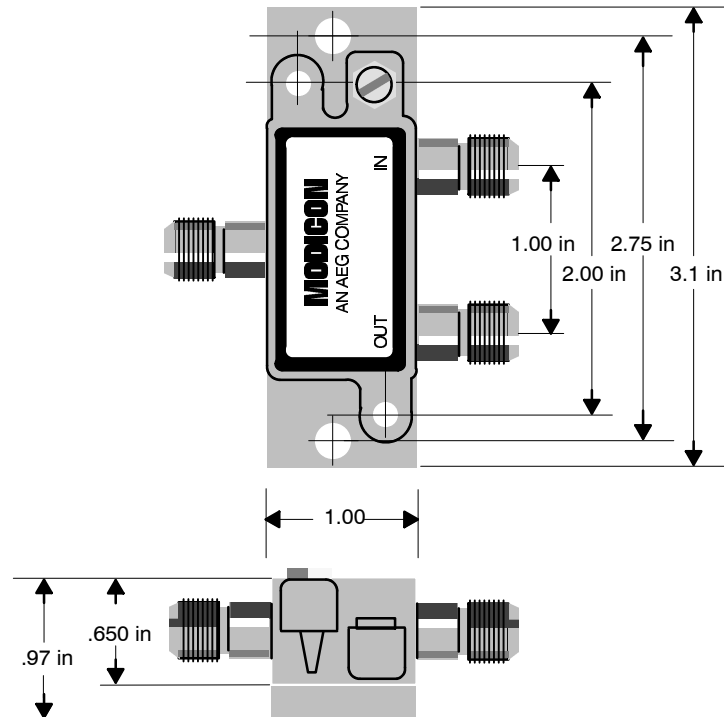


3.6 Tap Specifications

Modicon MA-0185-100 Taps connect the drop cables to the main trunk cable and isolate the RIO drop adapter from the rest of the network. This tap is *nondirectional* it allows signals to be propagated in both directions along the trunk cable. An MA-0185-100 tap has one drop port and two trunk ports.



Note Although the trunk ports are labeled IN and OUT, these labels can be ignored i.e., the tap is not directional.

An MA-0185-100 tap is supplied with a plastic isolator on its back. The tap isolates the drop adapter from the trunk cable by 14 dB.


Unused ports on the taps must be terminated open ports along the network must be terminated with a Modicon 52-0402-000 Tap Port Terminator, and the last (trunk-out) port of the last tap on the network must be terminated with a Modicon 52-0422-000 Trunk Terminator (see page 77).


MA-0185-100 Tap Specifications

Impedance	75 Ω
Frequency Range	100 kHz ... 30 MHz
Tap Loss	14 dB (+0.5 dB)
Trunk Insertion Loss	0.8 dB maximum
Trunk Return Loss	\geq 26 dB minimum
Tap Return Loss	-18 dB minimum
Temperature Range	\geq 40 ... +60 degrees C
Humidity	95% at 85 degrees C
Sealing	RFI/EMI sealed
Interconnections	F Connectors torque up to 90 in/lb
Tap Ports Center Contact	Grips 24 gauge solid conductor after repeated insertions of 16 gauge solid conductor
Tap Ports Connector Threads	$\frac{3}{8}$ -3 2 F Connectors; class 2B-0

Since the trunk ports are 1 in apart, most semirigid connectors do not fit directly onto the tap. If you are using semirigid cable and its connectors do not fit on the trunk ports of the tap, use a Modicon 52-0480-000 right-angle F adapter to make the tap connection.

 **Note** Taps not supplied by Modicon are not supported by Modicon.

 **Note** Older models of the Modicon MA-0185-000 Tap can be used on an RIO network if they are at Revision C.

 **Note** Do not ground a tap unless you are using it specifically as the single-point ground for the entire RIO cable system.