氟胶 (FKM/FPM/Viton)

Fluorocarbon seal is commonly considered to use in mechanical devices requiring maximum resistance to elevated temperatures, to many special medium, and to high vacuum applications, such as automobile, vacuum equipment and other

氟胶密封件通常用于需要耐高温、各种化学介质、及真空的机械设备,如汽配和真空设备等

Working temperature range. Considered to be -15 $^{\circ}$ C to 230 $^{\circ}$ C (5 $^{\circ}$ F to 446 $^{\circ}$ F) For short working periods or still work, it may take 250 $^{\circ}$ C (482 $^{\circ}$ F)

耐温范围: -15℃ to 230℃。用于静密封或者瞬时密封时,可耐温 250℃

High chemical stability. Generally speaking, FKM resist strong acid and weak alkali. Additionally, it has excellent resistance in mineral oils and fats

良好的耐化学介质性能: 笼统地说, 氟胶耐强酸弱碱。同时也可耐矿物油和脂肪

Special ones having improved exceptional properties such as improve the resistance to chemical attack and expand the temperature range

其它一些特配的氟胶提升了某些特殊的性能,如提升了耐介质性能和拓宽了耐温范围

Certification: RoHS 通过测试: RoHS

Hardness: 52-92 Shore A 硬度范围: 邵氏 52-92 度

双酚硫化氟胶(Bisphenol cure FKM/FPM/Viton)

Weakness. Bisphenol cured FKMs are susceptible to attack by high temperature water and steam 缺点: 双酚硫化氟胶耐热水及水蒸气性能不好

过氧氟胶(Peroxide-cure FKM/FPM/Viton)

Compared peroxide-cure FKMS with bisphenol-cure FKMs, though the volume swell in oil is similar, peroxide-cure FKMs has apparent advantage at steam resistance properties, as well as better resistance to alkaline environments and corrosion inhibitors

和双酚硫化氟胶相比,两者的油体积膨胀系数相近,但是过氧氟胶在耐水蒸气方面有显著的优势,除此之外,也 拥有优良的耐碱及腐蚀抑制剂性能

四丙氟 (AFLAS)

The monomers determine the alkali resistance of FKM/Viton is not good, so various of producers developed special base resistance FKM/Viton, such as ETP-600S by DuPont. Compared to ETP-600S, there is a cost-effective one called AFLAS by AGC, Japan.

氟胶的化学分子构成决定了它的耐碱性能并不好,因此各大厂家开发了特种耐碱氟胶,如杜邦的 ETP-600S。相比 ETP-600S,日本旭硝子推出了一款性价比较高的啊夫拉斯

Chemical properties. Based on peroxide-cure FKM, AFLAS improved its strong alkali resistance significantly.

化学性能: 在过氧氟胶的基础上, 极大地提高了其耐强碱性能

物理性能:和常规氟胶相比,啊夫拉斯有突出的压变性能

Physical properties. AFLAS has outstanding compression set when compared to conventional FKM.

Working temperature range. -2°C to 230°C (28.4°F to 446°F)

耐温范围: -2℃ to 230℃

Application. Oilfields, chemical equipment

偏氟 (ETP-600S)

Viton[™] Extreme[™] ETP-600S is a high-fluorine, peroxide-cure type of Viton[™]. Compared to other sealing materials, including conventional types of bisphenol-cured FKM, Viton[™] Extreme[™] ETP-600S has chemical-resistance second in performance only to Kalrez ®, it exhibit

偏氟是一种含氟量高的过氧氟胶。相比于其他密封件材质,包括双酚硫化氟胶,偏氟的耐化学性能仅次于全氟, 具体表现为:

Superior resistance to acid, base attack, and low volume change in highly caustic solutions, amines and hot water

优良的耐酸碱性能,以及在高度的碱溶液,胺和热水中可以保持较低的体积变化率

Superior resistance to a wide variety of chemicals, hydrocarbon and low molecular weight esters, ketones and aldehydes

优良的耐化学性能,包括各种化学物品、碳氢化合物和低浓度的酯、酮和醛

Low-temperature flexibility (Tg -10 °C [14 °F])

低温柔性

Application. Paint equipment, chemical equipment.

应用:油漆设备、化学设备

耐低温氟胶 (GLT/GFLT)

VitonTM low temperature performance is dependent on type. VitonTM GFLT-S, like VitonTM GLT-S, exhibits significantly improved low temperature flex characteristics compared to standard types of fluoroelastomer.

耐低温氟胶是一款独立分类的氟胶。和常规氟胶相比,GLT 和 GFLT 展现了突出了低温柔性

Viton[™] GLT-S provides the same excellent resistance to heat and fluids that is typical of the A types of Viton[™] fluoroelastomer. Its serviceability as low as -31 °C (-24 °F) in dynamic seals and -45 °C (-49 °F) in static seals

GLT 的耐化学介质性能和耐热性能,和 Viton 的 A 类氟胶相当。作为动密封,其在-31 °C 仍可保持弹性,作为静密封,其在-45 °C 仍可保持弹性

Viton[™] GFLT-S provides the same superior resistance to fluids that is typical of the F types of Viton[™] fluoroelastomer. Its serviceability as low as -25 °C (-13°F) in dynamic seals and -40 °C (-40°F) in static seals

GLT 的耐化学介质性能和耐热性能,和 Viton 的 F 类氟胶相当。作为动密封,其在-25 °C 仍可保持弹性,作为静密封,其在-40 °C 仍可保持弹性

全氟 (Kalrez®/FFKM)

FFKM is ideal for demanding sealing applications when customers require high quality parts like O-rings. The unique properties of this material help maintain its seal integrity which can reduce improve safety.

全氟橡胶用于密封要求严格的场合,例如当客户需要高质量的 O 型圈密封件时。这种材料的独特性能有助于保持 其密封完整性,提高安全性。

Advantages (优点)

Best media resistance 最优的耐介质性

最好的耐高温性能,可耐 327℃(620.6F)的高温

High reliability for static and dynamic applications

静态和动态的高可靠性

Outstanding chemical resistance

突出的耐化学性

低压变氟胶(Low voltage variable FKM)

Low voltage variable FKM has excellent compression set resistance. This material is the best choice of doing O-rings

低压变氟胶拥有突出的压缩永久变形性能,该材料是做 O 型圈的不二选择

耐高温氟胶(High temperature resistance Viton/FKM)

It exhibits significantly improved high temperature resistance compared to standard types of fluoroelastomer.

和常规氟胶相比,它展现了突出了耐高温性能

Working temperature range. Considered to be -15°C to 285°C (5°F to 545°F)