

Company Address	<i>Flexitallic, www.flexitallic.com Tele:+44 1274 851273 Email: sales@flexitallic.com</i>
Gasket Type	<i>Sigma 533 - PTFE with barium sulphate filler</i>
Thickness e_{G0} [mm]	<i>1.6mm</i>

Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 40$ bar									
L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]							
		$Q_A = 20$ [MPa]	$Q_A = 40$ [MPa]	$Q_A = 60$ [MPa]	$Q_A = 80$ [MPa]	$Q_A = 100$ [MPa]	$Q_A = 120$ [MPa]	$Q_A = 140$ [MPa]	$Q_A = 160$ [MPa]
10^{-0}	12	<10	<10	<10	<10		<10		<10
10^{-1}	17	13	<10	<10	<10		<10		<10
10^{-2}	24		<10	<10	<10		<10		<10
10^{-3}	31		<10	<10	<10		<10		<10
10^{-4}	38		10	10	10		10		10
10^{-5}	59			33	32		30		30
10^{-6}									
10^{-7}									
10^{-8}									

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm			
Gasket stress [MPa]	ambient temperature	temperature 1 [175°C]	temperature 2 [225°C]
Stress level 1 [30 MPa]		0,48	0,40
Stress level 2 [60 MPa]		0,58	0,52
Q_{Smax} [220 MPa]			

Maximal applicable gasket stress Q_{Smax}		
Q_{Smax} [MPa] – ambient temperature	Q_{Smax} [MPa] – temperature 1 [175°C]	Q_{Smax} [MPa] – temperature 2 [225°C]
>220	>220	>220

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [175°C]	temperature 2 [225°C]
20	2083	747	615
30	1858	961	679
40	1938	1366	992
50	2269	1374	979
60	4109	1452	981
80	5019	1573	1332
100	3003	1631	1253
120	3773	1505	1277
140	2472	1597	1473
160	2670	1719	1646
180	2923	2189	
200	2991	2963	
220	2377		
225			

Note: the content of darkened cells was not determined respectively is unnecessary

Creation date of this sheet: 04.12.2007