VMQ 60.501-01

Angst+Pfister

Sealing Technology
Technical Data Sheet

General compound description	
Material name, short description	VMQ
Material name, based on technical standards	Vinyl methyl silicone elastomer
Compound Code	VMQ 60.501-01
Material description / intended use	Silicone elastomer with good mechanical properties over a wide temperature range.
Color	black

Mechanical properties	
Density	1.16 g/cm³ ± 0.02 ASTM D 297
Hardness	60 Shore A ± 5 ASTM D 2240
Tensile strength	8 MPa ASTM D 412
Elongation at rupture	410 % ASTM D 412
Modulus 100 %	2.8 MPa ASTM D 412
Compression set	27 % ASTM D 395-B2 168 h, 175 °C, 25% deformation
	13 % ASTM D 395-B2 22 h, 175 °C, 25% deformation
Tear resistance	18 N/mm DIN 53507

Thermal properties	
Min. operating temperature	-50 °C
Max. operating temperature	+200 °C
TR 10 value	-45 °C ASTM D 1329
Glass transition temperature	-60 °C ASTM D 746

Chemical state change	
Air aging	
Value change 1	Hardness: +2 Points Tensile strength: +8 % Elongation at rapture: -15 % Test norm: ASTM D 573 Test parameter: 70 h, 225 °C
Storage in medium	
Value change 1	Medium: IRM 903 Oil (ASTM 3) Hardness: -17 Points Volume: +40 % Test norm: ASTM D 471 Test parameter: 168 h, 150 °C
Value change 2	Medium: IRM 902 Oil (ASTM 2) Hardness: -10 Points Weight: +8 % Test norm: ASTM D 471 Test parameter: 168 h, 150 °C