coupling drive, pulley, spur gear, or chain and sprocket. Two binding posts for electrical connection.

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.



Base Mounting Tachometer-Generator

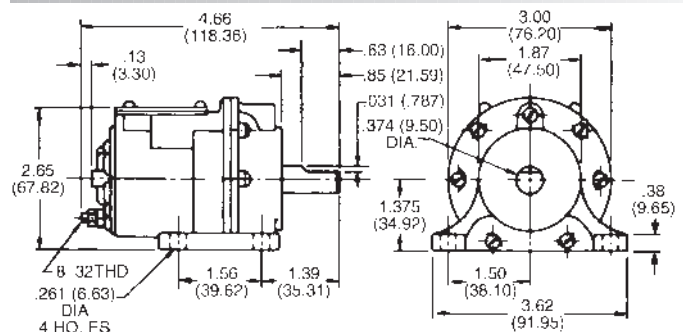
### SPECIFICATIONS

VOLTAGE OUTPUT AT 1000 RPM	6 Volts $\pm$ 1% Per 1000 RPM
ACCURACY	$\pm$ 1%
EMF LINEARITY 1	$\pm$ 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 $\Omega$ $\pm$ 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	1.0 oz. ins.
RUNNING TORQUE	1.0 oz. ins.
SHAFT DIAMETER	3/8"
SHAFT CONNECTION	Direct, Geared or Belted
SHAFT LENGTH	.85" (w/.63 Flat)
ADJUSTABLE MAGNETIC SHUNT RANGE	$\pm$ 4%
DIRECTION OF ROTATION EFFECT	$\pm$ 0.6%
MOUNTING	Base
ENCLOSURE	Dust Resistant
MEASUREMENTS	4.66"L x 2.87"H x 3"W
WEIGHT	1.7 lbs. (.77 kg). Approximate

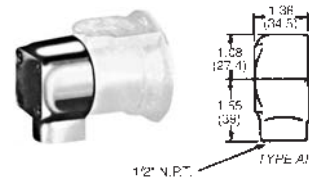
### ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
750-9901000	750 DC Tachometer-Generator
ACCESSORIES	
9933-0143156	Binding Post Cover Box
249302-901	Replacement Brush Kit

### DIMENSIONS (INCHES/MILLIMETERS)



BINDING POST COVER BOX





LISTED

File #E102224

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, which-ever comes first. Maximum recommended speed is 5,000 rpm. Brush life is greatest at the lower speeds.

Rigid, heavy-duty cast-iron housing and mounting base. 3/4" diameter shaft, supported by heavy-duty ball bearings. Includes conduit junction box with 1/2" N.P.T. opening suitable for flexible conduit, mountable in anyone of four positions. This unit is listed by Underwriter laboratories for use in hazardous locations Division 1 (vapors exist continuously), Class 1, Group D (natural gas or the vapors from lacquer solvents, acetone, alcohols, and petroleum derivatives), and Class 2, Groups F and G (carbon black, coal or coke dust, grain dust, etc.).

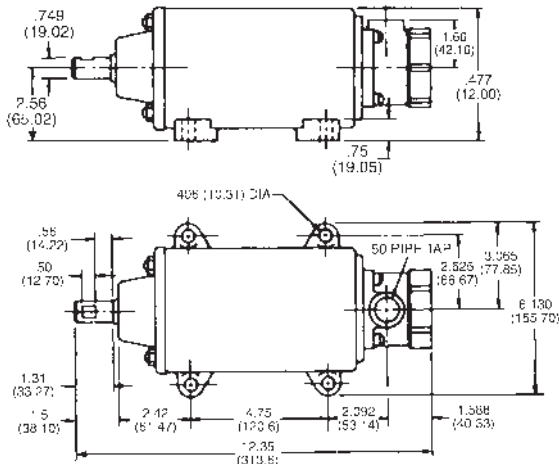
Approximate torque. 2.0 oz.-in. starting, 2.0 oz.-in., running (1000 RPM).

Explosion-Proof Tachometers/Generators

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
750-9905001	750-E Tachometer-Generator

DIMENSIONS (INCHES/MILLIMETERS)



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%
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	2.0 oz. ins.
RUNNING TORQUE	2.0 oz. ins.
SHAFT DIAMETER	3/4"
SHAFT CONNECTION	Direct, Geared or Belted
SHAFT LENGTH	1-1/2"
ADJUSTABLE MAGNETIC SHUNT RANGE	±4%
DIRECTION OF ROTATION EFFECT	±0.6%
MOUNTING	Base
ENCLOSURE	Explosion-Proof
MEASUREMENTS	12.35"L x 4.77"H x 6.13"W
WEIGHT	24.5 lbs.

Tachometers/Generators // 750-E Series

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).

### SPECIFICATIONS

VOLTAGE OUTPUT AT 1000 RPM	6 Volts $\pm 1\%$ Per 1000 RPM	
ACCURACY	$\pm 1\%$	
EMF LINEARITY 1	$\pm 0.15\%$	
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 $\Omega$ $\pm 2\%$ J2R: 200 $\Omega$ $\pm 2\%$	
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	$\pm 4\%$	
DIRECTION OF ROTATION EFFECT	$\pm 0.6\%$	
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	



Screw Mounted Tachometer-Generator

**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).

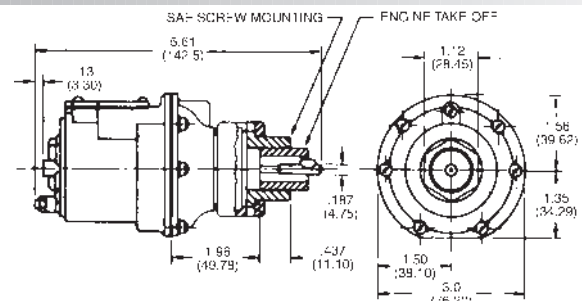
**Binding Post Cover Box:** Provides protection for the terminals, and has a 1/2" NPT connection for conduit.

**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





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.

Square aluminum mounting pad with a dust proof aluminum alloy housing and 1/4" square drive dog. Mounting pad in accordance with military drawing AND-20005. Two binding posts for electrical connections.

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

**Type K30:** Same as Type K3, but with a 3/16" square drive dog. Designed to operate only within protected environments.

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

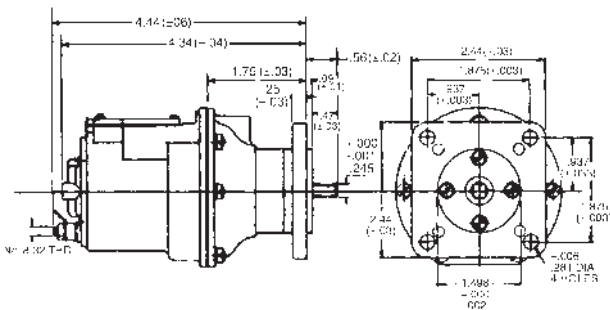
**Binding Post Cover Box:** Provides protection for the terminals, and has a fi" NPT connection for conduit.

Pad Mounting

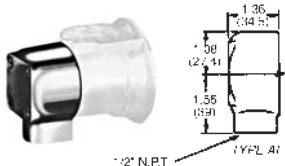
ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
750-9903000	750 Type K3 Tachometer-Generator
750-9905000	750 Type J30 Tachometer-Generator
ACCESSORIES	
9933-0143156	Binding Post Cover Box
249302-901	Replacement Brush Kit

DIMENSIONS (INCHES/MILLIMETERS)



BINDING POST COVER BOX



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%
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	3.0 oz. ins.
RUNNING TORQUE AT 1000 RPM	4.0 oz. ins.
SHAFT DIAMETER	1/4"
SHAFT CONNECTION	Direct
SHAFT LENGTH	.47"
ADJUSTABLE MAGNETIC SHUNT RANGE	±4%
DIRECTION OF ROTATION EFFECT	±0.6%
MOUNTING	Sq. AN Pad
ENCLOSURE	Dust Resistant
MEASUREMENTS	5.02" L x 2.91" H x 3"W
WEIGHT	1.7 lbs. (.77 kgs.) Approximate

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.

Rigid, heavy-duty cast-iron base mounting type housing, with 1/2" diameter shaft supported by heavy duty ball bearings for direct coupling, pulley, spur gear or chain and sprocket drive. Provided with conduit junction box with 1/2" N.P.T. opening suitable for flexible conduit which may be located in anyone of four positions at right angle to shaft. Designed for locations which are subject to mechanical abuse or water spray, such as paper mills and chemical plants where cleaning up by hose is frequent. Housing is gasket sealed.

Approximate torque: 2.0 oz. in. starting, 2.0 oz.-in. running (1000 RPM)

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

### SPECIFICATIONS

VOLTAGE OUTPUT AT 1000 RPM	6 Volts $\pm$ 1% Per 1000 RPM
ACCURACY	$\pm$ 1%
EMF LINEARITY 1	$\pm$ 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 $\Omega$ $\pm$ 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	2.0 oz. ins.
RUNNING TORQUE AT 1000 RPM	2.0 oz. ins.
SHAFT DIAMETER	3/4"
SHAFT CONNECTION	Direct, Geared or Belted
SHAFT LENGTH	1-1/2"
ADJUSTABLE MAGNETIC SHUNT RANGE	$\pm$ 4%
DIRECTION OF ROTATION EFFECT	$\pm$ 0.6%
MOUNTING	Base
ENCLOSURE	Weatherproof
MEASUREMENTS	12.3" L x 4.77" H x 6.13" W
WEIGHT	24.5 lbs (11.1 kgs) Approximate

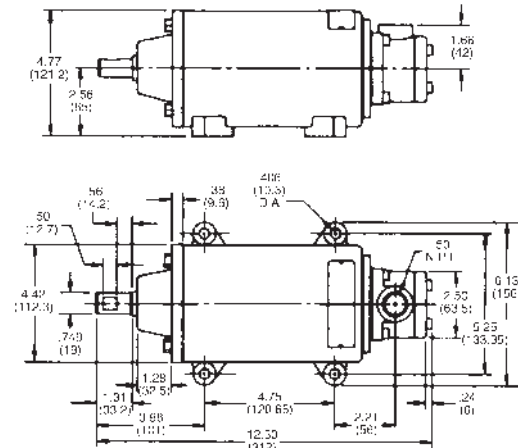


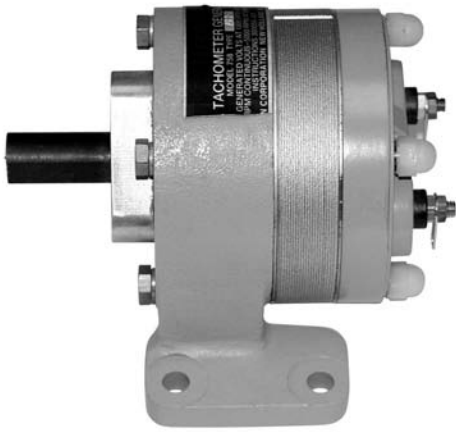
Splash-Proof Tachometer-Generator

### ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
750-9905002	750 Type W Tachometer-Generator
ACCESSORIES	
249302-901	Replacement Brush Kit

### DIMENSIONS (INCHES/MILLIMETERS)



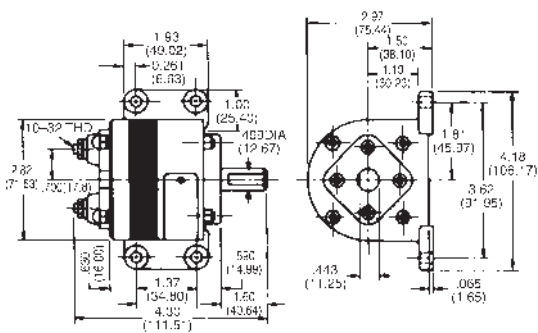


Base Model Tachometer

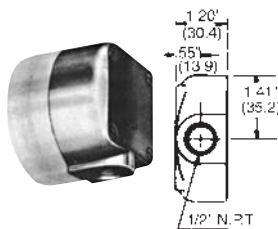
ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
758-9901000	758 Type AB Tachometer-Generator for Voltage-Responsive Systems
758-9901001	758 Type ABF Tachometer-Generator for Frequency-Responsive Systems
ACCESSORIES	
9933-0143157	Binding Post Cover Box

DIMENSIONS (INCHES/MILLIMETERS)



BINDING POST COVER BOX



The **758 Series** of tachometers all use a multi-pole cylindrical magnet turning in a wound stator constructed from quality transformer iron lamination. Single phase output current is a sine wave over the speed range of the tachometer. These units have 100 ohm stators and are intended for voltage responsive systems. When greater accuracy is required, use a tachometer having a 32 ohm stator (designation F in the type number) and a frequency responsive indicating system. For speeds over 5,000 rpm, use the bearingless AC generators on page 339.

Rigid cast-aluminum base; light-weight, dust-proof aluminum alloy housing. 1/2" diameter shaft extension for direct coupling drive, pulley, chain and sprocket, or spur gear. Two binding posts for electrical connection.

Approximate torque: 2.5 oz.-in. starting, 2.5-oz.-in. running (1000 RPM).

**Binding Post Cover Box:** Available for Types AB, JB2 and KB3 (both voltage and frequency-responsive models). Provides protection for terminals, and has a 1/2" NPT connection for conduit. Cat. No..

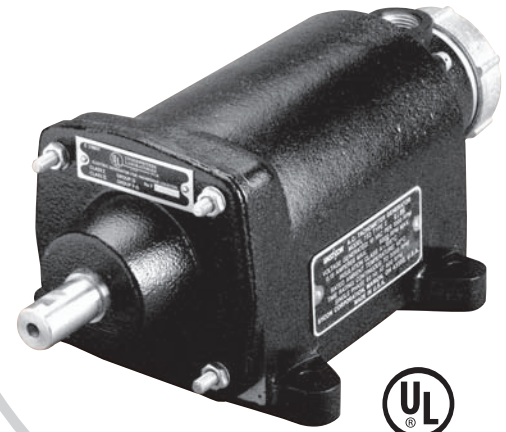
SPECIFICATIONS

VOLTAGE OUTPUT AT 1000 RPM	10 Volts AC $\pm 1\%$ Per 1000 RPM Open Circuit	
ACCURACY	$\pm 1\%$	
EMF LINEARITY 1	Dependent Upon Load and Speed	
PERMISSIBLE CURRENT DRAIN	150 mA	
FREQUENCY AT 900 RPM	60 Hz Sine Wave	
ALLOWABLE END PLAY	0.005"	
MAX OPERATING TEMPERATURE	250°F	
INTERNAL RESISTANCE AT 25°C	Standard Unit	100 $\Omega$ $\pm 1\%$
	F. Type Unit*	32 $\Omega$ $\pm 20\%$
INSULATION	Insulation Class 105	
ROTOR	Alnico V, 8 Poles	
STATOR	8 Poles	
BEARINGS	Ball	
TEMPERATURE COEFFICIENT	Standard Unit	0.2% Per 10°C Change
	F. Type Unit*	Not Compensated, 0.4% Per 10°C Change
MIN. SPEED	500 RPM	
MAX. TOP SPEED	5000 RPM	
STARTING TORQUE	2.0-3.0 oz. ins.	
RUNNING TORQUE AT 1000 RPM	2.3 oz. ins.	
SHAFT DIAMETER	1/2"	
SHAFT CONNECTION	Direct, Geared or Belt	
SHAFT LENGTH	1" (w/.87 Flat)	
ELECTRICAL CONNECTION	10-32 Studs	
MOUNTING	Base	
ENCLOSURE	Dust Resistant	
MEASUREMENTS	4.39" L x 2.97" H x 2.82" W	
WEIGHT	2.89 lbs. (1.31 kg.) Approximate	

\*F-Type generators for use in frequency responsive systems only. any of the above types can be supplied for use in frequency systems

The **758 Series** of tachometers all use a multi-pole cylindrical magnet turning in a wound stator constructed from quality transformer iron lamination. Single phase output current is a sine wave over the speed range of the tachometer. These units have 100 ohm stators and are intended for voltage responsive systems. When greater accuracy is required, use a tachometer having a 32 ohm stator (designation F in the type number) and a frequency responsive indicating system. For speeds over 5,000 rpm, use the bearingless AC generators.

Rigid, heavy-duty cast-iron housing and mounting base, 3/4" diameter shaft supported by heavy duty ball bearings. Includes conduit junction box with 1/2" N.P.T. opening suitable for flexible conduit, mountable in any one of four positions. This unit is listed by Underwriters Laboratories for use in hazardous locations Division 1 (vapors exist continuously), Class 1, Group D (natural gas or the vapors from lacquer solvents, acetone, alcohols, and petroleum derivatives such as gasoline); and Class 2, Groups F and G (carbon black, coal or coke dust, grain dust, etc.)



LISTED  
File # E102224

Explosion-Proof Tachometer

### SPECIFICATIONS

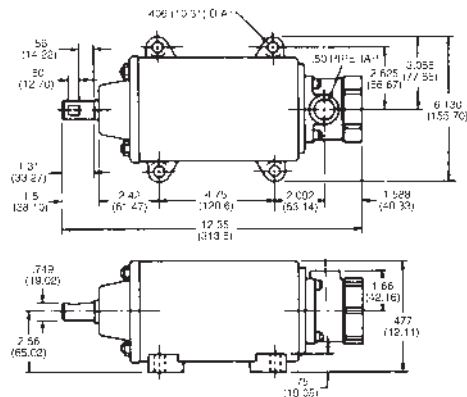
VOLTAGE OUTPUT AT 1000 RPM	10 Volts AC $\pm 1\%$ Per 1000 RPM Open Circuit	
ACCURACY	$\pm 1\%$	
EMF LINEARITY 1	Dependent Upon Load and Speed	
PERMISSIBLE CURRENT DRAIN	150 mA	
FREQUENCY AT 900 RPM	60 Hz Sine Wave	
ALLOWABLE END PLAY	0.005"	
MAX OPERATING TEMPERATURE	250°F	
INTERNAL RESISTANCE AT 25°C	Standard Unit	100 $\Omega \pm 1\%$
	F. Type Unit*	32 $\Omega \pm 20\%$
ROTOR	Alnico V, 8 Poles	
STATOR	8 Poles	
INSULATION	Insulation Class 105	
BEARINGS	Ball	
TEMPERATURE COEFFICIENT	Standard Unit	0.2% Per 10°C Change
	F. Type Unit*	Not Compensated, 0.4% Per 10°C Change
MIN. SPEED	500 RPM	
MAX. TOP SPEED	5000 RPM	
STARTING TORQUE	2.0-3.0 oz. ins.	
RUNNING TORQUE AT 1000 RPM	2.3 oz. ins.	
SHAFT DIAMETER	3/4"	
SHAFT CONNECTION	Direct, Geared or Belt	
SHAFT LENGTH	1-1/2"	
ELECTRICAL CONNECTION	1/2" NPT 10-32 Studs	
MOUNTING	Base	
ENCLOSURE	Explosion Proof	
MEASUREMENTS	12.35" L x 6.13" H x 4.77" W	
WEIGHT	24.5 lbs. (11.1 kgs.) Approximate	

\*F-Type generators for use in frequency responsive systems only.  
any of the above types can be supplied for use in frequency systems

### ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
758-9910001	758 Type E Tachometer for Voltage-Responsive Systems
0131483-902	758 Type EF Tachometer for Frequency-Responsive Systems.

### DIMENSIONS (INCHES/MILLIMETERS)





The **758 Series** of tachometers all use a multi-pole cylindrical magnet turning in a wound stator constructed from quality transformer iron lamination. Single phase output current is a sine wave over the speed range of the tachometer. These units have 100 ohm stators and are intended for voltage responsive systems. When greater accuracy is required, use a tachometer having a 32 ohm stator (designation F in the type number) and a frequency responsive indicating system. For speeds over 5,000 rpm, use the bearingless AC generators.

Square aluminum mounting pad with a dust proof aluminum alloy housing and 1/4" square drive dog. Mounting pad in accordance with military drawing AND 20005. Two binding posts for electrical connections. Approximate torque: 2.0 oz. in. starting, 2.0 oz. in. running (1000 rpm).

Type KB6 same as Type KB3 except method of electrical connection. Instead of binding posts, generator has a binding post cover box and an AN plug connector type AND 10066-12S-3P. The mating socket connector is an AN 3106-12S-3S (not supplied).

Type KB30—Same as Type KB3, but with a 3/16" square drive dog. Designed to operate only within protected environments.



Pad Mounted (AN) Tachometer

### SPECIFICATIONS

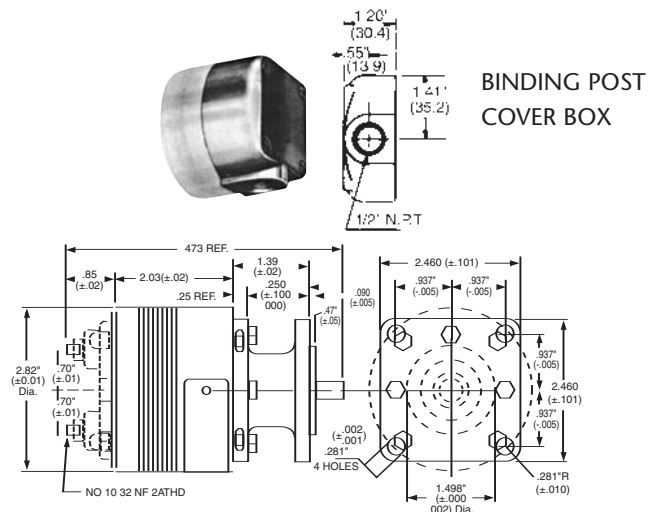
VOLTAGE OUTPUT AT 1000 RPM	10 Volts AC $\pm 1\%$ Per 1000 RPM Open Circuit	
ACCURACY	$\pm 1\%$	
EMF LINEARITY	Dependent Upon Load and Speed	
PERMISSIBLE CURRENT DRAIN	150 mA	
FREQUENCY AT 900 RPM	60 Hz Sine Wave	
ALLOWABLE END PLAY	0.005"	
MAX OPERATING TEMPERATURE	250°F	
INTERNAL RESISTANCE AT 25°C	Standard Unit 100	100 $\Omega \pm 1\%$
	F. Type Unit*	32 $\Omega \pm 20\%$
INSULATION	Insulation Class 105	
ROTOR	Alnico V, 8 Poles	
STATOR	8 Poles	
BEARINGS	Ball	
TEMPERATURE COEFFICIENT	Standard Unit	0.2% Per 10°C Change
	F. Type Unit*	Not Compensated, 0.4% Per 10°C Change
MIN. SPEED	500 RPM	
MAX. TOP SPEED	5000 RPM	
STARTING TORQUE	2.0-3.0 oz. ins.	
RUNNING TORQUE AT 1000 RPM	2.3 oz. ins.	
SHAFT DIAMETER	1/4" Square	
SHAFT CONNECTION	Direct	
SHAFT LENGTH	.47"	
ELECTRICAL CONNECTION	KB3	10-32 Studs
	KB6	AN Plug Connection
MOUNTING	Sq. AN Pad	
ENCLOSURE	Dust Resistant	
MEASUREMENTS	KB3	4.74"L x 2.82"H x 2.82"W
	KB6	5.11"L x 3.38"H x 2.82"W
WEIGHT	KB3	2.5 lbs. Approximate
	KB6	2.6 lbs. Approximate

\*F-Type generators for use in frequency responsive systems only.  
any of the above types can be supplied for use in frequency systems

### ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
758-9907000	758 Type KB3 Tachometer for Voltage-Responsive Systems
758-9911000	758 Type KBF3 Tachometer for Frequency-Responsive Systems
758-9908000	758 Type KB6 Tachometer for Voltage-Responsive Systems
0136522-902	758 Type KBF6 Tachometer for Frequency-Responsive Systems
0134277-901	758 Type KB30 Tachometer for Voltage-Responsive Systems
0134277-903	758 Type KBF30 Tachometer for Frequency-Responsive Systems
ACCESSORIES	
AN3106-12S-3S	Mating Socket Connector

### DIMENSIONS (INCHES/MILLIMETERS)





Explosion Proof Tachometer

The **758 Series** of tachometers all use a multi-pole cylindrical magnet turning in a wound stator constructed from quality transformer iron lamination. Single phase output current is a sine wave over the speed range of the tachometer. These units have 100 ohm stators and are intended for voltage responsive systems. When greater accuracy is required, use a tachometer having a 32 ohm stator (designation F in the type number) and a frequency responsive indicating system. For speeds over 5,000 rpm, use the bearingless AC generators.

Rigid, heavy-duty cast-iron base-mounting type housing with 1" diameter shaft supported by heavy duty ball bearings for direct coupling, pulley, spur gear or chain and sprocket drive. Provided with conduit junction box with 1/2 N.P.T. opening suitable for flexible conduit which may be located in anyone of four positions at right angle to shaft. Designed for locations which are subject to mechanical abuse or water spray, such as paper mills and chemical plants where cleaning up by hose is frequent. Housing is gasket sealed.

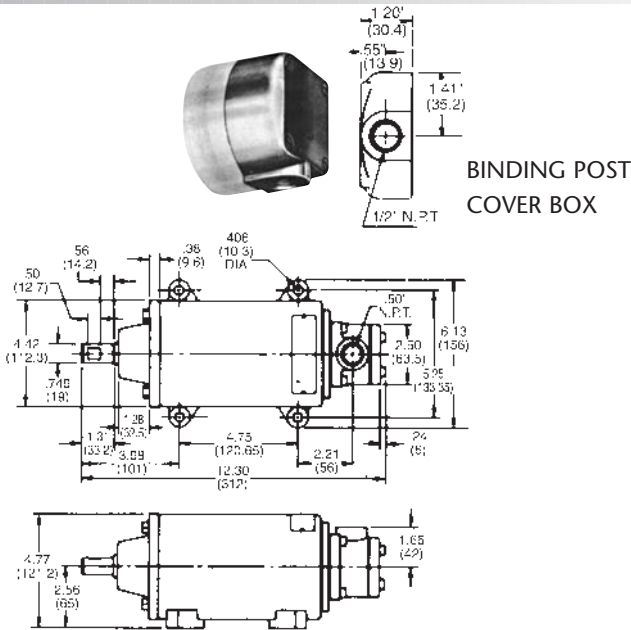
Approximate torque: 3.0 oz. in. starting, 3.0 oz.-in. running (1000 rpm).

Tachometers/Generators // 758-W Series

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
758-9910002	758 Type W Tachometer for Voltage-Responsive Systems
0133484-902	758 Type WF Tachometer for Frequency-Responsive Systems

DIMENSIONS (INCHES/MILLIMETERS)



SPECIFICATIONS

VOLTAGE OUTPUT AT 1000 RPM	10 Volts AC $\pm 1\%$ Per 1000 RPM Open Circuit	
ACCURACY	$\pm 1\%$	
EMF LINEARITY	Dependent Upon Load and Speed	
PERMISSIBLE CURRENT DRAIN	150 mA	
FREQUENCY AT 900 RPM	60 Hz Sine Wave	
ALLOWABLE END PLAY	0.005"	
MAX OPERATING TEMPERATURE	250°F	
INTERNAL RESISTANCE AT 25°C	Standard Unit	100 $\Omega$ $\pm 1\%$
	F. Type Unit*	32 $\Omega$ $\pm 20\%$
INSULATION	Insulation Class 105	
ROTOR	Alnico V, 8 Poles	
STATOR	8 Poles	
BEARINGS	Ball	
TEMPERATURE COEFFICIENT	Standard Unit	0.2% Per 10°C Change
	F. Type Unit*	Not Compensated, 0.4% Per 10°C Change
MIN. SPEED	500 RPM	
MAX. TOP SPEED	5000 RPM	
STARTING TORQUE	2.0-3.0 oz. ins.	
RUNNING TORQUE AT 1000 RPM	2.3 oz. ins.	
SHAFT DIAMETER	3/4"	
SHAFT CONNECTION	Direct, Geared or Belt	
SHAFT LENGTH	1-1/2"	
ELECTRICAL CONNECTION	1/2" NPT 10-32 Studs	
MOUNTING	Base	
ENCLOSURE	Spray Resistant	
MEASUREMENTS	12.35" L x 4.77" H x 6.13" W	
WEIGHT	24.5 lbs. Approximate	

\*F-Type generators for use in frequency responsive systems only. any of the above types can be supplied for use in frequency systems

These are AC generators of the most basic form, consisting only of a stator and a permanent magnet rotor which mounts on a rotating shaft in the customer's equipment. Designed primarily for use by OEM's, these extremely rugged and dependable generators have no bearings or brushes and therefore, require absolutely no maintenance.

Because they are impervious to oil, grease and relatively high temperatures, they may be installed in inaccessible areas, such as gear boxes, which permits the saving of space and the reduction of costs. They have extremely low torque burdens of less than one ounce-inch and are capable of speeds up to 100,000 rpm.

"Potted" Models. Units are available with the stator windings encapsulated with an epoxy material for greater protection. These are designed with the letter "P" in the type number. Minimum order of 6 pieces.

Mil-spec compliance. Model 758, types XPF86 and GF86 are designed to meet MIL-S-901 high shock, as required by specification MIL-T-16049.

**Rotor Installation:** The rotor of the generator unit should be mounted to the true center of the shaft with extreme care, particularly in higher speed applications. The relatively small inertia of the rotor makes it possible to secure it to the shaft with a right hand thread regardless of the direction of rotation. It is recommended that a steel screw having an SAE thread be used to permit maximum tightening.

NOTE: DO not press fit the rotor to the shaft, or the rotor will shatter because of the brittle nature of the magnetic rotor material.

**Indicators:** ATC offers digital RPM indicators that operate from AC and DC voltage signals, and from AC frequency. These meters are specially modified to reduce the rapid fluctuation in display digits that result from varying speed rates. Consult factory for details.

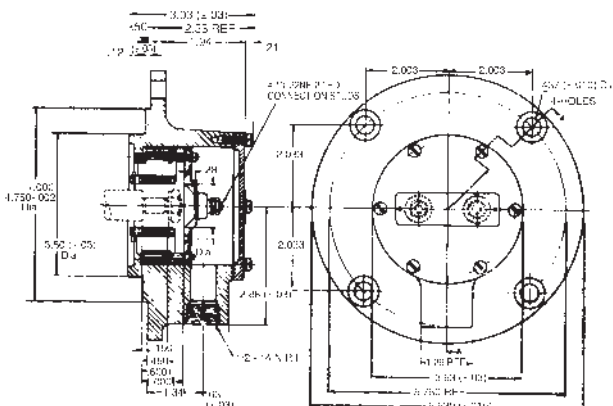
Bearingless AC Generators



TYPE	MODEL NUMBER	SPEED RANGE (RPM)	HOUSING	NO. OF STATOR POLES	ROTOR STYLE NO.	VOLT OUTPUT AT 1000 RPM (Open Circuit)	STATOR RESISTANCE (Ω ±20%)	FREQUENCY AT 1800 RPM (HO)
XF86	758-9989002	500-20,000	None	8	6	10 ± 1%	32	120
XPF86	758-0077533							
GF86	758-9912002	500-20,000	Cast Iron	8	6	10 ± 1%	32	120
GPF86	758-0300008							
XF44	758-0088466	20,000-40,000	None	4	4	+3% 2-0%	15	60
XPF44	758-0067273							
GF44	758-0049982	20,000-40,000	Cast Iron	4	4	+3% 2-0%	15	60
GPF44	758-D084866							

/// DIMENSIONS (INCHES/MILLIMETERS)

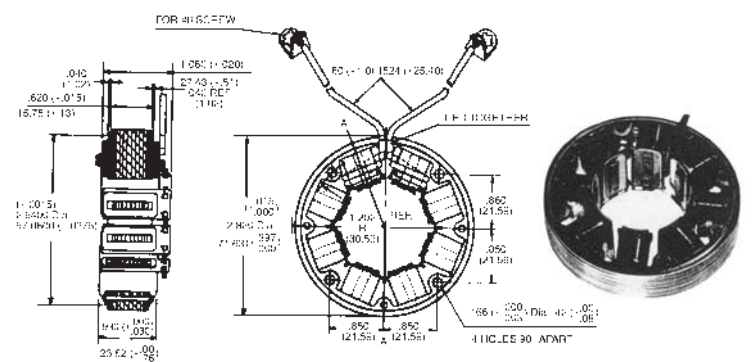
MODEL 758 -TYPE GF86



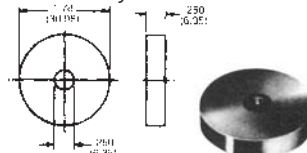
Mounted in cast iron housing.  
Weight: 7.27 lbs.



MODEL 758 -TYPE XF86



Rotor Style 4



Rotor Style 6

