

型式 **ESF-**
Model



1 標準サイズの規格値
Specification for standard sizes

特性項目 Item		ESF-40x1.0	ESF-65x1.0	ESF-90x1.0	ESF-130x1.5	ESF-180x1.5	
収縮前内径 Inner diameter before heat-shrinkage		mm 4.0 (+1.0/-0.5)	6.5 (+1.0/-0.5)	9.0 (±1.0)	13.0 (±1.0)	18.0 (±1.5)	
熱収縮後 After heat-shrinkage	150℃/5min	内径 Inner diameter	mm 1.5 (±0.5)	2.5 (±0.5)	4.0 (±0.5)	5.5 (±0.5)	7.5 (±1.0)
		肉厚 Wall thickness	mm	1.0 (±0.1)		1.5 (±0.2)	
		耐電圧 Withstanding voltage	—	合格 (2.5kV/min.) Pass			
		絶縁破壊電圧 Dielectric breakdown voltage at room temperature	kV	≧10 (室温) Room temperature		≧15 (室温) Room temperature	
	燃焼試験 VW-1 Vertical-Wire flame test	—	合格 Pass				
200℃/48hr	加熱曲げ Heat-bending test	—	合格 Pass				

※2)ESF-は社内にて燃焼試験(VW-1)をクリアしておりますが、UL規格品ではありません。
"ESF-" has passed our internal test for VW-1, not standardized UL products.

2 シリコンゴムの特性
Property of silicone rubber compound

特性項目 Item	実測値 Measured value
内径収縮率(%)※1 Heat shrinkage percentage of inner diameter	60
硬さ(デュロメータ) Type A durometer hardness	78
引張強さ(MPa) Tensile strength	4.48
伸び率(%) Elongation percentage	290
体積抵抗率(Ω・m) Volume resistivity	6.9 x 10 ¹³
密度(g/cm ³) Density	1.27

※1)熱収縮率(%)
Heat-shrinkage percentage

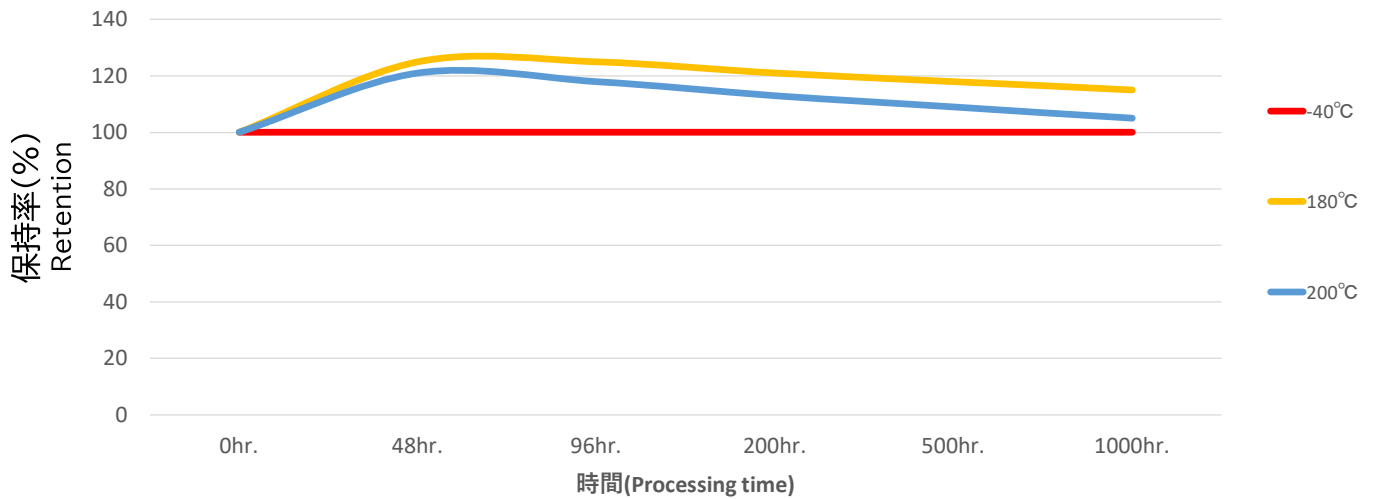
$$= \frac{\left(\begin{matrix} \text{収縮前内径} & \text{収縮後内径} \\ \text{Inner dia. before shrink} & \text{Inner dia. after shrink} \end{matrix} \right)}{\text{収縮前内径}} \times 100$$

Inner dia. before shrink

3 耐熱・耐寒性
Heat/Cold resistance

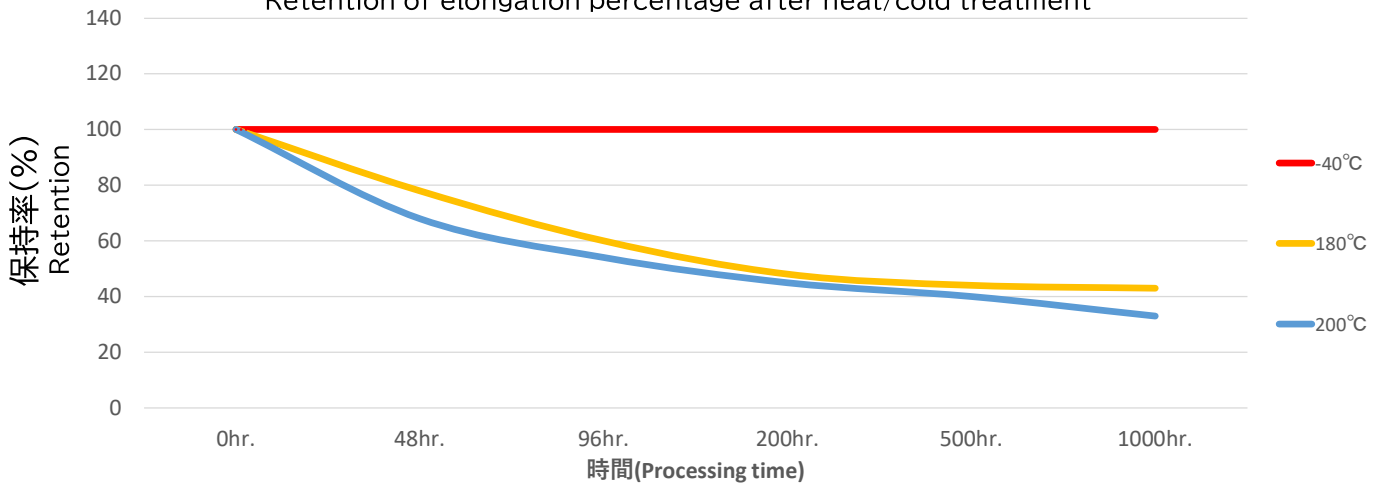
処理温度・時間による引張強さ保持率

Retention of tensile strength after heat/cold treatment



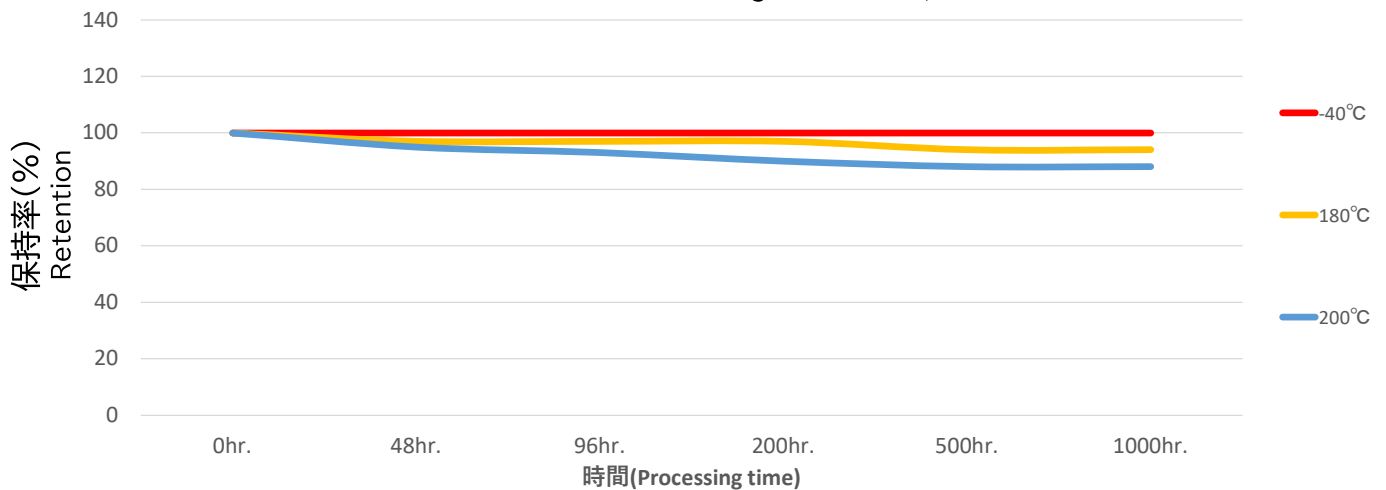
処理温度・時間による伸び保持率

Retention of elongation percentage after heat/cold treatment

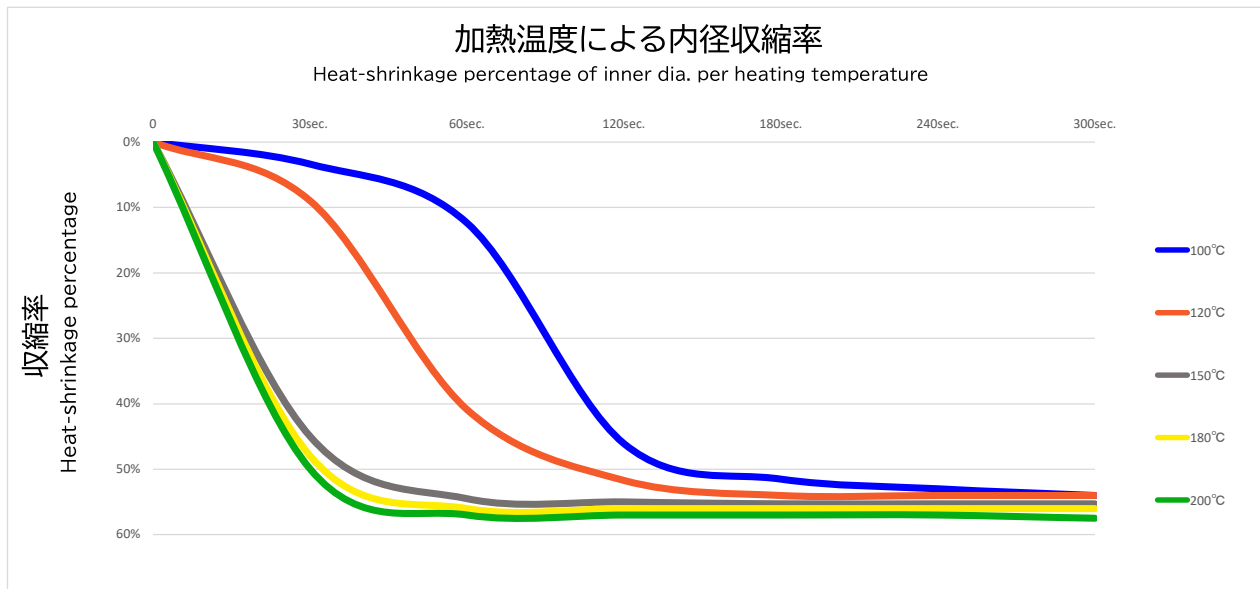


処理時間・温度による絶縁破壊電圧保持率

Retention of dielectric breakdown voltage after heat/cold treatment

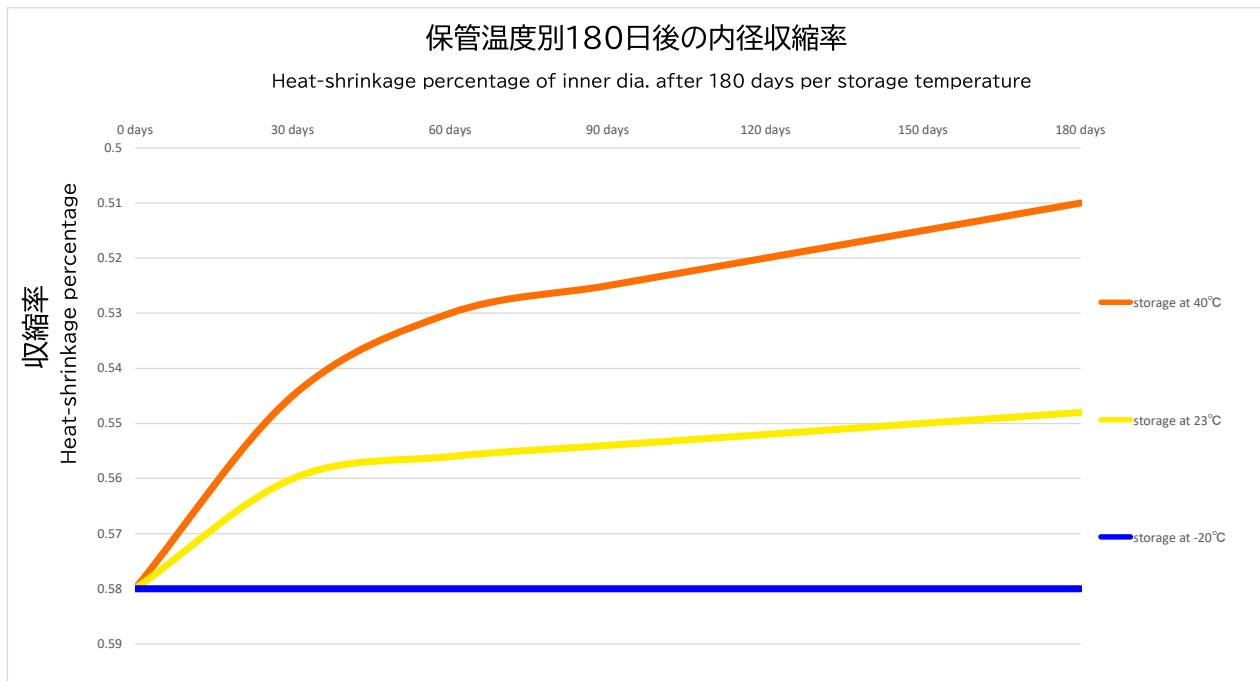


3 加熱温度による熱収縮率
Heat-shrinkage percentage per heating temperature.



測定サンプル：ESF-65x1.0(灰色)
Measurement sample : ESF-65x1.0(Gray)

4 180日保管後の熱収縮率
Heat-shrinkage percentage after 180 days per storage temperature



※収縮条件:150°C x 300秒 加熱
Heat-shrinkage condition : 150°C x 300 seconds.

測定サンプル：ESF-65x1.0(灰色)
Measurement sample : ESF-65x1.0(Gray)