

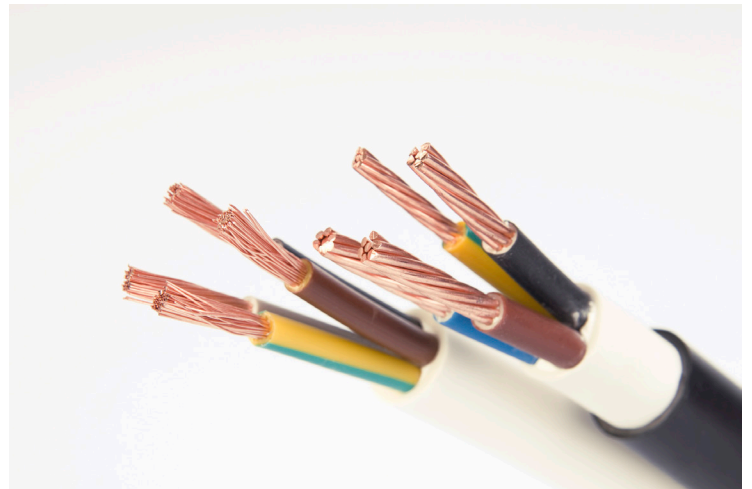
-  CHEMICAL RESISTANCE
-  ABRASION RESISTANCE
-  DIMENSIONAL STABILITY

## Offshore Seismic Acquisition and Downhole Wire & Cables

**Offshore Seismic Acquisition:** Rilsan® polyamides have truly outstanding qualities for the harsh conditions in which seismic acquisition cables operate. Rilsan® PA 11 exhibits high dimensional stability and creep resistance, as well as tremendous resistance to seawater and abrasion. In addition, its compatibility with other materials including fiber optics, extruded foams, and sensitive electronic equipment make it a great material choice for seismic acquisition applications.

**Downhole Wire & Cables:** Kynar Flex® PVDF is an extreme material that can endure through the demanding conditions that downhole wire & cables are subjected to. Its resistance to harsh chemicals and heat make it suitable for numerous applications including electrical downhole cable, fiber optic downhole cable, and hybrid electric/fiber cable. Its compatibility with a range of materials, pressures, and temperatures make it a choice that brings easy processing when manufacturing and installing the cables.

Oil & gas producers demand a product that can be relied on. With decades of trusted use in oil & gas wells around the world Kynar Flex® PVDF is considered a preferred solution for downhole applications.

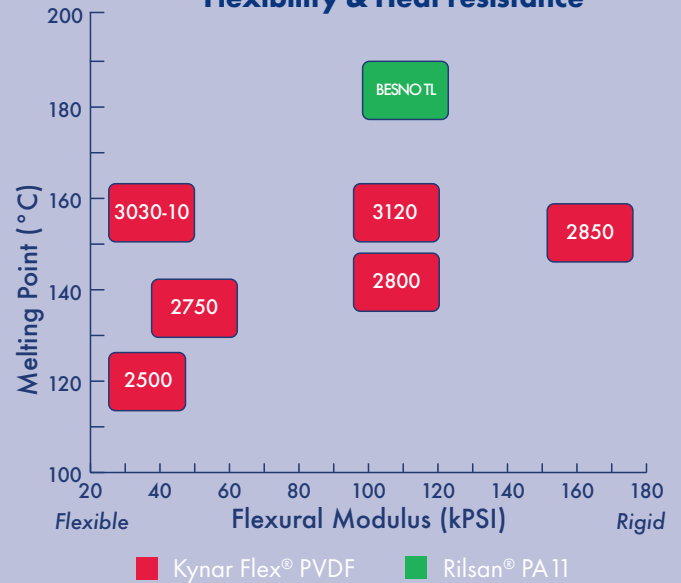


## Abrasion resistance of common materials

Materials	Weight Loss (mg)
Kynar® PVDF	5 - 10
Polyamide 6,10 (Nylon)	5
PVC (Rigid)	12 - 20
Polypropylene	15 - 20
HDPE	25
Mild Steel	100 - 300

(Taber Ring CS-10 mg/1000 Cycles Using a 1 kg Load)

## Flexibility & Heat resistance

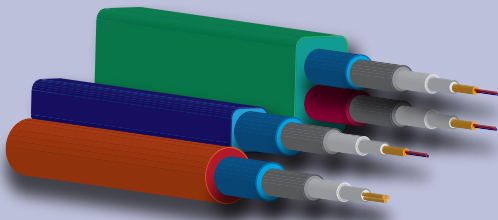


**High Temperature** - Kynar® PVDF  
**Medium - Low Temperature** - Rilsan® PA 11

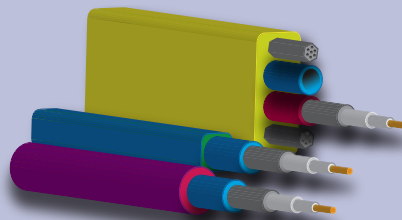
The introduction of **Kynar Flex® 3030-10** gives manufacturers a flexible fluoropolymer that also has a high melting point.

Kynar® PVDF is compatible with a variety materials for many types of cables used in downhole oil & gas applications:

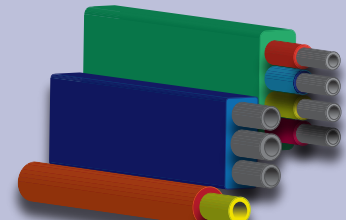
Hybrid Electro/Fiber Cables



Monoconductor Cables



Capillary Tubes



Arkema's dedicated business and technical community can assist in choosing the right grade of Kynar® PVDF and Rilsan® PA 11.

The Technical Polymers Oil & Gas Market webpage can be found at the following address:

[www.extremematerials-arkema.com/en/markets-and-applications/oil-and-gas/](http://www.extremematerials-arkema.com/en/markets-and-applications/oil-and-gas/)

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Please consult Arkema's disclaimer regarding the use of Arkema's products on <http://www.arkema.com/en/products/product-safety/disclaimer/index.html>

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