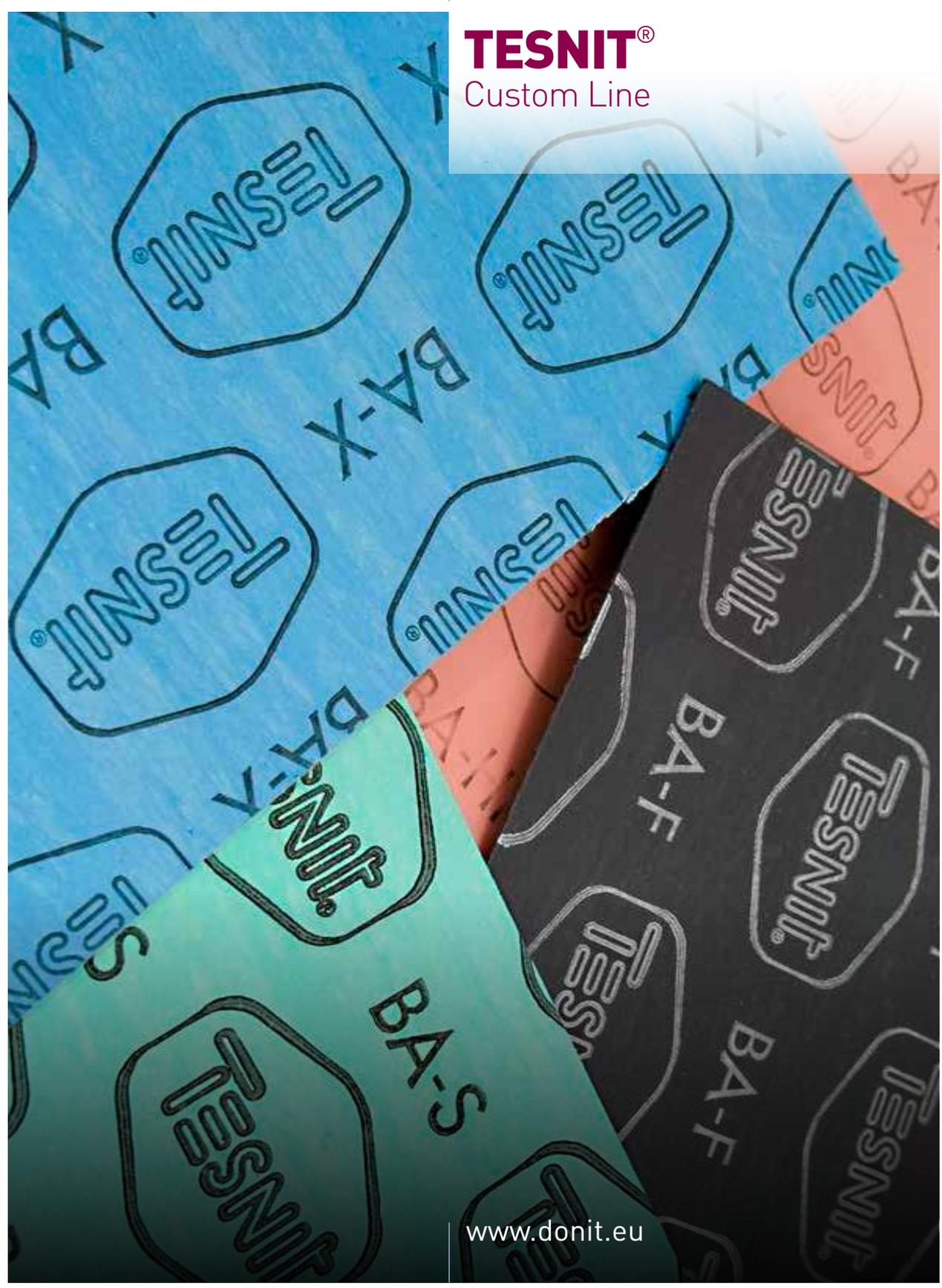




Gasket Sheets

TESNIT®
Custom Line



Granite Stone

ELECTROLUX

Your Original Manufacturer & Authorized Provider
of Parts & Services for all 1984-2012 Electrolux

DONIT | Gasket Sheets



About us:

Donit Tesnit® was founded in 1946 and is today one of the world's leading producers of sealing materials, gasket products and solutions serving all major markets. We provide integrated solutions for our customers' challenging environments and supply various custom made applications. With our own infrastructure we have gained extensive knowledge and experience in the sealing business. We produce technologically advanced products that are more environment-friendly. Our products are used globally in the chemical-, oil-, automotive-, food-, mechanical- and shipbuilding industry, in power plants and construction.

One of our biggest assets is the experience we have in building relationships and assuring quality. This generates trust which is embedded in the our brand. Through sustaining relationships with existing customers and expanding local presence, we align our business with that of our customers - a true partner for success.

Our Markets:

Our headquarters is in Medvode, Slovenia directly in the heart of Europe. From Slovenia we have direct access to a logistic infrastructure that enables us to provide fast and direct response to our customers. With more than 250 customers worldwide, our production is exported into more than 60 countries on all continents.

Our extensive worldwide network of distributors, agents and other clients enables us to provide real-time high quality tangible solutions around the globe, with special focus on Europe, USA and Asia. We

believe in supreme customer focus – listening keenly, then using our global presence and experience to provide solutions is what makes us the preferred partner in success stories all over the world.

Us as Partner:

We produce a wide range of high quality products. What makes us different is our genuine interest in what our customers really need. This makes us a true partner in transforming ideas into actions. Our high quality products enable our customers to lead an environmentally safe business and decrease the possibility of environmental cost. We act responsibly because we are in it for the long haul. The wide range of products and services make Donit a one-stop shop for our customers' diverse needs. This makes our customers' day-to-day business easier. We advise and consult with our customers in order give them the confidence to face change and keep their business sustainable and safe.

Our Personality:

THE CURIOUS GUY WITH EXPERIENCE.

We have the eagerness of an engineer - following the latest trends in the industry, asking questions and listening to our customer. When it is time to execute, the wisdom of a seasoned professional takes over. We demonstrate our deep knowledge about the industry in a way that is innovative and to-the-point. We engage with our customers and know that keeping promises matters more than big words.

Donit – A perfect fit.





PROPERTIES AND APPLICATIONS

Gasket material with very good thermal properties and chemical resistance to steam, oil, gases, fuels, alkaline media and weak acid.

Composition	Synthetic fibers, Graphite, NBR
Approvals	BAM (Oxygen)

SURFACE TREATMENT

Treatment with graphite, PTFE or antistick coating is available on request.

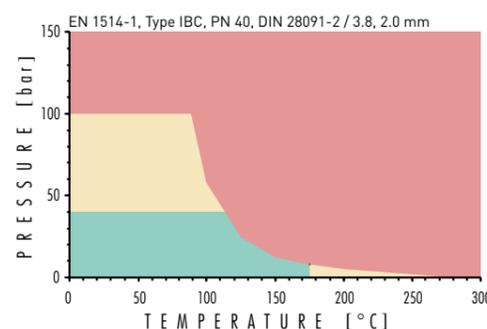
DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 0.5 | 0.8 | 1.0 | 1.5 | 2.0 | 3.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 2 mm

Compressibility	ASTM F 36J	%	7
Recovery	ASTM F 36J	%	50
Tensile strength	DIN 52910	MPa	9
Stress resistance	DIN 52913		
16h, 300°C, 50MPa		MPa	25
16h, 175°C, 50MPa		MPa	35
Specific leak rate	DIN 3535-6	mg/(s•m)	0.08
Thickness increase	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	5
ASTM Fuel B, 5h, 23°C		%	8
Max. operating conditions			
Peak temperature		°C/°F	350/662
Continuous temperature		°C/°F	280/536
- with steam		°C/°F	250/482
Pressure		bar/psi	100/1450

P-T DIAGRAM



- General suitability using common installation practices under the condition of chemical compatibility.
- Max. performance is ensured through appropriate measures for joint design and gasket installation. Consultation is recommended.
- Limited application area. Technical consultation is mandatory.

The Pressure - Temperature charts are the most current method of determining the suitability of a gasket material in a known application. Maximum figures for temperature and pressure can be misleading. Max. temperature and max. pressure represent maximum values and should not be used simultaneously. They are given only for guidance, since these max. values depend not only on the type of gasket material but also on the assembly conditions. Use the pressure and temperature graphs to check suitability of chosen gasket material for your application (combination of pressure and temperature).



PROPERTIES AND APPLICATIONS

Gasket material with good chemical and mechanical properties, resistance to oil, fuels and cooling liquids. It is used in automotive industry.

Composition	Aramid fibers, NBR
Approvals	Croatian Register of Shipping

SURFACE TREATMENT

Treatment with graphite, PTFE or antistick coating is available on request.

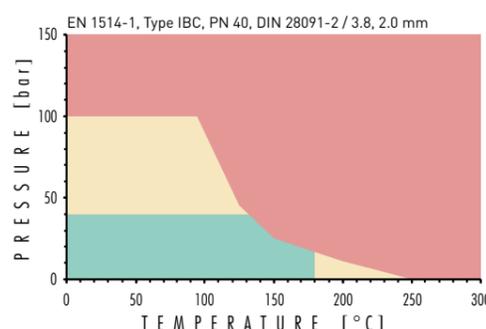
DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 0.5 | 0.8 | 1.0 | 2.0 | 3.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 2 mm

Compressibility	ASTM F 36J	%	8
Recovery	ASTM F 36J	%	50
Tensile strength	DIN 52910	MPa	11
Stress resistance	DIN 52913		
16h, 300°C, 50MPa		MPa	20
16h, 175°C, 50MPa		MPa	28
Specific leak rate	DIN 3535-6	mg/(s•m)	0.05
Thickness increase	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	5
ASTM Fuel B, 5h, 23°C		%	5
Max. operating conditions			
Peak temperature		°C/°F	330/626
Continuous temperature		°C/°F	250/482
- with steam		°C/°F	200/392
Pressure		bar/psi	100/1450

P-T DIAGRAM



- General suitability using common installation practices under the condition of chemical compatibility.
- Max. performance is ensured through appropriate measures for joint design and gasket installation. Consultation is recommended.
- Limited application area. Technical consultation is mandatory.

The Pressure - Temperature charts are the most current method of determining the suitability of a gasket material in a known application. Maximum figures for temperature and pressure can be misleading. Max. temperature and max. pressure represent maximum values and should not be used simultaneously. They are given only for guidance, since these max. values depend not only on the type of gasket material but also on the assembly conditions. Use the pressure and temperature graphs to check suitability of chosen gasket material for your application (combination of pressure and temperature).



PROPERTIES AND APPLICATIONS

Gasket material with controlled swell properties and light-to-medium loadings. Very suitable material for coarse flanges and with good resistance to water, steam, air, gases and non-aggressive media.

Composition	Aramid fibers, SBR/NBR/NR
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SURFACE TREATMENT

Treatment with graphite, PTFE or antistick coating is available on request.

DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 0.5 | 0.8 | 1.5 | 2.0 | 3.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 2 mm

Compressibility	ASTM F 36J	%	18
Recovery	ASTM F 36J	%	55
Tensile strength	DIN 52910	MPa	5
Stress resistance	DIN 52913		
16h, 300°C, 50MPa		MPa	
16h, 175°C, 50MPa		MPa	15
Specific leak rate	DIN 3535-6	mg/(s•m)	0.01
Thickness increase	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	35
ASTM Fuel B, 5h, 23°C		%	35
Max. operating conditions			
Peak temperature		°C/°F	220/428
Continuous temperature		°C/°F	200/392
- with steam		°C/°F	170/338
Pressure		bar/psi	40/580



PROPERTIES AND APPLICATIONS

High performance sealing material with superior mechanical properties, excellent torque retention, good thermal and chemical resistance. Suitable for use with water, oil, fuels, gases, alkaline media, weak acids and other chemicals. Very appropriate sealing material for demanding applications in different industries for sealing of valves, pipelines, pumps, hot water boilers, etc.

Composition	Gasket material reinforced with high quality fibers bonded with NBR rubber.
Approvals	WRAS/WQc

SURFACE TREATMENT

Treatment with graphite, PTFE or antistick coating is available on request.

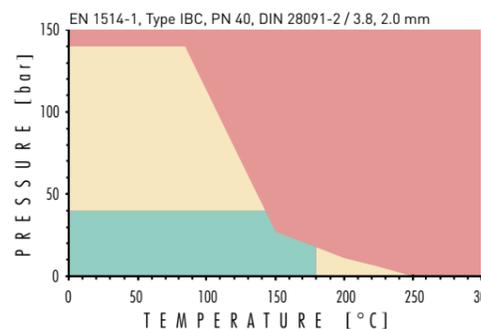
DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 0.5 | 0.8 | 1.5 | 2.0 | 3.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 2 mm

Compressibility	ASTM F 36J	%	8
Recovery	ASTM F 36J	%	50
Tensile strength	DIN 52910	MPa	15
Stress resistance	DIN 52913		
16h, 300°C, 50MPa		MPa	25
16h, 175°C, 50MPa		MPa	33
Specific leak rate	DIN 3535-6	mg/(s•m)	0.08
Thickness increase	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	5
ASTM Fuel B, 5h, 23°C		%	5
Max. operating conditions			
Peak temperature		°C/°F	400/752
Continuous temperature		°C/°F	280/536
- with steam		°C/°F	200/392
Pressure		bar/psi	140/2030

P-T DIAGRAM



- General suitability using common installation practices under the condition of chemical compatibility.
- Max. performance is ensured through appropriate measures for joint design and gasket installation. Consultation is recommended.
- Limited application area. Technical consultation is mandatory.

The Pressure - Temperature charts are the most current method of determining the suitability of a gasket material in a known application. Maximum figures for temperature and pressure can be misleading. Max. temperature and max. pressure represent maximum values and should not be used simultaneously. They are given only for guidance, since these max. values depend not only on the type of gasket material but also on the assembly conditions. Use the pressure and temperature graphs to check suitability of chosen gasket material for your application (combination of pressure and temperature).

PROPERTIES AND APPLICATIONS

Universal gasket material designed for use in steam applications, hot water radiators and boilers. For general use at high pressure, temperature and surface stress. Suitable for sealing hot water, steam, oils, fuels, non-aggressive chemicals and many other media. Standard version of BA-5D has specially designed non-stick top and bottom layers.

Composition

Biosoluble mineral and aramid fibers, NBR

SURFACE TREATMENT

Treatment with graphite, PTFE or antistick coating is available on request.

DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500 | 2000 x 2000
Thickness (mm): 0.5 | 1.0 | 1.5 | 2.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 1 mm.

Density	DIN 28090-2	g/cm ³	1.8 - 2.0
Compressibility	ASTM F 36J	%	5 - 8
Recovery	ASTM F 36J	%	>50
Tensile strength	DIN 52910	MPa	7
Stress resistance	DIN 52913		
16h, 300°C, 50MPa		MPa	33
Specific leak rate	DIN 3535-6	mg/(s•m)	0.05
Thickness increase	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	≤8
Compression modulus	DIN 28090-2		
At room temperature: ϵ_{krw}		%	5 - 7
At elevated temperature: $\epsilon_{krw}/200^\circ\text{C}$		%	7 - 11
Creep deformation percentage	DIN 28090-2		
At room temperature: ϵ_{krw}		%	>3.5
At elevated temperature: $\epsilon_{krw}/200^\circ\text{C}$		%	≈1.4
Max. operating conditions			
Peak temperature		°C/°F	350/662
Continuous temperature		°C/°F	250/482
- with steam		°C/°F	200/392
Pressure		bar/psi	100/1450

PROPERTIES AND APPLICATIONS

Gasket material for medium loadings, good swelling properties in oils, good steam resistance.

Composition

Aramid fibers, EPDM

SURFACE TREATMENT

Treatment with graphite, PTFE or antistick coating is available on request.

DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 0.8 | 1.0 | 1.6 | 2.0 | 3.2
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 1.6 mm.

Compressibility	ASTM F 36J	%	6 - 15
Recovery	ASTM F 36J	%	40
Tensile strength	DIN 52910	MPa	>8
Stress resistance	DIN 52913		
16h, 175°C, 50MPa		MPa	>20
Thickness increase	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	40
ASTM Fuel B, 5h, 23°C		%	20
Sealability	DIN 3535-6	mg/(s•m)	< 0.1
Max. operating conditions			
Peak temperature		°C/°F	200/392
Continuous temperature		°C/°F	170/338
- with steam		°C/°F	170/338
Pressure		bar/psi	60/870

PROPERTIES AND APPLICATIONS

Excellent torque retention properties, good chemical properties and sealability. Recommended for all applications where thermal cycling, saturated or overheated steam are used i.e. heat exchangers, boilers, radiators, steam supply, power generation, etc. For sealing oils, fuels, gases, refrigerants, solvents, non-aggressive chemicals, hot water and other media in many different flanged joints.

Composition	Biosoluble mineral fibers, NBR, wire mesh reinforcement
DIN 28091-2	FA-M1-St

SURFACE TREATMENT

Treatment with graphite, PTFE or antistick coating is available on request.

DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 0.5 | 1.0 | 1.5 | 2.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 1.5 mm.

Density	DIN 28090-2	g/cm ³	1.8 - 2.1
Compressibility	ASTM F 36J	%	10
Recovery	ASTM F 36J	%	>55
Tensile strength	DIN 52910	MPa	≈18
Thickness increase	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	≤ 5
Max. operating conditions			
Peak temperature		°C/F	440/824
Continuous temperature		°C/F	350/662
- with steam		°C/F	300/572
Pressure		bar/psi	130/1885

All information data are based on years of experience in production and operation of sealing elements. However, in view of the wide variety of possible installation and operating conditions one cannot draw final conclusions in all application cases regarding the behavior in gasket joint. The data may not, therefore, be used to support any warranty claims.



PROPERTIES AND APPLICATIONS

Top quality universal gasket material - specially reinforced - for use at very high pressures, high temperatures and surface stresses. Especially convenient for use at temperature and pressure fluctuations and mechanical vibrations. Due to special metal reinforcement it also assures high protection against blow-out. Material combines high torque retention, good chemical resistance, excellent sealability and outstanding thermo-mechanical properties. Suitable for sealing of hot water, steam, oils, fuels, non-aggressive chemicals and many other media.

Composition	Aramid fibers, NBR, expanded metal reinforcement
DIN 28091-2	FA-A1-St
Approvals	TA-luft (VDI 2440)

SURFACE TREATMENT

The standard version has non-stick top and bottom layers. Graphite or PTFE coating available on request.

DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 1.0 | 1.5 | 2.0 | 3.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 1.5 mm

Density	DIN 28090-2	g/cm ³	2.0 - 2.2
Compressibility	ASTM F 36J	%	5 - 8
Recovery	ASTM F 36J	%	>50
Tensile strength	DIN 52910	MPa	≈30
Stress resistance	DIN 52913		
50MPa, T=175°C		MPa	≈40
50MPa, T=300°C		MPa	≈35
Specific leak rate	DIN 3535-6	mg/(s•m)	<0.1
Specific leak rate	VDI 2440	mbar.l/(s•m)	≈3.9•10 ⁻⁸
Thickness increase after immersion in	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	≈3
ASTM Fuel B, 5h, 23°C		%	≈5
Compression modulus	DIN 28090-2		
At room temperature ϵ_{ksw}		%	6 - 8
At elevated temperature $\epsilon_{wsw}/200^\circ\text{C}$		%	7 - 9
Creep deformation percentage	DIN 28090-2		
At room temperature ϵ_{krw}		%	>3
At elevated temperature $\epsilon_{wrw}/200^\circ\text{C}$		%	≈0.5
Creep deformation 50MPa/300°C			
Change in thickness at 20°C		%	7 - 9
Change in thickness at 300°C		%	6 - 8

PROPERTIES AND APPLICATIONS

Gasket material for medium loadings. Good resistance to water, gases, oils, fuels.

Composition **Aramid fibers, NBR, wire mesh reinforcement**

SURFACE TREATMENT

Treatment with graphite, PTFE or antistick coating is available on request.

DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 0.5 | 1.0 | 1.5 | 2.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 1.5 mm.

Density	DIN 28090-2	g/cm ³	2.2
Ignition loss	DIN 52911	%	
Compressibility	ASTM F 36J	%	8
Recovery	ASTM F 36J	%	50
Tensile strength	DIN 52910	MPa	13
Stress resistance	DIN 52913		
16h, 175°C, 50MPa		MPa	25
Specific leak rate	DIN 3535-6	mg/(s•m)	<1
Thickness increase	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	10
Mass increase			
Oil IRM 903, 5h, 150°C		%	10
Max. operating conditions			
Peak temperature		°C/°F	250/482
Continuous temperature		°C/°F	200/392
- with steam		°C/°F	160/320
Pressure		bar/psi	70/1015



PROPERTIES AND APPLICATIONS

Top quality gasket material – specially reinforced - for use at high demanding applications. Material combines high blow-out resistance with very high pressures, high temperatures and surface stress resistance. Especially convenient for use at temperature and pressure fluctuations and mechanical vibrations. Material combines high torque retention, good chemical resistance, excellent sealability and outstanding thermo-mechanical properties. Suitable for sealing of hot water, steam, oils, fuels, non-aggressive chemicals and many other media.

Composition **Glass fibers, NBR, expanded metal reinforcement**

SURFACE TREATMENT

The standard version has non-stick top and bottom layers. Graphite or PTFE coating on request.

DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 1.0 | 1.5 | 2.0 | 3.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 1.5 mm

Density	DIN 28090-2	g/cm ³	2.0 - 2.3
Compressibility	ASTM F 36J	%	5 - 8
Recovery	ASTM F 36J	%	>50
Tensile strength	DIN 52910	MPa	≈35
Stress resistance	DIN 52913		
50MPa, T=175°C		MPa	≈43
50MPa, T=300°C		MPa	≈38
Specific leak rate	DIN 3535-6	mg/(s•m)	<0.05
Thickness increase after immersion in	ASTM F 146		
Oil IRM 903, 5h, 150°C			≈5
ASTM Fuel B, 5h, 23°C			≈8
Compression modulus	DIN 28090-2		
At room temperature: ϵ_{ksw}		%	5 - 6
At elevated temperature: $\epsilon_{WSW}/200^\circ\text{C}$		%	4 - 6
Creep deformation percentage	DIN 28090-2		
At room temperature: ϵ_{ksw}		%	>2.5
At elevated temperature: $\epsilon_{WSW}/200^\circ\text{C}$		%	≈0.5
Creep deformation 50MPa/300°C			
Change in thickness at 20°C		%	6 - 8
Change in thickness at 300°C		%	5 - 7



PROPERTIES AND APPLICATIONS

Top quality gasket material – specially reinforced - for use at very high pressures, high temperatures and surface stresses. Especially convenient for use at steam applications. Due to special metal reinforcement it also assures high protection against blow-out.

Material combines high torque retention, good chemical resistance and outstanding thermo-mechanical properties. Suitable for sealing of hot water, steam, oils, fuels, non-aggressive chemicals and many other media.

Composition	Aramid fibers, graphite, NBR, expanded metal reinforcement
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SURFACE TREATMENT

The standard version has non-stick top and bottom layers. Graphite or PTFE coating on request.

DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500
Thickness (mm): 1.0 | 1.5 | 2.0 | 3.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 1.5 mm

Density	DIN 28090-2	g/cm ³	2.0 - 2.2
Compressibility	ASTM F 36J	%	7 - 9
Recovery	ASTM F 36J	%	>55
Tensile strength	DIN 52910	MPa	≈25
Stress resistance	DIN 52913		
50MPa, T=175°C		MPa	≈39
50MPa, T=300°C		MPa	≈36
Specific leak rate	DIN 3535-6	mg/(s•m)	<0.5
Thickness increase after immersion in	ASTM F 146		
Oil IRM 903, 5h, 150°C		%	≈5
ASTM Fuel B, 5h, 23°C		%	≈7
Compression modulus	DIN 28090-2		
At room temperature: ϵ_{ksw}		%	8 - 10
At elevated temperature: $\epsilon_{wsw}/200^\circ\text{C}$		%	7 - 9
Creep deformation percentage	DIN 28090-2		
At room temperature: ϵ_{ksw}		%	>4
At elevated temperature: $\epsilon_{wsw}/200^\circ\text{C}$		%	≈1
Creep deformation - 50MPa/ 300°C			
Change in thickness at 20°C		%	8 - 10
Change in thickness at 300°C		%	13 - 15

All information data are based on years of experience in production and operation of sealing elements. However, in view of the wide variety of possible installation and operating conditions one cannot draw final conclusions in all application cases regarding the behaviour in gasket joint. The data may not, therefore, be used to support any warranty claims. This edition cancels all previous issues. Subject to change without notice.

PROPERTIES AND APPLICATIONS

High quality universal gasket material specially designed for use in gas supply – gas valves, gas appliances, gas mains. Also for general use at high pressure, temperature and surface stress. Combines good torque retention and chemical resistance with excellent sealability and mechanical properties.

Composition	Aramid fibers, NBR
DIN 28091-2	FA-A1-0

SURFACE TREATMENT

The standard version has non-stick top and bottom layers. Graphite or PTFE antistick available on request.

DIMENSIONS OF STANDARD SHEET

Sheet size (mm): 1000 x 1500 | 1500 x 1500 | 2000 x 2000
Thickness (mm): 0.5 | 1.0 | 1.5 | 2.0
Other dimensions and thicknesses on request.

TECHNICAL DATA Typical values for a thickness of 2 mm

Density	DIN 28090-2	g/cm ³	1.6 - 1.8
Compressibility	ASTM F 36J	%	6 - 12
Recovery	ASTM F 36J	%	>45
Tensile strength	DIN 52910	MPa	>10
Specific leak rate	DIN 3535-6	mg/(s•m)	0.05
Thickness increase	ASTM F146		
Oil IRM 903, 5h, 150°C		%	≤15
Fuel ASTM B, 5h, 20°C		%	≤15
Change in weight	ASTM F146		
Oil IRM 903, 5h, 150°C		%	≤15
Fuel ASTM B, 5h, 20°C		%	≤15
Ignition loss	DIN 52911	%	≤35
Hardness	ASTM D 2240	Sh D	62 - 69
(S) JET - 1 - 00			
CETIM/EDF procedure 1.1	(S) JET - 1 - 00	N cm ³ /h	<5
CETIM/EDF procedure 4.1	(S) JET - 1 - 00	%	<12
CETIM/EDF procedure 4.2	(S) JET - 1 - 00	%	<20

All information data are based on years of experience in production and operation of sealing elements. However, in view of the wide variety of possible installation and operating conditions one cannot draw final conclusions in all application cases regarding the behaviour in gasket joint. The data may not, therefore, be used to support any warranty claims. This edition cancels all previous issues. Subject to change without notice.

ELECTROLUX

Your Original Manufacturer & Authorized Provider
of Parts & Services for all 1984-2012 Electrolux

Granite Stone