

Our tapes are made of 100% virgin PTFE, which undergone a process of expansion, which makes them almost unlimited chemical resistance. The production process of ePTFE tape, provide a high level of structure fibrillation, so that the tape has not only characteristic softness of sealing materials but also high mechanical strength, similar to fiber materials. The tapes are available both form of profiles, as round, square and rectangular with a self-adhesive layer, which allows their direct montage on installation in a vertical position and under difficult conditions.

Features and benefits

The ePTFE tapes as a result of expansion processing and acquire new specific physical properties for ease of installation, such as softness, flexibility and compressibility. What is more, the material keep important properties of pure PTFE, such as:

- Wide operating temperature range, resistance both to cryogenic conditions and up to 260°C, decomposition over 340 °C.
- Applicable for both vacuum conditions as well as at high pressures up to 200 bars.
- Resistance to all chemical compounds in the pH 0-14 range with exception of molten alkali metals and elementary fluorine.
- PTFE tape is self-extinguishing and nonflammable, according to UL 94 class V-0.
- It is physiologically inert and safe for contact with foodstuffs, meets the high requirements of the latest EU Directive 10/2011.

Our strips and profiles can be applied to all types of flanges made of various materials like steel, copper, aluminium, ferrous metal alloys. Due to the very low initial pressure forming at 5 N/mm2 are also suitable for sealing joints with brittle or soft materials, such as plastics, epoxy composites, glass, ceramics in all industries. The tape can easily adapt even to the most complex shapes, it can be easily to cut and shape and montage is easy, fast and does not generate waste. The Tape profiles guarantee of proper sealing on uneven surface or in strongly worn joints.

Selection of tape profile and size

The right choice of the sealing tape dimensions depend on the width and quality of surface, which is sealing, the structure of a flange also the operating conditions. The tape Uniflexon behaves in different way during the installation than plane gaskets. The installation-stress not only compressed but also expands the tape to the sides, which should to fill the entire sealing space. Therefore, ought to use tape with smaller width than the width of sealing surfaces on level 1/3 to 2/3 of the final size. This ratio depends on the relative thickness of tape profile, and of the Installation-stress.

Rectangular profiles.

Size [mm]	Length [m]	Net weight [kg]	Code
3x1.5	80	0.27	4188
5x2	40	0.30	4189
7x2.5	25	0.33	4199
10x2	22	0.33	4194
10x3	40 or 10	0.90 or 0.27	4190
12x4	25	0.90	4191
15x4	20	0.90	4195
14x5	17	0.89	4187
17x6	12	0.92	4198
20x7	8	0.84	4184
28x6	7	0.88	4182
40x5	6	0.90	4193
45x2	13	0.87	4197
85x3	5	0.86	4169

Round profiles

Round profiles without adhesive layer are designed for sealing grooved joints as well as for glands of pumps and valves.

Diameter [mm]	Length [m]	Net weight [kg]	Code
2	130	0.31	4175
2.5	90	0.33	4173
3	60	0.32	4172
4	35	0.33	4174
5	22	0.32	4176
6	40	0.85	4177
8	22	0.83	4178
10	14	0.82	4179
12	10	0.85	4180
15	6.5	0.86	4181

Methods of installation

After cleaned checked sealing surface of equipment, should be partially detach the protective layer and gradually sticks the tape to the prepared surface. The tape should be applied at equal distance from both edges of the sealing surface and profiling with the shapes and corners without any creases and folds. The connection of tape ends should be located at one of the flange bolts. Dominated two ways to do a lock: one by overlap and second by chamfered the ends. The tape is relatively soft and seal can provide the already low pressure forming at 5 N/mm₂, but to achieve a high gas-tightness on level 0.01 at a pressure of 40 bar, increase the pressure mounting of at least 26 N/mm². However, should not exceed the mounting pressure of 90 N/mm².

Combining the tape to leave the free ends of the tab, which should extend beyond the rebate and place around one of the flange bolts.



When connecting sensitive to stress or made of brittle materials, use the lock by bias ends. The thickness of the lock should be at least 20% greater than the thickness of the seal.



Places with large cavities and bumps compensates by applying an additional layer of tape. The screws should be tightened diametrically opposed, in stages, gradually increasing the force by 25%, 50% and 100% of the required torque. Tensions when turning joints should evenly spread, it is advisable to use a torque wrench. The determinant of the appropriate pressure seals may be time to squeeze tape on the edge of the rebate.

Areas of application

EPTFE tape is conveniently a sealing material for use in most light collars and seal the various connections in the chemical, food and pharmaceutical industries. It is harmless and safe material, easy to store and install - allows you to perform immediate seal on every dimension and shape of the collar. It has a high resistance to aging, resistance to most acids, salts, alkalis, oxidants, solvents, petrochemicals and fuels.