Speed Sensors

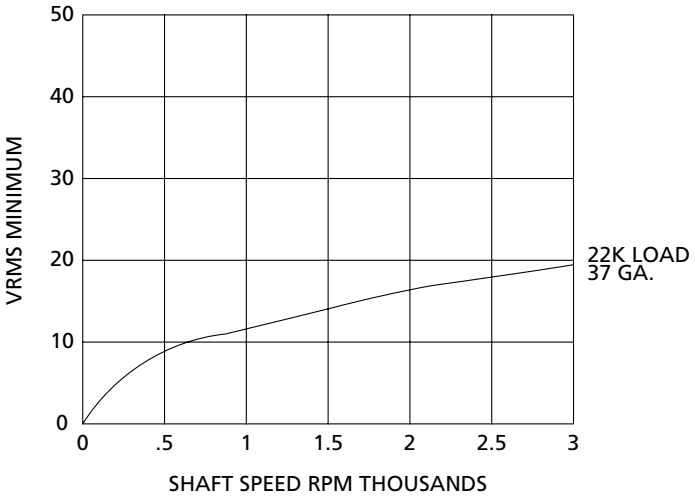
Mini-Gen® Signal Generator

The Mini-Gen® signal generator mounts on the transmissions of buses and trucks to measure road speed or on diesel engines to measure engine speed.

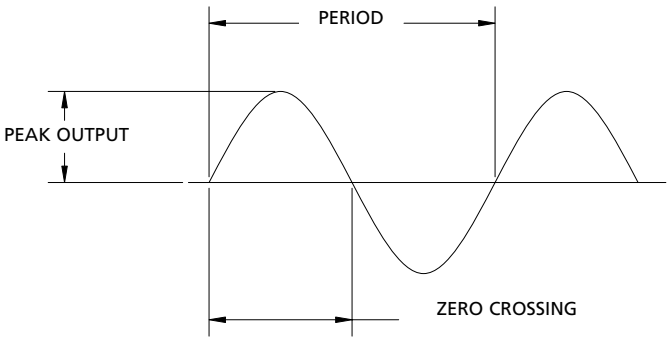
Features:

- Mounts on standard SAE ⅞-18, General Motors, and E1 & E2 DIN 75 532 tachometer outputs
- Non-feed thru models come standard with ¼" male tab
- Compact, only 1¾" in diameter
- Long, reliable life under continuous speeds as high as 4000 RPM
- Usable signal at speeds below 20 RPM (10 Hz)
- Output signal frequency ½ of shaft RPM
- Rugged zinc die cast construction
- Heavy duty, two-conductor cable on feed-thru models
- Plated for protection against moisture, salt and dirt
- Environmentally sealed
- Optional connectors available
- Patented design

Signal Generator Output:



Mini-Gen Timing:



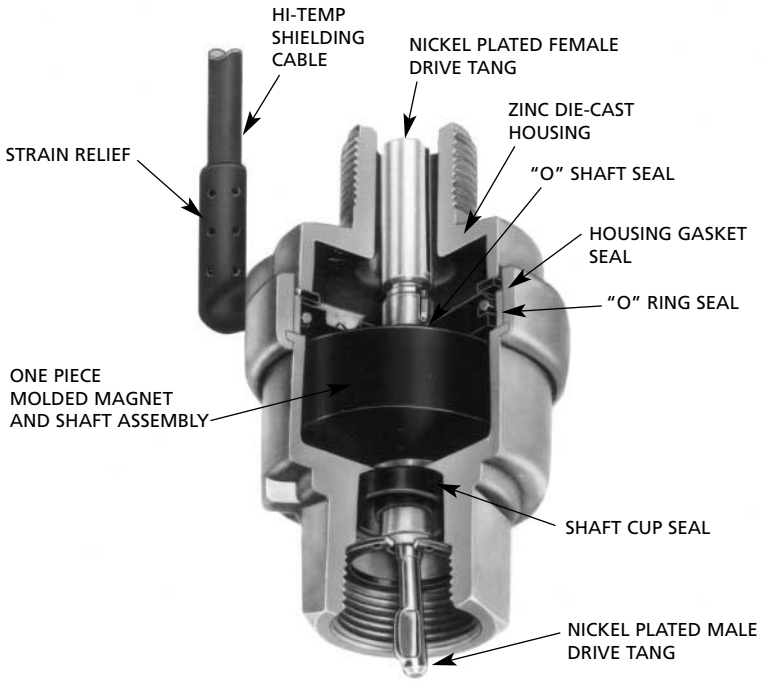
Sinusoidal Output @ 1000 RPM
(Mini-Gen shaft speed) = 500 Hz

1. Voltage output = 25 V peak (RMS = 17.7 volts)
2. Timing between zeroes = 1 millisecond
3. Timing between periods = 2 milliseconds

Timing variation between zero crossing = 7%

Mini-Gen® Signal Generator

RUGGED CONSTRUCTION



Electrical Specifications:

Output (37 GA)	
(No Load)	1750 RPM
Minimum	25 VRMS
Maximum	55 VRMS
Resistance (37 GA)	210 ohms +15%
Hi Pot	600 VDC
60 Pole Magnet	4000 RPM maximum

Consult factory for high RPM applications and alternate coil construction for higher output.

Mechanical Specifications:

Operating Temperature	-40˚F to + 225˚F (-40˚C to +107˚C)
Thread Torque	15 ft. lbs (20.3 Nm) maximum
Lead Pull Test (feed-thru)	10 lbs (44.5 N) maximum
Vibration	20 G's at 5-2000 Hz
Mechanical Shock	Withstands 3 drops to concrete from 3 feet
Environmental	Exposure to moisture, salt, fuel oil, lubricants, or transmission fluid will not degrade performance or shorten life

Specifications are for reference only.

Mini-Gen® Signal Generator

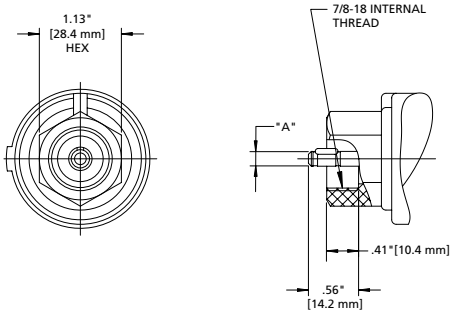
Three Mounting Drives

The Mini-Gen's non-feed thru or feed thru mounting styles permit its use with practically any engine, transmission, tachometer or speedometer manufactured throughout the world.

1. SAE Mounting

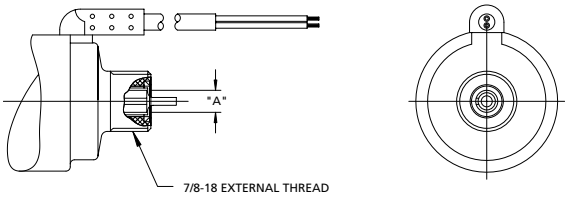
MGO

Non-feed Thru Mounting End
SA-2650A



MGO-1

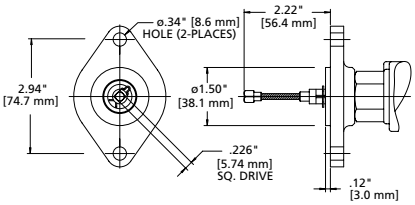
Feed Thru Mounting End
SA-2652A



2. General Motors Engine Mounting

MGY

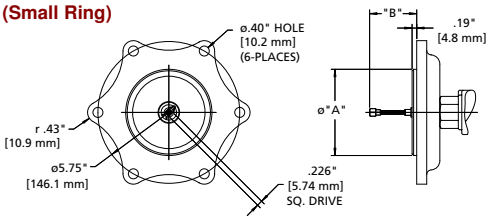
Non-feed Thru Mounting End
SA-2731A



NOTE: * For Feed thru End specify SA-2713A (MGY-1)

MGW

Non-feed Thru Mounting End
SA-2772A (Large Ring)
SA-2773A (Small Ring)

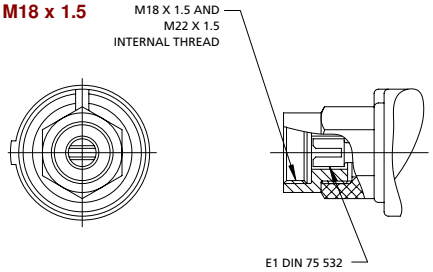


MTG. STYLE	DIM.	INCHES	MM
SMALL RING	A	3.50 DIA.	88.9 DIA.
	B	1.25	31.7
LARGE RING	A	4.56 DIA.	11.5 DIA.
	B	1.25	31.7

3. Metric Mounting

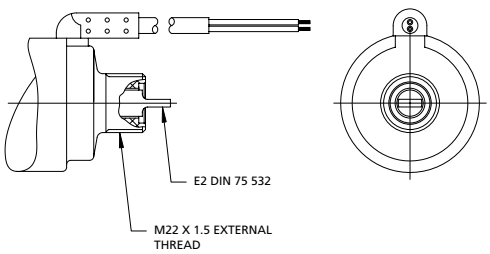
MGJ

Non-feed Thru Mounting End
SA-2685A – M22 x 1.5
SA-2888A – M18 x 1.5



MGJ-1

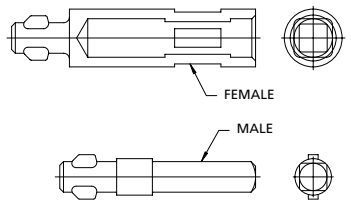
Feed Thru Mounting End
SA-2763A – M22 x 1.5



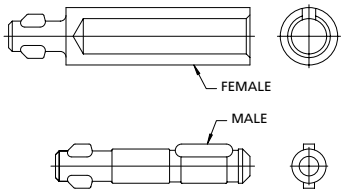
Mini-Gen® Signal Generator

Drive Tangs Nickel plated, round or square drive tangs for use with SAE mounting Mini-Gens. To select appropriate drive tang, match Dimension "A" from mounting drive diagram with Part No. from charts below.

SQUARE DRIVE TANG



ROUND DRIVE TANG



Order Information:

	Mounting Drive	Drive Designation	Mounting Style
SA-2650A	SAE ⅞-18	MGO	Non-feed thru
SA-2652A	SAE ⅞-18	MGO-1	Feed thru
SA-2731A	General Motors	MGY	Non-feed thru
SA-2713A	General Motors	MGY-1	Feed thru
SA-2772A	General Motors	MGW	Non-feed thru (large ring)
SA-2773A	General Motors	MGW	Non-feed thru (small ring)
SA-2685A	Metric (M22x1.5)	MGJ	Non-feed thru
SA-2888A	Metric (M18x1.5)	MGJ	Non-feed thru
SA-2763A	Metric (M22x1.5)	MGJ-1	Feed thru

Drive Tang Option: For use on SAE mounting drives only (MGO, MGO-1)

Square Drive Tangs

ORDER NO. Male	ORDER NO. Female	Dimensions "A" (mm)
SA-2676	SA-2635	.104" (2.64)
SA-2633	SA-2639	.150" (3.81)
SA-2634	SA-2640	.193" (4.90)

Round Drive Tangs

ORDER NO. Male	ORDER NO. Female	Dimensions "A" (mm)
SA-2677	SA-2636	.152" (3.86)
SA-2678	SA-2637	.187" (4.75)
SA-2679	SA-2638	.203" (5.16)
SA-2672		.187" (4.75) Extended

Metric Drive Tangs

ORDER NO.	Termination	Specifications
SA-2962	Male	E2 DIN 75 532
SA-2961	Female	E2 DIN 75 532

Note: Non-feed thru models come standard with ¼" male tab. Lead wire with connector is available as an option.

QCC It's About Time.®

Parts available for purchase online: QCC.Parts