

VICTOR REINZ® VR 60
Technical Data Sheet US/339
Edition 12/2016, supersedes all prior editions.

Material	VR 60 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	The gasket material is physiologically safe and does not contain any color pigments. On the one hand, this economical gasket material is conformable and flexible, which ensures adequate sealing even with low surface pressure. On the other hand, it provides adequately high stress resistance coupled with good gas sealability. In addition, VR 60 is resistant to solvents, oils, fuels, water and many other media.
Application	For sealing joints which are subject to moderate thermal and mechanical stress: for fittings in HVAC installations, gas units and heaters; for lightweight components and flanges; for apparatus, transmissions, pumps; for sealing lightweight components with comparatively low surface pressure, e.g. transmissions, valve covers, oil pans and covers in internal combustion engines. As VR 60 is physiologically safe, it may be used particularly in contact with drinking water and food.
Surfaces	The standard version of VR 60 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.
Approvals	Elastomer guideline (formerly KTW) For drinking water applications according to elastomer guideline DVGW Technical Standard W270 Microbiological suitability Germanischer Lloyd (DNV GL) Approval for shipbuilding

Technical Data Nominal thickness 0.08" (2.00 mm) unless otherwise specified	Density	112 - 125 lb/ft ³ (1.8 - 2.0 g/cm ³)
	Ignition loss DIN 52 911	≤ 27 %
	Tensile strength ASTM F 152 transverse	> 1015 psi (> 7 N/mm ²)
	Creep Relaxation ASTM F 38 B (1/32")	21 %
	Residual stress DIN 52 913 16 h, 350 °F (175 °C)	≈ 3626 psi (≈ 25 N/mm ²)
	VR-Hot compression test (@7250psi)	

Thickness decrease 68°F (20°C)	12 %
Thickness decrease additional, at maximum continuous application temperature	22 % (430 °F / 220 °C)

Compressibility and recovery

ASTM F 36, procedure J	
compressibility	9 - 18 %
recovery	≥ 55 %

Sealability against nitrogen

ASTM F 37 B (1/32")	0.11 ml/h
DIN 3535, part 6 FA	≈ 0.5 cm ³ /min

Swelling ASTM F 146

in IRM 903 Oil (replaces ASTM Oil No. 3)

5 h, 300 °F (150 °C)	
increase in thickness	10 - 25 %
increase in weight	20 % maximum

in ASTM Fuel B

5 h, ambient temperature	
increase in thickness	10 - 25 %
increase in weight	20 % maximum

Temporary **peak** temperature 570 °F (300 °C)

Maximum **continuous** temperature 428 °F (220 °C)

Maximum **operating** pressure 870 psi (60 bar)

ASTM F 104 "line call-out" F712330AB4E35M4



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					

More exact tolerances by arrangement.