

novatec[®] LD14/LD14hc *engineered graphite with Kevlar[®]*

Material profile:

- Highly adaptable soft material for cylinder head gaskets with open pores
- The main components are graphite and aramid fibres, bound with NBR (vulcanized)
- can be impregnated with all dilute bonding materials
- state-of-the-art material which combines the advantages of graphite and aramid

Typical applications:

- Steel-reinforced soft material for tanged metal/flat-sheet technology
- Automotive gasket with high demands to its adaptability
- Otto carburetor engines
- air-cooled motors

Supply data:

- | | | | |
|----------------|--|-------------------|------------------------------------|
| Rolls | • 1010 or 2020 mm | Thickness in mm: | • 0.5 bis 1.3 mm ± 7% |
| Outer diameter | • 700mm | Weight/unit area: | • 500 - 1300 g/m ² ± 4% |
| Coils | • from 150 to 2000mm wound on paper coils - inner diameter 100mm | | |
| | • Special sizes upon request | | |

General data raw material	Colour:	black		
	Surface:	without coating or branding		
	State of vulcanization:	vulcanized		
Physical properties raw material for sample thickness 0.8 mm	Property	Standard	Unity	Value *
	Density	DIN 28 090-2	[g/cm ³]	0.97
	Tensile strength	DIN 52 910		
	longitudinal		[N/mm ²]	3.6
	transverse		[N/mm ²]	3.0
	Compressibility	ASTM F 36 J / K	[%]	42 / 24
	Recovery	ASTM F 36 J / K	[%]	8 / 21
Loss on ignition 875°C/16h	DIN 52 911	[%]	74,5	
Physical properties after compression to application recommendation (without metal inlay and impregnation)	Density	DIN 28 090-2	[g/cm ³]	1.45
	Thickness	ASTM F102	[mm]	0.55
	Tensile strength	DIN 52 910		
	longitudinal		[N/mm ²]	6.0
	transverse		[N/mm ²]	5.0
	Compressibility	ASTM F 36 J	[%]	24
	Recovery	ASTM F 36 J	[%]	20
	Creep / Relaxation 150°C / 22h	ASTM F 38 B	[%]	22
	Compress. at ambient temperature			
	1 > 10 N/mm ²	Frenzelit - Test	[%]	12
	1 > 50 N/mm ²	Frenzelit - Test	[%]	28
	yield point	Frenzelit - Test	[N/mm ²]	> 250
	Compress. high temp. Break Point Test 50 N/mm ² / 120°C / 100 h	Frenzelit - Test	[%]	6
Leakage:	Under operating conditions no traces of oil or coolant detectable in the engine test.			
Media resistance:	The material selection and processing guarantee an excellent resist. to all media during application in the engine			
Compressed material on sheet iron	Properties can vary depending on the rolling technique applied			

* = Mode (typical value)

Issue: 12.08

Modifications: 2

Supersedes all prior versions

The technical data stated has been determined with standard material under laboratory conditions. With the variety of installation and operating conditions no guarantee claim can be inferred regarding the behaviour in a specific application.

We reserve the right to product changes which serve the purpose of technical progress.