

# BHAVYA INDUSTRIES

*Pioneering in the growth of comprehensive gamut of  
PTFE products.*



## OUR DIRECTOR

**Mr. Dhaval Shah** is the prime pillar of building a **BHAVYA INDUSTRIES**. He has started his own journey before 21 years ago as a trading firm. After getting a huge experience in the industry started as a manufacturing unit in Zak GIDC area. Our manufacturing unit is spread in 22000 square feet area with a wide range of production unit (PTFE Rod, PTFE Gasket, PTFE Components, PTFE Balls, Rubber Balls, PTFE Tubing, PTFE Cable & Fiber Glass Cable). Our main speciality in PTFE Balls.



## ABOUT US

Bhavya Industries, Gandhinagar are one of the leading names engaged as Manufacturer and Exporter of PTFE Balls, PTFE Sheets, PTFE Rods, PTFE Pipe, PTFE Gaskets, PTFE Components, Rubber Balls, PTFE Tubing and more. We believe in working towards our business goal with sheer determination and sincerity and today are well known as leading manufacturers of precision finished plastic balls in India. We are committed to integrating our pioneering expertise that contributes towards meeting the process demands of various industries who are widely using our range of industrial components such as PTFE skived sheet, PTFE molded sheet, PTFE extruded rod, PTFE molded rod, etc. To meet the quality standards and ever-increasing demands of our clients, we are well equipped with the latest machinery in our integrated manufacturing plant.

## OUR VISION

Our vision to reach every industries and manufacturing unit by providing our premium quality products at reasonable price.

## OUR FACTORY



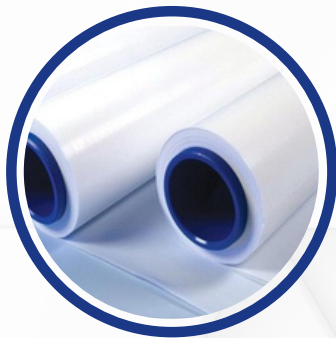
## PTFE Balls

We are prominent among the PTFE balls suppliers in India. Our polytetrafluoroethylene balls are very famous in the market due to its extraordinary quality. We are seen currently in the market as Potential PTFE plastic balls manufacturer. Discovered in 1938 by Dr. Roy J. Plunkett of the DuPont Company, Teflon® is a fluorocarbon-based polymer. Poly Tetra Fluoro Ethylene is commonly abbreviated PTFE . The fluoroplastic family offers plastics with high chemical resistance, low and high temperature capability, resistance to weathering, low friction, electrical and thermal insulation, and “slipperiness”.



### General Properties :

Mechanical properties of Teflon® are low compared to other plastics, but its properties remain at an useful level over a wide temperature range of -100°F to +400°F (-73°C to 204°C). It has excellent thermal and electrical insulation properties and a low coefficient of friction. PTFE is very dense and cannot be melt processed, it must be compressed and sintered to form useful shapes.



### Features :

PTFE resin is first molded into work-blank and then skived. The PTFE skived sheet & tape are highly dielectric. Our PTFE molded skived sheet is chemical resistant and is highly durable. They have a wide range of operation temperature.

### Applications :

Lining, sealing and oil less lubricating material and dielectric at any frequencies. Capacitor dielectric, wire isolation, electrical instrument isolation etc.

We supply these sheets at quite reasonable prices. We are one of the well known PTFE sheet manufacturers and suppliers in India.

## PTFE Skived Sheet

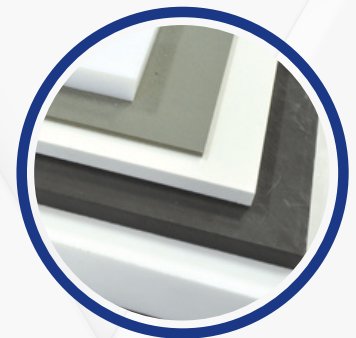
## PTFE Molded Sheet

### Features :

PTFE molded sheet is manufactured by molding method with PTFE granular resin. PTFE is the most chemical resistance of all known plastics. It does not age. It has the lowest coefficient of friction of all known solid materials and a wide range of practicable temperature from -180°C to +260°C.

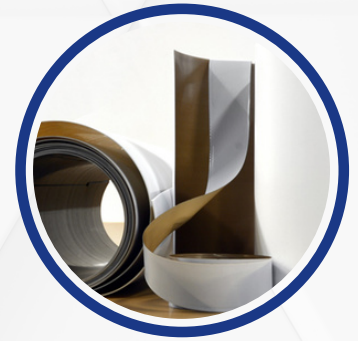
### Applications :

Lining Bearing pads, seals and electrical insulation. Our PTFE resin molded sheet and Teflon PTFE molded sheet are highly famous and are demanded by all. We supply our PTFE sheets at quite reasonable prices. We have gained the position of one of the reliable PTFE molded sheets suppliers in India.



## PTFE Etching Sheet

Bhavya Industries involved in manufacturing of PTFE Etching Sheets that have inch-perfect dimensions, fine surface finish and excellent bonding properties. We are enlisted amid the major Manufacturers, Suppliers and Exporters of the PTFE Etching Sheets in India and abroad. We make available these PTFE Etching Sheets in variable stipulations at the budget-friendly prices. Also, our delivery is executed with paramount safety.



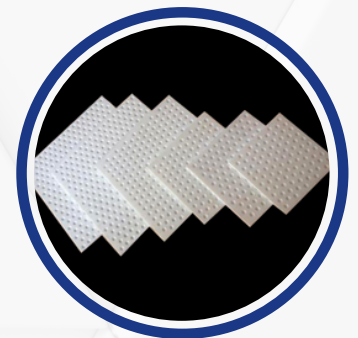
## PTFE Expanded Sheet



Bhavya Industries involved in manufacturing of PTFE Etching Sheets that have inch-perfect dimensions, fine surface finish and excellent bonding properties. We are enlisted amid the major Manufacturers, Suppliers and Exporters of the PTFE Etching Sheets in India and abroad. We make available these PTFE Etching Sheets in variable stipulations at the budget-friendly prices. Also, our delivery is executed with paramount safety.

## PTFE Dimple Sheet

We are widely well reckoned as one of the prominent PTFE slide manufacturers in India. We bring to forth a large range of PTFE bearing slide that mainly includes PTFE plastic bearing slide. Our PTFE bearing slide is made from high strength PTFE suspension resin by methods of moulding, sintering and finalizing the design to various sizes. Different fillings can be used to achieve special demands. It can also be adhered to rubber and metal with one side etched. PTFE has very low coefficient of friction; it is anticorrosive and not aging, can be widely used in temperature from  $-180^{\circ}\text{C}$  to  $+260^{\circ}\text{C}$ . Our PTFE bearing slide is immensely used in bridge bearing slide, building slide, vehicle slide etc.



## PTFE Molded Rods

### Features :

There are two kinds of PTFE molded rods we have to offer. One is manufactured by Paste extruding method in the diameter from 4 to 9mm and the other is made by Ram extruding method in the diameter from 10 to 50mm; rods over the diameter 50mm are manufactured by molding. PTFE is the most chemical-resistant of all known plastics. It does not age. PTFE has a wide range of practicable temperature from 180°C to +260°C and a wax-like surface to which anything hardly sticks. PTFE has the lowest coefficient of friction of all known solid materials. It has the best electrical properties of all plastics.



### Applications :

Used in electrical insulation, seal, anti-sticking materials. Our PTFE plastic rods are one of the best and are highly famous. We also supply our Polytetrafluoroethylene Molded Rods at one of the most reasonable prices. We have gained the position of a well known PTFE molded rods manufacturers in India.



## PTFE Molded Bushes

We are proud to introduce ourselves as one of the prominent Teflon PTFE Molded Bushes suppliers, based in India. Below are the features of our PTFE Molded bushes.

### Features:

There are various kinds of PTFE plastic molded bushes to offer. We manufacture PTFE bushes by molding process. PTFE is the most chemical-resistant of all known plastics. It does not age. Also available in filled grade PTFE like as carbon filled, glass filled, bronze filled & also pigmented PTFE in all standard colors. PTFE has a wide range of practicable temperature from 180°C to +260°C and a wax-like surface to which anything hardly sticks. PTFE has the lowest coefficient of friction of all known solid materials. It has the best electrical properties of all plastics.

### Applications:

Our PTFE molded bushes are used for electrical insulation, seal, anti-sticking materials.



## PTFE Extruded Rods

We have carved a niche as one of the salient Teflon PTFE rods manufacturers in India. There are two kinds of PTFE Extruded Rods to offer. One is manufactured by Paste extruding method in the diameter from 4 to 9 mm and the other is made by Ram extruding method in diameter from 10 to 120mm; rods over the diameter of 300mm are manufactured by molding. PTFE is the most chemical-resistant of all known plastics. It does not age. PTFE has a wide range of practicable temperature from 180 -/+ 260 and a wax-like surface to which anything hardly sticks. PTFE has the lowest coefficient of friction of all known solid materials. It has the best electrical properties of all plastics.

## PTFE Extruded Tubing

We are reckoned as one of the most leading PTFE plastic tubing suppliers, based in India. Some of the features of our PTFE extruded tubing are listed below

### Features :

PTEF extruded tubing is manufactured by high pressure PTFE dispense resin mixed with additive, it is extruded and sintered. According to different demands, the tubing could be opaque or translucent. PTFE is well know for its chemical resistance, not aging, non stick, self-lubrication, insulation and wide working temperature range from  $-180^{\circ}\text{C}$  to  $+260^{\circ}\text{C}$ . Because of these excellent properties, PTFE has a wide application in fields of chemical mechanical, electronics, medical and aviation, etc.



### Applications :

Our PTFE extruded tubes are used as wire and cable jacket, inner lined pipes for corrosive fluids and used in hydrochloric acid heat exchanger, etc.



## PTFE Liner

We stand as one of the most illustrious PTFE plastic liner manufacturers and suppliers in India. Our Teflon PTFE liner is manufactured from premium quality raw material, which is sourced from well known suppliers. Below are some of the features of our Teflon PTFE liner.

### Features:

The PTFE liner is made with high qualified Ram extrusion tube. Special processing technology is used to tighten the plastic tube & inner steel pipe, the positive pressure is 1.6 Mpa while the negative pressure is 77Kpa. It has a wide range of practicable temperature from  $-60^{\circ}\text{C}$  to  $+260^{\circ}\text{C}$  with good anti-corrosion facility. It can transport corrosion gas, liquid under high temperature, which is unstable by others.

## PTFE Pipe

If your temperature requirements range up to  $500^{\circ}\text{F}$  ( $260^{\circ}\text{C}$ ), Our PTFE Tubing (PolyTetraFluoroEthylene) is the recommended choice for you. Because of its excellent dielectric properties, it is widely used in electronics and electrical services. Another key advantage of PTFE pipe is its non-stick properties that allow the transport of materials with minimal fluid resistance. PTFE pipe can be used with virtually all industrial solvents, chemicals, and corrosive materials, and can be used in processes at elevated temperatures. It can be steam-sterilized without affecting its physical properties, such as surface hardness, elongation, flex life, or deformation under load.



## PTFE Convoluted Pipe

Bhavya Industries is a leading Manufacturer & Exporter of PTFE Convoluted Pipe.

### Properties :

- Non-Sticking, easy to clean.
- Non-Flammable.
- Chemically inert.
- Low coefficient of friction, ensuring low pressure drop.
- Excellent mechanical resistance for vibrations & flexing.
- Non-ageing & very good U.V Resistance.
- Good Dielectric properties.



## PTFE Ring & Gasket

We feel proud to boast that we are one of the supreme PTFE Ring & Gasket manufacturers, based in India. Our PTFE plastic ring & gasket is manufactured by molding method with PTFE granular resin. PTFE, compared with other plastics, has superior properties against chemicals and temperature. The PTFE ring & gasket offered by us is highly admired by all other clients due to their high reliability as well as durability. Our genuine quality PTFE ring and gasket is accessible at the least market prices.

## PTFE Filled Article

We have come forward to provide you a wide gamut of PTFE filled article that mainly includes PTFE filled article. Filled PTFE article is manufactured by molding method with filled PTFE resin. Filled PTFE resin is manufactured by compounding PTFE granular resin with fillers of many different kinds. We have carved a niche as one of the leading PTFE article manufacturers and suppliers in India. Amongst the many fillers suitable for compounding with PTFE, glass fiber, carbon fiber, Bronze and also lubricating materials like graphite, molybdenum disulphide, have been widely used in large scale production, Broadly speaking PTFE compounds have the following advantage over unfilled PTFE

- Improved Compression Strength
- Improved Thermal Conductivity
- Decreased Thermal Expansion
- Improved Abrasion Resistance



## PTFE Components

We feel proud to introduce ourselves as one of the distinguished polytetrafluoroethylene components manufacturers in India. We cater a large range of PTFE components that mainly includes molded PTFE components. Our molded PTFE components are manufactured from the premium quality raw material. The salient features of our molded PTFE components are their high reliability and long lasting life. Our molded PTFE components are in high demand due to their best results and efficacy. Our molded PTFE components are widely used in machining blank as per the requirement of the clients.



## PTFE Diaphragm

We have carved a niche as one of the overriding PTFE plastic diaphragm suppliers, located in India. Below listed are some of the common features of our PTFE diaphragm.

### Features :

PTFE diaphragm is manufactured by PTFE suspension resin with high strength and tenacity. Different specifications can be made by methods of molding, skiving and finalizing the design. It can also be adhered to rubber and metal with one side etched.

### Applications :

Our polytetrafluoroethylene diaphragm is used in metri pumps, diaphragm pumps and diaphragm valves.



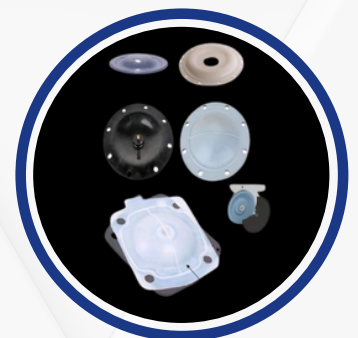
## PTFE Laminated Rubber Diaphragms

Bhavya Industries is a leading Manufacturer & Exporter of PTFE Laminated Rubber Diaphragms. PTFE laminated diaphragm mostly combines the advantages of PTFE with the flexibility of an elastomer, with higher mechanical durability and better flex life and memory than standard two piece PTFE diaphragm rubber backed. It also offers less thrust resistance for actuation and it is interchangeable with standard rubber diaphragm thanks to its threaded pin connection. We manufacturer Rubber Diaphragms & PTFE Laminated Rubber Diaphragms for Diaphragms Valves.

**Pattern :** A Type & S Type

**Size :** 15 NB to 200 NB

**Rubber :** Natural, Neoprene, EPDM, Butyle, Hypalon & PTFE Laminated.

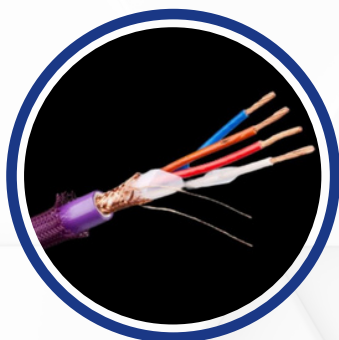




## PTFE Micro Tubing

Bhavya Industries is a leading Manufacturer & Exporter of Medical Grade PTFE Micro Tubing. Our PTFE Micro Tubing specifically designed and manufactured for use in medical applications. PTFE is a type of plastic that is known for its excellent chemical resistance, high temperature resistance, and low friction properties.

Medical grade PTFE micro tubing is also biocompatible, meaning that it does not cause an adverse reaction when it comes into contact with living tissue. This makes it a safe and reliable choice for use in medical applications. This can be safely used from -410°F (-277°C) TO 500°F (260°C).



## PTFE Cables

Bhavya Industries is a leading Manufacturer & Exporter of PTFE Cable. We manufacture PTFE Insulated wires conforming to JSS 51034 or MIL-W-16878 specifications (Size Range AWG 30 to AWG 00), Multi-core and Multi-pair High Temperature cables required in Electronics, Automation, Signal transmission and Equipment Control applications.

We are offering following constructions for Multi-core and Multi-pair PTFE Cables:

- PTFE/ PTFE
- PTFE/PTFE/SS Braid
- PTFE/PTFE/ Shielding
- PTFE/ PTFE/ Varnished Fibre Glass
- PTFE/ PTFE or Polyimide Isolator/ Shielding/ PTFE
- Non-ageing & very good U.V Resistance.
- Multi-Pair Cables with individually shielding
- PVC or Silicon Jacket is also provided on requirement.

## PTFE Shielded Cables

Our company Bhavya Industries is expert in exporting and manufacturing best quality PTFE Insulated Silver Plated Copper Wires. The manufacturing experts use good raw materials and advanced tools and machineries to produce these copper wires. The copper wires are supervised before exporting to certify its quality. The customers are served with these copper wires at reasonable rates to meet their requirements.

### General Characteristics :

- Inert to most chemicals & fungus.
- Very good mechanical strength.
- Excellent thermal stability.
- Low dia – electric constant.
- Low dissipation factor.
- Computers, electronic equipments.

### Performance Characteristics :

- Operating temperature from – 650c to + 250 color.
- Resistance to attack by lubricants, hydraulic fluids, aircraft or rocket fuel, atmospheric conditions & virtually all chemicals.



## PTFE High Temperature Cables

We are one of the leading manufacturers and exporters of High Temperature Cables. Using superior quality tested raw material accompanied with modern technologies we manufacture these cables. The manufacturing process of these cables is supervised by the team of our professional experts. Available in various sizes, length and thickness, our clients can purchase these from us at market leading rates.



### Specifications :

- Application: Heating
- Insulation Material: PTFE
- Conductor Type: Stranded

### Properties :

- Flexible
- Light Weight
- Easy To Install
- No Maintenance Required

## PTFE Insulated Multicore Cables



We Bhavya Industries are reckoned amongst the primary exporters and manufacturers of PTFE Insulated Wires. Our manufacturing unit is specialized in producing these insulated wires using advanced techniques and good quality resources. The insulated wires are analysed to prior to the exporting process to certify its flawlessness. Our customers are offered with these insulated wires at market leading prices within their mentioned deadline along with personalized services.

### Specifications :

- Insulation Material: PTFE
- Rated Voltage: 300V
- Color: to the client's requirements

### Characteristics :

- Resistant to High Temperatures
- Efficiency in Usage
- Robust Structure
- Rugged Edifice

## Fibre Glass Cable

Bhavya Industries is a leading Manufacturer & Exporter of Fiberglass Cable. These are also preferred at several areas where conventional PVC wire is not appropriate. The cable resists flames fungus radiation, chemical moisture, corona discharged, and acids ozone attack and even manages to retain excellent de electric properties when burnt.

### Application:

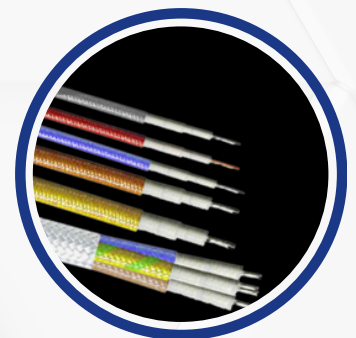
Fibre glass cables is used extensively as motors, transformers, lead wire and at places where conventional PVC wire is not suitable.

### Description:

Tinned Copper stranded wires twice wounded opposite and well overlapped with polyester films braided with fiber glass yarn and impregnated with high class insulating thermosetting varnish flexible up to temperature from 70°C to 200°C. Resists moisture chemicals, flames fungus radiation, corona discharged and acids ozone attack and even manages to retain excellent de electric properties when burnt.

### Range:

0.5 sq.mm to 630 sq.mm. (Single & Multicorel)



## Galls Balls

We feel proud to introduce ourselves as one of the overriding glass balls manufacturers and suppliers in India. We provide you superlative quality colored glass balls. Our glass balls are used in non-return valves, light-duty corrosion-resistant bearings, flow-meters and as insulators. Also available, "Black Glass" balls with super precision tolerance in sizes from 1/16" to 1/4" diameter for use in medical and chemical flow-meters. Our decorative glass balls have excellent resistance to most chemicals except hydrofluoric acid. They are not suitable for applications involving thermal or mechanical shock.

### Mechanical Properties :

Density : 0.097 lbs/cub.in., Specific Gravity : 2.7, Max. Useful Temperature : 350°C, Colour : Clear Glass (finish)

### Size Range :

Imperial : Stock sizes 1/8" to 2", Metric : 2mm to 50mm to special order

### Tolerances :

Basic Dia. Tolerance : VERY VERY CLOSE, Sphericity : VERY VERY CLOSE

### Corrosion Resistance :

Glass balls have excellent resistance to most chemicals except hydrofluoric acid. They are not suitable for applications involving thermal or mechanical shock.



We are a reputed precision ceramic balls manufacturer and supplier in India. Ceramic balls may be used at temperatures upto 1725°C (3135°F). They are extremely hard, abrasion resistant and immune to all furnace atmosphere. Used for check valves where heat, corrosion and /or abrasion resistance is needed.

**Basic Composition :** Aluminum Oxide {AL<sub>2</sub>O<sub>3</sub>} : 99.9% Max.

### Mechanical Properties :

Hardness : Rockwell 45 N 81, Density : 0.139 lbs / cub.in, Specific Gravity : 3.80 / 3. 84

### Size Range :

Imperial : 1/8" to 2" inclusive, Metric : 2mm to 50mm to order

### Tolerances :

Basic Dia. Tolerance : VERY VERY CLOSE, Sphericity : VERY VERY CLOSE

### Corrosion Resistance :

Alumina Ceramic has good resistance to most corrosive media but is not recommended for use in Hydrochloric or Hydrofluoric acids or strong alkaline solutions.

## Ceramic Balls

## Rubber Balls

We cater a large gamut of excellent quality rubber balls that mainly include molded rubber balls and precision rubber balls. We are counted in the midst of the prominent rubber balls manufacturers in India. We cater our rubber balls in various attractive colours. The range of rubber balls we provide have excellent physical and electrical strength. The rubber balls we manufacture are in high demand due to their good tear and abrasion resistance. It has the capability to resist the effect of water and flame.





## Derlin Balls

We are a well recognized acetal delrin balls manufacturer and supplier in India. Our delrin plastic balls are very much popular in the market worldwide. With the help of our advanced integrated technology we are able to produce high quality delrin balls.

### General Properties:

Acetal is the common name for a family of thermoplastics with the chemical name "PolyOxy-Methylene". Acetal provides high strength and stiffness, enhanced dimensional stability and is easy to machine. As a semi-crystalline material, acetal is characterized by a low coefficient of friction and good wear properties.

### Features :

- High Strength, Stiffness, Dimensional Stability
- Very Low Moisture Absorption
- Good Wear And Abrasion Resistance
- Wide Range Chemical Resistance (including many solvents)



## Polypropylene Balls

Polypropylene is an economical material that offers a combination of outstanding physical, chemical, mechanical, thermal and electrical properties not found in any other thermoplastic. Compared to low or high density polyethylene, it has a lower impact strength, but superior working temperature and tensile strength.

### General Properties:

Polypropylene provides excellent resistance to organic solvents, degreasing agents and electrolytic attack. It is light in weight, resistant to staining, and has a low moisture absorption rate. This is a tough, heat-resistant, semi-rigid material, ideal for the transfer of hot liquids or gases. It is recommended for vacuum systems and where higher heats and pressures are encountered. It has excellent resistance to acids and alkalines, but poor resistance to aromatic, aliphatic and chlorinated solvents.

We offer polypropylene balls which are of the best quality. Our propylene plastic balls are extensively used all over and are therefore highly demanded by all. We also supply our balls at quite reasonable prices for everyone to avail them easily. We are also one of the most reliable PP balls manufacturer and supplier in India.



## Nylon Balls

Nylon balls are used in valves, light-duty bearings, flow-meters and numerous special applications where toughness, abrasion resistance and light weight are more important than hardness. We are one of the well known precision nylon balls suppliers in India.

**Basic Composition :** Du Pont Nylon Resin Zytel ( or similar material)

**Mechanical Properties :** Hardness : 118 Rockwell 'R', Density: 0.041lbs / cub.in, Special Gravity: 1.14, Water Absorption (24hrs): 1.5 %, Max. Useful Temperature: 148°C (300°F), Colour: Natural

### Size Range :

Imperial: 1/8" to 14", Metric: 3mm to 350mm

### Tolerances :

Basic Dia. Tolerance: Very Very Close, Sphericity: Very Very Close

### Corrosion Resistance :

Nylon plastic balls are unaffected by most mild chemicals. They are particularly outstanding in resistance to alkalis and petroleum oils and greases. Acids, such as lactic acid, photographic solutions, ets. have little or no effect.



Size	Number of Strands & Dia of Strands		Dia of Conductor	Cross Sectional Area	Dia Over Insulation		Dia Over Insulation		Dia Over Insulation		Max Resistance of Conductor ohms/100 0 mtrs. At 20 C	Current Reating (amps)
				Sq	EV		E		EE			
					250 V		600 V		1000 V			
				(mm)	Min	Max	Min	Max	Min	Max		
AWG	AWG	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)		
32	7/40	7/0.08	0.25	0.035	0.5	0.6	0.66	0.86	0.91	1.11	567.57	0.7
30	1/30	1/0.25	0.25	0.049	0.5	0.6	0.66	0.86	0.91	1.11	354.32	1
30	7/38	7/0.10	0.31	0.055	0.55	0.66	0.71	0.91	0.96	1.11	330.37	1
28	1/28	1/0.32	0.32	0.08	0.58	0.68	0.73	0.93	0.99	1.19	223.09	2.1
28	7/36	7/0.13	0.33	0.093	0.63	0.73	0.78	0.99	1.04	1.24	209.31	2.1
26	1/26	1/0.40	0.48	0.125	0.66	0.76	0.81	1.01	1.06	1.27	140.09	3
26	7/34	7/0.16	0.48	0.14	0.73	0.83	0.88	1.09	1.14	1.34	132.87	3
26	19/38	19/0.10	0.51	0.149	0.73	0.83	0.88	1.09	1.14	1.34	125.98	3
24	1/24	1/0.51	0.51	0.204	0.76	0.86	0.91	1	1.16	1.37	87.92	4
24	7/32	7/0.20	0.61	0.219	0.86	0.96	1.01	1.21	1.27	1.47	82.67	4
24	19/36	19/0.13	0.64	0.252	0.86	0.96	1.01	1.21	1.27	1.47	79.72	4
22	1/22	1/0.64	0.64	0.321	0.88	1.01	1.04	2.27	1.29	1.52	55.77	7.3
22	7/30	7/0.25	0.76	0.343	1.01	1.11	1.16	1.37	1.42	1.62	52.16	7.3
22	19/34	19/0.16	0.81	0.382	1.01	1.11	1.16	1.37	1.42	1.62	49.54	7.3
20	1/20	1/0.81	0.81	0.515	1.06	1.16	1.21	1.42	1.47	1.67	34.44	11
20	7/28	7/0.32	0.97	0.562	1.21	1.32	1.37	1.57	1.62	1.82	32.8	11
20	19/32	19/0.20	1.02	0.596	1.21	1.32	1.37	1.57	1.62	1.82	30.15	11
18	7/26	7/0.40	1.22	0.879			1.63	1.87	1.87	2.13	20.6	16
18	19/30	19/0.25	1.27	0.932			1.63	1.87	1.87	2.13	18.99	16
16	19/29	19/0.29	1.45	1.254			1.85	2.2	2.1	2.41	14.82	22
15	19/28	19/0.32	1.6	1.528			1.98	2.28	2.26	2.54	12.09	26
14	19/27	19/0.36	1.83	1.933			2.23	2.59	2.48	2.89	9.44	32
13	19/26	19/0.40	2	2.387			2.43	2.74	2.66	3.02	7.59	35
12	19/25	19/0.45	2.31	3.021			2.71	3.07	2.97	3.37	5.93	41
12	37/28	37/0.32	2.26	2.975			2.66	3.02	2.92	3.32	6.23	41
11	19/24	19/0.50	2.5	3.73			2.99	3.3	3.2	3.58	4.72	45
10	19/22	19/0.65	3.25	6.304			3.73	4.03	3.96	4.34	2.99	55
10	37/26	37/0.40	2.82	4.649			3.22	3.58	3.47	3.88	3.51	50
8	133/29	133/0.29	4.29	8.784					5.05	5.56	2.15	75
6	133/27	133/0.36	5.41	13.537					6.42	6.93	1.37	100

Sr No	Property	Unit	Test Method	Virgin PTFE	25% Glass Filled PTFE	15% Glass + 5% MoS2 Filled PTFE	25% Carbon Filled PTFE	15% Graphite Filled PTFE	40% Bronze Filled PTFE						
1	Density	gm/cc	ASTM D-792	2.1-2.2	2.24-2.25	2.23-2.24	2.12-2.14	2.14-2.16	3.1-3.2						
2	Tensile Strength	kgf/cm <sup>2</sup>	ASTM D-638	210-350	125-200	150-200	120-155	150-200	125-150						
3	Elongation of Break	%	ASTM D-638	250-400	250-400	220-320	100-150	175-225	100-175						
4	Compressive Strength	kgf/cm <sup>2</sup>	ASTM D-695	40-50	75-85	65-75	75-85	65-75	85-100						
5	Compressive Modules	kgf/cm <sup>2</sup>	ASTM D-695	4000	7000	6000	8400	8000	8500						
6	Deformation Under Load														
	A. 2 Hrs. 23°C 113 Kg/cm <sup>2</sup>	%	ASTM D-621	12	9	10	5	6	5						
	B. 24 Hrs. 23°C 113 Kg/cm <sup>2</sup>			15	11	12	7	8	6						
	C. Permanent			8	7	7.5	3.5	4.5	3						
	D. 2Hrs. 150°C 113 Kg/cm <sup>2</sup>			55	50	50	35	43	42						
7	Flexural Strength	kgf/cm <sup>2</sup>	ASTM D-790	57	42	50	96	60	85						
8	Flexural Modules	kgf/cm <sup>2</sup>	ASTM D-790	3500-6300	16700	20000	11900	11000	14000						
9	Impact Strength														
	A. -20°C	cmkgf/cm <sup>2</sup>	ASTM D-256	9	9.25	9	8	10	11						
	B. +20°C			15	11	12	10	14	9						
10	Hardness	Shore-D	ASTM D-2240	60-65	70-75	62-68	70-75	60-65	70-75						
11	Co-Efficient of Friction														
	A. Dynamic P-7 Kg/cm <sup>2</sup> V-0.5 m/s	---	---	0.4-0.06	0.5-0.54	0.15-0.20	0.12-0.17	0.11-0.16	0.11-0.15						
	B. Static P-35Kg/cm <sup>2</sup>			0.05-0.08	0.11-0.13	0.08-0.10	0.09-0.11	0.08-0.10	0.08-0.10						
12	Water Absorption	%	ASTM D-570	0	0.013	0.015	0	0	0						
13	Heat Resistance at Atm. Pressure	°C	---		250 to + 260										
14	Thermal Conductivity	10 <sup>3</sup> cal cm S°C	Cenco Fitch	6	9	9	13	14	17						
15	Linear Thermal Expansion														
	A. 30-150°C	%	ASTM D-696	Axial	Radial	Axial	Radial	Axial	Radial	Axial	Radial	Axial	Radial		
	B. 30-200°C			1.5	1.5	1.5	0.7	1.5	1	1.2	1	1.3	1	1.15	0.95
	C. 30-250°C			2.4	2.3	2.2	1	2.3	1.8	1.9	1.5	2	1.7	1.85	1.55
				3.4	3.6	3.2	1.4	3.3	2.2	2.7	2.4	3	2.5	2.55	2.25
16	Dielectric Strength	Kv/mm	ASTM D-149	24	12	16	2	2	Conductive						
17	Volume Resistivity	ohm cm	ASTM D-257	10 <sup>18</sup>	10 <sup>15</sup>	10 <sup>15</sup>	10 <sup>4</sup>	10 <sup>3</sup>	10 <sup>7</sup>						
18	Surface Resistivity	ohm	ASTM D-258	10 <sup>15</sup>	10 <sup>15</sup>	10 <sup>15</sup>	10 <sup>7</sup>	10 <sup>6</sup>	10 <sup>9</sup>						
19	Chemical Resistance : PTFE is chemically inert & unaffected by all known chemicals except molten or dissolved alkali metals sodium, potassium, rubidium, francium & fluorine compounds & complexes at elevated temperatures. Filled PTFE has inferior chemical resistance depending upon the particular filler.														
20	We also manufacture filled grade products with percentage of fillers as per customer's specifications.														

Note :

1. Data Quoted are average values & may vary with source and grade of raw material.
2. Values may be used for design with consideration of factor of safety.
3. company do not accepts any responsibility of results obtained and infringement of any parents.

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