# BALLUFF

**Choosing Between PVC, PUR, and TPE** 

# CABLE JACKET SELECTION GUIDE FOR AUTOMATION CONNECTIONS

VS

### PVC, PUR, or TPE? Which cable jacket is best for your application?

What is it?

PVC Polyvinyl Chloride Standard automation and washdown

## Benefits and Info

- Widely available
- General purpose
- Typically best price point
- Durable
- High moisture resistance
- -55°...105°C (-67°...221°F)

#### Gotchas

- Causes toxic black smoke
- Sensitive to UV and oxidation degradation
- Limited thermal capability



- Halogen free, reduced toxicity when combusted
- Excellent oxidation
- Oil and ozone resistance
- -40°...80°C (-40°...176°F)
- Not recommended for high temperatures
- Service temperature limited

### Relative Cable Performance

Resistance to:	PVC	PLIR	TPF
			0
Oxidation	Excellent	Excellent	Outstanding
Heat	Good - Excellent	Excellent	Outstanding
Oil	Fair	Outstanding	Outstanding
Low Temperature Flexibility	Poor - Good	Excellent	Outstanding
Weather, Sun	Good - Excellent	Excellent	Outstanding
Ozone	Excellent	Excellent	Excellent
Abrasion	Fair - Good	Excellent	Excellent
Electrical Properties	Fair - Good	Excellent	Excellent
Flame	Excellent	Excellent	Outstanding
Nuclear Radiation	Fair	Excellent	Poor
Water	Good - Excellent	Good - Excellent	Excellent
Acid	Good - Excellent	Excellent	Excellent
Alkali	Good - Excellent	Excellent	Excellent
Gasoline	Poor	Excellent	Excellent
Benzol	Poor - Fair	Excellent	Excellent
Degreaser Solvents	Poor - Fair	Excellent	Excellent
Alcohol	Good - Excellent	Excellent	Excellent
Weld Slag	Fair	Excellent	Excellent

Note: These relative ratings are based on average performance. Special selective compounding of the jacket can improve the performance.