

Statotherm HD 9593/HD

Features

Statotherm HD 9593/HD is a reinforced, multilayer graphite gasket sheet made from 0.5 mm thick layers of high quality impregnated graphite foil (purity $\geq 99.85\%$) combined without adhesive with 0.05 mm thick stainless steel foil layers (AISI 316 (L)). Statotherm HD 9593/HD is outstanding for use in applications where high surface pressures are combined with high operating pressure. This seal is particularly useful where there are increased requirements in terms of seal tightness and operational safety. Equates to the SGL Sigraflex Hochdruck.

Key physical characteristics (2.0 mm thick)

Bulk density of the graphite [g/cm ³]		1
Ash content of the graphite [%]	DIN 51 903	$\leq 0,15$
Purity [%]		$\geq 99,85$
Total chloride content [ppm]		≤ 10
Total halogen content [ppm]		≤ 40
Total sulfur content [ppm]		< 300
Total loss to the air at 670 °C: [%/h]		< 4
Oxidation inhibitor		ja
Passive corrosion inhibitor	ASTM F2168-13	ja
Metal insert		Stainless steel plain insert
ASTM material number		316 (L)
Thickness (mm)		01
Number		3
Compressive strength $\sigma_{dE/16}$ [MPa] (300 °C, 50 MPa, 16 h)	DIN 52 913	≥ 48
Cold compressibility ϵ_{KSW} [%]	DIN 28090-2	35
Cold recovery ϵ_{KRW} [%]	DIN 28090-2	5
Hot creep ϵ_{WSW} [%]	DIN 28090-2	< 3
Hot recovery ϵ_{WRW} [%]	DIN 28090-2	4
Compressibility [%]	ASTM F36	35
Resiliency [%]	ASTM F36	15

m- und y-Factors

Thickness	y (PSI)	y (Mpa)
1,00	2,5	3.000, 20.68
1,50	2,5	3.000, 20.68
2,00	2,5	3.000, 20.68
3,00	2,5	3.000, 20.68

Gasket Constants acc. DIN 28090-1, AD-Merkblatt B7, DIN V 2505

DIN 28090 Part 1 (9/95) (DIN E 2505 Part 2)							AD-Merkblatt B7 DIN V 2505				
P _i	Dicke H _D	σ_{VU}	σ_{VO}	m	σ_{bo}				b _D : h _D	k ₀ x K _D	k ₁
[bar]	[mm]	[N/mm ²]	[N/mm ²]		[N/mm ²]					[N/mm ²]	[mm]
					20°C	100°C	200°C	300°C			
10	1	10	200	1,3				180			
16	1	14	200	1,3				180			
25	1	17	200	1,3				180			
40	1	20	200	1,3				180			

All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications, however, means that they can serve only as guide values.

We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. This is subject to change.