



## SIGRAFLEX MF TECHNICAL DATA SHEET

Sigraflex MF is a multiplayer high – strength graphite sealing sheet comprising 0.5mm thk layers of high – purity graphite foil and 0.05mm thk stainless steel foils with ash content less than 0.15%.

The external gasket is coated with a modified ptfе layer type Dyneon 1700 thk 0.05mm.

The anchorage between the various layers of materials, takes place without the aid of glue or similar but through the Hochdruck system (SGL Group Patent).

Both internally and externally, applies a SS AISI 316 thk 0.15mm reinforcement eyelet .

This gasket is particularly suitable for use on toxic substances, flammable, polluting or expensive, that require a minimum rate of loss (food industries, gas, chemical, pharmaceutical), plants need Fire Safety (standard BS 6755-2 or standard API 607) and all those applications that don't tolerate the bonding gasket's to the flange.

Other typical applications of Sigraflex MF are: plants needing resistance to accidental discharges of pressure, safety - proof; where we require very high hygiene standard's in the processes (pharmaceutical and food industries).

Sigraflex MF fits easily on existing flanges due to good capacity for compensation and adaptation.

The rate of leakage to the outside of Sigraflex MF is 1000 times below the new stringent requirements of German legislation on air clean (standard VDI 2440) at surface pressure of 10 Mpa. Gasket in accordance with standard DIN 28090 and DIN 28091.

The temperature range of Sigraflex MF is –250 °C + 350 °C.

It can be supplied sheets and gaskets according to DIN-ANSI norms for flanges male-female, RF, FF, and with a drawing for heat exchanger.

### CHARACTERISTICS

**Metal insert materials:**

-) Flat stainless steel foils AISI 316 L

**Material cladding metal part:**

- ) Expanded graphite with density 1.1 g/cm<sup>3</sup>
- ) Ash content less than 0.15 %
- ) Chloride content less than 10 ppm
- ) Sulphide content less than 500 ppm
- ) Compressibility 40 – 50 %
- ) Compressive strength 400 N/mm<sup>2</sup>
- ) Gas permeability less than 0.05 mg/ms (for thk 2mm corrosion inhibitor)

**surface coating:**

-) AISI 316 Stainless steel foil thk. 0.05mm and modified ptfе layer type Dyneon thk 0.05mm

**Specific loss rate in according to VDI 2440:**

-)  $3.11 \cdot 10^{-7}$  mbar/ms certificato su g.ni di produzione CF Service

**Gasket factor (DIN 28090-1):**

- ) svu (for L 0.01 DIN 28090-1) = 10 Mpa
- ) m (for L 0.01 DIN 28090-1) = 1.3

**Gasket factor (ASTM):**

- ) m factor = 2.5
- ) y factor = 1000 psi (6.89 Mpa)

**Certifications:**

- ) VDI 2440 for reducing fugitive emissions
- ) Fire Safe standard API 607 Rev. 4
- ) Fire Safe standard BS 6755-2
- ) BAM for use on oxygen and explosive atmospheres
- ) FDA for use on fluids with prohibition of contamination
- ) DVGW certificate (standard DIN 3535 – 6)

**Dimensions of standard sheets:**

- ) Sheets size: 1000x1000
- ) Thickness: 1.6mm, 2.0mm, 3.00mm
- ) Tolerances thickness: < 1.0mm ±0.10mm, ≥ 1.0mm ±0.3mm; Length ± 5mm; Width ±5mm