

PTFE Rod

Material type: Virgin and Filled

PTFE ROD

The full name for PTFE is Polytetrafluoroethylene, it is a low friction fluoropolymer (Low coefficient of friction (measured against polished steel)) with outstanding chemical and weathering resistance. The working temp range is -180° C to 260° C, and melting point is 327 °C. It has no slip-stick characteristics; static and dynamic coefficients are equal. Even gecko cannot stick. The best properties makes PTFE has a numerous applications.

Shenzhen Dechengwang Technology Co., Ltd has the ability to produce PTFE rod to high-precision Machined parts, like Gasket washers, O-ring, valve seat and so on, what more, Based on our Rich knowledge and experience on PTFE material, we capable of producing according to your Drawing, Design and Samples.

Always professional, Always on time. Under Promise, Over Deliver.

PTFE Performance benefits:

- Temperature Resistance(-180°C~+260°C), melting: (327 °C).
- Non-Stick.(Even gecko cannot stick)
- Low coefficient of friction(measured against polished steel)
- Superior chemical and thermal properties.(Good gasket material)
- Slippery
- Self-lubrication
- High insulate

Typical PTFE Applications are:

- Seals and gaskets
- Valve and fitting components
- Pump parts
- Scientific equipment
- Medical equipment
- Chemical resistant
- High insulate electric industry.
- Aerospace

Material Data Sheet for PTFE

| PROPERTY | Unit | Test Method Reference | Virgin PTFE |
|---|-----------------------------|-----------------------|--------------------|
| Density | gm/cc | ASTM D-792 | 2.1-2.3 |
| Tensile Strength | kgf/cm ² | ASTM D-638 | 210-375 |
| Elongation of Break | % | ASTM D-638 | 250-400 |
| Compressive strenght | kgf/cm ² | ASTM D-695 | 40-50 |
| Hardness | Shore D | ASTM D-2240 | 52-58 |
| Coefficient of Friction | Dynamic P-7 kg/cm2 V-0.5 | ASTM D-1894 | 0.04-0.06 |
| | Static P-35 kg/cm2 | | 0.05-0.08 |
| Continous Service Temp. at Atmospheric pressure | °C | ASTM D-648 | From- 250 To + 260 |
| Thermal Conductivity (max) | 10 ⁻¹ cal cm S°C | ASTM D-5930 | 6 |
| Dielectric Strength | Kv/mm | ASTM D-149 | 22-24 |
| Volume Resistivity | ohm cm | ASTM D-257 | >10 ¹⁸ |
| Surface Resistivity | ohm | ASTM D-258 | >10 ¹⁵ |
| Permeability | % | ASTM D-543 | 0.01 |
| Dissolution | | | 0.01 |

High Precision PTFE Machined Parts.Tailor-Made For You!



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ISO 9001:2008

FDA, RoHS, SGS

Specification table of PTFE Round Rod:

PTFE Round Rod is processed by extrusion method, which also call PTFE extruded rod. It usually has a long length which can reach to 2400mm, standard length is 1000mm, but the diameter only range from 3-160mm.


| Diameter(mm) | Length(mm) |
|--|---------------------------------------|
| 1, 2, 3, 4 | > 10000 (rolls) |
| 3,4,5,6,7,8 | 1000(in stock), 2000 (custmorized) |
| 9,10,12,13,14,15, | |
| 16,18,20,22,25 | |
| 30,35,40,45,50,55,60,65,70 75,80,85,90,95,100,110,120, 130,140,150,160 | |



Specification table of PTFE Large Diameter Rod:

PTFE Large Diameter Rod is processed by molded method, it diameter can reach to 400mm, the length only range from 100~1000m as the limited of mold, which 300mm length is most widely used.

| NO. | Specifications (Dia.*Length mm) | NO. | Specifications (Dia.*Length mm) | NO. | Specifications (Dia.*Length mm) |
|-----|---------------------------------|-----|---------------------------------|-----|---------------------------------|
| 1 | Ø6*100 | 29 | Ø68*200 | 57 | Ø350*100 |
| 2 | Ø8*100 | 30 | Ø70*300 | 58 | Ø360*300 |
| 3 | Ø10*100 | 31 | Ø75*300 | 59 | Ø380*200 |
| 4 | Ø12*100 | 32 | Ø80*300 | 60 | Ø410*200 |
| 5 | Ø12.7*47 | 33 | Ø85*300 | 61 | Ø565*100 |
| 6 | Ø13*100 | 34 | Ø90*300 | 62 | Ø517*120 |
| 7 | Ø14*100 | 35 | Ø95*300 | 63 | Ø610*200 |
| 8 | Ø15*100 | 36 | Ø100*300 | 64 | Ø660*120 |
| 9 | Ø16*150 | 37 | Ø110*300 | 65 | Ø110*1000 |
| 10 | Ø18*200 | 38 | Ø115*200 | 66 | Ø120*1000 |
| 11 | Ø20*300 | 39 | Ø120*300 | 67 | Ø130*1000 |
| 12 | Ø21.5*100 | 40 | Ø125*300 | 68 | Ø140*1000 |
| 13 | Ø22*100 | 41 | Ø130*300 | 69 | Ø150*1000 |
| 14 | Ø24.5*100 | 42 | Ø140*300 | 70 | Ø160*1000 |
| 15 | Ø25*300 | 43 | Ø150*300 | 71 | Ø180*1000 |
| 16 | Ø27*150 | 44 | Ø160*300 | 72 | Ø200*1000 |
| 17 | Ø28*150 | 45 | Ø165*200 | 73 | Ø250*1000 |
| 18 | Ø30*300 | 46 | Ø170*300 | 74 | Ø300*1000 |
| 19 | Ø31.5*100 | 47 | Ø180*300 | | |
| 20 | Ø32*100 | 48 | Ø190*300 | | |
| 21 | Ø35*300 | 49 | Ø200*300 | | |
| 22 | Ø40*300 | 50 | Ø210*200 | | |
| 23 | Ø45*300 | 51 | Ø220*300 | | |
| 24 | Ø48*250 | 52 | Ø240*300 | | |
| 25 | Ø50*300 | 53 | Ø250*300 | | |
| 26 | Ø55*300 | 54 | Ø260*200 | | |
| 27 | Ø60*300 | 55 | Ø280*300 | | |
| 28 | Ø65*300 | 56 | Ø310*300 | | |



Length, diameter and color may depending on manufacturer, You can feel free to Email: info@ptfedf.com



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