DF12

Tachometer Filter

For use with RS11 and MD33 Engine Monitors

The DF12 is a general-purpose Tachometer Filter. It removes noise and transients from many signals to provide stable RPM readings for the RS11 and MD33 Engine Monitors. It can be used with alternator, ignition, and sender tach signals. It may not work with some inductive (flywheel) pickups used on diesel engines. The DF12 filter is completely passive and will work with both 12 and 24 volt engines. If properly connected, it will not interfere with operation of existing tachometers.

Connection of the DF12 depends on the type of engine and the source of the Tachometer signal. Marine gasoline engines generally use ignition or alternator signals for their Tachometers. Some diesel engines also use an alternator output for RPM sensing. See Figure 1 for proper connection.

The green wire is normally not used. It may, however, be necessary to 'Ground' this wire for ignition-based signals with low 'ppr' (pulses-per-revolution) values, such as outboards.

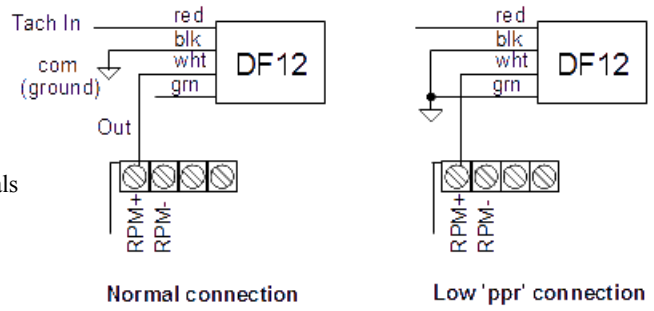

Figure 1.
Connection to Alternator or Ignition signals

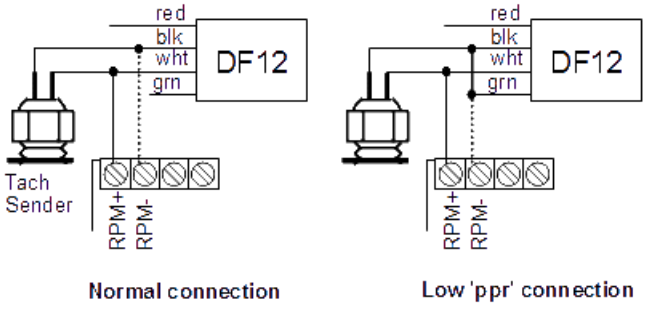

Figure 2.
Connection to Diesel Engines Senders

Diesel engines without alternator tach signals use senders or inductive pickups to sense RPM. For these engines, the connection of Figure 2 is used. The 'red' wire is not used with these senders.

In some cases one wire of the sender will be 'grounded.' If so, the 'grounded' wire must be connected to the 'black' wire of the DF12. It may also be necessary to connect the 'grounded' sender wire to the 'RPM-' terminal (see dashed line in Fig. 2.) for more stable operation.

In the case of senders driven by the camshaft (low ppr), the green and black wires often need to be connected to provide adequate signal filtering. Some "Inductive Pickup" senders (usually flywheel mounted) cannot use this DF12 because it will cause the vessel Tachometer to quit working.

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