SLEEVE AND PACKING MATERIAL OPTIONS

SLEEVE AND PACKING MATERIAL SELECTION MADE EASY

You may already have a specification for a particular sleeve and packing material best suited for your application. But more often than not, you’re either looking to improve the performance of the valves installed in your process or are still trying to determine which material is the most compatible with your flow medium.

We’re taking the guesswork out of your ordering process with this simple guide to our most common sleeve and packing materials.

PTFE
FOR LOW FRICTION (TORQUE) AND GREATER CHEMICAL RESISTANCE

Our standard fluoro-polymer sleeve and packing material, PTFE (Poly-TetraFluoroEthylene — Teflon®) combines great sealing capability, low torque, and unequaled chemical resistance for most non-abrasive applications.

RTFE
FOR IMPROVED WEAR RESISTANCE

RTFE (glass fiber Reinforced-pTFE) provides improved wear resistance over the standard PTFE, albeit with a slight increase in resulting operating torque.

GF2P
FOR IMPROVED WEAR AND TEMPERATURE RESISTANCE

GF2P sleeve material is a FluoroSeal proprietary fluoro-polymer which is a molecularly-enhanced version of PTFE (similar to Dyneon (3M) TFM or Dupont Teflon® NXT), modified to enhance high temperature (500°F) and wear resistance, while maintaining the same chemical inertness and low torque as PTFE.
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HI-TEMP
FOR HIGH TEMPERATURE APPLICATIONS

Combining the excellent properties of GF2P with improved high temperature performance, our Hi-Temp sleeve material allows for superior wear resistance at temperatures up to 600°F. However, there is an associated trade-off in operating torque.

PFA
FOR IMPROVED IMPERMEABILITY

PFA (Per-Fluoro-Alkoxy) is a modified Teflon® product, which improves on the impermeability of PTFE, while maintaining the same level of chemical inertness. For this reason, it is also the material of choice for lined valve products.

UHMWPE
FOR EXCELLENT WEAR AND GAMMA RADIATION RESISTANCE

Ultra-High Molecular Weight PolyEthylene is recommended for applications requiring improved wear and/or low-level radiation resistance (up to 10⁸ rads), where process temperature is below 180–200°F.

Other materials can also be made available for special applications, such as PVDF (Kynar) or PEEK (PolyEtherEtherKetone).