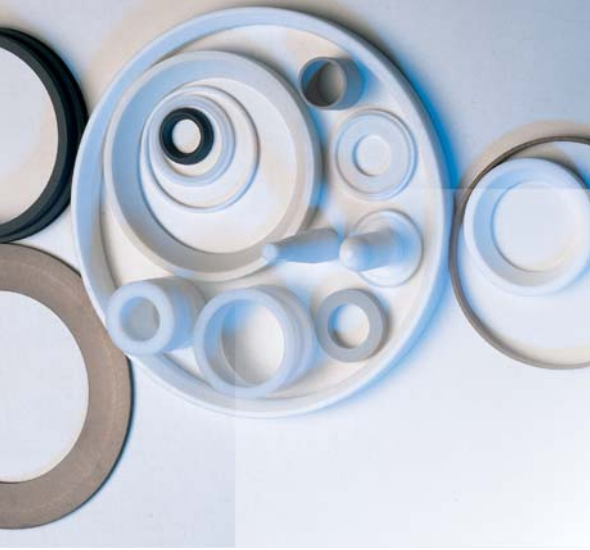
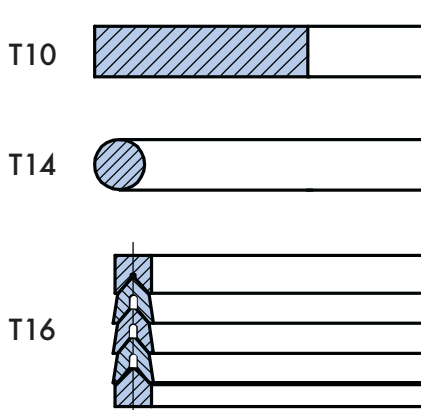


## 9. PTFE GASKETS



### PROPERTIES AND APPLICATION

PTFE gaskets are one of the most suitable types of gaskets for a variety of sealing applications and are mostly based on virgin PTFE or filled PTFE. PTFE gaskets provide an extensive range of applicability. PTFE is a fluoropolymer, which features an outstanding chemical resistivity to almost all chemicals, good thermal insulation properties, and useful mechanical and processing characteristics. The above-mentioned PTFE features can be usefully applied in PTFE gaskets. They can be mostly used in valve seats, bearings, requested to resin sliding and chemicals, elastic band for un-lubricated compressors, O-rings where elastomers can not withstand. An extended range of improved mechanical and processing properties can be additionally reached by combination of virgin PTFE and different fillers. Different combination offer a variety of different properties described in the following table.



Filler	Improved properties
Glass	<ul style="list-style-type: none"> <li>enhanced wear resistance</li> <li>chemical resistance</li> </ul>
Graphite	<ul style="list-style-type: none"> <li>extremely low coefficient of friction</li> <li>fairly good compressive strength</li> <li>good wear resistance</li> </ul>
Carbon	<ul style="list-style-type: none"> <li>good thermal resistance</li> <li>resistance to deformation</li> </ul>
Bronze	<ul style="list-style-type: none"> <li>enhanced compressive strength</li> <li>good wear resistance</li> <li>high thermal conductivity</li> </ul>

Expanded PTFE Gaskets and Seal materials consist of virgin PTFE with multidirectional fibrous and/or porous structure, which the extruded PTFE consists of. A special manufacturing process provides the material with special chemical and physical properties. This can be of advantage in wide range of the applications.

### ADVANTAGES

Virgin PTFE, PTFE compounds and expanded PTFE offer a wide range of compounded products with good mechanical properties, electrical properties, thermal properties, chemical resistance, low friction coefficient and good resistance to wear.

### SHAPE AND CONSTRUCTION SIZE

Several types of PTFE gaskets are produced to meet the most demanding application.

#### Materials

DONIT TESNIT is using virgin PTFE powder and compounds for RAM extrusion and compression moulding delivered exclusively by recognised supplier.

#### SIZE

SIZE limitations: each piece can feature a maximum external diameter of up to 1000 mm.

STANDARDS FOR PTFE GASKETS USED WITH FLANGES	
Gasket Standard	Flange Standard
EN 1514-1	EN 1092-1, -2, -3, -4, EN 545, EN 598, EN 969

### GASKET ORDERING EXAMPLE

EN 1514-1, DN 65, PN 16, Form IBC,  
virgin PTFE, 2 mm