

VICTOR REINZ® VR® 40**Technical Data Sheet US/338**

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Material	VR® 40 is an asbestos-free gasket material. It is composed of aramide fibres and other asbestos substitutes which are resistant to high temperatures. These substitutes are processed with high-grade elastomers under elevated pressure and temperature.
Properties	VR® 40 is the most economical gasket material in the VR range. The material which is resistant to oils and solvents is characterized by its very high compressibility and flexibility as well as outstanding gas sealability. VR® 40 ensures very effective sealing even under low surface pressure.
Application	<ul style="list-style-type: none">• for sealing joints which are exposed to low mechanical and thermal stress• for sealing lightweight components with comparatively low surface pressure, e.g. for valve covers, oil pans and covers in internal combustion engines• for transmissions, pumps, apparatus and pipelines in the fitting and sanitary fields.• for sealing off motor, transmission, hydraulic and refrigerating oils, fuels and solvents• against water as well as mixtures of water and antifreeze and corrosion inhibitors
Surfaces	The standard version of VR® 40 has a non-stick top and bottom layer with a high coefficient of friction. This facilitates dismantling. Additional surface treatment is unnecessary in most cases.

Technical Data
Nominal thickness
0.08" (2.00 mm)
unless otherwise
specified

Density	94 - 106 lb/ft ³ (1.50 - 1.70 g/cm ³)
Ignition loss DIN 52 911	< 45 %
Tensile strength transverse ASTM F 152	> 1015 psi (> 7 N/mm ²)
Creep Relaxation ASTM F 38 B (1/32")	22 %
Residual stress DIN 52 913 16 h, 350 °F (175 °C)	≈ 2900 psi (≈ 20 N/mm ²)
VR-Hot compression test (@7250psi)	
Thickness decrease 68 °F (20 °C)	15 %
Thickness decrease additional, 26 % (390 °F / 200 °C) at maximum continuous application temperature	
Compressibility and recovery ASTM F 36, procedure J	
compressibility	15 - 25 %
recovery	> 60 %
Sealability against nitrogen	
ASTM F 37 B (1/32")	0.05 ml/h
DIN 3535, part 6 FA	< 0.01 mg/(s*m)
Swelling ASTM F 146	
in IRM 903 Oil (replaces ASTM Oil No. 3) 5 h, 300 °F (150 °C)	
increase in thickness	0 - 10 %
increase in weight	20 % maximum
in ASTM Fuel B 5 h, ambient temperature	
increase in thickness	0 - 15 %
increase in weight	15 % maximum
in water / antifreeze (50:50) 5 h, 100 °C (210 °F)	
increase in thickness	0 - 5 %
increase in weight	15 % maximum
Temporary peak temperature	570 °F (300 °C)
Maximum continuous temperature	390 °F (200 °C)
Maximum operating pressure	725 psi (50 bar)
ASTM F 104 "line call-out"	F714130A9B4E23M4



Maximum continuous temperature and maximum pressure must not occur simultaneously, please refer to the table entitled "[Max. operating pressures at various temperatures and with various media](#)".



Sealing parameters see table: "[Sealing parameters](#)"

The data quoted above are valid for the material "as delivered" without any additional treatment. In view of the multiplicity of possible installation and operating conditions, definitive conclusions cannot be drawn for all applications regarding the behavior in a sealing joint. For this reason, we do not give any warranty for technical data. They do not represent warranted properties. If you have any doubt, please contact us and specify exact operating conditions.

Form of delivery	Sheets	60 x 60 inch, 60 x 120 inch, 60 x 180 inch				
	Nominal thicknesses and tolerances					
acc. to ASTM F 104 (inch)						
Limits of size within a delivery						
1/64	1/32	3/64	1/16	3/32	1/8	
+ 0.005	± 0.005	± 0.005	± 0.008	± 0.008	± 0.008	
- 0.002						

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