Back ARM IMD Input Power Cable

Model Number: THRSLTCA1091

Overview

The Back ARM IMD Input Power Cable is designed to deliver power and communication signals to the manipulator’s back arm drive unit. Supporting dual +24V DC, ground, RS-232 (Tx/Rx), and CAN bus signals, it ensures reliable connectivity under defense-grade operating conditions.

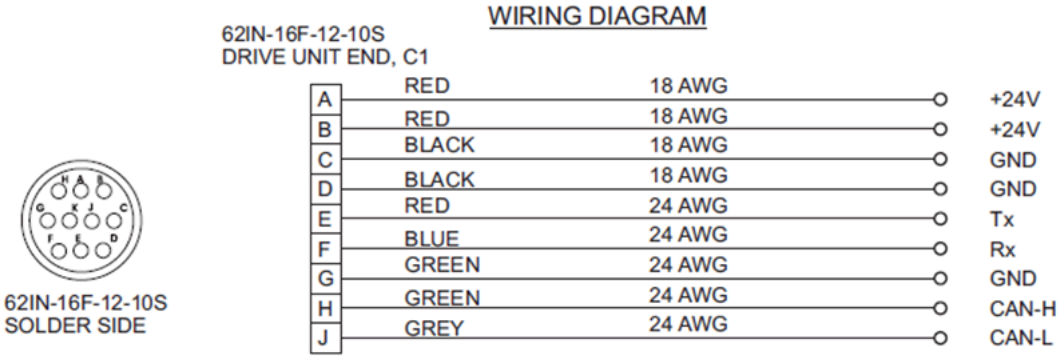
Proven in the **UXOR project supplied to the Indian Air Force (IAF)**, the cable has been field-tested for durability and mission-critical performance.

Technical Specifications

Parameter	Specification
Function	Power and communication interface for back arm IMD
Connector	C1: 62IN-16F-12-10S
Supported Signals	+24V, GND, RS-232 Tx/Rx, CAN-H, CAN-L
Cable Construction	PTFE-insulated shielded wiring with rugged boots
Protection Standard	IP65
Operating Temperature	–20°C to +55°C

Pin Configuration – 62IN-16F-12-10S

Pin	Wire Color	AWG	Signal
A	Red	18	+24V
B	Red	18	+24V
C	Black	18	GND
D	Black	18	GND
E	Red	24	Tx
F	Blue	24	Rx
G	Green	24	GND
H	Green	24	CAN-H
J	Grey	24	CAN-L
Body	–	–	Shield



Key Features

- Combines **power and communication lines** in a single rugged harness.
- Dual +24V DC supply with multiple ground lines for redundancy.
- Supports RS-232 Tx/Rx for communication and CAN bus for control.
- Rugged Amphenol MIL-grade connector ensures secure field performance.
- Shielded PTFE wiring minimizes interference and ensures EMI/EMC protection.

Applications

- Power and communication link for back arm IMD drive systems.
- Integration and testing of manipulator subsystems.
- Field validation of UXOR robotic platforms.
- **Back arm IMD harness (field-proven in IAF deployment).**

Note

The Back ARM IMD Input Power Cable is part of THRSL's standard subsystem harness suite. Custom variants can be developed with alternate connectors, extended cable lengths, or additional shielding.