

# TriVibe Field Cable Options

**We highly recommend using one of the cables that have been vetted by Machine Saver's Engineering Team, if you use a cable that is not specified on our list and have communication issues we may be unable to help you resolve them.**

If you still wish to select another cable manufacturer, it is critical to get the following specifications correct:

Power pair of conductors: 18 AWG, twisted pair

Digital Modbus pair of conductors: 22 AWG, twisted pair

The cable capacitance should be low 12pF / foot

The cable impedance should be as close to 120 ohms as possible

There should be a foil shield 100% with a drain wire (overall or surrounding the digital Modbus pair)

	VTB-CBL-10	VTB-CBL-40	VTB-CBL-50
Cable Capacitance (pF/ft)	11	11	11
Impedance (Ohms)	120	120	105
Temperature Rating (°C)	-80 to +200	-40 to +105	-20 to +80

Power Conductor Pair	18AWG Red + Black Twisted No Power Pair Shield	18AWG Red + Black Twisted 100% Foil Shield	18AWG Red + Black Twisted No Power Pair Shield
Weight (lbs/meter)	0.10	0.24	0.12
Data (Modbus) Conductor Pair	22AWG Green + White Twisted No Data Pair Shield	22AWG Green + White Twisted 100% Foil Shield	22AWG Blue + White Twisted 100% Foil Shield
Drain	24AWG	24AWG	24AWG
Overall Shield	100% Foil Shield	100% Foil Shield	No Overall Shield
Outer Jacket Material	FEP (Red or Black)	TPE (Black)	PVC (Black)
Outer Jacket Thickness (in)	0.012	0.050	0.040
Outer Jacket Dimensions (in)	0.209	0.365	0.275
Bend Radius (in)	2.09	3.15	2.75
TriVibe Sensor Load	(12) @ 1000 ft with a single power supply.  (22) @ 1500 -2000 ft with 2 Power Supplies and Sensor Distribution Dependent.	(12) @ 1000 ft with a single power supply.  (22) @ 1500 -2000 ft with 2 Power Supplies and Sensor Distribution Dependent.	(12) @ 1000 ft with a single power supply.  (22) @ 1500 -2000 ft with 2 Power Supplies and Sensor Distribution Dependent.
Certifications	CL2, CMP	UL and CSA Class I Div 2	UL444, NEC725 & 800
Suitability	Sunlight Resistant, Direct Burial, Wet, Oil, Gas, Abrasion, Acid, Indoor	Sunlight Resistant, Direct Burial, Wet, Oil, Abrasion, High Stress Movement, Indoor, Outdoor	Sunlight Resistant, Direct Burial, Indoor, Outdoor
Cycles	N/A	5 Million	N/A
Cost	\$\$	\$\$\$	\$

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