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## Electronic Wire and Cable Commercial Products

### UL/CSA Hook-up

UL Styles 1429, 1430, 1431 XLPVC

UL Styles 3265, 3266, 3271 XLPE

UL Styles 3398, 3289 XLPE

UL Styles 3385, 3386 0 Halogen XLPE

### High Voltage

UL Styles 3476, 3239 XLPE

### Multi-Conductor

Built to customer spec

### Mil-Spec Wire (Mil-W-16878)

XLPVC (105°C)

XLPE (125°C)

Voltage - 600V, 1000V, 3000V

## Jacket & Insulation Material Capabilities

- PVC
- PCA or IPVC
- Polyethylene
- LDPE
- HDPE
- XLPE
- XLPO
- ETFE (Tefzel®)
- XLETFE
- PVDF (Kynar®)
- XLPVDF
- ECTFE (Halar®)
- PE
- TPE

## Advantages of XLPVC and XLPE over PVC

- Solder iron resistance
- No shrink-back
- No creeping
- Excellent abrasion resistance
- Improved cut-through
- Better crush resistance
- Excellent chemical resistance
- Higher temperature
- Stress cracking resistance

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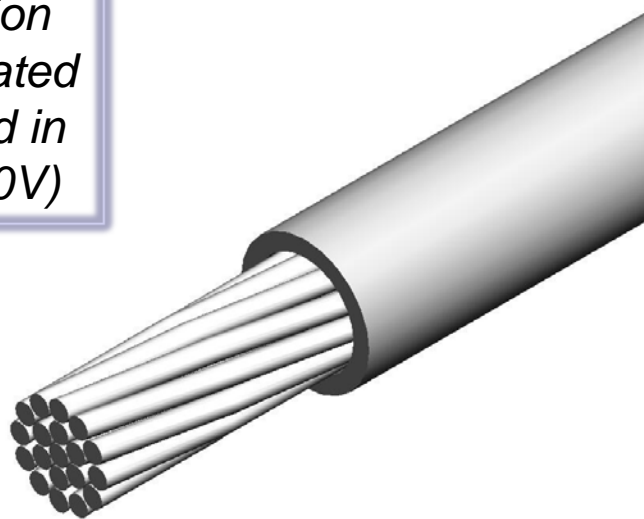
# **FLEXRAD<sup>®</sup> 150 UL3289 & UL3398**

*150°C 300 & 600 Volt XLPE RoHS Compliant*

*Judd Wire's FLEXRAD<sup>®</sup> 150 is an irradiation cross-linked polyethylene insulated wire, rated by UL and CSA. FLEXRAD<sup>®</sup> 150 is offered in two styles: UL3289 (600V) & UL3398 (300V)*

## **Product Features:**

- -55°C to 150°C Temperature Rating
- UL & CSA Approved
- Significant Cost Savings Compared to Fluorocarbon Constructions
  - Tinned Copper Conductors
- Avoids Fluorocarbon Production Problems
- Ideal for Automated Cut & Strip Processing
- Abrasion Resistant
- Chemical Resistant
- Highly Flexible
- Lead Free
- Flame Retardant Rating VW-1



## **Applications:**

- Power Supplies
- Appliances
- Transformers
- Ballasts
- Motor Leads
- Lighting Devices
- Industrial Controls
- Replacement for Fluorocarbon Constructions



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# **FLEXRAD<sup>®</sup> 150 UL3289 & UL3398**

*150°C 300 & 600 Volt XLPE RoHS Compliant*

## **Design Options**

UL Style	AWG Size	Standing Options	Nom. Wall	Nom OD	UL Style	AWG Size	Standing Options	Nom. Wall	Nom OD
<b>3289</b>	8	84/27	0.047	0.268	<b>3398</b>	10	37/0167	0.017	0.151
		133/0112		0.266			105/30		0.148
		68/30		0.263		12	65/30		0.125
	10	65/28	0.032	0.178		14	41/30		0.105
		105/30		0.178		16	19/0117		0.090
	12	65/30	0.155	26/30			0.089		
	14	41/30	0.135	18		19/30	0.082		
	16	19/.0117	0.120			41/34	0.079		
		26/30	0.119	20		19/32	0.072		
	18	16/30	0.111			26/34	0.069		
		19/30	0.112	22		19/34	0.064		
	20	7/28	0.102			19/34	0.064		
		10/30	0.106	24		7/36	0.056		
	22	7/30	0.094			19/30	0.059		
	24	10/34	0.086	7/32		0.058			
		19/36	0.089	26		7/28	0.053		
	26	19/38	0.083	28		7/36	0.049		

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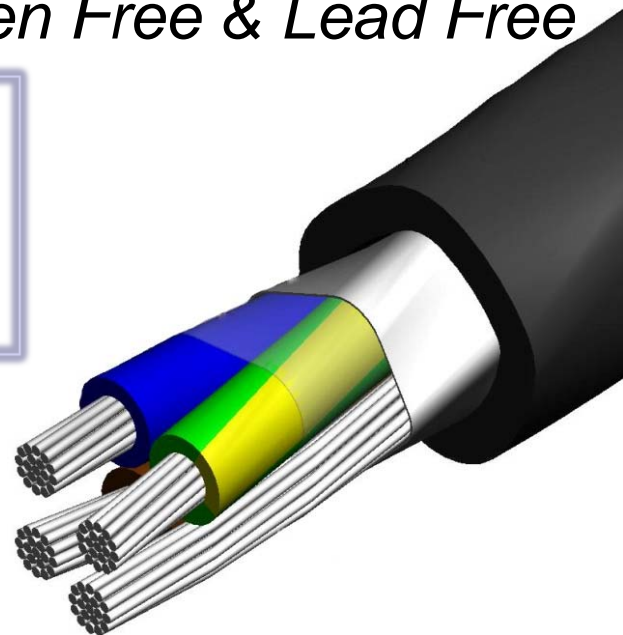
# FLEXRAD<sup>®</sup> HF PLTC-ITC

*105°C 300 Volt HFXLPE Halogen Free & Lead Free*

Judd Wire's FLEXRAD<sup>®</sup> HF PLTC-ITC (Halogen-Free Power Limited Tray Cable) is a family of specially designed Halogen Free multi conductor cables, rated by UL and CUL, for a wide variety of uses. FLEXRAD<sup>®</sup> HF PLTC-ITC is constructed using highly flexible radiation cross-linked 0 halogen polyethylene insulation and jacket.

## Product Features:

- Temperature Rated: -40°C to 105°C
- Halogen Free
- Highly Flexible
- Low Toxicity
- Environmentally Friendly
- Chemical Resistant
- Low smoke
- Lead Free
- No Corrosive Gases
- Shrink & Melt Resistant
- Flame Retardant Rating VW-1
- Approved to UL Subj. 13 PLTC-CL2/CL3 per NEC article 725 and AWM.
- CUL listed I/II, A/B.
- Approved for use in article 725 and carries UL approval for use in cable trays



## Applications:

- Process Control
- Instrumentation
- Safety Systems
- Security
- Nuclear
- Pulp and Paper
- Rail Transit Infrastructure
- Point of Sale Systems



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# **FLEXRAD<sup>®</sup> HF PLTC-ITC**

*Compliant to the following performance standards:*

## **Flame Tests**

- IEC 60332-3-24 Cat C Vertical Flame Test
- IEEE 1202 70,000 BTU Vertical Flame Test
- UL 1685 FT 4/IEC 332-1 Vertical Bunch Flame Test
- UL 1581 Vertical Tray Test With Smoke Measurement
- UL1581/IEEE 383 (1974) Vertical Tray Flame Test. 70 KBTU/210 KBTU
- IEEE 383 (2003) Vertical Tray Flame Test/UL 758 Vertical Flame Test

## **Materials Tests**

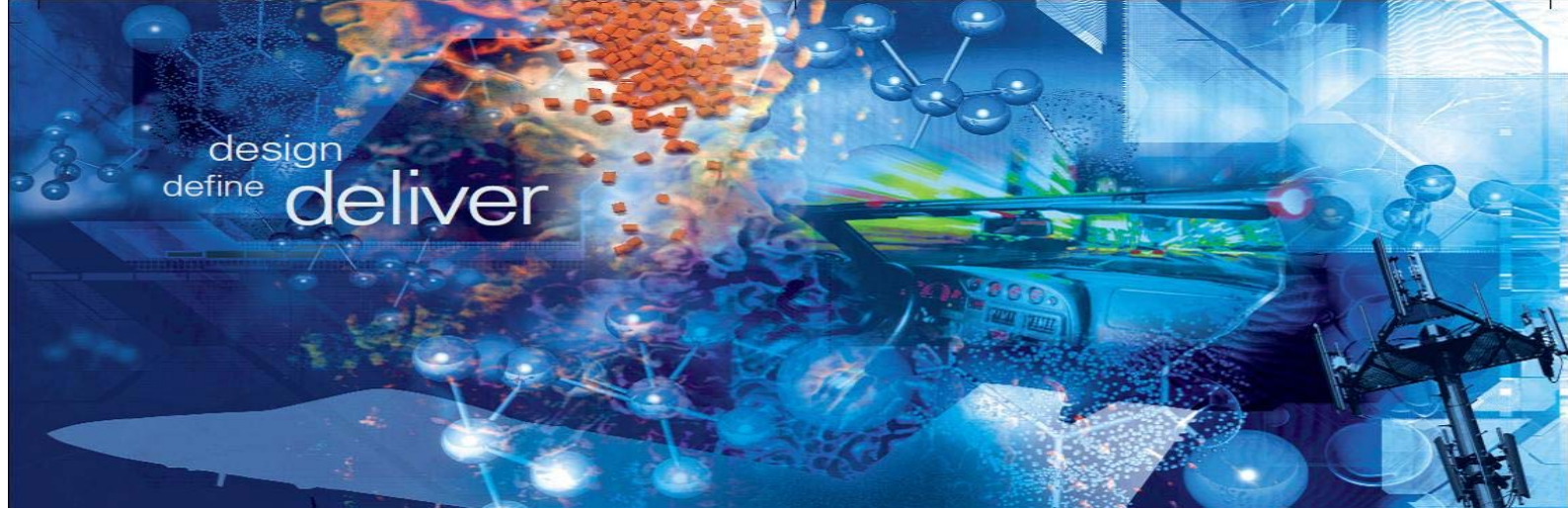
- IEC 60754-1 and -2 0 Halogen Test
- IEC 61034 Smoke Density Test

## **Judd Wire PLTC-ITC cables - Designed for harsh environments**

- UL tested and marked "Sunlight Resistant"
- Capable of performing in a wide operating temperature range
- -40°C to 105°C as recognized by both UL and CUL.

## **Instrumentation Tray Cable Type ITC**

- Complies with UL standard 2250 using conductors sized from 22 to 12 AWG
- Cables rated to 300 volts, used in circuits operating at 150 volts or less.
- ITC cables are suitable for use in hazardous locations under certain circumstances,
- in cable trays as well as conduit. In addition, ITC cables can be installed
- aerially or under the raised floor of a control room.

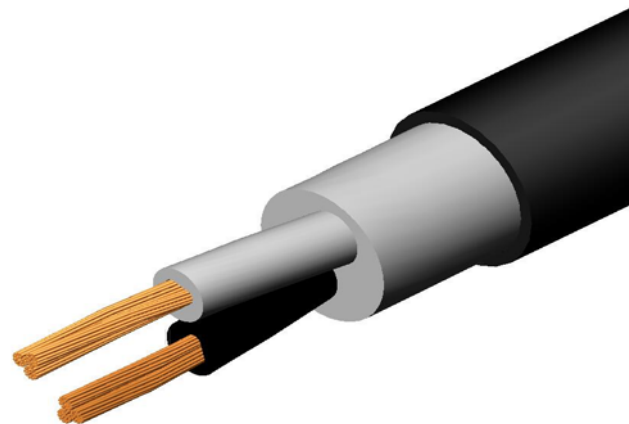
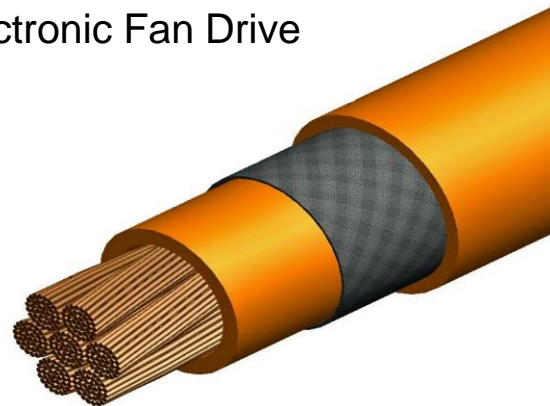


## Automotive Wire and Cable Products

- Primary Wires:
  - ISO: *Classes B - H*
  - JASO: *AEX, AESSX, AVX, AVSSX*
  - SAE: *TXL, GXL, STX*
- Engine Harness Wire:
  - AutoRad®
- Transmission Wire:
  - Silicon & Non-Silicon Blocked
- Sensor Cables:
  - ABS, Crank Sensor, Transmission
- Fuel Tank Wire
- Active/Passive Sensor Cables
- Hybrid Electric Vehicle Cables
- Air Bag Wire
- Battery Cable
- Shielded and Blocked Wires
- Databus
- Electronic Fan Drive

## Jacket & Insulation Materials

Material	Temperature Rating
PUR	(85°C up to 125°C)
XLPU	(85°C up to 150°C)
XLPVC	(100°C up to 115°C)
XLPE	(120°C up to 150°C)
XLPO	(120°C up to 150°C)
XLTPE	(150°C)
XLFE	(150°C up to 200°C)
XLETFE	(150°C up to 200°C)



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Wire Type	Standard	Judd Specification	Temperature Ratings	Conductor Range	Insulation Type	Application
TXL	SAE J1128	JW1427	135°C	0.22mm <sup>2</sup> - 8.00mm <sup>2</sup>	HFXLPO	Engine Harness
		JW1414	135°C		XLPE: G12	Gas Tank Wire
		JW1214	150°C & 200°C		XLFE: J5, J7 & R5	Transmission Wire
GXL	SAE J1127	JW1335	125°C, 135°C & 150°C	0.22mm <sup>2</sup> - 8.00mm <sup>2</sup>	HFXLPO	Engine Harness
STX		JW1131				13.0mm <sup>2</sup> - 103.0mm <sup>2</sup>
AVSSX	JASO D611	JW1052	105°C	0.30mm <sup>2</sup> - 2.00mm <sup>2</sup>	XLPVC	Passenger Compartment
AVX		JW1198		0.50mm <sup>2</sup> - 8.00mm <sup>2</sup>		Battery Cable
AESSX		JW881	125°C	0.30mm <sup>2</sup> - 2.00mm <sup>2</sup>	XLPE	Engine Harness
AEX		JW1151		0.22mm <sup>2</sup> - 8.00mm <sup>2</sup>		Battery Cable
Class B	ISO 6722	JW1202	105°C	0.30mm <sup>2</sup> - 120.0mm <sup>2</sup>	XLPVC	Passenger Compartment
Class C		JW1223	125°C		HFXLPO	Engine Harness
Class D		JW1109	150°C		XLPE	Engine Harness
Class F		JW1355	200°C		XLFE	Transmission Wire
Class H		JW1193	250°C		XLFP	Oxygen Sensor
Type A	SAE/ISO	JW1280	150°C	2mm <sup>2</sup> - 120.0mm <sup>2</sup>	XLPE/XLPE	High Voltage Shielded Battery Cables
Type B						
Type C						
Type D						
Type E						
Judd Flex		JW1187	200°C		FXLPE/FXLPE	
Type A		JW1314			XLFE/XLFE	
Type B	JW1313	150°C	XLPE	High Voltage Unshielded Battery Cables		
Types A-E						