MACER INDUSTRIES

TECHNICAL DATA SHEET

MACER UNIVERSAL METALLIC AF

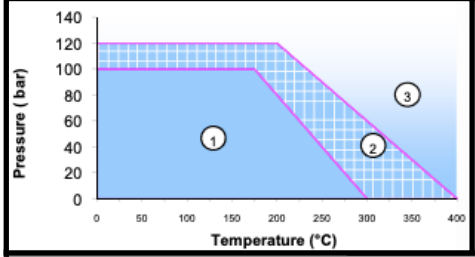
Material profile	Application
The main components are aramid & organic fibres with NBR Binder and steel reinforced.	Excellent thermal, chemical & mechanical properties internal combustion engines and alkalies for medium stress conditions

Dimensions of the standard sheets : ± 10%	Thickness Tolerance :
1500 x 1500, 1500 x 2000,1500 x 4000 mm Standard Thickness : 0.40 mm to 5.00 mm	≤ 1.00 mm ± 0.10 mm , > 1.00 mm ± 10 % mm combustion engines.

Surface finish : Grey Colour (other Colour on Customer requirement)

Specification Compliance : ASTM F 104 Line Call Out : F 712911E12 A9 B4 M6

Max. peak temperature : 400°C	Max. Operating pressure : 120 bar



Areas of application

1.Suitable for the application, subject to chemical compatibility.

2.Only for short term temp. excursions

3.Do not install the gasket without technical assistance

Physical Properties (Properties applicable for 2.0mm thickness)

Properties	Test Method	Unit	Specified Value
1. Density	ASTM F 1315	g/cm3	1.6 - 1.9
2. Compressibility	ASTM F 36 J	%	5 - 15
3. Recovery	ASTM F 36 J	%	≥ 50
4. Tensile Strength	ASTM F 152	N/mm2	≥ 10.50
5. Stress Relaxation (16h, 175°C)	DIN 52913		≥ 35
6. Gas Sealability	ASTM F 37B	ml/hour	≤ 1.0
7. ASTM Oil no. 3 (5h, 150°C)	ASTM F 146		
Thickness increase		%	≤ 10
Weight increase		%	≤ 10
ASTM Fuel B (5h, 23°C)	ASTM F 146		
Thickness increase		%	≤ 10
Weight increase		%	≤ 10
Water (5h, 100°C)	ASTM F 146		
Thickness increase		%	≤ 10
Weight increase		%	≤ 10

All information & recommendations given in this brochure are correct to the best of our knowledge. However, in view of the wide variety of possible installation & operating conditions one cannot draw the final conclusion in all application cases regarding the behaviour in a gasket joint. Therefore, information can only serve as a guideline.