

# Sending Unit Resistance Values

<b>TRIM GAUGE</b>	<b>UP</b>	<b>MID</b>	<b>DOWN</b>
	<i>ohms</i>	<i>ohms</i>	<i>ohms</i>
Mercury / Force	160	38.7	10
Force (70 & 75 HP only)	10	20.6	41.8
Johnson/Evenrude Outboard	10	44	88
Suzuki 4 Stroke 1999 (And newer)	2.5	44	88
OMC Cobra Stern	70	29.5	11
OMC Sea Stern Drive	88	44	10
Yamaha 1996	450	240	100
Yamaha 1997-2000	550	330	100
Yamaha 2001 (And newer)**	280	150	10
Volvo SX Cobra	146	---	11
Volvo SX (MD Mod)	70	---	3
Volvo SX (HU Mod, NC Mod)	146	---	11
Volvo DP (White)*	180	---	10
Volvo DP-S (NC Mod)*	146	---	11

\* Uses "Black Box" for Trim signal

\*\* A Mercury Trim Gauge may be used, "Trim" will be the full range of the gauge.

All resistance values shown for Oil Pressure, Water Temperature & Fuel gauges are for single station.

(Dual station senders have 1/2 the resistance value of single station senders.)

<b>OIL PRESSURE GAUGE</b>	<b>0-80 psi</b>		<b>0-100 psi</b>		<b>0-150 psi</b>		<b>350 psi</b>		<b>0-400 psi</b>	
	<b>(5-Bar)</b>		<b>(7-Bar)</b>		<b>(10-Bar)</b>		<b>(25-Bar)</b>			
	<i>psi</i>	<i>ohms</i>	<i>psi</i>	<i>ohms</i>	<i>psi</i>	<i>ohms</i>	<i>psi</i>	<i>ohms</i>	<i>psi</i>	<i>ohms</i>
American Marine Sender	0	240	0	240	0	240			0	1
	40	103	40	103	75	103			200	44
	80	33.5	100	33.5	150	33.5			400	88
European Marine Sender	0	10			0*	10	0	10	0*	10
	40	95			90	112	12.5	95	200	95
	80	180			150	180	25	180	400	180

\* For use with Competition series 150 psi, 400 psi & Dress White 400 psi

<b>WATER TEMPERATURE</b>	<b>100°F - 250°F</b>		<b>40°C - 120°C</b>	
	<i>°F</i>	<i>ohms</i>	<i>°C</i>	<i>ohms</i>
American Marine Sender	100	450	40	450
	175	99	65	99
	250	29.6	120	29.6
European Marine Sender			40	281
			80	68
			120	22

<b>FUEL LEVEL</b>	<b>EMPTY</b>	<b>MID</b>	<b>FULL</b>
	<i>ohms</i>	<i>ohms</i>	<i>ohms</i>
American Marine Sender	240	103	33.5
European Marine Sender	10	95	180

<b>CYLINDER HEAD TEMP</b>	<b>60°F - 220°F</b>		<b>20°C - 100°C</b>	
	<i>°F</i>	<i>ohms</i>	<i>°C</i>	<i>ohms</i>
Faria® Marine Sender Only (Single Station Sender)	60	1195	20	1040
	140	192	60	192
	220	46.5	100	56

<b>RUDDER ANGLE INDICATOR</b>	<b>PORT</b>	<b>MID</b>	<b>STARBOARD</b>
	<i>ohms</i>		<i>ohms</i>
Sender	10	95	180