

FRITEX-316

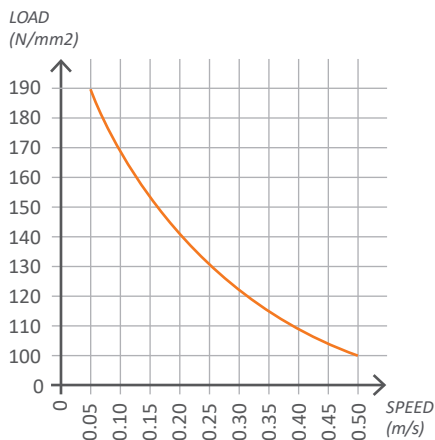
Aisi 316L + sintering + fabric + filled PTFE

Supporting shell: Aisi 316L

C	0.03%	Mn	1.80%
S	0.025%	Cr	16.70%
P	0.03%	Ni	10.00%
Si	0.50%	Mo	2.00%

The given values are nominal values from literature.

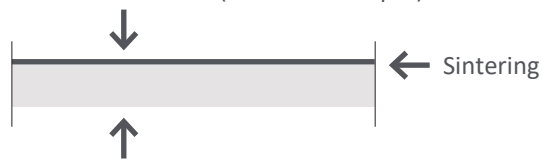
GRAPHIC LOAD / SPEED



Remarks: for more detailed technical information on load/speed tests, please contact our offices.

BEARING SECTION

Fabric + filled PTFE (thickness 400 µm)



Aisi 316L backing (thickness 0.50 - 3.00 mm)

SLIDING LAYERS

Special fabric with filled PTFE. Colour black-gray. Thickness 400 µm. Heavy load capacity and self-lubricating under dry operation.

SINTERING

Special adhesive between the fabric and the backing steel. Thickness 60 µm.

MECHANICAL PROPERTIES

WORKING TEMPERATURE	min -180°C - max +260 °C
COEFFICIENT OF FRICTION	0.03-0.10
MAX. SPEED	0.50 m/s
MAX. STATIC LOAD	300 N/mm ²
MAX. DYNAMIC LOAD (max. speed 0.05 m/s)	190 N/mm ²
MAX. DYNAMIC LOAD (max. speed 0.50 m/s)	100 N/mm ²

SHAFT

For an optimal performance the shaft surface finishing shall be between Ra 0.40 and 1.60 µm, depending on the different applications. Hardness 80 – 160 HB5.

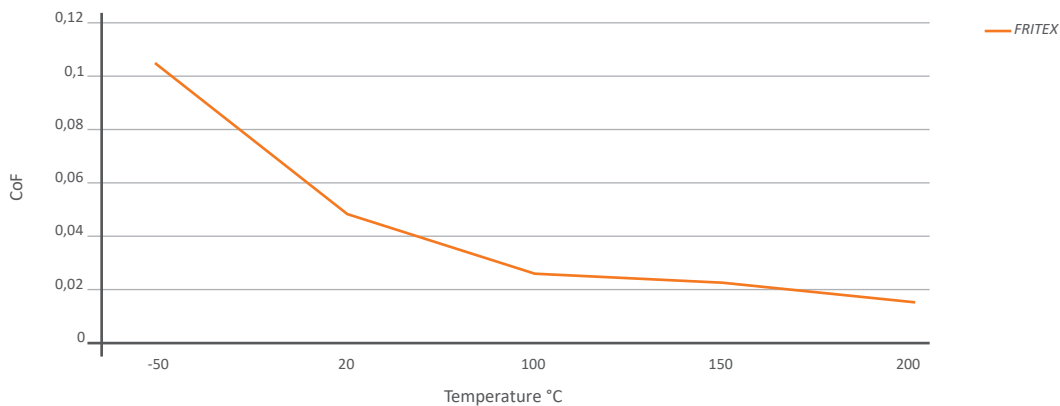
CHEMICAL RESISTANCE

HYDROCARBONS	Excellent
HYDROCHLORIC ACID (concentrate to 10%)	Excellent
SULFURIC ACID (concentrate to 10%)	Excellent
METHANE	Excellent
OXYGEN	Excellent
SODIUM HYDROXIDE	Excellent
LIQUID NITROGEN	Excellent
SOLVENTS	Good

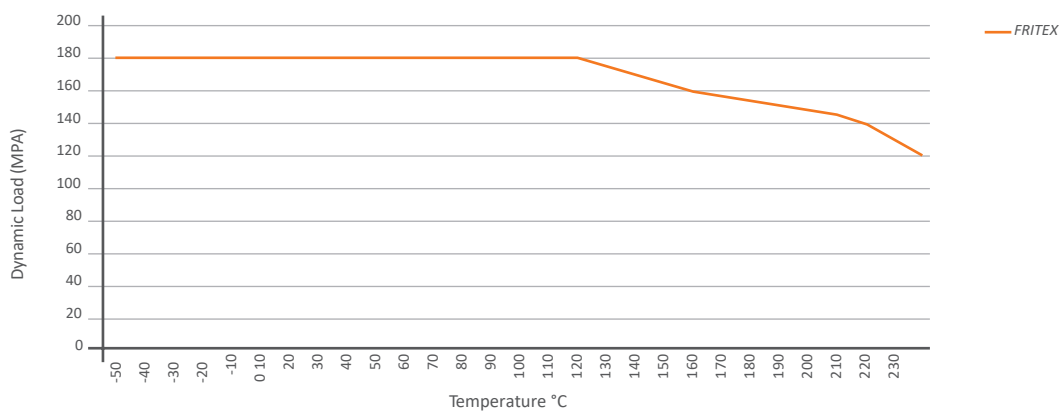
TEKNIKPRODUKTER AB Grännavägen
24, 561 34 Huskvarna

036-37 62 00, order@teknikprodukte
www.teknikprodukter.se

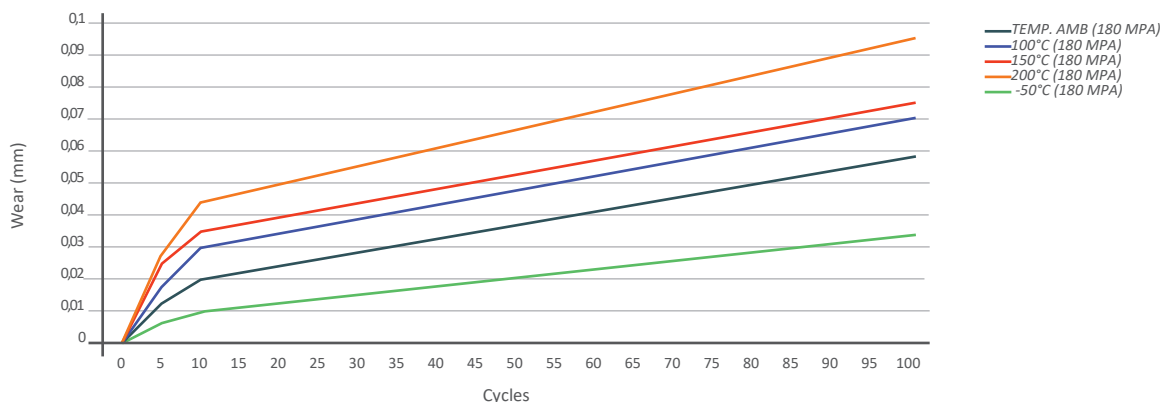
COEFFICIENT OF FRICTION - FRITEX



MAX. DYNAMIC LOAD - FRITEX



INTERNAL SURFACE WEAR - FRITEX



The tests were performed in laboratory with a Test Bench for the simulation of ball valves

- Types of tested bushes: FRITEX-316, MU-316 and HT-316
- Shaft roughness of the Test Bench: 0.5 - 0.8 Ra
- Shaft hardness of the Test Bench : 1100 Vickers
- Shaft rotation at 90° with load applied from 0° to 30° and backwars from 30° to 0°
- Rotation speed: 0.083 m/s
- Tests performed with temperatures between -50°C to +200°C