

Mini-Gen[®] Signal Generators



Mini-Gen® Signal Generator

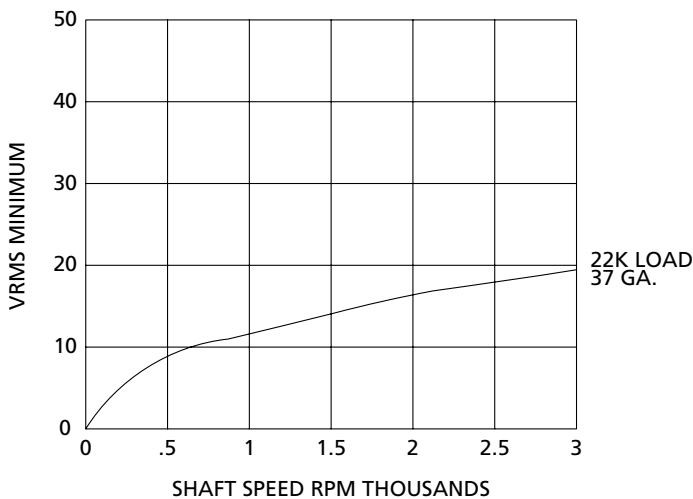
The Mini-Gen® signal generator mounts on the transmissions of buses and trucks to measure road speed or on diesel engines to measure engine speed.



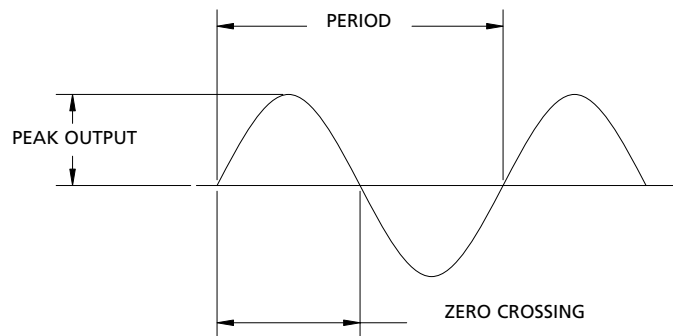
Features:

- Mounts on standard SAE 7/8-18, General Motors, and E1 & E2 DIN 75 532 tachometer outputs
- Non-feed thru models come standard with 1/4" male tab
- Compact, only 1 3/4" 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 1/2 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:

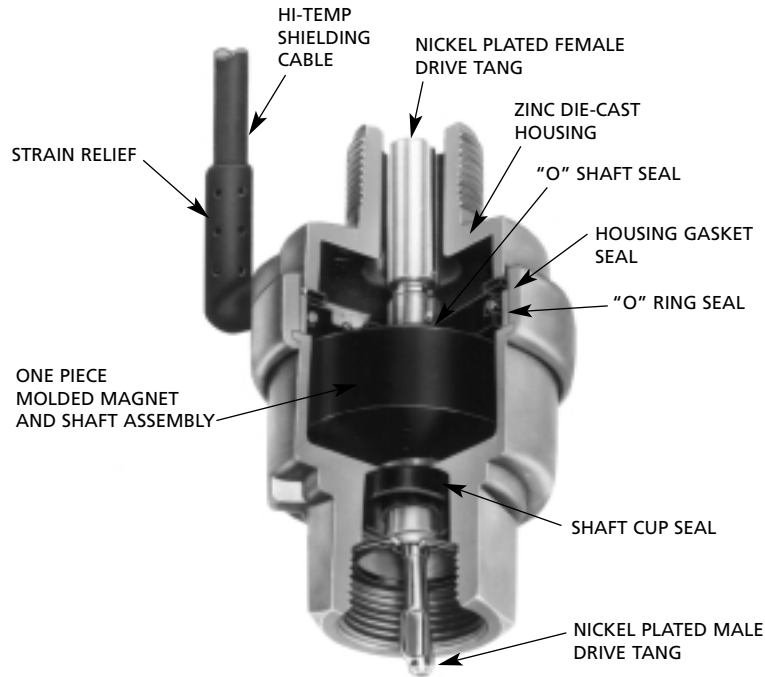


Sinusoidal Output @ 1000 RPM
(Mini-Gen shaft speed) = 500 Hz

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%

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RUGGED CONSTRUCTION



Electrical Specifications:

Output (37 GA) (No Load) Minimum Maximum	1750 RPM 25 VRMS 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.

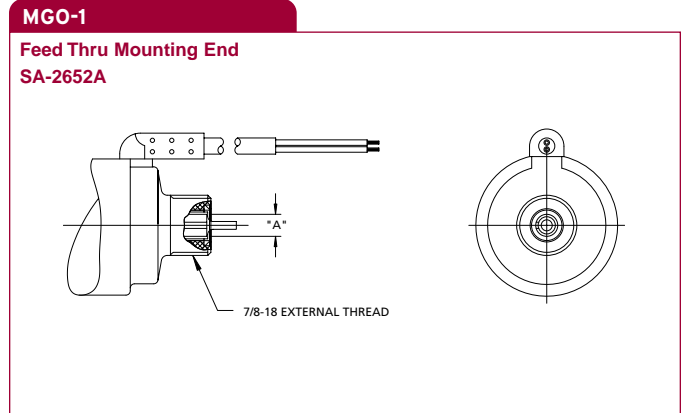
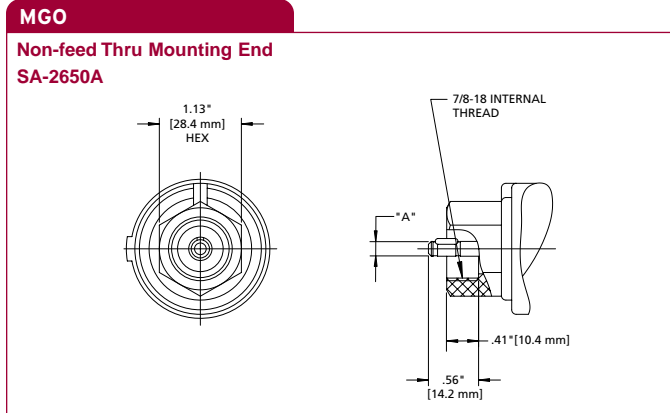
e-mail: info_niles@woodward.com

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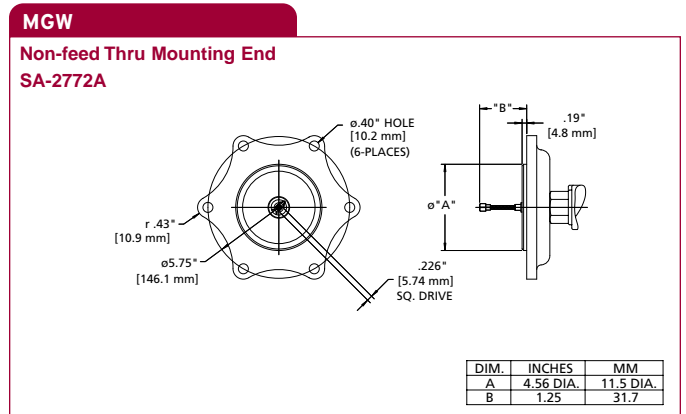
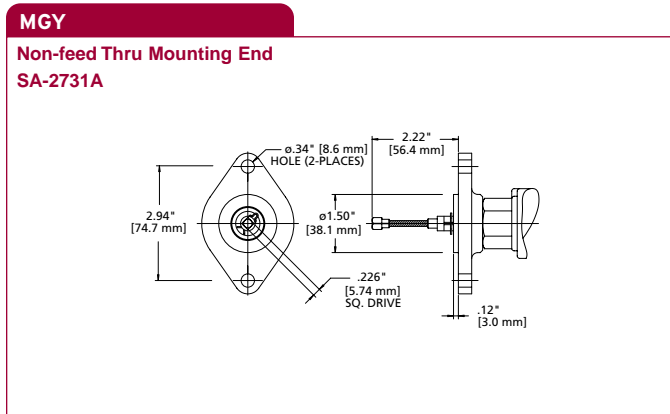
Three Mounting Drives

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.

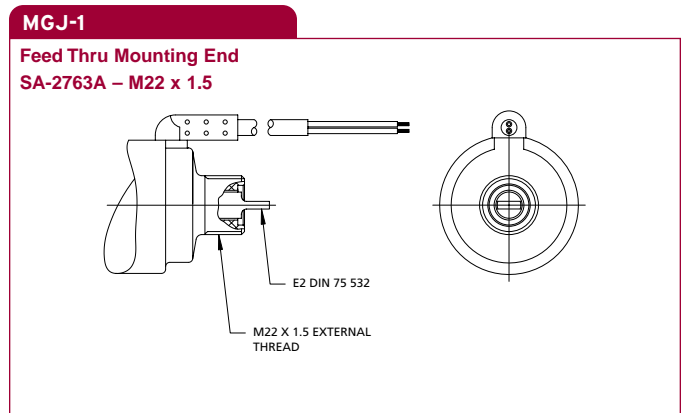
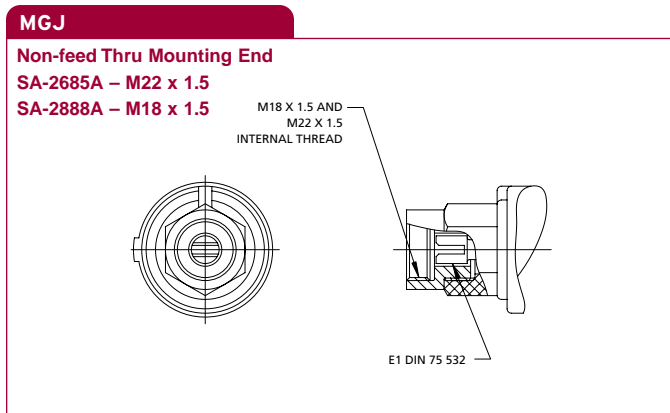
1. SAE Mounting



2. General Motors Engine Mounting

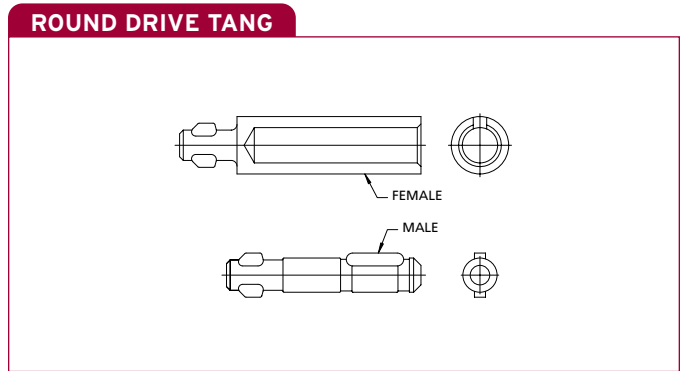
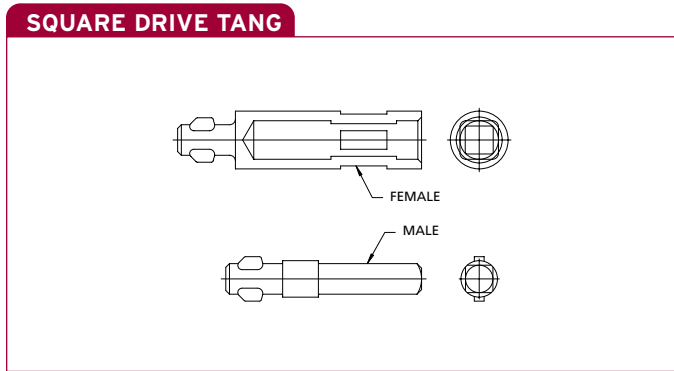


3. Metric Mounting



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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.



Order Information:

	Mounting Drive	Drive Designation	Mounting Style
SA-2650A	SAE 7/8-18	MGO	Non-feed thru
SA-2652A	SAE 7/8-18	MGO-1	Feed thru
SA-2731A	General Motors	MGY	Non-feed thru
SA-2772A	General Motors	MGW	Non-feed thru (large 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 1/4" male tab.
Lead wire with connector is available as an option.

We appreciate your comments about the content of our publications.

Send comments to: icinfo@woodward.com

Please reference publication **36748**.



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